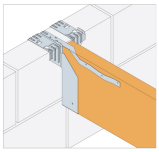
Technical Sheet

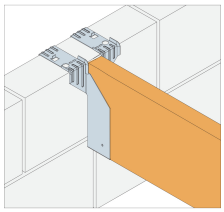
SFLH

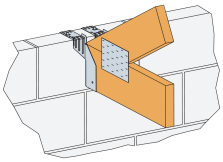
Safety Fast Lite Hanger - Solid Joists

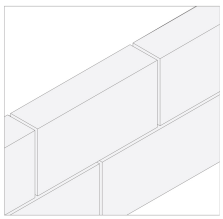
The SFLH is an innovative single piece hanger designed to support timber joists from masonry walls, without the need for masonry above the course of blockwork supporting the hanger.











Features

Benefits

The SFLH has been designed to assist in meeting the air leakage requirements as part of the Code for Sustainable Homes.
Since the joist is supported by a hanger and does not penetrate the inner leaf of blockwork, the potential for air leakage is reduced and avoids the time consuming and costly mortaring and sealing with mastic around built in joist ends.
This hanger allows construction work to continue safely just 3 days after the supporting blockwork has been laid - as opposed to 28 days in the case of traditional masonry hangers.

- Avoids joist penetrating block work, minimising air leakage.
- Achieves published performance values with no masonry above the supporting course of block work.
- Enables the construction of the floor deck prior to the next lift of masonry.
- Reduces health & safety risks associated with the
- use of traditional masonry hangers with no masonry courses above them.
- Eliminates the need for propping to support the floor joists.
- Web stiffeners are not required with joists to achieve published performance values.
- Use FMS strap range with every hanger spaced up to 600mm centres to provide lateral restraint of the floor joist in accordance with EN845-1.
- If using HES restraint straps, place at 2 metre centres.
- CE Approved: meets the requirements of EN845-1 and tested in accordance with EN 846-8.

Material

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Technical Data

Technical Sheet

SFLH

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SIMPSON Strong-Tie

Production Dimensions

Reference	Connector Dimensions										
	Timber size[mm]		Product Dimensions[mm]							Joist holes	
	Width[mm]	Height	A[mm]	B[mm]	C[mm]	D[mm]	E[mm]	F[mm]	t[mm]	Round Ø4.2[mm]	Obround Ø6x4[mm]
SFLH100/38	35	100.0	38	100	75	49.5	103	81	1.5	3	2
SFLH125/38	35	125.0	38	125	75	49.5	103	81	1.5	3	2
SFLH150/38	35	150.0	38	140	75	49.5	103	81	1.5	3	2
SFLH175/38	35	175.0	38	165	75	49.5	103	81	1.5	3	2
SFLH200/38	35	200.0	38	190	75	49.5	103	81	1.5	3	2
SFLH225/38	35	225.0	38	215	75	49.5	103	81	1.5	3	2
SFLH250/38	35	250.0	38	240	75	49.5	103	81	1.5	3	2
SFLH300/38	35	300.0	38	290	75	49.5	103	81	1.5	3	2
SFLH100/44	44	100.0	44	100	75	49.5	103	81	1.5	3	2
SFLH125/44	44	125.0	44	125	75	49.5	103	81	1.5	3	2
SFLH150/44	44	150.0	44	140	75	49.5	103	81	1.5	3	2
SFLH175/44	44	175.0	44	165	75	49.5	103	81	1.5	3	2
SFLH200/44	44	200.0	44	190	75	49.5	103	81	1.5	3	2
SFLH225/44	44	225.0	44	215	75	49.5	103	81	1.5	3	2
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SFLH300/44	44	300.0	44	290	75	49.5	103	81	1.5	3	2
SFLH100/47	45	100.0	47	100	75	49.5	103	81	1.5	3	2
SFLH125/47	45	125.0	47	125	75	49.5	103	81	1.5	3	2
SFLH150/47	45	150.0	47	140	75	49.5	103	81	1.5	3	2
SFLH175/47	45	175.0	47	165	75	49.5	103	81	1.5	3	2
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SFLH100/50	50	100.0	50	100	75	49.5	103	81	1.5	3	2
SFLH125/50	50	125.0	50	125	75	49.5	103	81	1.5	3	2
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SFLH100/63	63	100.0	63	100	75	49.5	103	81	1.5	3	2
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SFLH100/91	2x45 or 91	100.0	91	100	75	49.5	103	81	1.5	3	2
SFLH125/91	2x45 or 91	125.0	91	125	75	49.5	103	81	1.5	3	2
SFLH150/91	2x45 or 91	150.0	91	140	75	49.5	103	81	1.5	3	2
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SFLH300/91	2x45 or 91	300.0	91	290	75	49.5	103	81	1.5	3	2
SFLH100/96	2x47	100.0	96	100	75	49.5	103	81	1.5	3	2
SFLH125/96	2x47	125.0	96	125	75	49.5	103	81	1.5	3	2
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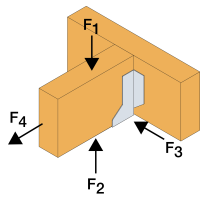

Product characteristic capacities

Reference	Hanger capacity						
	Number of Fasteners				Characteristic Capacities[kN]		
	Joist				$R_{1,k}$		
	FMS Strap		Hanger		2.8 N/mm2; Solid AAC	3.5 N/mm2 Solid LAC	7 N/mm2 Solid DAC
	Qty	Type	Qty	Type			
SFLH	3.0	N3.75 x 30	2.0	N3.75 x 30	6.8	7.9	7.9

Installation

Installation

Step 1: Build masonry to the required level, ensuring any coursing bricks or blocks are at least one course below the supporting block.
Leave the masonry to cure for at least three days.
Step 2: Place the Safety Fast Lite Masonry Hanger (SFLH) over the inner leaf of the block work, ensuring the top flanges are fully bearing onto the top of the supporting block work and are also tight against the front face of the block work.
Step 3: Install the floor joist into the SFLH. The end of the joist should be tight against the back of the hanger. Maximum gap allowed: 6mm.
Install the specified joist nails (see table below).
Step 4: Install the appropriate restraint strap (see installation notes), ensuring the strap is tight against the back face of the block work hanger return and the side of the floor joist.
Fix with 3 x 3.75x30mm square twist nails.

Working on the floor prior to the next lift of masonry:
1. The floor decking may be stored on the joists provided the load is uniformly distributed among several joists and does not exceed the hanger or joist capacities. Refer to joist manufacturer or supplier for joist capacity and maximum construction loads.
2. The floor decking must be securely attached to each joist before additional loads can be placed on the system.
3. Pallets of blocks or other construction material should be placed onto the scaffolding and not directly onto the floor.
The materials can then be evenly distributed around the floor manually, ensuring the hanger or joist capacities are not exceeded.
For example, total number of blocks per pair of joists (4 hangers) @ 600 c/c:
- **2.8N/mm2 AAC = 24**
- **3.5N/mm2 AAC = 20**
- **7.0N/mm2 DAC = 16**

Note: I-joist shown for illustration purposes, SFLH is compatible with solid sawn joists.

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