

HES  
**Heavy Engineered Restraint Strap**



*A direct replacement for traditional restraint straps, the innovative design of these lightweight straps allows ease of handling and installation whilst maintaining the structural strength and robustness of much heavier weight types.*

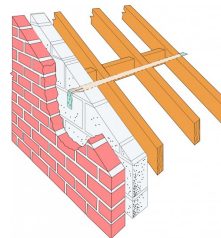
*The HES (heavy engineered strap) replace the traditional heavy (30 x 5mm) restraint straps in roof and floor construction.*

*Reduced thickness allows the HES strap to span the bottom chords of trusses and over floor joists without the need for notching.*

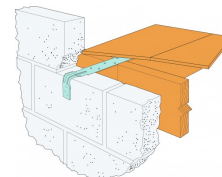
*HES straps are less than 40% of the weight, quicker to fit, and overcome many fixing problems associated with traditional heavy straps.*



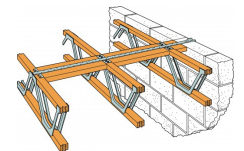
- Formed edge design gives additional strength on bend
- Quicker to install - can fit over top of floor joists and truss bottom chords
- Easier to course with blockwork
- No need to notch joists
- Complies with BS EN 845-1



*HES strap fits underneath the rafter and noggins, as per NHBC/TRA detail. In all instances fix HES using 8 No. 3.75 x 30mm square twist nails.*



*Fix HES strap using 8 No. 3.75 x 30mm square twist nail.*



*One strap at maximum 2m centres or as required by the building designer.*

## Features

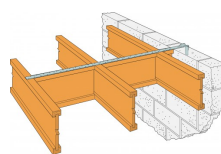
### Material

- Pre-galvanised mild steel - Z600

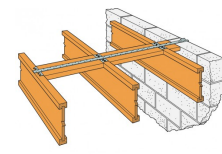
### Installation

#### Horizontal strap installation

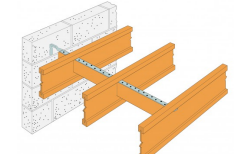
- Approved Document A of the Building Regulations requires lateral restraint to be provided at each floor at a maximum of 2 metre centres
- Restraint straps “perpendicular” to the floor joists are required to be held tight against the masonry and fixed across the first 3 joists
- Restraint straps “parallel” to the floor joists are required to be held tight to the masonry and be at least 1200mm long
- The characteristic tensile strength for horizontal restraint straps should not be less than 8 kN



*Strap can be fitted over joists without the need to cut through web or flange.*



*The HES strap can be used in conjunction with solid timber noggins.*



*The HES strap can also be fitted underneath the top flange of the I-Joist.*

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## Technical Data

### HES - Product Dimensions

References	Installation Type	Dimensions [mm]					Holes		
		Overall Length	A	B1	B2	t	Flange B2		Flange B1
							Ø4.1	Ø4.1	Ø6.1
HES06B10	Horizontal	600	38	500	100	1.2	3	8	8
HES08B10	Horizontal	800	38	700	100	1.2	3	12	12
HES10B10	Horizontal	1000	38	900	100	1.2	3	16	16
HES12B10	Horizontal	1200	38	1100	100	1.2	3	20	20
HES15B10	Horizontal	1500	38	1400	100	1.2	3	26	24

### HES Performance Values

References	Fasteners			Characteristic Load [kN]
	Masonry Wall	Floor Joist or Rafter	Wall Plate	
HES	-	8 - N3.75x30	-	8

