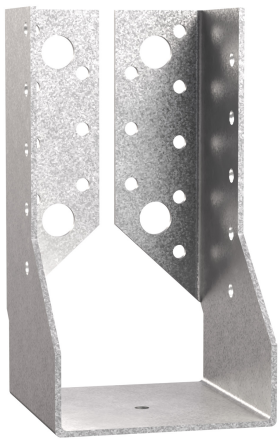
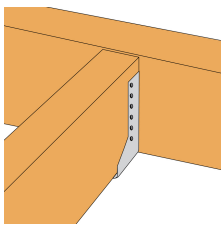
Technical Sheet

SAI-SAIL
Internal Flange Face Fix Hanger

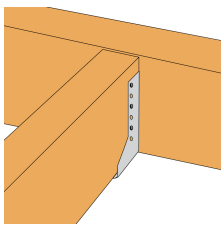
The SAE and SAI ranges are heavy-duty hangers designed for timber to timber applications requiring additional strength.

- The hanger depth is to be at least 60% of the carried member depth to prevent rotation, unless additional lateral restraint is added to the top of the carried member.
- SAI hangers are not recommended for bolted applications.
- SAI minimum width is 91mm. For small widths of internal flange hangers see IUC.





Full nailing



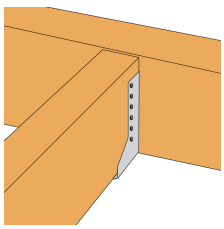
Partial Nailing



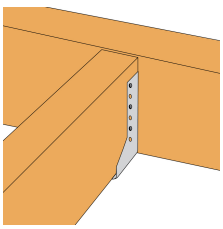
SAI Internal Flange Hanger



Internal Flange Face Fix Hanger SAIL



Full nailing



Partial Nailing

Features

Material

Pre-galvanised mild steel.

Advantages

Quick and simple installation.

Applications

Support

Solid Timber
I-Joists
Steel

Intend Use

Solid sawn timber joists.
Purlins.

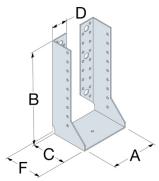
Technical Sheet

SAI-SAIL
Internal Flange Face Fix Hanger

Technical Data

Technical Sheet

SAI-SAIL
Internal Flange Face Fix Hanger



Product Dimensions

Reference	Connector Dimensions											
	Timber size[mm]		Product Dimensions[mm]						Header holes		Joist holes	Other
	Width		A[mm]	B[mm]	C[mm]	D[mm]	F[mm]	t[mm]	Round		Round	Weight[kg]
	Min[mm]	Max.[mm]							Ø5[mm]	Ø13[mm]	Ø5[mm]	
SAI200/38/2	36	38	38	81	76	17.5	82	2	4	-	4	0.24
SAI250/38/2	36	38	38	106	76	17.5	82	2	6	-	6	0.3
SAIL300/38/2	36	38	38	131	84	18.5	86	2	8	-	8	0.36
SAIL300/40/2	38	40	40	130	84	18.5	86	2	8	-	8	0.36
SAI200/60/2	58	60	60	70	76	17.5	82	2	4	-	4	0.24
SAI250/60/2	58	60	60	95	76	17.5	82	2	6	-	6	0.3
SAIL300/60/2	58	60	60	120	84	18.5	86	2	8	-	8	0.36
SAI200/64/2	62	64	64	68	76	34	82	2	4	-	4	0.24
SAI250/64/2	62	64	64	93	76	34	82	2	6	-	6	0.3
SAI300/64/2	62	64	64	118	76	34	82	2	16	-	9	0.36
SAI340/64/2	62	64	64	138	76	34	82	2	16	-	10	0.4
SAI380/64/2	62	64	64	158	76	34	82	2	20	-	12	0.44
SAI200/70/2	68	70	70	65	76	34	82	2	6	-	4	0.24
SAI250/70/2	68	70	70	90	76	34	82	2	10	-	6	0.3
SAI300/70/2	68	70	70	115	76	34	82	2	16	-	9	0.36
SAI340/70/2	68	70	70	135	76	34	82	2	16	-	10	0.4
SAI380/70/2	68	70	70	155	76	34	82	2	20	-	12	0.44
SAI440/70/2	68	70	70	185	76	34	82	2	26	-	15	0.52
SAI200/76/2	74	76	76	62	76	34	82	2	6	-	4	0.24
SAI250/76/2	74	76	76	87	76	34	82	2	10	-	6	0.3
SAI300/76/2	74	76	76	112	76	34	82	2	16	-	9	0.36
SAI340/76/2	74	76	76	132	76	34	82	2	16	-	10	0.4
SAI380/76/2	74	76	76	152	76	34	82	2	20	-	12	0.44
SAI440/76/2	74	76	76	182	76	34	82	2	26	-	15	0.52
SAI200/80/2	78	80	80	60	76	34	82	2	6	-	4	0.24
SAI250/80/2	78	80	80	85	76	34	82	2	10	-	6	0.3
SAI300/80/2	78	80	80	110	76	34	82	2	16	-	9	0.36
SAI340/80/2	78	80	80	130	76	34	82	2	16	-	10	0.4
SAI380/80/2	78	80	80	150	76	34	82	2	20	-	12	0.44
SAI440/80/2	78	80	80	180	76	34	82	2	26	-	15	0.52
SAI500/80/2	78	80	80	210	76	34	82	2	32	-	18	0.56
SAI380/90/2	88	90	90	145	76	34	82	2	20	-	12	0.44
SAI440/90/2	88	90	90	175	76	34	82	2	26	-	15	0.52
SAI500/90/2	88	90	90	205	76	34	82	2	32	-	18	0.56
SAIL380/92/2	90	92	92	144	84	41.5	86	2	20	-	10	0.44
SAI440/95/2	93	95	95	173	76	34	82	2	26	-	15	0.52
SAI340/100/2	98	100	100	120	76	34	82	2	16	-	10	0.4
SAI380/100/2	98	100	100	140	76	34	82	2	20	-	12	0.44
SAI440/100/2	98	100	100	170	76	34	82	2	26	-	15	0.52
SAI380/120/2	118	120	120	130	76	34	82	2	20	-	12	0.44
SAI440/120/2	118	120	120	160	76	34	82	2	26	-	15	0.52
SAI500/120/2	118	120	120	190	76	34	82	2	32	-	18	0.56

Technical Sheet

SAI-SAIL
Internal Flange Face Fix Hanger

Reference	Connector Dimensions											
	Timber size[mm]		Product Dimensions[mm]						Header holes		Joist holes	Other
	Width		A[mm]	B[mm]	C[mm]	D[mm]	F[mm]	t[mm]	Round		Round	Weight[kg]
	Min[mm]	Max.[mm]							Ø5[mm]	Ø13[mm]	Ø5[mm]	
SAIL440/136/2	134	136	136	152	84	41.5	86	2	26	-	13	0.52
SAIL500/140/2	138	140	140	180	84	41.5	86	2	32	-	16	0.56
SAI380/91/2	88	91	91	145	76	34	82	2	20	4	10	-
SAI500/91/2	88	91	91	205	76	34	82	2	32	6	16	0.66
SAI600/91/2	88	91	91	265	90	38	94	2	36	4	20	0.786
SAI380/99/2	96	99	99	141	76	34	82	2	20	4	10	0.49
SAI500/99/2	96	99	99	201	90	38	94	2	32	4	16	0.66
SAI600/99/2	96	99	99	251	90	38	94	2	36	4	20	0.786
SAI500/118/2	115	118	118	191	76	34	82	2	32	6	16	0.66
SAI600/118/2	115	118	118	241	90	38	94	2	36	4	20	0.786
SAI500/125/2	122	125	125	188	76	34	82	2	32	6	16	-
SAI600/125/2	122	125	125	238	90	38	94	2	36	4	20	0.786
SAI500/150/2	147	150	150	175	76	34	82	2	32	6	16	0.66
SAI600/150/2	147	150	150	225	90	38	94	2	36	4	20	0.786
SAI600/182/2	179	182	182	220	90	38	94	2	36	4	20	0.825
SAI720/182/2	179	182	182	269	72	40	76	2	38	8	20	-
SAI600/196/2	193	196	196	220	90	38	94	2	36	4	20	0.845
SAI720/196/2	193	196	196	262	72	40	76	2	38	8	20	-
SAI590/200/2	197	200	200	195	78	42	84	2	30	6	20	-

SAI Product Capacities

Reference	Hanger capacity		
	Characteristic capacities - Timber to timber - Full nailing		
	Product characteristic capacities - Timber C24[kN]		
	$R_{1,k}$		$R_{2,k}$
	N3.75x30 - C16 Header	N3.75x30 - C24 Header	N3.75x30 - C16 Joist
SAI380	18.2	19.4	8.5
SAI500	33.3	35.6	12.2
SAI600	42.2	45.1	15.9
SAI720	44.6	47.6	16.7
SAI590	25.8	26.5	16.7

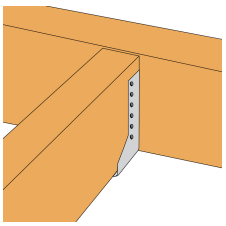
Installation

Fasteners

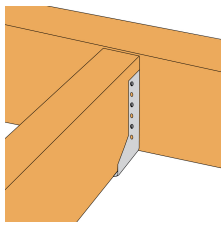
Install using 3.75 x 30mm square twist nails.

Installation

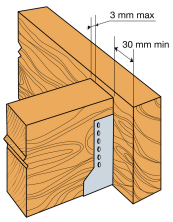
- Use all specified fasteners.
- Check that the header can accomodate the specified fasteners.
- Each SDE must be nailed through the holes underneath the joist.



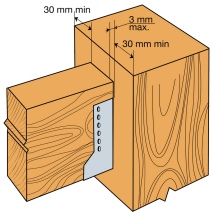
Full nailing



Partial Nailing



Installation on joist



Installation on Post

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