



eCo TRUSS HANGERS

creating the advantage in timber fasteners



TIMBER FASTENERS

We are the world leaders in the industry, with our Engineers totalling 170 years experience (combined), we are also ISO 9001 accredited and backed with an international P.I. Insurance.

We also offer full size prototype truss testing as an alternative truss design method. With a network of over 190 licensed truss manufacturers utilizing MiTek's state-of-the-art software we can provide a competitive and economic solution to even the most complex of roofs.

With all our products and designs warranted, we offer total peace of mind.

The timber fastening solution.



creating the advantage

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eCo TRUSS HANGERS

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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 girders in accordance with the specifications.
- Hangers must be fully nailed into both back and side flanges.
- The **eCo Permfix** nails (identified by the M11 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, purlin clips, purlin bracing strap, speed brace etc.

The shaft of the nail is serrated as a standard ring shank nail and M11 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 an 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 girder connections.

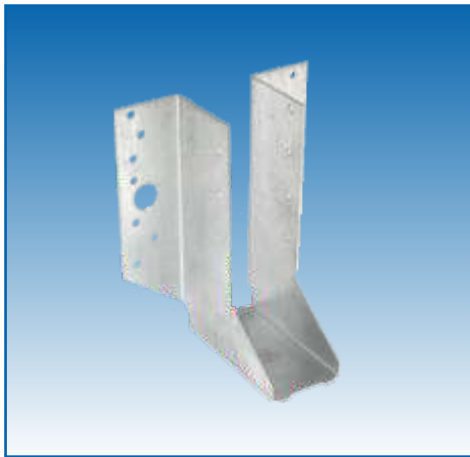
The **eCo Strap Hanger** can be used in various applications.

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 & nailed to the girder bottom chord or fixed to vertical webs and the girder bottom chord.



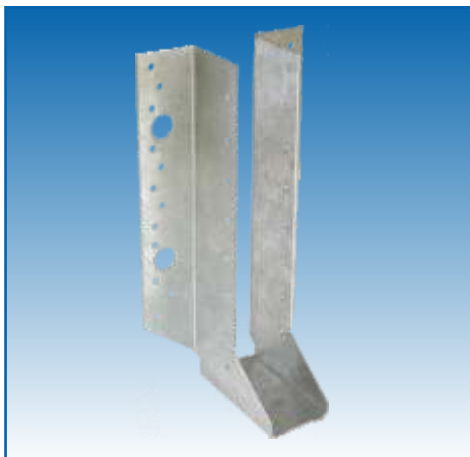


38mm TRUSS HANGER (SHORT & MINI)

90° x 38mm x 1.0mm Short / Mini

CODE: ETH 38 x 15/M

TYPE	For Truss Width (mm)	Height (mm)	Total number of nails	Number of M12 bolt holes	Safe Design Value (kN)		
					Downward (normal loading)		Uplift Restraint
					eCo Nails M11	M12 Bolts	eCo Nails M11
38S	38	125	23	2	5,0	4,8	3,5
38M	38	94	16	2	1,3	1,3	1,3

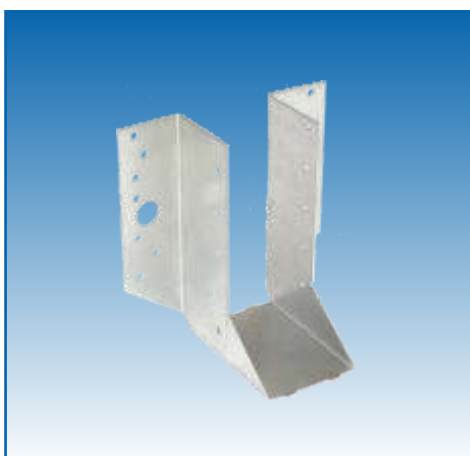


38mm TRUSS HANGER (LONG)

90° x 38mm x 1.0mm Long

CODE: ETH 38 x 1L

TYPE	For Truss Width (mm)	Height (mm)	Total number of nails	Number of M12 bolt holes	Safe Design Value (kN)		
					Downward (normal loading)		Uplift Restraint
					eCo Nails M11	M12 Bolts	eCo Nails M11
38L	38	195	35	4	6,5	6,5	5,2

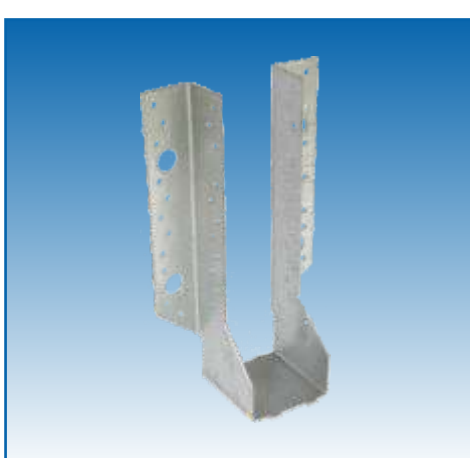


50mm TRUSS HANGER (SHORT)

90° x 50mm x 1.0mm Short

CODE: ETH 50 x 1S

TYPE	For Truss Width (mm)	Height (mm)	Total number of nails	Number of M12 bolt holes	Safe Design Value (kN)		
					Downward (normal loading)		Uplift Restraint
					eCo Nails M11	M12 Bolts	eCo Nails M11
50S	50	115	23	2	5,0	4,8	3,5

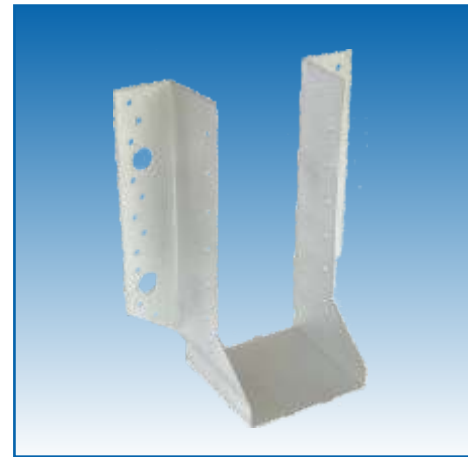


50mm TRUSS HANGER (LONG)

90° x 50mm x 1.0mm

CODE: ETH 50 x 1L

TYPE	For Truss Width (mm)	Height (mm)	Total number of nails	Number of M12 bolt holes	Safe Design Value (kN)		
					Downward (normal loading)		Uplift Restraint
					eCo Nails M11	M12 Bolts	eCo Nails M11
50 x 1.0	50	185	36	4	6,5	6,5	5,2

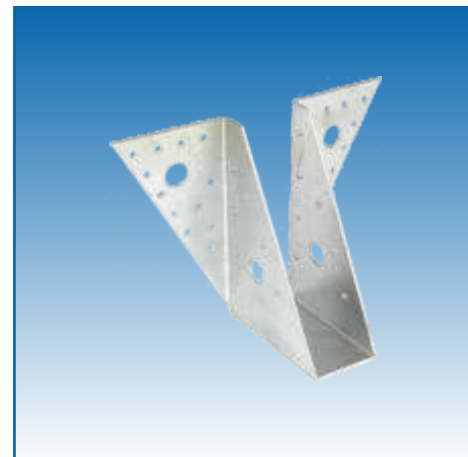


76mm TRUSS HANGER (LONG)

90° x 76mm x 1.6mm Long

CODE: ETH 76 x 1.6L

TYPE	For Truss Width (mm)	Height (mm)	Total number of nails	Number of M12 bolt holes	Safe Design Value (kN)		
					Downward (normal loading)		Uplift Restraint
					eCo Nails M11	M12 Bolts	eCo Nails M11
76 x 1.6	76	175	35	4	8,0	10,0	5,2



38mm TRUSS HANGER & 50mm TRUSS HANGER

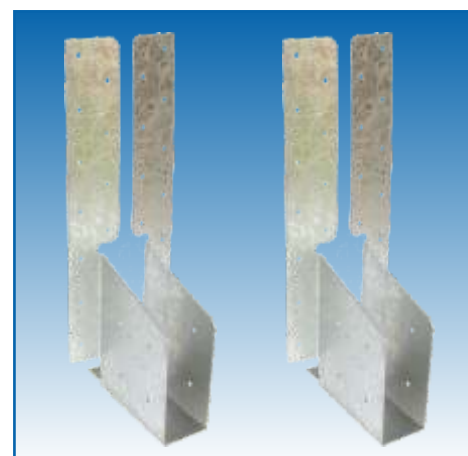
90° x 38mm x 1.2mm (1.6mm)

90° x 50mm x 1.6mm

CODE: ETH 38 x 1.2 (1.6)

CODE: ETH 50 x 1.6

TYPE	For Truss Width (mm)	Height (mm)	Total number of nails	Number of M12 bolt holes	Safe Design Value (kN)		
					Downward (normal loading)		Uplift Restraint
					eCo Nails M11	M12 Bolts	eCo Nails M11
38 x 1.2	38	120	37	2	5,0	5,0	2,0
38 x 1.6	38	120	37	2	5,4	6,0	2,0
50 x 1.6	50	115	37	2	5,4	6,0	2,0



38mm STRAP HANGER & 50mm STRAP HANGER

90° x 38mm x 1.0mm

90° x 50mm x 1.0mm

CODE: ESH 38 x 1

CODE: ESH 50 x 1

Description of Strap Hanger	For Truss 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	30	6,5	2,0
90° x 50mm x 1.0mm Galvanised strap Hanger	50	300	22+2	8	30	6,5	2,0



* Left Hanger Shown

45° STRAP HANGER (LEFT OR RIGHT)

45° x 38mm x 1.0mm Left or Right

CODE: ESH 45° x 38

Description of Strap Hanger	For Truss 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



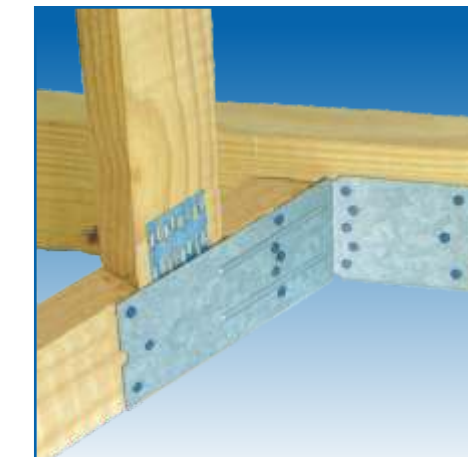
* Left Hanger Shown

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 M11	M12 Bolts	eCo Nails M11
45°	38	120	28	2	5,0	4,8	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	-	1.6	2.0	73mm bottom chord
	80	300	16	-	2.08	2.0	111mm bottom chord



eCo PURLIN CLIPS (LEFT OR RIGHT)

eCo Purlin Clips provide a solution for purlin to rafter connections under normal wind conditions, Terrain Category 3. 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 provides a solution for purlin to rafter connections under more severe wind conditions, Terrain Category 2. A single hurricane clip is required per connection except at the apex, eaves and gables, where a pair of Hurricane Clips must be used. 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)	
					Boled only	Nailed only
					Hurricane Clips (1,0mm Galvanised Steel)	4

NB: All values per each and not per pair

Terrain Category B (2)
Terrain Category C (3)

The allowable loads given are safe working loads. To obtain the allowable strengths for serviceability loads (limit state), these values can be multiplied by 1.5 * All Safe Values for Bolts are Into Concrete or Steel Only



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