

Technical data sheet

SIMPSON

Strong-Tie

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.



Features

Material

Pre-galvanised mild steel.

Advantages

Quick and simple installation.

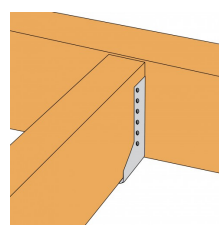
Applications

Support

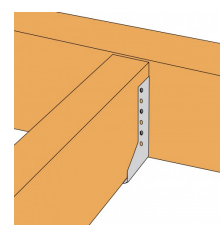
**Solid Timber
I-Joists
Steel**

Intend Use

**Solid sawn timber joists.
Purlins.**



Full nailing



Partial Nailing

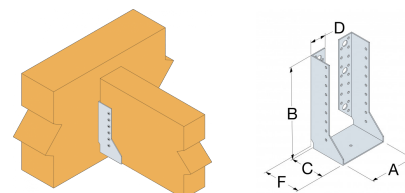
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Product Dimensions

References	Joist Size [mm]		Hanger Dimensions [mm]						Header holes		Joist holes	Weight [kg]
	Width		A	B	C	D	F	t	Ø5	Ø13	Ø5	
	Min	Max.										
SAI380/90/2	88	90	90	145	76	34	82	2	20	-	12	0.44
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	0.11
SAI600/91/2	88	91	91	265	90	38	94	2	36	4	20	0.01
SAI380/99/2	96	99	99	141	76	34	82	2	20	4	10	0.44
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	1
SAI500/118/2	115	118	118	191	76	34	82	2	32	6	16	0.64
SAI600/118/2	115	118	118	241	90	38	94	2	36	4	20	0.81
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	0.01
SAI500/150/2	147	150	150	175	76	34	82	2	32	6	16	0.56
SAI600/150/2	147	150	150	225	90	38	94	2	36	4	20	0.01
SAI600/182/2	179	182	182	220	90	38	94	2	36	4	20	0.01
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	0.86
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

References	Characteristic capacities - Timber to timber - Full nailing					
	Product characteristic capacities - Timber C24 [kN]			Safe Working Loads [kN]		
	R _{1,k}		R _{2,k}	R _{1,SWL,Long term}		Short Term Uplift
	N3.75x30 - C16 Header	N3.75x30 - C24 Header	N3.75x30 - C16 Joist	C16 header	C24 header	C16 Joist
				N3.75x30	N3.75x30	N3.75x30
SAI380	18.2	19.4	8.5	7.6	8.1	4.2
SAI500	33.3	35.6	12.2	13.9	14.8	6.1
SAI600	42.2	45.1	15.9	17.6	18.8	8.4
SAI720	44.6	47.6	16.7	18.6	19.8	8.4
SAI590	25.8	26.5	16.7	10.7	13.2	8.4

SAI-SAIL Internal Flange Face Fix Hanger

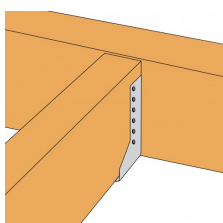
Installation

Fasteners

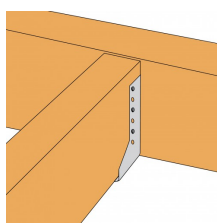
Install using 3.75 x 30mm square twist nails.

Installation

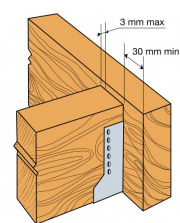
- Use all specified fasteners.
- Check that the header can accommodate the specified fasteners.
- Each SDE must be nailed through the holes underneath the joist.



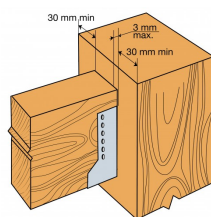
Full nailing



Partial Nailing



Installation on joist



Installation on Post

