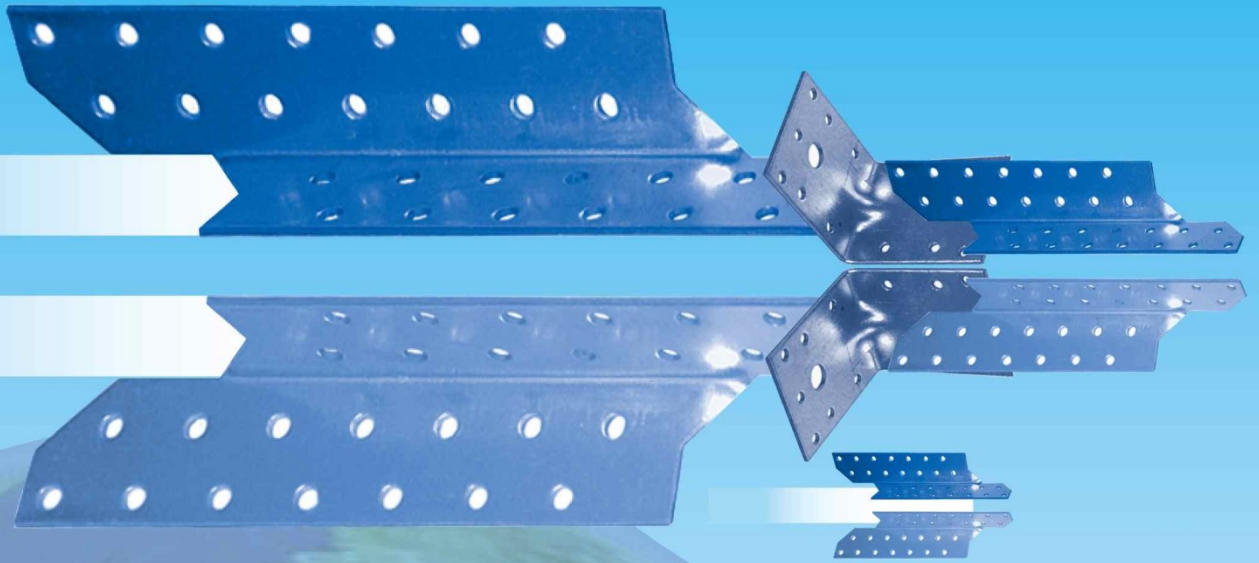


# *Connect fast and save...* **FraP Metall GmbH**

**Hardware,  
Timber connector**



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**FMG®**

**Our main focus is the production of timber connectors and hinges for timber collar frames.**

**We manufacture to DIN 1052 standards and our products conform to the relevant building standards or are individually approved by the building authorities, as for example our Joist hangers. Additionally, each production stage is subject to strict quality control procedures.**

**Since 1992 we have designed and produced high quality timber connectors to country specific requirements.**

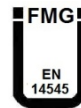
**Our manufacturing base has been located in Elektrėnai in Lithuania since 1996. Our continued success is based on our solid manufacturing experience. Pressing and cutting for example is carried out in our own tool shop along with finishing of the final product.**

**To protect the environment, we use the simplest processes and as few raw materials as possible whilst ensuring a high recycling potential of both our products and packing, as for example our collar frames.**

**Should you require additional information, please visit our Website at [www.frap-metall.de](http://www.frap-metall.de) or [www.toga-elektrenai.com](http://www.toga-elektrenai.com) or contact us directly. We would be pleased to offer our assistance.**

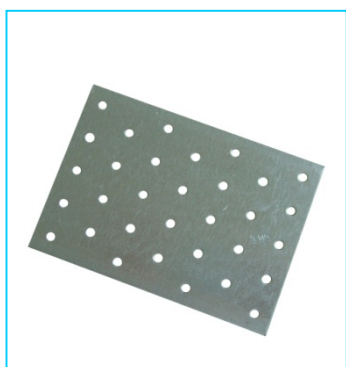


# Perforated plate, Perforated strip



**Steel DX 53 Z 275**  
 (20µm according to DIN 1052) CE to 14545  
 Thickness : 2,0 mm  
 Hole diameter : 5 mm  
 Suitable for timber/timber connections.

Other dimensions on request



Article ID 227 100 140

**Technical data :**

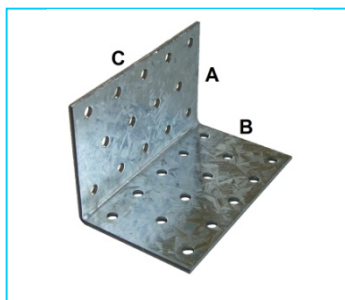
Article ID	Dimensions mm	Thickness	Pcs/box
227 040 080	plate 40 x 80	2,0 mm	50
227 040 100	plate 40 x 100	2,0 mm	50
227 040 120	plate 40 x 120	2,0 mm	50
227 040 140	plate 40 x 140	2,0 mm	100
227 040 160	plate 40 x 160	2,0 mm	100
227 040 200	plate 40 x 200	2,0 mm	100
227 050 200	plate 50 x 200	2,0 mm	50
227 060 120	plate 60 x 120	2,0 mm	50
227 060 140	plate 60 x 140	2,0 mm	50
227 060 160	plate 60 x 160	2,0 mm	50
227 060 200	plate 60 x 200	2,0 mm	50
227 060 240	plate 60 x 240	2,0 mm	50
227 080 200	plate 80 x 200	2,0 mm	25
227 080 240	plate 80 x 240	2,0 mm	25
227 080 300	plate 80 x 300	2,0 mm	25
227 100 140	plate 100 x 140	2,0 mm	25
227 100 160	plate 100 x 160	2,0 mm	25
227 100 200	plate 100 x 200	2,0 mm	25
227 100 240	plate 100 x 240	2,0 mm	25
227 100 260	plate 100 x 260	2,0 mm	25
227 100 300	plate 100 x 300	2,0 mm	25
227 100 400	plate 100 x 400	2,0 mm	10
227 120 200	plate 120 x 200	2,0 mm	25
227 120 240	plate 120 x 240	2,0 mm	25
227 120 300	plate 120 x 300	2,0 mm	25
227 120 400	plate 120 x 400	2,0 mm	10
227 140 200	plate 140 x 400	2,0 mm	10
227 140 400	plate 140 x 400	2,0 mm	10
227 160 300	plate 160 x 300	2,0 mm	10
227 160 400	plate 160 x 400	2,0 mm	10
226 025 012	strip 25 x 1200 mm	2,0 mm	10
226 040 012	strip 40 x 1200 mm	2,0 mm	10
226 060 012	strip 60 x 1200 mm	2,0 mm	10
226 080 012	strip 80 x 1200 mm	2,0 mm	10
226 100 012	strip 100 x 1200 mm	2,0 mm	10
226 120 012	strip 120 x 1200 mm	2,0 mm	10
226 140 012	strip 140 x 1200 mm	2,0 mm	10
226 160 012	strip 160 x 1200 mm	2,0 mm	10

# Perforated angle



**Steel S 260 GD Z 275**  
 Thickness : 2,0 mm / 2,5 mm  
 Hole diameter : 5 mm  
 Suitable for timber/timber connections .

\* European Technical Assessment ETA-08/0064



Article ID 241 661 250

**Technical data :**

Article ID	Dimensions A x B x C	Thickness	Pcs/box
241 332 200	30 x 30 x 25 mm	2,0 mm	100
241 442 200	40 x 40 x 20 mm	2,0 mm	100
241 444 200	40 x 40 x 40 mm	2,0 mm	50
241 446 200 *	40 x 40 x 60 mm	2,0 mm	50
241 664 200 *	60 x 60 x 40 mm	2,0 mm	50
241 665 200 *	60 x 60 x 50 mm	2,0 mm	50
241 666 200 *	60 x 60 x 60 mm	2,0 mm	50
241 446 250 *	40 x 40 x 60 mm	2,5 mm	50
241 664 250 *	60 x 60 x 40 mm	2,5 mm	50
241 666 250 *	60 x 60 x 60 mm	2,5 mm	50
241 668 250	60 x 60 x 80 mm	2,5 mm	50
241 661 250 *	60 x 60 x 100 mm	2,5 mm	50
241 886 250 *	80 x 80 x 60 mm	2,5 mm	50
241 888 250 *	80 x 80 x 80 mm	2,5 mm	25
241 881 250	80 x 80 x 100 mm	2,5 mm	25
241 116 250 *	100 x 100 x 60 mm	2,5 mm	25
241 118 250 *	100 x 100 x 80 mm	2,5 mm	25
241 111 250 *	100 x 100 x 100 mm	2,5 mm	25

Other thickness on request



# Angle connector equal, with and without reinforcement



**Steel S 260 GD Z 275**

Thickness : 2,5 mm, 3,0 mm  
 Hole diameter : 5 mm, 11 mm, 13 mm  
 Very stable and suitable for multiple use .  
 Suitable also for doweling .  
 Suitable for timber/timber and timber/concrete Connections.

**Note for assembly :**

Ring shanked nails 4,0 x 40 mm  
 2 angle connectors have to be attaches per connection .

European Technical Assessment  
 ETA-08/0064

**Technical data :**

Article ID	Dimensions mm	Thickness	Pcs/ box
242 050 035	50 x 50 x 35	2,5 mm	100
242 050 950	50 x 50 x 50 with reinforcement	2,5 mm	100
242 070 055	70 x 70 x 55	2,5 mm	50
242 070 955	70 x 70 x 55 with reinforcement	2,5 mm	50
242 090 040	90 x 90 x 40	3,0 mm	50
242 090 065	90 x 90 x 65	2,5 mm	50
242 090 965	90 x 90 x 65 with reinforcement	2,5 mm	50
242 100 090	105 x 105 x 90	3,0 mm	25
242 100 990	105 x 105 x 90 with reinforcement	3,0 mm	25



Article ID 242 070 055



Article ID 242 070 955



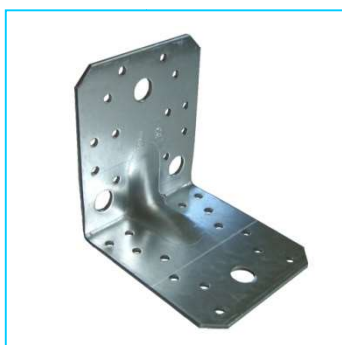
Article ID 242 090 065



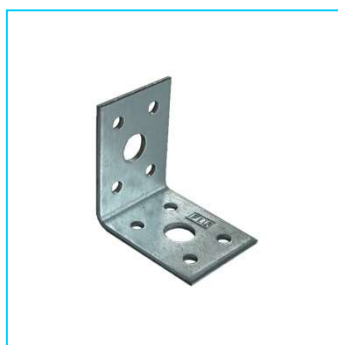
Article ID 242 090 965



Article ID 242 100 090



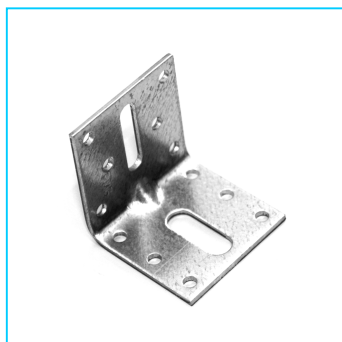
Article ID 242 100 990



Article ID 242 050 035



Article ID 242 090 040



Article ID 242 050 950



Article ID 243 115 990

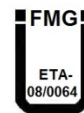


Article ID 243 129 040



Article ID 243 149 040

# Angle connector unequal, with and without reinforcement



**Steel S 260 GD Z 275**

Thickness : 2,0 mm , 2,5 mm , 3,0 mm  
 Hole diameter : 5 mm, 11 mm, 13 mm  
 Very stable and suitable for multiple use .  
 Suitable for timber/timber and timber/concrete connections .  
 Suitable also for doweling

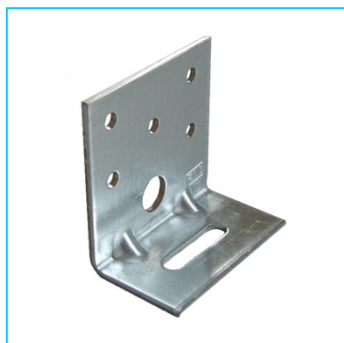
**Note for assembly :**

Ring shanked nails 4,0 x 40 mm  
 2 angle connectors have to be attached per connection .

\* European Technical Assessment  
 ETA-08/0064

**Technical data:**

Article ID	Dimensions (length x width)	Thickness	Pcs/box
243 409 040 *	40 x 90 x 40 mm	3,0 mm	100
243 416 040 *	40 x 160 x 40 mm	3,0 mm	50
243 060 935	60 x 35 x 60 mm with 2 reinforcements	2,5 mm	100
243 608 040 *	62 x 83 x 40 mm with reinforcement	2,0 mm	100
243 609 060 *	60 x 90 x 60 mm with 2 reinforcements	2,5 mm	50
243 609 062 *	60 x 90 x 60 mm with 2 reinforcements Eesti	2,0 mm	50
243 948 048 *	90 x 48 x 48 mm	3,0 mm	50
243 948 076 *	90 x 48 x 76 mm with reinforcements	3,0 mm	50
243 948 116 *	90 x 48 x 116 mm with 2 reinforcements	3,0 mm	25
243 905 054 *	90 x 50 x 55 mm with reinforcement	2,5 mm	50
243 915 965 *	90 x 150 x 65 mm with reinforcement	2,5 mm	25
243 115 990	100 x 150 x 90 mm with reinforcement	2,5 mm	25
243 129 040 *	119 x 91 x 40 mm	3,0 mm	50
243 149 040 *	141 x 91 x 40 mm	3,0 mm	50



Article ID 243 060 935



Article ID 243 609 062



Article ID 243 609 060



Article ID 243 905 054



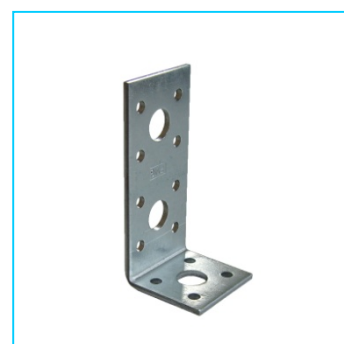
Article ID 243 948 048



Article ID 243 948 076



Article ID 243 948 116



Article ID 243 409 040



Article ID 243 416 040



Article ID 243 608 040



Article ID 243 915 965

# Joist hanger „Kombi“, with external flanges

European Technical Assessment  
ETA-08/0063

**Steel S 260 GD Z 275**

Thickness : 2,0 mm  
Hole diameter for nails : 5 mm  
Hole diameter for screws : 11 mm  
Ideal for combing screw and nail fastening .  
Ideal for supporting connection in timber structures .  
Zinc coating 275 g/m<sup>2</sup> - corrosion prevention .  
All constructions can be used for solid wood and laminated joist .

Further sizes on request (such as joist hanger made of 500 mm strips) .



Article ID 300 090 145

**Technical data :**

Article ID	Dimensions mm	nH	nN	Thickness	Pcs/ box	Article ID	Dimensions mm	nH	nN	Thickness	Pcs/ box
300 025 118	25 x 118	14	8	2,0 mm	20	300 064 098	64 x 98	14	8	2,0 mm	20
300 028 116	28 x 116	14	8	2,0 mm	20	300 064 128	64 x 128	18	10	2,0 mm	20
300 032 144	32 x 144	18	10	2,0 mm	20	300 064 158	64 x 158	22	12	2,0 mm	20
300 036 142	36 x 142	18	10	2,0 mm	20	300 070 125	70 x 125	18	10	2,0 mm	20
300 036 172	36 x 172	22	12	2,0 mm	20	300 070 155	70 x 155	22	12	2,0 mm	20
300 038 141	38 x 141	18	10	2,0 mm	20	300 073 124	73 x 124	18	10	2,0 mm	20
300 040 099	40 x 100	12	6	2,0 mm	20	300 073 153	73 x 153	22	12	2,0 mm	20
300 040 110	40 x 110	14	8	2,0 mm	20	300 073 183	73 x 183	26	14	2,0 mm	20
300 040 140	40 x 140	18	10	2,0 mm	20	300 076 120	76 x 120	18	10	2,0 mm	20
300 040 170	40 x 170	22	12	2,0 mm	20	300 076 152	76 x 152	22	12	2,0 mm	20
300 045 096	45 x 96	12	6	2,0 mm	20	300 076 182	76 x 182	26	14	2,0 mm	20
300 045 105	45 x 107	14	8	2,0 mm	20	300 080 120	80 x 120	18	10	2,0 mm	20
300 045 137	45 x 137	18	10	2,0 mm	20	300 080 150	80 x 150	22	12	2,0 mm	20
300 045 167	45 x 167	22	12	2,0 mm	20	300 080 180	80 x 180	26	14	2,0 mm	20
300 045 197	45 x 197	26	14	2,0 mm	20	300 080 210	80 x 210	30	16	2,0 mm	20
300 048 095	48 x 95	12	6	2,0 mm	20	300 086 147	86 x 147	22	12	2,0 mm	20
300 048 116	48 x 116	18	10	2,0 mm	20	300 090 145	90 x 145	22	12	2,0 mm	20
300 048 136	48 x 136	18	10	2,0 mm	20	300 090 175	90 x 175	30	16	2,0 mm	20
300 048 166	48 x 166	22	12	2,0 mm	20	300 090 205	90 x 205	30	16	2,0 mm	20
300 051 093	51 x 93	12	6	2,0 mm	20	300 098 141	98 x 141	22	12	2,0 mm	20
300 051 105	51 x 105	14	8	2,0 mm	20	300 100 140	100 x 140	22	12	2,0 mm	10
300 051 135	51 x 135	18	10	2,0 mm	20	300 100 170	100 x 170	26	14	2,0 mm	10
300 051 164	51 x 164	22	12	2,0 mm	20	300 100 200	100 x 200	30	16	2,0 mm	10
300 051 195	51 x 195	26	14	2,0 mm	20	300 115 162	115 x 162	26	14	2,0 mm	10
300 060 100	60 x 100	14	8	2,0 mm	20	300 115 190	115 x 190	30	16	2,0 mm	10
300 060 130	60 x 130	18	10	2,0 mm	20	300 120 160	120 x 160	26	14	2,0 mm	10
300 060 160	60 x 160	22	12	2,0 mm	20	300 120 190	120 x 190	30	16	2,0 mm	10
300 060 190	60 x 190	26	14	2,0 mm	20	300 127 186	127 x 186	30	16	2,0 mm	10
300 060 220	60 x 220	30	16	2,0 mm	20	300 140 180	140 x 180	30	16	2,0 mm	10

nH– nails main girder , nN- nails side girder

**Installation note :**

Nail connection : 5 mm hole diameter for easy processing with 4 mm ring shanked nails .  
Screw connection : 10 mm screw can be used for 11 mm hole diameter .

# Joist hanger, variable



Article ID 303 030 140

**Steel S 260 GD Z 275**

Thickness : 2,0 mm  
Hole diameter for nails : 5 mm  
Suitable for uniserval use on stronger beams or beams with intermediate dimensions.  
Ideal for supporting connection in timber structures .  
Zinc coating 275 g/m<sup>2</sup> - corrosion prevention .  
All constructions can be used for solid wood and laminated joist .  
Delivery in pairs (a right and a left side)

**Technical data :**

Article ID	Dimensions	Thickness	Pair/ box
303 030 100	30 x100 mm	2,0 mm	20
303 030 120	30 x120 mm	2,0 mm	20
303 030 140	30 x140 mm	2,0 mm	20
303 030 150	30 x150 mm	2,0 mm	20

# Joist hanger, inside, with interior flanges

European Technical Assessment  
ETA-08/0063

**Steel S 260 GD Z 275**

Thickness : 2,0 mm  
Hole diameter for nails : 5 mm  
Hole diameter for screws : 11 mm  
Ideal for supporting connection in timber structures .  
All types can be used for solid wood as well as laminated timber joists .  
Zinc coating 275 g/m<sup>2</sup> - corrosion resistant for masked connections in timber structures .  
Further sizes on request (such as joist hanger made of 500 mm strips) .



Article ID 302 090 145

**Technical data :**

Article ID	Dimensions mm	nH	nN	Thickness	Pcs/box	Article ID	Dimensions mm	nH	nN	Thickness	Pcs/box
302 040 110	40 x 110	8	8	2,0 mm	20	302 080 120	80 x 120	18	10	2,0 mm	20
302 040 140	40 x 140	10	10	2,0 mm	20	302 080 150	80 x 150	22	12	2,0 mm	20
302 045 096	45 x 96	6	6	2,0 mm	20	302 080 180	80 x 180	26	14	2,0 mm	20
302 045 105	45 x 105	8	8	2,0 mm	20	302 090 145	90 x 145	22	12	2,0 mm	20
302 045 137	45 x 137	10	10	2,0 mm	20	302 090 205	90 x 205	22	12	2,0 mm	20
302 045 167	45 x 167	12	12	2,0 mm	20	302 100 140	100 x 140	22	12	2,0 mm	10
302 045 197	45 x 197	14	14	2,0 mm	20	302 100 170	100 x 170	26	14	2,0 mm	10
302 048 096	48 x 96	14	14	2,0 mm	20	302 100 200	100 x 200	30	16	2,0 mm	10
302 048 136	48 x 136	10	10	2,0 mm	20	302 115 162	115 x 162	26	14	2,0 mm	10
302 048 166	48 x 166	12	12	2,0 mm	20	302 115 190	115 x 190	30	16	2,0 mm	10
302 051 093	51 x 93	6	6	2,0 mm	20	302 120 160	120 x 160	26	14	2,0 mm	10
302 051 105	51 x 105	8	8	2,0 mm	20	302 120 190	120 x 190	30	16	2,0 mm	10
302 051 135	51 x 135	10	10	2,0 mm	20	302 140 180	140 x 180	30	16	2,0 mm	10
302 051 164	51 x 164	12	12	2,0 mm	20						
302 051 195	51 x 195	14	14	2,0 mm	20						
302 060 100	60 x 100	11	8	2,0 mm	20						
302 060 160	60 x 160	17	12	2,0 mm	20						
302 060 190	60 x 190	20	14	2,0 mm	20						
302 064 098	64 x 98	11	8	2,0 mm	20						
302 064 128	64 x 128	14	10	2,0 mm	20						
302 070 125	70 x 125	14	10	2,0 mm	20						
302 070 155	70 x 155	17	12	2,0 mm	20						
302 073 183	73 x 183	20	14	2,0 mm	20						
302 076 120	76 x 120	14	10	2,0 mm	20						
302 076 152	76 x 152	17	12	2,0 mm	20						
302 076 182	76 x 182	20	14	2,0 mm	20						

nH– nails main girder , nN – nails side girder

# Joist hanger, custom made, inside / outside



Article ID 305 140 200

Also other dimensions inside possible.

**Steel S 260 GD Z 275**

Thickness : 2,5 mm,  
Hole diameter : 5 mm

European Technical Assessment  
ETA-08/0063

**Technical data :**

Article ID	Dimensions mm	Thickness	Pcs	Article ID	Dimensions mm	Thickness	Pcs
<u>outside</u>				<u>inside</u>			
305 100 280	100 x 280	2,5 mm	1	307 160 200	160 x 200	2,5 mm	1
305 100 320	100 x 320	2,5 mm	1	307 160 220	160 x 220	2,5 mm	1
305 120 240	120 x 240	2,5 mm	1	307 160 240	160 x 240	2,5 mm	1
305 120 280	120 x 280	2,5 mm	1	307 180 220	180 x 220	2,5 mm	1
305 120 320	120 x 320	2,5 mm	1	307 200 240	200 x 240	2,5 mm	1
305 140 200	140 x 200	2,5 mm	1				
305 140 220	140 x 220	2,5 mm	1				
305 140 240	140 x 240	2,5 mm	1				
305 140 260	140 x 260	2,5 mm	1				
305 140 280	140 x 280	2,5 mm	1				
305 140 300	140 x 300	2,5 mm	1				
305 140 320	140 x 320	2,5 mm	1				
305 160 200	160 x 200	2,5 mm	1				
305 160 220	160 x 220	2,5 mm	1				
305 160 240	160 x 240	2,5 mm	1				
305 160 280	160 x 280	2,5 mm	1				
305 180 220	180 x 220	2,5 mm	1				
305 180 260	180 x 260	2,5 mm	1				
305 180 300	180 x 300	2,5 mm	1				
305 200 240	200 x 240	2,5 mm	1				
305 220 260	220 x 260	2,5 mm	1				
305 240 260	240 x 260	2,5 mm	1				

All listed articles are on stock.

Other dimensions on request

# Joist and support bracket, Dowels

**Steel S 260 GD Z 275**

Thickness : 3,0 mm  
Hole diameter: 5 mm

**European Technical Assessment  
ETA-13/0348**



Article ID 311 350 090

Article ID 311 350 160

### Technical data :

Article ID	Dimensions	Thickness	Hole ranks	Pcs / box
311 350 090	90 mm	3,0 mm	2	25
311 350 120	120 mm	3,0 mm	4	25
311 350 160	160 mm	3,0 mm	4	25
311 350 200	200 mm	3,0 mm	4	15
311 350 240	240 mm	3,0 mm	4	15



Dowels

### Dowels

Article ID	Dimensions	Pcs / box
722080065	Dowel 8 x 65 mm	200
722080090	Dowel 8 x 90 mm	200
722080115	Dowel 8 x 115 mm	200
722120080	Dowel 12 x 80 mm	100
722120100	Dowel 12 x 100 mm	100
722120120	Dowel 12 x 120 mm	100
722120140	Dowel 12 x 140 mm	100
722120160	Dowel 12 x 160 mm	100

# Purlin anchor



**European Technical Assessment  
ETA-08/0064**

**Steel S 260 GD Z 275**

Thickness : 2,0 mm  
Hole diameter : 5 mm  
Secures rafter on joist .  
Absorbs wind forces to  
avoid distortion .

Delivery in pairs (only  
right/left on request).

Article ID 229 170 000

### Technical data :

Article ID	Dimensions mm	Thickness	Pcs/ box
229 170 000	170	2,0 mm	100
229 210 000	210	2,0 mm	50
229 250 000	250	2,0 mm	50
229 290 000	290	2,0 mm	20
229 330 000	330	2,0 mm	20
229 370 000	370	2,0 mm	20

# Purlin anchor Uni



**European Technical Assessment  
ETA-08/0064**

**Steel S 260 GD Z 275**

Thickness : 2,0 mm  
Hole diameter : 5 mm  
Secures rafter on joist .  
Absorbs wind forces to  
avoid distortion .

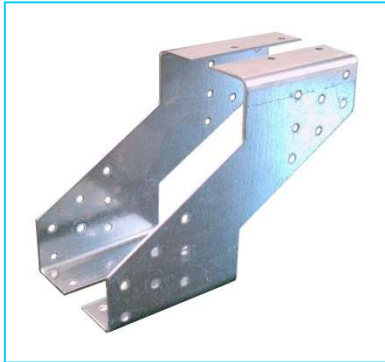
Article ID 230 180 000

### Technical data :

Article ID	Dimensions mm	Thickness	Pcs/ box
230 180 000	170	2,0 mm	100
230 220 000	210	2,0 mm	100
230 260 000	250	2,0 mm	100



# Cantilever bracket Typ B



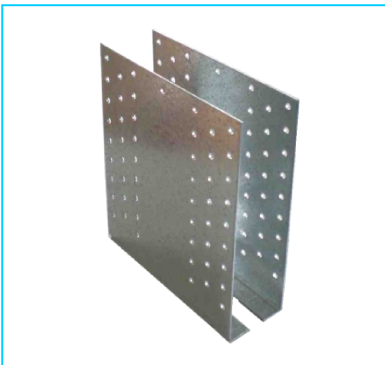
**European Technical Assessment**  
ETA-13/0349

**Steel S 260 GD Z 275**  
Thickness : 2,0 mm  
Hole diameter : 5 mm  
Timber connector for blunt connections to adjacent lying purlin .This connector can also absorb forces transverse to the direction of purlin .  
Ring shanked nails : 4,0 x 40 mm

**Technical data :**

Article ID	Dimensions	Thickness	Pair/box
224 125 902	125 x 90 mm (5")	2,0 mm	25
224 150 902	150 x 90 mm (6")	2,0 mm	25
224 175 902	175 x 90 mm (7")	2,0 mm	25
224 200 902	200 x 90 mm (8")	2,0 mm	25

# Cantilever bracket Typ W



**European Technical Assessment**  
ETA-13/0349

**Steel S 260 GD Z 275**  
Thickness : 2,0 mm  
Hole diameter : 5 mm  
Timber connector for blunt connections to adjacent lying purlin .This connector can also absorb forces transverse to the direction of purlin .  
Ring shanked nails : 4,0 x 40 mm

**Technical data:**

Article ID	Dimensions	Thickness	Pair / pcs box
224 000 090	90 x 180 mm	2,0 mm	10 / 20
224 000 120	120 x 180 mm	2,0 mm	10 / 20
224 000 140	140 x 180 mm	2,0 mm	10 / 20
224 000 160	160 x 180 mm	2,0 mm	10 / 20
224 000 180	180 x 180 mm	2,0 mm	10 / 20
224 000 200	200 x 180 mm	2,0 mm	10 / 20
224 000 220	220 x 180 mm	2,0 mm	10 / 20
224 000 240	240 x 180 mm	2,0 mm	10 / 20
224 000 260	260 x 180 mm	2,0 mm	10 / 20

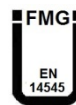
# Angle for counter sunk bolt



**Steel S 260 GD Z 275**  
Thickness : 2,0 mm  
Hole diameter : 5 mm

**Technical data:**

Article ID	Dimensions	Thickness	Pcs/box
255 222 200	27 x 27 x 16,5 mm	2,0 mm	100
255 332 200	32 x 32 x 16,5 mm	2,0 mm	100
255 442 200	42 x 42 x 16,5 mm	2,0 mm	100
255 552 200	52 x 52 x 16,5 mm	2,0 mm	100
255 662 200	62 x 62 x 16,5 mm	2,0 mm	100
255 772 200	77 x 77 x 16,5 mm	2,0 mm	100
255 992 200	92 x 92 x 19,0 mm	2,0 mm	100
255 112 200	103 x 103 x 19,0 mm	2,0 mm	50



# Profile anchor



**Steel S 260 GD Z 275**  
 Thickness : 3,0 mm  
 Hole diameter : 5 mm  
 For the quick fastening of timber constructions to a splint . Wind suction stability .

**Technical data :**

Article ID	Dimensions	Thickness	Pcs/box
250 108 300	108 x 35 mm	3,0 mm	100
250 158 300	158 x 35 mm	3,0 mm	100
250 198 300	198 x 35 mm	3,0 mm	50

Profile anchor have to be attached on both sides

Article ID 250 158 300

# Angle connector – 135°



**Steel S 260 GD Z 275**  
 Thickness : 2,5 mm, 3,0 mm  
 Hole diameter : 5 mm, 11 mm, 13 mm

**Technical data :**

Article ID	Dimensions	Thickness	Pcs/box
247 550 035	50 x 50 x 35 mm	2,5 mm	100
247 770 055	70 x 70 x 55 mm	2,5 mm	50
247 990 040	90 x 90 x 40 mm	3,0 mm	50
247 990 065	90 x 90 x 65 mm	2,5 mm	50
247 511 090	105 x 105 x 90 mm	3,0 mm	25

Article ID 247 990 065

# Flat steel anchor



**European Technical Assessment  
 ETA-08/0064**

**Steel S 260 GD Z 275**  
 Thickness : 2,0 mm, 4,0 mm  
 Hole diameter : 5 mm, 12 mm,  
 This concrete mounted anchor provide a secure hold for purlin .  
 Suitable for setting in concrete and doweling .

**Technical data:**

Article ID	Dimensions	Thickness	Pcs/box
228 200 040	200 x 40 mm	2,0 mm	25
228 300 040	300 x 40 mm	2,0 mm	25
228 400 040	400 x 40 mm	2,0 mm	25
228 500 040	500 x 40 mm	2,0 mm	25
228 200 044	200 x 40 mm	4,0 mm	20
228 300 044	300 x 40 mm	4,0 mm	20
228 400 044	400 x 40 mm	4,0 mm	20
228 500 044	500 x 40 mm	4,0 mm	20

Article ID 228 300 040



# Flat connector



**Steel S 260 GD Z 275**  
 Thickness: 2,5 mm, 3,0 mm  
 Hole diameter :  
 5 mm, 11 mm, 13 mm  
 Robust flat connector for  
 connecting timber on timber  
 and joist on joist  
 constructions .  
 The flat connectors need to  
 be nailed with 4,0 x 40 mm  
 ring shanked nails  
 according to the holes .  
 Dowels at least Ø10 mm.  
 Width of wood at least 60  
 mm .

**Technical data:**

Article ID	Dimensions	Thickness	Pcs/ box
245 100 035	95 x 35 mm	2,5 mm	50
245 140 055	135 x 55 mm	2,5 mm	50
245 180 040	175 x 40 mm	3,0 mm	50
245 180 065	175 x 65 mm	2,5 mm	50
245 205 090	203 x 90 mm	3,0 mm	25

Article ID 245 180 065

# Bracing strip



**Steel S 280 GD + Z 275 Re max 320 N/mm<sup>2</sup>**  
 for 1,5 mm and  
**DX 53 + Z 275 Re max 260 N/mm<sup>2</sup>**  
 for 2,0 mm  
 acc. DIN 1052 acc. DIN EN 14545

Thickness: 1,5 mm, 2,0 mm  
 Hole diameter : 5 mm  
 Length of roll : 25 m, 50 m  
 Fasten with ring shanked nails  
 4,0 x 40 mm

**Technical data:**

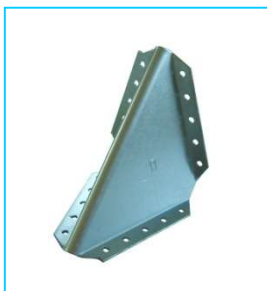
Article ID	Dimensions	Thickness	Roll
221 025 025	2 x 25 x 25 m	2,0 mm	1
221 040 025	2 x 40 x 25 m	2,0 mm	1
221 040 050	2 x 40 x 50 m	2,0 mm	1
221 060 025	2 x 60 x 25 m	2,0 mm	1
221 060 050	2 x 60 x 50 m	2,0 mm	1
221 080 025	2 x 80 x 25 m	2,0 mm	1
221 080 050	2 x 80 x 50 m	2,0 mm	1
221 041 025	1,5 x 40 x 25 m	1,5 mm	1
221 041 050	1,5 x 40 x 50 m	1,5 mm	1
221 061 025	1,5 x 60 x 25 m	1,5 mm	1
221 061 050	1,5 x 60 x 50 m	1,5 mm	1
221 081 025	1,5 x 80 x 25 m	1,5 mm	1
221 081 050	1,5 x 80 x 50 m	1,5 mm	1

80 mm only as custom made

**Installation notes :**  
 The bracing strip you can fasten directly  
 on the top side of the truss.  
 You must pay attention on a protected  
 introduction of the wind and traction  
 forces in the roof construction.  
 The bracing strip requires nail fastenings.  
 Minimum 2 nails at the truss per cross  
 point . Fix in accordance with DIN 1052 .  
 Several bracing strips may be used  
 adjacent to one another to provide  
 additional support.



# Knight bracket



**Steel S 260 GD Z 275**  
 Thickness: 2,0 mm,  
 Hole diameter: 5 mm

**Installations notes:**  
 Ring shanked nails or screws 4,0mm  
 minimum lenght 40 / 60 mm in purlin /  
 rafter.

Article ID 251 130 100

**Technical data:**

Article ID	Dimensions	Thickness	Pcs./ box
251 090 065	90 x 90 x 65	2,0 mm	25
251 130 100	125 x 125 x 80	2,0 mm	25
251 170 100	160 x 160 x 95	2,0 mm	25

# Profile anchor E



**Steel S 260 GD Z 275**  
 Thickness : 3,0 mm  
 Hole diameter : 5 mm, 13 mm  
 For the quick fastening of timber constructions to a splint .

**Note for assembly :**  
 Ring shanked nails 4,0 x 40 mm or screws 5,0 x 35 mm  
 Install minimum 2 anchors per connection diagonally.

**Technical data:**

Article ID	Dimensions	Thickness	Pcs/box
249 160 040	160 x 40 mm	3,0 mm	50
249 180 040	180 x 40 mm	3,0 mm	50
249 200 040	200 x 40 mm	3,0 mm	50

Article ID 249 180 040

# Plank connector



**Steel S 260 GD Z 275**  
 Thickness : 2,0 mm,  
 Hole diameter : 5 mm

Article ID  
 234  
 300  
 000

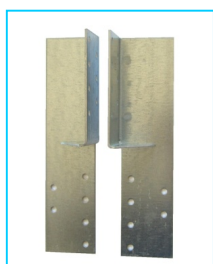
**Note for assembly :**  
 Screws 5,0 x minimum 25 mm

1 or 2 plank connectors have to be attached per connection .

**Technical data:**

Article ID	Dimensions	Thickness	Pcs/box
234 200 000	200 x 40 mm	2,0 mm	20
234 260 000	260 x 40 mm	2,0 mm	20
234 300 000	300 x 40 mm	2,0 mm	20

# Universal mounting connector



**Steel S 260 GD Z 275**  
 Thickness : 2,0 mm,  
 Hole diameter : 5 mm

**Note for assembly :**  
 For connection in joist and rafter .  
 Install in pairs.

**Technical data:**

Article ID	Dimensions	Thickness	Pcs/box
233 100 250	100 mm	2,5 mm	60
233 130 250	130 mm	2,5 mm	50
233 190 200	190 mm	2,0 mm	50

Article ID 233 190 200

# single/double sided timber connector



**Steel S 260 GD Z 275**  
 Suitable for strong timber/timber connections.

Further dimensions are planned in the future!

**Technical data:**

Article ID	Dimensions	Pcs/box
261 248 017	48 x 17 two-sided	120
261 262 021	62 x 21 two-sided	60
in future	48 x 12 one-sided	
in future	62 x 12 one-sided	

Article ID 261 248 017



# Log home angle

**Steel S 260 GD Z 275**

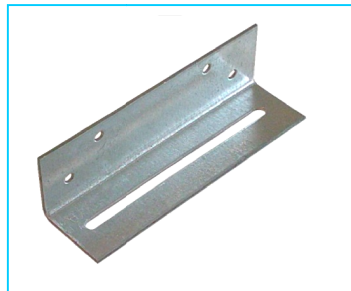
Thickness : 2,0 mm , hole diameter : 5 mm, 11 mm  
 Log home angles are used in log-cabins to level out the length change on loaded and not loaded timber .  
 They are used for example on roof trusses or on walls.  
 Ridge clips are used to anchor beams with a width of 45-50 mm at the underlying wooden structure.

**Technical data:**

Article ID	Dimensions	Thickness	Pcs./box
248 135 053	set of 2	2,0 mm	50
248 200 040	200 x 40 mm	2,0 mm	50
248 335 130	35 x 130 mm	2,0 mm	50
248 340 100	40 x 100 mm	2,0 mm	100
235 048 320	48 x 320 mm	1,5 mm	10



Article ID 248 200 040



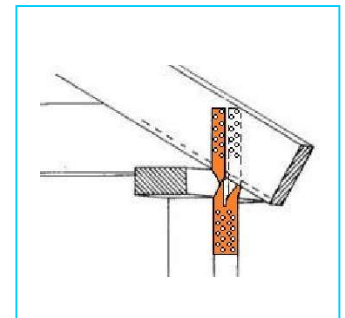
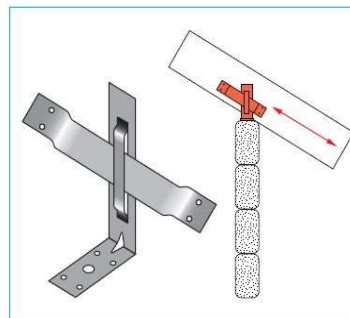
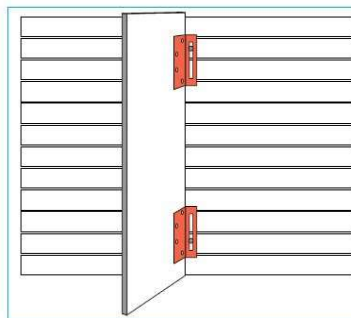
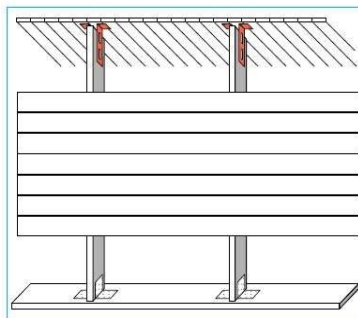
Article ID 248 335 130



Article ID 248 135 053



Article ID 235 048 320



# Stainless Steel



Article ID 542 052 035

**Technical data:**

Article ID	Dimensions	Thickness	Pcs/box	Article ID	Dimensions	Thickness	Pcs/box
500 045 096 *	joist hanger 45 x 96 X6Cr17	2,0 mm	20	529 170 000 *	purlin anch. 170 pair X6Cr17	2,0 mm	100
500 045 137 *	joist hanger 45 x 137 X6Cr17	2,0 mm	20	529 210 000 *	purlin anch. 210 pair X6Cr17	2,0 mm	50
500 048 096 *	joist hanger 48 x 96 X6Cr17	2,0 mm	20	541 442 000 *	perf.angle 40x40x20 X6Cr17	2,0 mm	100
500 048 106 *	joist hanger 48 x 106 X6Cr17	2,0 mm	20	541 664 000 *	perf.angle 60x60x40 X6Cr17	2,0 mm	50
500 048 136 *	joist hanger 48 x 136 X6Cr17	2,0 mm	20	541 666 000 *	perf.angle 60x60x60 X6Cr17	2,0 mm	50
500 051 093 *	joist hanger 51 x 93 X6Cr17	2,0 mm	20	542 052 035	angle 50 x 50 x 35 X6Cr17	2,0 mm	100
500 051 135 *	joist hanger 51 x 135 X6Cr17	2,0 mm	20	542 072 055 *	angle 70 x 70 x 55 X6Cr17	2,0 mm	50
500 080 120 *	joist hanger 80 x 120 X6Cr17	2,0 mm	20	542 072 955 *	angle 70 x 70 x 55 rib X6Cr17	2,0 mm	50
500 080 150 *	joist hanger 80 x 150 X6Cr17	2,0 mm	20	542 090 065 *	angle 90 x 90 x 65 X6Cr17	2,5 mm	50
500 080 210 *	joist hanger 80 x 210 X6Cr17	2,0 mm	20	542 090 965 *	angle 90 x 90 x 65 rib X6Cr17	2,5 mm	50
500 120 160 *	joist hanger 120 x 160 X6Cr17	2,0 mm	10	542 091 040 *	angle 90 x 90 x 40 rib X6Cr17	2,5 mm	50
527 040 120	perforated plate 40 x 120 X6Cr17	2,0 mm	50	542 100 990 *	angle 105x90x105 rib X6Cr17	2,5 mm	25
527 040 200	perforated plate 40 x 200 X6Cr17	2,0 mm	100				
527 050 200	perforated plate 50 x 200 X6Cr17	2,0 mm	50				
527 060 200	perforated plate 60 x 200 X6Cr17	2,0 mm	50				
527 080 200	perforated plate 80 x 200 X6Cr17	2,0 mm	25				
527 100 300	perforated plate 100 x 300 X6Cr17	2,0 mm	25				
527 120 300	perforated plate 120 x 300 X6Cr17	2,0 mm	25				

Joist hangers inside are available on request

Other dimensions on request

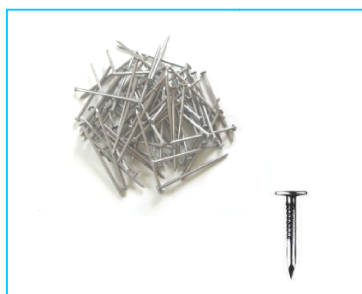
**Material no. 1.4016**  
 Thickness : 2,0 mm, 2,5 mm  
 Hole diameter: 5 mm, 11 mm, 13 mm  
 For more information please take a look at category: joist hanger, perforated plate and angle connector

\* ETA-08/0063 /  
 ETA-08/0064

# Our other selling programm:



Cat. 7.00



Cat. 7.02



Cat. 7.14



Cat. 7.04



Cat. 7.03



Cat. 7.10



Cat. 7.11



Cat. 7.18



Cat. 7.07



Cat. 7.09 TX20



Cat. 7.01



Cat. 7.30.1



Cat. 7.30.2.2/ 7.30.2.1



Cat. 7.12



Cat. 7.24



Cat. 4.00



Cat. 7.51 – 7.53



Cat. 2.21/ 2.24/ 4.44

Category-Code	Product category	Specials/ Thickness
2.57	Window angle	1,0 – 3,2 mm
4.00	Support U/H/ for concrete	
4.21	Hinge staight/ pivot hinge	
4.24	Sliging bolds/ safety catches	
4.44	Interwoven fence support	
5.00	Stainless steel connectors	
7.00	Ring shanked nails / screws	4,0 mm\ 5,0 mm
7.01	Rafter nails / screws	6,0 mm\ 8,0mm/ 10 mm
7.02	Nails/ clout nails	2,2-7mm\ 2,0/2,2/2,5mm
7.03	Screws C2 (Clip bord-/ terrace screws)	stainless steel
7.04	Clip bord screws	4,0 / 4,5/ 5,0/ 6,0 mm
7.07	Concrete frame screw concrete screws	7,5 mm
7.09	Torx Bit	
7.10	Hexagonal Head wood screws DIN 571	6,0/ 8,0/ 10,0/ 12,0 mm
7.11	Screw with nut DIN 601	with nut, M12/ M16
7.12	Carriage bolt DIN 603	with nut
7.14	Hexagonal nuts	M10 – M20
7.18	Washers	DIN 440/ DIN 1052
7.24	PU-foam + equipment	
7.30.1	Steel anchors for screwing	
7.30.2.1	Steel anchors for hammer capsules	
7.30.2.2	Steel anchors for injection cartridge	
7.51 – 7.53	Screw plug / Nail plug	
7.94	Threaded rod	M10 – M20

# Equipment and Support



- development and production of fasteners
- Coil cutting from 0,8 till 3,0 mm – 1.250 mm
- Packing, labelling and marking according to customers specification
- delivery –Europe-wide
- Steel stamping from 10 t till 400 t
- tool manufacture incl. development of multi-functional stamping tools

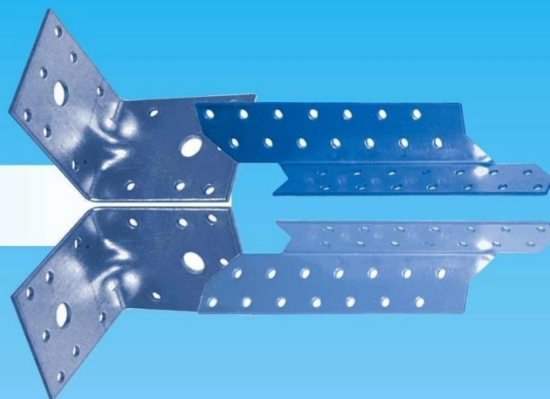


- Approval according german DIN
  - European Technical Assessment from ETA-Danmark A/S
  - Certificate of Production Control CE
  - Collar frames according IPPC/ISPM
- ## Quality Control

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**FraP Metall GmbH**

*Pressing, Bending, Packaging*



*Present through:*

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