Technical data sheet

JHMI
Joist Hanger for Masonry: I-Joists

The JHM and JHMI range of joist hangers can be used to connect solid sawn joists, trusses and engineered joists to masonry walls or steel beams.

Features

Material

- Pre-galvanised mild steel

Benefits

- Built-in inspection slot at the base of the hanger to aid inspection from the ground.
- Top flange provides widest area in contact with masonry support allowing superior performance.
- Embossments on top flange, and holes, allow improved mortar keying.
- Flanges on hangers are much higher than traditional style, providing greatly enhanced resistance to joist rotation.
- Can be installed onto 'I' section or hollow section steel beams.

Applications

Options

- Return configuration provides additional support by wrapping around three sides of the block. Designate "return" and length of return dimensions when ordering.
- JHMI, JHMIR OR JHMIS HANGERS DO NOT SATISFY THE REQUIREMENTS FOR LATERAL RESTRAINT TYPE HANGERS UNLESS STRAPS ARE FITTED.
- Straddle configuration provides two hangers connected across top of support enabling exact alignment on both sides of supporting wall. Designate "straddle" and length of straddle dimensions when ordering.
- Other widths and heights available to order.

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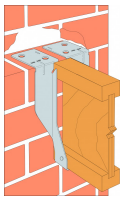
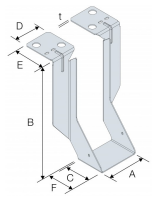
Technical Data

JHMI Enhanced Uplift

Model	Size Range		Joist Fasteners		Characteristic Capacity (kN)
	Width	Height	Qty	Specification	Enhanced Uplift
JHMI	38 - 47	140 - 400	6	3.75 x 30mm	3.16
JHMI	50 - 100	**140-400**	6	3.75 x 30mm	3.73

1) 3.75x30mm refers to 3.75 x 30mm square twist nails





Product Dimensions

References	Joist dimensions [mm]		Hanger Dimensions [mm]							Joist holes	Weight [kg]
	Width	Height	A	B	C	D	E	F	t	Ø4	
JHMI235/66	63	235	66	235	64	64	75	75	2	2	-
JHMI200/72	70	200	72	200	64	64	75	75	2	2	-
JHMI400/72	70	400	72	400	64	64	75	75	2	2	-
JHMI235/75	72	235	75	235	64	64	75	75	2	2	-
JHMI235/78	2x38	235	78	235	64	64	75	75	2	2	-
JHMI235/91	2x45 or 89-90	235	91	235	64	64	75	75	2	2	-
JHMI245/91	2x45 or 89-90	245	91	245	64	64	75	75	2	2	-

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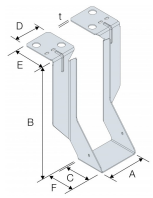
JHMI
Joist Hanger for Masonry: I-Joists



Product Dimensions - Metal Web Joists

References	Joist dimensions		Hanger Dimensions [mm]							Joist holes
	Width	Height	A	B	C	D	E	F	t	Ø4
JHMI114/40	-	-	40	114	64	64	75	75	2	2
JHMI140/40	-	-	40	140	64	64	75	75	2	2
JHMI184/40	-	-	40	184	64	64	75	75	2	2
JHMI350/40	-	-	40	350	64	64	75	75	2	2
JHMI184/47	-	-	47	184	64	64	75	75	2	2
JHMI235/50	-	-	50	235	64	64	75	75	2	2
JHMI350/50	-	-	50	350	64	64	75	75	2	2
JHMI240/53	-	-	53	240	64	64	75	75	2	2
JHMI300/53	-	-	53	300	64	64	75	75	2	2
JHMI350/53	-	-	53	350	64	64	75	75	2	2
JHMI400/53	-	-	53	400	64	64	75	75	2	2
JHMI235/61	-	-	61	235	64	64	75	75	2	2
JHMI245/61	-	-	61	240	64	64	75	75	2	2
JHMI235/66	-	-	66	235	64	64	75	75	2	2
JHMI350/66	-	-	66	350	64	64	75	75	2	2
JHMI400/66	-	-	66	400	64	64	75	75	2	2
JHMI245/70	-	-	70	245	64	64	75	75	2	2
JHMI350/70	-	-	70	350	64	64	75	75	2	2
JHMI400/70	-	-	70	400	64	64	75	75	2	2
JHMI200/72	-	-	72	200	64	64	75	75	2	2
JHMI350/72	-	-	72	350	64	64	75	75	2	2
JHMI400/72	-	-	72	400	64	64	75	75	2	2
JHMI235/75	-	-	75	235	64	64	75	75	2	2
JHMI114/78	-	-	78	114	64	64	75	75	2	2
JHMI140/78	-	-	78	140	64	64	75	75	2	2
JHMI184/78	-	-	78	184	64	64	75	75	2	2
JHMI235/78	-	-	78	235	64	64	75	75	2	2
JHMI350/78	-	-	78	350	64	64	75	75	2	2
JHMI184/91	-	-	91	184	64	64	75	75	2	2
JHMI235/91	-	-	91	235	64	64	75	75	2	2
JHMI245/91	-	-	91	245	64	64	75	75	2	2
JHMI350/96	-	-	96	350	64	64	75	75	2	2
JHMI400/96	-	-	96	400	64	64	75	75	2	2
JHMI	-	-	-	-	-	-	-	-	-	2
SPEC JHMSK	-	-	40-61	400-450	64	64	-	-	2.5	2

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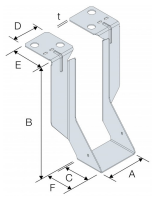
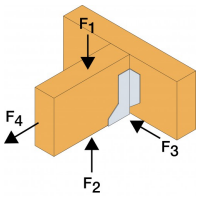
JHMI

Joist Hanger for Masonry: I-Joists



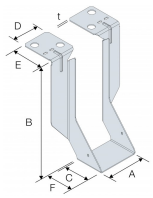


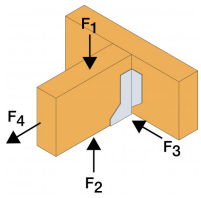
Product Capacities - Masonry

References	Joist Fasteners		Characteristic Capacity [kN]				Safe Working Loads			
			$R_{1,k}$			$R_{2,k}$	$R_{1,SWL}$			$R_{2,SWL,Short\ Term}$
	Qty	Type	2.8N/mm² Solid AAC	3.5N/mm² Solid LAC	7.0N/mm² Solid DAC		2.8N/mm² Solid AAC	3.5N/mm² Solid LAC	7.0N/mm² Solid DAC	
JHMI	2	3.75 x 30	10.5	12.8	20	1.8	5.2	6.4	10	1

Technical data sheet

JHMI
Joist Hanger for Masonry: I-Joists





Product Capacities - Masonry - Enhanced Uplift

References	Joist Fasteners		Characteristic Capacity [kN]				Safe Working Loads			
			$R_{1,k}$			$R_{2,k}$	$R_{1,SWL}$			$R_{2,SWL,Short\ Term}$
	Qty	Type	2.8N/mm² Solid AAC	3.5N/mm² Solid LAC	7.0N/mm² Solid DAC		2.8N/mm² Solid AAC	3.5N/mm² Solid LAC	7.0N/mm² Solid DAC	
JHMI114/40	6	3.75 x 30	10.5	12.8	20	3.1	5.2	6.4	10	-
JHMI140/40	6	3.75 x 30	10.5	12.8	20	3.1	5.2	6.4	10	-
JHMI184/40	6	3.75 x 30	10.5	12.8	20	3.1	5.2	6.4	10	-
JHMI350/40	6	3.75 x 30	10.5	12.8	20	3.1	5.2	6.4	10	-
JHMI184/47	6	3.75 x 30	10.5	12.8	20	3.1	5.2	6.4	10	-
JHMI235/50	6	3.75 x 30	10.5	12.8	20	3.1	5.2	6.4	10	-
JHMI350/50	6	3.75 x 30	10.5	12.8	20	3.1	5.2	6.4	10	-
JHMI240/53	6	3.75 x 30	10.5	12.8	20	3.1	5.2	6.4	10	-
JHMI300/53	6	3.75 x 30	10.5	12.8	20	3.1	5.2	6.4	10	-
JHMI350/53	6	3.75 x 30	10.5	12.8	20	3.1	5.2	6.4	10	-
JHMI400/53	6	3.75 x 30	10.5	12.8	20	3.1	5.2	6.4	10	-
JHMI235/61	6	3.75 x 30	10.5	12.8	20	3.1	5.2	6.4	10	-
JHMI245/61	6	3.75 x 30	10.5	12.8	20	3.1	5.2	6.4	10	-
JHMI235/66	6	3.75 x 30	10.5	12.8	20	3.1	5.2	6.4	10	-
JHMI350/66	6	3.75 x 30	10.5	12.8	20	3.1	5.2	6.4	10	-
JHMI400/66	6	3.75 x 30	10.5	12.8	20	3.1	5.2	6.4	10	-
JHMI245/70	6	3.75 x 30	10.5	12.8	20	3.1	5.2	6.4	10	-
JHMI350/70	6	3.75 x 30	10.5	12.8	20	3.1	5.2	6.4	10	-
JHMI400/70	6	3.75 x 30	10.5	12.8	20	3.1	5.2	6.4	10	-
JHMI200/72	6	3.75 x 30	10.5	12.8	20	3.1	5.2	6.4	10	-
JHMI350/72	6	3.75 x 30	10.5	12.8	20	3.1	5.2	6.4	10	-
JHMI400/72	6	3.75 x 30	10.5	12.8	20	3.1	5.2	6.4	10	-
JHMI235/75	6	3.75 x 30	10.5	12.8	20	3.1	5.2	6.4	10	-
JHMI114/78	6	3.75 x 30	10.5	12.8	20	3.1	5.2	6.4	10	-

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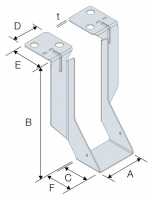
JHMI

Joist Hanger for Masonry: I-Joists

References	Joist Fasteners		Characteristic Capacity [kN]				Safe Working Loads			
			$R_{1,k}$			$R_{2,k}$	$R_{1,SWL}$			$R_{2,SWL,Short\ Term}$
	Qty	Type	2.8N/mm² Solid AAC	3.5N/mm² Solid LAC	7.0N/mm² Solid DAC		2.8N/mm² Solid AAC	3.5N/mm² Solid LAC	7.0N/mm² Solid DAC	
JHMI140/78	6	3.75 x 30	10.5	12.8	20	3.1	5.2	6.4	10	-
JHMI184/78	6	3.75 x 30	10.5	12.8	20	3.1	5.2	6.4	10	-
JHMI235/78	6	3.75 x 30	10.5	12.8	20	3.1	5.2	6.4	10	-
JHMI350/78	6	3.75 x 30	10.5	12.8	20	3.1	5.2	6.4	10	-
JHMI184/91	6	3.75 x 30	10.5	12.8	20	3.1	5.2	6.4	10	-
JHMI235/91	6	3.75 x 30	10.5	12.8	20	3.1	5.2	6.4	10	-
JHMI245/91	6	3.75 x 30	10.5	12.8	20	3.1	5.2	6.4	10	-
JHMI350/96	6	3.75 x 30	10.5	12.8	20	3.1	5.2	6.4	10	-
JHMI400/96	6	3.75 x 30	10.5	12.8	20	3.1	5.2	6.4	10	-
JHMI	-	-	10.5	12.8	20	3.1	5.2	6.4	10	-
SPEC JHMSK	-	-	-	-	-	-	-	-	-	-



Product Capacities - Masonry & Skewed

References	Joist Fasteners		Safe Working Loads			
			$R_{1,SWL}$			$R_{2,SWL,Short\ Term}$
	Qty	Type	2.8N/mm² Solid AAC	3.5N/mm² Solid LAC	7.0N/mm² Solid DAC	
SPEC JHMSK	4	N3.75x30	5	5.1	5.1	-

1. Maximum skew 45°

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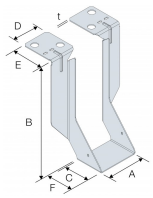

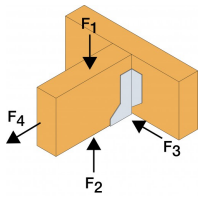

Product Capacities - Shot Fired to Steel Girder

References	Number of Fasteners				Safe Working Loads
	Header		Joist		
	Qty	Type	Qty	Type	$R_{1,SWL,Long\ Term}$
JHMI	4	Shot Fire Pns*	2	N3.75x30	5.1

1.The above Safe Working Loads are based upon product tests using four No. Hilti 12mm X-EDNI steel pins fired through holes provided in the top flange of the hangers onto 4mm thick steel plate. Other pins may be used provided similar structural performance is verified by the pin manufacturer. Pin Head size must be sufficient to prevent pull through during loading.
2.The designer must ensure that the steel support member will support the imposed loads.
3.Install shot-fired pins in accordance with manufacturer's instructions.

Product Performance - Mechanically Fixed to Steel Beam

References	Number of Fasteners				Safe Working Loads [kN]	Characteristic Load [kN]
	Header		Joist			
	Qty	Type	Qty	Type	$R_{1,\ SWL,\ Long\ Term}$	$R_{1,k}$
JHMI	2	XLQ114B1224	2	N3.75x30	10.8	19

- The designer / engineer must ensure that the steel support can take the imposed loads
- Suitable for Steel I-beams and Hollow Sections upto 12.5mm thick
- Timber is required in the web of steel I-beam when the hanger depth is less than the steel depth. Timber must finish flush with outer edges of steel I-beam

Fastener Reference	Length [mm]	Hex Head [in]	Washer Diameter [mm]	Shank Diameter [mm]	Suitable Material Thickness [mm]	Recommended Install Speed [RPM]
XLQ114B1224	32	5/16"	16	5.5	3.5 - 12.5	1400

Installation

Ínstallation

Standard Masonry Installation

- Use all specified fasteners. See table.
- Hanger must be installed so that the back flange is tight against the face of the supporting member.
- MINIMUM 3 COURSES OF SOLID BLOCK (675MM MASONRY) REQUIRED ABOVE HANGER, WITH MORTAR FULLY CURED, BEFORE APPLYING LOAD.
- Do not stack blocks or heavy loads on the joists during construction unless the joists have additional support to take the full load of the blocks, vertically and horizontally.

Fixed to Steel Beams

- The JHMI range can be mechanically fixed to steel beams of thicknesses up to 12.5mm
- Timber is required in the web of the 'I' section steel beam when the hanger depth is less than the steel depth
- Timber must be flush with the outer edges of the 'I' section steel beam
- The shot-fired pins must be installed by a qualified person in accordance with the manufacturer's installation requirements.