

VAN DER VALK



SOLAR SYSTEMS

Quick Guide



PV Inverter Shelter **Slim**



Ballast sheets

How to determine ballast?

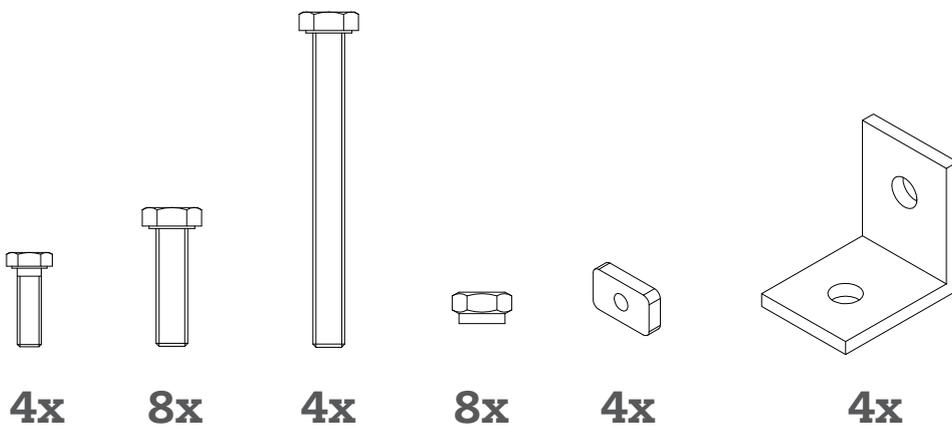
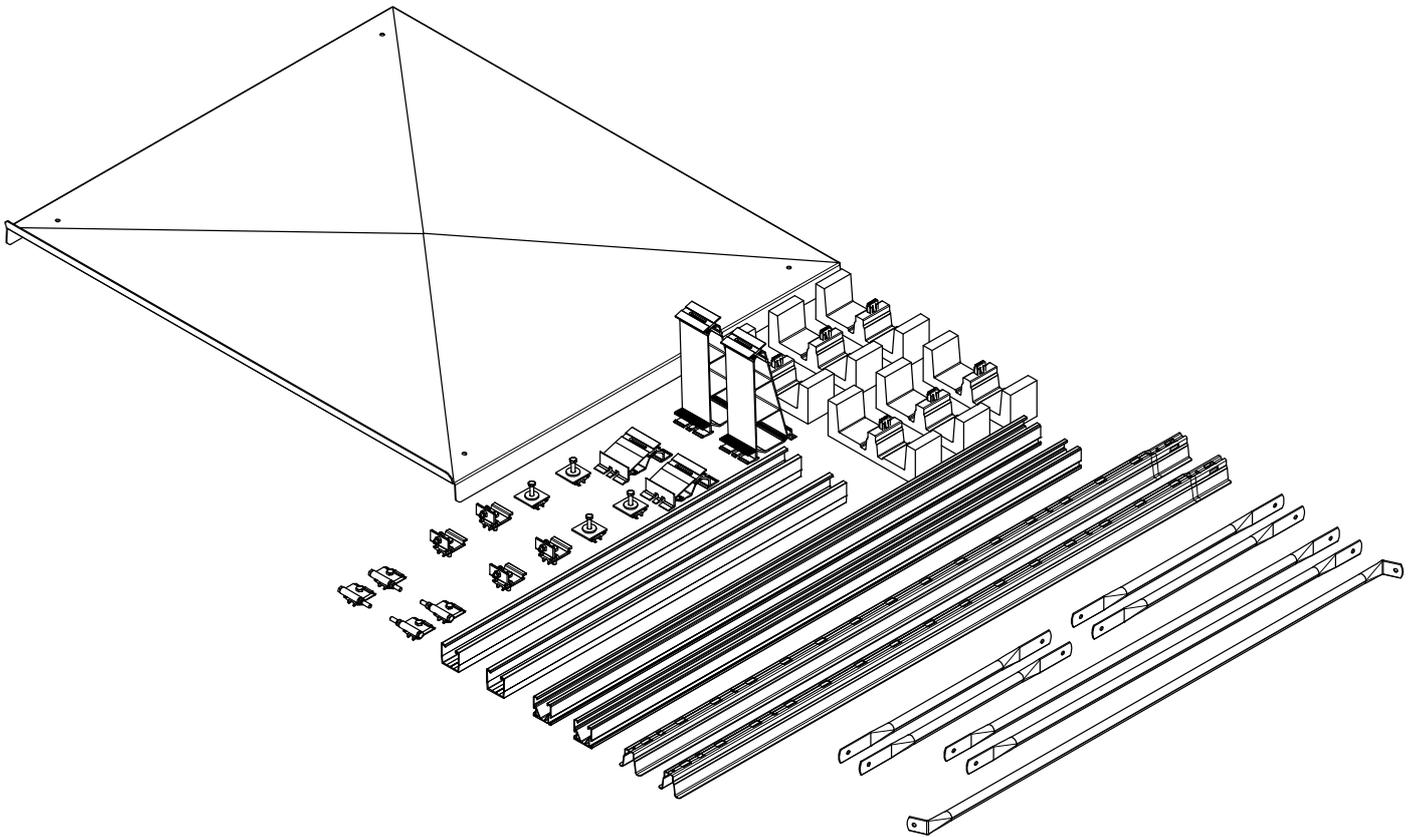
1. Select the relevant inverter weight category: 30 Kg, 60 Kg, 90 Kg.
2. Determine the following environmental factors based on the project location:
 - a. Terrain category (O, I, II, III, IV)
 - b. Building height (0 m - 20 m)
 - c. Wind speed (20 m/s up to 30 m/s)
3. Consult the correct table, column and row to gather the specific ballast information.
 - a. ATTENTION: add or subtract the difference in weight of the inverter compared to the values used in the inverter weight category.
4. Placing an amount of ballast may require the use of ballast carriers (art. nr. 742561).

Refer to the legend below the table or contact Van der Valk Solar Systems, including for specific project calculations or questions about ballast.

Inverter weight: 30 Kg																										
Terrain category		O					I					II					III					IV				
Height		0	5	10	15	20	0	5	10	15	20	0	5	10	15	20	0	5	10	15	20	0	5	10	15	20
vb,0 (m/s)	20	79	133	x	x	x	61	117	144	x	x	53	87	116	133	147	44	44	72	91	104	36	36	36	55	68
	21	92	151	x	x	x	72	133	x	x	x	63	101	132	152	x	52	52	84	104	119	45	45	45	64	79
	22	105	x	x	x	x	83	150	x	x	x	73	115	149	x	x	62	62	97	119	135	53	53	53	75	91
	23	119	x	x	x	x	94	x	x	x	x	84	129	x	x	x	71	71	110	134	152	62	62	62	86	104
	24	133	x	x	x	x	107	x	x	x	x	95	144	x	x	x	82	82	123	149	x	71	71	71	97	117
	25	148	x	x	x	x	119	x	x	x	x	107	x	x	x	x	92	92	137	x	x	81	81	81	109	130
	26	x	x	x	x	x	133	x	x	x	x	119	x	x	x	x	103	103	152	x	x	91	91	91	122	144
	27	x	x	x	x	x	146	x	x	x	x	132	x	x	x	x	115	115	x	x	x	102	102	102	134	x
	28	x	x	x	x	x	x	x	x	x	x	145	x	x	x	x	126	126	x	x	x	113	113	113	148	x
	29	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	139	139	x	x	x	124	124	124	x	x
	30	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	136	136	136	x	x
Inverter weight: 60 Kg																										
Terrain category		O					I					II					III					IV				
Height		0	5	10	15	20	0	5	10	15	20	0	5	10	15	20	0	5	10	15	20	0	5	10	15	20
vb,0 (m/s)	20	49	103	128	144	x	31	87	114	130	143	23	57	86	103	117	14	14	42	61	74	6	6	6	25	38
	21	62	121	149	x	x	42	103	133	151	x	33	71	102	122	136	22	22	54	74	89	15	15	15	34	49
	22	75	140	x	x	x	53	120	x	x	x	43	85	119	140	x	32	32	67	89	105	23	23	23	45	61
	23	89	x	x	x	x	64	138	x	x	x	54	99	137	x	x	41	41	80	104	122	32	32	32	56	74
	24	103	x	x	x	x	77	x	x	x	x	65	114	x	x	x	52	52	93	119	139	41	41	41	67	87
	25	118	x	x	x	x	89	x	x	x	x	77	130	x	x	x	62	62	107	136	x	51	51	51	79	100
	26	134	x	x	x	x	103	x	x	x	x	89	147	x	x	x	73	73	122	x	x	61	61	61	92	114
	27	150	x	x	x	x	116	x	x	x	x	102	x	x	x	x	85	85	137	x	x	72	72	72	104	129
	28	x	x	x	x	x	131	x	x	x	x	115	x	x	x	x	96	96	x	x	x	83	83	83	118	144
	29	x	x	x	x	x	145	x	x	x	x	129	x	x	x	x	109	109	x	x	x	94	94	94	132	x
	30	x	x	x	x	x	x	x	x	x	x	143	x	x	x	x	121	121	x	x	x	106	106	106	146	x
Inverter weight: 90 Kg																										
Terrain category		O					I					II					III					IV				
Height		0	5	10	15	20	0	5	10	15	20	0	5	10	15	20	0	5	10	15	20	0	5	10	15	20
vb,0 (m/s)	20	19	73	98	114	126	1	57	84	100	113	0	27	56	73	87	0	0	12	31	44	0	0	0	0	8
	21	32	91	119	136	149	12	73	103	121	135	3	41	72	92	106	0	0	24	44	59	0	0	0	4	19
	22	45	110	141	x	x	23	90	123	143	x	13	55	89	110	126	2	2	37	59	75	0	0	0	15	31
	23	59	129	x	x	x	34	108	144	x	x	24	69	107	130	148	11	11	50	74	92	2	2	2	26	44
	24	73	150	x	x	x	47	127	x	x	x	35	84	125	151	x	22	22	63	89	109	11	11	11	37	57
	25	88	x	x	x	x	59	146	x	x	x	47	100	145	x	x	32	32	77	106	127	21	21	21	49	70
	26	104	x	x	x	x	73	x	x	x	x	59	117	x	x	x	43	43	92	123	146	31	31	31	62	84
	27	120	x	x	x	x	86	x	x	x	x	72	134	x	x	x	55	55	107	140	x	42	42	42	74	99
	28	136	x	x	x	x	101	x	x	x	x	85	152	x	x	x	66	66	123	x	x	53	53	53	88	114
	29	x	x	x	x	x	115	x	x	x	x	99	x	x	x	x	79	79	139	x	x	64	64	64	102	130
	30	x	x	x	x	x	131	x	x	x	x	113	x	x	x	x	91	91	x	x	x	76	76	76	116	146

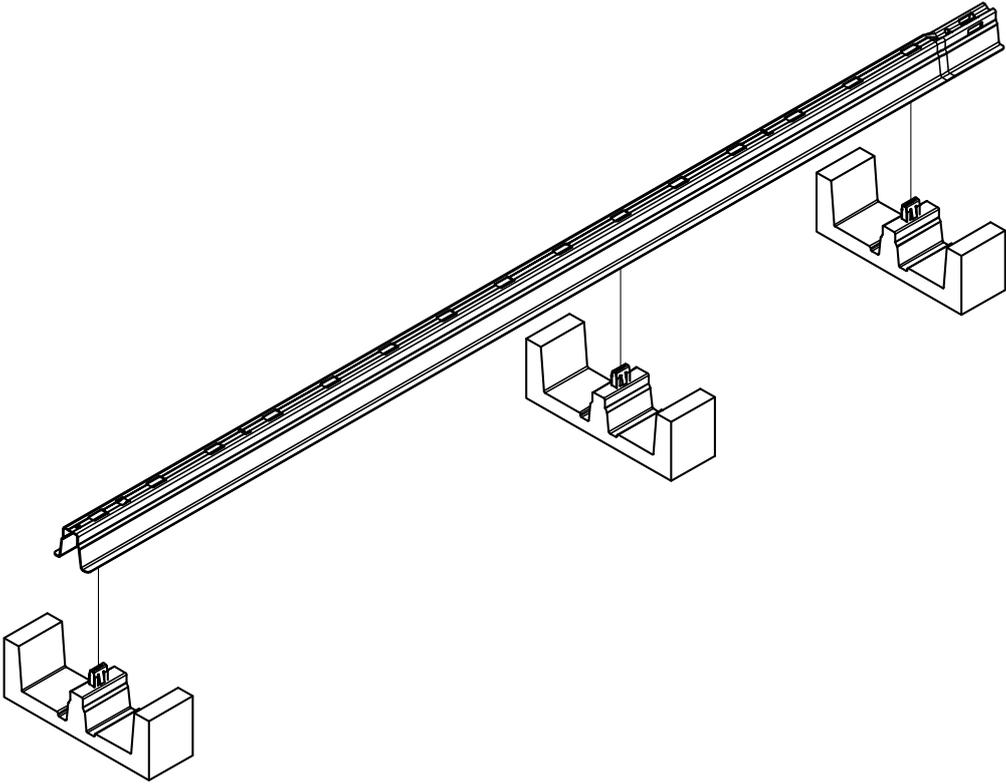
Nr. of ballast carrier sets (Max. 2)

	=	0	(No ballast)
	=	1	(1-108)
	=	2	(109-200)
	=		Fixation required

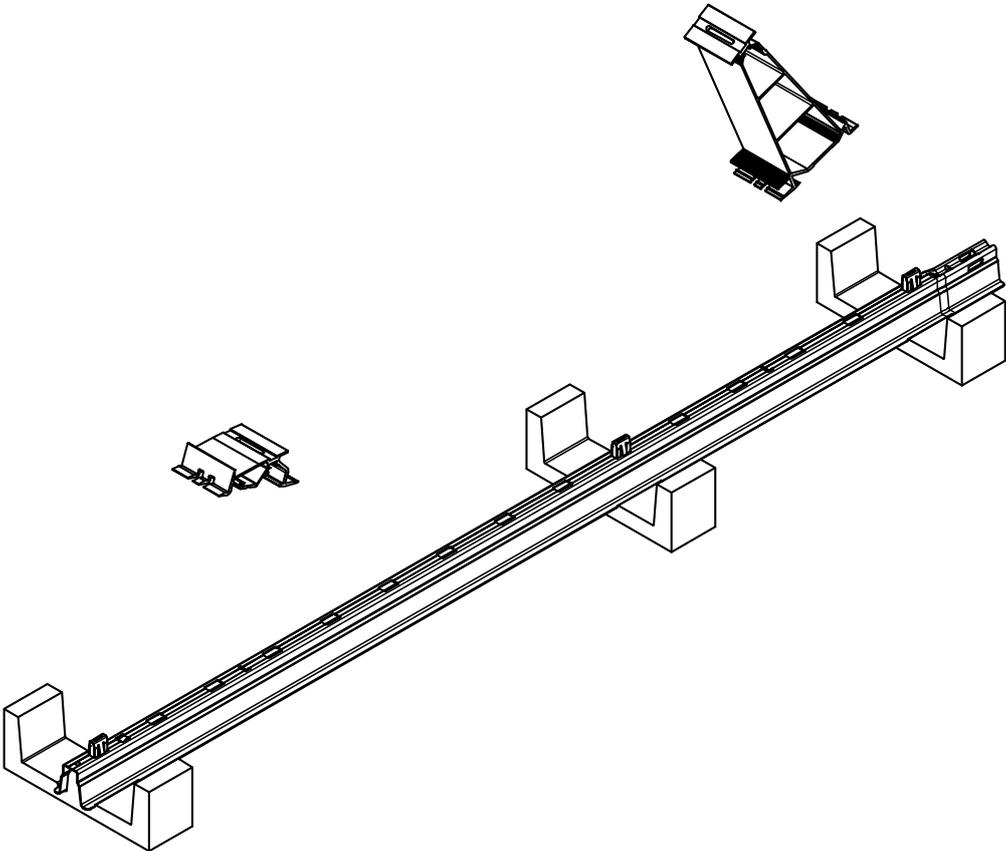


Required tools: socket wrench 13 and 10 mm

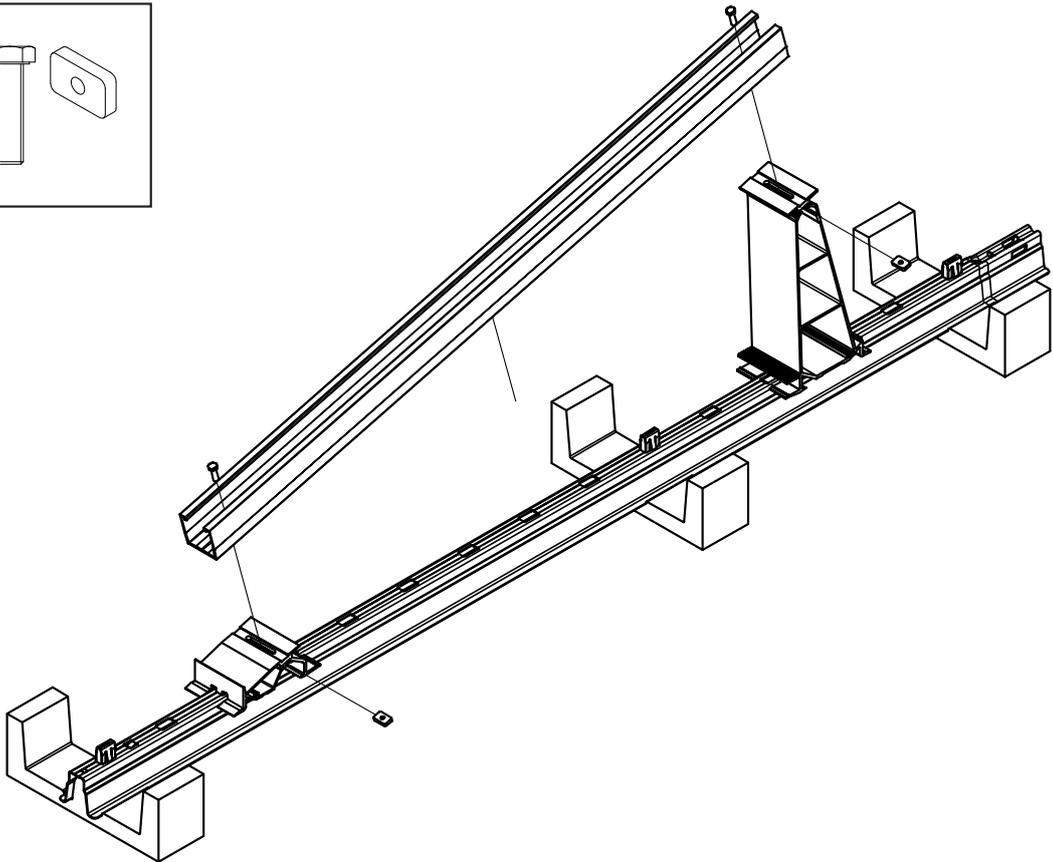
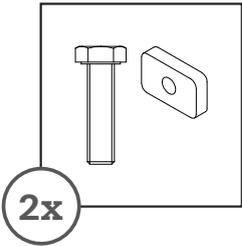
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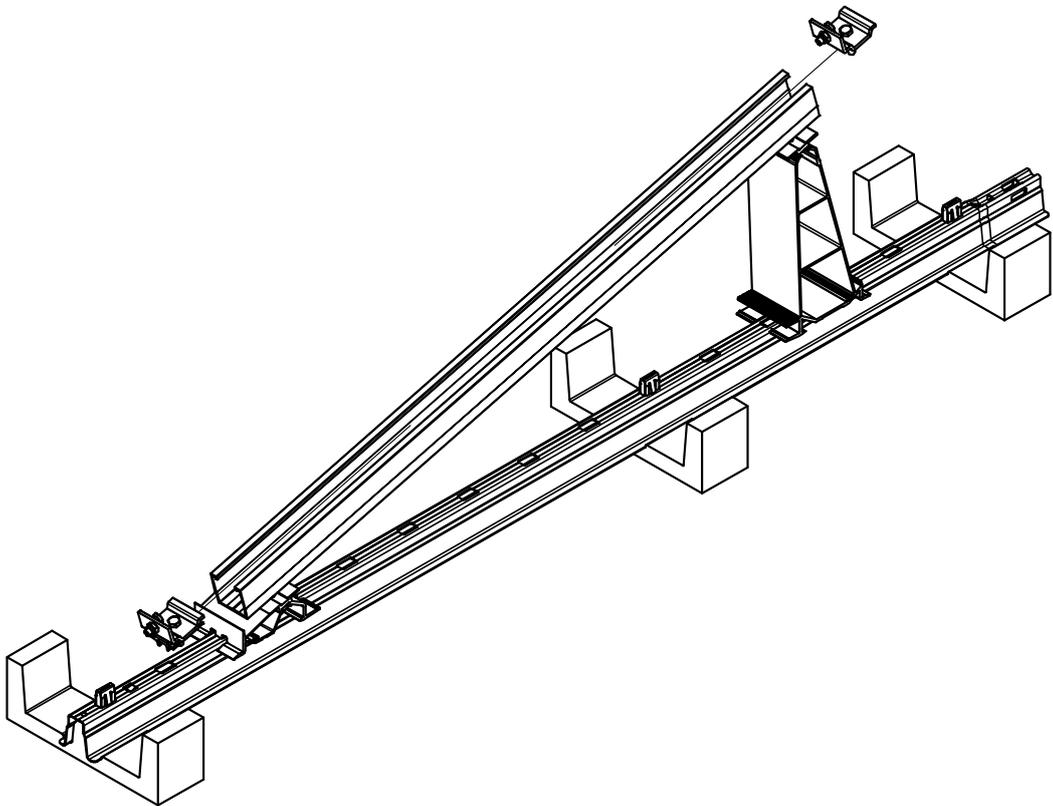
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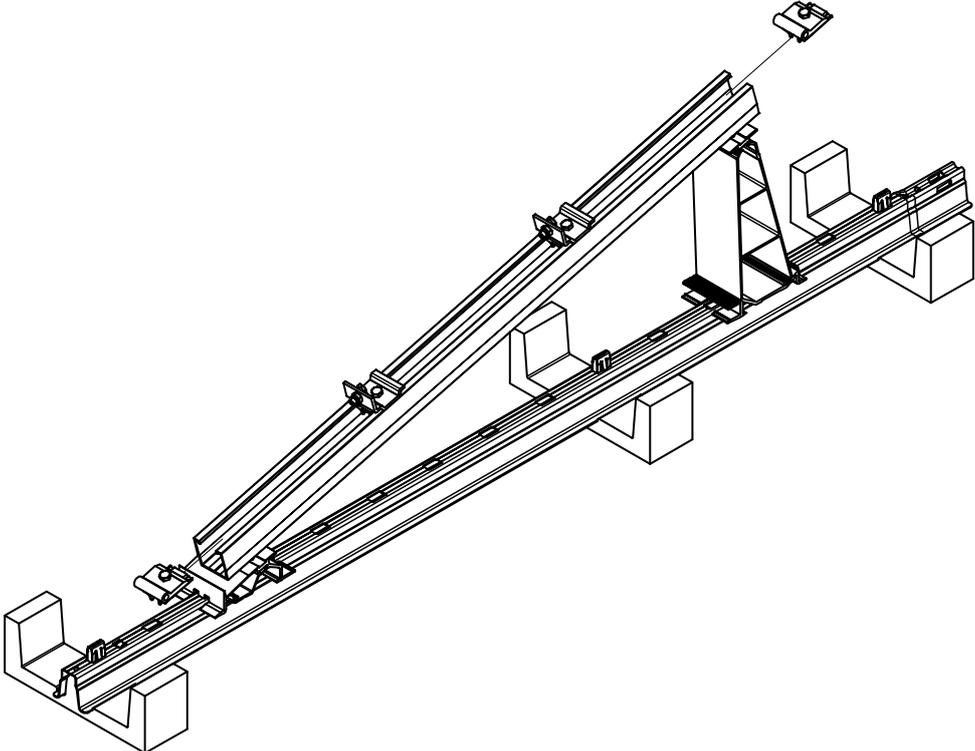


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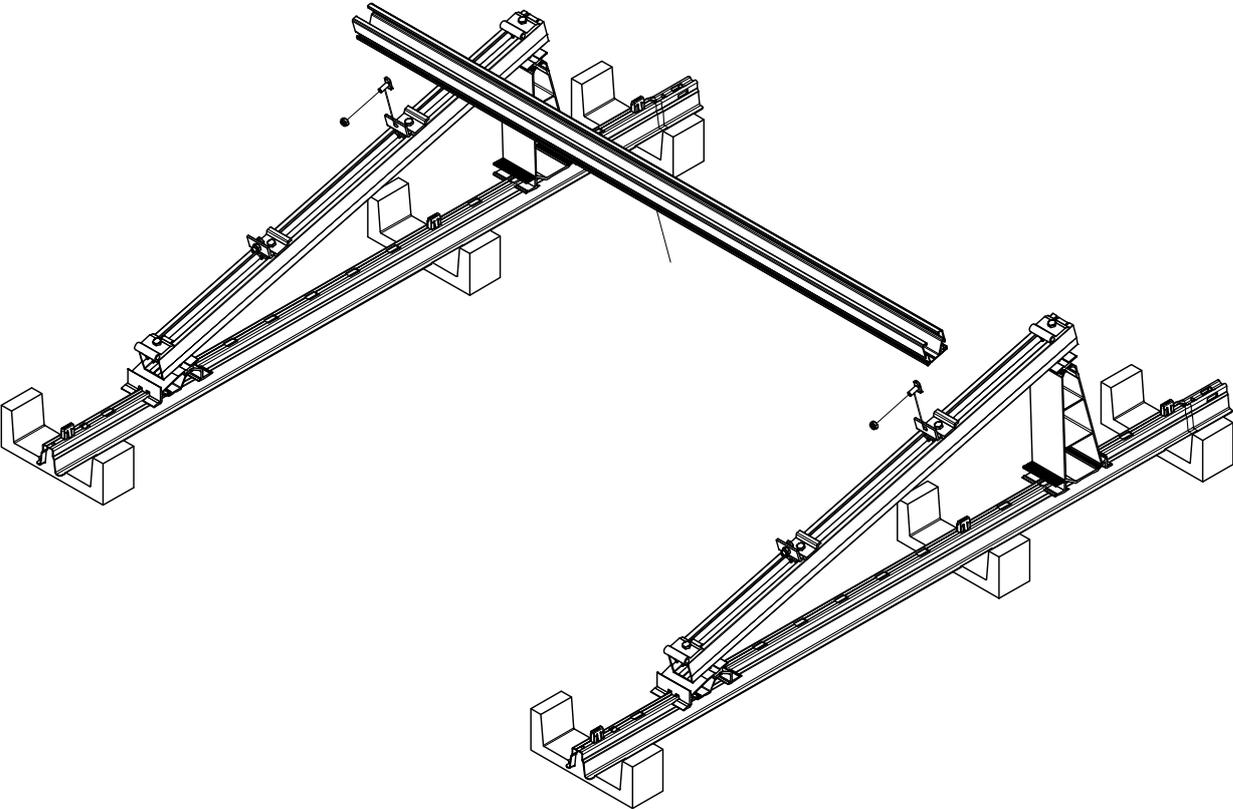


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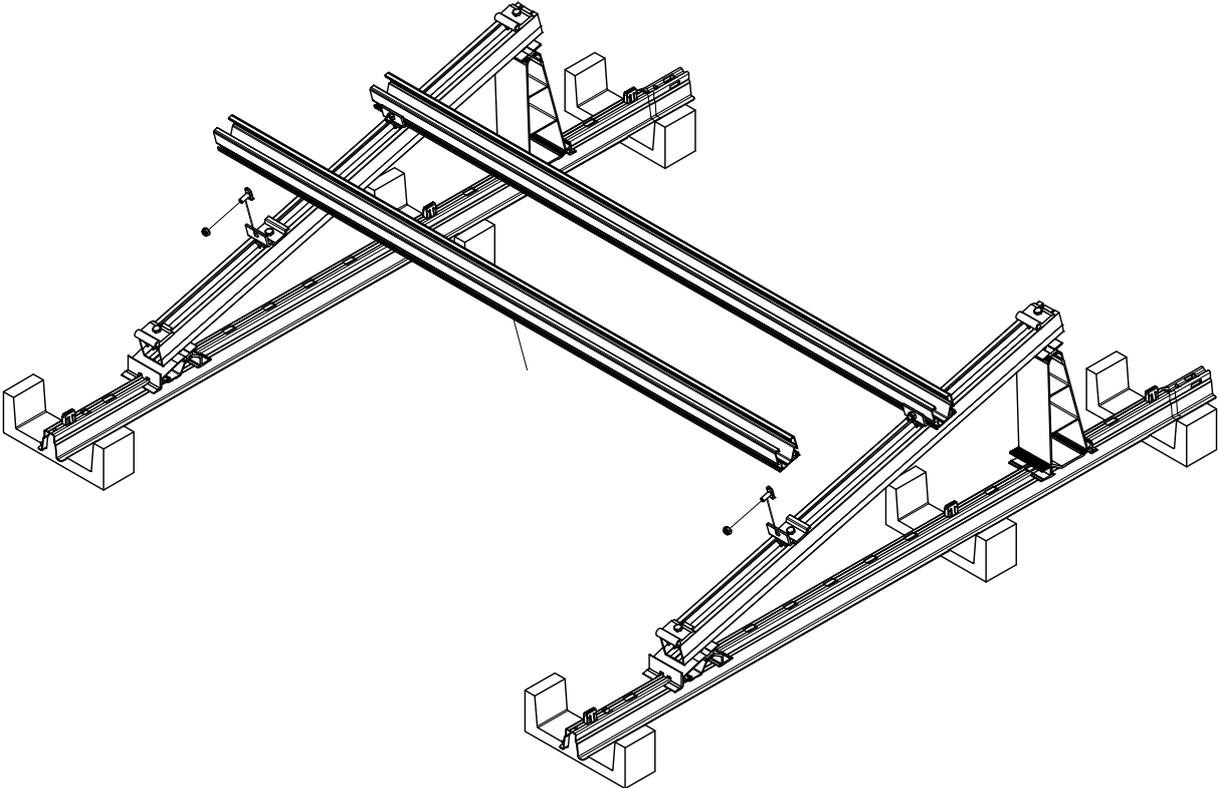
2x



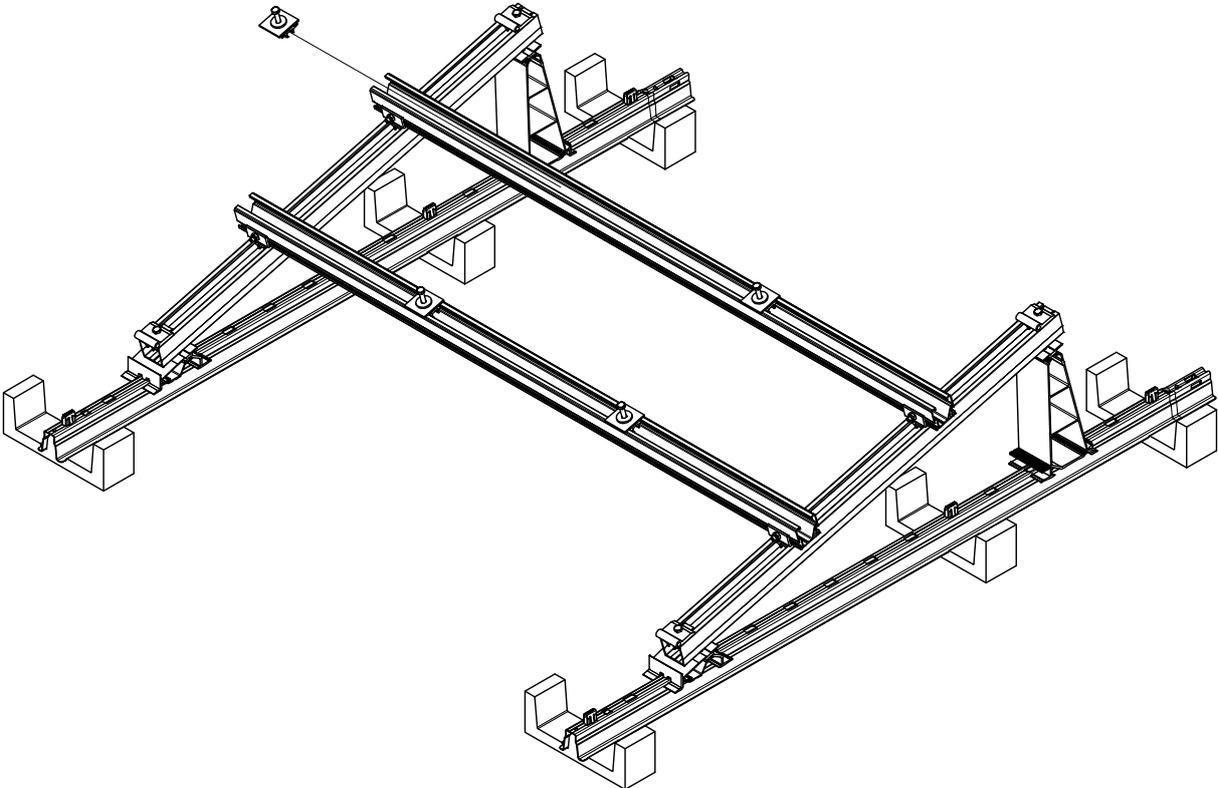
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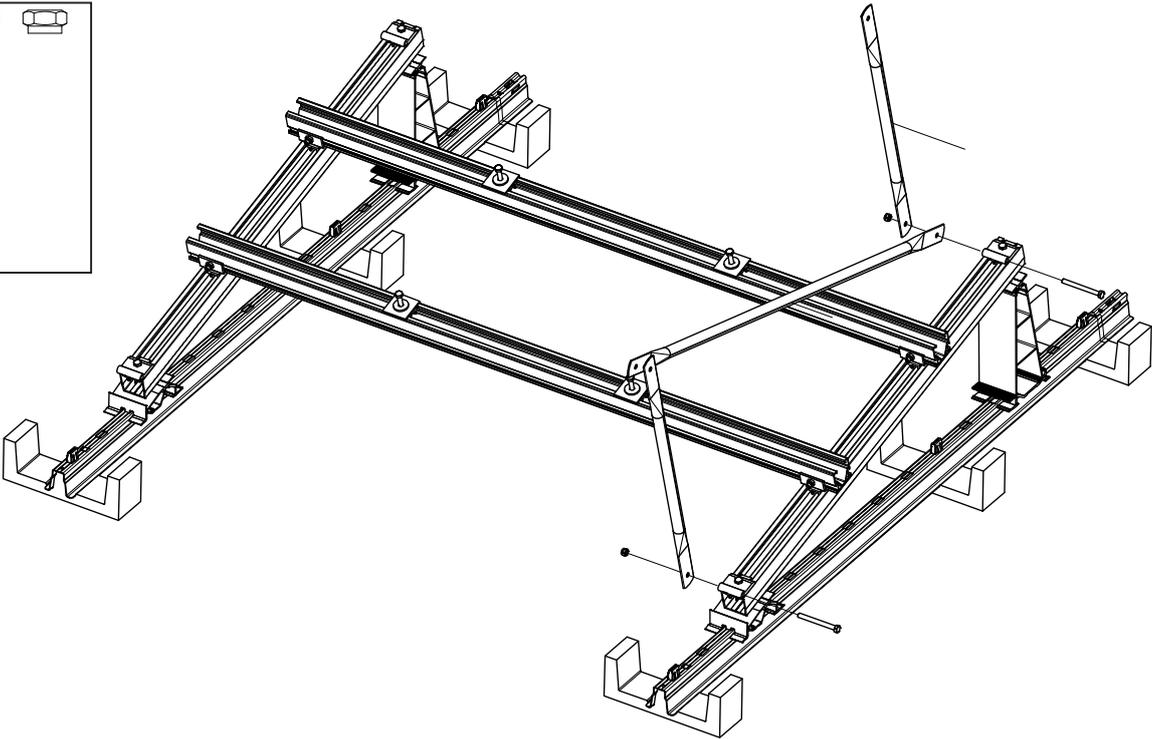
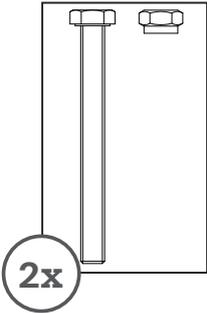
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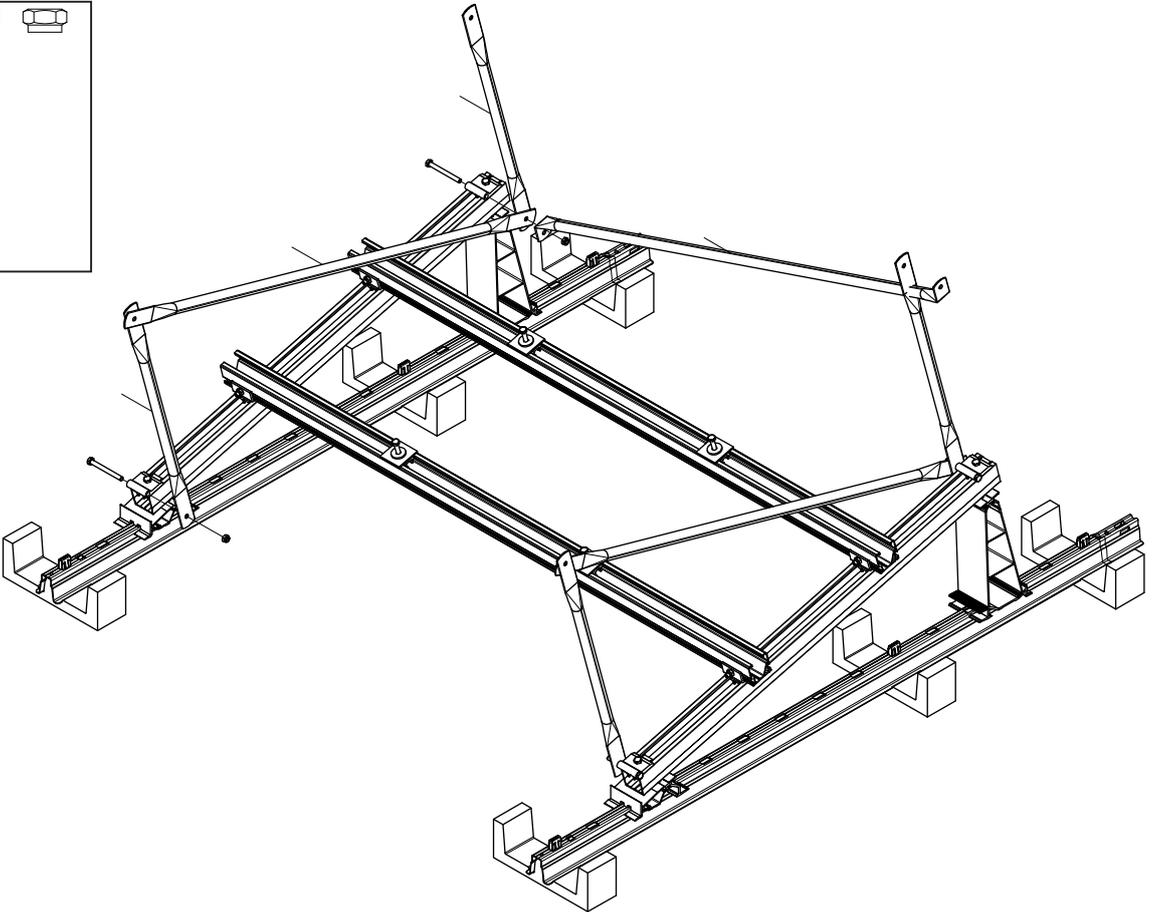
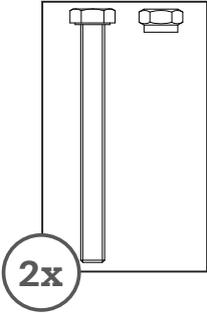
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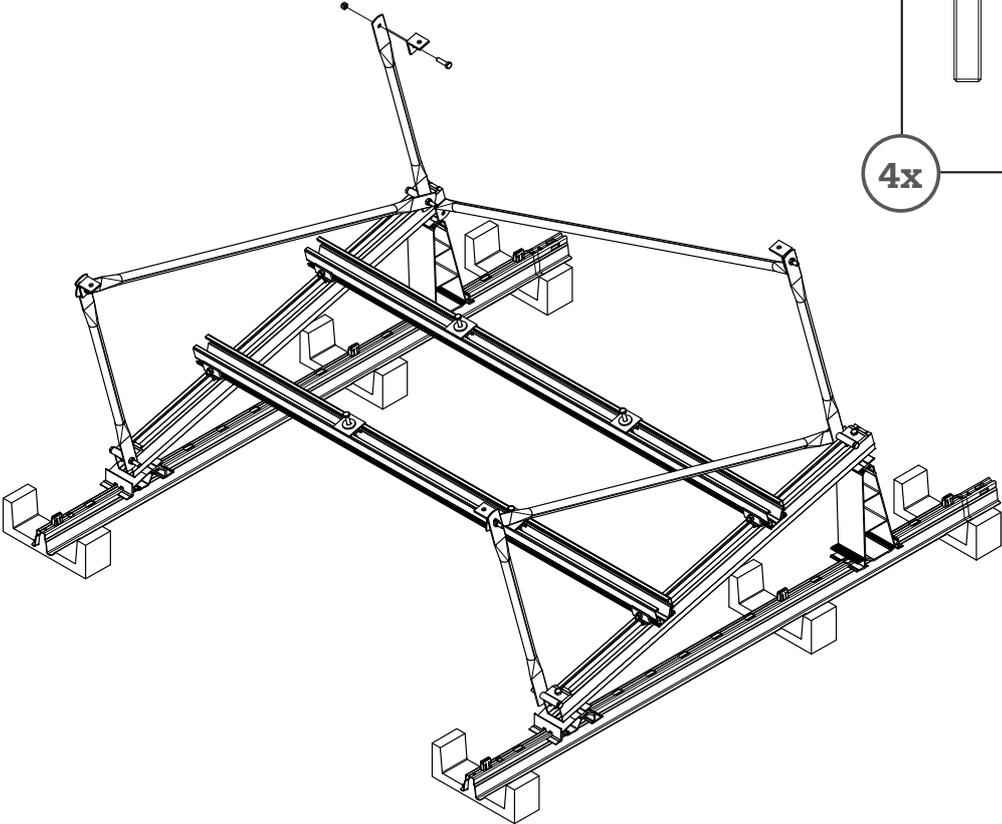
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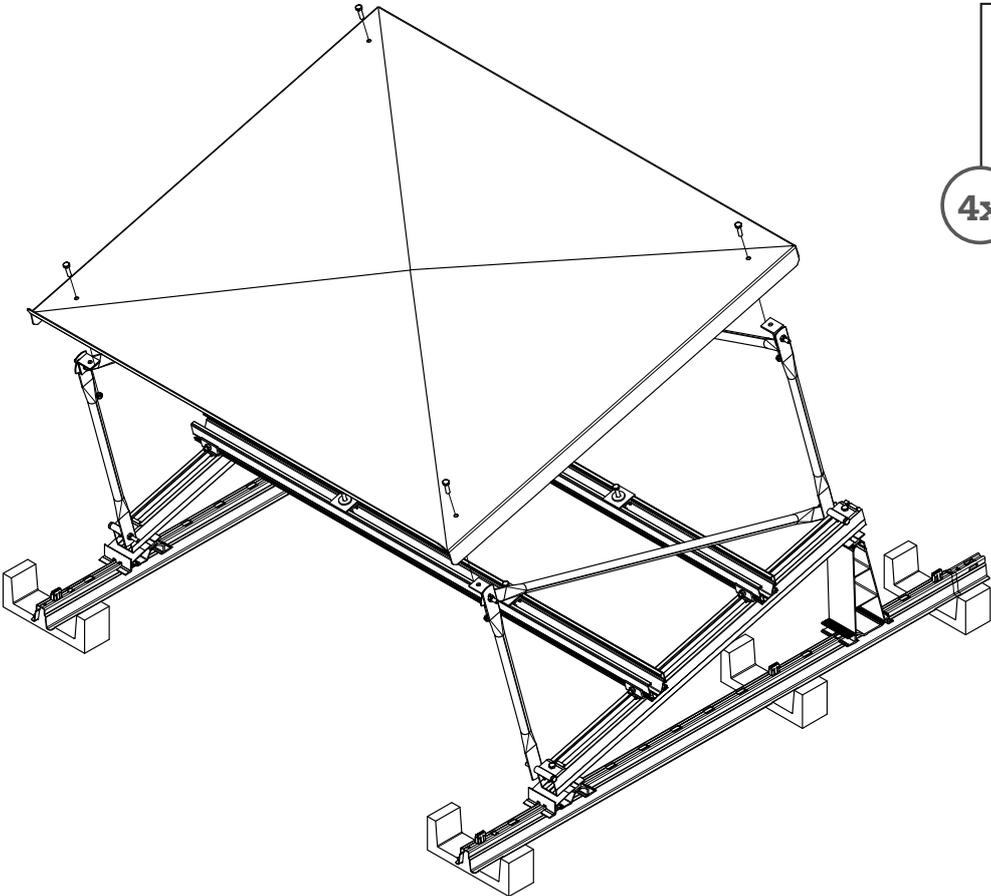


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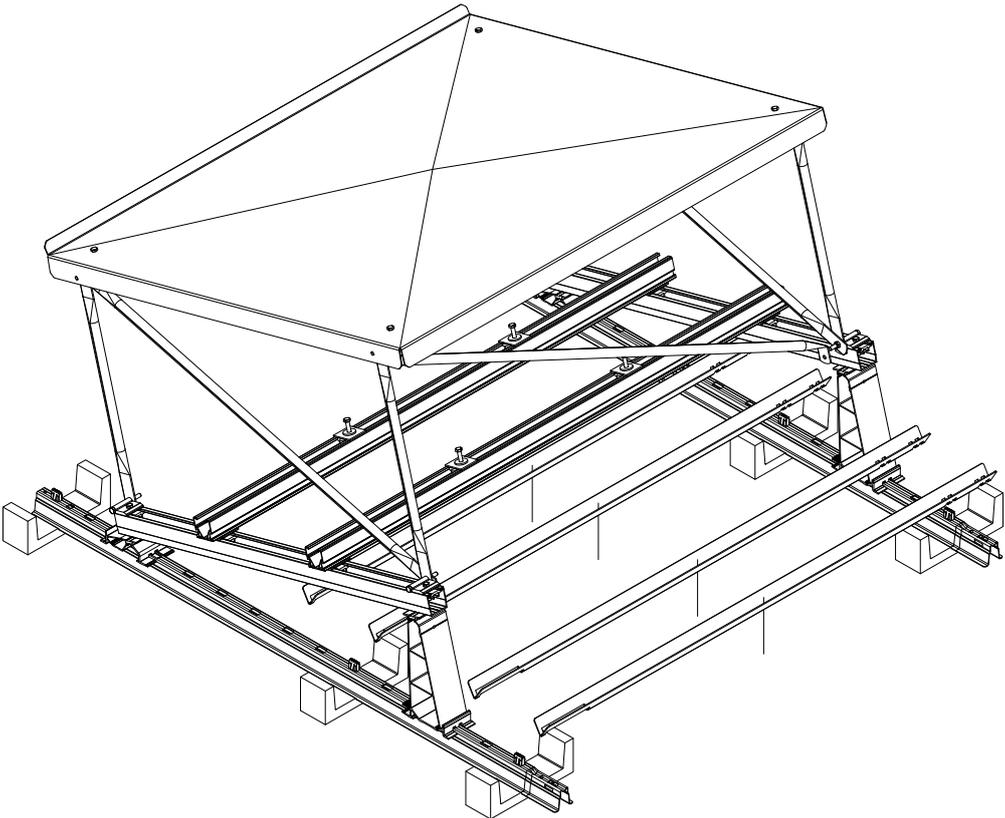
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12

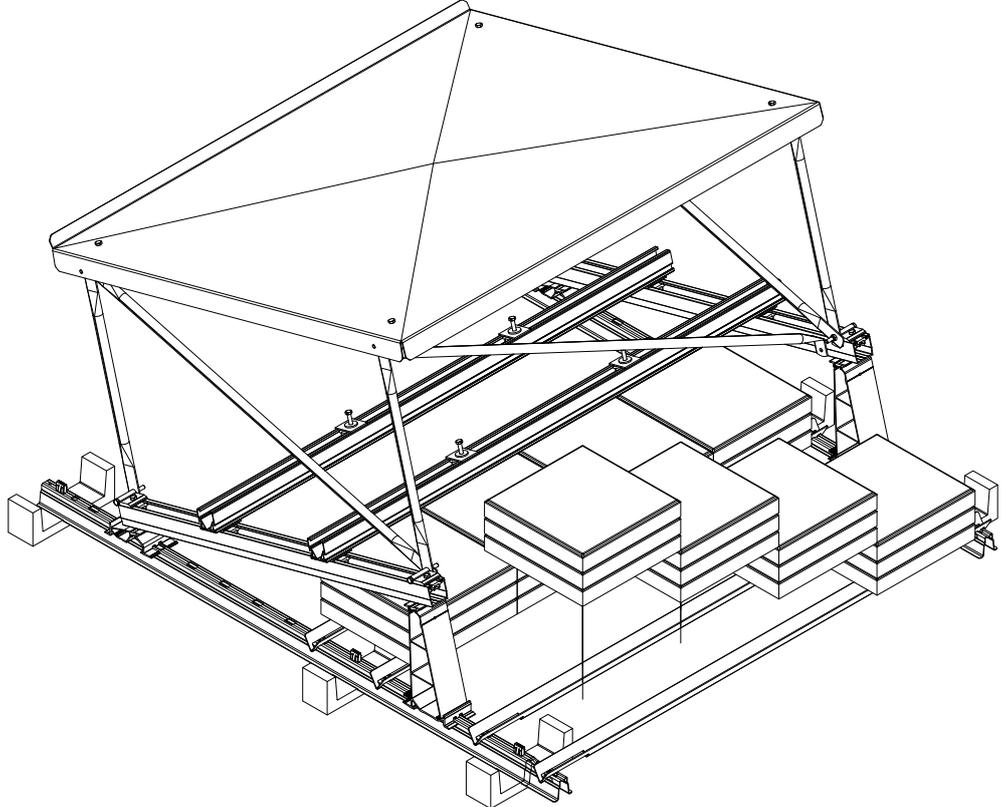


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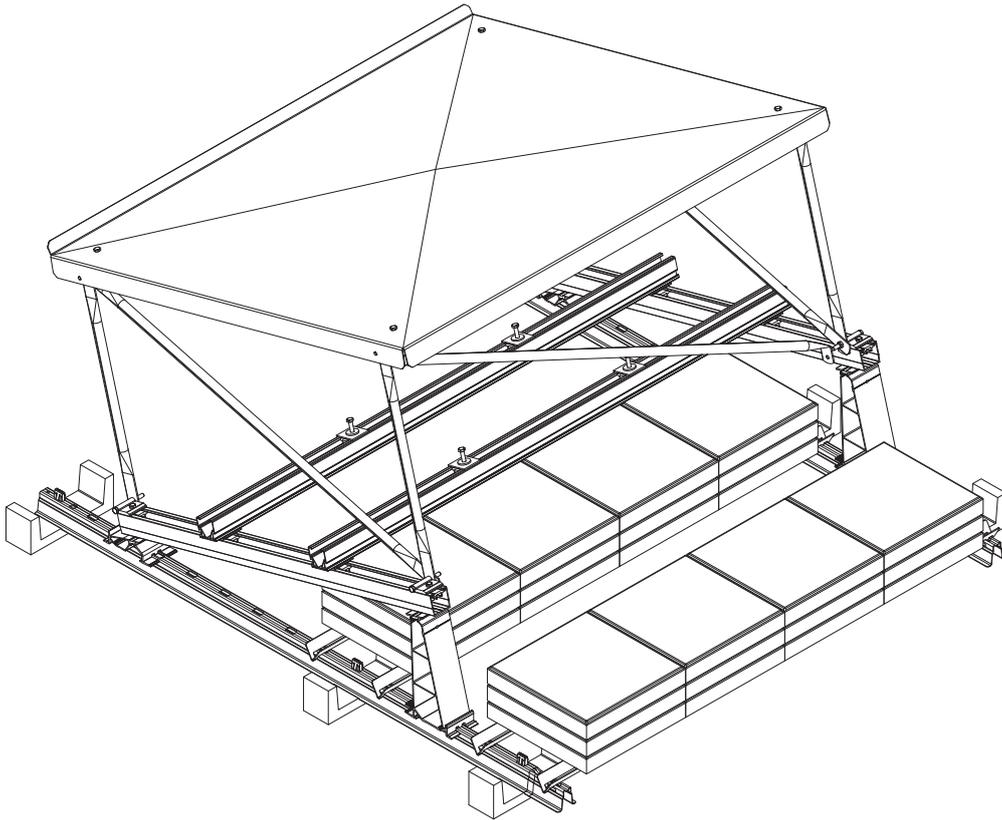
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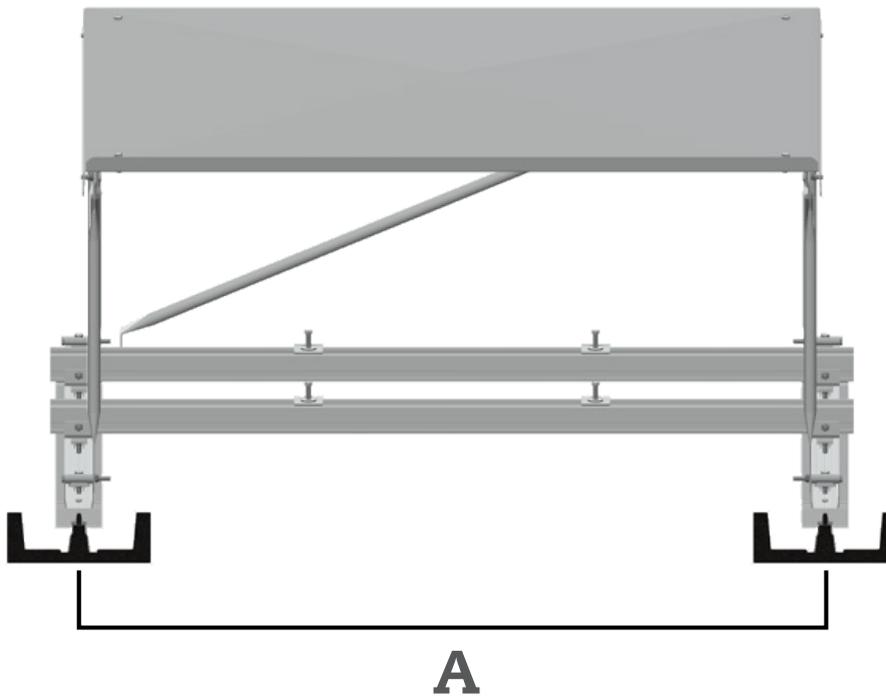


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16

In case of mechanical anchoring



A = 1300 mm

Et voilà!

