

A direct replacement for traditional 2.5mm and 5mm thick 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) & LES (light engineered strap) replace traditional heavy and light restraint straps in roof and floor construction. Reducing the thickness to 1.5mm allows the HES strap to span over the top of floor joists and the bottom chords of trusses 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. The LES is designed for vertical applications e.g. holding down wall plates.

[UK-DoP-h05/0001](#)

## FEATURES

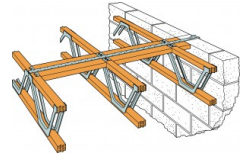
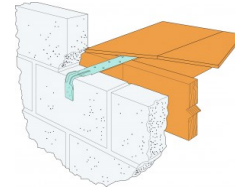
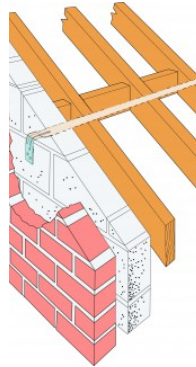
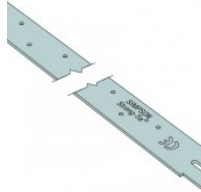
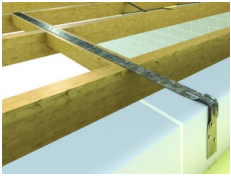
### Material

- Pre-galvanised mild steel.

### Installation

- 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 8kN.

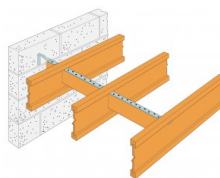
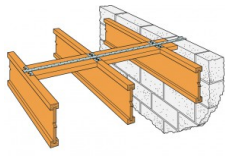
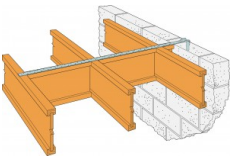
## APPLICATIONS



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.

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.



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.

TECHNICAL DATA

HES - Horizontal Restraint Strap

References	Dimensions (mm)			Masonry Wall	Fasteners		Declared Characteristic Load (kN)
	L1 (mm) [mm]	L2 (mm) [mm]	Overall Length (mm) [mm]		Floor Joist or Rafter		
					Quantity	Specification	
HES06B10	500	100	600	none	8	3.75x30mm	8
HES08B10	700	100	800	none	8	3.75x30mm	8
HES10B10	900	100	1000	none	8	3.75x30mm	8
HES12B10	1100	100	1200	none	8	3.75x30mm	8
HES15B10	1400	100	1500	none	8	3.75x30mm	8

