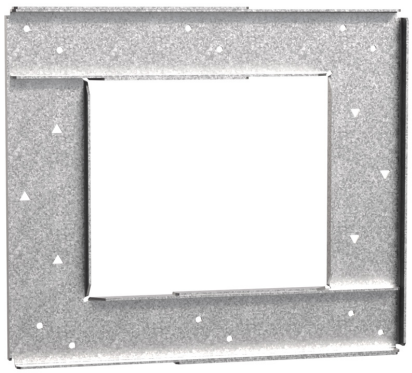
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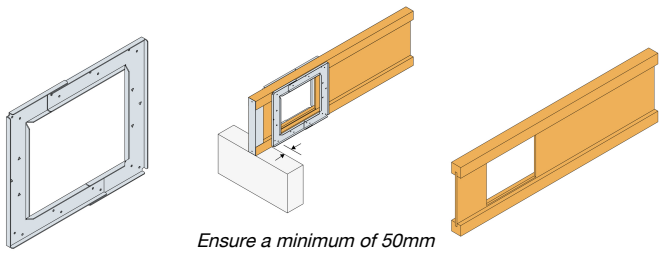
IHS
I-Joist Hole Support

The IHS is designed to strengthen I-joists when holes are required to be cut in locations not normally permitted.

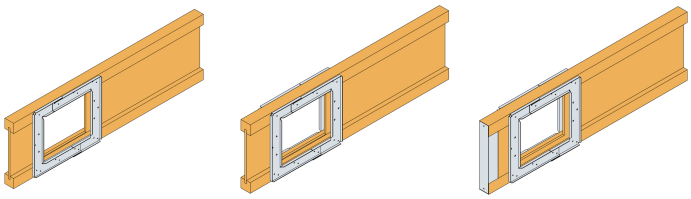
- *Allows holes to be cut 50mm from bearing point, which allows services to run close to external walls.*
- *Variable hole sizes from 150mm to a maximum width of 250mm.*
- *Supplied as 2 sets of 2 interlocking plates (1 set per side of I-joist) which always allows the IHS to be fitted, even when services are already in-situ.*
- *Helps to eliminate expensive and time consuming joist trimming for SVP (soil vent pipe) runs.*
- *Can be used on single and double ply I-joists.*

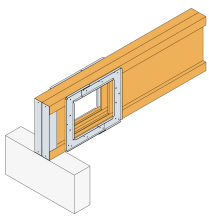






Ensure a minimum of 50mm from edge of cut hole to the bearing face.





Features

Materials

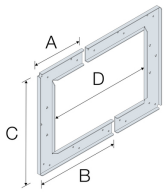
- Pre-galvanised mild steel

Technical Sheet

IHS
I-Joist Hole Support

Technical Data

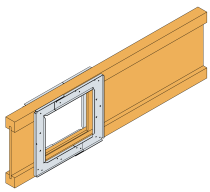
IHS Product Dimensions

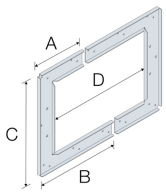


Reference	Hanger capacity			
	Number of Fasteners			
	150 mm Bracket Opening		250mm Bracket Opening	
	Specification	Quantity	Quantity	Specification
IHS240	3.75x30mm	24.0	32.0	3.75x30mm
IHS300	3.75x30mm	24.0	32.0	3.75x30mm

1) Use 3.75x30mm Square Twist Nails
2) Number of fasteners is per hole in joist

Dimensions Br46





Reference	Connector Dimensions
	Other
	NOBB no.
IHS240	-
IHS300	-
IHS350	-

IHS Characteristc Performance : Boise I-Joist - 60mm

Reference	Hanger capacity						
	Joist Type	Joist Height	Max. allowable hole size with IHS (d x w)	Shear Capacity at Location of IHS (Boise I-Joist - 60mm)			
	Joist Type (Boise I-Joist - 60mm)	Joist Height	Maximum Allowable Rectangular Hole Size with IHS (d x w in mm)	Characteristic Capacities		Permissible loads (Intermediate Floor Joist Applications)	
				$V_{k,hole}$ (IHS Installed)		V_{hole} (IHS Installed)	
				1 ply	Double Ply	1 ply	Double Ply
IHS240	BCI60	241	150 x 250	6.76	9.83	2.51	3.65
IHS300	BCI60	302	200 x 250	8.24	11.98	3.06	4.45
IHS350	-	-	-	-	-	-	-

Technical Sheet

IHS
I-Joist Hole Support

SIMPSON Strong-Tie

IHS Performance: Boise (BCI90) I-Joist

Reference	Hanger capacity						
	Joist Type	Joist Height	Max. allowable hole size with IHS (d x w)	Shear Capacity at Location of IHS (Boise I-Joist - 60mm)			
	Joist Type (Boise (BCI90) I-Joist)	Joist Height	Maximum Allowable Rectangular Hole Size with IHS (d x w in mm)	Characteristic Capacities		Permissible loads (Intermediate Floor Joist Applications)	
				$V_{k,hole}$ (IHS Installed)		V_{hole} (IHS Installed)	
				1 ply	Double Ply	1 ply	Double Ply
IHS240	BCI90	241	150 x 250	6.76	9.83	2.51	3.65
IHS300	BCI90	302	200 x 250	8.24	11.98	3.06	4.45
IHS350	-	-	-	-	-	-	-

IHS Performance: Boise (BCI4500) I-Joist

Reference	Hanger capacity						
	Joist Type	Joist Height	Max. allowable hole size with IHS (d x w)	Shear Capacity at Location of IHS (Boise (BCI4500) I-Joist)[kN]			
	Joist Type (Boise (BCI4500) I-Joist)	Joist Height	Maximum Allowable Rectangular Hole Size with IHS (d x w in mm)	Permissible loads (Intermediate Floor Joist Applications)		Characteristic Capacities	
				V_{hole} (IHS Installed)		$V_{k,hole}$ (IHS Installed)	
				1 ply	Double Ply	1 ply	Double Ply
IHS240	BCI4500	241	150 x 250	1.77	2.22	4.78	5.97
IHS300	BCI4500	302	200 x 250	2.17	2.71	5.85	7.31
IHS350	-	-	-	-	-	-	-

IHS Performance: Boise (BCI6000) I-Joist

Reference	Hanger capacity						
	Joist Type	Joist Height	Max. allowable hole size with IHS (d x w)	Shear Capacity at Location of IHS (Boise (BCI6000) I-Joist)			
	Joist Type (Boise (BCI6000) I-Joist)	Joist Height	Maximum Allowable Rectangular Hole Size with IHS (d x w in mm)	Characteristic Capacities		Permissible loads (Intermediate Floor Joist Applications)[kN]	
				$V_{k,hole}$ (IHS Installed)		V_{hole} (IHS Installed)	
				1 ply	Double Ply	1 ply	Double Ply
IHS240	BCI6000	241	150 x 250	4.78	5.97	1.77	2.22
IHS300	BCI6000	302	200 x 250	5.85	7.31	2.17	2.71
IHS350	-	-	-	-	-	-	-

Technical Sheet

IHS
I-Joist Hole Support

SIMPSON Strong-Tie

IHS Performance: James Jones (JJI A+) I-Joist

Reference	Hanger capacity						
	Joist Type	Joist Height	Max. allowable hole size with IHS (d x w)	Shear Capacity at Location of IHS (James Jones (JJI A+) I-Joist)[kN]			
	Joist Type (James Jones (JJI A+) I-Joist)	Joist Height (JJI-Joist)[mm]	Max. allowable hole size with IHS (d x w) (JJI-Joist)	Characteristic Capacities		Permissible loads (Intermediate Floor Joist Applications)	
				$V_{k,hole}$ (IHS Installed)		V_{hole} (IHS Installed)	
				1 ply	Double Ply	1 ply	Double Ply
IHS240	JJI-Joist A+ (47mm)	245	150 x 250	7.25	9.66	2.97	3.96
IHS300	JJI-Joist A+ (47mm)	300	200 x 250	8.32	11.09	3.41	4.55

IHS Performance: James Jones (JJI B+) I-Joist

Reference	Hanger capacity						
	Joist Type	Joist Height	Max. allowable hole size with IHS (d x w)	Shear Capacity at Location of IHS (James Jones (JJI B+) I-Joist)[kN]			
	Joist Type (James Jones (JJI B+) I-Joist)	Joist Height (JJI-Joist)[mm]	Max. allowable hole size with IHS (d x w) (JJI-Joist)	Permissible loads (Intermediate Floor Joist Applications)		Characteristic Capacities	
				V_{hole} (IHS Installed)		$V_{k,hole}$ (IHS Installed)	
				1 ply	Double Ply	1 ply	Double Ply
IHS240	JJI-Joist B+ (63 mm)	245	150 x 250	3.25	4.33	7.91	10.55
IHS300	JJI-Joist B+ (63 mm)	300	200 x 250	3.67	4.89	8.95	11.93

IHS Performance: James Jones (JJI C) I-Joist

Reference	Hanger capacity						
	Joist Type	Joist Height	Max. allowable hole size with IHS (d x w)	Shear Capacity at Location of IHS (James Jones (JJI C) I-Joist)[kN]			
	Joist Type (James Jones (JJI C) I-Joist)	Joist Height (JJI-Joist)[mm]	Max. allowable hole size with IHS (d x w) (JJI-Joist)	Permissible loads (Intermediate Floor Joist Applications)		Characteristic Capacities	
				V_{hole} (IHS Installed)		$V_{k,hole}$ (IHS Installed)	
				1 ply	Double Ply	1 ply	Double Ply
IHS240	JJI-Joist C (72 mm)	245	150 x 250	3.4	4.53	8.28	11.04
IHS300	JJI-Joist C (72 mm)	300	200 x 250	3.81	5.08	9.29	12.39

Technical Sheet

IHS
I-Joist Hole Support

SIMPSON Strong-Tie

IHS Performance: James Jones (JJI D) I-Joist

Reference	Hanger capacity						
	Joist Type	Joist Height	Max. allowable hole size with IHS (d x w)	Shear Capacity at Location of IHS (James Jones (JJI D) I-Joist)[kN]			
	Joist Type (James Jones (JJI D) I-Joist)	Joist Height (JJI-Joist)[mm]	Max. allowable hole size with IHS (d x w) (JJI-Joist)	Characteristic Capacities		Permissible loads (Intermediate Floor Joist Applications)	
				$V_{k,hole}$ (IHS Installed)		V_{hole} (IHS Installed)	
				1 ply	Double Ply	1 ply	Double Ply
IHS240	JJI-Joist D (97 mm)	245	150 x 250	9.24	12.32	3.79	5.05
IHS300	JJI-Joist D (97 mm)	300	200 x 250	10.24	13.66	4.2	5.6

IHS Performance: LP Building Products(LPI20Plus 63mm) I-Joist

Reference	Hanger capacity						
	Joist Type	Joist Height	Max. allowable hole size with IHS (d x w)	Shear Capacity at Location of IHS (LPI20Plus I-Joist)[kN]			
	Joist Type (LPI20Plus I-Joist)	Joist Height (LPI20Plus I-Joist)[mm]	Max. allowable hole size with IHS (d x w) (LPI20Plus I-Joist)	Permissible loads (Intermediate Floor Joist Applications)		Characteristic Capacities	
				V_{hole} (IHS Installed)		$V_{k,hole}$ (IHS Installed)	
				1 ply	Double Ply	1 ply	Double Ply
IHS240	-	-	-	-	-	-	-
IHS300	-	-	-	-	-	-	-
IHS350	-	-	-	-	-	-	-

IHS Performance: Masonite H (47mm Flange) I-Joist

Reference	Hanger capacity						
	Joist Type	Joist Height	Max. allowable hole size with IHS (d x w)	Shear Capacity at Location of IHS (Masonite)[kN]			
	Joist Type (Masonite H)	Joist Height (Masonite)[mm]	Max. allowable hole size with IHS (d x w) (Masonite)[mm]	Permissible loads (Intermediate Floor Joist Applications)		Characteristic Capacities	
				V_{hole} (IHS Installed)		$V_{k,hole}$ (IHS Installed)	
				1 Ply	Double Ply	1 Ply	Double Ply
IHS240	H	240	140 x 250	2.45	2.94	8.24	9.89
IHS300	H	300	200 x 250	3.05	3.66	10.26	12.31

IHS Performance: Masonite HM (60mm Flange) I-Joist

Reference	Hanger capacity						
	Joist Type	Joist Height	Max. allowable hole size with IHS (d x w)	Shear Capacity at Location of IHS (Masonite)[kN]			
	Joist Type (Masonite HM)	Joist Height (Masonite)[mm]	Max. allowable hole size with IHS (d x w) (Masonite)[mm]	Permissible loads (Intermediate Floor Joist Applications)		Characteristic Capacities	
				V_{hole} (IHS Installed)		$V_{k,hole}$ (IHS Installed)	
				1 Ply	Double Ply	1 Ply	Double Ply
IHS240	HM	240	140 x 250	2.45	2.94	8.24	9.89
IHS300	HM	300	200 x 250	3.05	3.66	10.26	12.31

Technical Sheet

IHS
I-Joist Hole Support

SIMPSON Strong-Tie

IHS Performance: Masonite HI (70mm flange) I-Joist

Reference	Hanger capacity						
	Joist Type	Joist Height	Max. allowable hole size with IHS (d x w)	Shear Capacity at Location of IHS (Masonite)[kN]			
	Joist Type (Masonite HI)	Joist Height (Masonite)[mm]	Max. allowable hole size with IHS (d x w) (Masonite)[mm]	Permissible loads (Intermediate Floor Joist Applications)		Characteristic Capacities	
				V_{hole} (IHS Installed)		$V_{k,hole}$ (IHS Installed)	
				1 Ply	Double Ply	1 Ply	Double Ply
IHS240	HI	240	140 x 250	2.45	2.94	8.24	9.89
IHS300	HI	300	200 x 250	3.05	3.66	10.26	12.31

IHS Performance: Masonite HB (97mm flange) I-Joist

Reference	Hanger capacity						
	Joist Type	Joist Height	Max. allowable hole size with IHS (d x w)	Shear Capacity at Location of IHS (Masonite HB)[kN]			
	Joist Type (Masonite HB)	Joist Height (Masonite)[mm]	Max. allowable hole size with IHS (d x w) (Masonite)[mm]	Permissible loads (Intermediate Floor Joist Applications)		Characteristic Capacities	
				V_{hole} (IHS Installed)		$V_{k,hole}$ (IHS Installed)	
				1 Ply	Double Ply	1 Ply	Double Ply
IHS240	HB	240	140 x 250	2.5	2.9	8.2	9.9
IHS300	HB	300	200 x 250	3.1	3.7	10.3	12.3

IHS Performance: MetsaWood (FinnJoist 38mm) I-Joist

Reference	Hanger capacity						
	Joist Type	Joist Height	Max. allowable hole size with IHS (d x w)	Shear Capacity at Location of IHS (FinnJoist 38mm)[kN]			
	Joist Type (FinnJoist 38mm)	Joist Height (FinnJoist)[mm]	Max. allowable hole size with IHS (d x w) (FinnJoist)	Permissible loads (Intermediate Floor Joist Applications)		Characteristic Capacities	
				V_{hole} (IHS Installed)		1 ply	$V_{k,hole}$ (IHS Installed)
				1 ply	Double Ply		Double Ply
IHS240	FJI 38	240	145 x 250	2.83	3.3	6.78	7.91
IHS300	FJI 38	300	200 x 250	3.41	3.98	8.18	9.54
IHS350	-	-	-	-	-	-	-

IHS Performance: MetsaWood (FinnJoist 45mm) I-Joist

Reference	Hanger capacity						
	Joist Type	Joist Height	Max. allowable hole size with IHS (d x w)	Shear Capacity at Location of IHS (FinnJoist 38mm)[kN]			
	Joist Type (FinnJoist 38mm)	Joist Height (FinnJoist)[mm]	Max. allowable hole size with IHS (d x w) (FinnJoist)	Characteristic Capacities		Permissible loads (Intermediate Floor Joist Applications)	
				$V_{k,hole}$ (IHS Installed)		V_{hole} (IHS Installed)	
				1 ply	Double Ply	1 ply	Double Ply
IHS240	FJI 45	240	145 x 250	7.02	8.19	2.93	3.41
IHS300	FJI 45	300	200 x 250	8.48	9.89	3.53	4.12

Technical Sheet

IHS
I-Joist Hole Support

SIMPSON Strong-Tie

IHS Performance: MetsaWood (FinnJoist 53mm) I-Joist

Reference	Hanger capacity						
	Joist Type	Joist Height	Max. allowable hole size with IHS (d x w)	Shear Capacity at Location of IHS (FinnJoist 53mm)[kN]			
	Joist Type (FinnJoist 53mm)	Joist Height (FinnJoist)[mm]	Max. allowable hole size with IHS (d x w) (FinnJoist)	Permissible loads (Intermediate Floor Joist Applications)		Characteristic Capacities	
				V_{hole} (IHS Installed)		$V_{k,hole}$ (IHS Installed)	
				1 ply	Double Ply	1 ply	Double Ply
IHS240	FJI 58	240	145 x 250	3.12	3.64	7.48	8.73
IHS300	FJI 58	300	200 x 250	3.76	4.39	9.09	10.54

IHS Performance: MetsaWood (FinnJoist 69mm) I-Joist

Reference	Hanger capacity						
	Joist Type	Joist Height	Max. allowable hole size with IHS (d x w)	Shear Capacity at Location of IHS (FinnJoist 69mm)[kN]			
	Joist Type (FinnJoist 69mm)	Joist Height (FinnJoist)[mm]	Max. allowable hole size with IHS (d x w) (FinnJoist)	Permissible loads (Intermediate Floor Joist Applications)		Characteristic Capacities	
				V_{hole} (IHS Installed)		$V_{k,hole}$ (IHS Installed)	
				1 ply	Double Ply	1 ply	Double Ply
IHS240	FJI 70	240	145 x 250	3.22	3.76	7.73	9.02
IHS300	FJI 70	300	200 x 250	3.89	4.53	9.32	10.88

IHS Performance: MetsaWood (FinnJoist 96mm) I-Joist

Reference	Hanger capacity						
	Joist Type	Joist Height	Max. allowable hole size with IHS (d x w)	Shear Capacity at Location of IHS (FinnJoist 96mm)[kN]			
	Joist Type (FinnJoist 96mm)	Joist Height (FinnJoist)[mm]	Max. allowable hole size with IHS (d x w) (FinnJoist)	Permissible loads (Intermediate Floor Joist Applications)		Characteristic Capacities	
				V_{hole} (IHS Installed)		$V_{k,hole}$ (IHS Installed)	
				1 ply	Double Ply	1 ply	Double Ply
IHS240	FJI 89	240	145 x 250	3.22	3.76	7.73	9.02
IHS300	FJI 89	300	200 x 250	3.89	4.53	9.32	10.88

IHS Performance: Steico (SJL 45mm) I-Joist

Reference	Hanger capacity						
	Joist Type	Joist Height	Max. allowable hole size with IHS (d x w)	Shear Capacity at Location of IHS (Steico (SJL 45mm))[kN]			
	Joist Type (Steico (SJL 45mm))	Joist Height (Steico)[mm]	Max. allowable hole size with IHS (d x w) (Steico)	Permissible loads (Intermediate Floor Joist Applications)		Characteristic Capacities	
				V_{hole} (IHS Installed)		$V_{k,hole}$ (IHS Installed)	
				1 ply	Double Ply	1 ply	Double Ply
IHS240	SJL 45	240	150 x 250	1.62	2.27	6.38	8.93
IHS300	SJL 45	300	200 x 250	1.95	2.73	7.68	10.75

Technical Sheet

IHS
I-Joist Hole Support

IHS Performance: Steico (SJL 60mm) I-Joist

Reference	Hanger capacity						
	Joist Type	Joist Height	Max. allowable hole size with IHS (d x w)	Shear Capacity at Location of IHS (Steico (SJL 60mm))[kN]			
	Joist Type (Steico (SJL 60mm))	Joist Height (Steico)[mm]	Max. allowable hole size with IHS (d x w) (Steico)	Permissible loads (Intermediate Floor Joist Applications)		Characteristic Capacities	
				V_{hole} (IHS Installed)		$V_{k,hole}$ (IHS Installed)	
				1 ply	Double Ply	1 ply	Double Ply
IHS240	SJL 60	240	150 x 250	1.6	2.25	6.32	8.85
IHS300	SJL 60	300	200 x 250	1.93	2.7	7.59	10.62

IHS Performance: Steico (SJL 90mm) I-Joist

Reference	Hanger capacity						
	Joist Type	Joist Height	Max. allowable hole size with IHS (d x w)	Shear Capacity at Location of IHS (Steico (SJL 90mm))[kN]			
	Joist Type (Steico (SJL 90mm))	Joist Height (Steico)[mm]	Max. allowable hole size with IHS (d x w) (Steico)	Permissible loads (Intermediate Floor Joist Applications)		Characteristic Capacities	
				V_{hole} (IHS Installed)		$V_{k,hole}$ (IHS Installed)	
				1 ply	Double Ply	1 ply	Double Ply
IHS240	SJL 90	240	150 x 250	1.59	2.22	6.26	8.76
IHS300	SJL 90	300	200 x 250	1.9	2.66	7.49	10.48
IHS350	-	-	-	-	-	-	-

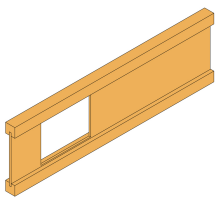
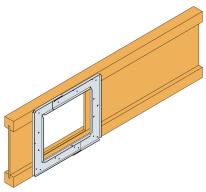
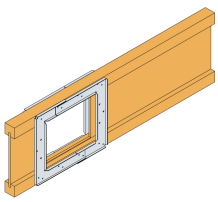
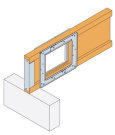
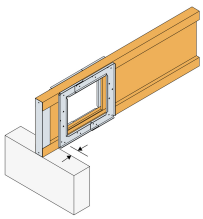
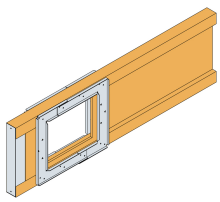
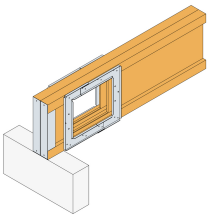
Installation

Installation

- Each IHS consists of 2 sets of 2 interlocking plates with one set required for each side of the I-joist.
- The outer edge of the holes cut into the web of the I-joist can be a minimum of 50mm from the inner face of the blockwork.
- Holes can be cut into the web of the I-joist before or after installation of the IHS.
- Holes must fit within the internal aperture of the IHS.
- Place the IHS onto the I-joist so that the top and bottom sliding flanges are aligned vertically central onto the top and bottom chords of the I-joist.
- Open or close the IHS to the required width, ensuring that the two sections overlap by at least one row of nails (minimum overlap of 45mm).
- Install 3.75x30mm square twist nails through all round holes into the top and bottom chords of the I-joist.
- Repeat the above steps to install plates on the other side of the I-joist, completing the installation.

Applications

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