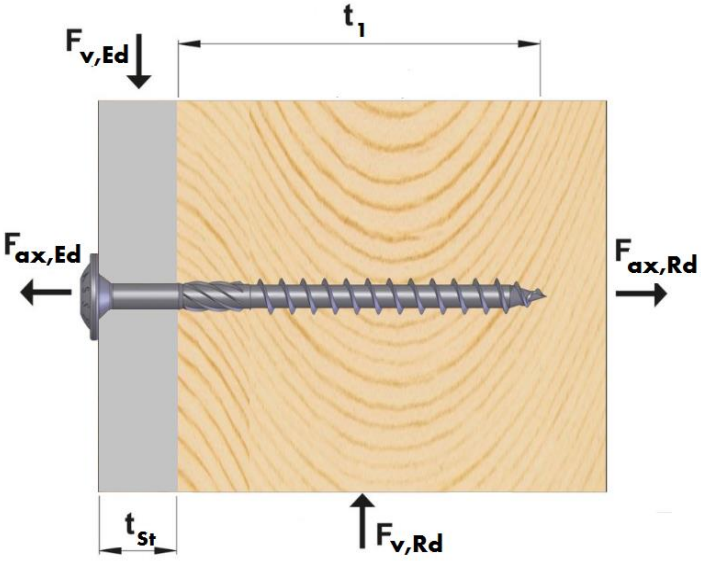
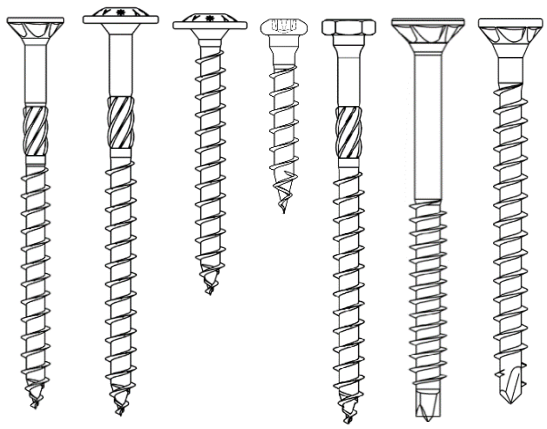
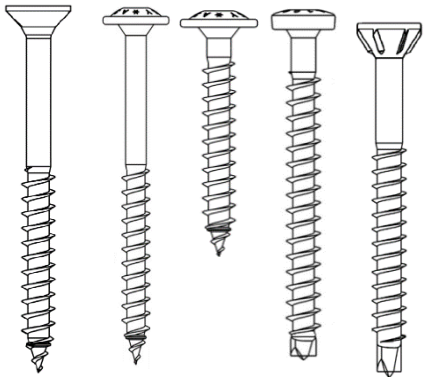
AXIAL/SHEARING VALUE TABLE FOR ASSY® SCREWS STEEL-WOOD







CONNECTS THE WOOD - INSTEAD OF SPLITTING IT

A2

15.05.2017

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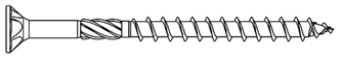
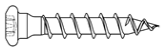
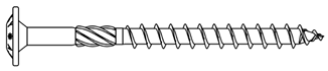
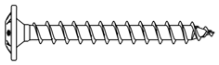
ASSY 3.0		Page 9
ASSY 3.0 combination joist screw		Page 31
ASSY 3.0 SK		Page 33
ASSY 3.0 SK		Page 55
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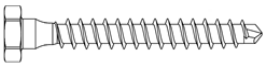
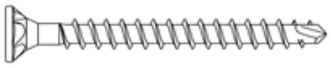
ASSY plus VG combi		Page 79
ASSY plus VG		Page 87
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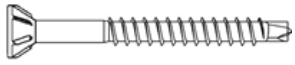
ASSY 3.0 plus A2 countersunk head		Page 125
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NOTE: These are planning aids. These values must be measured by authorized persons for each project.

FOR YOUR NOTES

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

DETERMINING THE TABLE VALUES FOR ASSY SCREWS

Boundary conditions

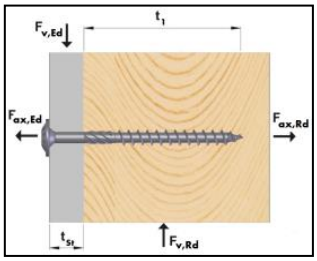
The example calculation is based on ETA-11/0190 and DIN EN 1995-1-1. This example assumes a connection between S235 steel and C24 wood that exerts a shearing and pullout force on a fastener in the non-predrilled state. The analyed fastener is a Würth ASSY 3.0 combi 8x100mm.

Steel

t_{st} =	6 mm
Height h =	60 mm
Steel quality =	S235

Wood

Width b =	100 mm
Height h =	200 mm
$\rho_{k,2}$ =	350 kg/m^3
t_1 =	94 mm



Würth ASSY 3.0 combi partial thread Ø8x100mm

d =	8 mm	"Screw diameter"
$M_{y,Rk}$ =	20000 Nmm	"Characteristic yield moment [Annex 1 Table 1.1]"
$f_{ax,k}$ =	11 N/mm²	"Characteristic pull-out parameter [A.1.3.1]"
$f_{h,k}$ =	15.38 N/mm²	"Bearing strength [A1.2.2] wood"

Data according to ETA-11/0190 and corresponding product details

Pullout strength

α =	90°	"Angle between screw axis and direction of grain"
k_{ax} =	1,00	"Factor [A.1.3.1]"
$f_{tens,k}$ =	20000 N	"Characteristic tensile strength [Annex 1 Table 1.1]"
l_{ef} =	60 mm	"Effectve thread length in wood"

$F_{ax,\alpha,Rk,1}$ = 5280 N $= k_{ax} \times f_{ax,k} \times d \times l_{ef} \times \left(\frac{\rho_k}{350}\right)^{0,8}$

$F_{ax,\alpha,Rk,2}$ =	20000 N	"Characteristic tensile strength [Annex 1 Table 1.1]"
$F_{ax,\alpha,Rk}$ =	**5280 N**	"Minimum pullout strength"

Data according to ETA-11/0190 and corresponding product details

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

DETERMINING THE TABLE VALUES FOR ASSY SCREWS

Calculation according to DIN EN 1995-1-1 8.2.3

a) 4626 N $= 0{,}4 f_{h,k} \times t_1 \times d$

b) **3871 N** $= 1{,}15 \sqrt{2 M_{y,Rk} \times f_{h,k} \times d} + \frac{F_{ax,Rk}}{4}$

} Thin steel sheet

c) 11566 N $= f_{h,k} \times t_1 \times d$

d) 6409 N $= f_{h,k} \times t_1 \times d \left[\sqrt{2 + \frac{4 M_{y,Rk}}{f_{h,k} \times d \times {t_1}^2}} - 1 \right] + \frac{F_{ax,Rk}}{4}$

e) **4928 N** $= 2{,}3 \sqrt{M_{y,Rk} \times f_{h,k} \times d} + \frac{F_{ax,Rk}}{4}$

} Thick steel sheet

Interpolation

b)	**3871 N**	**Thin steel sheet**	t_{thin} =	4 mm	"Thin sheet limit value"
e)	**4928 N**	**Thick steel sheet**	t_{thick} =	8 mm	"Thick sheet limit value"

$F_{v,Rk}$ = **4400 N** $= F_{v,Rk,dünn} + \frac{(F_{v,Rk,thick} - F_{v,Rk,thin})}{(t_{thick} - t_{thin})} \times t - t_{thin}$

Design situation according to DIN EN 1995-1-1

Utilization class =	1		"Utilization class [2.3.1.3]"
KLED =	medium		"Load duration class [Table 2.2]"
k_{mod} =	0,8		"Modification factor [Table 3.1]"
γ_M =	1,3		"Part safety coefficient [Table 2.3]"
$F_{v,Rd}$ =	**2707 N**	**= 2.71 kN**	$= \frac{F_{v,Rk} \times k_{mod}}{1{,}3}$
$F_{ax,Rd}$ =	**3249 N**	**= 2.25 kN**	$= \frac{F_{ax,Rk} \times k_{mod}}{1{,}3}$

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

USING THE TABLE VALUES

Example calculation

System:	Fishplate with steel sheet S235 t_{St} = 6 mm
Beam:	w/h = 100 mm / 200 mm softwood, strength class C24 according to EN 338 (ρ_k = 350 kg/m³)
Side steel tab:	t_{St}/h_{St} = 6 mm / 60 mm, strength class S235
Basic for calculation:	Dimensioning: EC5 or DIN EN 1995-1-1:2010-12 and national German application document DIN 20000-6:2012-06; ETA-11/0190 ASSY wood screws.
Design force:	$F_{v,Ed}$ = 11,3 kN (utilization class = 1, KLED = "medium")
Connection / design load:	According to the table, each ASSY 3.0 combi 8.0x100mm screw has the following load-bearing capacity.
Design pullout value:	$F_{ax,Rd}$ = 3,25 kN
Design shearing value:	$F_{v,Rd}$ = 2,71 kN

5 screws therefore have a load-bearing capacity of $F_{v,Rd}$ = 13.55 kN. The group effect may have to be taken into account depending on the arrangement variant.

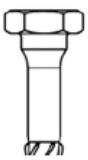
	Axial tensile strength $F_{ax,Rk}$ or $F_{ax,Rd}$	Shear strength $F_{v,Rk}$ or $F_{v,Rd}$	
Characteristic	5,28	4,40	WITHOUT predrilled holes
		5,36	WITH predrilled holes
KLED_medium (k_{mod}=0.8)	3,25	2,71	WITHOUT predrilled holes
		3,30	WITH predrilled holes

Characteristic load-bearing capacity $F_{v,Rk}$ and design load-bearing capacity values $F_{v,Rd}$ (KLED="medium", k_{mod}=0.8) for steel-wood (for utilization class 1 and 2 each).

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 COMBI

Type d x ℓ	Steel sheet thickness in [mm]													
	2		4		6		8		10		12		14	
ASSY 3.0 Combi 8x80 mm	4,40	3,65	4,40	3,65	4,40	4,17	4,40	4,71	4,40	4,71	4,40	4,71	4,40	4,71
		4,44		4,44		5,14		5,83		5,83		5,83		5,83
	2,71	2,25	2,71	2,25	2,71	2,57	2,71	2,90	2,71	2,90	2,71	2,90	2,71	2,90
		2,73		2,73		3,16		3,59		3,59		3,59		3,59
ASSY 3.0 Combi 8x100 mm	5,28	3,87	5,28	3,87	5,28	4,40	5,28	4,93	5,28	4,93	5,28	4,93	5,28	4,93
		4,66		4,66		5,36		6,05		6,05		6,05		6,05
	3,25	2,38	3,25	2,38	3,25	2,71	3,25	3,03	3,25	3,03	3,25	3,03	3,25	3,03
		2,87		2,87		3,30		3,72		3,72		3,72		3,72
		4,31		4,31		4,84		5,37		5,37		5,37		5,37

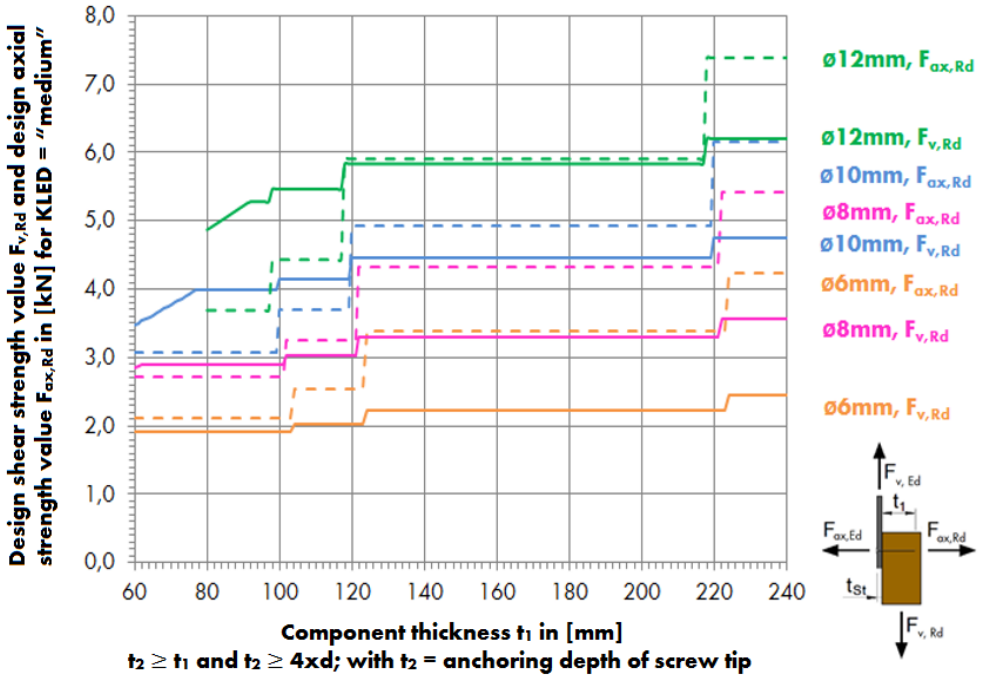
∅ **8,0 mm**



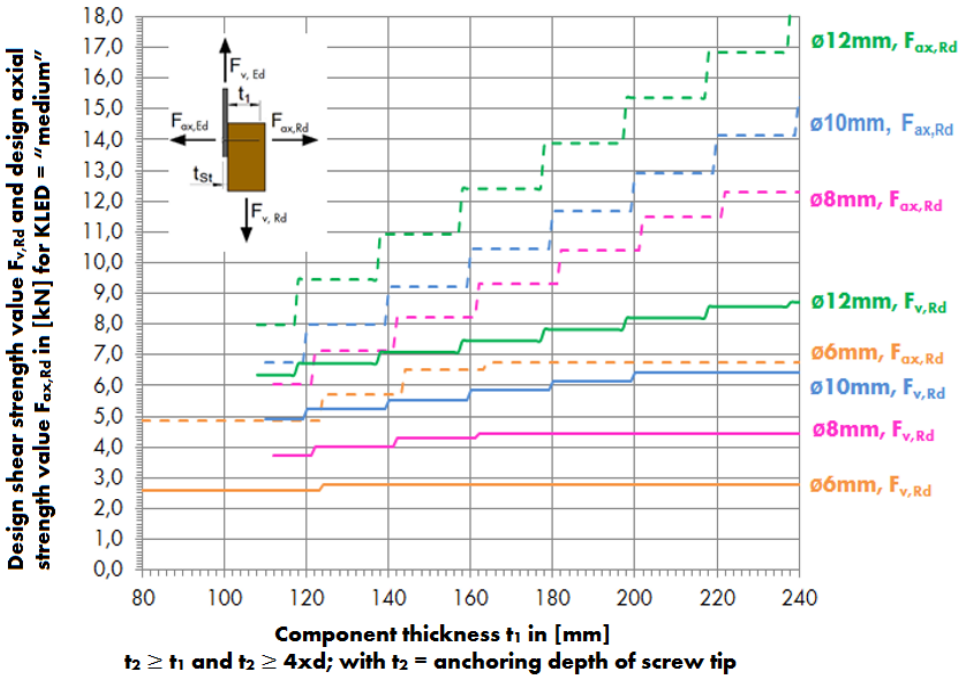
NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE DIAGRAMS FOR STEEL-WOOD

ASSY 3.0, ASSY 3.0 SK, ASSY 3.0 combi



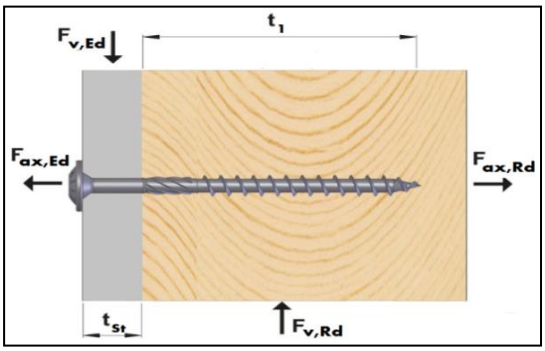
ASSY plus VG



NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES FOR STEEL-WOOD

Legend



$F_{ax,Rk}$	Characteristic pullout strength in [kN] of a screw for an angle of 90° between direction of grain and screw axis.
$F_{ax,Rd}$	Design pullout strength in [kN] of a screw for an angle of 90° between direction of grain and screw axis.
$F_{v,Rk}$	Characteristic shearing strength in [kN] of a screw for an angle of 0°÷ 90° between direction of grain and force.
$F_{v,Rd}$	Design shearing strength in [kN] of a screw for an angle of 0°÷ 90° between direction of grain and force.
ℓ	Screw length in [mm]
ℓ_g	Thread length anchored in wood (t_1) in [mm]
d	Nominal diameter / outer thread diameter of screw in [mm]
t_{St}	Metal tab thickness on screw head side in [mm]; countersunk head screws must be applied flush with precision fit countersunk hole.
t_1	Wood thickness up to screw tip in [mm] with $t_1 = \ell - t_{St}$

Axial tensile strength $F_{ax,Rk}$ or $F_{ax,Rd}$ — Shear strength $F_{v,Rk}$ or $F_{v,Rd}$

Characteristic	5,28	4,40	WITHOUT predrilled holes
		5,36	WITH predrilled holes
KLED_medium (k_{mod}=0.8)	3,25	2,71	WITHOUT predrilled holes
		3,30	WITH predrilled holes

Bases for calculation

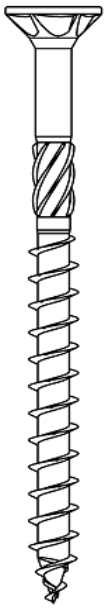
DIN EN 1/1/1995:2010-12	Design of timber structures – Common rules and rules for buildings
DIN EN 1995-1-1/NA:2013-08	National Annex – Nationally determined parameters
DIN 20000-6	Application of construction products in structures – Part 6: Dowel-type fasteners and connectors
ETA-11/0190	Würth self-tapping screws for use in timber constructions
EN 14081-1	Timber structures – General requirements
EN 338	Construction wood for load bearing purposes, strength classes

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 - ASSY 3.0 ZINI

Type d x ℓ	Steel sheet thickness in [mm]													
	2		4		6		8		10		12		14	
ASSY 3.0 5x45 mm	1,80	1,52	1,80	1,85	1,80	2,09	1,80	2,03	1,80	1,97	1,80	1,91	1,80	1,85
		1,91		2,27		2,51		2,51		2,51		2,51		2,46
	1,11	0,94	1,11	1,14	1,11	1,29	1,11	1,25	1,11	1,21	1,11	1,17	1,11	1,14
		1,17		1,40		1,55		1,55		1,55		1,55		1,52
ASSY 3.0 5x50 mm	1,80	1,63	1,80	1,92	1,80	2,11	1,80	2,11	1,80	2,11	1,80	2,06	1,80	2,00
		1,91		2,27		2,51		2,51		2,51		2,51		2,51
	1,11	1,00	1,11	1,18	1,11	1,30	1,11	1,30	1,11	1,30	1,11	1,27	1,11	1,23
		1,17		1,40		1,55		1,55		1,55		1,55		1,55
ASSY 3.0 5x55 mm	1,92	1,66	1,92		1,92	2,14	1,92	2,14	1,92	2,14	1,92	2,14	1,92	2,14
		1,94		2,30		2,54		2,54		2,54		2,54		2,54
	1,18	1,02	1,18	1,20	1,18	1,32	1,18	1,32	1,18	1,32	1,18	1,32	1,18	1,32
		1,19		1,42		1,56		1,56		1,56		1,56		1,56
ASSY 3.0 5x60 mm	2,22	1,73	2,22	2,02	2,22	2,22	2,22	2,22	2,22	2,22	2,22	2,22	2,22	2,22
		2,01		2,38		2,62		2,62		2,62		2,62		2,62
	1,37	1,06	1,37	1,24	1,37	1,36	1,37	1,36	1,37	1,36	1,37	1,36	1,37	1,36
		1,24		1,46		1,61		1,61		1,61		1,61		1,61
ASSY 3.0 5x70 mm	2,52	1,81	2,52	2,10	2,52	2,29	2,52	2,29	2,52	2,29	2,52	2,29	2,52	2,29
		2,09		2,45		2,69		2,69		2,69		2,69		2,69
	1,55	1,11	1,55	1,29	1,55	1,41	1,55	1,41	1,55	1,41	1,55	1,41	1,55	1,41
		1,29		1,51		1,66		1,66		1,66		1,66		1,66
ASSY 3.0 5x80 mm	2,52	1,81	2,52	2,10	2,52	2,29	2,52	2,29	2,52	2,29	2,52	2,29	2,52	2,29
		2,09		2,45		2,69		2,69		2,69		2,69		2,69
	1,55	1,11	1,55	1,29	1,55	1,41	1,55	1,41	1,55	1,41	1,55	1,41	1,55	1,41
		1,29		1,51		1,66		1,66		1,66		1,66		1,66
ASSY 3.0 5x90 mm	2,82	1,88	2,82	2,17	2,82	2,37	2,82	2,37	2,82	2,37	2,82	2,37	2,82	2,37
		2,16		2,53		2,77		2,77		2,77		2,77		2,77
	1,74	1,16	1,74	1,34	1,74	1,46	1,74	1,46	1,74	1,46	1,74	1,46	1,74	1,46
		1,33		1,55		1,70		1,70		1,70		1,70		1,70
ASSY 3.0 5x100 mm	3,12	1,96	3,12	2,25	3,12	2,44	3,12	2,44	3,12	2,44	3,12	2,44	3,12	2,44
		2,24		2,60		2,84		2,84		2,84		2,84		2,84
	1,92	1,20	1,92	1,38	1,92	1,50	1,92	1,50	1,92	1,50	1,92	1,50	1,92	1,50
		1,38		1,60		1,75		1,75		1,75		1,75		1,75

∅ **5,0 mm**



Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

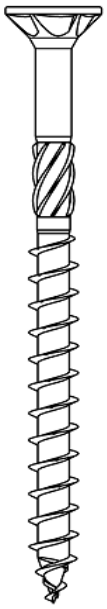
Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 - ASSY 3.0 ZINI

Type d x ℓ	Steel sheet thickness in [mm]													
	16		18		20		22		24		26		28	
ASSY 3.0 5x45 mm	1,74	1,78	1,62	1,69	1,50	1,61	1,38	1,53	1,26	1,46	1,14	1,39	1,02	1,32
		2,35		2,23		2,11		1,99		1,88		1,77		1,67
	1,07	1,09	1,00	1,04	0,92	0,99	0,85	0,94	0,78	0,90	0,70	0,85	0,63	0,81
		1,45		1,37		1,30		1,23		1,16		1,09		1,03
ASSY 3.0 5x50 mm	1,80	1,94	1,80	1,88	1,80	1,82	1,68	1,73	1,56	1,65	1,44	1,57	1,32	1,49
		2,51		2,51		2,42		2,29		2,17		2,05		1,94
	1,11	1,19	1,11	1,15	1,11	1,12	1,03	1,07	0,96	1,02	0,89	0,97	0,81	0,92
		1,55		1,55		1,49		1,41		1,34		1,26		1,19
ASSY 3.0 5x55 mm	1,92	2,12	1,92	2,06	1,92	2,00	1,92	1,94	1,86	1,86	1,74	1,78	1,62	1,69
		2,54		2,54		2,54		2,54		2,48		2,35		2,23
	1,18	1,30	1,18	1,27	1,18	1,23	1,18	1,19	1,14	1,15	1,07	1,09	1,00	1,04
		1,56		1,56		1,56		1,56		1,53		1,45		1,37
ASSY 3.0 5x60 mm	2,22	2,22	2,22	2,22	2,22	2,22	2,22	2,16	2,16	2,09	2,04	2,00	1,92	1,91
		2,62		2,62		2,62		2,62		2,60		2,57		2,54
	1,37	1,36	1,37	1,36	1,37	1,36	1,37	1,33	1,33	1,28	1,26	1,23	1,18	1,17
		1,61		1,61		1,61		1,61		1,60		1,58		1,56
ASSY 3.0 5x70 mm	2,52	2,29	2,52	2,29	2,52	2,29	2,52	2,29	2,52	2,29	2,52	2,29	2,52	2,29
		2,69		2,69		2,69		2,69		2,69		2,69		2,69
	1,55	1,41	1,55	1,41	1,55	1,41	1,55	1,41	1,55	1,41	1,55	1,41	1,55	1,41
		1,66		1,66		1,66		1,66		1,66		1,66		1,66
ASSY 3.0 5x80 mm	2,52	2,29	2,52	2,29	2,52	2,29	2,52	2,29	2,52	2,29	2,52	2,29	2,52	2,29
		2,69		2,69		2,69		2,69		2,69		2,69		2,69
	1,55	1,41	1,55	1,41	1,55	1,41	1,55	1,41	1,55	1,41	1,55	1,41	1,55	1,41
		1,66		1,66		1,66		1,66		1,66		1,66		1,66
ASSY 3.0 5x90 mm	2,82	2,37	2,82	2,37	2,82	2,37	2,82	2,37	2,82	2,37	2,82	2,37	2,82	2,37
		2,77		2,77		2,77		2,77		2,77		2,77		2,77
	1,74	1,46	1,74	1,46	1,74	1,46	1,74	1,46	1,74	1,46	1,74	1,46	1,74	1,46
		1,70		1,70		1,70		1,70		1,70		1,70		1,70
ASSY 3.0 5x100 mm	3,12	2,44	3,12	2,44	3,12	2,44	3,12	2,44	3,12	2,44	3,12	2,44	3,12	2,44
		2,84		2,84		2,84		2,84		2,84		2,84		2,84
	1,92	1,50	1,92	1,50	1,92	1,50	1,92	1,50	1,92	1,50	1,92	1,50	1,92	1,50
		1,75		1,75		1,75		1,75		1,75		1,75		1,75

∅ **5,0 mm**



Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

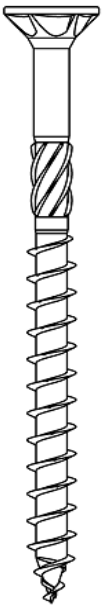
Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 - ASSY 3.0 ZINI

Type d x ℓ	Steel sheet thickness in [mm]													
	2		4		6		8		10		12		14	
ASSY 3.0 5x110 mm	3,12	1,96	3,12	2,25	3,12	2,44	3,12	2,44	3,12	2,44	3,12	2,44	3,12	2,44
		2,24		2,60		2,84		2,84		2,84		2,84		2,84
	1,92	1,20	1,92	1,38	1,92	1,50	1,92	1,50	1,92	1,50	1,92	1,50	1,92	1,50
		1,38		1,60		1,75		1,75		1,75		1,75		1,75
ASSY 3.0 5x120 mm	3,72	2,11	3,72	2,40	3,72	2,59	3,72	2,59	3,72	2,59	3,72	2,59	3,72	2,59
		2,39		2,75		2,99		2,99		2,99		2,99		2,99
	2,29	1,30	2,29	1,48	2,29	1,60	2,29	1,60	2,29	1,60	2,29	1,60	2,29	1,60
		1,47		1,69		1,84		1,84		1,84		1,84		1,84

∅ **5,0 mm**



Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

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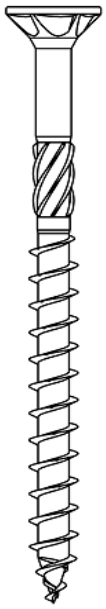
NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 - ASSY 3.0 ZINI

Type d x ℓ	Steel sheet thickness in [mm]													
	16		18		20		22		24		26		28	
ASSY 3.0 5x110 mm	3,12	2,44	3,12	2,44	3,12	2,44	3,12	2,44	3,12	2,44	3,12	2,44	3,12	2,44
		2,84		2,84		2,84		2,84		2,84		2,84		2,84
	1,92	1,50	1,92	1,50	1,92	1,50	1,92	1,50	1,92	1,50	1,92	1,50	1,92	1,50
		1,75		1,75		1,75		1,75		1,75		1,75		1,75
ASSY 3.0 5x120 mm	3,72	2,59	3,72	2,59	3,72	2,59	3,72	2,59	3,72	2,59	3,72	2,59	3,72	2,59
		2,99		2,99		2,99		2,99		2,99		2,99		2,99
	2,29	1,60	2,29	1,60	2,29	1,60	2,29	1,60	2,29	1,60	2,29	1,60	2,29	1,60
		1,84		1,84		1,84		1,84		1,84		1,84		1,84

∅ **5,0 mm**



Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

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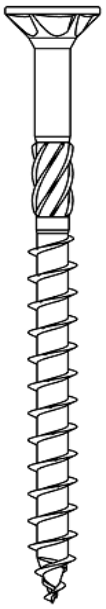
NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 - ASSY 3.0 ZINI

Type d x ℓ	Steel sheet thickness in [mm]													
	2		4		6		8		10		12		14	
ASSY 3.0 6x50 mm	2,21	1,93	2,21	2,15	2,21	2,68	2,21	2,61	2,21	2,55	2,21	2,48	2,21	2,41
		2,57		2,85		3,40		3,40		3,40		3,40		3,33
	1,36	1,19	1,36	1,32	1,36	1,65	1,36	1,61	1,36	1,57	1,36	1,52	1,36	1,48
		1,58		1,75		2,09		2,09		2,09		2,09		2,05
ASSY 3.0 6x55 mm	3,11	2,13	3,11	2,38	3,11	3,02	3,11	3,01	3,11	2,94	2,97	2,84	2,83	2,73
		2,79		3,07		3,63		3,63		3,63		3,59		3,56
	1,91	1,31	1,91	1,46	1,91	1,86	1,91	1,86	1,91	1,81	1,83	1,75	1,74	1,68
		1,72		1,89		2,23		2,23		2,23		2,21		2,19
ASSY 3.0 6x60 mm	2,55	2,23	2,55	2,45	2,55	2,89	2,55	2,89	2,55	2,89	2,55	2,89	2,55	2,84
		2,66		2,93		3,49		3,49		3,49		3,49		3,49
	1,57	1,37	1,57	1,51	1,57	1,78	1,57	1,78	1,57	1,78	1,57	1,78	1,57	1,75
		1,63		1,81		2,15		2,15		2,15		2,15		2,15
ASSY 3.0 6x70 mm	2,90	2,31	2,90	2,53	2,90	2,97	2,90	2,97	2,90	2,97	2,90	2,97	2,90	2,97
		2,74		3,02		3,58		3,58		3,58		3,58		3,58
	1,78	1,42	1,78	1,56	1,78	1,83	1,78	1,83	1,78	1,83	1,78	1,83	1,78	1,83
		1,69		1,86		2,20		2,20		2,20		2,20		2,20
ASSY 3.0 6x80 mm	3,45	2,45	3,45	2,67	3,45	3,11	3,45	3,11	3,45	3,11	3,45	3,11	3,45	3,11
		2,88		3,16		3,71		3,71		3,71		3,71		3,71
	2,12	1,51	2,12	1,64	2,12	1,91	2,12	1,91	2,12	1,91	2,12	1,91	2,12	1,91
		1,77		1,94		2,29		2,29		2,29		2,29		2,29
ASSY 3.0 6x90 mm	3,45	2,45	3,45	2,67	3,45	3,11	3,45	3,11	3,45	3,11	3,45	3,11	3,45	3,11
		2,88		3,16		3,71		3,71		3,71		3,71		3,71
	2,12	1,51	2,12	1,64	2,12	1,91	2,12	1,91	2,12	1,91	2,12	1,91	2,12	1,91
		1,77		1,94		2,29		2,29		2,29		2,29		2,29
ASSY 3.0 6x100 mm	4,14	2,62	4,14	2,84	4,14	3,28	4,14	3,28	4,14	3,28	4,14	3,28	4,14	3,28
		3,05		3,33		3,89		3,89		3,89		3,89		3,89
	2,55	1,62	2,55	1,75	2,55	2,02	2,55	2,02	2,55	2,02	2,55	2,02	2,55	2,02
		1,88		2,05		2,39		2,39		2,39		2,39		2,39
ASSY 3.0 6x110 mm	4,83	2,80	4,83	3,02	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46
		3,22		3,50		4,06		4,06		4,06		4,06		4,06
	2,97	1,72	2,97	1,86	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13
		1,98		2,16		2,50		2,50		2,50		2,50		2,50

∅ **6,0 mm**



Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

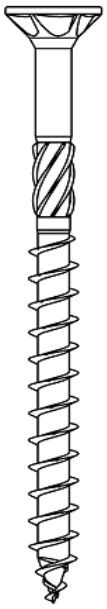
Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 - ASSY 3.0 ZINI

Type d x ℓ	Steel sheet thickness in [mm]													
	16		18		20		22		24		26		28	
ASSY 3.0 6x50 mm	2,21	2,35	2,21	2,29	2,07	2,19	1,93	2,10	1,79	2,02	1,66	1,93	1,52	1,86
		3,22		3,11		2,96		2,82		2,69		2,56		2,43
	1,36	1,45	1,36	1,41	1,27	1,35	1,19	1,29	1,10	1,24	1,02	1,19	0,93	1,14
		1,98		1,91		1,82		1,74		1,65		1,57		1,50
ASSY 3.0 6x55 mm	2,69	2,63	2,55	2,53	2,42	2,43	2,28	2,34	2,14	2,24	2,00	2,15	1,86	2,06
		3,52		3,47		3,33		3,18		3,03		2,89		2,76
	1,66	1,62	1,57	1,56	1,49	1,50	1,40	1,44	1,32	1,38	1,23	1,32	1,15	1,27
		2,17		2,14		2,05		1,96		1,87		1,78		1,70
ASSY 3.0 6x60 mm	2,55	2,77	2,55	2,70	2,55	2,63	2,55	2,56	2,48	2,48	2,35	2,38	2,21	2,29
		3,49		3,49		3,49		3,49		3,40		3,25		3,11
	1,57	1,70	1,57	1,66	1,57	1,62	1,57	1,58	1,53	1,53	1,44	1,47	1,36	1,41
		2,15		2,15		2,15		2,15		2,09		2,00		1,91
ASSY 3.0 6x70 mm	2,90	2,97	2,90	2,97	2,90	2,97	2,90	2,97	2,90	2,93	2,90	2,86	2,90	2,79
		3,58		3,58		3,58		3,58		3,58		3,58		3,58
	1,78	1,83	1,78	1,83	1,78	1,83	1,78	1,83	1,78	1,80	1,78	1,76	1,78	1,71
		2,20		2,20		2,20		2,20		2,20		2,20		2,20
ASSY 3.0 6x80 mm	3,45	3,11	3,45	3,11	3,45	3,11	3,45	3,11	3,45	3,11	3,45	3,11	3,45	3,11
		3,71		3,71		3,71		3,71		3,71		3,71		3,71
	2,12	1,91	2,12	1,91	2,12	1,91	2,12	1,91	2,12	1,91	2,12	1,91	2,12	1,91
		2,29		2,29		2,29		2,29		2,29		2,29		2,29
ASSY 3.0 6x90 mm	3,45	3,11	3,45	3,11	3,45	3,11	3,45	3,11	3,45	3,11	3,45	3,11	3,45	3,11
		3,71		3,71		3,71		3,71		3,71		3,71		3,71
	2,12	1,91	2,12	1,91	2,12	1,91	2,12	1,91	2,12	1,91	2,12	1,91	2,12	1,91
		2,29		2,29		2,29		2,29		2,29		2,29		2,29
ASSY 3.0 6x100 mm	4,14	3,28	4,14	3,28	4,14	3,28	4,14	3,28	4,14	3,28	4,14	3,28	4,14	3,28
		3,89		3,89		3,89		3,89		3,89		3,89		3,89
	2,55	2,02	2,55	2,02	2,55	2,02	2,55	2,02	2,55	2,02	2,55	2,02	2,55	2,02
		2,39		2,39		2,39		2,39		2,39		2,39		2,39
ASSY 3.0 6x110 mm	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46
		4,06		4,06		4,06		4,06		4,06		4,06		4,06
	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13
		2,50		2,50		2,50		2,50		2,50		2,50		2,50

∅ **6,0 mm**



Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

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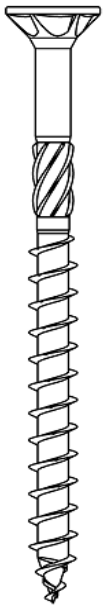
NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 - ASSY 3.0 ZINI

Type d x ℓ	Steel sheet thickness in [mm]													
	2		4		6		8		10		12		14	
ASSY 3.0 6x120 mm	4,83	2,80	4,83	3,02	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46
		3,22		3,50		4,06		4,06		4,06		4,06		4,06
	2,97	1,72	2,97	1,86	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13
		1,98		2,16		2,50		2,50		2,50		2,50		2,50
ASSY 3.0 6x130 mm	4,83	2,80	4,83	3,02	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46
		3,22		3,50		4,06		4,06		4,06		4,06		4,06
	2,97	1,72	2,97	1,86	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13
		1,98		2,16		2,50		2,50		2,50		2,50		2,50
ASSY 3.0 6x140 mm	4,83	2,80	4,83	3,02	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46
		3,22		3,50		4,06		4,06		4,06		4,06		4,06
	2,97	1,72	2,97	1,86	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13
		1,98		2,16		2,50		2,50		2,50		2,50		2,50
ASSY 3.0 6x150 mm	4,83	2,80	4,83	3,02	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46
		3,22		3,50		4,06		4,06		4,06		4,06		4,06
	2,97	1,72	2,97	1,86	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13
		1,98		2,16		2,50		2,50		2,50		2,50		2,50
ASSY 3.0 6x160 mm	4,83	2,80	4,83	3,02	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46
		3,22		3,50		4,06		4,06		4,06		4,06		4,06
	2,97	1,72	2,97	1,86	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13
		1,98		2,16		2,50		2,50		2,50		2,50		2,50
ASSY 3.0 6x180 mm	4,83	2,80	4,83	3,02	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46
		3,22		3,50		4,06		4,06		4,06		4,06		4,06
	2,97	1,72	2,97	1,86	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13
		1,98		2,16		2,50		2,50		2,50		2,50		2,50
ASSY 3.0 6x200 mm	4,83	2,80	4,83	3,02	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46
		3,22		3,50		4,06		4,06		4,06		4,06		4,06
	2,97	1,72	2,97	1,86	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13
		1,98		2,16		2,50		2,50		2,50		2,50		2,50
ASSY 3.0 6x220 mm	4,83	2,80	4,83	3,02	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46
		3,22		3,50		4,06		4,06		4,06		4,06		4,06
	2,97	1,72	2,97	1,86	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13
		1,98		2,16		2,50		2,50		2,50		2,50		2,50

∅ **6,0 mm**



Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

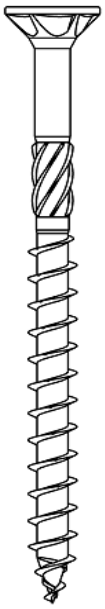
Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 - ASSY 3.0 ZINI

Type d x ℓ	Steel sheet thickness in [mm]													
	16		18		20		22		24		26		28	
ASSY 3.0 6x120 mm	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46
		4,06		4,06		4,06		4,06		4,06		4,06		4,06
	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13
		2,50		2,50		2,50		2,50		2,50		2,50		2,50
ASSY 3.0 6x130 mm	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46
		4,06		4,06		4,06		4,06		4,06		4,06		4,06
	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13
		2,50		2,50		2,50		2,50		2,50		2,50		2,50
ASSY 3.0 6x140 mm	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46
		4,06		4,06		4,06		4,06		4,06		4,06		4,06
	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13
		2,50		2,50		2,50		2,50		2,50		2,50		2,50
ASSY 3.0 6x150 mm	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46
		4,06		4,06		4,06		4,06		4,06		4,06		4,06
	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13
		2,50		2,50		2,50		2,50		2,50		2,50		2,50
ASSY 3.0 6x160 mm	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46
		4,06		4,06		4,06		4,06		4,06		4,06		4,06
	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13
		2,50		2,50		2,50		2,50		2,50		2,50		2,50
ASSY 3.0 6x180 mm	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46
		4,06		4,06		4,06		4,06		4,06		4,06		4,06
	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13
		2,50		2,50		2,50		2,50		2,50		2,50		2,50
ASSY 3.0 6x200 mm	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46
		4,06		4,06		4,06		4,06		4,06		4,06		4,06
	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13
		2,50		2,50		2,50		2,50		2,50		2,50		2,50
ASSY 3.0 6x220 mm	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46
		4,06		4,06		4,06		4,06		4,06		4,06		4,06
	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13
		2,50		2,50		2,50		2,50		2,50		2,50		2,50

∅ **6,0 mm**



Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

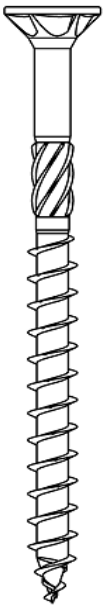
Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 - ASSY 3.0 ZINI

Type d x ℓ	Steel sheet thickness in [mm]													
	2		4		6		8		10		12		14	
ASSY 3.0 6x240 mm	4,83	2,80	4,83	3,02	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46
		3,22		3,50		4,06		4,06		4,06		4,06		4,06
	2,97	1,72	2,97	1,86	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13
		1,98		2,16		2,50		2,50		2,50		2,50		2,50
ASSY 3.0 6x260 mm	4,83	2,80	4,83	3,02	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46
		3,22		3,50		4,06		4,06		4,06		4,06		4,06
	2,97	1,72	2,97	1,86	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13
		1,98		2,16		2,50		2,50		2,50		2,50		2,50
ASSY 3.0 6x280 mm	4,83	2,80	4,83	3,02	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46
		3,22		3,50		4,06		4,06		4,06		4,06		4,06
	2,97	1,72	2,97	1,86	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13
		1,98		2,16		2,50		2,50		2,50		2,50		2,50
ASSY 3.0 6x300 mm	4,83	2,80	4,83	3,02	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46
		3,22		3,50		4,06		4,06		4,06		4,06		4,06
	2,97	1,72	2,97	1,86	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13
		1,98		2,16		2,50		2,50		2,50		2,50		2,50

∅ **6,0 mm**



Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

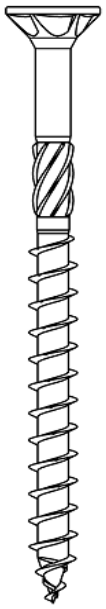
Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 - ASSY 3.0 ZINI

Type d x ℓ	Steel sheet thickness in [mm]													
	16		18		20		22		24		26		28	
ASSY 3.0 6x240 mm	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46
		4,06		4,06		4,06		4,06		4,06		4,06		4,06
	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13
		2,50		2,50		2,50		2,50		2,50		2,50		2,50
ASSY 3.0 6x260 mm	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46
		4,06		4,06		4,06		4,06		4,06		4,06		4,06
	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13
		2,50		2,50		2,50		2,50		2,50		2,50		2,50
ASSY 3.0 6x280 mm	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46
		4,06		4,06		4,06		4,06		4,06		4,06		4,06
	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13
		2,50		2,50		2,50		2,50		2,50		2,50		2,50
ASSY 3.0 6x300 mm	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46
		4,06		4,06		4,06		4,06		4,06		4,06		4,06
	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13
		2,50		2,50		2,50		2,50		2,50		2,50		2,50

∅ **6,0 mm**



Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

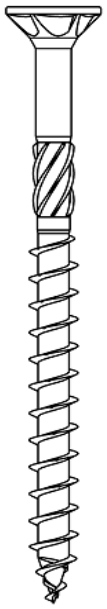
Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0

Type d x ℓ	Steel sheet thickness in [mm]													
	2		4		6		8		10		12		14	
ASSY 3.0 7x80 mm	4,03	3,04	4,03	3,16	4,03	3,65	4,03	3,89	4,03	3,89	4,03	3,89	4,03	3,89
		3,64		3,79		4,41		4,73		4,73		4,73		4,73
	2,48	1,87	2,48	1,95	2,48	2,24	2,48	2,39	2,48	2,39	2,48	2,39	2,48	2,39
		2,24		2,33		2,72		2,91		2,91		2,91		2,91
ASSY 3.0 7x90 mm	4,03	3,04	4,03	3,16	4,03	3,65	4,03	3,89	4,03	3,89	4,03	3,89	4,03	3,89
		3,64		3,79		4,41		4,73		4,73		4,73		4,73
	2,48	1,87	2,48	1,95	2,48	2,24	2,48	2,39	2,48	2,39	2,48	2,39	2,48	2,39
		2,24		2,33		2,72		2,91		2,91		2,91		2,91
ASSY 3.0 7x100 mm	4,83	3,24	4,83	3,37	4,83	3,85	4,83	4,09	4,83	4,09	4,83	4,09	4,83	4,09
		3,84		3,99		4,62		4,93		4,93		4,93		4,93
	2,97	2,00	2,97	2,07	2,97	2,37	2,97	2,52	2,97	2,52	2,97	2,52	2,97	2,52
		2,36		2,46		2,84		3,03		3,03		3,03		3,03
ASSY 3.0 7x120 mm	5,64	3,45	5,64	3,57	5,64	4,05	5,64	4,29	5,64	4,29	5,64	4,29	5,64	4,29
		4,04		4,19		4,82		5,13		5,13		5,13		5,13
	3,47	2,12	3,47	2,19	3,47	2,49	3,47	2,64	3,47	2,64	3,47	2,64	3,47	2,64
		2,49		2,58		2,96		3,16		3,16		3,16		3,16
ASSY 3.0 7x140 mm	5,64	3,45	5,64	3,57	5,64	4,05	5,64	4,29	5,64	4,29	5,64	4,29	5,64	4,29
		4,04		4,19		4,82		5,13		5,13		5,13		5,13
	3,47	2,12	3,47	2,19	3,47	2,49	3,47	2,64	3,47	2,64	3,47	2,64	3,47	2,64
		2,49		2,58		2,96		3,16		3,16		3,16		3,16
ASSY 3.0 7x160 mm	6,84	3,75	6,84	3,87	6,84	4,35	6,84	4,59	6,84	4,59	6,84	4,59	6,84	4,59
		4,34		4,50		5,12		5,43		5,43		5,43		5,43
	4,21	2,31	4,21	2,38	4,21	2,68	4,21	2,83	4,21	2,83	4,21	2,83	4,21	2,83
		2,67		2,77		3,15		3,34		3,34		3,34		3,34
ASSY 3.0 7x180 mm	6,84	3,75	6,84	3,87	6,84	4,35	6,84	4,59	6,84	4,59	6,84	4,59	6,84	4,59
		4,34		4,50		5,12		5,43		5,43		5,43		5,43
	4,21	2,31	4,21	2,38	4,21	2,68	4,21	2,83	4,21	2,83	4,21	2,83	4,21	2,83
		2,67		2,77		3,15		3,34		3,34		3,34		3,34
ASSY 3.0 7x200 mm	6,84	3,75	6,84	3,87	6,84	4,35	6,84	4,59	6,84	4,59	6,84	4,59	6,84	4,59
		4,34		4,50		5,12		5,43		5,43		5,43		5,43
	4,21	2,31	4,21	2,38	4,21	2,68	4,21	2,83	4,21	2,83	4,21	2,83	4,21	2,83
		2,67		2,77		3,15		3,34		3,34		3,34		3,34
ASSY 3.0 7x220 mm	6,84	3,75	6,84	3,87	6,84	4,35	6,84	4,59	6,84	4,59	6,84	4,59	6,84	4,59
		4,34		4,50		5,12		5,43		5,43		5,43		5,43
	4,21	2,31	4,21	2,38	4,21	2,68	4,21	2,83	4,21	2,83	4,21	2,83	4,21	2,83
		2,67		2,77		3,15		3,34		3,34		3,34		3,34

∅ **7,0 mm**



Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

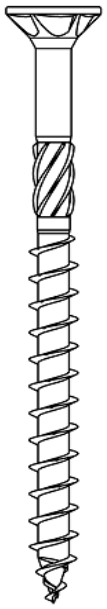
Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0

Type d x ℓ	Steel sheet thickness in [mm]													
	16		18		20		22		24		26		28	
ASSY 3.0 7x80 mm	4,03	3,89	4,03	3,89	4,03	3,89	4,03	3,89	4,03	3,89	4,03	3,87	4,03	3,79
		4,73		4,73		4,73		4,73		4,73		4,73		4,73
	2,48	2,39	2,48	2,39	2,48	2,39	2,48	2,39	2,48	2,39	2,48	2,38	2,48	2,33
		2,91		2,91		2,91		2,91		2,91		2,91		2,91
ASSY 3.0 7x90 mm	4,03	3,89	4,03	3,89	4,03	3,89	4,03	3,89	4,03	3,89	4,03	3,89	4,03	3,89
		4,73		4,73		4,73		4,73		4,73		4,73		4,73
	2,48	2,39	2,48	2,39	2,48	2,39	2,48	2,39	2,48	2,39	2,48	2,39	2,48	2,39
		2,91		2,91		2,91		2,91		2,91		2,91		2,91
ASSY 3.0 7x100 mm	4,83	4,09	4,83	4,09	4,83	4,09	4,83	4,09	4,83	4,09	4,83	4,09	4,83	4,09
		4,93		4,93		4,93		4,93		4,93		4,93		4,93
	2,97	2,52	2,97	2,52	2,97	2,52	2,97	2,52	2,97	2,52	2,97	2,52	2,97	2,52
		3,03		3,03		3,03		3,03		3,03		3,03		3,03
ASSY 3.0 7x120 mm	5,64	4,29	5,64	4,29	5,64	4,29	5,64	4,29	5,64	4,29	5,64	4,29	5,64	4,29
		5,13		5,13		5,13		5,13		5,13		5,13		5,13
	3,47	2,64	3,47	2,64	3,47	2,64	3,47	2,64	3,47	2,64	3,47	2,64	3,47	2,64
		3,16		3,16		3,16		3,16		3,16		3,16		3,16
ASSY 3.0 7x140 mm	5,64	4,29	5,64	4,29	5,64	4,29	5,64	4,29	5,64	4,29	5,64	4,29	5,64	4,29
		5,13		5,13		5,13		5,13		5,13		5,13		5,13
	3,47	2,64	3,47	2,64	3,47	2,64	3,47	2,64	3,47	2,64	3,47	2,64	3,47	2,64
		3,16		3,16		3,16		3,16		3,16		3,16		3,16
ASSY 3.0 7x160 mm	6,84	4,59	6,84	4,59	6,84	4,59	6,84	4,59	6,84	4,59	6,84	4,59	6,84	4,59
		5,43		5,43		5,43		5,43		5,43		5,43		5,43
	4,21	2,83	4,21	2,83	4,21	2,83	4,21	2,83	4,21	2,83	4,21	2,83	4,21	2,83
		3,34		3,34		3,34		3,34		3,34		3,34		3,34
ASSY 3.0 7x180 mm	6,84	4,59	6,84	4,59	6,84	4,59	6,84	4,59	6,84	4,59	6,84	4,59	6,84	4,59
		5,43		5,43		5,43		5,43		5,43		5,43		5,43
	4,21	2,83	4,21	2,83	4,21	2,83	4,21	2,83	4,21	2,83	4,21	2,83	4,21	2,83
		3,34		3,34		3,34		3,34		3,34		3,34		3,34
ASSY 3.0 7x200 mm	6,84	4,59	6,84	4,59	6,84	4,59	6,84	4,59	6,84	4,59	6,84	4,59	6,84	4,59
		5,43		5,43		5,43		5,43		5,43		5,43		5,43
	4,21	2,83	4,21	2,83	4,21	2,83	4,21	2,83	4,21	2,83	4,21	2,83	4,21	2,83
		3,34		3,34		3,34		3,34		3,34		3,34		3,34
ASSY 3.0 7x220 mm	6,84	4,59	6,84	4,59	6,84	4,59	6,84	4,59	6,84	4,59	6,84	4,59	6,84	4,59
		5,43		5,43		5,43		5,43		5,43		5,43		5,43
	4,21	2,83	4,21	2,83	4,21	2,83	4,21	2,83	4,21	2,83	4,21	2,83	4,21	2,83
		3,34		3,34		3,34		3,34		3,34		3,34		3,34

∅ **7,0 mm**



Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

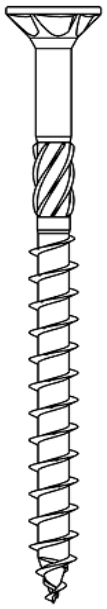
Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0

Type d x ℓ	Steel sheet thickness in [mm]													
	2		4		6		8		10		12		14	
ASSY 3.0 7x240 mm	6,84	3,75	6,84	3,87	6,84	4,35	6,84	4,59	6,84	4,59	6,84	4,59	6,84	4,59
		4,34		4,50		5,12		5,43		5,43		5,43		5,43
	4,21	2,31	4,21	2,38	4,21	2,68	4,21	2,83	4,21	2,83	4,21	2,83	4,21	2,83
		2,67		2,77		3,15		3,34		3,34		3,34		3,34
ASSY 3.0 7x260 mm	6,84	3,75	6,84	3,87	6,84	4,35	6,84	4,59	6,84	4,59	6,84	4,59	6,84	4,59
		4,34		4,50		5,12		5,43		5,43		5,43		5,43
	4,21	2,31	4,21	2,38	4,21	2,68	4,21	2,83	4,21	2,83	4,21	2,83	4,21	2,83
		2,67		2,77		3,15		3,34		3,34		3,34		3,34
ASSY 3.0 7x280 mm	6,84	3,75	6,84	3,87	6,84	4,35	6,84	4,59	6,84	4,59	6,84	4,59	6,84	4,59
		4,34		4,50		5,12		5,43		5,43		5,43		5,43
	4,21	2,31	4,21	2,38	4,21	2,68	4,21	2,83	4,21	2,83	4,21	2,83	4,21	2,83
		2,67		2,77		3,15		3,34		3,34		3,34		3,34
ASSY 3.0 7x300 mm	6,84	3,75	6,84	3,87	6,84	4,35	6,84	4,59	6,84	4,59	6,84	4,59	6,84	4,59
		4,34		4,50		5,12		5,43		5,43		5,43		5,43
	4,21	2,31	4,21	2,38	4,21	2,68	4,21	2,83	4,21	2,83	4,21	2,83	4,21	2,83
		2,67		2,77		3,15		3,34		3,34		3,34		3,34

∅ **7,0 mm**



Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

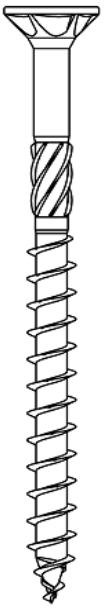
Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0

Type d x ℓ	Steel sheet thickness in [mm]													
	16		18		20		22		24		26		28	
ASSY 3.0 7x240 mm	6,84	4,59	6,84	4,59	6,84	4,59	6,84	4,59	6,84	4,59	6,84	4,59	6,84	4,59
		5,43		5,43		5,43		5,43		5,43		5,43		5,43
	4,21	2,83	4,21	2,83	4,21	2,83	4,21	2,83	4,21	2,83	4,21	2,83	4,21	2,83
		3,34		3,34		3,34		3,34		3,34		3,34		3,34
ASSY 3.0 7x260 mm	6,84	4,59	6,84	4,59	6,84	4,59	6,84	4,59	6,84	4,59	6,84	4,59	6,84	4,59
		5,43		5,43		5,43		5,43		5,43		5,43		5,43
	4,21	2,83	4,21	2,83	4,21	2,83	4,21	2,83	4,21	2,83	4,21	2,83	4,21	2,83
		3,34		3,34		3,34		3,34		3,34		3,34		3,34
ASSY 3.0 7x280 mm	6,84	4,59	6,84	4,59	6,84	4,59	6,84	4,59	6,84	4,59	6,84	4,59	6,84	4,59
		5,43		5,43		5,43		5,43		5,43		5,43		5,43
	4,21	2,83	4,21	2,83	4,21	2,83	4,21	2,83	4,21	2,83	4,21	2,83	4,21	2,83
		3,34		3,34		3,34		3,34		3,34		3,34		3,34
ASSY 3.0 7x300 mm	6,84	4,59	6,84	4,59	6,84	4,59	6,84	4,59	6,84	4,59	6,84	4,59	6,84	4,59
		5,43		5,43		5,43		5,43		5,43		5,43		5,43
	4,21	2,83	4,21	2,83	4,21	2,83	4,21	2,83	4,21	2,83	4,21	2,83	4,21	2,83
		3,34		3,34		3,34		3,34		3,34		3,34		3,34

∅ **7,0 mm**



Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

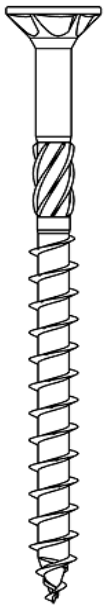
Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 - ASSY 3.0 ZINI

Type d x ℓ	Steel sheet thickness in [mm]													
	2		4		6		8		10		12		14	
ASSY 3.0 8x80 mm	4,40	3,65	4,40	3,65	4,40	4,17	4,40	4,71	4,40	4,71	4,40	4,71	4,40	4,71
		4,44		4,44		5,14		5,83		5,83		5,83		5,83
	2,71	2,25	2,71	2,25	2,71	2,57	2,71	2,90	2,71	2,90	2,71	2,90	2,71	2,90
		2,73		2,73		3,16		3,59		3,59		3,59		3,59
ASSY 3.0 8x100 mm	5,28	3,87	5,28	3,87	5,28	4,40	5,28	4,93	5,28	4,93	5,28	4,93	5,28	4,93
		4,66		4,66		5,36		6,05		6,05		6,05		6,05
	3,25	2,38	3,25	2,38	3,25	2,71	3,25	3,03	3,25	3,03	3,25	3,03	3,25	3,03
		2,87		2,87		3,30		3,72		3,72		3,72		3,72
ASSY 3.0 8x120 mm	7,04	4,31	7,04	4,31	7,04	4,84	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37
		5,10		5,10		5,80		6,49		6,49		6,49		6,49
	4,33	2,65	4,33	2,65	4,33	2,98	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30
		3,14		3,14		3,57		3,99		3,99		3,99		3,99
ASSY 3.0 8x140 mm	7,04	4,31	7,04	4,31	7,04	4,84	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37
		5,10		5,10		5,80		6,49		6,49		6,49		6,49
	4,33	2,65	4,33	2,65	4,33	2,98	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30
		3,14		3,14		3,57		3,99		3,99		3,99		3,99
ASSY 3.0 8x160 mm	7,04	4,31	7,04	4,31	7,04	4,84	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37
		5,10		5,10		5,80		6,49		6,49		6,49		6,49
	4,33	2,65	4,33	2,65	4,33	2,98	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30
		3,14		3,14		3,57		3,99		3,99		3,99		3,99
ASSY 3.0 8x180 mm	7,04	4,31	7,04	4,31	7,04	4,84	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37
		5,10		5,10		5,80		6,49		6,49		6,49		6,49
	4,33	2,65	4,33	2,65	4,33	2,98	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30
		3,14		3,14		3,57		3,99		3,99		3,99		3,99
ASSY 3.0 8x200 mm	7,04	4,31	7,04	4,31	7,04	4,84	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37
		5,10		5,10		5,80		6,49		6,49		6,49		6,49
	4,33	2,65	4,33	2,65	4,33	2,98	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30
		3,14		3,14		3,57		3,99		3,99		3,99		3,99
ASSY 3.0 8x220 mm	8,80	4,75	8,80	4,75	8,80	5,28	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81
		5,54		5,54		6,24		6,93		6,93		6,93		6,93
	5,42	2,92	5,42	2,92	5,42	3,25	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57
		3,41		3,41		3,84		4,26		4,26		4,26		4,26
ASSY 3.0 8x240 mm	8,80	4,75	8,80	4,75	8,80	5,28	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81
		5,54		5,54		6,24		6,93		6,93		6,93		6,93
	5,42	2,92	5,42	2,92	5,42	3,25	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57
		3,41		3,41		3,84		4,26		4,26		4,26		4,26

∅ **8,0 mm**



Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

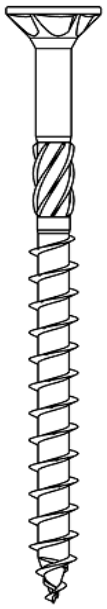
Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 - ASSY 3.0 ZINI

Type d x ℓ	Steel sheet thickness in [mm]													
	16		18		20		22		24		26		28	
ASSY 3.0 8x80 mm	4,40	4,71	4,40	4,71	4,40	4,62	4,40	4,53	4,40	4,45	4,40	4,36	4,40	4,28
		5,83		5,83		5,83		5,83		5,83		5,83		5,83
	2,71	2,90	2,71	2,90	2,71	2,84	2,71	2,79	2,71	2,74	2,71	2,68	2,71	2,63
		3,59		3,59		3,59		3,59		3,59		3,59		3,59
ASSY 3.0 8x100 mm	5,28	4,93	5,28	4,93	5,28	4,93	5,28	4,93	5,28	4,93	5,28	4,93	5,28	4,93
		6,05		6,05		6,05		6,05		6,05		6,05		6,05
	3,25	3,03	3,25	3,03	3,25	3,03	3,25	3,03	3,25	3,03	3,25	3,03	3,25	3,03
		3,72		3,72		3,72		3,72		3,72		3,72		3,72
ASSY 3.0 8x120 mm	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37
		6,49		6,49		6,49		6,49		6,49		6,49		6,49
	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30
		3,99		3,99		3,99		3,99		3,99		3,99		3,99
ASSY 3.0 8x140 mm	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37
		6,49		6,49		6,49		6,49		6,49		6,49		6,49
	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30
		3,99		3,99		3,99		3,99		3,99		3,99		3,99
ASSY 3.0 8x160 mm	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37
		6,49		6,49		6,49		6,49		6,49		6,49		6,49
	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30
		3,99		3,99		3,99		3,99		3,99		3,99		3,99
ASSY 3.0 8x180 mm	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37
		6,49		6,49		6,49		6,49		6,49		6,49		6,49
	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30
		3,99		3,99		3,99		3,99		3,99		3,99		3,99
ASSY 3.0 8x200 mm	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37
		6,49		6,49		6,49		6,49		6,49		6,49		6,49
	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30
		3,99		3,99		3,99		3,99		3,99		3,99		3,99
ASSY 3.0 8x220 mm	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81
		6,93		6,93		6,93		6,93		6,93		6,93		6,93
	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57
		4,26		4,26		4,26		4,26		4,26		4,26		4,26
ASSY 3.0 8x240 mm	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81
		6,93		6,93		6,93		6,93		6,93		6,93		6,93
	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57
		4,26		4,26		4,26		4,26		4,26		4,26		4,26

∅ **8,0 mm**



Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

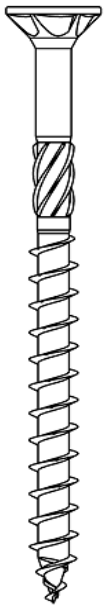
Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 - ASSY 3.0 ZINI

Type d x ℓ	Steel sheet thickness in [mm]													
	2		4		6		8		10		12		14	
ASSY 3.0 8x260 mm	8,80	4,75	8,80	4,75	8,80	5,28	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81
		5,54		5,54		6,24		6,93		6,93		6,93		6,93
	5,42	2,92	5,42	2,92	5,42	3,25	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57
		3,41		3,41		3,84		4,26		4,26		4,26		4,26
ASSY 3.0 8x280 mm	8,80	4,75	8,80	4,75	8,80	5,28	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81
		5,54		5,54		6,24		6,93		6,93		6,93		6,93
	5,42	2,92	5,42	2,92	5,42	3,25	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57
		3,41		3,41		3,84		4,26		4,26		4,26		4,26
ASSY 3.0 8x300 mm	8,80	4,75	8,80	4,75	8,80	5,28	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81
		5,54		5,54		6,24		6,93		6,93		6,93		6,93
	5,42	2,92	5,42	2,92	5,42	3,25	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57
		3,41		3,41		3,84		4,26		4,26		4,26		4,26
ASSY 3.0 8x320 mm	8,80	4,75	8,80	4,75	8,80	5,28	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81
		5,54		5,54		6,24		6,93		6,93		6,93		6,93
	5,42	2,92	5,42	2,92	5,42	3,25	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57
		3,41		3,41		3,84		4,26		4,26		4,26		4,26
ASSY 3.0 8x340 mm	8,80	4,75	8,80	4,75	8,80	5,28	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81
		5,54		5,54		6,24		6,93		6,93		6,93		6,93
	5,42	2,92	5,42	2,92	5,42	3,25	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57
		3,41		3,41		3,84		4,26		4,26		4,26		4,26
ASSY 3.0 8x360 mm	8,80	4,75	8,80	4,75	8,80	5,28	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81
		5,54		5,54		6,24		6,93		6,93		6,93		6,93
	5,42	2,92	5,42	2,92	5,42	3,25	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57
		3,41		3,41		3,84		4,26		4,26		4,26		4,26
ASSY 3.0 8x380 mm	8,80	4,75	8,80	4,75	8,80	5,28	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81
		5,54		5,54		6,24		6,93		6,93		6,93		6,93
	5,42	2,92	5,42	2,92	5,42	3,25	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57
		3,41		3,41		3,84		4,26		4,26		4,26		4,26
ASSY 3.0 8x400 mm	8,80	4,75	8,80	4,75	8,80	5,28	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81
		5,54		5,54		6,24		6,93		6,93		6,93		6,93
	5,42	2,92	5,42	2,92	5,42	3,25	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57
		3,41		3,41		3,84		4,26		4,26		4,26		4,26

∅ **8,0 mm**



Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

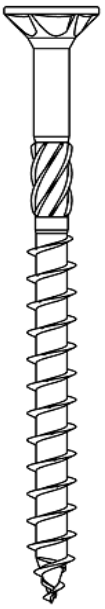
Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 - ASSY 3.0 ZINI

Type d x ℓ	Steel sheet thickness in [mm]													
	16		18		20		22		24		26		28	
ASSY 3.0 8x260 mm	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81
		6,93		6,93		6,93		6,93		6,93		6,93		6,93
	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57
		4,26		4,26		4,26		4,26		4,26		4,26		4,26
ASSY 3.0 8x280 mm	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81
		6,93		6,93		6,93		6,93		6,93		6,93		6,93
	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57
		4,26		4,26		4,26		4,26		4,26		4,26		4,26
ASSY 3.0 8x300 mm	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81
		6,93		6,93		6,93		6,93		6,93		6,93		6,93
	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57
		4,26		4,26		4,26		4,26		4,26		4,26		4,26
ASSY 3.0 8x320 mm	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81
		6,93		6,93		6,93		6,93		6,93		6,93		6,93
	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57
		4,26		4,26		4,26		4,26		4,26		4,26		4,26
ASSY 3.0 8x340 mm	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81
		6,93		6,93		6,93		6,93		6,93		6,93		6,93
	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57
		4,26		4,26		4,26		4,26		4,26		4,26		4,26
ASSY 3.0 8x360 mm	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81
		6,93		6,93		6,93		6,93		6,93		6,93		6,93
	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57
		4,26		4,26		4,26		4,26		4,26		4,26		4,26
ASSY 3.0 8x380 mm	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81
		6,93		6,93		6,93		6,93		6,93		6,93		6,93
	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57
		4,26		4,26		4,26		4,26		4,26		4,26		4,26
ASSY 3.0 8x400 mm	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81
		6,93		6,93		6,93		6,93		6,93		6,93		6,93
	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57
		4,26		4,26		4,26		4,26		4,26		4,26		4,26

∅ **8,0 mm**



Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

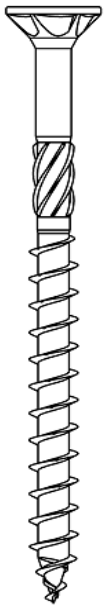
Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0

Type d x ℓ	Steel sheet thickness in [mm]													
	2		4		6		8		10		12		14	
ASSY 3.0 10x80 mm	5,00	4,49	5,00	4,37	5,00	4,67	5,00	5,40	5,00	6,13	5,00	6,03	5,00	5,93
		6,21		6,21		6,62		7,44		8,26		8,26		8,26
	3,08	2,76	3,08	2,69	3,08	2,88	3,08	3,32	3,08	3,77	3,08	3,71	3,08	3,65
		3,82		3,82		4,07		4,58		5,09		5,09		5,09
ASSY 3.0 10x100 mm	6,00	5,20	6,00	5,20	6,00	5,51	6,00	6,12	6,00	6,73	6,00	6,73	6,00	6,73
		6,46		6,46		6,87		7,69		8,51		8,51		8,51
	3,69	3,20	3,69	3,20	3,69	3,39	3,69	3,77	3,69	4,14	3,69	4,14	3,69	4,14
		3,97		3,97		4,23		4,73		5,24		5,24		5,24
ASSY 3.0 10x120 mm	8,00	5,70	8,00	5,70	8,00	6,01	8,00	6,62	8,00	7,23	8,00	7,23	8,00	7,23
		6,96		6,96		7,37		8,19		9,01		9,01		9,01
	4,92	3,51	4,92	3,51	4,92	3,70	4,92	4,07	4,92	4,45	4,92	4,45	4,92	4,45
		4,28		4,28		4,54		5,04		5,55		5,55		5,55
ASSY 3.0 10x140 mm	8,00	5,70	8,00	5,70	8,00	6,01	8,00	6,62	8,00	7,23	8,00	7,23	8,00	7,23
		6,96		6,96		7,37		8,19		9,01		9,01		9,01
	4,92	3,51	4,92	3,51	4,92	3,70	4,92	4,07	4,92	4,45	4,92	4,45	4,92	4,45
		4,28		4,28		4,54		5,04		5,55		5,55		5,55
ASSY 3.0 10x160 mm	10,00	6,20	10,00	6,20	10,00	6,51	10,00	7,12	10,00	7,73	10,00	7,73	10,00	7,73
		7,46		7,46		7,87		8,69		9,51		9,51		9,51
	6,15	3,82	6,15	3,82	6,15	4,00	6,15	4,38	6,15	4,76	6,15	4,76	6,15	4,76
		4,59		4,59		4,84		5,35		5,85		5,85		5,85
ASSY 3.0 10x180 mm	10,00	6,20	10,00	6,20	10,00	6,51	10,00	7,12	10,00	7,73	10,00	7,73	10,00	7,73
		7,46		7,46		7,87		8,69		9,51		9,51		9,51
	6,15	3,82	6,15	3,82	6,15	4,00	6,15	4,38	6,15	4,76	6,15	4,76	6,15	4,76
		4,59		4,59		4,84		5,35		5,85		5,85		5,85
ASSY 3.0 10x200 mm	10,00	6,20	10,00	6,20	10,00	6,51	10,00	7,12	10,00	7,73	10,00	7,73	10,00	7,73
		7,46		7,46		7,87		8,69		9,51		9,51		9,51
	6,15	3,82	6,15	3,82	6,15	4,00	6,15	4,38	6,15	4,76	6,15	4,76	6,15	4,76
		4,59		4,59		4,84		5,35		5,85		5,85		5,85
ASSY 3.0 10x220 mm	10,00	6,20	10,00	6,20	10,00	6,51	10,00	7,12	10,00	7,73	10,00	7,73	10,00	7,73
		7,46		7,46		7,87		8,69		9,51		9,51		9,51
	6,15	3,82	6,15	3,82	6,15	4,00	6,15	4,38	6,15	4,76	6,15	4,76	6,15	4,76
		4,59		4,59		4,84		5,35		5,85		5,85		5,85
ASSY 3.0 10x240 mm	10,00	6,20	10,00	6,20	10,00	6,51	10,00	7,12	10,00	7,73	10,00	7,73	10,00	7,73
		7,46		7,46		7,87		8,69		9,51		9,51		9,51
	6,15	3,82	6,15	3,82	6,15	4,00	6,15	4,38	6,15	4,76	6,15	4,76	6,15	4,76
		4,59		4,59		4,84		5,35		5,85		5,85		5,85

∅ **10,0 mm**



Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

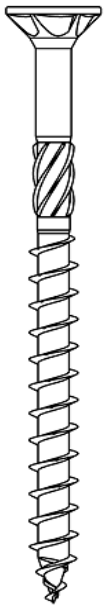
Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0

Type d x ℓ	Steel sheet thickness in [mm]													
	16		18		20		22		24		26		28	
ASSY 3.0 10x80 mm	5,00	5,84	5,00	5,74	5,00	5,65	5,00	5,55	5,00	5,46	5,00	5,37	5,00	5,29
		8,26		8,26		8,26		8,26		8,13		7,95		7,77
	3,08	3,59	3,08	3,53	3,08	3,47	3,08	3,42	3,08	3,36	3,08	3,31	3,08	3,25
		5,09		5,09		5,09		5,09		5,00		4,89		4,78
ASSY 3.0 10x100 mm	6,00	6,73	6,00	6,73	6,00	6,73	6,00	6,73	6,00	6,68	6,00	6,58	6,00	6,48
		8,51		8,51		8,51		8,51		8,51		8,51		8,51
	3,69	4,14	3,69	4,14	3,69	4,14	3,69	4,14	3,69	4,11	3,69	4,05	3,69	3,99
		5,24		5,24		5,24		5,24		5,24		5,24		5,24
ASSY 3.0 10x120 mm	8,00	7,23	8,00	7,23	8,00	7,23	8,00	7,23	8,00	7,23	8,00	7,23	8,00	7,23
		9,01		9,01		9,01		9,01		9,01		9,01		9,01
	4,92	4,45	4,92	4,45	4,92	4,45	4,92	4,45	4,92	4,45	4,92	4,45	4,92	4,45
		5,55		5,55		5,55		5,55		5,55		5,55		5,55
ASSY 3.0 10x140 mm	8,00	7,23	8,00	7,23	8,00	7,23	8,00	7,23	8,00	7,23	8,00	7,23	8,00	7,23
		9,01		9,01		9,01		9,01		9,01		9,01		9,01
	4,92	4,45	4,92	4,45	4,92	4,45	4,92	4,45	4,92	4,45	4,92	4,45	4,92	4,45
		5,55		5,55		5,55		5,55		5,55		5,55		5,55
ASSY 3.0 10x160 mm	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73
		9,51		9,51		9,51		9,51		9,51		9,51		9,51
	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76
		5,85		5,85		5,85		5,85		5,85		5,85		5,85
ASSY 3.0 10x180 mm	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73
		9,51		9,51		9,51		9,51		9,51		9,51		9,51
	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76
		5,85		5,85		5,85		5,85		5,85		5,85		5,85
ASSY 3.0 10x200 mm	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73
		9,51		9,51		9,51		9,51		9,51		9,51		9,51
	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76
		5,85		5,85		5,85		5,85		5,85		5,85		5,85
ASSY 3.0 10x220 mm	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73
		9,51		9,51		9,51		9,51		9,51		9,51		9,51
	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76
		5,85		5,85		5,85		5,85		5,85		5,85		5,85
ASSY 3.0 10x240 mm	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73
		9,51		9,51		9,51		9,51		9,51		9,51		9,51
	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76
		5,85		5,85		5,85		5,85		5,85		5,85		5,85

∅ **10,0 mm**



Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

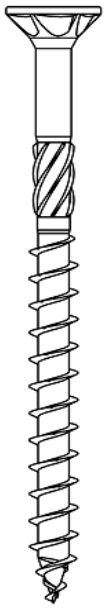
Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0

Type d x ℓ	Steel sheet thickness in [mm]													
	2		4		6		8		10		12		14	
ASSY 3.0 10x260 mm	10,00	6,20	10,00	6,20	10,00	6,51	10,00	7,12	10,00	7,73	10,00	7,73	10,00	7,73
		7,46		7,46		7,87		8,69		9,51		9,51		9,51
	6,15	3,82	6,15	3,82	6,15	4,00	6,15	4,38	6,15	4,76	6,15	4,76	6,15	4,76
		4,59		4,59		4,84		5,35		5,85		5,85		5,85
ASSY 3.0 10x280 mm	10,00	6,20	10,00	6,20	10,00	6,51	10,00	7,12	10,00	7,73	10,00	7,73	10,00	7,73
		7,46		7,46		7,87		8,69		9,51		9,51		9,51
	6,15	3,82	6,15	3,82	6,15	4,00	6,15	4,38	6,15	4,76	6,15	4,76	6,15	4,76
		4,59		4,59		4,84		5,35		5,85		5,85		5,85
ASSY 3.0 10x300 mm	10,00	6,20	10,00	6,20	10,00	6,51	10,00	7,12	10,00	7,73	10,00	7,73	10,00	7,73
		7,46		7,46		7,87		8,69		9,51		9,51		9,51
	6,15	3,82	6,15	3,82	6,15	4,00	6,15	4,38	6,15	4,76	6,15	4,76	6,15	4,76
		4,59		4,59		4,84		5,35		5,85		5,85		5,85
ASSY 3.0 10x320 mm	12,00	6,70	12,00	6,70	12,00	7,01	12,00	7,62	12,00	8,23	12,00	8,23	12,00	8,23
		7,96		7,96		8,37		9,19		10,01		10,01		10,01
	7,38	4,12	7,38	4,12	7,38	4,31	7,38	4,69	7,38	5,07	7,38	5,07	7,38	5,07
		4,90		4,90		5,15		5,66		6,16		6,16		6,16
ASSY 3.0 10x340 mm	12,00	6,70	12,00	6,70	12,00	7,01	12,00	7,62	12,00	8,23	12,00	8,23	12,00	8,23
		7,96		7,96		8,37		9,19		10,01		10,01		10,01
	7,38	4,12	7,38	4,12	7,38	4,31	7,38	4,69	7,38	5,07	7,38	5,07	7,38	5,07
		4,90		4,90		5,15		5,66		6,16		6,16		6,16
ASSY 3.0 10x360 mm	12,00	6,70	12,00	6,70	12,00	7,01	12,00	7,62	12,00	8,23	12,00	8,23	12,00	8,23
		7,96		7,96		8,37		9,19		10,01		10,01		10,01
	7,38	4,12	7,38	4,12	7,38	4,31	7,38	4,69	7,38	5,07	7,38	5,07	7,38	5,07
		4,90		4,90		5,15		5,66		6,16		6,16		6,16
ASSY 3.0 10x380 mm	12,00	6,70	12,00	6,70	12,00	7,01	12,00	7,62	12,00	8,23	12,00	8,23	12,00	8,23
		7,96		7,96		8,37		9,19		10,01		10,01		10,01
	7,38	4,12	7,38	4,12	7,38	4,31	7,38	4,69	7,38	5,07	7,38	5,07	7,38	5,07
		4,90		4,90		5,15		5,66		6,16		6,16		6,16
ASSY 3.0 10x400 mm	12,00	6,70	12,00	6,70	12,00	7,01	12,00	7,62	12,00	8,23	12,00	8,23	12,00	8,23
		7,96		7,96		8,37		9,19		10,01		10,01		10,01
	7,38	4,12	7,38	4,12	7,38	4,31	7,38	4,69	7,38	5,07	7,38	5,07	7,38	5,07
		4,90		4,90		5,15		5,66		6,16		6,16		6,16

∅ **10,0 mm**



Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

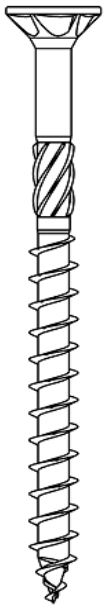
Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0

Type d x ℓ	Steel sheet thickness in [mm]													
	16		18		20		22		24		26		28	
ASSY 3.0 10x260 mm	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73
		9,51		9,51		9,51		9,51		9,51		9,51		9,51
	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76
		5,85		5,85		5,85		5,85		5,85		5,85		5,85
ASSY 3.0 10x280 mm	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73
		9,51		9,51		9,51		9,51		9,51		9,51		9,51
	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76
		5,85		5,85		5,85		5,85		5,85		5,85		5,85
ASSY 3.0 10x300 mm	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73
		9,51		9,51		9,51		9,51		9,51		9,51		9,51
	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76
		5,85		5,85		5,85		5,85		5,85		5,85		5,85
ASSY 3.0 10x320 mm	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23
		10,01		10,01		10,01		10,01		10,01		10,01		10,01
	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07
		6,16		6,16		6,16		6,16		6,16		6,16		6,16
ASSY 3.0 10x340 mm	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23
		10,01		10,01		10,01		10,01		10,01		10,01		10,01
	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07
		6,16		6,16		6,16		6,16		6,16		6,16		6,16
ASSY 3.0 10x360 mm	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23
		10,01		10,01		10,01		10,01		10,01		10,01		10,01
	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07
		6,16		6,16		6,16		6,16		6,16		6,16		6,16
ASSY 3.0 10x380 mm	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23
		10,01		10,01		10,01		10,01		10,01		10,01		10,01
	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07
		6,16		6,16		6,16		6,16		6,16		6,16		6,16
ASSY 3.0 10x400 mm	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23
		10,01		10,01		10,01		10,01		10,01		10,01		10,01
	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07
		6,16		6,16		6,16		6,16		6,16		6,16		6,16

∅ **10,0 mm**



Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 COMBINATION JOIST SCREW

Type d x ℓ	Steel sheet thickness in [mm]													
	1,5		2		2,5		3		4		6		8	
ASSY 3.0 combination joist screw 5x25 mm	1,20	1,50	1,20	1,49	1,20	1,47	1,20	1,46	1,20	1,44				
		1,97		1,95		1,93		1,91		1,87				
	0,74	0,92	0,74	0,91	0,74	0,91	0,74	0,90	0,74	0,89				
		1,21		1,20		1,19		1,17		1,15				
ASSY 3.0 combination joist screw 5x35 mm	1,80	1,92	1,80	1,91	1,80	1,89	1,80	1,88	1,80	1,85	1,74	1,78	1,62	1,69
		2,51		2,51		2,51		2,51		2,46		2,35		2,23
	1,11	1,18	1,11	1,17	1,11	1,16	1,11	1,15	1,11	1,14	1,07	1,09	1,00	1,04
		1,55		1,55		1,55		1,55		1,52		1,45		1,37
ASSY 3.0 combination joist screw 5x40 mm	2,10	2,15	2,10	2,13	2,10	2,12	2,10	2,10	2,10	2,07	2,04	2,00	1,92	1,91
		2,59		2,59		2,59		2,59		2,59		2,57		2,54
	1,29	1,32	1,29	1,31	1,29	1,30	1,29	1,29	1,29	1,27	1,26	1,23	1,18	1,17
		1,59		1,59		1,59		1,59		1,59		1,58		1,56
ASSY 3.0 combination joist screw 5x50 mm	2,70	2,34	2,70	2,34	2,70	2,34	2,70	2,34	2,70	2,34	2,64	2,32	2,52	2,29
		2,74		2,74		2,74		2,74		2,74		2,72		2,69
	1,66	1,44	1,66	1,44	1,66	1,44	1,66	1,44	1,66	1,44	1,62	1,43	1,55	1,41
		1,68		1,68		1,68		1,68		1,68		1,68		1,66
ASSY 3.0 combination joist screw 5x60 mm	3,12	2,44	3,12	2,44	3,12	2,44	3,12	2,44	3,12	2,44	3,12	2,44	3,12	2,44
		2,84		2,84		2,84		2,84		2,84		2,84		2,84
	1,92	1,50	1,92	1,50	1,92	1,50	1,92	1,50	1,92	1,50	1,92	1,50	1,92	1,50
		1,75		1,75		1,75		1,75		1,75		1,75		1,75
ASSY 3.0 combination joist screw 5x70 mm	3,72	2,59	3,72	2,59	3,72	2,59	3,72	2,59	3,72	2,59	3,72	2,59	3,72	2,59
		2,99		2,99		2,99		2,99		2,99		2,99		2,99
	2,29	1,60	2,29	1,60	2,29	1,60	2,29	1,60	2,29	1,60	2,29	1,60	2,29	1,60
		1,84		1,84		1,84		1,84		1,84		1,84		1,84

∅ **5,0 mm**

Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 COMBINATION JOIST SCREW

Type d x ℓ	Steel sheet thickness in [mm]													
	10		12		14		16		18		20		22	
ASSY 3.0 combination joist screw 5x25 mm														
ASSY 3.0 combination joist screw 5x35 mm	1,50	1,61	1,38	1,53	1,26	1,46								
		2,11		1,99		1,88								
	0,92	0,99	0,85	0,94	0,78	0,90								
		1,30		1,23		1,16								
ASSY 3.0 combination joist screw 5x40 mm	1,80	1,82	1,68	1,73	1,56	1,65	1,44	1,57	1,32	1,49	1,20	1,42		
		2,42		2,29		2,17		2,05		1,94		1,83		
	1,11	1,12	1,03	1,07	0,96	1,02	0,89	0,97	0,81	0,92	0,74	0,87		
		1,49		1,41		1,34		1,26		1,19		1,12		
ASSY 3.0 combination joist screw 5x50 mm	2,40	2,26	2,28	2,18	2,16	2,09	2,04	2,00	1,92	1,91	1,80	1,82	1,68	1,73
		2,66		2,63		2,60		2,57		2,54		2,42		2,29
	1,48	1,39	1,40	1,34	1,33	1,28	1,26	1,23	1,18	1,17	1,11	1,12	1,03	1,07
		1,64		1,62		1,60		1,58		1,56		1,49		1,41
ASSY 3.0 combination joist screw 5x60 mm	3,00	2,41	2,88	2,38	2,76	2,35	2,64	2,32	2,52	2,29	2,40	2,26	2,28	2,18
		2,81		2,78		2,75		2,72		2,69		2,66		2,63
	1,85	1,48	1,77	1,47	1,70	1,45	1,62	1,43	1,55	1,41	1,48	1,39	1,40	1,34
		1,73		1,71		1,69		1,68		1,66		1,64		1,62
ASSY 3.0 combination joist screw 5x70 mm	3,60	2,56	3,48	2,53	3,36	2,50	3,24	2,47	3,12	2,44	3,00	2,41	2,88	2,38
		2,96		2,93		2,90		2,87		2,84		2,81		2,78
	2,22	1,58	2,14	1,56	2,07	1,54	1,99	1,52	1,92	1,50	1,85	1,48	1,77	1,47
		1,82		1,80		1,79		1,77		1,75		1,73		1,71

∅ **5,0 mm**

Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

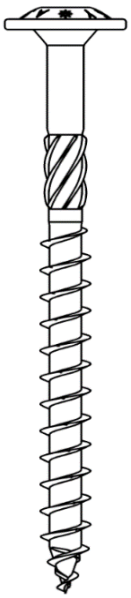
Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 SK

Type d x ℓ	Steel sheet thickness in [mm]													
	2		4		6		8		10		12		14	
ASSY 3.0 SK 5x50 mm	1,80	1,63	1,80	1,92	1,80	2,11	1,80	2,11	1,80	2,11	1,80	2,06	1,80	2,00
		1,91		2,27		2,51		2,51		2,51		2,51		2,51
	1,11	1,00	1,11	1,18	1,11	1,30	1,11	1,30	1,11	1,30	1,11	1,27	1,11	1,23
		1,17		1,40		1,55		1,55		1,55		1,55		1,55
ASSY 3.0 SK 5x60 mm	2,22	1,73	2,22	2,02	2,22	2,22	2,22	2,22	2,22	2,22	2,22	2,22	2,22	2,22
		2,01		2,38		2,62		2,62		2,62		2,62		2,62
	1,37	1,06	1,37	1,24	1,37	1,36	1,37	1,36	1,37	1,36	1,37	1,36	1,37	1,36
		1,24		1,46		1,61		1,61		1,61		1,61		1,61
ASSY 3.0 SK 5x70 mm	2,52	1,81	2,52	2,10	2,52	2,29	2,52	2,29	2,52	2,29	2,52	2,29	2,52	2,29
		2,09		2,45		2,69		2,69		2,69		2,69		2,69
	1,55	1,11	1,55	1,29	1,55	1,41	1,55	1,41	1,55	1,41	1,55	1,41	1,55	1,41
		1,29		1,51		1,66		1,66		1,66		1,66		1,66
ASSY 3.0 SK 5x80 mm	2,52	1,81	2,52	2,10	2,52	2,29	2,52	2,29	2,52	2,29	2,52	2,29	2,52	2,29
		2,09		2,45		2,69		2,69		2,69		2,69		2,69
	1,55	1,11	1,55	1,29	1,55	1,41	1,55	1,41	1,55	1,41	1,55	1,41	1,55	1,41
		1,29		1,51		1,66		1,66		1,66		1,66		1,66
ASSY 3.0 SK 5x90 mm	2,82	1,88	2,82	2,17	2,82	2,37	2,82	2,37	2,82	2,37	2,82	2,37	2,82	2,37
		2,16		2,53		2,77		2,77		2,77		2,77		2,77
	1,74	1,16	1,74	1,34	1,74	1,46	1,74	1,46	1,74	1,46	1,74	1,46	1,74	1,46
		1,33		1,55		1,70		1,70		1,70		1,70		1,70
ASSY 3.0 SK 5x100 mm	3,12	1,96	3,12	2,25	3,12	2,44	3,12	2,44	3,12	2,44	3,12	2,44	3,12	2,44
		2,24		2,60		2,84		2,84		2,84		2,84		2,84
	1,92	1,20	1,92	1,38	1,92	1,50	1,92	1,50	1,92	1,50	1,92	1,50	1,92	1,50
		1,38		1,60		1,75		1,75		1,75		1,75		1,75
ASSY 3.0 SK 5x110 mm	3,12	1,96	3,12	2,25	3,12	2,44	3,12	2,44	3,12	2,44	3,12	2,44	3,12	2,44
		2,24		2,60		2,84		2,84		2,84		2,84		2,84
	1,92	1,20	1,92	1,38	1,92	1,50	1,92	1,50	1,92	1,50	1,92	1,50	1,92	1,50
		1,38		1,60		1,75		1,75		1,75		1,75		1,75
ASSY 3.0 SK 5x120 mm	3,72	2,11	3,72	2,40	3,72	2,59	3,72	2,59	3,72	2,59	3,72	2,59	3,72	2,59
		2,39		2,75		2,99		2,99		2,99		2,99		2,99
	2,29	1,30	2,29	1,48	2,29	1,60	2,29	1,60	2,29	1,60	2,29	1,60	2,29	1,60
		1,47		1,69		1,84		1,84		1,84		1,84		1,84

∅ **5,0 mm**



Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

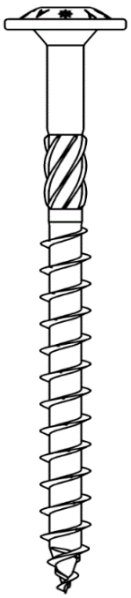
Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 SK

Type d x ℓ	Steel sheet thickness in [mm]													
	16		18		20		22		24		26		28	
ASSY 3.0 SK 5x50 mm	1,80	1,94	1,80	1,88	1,80	1,82	1,68	1,73	1,56	1,65	1,44	1,57	1,32	1,49
		2,51		2,51		2,42		2,29		2,17		2,05		1,94
	1,11	1,19	1,11	1,15	1,11	1,12	1,03	1,07	0,96	1,02	0,89	0,97	0,81	0,92
		1,55		1,55		1,49		1,41		1,34		1,26		1,19
ASSY 3.0 SK 5x60 mm	2,22	2,22	2,22	2,22	2,22	2,22	2,22	2,16	2,16	2,09	2,04	2,00	1,92	1,91
		2,62		2,62		2,62		2,62		2,60		2,57		2,54
	1,37	1,36	1,37	1,36	1,37	1,36	1,37	1,33	1,33	1,28	1,26	1,23	1,18	1,17
		1,61		1,61		1,61		1,61		1,60		1,58		1,56
ASSY 3.0 SK 5x70 mm	2,52	2,29	2,52	2,29	2,52	2,29	2,52	2,29	2,52	2,29	2,52	2,29	2,52	2,29
		2,69		2,69		2,69		2,69		2,69		2,69		2,69
	1,55	1,41	1,55	1,41	1,55	1,41	1,55	1,41	1,55	1,41	1,55	1,41	1,55	1,41
		1,66		1,66		1,66		1,66		1,66		1,66		1,66
ASSY 3.0 SK 5x80 mm	2,52	2,29	2,52	2,29	2,52	2,29	2,52	2,29	2,52	2,29	2,52	2,29	2,52	2,29
		2,69		2,69		2,69		2,69		2,69		2,69		2,69
	1,55	1,41	1,55	1,41	1,55	1,41	1,55	1,41	1,55	1,41	1,55	1,41	1,55	1,41
		1,66		1,66		1,66		1,66		1,66		1,66		1,66
ASSY 3.0 SK 5x90 mm	2,82	2,37	2,82	2,37	2,82	2,37	2,82	2,37	2,82	2,37	2,82	2,37	2,82	2,37
		2,77		2,77		2,77		2,77		2,77		2,77		2,77
	1,74	1,46	1,74	1,46	1,74	1,46	1,74	1,46	1,74	1,46	1,74	1,46	1,74	1,46
		1,70		1,70		1,70		1,70		1,70		1,70		1,70
ASSY 3.0 SK 5x100 mm	3,12	2,44	3,12	2,44	3,12	2,44	3,12	2,44	3,12	2,44	3,12	2,44	3,12	2,44
		2,84		2,84		2,84		2,84		2,84		2,84		2,84
	1,92	1,50	1,92	1,50	1,92	1,50	1,92	1,50	1,92	1,50	1,92	1,50	1,92	1,50
		1,75		1,75		1,75		1,75		1,75		1,75		1,75
ASSY 3.0 SK 5x110 mm	3,12	2,44	3,12	2,44	3,12	2,44	3,12	2,44	3,12	2,44	3,12	2,44	3,12	2,44
		2,84		2,84		2,84		2,84		2,84		2,84		2,84
	1,92	1,50	1,92	1,50	1,92	1,50	1,92	1,50	1,92	1,50	1,92	1,50	1,92	1,50
		1,75		1,75		1,75		1,75		1,75		1,75		1,75
ASSY 3.0 SK 5x120 mm	3,72	2,59	3,72	2,59	3,72	2,59	3,72	2,59	3,72	2,59	3,72	2,59	3,72	2,59
		2,99		2,99		2,99		2,99		2,99		2,99		2,99
	2,29	1,60	2,29	1,60	2,29	1,60	2,29	1,60	2,29	1,60	2,29	1,60	2,29	1,60
		1,84		1,84		1,84		1,84		1,84		1,84		1,84

∅ **5,0 mm**



Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

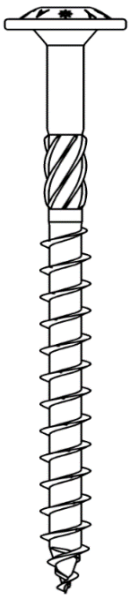
Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 SK

Type d x ℓ	Steel sheet thickness in [mm]													
	2		4		6		8		10		12		14	
ASSY 3.0 SK 6x60 mm	2,55	2,23	2,55	2,45	2,55	2,89	2,55	2,89	2,55	2,89	2,55	2,89	2,55	2,84
		2,66		2,93		3,49		3,49		3,49		3,49		3,49
	1,57	1,37	1,57	1,51	1,57	1,78	1,57	1,78	1,57	1,78	1,57	1,78	1,57	1,75
		1,63		1,81		2,15		2,15		2,15		2,15		2,15
ASSY 3.0 SK 6x70 mm	2,90	2,31	2,90	2,53	2,90	2,97	2,90	2,97	2,90	2,97	2,90	2,97	2,90	2,97
		2,74		3,02		3,58		3,58		3,58		3,58		3,58
	1,78	1,42	1,78	1,56	1,78	1,83	1,78	1,83	1,78	1,83	1,78	1,83	1,78	1,83
		1,69		1,86		2,20		2,20		2,20		2,20		2,20
ASSY 3.0 SK 6x80 mm	3,45	2,45	3,45	2,67	3,45	3,11	3,45	3,11	3,45	3,11	3,45	3,11	3,45	3,11
		2,88		3,16		3,71		3,71		3,71		3,71		3,71
	2,12	1,51	2,12	1,64	2,12	1,91	2,12	1,91	2,12	1,91	2,12	1,91	2,12	1,91
		1,77		1,94		2,29		2,29		2,29		2,29		2,29
ASSY 3.0 SK 6x90 mm	3,45	2,45	3,45	2,67	3,45	3,11	3,45	3,11	3,45	3,11	3,45	3,11	3,45	3,11
		2,88		3,16		3,71		3,71		3,71		3,71		3,71
	2,12	1,51	2,12	1,64	2,12	1,91	2,12	1,91	2,12	1,91	2,12	1,91	2,12	1,91
		1,77		1,94		2,29		2,29		2,29		2,29		2,29
ASSY 3.0 SK 6x100 mm	4,14	2,62	4,14	2,84	4,14	3,28	4,14	3,28	4,14	3,28	4,14	3,28	4,14	3,28
		3,05		3,33		3,89		3,89		3,89		3,89		3,89
	2,55	1,62	2,55	1,75	2,55	2,02	2,55	2,02	2,55	2,02	2,55	2,02	2,55	2,02
		1,88		2,05		2,39		2,39		2,39		2,39		2,39
ASSY 3.0 SK 6x110 mm	4,83	2,80	4,83	3,02	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46
		3,22		3,50		4,06		4,06		4,06		4,06		4,06
	2,97	1,72	2,97	1,86	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13
		1,98		2,16		2,50		2,50		2,50		2,50		2,50
ASSY 3.0 SK 6x120 mm	4,83	2,80	4,83	3,02	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46
		3,22		3,50		4,06		4,06		4,06		4,06		4,06
	2,97	1,72	2,97	1,86	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13
		1,98		2,16		2,50		2,50		2,50		2,50		2,50
ASSY 3.0 SK 6x140 mm	4,83	2,80	4,83	3,02	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46
		3,22		3,50		4,06		4,06		4,06		4,06		4,06
	2,97	1,72	2,97	1,86	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13
		1,98		2,16		2,50		2,50		2,50		2,50		2,50

∅ **6,0 mm**



Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

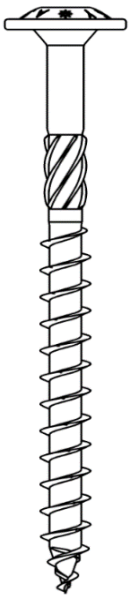
Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 SK

Type d x ℓ	Steel sheet thickness in [mm]													
	16		18		20		22		24		26		28	
ASSY 3.0 SK 6x60 mm	2,55	2,77	2,55	2,70	2,55	2,63	2,55	2,56	2,48	2,48	2,35	2,38	2,21	2,29
		3,49		3,49		3,49		3,49		3,40		3,25		3,11
	1,57	1,70	1,57	1,66	1,57	1,62	1,57	1,58	1,53	1,53	1,44	1,47	1,36	1,41
		2,15		2,15		2,15		2,15		2,09		2,00		1,91
ASSY 3.0 SK 6x70 mm	2,90	2,97	2,90	2,97	2,90	2,97	2,90	2,97	2,90	2,93	2,90	2,86	2,90	2,79
		3,58		3,58		3,58		3,58		3,58		3,58		3,58
	1,78	1,83	1,78	1,83	1,78	1,83	1,78	1,83	1,78	1,80	1,78	1,76	1,78	1,71
		2,20		2,20		2,20		2,20		2,20		2,20		2,20
ASSY 3.0 SK 6x80 mm	3,45	3,11	3,45	3,11	3,45	3,11	3,45	3,11	3,45	3,11	3,45	3,11	3,45	3,11
		3,71		3,71		3,71		3,71		3,71		3,71		3,71
	2,12	1,91	2,12	1,91	2,12	1,91	2,12	1,91	2,12	1,91	2,12	1,91	2,12	1,91
		2,29		2,29		2,29		2,29		2,29		2,29		2,29
ASSY 3.0 SK 6x90 mm	3,45	3,11	3,45	3,11	3,45	3,11	3,45	3,11	3,45	3,11	3,45	3,11	3,45	3,11
		3,71		3,71		3,71		3,71		3,71		3,71		3,71
	2,12	1,91	2,12	1,91	2,12	1,91	2,12	1,91	2,12	1,91	2,12	1,91	2,12	1,91
		2,29		2,29		2,29		2,29		2,29		2,29		2,29
ASSY 3.0 SK 6x100 mm	4,14	3,28	4,14	3,28	4,14	3,28	4,14	3,28	4,14	3,28	4,14	3,28	4,14	3,28
		3,89		3,89		3,89		3,89		3,89		3,89		3,89
	2,55	2,02	2,55	2,02	2,55	2,02	2,55	2,02	2,55	2,02	2,55	2,02	2,55	2,02
		2,39		2,39		2,39		2,39		2,39		2,39		2,39
ASSY 3.0 SK 6x110 mm	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46
		4,06		4,06		4,06		4,06		4,06		4,06		4,06
	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13
		2,50		2,50		2,50		2,50		2,50		2,50		2,50
ASSY 3.0 SK 6x120 mm	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46
		4,06		4,06		4,06		4,06		4,06		4,06		4,06
	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13
		2,50		2,50		2,50		2,50		2,50		2,50		2,50
ASSY 3.0 SK 6x140 mm	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46
		4,06		4,06		4,06		4,06		4,06		4,06		4,06
	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13
		2,50		2,50		2,50		2,50		2,50		2,50		2,50

∅ **6,0 mm**



Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

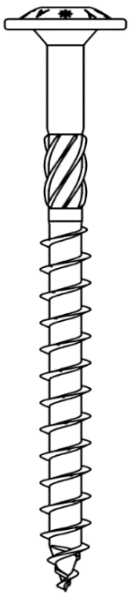
Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 SK

Type d x ℓ	Steel sheet thickness in [mm]													
	2		4		6		8		10		12		14	
ASSY 3.0 SK 6x160 mm	4,83	2,80	4,83	3,02	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46
		3,22		3,50		4,06		4,06		4,06		4,06		4,06
	2,97	1,72	2,97	1,86	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13
		1,98		2,16		2,50		2,50		2,50		2,50		2,50
ASSY 3.0 SK 6x180 mm	4,83	2,80	4,83	3,02	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46
		3,22		3,50		4,06		4,06		4,06		4,06		4,06
	2,97	1,72	2,97	1,86	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13
		1,98		2,16		2,50		2,50		2,50		2,50		2,50
ASSY 3.0 SK 6x200 mm	4,83	2,80	4,83	3,02	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46
		3,22		3,50		4,06		4,06		4,06		4,06		4,06
	2,97	1,72	2,97	1,86	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13
		1,98		2,16		2,50		2,50		2,50		2,50		2,50
ASSY 3.0 SK 6x220 mm	4,83	2,80	4,83	3,02	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46
		3,22		3,50		4,06		4,06		4,06		4,06		4,06
	2,97	1,72	2,97	1,86	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13
		1,98		2,16		2,50		2,50		2,50		2,50		2,50
ASSY 3.0 SK 6x240 mm	4,83	2,80	4,83	3,02	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46
		3,22		3,50		4,06		4,06		4,06		4,06		4,06
	2,97	1,72	2,97	1,86	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13
		1,98		2,16		2,50		2,50		2,50		2,50		2,50
ASSY 3.0 SK 6x260 mm	4,83	2,80	4,83	3,02	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46
		3,22		3,50		4,06		4,06		4,06		4,06		4,06
	2,97	1,72	2,97	1,86	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13
		1,98		2,16		2,50		2,50		2,50		2,50		2,50
ASSY 3.0 SK 6x280 mm	4,83	2,80	4,83	3,02	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46
		3,22		3,50		4,06		4,06		4,06		4,06		4,06
	2,97	1,72	2,97	1,86	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13
		1,98		2,16		2,50		2,50		2,50		2,50		2,50
ASSY 3.0 SK 6x300 mm	4,83	2,80	4,83	3,02	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46
		3,22		3,50		4,06		4,06		4,06		4,06		4,06
	2,97	1,72	2,97	1,86	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13
		1,98		2,16		2,50		2,50		2,50		2,50		2,50

∅ **6,0 mm**



Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

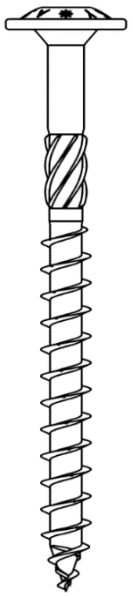
Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 SK

Type d x ℓ	Steel sheet thickness in [mm]													
	16		18		20		22		24		26		28	
ASSY 3.0 SK 6x160 mm	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46
		4,06		4,06		4,06		4,06		4,06		4,06		4,06
	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13
		2,50		2,50		2,50		2,50		2,50		2,50		2,50
ASSY 3.0 SK 6x180 mm	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46
		4,06		4,06		4,06		4,06		4,06		4,06		4,06
	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13
		2,50		2,50		2,50		2,50		2,50		2,50		2,50
ASSY 3.0 SK 6x200 mm	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46
		4,06		4,06		4,06		4,06		4,06		4,06		4,06
	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13
		2,50		2,50		2,50		2,50		2,50		2,50		2,50
ASSY 3.0 SK 6x220 mm	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46
		4,06		4,06		4,06		4,06		4,06		4,06		4,06
	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13
		2,50		2,50		2,50		2,50		2,50		2,50		2,50
ASSY 3.0 SK 6x240 mm	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46
		4,06		4,06		4,06		4,06		4,06		4,06		4,06
	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13
		2,50		2,50		2,50		2,50		2,50		2,50		2,50
ASSY 3.0 SK 6x260 mm	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46
		4,06		4,06		4,06		4,06		4,06		4,06		4,06
	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13
		2,50		2,50		2,50		2,50		2,50		2,50		2,50
ASSY 3.0 SK 6x280 mm	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46
		4,06		4,06		4,06		4,06		4,06		4,06		4,06
	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13
		2,50		2,50		2,50		2,50		2,50		2,50		2,50
ASSY 3.0 SK 6x300 mm	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46	4,83	3,46
		4,06		4,06		4,06		4,06		4,06		4,06		4,06
	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13	2,97	2,13
		2,50		2,50		2,50		2,50		2,50		2,50		2,50

∅ **6,0 mm**



Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

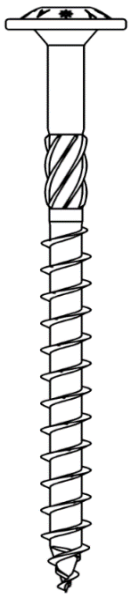
Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 SK

Type d x ℓ	Steel sheet thickness in [mm]													
	2		4		6		8		10		12		14	
ASSY 3.0 SK 8x60 mm	4,40	2,85	4,40	2,76	4,40	3,51	4,40	4,28	4,40	4,20	4,22	4,07	4,05	3,95
		4,44		4,44		5,14		5,83		5,83		5,78		5,64
	2,71	1,76	2,71	1,70	2,71	2,16	2,71	2,63	2,71	2,58	2,60	2,51	2,49	2,43
		2,73		2,73		3,16		3,59		3,59		3,56		3,47
ASSY 3.0 SK 8x80 mm	4,40	3,65	4,40	3,65	4,40	4,17	4,40	4,71	4,40	4,71	4,40	4,71	4,40	4,71
		4,44		4,44		5,14		5,83		5,83		5,83		5,83
	2,71	2,25	2,71	2,25	2,71	2,57	2,71	2,90	2,71	2,90	2,71	2,90	2,71	2,90
		2,73		2,73		3,16		3,59		3,59		3,59		3,59
ASSY 3.0 SK 8x100 mm	5,28	3,87	5,28	3,87	5,28	4,40	5,28	4,93	5,28	4,93	5,28	4,93	5,28	4,93
		4,66		4,66		5,36		6,05		6,05		6,05		6,05
	3,25	2,38	3,25	2,38	3,25	2,71	3,25	3,03	3,25	3,03	3,25	3,03	3,25	3,03
		2,87		2,87		3,30		3,72		3,72		3,72		3,72
ASSY 3.0 SK 8x120 mm	7,04	4,31	7,04	4,31	7,04	4,84	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37
		5,10		5,10		5,80		6,49		6,49		6,49		6,49
	4,33	2,65	4,33	2,65	4,33	2,98	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30
		3,14		3,14		3,57		3,99		3,99		3,99		3,99
ASSY 3.0 SK 8x140 mm	7,04	4,31	7,04	4,31	7,04	4,84	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37
		5,10		5,10		5,80		6,49		6,49		6,49		6,49
	4,33	2,65	4,33	2,65	4,33	2,98	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30
		3,14		3,14		3,57		3,99		3,99		3,99		3,99
ASSY 3.0 SK 8x160 mm	7,04	4,31	7,04	4,31	7,04	4,84	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37
		5,10		5,10		5,80		6,49		6,49		6,49		6,49
	4,33	2,65	4,33	2,65	4,33	2,98	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30
		3,14		3,14		3,57		3,99		3,99		3,99		3,99
ASSY 3.0 SK 8x180 mm	7,04	4,31	7,04	4,31	7,04	4,84	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37
		5,10		5,10		5,80		6,49		6,49		6,49		6,49
	4,33	2,65	4,33	2,65	4,33	2,98	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30
		3,14		3,14		3,57		3,99		3,99		3,99		3,99
ASSY 3.0 SK 8x200 mm	7,04	4,31	7,04	4,31	7,04	4,84	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37
		5,10		5,10		5,80		6,49		6,49		6,49		6,49
	4,33	2,65	4,33	2,65	4,33	2,98	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30
		3,14		3,14		3,57		3,99		3,99		3,99		3,99
ASSY 3.0 SK 8x220 mm	8,80	4,75	8,80	4,75	8,80	5,28	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81
		5,54		5,54		6,24		6,93		6,93		6,93		6,93
	5,42	2,92	5,42	2,92	5,42	3,25	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57
		3,41		3,41		3,84		4,26		4,26		4,26		4,26

∅ **8,0 mm**



Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

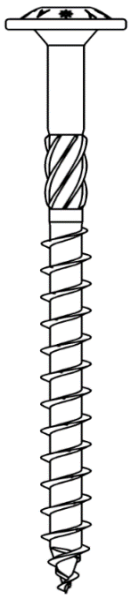
Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 SK

Type d x ℓ	Steel sheet thickness in [mm]													
	16		18		20		22		24		26		28	
ASSY 3.0 SK 8x60 mm	3,87	3,83	3,70	3,71	3,52	3,59	3,34	3,48	3,17	3,37	2,99	3,26	2,82	3,16
		5,45		5,26		5,07		4,88		4,70		4,52		4,35
	2,38	2,36	2,27	2,28	2,17	2,21	2,06	2,14	1,95	2,07	1,84	2,01	1,73	1,94
		3,35		3,23		3,12		3,00		2,89		2,78		2,68
ASSY 3.0 SK 8x80 mm	4,40	4,71	4,40	4,71	4,40	4,62	4,40	4,53	4,40	4,45	4,40	4,36	4,40	4,28
		5,83		5,83		5,83		5,83		5,83		5,83		5,83
	2,71	2,90	2,71	2,90	2,71	2,84	2,71	2,79	2,71	2,74	2,71	2,68	2,71	2,63
		3,59		3,59		3,59		3,59		3,59		3,59		3,59
ASSY 3.0 SK 8x100 mm	5,28	4,93	5,28	4,93	5,28	4,93	5,28	4,93	5,28	4,93	5,28	4,93	5,28	4,93
		6,05		6,05		6,05		6,05		6,05		6,05		6,05
	3,25	3,03	3,25	3,03	3,25	3,03	3,25	3,03	3,25	3,03	3,25	3,03	3,25	3,03
		3,72		3,72		3,72		3,72		3,72		3,72		3,72
ASSY 3.0 SK 8x120 mm	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37
		6,49		6,49		6,49		6,49		6,49		6,49		6,49
	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30
		3,99		3,99		3,99		3,99		3,99		3,99		3,99
ASSY 3.0 SK 8x140 mm	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37
		6,49		6,49		6,49		6,49		6,49		6,49		6,49
	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30
		3,99		3,99		3,99		3,99		3,99		3,99		3,99
ASSY 3.0 SK 8x160 mm	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37
		6,49		6,49		6,49		6,49		6,49		6,49		6,49
	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30
		3,99		3,99		3,99		3,99		3,99		3,99		3,99
ASSY 3.0 SK 8x180 mm	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37
		6,49		6,49		6,49		6,49		6,49		6,49		6,49
	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30
		3,99		3,99		3,99		3,99		3,99		3,99		3,99
ASSY 3.0 SK 8x200 mm	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37
		6,49		6,49		6,49		6,49		6,49		6,49		6,49
	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30
		3,99		3,99		3,99		3,99		3,99		3,99		3,99
ASSY 3.0 SK 8x220 mm	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81
		6,93		6,93		6,93		6,93		6,93		6,93		6,93
	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57
		4,26		4,26		4,26		4,26		4,26		4,26		4,26

∅ **8,0 mm**



Calculation assumptions

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Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

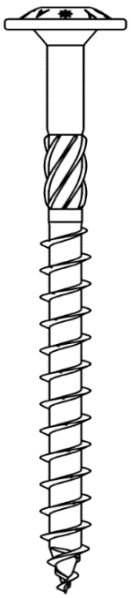
Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 SK

Type d x ℓ	Steel sheet thickness in [mm]													
	2		4		6		8		10		12		14	
ASSY 3.0 SK 8x240 mm	8,80	4,75	8,80	4,75	8,80	5,28	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81
		5,54		5,54		6,24		6,93		6,93		6,93		6,93
	5,42	2,92	5,42	2,92	5,42	3,25	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57
		3,41		3,41		3,84		4,26		4,26		4,26		4,26
ASSY 3.0 SK 8x260 mm	8,80	4,75	8,80	4,75	8,80	5,28	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81
		5,54		5,54		6,24		6,93		6,93		6,93		6,93
	5,42	2,92	5,42	2,92	5,42	3,25	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57
		3,41		3,41		3,84		4,26		4,26		4,26		4,26
ASSY 3.0 SK 8x280 mm	8,80	4,75	8,80	4,75	8,80	5,28	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81
		5,54		5,54		6,24		6,93		6,93		6,93		6,93
	5,42	2,92	5,42	2,92	5,42	3,25	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57
		3,41		3,41		3,84		4,26		4,26		4,26		4,26
ASSY 3.0 SK 8x300 mm	8,80	4,75	8,80	4,75	8,80	5,28	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81
		5,54		5,54		6,24		6,93		6,93		6,93		6,93
	5,42	2,92	5,42	2,92	5,42	3,25	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57
		3,41		3,41		3,84		4,26		4,26		4,26		4,26
ASSY 3.0 SK 8x320 mm	8,80	4,75	8,80	4,75	8,80	5,28	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81
		5,54		5,54		6,24		6,93		6,93		6,93		6,93
	5,42	2,92	5,42	2,92	5,42	3,25	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57
		3,41		3,41		3,84		4,26		4,26		4,26		4,26
ASSY 3.0 SK 8x340 mm	8,80	4,75	8,80	4,75	8,80	5,28	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81
		5,54		5,54		6,24		6,93		6,93		6,93		6,93
	5,42	2,92	5,42	2,92	5,42	3,25	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57
		3,41		3,41		3,84		4,26		4,26		4,26		4,26
ASSY 3.0 SK 8x360 mm	8,80	4,75	8,80	4,75	8,80	5,28	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81
		5,54		5,54		6,24		6,93		6,93		6,93		6,93
	5,42	2,92	5,42	2,92	5,42	3,25	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57
		3,41		3,41		3,84		4,26		4,26		4,26		4,26
ASSY 3.0 SK 8x380 mm	8,80	4,75	8,80	4,75	8,80	5,28	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81
		5,54		5,54		6,24		6,93		6,93		6,93		6,93
	5,42	2,92	5,42	2,92	5,42	3,25	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57
		3,41		3,41		3,84		4,26		4,26		4,26		4,26
ASSY 3.0 SK 8x400 mm	8,80	4,75	8,80	4,75	8,80	5,28	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81
		5,54		5,54		6,24		6,93		6,93		6,93		6,93
	5,42	2,92	5,42	2,92	5,42	3,25	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57
		3,41		3,41		3,84		4,26		4,26		4,26		4,26

∅ **8,0 mm**



Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

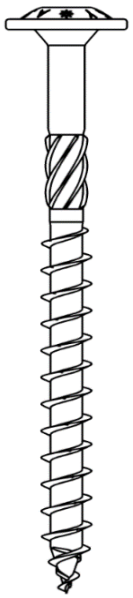
Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 SK

Type d x ℓ	Steel sheet thickness in [mm]													
	16		18		20		22		24		26		28	
ASSY 3.0 SK 8x240 mm	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81
		6,93		6,93		6,93		6,93		6,93		6,93		6,93
	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57
		4,26		4,26		4,26		4,26		4,26		4,26		4,26
ASSY 3.0 SK 8x260 mm	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81
		6,93		6,93		6,93		6,93		6,93		6,93		6,93
	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57
		4,26		4,26		4,26		4,26		4,26		4,26		4,26
ASSY 3.0 SK 8x280 mm	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81
		6,93		6,93		6,93		6,93		6,93		6,93		6,93
	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57
		4,26		4,26		4,26		4,26		4,26		4,26		4,26
ASSY 3.0 SK 8x300 mm	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81
		6,93		6,93		6,93		6,93		6,93		6,93		6,93
	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57
		4,26		4,26		4,26		4,26		4,26		4,26		4,26
ASSY 3.0 SK 8x320 mm	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81
		6,93		6,93		6,93		6,93		6,93		6,93		6,93
	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57
		4,26		4,26		4,26		4,26		4,26		4,26		4,26
ASSY 3.0 SK 8x340 mm	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81
		6,93		6,93		6,93		6,93		6,93		6,93		6,93
	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57
		4,26		4,26		4,26		4,26		4,26		4,26		4,26
ASSY 3.0 SK 8x360 mm	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81
		6,93		6,93		6,93		6,93		6,93		6,93		6,93
	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57
		4,26		4,26		4,26		4,26		4,26		4,26		4,26
ASSY 3.0 SK 8x380 mm	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81
		6,93		6,93		6,93		6,93		6,93		6,93		6,93
	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57
		4,26		4,26		4,26		4,26		4,26		4,26		4,26
ASSY 3.0 SK 8x400 mm	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81
		6,93		6,93		6,93		6,93		6,93		6,93		6,93
	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57
		4,26		4,26		4,26		4,26		4,26		4,26		4,26

∅ **8,0 mm**



Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

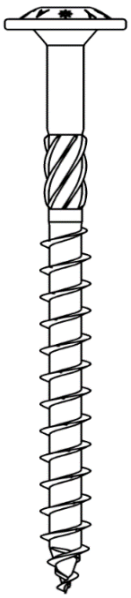
Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 SK

Type d x ℓ	Steel sheet thickness in [mm]													
	2		4		6		8		10		12		14	
ASSY 3.0 SK 8x420 mm	8,80	4,75	8,80	4,75	8,80	5,28	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81
		5,54		5,54		6,24		6,93		6,93		6,93		6,93
	5,42	2,92	5,42	2,92	5,42	3,25	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57
		3,41		3,41		3,84		4,26		4,26		4,26		4,26
ASSY 3.0 SK 8x440 mm	8,80	4,75	8,80	4,75	8,80	5,28	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81
		5,54		5,54		6,24		6,93		6,93		6,93		6,93
	5,42	2,92	5,42	2,92	5,42	3,25	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57
		3,41		3,41		3,84		4,26		4,26		4,26		4,26
ASSY 3.0 SK 8x460 mm	8,80	4,75	8,80	4,75	8,80	5,28	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81
		5,54		5,54		6,24		6,93		6,93		6,93		6,93
	5,42	2,92	5,42	2,92	5,42	3,25	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57
		3,41		3,41		3,84		4,26		4,26		4,26		4,26
ASSY 3.0 SK 8x480 mm	8,80	4,75	8,80	4,75	8,80	5,28	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81
		5,54		5,54		6,24		6,93		6,93		6,93		6,93
	5,42	2,92	5,42	2,92	5,42	3,25	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57
		3,41		3,41		3,84		4,26		4,26		4,26		4,26
ASSY 3.0 SK 8x500 mm	8,80	4,75	8,80	4,75	8,80	5,28	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81
		5,54		5,54		6,24		6,93		6,93		6,93		6,93
	5,42	2,92	5,42	2,92	5,42	3,25	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57
		3,41		3,41		3,84		4,26		4,26		4,26		4,26
ASSY 3.0 SK 8x520 mm	8,80	4,75	8,80	4,75	8,80	5,28	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81
		5,54		5,54		6,24		6,93		6,93		6,93		6,93
	5,42	2,92	5,42	2,92	5,42	3,25	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57
		3,41		3,41		3,84		4,26		4,26		4,26		4,26
ASSY 3.0 SK 8x540 mm	8,80	4,75	8,80	4,75	8,80	5,28	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81
		5,54		5,54		6,24		6,93		6,93		6,93		6,93
	5,42	2,92	5,42	2,92	5,42	3,25	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57
		3,41		3,41		3,84		4,26		4,26		4,26		4,26
ASSY 3.0 SK 8x560 mm	8,80	4,75	8,80	4,75	8,80	5,28	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81
		5,54		5,54		6,24		6,93		6,93		6,93		6,93
	5,42	2,92	5,42	2,92	5,42	3,25	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57
		3,41		3,41		3,84		4,26		4,26		4,26		4,26

∅ **8,0 mm**



Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

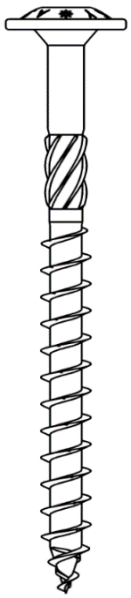
Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 SK

Type d x ℓ	Steel sheet thickness in [mm]													
	16		18		20		22		24		26		28	
ASSY 3.0 SK 8x420 mm	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81
		6,93		6,93		6,93		6,93		6,93		6,93		6,93
	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57
		4,26		4,26		4,26		4,26		4,26		4,26		4,26
ASSY 3.0 SK 8x440 mm	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81
		6,93		6,93		6,93		6,93		6,93		6,93		6,93
	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57
		4,26		4,26		4,26		4,26		4,26		4,26		4,26
ASSY 3.0 SK 8x460 mm	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81
		6,93		6,93		6,93		6,93		6,93		6,93		6,93
	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57
		4,26		4,26		4,26		4,26		4,26		4,26		4,26
ASSY 3.0 SK 8x480 mm	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81
		6,93		6,93		6,93		6,93		6,93		6,93		6,93
	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57
		4,26		4,26		4,26		4,26		4,26		4,26		4,26
ASSY 3.0 SK 8x500 mm	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81
		6,93		6,93		6,93		6,93		6,93		6,93		6,93
	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57
		4,26		4,26		4,26		4,26		4,26		4,26		4,26
ASSY 3.0 SK 8x520 mm	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81
		6,93		6,93		6,93		6,93		6,93		6,93		6,93
	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57
		4,26		4,26		4,26		4,26		4,26		4,26		4,26
ASSY 3.0 SK 8x540 mm	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81
		6,93		6,93		6,93		6,93		6,93		6,93		6,93
	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57
		4,26		4,26		4,26		4,26		4,26		4,26		4,26
ASSY 3.0 SK 8x560 mm	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81
		6,93		6,93		6,93		6,93		6,93		6,93		6,93
	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57
		4,26		4,26		4,26		4,26		4,26		4,26		4,26

∅ **8,0 mm**



Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

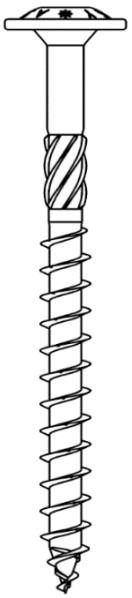
Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 SK

Type d x ℓ	Steel sheet thickness in [mm]													
	2		4		6		8		10		12		14	
ASSY 3.0 SK 10x100 mm	6,00	5,20	6,00	5,20	6,00	5,51	6,00	6,12	6,00	6,73	6,00	6,73	6,00	6,73
		6,46		6,46		6,87		7,69		8,51		8,51		8,51
	3,69	3,20	3,69	3,20	3,69	3,39	3,69	3,77	3,69	4,14	3,69	4,14	3,69	4,14
		3,97		3,97		4,23		4,73		5,24		5,24		5,24
ASSY 3.0 SK 10x120 mm	8,00	5,70	8,00	5,70	8,00	6,01	8,00	6,62	8,00	7,23	8,00	7,23	8,00	7,23
		6,96		6,96		7,37		8,19		9,01		9,01		9,01
	4,92	3,51	4,92	3,51	4,92	3,70	4,92	4,07	4,92	4,45	4,92	4,45	4,92	4,45
		4,28		4,28		4,54		5,04		5,55		5,55		5,55
ASSY 3.0 SK 10x140 mm	8,00	5,70	8,00	5,70	8,00	6,01	8,00	6,62	8,00	7,23	8,00	7,23	8,00	7,23
		6,96		6,96		7,37		8,19		9,01		9,01		9,01
	4,92	3,51	4,92	3,51	4,92	3,70	4,92	4,07	4,92	4,45	4,92	4,45	4,92	4,45
		4,28		4,28		4,54		5,04		5,55		5,55		5,55
ASSY 3.0 SK 10x160 mm	10,00	6,20	10,00	6,20	10,00	6,51	10,00	7,12	10,00	7,73	10,00	7,73	10,00	7,73
		7,46		7,46		7,87		8,69		9,51		9,51		9,51
	6,15	3,82	6,15	3,82	6,15	4,00	6,15	4,38	6,15	4,76	6,15	4,76	6,15	4,76
		4,59		4,59		4,84		5,35		5,85		5,85		5,85
ASSY 3.0 SK 10x180 mm	10,00	6,20	10,00	6,20	10,00	6,51	10,00	7,12	10,00	7,73	10,00	7,73	10,00	7,73
		7,46		7,46		7,87		8,69		9,51		9,51		9,51
	6,15	3,82	6,15	3,82	6,15	4,00	6,15	4,38	6,15	4,76	6,15	4,76	6,15	4,76
		4,59		4,59		4,84		5,35		5,85		5,85		5,85
ASSY 3.0 SK 10x200 mm	10,00	6,20	10,00	6,20	10,00	6,51	10,00	7,12	10,00	7,73	10,00	7,73	10,00	7,73
		7,46		7,46		7,87		8,69		9,51		9,51		9,51
	6,15	3,82	6,15	3,82	6,15	4,00	6,15	4,38	6,15	4,76	6,15	4,76	6,15	4,76
		4,59		4,59		4,84		5,35		5,85		5,85		5,85
ASSY 3.0 SK 10x220 mm	10,00	6,20	10,00	6,20	10,00	6,51	10,00	7,12	10,00	7,73	10,00	7,73	10,00	7,73
		7,46		7,46		7,87		8,69		9,51		9,51		9,51
	6,15	3,82	6,15	3,82	6,15	4,00	6,15	4,38	6,15	4,76	6,15	4,76	6,15	4,76
		4,59		4,59		4,84		5,35		5,85		5,85		5,85
ASSY 3.0 SK 10x240 mm	10,00	6,20	10,00	6,20	10,00	6,51	10,00	7,12	10,00	7,73	10,00	7,73	10,00	7,73
		7,46		7,46		7,87		8,69		9,51		9,51		9,51
	6,15	3,82	6,15	3,82	6,15	4,00	6,15	4,38	6,15	4,76	6,15	4,76	6,15	4,76
		4,59		4,59		4,84		5,35		5,85		5,85		5,85

∅ **10,0 mm**



Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

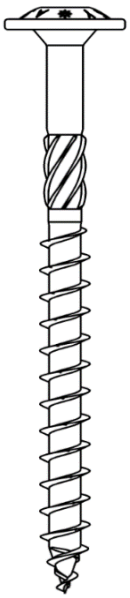
Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 SK

Type d x ℓ	Steel sheet thickness in [mm]													
	16		18		20		22		24		26		28	
ASSY 3.0 SK 10x100 mm	6,00	6,73	6,00	6,73	6,00	6,73	6,00	6,73	6,00	6,68	6,00	6,58	6,00	6,48
		8,51		8,51		8,51		8,51		8,51		8,51		8,51
	3,69	4,14	3,69	4,14	3,69	4,14	3,69	4,14	3,69	4,11	3,69	4,05	3,69	3,99
		5,24		5,24		5,24		5,24		5,24		5,24		5,24
ASSY 3.0 SK 10x120 mm	8,00	7,23	8,00	7,23	8,00	7,23	8,00	7,23	8,00	7,23	8,00	7,23	8,00	7,23
		9,01		9,01		9,01		9,01		9,01		9,01		9,01
	4,92	4,45	4,92	4,45	4,92	4,45	4,92	4,45	4,92	4,45	4,92	4,45	4,92	4,45
		5,55		5,55		5,55		5,55		5,55		5,55		5,55
ASSY 3.0 SK 10x140 mm	8,00	7,23	8,00	7,23	8,00	7,23	8,00	7,23	8,00	7,23	8,00	7,23	8,00	7,23
		9,01		9,01		9,01		9,01		9,01		9,01		9,01
	4,92	4,45	4,92	4,45	4,92	4,45	4,92	4,45	4,92	4,45	4,92	4,45	4,92	4,45
		5,55		5,55		5,55		5,55		5,55		5,55		5,55
ASSY 3.0 SK 10x160 mm	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73
		9,51		9,51		9,51		9,51		9,51		9,51		9,51
	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76
		5,85		5,85		5,85		5,85		5,85		5,85		5,85
ASSY 3.0 SK 10x180 mm	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73
		9,51		9,51		9,51		9,51		9,51		9,51		9,51
	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76
		5,85		5,85		5,85		5,85		5,85		5,85		5,85
ASSY 3.0 SK 10x200 mm	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73
		9,51		9,51		9,51		9,51		9,51		9,51		9,51
	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76
		5,85		5,85		5,85		5,85		5,85		5,85		5,85
ASSY 3.0 SK 10x220 mm	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73
		9,51		9,51		9,51		9,51		9,51		9,51		9,51
	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76
		5,85		5,85		5,85		5,85		5,85		5,85		5,85
ASSY 3.0 SK 10x240 mm	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73
		9,51		9,51		9,51		9,51		9,51		9,51		9,51
	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76
		5,85		5,85		5,85		5,85		5,85		5,85		5,85

∅ **10,0 mm**



Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

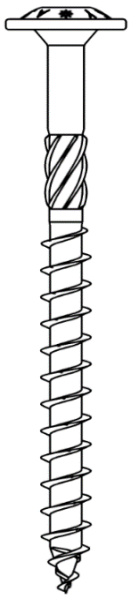
Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 SK

Type d x ℓ	Steel sheet thickness in [mm]													
	2		4		6		8		10		12		14	
ASSY 3.0 SK 10x260 mm	10,00	6,20	10,00	6,20	10,00	6,51	10,00	7,12	10,00	7,73	10,00	7,73	10,00	7,73
		7,46		7,46		7,87		8,69		9,51		9,51		9,51
	6,15	3,82	6,15	3,82	6,15	4,00	6,15	4,38	6,15	4,76	6,15	4,76	6,15	4,76
		4,59		4,59		4,84		5,35		5,85		5,85		5,85
ASSY 3.0 SK 10x280 mm	10,00	6,20	10,00	6,20	10,00	6,51	10,00	7,12	10,00	7,73	10,00	7,73	10,00	7,73
		7,46		7,46		7,87		8,69		9,51		9,51		9,51
	6,15	3,82	6,15	3,82	6,15	4,00	6,15	4,38	6,15	4,76	6,15	4,76	6,15	4,76
		4,59		4,59		4,84		5,35		5,85		5,85		5,85
ASSY 3.0 SK 10x300 mm	10,00	6,20	10,00	6,20	10,00	6,51	10,00	7,12	10,00	7,73	10,00	7,73	10,00	7,73
		7,46		7,46		7,87		8,69		9,51		9,51		9,51
	6,15	3,82	6,15	3,82	6,15	4,00	6,15	4,38	6,15	4,76	6,15	4,76	6,15	4,76
		4,59		4,59		4,84		5,35		5,85		5,85		5,85
ASSY 3.0 SK 10x320 mm	12,00	6,70	12,00	6,70	12,00	7,01	12,00	7,62	12,00	8,23	12,00	8,23	12,00	8,23
		7,96		7,96		8,37		9,19		10,01		10,01		10,01
	7,38	4,12	7,38	4,12	7,38	4,31	7,38	4,69	7,38	5,07	7,38	5,07	7,38	5,07
		4,90		4,90		5,15		5,66		6,16		6,16		6,16
ASSY 3.0 SK 10x340 mm	12,00	6,70	12,00	6,70	12,00	7,01	12,00	7,62	12,00	8,23	12,00	8,23	12,00	8,23
		7,96		7,96		8,37		9,19		10,01		10,01		10,01
	7,38	4,12	7,38	4,12	7,38	4,31	7,38	4,69	7,38	5,07	7,38	5,07	7,38	5,07
		4,90		4,90		5,15		5,66		6,16		6,16		6,16
ASSY 3.0 SK 10x360 mm	12,00	6,70	12,00	6,70	12,00	7,01	12,00	7,62	12,00	8,23	12,00	8,23	12,00	8,23
		7,96		7,96		8,37		9,19		10,01		10,01		10,01
	7,38	4,12	7,38	4,12	7,38	4,31	7,38	4,69	7,38	5,07	7,38	5,07	7,38	5,07
		4,90		4,90		5,15		5,66		6,16		6,16		6,16
ASSY 3.0 SK 10x380 mm	12,00	6,70	12,00	6,70	12,00	7,01	12,00	7,62	12,00	8,23	12,00	8,23	12,00	8,23
		7,96		7,96		8,37		9,19		10,01		10,01		10,01
	7,38	4,12	7,38	4,12	7,38	4,31	7,38	4,69	7,38	5,07	7,38	5,07	7,38	5,07
		4,90		4,90		5,15		5,66		6,16		6,16		6,16
ASSY 3.0 SK 10x400 mm	12,00	6,70	12,00	6,70	12,00	7,01	12,00	7,62	12,00	8,23	12,00	8,23	12,00	8,23
		7,96		7,96		8,37		9,19		10,01		10,01		10,01
	7,38	4,12	7,38	4,12	7,38	4,31	7,38	4,69	7,38	5,07	7,38	5,07	7,38	5,07
		4,90		4,90		5,15		5,66		6,16		6,16		6,16

∅ **10,0 mm**



Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

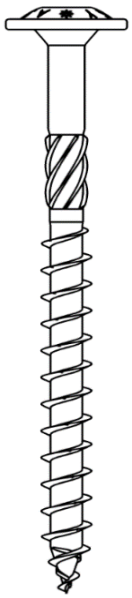
Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 SK

Type d x ℓ	Steel sheet thickness in [mm]													
	16		18		20		22		24		26		28	
ASSY 3.0 SK 10x260 mm	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73
		9,51		9,51		9,51		9,51		9,51		9,51		9,51
	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76
		5,85		5,85		5,85		5,85		5,85		5,85		5,85
ASSY 3.0 SK 10x280 mm	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73
		9,51		9,51		9,51		9,51		9,51		9,51		9,51
	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76
		5,85		5,85		5,85		5,85		5,85		5,85		5,85
ASSY 3.0 SK 10x300 mm	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73
		9,51		9,51		9,51		9,51		9,51		9,51		9,51
	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76
		5,85		5,85		5,85		5,85		5,85		5,85		5,85
ASSY 3.0 SK 10x320 mm	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23
		10,01		10,01		10,01		10,01		10,01		10,01		10,01
	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07
		6,16		6,16		6,16		6,16		6,16		6,16		6,16
ASSY 3.0 SK 10x340 mm	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23
		10,01		10,01		10,01		10,01		10,01		10,01		10,01
	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07
		6,16		6,16		6,16		6,16		6,16		6,16		6,16
ASSY 3.0 SK 10x360 mm	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23
		10,01		10,01		10,01		10,01		10,01		10,01		10,01
	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07
		6,16		6,16		6,16		6,16		6,16		6,16		6,16
ASSY 3.0 SK 10x380 mm	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23
		10,01		10,01		10,01		10,01		10,01		10,01		10,01
	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07
		6,16		6,16		6,16		6,16		6,16		6,16		6,16
ASSY 3.0 SK 10x400 mm	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23
		10,01		10,01		10,01		10,01		10,01		10,01		10,01
	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07
		6,16		6,16		6,16		6,16		6,16		6,16		6,16

∅ **10,0 mm**



Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

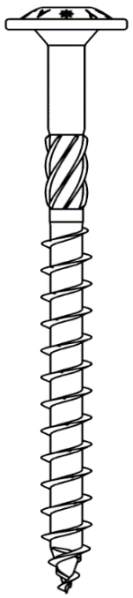
Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 SK

Type d x ℓ	Steel sheet thickness in [mm]													
	2		4		6		8		10		12		14	
ASSY 3.0 SK 10x420 mm	12,00	6,70	12,00	6,70	12,00	7,01	12,00	7,62	12,00	8,23	12,00	8,23	12,00	8,23
		7,96		7,96		8,37		9,19		10,01		10,01		10,01
	7,38	4,12	7,38	4,12	7,38	4,31	7,38	4,69	7,38	5,07	7,38	5,07	7,38	5,07
		4,90		4,90		5,15		5,66		6,16		6,16		6,16
ASSY 3.0 SK 10x440 mm	12,00	6,70	12,00	6,70	12,00	7,01	12,00	7,62	12,00	8,23	12,00	8,23	12,00	8,23
		7,96		7,96		8,37		9,19		10,01		10,01		10,01
	7,38	4,12	7,38	4,12	7,38	4,31	7,38	4,69	7,38	5,07	7,38	5,07	7,38	5,07
		4,90		4,90		5,15		5,66		6,16		6,16		6,16
ASSY 3.0 SK 10x460 mm	12,00	6,70	12,00	6,70	12,00	7,01	12,00	7,62	12,00	8,23	12,00	8,23	12,00	8,23
		7,96		7,96		8,37		9,19		10,01		10,01		10,01
	7,38	4,12	7,38	4,12	7,38	4,31	7,38	4,69	7,38	5,07	7,38	5,07	7,38	5,07
		4,90		4,90		5,15		5,66		6,16		6,16		6,16
ASSY 3.0 SK 10x480 mm	12,00	6,70	12,00	6,70	12,00	7,01	12,00	7,62	12,00	8,23	12,00	8,23	12,00	8,23
		7,96		7,96		8,37		9,19		10,01		10,01		10,01
	7,38	4,12	7,38	4,12	7,38	4,31	7,38	4,69	7,38	5,07	7,38	5,07	7,38	5,07
		4,90		4,90		5,15		5,66		6,16		6,16		6,16
ASSY 3.0 SK 10x500 mm	12,00	6,70	12,00	6,70	12,00	7,01	12,00	7,62	12,00	8,23	12,00	8,23	12,00	8,23
		7,96		7,96		8,37		9,19		10,01		10,01		10,01
	7,38	4,12	7,38	4,12	7,38	4,31	7,38	4,69	7,38	5,07	7,38	5,07	7,38	5,07
		4,90		4,90		5,15		5,66		6,16		6,16		6,16

∅ **10,0 mm**



Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

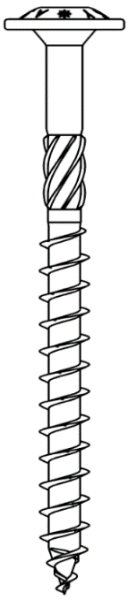
Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 SK

Type d x ℓ	Steel sheet thickness in [mm]													
	16		18		20		22		24		26		28	
ASSY 3.0 SK 10x420 mm	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23
		10,01		10,01		10,01		10,01		10,01		10,01		10,01
	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07
		6,16		6,16		6,16		6,16		6,16		6,16		6,16
ASSY 3.0 SK 10x440 mm	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23
		10,01		10,01		10,01		10,01		10,01		10,01		10,01
	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07
		6,16		6,16		6,16		6,16		6,16		6,16		6,16
ASSY 3.0 SK 10x460 mm	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23
		10,01		10,01		10,01		10,01		10,01		10,01		10,01
	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07
		6,16		6,16		6,16		6,16		6,16		6,16		6,16
ASSY 3.0 SK 10x480 mm	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23
		10,01		10,01		10,01		10,01		10,01		10,01		10,01
	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07
		6,16		6,16		6,16		6,16		6,16		6,16		6,16
ASSY 3.0 SK 10x500 mm	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23
		10,01		10,01		10,01		10,01		10,01		10,01		10,01
	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07
		6,16		6,16		6,16		6,16		6,16		6,16		6,16

∅ **10,0 mm**



Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

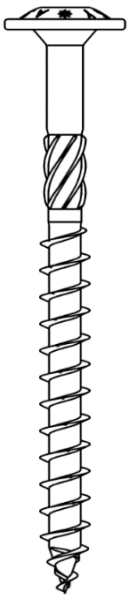
Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 SK

Type d x ℓ	Steel sheet thickness in [mm]													
	2		4		6		8		10		12		14	
ASSY 3.0 SK 12x200 mm	12,00	8,01	12,00	8,01	12,00	8,01	12,00	8,70	12,00	9,39	12,00	10,08	12,00	10,08
		9,82		9,82		9,82		10,76		11,70		12,64		12,64
	7,38	4,93	7,38	4,93	7,38	4,93	7,38	5,35	7,38	5,78	7,38	6,20	7,38	6,20
		6,04		6,04		6,04		6,62		7,20		7,78		7,78
ASSY 3.0 SK 12x220 mm	14,40	8,61	14,40	8,61	14,40	8,61	14,40	9,30	14,40	9,99	14,40	10,68	14,40	10,68
		10,42		10,42		10,42		11,36		12,30		13,24		13,24
	8,86	5,30	8,86	5,30	8,86	5,30	8,86	5,72	8,86	6,15	8,86	6,57	8,86	6,57
		6,41		6,41		6,41		6,99		7,57		8,15		8,15
ASSY 3.0 SK 12x240 mm	14,40	8,61	14,40	8,61	14,40	8,61	14,40	9,30	14,40	9,99	14,40	10,68	14,40	10,68
		10,42		10,42		10,42		11,36		12,30		13,24		13,24
	8,86	5,30	8,86	5,30	8,86	5,30	8,86	5,72	8,86	6,15	8,86	6,57	8,86	6,57
		6,41		6,41		6,41		6,99		7,57		8,15		8,15
ASSY 3.0 SK 12x260 mm	14,40	8,61	14,40	8,61	14,40	8,61	14,40	9,30	14,40	9,99	14,40	10,68	14,40	10,68
		10,42		10,42		10,42		11,36		12,30		13,24		13,24
	8,86	5,30	8,86	5,30	8,86	5,30	8,86	5,72	8,86	6,15	8,86	6,57	8,86	6,57
		6,41		6,41		6,41		6,99		7,57		8,15		8,15
ASSY 3.0 SK 12x280 mm	14,40	8,61	14,40	8,61	14,40	8,61	14,40	9,30	14,40	9,99	14,40	10,68	14,40	10,68
		10,42		10,42		10,42		11,36		12,30		13,24		13,24
	8,86	5,30	8,86	5,30	8,86	5,30	8,86	5,72	8,86	6,15	8,86	6,57	8,86	6,57
		6,41		6,41		6,41		6,99		7,57		8,15		8,15
ASSY 3.0 SK 12x300 mm	14,40	8,61	14,40	8,61	14,40	8,61	14,40	9,30	14,40	9,99	14,40	10,68	14,40	10,68
		10,42		10,42		10,42		11,36		12,30		13,24		13,24
	8,86	5,30	8,86	5,30	8,86	5,30	8,86	5,72	8,86	6,15	8,86	6,57	8,86	6,57
		6,41		6,41		6,41		6,99		7,57		8,15		8,15
ASSY 3.0 SK 12x320 mm	14,40	8,61	14,40	8,61	14,40	8,61	14,40	9,30	14,40	9,99	14,40	10,68	14,40	10,68
		10,42		10,42		10,42		11,36		12,30		13,24		13,24
	8,86	5,30	8,86	5,30	8,86	5,30	8,86	5,72	8,86	6,15	8,86	6,57	8,86	6,57
		6,41		6,41		6,41		6,99		7,57		8,15		8,15

∅ **12,0 mm**



Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

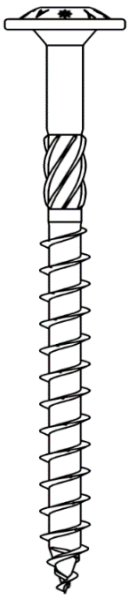
Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 SK

Type d x ℓ	Steel sheet thickness in [mm]													
	16		18		20		22		24		26		28	
ASSY 3.0 SK 12x200 mm	12,00	10,08 12,64	12,00	10,08 12,64	12,00	10,08 12,64	12,00	10,08 12,64	12,00	10,08 12,64	12,00	10,08 12,64	12,00	10,08 12,64
	7,38	6,20 7,78	7,38	6,20 7,78	7,38	6,20 7,78	7,38	6,20 7,78	7,38	6,20 7,78	7,38	6,20 7,78	7,38	6,20 7,78
ASSY 3.0 SK 12x220 mm	14,40	10,68 13,24	14,40	10,68 13,24	14,40	10,68 13,24	14,40	10,68 13,24	14,40	10,68 13,24	14,40	10,68 13,24	14,40	10,68 13,24
	8,86	6,57 8,15	8,86	6,57 8,15	8,86	6,57 8,15	8,86	6,57 8,15	8,86	6,57 8,15	8,86	6,57 8,15	8,86	6,57 8,15
ASSY 3.0 SK 12x240 mm	14,40	10,68 13,24	14,40	10,68 13,24	14,40	10,68 13,24	14,40	10,68 13,24	14,40	10,68 13,24	14,40	10,68 13,24	14,40	10,68 13,24
	8,86	6,57 8,15	8,86	6,57 8,15	8,86	6,57 8,15	8,86	6,57 8,15	8,86	6,57 8,15	8,86	6,57 8,15	8,86	6,57 8,15
ASSY 3.0 SK 12x260 mm	14,40	10,68 13,24	14,40	10,68 13,24	14,40	10,68 13,24	14,40	10,68 13,24	14,40	10,68 13,24	14,40	10,68 13,24	14,40	10,68 13,24
	8,86	6,57 8,15	8,86	6,57 8,15	8,86	6,57 8,15	8,86	6,57 8,15	8,86	6,57 8,15	8,86	6,57 8,15	8,86	6,57 8,15
ASSY 3.0 SK 12x280 mm	14,40	10,68 13,24	14,40	10,68 13,24	14,40	10,68 13,24	14,40	10,68 13,24	14,40	10,68 13,24	14,40	10,68 13,24	14,40	10,68 13,24
	8,86	6,57 8,15	8,86	6,57 8,15	8,86	6,57 8,15	8,86	6,57 8,15	8,86	6,57 8,15	8,86	6,57 8,15	8,86	6,57 8,15
ASSY 3.0 SK 12x300 mm	14,40	10,68 13,24	14,40	10,68 13,24	14,40	10,68 13,24	14,40	10,68 13,24	14,40	10,68 13,24	14,40	10,68 13,24	14,40	10,68 13,24
	8,86	6,57 8,15	8,86	6,57 8,15	8,86	6,57 8,15	8,86	6,57 8,15	8,86	6,57 8,15	8,86	6,57 8,15	8,86	6,57 8,15
ASSY 3.0 SK 12x320 mm	14,40	10,68 13,24	14,40	10,68 13,24	14,40	10,68 13,24	14,40	10,68 13,24	14,40	10,68 13,24	14,40	10,68 13,24	14,40	10,68 13,24
	8,86	6,57 8,15	8,86	6,57 8,15	8,86	6,57 8,15	8,86	6,57 8,15	8,86	6,57 8,15	8,86	6,57 8,15	8,86	6,57 8,15

∅ **12,0 mm**



Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

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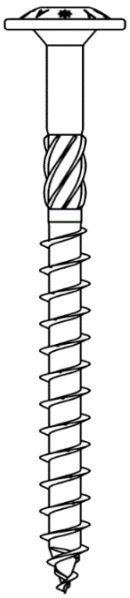
NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 SK

Type d x ℓ	Steel sheet thickness in [mm]													
	2		4		6		8		10		12		14	
ASSY 3.0 SK 12x340 mm	14,40	8,61	14,40	8,61	14,40	8,61	14,40	9,30	14,40	9,99	14,40	10,68	14,40	10,68
		10,42		10,42		10,42		11,36		12,30		13,24		13,24
	8,86	5,30	8,86	5,30	8,86	5,30	8,86	5,72	8,86	6,15	8,86	6,57	8,86	6,57
		6,41		6,41		6,41		6,99		7,57		8,15		8,15
ASSY 3.0 SK 12x360 mm	14,40	8,61	14,40	8,61	14,40	8,61	14,40	9,30	14,40	9,99	14,40	10,68	14,40	10,68
		10,42		10,42		10,42		11,36		12,30		13,24		13,24
	8,86	5,30	8,86	5,30	8,86	5,30	8,86	5,72	8,86	6,15	8,86	6,57	8,86	6,57
		6,41		6,41		6,41		6,99		7,57		8,15		8,15
ASSY 3.0 SK 12x380 mm	17,40	9,36	17,40	9,36	17,40	9,36	17,40	10,05	17,40	10,74	17,40	11,43	17,40	11,43
		11,17		11,17		11,17		12,11		13,05		13,99		13,99
	10,71	5,76	10,71	5,76	10,71	5,76	10,71	6,18	10,71	6,61	10,71	7,03	10,71	7,03
		6,87		6,87		6,87		7,45		8,03		8,61		8,61
ASSY 3.0 SK 12x400 mm	17,40	9,36	17,40	9,36	17,40	9,36	17,40	10,05	17,40	10,74	17,40	11,43	17,40	11,43
		11,17		11,17		11,17		12,11		13,05		13,99		13,99
	10,71	5,76	10,71	5,76	10,71	5,76	10,71	6,18	10,71	6,61	10,71	7,03	10,71	7,03
		6,87		6,87		6,87		7,45		8,03		8,61		8,61
ASSY 3.0 SK 12x440 mm	17,40	9,36	17,40	9,36	17,40	9,36	17,40	10,05	17,40	10,74	17,40	11,43	17,40	11,43
		11,17		11,17		11,17		12,11		13,05		13,99		13,99
	10,71	5,76	10,71	5,76	10,71	5,76	10,71	6,18	10,71	6,61	10,71	7,03	10,71	7,03
		6,87		6,87		6,87		7,45		8,03		8,61		8,61
ASSY 3.0 SK 12x480 mm	17,40	9,36	17,40	9,36	17,40	9,36	17,40	10,05	17,40	10,74	17,40	11,43	17,40	11,43
		11,17		11,17		11,17		12,11		13,05		13,99		13,99
	10,71	5,76	10,71	5,76	10,71	5,76	10,71	6,18	10,71	6,61	10,71	7,03	10,71	7,03
		6,87		6,87		6,87		7,45		8,03		8,61		8,61
ASSY 3.0 SK 12x520 mm	17,40	9,36	17,40	9,36	17,40	9,36	17,40	10,05	17,40	10,74	17,40	11,43	17,40	11,43
		11,17		11,17		11,17		12,11		13,05		13,99		13,99
	10,71	5,76	10,71	5,76	10,71	5,76	10,71	6,18	10,71	6,61	10,71	7,03	10,71	7,03
		6,87		6,87		6,87		7,45		8,03		8,61		8,61

∅ **12,0 mm**



Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

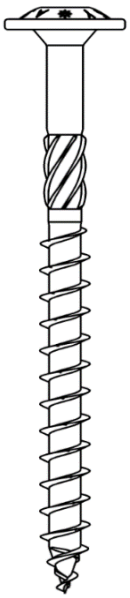
Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 SK

Type d x ℓ	Steel sheet thickness in [mm]													
	16		18		20		22		24		26		28	
ASSY 3.0 SK 12x340 mm	14,40	10,68 13,24	14,40	10,68 13,24	14,40	10,68 13,24	14,40	10,68 13,24	14,40	10,68 13,24	14,40	10,68 13,24	14,40	10,68 13,24
	8,86	6,57 8,15	8,86	6,57 8,15	8,86	6,57 8,15	8,86	6,57 8,15	8,86	6,57 8,15	8,86	6,57 8,15	8,86	6,57 8,15
ASSY 3.0 SK 12x360 mm	14,40	10,68 13,24	14,40	10,68 13,24	14,40	10,68 13,24	14,40	10,68 13,24	14,40	10,68 13,24	14,40	10,68 13,24	14,40	10,68 13,24
	8,86	6,57 8,15	8,86	6,57 8,15	8,86	6,57 8,15	8,86	6,57 8,15	8,86	6,57 8,15	8,86	6,57 8,15	8,86	6,57 8,15
ASSY 3.0 SK 12x380 mm	17,40	11,43 13,99	17,40	11,43 13,99	17,40	11,43 13,99	17,40	11,43 13,99	17,40	11,43 13,99	17,40	11,43 13,99	17,40	11,43 13,99
	10,71	7,03 8,61	10,71	7,03 8,61	10,71	7,03 8,61	10,71	7,03 8,61	10,71	7,03 8,61	10,71	7,03 8,61	10,71	7,03 8,61
ASSY 3.0 SK 12x400 mm	17,40	11,43 13,99	17,40	11,43 13,99	17,40	11,43 13,99	17,40	11,43 13,99	17,40	11,43 13,99	17,40	11,43 13,99	17,40	11,43 13,99
	10,71	7,03 8,61	10,71	7,03 8,61	10,71	7,03 8,61	10,71	7,03 8,61	10,71	7,03 8,61	10,71	7,03 8,61	10,71	7,03 8,61
ASSY 3.0 SK 12x440 mm	17,40	11,43 13,99	17,40	11,43 13,99	17,40	11,43 13,99	17,40	11,43 13,99	17,40	11,43 13,99	17,40	11,43 13,99	17,40	11,43 13,99
	10,71	7,03 8,61	10,71	7,03 8,61	10,71	7,03 8,61	10,71	7,03 8,61	10,71	7,03 8,61	10,71	7,03 8,61	10,71	7,03 8,61
ASSY 3.0 SK 12x480 mm	17,40	11,43 13,99	17,40	11,43 13,99	17,40	11,43 13,99	17,40	11,43 13,99	17,40	11,43 13,99	17,40	11,43 13,99	17,40	11,43 13,99
	10,71	7,03 8,61	10,71	7,03 8,61	10,71	7,03 8,61	10,71	7,03 8,61	10,71	7,03 8,61	10,71	7,03 8,61	10,71	7,03 8,61
ASSY 3.0 SK 12x520 mm	17,40	11,43 13,99	17,40	11,43 13,99	17,40	11,43 13,99	17,40	11,43 13,99	17,40	11,43 13,99	17,40	11,43 13,99	17,40	11,43 13,99
	10,71	7,03 8,61	10,71	7,03 8,61	10,71	7,03 8,61	10,71	7,03 8,61	10,71	7,03 8,61	10,71	7,03 8,61	10,71	7,03 8,61

∅ **12,0 mm**



Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

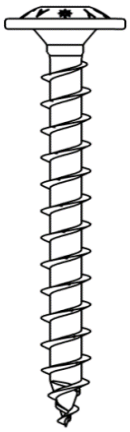
Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 SK FULL THREAD

Type d x ℓ	Steel sheet thickness in [mm]													
	2		4		6		8		10		12		14	
ASSY 3.0 SK full thread 6x40 mm	2,48	1,53	2,48	1,79	2,35	2,38	2,21	2,29	2,07	2,19	1,93	2,10	1,79	2,02
		2,46		2,69		3,25		3,11		2,96		2,82		2,69
	1,53	0,94	1,53	1,10	1,44	1,47	1,36	1,41	1,27	1,35	1,19	1,29	1,10	1,24
		1,51		1,65		2,00		1,91		1,82		1,74		1,65
ASSY 3.0 SK full thread 6x50 mm	3,11	1,93	3,11	2,23	3,04	2,89	2,90	2,79	2,76	2,68	2,62	2,58	2,48	2,48
		2,79		3,07		3,61		3,58		3,54		3,51		3,40
	1,91	1,19	1,91	1,37	1,87	1,78	1,78	1,71	1,70	1,65	1,61	1,59	1,53	1,53
		1,72		1,89		2,22		2,20		2,18		2,16		2,09
ASSY 3.0 SK full thread 8x40 mm	2,82	1,87	2,82	1,77	2,82	2,45	2,82	3,16						
		3,21		3,04		3,68		4,35						
	1,73	1,15	1,73	1,09	1,73	1,50	1,73	1,94						
		1,98		1,87		2,26		2,68						
ASSY 3.0 SK full thread 8x50 mm	3,52	2,36	3,52	2,26	3,52	2,95	3,52	3,67	3,52	3,59	3,34	3,48	3,17	3,37
		4,06		3,89		4,54		5,21		5,07		4,88		4,70
	2,17	1,45	2,17	1,39	2,17	1,82	2,17	2,26	2,17	2,21	2,06	2,14	1,95	2,07
		2,50		2,39		2,79		3,21		3,12		3,00		2,89

∅
6,0
8,0
mm



Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

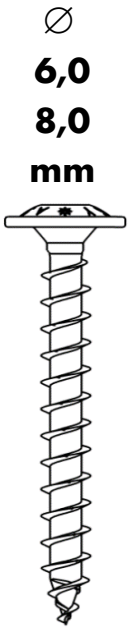
Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 SK FULL THREAD

Type d x ℓ	Steel sheet thickness in [mm]													
	16		18		20		22		24		26		28	
ASSY 3.0 SK full thread 6x40 mm	1,66	1,93												
		2,56												
	1,02	1,19												
		1,57												
ASSY 3.0 SK full thread 6x50 mm	2,35	2,38	2,21	2,29	2,07	2,19	1,93	2,10	1,79	2,02	1,66	1,93		
		3,25		3,11		2,96		2,82		2,69		2,56		
	1,44	1,47	1,36	1,41	1,27	1,35	1,19	1,29	1,10	1,24	1,02	1,19		
		2,00		1,91		1,82		1,74		1,65		1,57		
ASSY 3.0 SK full thread 8x40 mm														
ASSY 3.0 SK full thread 8x50 mm	2,99	3,26	2,82	3,16										
		4,52		4,35										
	1,84	2,01	1,73	1,94										
		2,78		2,68										



Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

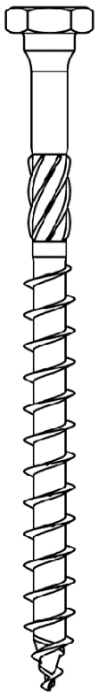
Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 COMBI

Type d x ℓ	Steel sheet thickness in [mm]													
	2		4		6		8		10		12		14	
ASSY 3.0 Combi 8x80 mm	4,40	3,65	4,40	3,65	4,40	4,17	4,40	4,71	4,40	4,71	4,40	4,71	4,40	4,71
		4,44		4,44		5,14		5,83		5,83		5,83		5,83
	2,71	2,25	2,71	2,25	2,71	2,57	2,71	2,90	2,71	2,90	2,71	2,90	2,71	2,90
		2,73		2,73		3,16		3,59		3,59		3,59		3,59
ASSY 3.0 Combi 8x100 mm	5,28	3,87	5,28	3,87	5,28	4,40	5,28	4,93	5,28	4,93	5,28	4,93	5,28	4,93
		4,66		4,66		5,36		6,05		6,05		6,05		6,05
	3,25	2,38	3,25	2,38	3,25	2,71	3,25	3,03	3,25	3,03	3,25	3,03	3,25	3,03
		2,87		2,87		3,30		3,72		3,72		3,72		3,72
ASSY 3.0 Combi 8x120 mm	7,04	4,31	7,04	4,31	7,04	4,84	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37
		5,10		5,10		5,80		6,49		6,49		6,49		6,49
	4,33	2,65	4,33	2,65	4,33	2,98	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30
		3,14		3,14		3,57		3,99		3,99		3,99		3,99
ASSY 3.0 Combi 8x140 mm	7,04	4,31	7,04	4,31	7,04	4,84	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37
		5,10		5,10		5,80		6,49		6,49		6,49		6,49
	4,33	2,65	4,33	2,65	4,33	2,98	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30
		3,14		3,14		3,57		3,99		3,99		3,99		3,99
ASSY 3.0 Combi 8x160 mm	7,04	4,31	7,04	4,31	7,04	4,84	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37
		5,10		5,10		5,80		6,49		6,49		6,49		6,49
	4,33	2,65	4,33	2,65	4,33	2,98	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30
		3,14		3,14		3,57		3,99		3,99		3,99		3,99
ASSY 3.0 Combi 8x180 mm	7,04	4,31	7,04	4,31	7,04	4,84	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37
		5,10		5,10		5,80		6,49		6,49		6,49		6,49
	4,33	2,65	4,33	2,65	4,33	2,98	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30
		3,14		3,14		3,57		3,99		3,99		3,99		3,99
ASSY 3.0 Combi 8x200 mm	7,04	4,31	7,04	4,31	7,04	4,84	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37
		5,10		5,10		5,80		6,49		6,49		6,49		6,49
	4,33	2,65	4,33	2,65	4,33	2,98	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30
		3,14		3,14		3,57		3,99		3,99		3,99		3,99
ASSY 3.0 Combi 8x220 mm	8,80	4,75	8,80	4,75	8,80	5,28	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81
		5,54		5,54		6,24		6,93		6,93		6,93		6,93
	5,42	2,92	5,42	2,92	5,42	3,25	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57
		3,41		3,41		3,84		4,26		4,26		4,26		4,26
ASSY 3.0 Combi 8x240 mm	8,80	4,75	8,80	4,75	8,80	5,28	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81
		5,54		5,54		6,24		6,93		6,93		6,93		6,93
	5,42	2,92	5,42	2,92	5,42	3,25	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57
		3,41		3,41		3,84		4,26		4,26		4,26		4,26

∅ **8,0 mm**



Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

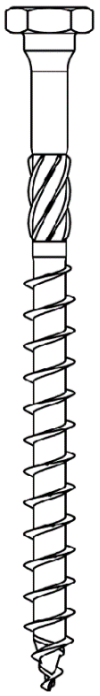
Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 COMBI

Type d x ℓ	Steel sheet thickness in [mm]													
	16		18		20		22		24		26		28	
ASSY 3.0 Combi 8x80 mm	4,40	4,71	4,40	4,71	4,40	4,62	4,40	4,53	4,40	4,45	4,40	4,36	4,40	4,28
		5,83		5,83		5,83		5,83		5,83		5,83		5,83
	2,71	2,90	2,71	2,90	2,71	2,84	2,71	2,79	2,71	2,74	2,71	2,68	2,71	2,63
		3,59		3,59		3,59		3,59		3,59		3,59		3,59
ASSY 3.0 Combi 8x100 mm	5,28	4,93	5,28	4,93	5,28	4,93	5,28	4,93	5,28	4,93	5,28	4,93	5,28	4,93
		6,05		6,05		6,05		6,05		6,05		6,05		6,05
	3,25	3,03	3,25	3,03	3,25	3,03	3,25	3,03	3,25	3,03	3,25	3,03	3,25	3,03
		3,72		3,72		3,72		3,72		3,72		3,72		3,72
ASSY 3.0 Combi 8x120 mm	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37
		6,49		6,49		6,49		6,49		6,49		6,49		6,49
	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30
		3,99		3,99		3,99		3,99		3,99		3,99		3,99
ASSY 3.0 Combi 8x140 mm	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37
		6,49		6,49		6,49		6,49		6,49		6,49		6,49
	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30
		3,99		3,99		3,99		3,99		3,99		3,99		3,99
ASSY 3.0 Combi 8x160 mm	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37
		6,49		6,49		6,49		6,49		6,49		6,49		6,49
	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30
		3,99		3,99		3,99		3,99		3,99		3,99		3,99
ASSY 3.0 Combi 8x180 mm	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37
		6,49		6,49		6,49		6,49		6,49		6,49		6,49
	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30
		3,99		3,99		3,99		3,99		3,99		3,99		3,99
ASSY 3.0 Combi 8x200 mm	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37	7,04	5,37
		6,49		6,49		6,49		6,49		6,49		6,49		6,49
	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30	4,33	3,30
		3,99		3,99		3,99		3,99		3,99		3,99		3,99
ASSY 3.0 Combi 8x220 mm	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81
		6,93		6,93		6,93		6,93		6,93		6,93		6,93
	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57
		4,26		4,26		4,26		4,26		4,26		4,26		4,26
ASSY 3.0 Combi 8x240 mm	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81
		6,93		6,93		6,93		6,93		6,93		6,93		6,93
	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57
		4,26		4,26		4,26		4,26		4,26		4,26		4,26

∅ **8,0 mm**



Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 COMBI

Type d x ℓ	Steel sheet thickness in [mm]													
	2		4		6		8		10		12		14	
ASSY 3.0 Combi 8x260 mm	8,80	4,75	8,80	4,75	8,80	5,28	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81
		5,54		5,54		6,24		6,93		6,93		6,93		6,93
	5,42	2,92	5,42	2,92	5,42	3,25	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57
		3,41		3,41		3,84		4,26		4,26		4,26		4,26
ASSY 3.0 Combi 8x280 mm	8,80	4,75	8,80	4,75	8,80	5,28	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81
		5,54		5,54		6,24		6,93		6,93		6,93		6,93
	5,42	2,92	5,42	2,92	5,42	3,25	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57
		3,41		3,41		3,84		4,26		4,26		4,26		4,26
ASSY 3.0 Combi 8x300 mm	8,80	4,75	8,80	4,75	8,80	5,28	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81
		5,54		5,54		6,24		6,93		6,93		6,93		6,93
	5,42	2,92	5,42	2,92	5,42	3,25	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57
		3,41		3,41		3,84		4,26		4,26		4,26		4,26

∅ **8,0 mm**

Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

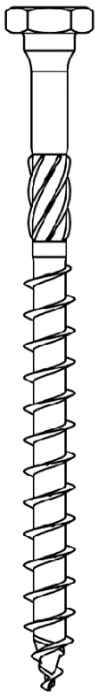
Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 COMBI

Type d x ℓ	Steel sheet thickness in [mm]													
	16		18		20		22		24		26		28	
ASSY 3.0 Combi 8x260 mm	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81
		6,93		6,93		6,93		6,93		6,93		6,93		6,93
	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57
		4,26		4,26		4,26		4,26		4,26		4,26		4,26
ASSY 3.0 Combi 8x280 mm	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81
		6,93		6,93		6,93		6,93		6,93		6,93		6,93
	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57
		4,26		4,26		4,26		4,26		4,26		4,26		4,26
ASSY 3.0 Combi 8x300 mm	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81	8,80	5,81
		6,93		6,93		6,93		6,93		6,93		6,93		6,93
	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57	5,42	3,57
		4,26		4,26		4,26		4,26		4,26		4,26		4,26

∅ **8,0 mm**



Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

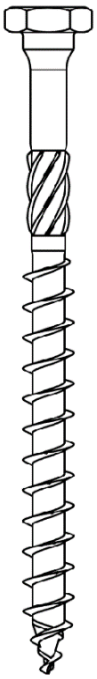
Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 COMBI

Type d x ℓ	Steel sheet thickness in [mm]													
	2		4		6		8		10		12		14	
ASSY 3.0 Combi 10x80 mm	5,00	4,49	5,00	4,37	5,00	4,67	5,00	5,40	5,00	6,13	5,00	6,03	5,00	5,93
		6,21		6,21		6,62		7,44		8,26		8,26		8,26
	3,08	2,76	3,08	2,69	3,08	2,88	3,08	3,32	3,08	3,77	3,08	3,71	3,08	3,65
		3,82		3,82		4,07		4,58		5,09		5,09		5,09
ASSY 3.0 Combi 10x100 mm	6,00	5,20	6,00	5,20	6,00	5,51	6,00	6,12	6,00	6,73	6,00	6,73	6,00	6,73
		6,46		6,46		6,87		7,69		8,51		8,51		8,51
	3,69	3,20	3,69	3,20	3,69	3,39	3,69	3,77	3,69	4,14	3,69	4,14	3,69	4,14
		3,97		3,97		4,23		4,73		5,24		5,24		5,24
ASSY 3.0 Combi 10x120 mm	8,00	5,70	8,00	5,70	8,00	6,01	8,00	6,62	8,00	7,23	8,00	7,23	8,00	7,23
		6,96		6,96		7,37		8,19		9,01		9,01		9,01
	4,92	3,51	4,92	3,51	4,92	3,70	4,92	4,07	4,92	4,45	4,92	4,45	4,92	4,45
		4,28		4,28		4,54		5,04		5,55		5,55		5,55
ASSY 3.0 Combi 10x140 mm	8,00	5,70	8,00	5,70	8,00	6,01	8,00	6,62	8,00	7,23	8,00	7,23	8,00	7,23
		6,96		6,96		7,37		8,19		9,01		9,01		9,01
	4,92	3,51	4,92	3,51	4,92	3,70	4,92	4,07	4,92	4,45	4,92	4,45	4,92	4,45
		4,28		4,28		4,54		5,04		5,55		5,55		5,55
ASSY 3.0 Combi 10x160 mm	10,00	6,20	10,00	6,20	10,00	6,51	10,00	7,12	10,00	7,73	10,00	7,73	10,00	7,73
		7,46		7,46		7,87		8,69		9,51		9,51		9,51
	6,15	3,82	6,15	3,82	6,15	4,00	6,15	4,38	6,15	4,76	6,15	4,76	6,15	4,76
		4,59		4,59		4,84		5,35		5,85		5,85		5,85
ASSY 3.0 Combi 10x180 mm	10,00	6,20	10,00	6,20	10,00	6,51	10,00	7,12	10,00	7,73	10,00	7,73	10,00	7,73
		7,46		7,46		7,87		8,69		9,51		9,51		9,51
	6,15	3,82	6,15	3,82	6,15	4,00	6,15	4,38	6,15	4,76	6,15	4,76	6,15	4,76
		4,59		4,59		4,84		5,35		5,85		5,85		5,85
ASSY 3.0 Combi 10x200 mm	10,00	6,20	10,00	6,20	10,00	6,51	10,00	7,12	10,00	7,73	10,00	7,73	10,00	7,73
		7,46		7,46		7,87		8,69		9,51		9,51		9,51
	6,15	3,82	6,15	3,82	6,15	4,00	6,15	4,38	6,15	4,76	6,15	4,76	6,15	4,76
		4,59		4,59		4,84		5,35		5,85		5,85		5,85
ASSY 3.0 Combi 10x220 mm	10,00	6,20	10,00	6,20	10,00	6,51	10,00	7,12	10,00	7,73	10,00	7,73	10,00	7,73
		7,46		7,46		7,87		8,69		9,51		9,51		9,51
	6,15	3,82	6,15	3,82	6,15	4,00	6,15	4,38	6,15	4,76	6,15	4,76	6,15	4,76
		4,59		4,59		4,84		5,35		5,85		5,85		5,85
ASSY 3.0 Combi 10x240 mm	10,00	6,20	10,00	6,20	10,00	6,51	10,00	7,12	10,00	7,73	10,00	7,73	10,00	7,73
		7,46		7,46		7,87		8,69		9,51		9,51		9,51
	6,15	3,82	6,15	3,82	6,15	4,00	6,15	4,38	6,15	4,76	6,15	4,76	6,15	4,76
		4,59		4,59		4,84		5,35		5,85		5,85		5,85

∅ **10,0 mm**



Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 COMBI

Type d x ℓ	Steel sheet thickness in [mm]													
	16		18		20		22		24		26		28	
ASSY 3.0 Combi 10x80 mm	5,00	5,84	5,00	5,74	5,00	5,65	5,00	5,55	5,00	5,46	5,00	5,37	5,00	5,29
		8,26		8,26		8,26		8,26		8,13		7,95		7,77
	3,08	3,59	3,08	3,53	3,08	3,47	3,08	3,42	3,08	3,36	3,08	3,31	3,08	3,25
		5,09		5,09		5,09		5,09		5,00		4,89		4,78
ASSY 3.0 Combi 10x100 mm	6,00	6,73	6,00	6,73	6,00	6,73	6,00	6,73	6,00	6,68	6,00	6,58	6,00	6,48
		8,51		8,51		8,51		8,51		8,51		8,51		8,51
	3,69	4,14	3,69	4,14	3,69	4,14	3,69	4,14	3,69	4,11	3,69	4,05	3,69	3,99
		5,24		5,24		5,24		5,24		5,24		5,24		5,24
ASSY 3.0 Combi 10x120 mm	8,00	7,23	8,00	7,23	8,00	7,23	8,00	7,23	8,00	7,23	8,00	7,23	8,00	7,23
		9,01		9,01		9,01		9,01		9,01		9,01		9,01
	4,92	4,45	4,92	4,45	4,92	4,45	4,92	4,45	4,92	4,45	4,92	4,45	4,92	4,45
		5,55		5,55		5,55		5,55		5,55		5,55		5,55
ASSY 3.0 Combi 10x140 mm	8,00	7,23	8,00	7,23	8,00	7,23	8,00	7,23	8,00	7,23	8,00	7,23	8,00	7,23
		9,01		9,01		9,01		9,01		9,01		9,01		9,01
	4,92	4,45	4,92	4,45	4,92	4,45	4,92	4,45	4,92	4,45	4,92	4,45	4,92	4,45
		5,55		5,55		5,55		5,55		5,55		5,55		5,55
ASSY 3.0 Combi 10x160 mm	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73
		9,51		9,51		9,51		9,51		9,51		9,51		9,51
	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76
		5,85		5,85		5,85		5,85		5,85		5,85		5,85
ASSY 3.0 Combi 10x180 mm	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73
		9,51		9,51		9,51		9,51		9,51		9,51		9,51
	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76
		5,85		5,85		5,85		5,85		5,85		5,85		5,85
ASSY 3.0 Combi 10x200 mm	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73
		9,51		9,51		9,51		9,51		9,51		9,51		9,51
	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76
		5,85		5,85		5,85		5,85		5,85		5,85		5,85
ASSY 3.0 Combi 10x220 mm	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73
		9,51		9,51		9,51		9,51		9,51		9,51		9,51
	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76
		5,85		5,85		5,85		5,85		5,85		5,85		5,85
ASSY 3.0 Combi 10x240 mm	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73
		9,51		9,51		9,51		9,51		9,51		9,51		9,51
	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76
		5,85		5,85		5,85		5,85		5,85		5,85		5,85

∅ **10,0 mm**

Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

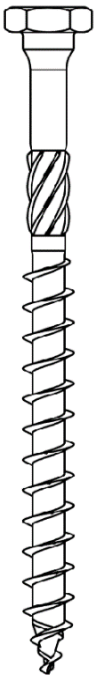
Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 COMBI

Type d x ℓ	Steel sheet thickness in [mm]													
	2		4		6		8		10		12		14	
ASSY 3.0 Combi 10x260 mm	10,00	6,20	10,00	6,20	10,00	6,51	10,00	7,12	10,00	7,73	10,00	7,73	10,00	7,73
		7,46		7,46		7,87		8,69		9,51		9,51		9,51
	6,15	3,82	6,15	3,82	6,15	4,00	6,15	4,38	6,15	4,76	6,15	4,76	6,15	4,76
		4,59		4,59		4,84		5,35		5,85		5,85		5,85
ASSY 3.0 Combi 10x280 mm	10,00	6,20	10,00	6,20	10,00	6,51	10,00	7,12	10,00	7,73	10,00	7,73	10,00	7,73
		7,46		7,46		7,87		8,69		9,51		9,51		9,51
	6,15	3,82	6,15	3,82	6,15	4,00	6,15	4,38	6,15	4,76	6,15	4,76	6,15	4,76
		4,59		4,59		4,84		5,35		5,85		5,85		5,85
ASSY 3.0 Combi 10x300 mm	10,00	6,20	10,00	6,20	10,00	6,51	10,00	7,12	10,00	7,73	10,00	7,73	10,00	7,73
		7,46		7,46		7,87		8,69		9,51		9,51		9,51
	6,15	3,82	6,15	3,82	6,15	4,00	6,15	4,38	6,15	4,76	6,15	4,76	6,15	4,76
		4,59		4,59		4,84		5,35		5,85		5,85		5,85
ASSY 3.0 Combi 10x320 mm	12,00	6,70	12,00	6,70	12,00	7,01	12,00	7,62	12,00	8,23	12,00	8,23	12,00	8,23
		7,96		7,96		8,37		9,19		10,01		10,01		10,01
	7,38	4,12	7,38	4,12	7,38	4,31	7,38	4,69	7,38	5,07	7,38	5,07	7,38	5,07
		4,90		4,90		5,15		5,66		6,16		6,16		6,16
ASSY 3.0 Combi 10x340 mm	12,00	6,70	12,00	6,70	12,00	7,01	12,00	7,62	12,00	8,23	12,00	8,23	12,00	8,23
		7,96		7,96		8,37		9,19		10,01		10,01		10,01
	7,38	4,12	7,38	4,12	7,38	4,31	7,38	4,69	7,38	5,07	7,38	5,07	7,38	5,07
		4,90		4,90		5,15		5,66		6,16		6,16		6,16
ASSY 3.0 Combi 10x360 mm	12,00	6,70	12,00	6,70	12,00	7,01	12,00	7,62	12,00	8,23	12,00	8,23	12,00	8,23
		7,96		7,96		8,37		9,19		10,01		10,01		10,01
	7,38	4,12	7,38	4,12	7,38	4,31	7,38	4,69	7,38	5,07	7,38	5,07	7,38	5,07
		4,90		4,90		5,15		5,66		6,16		6,16		6,16
ASSY 3.0 Combi 10x380 mm	12,00	6,70	12,00	6,70	12,00	7,01	12,00	7,62	12,00	8,23	12,00	8,23	12,00	8,23
		7,96		7,96		8,37		9,19		10,01		10,01		10,01
	7,38	4,12	7,38	4,12	7,38	4,31	7,38	4,69	7,38	5,07	7,38	5,07	7,38	5,07
		4,90		4,90		5,15		5,66		6,16		6,16		6,16
ASSY 3.0 Combi 10x400 mm	12,00	6,70	12,00	6,70	12,00	7,01	12,00	7,62	12,00	8,23	12,00	8,23	12,00	8,23
		7,96		7,96		8,37		9,19		10,01		10,01		10,01
	7,38	4,12	7,38	4,12	7,38	4,31	7,38	4,69	7,38	5,07	7,38	5,07	7,38	5,07
		4,90		4,90		5,15		5,66		6,16		6,16		6,16

∅ **10,0 mm**



Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 COMBI

Type d x ℓ	Steel sheet thickness in [mm]													
	16		18		20		22		24		26		28	
ASSY 3.0 Combi 10x260 mm	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73
		9,51		9,51		9,51		9,51		9,51		9,51		9,51
	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76
		5,85		5,85		5,85		5,85		5,85		5,85		5,85
ASSY 3.0 Combi 10x280 mm	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73
		9,51		9,51		9,51		9,51		9,51		9,51		9,51
	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76
		5,85		5,85		5,85		5,85		5,85		5,85		5,85
ASSY 3.0 Combi 10x300 mm	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73	10,00	7,73
		9,51		9,51		9,51		9,51		9,51		9,51		9,51
	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76	6,15	4,76
		5,85		5,85		5,85		5,85		5,85		5,85		5,85
ASSY 3.0 Combi 10x320 mm	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23
		10,01		10,01		10,01		10,01		10,01		10,01		10,01
	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07
		6,16		6,16		6,16		6,16		6,16		6,16		6,16
ASSY 3.0 Combi 10x340 mm	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23
		10,01		10,01		10,01		10,01		10,01		10,01		10,01
	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07
		6,16		6,16		6,16		6,16		6,16		6,16		6,16
ASSY 3.0 Combi 10x360 mm	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23
		10,01		10,01		10,01		10,01		10,01		10,01		10,01
	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07
		6,16		6,16		6,16		6,16		6,16		6,16		6,16
ASSY 3.0 Combi 10x380 mm	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23
		10,01		10,01		10,01		10,01		10,01		10,01		10,01
	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07
		6,16		6,16		6,16		6,16		6,16		6,16		6,16
ASSY 3.0 Combi 10x400 mm	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23	12,00	8,23
		10,01		10,01		10,01		10,01		10,01		10,01		10,01
	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07	7,38	5,07
		6,16		6,16		6,16		6,16		6,16		6,16		6,16

∅ **10,0 mm**

Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 COMBI

Type d x ℓ	Steel sheet thickness in [mm]													
	2		4		6		8		10		12		14	
ASSY 3.0 Combi 12x100 mm	7,20	6,41	7,20	6,28	7,20	6,14	7,20	6,97	7,20	7,82	7,20	8,67	7,20	8,55
		8,62		8,62		8,62		9,56		10,50		11,44		11,44
	4,43	3,94	4,43	3,86	4,43	3,78	4,43	4,29	4,43	4,81	4,43	5,33	4,43	5,26
		5,30		5,30		5,30		5,88		6,46		7,04		7,04
ASSY 3.0 Combi 12x120 mm	9,60	7,41	9,60	7,41	9,60	7,41	9,60	8,04	9,60	8,72	9,60	9,48	9,60	9,48
		9,22		9,22		9,22		10,16		11,10		12,04		12,04
	5,91	4,56	5,91	4,56	5,91	4,56	5,91	4,95	5,91	5,36	5,91	5,83	5,91	5,83
		5,67		5,67		5,67		6,25		6,83		7,41		7,41
ASSY 3.0 Combi 12x140 mm	9,60	7,41	9,60	7,41	9,60	7,41	9,60	8,10	9,60	8,79	9,60	9,48	9,60	9,48
		9,22		9,22		9,22		10,16		11,10		12,04		12,04
	5,91	4,56	5,91	4,56	5,91	4,56	5,91	4,98	5,91	5,41	5,91	5,83	5,91	5,83
		5,67		5,67		5,67		6,25		6,83		7,41		7,41
ASSY 3.0 Combi 12x160 mm	12,00	8,01	12,00	8,01	12,00	8,01	12,00	8,70	12,00	9,39	12,00	10,08	12,00	10,08
		9,82		9,82		9,82		10,76		11,70		12,64		12,64
	7,38	4,93	7,38	4,93	7,38	4,93	7,38	5,35	7,38	5,78	7,38	6,20	7,38	6,20
		6,04		6,04		6,04		6,62		7,20		7,78		7,78
ASSY 3.0 Combi 12x180 mm	12,00	8,01	12,00	8,01	12,00	8,01	12,00	8,70	12,00	9,39	12,00	10,08	12,00	10,08
		9,82		9,82		9,82		10,76		11,70		12,64		12,64
	7,38	4,93	7,38	4,93	7,38	4,93	7,38	5,35	7,38	5,78	7,38	6,20	7,38	6,20
		6,04		6,04		6,04		6,62		7,20		7,78		7,78
ASSY 3.0 Combi 12x200 mm	12,00	8,01	12,00	8,01	12,00	8,01	12,00	8,70	12,00	9,39	12,00	10,08	12,00	10,08
		9,82		9,82		9,82		10,76		11,70		12,64		12,64
	7,38	4,93	7,38	4,93	7,38	4,93	7,38	5,35	7,38	5,78	7,38	6,20	7,38	6,20
		6,04		6,04		6,04		6,62		7,20		7,78		7,78
ASSY 3.0 Combi 12x220 mm	14,40	8,61	14,40	8,61	14,40	8,61	14,40	9,30	14,40	9,99	14,40	10,68	14,40	10,68
		10,42		10,42		10,42		11,36		12,30		13,24		13,24
	8,86	5,30	8,86	5,30	8,86	5,30	8,86	5,72	8,86	6,15	8,86	6,57	8,86	6,57
		6,41		6,41		6,41		6,99		7,57		8,15		8,15
ASSY 3.0 Combi 12x240 mm	14,40	8,61	14,40	8,61	14,40	8,61	14,40	9,30	14,40	9,99	14,40	10,68	14,40	10,68
		10,42		10,42		10,42		11,36		12,30		13,24		13,24
	8,86	5,30	8,86	5,30	8,86	5,30	8,86	5,72	8,86	6,15	8,86	6,57	8,86	6,57
		6,41		6,41		6,41		6,99		7,57		8,15		8,15

∅ **12,0 mm**

Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 COMBI

Type d x ℓ	Steel sheet thickness in [mm]													
	16		18		20		22		24		26		28	
ASSY 3.0 Combi 12x100 mm	7,20	8,44	7,20	8,33	7,20	8,21	7,20	8,10	7,20	7,99	7,20	7,88	7,20	7,78
		11,44		11,44		11,44		11,44		11,44		11,44		11,44
	4,43	5,19	4,43	5,12	4,43	5,05	4,43	4,99	4,43	4,92	4,43	4,85	4,43	4,79
		7,04		7,04		7,04		7,04		7,04		7,04		7,04
ASSY 3.0 Combi 12x120 mm	9,60	9,48	9,60	9,48	9,60	9,48	9,60	9,48	9,60	9,48	9,60	9,48	9,60	9,48
		12,04		12,04		12,04		12,04		12,04		12,04		12,04
	5,91	5,83	5,91	5,83	5,91	5,83	5,91	5,83	5,91	5,83	5,91	5,83	5,91	5,83
		7,41		7,41		7,41		7,41		7,41		7,41		7,41
ASSY 3.0 Combi 12x140 mm	9,60	9,48	9,60	9,48	9,60	9,48	9,60	9,48	9,60	9,48	9,60	9,48	9,60	9,48
		12,04		12,04		12,04		12,04		12,04		12,04		12,04
	5,91	5,83	5,91	5,83	5,91	5,83	5,91	5,83	5,91	5,83	5,91	5,83	5,91	5,83
		7,41		7,41		7,41		7,41		7,41		7,41		7,41
ASSY 3.0 Combi 12x160 mm	12,00	10,08	12,00	10,08	12,00	10,08	12,00	10,08	12,00	10,08	12,00	10,08	12,00	10,08
		12,64		12,64		12,64		12,64		12,64		12,64		12,64
	7,38	6,20	7,38	6,20	7,38	6,20	7,38	6,20	7,38	6,20	7,38	6,20	7,38	6,20
		7,78		7,78		7,78		7,78		7,78		7,78		7,78
ASSY 3.0 Combi 12x180 mm	12,00	10,08	12,00	10,08	12,00	10,08	12,00	10,08	12,00	10,08	12,00	10,08	12,00	10,08
		12,64		12,64		12,64		12,64		12,64		12,64		12,64
	7,38	6,20	7,38	6,20	7,38	6,20	7,38	6,20	7,38	6,20	7,38	6,20	7,38	6,20
		7,78		7,78		7,78		7,78		7,78		7,78		7,78
ASSY 3.0 Combi 12x200 mm	12,00	10,08	12,00	10,08	12,00	10,08	12,00	10,08	12,00	10,08	12,00	10,08	12,00	10,08
		12,64		12,64		12,64		12,64		12,64		12,64		12,64
	7,38	6,20	7,38	6,20	7,38	6,20	7,38	6,20	7,38	6,20	7,38	6,20	7,38	6,20
		7,78		7,78		7,78		7,78		7,78		7,78		7,78
ASSY 3.0 Combi 12x220 mm	14,40	10,68	14,40	10,68	14,40	10,68	14,40	10,68	14,40	10,68	14,40	10,68	14,40	10,68
		13,24		13,24		13,24		13,24		13,24		13,24		13,24
	8,86	6,57	8,86	6,57	8,86	6,57	8,86	6,57	8,86	6,57	8,86	6,57	8,86	6,57
		8,15		8,15		8,15		8,15		8,15		8,15		8,15
ASSY 3.0 Combi 12x240 mm	14,40	10,68	14,40	10,68	14,40	10,68	14,40	10,68	14,40	10,68	14,40	10,68	14,40	10,68
		13,24		13,24		13,24		13,24		13,24		13,24		13,24
	8,86	6,57	8,86	6,57	8,86	6,57	8,86	6,57	8,86	6,57	8,86	6,57	8,86	6,57
		8,15		8,15		8,15		8,15		8,15		8,15		8,15

∅ **12,0 mm**

Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 COMBI

Type d x ℓ	Steel sheet thickness in [mm]													
	2		4		6		8		10		12		14	
ASSY 3.0 Combi 12x260 mm	14,40	8,61	14,40	8,61	14,40	8,61	14,40	9,30	14,40	9,99	14,40	10,68	14,40	10,68
		10,42		10,42		10,42		11,36		12,30		13,24		13,24
	8,86	5,30	8,86	5,30	8,86	5,30	8,86	5,72	8,86	6,15	8,86	6,57	8,86	6,57
		6,41		6,41		6,41		6,99		7,57		8,15		8,15
ASSY 3.0 Combi 12x280 mm	14,40	8,61	14,40	8,61	14,40	8,61	14,40	9,30	14,40	9,99	14,40	10,68	14,40	10,68
		10,42		10,42		10,42		11,36		12,30		13,24		13,24
	8,86	5,30	8,86	5,30	8,86	5,30	8,86	5,72	8,86	6,15	8,86	6,57	8,86	6,57
		6,41		6,41		6,41		6,99		7,57		8,15		8,15
ASSY 3.0 Combi 12x300 mm	14,40	8,61	14,40	8,61	14,40	8,61	14,40	9,30	14,40	9,99	14,40	10,68	14,40	10,68
		10,42		10,42		10,42		11,36		12,30		13,24		13,24
	8,86	5,30	8,86	5,30	8,86	5,30	8,86	5,72	8,86	6,15	8,86	6,57	8,86	6,57
		6,41		6,41		6,41		6,99		7,57		8,15		8,15
ASSY 3.0 Combi 12x320 mm	14,40	8,61	14,40	8,61	14,40	8,61	14,40	9,30	14,40	9,99	14,40	10,68	14,40	10,68
		10,42		10,42		10,42		11,36		12,30		13,24		13,24
	8,86	5,30	8,86	5,30	8,86	5,30	8,86	5,72	8,86	6,15	8,86	6,57	8,86	6,57
		6,41		6,41		6,41		6,99		7,57		8,15		8,15
ASSY 3.0 Combi 12x340 mm	14,40	8,61	14,40	8,61	14,40	8,61	14,40	9,30	14,40	9,99	14,40	10,68	14,40	10,68
		10,42		10,42		10,42		11,36		12,30		13,24		13,24
	8,86	5,30	8,86	5,30	8,86	5,30	8,86	5,72	8,86	6,15	8,86	6,57	8,86	6,57
		6,41		6,41		6,41		6,99		7,57		8,15		8,15
ASSY 3.0 Combi 12x360 mm	14,40	8,61	14,40	8,61	14,40	8,61	14,40	9,30	14,40	9,99	14,40	10,68	14,40	10,68
		10,42		10,42		10,42		11,36		12,30		13,24		13,24
	8,86	5,30	8,86	5,30	8,86	5,30	8,86	5,72	8,86	6,15	8,86	6,57	8,86	6,57
		6,41		6,41		6,41		6,99		7,57		8,15		8,15
ASSY 3.0 Combi 12x380 mm	17,40	9,36	17,40	9,36	17,40	9,36	17,40	10,05	17,40	10,74	17,40	11,43	17,40	11,43
		11,17		11,17		11,17		12,11		13,05		13,99		13,99
	10,71	5,76	10,71	5,76	10,71	5,76	10,71	6,18	10,71	6,61	10,71	7,03	10,71	7,03
		6,87		6,87		6,87		7,45		8,03		8,61		8,61
ASSY 3.0 Combi 12x400 mm	17,40	9,36	17,40	9,36	17,40	9,36	17,40	10,05	17,40	10,74	17,40	11,43	17,40	11,43
		11,17		11,17		11,17		12,11		13,05		13,99		13,99
	10,71	5,76	10,71	5,76	10,71	5,76	10,71	6,18	10,71	6,61	10,71	7,03	10,71	7,03
		6,87		6,87		6,87		7,45		8,03		8,61		8,61

∅ **12,0 mm**

Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 COMBI

Type d x ℓ	Steel sheet thickness in [mm]													
	16		18		20		22		24		26		28	
ASSY 3.0 Combi 12x260 mm	14,40	10,68 13,24	14,40	10,68 13,24	14,40	10,68 13,24	14,40	10,68 13,24	14,40	10,68 13,24	14,40	10,68 13,24	14,40	10,68 13,24
	8,86	6,57 8,15	8,86	6,57 8,15	8,86	6,57 8,15	8,86	6,57 8,15	8,86	6,57 8,15	8,86	6,57 8,15	8,86	6,57 8,15
ASSY 3.0 Combi 12x280 mm	14,40	10,68 13,24	14,40	10,68 13,24	14,40	10,68 13,24	14,40	10,68 13,24	14,40	10,68 13,24	14,40	10,68 13,24	14,40	10,68 13,24
	8,86	6,57 8,15	8,86	6,57 8,15	8,86	6,57 8,15	8,86	6,57 8,15	8,86	6,57 8,15	8,86	6,57 8,15	8,86	6,57 8,15
ASSY 3.0 Combi 12x300 mm	14,40	10,68 13,24	14,40	10,68 13,24	14,40	10,68 13,24	14,40	10,68 13,24	14,40	10,68 13,24	14,40	10,68 13,24	14,40	10,68 13,24
	8,86	6,57 8,15	8,86	6,57 8,15	8,86	6,57 8,15	8,86	6,57 8,15	8,86	6,57 8,15	8,86	6,57 8,15	8,86	6,57 8,15
ASSY 3.0 Combi 12x320 mm	14,40	10,68 13,24	14,40	10,68 13,24	14,40	10,68 13,24	14,40	10,68 13,24	14,40	10,68 13,24	14,40	10,68 13,24	14,40	10,68 13,24
	8,86	6,57 8,15	8,86	6,57 8,15	8,86	6,57 8,15	8,86	6,57 8,15	8,86	6,57 8,15	8,86	6,57 8,15	8,86	6,57 8,15
ASSY 3.0 Combi 12x340 mm	14,40	10,68 13,24	14,40	10,68 13,24	14,40	10,68 13,24	14,40	10,68 13,24	14,40	10,68 13,24	14,40	10,68 13,24	14,40	10,68 13,24
	8,86	6,57 8,15	8,86	6,57 8,15	8,86	6,57 8,15	8,86	6,57 8,15	8,86	6,57 8,15	8,86	6,57 8,15	8,86	6,57 8,15
ASSY 3.0 Combi 12x360 mm	14,40	10,68 13,24	14,40	10,68 13,24	14,40	10,68 13,24	14,40	10,68 13,24	14,40	10,68 13,24	14,40	10,68 13,24	14,40	10,68 13,24
	8,86	6,57 8,15	8,86	6,57 8,15	8,86	6,57 8,15	8,86	6,57 8,15	8,86	6,57 8,15	8,86	6,57 8,15	8,86	6,57 8,15
ASSY 3.0 Combi 12x380 mm	17,40	11,43 13,99	17,40	11,43 13,99	17,40	11,43 13,99	17,40	11,43 13,99	17,40	11,43 13,99	17,40	11,43 13,99	17,40	11,43 13,99
	10,71	7,03 8,61	10,71	7,03 8,61	10,71	7,03 8,61	10,71	7,03 8,61	10,71	7,03 8,61	10,71	7,03 8,61	10,71	7,03 8,61
ASSY 3.0 Combi 12x400 mm	17,40	11,43 13,99	17,40	11,43 13,99	17,40	11,43 13,99	17,40	11,43 13,99	17,40	11,43 13,99	17,40	11,43 13,99	17,40	11,43 13,99
	10,71	7,03 8,61	10,71	7,03 8,61	10,71	7,03 8,61	10,71	7,03 8,61	10,71	7,03 8,61	10,71	7,03 8,61	10,71	7,03 8,61

∅ **12,0 mm**

Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 COMBI

Type d x ℓ	Steel sheet thickness in [mm]													
	2		4		6		8		10		12		14	
ASSY 3.0 Combi 12x440 mm	17,40	9,36	17,40	9,36	17,40	9,36	17,40	10,05	17,40	10,74	17,40	11,43	17,40	11,43
		11,17		11,17		11,17		12,11		13,05		13,99		13,99
	10,71	5,76	10,71	5,76	10,71	5,76	10,71	6,18	10,71	6,61	10,71	7,03	10,71	7,03
		6,87		6,87		6,87		7,45		8,03		8,61		8,61
ASSY 3.0 Combi 12x480 mm	17,40	9,36	17,40	9,36	17,40	9,36	17,40	10,05	17,40	10,74	17,40	11,43	17,40	11,43
		11,17		11,17		11,17		12,11		13,05		13,99		13,99
	10,71	5,76	10,71	5,76	10,71	5,76	10,71	6,18	10,71	6,61	10,71	7,03	10,71	7,03
		6,87		6,87		6,87		7,45		8,03		8,61		8,61

∅ **12,0 mm**

Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 COMBI

Type d x ℓ	Steel sheet thickness in [mm]													
	16		18		20		22		24		26		28	
ASSY 3.0 Combi 12x440 mm	17,40	11,43	17,40	11,43	17,40	11,43	17,40	11,43	17,40	11,43	17,40	11,43	17,40	11,43
		13,99		13,99		13,99		13,99		13,99		13,99		13,99
	10,71	7,03	10,71	7,03	10,71	7,03	10,71	7,03	10,71	7,03	10,71	7,03	10,71	7,03
		8,61		8,61		8,61		8,61		8,61		8,61		8,61
ASSY 3.0 Combi 12x480 mm	17,40	11,43	17,40	11,43	17,40	11,43	17,40	11,43	17,40	11,43	17,40	11,43	17,40	11,43
		13,99		13,99		13,99		13,99		13,99		13,99		13,99
	10,71	7,03	10,71	7,03	10,71	7,03	10,71	7,03	10,71	7,03	10,71	7,03	10,71	7,03
		8,61		8,61		8,61		8,61		8,61		8,61		8,61

∅ **12,0 mm**

Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY PLUS

Type d x ℓ	Steel sheet thickness in [mm]													
	2		4		6		8		10		12		14	
ASSY plus 5x50 mm	1,86	1,64	1,86	1,93	1,86	2,13	1,86	2,13	1,86	2,13	1,86	2,07	1,86	2,01
		1,92		2,29		2,53		2,53		2,53		2,53		2,53
	1,14	1,01	1,14	1,19	1,14	1,31	1,14	1,31	1,14	1,31	1,14	1,28	1,14	1,24
		1,18		1,41		1,56		1,56		1,56		1,56		1,56
ASSY plus 5x60 mm	1,98	1,67	1,98	1,96	1,98	2,16	1,98	2,16	1,98	2,16	1,98	2,16	1,98	2,16
		1,95		2,32		2,56		2,56		2,56		2,56		2,56
	1,22	1,03	1,22	1,21	1,22	1,33	1,22	1,33	1,22	1,33	1,22	1,33	1,22	1,33
		1,20		1,43		1,57		1,57		1,57		1,57		1,57
ASSY plus 5x70 mm	2,58	1,82	2,58	2,11	2,58	2,31	2,58	2,31	2,58	2,31	2,58	2,31	2,58	2,31
		2,10		2,47		2,71		2,71		2,71		2,71		2,71
	1,59	1,12	1,59	1,30	1,59	1,42	1,59	1,42	1,59	1,42	1,59	1,42	1,59	1,42
		1,29		1,52		1,67		1,67		1,67		1,67		1,67
ASSY plus 5x80 mm	2,58	1,82	2,58	2,11	2,58	2,31	2,58	2,31	2,58	2,31	2,58	2,31	2,58	2,31
		2,10		2,47		2,71		2,71		2,71		2,71		2,71
	1,59	1,12	1,59	1,30	1,59	1,42	1,59	1,42	1,59	1,42	1,59	1,42	1,59	1,42
		1,29		1,52		1,67		1,67		1,67		1,67		1,67
ASSY plus 5x90 mm	3,18	1,97	3,18	2,26	3,18	2,46	3,18	2,46	3,18	2,46	3,18	2,46	3,18	2,46
		2,25		2,62		2,86		2,86		2,86		2,86		2,86
	1,96	1,21	1,96	1,39	1,96	1,51	1,96	1,51	1,96	1,51	1,96	1,51	1,96	1,51
		1,39		1,61		1,76		1,76		1,76		1,76		1,76
ASSY plus 5x100 mm	3,18	1,97	3,18	2,26	3,18	2,46	3,18	2,46	3,18	2,46	3,18	2,46	3,18	2,46
		2,25		2,62		2,86		2,86		2,86		2,86		2,86
	1,96	1,21	1,96	1,39	1,96	1,51	1,96	1,51	1,96	1,51	1,96	1,51	1,96	1,51
		1,39		1,61		1,76		1,76		1,76		1,76		1,76

∅ **5,0 mm**

Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY PLUS

Type d x ℓ	Steel sheet thickness in [mm]													
	16		18		20		22		24		26		28	
ASSY plus 5x50 mm	1,86	1,95	1,86	1,89	1,80	1,82	1,68	1,73	1,56	1,65	1,44	1,57	1,32	1,49
		2,53		2,53		2,42		2,29		2,17		2,05		1,94
	1,14	1,20	1,14	1,16	1,11	1,12	1,03	1,07	0,96	1,02	0,89	0,97	0,81	0,92
		1,56		1,56		1,49		1,41		1,34		1,26		1,19
ASSY plus 5x60 mm	1,98	2,16	1,98	2,16	1,98	2,16	1,98	2,10	1,98	2,04	1,98	1,98	1,92	1,91
		2,56		2,56		2,56		2,56		2,56		2,56		2,54
	1,22	1,33	1,22	1,33	1,22	1,33	1,22	1,29	1,22	1,26	1,22	1,22	1,18	1,17
		1,57		1,57		1,57		1,57		1,57		1,57		1,56
ASSY plus 5x70 mm	2,58	2,31	2,58	2,31	2,58	2,31	2,58	2,31	2,58	2,31	2,58	2,31	2,52	2,29
		2,71		2,71		2,71		2,71		2,71		2,71		2,69
	1,59	1,42	1,59	1,42	1,59	1,42	1,59	1,42	1,59	1,42	1,59	1,42	1,55	1,41
		1,67		1,67		1,67		1,67		1,67		1,67		1,66
ASSY plus 5x80 mm	2,58	2,31	2,58	2,31	2,58	2,31	2,58	2,31	2,58	2,31	2,58	2,31	2,58	2,31
		2,71		2,71		2,71		2,71		2,71		2,71		2,71
	1,59	1,42	1,59	1,42	1,59	1,42	1,59	1,42	1,59	1,42	1,59	1,42	1,59	1,42
		1,67		1,67		1,67		1,67		1,67		1,67		1,67
ASSY plus 5x90 mm	3,18	2,46	3,18	2,46	3,18	2,46	3,18	2,46	3,18	2,46	3,18	2,46	3,18	2,46
		2,86		2,86		2,86		2,86		2,86		2,86		2,86
	1,96	1,51	1,96	1,51	1,96	1,51	1,96	1,51	1,96	1,51	1,96	1,51	1,96	1,51
		1,76		1,76		1,76		1,76		1,76		1,76		1,76
ASSY plus 5x100 mm	3,18	2,46	3,18	2,46	3,18	2,46	3,18	2,46	3,18	2,46	3,18	2,46	3,18	2,46
		2,86		2,86		2,86		2,86		2,86		2,86		2,86
	1,96	1,51	1,96	1,51	1,96	1,51	1,96	1,51	1,96	1,51	1,96	1,51	1,96	1,51
		1,76		1,76		1,76		1,76		1,76		1,76		1,76

∅ **5,0 mm**

Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUES TABLE STEEL-WOOD ASSY PLUS

Type d x ℓ	Steel sheet thickness in [mm]													
	2		4		6		8		10		12		14	
ASSY plus 6x80 mm	3,52	2,47	3,52	2,69	3,52	3,13	3,52	3,13	3,52	3,13	3,52	3,13	3,52	3,13
		2,90		3,17		3,73		3,73		3,73		3,73		3,73
	2,17	1,52	2,17	1,65	2,17	1,93	2,17	1,93	2,17	1,93	2,17	1,93	2,17	1,93
		1,78		1,95		2,30		2,30		2,30		2,30		2,30
ASSY plus 6x90 mm	3,52	2,47	3,52	2,69	3,52	3,13	3,52	3,13	3,52	3,13	3,52	3,13	3,52	3,13
		2,90		3,17		3,73		3,73		3,73		3,73		3,73
	2,17	1,52	2,17	1,65	2,17	1,93	2,17	1,93	2,17	1,93	2,17	1,93	2,17	1,93
		1,78		1,95		2,30		2,30		2,30		2,30		2,30
ASSY plus 6x100 mm	4,14	2,62	4,14	2,84	4,14	3,28	4,14	3,28	4,14	3,28	4,14	3,28	4,14	3,28
		3,05		3,33		3,89		3,89		3,89		3,89		3,89
	2,55	1,62	2,55	1,75	2,55	2,02	2,55	2,02	2,55	2,02	2,55	2,02	2,55	2,02
		1,88		2,05		2,39		2,39		2,39		2,39		2,39
ASSY plus 6x120 mm	4,14	2,62	4,14	2,84	4,14	3,28	4,14	3,28	4,14	3,28	4,14	3,28	4,14	3,28
		3,05		3,33		3,89		3,89		3,89		3,89		3,89
	2,55	1,62	2,55	1,75	2,55	2,02	2,55	2,02	2,55	2,02	2,55	2,02	2,55	2,02
		1,88		2,05		2,39		2,39		2,39		2,39		2,39
ASSY plus 6x140 mm	4,14	2,62	4,14	2,84	4,14	3,28	4,14	3,28	4,14	3,28	4,14	3,28	4,14	3,28
		3,05		3,33		3,89		3,89		3,89		3,89		3,89
	2,55	1,62	2,55	1,75	2,55	2,02	2,55	2,02	2,55	2,02	2,55	2,02	2,55	2,02
		1,88		2,05		2,39		2,39		2,39		2,39		2,39
ASSY plus 6x160 mm	4,14	2,62	4,14	2,84	4,14	3,28	4,14	3,28	4,14	3,28	4,14	3,28	4,14	3,28
		3,05		3,33		3,89		3,89		3,89		3,89		3,89
	2,55	1,62	2,55	1,75	2,55	2,02	2,55	2,02	2,55	2,02	2,55	2,02	2,55	2,02
		1,88		2,05		2,39		2,39		2,39		2,39		2,39
ASSY plus 6x180 mm	4,14	2,62	4,14	2,84	4,14	3,28	4,14	3,28	4,14	3,28	4,14	3,28	4,14	3,28
		3,05		3,33		3,89		3,89		3,89		3,89		3,89
	2,55	1,62	2,55	1,75	2,55	2,02	2,55	2,02	2,55	2,02	2,55	2,02	2,55	2,02
		1,88		2,05		2,39		2,39		2,39		2,39		2,39
ASSY plus 6x200 mm	4,14	2,62	4,14	2,84	4,14	3,28	4,14	3,28	4,14	3,28	4,14	3,28	4,14	3,28
		3,05		3,33		3,89		3,89		3,89		3,89		3,89
	2,55	1,62	2,55	1,75	2,55	2,02	2,55	2,02	2,55	2,02	2,55	2,02	2,55	2,02
		1,88		2,05		2,39		2,39		2,39		2,39		2,39

∅ **6,0 mm**

Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUES TABLE STEEL-WOOD ASSY PLUS

Type d x ℓ	Steel sheet thickness in [mm]													
	16		18		20		22		24		26		28	
ASSY plus 6x80 mm	3,52	3,13	3,52	3,13	3,52	3,13	3,52	3,13	3,52	3,13	3,52	3,13	3,52	3,13
		3,73		3,73		3,73		3,73		3,73		3,73		3,73
	2,17	1,93	2,17	1,93	2,17	1,93	2,17	1,93	2,17	1,93	2,17	1,93	2,17	1,93
		2,30		2,30		2,30		2,30		2,30		2,30		2,30
ASSY plus 6x90 mm	3,52	3,13	3,52	3,13	3,52	3,13	3,52	3,13	3,52	3,13	3,52	3,13	3,52	3,13
		3,73		3,73		3,73		3,73		3,73		3,73		3,73
	2,17	1,93	2,17	1,93	2,17	1,93	2,17	1,93	2,17	1,93	2,17	1,93	2,17	1,93
		2,30		2,30		2,30		2,30		2,30		2,30		2,30
ASSY plus 6x100 mm	4,14	3,28	4,14	3,28	4,14	3,28	4,14	3,28	4,14	3,28	4,14	3,28	4,14	3,28
		3,89		3,89		3,89		3,89		3,89		3,89		3,89
	2,55	2,02	2,55	2,02	2,55	2,02	2,55	2,02	2,55	2,02	2,55	2,02	2,55	2,02
		2,39		2,39		2,39		2,39		2,39		2,39		2,39
ASSY plus 6x120 mm	4,14	3,28	4,14	3,28	4,14	3,28	4,14	3,28	4,14	3,28	4,14	3,28	4,14	3,28
		3,89		3,89		3,89		3,89		3,89		3,89		3,89
	2,55	2,02	2,55	2,02	2,55	2,02	2,55	2,02	2,55	2,02	2,55	2,02	2,55	2,02
		2,39		2,39		2,39		2,39		2,39		2,39		2,39
ASSY plus 6x140 mm	4,14	3,28	4,14	3,28	4,14	3,28	4,14	3,28	4,14	3,28	4,14	3,28	4,14	3,28
		3,89		3,89		3,89		3,89		3,89		3,89		3,89
	2,55	2,02	2,55	2,02	2,55	2,02	2,55	2,02	2,55	2,02	2,55	2,02	2,55	2,02
		2,39		2,39		2,39		2,39		2,39		2,39		2,39
ASSY plus 6x160 mm	4,14	3,28	4,14	3,28	4,14	3,28	4,14	3,28	4,14	3,28	4,14	3,28	4,14	3,28
		3,89		3,89		3,89		3,89		3,89		3,89		3,89
	2,55	2,02	2,55	2,02	2,55	2,02	2,55	2,02	2,55	2,02	2,55	2,02	2,55	2,02
		2,39		2,39		2,39		2,39		2,39		2,39		2,39
ASSY plus 6x180 mm	4,14	3,28	4,14	3,28	4,14	3,28	4,14	3,28	4,14	3,28	4,14	3,28	4,14	3,28
		3,89		3,89		3,89		3,89		3,89		3,89		3,89
	2,55	2,02	2,55	2,02	2,55	2,02	2,55	2,02	2,55	2,02	2,55	2,02	2,55	2,02
		2,39		2,39		2,39		2,39		2,39		2,39		2,39
ASSY plus 6x200 mm	4,14	3,28	4,14	3,28	4,14	3,28	4,14	3,28	4,14	3,28	4,14	3,28	4,14	3,28
		3,89		3,89		3,89		3,89		3,89		3,89		3,89
	2,55	2,02	2,55	2,02	2,55	2,02	2,55	2,02	2,55	2,02	2,55	2,02	2,55	2,02
		2,39		2,39		2,39		2,39		2,39		2,39		2,39

∅ **6,0 mm**

Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY PLUS

Type d x ℓ	Steel sheet thickness in [mm]													
	2		4		6		8		10		12		14	
ASSY plus 6x220 mm	4,14	2,62	4,14	2,84	4,14	3,28	4,14	3,28	4,14	3,28	4,14	3,28	4,14	3,28
		3,05		3,33		3,89		3,89		3,89		3,89		3,89
	2,55	1,62	2,55	1,75	2,55	2,02	2,55	2,02	2,55	2,02	2,55	2,02	2,55	2,02
		1,88		2,05		2,39		2,39		2,39		2,39		2,39
ASSY plus 6x240 mm	4,14	2,62	4,14	2,84	4,14	3,28	4,14	3,28	4,14	3,28	4,14	3,28	4,14	3,28
		3,05		3,33		3,89		3,89		3,89		3,89		3,89
	2,55	1,62	2,55	1,75	2,55	2,02	2,55	2,02	2,55	2,02	2,55	2,02	2,55	2,02
		1,88		2,05		2,39		2,39		2,39		2,39		2,39

∅ **6,0 mm**

Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUES TABLE STEEL-WOOD ASSY PLUS

Type d x ℓ	Steel sheet thickness in [mm]													
	16		18		20		22		24		26		28	
ASSY plus 6x220 mm	4,14	3,28	4,14	3,28	4,14	3,28	4,14	3,28	4,14	3,28	4,14	3,28	4,14	3,28
		3,89		3,89		3,89		3,89		3,89		3,89		3,89
	2,55	2,02	2,55	2,02	2,55	2,02	2,55	2,02	2,55	2,02	2,55	2,02	2,55	2,02
		2,39		2,39		2,39		2,39		2,39		2,39		2,39
ASSY plus 6x240 mm	4,14	3,28	4,14	3,28	4,14	3,28	4,14	3,28	4,14	3,28	4,14	3,28	4,14	3,28
		3,89		3,89		3,89		3,89		3,89		3,89		3,89
	2,55	2,02	2,55	2,02	2,55	2,02	2,55	2,02	2,55	2,02	2,55	2,02	2,55	2,02
		2,39		2,39		2,39		2,39		2,39		2,39		2,39

∅ **6,0 mm**

Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY PLUS

Type d x ℓ	Steel sheet thickness in [mm]													
	2		4		6		8		10		12		14	
ASSY plus 8x140 mm	6,51	4,18	6,51	4,18	6,51	4,71	6,51	5,24	6,51	5,24	6,51	5,24	6,51	5,24
		4,97		4,97		5,66		6,36		6,36		6,36		6,36
	4,01	2,57	4,01	2,57	4,01	2,90	4,01	3,22	4,01	3,22	4,01	3,22	4,01	3,22
		3,06		3,06		3,48		3,91		3,91		3,91		3,91
ASSY plus 8x160 mm	6,51	4,18	6,51	4,18	6,51	4,71	6,51	5,24	6,51	5,24	6,51	5,24	6,51	5,24
		4,97		4,97		5,66		6,36		6,36		6,36		6,36
	4,01	2,57	4,01	2,57	4,01	2,90	4,01	3,22	4,01	3,22	4,01	3,22	4,01	3,22
		3,06		3,06		3,48		3,91		3,91		3,91		3,91
ASSY plus 8x180 mm	6,51	4,18	6,51	4,18	6,51	4,71	6,51	5,24	6,51	5,24	6,51	5,24	6,51	5,24
		4,97		4,97		5,66		6,36		6,36		6,36		6,36
	4,01	2,57	4,01	2,57	4,01	2,90	4,01	3,22	4,01	3,22	4,01	3,22	4,01	3,22
		3,06		3,06		3,48		3,91		3,91		3,91		3,91
ASSY plus 8x200 mm	6,51	4,18	6,51	4,18	6,51	4,71	6,51	5,24	6,51	5,24	6,51	5,24	6,51	5,24
		4,97		4,97		5,66		6,36		6,36		6,36		6,36
	4,01	2,57	4,01	2,57	4,01	2,90	4,01	3,22	4,01	3,22	4,01	3,22	4,01	3,22
		3,06		3,06		3,48		3,91		3,91		3,91		3,91
ASSY plus 8x220 mm	8,27	4,62	8,27	4,62	8,27	5,15	8,27	5,68	8,27	5,68	8,27	5,68	8,27	5,68
		5,41		5,41		6,10		6,80		6,80		6,80		6,80
	5,09	2,84	5,09	2,84	5,09	3,17	5,09	3,49	5,09	3,49	5,09	3,49	5,09	3,49
		3,33		3,33		3,76		4,18		4,18		4,18		4,18
ASSY plus 8x240 mm	8,27	4,62	8,27	4,62	8,27	5,15	8,27	5,68	8,27	5,68	8,27	5,68	8,27	5,68
		5,41		5,41		6,10		6,80		6,80		6,80		6,80
	5,09	2,84	5,09	2,84	5,09	3,17	5,09	3,49	5,09	3,49	5,09	3,49	5,09	3,49
		3,33		3,33		3,76		4,18		4,18		4,18		4,18
ASSY plus 8x260 mm	8,27	4,62	8,27	4,62	8,27	5,15	8,27	5,68	8,27	5,68	8,27	5,68	8,27	5,68
		5,41		5,41		6,10		6,80		6,80		6,80		6,80
	5,09	2,84	5,09	2,84	5,09	3,17	5,09	3,49	5,09	3,49	5,09	3,49	5,09	3,49
		3,33		3,33		3,76		4,18		4,18		4,18		4,18
ASSY plus 8x280 mm	8,27	4,62	8,27	4,62	8,27	5,15	8,27	5,68	8,27	5,68	8,27	5,68	8,27	5,68
		5,41		5,41		6,10		6,80		6,80		6,80		6,80
	5,09	2,84	5,09	2,84	5,09	3,17	5,09	3,49	5,09	3,49	5,09	3,49	5,09	3,49
		3,33		3,33		3,76		4,18		4,18		4,18		4,18
ASSY plus 8x300 mm	8,27	4,62	8,27	4,62	8,27	5,15	8,27	5,68	8,27	5,68	8,27	5,68	8,27	5,68
		5,41		5,41		6,10		6,80		6,80		6,80		6,80
	5,09	2,84	5,09	2,84	5,09	3,17	5,09	3,49	5,09	3,49	5,09	3,49	5,09	3,49
		3,33		3,33		3,76		4,18		4,18		4,18		4,18

∅ **8,0 mm**

Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY PLUS

Type d x ℓ	Steel sheet thickness in [mm]													
	16		18		20		22		24		26		28	
ASSY plus 8x140 mm	6,51	5,24	6,51	5,24	6,51	5,24	6,51	5,24	6,51	5,24	6,51	5,24	6,51	5,24
		6,36		6,36		6,36		6,36		6,36		6,36		6,36
	4,01	3,22	4,01	3,22	4,01	3,22	4,01	3,22	4,01	3,22	4,01	3,22	4,01	3,22
		3,91		3,91		3,91		3,91		3,91		3,91		3,91
ASSY plus 8x160 mm	6,51	5,24	6,51	5,24	6,51	5,24	6,51	5,24	6,51	5,24	6,51	5,24	6,51	5,24
		6,36		6,36		6,36		6,36		6,36		6,36		6,36
	4,01	3,22	4,01	3,22	4,01	3,22	4,01	3,22	4,01	3,22	4,01	3,22	4,01	3,22
		3,91		3,91		3,91		3,91		3,91		3,91		3,91
ASSY plus 8x180 mm	6,51	5,24	6,51	5,24	6,51	5,24	6,51	5,24	6,51	5,24	6,51	5,24	6,51	5,24
		6,36		6,36		6,36		6,36		6,36		6,36		6,36
	4,01	3,22	4,01	3,22	4,01	3,22	4,01	3,22	4,01	3,22	4,01	3,22	4,01	3,22
		3,91		3,91		3,91		3,91		3,91		3,91		3,91
ASSY plus 8x200 mm	6,51	5,24	6,51	5,24	6,51	5,24	6,51	5,24	6,51	5,24	6,51	5,24	6,51	5,24
		6,36		6,36		6,36		6,36		6,36		6,36		6,36
	4,01	3,22	4,01	3,22	4,01	3,22	4,01	3,22	4,01	3,22	4,01	3,22	4,01	3,22
		3,91		3,91		3,91		3,91		3,91		3,91		3,91
ASSY plus 8x220 mm	8,27	5,68	8,27	5,68	8,27	5,68	8,27	5,68	8,27	5,68	8,27	5,68	8,27	5,68
		6,80		6,80		6,80		6,80		6,80		6,80		6,80
	5,09	3,49	5,09	3,49	5,09	3,49	5,09	3,49	5,09	3,49	5,09	3,49	5,09	3,49
		4,18		4,18		4,18		4,18		4,18		4,18		4,18
ASSY plus 8x240 mm	8,27	5,68	8,27	5,68	8,27	5,68	8,27	5,68	8,27	5,68	8,27	5,68	8,27	5,68
		6,80		6,80		6,80		6,80		6,80		6,80		6,80
	5,09	3,49	5,09	3,49	5,09	3,49	5,09	3,49	5,09	3,49	5,09	3,49	5,09	3,49
		4,18		4,18		4,18		4,18		4,18		4,18		4,18
ASSY plus 8x260 mm	8,27	5,68	8,27	5,68	8,27	5,68	8,27	5,68	8,27	5,68	8,27	5,68	8,27	5,68
		6,80		6,80		6,80		6,80		6,80		6,80		6,80
	5,09	3,49	5,09	3,49	5,09	3,49	5,09	3,49	5,09	3,49	5,09	3,49	5,09	3,49
		4,18		4,18		4,18		4,18		4,18		4,18		4,18
ASSY plus 8x280 mm	8,27	5,68	8,27	5,68	8,27	5,68	8,27	5,68	8,27	5,68	8,27	5,68	8,27	5,68
		6,80		6,80		6,80		6,80		6,80		6,80		6,80
	5,09	3,49	5,09	3,49	5,09	3,49	5,09	3,49	5,09	3,49	5,09	3,49	5,09	3,49
		4,18		4,18		4,18		4,18		4,18		4,18		4,18
ASSY plus 8x300 mm	8,27	5,68	8,27	5,68	8,27	5,68	8,27	5,68	8,27	5,68	8,27	5,68	8,27	5,68
		6,80		6,80		6,80		6,80		6,80		6,80		6,80
	5,09	3,49	5,09	3,49	5,09	3,49	5,09	3,49	5,09	3,49	5,09	3,49	5,09	3,49
		4,18		4,18		4,18		4,18		4,18		4,18		4,18

∅ **8,0 mm**

Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

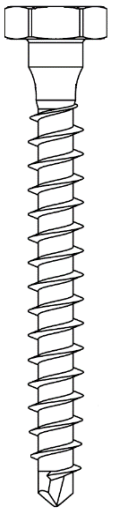
Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY PLUS VG COMBI

Type d x ℓ	Steel sheet thickness in [mm]													
	2		4		6		8		10		12		14	
ASSY plus VG combi 6x80 mm	4,90	2,81	4,90	3,03	4,90	3,47	4,90	3,47	4,83	3,46	4,69	3,42	4,55	3,39
		3,24		3,52		4,08		4,08		4,06		4,03		3,99
	3,01	1,73	3,01	1,87	3,01	2,14	3,01	2,14	2,97	2,13	2,89	2,11	2,80	2,08
		1,99		2,17		2,51		2,51		2,50		2,48		2,46
ASSY plus VG combi 6x100 mm	6,28	3,16	6,28	3,38	6,28	3,82	6,28	3,82	6,21	3,80	6,07	3,77	5,93	3,73
		3,59		3,86		4,42		4,42		4,40		4,37		4,34
	3,86	1,94	3,86	2,08	3,86	2,35	3,86	2,35	3,82	2,34	3,74	2,32	3,65	2,30
		2,21		2,38		2,72		2,72		2,71		2,69		2,67

∅
6,0 mm



Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

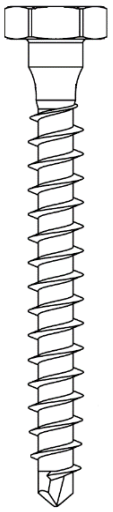
Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY PLUS VG COMBI

Type d x ℓ	Steel sheet thickness in [mm]													
	16		18		20		22		24		26		28	
ASSY plus VG combi 6x80 mm	4,42	3,35	4,28	3,32	4,14	3,28	4,00	3,25	3,86	3,21	3,73	3,18	3,59	3,15
		3,96		3,92		3,89		3,85		3,82		3,78		3,75
	2,72	2,06	2,63	2,04	2,55	2,02	2,46	2,00	2,38	1,98	2,29	1,96	2,21	1,94
		2,43		2,41		2,39		2,37		2,35		2,33		2,31
ASSY plus VG combi 6x100 mm	5,80	3,70	5,66	3,66	5,52	3,63	5,38	3,59	5,24	3,56	5,11	3,52	4,97	3,49
		4,30		4,27		4,23		4,20		4,16		4,13		4,09
	3,57	2,28	3,48	2,25	3,40	2,23	3,31	2,21	3,23	2,19	3,14	2,17	3,06	2,15
		2,65		2,63		2,60		2,58		2,56		2,54		2,52

∅ **6,0 mm**



Calculation assumptions

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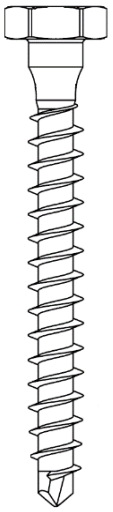
AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY PLUS VG COMBI

Type d x ℓ	Steel sheet thickness in [mm]													
	2		4		6		8		10		12		14	
ASSY plus VG combi 8x80 mm	5,90	3,84	5,90	3,74	5,90	4,36	5,90	5,08	5,90	5,08	5,90	5,08	5,81	5,06
		4,82		4,82		5,51		6,20		6,20		6,20		6,18
	3,63	2,36	3,63	2,30	3,63	2,68	3,63	3,13	3,63	3,13	3,63	3,13	3,57	3,11
		2,96		2,96		3,39		3,82		3,82		3,82		3,80
ASSY plus VG combi 8x100 mm	7,66	4,47	7,66	4,47	7,66	4,99	7,66	5,52	7,66	5,52	7,66	5,52	7,57	5,50
		5,26		5,26		5,95		6,64		6,64		6,64		6,62
	4,71	2,75	4,71	2,75	4,71	3,07	4,71	3,40	4,71	3,40	4,71	3,40	4,66	3,38
		3,23		3,23		3,66		4,09		4,09		4,09		4,07
ASSY plus VG combi 8x120 mm	9,42	4,91	9,42	4,91	9,42	5,43	9,42	5,96	9,42	5,96	9,42	5,96	9,33	5,94
		5,70		5,70		6,39		7,08		7,08		7,08		7,06
	5,79	3,02	5,79	3,02	5,79	3,34	5,79	3,67	5,79	3,67	5,79	3,67	5,74	3,66
		3,51		3,51		3,93		4,36		4,36		4,36		4,34

∅ **8,0 mm**



Calculation assumptions

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Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

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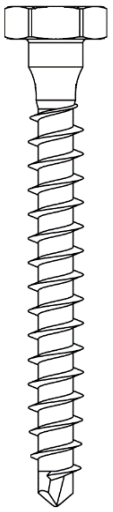
AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY PLUS VG COMBI

Type d x ℓ	Steel sheet thickness in [mm]													
	16		18		20		22		24		26		28	
ASSY plus VG combi 8x80 mm	5,63	5,02	5,46	4,97	5,28	4,84	5,10	4,71	4,93	4,58	4,75	4,45	4,58	4,32
		6,14		6,09		6,05		6,00		5,96		5,92		5,87
	3,47	3,09	3,36	3,06	3,25	2,98	3,14	2,90	3,03	2,82	2,92	2,74	2,82	2,66
		3,78		3,75		3,72		3,69		3,67		3,64		3,61
ASSY plus VG combi 8x100 mm	7,39	5,46	7,22	5,41	7,04	5,37	6,86	5,32	6,69	5,28	6,51	5,24	6,34	5,19
		6,58		6,53		6,49		6,44		6,40		6,36		6,31
	4,55	3,36	4,44	3,33	4,33	3,30	4,22	3,28	4,12	3,25	4,01	3,22	3,90	3,20
		4,05		4,02		3,99		3,97		3,94		3,91		3,88
ASSY plus VG combi 8x120 mm	9,15	5,90	8,98	5,85	8,80	5,81	8,62	5,76	8,45	5,72	8,27	5,68	8,10	5,63
		7,02		6,97		6,93		6,88		6,84		6,80		6,75
	5,63	3,63	5,52	3,60	5,42	3,57	5,31	3,55	5,20	3,52	5,09	3,49	4,98	3,47
		4,32		4,29		4,26		4,24		4,21		4,18		4,15

∅ **8,0 mm**



Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

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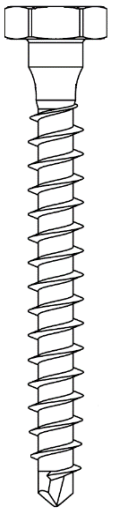
NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY PLUS VG COMBI

Type d x ℓ	Steel sheet thickness in [mm]													
	2		4		6		8		10		12		14	
ASSY plus VG combi 10x100 mm	8,00	5,64	8,00	5,52	8,00	5,77	8,00	6,46	8,00	7,23	8,00	7,23	8,00	7,23
		6,96		6,96		7,37		8,19		9,01		9,01		9,01
	4,92	3,47	4,92	3,40	4,92	3,55	4,92	3,97	4,92	4,45	4,92	4,45	4,92	4,45
		4,28		4,28		4,54		5,04		5,55		5,55		5,55
ASSY plus VG combi 10x120 mm	10,00	6,20	10,00	6,20	10,00	6,51	10,00	7,12	10,00	7,73	10,00	7,73	10,00	7,73
		7,46		7,46		7,87		8,69		9,51		9,51		9,51
	6,15	3,82	6,15	3,82	6,15	4,00	6,15	4,38	6,15	4,76	6,15	4,76	6,15	4,76
		4,59		4,59		4,84		5,35		5,85		5,85		5,85
ASSY plus VG combi 10x140 mm	12,00	6,70	12,00	6,70	12,00	7,01	12,00	7,62	12,00	8,23	12,00	8,23	12,00	8,23
		7,96		7,96		8,37		9,19		10,01		10,01		10,01
	7,38	4,12	7,38	4,12	7,38	4,31	7,38	4,69	7,38	5,07	7,38	5,07	7,38	5,07
		4,90		4,90		5,15		5,66		6,16		6,16		6,16
ASSY plus VG combi 10x160 mm	14,00	7,20	14,00	7,20	14,00	7,51	14,00	8,12	14,00	8,73	14,00	8,73	14,00	8,73
		8,46		8,46		8,87		9,69		10,51		10,51		10,51
	8,62	4,43	8,62	4,43	8,62	4,62	8,62	5,00	8,62	5,37	8,62	5,37	8,62	5,37
		5,21		5,21		5,46		5,96		6,47		6,47		6,47

∅ **10,0 mm**



Calculation assumptions

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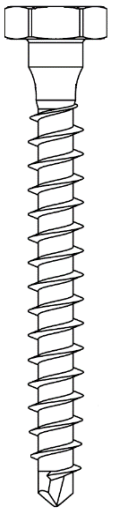
AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY PLUS VG COMBI

Type d x ℓ	Steel sheet thickness in [mm]													
	16		18		20		22		24		26		28	
ASSY plus VG combi 10x100 mm	8,00	7,23	8,00	7,23	8,00	7,23	7,80	7,18	7,60	7,08	7,40	6,93	7,20	6,78
		9,01		9,01		9,01		8,96		8,91		8,86		8,81
	4,92	4,45	4,92	4,45	4,92	4,45	4,80	4,42	4,68	4,36	4,55	4,27	4,43	4,17
		5,55		5,55		5,55		5,52		5,49		5,45		5,42
ASSY plus VG combi 10x120 mm	10,00	7,73	10,00	7,73	10,00	7,73	9,80	7,68	9,60	7,63	9,40	7,58	9,20	7,53
		9,51		9,51		9,51		9,46		9,41		9,36		9,31
	6,15	4,76	6,15	4,76	6,15	4,76	6,03	4,73	5,91	4,70	5,78	4,67	5,66	4,64
		5,85		5,85		5,85		5,82		5,79		5,76		5,73
ASSY plus VG combi 10x140 mm	12,00	8,23	12,00	8,23	12,00	8,23	11,80	8,18	11,60	8,13	11,40	8,08	11,20	8,03
		10,01		10,01		10,01		9,96		9,91		9,86		9,81
	7,38	5,07	7,38	5,07	7,38	5,07	7,26	5,04	7,14	5,01	7,02	4,97	6,89	4,94
		6,16		6,16		6,16		6,13		6,10		6,07		6,04
ASSY plus VG combi 10x160 mm	14,00	8,73	14,00	8,73	14,00	8,73	13,80	8,68	13,60	8,63	13,40	8,58	13,20	8,53
		10,51		10,51		10,51		10,46		10,41		10,36		10,31
	8,62	5,37	8,62	5,37	8,62	5,37	8,49	5,34	8,37	5,31	8,25	5,28	8,12	5,25
		6,47		6,47		6,47		6,44		6,41		6,38		6,35

∅ **10,0 mm**



Calculation assumptions

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Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

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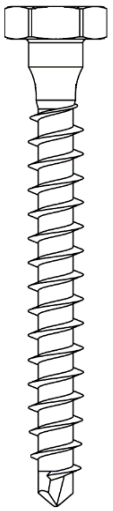
NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY PLUS VG COMBI

Type d x ℓ	Steel sheet thickness in [mm]													
	2		4		6		8		10		12		14	
ASSY plus VG combi 12x120 mm	11,76	7,71	11,76	7,58	11,76	7,45	11,76	8,22	11,76	9,08	11,76	10,02	11,76	10,02
		9,76		9,76		9,76		10,70		11,64		12,58		12,58
	7,24	4,75	7,24	4,67	7,24	4,59	7,24	5,06	7,24	5,59	7,24	6,17	7,24	6,17
		6,01		6,01		6,01		6,58		7,16		7,74		7,74
ASSY plus VG combi 12x140 mm	14,16	8,55	14,16	8,55	14,16	8,55	14,16	9,24	14,16	9,91	14,16	10,62	14,16	10,62
		10,36		10,36		10,36		11,30		12,24		13,18		13,18
	8,71	5,26	8,71	5,26	8,71	5,26	8,71	5,69	8,71	6,10	8,71	6,54	8,71	6,54
		6,37		6,37		6,37		6,95		7,53		8,11		8,11
ASSY plus VG combi 12x160 mm	16,56	9,15	16,56	9,15	16,56	9,15	16,56	9,84	16,56	10,53	16,56	11,22	16,56	11,22
		10,96		10,96		10,96		11,90		12,84		13,78		13,78
	10,19	5,63	10,19	5,63	10,19	5,63	10,19	6,05	10,19	6,48	10,19	6,91	10,19	6,91
		6,74		6,74		6,74		7,32		7,90		8,48		8,48

∅ **12,0 mm**



Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

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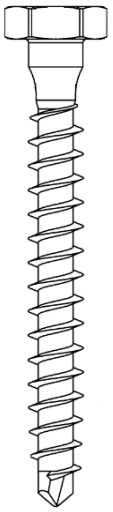
NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY PLUS VG COMBI

Type d x ℓ	Steel sheet thickness in [mm]													
	16		18		20		22		24		26		28	
ASSY plus VG combi 12x120 mm	11,76	10,02 12,58	11,76	10,02 12,58	11,76	10,02 12,58	11,76	10,02 12,58	11,52	9,96 12,52	11,28	9,90 12,46	11,04	9,84 12,40
	7,24	6,17 7,74	7,24	6,17 7,74	7,24	6,17 7,74	7,24	6,17 7,74	7,09	6,13 7,71	6,94	6,09 7,67	6,79	6,06 7,63
ASSY plus VG combi 12x140 mm	14,16	10,62 13,18	14,16	10,62 13,18	14,16	10,62 13,18	14,16	10,62 13,18	13,92	10,56 13,12	13,68	10,50 13,06	13,44	10,44 13,00
	8,71	6,54 8,11	8,71	6,54 8,11	8,71	6,54 8,11	8,71	6,54 8,11	8,57	6,50 8,08	8,42	6,46 8,04	8,27	6,43 8,00
ASSY plus VG combi 12x160 mm	16,56	11,22 13,78	16,56	11,22 13,78	16,56	11,22 13,78	16,56	11,22 13,78	16,32	11,16 13,72	16,08	11,10 13,66	15,84	11,04 13,60
	10,19	6,91 8,48	10,19	6,91 8,48	10,19	6,91 8,48	10,19	6,91 8,48	10,04	6,87 8,44	9,90	6,83 8,41	9,75	6,79 8,37

∅ **12,0 mm**



Calculation assumptions

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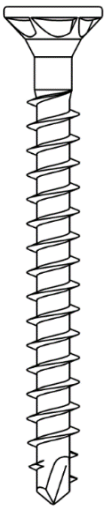
AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY PLUS VG

Type d x ℓ	Steel sheet thickness in [mm]													
	2		4		6		8		10		12		14	
ASSY plus VG 6x80 mm	5,38	2,94	5,24	3,12	5,11	3,52	4,97	3,49	4,83	3,46	4,69	3,42	4,55	3,39
		3,36		3,61		4,13		4,09		4,06		4,03		3,99
	3,31	1,81	3,23	1,92	3,14	2,17	3,06	2,15	2,97	2,13	2,89	2,11	2,80	2,08
		2,07		2,22		2,54		2,52		2,50		2,48		2,46
ASSY plus VG 6x100 mm	6,76	3,18	6,62	3,42	6,49	3,87	6,35	3,84	6,21	3,80	6,07	3,77	5,93	3,73
		3,71		3,95		4,47		4,44		4,40		4,37		4,34
	4,16	1,96	4,08	2,11	3,99	2,38	3,91	2,36	3,82	2,34	3,74	2,32	3,65	2,30
		2,28		2,43		2,75		2,73		2,71		2,69		2,67
ASSY plus VG 6x120 mm	8,14	3,18	8,00	3,54	7,87	4,21	7,73	4,18	7,59	4,15	7,45	4,11	7,31	4,08
		4,03		4,30		4,82		4,78		4,75		4,72		4,68
	5,01	1,96	4,93	2,18	4,84	2,59	4,76	2,57	4,67	2,55	4,59	2,53	4,50	2,51
		2,48		2,64		2,97		2,94		2,92		2,90		2,88
ASSY plus VG 6x140 mm	9,52	3,18	9,38	3,62	9,25	4,50	9,11	4,50	8,97	4,49	8,83	4,46	8,69	4,42
		4,03		4,42		5,16		5,13		5,09		5,06		5,03
	5,86	1,96	5,77	2,23	5,69	2,77	5,60	2,77	5,52	2,76	5,44	2,74	5,35	2,72
		2,48		2,72		3,18		3,16		3,14		3,11		3,09
ASSY plus VG 6x160 mm	10,90	3,18	10,76	3,62	10,63	4,50	10,49	4,50	10,35	4,50	10,21	4,50	10,07	4,50
		4,03		4,54		5,51		5,47		5,44		5,41		5,37
	6,71	1,96	6,62	2,23	6,54	2,77	6,45	2,77	6,37	2,77	6,28	2,77	6,20	2,77
		2,48		2,79		3,39		3,37		3,35		3,33		3,31
ASSY plus VG 6x180 mm	11,00	3,18	11,00	3,62	11,00	4,50	11,00	4,50	11,00	4,50	11,00	4,50	11,00	4,50
		4,03		4,56		5,60		5,60		5,60		5,60		5,60
	6,77	1,96	6,77	2,23	6,77	2,77	6,77	2,77	6,77	2,77	6,77	2,77	6,77	2,77
		2,48		2,80		3,45		3,45		3,45		3,45		3,45
ASSY plus VG 6x200 mm	11,00	3,18	11,00	3,62	11,00	4,50	11,00	4,50	11,00	4,50	11,00	4,50	11,00	4,50
		4,03		4,56		5,60		5,60		5,60		5,60		5,60
	6,77	1,96	6,77	2,23	6,77	2,77	6,77	2,77	6,77	2,77	6,77	2,77	6,77	2,77
		2,48		2,80		3,45		3,45		3,45		3,45		3,45

∅ **6,0 mm**



Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

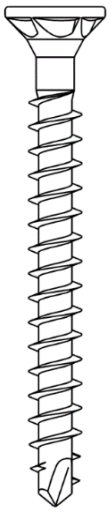
Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY PLUS VG

Type d x ℓ	Steel sheet thickness in [mm]													
	16		18		20		22		24		26		28	
ASSY plus VG 6x80 mm	4,42	3,35	4,28	3,32	4,14	3,28	4,00	3,25	3,86	3,21	3,73	3,18	3,59	3,15
		3,96		3,92		3,89		3,85		3,82		3,78		3,75
	2,72	2,06	2,63	2,04	2,55	2,02	2,46	2,00	2,38	1,98	2,29	1,96	2,21	1,94
		2,43		2,41		2,39		2,37		2,35		2,33		2,31
ASSY plus VG 6x100 mm	5,80	3,70	5,66	3,66	5,52	3,63	5,38	3,59	5,24	3,56	5,11	3,52	4,97	3,49
		4,30		4,27		4,23		4,20		4,16		4,13		4,09
	3,57	2,28	3,48	2,25	3,40	2,23	3,31	2,21	3,23	2,19	3,14	2,17	3,06	2,15
		2,65		2,63		2,60		2,58		2,56		2,54		2,52
ASSY plus VG 6x120 mm	7,18	4,04	7,04	4,01	6,90	3,97	6,76	3,94	6,62	3,90	6,49	3,87	6,35	3,84
		4,65		4,61		4,58		4,54		4,51		4,47		4,44
	4,42	2,49	4,33	2,47	4,25	2,45	4,16	2,42	4,08	2,40	3,99	2,38	3,91	2,36
		2,86		2,84		2,82		2,80		2,77		2,75		2,73
ASSY plus VG 6x140 mm	8,56	4,39	8,42	4,35	8,28	4,32	8,14	4,28	8,00	4,25	7,87	4,21	7,73	4,18
		4,99		4,96		4,92		4,89		4,85		4,82		4,78
	5,27	2,70	5,18	2,68	5,10	2,66	5,01	2,64	4,93	2,62	4,84	2,59	4,76	2,57
		3,07		3,05		3,03		3,01		2,99		2,97		2,94
ASSY plus VG 6x160 mm	9,94	4,50	9,80	4,50	9,66	4,50	9,52	4,50	9,38	4,50	9,25	4,50	9,11	4,50
		5,34		5,30		5,27		5,23		5,20		5,16		5,13
	6,11	2,77	6,03	2,77	5,94	2,77	5,86	2,77	5,77	2,77	5,69	2,77	5,60	2,77
		3,28		3,26		3,24		3,22		3,20		3,18		3,16
ASSY plus VG 6x180 mm	11,00	4,50	11,00	4,50	11,00	4,50	10,90	4,50	10,76	4,50	10,63	4,50	10,49	4,50
		5,60		5,60		5,60		5,58		5,54		5,51		5,47
	6,77	2,77	6,77	2,77	6,77	2,77	6,71	2,77	6,62	2,77	6,54	2,77	6,45	2,77
		3,45		3,45		3,45		3,43		3,41		3,39		3,37
ASSY plus VG 6x200 mm	11,00	4,50	11,00	4,50	11,00	4,50	11,00	4,50	11,00	4,50	11,00	4,50	11,00	4,50
		5,60		5,60		5,60		5,60		5,60		5,60		5,60
	6,77	2,77	6,77	2,77	6,77	2,77	6,77	2,77	6,77	2,77	6,77	2,77	6,77	2,77
		3,45		3,45		3,45		3,45		3,45		3,45		3,45

∅ **6,0 mm**



Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

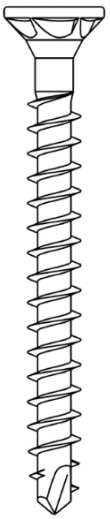
Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY PLUS VG

Type d x ℓ	Steel sheet thickness in [mm]													
	2		4		6		8		10		12		14	
ASSY plus VG 8x120 mm	10,38	5,10	10,21	5,10	10,03	5,59	9,86	6,07	9,68	6,03	9,50	5,98	9,33	5,94
		5,94		5,89		6,54		7,19		7,15		7,10		7,06
	6,39	3,14	6,28	3,14	6,17	3,44	6,07	3,74	5,96	3,71	5,85	3,68	5,74	3,66
		3,65		3,63		4,03		4,43		4,40		4,37		4,34
ASSY plus VG 8x140 mm	12,14	5,10	11,97	5,10	11,79	5,83	11,62	6,51	11,44	6,47	11,26	6,42	11,09	6,38
		6,38		6,33		6,98		7,63		7,59		7,54		7,50
	7,47	3,14	7,36	3,14	7,26	3,59	7,15	4,01	7,04	3,98	6,93	3,95	6,82	3,93
		3,93		3,90		4,30		4,70		4,67		4,64		4,62
ASSY plus VG 8x160 mm	13,90	5,10	13,73	5,10	13,55	6,05	13,38	6,95	13,20	6,91	13,02	6,86	12,85	6,82
		6,69		6,69		7,40		8,07		8,03		7,98		7,94
	8,56	3,14	8,45	3,14	8,34	3,72	8,23	4,28	8,12	4,25	8,01	4,22	7,91	4,20
		4,11		4,11		4,55		4,97		4,94		4,91		4,89
ASSY plus VG 8x180 mm	15,66	5,10	15,49	5,10	15,31	6,16	15,14	7,22	14,96	7,22	14,78	7,22	14,61	7,22
		6,69		6,69		7,62		8,51		8,47		8,42		8,38
	9,64	3,14	9,53	3,14	9,42	3,79	9,31	4,44	9,21	4,44	9,10	4,44	8,99	4,44
		4,11		4,11		4,69		5,24		5,21		5,18		5,16
ASSY plus VG 8x200 mm	17,42	5,10	17,25	5,10	17,07	6,16	16,90	7,22	16,72	7,22	16,54	7,22	16,37	7,22
		6,69		6,69		7,84		8,95		8,91		8,86		8,82
	10,72	3,14	10,61	3,14	10,51	3,79	10,40	4,44	10,29	4,44	10,18	4,44	10,07	4,44
		4,11		4,11		4,82		5,51		5,48		5,45		5,43
ASSY plus VG 8x220 mm	19,18	5,10	19,01	5,10	18,83	6,16	18,66	7,22	18,48	7,22	18,30	7,22	18,13	7,22
		6,69		6,69		8,06		9,39		9,35		9,30		9,26
	11,81	3,14	11,70	3,14	11,59	3,79	11,48	4,44	11,37	4,44	11,26	4,44	11,16	4,44
		4,11		4,11		4,96		5,78		5,75		5,73		5,70
ASSY plus VG 8x240 mm	20,00	5,10	20,00	5,10	20,00	6,16	20,00	7,22	20,00	7,22	20,00	7,22	19,89	7,22
		6,69		6,69		8,07		9,45		9,45		9,45		9,45
	12,31	3,14	12,31	3,14	12,31	3,79	12,31	4,44	12,31	4,44	12,31	4,44	12,24	4,44
		4,11		4,11		4,97		5,82		5,82		5,82		5,82
ASSY plus VG 8x260 mm	20,00	5,10	20,00	5,10	20,00	6,16	20,00	7,22	20,00	7,22	20,00	7,22	20,00	7,22
		6,69		6,69		8,07		9,45		9,45		9,45		9,45
	12,31	3,14	12,31	3,14	12,31	3,79	12,31	4,44	12,31	4,44	12,31	4,44	12,31	4,44
		4,11		4,11		4,97		5,82		5,82		5,82		5,82

∅ **8,0 mm**



Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

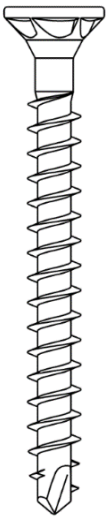
Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY PLUS VG

Type d x ℓ	Steel sheet thickness in [mm]													
	16		18		20		22		24		26		28	
ASSY plus VG 8x120 mm	9,15	5,90	8,98	5,85	8,80	5,81	8,62	5,76	8,45	5,72	8,27	5,68	8,10	5,63
		7,02		6,97		6,93		6,88		6,84		6,80		6,75
	5,63	3,63	5,52	3,60	5,42	3,57	5,31	3,55	5,20	3,52	5,09	3,49	4,98	3,47
		4,32		4,29		4,26		4,24		4,21		4,18		4,15
ASSY plus VG 8x140 mm	10,91	6,34	10,74	6,29	10,56	6,25	10,38	6,20	10,21	6,16	10,03	6,12	9,86	6,07
		7,46		7,41		7,37		7,32		7,28		7,24		7,19
	6,72	3,90	6,61	3,87	6,50	3,84	6,39	3,82	6,28	3,79	6,17	3,76	6,07	3,74
		4,59		4,56		4,53		4,51		4,48		4,45		4,43
ASSY plus VG 8x160 mm	12,67	6,78	12,50	6,73	12,32	6,69	12,14	6,64	11,97	6,60	11,79	6,56	11,62	6,51
		7,90		7,85		7,81		7,76		7,72		7,68		7,63
	7,80	4,17	7,69	4,14	7,58	4,12	7,47	4,09	7,36	4,06	7,26	4,03	7,15	4,01
		4,86		4,83		4,80		4,78		4,75		4,72		4,70
ASSY plus VG 8x180 mm	14,43	7,22	14,26	7,17	14,08	7,13	13,90	7,08	13,73	7,04	13,55	7,00	13,38	6,95
		8,34		8,29		8,25		8,20		8,16		8,12		8,07
	8,88	4,44	8,77	4,41	8,66	4,39	8,56	4,36	8,45	4,33	8,34	4,31	8,23	4,28
		5,13		5,10		5,08		5,05		5,02		4,99		4,97
ASSY plus VG 8x200 mm	16,19	7,22	16,02	7,22	15,84	7,22	15,66	7,22	15,49	7,22	15,31	7,22	15,14	7,22
		8,78		8,73		8,69		8,64		8,60		8,56		8,51
	9,96	4,44	9,86	4,44	9,75	4,44	9,64	4,44	9,53	4,44	9,42	4,44	9,31	4,44
		5,40		5,37		5,35		5,32		5,29		5,26		5,24
ASSY plus VG 8x220 mm	17,95	7,22	17,78	7,22	17,60	7,22	17,42	7,22	17,25	7,22	17,07	7,22	16,90	7,22
		9,22		9,17		9,13		9,08		9,04		9,00		8,95
	11,05	4,44	10,94	4,44	10,83	4,44	10,72	4,44	10,61	4,44	10,51	4,44	10,40	4,44
		5,67		5,64		5,62		5,59		5,56		5,54		5,51
ASSY plus VG 8x240 mm	19,71	7,22	19,54	7,22	19,36	7,22	19,18	7,22	19,01	7,22	18,83	7,22	18,66	7,22
		9,45		9,45		9,45		9,45		9,45		9,44		9,39
	12,13	4,44	12,02	4,44	11,91	4,44	11,81	4,44	11,70	4,44	11,59	4,44	11,48	4,44
		5,82		5,82		5,82		5,82		5,82		5,81		5,78
ASSY plus VG 8x260 mm	20,00	7,22	20,00	7,22	20,00	7,22	20,00	7,22	20,00	7,22	20,00	7,22	20,00	7,22
		9,45		9,45		9,45		9,45		9,45		9,45		9,45
	12,31	4,44	12,31	4,44	12,31	4,44	12,31	4,44	12,31	4,44	12,31	4,44	12,31	4,44
		5,82		5,82		5,82		5,82		5,82		5,82		5,82

∅ **8,0 mm**



Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

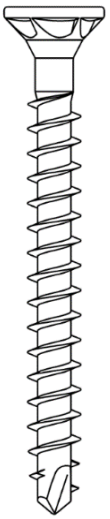
Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY PLUS VG

Type d x ℓ	Steel sheet thickness in [mm]													
	2		4		6		8		10		12		14	
ASSY plus VG 8x280 mm	20,00	5,10	20,00	5,10	20,00	6,16	20,00	7,22	20,00	7,22	20,00	7,22	20,00	7,22
		6,69		6,69		8,07		9,45		9,45		9,45		9,45
	12,31	3,14	12,31	3,14	12,31	3,79	12,31	4,44	12,31	4,44	12,31	4,44	12,31	4,44
		4,11		4,11		4,97		5,82		5,82		5,82		5,82
ASSY plus VG 8x300 mm	20,00	5,10	20,00	5,10	20,00	6,16	20,00	7,22	20,00	7,22	20,00	7,22	20,00	7,22
		6,69		6,69		8,07		9,45		9,45		9,45		9,45
	12,31	3,14	12,31	3,14	12,31	3,79	12,31	4,44	12,31	4,44	12,31	4,44	12,31	4,44
		4,11		4,11		4,97		5,82		5,82		5,82		5,82
ASSY plus VG 8x330 mm	20,00	5,10	20,00	5,10	20,00	6,16	20,00	7,22	20,00	7,22	20,00	7,22	20,00	7,22
		6,69		6,69		8,07		9,45		9,45		9,45		9,45
	12,31	3,14	12,31	3,14	12,31	3,79	12,31	4,44	12,31	4,44	12,31	4,44	12,31	4,44
		4,11		4,11		4,97		5,82		5,82		5,82		5,82
ASSY plus VG 8x380 mm	20,00	5,10	20,00	5,10	20,00	6,16	20,00	7,22	20,00	7,22	20,00	7,22	20,00	7,22
		6,69		6,69		8,07		9,45		9,45		9,45		9,45
	12,31	3,14	12,31	3,14	12,31	3,79	12,31	4,44	12,31	4,44	12,31	4,44	12,31	4,44
		4,11		4,11		4,97		5,82		5,82		5,82		5,82
ASSY plus VG 8x430 mm	20,00	5,10	20,00	5,10	20,00	6,16	20,00	7,22	20,00	7,22	20,00	7,22	20,00	7,22
		6,69		6,69		8,07		9,45		9,45		9,45		9,45
	12,31	3,14	12,31	3,14	12,31	3,79	12,31	4,44	12,31	4,44	12,31	4,44	12,31	4,44
		4,11		4,11		4,97		5,82		5,82		5,82		5,82
ASSY plus VG 8x480 mm	20,00	5,10	20,00	5,10	20,00	6,16	20,00	7,22	20,00	7,22	20,00	7,22	20,00	7,22
		6,69		6,69		8,07		9,45		9,45		9,45		9,45
	12,31	3,14	12,31	3,14	12,31	3,79	12,31	4,44	12,31	4,44	12,31	4,44	12,31	4,44
		4,11		4,11		4,97		5,82		5,82		5,82		5,82
ASSY plus VG 8x530 mm	20,00	5,10	20,00	5,10	20,00	6,16	20,00	7,22	20,00	7,22	20,00	7,22	20,00	7,22
		6,69		6,69		8,07		9,45		9,45		9,45		9,45
	12,31	3,14	12,31	3,14	12,31	3,79	12,31	4,44	12,31	4,44	12,31	4,44	12,31	4,44
		4,11		4,11		4,97		5,82		5,82		5,82		5,82
ASSY plus VG 8x580 mm	20,00	5,10	20,00	5,10	20,00	6,16	20,00	7,22	20,00	7,22	20,00	7,22	20,00	7,22
		6,69		6,69		8,07		9,45		9,45		9,45		9,45
	12,31	3,14	12,31	3,14	12,31	3,79	12,31	4,44	12,31	4,44	12,31	4,44	12,31	4,44
		4,11		4,11		4,97		5,82		5,82		5,82		5,82

∅ **8,0 mm**



Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

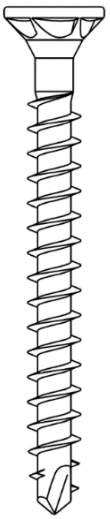
Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY PLUS VG

Type d x ℓ	Steel sheet thickness in [mm]													
	16		18		20		22		24		26		28	
ASSY plus VG 8x280 mm	20,00	7,22	20,00	7,22	20,00	7,22	20,00	7,22	20,00	7,22	20,00	7,22	20,00	7,22
		9,45		9,45		9,45		9,45		9,45		9,45		9,45
	12,31	4,44	12,31	4,44	12,31	4,44	12,31	4,44	12,31	4,44	12,31	4,44	12,31	4,44
		5,82		5,82		5,82		5,82		5,82		5,82		5,82
ASSY plus VG 8x300 mm	20,00	7,22	20,00	7,22	20,00	7,22	20,00	7,22	20,00	7,22	20,00	7,22	20,00	7,22
		9,45		9,45		9,45		9,45		9,45		9,45		9,45
	12,31	4,44	12,31	4,44	12,31	4,44	12,31	4,44	12,31	4,44	12,31	4,44	12,31	4,44
		5,82		5,82		5,82		5,82		5,82		5,82		5,82
ASSY plus VG 8x330 mm	20,00	7,22	20,00	7,22	20,00	7,22	20,00	7,22	20,00	7,22	20,00	7,22	20,00	7,22
		9,45		9,45		9,45		9,45		9,45		9,45		9,45
	12,31	4,44	12,31	4,44	12,31	4,44	12,31	4,44	12,31	4,44	12,31	4,44	12,31	4,44
		5,82		5,82		5,82		5,82		5,82		5,82		5,82
ASSY plus VG 8x380 mm	20,00	7,22	20,00	7,22	20,00	7,22	20,00	7,22	20,00	7,22	20,00	7,22	20,00	7,22
		9,45		9,45		9,45		9,45		9,45		9,45		9,45
	12,31	4,44	12,31	4,44	12,31	4,44	12,31	4,44	12,31	4,44	12,31	4,44	12,31	4,44
		5,82		5,82		5,82		5,82		5,82		5,82		5,82
ASSY plus VG 8x430 mm	20,00	7,22	20,00	7,22	20,00	7,22	20,00	7,22	20,00	7,22	20,00	7,22	20,00	7,22
		9,45		9,45		9,45		9,45		9,45		9,45		9,45
	12,31	4,44	12,31	4,44	12,31	4,44	12,31	4,44	12,31	4,44	12,31	4,44	12,31	4,44
		5,82		5,82		5,82		5,82		5,82		5,82		5,82
ASSY plus VG 8x480 mm	20,00	7,22	20,00	7,22	20,00	7,22	20,00	7,22	20,00	7,22	20,00	7,22	20,00	7,22
		9,45		9,45		9,45		9,45		9,45		9,45		9,45
	12,31	4,44	12,31	4,44	12,31	4,44	12,31	4,44	12,31	4,44	12,31	4,44	12,31	4,44
		5,82		5,82		5,82		5,82		5,82		5,82		5,82
ASSY plus VG 8x530 mm	20,00	7,22	20,00	7,22	20,00	7,22	20,00	7,22	20,00	7,22	20,00	7,22	20,00	7,22
		9,45		9,45		9,45		9,45		9,45		9,45		9,45
	12,31	4,44	12,31	4,44	12,31	4,44	12,31	4,44	12,31	4,44	12,31	4,44	12,31	4,44
		5,82		5,82		5,82		5,82		5,82		5,82		5,82
ASSY plus VG 8x580 mm	20,00	7,22	20,00	7,22	20,00	7,22	20,00	7,22	20,00	7,22	20,00	7,22	20,00	7,22
		9,45		9,45		9,45		9,45		9,45		9,45		9,45
	12,31	4,44	12,31	4,44	12,31	4,44	12,31	4,44	12,31	4,44	12,31	4,44	12,31	4,44
		5,82		5,82		5,82		5,82		5,82		5,82		5,82

∅ **8,0 mm**



Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

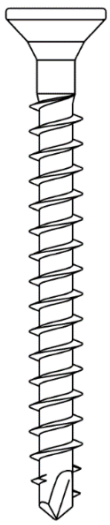
Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY PLUS VG

Type d x ℓ	Steel sheet thickness in [mm]													
	2		4		6		8		10		12		14	
ASSY plus VG 10x120 mm	11,80	6,65	11,60	6,60	11,40	6,86	11,20	7,40	11,00	7,98	10,80	7,93	10,60	7,88
		7,91		7,86		8,22		8,99		9,76		9,71		9,66
	7,26	4,09	7,14	4,06	7,02	4,22	6,89	4,55	6,77	4,91	6,65	4,88	6,52	4,85
		4,87		4,84		5,06		5,53		6,01		5,98		5,95
ASSY plus VG 10x140 mm	13,80	7,15	13,60	7,10	13,40	7,36	13,20	7,92	13,00	8,48	12,80	8,43	12,60	8,38
		8,41		8,36		8,72		9,49		10,26		10,21		10,16
	8,49	4,40	8,37	4,37	8,25	4,53	8,12	4,87	8,00	5,22	7,88	5,19	7,75	5,16
		5,17		5,14		5,37		5,84		6,32		6,29		6,25
ASSY plus VG 10x160 mm	15,80	7,40	15,60	7,40	15,40	7,74	15,20	8,38	15,00	8,98	14,80	8,93	14,60	8,88
		8,91		8,86		9,22		9,99		10,76		10,71		10,66
	9,72	4,55	9,60	4,55	9,48	4,76	9,35	5,16	9,23	5,53	9,11	5,50	8,98	5,47
		5,48		5,45		5,67		6,15		6,62		6,59		6,56
ASSY plus VG 10x180 mm	17,80	7,40	17,60	7,40	17,40	7,84	17,20	8,68	17,00	9,48	16,80	9,43	16,60	9,38
		9,41		9,36		9,72		10,49		11,26		11,21		11,16
	10,95	4,55	10,83	4,55	10,71	4,82	10,58	5,34	10,46	5,84	10,34	5,81	10,22	5,77
		5,79		5,76		5,98		6,46		6,93		6,90		6,87
ASSY plus VG 10x200 mm	19,80	7,40	19,60	7,40	19,40	7,94	19,20	8,98	19,00	9,98	18,80	9,93	18,60	9,88
		9,91		9,86		10,22		10,99		11,76		11,71		11,66
	12,18	4,55	12,06	4,55	11,94	4,89	11,82	5,53	11,69	6,14	11,57	6,11	11,45	6,08
		6,10		6,07		6,29		6,76		7,24		7,21		7,18
ASSY plus VG 10x220 mm	21,80	7,40	21,60	7,40	21,40	8,01	21,20	9,24	21,00	10,47	20,80	10,43	20,60	10,38
		9,92		9,92		10,41		11,36		12,26		12,21		12,16
	13,42	4,55	13,29	4,55	13,17	4,93	13,05	5,69	12,92	6,44	12,80	6,42	12,68	6,39
		6,10		6,10		6,40		6,99		7,55		7,52		7,49
ASSY plus VG 10x240 mm	23,80	7,40	23,60	7,40	23,40	8,01	23,20	9,24	23,00	10,47	22,80	10,47	22,60	10,47
		9,92		9,92		10,51		11,66		12,76		12,71		12,66
	14,65	4,55	14,52	4,55	14,40	4,93	14,28	5,69	14,15	6,44	14,03	6,44	13,91	6,44
		6,10		6,10		6,47		7,17		7,85		7,82		7,79
ASSY plus VG 10x260 mm	25,80	7,40	25,60	7,40	25,40	8,01	25,20	9,24	25,00	10,47	24,80	10,47	24,60	10,47
		9,92		9,92		10,61		11,96		13,26		13,21		13,16
	15,88	4,55	15,75	4,55	15,63	4,93	15,51	5,69	15,38	6,44	15,26	6,44	15,14	6,44
		6,10		6,10		6,53		7,36		8,16		8,13		8,10
ASSY plus VG 10x280 mm	27,80	7,40	27,60	7,40	27,40	8,01	27,20	9,24	27,00	10,47	26,80	10,47	26,60	10,47
		9,92		9,92		10,71		12,26		13,76		13,71		13,66
	17,11	4,55	16,98	4,55	16,86	4,93	16,74	5,69	16,62	6,44	16,49	6,44	16,37	6,44
		6,10		6,10		6,59		7,54		8,47		8,44		8,41

∅ **10,0 mm**



Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

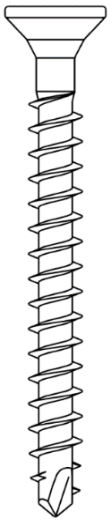
Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY PLUS VG

Type d x ℓ	Steel sheet thickness in [mm]													
	16		18		20		22		24		26		28	
ASSY plus VG 10x120 mm	10,40	7,83	10,20	7,78	10,00	7,73	9,80	7,68	9,60	7,63	9,40	7,58	9,20	7,53
		9,61		9,56		9,51		9,46		9,41		9,36		9,31
	6,40	4,82	6,28	4,79	6,15	4,76	6,03	4,73	5,91	4,70	5,78	4,67	5,66	4,64
		5,92		5,89		5,85		5,82		5,79		5,76		5,73
ASSY plus VG 10x140 mm	12,40	8,33	12,20	8,28	12,00	8,23	11,80	8,18	11,60	8,13	11,40	8,08	11,20	8,03
		10,11		10,06		10,01		9,96		9,91		9,86		9,81
	7,63	5,13	7,51	5,10	7,38	5,07	7,26	5,04	7,14	5,01	7,02	4,97	6,89	4,94
		6,22		6,19		6,16		6,13		6,10		6,07		6,04
ASSY plus VG 10x160 mm	14,40	8,83	14,20	8,78	14,00	8,73	13,80	8,68	13,60	8,63	13,40	8,58	13,20	8,53
		10,61		10,56		10,51		10,46		10,41		10,36		10,31
	8,86	5,44	8,74	5,41	8,62	5,37	8,49	5,34	8,37	5,31	8,25	5,28	8,12	5,25
		6,53		6,50		6,47		6,44		6,41		6,38		6,35
ASSY plus VG 10x180 mm	16,40	9,33	16,20	9,28	16,00	9,23	15,80	9,18	15,60	9,13	15,40	9,08	15,20	9,03
		11,11		11,06		11,01		10,96		10,91		10,86		10,81
	10,09	5,74	9,97	5,71	9,85	5,68	9,72	5,65	9,60	5,62	9,48	5,59	9,35	5,56
		6,84		6,81		6,78		6,75		6,72		6,69		6,65
ASSY plus VG 10x200 mm	18,40	9,83	18,20	9,78	18,00	9,73	17,80	9,68	17,60	9,63	17,40	9,58	17,20	9,53
		11,61		11,56		11,51		11,46		11,41		11,36		11,31
	11,32	6,05	11,20	6,02	11,08	5,99	10,95	5,96	10,83	5,93	10,71	5,90	10,58	5,87
		7,15		7,12		7,09		7,05		7,02		6,99		6,96
ASSY plus VG 10x220 mm	20,40	10,33	20,20	10,28	20,00	10,23	19,80	10,18	19,60	10,13	19,40	10,08	19,20	10,03
		12,11		12,06		12,01		11,96		11,91		11,86		11,81
	12,55	6,36	12,43	6,33	12,31	6,30	12,18	6,27	12,06	6,24	11,94	6,21	11,82	6,17
		7,45		7,42		7,39		7,36		7,33		7,30		7,27
ASSY plus VG 10x240 mm	22,40	10,47	22,20	10,47	22,00	10,47	21,80	10,47	21,60	10,47	21,40	10,47	21,20	10,47
		12,61		12,56		12,51		12,46		12,41		12,36		12,31
	13,78	6,44	13,66	6,44	13,54	6,44	13,42	6,44	13,29	6,44	13,17	6,44	13,05	6,44
		7,76		7,73		7,70		7,67		7,64		7,61		7,58
ASSY plus VG 10x260 mm	24,40	10,47	24,20	10,47	24,00	10,47	23,80	10,47	23,60	10,47	23,40	10,47	23,20	10,47
		13,11		13,06		13,01		12,96		12,91		12,86		12,81
	15,02	6,44	14,89	6,44	14,77	6,44	14,65	6,44	14,52	6,44	14,40	6,44	14,28	6,44
		8,07		8,04		8,01		7,98		7,95		7,92		7,89
ASSY plus VG 10x280 mm	26,40	10,47	26,20	10,47	26,00	10,47	25,80	10,47	25,60	10,47	25,40	10,47	25,20	10,47
		13,61		13,56		13,51		13,46		13,41		13,36		13,31
	16,25	6,44	16,12	6,44	16,00	6,44	15,88	6,44	15,75	6,44	15,63	6,44	15,51	6,44
		8,38		8,35		8,32		8,29		8,25		8,22		8,19

∅ **10,0 mm**



Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

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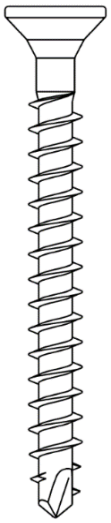
AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY PLUS VG

Type d x ℓ	Steel sheet thickness in [mm]													
	2		4		6		8		10		12		14	
ASSY plus VG 10x300 mm	29,80	7,40	29,60	7,40	29,40	8,01	29,20	9,24	29,00	10,47	28,80	10,47	28,60	10,47
		9,92		9,92		10,74		12,38		14,03		14,03		14,03
	18,34	4,55	18,22	4,55	18,09	4,93	17,97	5,69	17,85	6,44	17,72	6,44	17,60	6,44
		6,10		6,10		6,61		7,62		8,63		8,63		8,63
ASSY plus VG 10x320 mm	31,80	7,40	31,60	7,40	31,40	8,01	31,20	9,24	31,00	10,47	30,80	10,47	30,60	10,47
		9,92		9,92		10,74		12,38		14,03		14,03		14,03
	19,57	4,55	19,45	4,55	19,32	4,93	19,20	5,69	19,08	6,44	18,95	6,44	18,83	6,44
		6,10		6,10		6,61		7,62		8,63		8,63		8,63
ASSY plus VG 10x340 mm	32,00	7,40	32,00	7,40	32,00	8,01	32,00	9,24	32,00	10,47	32,00	10,47	32,00	10,47
		9,92		9,92		10,74		12,38		14,03		14,03		14,03
	19,69	4,55	19,69	4,55	19,69	4,93	19,69	5,69	19,69	6,44	19,69	6,44	19,69	6,44
		6,10		6,10		6,61		7,62		8,63		8,63		8,63
ASSY plus VG 10x360 mm	32,00	7,40	32,00	7,40	32,00	8,01	32,00	9,24	32,00	10,47	32,00	10,47	32,00	10,47
		9,92		9,92		10,74		12,38		14,03		14,03		14,03
	19,69	4,55	19,69	4,55	19,69	4,93	19,69	5,69	19,69	6,44	19,69	6,44	19,69	6,44
		6,10		6,10		6,61		7,62		8,63		8,63		8,63
ASSY plus VG 10x380 mm	32,00	7,40	32,00	7,40	32,00	8,01	32,00	9,24	32,00	10,47	32,00	10,47	32,00	10,47
		9,92		9,92		10,74		12,38		14,03		14,03		14,03
	19,69	4,55	19,69	4,55	19,69	4,93	19,69	5,69	19,69	6,44	19,69	6,44	19,69	6,44
		6,10		6,10		6,61		7,62		8,63		8,63		8,63
ASSY plus VG 10x400 mm	32,00	7,40	32,00	7,40	32,00	8,01	32,00	9,24	32,00	10,47	32,00	10,47	32,00	10,47
		9,92		9,92		10,74		12,38		14,03		14,03		14,03
	19,69	4,55	19,69	4,55	19,69	4,93	19,69	5,69	19,69	6,44	19,69	6,44	19,69	6,44
		6,10		6,10		6,61		7,62		8,63		8,63		8,63
ASSY plus VG 10x430 mm	32,00	7,40	32,00	7,40	32,00	8,01	32,00	9,24	32,00	10,47	32,00	10,47	32,00	10,47
		9,92		9,92		10,74		12,38		14,03		14,03		14,03
	19,69	4,55	19,69	4,55	19,69	4,93	19,69	5,69	19,69	6,44	19,69	6,44	19,69	6,44
		6,10		6,10		6,61		7,62		8,63		8,63		8,63
ASSY plus VG 10x480 mm	32,00	7,40	32,00	7,40	32,00	8,01	32,00	9,24	32,00	10,47	32,00	10,47	32,00	10,47
		9,92		9,92		10,74		12,38		14,03		14,03		14,03
	19,69	4,55	19,69	4,55	19,69	4,93	19,69	5,69	19,69	6,44	19,69	6,44	19,69	6,44
		6,10		6,10		6,61		7,62		8,63		8,63		8,63
ASSY plus VG 10x530 mm	32,00	7,40	32,00	7,40	32,00	8,01	32,00	9,24	32,00	10,47	32,00	10,47	32,00	10,47
		9,92		9,92		10,74		12,38		14,03		14,03		14,03
	19,69	4,55	19,69	4,55	19,69	4,93	19,69	5,69	19,69	6,44	19,69	6,44	19,69	6,44
		6,10		6,10		6,61		7,62		8,63		8,63		8,63

∅ **10,0 mm**



Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

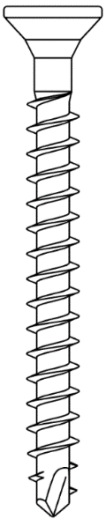
Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY PLUS VG

Type d x ℓ	Steel sheet thickness in [mm]													
	16		18		20		22		24		26		28	
ASSY plus VG 10x300 mm	28,40	10,47	28,20	10,47	28,00	10,47	27,80	10,47	27,60	10,47	27,40	10,47	27,20	10,47
		14,03		14,03		14,01		13,96		13,91		13,86		13,81
	17,48	6,44	17,35	6,44	17,23	6,44	17,11	6,44	16,98	6,44	16,86	6,44	16,74	6,44
		8,63		8,63		8,62		8,59		8,56		8,53		8,50
ASSY plus VG 10x320 mm	30,40	10,47	30,20	10,47	30,00	10,47	29,80	10,47	29,60	10,47	29,40	10,47	29,20	10,47
		14,03		14,03		14,03		14,03		14,03		14,03		14,03
	18,71	6,44	18,58	6,44	18,46	6,44	18,34	6,44	18,22	6,44	18,09	6,44	17,97	6,44
		8,63		8,63		8,63		8,63		8,63		8,63		8,63
ASSY plus VG 10x340 mm	32,00	10,47	32,00	10,47	32,00	10,47	31,80	10,47	31,60	10,47	31,40	10,47	31,20	10,47
		14,03		14,03		14,03		14,03		14,03		14,03		14,03
	19,69	6,44	19,69	6,44	19,69	6,44	19,57	6,44	19,45	6,44	19,32	6,44	19,20	6,44
		8,63		8,63		8,63		8,63		8,63		8,63		8,63
ASSY plus VG 10x360 mm	32,00	10,47	32,00	10,47	32,00	10,47	32,00	10,47	32,00	10,47	32,00	10,47	32,00	10,47
		14,03		14,03		14,03		14,03		14,03		14,03		14,03
	19,69	6,44	19,69	6,44	19,69	6,44	19,69	6,44	19,69	6,44	19,69	6,44	19,69	6,44
		8,63		8,63		8,63		8,63		8,63		8,63		8,63
ASSY plus VG 10x380 mm	32,00	10,47	32,00	10,47	32,00	10,47	32,00	10,47	32,00	10,47	32,00	10,47	32,00	10,47
		14,03		14,03		14,03		14,03		14,03		14,03		14,03
	19,69	6,44	19,69	6,44	19,69	6,44	19,69	6,44	19,69	6,44	19,69	6,44	19,69	6,44
		8,63		8,63		8,63		8,63		8,63		8,63		8,63
ASSY plus VG 10x400 mm	32,00	10,47	32,00	10,47	32,00	10,47	32,00	10,47	32,00	10,47	32,00	10,47	32,00	10,47
		14,03		14,03		14,03		14,03		14,03		14,03		14,03
	19,69	6,44	19,69	6,44	19,69	6,44	19,69	6,44	19,69	6,44	19,69	6,44	19,69	6,44
		8,63		8,63		8,63		8,63		8,63		8,63		8,63
ASSY plus VG 10x430 mm	32,00	10,47	32,00	10,47	32,00	10,47	32,00	10,47	32,00	10,47	32,00	10,47	32,00	10,47
		14,03		14,03		14,03		14,03		14,03		14,03		14,03
	19,69	6,44	19,69	6,44	19,69	6,44	19,69	6,44	19,69	6,44	19,69	6,44	19,69	6,44
		8,63		8,63		8,63		8,63		8,63		8,63		8,63
ASSY plus VG 10x480 mm	32,00	10,47	32,00	10,47	32,00	10,47	32,00	10,47	32,00	10,47	32,00	10,47	32,00	10,47
		14,03		14,03		14,03		14,03		14,03		14,03		14,03
	19,69	6,44	19,69	6,44	19,69	6,44	19,69	6,44	19,69	6,44	19,69	6,44	19,69	6,44
		8,63		8,63		8,63		8,63		8,63		8,63		8,63
ASSY plus VG 10x530 mm	32,00	10,47	32,00	10,47	32,00	10,47	32,00	10,47	32,00	10,47	32,00	10,47	32,00	10,47
		14,03		14,03		14,03		14,03		14,03		14,03		14,03
	19,69	6,44	19,69	6,44	19,69	6,44	19,69	6,44	19,69	6,44	19,69	6,44	19,69	6,44
		8,63		8,63		8,63		8,63		8,63		8,63		8,63

∅ **10,0 mm**



Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

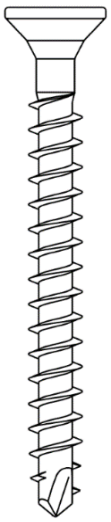
Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY PLUS VG

Type d x ℓ	Steel sheet thickness in [mm]													
	2		4		6		8		10		12		14	
ASSY plus VG 10x580 mm	32,00	7,40	32,00	7,40	32,00	8,01	32,00	9,24	32,00	10,47	32,00	10,47	32,00	10,47
		9,92		9,92		10,74		12,38		14,03		14,03		14,03
	19,69	4,55	19,69	4,55	19,69	4,93	19,69	5,69	19,69	6,44	19,69	6,44	19,69	6,44
		6,10		6,10		6,61		7,62		8,63		8,63		8,63
ASSY plus VG 10x600 mm	32,00	7,40	32,00	7,40	32,00	8,01	32,00	9,24	32,00	10,47	32,00	10,47	32,00	10,47
		9,92		9,92		10,74		12,38		14,03		14,03		14,03
	19,69	4,55	19,69	4,55	19,69	4,93	19,69	5,69	19,69	6,44	19,69	6,44	19,69	6,44
		6,10		6,10		6,61		7,62		8,63		8,63		8,63
ASSY plus VG 10x650 mm	32,00	7,40	32,00	7,40	32,00	8,01	32,00	9,24	32,00	10,47	32,00	10,47	32,00	10,47
		9,92		9,92		10,74		12,38		14,03		14,03		14,03
	19,69	4,55	19,69	4,55	19,69	4,93	19,69	5,69	19,69	6,44	19,69	6,44	19,69	6,44
		6,10		6,10		6,61		7,62		8,63		8,63		8,63
ASSY plus VG 10x700 mm	32,00	7,40	32,00	7,40	32,00	8,01	32,00	9,24	32,00	10,47	32,00	10,47	32,00	10,47
		9,92		9,92		10,74		12,38		14,03		14,03		14,03
	19,69	4,55	19,69	4,55	19,69	4,93	19,69	5,69	19,69	6,44	19,69	6,44	19,69	6,44
		6,10		6,10		6,61		7,62		8,63		8,63		8,63
ASSY plus VG 10x750 mm	32,00	7,40	32,00	7,40	32,00	8,01	32,00	9,24	32,00	10,47	32,00	10,47	32,00	10,47
		9,92		9,92		10,74		12,38		14,03		14,03		14,03
	19,69	4,55	19,69	4,55	19,69	4,93	19,69	5,69	19,69	6,44	19,69	6,44	19,69	6,44
		6,10		6,10		6,61		7,62		8,63		8,63		8,63
ASSY plus VG 10x800 mm	32,00	7,40	32,00	7,40	32,00	8,01	32,00	9,24	32,00	10,47	32,00	10,47	32,00	10,47
		9,92		9,92		10,74		12,38		14,03		14,03		14,03
	19,69	4,55	19,69	4,55	19,69	4,93	19,69	5,69	19,69	6,44	19,69	6,44	19,69	6,44
		6,10		6,10		6,61		7,62		8,63		8,63		8,63

∅ **10,0 mm**



Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

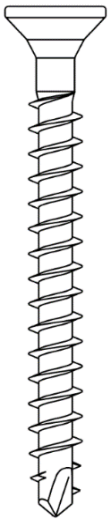
Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY PLUS VG

Type d x ℓ	Steel sheet thickness in [mm]													
	16		18		20		22		24		26		28	
ASSY plus VG 10x580 mm	32,00	10,47 14,03	32,00	10,47 14,03	32,00	10,47 14,03	32,00	10,47 14,03	32,00	10,47 14,03	32,00	10,47 14,03	32,00	10,47 14,03
	19,69	6,44 8,63	19,69	6,44 8,63	19,69	6,44 8,63	19,69	6,44 8,63	19,69	6,44 8,63	19,69	6,44 8,63	19,69	6,44 8,63
ASSY plus VG 10x600 mm	32,00	10,47 14,03	32,00	10,47 14,03	32,00	10,47 14,03	32,00	10,47 14,03	32,00	10,47 14,03	32,00	10,47 14,03	32,00	10,47 14,03
	19,69	6,44 8,63	19,69	6,44 8,63	19,69	6,44 8,63	19,69	6,44 8,63	19,69	6,44 8,63	19,69	6,44 8,63	19,69	6,44 8,63
ASSY plus VG 10x650 mm	32,00	10,47 14,03	32,00	10,47 14,03	32,00	10,47 14,03	32,00	10,47 14,03	32,00	10,47 14,03	32,00	10,47 14,03	32,00	10,47 14,03
	19,69	6,44 8,63	19,69	6,44 8,63	19,69	6,44 8,63	19,69	6,44 8,63	19,69	6,44 8,63	19,69	6,44 8,63	19,69	6,44 8,63
ASSY plus VG 10x700 mm	32,00	10,47 14,03	32,00	10,47 14,03	32,00	10,47 14,03	32,00	10,47 14,03	32,00	10,47 14,03	32,00	10,47 14,03	32,00	10,47 14,03
	19,69	6,44 8,63	19,69	6,44 8,63	19,69	6,44 8,63	19,69	6,44 8,63	19,69	6,44 8,63	19,69	6,44 8,63	19,69	6,44 8,63
ASSY plus VG 10x750 mm	32,00	10,47 14,03	32,00	10,47 14,03	32,00	10,47 14,03	32,00	10,47 14,03	32,00	10,47 14,03	32,00	10,47 14,03	32,00	10,47 14,03
	19,69	6,44 8,63	19,69	6,44 8,63	19,69	6,44 8,63	19,69	6,44 8,63	19,69	6,44 8,63	19,69	6,44 8,63	19,69	6,44 8,63
ASSY plus VG 10x800 mm	32,00	10,47 14,03	32,00	10,47 14,03	32,00	10,47 14,03	32,00	10,47 14,03	32,00	10,47 14,03	32,00	10,47 14,03	32,00	10,47 14,03
	19,69	6,44 8,63	19,69	6,44 8,63	19,69	6,44 8,63	19,69	6,44 8,63	19,69	6,44 8,63	19,69	6,44 8,63	19,69	6,44 8,63

∅ **10,0 mm**



Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

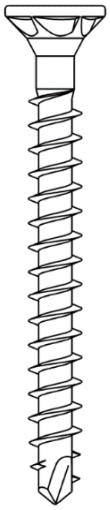
Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY PLUS VG

Type d x ℓ	Steel sheet thickness in [mm]													
	2		4		6		8		10		12		14	
ASSY plus VG 12x120 mm	14,16	7,71	13,92	7,58	13,68	7,45	13,44	8,36	13,20	9,32	12,96	10,32	12,72	10,26
		10,36		10,30		10,24		11,12		12,00		12,88		12,82
	8,71	4,75	8,57	4,67	8,42	4,59	8,27	5,15	8,12	5,73	7,98	6,35	7,83	6,31
		6,37		6,34		6,30		6,84		7,39		7,93		7,89
ASSY plus VG 12x140 mm	16,56	9,02	16,32	8,89	16,08	8,76	15,84	9,43	15,60	10,15	15,36	10,92	15,12	10,86
		10,96		10,90		10,84		11,72		12,60		13,48		13,42
	10,19	5,55	10,04	5,47	9,90	5,39	9,75	5,80	9,60	6,25	9,45	6,72	9,30	6,68
		6,74		6,71		6,67		7,21		7,75		8,30		8,26
ASSY plus VG 12x160 mm	18,96	9,75	18,72	9,69	18,48	9,63	18,24	10,26	18,00	10,89	17,76	11,52	17,52	11,46
		11,56		11,50		11,44		12,32		13,20		14,08		14,02
	11,67	6,00	11,52	5,96	11,37	5,92	11,22	6,31	11,08	6,70	10,93	7,09	10,78	7,05
		7,11		7,08		7,04		7,58		8,12		8,67		8,63
ASSY plus VG 12x180 mm	21,36	10,01	21,12	10,01	20,88	10,01	20,64	10,76	20,40	11,46	20,16	12,12	19,92	12,06
		12,16		12,10		12,04		12,92		13,80		14,68		14,62
	13,14	6,16	13,00	6,16	12,85	6,16	12,70	6,62	12,55	7,05	12,41	7,46	12,26	7,42
		7,48		7,45		7,41		7,95		8,49		9,04		9,00
ASSY plus VG 12x200 mm	23,76	10,01	23,52	10,01	23,28	10,01	23,04	10,96	22,80	11,86	22,56	12,72	22,32	12,66
		12,76		12,70		12,64		13,52		14,40		15,28		15,22
	14,62	6,16	14,47	6,16	14,33	6,16	14,18	6,74	14,03	7,30	13,88	7,83	13,74	7,79
		7,85		7,81		7,78		8,32		8,86		9,40		9,37
ASSY plus VG 12x220 mm	26,16	10,01	25,92	10,01	25,68	10,01	25,44	11,16	25,20	12,26	24,96	13,32	24,72	13,26
		13,36		13,30		13,24		14,12		15,00		15,88		15,82
	16,10	6,16	15,95	6,16	15,80	6,16	15,66	6,87	15,51	7,54	15,36	8,20	15,21	8,16
		8,22		8,18		8,15		8,69		9,23		9,77		9,74
ASSY plus VG 12x240 mm	28,56	10,01	28,32	10,01	28,08	10,01	27,84	11,36	27,60	12,66	27,36	13,92	27,12	13,86
		13,64		13,64		13,64		14,63		15,57		16,48		16,42
	17,58	6,16	17,43	6,16	17,28	6,16	17,13	6,99	16,98	7,79	16,84	8,57	16,69	8,53
		8,39		8,39		8,39		9,00		9,58		10,14		10,11
ASSY plus VG 12x260 mm	30,96	10,01	30,72	10,01	30,48	10,01	30,24	11,40	30,00	12,78	29,76	14,16	29,52	14,16
		13,64		13,64		13,64		14,83		15,97		17,08		17,02
	19,05	6,16	18,90	6,16	18,76	6,16	18,61	7,01	18,46	7,86	18,31	8,72	18,17	8,72
		8,39		8,39		8,39		9,12		9,83		10,51		10,48
ASSY plus VG 12x280 mm	33,36	10,01	33,12	10,01	32,88	10,01	32,64	11,40	32,40	12,78	32,16	14,16	31,92	14,16
		13,64		13,64		13,64		15,03		16,37		17,68		17,62
	20,53	6,16	20,38	6,16	20,23	6,16	20,09	7,01	19,94	7,86	19,79	8,72	19,64	8,72
		8,39		8,39		8,39		9,25		10,08		10,88		10,84

∅ **12,0 mm**



Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

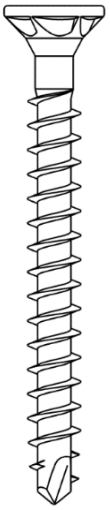
Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY PLUS VG

Type d x ℓ	Steel sheet thickness in [mm]													
	16		18		20		22		24		26		28	
ASSY plus VG 12x120 mm	12,48	10,20	12,24	10,14	12,00	10,08	11,76	10,02	11,52	9,96	11,28	9,90	11,04	9,84
		12,76		12,70		12,64		12,58		12,52		12,46		12,40
	7,68	6,28	7,53	6,24	7,38	6,20	7,24	6,17	7,09	6,13	6,94	6,09	6,79	6,06
		7,85		7,82		7,78		7,74		7,71		7,67		7,63
ASSY plus VG 12x140 mm	14,88	10,80	14,64	10,74	14,40	10,68	14,16	10,62	13,92	10,56	13,68	10,50	13,44	10,44
		13,36		13,30		13,24		13,18		13,12		13,06		13,00
	9,16	6,65	9,01	6,61	8,86	6,57	8,71	6,54	8,57	6,50	8,42	6,46	8,27	6,43
		8,22		8,19		8,15		8,11		8,08		8,04		8,00
ASSY plus VG 12x160 mm	17,28	11,40	17,04	11,34	16,80	11,28	16,56	11,22	16,32	11,16	16,08	11,10	15,84	11,04
		13,96		13,90		13,84		13,78		13,72		13,66		13,60
	10,63	7,02	10,49	6,98	10,34	6,94	10,19	6,91	10,04	6,87	9,90	6,83	9,75	6,79
		8,59		8,56		8,52		8,48		8,44		8,41		8,37
ASSY plus VG 12x180 mm	19,68	12,00	19,44	11,94	19,20	11,88	18,96	11,82	18,72	11,76	18,48	11,70	18,24	11,64
		14,56		14,50		14,44		14,38		14,32		14,26		14,20
	12,11	7,39	11,96	7,35	11,82	7,31	11,67	7,27	11,52	7,24	11,37	7,20	11,22	7,16
		8,96		8,92		8,89		8,85		8,81		8,78		8,74
ASSY plus VG 12x200 mm	22,08	12,60	21,84	12,54	21,60	12,48	21,36	12,42	21,12	12,36	20,88	12,30	20,64	12,24
		15,16		15,10		15,04		14,98		14,92		14,86		14,80
	13,59	7,75	13,44	7,72	13,29	7,68	13,14	7,64	13,00	7,61	12,85	7,57	12,70	7,53
		9,33		9,29		9,26		9,22		9,18		9,15		9,11
ASSY plus VG 12x220 mm	24,48	13,20	24,24	13,14	24,00	13,08	23,76	13,02	23,52	12,96	23,28	12,90	23,04	12,84
		15,76		15,70		15,64		15,58		15,52		15,46		15,40
	15,06	8,12	14,92	8,09	14,77	8,05	14,62	8,01	14,47	7,98	14,33	7,94	14,18	7,90
		9,70		9,66		9,63		9,59		9,55		9,52		9,48
ASSY plus VG 12x240 mm	26,88	13,80	26,64	13,74	26,40	13,68	26,16	13,62	25,92	13,56	25,68	13,50	25,44	13,44
		16,36		16,30		16,24		16,18		16,12		16,06		16,00
	16,54	8,49	16,39	8,46	16,25	8,42	16,10	8,38	15,95	8,35	15,80	8,31	15,66	8,27
		10,07		10,03		10,00		9,96		9,92		9,88		9,85
ASSY plus VG 12x260 mm	29,28	14,16	29,04	14,16	28,80	14,16	28,56	14,16	28,32	14,16	28,08	14,10	27,84	14,04
		16,96		16,90		16,84		16,78		16,72		16,66		16,60
	18,02	8,72	17,87	8,72	17,72	8,72	17,58	8,72	17,43	8,71	17,28	8,68	17,13	8,64
		10,44		10,40		10,36		10,33		10,29		10,25		10,22
ASSY plus VG 12x280 mm	31,68	14,16	31,44	14,16	31,20	14,16	30,96	14,16	30,72	14,16	30,48	14,16	30,24	14,16
		17,56		17,50		17,44		17,38		17,32		17,26		17,20
	19,50	8,72	19,35	8,72	19,20	8,72	19,05	8,72	18,90	8,72	18,76	8,72	18,61	8,72
		10,81		10,77		10,73		10,70		10,66		10,62		10,59

∅ **12,0 mm**



Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

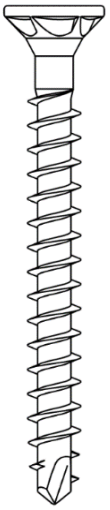
Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY PLUS VG

Type d x ℓ	Steel sheet thickness in [mm]													
	2		4		6		8		10		12		14	
ASSY plus VG 12x300 mm	35,76	10,01	35,52	10,01	35,28	10,01	35,04	11,40	34,80	12,78	34,56	14,16	34,32	14,16
		13,64		13,64		13,64		15,23		16,77		18,28		18,22
	22,01	6,16	21,86	6,16	21,71	6,16	21,56	7,01	21,42	7,86	21,27	8,72	21,12	8,72
		8,39		8,39		8,39		9,37		10,32		11,25		11,21
ASSY plus VG 12x380 mm	45,00	10,01	45,00	10,01	44,88	10,01	44,64	11,40	44,40	12,78	44,16	14,16	43,92	14,16
		13,64		13,64		13,64		15,52		17,40		19,29		19,29
	27,69	6,16	27,69	6,16	27,62	6,16	27,47	7,01	27,32	7,86	27,18	8,72	27,03	8,72
		8,39		8,39		8,39		9,55		10,71		11,87		11,87
ASSY plus VG 12x480 mm	45,00	10,01	45,00	10,01	45,00	10,01	45,00	11,40	45,00	12,78	45,00	14,16	45,00	14,16
		13,64		13,64		13,64		15,52		17,40		19,29		19,29
	27,69	6,16	27,69	6,16	27,69	6,16	27,69	7,01	27,69	7,86	27,69	8,72	27,69	8,72
		8,39		8,39		8,39		9,55		10,71		11,87		11,87
ASSY plus VG 12x600 mm	45,00	10,01	45,00	10,01	45,00	10,01	45,00	11,40	45,00	12,78	45,00	14,16	45,00	14,16
		13,64		13,64		13,64		15,52		17,40		19,29		19,29
	27,69	6,16	27,69	6,16	27,69	6,16	27,69	7,01	27,69	7,86	27,69	8,72	27,69	8,72
		8,39		8,39		8,39		9,55		10,71		11,87		11,87

∅ **12,0 mm**



Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

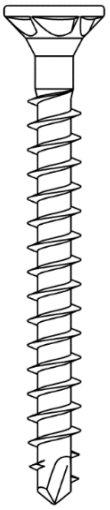
Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY PLUS VG

Type d x ℓ	Steel sheet thickness in [mm]													
	16		18		20		22		24		26		28	
ASSY plus VG 12x300 mm	34,08	14,16	33,84	14,16	33,60	14,16	33,36	14,16	33,12	14,16	32,88	14,16	32,64	14,16
		18,16		18,10		18,04		17,98		17,92		17,86		17,80
	20,97	8,72	20,82	8,72	20,68	8,72	20,53	8,72	20,38	8,72	20,23	8,72	20,09	8,72
		11,18		11,14		11,10		11,07		11,03		10,99		10,96
ASSY plus VG 12x380 mm	43,68	14,16	43,44	14,16	43,20	14,16	42,96	14,16	42,72	14,16	42,48	14,16	42,24	14,16
		19,29		19,29		19,29		19,29		19,29		19,29		19,29
	26,88	8,72	26,73	8,72	26,58	8,72	26,44	8,72	26,29	8,72	26,14	8,72	25,99	8,72
		11,87		11,87		11,87		11,87		11,87		11,87		11,87
ASSY plus VG 12x480 mm	45,00	14,16	45,00	14,16	45,00	14,16	45,00	14,16	45,00	14,16	45,00	14,16	45,00	14,16
		19,29		19,29		19,29		19,29		19,29		19,29		19,29
	27,69	8,72	27,69	8,72	27,69	8,72	27,69	8,72	27,69	8,72	27,69	8,72	27,69	8,72
		11,87		11,87		11,87		11,87		11,87		11,87		11,87
ASSY plus VG 12x600 mm	45,00	14,16	45,00	14,16	45,00	14,16	45,00	14,16	45,00	14,16	45,00	14,16	45,00	14,16
		19,29		19,29		19,29		19,29		19,29		19,29		19,29
	27,69	8,72	27,69	8,72	27,69	8,72	27,69	8,72	27,69	8,72	27,69	8,72	27,69	8,72
		11,87		11,87		11,87		11,87		11,87		11,87		11,87

∅ **12,0 mm**



Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY PLUS VG

Type d x ℓ	Steel sheet thickness in [mm]													
	2		4		6		8		10		12		14	
ASSY plus VG 14x800 mm	62,00	12,87	62,00	12,87	62,00	12,87	62,00	13,63	62,00	15,15	62,00	16,68	62,00	18,20
		17,73		17,73		17,73		18,78		20,88		22,98		25,08
	38,15	7,92	38,15	7,92	38,15	7,92	38,15	8,39	38,15	9,33	38,15	10,26	38,15	11,20
		10,91		10,91		10,91		11,56		12,85		14,14		15,43
ASSY plus VG 14x850 mm	62,00	12,87	62,00	12,87	62,00	12,87	62,00	13,63	62,00	15,15	62,00	16,68	62,00	18,20
		17,73		17,73		17,73		18,78		20,88		22,98		25,08
	38,15	7,92	38,15	7,92	38,15	7,92	38,15	8,39	38,15	9,33	38,15	10,26	38,15	11,20
		10,91		10,91		10,91		11,56		12,85		14,14		15,43
ASSY plus VG 14x900 mm	62,00	12,87	62,00	12,87	62,00	12,87	62,00	13,63	62,00	15,15	62,00	16,68	62,00	18,20
		17,73		17,73		17,73		18,78		20,88		22,98		25,08
	38,15	7,92	38,15	7,92	38,15	7,92	38,15	8,39	38,15	9,33	38,15	10,26	38,15	11,20
		10,91		10,91		10,91		11,56		12,85		14,14		15,43
ASSY plus VG 14x950 mm	62,00	12,87	62,00	12,87	62,00	12,87	62,00	13,63	62,00	15,15	62,00	16,68	62,00	18,20
		17,73		17,73		17,73		18,78		20,88		22,98		25,08
	38,15	7,92	38,15	7,92	38,15	7,92	38,15	8,39	38,15	9,33	38,15	10,26	38,15	11,20
		10,91		10,91		10,91		11,56		12,85		14,14		15,43
ASSY plus VG 14x1000 mm	62,00	12,87	62,00	12,87	62,00	12,87	62,00	13,63	62,00	15,15	62,00	16,68	62,00	18,20
		17,73		17,73		17,73		18,78		20,88		22,98		25,08
	38,15	7,92	38,15	7,92	38,15	7,92	38,15	8,39	38,15	9,33	38,15	10,26	38,15	11,20
		10,91		10,91		10,91		11,56		12,85		14,14		15,43
ASSY plus VG 14x1050 mm	62,00	12,87	62,00	12,87	62,00	12,87	62,00	13,63	62,00	15,15	62,00	16,68	62,00	18,20
		17,73		17,73		17,73		18,78		20,88		22,98		25,08
	38,15	7,92	38,15	7,92	38,15	7,92	38,15	8,39	38,15	9,33	38,15	10,26	38,15	11,20
		10,91		10,91		10,91		11,56		12,85		14,14		15,43
ASSY plus VG 14x1100 mm	62,00	12,87	62,00	12,87	62,00	12,87	62,00	13,63	62,00	15,15	62,00	16,68	62,00	18,20
		17,73		17,73		17,73		18,78		20,88		22,98		25,08
	38,15	7,92	38,15	7,92	38,15	7,92	38,15	8,39	38,15	9,33	38,15	10,26	38,15	11,20
		10,91		10,91		10,91		11,56		12,85		14,14		15,43
ASSY plus VG 14x1200 mm	62,00	12,87	62,00	12,87	62,00	12,87	62,00	13,63	62,00	15,15	62,00	16,68	62,00	18,20
		17,73		17,73		17,73		18,78		20,88		22,98		25,08
	38,15	7,92	38,15	7,92	38,15	7,92	38,15	8,39	38,15	9,33	38,15	10,26	38,15	11,20
		10,91		10,91		10,91		11,56		12,85		14,14		15,43

∅ **14,0 mm**

Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY PLUS VG

Type d x ℓ	Steel sheet thickness in [mm]													
	16		18		20		22		24		26		28	
ASSY plus VG 14x800 mm	62,00	18,20	62,00	18,20	62,00	18,20	62,00	18,20	62,00	18,20	62,00	18,20	62,00	18,20
		25,08		25,08		25,08		25,08		25,08		25,08		25,08
	38,15	11,20	38,15	11,20	38,15	11,20	38,15	11,20	38,15	11,20	38,15	11,20	38,15	11,20
		15,43		15,43		15,43		15,43		15,43		15,43		15,43
ASSY plus VG 14x850 mm	62,00	18,20	62,00	18,20	62,00	18,20	62,00	18,20	62,00	18,20	62,00	18,20	62,00	18,20
		25,08		25,08		25,08		25,08		25,08		25,08		25,08
	38,15	11,20	38,15	11,20	38,15	11,20	38,15	11,20	38,15	11,20	38,15	11,20	38,15	11,20
		15,43		15,43		15,43		15,43		15,43		15,43		15,43
ASSY plus VG 14x900 mm	62,00	18,20	62,00	18,20	62,00	18,20	62,00	18,20	62,00	18,20	62,00	18,20	62,00	18,20
		25,08		25,08		25,08		25,08		25,08		25,08		25,08
	38,15	11,20	38,15	11,20	38,15	11,20	38,15	11,20	38,15	11,20	38,15	11,20	38,15	11,20
		15,43		15,43		15,43		15,43		15,43		15,43		15,43
ASSY plus VG 14x950 mm	62,00	18,20	62,00	18,20	62,00	18,20	62,00	18,20	62,00	18,20	62,00	18,20	62,00	18,20
		25,08		25,08		25,08		25,08		25,08		25,08		25,08
	38,15	11,20	38,15	11,20	38,15	11,20	38,15	11,20	38,15	11,20	38,15	11,20	38,15	11,20
		15,43		15,43		15,43		15,43		15,43		15,43		15,43
ASSY plus VG 14x1000 mm	62,00	18,20	62,00	18,20	62,00	18,20	62,00	18,20	62,00	18,20	62,00	18,20	62,00	18,20
		25,08		25,08		25,08		25,08		25,08		25,08		25,08
	38,15	11,20	38,15	11,20	38,15	11,20	38,15	11,20	38,15	11,20	38,15	11,20	38,15	11,20
		15,43		15,43		15,43		15,43		15,43		15,43		15,43
ASSY plus VG 14x1050 mm	62,00	18,20	62,00	18,20	62,00	18,20	62,00	18,20	62,00	18,20	62,00	18,20	62,00	18,20
		25,08		25,08		25,08		25,08		25,08		25,08		25,08
	38,15	11,20	38,15	11,20	38,15	11,20	38,15	11,20	38,15	11,20	38,15	11,20	38,15	11,20
		15,43		15,43		15,43		15,43		15,43		15,43		15,43
ASSY plus VG 14x1100 mm	62,00	18,20	62,00	18,20	62,00	18,20	62,00	18,20	62,00	18,20	62,00	18,20	62,00	18,20
		25,08		25,08		25,08		25,08		25,08		25,08		25,08
	38,15	11,20	38,15	11,20	38,15	11,20	38,15	11,20	38,15	11,20	38,15	11,20	38,15	11,20
		15,43		15,43		15,43		15,43		15,43		15,43		15,43
ASSY plus VG 14x1200 mm	62,00	18,20	62,00	18,20	62,00	18,20	62,00	18,20	62,00	18,20	62,00	18,20	62,00	18,20
		25,08		25,08		25,08		25,08		25,08		25,08		25,08
	38,15	11,20	38,15	11,20	38,15	11,20	38,15	11,20	38,15	11,20	38,15	11,20	38,15	11,20
		15,43		15,43		15,43		15,43		15,43		15,43		15,43

∅ **14,0 mm**

Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY PLUS VG

Type d x ℓ	Steel sheet thickness in [mm]													
	2		4		6		8		10		12		14	
ASSY plus VG 14x1300 mm	62,00	12,87	62,00	12,87	62,00	12,87	62,00	13,63	62,00	15,15	62,00	16,68	62,00	18,20
		17,73		17,73		17,73		18,78		20,88		22,98		25,08
	38,15	7,92	38,15	7,92	38,15	7,92	38,15	8,39	38,15	9,33	38,15	10,26	38,15	11,20
		10,91		10,91		10,91		11,56		12,85		14,14		15,43
ASSY plus VG 14x1400 mm	62,00	12,87	62,00	12,87	62,00	12,87	62,00	13,63	62,00	15,15	62,00	16,68	62,00	18,20
		17,73		17,73		17,73		18,78		20,88		22,98		25,08
	38,15	7,92	38,15	7,92	38,15	7,92	38,15	8,39	38,15	9,33	38,15	10,26	38,15	11,20
		10,91		10,91		10,91		11,56		12,85		14,14		15,43
ASSY plus VG 14x1500 mm	62,00	12,87	62,00	12,87	62,00	12,87	62,00	13,63	62,00	15,15	62,00	16,68	62,00	18,20
		17,73		17,73		17,73		18,78		20,88		22,98		25,08
	38,15	7,92	38,15	7,92	38,15	7,92	38,15	8,39	38,15	9,33	38,15	10,26	38,15	11,20
		10,91		10,91		10,91		11,56		12,85		14,14		15,43

∅ **14,0 mm**

Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY PLUS VG

Type d x ℓ	Steel sheet thickness in [mm]													
	16		18		20		22		24		26		28	
ASSY plus VG 14x1300 mm	62,00	18,20	62,00	18,20	62,00	18,20	62,00	18,20	62,00	18,20	62,00	18,20	62,00	18,20
		25,08		25,08		25,08		25,08		25,08		25,08		25,08
	38,15	11,20	38,15	11,20	38,15	11,20	38,15	11,20	38,15	11,20	38,15	11,20	38,15	11,20
		15,43		15,43		15,43		15,43		15,43		15,43		15,43
ASSY plus VG 14x1400 mm	62,00	18,20	62,00	18,20	62,00	18,20	62,00	18,20	62,00	18,20	62,00	18,20	62,00	18,20
		25,08		25,08		25,08		25,08		25,08		25,08		25,08
	38,15	11,20	38,15	11,20	38,15	11,20	38,15	11,20	38,15	11,20	38,15	11,20	38,15	11,20
		15,43		15,43		15,43		15,43		15,43		15,43		15,43
ASSY plus VG 14x1500 mm	62,00	18,20	62,00	18,20	62,00	18,20	62,00	18,20	62,00	18,20	62,00	18,20	62,00	18,20
		25,08		25,08		25,08		25,08		25,08		25,08		25,08
	38,15	11,20	38,15	11,20	38,15	11,20	38,15	11,20	38,15	11,20	38,15	11,20	38,15	11,20
		15,43		15,43		15,43		15,43		15,43		15,43		15,43

∅ **14,0 mm**

Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 A2

Type d x ℓ	Steel sheet thickness in [mm]													
	2		4		6		8		10		12		14	
ASSY 3.0 A2 5x50 mm	1,92	1,29	1,92	1,49	1,92	1,63	1,92	1,63	1,92	1,63	1,92	1,63	1,92	1,63
		1,48		1,73		1,90		1,90		1,90		1,90		1,90
	1,18	0,79	1,18	0,92	1,18	1,00	1,18	1,00	1,18	1,00	1,18	1,00	1,18	1,00
		0,91		1,07		1,17		1,17		1,17		1,17		1,17
ASSY 3.0 A2 5x60 mm	2,52	1,44	2,52	1,64	2,52	1,78	2,52	1,78	2,52	1,78	2,52	1,78	2,52	1,78
		1,63		1,88		2,05		2,05		2,05		2,05		2,05
	1,55	0,89	1,55	1,01	1,55	1,09	1,55	1,09	1,55	1,09	1,55	1,09	1,55	1,09
		1,01		1,16		1,26		1,26		1,26		1,26		1,26
ASSY 3.0 A2 5x70 mm	2,52	1,44	2,52	1,64	2,52	1,78	2,52	1,78	2,52	1,78	2,52	1,78	2,52	1,78
		1,63		1,88		2,05		2,05		2,05		2,05		2,05
	1,55	0,89	1,55	1,01	1,55	1,09	1,55	1,09	1,55	1,09	1,55	1,09	1,55	1,09
		1,01		1,16		1,26		1,26		1,26		1,26		1,26
ASSY 3.0 A2 5x80 mm	3,12	1,59	3,12	1,79	3,12	1,93	3,12	1,93	3,12	1,93	3,12	1,93	3,12	1,93
		1,78		2,03		2,20		2,20		2,20		2,20		2,20
	1,92	0,98	1,92	1,10	1,92	1,18	1,92	1,18	1,92	1,18	1,92	1,18	1,92	1,18
		1,10		1,25		1,35		1,35		1,35		1,35		1,35
ASSY 3.0 A2 5x90 mm	3,12	1,59	3,12	1,79	3,12	1,93	3,12	1,93	3,12	1,93	3,12	1,93	3,12	1,93
		1,78		2,03		2,20		2,20		2,20		2,20		2,20
	1,92	0,98	1,92	1,10	1,92	1,18	1,92	1,18	1,92	1,18	1,92	1,18	1,92	1,18
		1,10		1,25		1,35		1,35		1,35		1,35		1,35
ASSY 3.0 A2 5x100 mm	3,12	1,59	3,12	1,79	3,12	1,93	3,12	1,93	3,12	1,93	3,12	1,93	3,12	1,93
		1,78		2,03		2,20		2,20		2,20		2,20		2,20
	1,92	0,98	1,92	1,10	1,92	1,18	1,92	1,18	1,92	1,18	1,92	1,18	1,92	1,18
		1,10		1,25		1,35		1,35		1,35		1,35		1,35

∅ **5,0 mm**

A2

Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 A2

Type d x ℓ	Steel sheet thickness in [mm]													
	16		18		20		22		24		26		28	
ASSY 3.0 A2 5x50 mm	1,92	1,63	1,92	1,63	1,80	1,60	1,68	1,57	1,56	1,49	1,44	1,40	1,32	1,31
		1,90		1,90		1,87		1,84		1,81		1,78		1,75
	1,18	1,00	1,18	1,00	1,11	0,98	1,03	0,96	0,96	0,92	0,89	0,86	0,81	0,81
		1,17		1,17		1,15		1,13		1,11		1,10		1,08
ASSY 3.0 A2 5x60 mm	2,52	1,78	2,52	1,78	2,40	1,75	2,28	1,72	2,16	1,69	2,04	1,66	1,92	1,63
		2,05		2,05		2,02		1,99		1,96		1,93		1,90
	1,55	1,09	1,55	1,09	1,48	1,07	1,40	1,06	1,33	1,04	1,26	1,02	1,18	1,00
		1,26		1,26		1,24		1,23		1,21		1,19		1,17
ASSY 3.0 A2 5x70 mm	2,52	1,78	2,52	1,78	2,52	1,78	2,52	1,78	2,52	1,78	2,52	1,78	2,52	1,78
		2,05		2,05		2,05		2,05		2,05		2,05		2,05
	1,55	1,09	1,55	1,09	1,55	1,09	1,55	1,09	1,55	1,09	1,55	1,09	1,55	1,09
		1,26		1,26		1,26		1,26		1,26		1,26		1,26
ASSY 3.0 A2 5x80 mm	3,12	1,93	3,12	1,93	3,12	1,93	3,12	1,93	3,12	1,93	3,12	1,93	3,12	1,93
		2,20		2,20		2,20		2,20		2,20		2,20		2,20
	1,92	1,18	1,92	1,18	1,92	1,18	1,92	1,18	1,92	1,18	1,92	1,18	1,92	1,18
		1,35		1,35		1,35		1,35		1,35		1,35		1,35
ASSY 3.0 A2 5x90 mm	3,12	1,93	3,12	1,93	3,12	1,93	3,12	1,93	3,12	1,93	3,12	1,93	3,12	1,93
		2,20		2,20		2,20		2,20		2,20		2,20		2,20
	1,92	1,18	1,92	1,18	1,92	1,18	1,92	1,18	1,92	1,18	1,92	1,18	1,92	1,18
		1,35		1,35		1,35		1,35		1,35		1,35		1,35
ASSY 3.0 A2 5x100 mm	3,12	1,93	3,12	1,93	3,12	1,93	3,12	1,93	3,12	1,93	3,12	1,93	3,12	1,93
		2,20		2,20		2,20		2,20		2,20		2,20		2,20
	1,92	1,18	1,92	1,18	1,92	1,18	1,92	1,18	1,92	1,18	1,92	1,18	1,92	1,18
		1,35		1,35		1,35		1,35		1,35		1,35		1,35

∅ **5,0 mm**

A2

Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 A2

Type d x ℓ	Steel sheet thickness in [mm]													
	2		4		6		8		10		12		14	
ASSY 3.0 A2 6x60 mm	2,55	1,85	2,55	2,02	2,55	2,35	2,55	2,35	2,55	2,35	2,55	2,35	2,55	2,35
		2,17		2,38		2,81		2,81		2,81		2,81		2,81
	1,57	1,14	1,57	1,24	1,57	1,45	1,57	1,45	1,57	1,45	1,57	1,45	1,57	1,45
		1,34		1,47		1,73		1,73		1,73		1,73		1,73
ASSY 3.0 A2 6x70 mm	2,90	1,93	2,90	2,10	2,90	2,44	2,90	2,44	2,90	2,44	2,90	2,44	2,90	2,44
		2,26		2,47		2,89		2,89		2,89		2,89		2,89
	1,78	1,19	1,78	1,29	1,78	1,50	1,78	1,50	1,78	1,50	1,78	1,50	1,78	1,50
		1,39		1,52		1,78		1,78		1,78		1,78		1,78
ASSY 3.0 A2 6x80 mm	3,45	2,07	3,45	2,24	3,45	2,57	3,45	2,57	3,45	2,57	3,45	2,57	3,45	2,57
		2,40		2,61		3,03		3,03		3,03		3,03		3,03
	2,12	1,28	2,12	1,38	2,12	1,58	2,12	1,58	2,12	1,58	2,12	1,58	2,12	1,58
		1,48		1,61		1,87		1,87		1,87		1,87		1,87
ASSY 3.0 A2 6x90 mm	3,45	2,07	3,45	2,24	3,45	2,57	3,45	2,57	3,45	2,57	3,45	2,57	3,45	2,57
		2,40		2,61		3,03		3,03		3,03		3,03		3,03
	2,12	1,28	2,12	1,38	2,12	1,58	2,12	1,58	2,12	1,58	2,12	1,58	2,12	1,58
		1,48		1,61		1,87		1,87		1,87		1,87		1,87
ASSY 3.0 A2 6x100 mm	4,14	2,24	4,14	2,41	4,14	2,75	4,14	2,75	4,14	2,75	4,14	2,75	4,14	2,75
		2,57		2,78		3,21		3,21		3,21		3,21		3,21
	2,55	1,38	2,55	1,48	2,55	1,69	2,55	1,69	2,55	1,69	2,55	1,69	2,55	1,69
		1,58		1,71		1,97		1,97		1,97		1,97		1,97
ASSY 3.0 A2 6x110 mm	4,83	2,42	4,83	2,58	4,83	2,92	4,83	2,92	4,83	2,92	4,83	2,92	4,83	2,92
		2,74		2,95		3,38		3,38		3,38		3,38		3,38
	2,97	1,49	2,97	1,59	2,97	1,80	2,97	1,80	2,97	1,80	2,97	1,80	2,97	1,80
		1,69		1,82		2,08		2,08		2,08		2,08		2,08
ASSY 3.0 A2 6x120 mm	4,83	2,42	4,83	2,58	4,83	2,92	4,83	2,92	4,83	2,92	4,83	2,92	4,83	2,92
		2,74		2,95		3,38		3,38		3,38		3,38		3,38
	2,97	1,49	2,97	1,59	2,97	1,80	2,97	1,80	2,97	1,80	2,97	1,80	2,97	1,80
		1,69		1,82		2,08		2,08		2,08		2,08		2,08
ASSY 3.0 A2 6x140 mm	4,83	2,92	4,83	2,92	4,83	2,92	4,83	2,92	4,83	2,92	4,83	2,92	4,83	2,92
		3,38		3,38		3,38		3,38		3,38		3,38		3,38
	2,97	1,80	2,97	1,80	2,97	1,80	2,97	1,80	2,97	1,80	2,97	1,80	2,97	1,80
		2,08		2,08		2,08		2,08		2,08		2,08		2,08

∅ **6,0 mm**

A2

Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 A2

Type d x ℓ	Steel sheet thickness in [mm]													
	16		18		20		22		24		26		28	
ASSY 3.0 A2 6x60 mm	2,55	2,35	2,55	2,35	2,55	2,35	2,55	2,35	2,48	2,33	2,35	2,23	2,21	2,12
		2,81		2,81		2,81		2,81		2,79		2,76		2,72
	1,57	1,45	1,57	1,45	1,57	1,45	1,57	1,45	1,53	1,43	1,44	1,37	1,36	1,31
		1,73		1,73		1,73		1,73		1,72		1,70		1,68
ASSY 3.0 A2 6x70 mm	2,90	2,44	2,90	2,44	2,90	2,44	2,90	2,44	2,90	2,44	2,90	2,44	2,90	2,44
		2,89		2,89		2,89		2,89		2,89		2,89		2,89
	1,78	1,50	1,78	1,50	1,78	1,50	1,78	1,50	1,78	1,50	1,78	1,50	1,78	1,50
		1,78		1,78		1,78		1,78		1,78		1,78		1,78
ASSY 3.0 A2 6x80 mm	3,45	2,57	3,45	2,57	3,45	2,57	3,45	2,57	3,45	2,57	3,45	2,57	3,45	2,57
		3,03		3,03		3,03		3,03		3,03		3,03		3,03
	2,12	1,58	2,12	1,58	2,12	1,58	2,12	1,58	2,12	1,58	2,12	1,58	2,12	1,58
		1,87		1,87		1,87		1,87		1,87		1,87		1,87
ASSY 3.0 A2 6x90 mm	3,45	2,57	3,45	2,57	3,45	2,57	3,45	2,57	3,45	2,57	3,45	2,57	3,45	2,57
		3,03		3,03		3,03		3,03		3,03		3,03		3,03
	2,12	1,58	2,12	1,58	2,12	1,58	2,12	1,58	2,12	1,58	2,12	1,58	2,12	1,58
		1,87		1,87		1,87		1,87		1,87		1,87		1,87
ASSY 3.0 A2 6x100 mm	4,14	2,75	4,14	2,75	4,14	2,75	4,14	2,75	4,14	2,75	4,14	2,75	4,14	2,75
		3,21		3,21		3,21		3,21		3,21		3,21		3,21
	2,55	1,69	2,55	1,69	2,55	1,69	2,55	1,69	2,55	1,69	2,55	1,69	2,55	1,69
		1,97		1,97		1,97		1,97		1,97		1,97		1,97
ASSY 3.0 A2 6x110 mm	4,83	2,92	4,83	2,92	4,83	2,92	4,83	2,92	4,83	2,92	4,83	2,92	4,83	2,92
		3,38		3,38		3,38		3,38		3,38		3,38		3,38
	2,97	1,80	2,97	1,80	2,97	1,80	2,97	1,80	2,97	1,80	2,97	1,80	2,97	1,80
		2,08		2,08		2,08		2,08		2,08		2,08		2,08
ASSY 3.0 A2 6x120 mm	4,83	2,92	4,83	2,92	4,83	2,92	4,83	2,92	4,83	2,92	4,83	2,92	4,83	2,92
		3,38		3,38		3,38		3,38		3,38		3,38		3,38
	2,97	1,80	2,97	1,80	2,97	1,80	2,97	1,80	2,97	1,80	2,97	1,80	2,97	1,80
		2,08		2,08		2,08		2,08		2,08		2,08		2,08
ASSY 3.0 A2 6x140 mm	4,83	2,92	4,83	2,92	4,83	2,92	4,83	2,92	4,83	2,92	4,83	2,92	4,83	2,92
		3,38		3,38		3,38		3,38		3,38		3,38		3,38
	2,97	1,80	2,97	1,80	2,97	1,80	2,97	1,80	2,97	1,80	2,97	1,80	2,97	1,80
		2,08		2,08		2,08		2,08		2,08		2,08		2,08

∅ **6,0 mm**

A2

Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 A2

Type d x ℓ	Steel sheet thickness in [mm]													
	2		4		6		8		10		12		14	
ASSY 3.0 A2 6x160 mm	4,83	2,42	4,83	2,58	4,83	2,92	4,83	2,92	4,83	2,92	4,83	2,92	4,83	2,92
		2,74		2,95		3,38		3,38		3,38		3,38		3,38
	2,97	1,49	2,97	1,59	2,97	1,80	2,97	1,80	2,97	1,80	2,97	1,80	2,97	1,80
		1,69		1,82		2,08		2,08		2,08		2,08		2,08
ASSY 3.0 A2 6x180 mm	4,83	2,42	4,83	2,58	4,83	2,92	4,83	2,92	4,83	2,92	4,83	2,92	4,83	2,92
		2,74		2,95		3,38		3,38		3,38		3,38		3,38
	2,97	1,49	2,97	1,59	2,97	1,80	2,97	1,80	2,97	1,80	2,97	1,80	2,97	1,80
		1,69		1,82		2,08		2,08		2,08		2,08		2,08
ASSY 3.0 A2 6x200 mm	4,83	2,42	4,83	2,58	4,83	2,92	4,83	2,92	4,83	2,92	4,83	2,92	4,83	2,92
		2,74		2,95		3,38		3,38		3,38		3,38		3,38
	2,97	1,49	2,97	1,59	2,97	1,80	2,97	1,80	2,97	1,80	2,97	1,80	2,97	1,80
		1,69		1,82		2,08		2,08		2,08		2,08		2,08

∅ **6,0 mm**

A2

Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 A2

Type d x ℓ	Steel sheet thickness in [mm]													
	16		18		20		22		24		26		28	
ASSY 3.0 A2 6x160 mm	4,83	2,92	4,83	2,92	4,83	2,92	4,83	2,92	4,83	2,92	4,83	2,92	4,83	2,92
		3,38		3,38		3,38		3,38		3,38		3,38		3,38
	2,97	1,80	2,97	1,80	2,97	1,80	2,97	1,80	2,97	1,80	2,97	1,80	2,97	1,80
		2,08		2,08		2,08		2,08		2,08		2,08		2,08
ASSY 3.0 A2 6x180 mm	4,83	2,92	4,83	2,92	4,83	2,92	4,83	2,92	4,83	2,92	4,83	2,92	4,83	2,92
		3,38		3,38		3,38		3,38		3,38		3,38		3,38
	2,97	1,80	2,97	1,80	2,97	1,80	2,97	1,80	2,97	1,80	2,97	1,80	2,97	1,80
		2,08		2,08		2,08		2,08		2,08		2,08		2,08
ASSY 3.0 A2 6x200 mm	4,83	2,92	4,83	2,92	4,83	2,92	4,83	2,92	4,83	2,92	4,83	2,92	4,83	2,92
		3,38		3,38		3,38		3,38		3,38		3,38		3,38
	2,97	1,80	2,97	1,80	2,97	1,80	2,97	1,80	2,97	1,80	2,97	1,80	2,97	1,80
		2,08		2,08		2,08		2,08		2,08		2,08		2,08

∅ **6,0 mm**

A2

Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 A2

Type d x ℓ	Steel sheet thickness in [mm]													
	2		4		6		8		10		12		14	
ASSY 3.0 A2 8x80 mm	4,40	2,99	4,40	2,99	4,40	3,38	4,40	3,78	4,40	3,78	4,40	3,78	4,40	3,78
		3,58		3,58		4,09		4,61		4,61		4,61		4,61
	2,71	1,84	2,71	1,84	2,71	2,08	2,71	2,32	2,71	2,32	2,71	2,32	2,71	2,32
		2,20		2,20		2,52		2,83		2,83		2,83		2,83
ASSY 3.0 A2 8x100 mm	5,28	3,21	5,28	3,21	5,28	3,60	5,28	4,00	5,28	4,00	5,28	4,00	5,28	4,00
		3,80		3,80		4,31		4,83		4,83		4,83		4,83
	3,25	1,98	3,25	1,98	3,25	2,22	3,25	2,46	3,25	2,46	3,25	2,46	3,25	2,46
		2,34		2,34		2,65		2,97		2,97		2,97		2,97
ASSY 3.0 A2 8x120 mm	7,04	3,65	7,04	3,65	7,04	4,04	7,04	4,44	7,04	4,44	7,04	4,44	7,04	4,44
		4,24		4,24		4,75		5,27		5,27		5,27		5,27
	4,33	2,25	4,33	2,25	4,33	2,49	4,33	2,73	4,33	2,73	4,33	2,73	4,33	2,73
		2,61		2,61		2,92		3,24		3,24		3,24		3,24
ASSY 3.0 A2 8x140 mm	7,04	3,65	7,04	3,65	7,04	4,04	7,04	4,44	7,04	4,44	7,04	4,44	7,04	4,44
		4,24		4,24		4,75		5,27		5,27		5,27		5,27
	4,33	2,25	4,33	2,25	4,33	2,49	4,33	2,73	4,33	2,73	4,33	2,73	4,33	2,73
		2,61		2,61		2,92		3,24		3,24		3,24		3,24
ASSY 3.0 A2 8x160 mm	7,04	3,65	7,04	3,65	7,04	4,04	7,04	4,44	7,04	4,44	7,04	4,44	7,04	4,44
		4,24		4,24		4,75		5,27		5,27		5,27		5,27
	4,33	2,25	4,33	2,25	4,33	2,49	4,33	2,73	4,33	2,73	4,33	2,73	4,33	2,73
		2,61		2,61		2,92		3,24		3,24		3,24		3,24
ASSY 3.0 A2 8x180 mm	7,04	3,65	7,04	3,65	7,04	4,04	7,04	4,44	7,04	4,44	7,04	4,44	7,04	4,44
		4,24		4,24		4,75		5,27		5,27		5,27		5,27
	4,33	2,25	4,33	2,25	4,33	2,49	4,33	2,73	4,33	2,73	4,33	2,73	4,33	2,73
		2,61		2,61		2,92		3,24		3,24		3,24		3,24
ASSY 3.0 A2 8x200 mm	7,04	3,65	7,04	3,65	7,04	4,04	7,04	4,44	7,04	4,44	7,04	4,44	7,04	4,44
		4,24		4,24		4,75		5,27		5,27		5,27		5,27
	4,33	2,25	4,33	2,25	4,33	2,49	4,33	2,73	4,33	2,73	4,33	2,73	4,33	2,73
		2,61		2,61		2,92		3,24		3,24		3,24		3,24
ASSY 3.0 A2 8x220 mm	8,80	4,09	8,80	4,09	8,80	4,48	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88
		4,68		4,68		5,19		5,71		5,71		5,71		5,71
	5,42	2,52	5,42	2,52	5,42	2,76	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00
		2,88		2,88		3,20		3,51		3,51		3,51		3,51
ASSY 3.0 A2 8x240 mm	8,80	4,09	8,80	4,09	8,80	4,48	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88
		4,68		4,68		5,19		5,71		5,71		5,71		5,71
	5,42	2,52	5,42	2,52	5,42	2,76	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00
		2,88		2,88		3,20		3,51		3,51		3,51		3,51

∅ **8,0 mm**

A2

Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 A2

Type d x ℓ	Steel sheet thickness in [mm]													
	16		18		20		22		24		26		28	
ASSY 3.0 A2 8x80 mm	4,40	3,78	4,40	3,78	4,40	3,78	4,40	3,78	4,40	3,78	4,40	3,78	4,40	3,78
		4,61		4,61		4,61		4,61		4,61		4,61		4,61
	2,71	2,32	2,71	2,32	2,71	2,32	2,71	2,32	2,71	2,32	2,71	2,32	2,71	2,32
		2,83		2,83		2,83		2,83		2,83		2,83		2,83
ASSY 3.0 A2 8x100 mm	5,28	4,00	5,28	4,00	5,28	4,00	5,28	4,00	5,28	4,00	5,28	4,00	5,28	4,00
		4,83		4,83		4,83		4,83		4,83		4,83		4,83
	3,25	2,46	3,25	2,46	3,25	2,46	3,25	2,46	3,25	2,46	3,25	2,46	3,25	2,46
		2,97		2,97		2,97		2,97		2,97		2,97		2,97
ASSY 3.0 A2 8x120 mm	7,04	4,44	7,04	4,44	7,04	4,44	7,04	4,44	7,04	4,44	7,04	4,44	7,04	4,44
		5,27		5,27		5,27		5,27		5,27		5,27		5,27
	4,33	2,73	4,33	2,73	4,33	2,73	4,33	2,73	4,33	2,73	4,33	2,73	4,33	2,73
		3,24		3,24		3,24		3,24		3,24		3,24		3,24
ASSY 3.0 A2 8x140 mm	7,04	4,44	7,04	4,44	7,04	4,44	7,04	4,44	7,04	4,44	7,04	4,44	7,04	4,44
		5,27		5,27		5,27		5,27		5,27		5,27		5,27
	4,33	2,73	4,33	2,73	4,33	2,73	4,33	2,73	4,33	2,73	4,33	2,73	4,33	2,73
		3,24		3,24		3,24		3,24		3,24		3,24		3,24
ASSY 3.0 A2 8x160 mm	7,04	4,44	7,04	4,44	7,04	4,44	7,04	4,44	7,04	4,44	7,04	4,44	7,04	4,44
		5,27		5,27		5,27		5,27		5,27		5,27		5,27
	4,33	2,73	4,33	2,73	4,33	2,73	4,33	2,73	4,33	2,73	4,33	2,73	4,33	2,73
		3,24		3,24		3,24		3,24		3,24		3,24		3,24
ASSY 3.0 A2 8x180 mm	7,04	4,44	7,04	4,44	7,04	4,44	7,04	4,44	7,04	4,44	7,04	4,44	7,04	4,44
		5,27		5,27		5,27		5,27		5,27		5,27		5,27
	4,33	2,73	4,33	2,73	4,33	2,73	4,33	2,73	4,33	2,73	4,33	2,73	4,33	2,73
		3,24		3,24		3,24		3,24		3,24		3,24		3,24
ASSY 3.0 A2 8x200 mm	7,04	4,44	7,04	4,44	7,04	4,44	7,04	4,44	7,04	4,44	7,04	4,44	7,04	4,44
		5,27		5,27		5,27		5,27		5,27		5,27		5,27
	4,33	2,73	4,33	2,73	4,33	2,73	4,33	2,73	4,33	2,73	4,33	2,73	4,33	2,73
		3,24		3,24		3,24		3,24		3,24		3,24		3,24
ASSY 3.0 A2 8x220 mm	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88
		5,71		5,71		5,71		5,71		5,71		5,71		5,71
	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00
		3,51		3,51		3,51		3,51		3,51		3,51		3,51
ASSY 3.0 A2 8x240 mm	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88
		5,71		5,71		5,71		5,71		5,71		5,71		5,71
	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00
		3,51		3,51		3,51		3,51		3,51		3,51		3,51

∅ **8,0 mm**

A2

Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 A2

Type d x ℓ	Steel sheet thickness in [mm]													
	2		4		6		8		10		12		14	
ASSY 3.0 A2 8x260 mm	8,80	4,09	8,80	4,09	8,80	4,48	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88
		4,68		4,68		5,19		5,71		5,71		5,71		5,71
	5,42	2,52	5,42	2,52	5,42	2,76	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00
		2,88		2,88		3,20		3,51		3,51		3,51		3,51
ASSY 3.0 A2 8x280 mm	8,80	4,09	8,80	4,09	8,80	4,48	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88
		4,68		4,68		5,19		5,71		5,71		5,71		5,71
	5,42	2,52	5,42	2,52	5,42	2,76	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00
		2,88		2,88		3,20		3,51		3,51		3,51		3,51
ASSY 3.0 A2 8x300 mm	8,80	4,09	8,80	4,09	8,80	4,48	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88
		4,68		4,68		5,19		5,71		5,71		5,71		5,71
	5,42	2,52	5,42	2,52	5,42	2,76	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00
		2,88		2,88		3,20		3,51		3,51		3,51		3,51

∅ **8,0 mm**

A2

Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 A2

Type d x ℓ	Steel sheet thickness in [mm]													
	16		18		20		22		24		26		28	
ASSY 3.0 A2 8x260 mm	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88
		5,71		5,71		5,71		5,71		5,71		5,71		5,71
	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00
		3,51		3,51		3,51		3,51		3,51		3,51		3,51
ASSY 3.0 A2 8x280 mm	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88
		5,71		5,71		5,71		5,71		5,71		5,71		5,71
	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00
		3,51		3,51		3,51		3,51		3,51		3,51		3,51
ASSY 3.0 A2 8x300 mm	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88
		5,71		5,71		5,71		5,71		5,71		5,71		5,71
	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00
		3,51		3,51		3,51		3,51		3,51		3,51		3,51

∅ **8,0 mm**

A2

Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 SK A2

Type d x ℓ	Steel sheet thickness in [mm]													
	2		4		6		8		10		12		14	
ASSY 3.0 SK A2 6x60 mm	2,55	1,85	2,55	2,02	2,55	2,35	2,55	2,35	2,55	2,35	2,55	2,35	2,55	2,35
		2,17		2,38		2,81		2,81		2,81		2,81		2,81
	1,57	1,14	1,57	1,24	1,57	1,45	1,57	1,45	1,57	1,45	1,57	1,45	1,57	1,45
		1,34		1,47		1,73		1,73		1,73		1,73		1,73
ASSY 3.0 SK A2 6x70 mm	2,90	1,93	2,90	2,10	2,90	2,44	2,90	2,44	2,90	2,44	2,90	2,44	2,90	2,44
		2,26		2,47		2,89		2,89		2,89		2,89		2,89
	1,78	1,19	1,78	1,29	1,78	1,50	1,78	1,50	1,78	1,50	1,78	1,50	1,78	1,50
		1,39		1,52		1,78		1,78		1,78		1,78		1,78
ASSY 3.0 SK A2 6x80 mm	3,45	2,07	3,45	2,24	3,45	2,57	3,45	2,57	3,45	2,57	3,45	2,57	3,45	2,57
		2,40		2,61		3,03		3,03		3,03		3,03		3,03
	2,12	1,28	2,12	1,38	2,12	1,58	2,12	1,58	2,12	1,58	2,12	1,58	2,12	1,58
		1,48		1,61		1,87		1,87		1,87		1,87		1,87
ASSY 3.0 SK A2 6x90 mm	3,45	2,07	3,45	2,24	3,45	2,57	3,45	2,57	3,45	2,57	3,45	2,57	3,45	2,57
		2,40		2,61		3,03		3,03		3,03		3,03		3,03
	2,12	1,28	2,12	1,38	2,12	1,58	2,12	1,58	2,12	1,58	2,12	1,58	2,12	1,58
		1,48		1,61		1,87		1,87		1,87		1,87		1,87
ASSY 3.0 SK A2 6x100 mm	4,14	2,24	4,14	2,41	4,14	2,75	4,14	2,75	4,14	2,75	4,14	2,75	4,14	2,75
		2,57		2,78		3,21		3,21		3,21		3,21		3,21
	2,55	1,38	2,55	1,48	2,55	1,69	2,55	1,69	2,55	1,69	2,55	1,69	2,55	1,69
		1,58		1,71		1,97		1,97		1,97		1,97		1,97
ASSY 3.0 SK A2 6x120 mm	4,83	2,42	4,83	2,58	4,83	2,92	4,83	2,92	4,83	2,92	4,83	2,92	4,83	2,92
		2,74		2,95		3,38		3,38		3,38		3,38		3,38
	2,97	1,49	2,97	1,59	2,97	1,80	2,97	1,80	2,97	1,80	2,97	1,80	2,97	1,80
		1,69		1,82		2,08		2,08		2,08		2,08		2,08
ASSY 3.0 SK A2 6x140 mm	4,83	2,42	4,83	2,58	4,83	2,92	4,83	2,92	4,83	2,92	4,83	2,92	4,83	2,92
		2,74		2,95		3,38		3,38		3,38		3,38		3,38
	2,97	1,49	2,97	1,59	2,97	1,80	2,97	1,80	2,97	1,80	2,97	1,80	2,97	1,80
		1,69		1,82		2,08		2,08		2,08		2,08		2,08

∅ **6,0 mm**

A2

Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 SK A2

Type d x ℓ	Steel sheet thickness in [mm]													
	16		18		20		22		24		26		28	
ASSY 3.0 SK A2 6x60 mm	2,55	2,35	2,55	2,35	2,55	2,35	2,55	2,35	2,48	2,33	2,35	2,23	2,21	2,12
		2,81		2,81		2,81		2,81		2,79		2,76		2,72
	1,57	1,45	1,57	1,45	1,57	1,45	1,57	1,45	1,53	1,43	1,44	1,37	1,36	1,31
		1,73		1,73		1,73		1,73		1,72		1,70		1,68
ASSY 3.0 SK A2 6x70 mm	2,90	2,44	2,90	2,44	2,90	2,44	2,90	2,44	2,90	2,44	2,90	2,44	2,90	2,44
		2,89		2,89		2,89		2,89		2,89		2,89		2,89
	1,78	1,50	1,78	1,50	1,78	1,50	1,78	1,50	1,78	1,50	1,78	1,50	1,78	1,50
		1,78		1,78		1,78		1,78		1,78		1,78		1,78
ASSY 3.0 SK A2 6x80 mm	3,45	2,57	3,45	2,57	3,45	2,57	3,45	2,57	3,45	2,57	3,45	2,57	3,45	2,57
		3,03		3,03		3,03		3,03		3,03		3,03		3,03
	2,12	1,58	2,12	1,58	2,12	1,58	2,12	1,58	2,12	1,58	2,12	1,58	2,12	1,58
		1,87		1,87		1,87		1,87		1,87		1,87		1,87
ASSY 3.0 SK A2 6x90 mm	3,45	2,57	3,45	2,57	3,45	2,57	3,45	2,57	3,45	2,57	3,45	2,57	3,45	2,57
		3,03		3,03		3,03		3,03		3,03		3,03		3,03
	2,12	1,58	2,12	1,58	2,12	1,58	2,12	1,58	2,12	1,58	2,12	1,58	2,12	1,58
		1,87		1,87		1,87		1,87		1,87		1,87		1,87
ASSY 3.0 SK A2 6x100 mm	4,14	2,75	4,14	2,75	4,14	2,75	4,14	2,75	4,14	2,75	4,14	2,75	4,14	2,75
		3,21		3,21		3,21		3,21		3,21		3,21		3,21
	2,55	1,69	2,55	1,69	2,55	1,69	2,55	1,69	2,55	1,69	2,55	1,69	2,55	1,69
		1,97		1,97		1,97		1,97		1,97		1,97		1,97
ASSY 3.0 SK A2 6x120 mm	4,83	2,92	4,83	2,92	4,83	2,92	4,83	2,92	4,83	2,92	4,83	2,92	4,83	2,92
		3,38		3,38		3,38		3,38		3,38		3,38		3,38
	2,97	1,80	2,97	1,80	2,97	1,80	2,97	1,80	2,97	1,80	2,97	1,80	2,97	1,80
		2,08		2,08		2,08		2,08		2,08		2,08		2,08
ASSY 3.0 SK A2 6x140 mm	4,83	2,92	4,83	2,92	4,83	2,92	4,83	2,92	4,83	2,92	4,83	2,92	4,83	2,92
		3,38		3,38		3,38		3,38		3,38		3,38		3,38
	2,97	1,80	2,97	1,80	2,97	1,80	2,97	1,80	2,97	1,80	2,97	1,80	2,97	1,80
		2,08		2,08		2,08		2,08		2,08		2,08		2,08

∅ **6,0 mm**

A2

Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 SK A2

Type d x ℓ	Steel sheet thickness in [mm]													
	2		4		6		8		10		12		14	
ASSY 3.0 SK A2 8x80 mm	4,40	2,99	4,40	2,99	4,40	3,38	4,40	3,78	4,40	3,78	4,40	3,78	4,40	3,78
		3,58		3,58		4,09		4,61		4,61		4,61		4,61
	2,71	1,84	2,71	1,84	2,71	2,08	2,71	2,32	2,71	2,32	2,71	2,32	2,71	2,32
		2,20		2,20		2,52		2,83		2,83		2,83		2,83
ASSY 3.0 SK A2 8x100 mm	5,28	3,21	5,28	3,21	5,28	3,60	5,28	4,00	5,28	4,00	5,28	4,00	5,28	4,00
		3,80		3,80		4,31		4,83		4,83		4,83		4,83
	3,25	1,98	3,25	1,98	3,25	2,22	3,25	2,46	3,25	2,46	3,25	2,46	3,25	2,46
		2,34		2,34		2,65		2,97		2,97		2,97		2,97
ASSY 3.0 SK A2 8x120 mm	7,04	3,65	7,04	3,65	7,04	4,04	7,04	4,44	7,04	4,44	7,04	4,44	7,04	4,44
		4,24		4,24		4,75		5,27		5,27		5,27		5,27
	4,33	2,25	4,33	2,25	4,33	2,49	4,33	2,73	4,33	2,73	4,33	2,73	4,33	2,73
		2,61		2,61		2,92		3,24		3,24		3,24		3,24
ASSY 3.0 SK A2 8x140 mm	7,04	3,65	7,04	3,65	7,04	4,04	7,04	4,44	7,04	4,44	7,04	4,44	7,04	4,44
		4,24		4,24		4,75		5,27		5,27		5,27		5,27
	4,33	2,25	4,33	2,25	4,33	2,49	4,33	2,73	4,33	2,73	4,33	2,73	4,33	2,73
		2,61		2,61		2,92		3,24		3,24		3,24		3,24
ASSY 3.0 SK A2 8x160 mm	7,04	3,65	7,04	3,65	7,04	4,04	7,04	4,44	7,04	4,44	7,04	4,44	7,04	4,44
		4,24		4,24		4,75		5,27		5,27		5,27		5,27
	4,33	2,25	4,33	2,25	4,33	2,49	4,33	2,73	4,33	2,73	4,33	2,73	4,33	2,73
		2,61		2,61		2,92		3,24		3,24		3,24		3,24
ASSY 3.0 SK A2 8x180 mm	7,04	3,65	7,04	3,65	7,04	4,04	7,04	4,44	7,04	4,44	7,04	4,44	7,04	4,44
		4,24		4,24		4,75		5,27		5,27		5,27		5,27
	4,33	2,25	4,33	2,25	4,33	2,49	4,33	2,73	4,33	2,73	4,33	2,73	4,33	2,73
		2,61		2,61		2,92		3,24		3,24		3,24		3,24
ASSY 3.0 SK A2 8x200 mm	7,04	3,65	7,04	3,65	7,04	4,04	7,04	4,44	7,04	4,44	7,04	4,44	7,04	4,44
		4,24		4,24		4,75		5,27		5,27		5,27		5,27
	4,33	2,25	4,33	2,25	4,33	2,49	4,33	2,73	4,33	2,73	4,33	2,73	4,33	2,73
		2,61		2,61		2,92		3,24		3,24		3,24		3,24
ASSY 3.0 SK A2 8x220 mm	8,80	4,09	8,80	4,09	8,80	4,48	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88
		4,68		4,68		5,19		5,71		5,71		5,71		5,71
	5,42	2,52	5,42	2,52	5,42	2,76	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00
		2,88		2,88		3,20		3,51		3,51		3,51		3,51
ASSY 3.0 SK A2 8x240 mm	8,80	4,09	8,80	4,09	8,80	4,48	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88
		4,68		4,68		5,19		5,71		5,71		5,71		5,71
	5,42	2,52	5,42	2,52	5,42	2,76	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00
		2,88		2,88		3,20		3,51		3,51		3,51		3,51

∅ **8,0 mm**

A2

Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 SK A2

Type d x ℓ	Steel sheet thickness in [mm]													
	16		18		20		22		24		26		28	
ASSY 3.0 SK A2 8x80 mm	4,40	3,78	4,40	3,78	4,40	3,78	4,40	3,78	4,40	3,78	4,40	3,78	4,40	3,78
		4,61		4,61		4,61		4,61		4,61		4,61		4,61
	2,71	2,32	2,71	2,32	2,71	2,32	2,71	2,32	2,71	2,32	2,71	2,32	2,71	2,32
		2,83		2,83		2,83		2,83		2,83		2,83		2,83
ASSY 3.0 SK A2 8x100 mm	5,28	4,00	5,28	4,00	5,28	4,00	5,28	4,00	5,28	4,00	5,28	4,00	5,28	4,00
		4,83		4,83		4,83		4,83		4,83		4,83		4,83
	3,25	2,46	3,25	2,46	3,25	2,46	3,25	2,46	3,25	2,46	3,25	2,46	3,25	2,46
		2,97		2,97		2,97		2,97		2,97		2,97		2,97
ASSY 3.0 SK A2 8x120 mm	7,04	4,44	7,04	4,44	7,04	4,44	7,04	4,44	7,04	4,44	7,04	4,44	7,04	4,44
		5,27		5,27		5,27		5,27		5,27		5,27		5,27
	4,33	2,73	4,33	2,73	4,33	2,73	4,33	2,73	4,33	2,73	4,33	2,73	4,33	2,73
		3,24		3,24		3,24		3,24		3,24		3,24		3,24
ASSY 3.0 SK A2 8x140 mm	7,04	4,44	7,04	4,44	7,04	4,44	7,04	4,44	7,04	4,44	7,04	4,44	7,04	4,44
		5,27		5,27		5,27		5,27		5,27		5,27		5,27
	4,33	2,73	4,33	2,73	4,33	2,73	4,33	2,73	4,33	2,73	4,33	2,73	4,33	2,73
		3,24		3,24		3,24		3,24		3,24		3,24		3,24
ASSY 3.0 SK A2 8x160 mm	7,04	4,44	7,04	4,44	7,04	4,44	7,04	4,44	7,04	4,44	7,04	4,44	7,04	4,44
		5,27		5,27		5,27		5,27		5,27		5,27		5,27
	4,33	2,73	4,33	2,73	4,33	2,73	4,33	2,73	4,33	2,73	4,33	2,73	4,33	2,73
		3,24		3,24		3,24		3,24		3,24		3,24		3,24
ASSY 3.0 SK A2 8x180 mm	7,04	4,44	7,04	4,44	7,04	4,44	7,04	4,44	7,04	4,44	7,04	4,44	7,04	4,44
		5,27		5,27		5,27		5,27		5,27		5,27		5,27
	4,33	2,73	4,33	2,73	4,33	2,73	4,33	2,73	4,33	2,73	4,33	2,73	4,33	2,73
		3,24		3,24		3,24		3,24		3,24		3,24		3,24
ASSY 3.0 SK A2 8x200 mm	7,04	4,44	7,04	4,44	7,04	4,44	7,04	4,44	7,04	4,44	7,04	4,44	7,04	4,44
		5,27		5,27		5,27		5,27		5,27		5,27		5,27
	4,33	2,73	4,33	2,73	4,33	2,73	4,33	2,73	4,33	2,73	4,33	2,73	4,33	2,73
		3,24		3,24		3,24		3,24		3,24		3,24		3,24
ASSY 3.0 SK A2 8x220 mm	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88
		5,71		5,71		5,71		5,71		5,71		5,71		5,71
	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00
		3,51		3,51		3,51		3,51		3,51		3,51		3,51
ASSY 3.0 SK A2 8x240 mm	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88
		5,71		5,71		5,71		5,71		5,71		5,71		5,71
	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00
		3,51		3,51		3,51		3,51		3,51		3,51		3,51

∅ **8,0 mm**

A2

Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

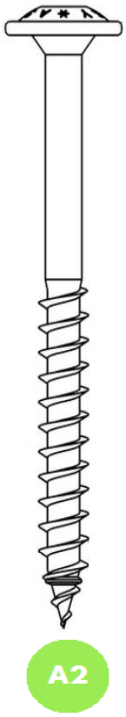
Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 SK A2

Type d x ℓ	Steel sheet thickness in [mm]													
	2		4		6		8		10		12		14	
ASSY 3.0 SK A2 8x260 mm	8,80	4,09	8,80	4,09	8,80	4,48	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88
		4,68		4,68		5,19		5,71		5,71		5,71		5,71
	5,42	2,52	5,42	2,52	5,42	2,76	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00
		2,88		2,88		3,20		3,51		3,51		3,51		3,51
ASSY 3.0 SK A2 8x280 mm	8,80	4,09	8,80	4,09	8,80	4,48	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88
		4,68		4,68		5,19		5,71		5,71		5,71		5,71
	5,42	2,52	5,42	2,52	5,42	2,76	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00
		2,88		2,88		3,20		3,51		3,51		3,51		3,51
ASSY 3.0 SK A2 8x300 mm	8,80	4,09	8,80	4,09	8,80	4,48	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88
		4,68		4,68		5,19		5,71		5,71		5,71		5,71
	5,42	2,52	5,42	2,52	5,42	2,76	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00
		2,88		2,88		3,20		3,51		3,51		3,51		3,51
ASSY 3.0 SK A2 8x320 mm	8,80	4,09	8,80	4,09	8,80	4,48	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88
		4,68		4,68		5,19		5,71		5,71		5,71		5,71
	5,42	2,52	5,42	2,52	5,42	2,76	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00
		2,88		2,88		3,20		3,51		3,51		3,51		3,51
ASSY 3.0 SK A2 8x340 mm	8,80	4,09	8,80	4,09	8,80	4,48	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88
		4,68		4,68		5,19		5,71		5,71		5,71		5,71
	5,42	2,52	5,42	2,52	5,42	2,76	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00
		2,88		2,88		3,20		3,51		3,51		3,51		3,51
ASSY 3.0 SK A2 8x360 mm	8,80	4,09	8,80	4,09	8,80	4,48	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88
		4,68		4,68		5,19		5,71		5,71		5,71		5,71
	5,42	2,52	5,42	2,52	5,42	2,76	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00
		2,88		2,88		3,20		3,51		3,51		3,51		3,51
ASSY 3.0 SK A2 8x380 mm	8,80	4,09	8,80	4,09	8,80	4,48	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88
		4,68		4,68		5,19		5,71		5,71		5,71		5,71
	5,42	2,52	5,42	2,52	5,42	2,76	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00
		2,88		2,88		3,20		3,51		3,51		3,51		3,51
ASSY 3.0 SK A2 8x400 mm	8,80	4,09	8,80	4,09	8,80	4,48	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88
		4,68		4,68		5,19		5,71		5,71		5,71		5,71
	5,42	2,52	5,42	2,52	5,42	2,76	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00
		2,88		2,88		3,20		3,51		3,51		3,51		3,51

∅ **8,0 mm**



Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 SK A2

Type d x ℓ	Steel sheet thickness in [mm]													
	16		18		20		22		24		26		28	
ASSY 3.0 SK A2 8x260 mm	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88
		5,71		5,71		5,71		5,71		5,71		5,71		5,71
	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00
		3,51		3,51		3,51		3,51		3,51		3,51		3,51
ASSY 3.0 SK A2 8x280 mm	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88
		5,71		5,71		5,71		5,71		5,71		5,71		5,71
	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00
		3,51		3,51		3,51		3,51		3,51		3,51		3,51
ASSY 3.0 SK A2 8x300 mm	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88
		5,71		5,71		5,71		5,71		5,71		5,71		5,71
	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00
		3,51		3,51		3,51		3,51		3,51		3,51		3,51
ASSY 3.0 SK A2 8x320 mm	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88
		5,71		5,71		5,71		5,71		5,71		5,71		5,71
	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00
		3,51		3,51		3,51		3,51		3,51		3,51		3,51
ASSY 3.0 SK A2 8x340 mm	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88
		5,71		5,71		5,71		5,71		5,71		5,71		5,71
	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00
		3,51		3,51		3,51		3,51		3,51		3,51		3,51
ASSY 3.0 SK A2 8x360 mm	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88
		5,71		5,71		5,71		5,71		5,71		5,71		5,71
	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00
		3,51		3,51		3,51		3,51		3,51		3,51		3,51
ASSY 3.0 SK A2 8x380 mm	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88
		5,71		5,71		5,71		5,71		5,71		5,71		5,71
	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00
		3,51		3,51		3,51		3,51		3,51		3,51		3,51
ASSY 3.0 SK A2 8x400 mm	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88	8,80	4,88
		5,71		5,71		5,71		5,71		5,71		5,71		5,71
	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00	5,42	3,00
		3,51		3,51		3,51		3,51		3,51		3,51		3,51

∅ **8,0 mm**

A2

Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

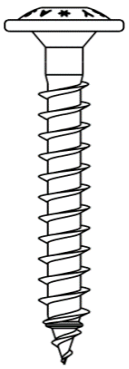
Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 SK A2 FULL THREAD

Type d x ℓ	Steel sheet thickness in [mm]													
	2		4		6		8		10		12		14	
ASSY 3.0 SK A2 full thread 6x40 mm	2,48	1,53	2,48	1,74	2,35	2,23	2,21	2,12	2,07	2,02	1,93	1,92	1,79	1,82
		2,16		2,37		2,76		2,72		2,69		2,63		2,48
	1,53	0,94	1,53	1,07	1,44	1,37	1,36	1,31	1,27	1,24	1,19	1,18	1,10	1,12
		1,33		1,46		1,70		1,68		1,65		1,62		1,53
ASSY 3.0 SK A2 full thread 6x50 mm	3,11	1,93	3,11	2,06	3,04	2,47	2,90	2,44	2,76	2,40	2,62	2,37	2,48	2,33
		2,31		2,52		2,93		2,89		2,86		2,83		2,79
	1,91	1,19	1,91	1,27	1,87	1,52	1,78	1,50	1,70	1,48	1,61	1,46	1,53	1,43
		1,42		1,55		1,80		1,78		1,76		1,74		1,72
ASSY 3.0 SK A2 full thread 8x40 mm	2,82	1,87	2,82	1,77	2,82	2,28	2,82	2,80	2,64	2,68	2,46	2,57	2,29	2,46
		3,18		3,04		3,50		3,98		3,79		3,60		3,42
	1,73	1,15	1,73	1,09	1,73	1,40	1,73	1,72	1,62	1,65	1,52	1,58	1,41	1,51
		1,96		1,87		2,15		2,45		2,33		2,22		2,11
ASSY 3.0 SK A2 full thread 8x50 mm	3,52	2,36	3,52	2,26	3,52	2,82	3,52	3,38	3,52	3,30	3,34	3,17	3,17	3,04
		3,36		3,36		3,87		4,39		4,39		4,34		4,30
	2,17	1,45	2,17	1,39	2,17	1,73	2,17	2,08	2,17	2,03	2,06	1,95	1,95	1,87
		2,07		2,07		2,38		2,70		2,70		2,67		2,64

∅
6,0
8.0
mm



A2

Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

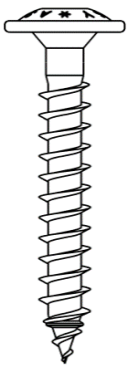
Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY 3.0 SK A2 FULL THREAD

Type d x ℓ	Steel sheet thickness in [mm]													
	16		18		20		22		24		26		28	
ASSY 3.0 SK A2 full thread 6x40 mm	1,66	1,72	1,52	1,63	1,38	1,54	1,24	1,46	1,10	1,39	0,97	1,32	0,83	1,21
		2,34		2,20		2,06		1,93		1,81		1,69		1,60
	1,02	1,06	0,93	1,00	0,85	0,95	0,76	0,90	0,68	0,85	0,59	0,81	0,51	0,74
		1,44		1,35		1,27		1,19		1,11		1,04		0,98
ASSY 3.0 SK A2 full thread 6x50 mm	2,35	2,23	2,21	2,12	2,07	2,02	1,93	1,92	1,79	1,82	1,66	1,72	1,52	1,63
		2,76		2,72		2,69		2,63		2,48		2,34		2,20
	1,44	1,37	1,36	1,31	1,27	1,24	1,19	1,18	1,10	1,12	1,02	1,06	0,93	1,00
		1,70		1,68		1,65		1,62		1,53		1,44		1,35
ASSY 3.0 SK A2 full thread 8x40 mm	2,11	2,36	1,94	2,26	1,76	2,17	1,58	2,08	1,41	1,97	1,23	1,72	1,06	1,48
		3,25		3,08		2,92		2,78		2,64		2,53		2,44
	1,30	1,45	1,19	1,39	1,08	1,33	0,97	1,28	0,87	1,21	0,76	1,06	0,65	0,91
		2,00		1,90		1,80		1,71		1,63		1,55		1,50
ASSY 3.0 SK A2 full thread 8x50 mm	2,99	2,92	2,82	2,80	2,64	2,68	2,46	2,57	2,29	2,46	2,11	2,36	1,94	2,26
		4,17		3,98		3,79		3,60		3,42		3,25		3,08
	1,84	1,80	1,73	1,72	1,62	1,65	1,52	1,58	1,41	1,51	1,30	1,45	1,19	1,39
		2,57		2,45		2,33		2,22		2,11		2,00		1,90

∅
6,0
8,0
mm



A2

Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY PLUS A2

Type d x ℓ	Steel sheet thickness in [mm]													
	2		4		6		8		10		12		14	
ASSY plus A2 5.5x45 mm	1,45	1,41	1,45	1,61	1,45	1,85	1,45	1,85	1,45	1,85	1,45	1,84	1,45	1,78
		1,68		1,93		2,23		2,23		2,23		2,23		2,23
	0,90	0,87	0,90	0,99	0,90	1,14	0,90	1,14	0,90	1,14	0,90	1,13	0,90	1,09
		1,03		1,19		1,37		1,37		1,37		1,37		1,37
ASSY plus A2 5.5x50 mm	1,77	1,49	1,77	1,69	1,77	1,93	1,77	1,93	1,77	1,93	1,77	1,93	1,77	1,93
		1,76		2,01		2,31		2,31		2,31		2,31		2,31
	1,09	0,92	1,09	1,04	1,09	1,19	1,09	1,19	1,09	1,19	1,09	1,19	1,09	1,19
		1,08		1,24		1,42		1,42		1,42		1,42		1,42
ASSY plus A2 5.5x60 mm	2,09	1,57	2,09	1,77	2,09	2,01	2,09	2,01	2,09	2,01	2,09	2,01	2,09	2,01
		1,84		2,09		2,39		2,39		2,39		2,39		2,39
	1,28	0,97	1,28	1,09	1,28	1,23	1,28	1,23	1,28	1,23	1,28	1,23	1,28	1,23
		1,13		1,28		1,47		1,47		1,47		1,47		1,47
ASSY plus A2 5.5x70 mm	2,40	1,65	2,40	1,85	2,40	2,09	2,40	2,09	2,40	2,09	2,40	2,09	2,40	2,09
		1,92		2,17		2,46		2,46		2,46		2,46		2,46
	1,48	1,02	1,48	1,14	1,48	1,28	1,48	1,28	1,48	1,28	1,48	1,28	1,48	1,28
		1,18		1,33		1,52		1,52		1,52		1,52		1,52
ASSY plus A2 5.5x80 mm	2,40	1,65	2,40	1,85	2,40	2,09	2,40	2,09	2,40	2,09	2,40	2,09	2,40	2,09
		1,92		2,17		2,46		2,46		2,46		2,46		2,46
	1,48	1,02	1,48	1,14	1,48	1,28	1,48	1,28	1,48	1,28	1,48	1,28	1,48	1,28
		1,18		1,33		1,52		1,52		1,52		1,52		1,52
ASSY plus A2 5.5x90 mm	2,72	1,73	2,72	1,93	2,72	2,16	2,72	2,16	2,72	2,16	2,72	2,16	2,72	2,16
		2,00		2,25		2,54		2,54		2,54		2,54		2,54
	1,67	1,06	1,67	1,19	1,67	1,33	1,67	1,33	1,67	1,33	1,67	1,33	1,67	1,33
		1,23		1,38		1,57		1,57		1,57		1,57		1,57
ASSY plus A2 5.5x100 mm	3,04	1,81	3,04	2,01	3,04	2,24	3,04	2,24	3,04	2,24	3,04	2,24	3,04	2,24
		2,08		2,32		2,62		2,62		2,62		2,62		2,62
	1,87	1,11	1,87	1,23	1,87	1,38	1,87	1,38	1,87	1,38	1,87	1,38	1,87	1,38
		1,28		1,43		1,61		1,61		1,61		1,61		1,61

∅ **5,5 mm**

A2

Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY PLUS A2

Type d x ℓ	Steel sheet thickness in [mm]													
	16		18		20		22		24		26		28	
ASSY plus A2 5.5x45 mm	1,45	1,71	1,45	1,65	1,45	1,58	1,45	1,53	1,33	1,44	1,20	1,35	1,08	1,28
		2,23		2,23		2,15		2,05		1,92		1,79		1,67
	0,90	1,05	0,90	1,01	0,90	0,97	0,90	0,94	0,82	0,88	0,74	0,83	0,66	0,79
		1,37		1,37		1,32		1,26		1,18		1,10		1,03
ASSY plus A2 5.5x50 mm	1,77	1,93	1,77	1,89	1,77	1,82	1,77	1,76	1,64	1,66	1,52	1,57	1,39	1,48
		2,31		2,31		2,31		2,31		2,25		2,12		1,98
	1,09	1,19	1,09	1,16	1,09	1,12	1,09	1,08	1,01	1,02	0,93	0,97	0,86	0,91
		1,42		1,42		1,42		1,42		1,39		1,30		1,22
ASSY plus A2 5.5x60 mm	2,09	2,01	2,09	2,01	2,09	2,01	2,09	2,01	2,09	2,01	2,09	2,01	2,02	1,95
		2,39		2,39		2,39		2,39		2,39		2,39		2,37
	1,28	1,23	1,28	1,23	1,28	1,23	1,28	1,23	1,28	1,23	1,28	1,23	1,25	1,20
		1,47		1,47		1,47		1,47		1,47		1,47		1,46
ASSY plus A2 5.5x70 mm	2,40	2,09	2,40	2,09	2,40	2,09	2,40	2,09	2,40	2,09	2,40	2,09	2,40	2,09
		2,46		2,46		2,46		2,46		2,46		2,46		2,46
	1,48	1,28	1,48	1,28	1,48	1,28	1,48	1,28	1,48	1,28	1,48	1,28	1,48	1,28
		1,52		1,52		1,52		1,52		1,52		1,52		1,52
ASSY plus A2 5.5x80 mm	2,40	2,09	2,40	2,09	2,40	2,09	2,40	2,09	2,40	2,09	2,40	2,09	2,40	2,09
		2,46		2,46		2,46		2,46		2,46		2,46		2,46
	1,48	1,28	1,48	1,28	1,48	1,28	1,48	1,28	1,48	1,28	1,48	1,28	1,48	1,28
		1,52		1,52		1,52		1,52		1,52		1,52		1,52
ASSY plus A2 5.5x90 mm	2,72	2,16	2,72	2,16	2,72	2,16	2,72	2,16	2,72	2,16	2,72	2,16	2,72	2,16
		2,54		2,54		2,54		2,54		2,54		2,54		2,54
	1,67	1,33	1,67	1,33	1,67	1,33	1,67	1,33	1,67	1,33	1,67	1,33	1,67	1,33
		1,57		1,57		1,57		1,57		1,57		1,57		1,57
ASSY plus A2 5.5x100 mm	3,04	2,24	3,04	2,24	3,04	2,24	3,04	2,24	3,04	2,24	3,04	2,24	3,04	2,24
		2,62		2,62		2,62		2,62		2,62		2,62		2,62
	1,87	1,38	1,87	1,38	1,87	1,38	1,87	1,38	1,87	1,38	1,87	1,38	1,87	1,38
		1,61		1,61		1,61		1,61		1,61		1,61		1,61

∅ **5,5 mm**

A2

Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY PLUS A2

Type d x ℓ	Steel sheet thickness in [mm]													
	2		4		6		8		10		12		14	
ASSY plus A2 6.5x60 mm	2,39	1,98	2,39	2,11	2,39	2,47	2,39	2,55	2,39	2,55	2,39	2,55	2,39	2,55
		2,37		2,54		2,99		3,10		3,10		3,10		3,10
	1,47	1,22	1,47	1,30	1,47	1,52	1,47	1,57	1,47	1,57	1,47	1,57	1,47	1,57
		1,46		1,56		1,84		1,91		1,91		1,91		1,91
ASSY plus A2 6.5x70 mm	2,77	2,07	2,77	2,21	2,77	2,56	2,77	2,65	2,77	2,65	2,77	2,65	2,77	2,65
		2,46		2,63		3,08		3,20		3,20		3,20		3,20
	1,70	1,28	1,70	1,36	1,70	1,58	1,70	1,63	1,70	1,63	1,70	1,63	1,70	1,63
		1,52		1,62		1,90		1,97		1,97		1,97		1,97
ASSY plus A2 6.5x80 mm	3,36	2,22	3,36	2,36	3,36	2,71	3,36	2,80	3,36	2,80	3,36	2,80	3,36	2,80
		2,61		2,78		3,23		3,35		3,35		3,35		3,35
	2,07	1,37	2,07	1,45	2,07	1,67	2,07	1,72	2,07	1,72	2,07	1,72	2,07	1,72
		1,61		1,71		1,99		2,06		2,06		2,06		2,06
ASSY plus A2 6.5x90 mm	3,36	2,22	3,36	2,36	3,36	2,71	3,36	2,80	3,36	2,80	3,36	2,80	3,36	2,80
		2,61		2,78		3,23		3,35		3,35		3,35		3,35
	2,07	1,37	2,07	1,45	2,07	1,67	2,07	1,72	2,07	1,72	2,07	1,72	2,07	1,72
		1,61		1,71		1,99		2,06		2,06		2,06		2,06
ASSY plus A2 6.5x100 mm	4,11	2,41	4,11	2,54	4,11	2,90	4,11	2,98	4,11	2,98	4,11	2,98	4,11	2,98
		2,80		2,97		3,42		3,53		3,53		3,53		3,53
	2,53	1,48	2,53	1,57	2,53	1,78	2,53	1,84	2,53	1,84	2,53	1,84	2,53	1,84
		1,72		1,83		2,10		2,17		2,17		2,17		2,17
ASSY plus A2 6.5x120 mm	4,86	2,60	4,86	2,73	4,86	3,08	4,86	3,17	4,86	3,17	4,86	3,17	4,86	3,17
		2,99		3,16		3,61		3,72		3,72		3,72		3,72
	2,99	1,60	2,99	1,68	2,99	1,90	2,99	1,95	2,99	1,95	2,99	1,95	2,99	1,95
		1,84		1,94		2,22		2,29		2,29		2,29		2,29
ASSY plus A2 6.5x140 mm	4,86	2,60	4,86	2,73	4,86	3,08	4,86	3,17	4,86	3,17	4,86	3,17	4,86	3,17
		2,99		3,16		3,61		3,72		3,72		3,72		3,72
	2,99	1,60	2,99	1,68	2,99	1,90	2,99	1,95	2,99	1,95	2,99	1,95	2,99	1,95
		1,84		1,94		2,22		2,29		2,29		2,29		2,29
ASSY plus A2 6.5x160 mm	4,86	2,60	4,86	2,73	4,86	3,08	4,86	3,17	4,86	3,17	4,86	3,17	4,86	3,17
		2,99		3,16		3,61		3,72		3,72		3,72		3,72
	2,99	1,60	2,99	1,68	2,99	1,90	2,99	1,95	2,99	1,95	2,99	1,95	2,99	1,95
		1,84		1,94		2,22		2,29		2,29		2,29		2,29

∅ **6,5 mm**

A2

Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY PLUS A2

Type d x ℓ	Steel sheet thickness in [mm]													
	16		18		20		22		24		26		28	
ASSY plus A2 6.5x60 mm	2,39	2,55	2,39	2,55	2,39	2,55	2,39	2,52	2,39	2,45	2,39	2,37	2,39	2,30
		3,10		3,10		3,10		3,10		3,10		3,10		3,10
	1,47	1,57	1,47	1,57	1,47	1,57	1,47	1,55	1,47	1,50	1,47	1,46	1,47	1,42
		1,91		1,91		1,91		1,91		1,91		1,91		1,91
ASSY plus A2 6.5x70 mm	2,77	2,65	2,77	2,65	2,77	2,65	2,77	2,65	2,77	2,65	2,77	2,65	2,77	2,65
		3,20		3,20		3,20		3,20		3,20		3,20		3,20
	1,70	1,63	1,70	1,63	1,70	1,63	1,70	1,63	1,70	1,63	1,70	1,63	1,70	1,63
		1,97		1,97		1,97		1,97		1,97		1,97		1,97
ASSY plus A2 6.5x80 mm	3,36	2,80	3,36	2,80	3,36	2,80	3,36	2,80	3,36	2,80	3,36	2,80	3,36	2,80
		3,35		3,35		3,35		3,35		3,35		3,35		3,35
	2,07	1,72	2,07	1,72	2,07	1,72	2,07	1,72	2,07	1,72	2,07	1,72	2,07	1,72
		2,06		2,06		2,06		2,06		2,06		2,06		2,06
ASSY plus A2 6.5x90 mm	3,36	2,80	3,36	2,80	3,36	2,80	3,36	2,80	3,36	2,80	3,36	2,80	3,36	2,80
		3,35		3,35		3,35		3,35		3,35		3,35		3,35
	2,07	1,72	2,07	1,72	2,07	1,72	2,07	1,72	2,07	1,72	2,07	1,72	2,07	1,72
		2,06		2,06		2,06		2,06		2,06		2,06		2,06
ASSY plus A2 6.5x100 mm	4,11	2,98	4,11	2,98	4,11	2,98	4,11	2,98	4,11	2,98	4,11	2,98	4,11	2,98
		3,53		3,53		3,53		3,53		3,53		3,53		3,53
	2,53	1,84	2,53	1,84	2,53	1,84	2,53	1,84	2,53	1,84	2,53	1,84	2,53	1,84
		2,17		2,17		2,17		2,17		2,17		2,17		2,17
ASSY plus A2 6.5x120 mm	4,86	3,17	4,86	3,17	4,86	3,17	4,86	3,17	4,86	3,17	4,86	3,17	4,86	3,17
		3,72		3,72		3,72		3,72		3,72		3,72		3,72
	2,99	1,95	2,99	1,95	2,99	1,95	2,99	1,95	2,99	1,95	2,99	1,95	2,99	1,95
		2,29		2,29		2,29		2,29		2,29		2,29		2,29
ASSY plus A2 6.5x140 mm	4,86	3,17	4,86	3,17	4,86	3,17	4,86	3,17	4,86	3,17	4,86	3,17	4,86	3,17
		3,72		3,72		3,72		3,72		3,72		3,72		3,72
	2,99	1,95	2,99	1,95	2,99	1,95	2,99	1,95	2,99	1,95	2,99	1,95	2,99	1,95
		2,29		2,29		2,29		2,29		2,29		2,29		2,29
ASSY plus A2 6.5x160 mm	4,86	3,17	4,86	3,17	4,86	3,17	4,86	3,17	4,86	3,17	4,86	3,17	4,86	3,17
		3,72		3,72		3,72		3,72		3,72		3,72		3,72
	2,99	1,95	2,99	1,95	2,99	1,95	2,99	1,95	2,99	1,95	2,99	1,95	2,99	1,95
		2,29		2,29		2,29		2,29		2,29		2,29		2,29

∅ **6,5 mm**

A2

Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY PLUS A2

Type d x ℓ	Steel sheet thickness in [mm]													
	2		4		6		8		10		12		14	
ASSY plus A2 6.5x180 mm	4,86	2,60	4,86	2,73	4,86	3,08	4,86	3,17	4,86	3,17	4,86	3,17	4,86	3,17
		2,99		3,16		3,61		3,72		3,72		3,72		3,72
	2,99	1,60	2,99	1,68	2,99	1,90	2,99	1,95	2,99	1,95	2,99	1,95	2,99	1,95
		1,84		1,94		2,22		2,29		2,29		2,29		2,29
ASSY plus A2 6.5x200 mm	4,86	2,60	4,86	2,73	4,86	3,08	4,86	3,17	4,86	3,17	4,86	3,17	4,86	3,17
		2,99		3,16		3,61		3,72		3,72		3,72		3,72
	2,99	1,60	2,99	1,68	2,99	1,90	2,99	1,95	2,99	1,95	2,99	1,95	2,99	1,95
		1,84		1,94		2,22		2,29		2,29		2,29		2,29

∅ **6,5 mm**

A2

Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

Each load-bearing capacity for one screw. The group effect must be taken into account when there is more than one screw.

Load-bearing connections must consist of at least two screws. There may be deviations according to DIN EN 1995-1-1/NA:2010-12, NCI for 8.3.1.2 (NA 10), and ETA-11/0190, 4.2. All screws must be applied flush, if necessary with countersunk hole and matching washer. On thin sheets, the bearing stress must be analyzed separately in the steel cross section.

Preliminary holes may be drilled (in the wood) according to Table 1 under Section 4.2 of ETA-11/0190. The preliminary holes in the steel must be drilled with a maximum diameter of d+1mm.

NOTE: These are planning aids. These values must be measured by authorized persons for each project.

AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY PLUS A2

Type d x ℓ	Steel sheet thickness in [mm]													
	80		100		120		140		160		180		200	
ASSY plus A2 6.5x180 mm	4,86	3,17	4,86	3,17	4,86	3,17	4,86	3,17	4,86	3,17	4,86	3,17	4,86	3,17
		3,72		3,72		3,72		3,72		3,72		3,72		3,72
	2,99	1,95	2,99	1,95	2,99	1,95	2,99	1,95	2,99	1,95	2,99	1,95	2,99	1,95
		2,29		2,29		2,29		2,29		2,29		2,29		2,29
ASSY plus A2 6.5x200 mm	4,86	3,17	4,86	3,17	4,86	3,17	4,86	3,17	4,86	3,17	4,86	3,17	4,86	3,17
		3,72		3,72		3,72		3,72		3,72		3,72		3,72
	2,99	1,95	2,99	1,95	2,99	1,95	2,99	1,95	2,99	1,95	2,99	1,95	2,99	1,95
		2,29		2,29		2,29		2,29		2,29		2,29		2,29

∅ **6,5 mm**

A2

Calculation assumptions

Calculated values apply to softwood according to EN 14081-1 of the strength class C24 according to EN 338.

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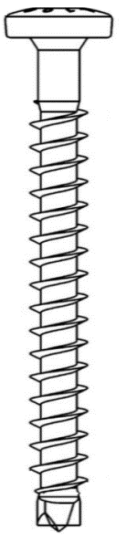
AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY PLUS PANHEAD A2

Type d x ℓ	Steel sheet thickness in [mm]													
	2		4		6		8		10		12		14	
ASSY plus panhead A2 8x100 mm	7,48	3,76	7,48	3,76	7,48	4,15	7,48	4,55	7,48	4,55	7,48	4,55	7,48	4,55
		4,35		4,35		4,86		5,38		5,38		5,38		5,38
	4,60	2,32	4,60	2,32	4,60	2,56	4,60	2,80	4,60	2,80	4,60	2,80	4,60	2,80
		2,68		2,68		2,99		3,31		3,31		3,31		3,31
ASSY plus panhead A2 8x120 mm	8,36	3,98	8,36	3,98	8,36	4,37	8,36	4,77	8,36	4,77	8,36	4,77	8,36	4,77
		4,57		4,57		5,08		5,60		5,60		5,60		5,60
	5,14	2,45	5,14	2,45	5,14	2,69	5,14	2,93	5,14	2,93	5,14	2,93	5,14	2,93
		2,81		2,81		3,13		3,44		3,44		3,44		3,44

∅ **8,0 mm**



A2

Calculation assumptions

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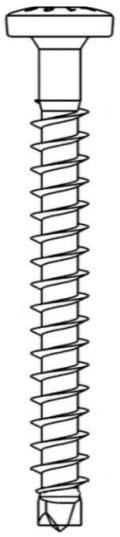
AXIAL/SHEARING VALUE TABLES STEEL-WOOD ASSY PLUS PANHEAD A2

Type d x ℓ	Steel sheet thickness in [mm]													
	16		18		20		22		24		26		28	
ASSY plus panhead A2 8x100 mm	7,39	4,52	7,22	4,48	7,04	4,44	6,86	4,39	6,69	4,35	6,51	4,30	6,34	4,26
		5,35		5,31		5,27		5,22		5,18		5,13		5,09
	4,55	2,78	4,44	2,76	4,33	2,73	4,22	2,70	4,12	2,68	4,01	2,65	3,90	2,62
		3,29		3,27		3,24		3,21		3,19		3,16		3,13
ASSY plus panhead A2 8x120 mm	8,36	4,77	8,36	4,77	8,36	4,77	8,36	4,77	8,36	4,77	8,27	4,74	8,10	4,70
		5,60		5,60		5,60		5,60		5,60		5,57		5,53
	5,14	2,93	5,14	2,93	5,14	2,93	5,14	2,93	5,14	2,93	5,09	2,92	4,98	2,89
		3,44		3,44		3,44		3,44		3,44		3,43		3,40

∅ **8,0 mm**



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