



## eCo TRUSS HANGERS

creating the advantage in timber fasteners

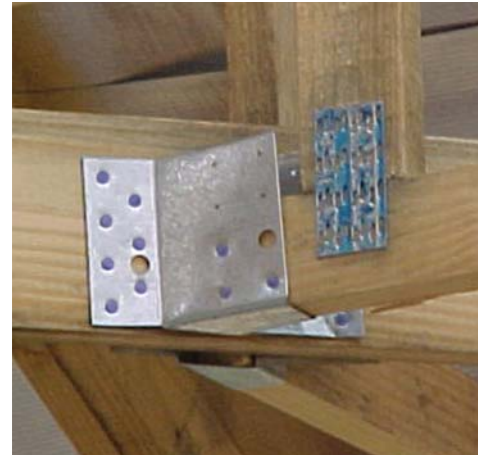


## eCo TRUSS HANGERS

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

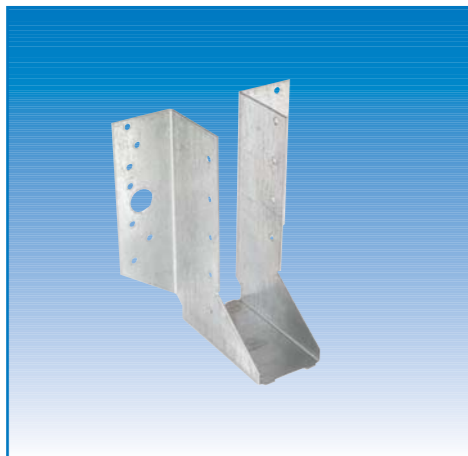
**eCo Strap Hangers** are designed for truss to truss connections. The **eCo Strap Hanger** can be used in various applications. **eCo Strap Hangers** are manufactured from 1,0mm galvanized steel and are available in 38mm x 90°, 50mm x 90° and 38mm x 45° both left and right options.

### Characteristics

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



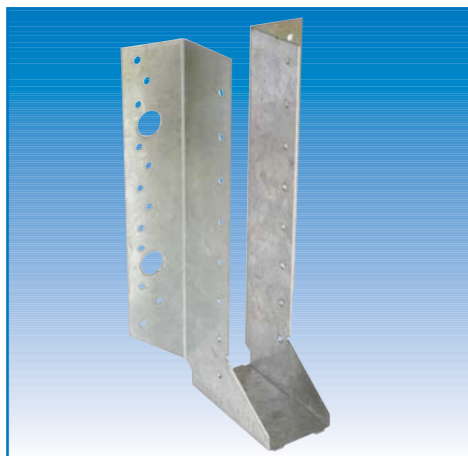
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**38mm TRUSS HANGER (SHORT)**

90° x 38mm x 1.0mm Short

**CODE: ETH 38 x 1S**

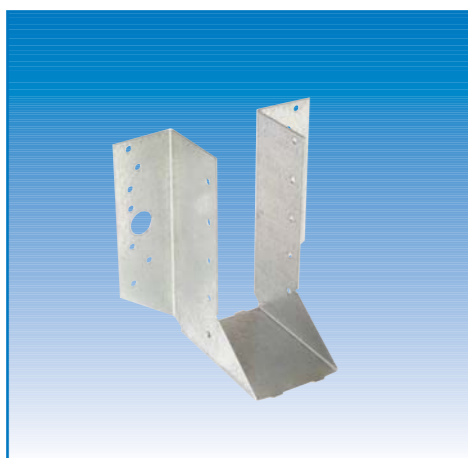
TYPE	Width (mm)	Height (mm)	Total number of nails	Number of M12 bolt holes	Safe Design Value (kN)			
					Downward (normal loading)		Uplift Restraint	
					eCo Nails Mill	M12 Bolts	eCo Nails Mill	M12 Bolts
38S	38	125	23	2	5,0	4,8	3,5	3,0

**38mm TRUSS HANGER (LONG)**

90° x 38mm x 1.0mm Long

**CODE: ETH 38 x 1L**

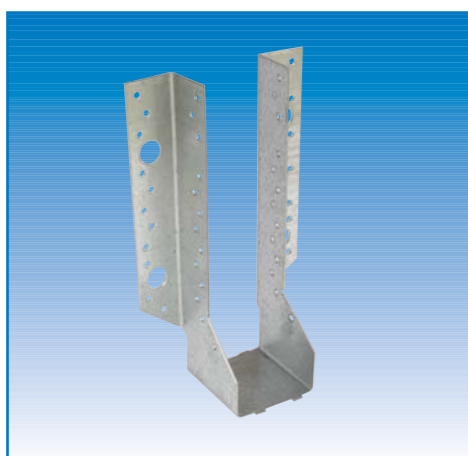
TYPE	Width (mm)	Height (mm)	Total number of nails	Number of M12 bolt holes	Safe Design Value (kN)			
					Downward (normal loading)		Uplift Restraint	
					eCo Nails Mill	M12 Bolts	eCo Nails Mill	M12 Bolts
38L	38	195	40	4	6,5	6,5	5,2	4,2

**50mm TRUSS HANGER (SHORT)**

90° x 50mm x 1.0mm Short

**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 Mill	M12 Bolts	eCo Nails Mill	M12 Bolts
50S	50	115	23	2	5,0	4,8	3,5	3,0

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

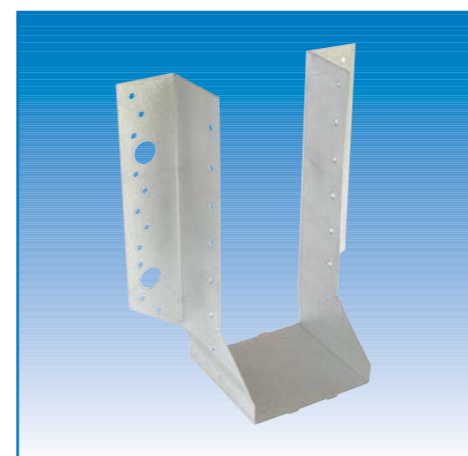
90° x 50mm x 1.0mm

**CODE: ETH 50 x 1L**

90° x 76mm x 1.0mm

**CODE: ETH 76 x 1L**

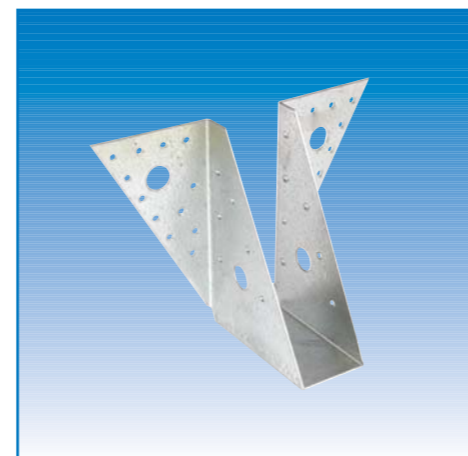
TYPE	Width (mm)	Height (mm)	Total number of nails	Number of M12 bolt holes	Safe Design Value (kN)			
					Downward (normal loading)		Uplift Restraint	
					eCo Nails Mill	M12 Bolts	eCo Nails Mill	M12 Bolts
50 x 1.0	50	185	40	4	6,5	6,5	5,2	4,2
76 x 1.0	76	175	40	4	6,5	6,5	5,2	4,2

**76mm TRUSS HANGER (LONG)**

90° x 76mm x 1.6mm Long

**CODE: ETH 76 x 1.6L**

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 Mill	M12 Bolts	eCo Nails Mill	M12 Bolts
76 x 1.6	76	175	40	4	8,0	10,0	8,0	6,5

**38mm TRUSS HANGER & 50mm TRUSS HANGER**

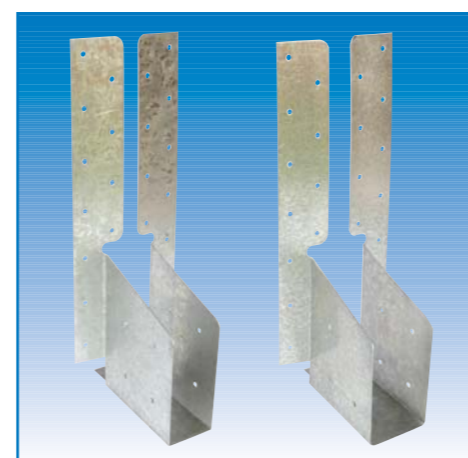
90° x 38mm x 1.2mm (1.6mm)

**CODE: ETH 38 x 1.2 (1.6)**

90° x 50mm x 1.6mm

**CODE: ETH 50 x 1.6**

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 Mill	M12 Bolts	eCo Nails Mill	M12 Bolts
38 x 1.2	38	120	37	2	5,0	5,0	2,0	2,4
38 x 1.6	38	120	37	2	5,4	6,0	2,0	2,4
50 x 1.6	50	115	37	2	5,4	6,0	2,0	2,4

**38mm STRAP HANGER & 50mm STRAP HANGER**

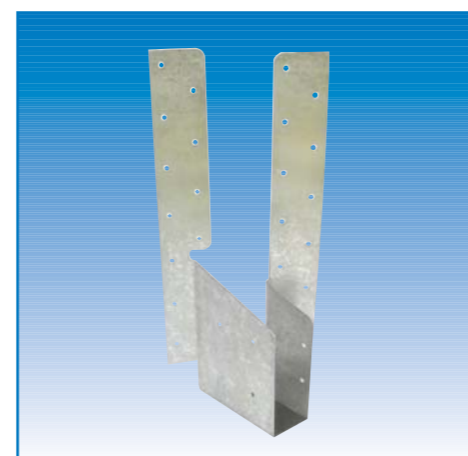
90° x 38mm x 1.0mm

**CODE: ESH 38 x 1**

90° x 50mm x 1.0mm

**CODE: ESH 50 x 1**

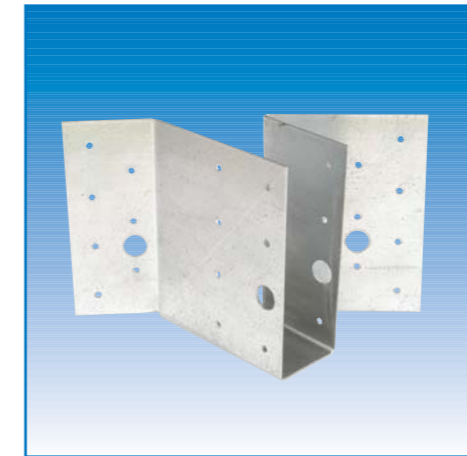
Description of Strap Hanger	Width (mm)	Height (mm)	Nails per Girder/Beam	Nails per Joist/Truss	Total number of nails	Safe Design Value (kN)	
						Downward (normal loading)	Uplift Restraint
						eCo Permfix Nails	eCo Permfix Nails
90° x 38mm x 1.0mm Galvanised strap Hanger	38	305	22+2	8	32	6,5	2,0
90° x 50mm x 1.0mm Galvanised strap Hanger	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

**CODE: ESH 45° x 38**

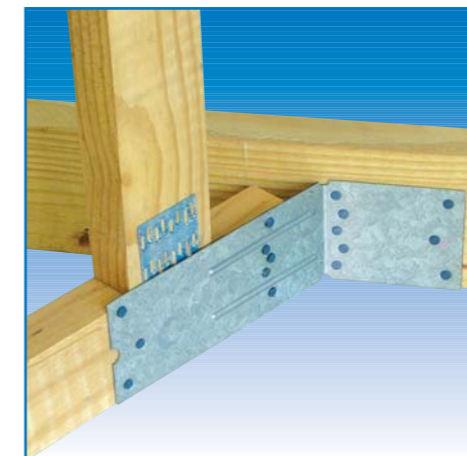
Description of Strap Hanger	Width (mm)	Height (mm)	Nails per Girder/Beam	Nails per Joist/Truss	Total number of nails	Safe Design Value (kN)	
						Downward (normal loading)	Uplift Restraint
						eCo Permfix Nails	eCo Permfix Nails
45° x 38mm x 1.0mm Galvanised Strap Hanger	38	300	23	6	29	6,5	2,0

**45° TRUSS HANGER (LEFT OR RIGHT)**

45° x 38mm x 1.2mm Left or Right

**CODE: ETH 45° x 38**

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 Mill	M12 Bolts	eCo Nails Mill	M12 Bolts
45°	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**

Description	Width	Length	Total number of nails	Bolts per rafter	Safe Design Value (kN)	
					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 purlin	Nails per rafter	Maximum Safe Load (kN)
			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 purlin	Nails per rafter	Bolts per purlin	Bolts per rafter	Maximum Safe Load (kN)	
					Bolted only	Nailed only
					Hurricane Clips (1,0mm Galvanised Steel)	4

**NB: All values per each and not per pair**