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.

Technical Data

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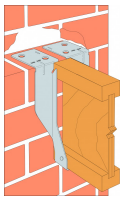

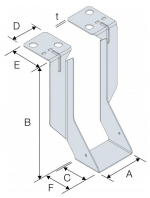

Product Dimensions

References	Joist dimensions [mm]		Hanger Dimensions [mm]							Joist holes
	Width	Height	A	B	C	D	E	F	t	Ø4
JHMI195/40	38	195	40	195	64	64	75	75	2	2
JHMI200/40	38	200	40	200	64	64	75	75	2	2
JHMI220/40	38	220	40	220	64	64	75	75	2	2
JHMI225/40	38	220	40	225	64	64	75	75	2	2
JHMI235/40	38	235	40	235	64	64	75	75	2	2
JHMI240/40	38	240	40	240	64	64	75	75	2	2
JHMI245/40	38	245	40	245	64	64	75	75	2	2
JHMI300/40	38	300	40	300	64	64	75	75	2	2
JHMI360/40	38	360	40	360	64	64	75	75	2	2
JHMI400/40	38	400	40	400	64	64	75	75	2	2
JHMI145/47	45	145	47	145	64	64	75	75	2	2
JHMI195/47	45	195	47	195	64	64	75	75	2	2
JHMI200/47	45	200	47	200	64	64	75	75	2	2
JHMI220/47	45	220	47	220	64	64	75	75	2	2
JHMI225/47	45	220	47	225	64	64	75	75	2	2
JHMI235/47	45	235	47	235	64	64	75	75	2	2
JHMI240/47	45	240	47	240	64	64	75	75	2	2
JHMI245/47	45	245	47	245	64	64	75	75	2	2
JHMI300/47	45	300	47	300	64	64	75	75	2	2
JHMI350/47	45	350	47	350	64	64	75	75	2	2
JHMI360/47	45	360	47	360	64	64	75	75	2	2
JHMI400/47	45	400	47	400	64	64	75	75	2	2
JHMI220/50	47	220	50	220	64	64	75	75	2	2
JHMI225/50	47	220	50	225	64	64	75	75	2	2
JHMI240/50	47	240	50	240	64	64	75	75	2	2
JHMI300/50	47	300	50	300	64	64	75	75	2	2
JHMI220/56	53	220	56	220	64	64	75	75	2	2
JHMI225/56	53	220	56	225	64	64	75	75	2	2
JHMI240/56	53	240	56	240	64	64	75	75	2	2
JHMI300/56	53	300	56	300	64	64	75	75	2	2
JHMI200/61	58	200	61	200	64	64	75	75	2	2
JHMI360/61	58	360	61	360	64	64	75	75	2	2
JHMI400/61	58	400	61	400	64	64	75	75	2	2
JHMI200/63	60	200	63	200	64	64	75	75	2	2
JHMI220/63	60	220	63	220	64	64	75	75	2	2
JHMI225/63	60	220	63	225	64	64	75	75	2	2
JHMI240/63	60	240	63	240	64	64	75	75	2	2
JHMI300/63	60	300	63	300	64	64	75	75	2	2
JHMI350/63	60	350	63	350	64	64	75	75	2	2
JHMI360/63	60	360	63	360	64	64	75	75	2	2
JHMI400/63	60	400	63	400	64	64	75	75	2	2
JHMI220/66	63	220	66	220	64	64	75	75	2	2
JHMI225/66	63	220	66	225	64	64	75	75	2	2
JHMI235/66	63	235	66	235	64	64	75	75	2	2

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References	Joist dimensions [mm]		Hanger Dimensions [mm]							Joist holes
	Width	Height	A	B	C	D	E	F	t	Ø4
JHMI240/66	63	240	66	240	64	64	75	75	2	2
JHMI245/66	63	245	66	245	64	64	75	75	2	2
JHMI300/66	63	300	66	300	64	64	75	75	2	2
JHMI200/72	70	200	72	200	64	64	75	75	2	2
JHMI220/72	70	220	72	220	64	64	75	75	2	2
JHMI225/72	70	220	72	225	64	64	75	75	2	2
JHMI240/72	70	240	72	240	64	64	75	75	2	2
JHMI300/72	70	300	72	300	64	64	75	75	2	2
JHMI360/72	70	360	72	360	64	64	75	75	2	2
JHMI400/72	70	400	72	400	64	64	75	75	2	2
JHMI195/75	72	195	75	195	64	64	75	75	2	2
JHMI200/75	72	200	75	200	64	64	75	75	2	2
JHMI220/75	72	220	75	220	64	64	75	75	2	2
JHMI225/75	72	220	75	225	64	64	75	75	2	2
JHMI235/75	72	235	75	235	64	64	75	75	2	2
JHMI240/75	72	240	75	240	64	64	75	75	2	2
JHMI245/75	72	245	75	245	64	64	75	75	2	2
JHMI253/75	72	253	75	253	64	64	75	75	2	2
JHMI300/75	72	300	75	300	64	64	75	75	2	2
JHMI304/75	72	304	75	304	64	64	75	75	2	2
JHMI350/75	72	350	75	350	64	64	75	75	2	2
JHMI360/75	72	360	75	360	64	64	75	75	2	2
JHMI400/75	72	400	75	400	64	64	75	75	2	2
JHMI417/75	72	417	75	417	64	64	75	75	2	2
JHMI421/75	72	421	75	421	64	64	75	75	2	2
JHMI195/78	2x38	195	78	195	64	64	75	75	2	2
JHMI200/78	2x38	200	78	200	64	64	75	75	2	2
JHMI220/78	2x38	220	78	220	64	64	75	75	2	2
JHMI225/78	2x38	220	78	225	64	64	75	75	2	2
JHMI235/78	2x38	235	78	235	64	64	75	75	2	2
JHMI240/78	2x38	240	78	240	64	64	75	75	2	2
JHMI245/78	2x38	245	78	245	64	64	75	75	2	2
JHMI300/78	2x38	300	78	300	64	64	75	75	2	2
JHMI360/78	2x38	360	78	360	64	64	75	75	2	2
JHMI400/78	2x38	400	78	400	64	64	75	75	2	2
JHMI195/91	2x45 or 89-90	195	91	195	64	64	75	75	2	2
JHMI200/91	2x45 or 89-90	200	91	200	64	64	75	75	2	2
JHMI220/91	2x45 or 89-90	220	91	220	64	64	75	75	2	2
JHMI225/91	2x45 or 89-90	220	91	225	64	64	75	75	2	2
JHMI235/91	2x45 or 89-90	235	91	235	64	64	75	75	2	2
JHMI240/91	2x45 or 89-90	240	91	240	64	64	75	75	2	2
JHMI245/91	2x45 or 89-90	245	91	245	64	64	75	75	2	2
JHMI253/91	2x45 or 89-90	253	91	253	64	64	75	75	2	2
JHMI300/91	2x45 or 89-90	300	91	300	64	64	75	75	2	2
JHMI350/91	2x45 or 89-90	350	91	350	64	64	75	75	2	2
JHMI360/91	2x45 or 89-90	360	91	360	64	64	75	75	2	2
JHMI400/91	2x45 or 89-90	400	91	400	64	64	75	75	2	2
JHMI220/96	2x47	220	96	220	64	64	75	75	2	2
JHMI225/96	2x47	220	96	225	64	64	75	75	2	2
JHMI240/96	2x47	240	96	240	64	64	75	75	2	2

Technical data sheet

JHMI

Joist Hanger for Masonry: I-Joists

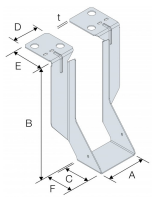
References	Joist dimensions [mm]		Hanger Dimensions [mm]							Joist holes
	Width	Height	A	B	C	D	E	F	t	Ø4
JHMI300/96	2x47	300	96	300	64	64	75	75	2	2
JHMI195/99	96-97	195	99	195	64	64	75	75	2	2
JHMI200/99	96-97	200	99	200	64	64	75	75	2	2
JHMI220/99	96-97	220	99	220	64	64	75	75	2	2
JHMI225/99	96-97	220	99	225	64	64	75	75	2	2
JHMI235/99	96-97	235	99	235	64	64	75	75	2	2
JHMI240/99	96-97	240	99	240	64	64	75	75	2	2
JHMI245/99	96-97	245	99	245	64	64	75	75	2	2
JHMI253/99	96-97	253	99	253	64	64	75	75	2	2
JHMI300/99	96-97	300	99	300	64	64	75	75	2	2
JHMI304/99	96-97	304	99	304	64	64	75	75	2	2
JHMI350/99	96-97	350	99	350	64	64	75	75	2	2
JHMI360/99	96-97	360	99	360	64	64	75	75	2	2
JHMI373/99	96-97	373	99	373	64	64	75	75	2	2
JHMI400/99	96-97	400	99	400	64	64	75	75	2	2
JHMI417/99	96-97	417	99	417	64	64	75	75	2	2
JHMI421/99	96-97	421	99	421	64	64	75	75	2	2
JHMI220/109	2x53	220	109	220	64	64	75	75	2	2
JHMI225/109	2x53	220	109	225	64	64	75	75	2	2
JHMI240/109	2x53	240	109	240	64	64	75	75	2	2
JHMI300/109	2x53	300	109	300	64	64	75	75	2	2
JHMI200/122	2x60	200	122	200	64	64	75	75	2	2
JHMI220/122	2x60	220	122	220	64	64	75	75	2	2
JHMI225/122	2x60	220	122	225	64	64	75	75	2	2
JHMI240/122	2x60	240	122	240	64	64	75	75	2	2
JHMI300/122	2x60	300	122	300	64	64	75	75	2	2
JHMI350/122	2x60	350	122	350	64	64	75	75	2	2
JHMI360/122	2x60	360	122	360	64	64	75	75	2	2
JHMI400/122	2x60	400	122	400	64	64	75	75	2	2
JHMI195/125	125	195	125	195	64	64	75	75	2	2
JHMI200/125	125	200	125	200	64	64	75	75	2	2
JHMI220/125	125	220	125	220	64	64	75	75	2	2
JHMI225/125	125	225	125	225	64	64	75	75	2	2
JHMI253/125	125	253	125	253	64	64	75	75	2	2
JHMI304/125	125	304	125	304	64	64	75	75	2	2
JHMI373/125	125	373	125	373	64	64	75	75	2	2
JHMI417/125	125	417	125	417	64	64	75	75	2	2
JHMI421/125	125	421	125	421	64	64	75	75	2	2
JHMI220/128	2x63	220	128	220	64	64	75	75	2	2
JHMI225/128	2x63	220	128	225	64	64	75	75	2	2
JHMI235/128	2x63	235	128	235	64	64	75	75	2	2
JHMI240/128	2x63	240	128	240	64	64	75	75	2	2
JHMI245/128	2x63	245	128	245	64	64	75	75	2	2
JHMI300/128	2x63	300	128	300	64	64	75	75	2	2
JHMI200/142	2x70 or 140	200	142	200	64	64	75	75	2	2
JHMI220/142	2x70 or 140	220	142	220	64	64	75	75	2	2
JHMI225/142	2x70 or 140	220	142	225	64	64	75	75	2	2
JHMI240/142	2x70 or 140	240	142	240	64	64	75	75	2	2
JHMI300/142	2x70 or 140	300	142	300	64	64	75	75	2	2
JHMI360/142	2x70 or 140	360	142	360	64	64	75	75	2	2

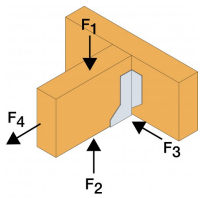
Technical data sheet

JHMI

Joist Hanger for Masonry: I-Joists

References	Joist dimensions [mm]		Hanger Dimensions [mm]							Joist holes
	Width	Height	A	B	C	D	E	F	t	Ø4
JHMI400/142	2x70 or 140	400	142	400	64	64	75	75	2	2
JHMI195/146	2x72	195	146	195	64	64	75	75	2	2
JHMI200/146	2x73	200	146	200	64	64	75	75	2	2
JHMI220/146	2x74	220	146	220	64	64	75	75	2	2
JHMI225/146	2x75	225	146	225	64	64	75	75	2	2
JHMI235/146	2x76	235	146	235	64	64	75	75	2	2
JHMI240/146	2x77	240	146	235	64	64	75	75	2	2
JHMI245/146	2x78	245	146	245	64	64	75	75	2	2
JHMI300/146	2x80	300	146	300	64	64	75	75	2	2
JHMI350/146	2x82	350	146	350	64	64	75	75	2	2
JHMI360/146	2x84	360	146	360	64	64	75	75	2	2
JHMI400/146	2x86	400	146	400	64	64	75	75	2	2
JHMI195/150	2x75 or 147	195	150	195	64	64	75	75	2	2
JHMI200/150	2x75 or 147	200	150	195	64	64	75	75	2	2
JHMI220/150	2x75 or 147	220	150	220	64	64	75	75	2	2
JHMI225/150	2x75 or 147	225	150	225	64	64	75	75	2	2
JHMI235/150	2x75 or 147	235	150	235	64	64	75	75	2	2
JHMI240/150	2x75 or 147	240	150	240	64	64	75	75	2	2
JHMI245/150	2x75 or 147	245	150	245	64	64	75	75	2	2
JHMI253/150	2x75 or 147	253	150	253	64	64	75	75	2	2
JHMI300/150	2x75 or 147	300	150	300	64	64	75	75	2	2
JHMI304/150	2x75 or 147	304	150	304	64	64	75	75	2	2
JHMI360/150	2x75 or 147	360	150	360	64	64	75	75	2	2
JHMI373/150	2x75 or 147	373	150	373	64	64	75	75	2	2
JHMI400/150	2x75 or 147	400	150	400	64	64	75	75	2	2
JHMI417/150	2x75 or 147	417	150	417	64	64	75	75	2	2
JHMI421/150	2x75 or 147	421	150	421	64	64	75	75	2	2





Product Capacities - Masonry

References	Joist Fasteners		Characteristic Capacity [kN]				Safe Working Loads			
	Qty	Type	$R_{1,k}$			$R_{2,k}$	$R_{1,SWL}$			$R_{2,SWL,Short\ Term}$
			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

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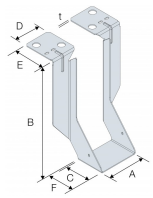
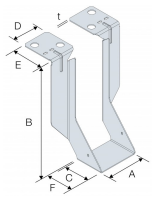
Joist Hanger for Masonry: I-Joists

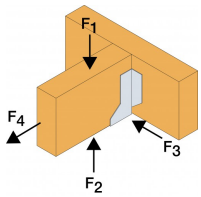


Product Capacities - Masonry & Skewed

References	Joist Fasteners		Safe Working Loads			
	Qty	Type	$R_{1,SWL}$			$R_{2,SWL,Short\ Term}$
			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°





Product Capacities - Shot Fired to Steel Girder

References	Number of Fasteners				Safe Working Loads
	Header		Joist		$R_{1,SWL,Long\ Term}$
	Qty	Type	Qty	Type	
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		$R_{1,\ SWL,\ Long\ Term}$	$R_{1,k}$
	Qty	Type	Qty	Type		
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

Installation

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.

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