Technical Sheet

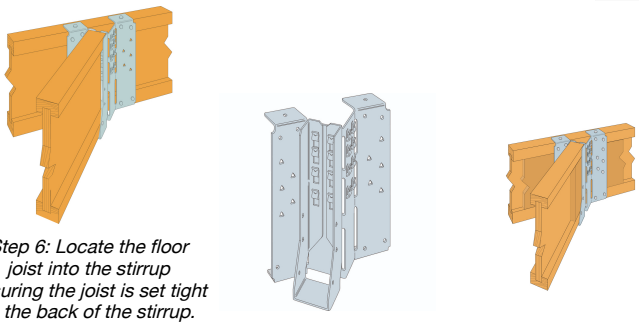
ITBS

Backer Free I-Joist Hanger with Adjustable Skew

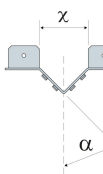
The ITBS solves the problem of skew hangers in I-joist to I-joist connections. It can be handed left or right on site by the carpenter, removing confusion when the floor is built opposite to the drawing. The ITBS is fully adjustable from 5° to 67.5° skew, reducing the need for 'special' skew hangers.

- *Finally, the ITBS is a backer free hanger removing the need for backer blocks in standard installation. Overall, the revolutionary ITBS reduces build cost, confusion, speed of installation and stock holding.*
- *Standard 45° skew, with site adjustable skew from 5° to 67.5°.*
- *Non-handed hanger, can be left or right skew-adjusted on site, removing any handing confusion and reducing stock holding.*
- *Eliminates the need for backer blocks when supported from an I-joist header.*
- *Open top flange improves ease-of-installation.*
- *Can be used on I-joist or solid joist headers.*
- *Optional nail holes for additional download capacity.*





Step 6: Locate the floor joist into the stirrup ensuring the joist is set tight to the back of the stirrup. The joist should be secured into the stirrup with all specified nails on the open face of the stirrup.



Features

Material

- Pre-galvanised mild steel

Benefits

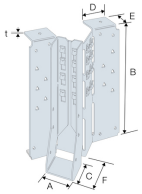
- Characteristic load capacities
- Strong and durable connections
- Optimal hole arrangement
- Easy installation
- Infinitely adjustable angle in the horizontal plane from 5° to 67.5° for left or right connections.

Technical Sheet

ITBS

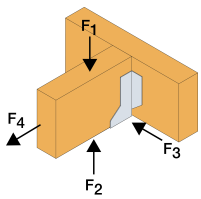
Backer Free I-Joist Hanger with Adjustable Skew

Technical Data



Product Dimensions

Reference	Connector Dimensions													
	Timber size[mm]	Product Dimensions[mm]							Header holes			Joist holes		Other
	Width Min[mm]	A[mm]	B[mm]	C[mm]	D[mm]	E[mm]	F[mm]	t[mm]	Triangular	Round Ø4.1	Obround Ø6x4	Tri[mm]	Obround Ø6x4[mm]	Weight[kg]
ITBS195/40	38	40	195	64	55	37	75	1.5	10	10	2	4	2	-
ITBS225/40	38	40	225	64	55	37	75	1.5	10	10	2	4	2	-
ITBS245/40	38	40	245	64	55	37	75	1.5	10	10	2	4	2	0.1
ITBS235/47	45	47	235	64	55	37	75	1.5	10	10	2	4	2	-
ITBS200/53	-	53	200	64	55	37	75	1.5	10	10	2	4	2	-
ITBS301/53	-	53	301	64	55	37	75	1.5	10	10	2	4	2	-
ITBS195/61	58	61	195	64	55	37	75	1.5	10	10	2	4	2	-
ITBS200/61	58	61	200	64	55	37	75	1.5	10	10	2	4	2	-
ITBS245/61	58	61	245	64	55	37	75	1.5	10	10	2	4	2	-
ITBS225/66	63	66	225	64	55	37	75	1.5	10	10	2	4	2	-
ITBS235/66	63	66	235	64	55	37	75	1.5	10	10	2	4	2	-
ITBS240/66	63	66	240	64	55	37	75	1.5	10	10	2	4	2	-
ITBS300/66	63	66	300	64	55	37	75	1.5	10	10	2	4	2	-
ITBS301/66	63	66	301	64	55	37	75	1.5	10	10	2	4	2	-
ITBS200/72	69	72	200	64	55	37	75	1.5	10	10	2	4	2	-
ITBS220/72	69	72	220	64	55	37	75	1.5	10	10	2	4	2	-
ITBS195/78	75, 2x38 or 2x39	78	195	64	55	37	75	1.5	10	10	2	4	2	-
ITBS220/78	75, 2x38 or 2x39	78	220	64	55	37	75	1.5	10	10	2	4	2	-
ITBS225/78	75, 2x38 or 2x39	78	225	64	55	37	75	1.5	10	10	2	4	2	-
ITBS301/78	75, 2x38 or 2x39	78	301	64	55	37	75	1.5	10	10	2	4	2	-
ITBS225/91	89, 90 or 2x45	91	225	64	55	37	75	1.5	10	10	2	4	2	-
ITBS301/96	2x47	96	301	64	55	37	75	1.5	10	10	2	4	2	1.6



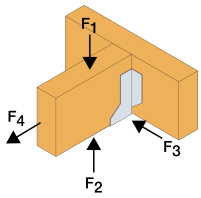
Product Capacities - I-Joists - Standard Installation

Reference	Hanger capacity									
	Product capacities - I-Joists - Standard Installation									
	Number of Fasteners				Safe Working Loads[kN]			Characteristic Capacities[kN]		
	Header			Joist	$R_{2,sWI,short\ term}$	$R_{1,sWI,long\ term}$		$R_{2,k}$	$R_{1,k}$	
	Face	Top	Bottom	Qty	N3.75x30	C24 Solid Sawn Flanges 45 mm	LVL Flanges ≥ 35 mm	N3.75x30	LVL Flanges ≥ 35 mm	C24 Solid Sawn Flanges 45 mm
	Qty	Qty	Qty			N3.75x30	N3.75x30		N3.75x30	N3.75x30
ITBS	8.0	2.0	2.0	1.0	0.7	2.1	3.7	1.5	10.2	7.4

Technical Sheet

ITBS

Backer Free I-Joist Hanger with Adjustable Skew



Product Capacities - I-Joists - Enhanced Installation

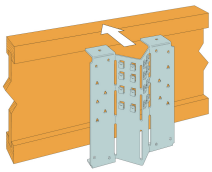
Reference	Hanger capacity									
	Product Capacities - I-Joists - Enhanced Installation									
	Number of Fasteners				Safe Working Loads[kN]			Characteristic Capacities[kN]		
	Joist	Header			$R_{1,s}W_{I,long\ term}$		$R_{2,s}W_{I,short\ term}$	$R_{1,k}$		$R_{2,k}$
	Qty	Face	Top	Bottom	LVL Flanges ≥ 35 mm	C24 Solid Sawn Flanges 45 mm	N3.75x30	LVL Flanges ≥ 35 mm	C24 Solid Sawn Flanges 45 mm	N3.75x30
		Qty	Qty	Qty	N3.75x30	N3.75x30		N3.75x30	N3.75x30	
ITBS	3.0	18.0	2.0	2.0	5.5	6.3	0.7	15	12.8	1.5

NOTE: Enhanced installation onto I-joist headers require the header to have back blocks installed and web stiffeners installed on a carried I-joist. Backer blocks and web stiffeners to be installed in accordajmnce with I-joist manufacturer's instructions

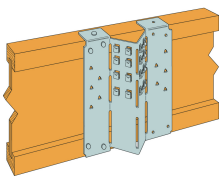
Installation

Installation

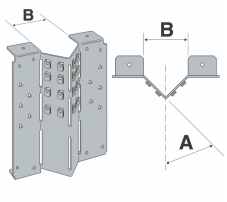
Standard Installation Sequence
Step 1:
Position the back plate onto the header in the required position. Ensure backer blocks are fitted if enhanced performance is required. Secure the acute side of the backplate (inside angle) with the specified nails.
Step 2:
Adjust the angle of the backplate (if different from 45°) to suit the required angle. Use either an adjustable set square or the guide tables shown below: Bend one time only. Secure the obtuse side of the back plate onto the header with all the specified nails, ensuring the face of the back plate is tight against the header.
Step 3:
Offer the stirrup to the back plate ensuring it is located on the correct side (which can be either left or right hand side). Once all of the hooks (on the back plate) are clearly through the apertures (on the stirrup) slide in a downward direction ensuring all hooks engage onto the stirrup and click into position.
Locate the floor joist into the stirrup ensuring the joist is set tight to the back. The joist should be secured with all specified nails on the open face of the stirrup.



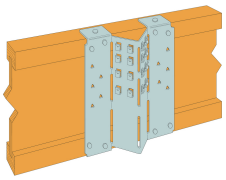
Step 1: Position the back plate onto the header in the required position. Ensure backer blocks are fitted if enhanced performance is required.



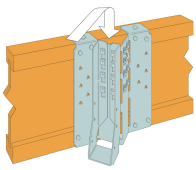
Step 2: Secure the acute side of the backplate (inside angle) with the specified nails.



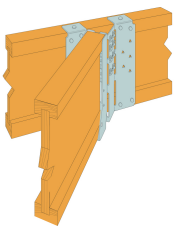
Step 3: Adjust the angle of the backplate (if different from 45°) to suit the required angle. Use either adjustable set square or the guide tables shown below: Bend one time only.



Step 4: Secure the obtuse side of the back plate onto the header with all the specified nails, ensuring the face of the back plate is tight against the header.



Step 5: Offer the stirrup to the back plate ensuring it is located on the correct side (which can be either left or right hand side). Once all of the hooks (on the back plate) are clearly through the apertures (on the stirrup) slide in a downward direction ensuring all hooks engage onto the stirrup and click into position.



Step 6: Locate the floor joist into the stirrup ensuring the joist is set tight to the back of the stirrup. The joist should be secured into the stirrup with all specified nails on the open face of the stirrup.

Copyright by Simpson Strong-Tie®