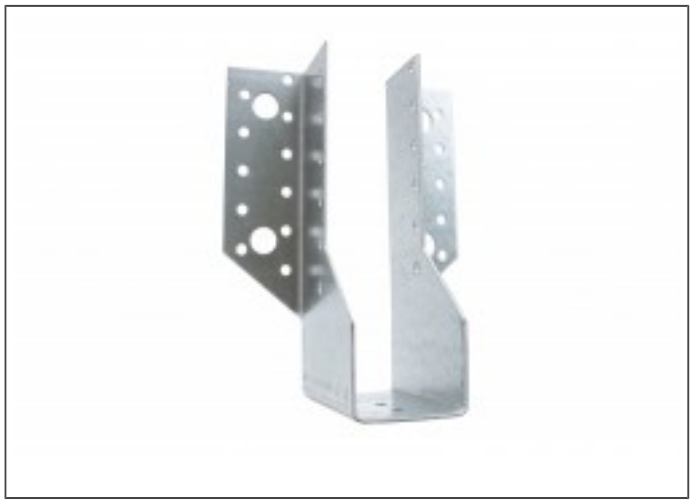
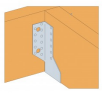
Technical data sheet

SAE-SAEL - HEAVY DUTY FACE FIX HANGERS





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

UK-DoP-e06/0270, ETA-06/0270

FEATURES

CL2 INDOOR Z275

Material

Pre-galvanised mild steel

Advantage

- Quick and simple installation

APPLICATIONS

Header member

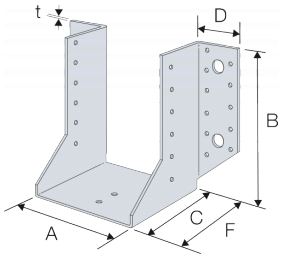
- Solid Timber
- I-Joists
- Steel

For Use With

- Solid sawn timber joists
- Purlins

TECHNICAL DATA

Product Dimensions

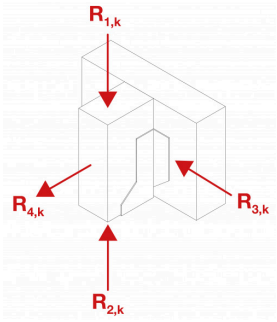


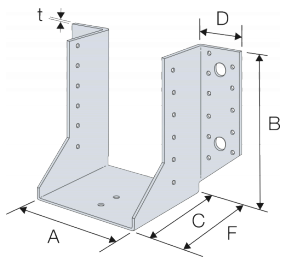
References	Joist dimensions [mm]				Product Dimensions [mm]						Header holes			Joist holes
	Width		Height		A	B	C	D	F	t	Ø5	Ø11	Ø13	Ø5
	Min	Max.	Min	Max.										
SAE200/38/2	36	38	96	122	38	81	84	41.5	86	2	8	2	-	5
SAE250/38/2	36	38	116	159		106	84	41.5	86	2	12	2	-	7
SAE380/38/2	35	38	186	286		171	84	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

SAE-SAEL - HEAVY DUTY FACE FIX HANGERS

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.										
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
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

Product characteristic capacities - Timber to timber - full nailing





References	Characteristic capacities - Timber to timber - Full nailing								
	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 N3.75x30	C24 header N3.75x30	C16 Joist N3.75x30
SAE200/38/2	38	8	5	7.6	8.1	4.2	3.2	3.4	2.1

SAE-SAEL - HEAVY DUTY FACE FIX HANGERS

References	Characteristic capacities - Timber to timber - Full nailing									
	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 N3.75x30	C24 header N3.75x30	C16 Joist N3.75x30
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
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

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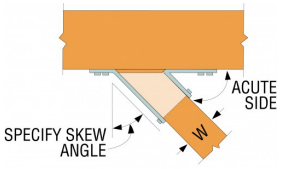
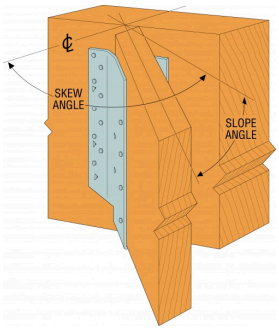
SAE-SAEL - HEAVY DUTY FACE FIX HANGERS

References	Characteristic capacities - Timber to timber - Full nailing								
	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 N3.75x30	C24 header N3.75x30	C16 Joist N3.75x30
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

SAE(X) Made to Order Specials





References	Product Dimensions [mm]			Number of Fasteners		Safe Working Load [kN]
	A	B	C	Header Qty	Joist Qty	$R_{1,SWL,Long\ term}$ 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°).

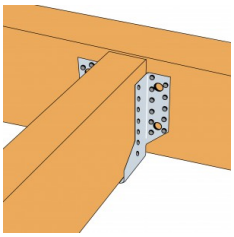
INSTALLATION

Fasteners

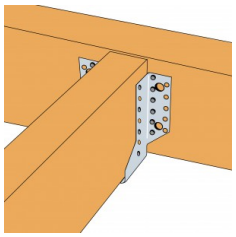
- Install using 3.75 x 30mm square twist nails

Installation

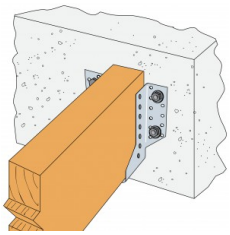
The hanger depth is to be at least 60% of the carried member depth to prevent rotation, unless additional lateral restraint is added to the top of the carried member.
• SAE hangers have bolt holes for 12mm fasteners if required
• SAE timber bolted capacity to be determined according to the relevant standards



Full Nailing on Timber



Partial Nailing on Timber



Bolted into masonry