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RAFTER ANCHORS TRUSS CLIPS

GREENLINE TOPLINE

RAFTER ANCHORS / TRUSS CLIPS

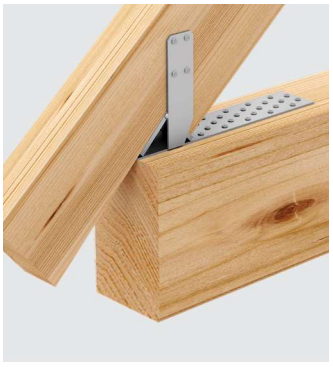
RAFTER ANCHORS TYPE RLD

- Assembly mandrel
- Same product on the right and left side of the rafter
- For use in every rafter angle
- Patent-protected shape
- Optimised nail pattern
- Optional in **GREEN**LINE = resource-saving manufacturing

Basics of statics **from page 226** / Products & statics **from page 228**

TRUSS CLIPS TYPE CONCRETE / TYPE TIMBER

- Abutment of rafters on concrete or ceiling beams
- The complex offset and the angled pivot, or clamping bolt, are not required (timber type)



Basics of statics **from page 232** / Products & statics **from page 234**

2-PIECE TRUSS CLIPS

- For fixing rafters on ceiling beams
- The complex offset and the angled pivot, or clamping bolt, are not required
- From a timber width of approx. 80 mm.

Products **on page 234**

RAFTER ANCHORS/TRUSS CLIPS

ASSORTMENT

								Length [mm]	Width [mm]	Basics Statics from page	Products & Statics from page	Products Made of V4A from page
RAFTER ANCHOR RLD WITH ASSEMBLY MANDREL		CE	250 GD Z275	NKL 2				170-250	36	226	228	
RAFTER ANCHORS		CE	250 GD Z275	NKL 2	A4 1.4571	NKL 3		290-370	34,50	226	230	295
TRUSS CLIPS, TYPE CONCRETE		CE	S235 JR 55µm	NKL 2				170	60-120	232	234	
TRUSS CLIPS, TYPE TIMBER		CE	S235 JR 55µm	NKL 2				300	60-120	232	234	
2-PIECE TRUSS CLIPS		CE	250 GD Z275	NKL 2				60	160		234	

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CE symbol

Steel with indication of the steel quality and zinc coating

Stainless steel with material number

Timber/timber connection

Timber/concrete-connection

Usage class 1
Moisture content in the building materials that corresponds to a temperature of 20° C and a relative humidity of the ambient air that only exceeds a value of 65% for a few weeks per year, e.g. in the case of buildings that are closed on all sides and heated.
Comment: In UC 1, the average moisture content of most softwoods does not exceed 12 %.

Usage class 2
Moisture content in the building materials that corresponds to a temperature of 20° C and a relative humidity of the ambient air that only exceeds a value of 85% for a few weeks per year, e.g. in the case of open buildings covered by a roof.
Comment: In UC 2, the average moisture content of most softwoods does not exceed 20 %.

Usage class 3
Includes climatic conditions that lead to higher moisture contents than in UC 2, e.g. structures that are exposed to the weather without protection. Eurocode 5 / DIN EN 1995-1-1 section 2.3.1.3

RAFTER ANCHORS

TECHNICAL FEATURES

Geometry

L	Length of legs (mm)
W(B)	Width (mm)
T(S)	Material thickness (mm)
Ø [mm]	Diameter

Tables

$F_{z,rk}$	Max. load capacity in load direction [kN]
n	Number of holes Ø 5.0

Timber connecting element

GH threaded nails ETA-13/0523 Ø 4.0 x L [mm]

GH wood connector screw ETA-13/0523 Ø 5.0 x L [mm]

Threaded nails EN 14592 stainless steel Ø 4.0 x L [mm]

Load directions

F_1 ↑ Lifting load

Design

Load capacities for two rafter anchors, each arranged diagonally.

The load capacities can be doubled when arranging four rafter anchors.

Characteristic raw density of timber min. 350 kg/m³.

Proof of cross-tension according to DIN EN 1995-1-1 8.1.4 must be kept.

The min. edge spacing according to EC 5 must be met.

Steel with indication of the steel quality and zinc coating

Stainless steel

Timber/timber connection

Timber/concrete-connection

Usage class 1
Moisture content in the building materials that corresponds to a temperature of 20° C and a relative humidity of the ambient air that only exceeds a value of 65% for a few weeks per year, e.g. in the case of buildings that are closed on all sides and heated.
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Usage class 2
Moisture content in the building materials that corresponds to a temperature of 20° C and a relative humidity of the ambient air that only exceeds a value of 85% for a few weeks per year, e.g. in the case of open buildings covered by a roof.
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Usage class 3
Includes climatic conditions that lead to higher moisture contents than in UC 2, e.g. structures that are exposed to the weather without protection. Eurocode 5 / DIN EN 1995-1-1 section 2.3.1.3

RAFTER ANCHORS

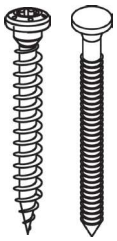
APPLICATIONS

Application:
To secure lifting loads

Materials:

250 GD Z275

Material thickness:
1.5/2.0 mm



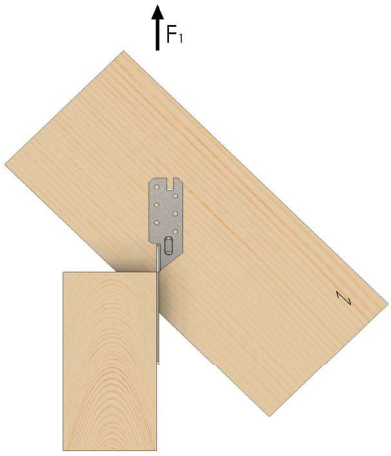
Connecting element:
GH threaded nails 4.0 x 40 / 50 / 60 / 75 / 100 mm
GH screws 5.0 x 25 / 35 / 40 / 50 / 60 / 70 mm

Connecting elements from page 274

For use in usage classes

NKL 1 NKL 2 NKL 3

Load directions



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RAFTER ANCHORS

TYPE RLD

1. Assembly mandrel (your third hand in assembly)
2. Same product on the right and left side of the rafter
3. For use in every rafter angle
4. Patent-protected shape
5. Optimised nail pattern
6. Optionally in GREENLINE = resource-saving manufacturing

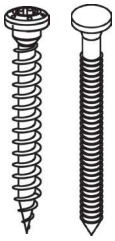
FOR LEFT OR RIGHT-HAND USE - IN EVERY RAFTER ANGLE

ADVANTAGES

- Fast and precise adjustment due to assembly mandrel
- Simple processing in every rafter angle
- Only one product for the left and right side of the rafter
- Quick processing due to the optimally coordinated nail pattern
- No improvement work on the building site

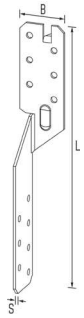
FASTENING ELEMENTS

- GH threaded nail or GH screws



GH threaded nails 4.0 x 40 / 50 / 60 / 75 / 100 mm
GH screws 5.0 x 25 / 35 / 40 / 50 / 60 / 70 mm

Connecting elements from page 274



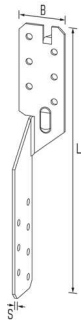
TOPLINE GREENLINE ETA-10 0007

NKL 2 350 GD Z275

RAFTER ANCHORS

TYPE RL-D GREENLINE

Art. No.	Dimensions [mm]					nN	EAN	Weight	Pallet	PU		
	L	x	W(B)	x	T(S)	Ø 5	4019346	kg				
100501RLD15	170	x	36	x	1,5	9	026007	0.060	4200	100	■	
100502RLD15	210	x	36	x	1,5	13	026014	0.070	4200	100	■	
100503RLD15	250	x	36	x	1,5	17	026021	0.093	4200	100	■	



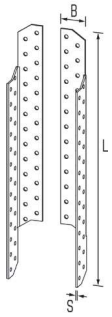
TOPLINE ETA-10 0007

NKL 2 250 GD Z275

RAFTER ANCHORS

TYPE RL-D

Art. No.	Dimensions [mm]					nN	EAN	Weight	Pallet	PU		
	L	x	W(B)	x	T(S)	Ø 5	4019346	kg				
100501RLD	170	x	36	x	2,0	9	115244	0.080	4200	100	■	
100502RLD	210	x	36	x	2,0	13	115251	0.104	4200	100	■	
100503RLD	250	x	36	x	2,0	17	115275	0.124	4200	100	■	



ETA-10 0007

NKL 2 250 GD Z275

RAFTER ANCHORS

Art. No.	Dimensions [mm]					nN	EAN	Weight	Pallet	PU		
	L	x	W(B)	x	T(S)	Ø 5	4019346	kg				
100504	290	x	34,5	x	2,0	2x22	115138	0.202	3900	100	■	
100505	330	x	34,5	x	2,0	2x26	115145	0.235	3000	100	■	
100506	370	x	34,5	x	2,0	2x30	115152	0.274	3000	100	■	

Rafter anchors are used for intersecting timbers, e.g. purlin roofs, or for other sloping roofs.
Horizontal forces can also be absorbed.

TYPE RL-D GREENLINE

Timber / Timber

Art. No.	L	W(B)	T(S)	n_a Ø 5	Connecting element	$F_{Z,Rk}$
100501RLD15	170	36	1,5	4 + 5	4,0x40 / 5,0x40	7,70
100502RLD15	210	36	1,5	6 + 7	4,0x40 / 5,0x40	7,70
100503RLD15	250	36	1,5	8 + 9	4,0x40 / 5,0x40	7,70

TYPE RL-D

Timber / Timber

Art. No.	L	W(B)	T(S)	n_a Ø 5	Connecting element	$F_{Z,Rk}$
100501RLD	170	36	2,0	4 + 5	4,0x40 / 5,0x40	7,70
100502RLD	210	36	2,0	6 + 7	4,0x40 / 5,0x40	7,70
100503RLD	250	36	2,0	8 + 9	4,0x40 / 5,0x40	7,70

Timber / Timber

Art. No.	L	W(B)	T(S)	n_a Ø 5	Connecting element	$F_{Z,Rk}$
100504	290	34,5	2,0	10 + 10	4,0x40 / 5,0x40	10,20
100505	330	34,5	2,0	12 + 12	4,0x40 / 5,0x40	10,20
100506	370	34,5	2,0	14 + 14	4,0x40 / 5,0x40	10,20