

SAE-SAEL Heavy Duty Face Fix Hangers

SAE and SAI ranges are heavy-duty hangers designed for applications requiring additional strength. SAE hangers are nailed using square twist nails but have bolt holes for 12mm fasteners into the face. SAE Timber Bolted capacity to be determined according to the relevant standards. 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.

Features

Material

Pre-galvanised mild steel

Advantage

- Quick and simple installation

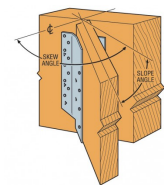
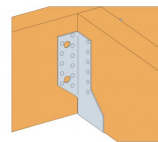
Applications

Header member

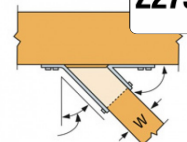
- Solid Timber
- I-Joists
- Steel

For Use With

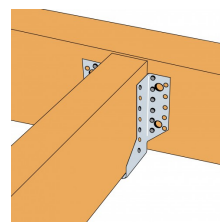
- Solid sawn timber joists
- Purlins



Typical SAE(X) Sloped down, skewed right installation (no bolt holes)



Top view SAE(X) Hanger Skewed right (no bolt holes)



Partial Nailing on Timber

SAE-SAEL
Heavy Duty Face Fix Hangers

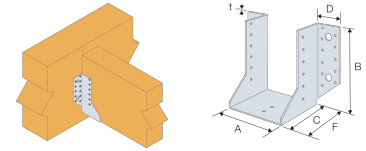
Technical Data

Technical data sheet



SAE-SAEL Heavy Duty Face Fix Hangers

Product Dimensions



References	Joist dimensions [mm]				Product Dimensions [mm]							Header holes			Joist holes
	Width		Height		A	B	C	D	F	t	Ø5	Ø11	Ø13	Ø5	
	Min	Max.	Min	Max.											
SAE200/38/2	36	38	96	122	38	81	84	41.5	86	2	8	2	-	5	
SAE250/38/2	36	38	116	159		106	84	41.5	86	2	12	2	-	7	
SAE380/38/2	35	38	186	286		171	84	41.5	86	2	20	-	4	10	
SAE500/38/2	35	38	246	386		231	84	41.5	86	2	32	-	6	16	
SAE600/38/2	35	38	296	469		281	88	36	90	2	36	-	4	20	
SAE200/40/2	38	40	95	120	40	80	84	41.5	86	2	8	2	-	5	
SAE250/40/2	38	40	115	158		105	84	41.5	86	2	12	2	-	7	
SAE380/40/2	37	40	185	284		170	84	41.5	86	2	20	-	4	10	
SAE500/40/2	37	40	245	384		230	84	41.5	86	2	32	-	6	16	
SAE600/40/2	37	40	295	468		280	88	36	90	2	36	-	4	20	
SAE200/47/2	44	47	92	128	47	76.5	88	41.5	90	2	8	2	-	5	
SAE250/47/2	44	47	117	170		101.5	88	41.5	90	2	12	2	-	7	
SAE380/47/2	44	47	182	278		166.5	84	41.5	86	2	20	-	4	10	
SAE500/47/2	44	47	242	378		226.5	84	41.5	86	2	32	-	6	16	
SAE600/47/2	44	47	292	462		276.5	88	36	90	2	36	-	4	20	
SAE200/50/2	48	50	90	113	50	75	84	41.5	86	2	8	2	-	5	
SAE250/50/2	48	50	110	150		100	84	41.5	86	2	12	2	-	7	
SAE500/50/2	48	50	240	338		225	84	41.5	86	2	34	-	6	18	
SAE380/50/2	47	50	180	276		165	84	41.5	86	2	20	-	4	10	
SAE600/50/2	47	50	290	459		275	88	36	90	2	36	-	4	20	
SAE380/56/2	53	56	177	271	56	162	84	41.5	86	2	20	-	4	10	
SAE500/56/2	53	56	237	371		222	84	41.5	86	2	32	-	6	16	
SAE600/56/2	53	56	287	454		272	88	36	90	2	36	-	4	20	
SAE380/63/2	60	63	174	265	63	158.5	84	41.5	86	2	20	-	4	10	
SAE500/63/2	60	63	234	365		218.5	84	41.5	86	2	32	-	6	16	
SAE600/63/2	60	63	284	448		268.5	88	36	90	2	36	-	4	20	
SAE380/66/2	64	66	172	236	66	157	84	41.5	86	2	22	-	4	12	
SAE500/66/2	63	66	232	362		217	84	41.5	86	2	32	-	6	16	
SAE600/66/2	63	66	282	446		267	88	36	90	2	36	-	4	20	
SAE380/72/2	70	72	169	231	72	154	84	41.5	86	2	22	-	4	12	
SAE500/72/2	69	72	229	357		214	84	41.5	86	2	32	-	6	16	
SAE600/72/2	69	72	279	441		264	88	36	90	2	36	-	4	20	
SAE380/75/2	72	75	168	255	75	152.5	84	41.5	86	2	20	-	4	10	
SAE500/75/2	72	75	228	355		212.5	84	41.5	86	2	32	-	6	16	
SAE600/75/2	72	75	278	438		262.5	88	36	90	2	36	-	4	20	
SAE380/78/2	75	78	166	252	78	151	84	41.5	86	2	20	-	4	10	
SAE500/78/2	75	78	226	352		211	84	41.5	86	2	32	-	6	16	
SAE600/78/2	75	78	276	436		261	88	36	90	2	36	-	4	20	
SAE380/91/2	88	91	160	241	91	144.5	84	41.5	86	2	20	-	4	10	
SAE500/91/2	88	91	220	342		204.5	84	41.5	86	2	32	-	6	16	
SAE600/91/2	88	91	270	425		254.5	88	36	90	2	36	-	4	20	
SAE380/96/2	93	96	157	237	96	142	84	41.5	86	2	20	-	4	10	

Technical data sheet



SAE-SAEL Heavy Duty Face Fix Hangers

References	Joist dimensions [mm]				A	Product Dimensions [mm]					Header holes			Joist holes
	Width		Height			B	C	D	F	t	Ø5	Ø11	Ø13	Ø5
	Min	Max.	Min	Max.										
SAE500/96/2	93	96	217	337		202	84	41.5	86	2	32	-	6	16
SAE600/96/2	93	96	267	421		252	88	36	90	2	36	-	4	20
SAE380/99/2	96	99	156	235	99	140.5	84	41.5	86	2	20	-	4	10
SAE500/99/2	96	99	216	335		200.5	84	41.5	86	2	32	-	6	16
SAE600/99/2	96	99	266	418		250.5	88	36	90	2	36	-	4	20
SAE380/109/2	106	109	151	226	109	135.5	84	41.5	86	2	20	-	4	10
SAE500/109/2	106	109	211	326		195.5	84	41.5	86	2	32	-	6	16
SAE600/109/2	106	109	261	410		245.5	88	36	90	2	36	-	4	20
SAE500/118/2	115	118	206	319	118	191	84	41.5	86	2	32	-	6	16
SAE600/118/2	115	118	256	402		241	88	36	90	2	36	-	4	20
SAE500/122/2	119	122	204	316	122	189	84	41.5	86	2	32	-	6	16
SAE600/122/2	119	122	254	399		239	88	36	90	2	36	-	4	20
SAE500/125/2	122	125	203	313	125	187.5	84	41.5	86	2	32	-	6	16
SAE600/125/2	122	125	253	397		237.5	88	36	90	2	36	-	4	20
SAE500/128/2	125	128	201	311	128	186	84	41.5	86	2	32	-	6	16
SAE600/128/2	125	128	251	394		236	88	36	90	2	36	-	4	20
SAE500/142/2	139	142	194	299	142	179	84	41.5	86	2	32	-	6	16
SAE600/142/2	139	142	244	382		229	88	36	90	2	36	-	4	20
SAE500/146/2	143	146	192	296	146	177	84	41.5	86	2	32	-	6	16
SAE600/146/2	143	146	242	379		227	88	36	90	2	36	-	4	20
SAE500/150/2	147	150	190	292	150	175	84	41.5	86	2	32	-	6	16
SAE600/150/2	147	150	240	376		225	88	36	90	2	36	-	4	20
SAE600/182/2	179	182	224	349	182	209	88	36	90	2	36	-	4	20
SAE720/182/2	179	182	284	449		269	75	38	77	2	38	-	6	20
SAE600/196/2	193	196	217	337	196	202	88	41.5	90	2	36	-	4	20
SAE720/196/2	193	196	277	438		262	75	38	77	2	38	-	6	20
SAE590/200/2	197	200	210	326	200	195	88	41.5	90	2	30	-	6	20

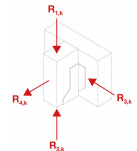
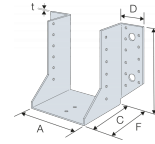
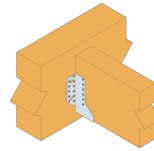
Technical data sheet

SIMPSON

Strong-Tie

SAE-SAEL Heavy Duty Face Fix Hangers

Product characteristic capacities - Timber to timber - full nailing



Characteristic capacities - Timber to timber - Full nailing

References	A	Number of Fasteners		Product characteristic capacities - Timber C24 [kN]			Safe Working Load [kN]		
		Header	Joist	R _{1,k}		R _{2,k}	R _{1,SWL,Long term}		R _{2,SWL,Short term}
		Qty	Qty	N3.75x30 - C16 Header	N3.75x30 - C24 Header	N3.75x30 - C16 Joist	C16 header	C24 header	C16 Joist
				N3.75x30	N3.75x30	N3.75x30	N3.75x30	N3.75x30	
SAE200/38/2	38	8	5	7.6	8.1	4.2	3.2	3.4	2.1
SAE250/38/2		12	7	12.7	13.5	5.9	5.3	5.6	3
SAE380/38/2		20	10	18.2	19.4	8.5	7.6	8.1	4.2
SAE500/38/2		32	16	33.3	35.6	12.2	13.9	14.8	6.1
SAE600/38/2		36	20	42.2	45.1	15.9	17.6	18.8	8.4
SAE200/40/2	40	8	5	7.6	8.1	4.2	3.2	3.4	2.1
SAE250/40/2		12	7	12.7	13.5	5.9	5.3	5.6	3
SAE380/40/2		20	10	18.2	19.4	8.5	7.6	8.1	4.2
SAE500/40/2		32	16	33.3	35.6	12.2	13.9	14.8	6.1
SAE600/40/2		36	20	42.2	45.1	15.9	17.6	18.8	8.4
SAE200/47/2	47	8	5	7.6	8.1	4.2	3.2	3.4	2.1
SAE250/47/2		12	7	12.7	13.5	5.9	5.3	5.6	3
SAE380/47/2		20	10	18.2	19.4	8.5	7.6	8.1	4.2
SAE500/47/2		32	16	33.3	35.6	12.2	13.9	14.8	6.1
SAE600/47/2		36	20	42.2	45.1	15.9	17.6	18.8	8.4
SAE200/50/2	50	8	5	7.6	8.1	4.2	3.2	3.4	2.1
SAE250/50/2		12	7	12.7	13.5	5.9	5.3	5.6	3
SAE500/50/2		34	18	33.3	35.6	12.2	13.9	14.8	6.1
SAE380/50/2		20	10	18.2	19.4	8.5	7.6	8.1	4.2
SAE600/50/2		36	20	42.2	45.1	15.9	17.6	18.8	8.4
SAE380/56/2	56	20	10	18.2	19.4	8.5	7.6	8.1	4.2
SAE500/56/2		32	16	33.3	35.6	12.2	13.9	14.8	6.1
SAE600/56/2		36	20	42.2	45.1	15.9	17.6	18.8	8.4
SAE380/63/2	63	20	10	18.2	19.4	8.5	7.6	8.1	4.2
SAE500/63/2		32	16	33.3	35.6	12.2	13.9	14.8	6.1
SAE600/63/2		36	20	42.2	45.1	15.9	17.6	18.8	8.4
SAE380/66/2	66	22	12	18.2	19.4	8.5	7.6	8.1	4.2
SAE500/66/2		32	16	33.3	35.6	12.2	13.9	14.8	6.1
SAE600/66/2		36	20	42.2	45.1	15.9	17.6	18.8	8.4
SAE380/72/2	72	22	12	18.2	19.4	8.5	7.6	8.1	4.2
SAE500/72/2		32	16	33.3	35.6	12.2	13.9	14.8	6.1
SAE600/72/2		36	20	42.2	45.1	15.9	17.6	18.8	8.4
SAE380/75/2	75	20	10	18.2	19.4	8.5	7.6	8.1	4.2
SAE500/75/2		32	16	33.3	35.6	12.2	13.9	14.8	6.1
SAE600/75/2		36	20	42.2	45.1	15.9	17.6	18.8	8.4
SAE380/78/2	78	20	10	18.2	19.4	8.5	7.6	8.1	4.2
SAE500/78/2		32	16	33.3	35.6	12.2	13.9	14.8	6.1

Technical data sheet



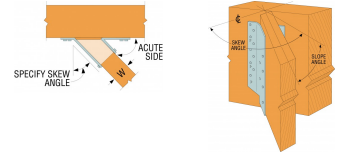
SAE-SAEL Heavy Duty Face Fix Hangers

References		Characteristic capacities - Timber to timber - Full nailing							
		Number of Fasteners		Product characteristic capacities - Timber C24 [kN]			Safe Working Load [kN]		
		Header	Joist	R _{1,k}		R _{2,k}	R _{1,SWL,Long term}		R _{2,SWL,Short term}
		Qty	Qty	N3.75x30 - C16 Header	N3.75x30 - C24 Header	N3.75x30 - C16 Joist	C16 header N3.75x30	C24 header N3.75x30	C16 Joist N3.75x30
SAE600/78/2		36	20	42.2	45.1	15.9	17.6	18.8	8.4
SAE380/91/2	91	20	10	18.2	19.4	8.5	7.6	8.1	4.2
SAE500/91/2		32	16	33.3	35.6	12.2	13.9	14.8	6.1
SAE600/91/2		36	20	42.2	45.1	15.9	17.6	18.8	8.4
SAE380/96/2	96	20	10	18.2	19.4	8.5	7.6	8.1	4.2
SAE500/96/2		32	16	33.3	35.6	12.2	13.9	14.8	6.1
SAE600/96/2		36	20	42.2	45.1	15.9	17.6	18.8	8.4
SAE380/99/2	99	20	10	18.2	19.4	8.5	7.6	8.1	4.2
SAE500/99/2		32	16	33.3	35.6	12.2	13.9	14.8	6.1
SAE600/99/2		36	20	42.2	45.1	15.9	17.6	18.8	8.4
SAE380/109/2	109	20	10	18.2	19.4	8.5	7.6	8.1	4.2
SAE500/109/2		32	16	33.3	35.6	12.2	13.9	14.8	6.1
SAE600/109/2		36	20	42.2	45.1	15.9	17.6	18.8	8.4
SAE500/118/2	118	32	16	33.3	35.6	12.2	13.9	14.8	6.1
SAE600/118/2		36	20	42.2	45.1	15.9	17.6	18.8	8.4
SAE500/122/2	122	32	16	33.3	35.6	12.2	13.9	14.8	6.1
SAE600/122/2		36	20	42.2	45.1	15.9	17.6	18.8	8.4
SAE500/125/2	125	32	16	33.3	35.6	12.2	13.9	14.8	6.1
SAE600/125/2		36	20	42.2	45.1	15.9	17.6	18.8	8.4
SAE500/128/2	128	32	16	33.3	35.6	12.2	13.9	14.8	6.1
SAE600/128/2		36	20	42.2	45.1	15.9	17.6	18.8	8.4
SAE500/142/2	142	32	16	33.3	35.6	12.2	13.9	14.8	6.1
SAE600/142/2		36	20	42.2	45.1	15.9	17.6	18.8	8.4
SAE500/146/2	146	32	16	33.3	35.6	12.2	13.9	14.8	6.1
SAE600/146/2		36	20	42.2	45.1	15.9	17.6	18.8	8.4
SAE500/150/2	150	32	16	33.3	35.6	12.2	13.9	14.8	6.1
SAE600/150/2		36	20	42.2	45.1	15.9	17.6	18.8	8.4
SAE600/182/2	182	36	20	42.2	45.1	15.9	17.6	18.8	8.4
SAE720/182/2		38	20	44.6	47.6	16.7	18.6	19.8	8.4
SAE600/196/2	196	36	20	42.2	45.1	15.9	17.6	18.8	8.4
SAE720/196/2		38	20	44.6	47.6	16.7	18.6	19.8	8.4
SAE590/200/2	200	30	20	29.4	31.4	16.7	12.3	13.1	8.4

Technical data sheet



SAE-SAEL Heavy Duty Face Fix Hangers



SAE(X) Made to Order Specials

References	Product Dimensions [mm]			Number of Fasteners		Safe Working Load [kN]
	A	B	C	Header	Joist	R ₁ , SWL, Long term
				Qty	Qty	C16 header N3.75x30
SAE250X	40-76	87-105	64	6	4	2.3
SAE380X	38 - 100	140 - 175	64	14	6	5.4
SAE500X	38 - 150	165 - 235	64	18	8	6.9
SAE600X	38 - 150	235 - 290	64	28	10	10.8
SAE720X	40-182	269 - 340	64	28	10	10.8

1. These hangers are based upon Composite Wood style SAE hangers and contain round and triangular nail holes only. (ie. **No Bolt Holes**).
2. SWL's are based upon a maximum nailing schedule—all round and triangular holes filled.
3. Skews right or left up to 67.5° and slopes up or down up to 45°. For combined skew and sloped hangers the maximum SWL is 80% of the stated loads.
4. Enables hangers to be manufactured for any combination of widths and heights listed for a model number.
5. To order specify model number, width, height, skew and/or slope. eg SAE380/63 Skewed Right at 15° becomes SAE380X, A = 63, B = 159, SKR = 15° (for no skewed/sloped options please specify skew = 0° & slope = 0°).

SAE-SAEL Heavy Duty Face Fix Hangers

Installation

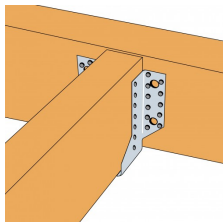
Fasteners

- Install using 3.75 x 30mm square twist nails

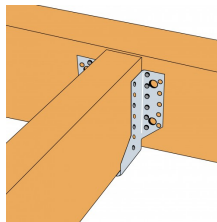
Installation

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.

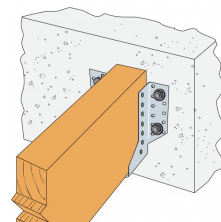
- **SAE hangers have bolt holes for 12mm fasteners if required**
- **SAE timber bolted capacity to be determined according to the relevant standards**



Full Nailing on Timber



Partial Nailing on Timber



Bolted into masonry

