





eCo TRUSS HANGERS creating the advantage in timber fasteners

Advantages

eCo Truss Hangers provide a secure means of support to connect timber beams, joists or trusses.

eCo Truss Hangers are available in widths of 38mm, 50mm and 76mm. Various configurations of truss hangers are available, thus offering a range of load values whilst keeping economy in mind.

eCo Truss Hangers have been tested to establish safe working loads. eCo Truss Hangers have been designed for timber to timber, timber to steel or timber to concrete connection applications.

Basic requirements

- Supported truss must butt firmly against girder or wall. No gap is allowed
- Torsional restraint strap must be used on multiple member girders in accordance with specification.
- Hangers must be fully nailed into both back and side flanges.
- The eCo Permfix nails (identified by the MII marking on heads and their distinct blue colour) must be used for these design values to be valid.
- NB: The design values contained in this brochure supersede all previously mentioned.
- All bolted values are based on M12 bolts into concrete with 3mm x 36mm washers, assuming 2 bolts in the 'S' type and 4 bolts in the 'L' type hanger and with supported truss/joist fully nailed with eCo Permfix nails into the side flanges.

eCo Permfix Nails

The **eCo** Permfix collar nail is specifically designed for use with **eCo** products such as truss hangers, hurricane clips, bracing strap, speed brace etc

The shaft of the nail is serrated as a standard ring shank nail and MII is forged on the head for easy identification. The nail is blue DiSTek coated for superior corrosion resistance.

The eCo Permfix nail has been tested in a laboratory under controlled conditions and has proved to attain a vastly increased holding capacity over ordinary nails. The thickened collar ensures that the head does not break-off during application which is often the case when using clout nails.



eCo Strap Hangers

eCo Strap Hangers are designed for truss to truss connections. The eCo Strap Hanger can be used in various applications. eCo Strap Hangers are manufactured from 1,0mm galvanized steel and are available in 38mm x 90°, 50mm x 90° and 38mm x 45° both left and right options.

Characteristics

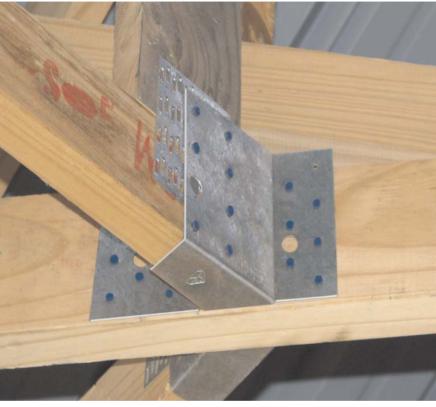
Strap hangers are either wrapped over the girder bottom chord or fixed to vertical webs.









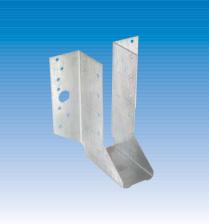




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38mm TRUSS HANGER (SHORT)

38mm TRUSS HANGER (LONG)

Height (mm)

38 195

90⁰ x 38mm x 1.0mm Long

Width

(mm)

CODE: ETH 38 x 1L

TYPE

38L

90⁰ x 38mm x 1.0mm Short CODE: ETH 38 x 15

	TYPE Width Height number (mm) (mm) of nails		Total	Number	Safe Design Value (kN)			
TYPE		of M12 bolt	Downward (normal loading)		Uplift Restraint			
			naiis	holes	eCo Nails MII	M12 Bolts	eCo Nails MII	M12 Bolts
385	38	125	23	2	5,0	4,8	3,5	3,0

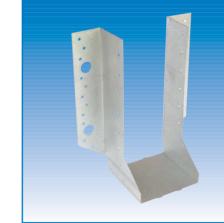
of M12 bolt holes

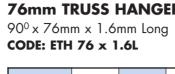
4

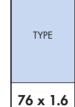
number

of nails

40











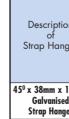
38 x 1.2 38 x 1.6

90[°] x 38mm x 1.0mm CODE: ESH 38 x 1

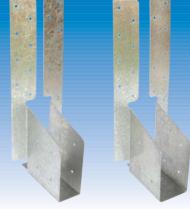
Descript Strap Han

90⁰ x 38mm x Galvanised s Hanger 90⁰ x 50mm x

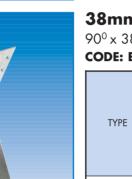


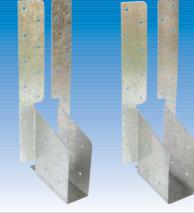


50 x 1.6

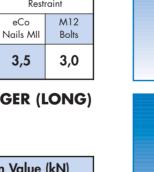












	Number of M12 bolt holes	Safe Design Value (kN)							
		Down (normal		Uplift Restraint					
		eCo Nails Mll	M12 Bolts	eCo Nails Mll	M12 Bolts				
	4	6,5	6,5	5,2	4,2				
	4	6,5	6,5	5,2	4,2				

Safe Design Value (kN)

Downward (normal loading)

M12 Bolts

6,5

eCo Nails Mll

6,5

Uplift Restraint

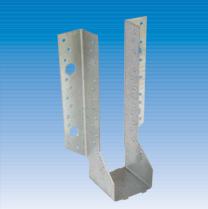
eCo M12 Nails MII Bolts

4,2

5,2











50mm TRUSS HANGER (SHORT)

90[°] x 50mm x 1.0mm Short

Width (mm)

TYPE

CODE: ETH 50 x 1S

TYPE	Width (mm)	Height (mm)	Total number of nails	Number of M12 bolt holes	Safe Design Value (kN)			
					Downward (normal loading)		Uplift Restraint	
					eCo Nails MII	M12 Bolts	eCo Nails MII	M12 Bolts
505	50	115	23	2	5,0	4,8	3,5	3,0

50mm TRUSS HANGER & 76mm TRUSS HANGER (LONG)

90[°] x 50mm x 1.0mm CODE: ETH 50 x 1L

Height (mm)

number of nails

90[°] x 76mm x 1.0mm CODE: ETH 76 x 1L



76mm TRUSS HANGER (LONG)

		Total	ber M12 f bolt	Safe Design Value (kN)				
Width (mm)	Height (mm)	number of nails		Downward (normal loading)		Uplift Restraint		
	na	nuns		eCo Nails MII	M12 Bolts	eCo Nails MII	M12 Bolts	
76	175	40	4	8,0	10,0	8,0	6,5	

38mm TRUSS HANGER & 50mm TRUSS HANGER

90[°] x 50mm x 1.6mm CODE: ETH 50 x 1.6

					S	iafe Desi	gn Value	(kN)
	Width (mm)	Height (mm)	Total number of	Number of M12 bolt holes		wnward al loading)		olift raint
	()	()	nails		eCo Nails MII	M12 Bolts	eCo Nails Mll	M12 Bolts
2	38	120	37	2	5,0	5,0	2,0	2,4
,	38	120	37	2	5,4	6,0	2,0	2,4
)	50	115	37	2	5,4	6,0	2,0	2,4
,	50	115	37	2	5,4	6,0	2,0	2,4

38mm STRAP HANGER & 50mm STRAP HANGER 90[°] x 50mm x 1.0mm

CODE: ESH 50 x 1

1.0		CODE: ESIT SO X T											
	Width (mm)	Height (mm)	Nails per Girder/ Beam	Nails per Joist/ Truss	Total number of nails	Safe Design Value (kN)							
n Jer						Downward (normal loading)	Uplift Restraint						
						eCo Permfix Nails	eCo Permfix Nails						
.0mm rap	38	305	22+2	8	32	6,5	2,0						
.0mm rap	50	300	22+2	8	32	6,5	2,0						

45° STRAP HANGER (LEFT OR RIGHT)

45° x 38mm x 1.0mm Left or Right

4	5° x 3	8			
			NL 1	NL 1	T . 1

						j -	
on	Width (mm)	Height (mm)	Nails per Girder/	per per numbe Girder/ Joist/ of	number	Downward (normal loading)	Uplift Restraint
iger	. ,	. ,	Beam	Truss	nails	eCo Permfix Nails	eCo Permfix Nails
1.0mm ed ger	38	300	23	6	29	6,5	2,0



Safe Desian Value (kN)









45° TRUSS HANGER (LEFT OR RIGHT)

45° x 38mm x 1.2mm Left or Right

CODE: ETH 45° x 38

			Total		Safe Design Value (kN)			
TYPE	Width (mm)	Height (mm)	number of nails	of M12 bolt holes	Down (normal		Up Rest	lift raint
					eCo Nails MII	M12 Bolts	eCo Nails MII	M12 Bolts
45 ⁰	38	120	28	2	5,0	4,8	2,0	2,0

eCo UNIVERSAL ANGLE BRACKET

eCo Universal Angle Bracket is designed for the connection of small jack trusses to hip girders in roofs. With no tight corner nailing the bracket is easy to install and secure with eCo Permfix nails.

CODE: EUAB 80 X 1.2G

			Total number of nails	Til		Safe Design Value (kN)		
Description	Width	Length		Bolts per rafter	Downward (normal loading)	Uplift Restraint		
					eCo Permfix nails	eCo Permfix nails		
Universal Angle Bracket-80 x 1,2 Galvanised	80	300	16	-	2,0	2,0		

eCo PURLIN CLIPS (LEFT OR RIGHT)

eCo Purlin Clips provide a solution for purlin to rafter connections under normal wind conditions. A single purlin clip is required per connection except at the apex, eaves and gables, where a pair of purlin clips must be used.

CODE: EPURCLIP

Description	Nails per	Nails per	Maximum Safe Load (kN)	
	purlin	rafter	Nailed	
Purlin Clips (1,0mm Galvanised Steel)	3	3	1,2	

NB: All values per each and not per pair

eCo HURRICANE CLIPS (LEFT OR RIGHT)

eCo Hurricane Clips provide a solution for purlin to rafter connections under more severe wind conditions and must be configured as per the purlin clip. Hurricane clips are also used for various bracing connections.

CODE: EHURR

Description	Nails per	Nails per	Bolts per	Bolts per Safe Load (kN)		
	purlin	ratter	purlin	ratter	Bolted only	Nailed only
Hurricane Clips (1,0mm Galvanised Steel)	4	4	1	1	1,4	1,6

NB: All values per each and not per pair



