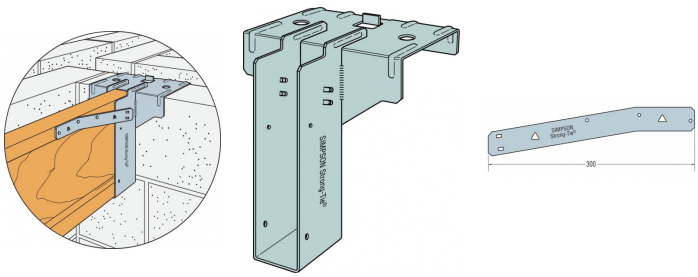
Technical data sheet

SFWHI

Safety Fast (Welded) Masonry Restraint Hanger for I-Joists

The Safety Fast Hangers are designed to support timber joists, beams and trussed rafters from masonry walls without the need for masonry above the top flange.



Features

Benefits

- Requires no masonry above the top flange to achieve the published performance values.
- Improved vertical and lateral load distribution.
- Mini Strap simply hooks onto the hanger.
- Enables the construction of the floor deck prior to the next lift of masonry.
- Reduces Health & Safety risks associated with the use of the traditional masonry hangers with no masonry above.
- Eliminates the need for propping of floor joists.
- Mini Strap provides lateral restraint capacity in accordance with NHBC guidelines.
- Allows for retrofit of lateral restraint straps.

Material

- SFWH/SFWHI: Hot-dip galvanised mild steel
- Mini Strap: Pre-galvanised mild steel

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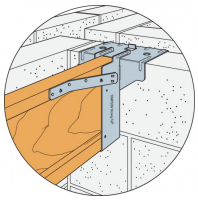

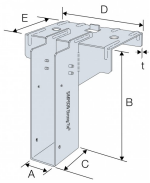

Product Dimensions

References	Joist Size [mm]		Product Dimensions [mm]						Joist holes		Mini Strap holes
	Width	Height	A	B	C	D	E	t	Ø6x4 Oblong [mm]	Ø4.1 [mm]	Ø4.2 [mm]
SFWHI195/40/100	38	195	40	195	75	200	100	2.5	2	2	3
SFWHI200/40/100	38	200	40	200	75	200	100	2.5	2	2	3
SFWHI220/40/100	38	220	40	220	75	200	100	2.5	2	2	3
SFWHI225/40/100	38	225	40	225	75	200	100	2.5	2	2	3
SFWHI235/40/100	38	235	40	235	75	200	100	2.5	2	2	3
SFWHI240/40/100	38	240	40	240	75	200	100	2.5	2	2	3
SFWHI245/40/100	38	245	40	245	75	200	100	2.5	2	2	3
SFWHI300/40/100	38	300	40	300	75	200	100	2.5	2	2	3
SFWHI360/40/100	38	360	40	360	75	200	100	2.5	2	2	3
SFWHI400/40/100	38	400	40	400	75	200	100	2.5	2	2	3
SFWHI195/47/100	45	195	47	195	75	200	100	2.5	2	2	3
SFWHI200/47/100	45	200	47	200	75	200	100	2.5	2	2	3
SFWHI220/47/100	45	220	47	220	75	200	100	2.5	2	2	3
SFWHI225/47/100	45	225	47	225	75	200	100	2.5	2	2	3
SFWHI235/47/100	45	235	47	235	75	200	100	2.5	2	2	3
SFWHI240/47/100	45	240	47	240	75	200	100	2.5	2	2	3
SFWHI245/47/100	45	245	47	245	75	200	100	2.5	2	2	3
SFWHI253/47/100	45	253	47	253	75	200	100	2.5	2	2	3
SFWHI300/47/100	45	300	47	300	75	200	100	2.5	2	2	3
SFWHI350/47/100	45	350	47	350	75	200	100	2.5	2	2	3
SFWHI360/47/100	45	360	47	360	75	200	100	2.5	2	2	3
SFWHI400/47/100	45	400	47	400	75	200	100	2.5	2	2	3
SFWHI195/50/100	47	195	50	195	75	200	100	2.5	2	2	3
SFWHI220/50/100	47	220	50	220	75	200	100	2.5	2	2	3
SFWHI225/50/100	47	225	50	225	75	200	100	2.5	2	2	3
SFWHI235/50/100	47	235	50	235	75	200	100	2.5	2	2	3
SFWHI240/50/100	47	240	50	240	75	200	100	2.5	2	2	3
SFWHI245/50/100	47	245	50	245	75	200	100	2.5	2	2	3
SFWHI300/50/100	47	300	50	300	75	200	100	2.5	2	2	3
SFWHI220/56/100	53	220	56	220	75	200	100	2.5	2	2	3
SFWHI225/56/100	53	225	56	225	75	200	100	2.5	2	2	3
SFWHI240/56/100	53	240	56	240	75	200	100	2.5	2	2	3
SFWHI300/56/100	53	300	56	300	75	200	100	2.5	2	2	3
SFWHI200/61/100	58	200	61	200	75	200	100	2.5	2	2	3
SFWHI360/61/100	58	360	61	360	75	200	100	2.5	2	2	3
SFWHI400/61/100	58	400	61	400	75	200	100	2.5	2	2	3
SFWHI200/63/100	60	200	63	200	75	200	100	2.5	2	2	3
SFWHI220/63/100	60	220	63	220	75	200	100	2.5	2	2	3
SFWHI225/63/100	60	225	63	225	75	200	100	2.5	2	2	3
SFWHI240/63/100	60	240	63	240	75	200	100	2.5	2	2	3
SFWHI300/63/100	60	300	63	300	75	200	100	2.5	2	2	3
SFWHI350/63/100	60	350	63	350	75	200	100	2.5	2	2	3
SFWHI360/63/100	60	360	63	360	75	200	100	2.5	2	2	3
SFWHI400/63/100	60	400	63	400	75	200	100	2.5	2	2	3

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SFWHI

Safety Fast (Welded) Masonry Restraint Hanger for I-Joists

References	Joist Size [mm]		Product Dimensions [mm]						Joist holes		Mini Strap holes
	Width	Height	A	B	C	D	E	t	Ø6x4 Oblong [mm]	Ø4.1 [mm]	Ø4.2 [mm]
SFWHI220/66/100	63	220	66	220	75	200	100	2.5	2	2	3
SFWHI225/66/100	63	225	66	225	75	200	100	2.5	2	2	3
SFWHI235/66/100	63	235	66	235	75	200	100	2.5	2	2	3
SFWHI240/66/100	63	240	66	240	75	200	100	2.5	2	2	3
SFWHI245/66/100	63	245	66	245	75	200	100	2.5	2	2	3
SFWHI300/66/100	63	300	66	300	75	200	100	2.5	2	2	3
SFWHI200/72/100	70	200	72	200	75	200	100	2.5	2	2	3
SFWHI220/72/100	70	220	72	220	75	200	100	2.5	2	2	3
SFWHI225/72/100	70	225	72	225	75	200	100	2.5	2	2	3
SFWHI240/72/100	70	240	72	240	75	200	100	2.5	2	2	3
SFWHI300/72/100	70	300	72	300	75	200	100	2.5	2	2	3
SFWHI360/72/100	70	360	72	360	75	200	100	2.5	2	2	3
SFWHI400/72/100	72	400	72	400	75	200	100	2.5	2	2	3
SFWHI195/75/100	72	195	75	195	75	200	100	2.5	2	2	3
SFWHI200/75/100	72	200	75	200	75	200	100	2.5	2	2	3
SFWHI220/75/100	72	220	75	220	75	200	100	2.5	2	2	3
SFWHI225/75/100	72	225	75	225	75	200	100	2.5	2	2	3
SFWHI235/75/100	72	235	75	235	75	200	100	2.5	2	2	3
SFWHI240/75/100	72	240	75	240	75	200	100	2.5	2	2	3
SFWHI245/75/100	72	245	75	245	75	200	100	2.5	2	2	3
SFWHI253/75/100	72	253	75	253	75	200	100	2.5	2	2	3
SFWHI300/75/100	72	300	75	300	75	200	100	2.5	2	2	3
SFWHI304/75/100	72	304	75	304	75	200	100	2.5	2	2	3
SFWHI350/75/100	72	350	75	350	75	200	100	2.5	2	2	3
SFWHI360/75/100	72	360	75	360	75	200	100	2.5	2	2	3
SFWHI373/75/100	72	373	75	373	75	200	100	2.5	2	2	3
SFWHI400/75/100	72	400	75	400	75	200	100	2.5	2	2	3
SFWHI417/75/100	72	417	75	417	75	200	100	2.5	2	2	3
SFWHI421/75/100	72	421	75	421	75	200	100	2.5	2	2	3
SFWHI195/78/100	2x38	195	78	195	75	200	100	2.5	2	2	3
SFWHI200/78/100	2x38	200	78	200	75	200	100	2.5	2	2	3
SFWHI220/78/100	2x38	220	78	220	75	200	100	2.5	2	2	3
SFWHI225/78/100	2x38	225	78	225	75	200	100	2.5	2	2	3
SFWHI235/78/100	2x38	235	78	235	75	200	100	2.5	2	2	3
SFWHI240/78/100	2x38	240	78	240	75	200	100	2.5	2	2	3
SFWHI245/78/100	2x38	245	78	245	75	200	100	2.5	2	2	3
SFWHI300/78/100	2x38	300	78	300	75	200	100	2.5	2	2	3
SFWHI360/78/100	2x38	360	78	360	75	200	100	2.5	2	2	3
SFWHI400/78/100	2x38	400	78	400	75	200	100	2.5	2	2	3
SFWHI195/91/100	2x45 or 89-90	195	91	195	75	200	100	2.5	2	2	3
SFWHI200/91/100	2x45 or 89-90	200	91	200	75	200	100	2.5	2	2	3
SFWHI220/91/100	2x45 or 89-90	220	91	220	75	200	100	2.5	2	2	3
SFWHI225/91/100	2x45 or 89-90	225	91	225	75	200	100	2.5	2	2	3
SFWHI235/91/100	2x45 or 89-90	235	91	235	75	200	100	2.5	2	2	3
SFWHI240/91/100	2x45 or 89-90	240	91	240	75	200	100	2.5	2	2	3
SFWHI245/91/100	2x45 or 89-90	245	91	245	75	200	100	2.5	2	2	3
SFWHI253/91/100	2x45 or 89-90	253	91	253	75	200	100	2.5	2	2	3
SFWHI300/91/100	2x45 or 89-90	300	91	300	75	200	100	2.5	2	2	3
SFWHI350/91/100	2x45 or 89-90	350	91	350	75	200	100	2.5	2	2	3
SFWHI400/91/100	2x45 or 89-90	400	91	400	75	200	100	2.5	2	2	3

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Safety Fast (Welded) Masonry Restraint Hanger for I-Joists

References	Joist Size [mm]		Product Dimensions [mm]						Joist holes		Mini Strap holes
	Width	Height	A	B	C	D	E	t	Ø6x4 Oblong [mm]	Ø4.1 [mm]	Ø4.2 [mm]
SFWHI195/96/100	2x47	195	96	195	75	200	100	2.5	2	2	3
SFWHI220/96/100	2x47	220	96	220	75	200	100	2.5	2	2	3
SFWHI225/96/100	2x47	225	96	225	75	200	100	2.5	2	2	3
SFWHI235/96/100	2x47	235	96	235	75	200	100	2.5	2	2	3
SFWHI240/96/100	2x47	240	96	240	75	200	100	2.5	2	2	3
SFWHI245/96/100	2x47	245	96	245	75	200	100	2.5	2	2	3
SFWHI300/96/100	2x47	300	96	300	75	200	100	2.5	2	2	3
SFWHI195/99/100	96-97	195	99	195	75	200	100	2.5	2	2	3
SFWHI200/99/100	96-97	200	99	200	75	200	100	2.5	2	2	3
SFWHI220/99/100	96-97	220	99	220	75	200	100	2.5	2	2	3
SFWHI225/99/100	96-97	225	99	225	75	200	100	2.5	2	2	3
SFWHI235/99/100	96-97	235	99	235	75	200	100	2.5	2	2	3
SFWHI240/99/100	96-97	240	99	240	75	200	100	2.5	2	2	3
SFWHI245/99/100	96-97	245	99	245	75	200	100	2.5	2	2	3
SFWHI253/99/100	96-97	253	99	253	75	200	100	2.5	2	2	3
SFWHI300/99/100	96-97	300	99	300	75	200	100	2.5	2	2	3
SFWHI304/99/100	96-97	304	99	304	75	200	100	2.5	2	2	3
SFWHI350/99/100	96-97	350	99	350	75	200	100	2.5	2	2	3
SFWHI373/99/100	96-97	373	99	373	75	200	100	2.5	2	2	3
SFWHI400/99/100	96-97	400	99	400	75	200	100	2.5	2	2	3
SFWHI417/99/100	96-97	417	99	417	75	200	100	2.5	2	2	3
SFWHI421/99/100	96-97	421	99	421	75	200	100	2.5	2	2	3
SFWHI220/109/100	2x53	220	109	220	75	200	100	2.5	2	2	3
SFWHI225/109/100	2x53	225	109	225	75	200	100	2.5	2	2	3
SFWHI300/109/100	2x53	300	109	300	75	200	100	2.5	2	2	3
SFWHI200/122/100	2x60	200	122	200	75	200	100	2.5	2	2	3
SFWHI220/122/100	2x60	220	122	220	75	200	100	2.5	2	2	3
SFWHI225/122/100	2x60	225	122	225	75	200	100	2.5	2	2	3
SFWHI240/122/100	2x60	240	122	240	75	200	100	2.5	2	2	3
SFWHI300/122/100	2x60	300	122	300	75	200	100	2.5	2	2	3
SFWHI350/122/100	2x60	350	122	350	75	200	100	2.5	2	2	3
SFWHI360/122/100	2x60	360	122	360	75	200	100	2.5	2	2	3
SFWHI400/122/100	2x60	400	122	400	75	200	100	2.5	2	2	3
SFWHI195/125/100	122	195	125	195	75	200	100	2.5	2	2	3
SFWHI200/125/100	122	200	125	200	75	200	100	2.5	2	2	3
SFWHI225/125/100	122	225	125	225	75	200	100	2.5	2	2	3
SFWHI253/125/100	122	253	125	253	75	200	100	2.5	2	2	3
SFWHI304/125/100	122	304	125	304	75	200	100	2.5	2	2	3
SFWHI373/125/100	122	373	125	373	75	200	100	2.5	2	2	3
SFWHI417/125/100	122	417	125	417	75	200	100	2.5	2	2	3
SFWHI421/125/100	122	421	125	421	75	200	100	2.5	2	2	3
SFWHI220/128/100	2x63	220	128	220	75	200	100	2.5	2	2	3
SFWHI225/128/100	2x63	225	128	225	75	200	100	2.5	2	2	3
SFWHI235/128/100	2x63	235	128	235	75	200	100	2.5	2	2	3
SFWHI240/128/100	2x63	240	128	240	75	200	100	2.5	2	2	3
SFWHI245/128/100	2x63	245	128	245	75	200	100	2.5	2	2	3
SFWHI300/128/100	2x63	300	128	300	75	200	100	2.5	2	2	3
SFWHI200/142/100	2x70	200	142	200	75	225	100	2.5	2	2	3
SFWHI220/142/100	2x70	220	142	220	75	225	100	2.5	2	2	3
SFWHI225/142/100	2x70	220	142	220	75	225	100	2.5	2	2	3

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SFWHI

Safety Fast (Welded) Masonry Restraint Hanger for I-Joists

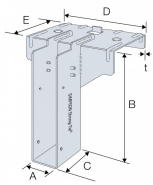
References	Joist Size [mm]		Product Dimensions [mm]						Joist holes		Mini Strap holes
	Width	Height	A	B	C	D	E	t	Ø6x4 Oblong [mm]	Ø4.1 [mm]	Ø4.2 [mm]
SFWHI240/142/100	2x70	240	142	240	75	225	100	2.5	2	2	3
SFWHI300/142/100	2x70	300	142	300	75	225	100	2.5	2	2	3
SFWHI360/142/100	2x70	360	142	360	75	225	100	2.5	2	2	3
SFWHI400/142/100	2x70	400	142	400	75	225	100	2.5	2	2	3
SFWHI195/146/100	2x72	195	146	195	75	225	100	2.5	2	2	3
SFWHI200/146/100	2x72	200	146	195	75	225	100	2.5	2	2	3
SFWHI220/146/100	2x72	220	146	220	75	225	100	2.5	2	2	3
SFWHI225/146/100	2x72	225	146	225	75	225	100	2.5	2	2	3
SFWHI235/146/100	2x72	235	146	235	75	225	100	2.5	2	2	3
SFWHI240/146/100	2x72	240	146	240	75	225	100	2.5	2	2	3
SFWHI245/146/100	2x72	245	146	245	75	225	100	2.5	2	2	3
SFWHI300/146/100	2x72	300	146	300	75	225	100	2.5	2	2	3
SFWHI350/146/100	2x72	350	146	350	75	225	100	2.5	2	2	3
SFWHI360/146/100	2x72	360	146	360	75	225	100	2.5	2	2	3
SFWHI400/146/100	2x72	400	146	400	75	225	100	2.5	2	2	3
SFWHI195/150/100	2x75 or 147	195	150	195	75	225	100	2.5	2	2	3
SFWHI200/150/100	2x75 or 147	200	150	200	75	225	100	2.5	2	2	3
SFWHI220/150/100	2x75 or 147	220	150	220	75	225	100	2.5	2	2	3
SFWHI225/150/100	2x75 or 147	225	150	225	75	225	100	2.5	2	2	3
SFWHI235/150/100	2x75 or 147	235	150	235	75	225	100	2.5	2	2	3
SFWHI240/150/100	2x75 or 147	240	150	240	75	225	100	2.5	2	2	3
SFWHI245/150/100	2x75 or 147	245	150	245	75	225	100	2.5	2	2	3
SFWHI253/150/100	2x75 or 147	253	150	253	75	225	100	2.5	2	2	3
SFWHI300/150/100	2x75 or 147	300	150	300	75	225	100	2.5	2	2	3
SFWHI304/150/100	2x75 or 147	304	150	304	75	225	100	2.5	2	2	3
SFWHI360/150/100	2x75 or 147	360	150	360	75	225	100	2.5	2	2	3
SFWHI373/150/100	2x75 or 147	373	150	373	75	225	100	2.5	2	2	3
SFWHI400/150/100	2x75 or 147	400	150	400	75	225	100	2.5	2	2	3
SFWHI417/150/100	2x75 or 147	417	150	417	75	225	100	2.5	2	2	3
SFWHI421/150/100	2x75 or 147	421	150	421	75	225	100	2.5	2	2	3
SFWHI195/182/100	2x89-90	195	182	195	75	275	100	2.5	2	2	3
SFWHI200/182/100	2x89-90	200	182	200	75	275	100	2.5	2	2	3
SFWHI220/182/100	2x89-90	220	182	220	75	275	100	2.5	2	2	3
SFWHI225/182/100	2x89-90	225	182	225	75	275	100	2.5	2	2	3
SFWHI235/182/100	2x89-90	235	182	235	75	275	100	2.5	2	2	3
SFWHI240/182/100	2x89-90	240	182	240	75	275	100	2.5	2	2	3
SFWHI245/182/100	2x89-90	245	182	245	75	275	100	2.5	2	2	3
SFWHI300/182/100	2x89-90	300	182	300	75	275	100	2.5	2	2	3
SFWHI350/182/100	2x89-90	350	182	350	75	275	100	2.5	2	2	3
SFWHI360/182/100	2x89-90	360	182	360	75	275	100	2.5	2	2	3
SFWHI400/182/100	2x89-90	400	182	400	75	275	100	2.5	2	2	3
SFWHI220/196/100	2x97	220	196	220	75	275	100	2.5	2	2	3
SFWHI225/196/100	2x97	220	196	220	75	275	100	2.5	2	2	3
SFWHI235/196/100	2x97	235	196	235	75	275	100	2.5	2	2	3
SFWHI240/196/100	2x97	240	196	240	75	275	100	2.5	2	2	3
SFWHI245/196/100	2x97	245	196	245	75	275	100	2.5	2	2	3
SFWHI300/196/100	2x97	300	196	300	75	275	100	2.5	2	2	3
SFWHI350/196/100	2x97	350	196	350	75	275	100	2.5	2	2	3
SFWHI400/196/100	2x97	400	196	400	75	275	100	2.5	2	2	3
SFWHI450/196/100	2x97	450	196	450	75	275	100	2.5	2	2	3

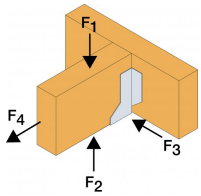
Technical data sheet

SFWHI

Safety Fast (Welded) Masonry Restraint Hanger for I-Joists

References	Joist Size [mm]		Product Dimensions [mm]						Joist holes		Mini Strap holes
	Width	Height	A	B	C	D	E	t	Ø6x4 Oblong [mm]	Ø4.1 [mm]	Ø4.2 [mm]
SFWHI195/246/100	2x122	195	246	195	75	275	100	2.5	2	2	3
SFWHI200/246/100	2x122	200	246	200	75	275	100	2.5	2	2	3
SFWHI220/246/100	2x122	220	246	220	75	275	100	2.5	2	2	3
SFWHI225/246/100	2x122	225	246	225	75	275	100	2.5	2	2	3
SFWHI253/246/100	2x122	253	246	253	75	275	100	2.5	2	2	3
SFWHI304/246/100	2x122	304	246	304	75	275	100	2.5	2	2	3
SFWHI373/246/100	2x122	373	246	373	75	275	100	2.5	2	2	3
SFWHI417/246/100	2x122	417	246	417	75	275	100	2.5	2	2	3
SFWHI421/246/100	2x122	421	246	421	75	275	100	2.5	2	2	3
SFWHI195/296/100	2x147	195	246	195	75	275	100	2.5	2	2	3
SFWHI200/296/100	2x147	200	246	200	75	275	100	2.5	2	2	3
SFWHI220/296/100	2x147	220	246	220	75	275	100	2.5	2	2	3
SFWHI225/296/100	2x147	225	246	225	75	275	100	2.5	2	2	3
SFWHI253/296/100	2x147	253	246	253	75	275	100	2.5	2	2	3
SFWHI304/296/100	2x147	304	246	304	75	275	100	2.5	2	2	3
SFWHI373/296/100	2x147	373	246	373	75	275	100	2.5	2	2	3
SFWHI417/296/100	2x147	417	246	417	75	275	100	2.5	2	2	3
SFWHI421/296/100	2x147	421	246	421	75	275	100	2.5	2	2	3





Product Capacities - Timber to Masonry

References	Number of Fasteners				Characteristic Capacities [kN]		Safe Working Loads [kN]		
	Joist Fasteners		Mini Strap		$R_{1.k}$		$R_{1,SWL}$		
	Qty	Type	Qty	Type	3.5N/mm² Solid LAC	7N/mm² Solid DAC	2.8N/mm² Solid AAC	3.5N/mm² Solid LAC	7N/mm² Solid DAC
SFWHI (A ≤ 63mm)	2	N3.75x30	3	N3.75x30	18.6	18.6	7.4	9.3	9.3
SFWHI (A > 63mm)	2	N3.75x30	3	N3.75x30	28.9	28.9	11.6	14.5	14.5

Installation

Installation

- Use all specified nails.
- Build masonry to required level, ensuring any coursing bricks or blocks are at least one course below the supporting block, and leave to cure.
- Place the Safety Fast Restraint Hanger over the inner leaf of block work, ensuring the bearing plate is fully located onto the top of the masonry, sitting tight against the front face and top of the block work.
- Sit the floor joist into the masonry hanger and ensure all joists are correctly installed. The joist should be tight into the back of the hanger where possible. The maximum gap between the back of the hanger and the end of the joist is 6mm.
- Clip the Safety Fast Mini Strap onto the restraining hooks on either side of the hanger and nail to the side face of the joist with 3.75 x 30mm square twist nails. INSTALL ONLY ONE STRAP PER HANGER.

General Installation Notes

- The floor decking may be stored on the joists provided the load is uniformly distributed between the several joists and does not exceed the hanger or joist capacities. Refer to joist manufacturer or supplier for joist capacity and maximum construction loads.
- The floor decking must be securely attached to each joist before additional loads can be placed on the system.
- Floor decking and block work is to be cut where necessary to fit around the upstand stiffeners.
- Pallets of blocks or other construction materials should be placed onto the scaffolding and NOT directly onto the floor. The materials can then be evenly distributed around the floor manually, ensuring hanger or joist capacities are not exceeded.

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