

**THE INNOVATIVE DESIGN OF THESE NEW LIGHTWEIGHT STRAPS ALLOWS EASE OF HANDLING AND INSTALLATION WHILST MAINTAINING THE STRUCTURAL STRENGTH AND ROBUSTNESS OF MUCH HEAVIER WEIGHT STRAPS.**

Developed as an alternative to the traditional “heavy” and “light” restraint strap. They save time in installation in both horizontal and vertical applications and are CE marked.

The HES (heavy engineered strap) & LES (light engineered strap) replace traditional heavy 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 truss 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, and is also CE marked.

- CE Marked.
- 1.5mm thick.
- Formed edge design gives additional strength on bend.
- Complies with the BS EN 845.
- Lighter, less than 40% of the weight of traditional straps.
- Quicker to install - can fit over the top of floor joists and truss bottom chords.
- Easier to course with blockwork.
- No need to notch joists.

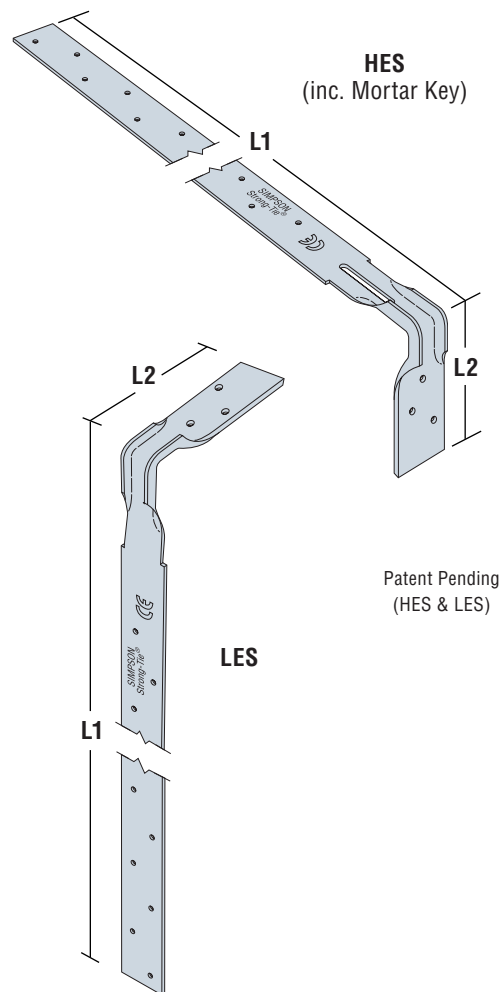
**MATERIAL:** 1.5mm galvanised mild steel

**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 and a performance requirement of 8kN ultimate capacity per horizontal restraint strap.

Restraint straps **"perpendicular"** to the floor joists are required to fix tight against the masonry and fixed across the first 3 joists, with a minimum of 8 square twist nails (2 per joist and 1 per noggin).

Restraint straps **"parallel"** to the floor joists are required to fix tight to the masonry and be at least 1200mm long.

**VERTICAL STRAP INSTALLATION:** Vertical strapping at least 1 metre in length should be provided at eaves level at intervals not exceeding 2 metres.

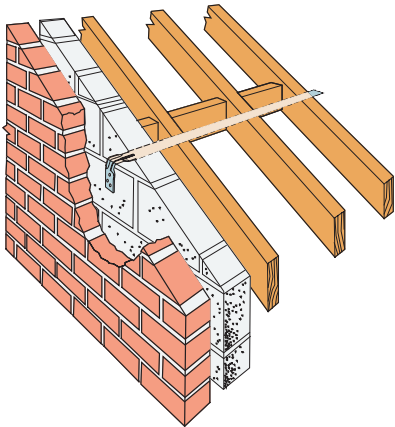


**Heavy Engineered Strap Performance Data**

Model No.	Dimension (mm)		Declared Load (kN)
	L1	L2	
HES06B10	500	100	8.0
HES08B10	700	100	8.0
HES10B10	900	100	8.0
HES12B10	1100	100	8.0
HES15B10	1400	100	8.0

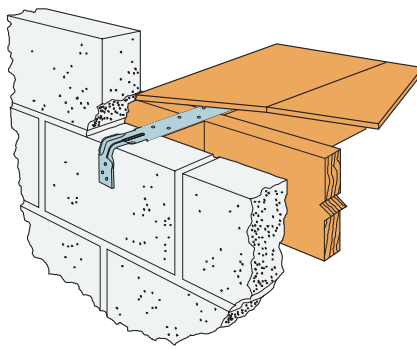
**Light Engineered Strap Performance Data**

Model No.	Dimension (mm)		Declared Load (kN)
	L1	L2	
LES06B10	500	100	4.0
LES08B10	700	100	4.0
LES10B10	900	100	4.0
LES12B10	1100	100	4.0



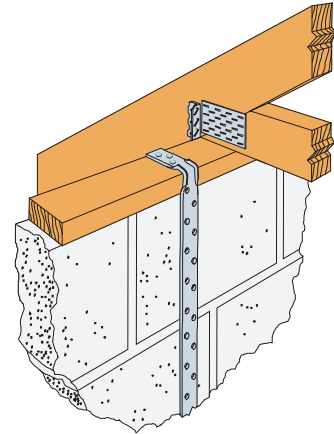
**Roof Application:**

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.



**Floor Joist Application:**

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



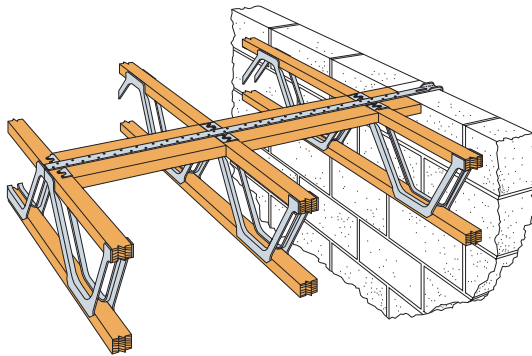
**Vertical Application:**

Fix LES strap to wall plate with 3 No. 3.75x30 square twist nails. Fix LES strap to masonry with 5 off # 12 x 50mm wood screws, plugged and screwed into masonry.

The lowest fixing should be located within 150mm of the bottom of the vertical strap

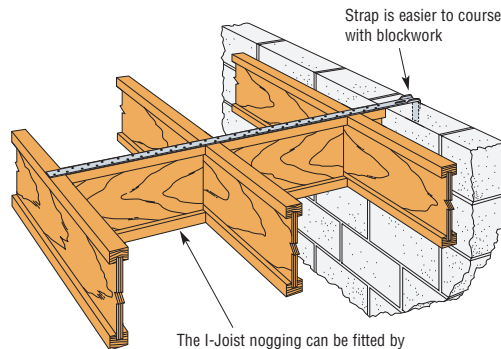
**Metal Web Joist Application:**

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



**I-Joist Application Option 1:**

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

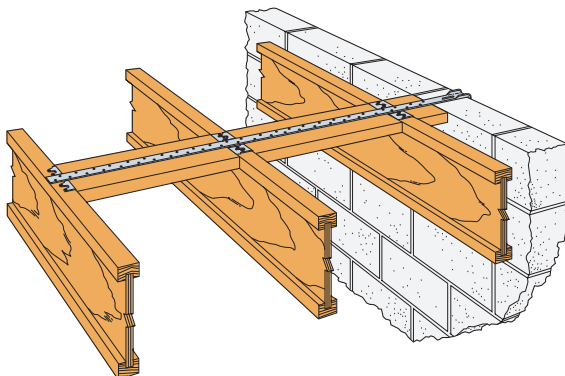


Strap is easier to course with blockwork

The I-Joist noggling can be fitted by either skew nailing or ZS Clips (using ZS clips will make fitting easier).

**I-Joist Application Option 2:**

The HES Safety Fast Strap can be used in conjunction with solid timber noggins.



**I-Joist Application Option 3:**

The HES Safety Fast Strap can also be fitted underneath the top flange of the I-Joist.

