### EXPAMET SPH JOIST HANGERS

#### **Design Features**

- Single-piece, non-welded construction.
- Wider masonry flange to increase loadings on masonry of compressive strength 2.8N/mm² and greater.
- Manufactured from 2mm thick pre-galvanised mild steel to BS EN 10327: 2004, DX51D + Z600.
- 75mm load bearing surfaces.
- All hangers 150mm deep and over are manufactured 10mm less to allow for notching and regularisation of timber joists.
- Gusset nail holes are non coaxial.
- Standard available widths 38, 44, 47, 50, 63, 75, 100, 125, 150mm.

#### **Installation Requirements**

The back face of hanger must be flush against the wall.

The timber joist should be square cut and butting to the back face of the hanger (maximum permitted gap 6mm).

A minimum height of 675mm of set masonry must be in position above the supporting flange before any load is applied.

Fixing: Nail to the joist through the nail holes in each side gusset with BAT  $3.75 \times 30$ mm long square twisted sherardised nails.

It is recommended that joists are notched for the base of the hanger to achieve a level surface for plasterboarding.

Type 'R' and 'ST' provide additional location and alignment during construction.

HD Restraint Straps must be used with all types of SPH joist hangers to provide lateral restraint.

### **How to Order/Specify BAT SPH Joist Hangers**

#### TYPE 'S' -

Please state dimensions of joist

(a) depth

(b) width

e.g. SPHS22550

Minimum box quantity dependent on hanger size.

TYPES 'R' & 'ST' (made to order) -

Please state dimensions of joist

(a) depth

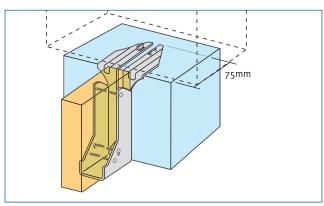
(b) width

(c) top flange (to suit wall width)

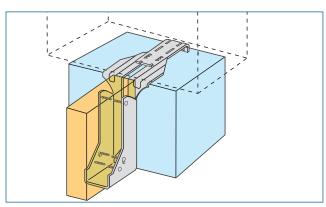
e.g. SPH22550R100

Quantity made to order

The BAT S.P.H. Joist Hanger is a single piece timber to masonry hanger for building into the inner leaf of external cavity walls and internal walls.

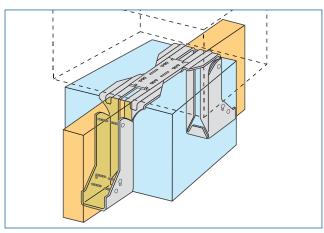


Standard Type 'S'



Return Type 'R'

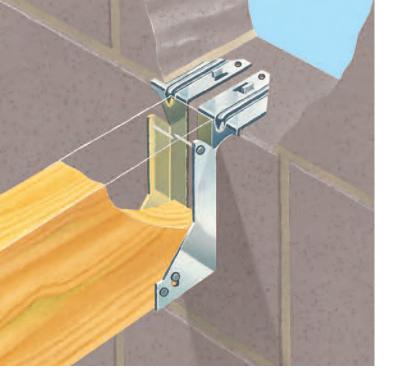
('R' Type is a Standard type 'S' with Return Plate added).



Straddle Type 'ST'

('ST' Type is two Standard Joist Hangers joined together with Jointing Plate).

Both the 'R' and 'ST' Type enables the hangers to be positioned accurately whilst the masonry is built above.



# EXPAMET SPH JOIST HANGERS

## Safe Working Loads of the S.P.H. Joist Hanger used with various types of masonry

Masonry Strength 2.8  $N/mm^2$ 

\* not available

| Nominal Joist<br>Depth (mm) | S.P.H. Hanger<br>Depth (mm) | Jo<br>38 to 50 | ist Widths (m<br>63 to 75 | nm)<br>89 to 150 |
|-----------------------------|-----------------------------|----------------|---------------------------|------------------|
| 100                         | 100                         | 3.08           | 2.86                      | *                |
| 125                         | 125                         | 3.21           | 2.98                      | *                |
| 150                         | 140                         | 3.28           | 3.05                      | *                |
| 175                         | 165                         | 3.40           | 3.07                      | *                |
| 200                         | 190                         | 3.52           | 3.29                      | *                |
| 225                         | 215                         | 3.65           | 3.43                      | *                |
| 250                         | 240                         | 3.65           | 3.43                      | *                |
| 275                         | 265                         | 3.65           | 3.43                      | *                |
|                             |                             |                |                           |                  |

Masonry Strength 4.0  $N/mm^2$ 

|                             | 0.50.0                      |                 |                           |                  |
|-----------------------------|-----------------------------|-----------------|---------------------------|------------------|
| Nominal Joist<br>Depth (mm) | S.P.H. Hanger<br>Depth (mm) | Joi<br>38 to 50 | ist Widths (m<br>63 to 75 | im)<br>89 to 150 |
| 100                         | 100                         | 2.84            | 2.93                      | 4.17             |
| 125                         | 125                         | 3.06            | 3.18                      | 4.17             |
| 150                         | 140                         | 3.19            | 3.33                      | 4.08             |
| 175                         | 165                         | 3.41            | 3.57                      | 3.99             |
| 200                         | 190                         | 3.64            | 3.83                      | 3.90             |
| 225                         | 215                         | 3.87            | 3.87                      | 3.81             |
| 250                         | 240                         | 3.87            | 3.87                      | 3.81             |
| 275                         | 265                         | 3.87            | 3.87                      | 3.81             |

Masonry Strength 3.5 N/mm²

| Nominal Joist | S.P.H. Hanger | Joist Widths (mm) |          |           |
|---------------|---------------|-------------------|----------|-----------|
| Depth (mm)    | Depth (mm)    | 38 to 50          | 63 to 75 | 89 to 150 |
| 100           | 100           | 2.67              | 2.77     | *         |
| 125           | 125           | 2.86              | 2.98     | *         |
| 150           | 140           | 3.05              | 3.19     | *         |
| 175           | 165           | 3.25              | 3.40     | *         |
| 200           | 190           | 3.44              | 3.61     | *         |
| 225           | 215           | 3.63              | 3.82     | *         |
| 250           | 240           | 3.63              | 3.82     | *         |
| 275           | 265           | 3.63              | 3.82     | *         |

Masonry Strength 7.0 N/mm²

| Nominal Joist<br>Depth (mm) | S.P.H. Hanger<br>Depth (mm) | Jo<br>38 to 50 | ist Widths (m<br>63 to 75 | m)<br>89 to 150 |
|-----------------------------|-----------------------------|----------------|---------------------------|-----------------|
| 100                         | 100                         | 3.13           | 4.29                      | 4.47            |
| 125                         | 125                         | 3.55           | 4.65                      | 4.47            |
| 150                         | 140                         | 3.80           | 4.87                      | 4.42            |
| 175                         | 165                         | 4.22           | 5.22                      | 4.36            |
| 200                         | 190                         | 4.63           | 5.58                      | 4.31            |
| 225                         | 215                         | 5.05           | 5.94                      | 4.25            |
| 250                         | 240                         | 5.05           | 5.94                      | 4.25            |
| 275                         | 265                         | 5.05           | 5.94                      | 4.25            |