



SHADOW SOLAR EVOLUTION

PERGOLAS | CARPORTS - ENERGY GENERATION AND SOLAR PROTECTION

For photovoltaic modules

Installation Instructions



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To optimise the photovoltaic production, it is recommended to clean the PV modules, especially the bottom of the Shed, as well as the rainwater runoff areas. Cleaning frequency depends on the environment.

INSTRUCTIONS DE SECURITE

La conception, le montage et la mise en service de la pergola et de son système photovoltaïque ne doivent être effectués que par du personnel dûment qualifié et habilité. Une exécution inadéquate peut causer des dommages à l'installation et mettre des vies en danger.

La bonne qualification de l'installateur est exigée pour l'application des aides éventuelles (prime et tarif d'achat). Renseignez-vous localement.

Les normes électriques et de constructions nationales et locales, les règlements divers ainsi que les directives concernant la protection de l'environnement en vigueur doivent impérativement être respectés.

Avant le montage, il incombe à l'installateur de vérifier la capacité d'ancrage du sol et du mur attendant le cas échéant. MPS ne pourra être tenue pour responsable du non-respect des consignes concernant les ancrages et des conséquences qui en découleraient.

Avant le montage, vérifiez que vous êtes en possession de la version à jour des instructions de montage sur notre site internet : <https://mapergolasolaire.com/supports/>. Tout au long du montage, assurez-vous qu'au moins un exemplaire des instructions de montage soit disponible sur le chantier. Veuillez prendre en compte les instructions de montage du fabricant des modules photovoltaïque et vérifier que ces derniers sont en adéquations avec les surcharges climatiques du lieu d'implantation. Ces vérifications incombent à l'installateur.

Les pergolas MPS ne peuvent être installée à plus de 3 km du bord de mer (bord de mer non admis). Procédez au démontage du système en suivant les étapes de montage dans le sens inverse.

SAFETY INSTRUCTIONS

Design, installation, and commissioning of the pergola and its photovoltaic system must be performed by qualified personnel only. Incorrect execution can result in damage to the system and can put lives in danger.

The qualification of the installer may be a prerequisite to incentives (subsidies and feed-in tariffs). Please check locally.

National and local electrical and construction standards, the various regulations and all directives in force concerning environmental protection must be observed.

It is your responsibility, before installation, to check the ground anchoring capability and the wall resistance if the pergola is contiguous to the house. MPS shall in no way be responsible for any consequences due to a bad anchoring.

Before installation, check that you have the up-to-date version of the installation instructions by visiting our website: <https://mapergolasolaire.com/supports/>. Throughout the installation operation, make sure that at least one copy of the installation instruction manual is available on site.

Please be aware of the installation instructions provided by the manufacturer of the photovoltaic modules or thermal sensors and check that they are compatible with the climatic loads of the site.

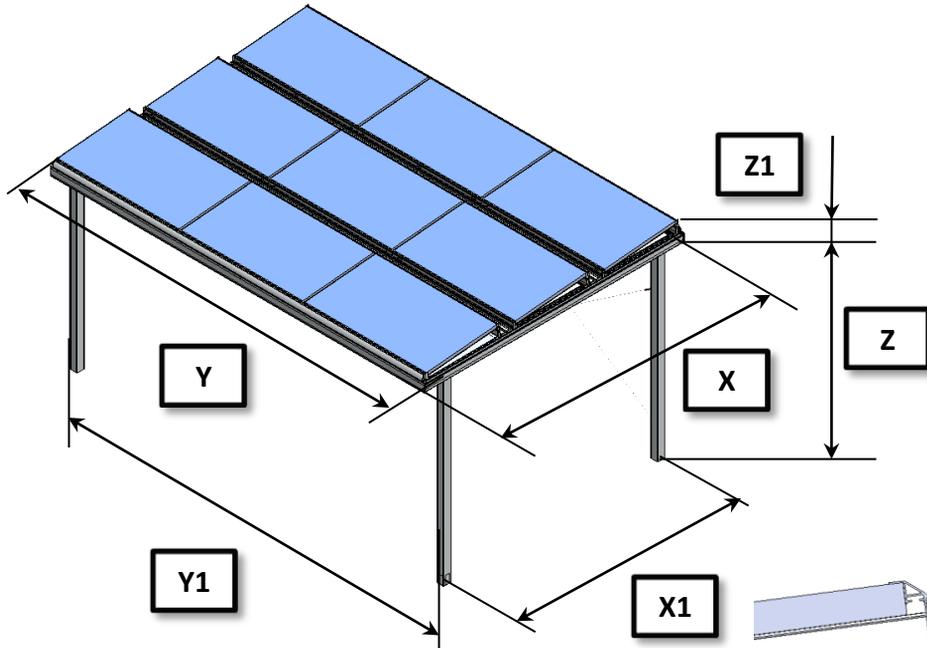
The fitter is responsible for performing this check.

MPS pergolas are not to be installed near sea side (please respect a 3 km distance).

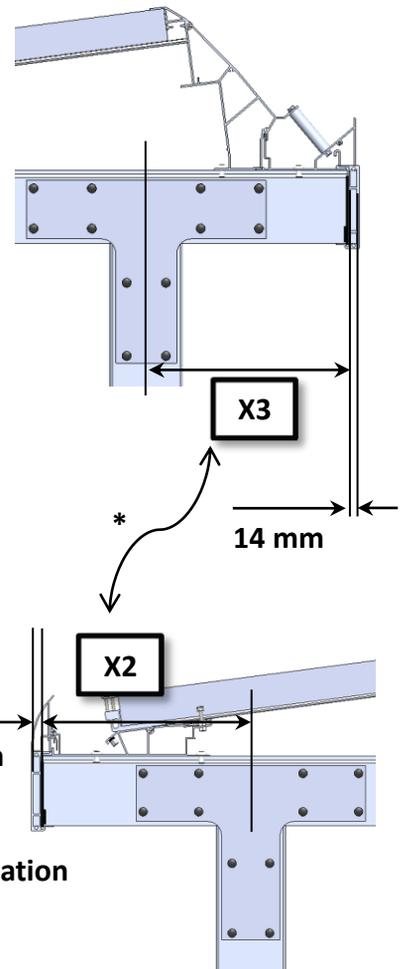
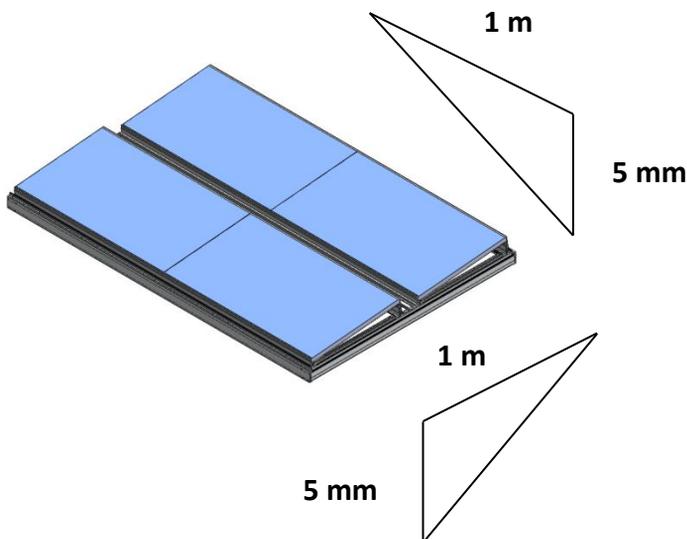
To remove the system, apply the installation procedure in reverse.

Characteristics

Format\ Dimension	X	Y	Z	X1	X2	X3	Y1	Z1
2x2	2655	3523	2400 ¹	X-28-X2-X3	62 -> 500	62 -> 500	3423	323
3x3	3905	5223	2400 ¹	X-28-X2-X3	62 -> 1000	62 -> 500	5123	323
4x2	5155	3523	2400 ¹	X-28-X2-X3	1000 -> 1200 531 -> 850 (X2 ≈ X3)	62 -> 500	3423	323
4x3 (1) or 3500 according to leg chosen	5155	5223	2400 ¹	X-28-X2-X3	1000 -> 1200 531 -> 850 (X2 ≈ X3)	62 -> 500	5123	323



Remember the slopes for rainwater runoff

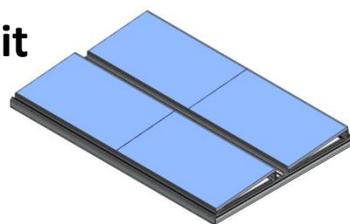


• : depending on the MPS SHADOW SOLAR EVOLUTION installation
 If two leg version: X3 = 0

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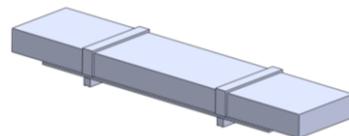
1) Installation guide

1.1) MPS SHADOW SOLAR EVOLUTION 2 X 2 kit



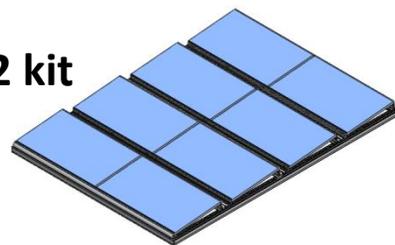
QTY.	DESCRIPTION	Drwg. no.	Number	Unit weight (kg)
8	Single clamp	A001V40	1	23.78
4	COMPRESSION TAPE TRS 15/1-3M length 1400 mm	PDC0P00533A	2	41.76
2	COMPRESSION TAPE TRS 20/5-10 length 120 mm	PDC0P00533A	3	63
1	Caniveau droit 2x (percé)/Right gutter 2x (drilled)	PRT0P00632A	4	9936.36
1	Caniveau gauche 2x (percé)/Left gutter 2x (drilled)	PRT0P00619A	5	9936.38
1	Sealing joint plate	PRT00036	6	126.84
4	Squaring plate	PRT00018	7	450.39
1	Renfort spoiler x2 / Reinforcement spoiler x2	PRT0P00620A		3847.27
1	Spoiler avant x2 / Front spoiler x2	PRT0P00618A		7923.81
14	SCREW 4.8*38	V043V02		
1	ASSY	ASM0P00631A	8	
12	SHA BRIDE MODULE ARRIERE / SHA REAR MODULE CLAMP	PRT0P00594A	9	20.16
8	SHA ENTRETOISE SUPPORTS / SHA MOUNTING SPACER	PRT0P00582A	10	25.98
2	SHA GOUTIERE INTER-MODULES / SHA GUTTER BETWEEN MODULE	PRT0P00597A	11	475.51
2	SHA HABILLAGE DROIT / SHA RIGHT TRIM	PRT0P00601A	12	943.7
2	SHA HABILLAGE GAUCHE / SHA LEFT TRIM	PRT0P00602A	13	943.7
1	SHA LIAISON ARRIERE X2 / SHA REAR LINK X2	PRT0P00583A	14	6423.43
8	SHA PATTE MODULE AVANT / SHA FRONT MODULE BRACKET	PRT0P00595A	15	152.73
2	SHA SUPPORT ARRIERE X2 / SHA REAR SUPPORT X2	PRT0P00580A	16	18378.92
2	SHA SUPPORT AVANT X2 / SHA FRONT SUPPORT X2	PRT0P00579A	17	12031
1	Gutter outlet	PRT00106	18	23.03
1	Spoiler arrière x2 / Rear spoiler x2	PRT0P00637A	19	7926.85
2	Front closing metal sheet	PRT0P00640A	20	26.42
2	Rear closing metal sheet	PRT0P00639A	21	22.92
4	Spoiler closing metal sheet	PRT00108	22	14.67
70	Nut HM8 with serrated baseplate	V066V02	28	
50	Dome head stainless steel hex screw TBHc M8x12	V053V02	29	
20	Self-tapping screw 5.5x38 countersunk Torx	V046V02	30	
50	Self-tapping screw 4.8x50 countersunk Torx	V045V02	31	
20	Self-tapping screw 4.8x60 H head	V044V02	32	
25	Self-tapping screw 4.8x38 countersunk Torx	V043V02	33	
15	Rivet 4 x 16 BLACK	V042V02N	34	
15	Rivet 4 x 16 WHITE	V042V02B	35	
5	Self-tapping screw 3.5x25 countersunk Torx	V040V02	36	
20	Nut HM6	V025V02	37	
25	Screw CHc M6x40	V013V02	38	
35	Vis CHc M6x30	V012V02	39	
50	Screw TBHc M 5x35	V001V02	40	
45	Hammerhead screw M8x50 TYPE 28/15	V087V02	41	
25	Hammerhead screw M8x25 TYPE 28/15	V086V02	42	
20	Screw TBHc with baseplate M5x16	V088V02	43	
25	Screw H M6x80-18	V090V02	44	
25	Spoiler screw cover BLACK	V111V02N	45	
25	Spoiler screw cover WHITE	V111V02B	46	
50	Screw cover Torx 25 BLACK	V048V02N	47	
50	Screw cover Torx 25 WHITE	V048V02B	48	
20	Black leg screw cover	V049V02N	49	
20	White leg screw cover	V049V02B	50	
25	Self-tapping screw 4.8x25 cap head Torx	V112V02	51	
12	SHA CALAGE SOUS FACE / HONEYCOMB WEDGE	PRT0P00732AA	52	
24	SELF-TAPPING SCREW 4.8*19 DIN7504K	V035V02	53	
12	VITASEAL 600 20/5-10 5.6M LONG, 100MM	PDC0P00533A	54	
	DESCRIPTION			
FR	TOIT EVO 2x2 7016 MAT / 9010 BRILLANT			
EN	ROOF EVO 2x2 7016 MAT/9010 GLOSS			

3650 x 800 x 350



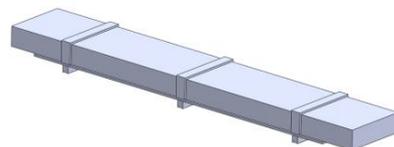
1) Installation guide

1.2) MPS SHADOW SOLAR EVOLUTION 4 X 2 kit



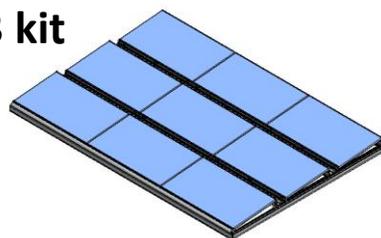
QTY.	DESCRIPTION	Drawing no.	Number	Unit weight (kg)
16	Single clamp	A001V40	1	23.78
8	COMPRESSION TAPE TRS 15/1-3M length 1400 mm	PDCOP00533A	2	41.76
4	COMPRESSION TAPE TRS 20/5-10 length 120 mm	PDCOP00533A	3	63
1	Caniveau droit 4x (percé)/Right gutter 4x (drilled)	PRTOP00634A	4	19389.14
1	Caniveau gauche 4x (percé)/Left gutter 4x (drilled)	PRTOP00612A	5	19389.17
1	Sealing joint plate	PRT00036	6	126.84
4	Squaring plate	PRT00018	7	450.39
1	Renfort spoiler x2 / Reinforcement spoiler x2	PRTOP00620A		3847.27
1	Spoiler avant x2 / Front spoiler x2	PRTOP00618A		7923.81
14	SCREW 4.8*38	V043V02		
1	ASSY	ASM0P00631A	8	
24	SHA BRIDE MODULE ARRIERE / SHA REAR MODULE CLAMP	PRTOP00594A	9	20.16
16	SHA ENTRETOISE SUPPORTS / SHA MOUNTING SPACER	PRTOP00582A	10	25.98
4	SHA GOUTIERE INTER-MODULES / SHA GUTTER BETWEEN MODULE	PRTOP00597A	11	475.51
4	SHA HABILLAGE DROIT / SHA RIGHT TRIM	PRTOP00601A	12	943.7
4	SHA HABILLAGE GAUCHE / SHA LEFT TRIM	PRTOP00602A	13	943.7
1	SHA LIAISON ARRIERE X2 / SHA REAR LINK X2	PRTOP00583A	14	6423.43
16	SHA PATTE MODULE AVANT / SHA FRONT MODULE BRACKET	PRTOP00595A	15	152.73
4	SHA SUPPORT ARRIERE X2 / SHA REAR SUPPORT X2	PRTOP00580A	16	18378.92
4	SHA SUPPORT AVANT X2 / SHA FRONT SUPPORT X2	PRTOP00579A	17	12031
1	Gutter outlet	PRT00106	18	23.03
1	Spoiler arrière x2 / Rear spoiler x2	PRTOP00637A	19	7926.85
2	Front closing metal sheet	PRTOP00640A	20	26.42
2	Rear closing metal sheet	PRTOP00639A	21	22.92
4	Spoiler closing metal sheet	PRT00108	22	14.67
70	Nut HM8 with serrated baseplate	V066V02	28	
50	Dome head stainless steel hex screw TBHc M8x12	V053V02	29	
20	Self-tapping screw 5.5x38 countersunk Torx	V046V02	30	
50	Self-tapping screw 4.8x50 countersunk Torx	V045V02	31	
20	Self-tapping screw 4.8x60 H head	V044V02	32	
25	Self-tapping screw 4.8x38 countersunk Torx	V043V02	33	
15	Rivet 4 x 16 BLACK	V042V02N	34	
15	Rivet 4 x 16 WHITE	V042V02B	35	
5	Self-tapping screw 3.5x25 countersunk Torx	V040V02	36	
20	Nut HM6	V025V02	37	
25	Screw CHc M6x40	V013V02	38	
35	Vis CHc M6x30	V012V02	39	
50	Screw TBHc M 5x35	V001V02	40	
45	Hammerhead screw M8x50 TYPE 28/15	V087V02	41	
25	Hammerhead screw M8x25 TYPE 28/15	V086V02	42	
20	Screw TBHc with baseplate M5x16	V088V02	43	
25	Screw H M6x80-18	V090V02	44	
25	Spoiler screw cover BLACK	V111V02N	45	
25	Spoiler screw cover WHITE	V111V02B	46	
50	Screw cover Torx 25 BLACK	V048V02N	47	
50	Screw cover Torx 25 WHITE	V048V02B	48	
20	Black leg screw cover	V049V02N	49	
20	White leg screw cover	V049V02B	50	
25	Self-tapping screw 4.8x25 cap head Torx	V112V02	51	
24	SHA CALAGE SOUS FACE / HONEYCOMB WEDGE	PRTOP00732AA	52	
48	SELF-TAPPING SCREW 4.8*19 DIN7504K	V035V02	53	
24	VITASEAL 600 20/5-10 5.6M LONG, 100MM	PDCOP00533A	54	
	DESCRIPTION			
FR	TOIT EVO 4x2 7016 MAT /9010 BRILLANT			
EN	ROOF EVO 4x2 7016 MAT/9010 GLOSS			

4950 x 800 x 350



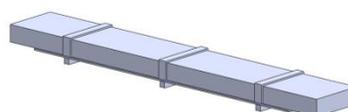
1) Installation guide

1.3) MPS SHADOW SOLAR EVOLUTION 3 X 3 kit



QTY.	DESCRIPTION	Drawing no.	Number	Unit weight (kg)
18	Single clamp	A001V40	1	23.78
6	COMPRESSION TAPE TRS 15/1-3M length 1400 mm	PDC0P00533A	2	41.76
6	COMPRESSION TAPE TRS 20/5-10 length 120 mm	PDC0P00533A	3	63
1	Caniveau central 3x (troué)/Central gutter 3x (drilled)	PRT0P00635A	23	14671.85
1	Caniveau droit 3x (troué)/Right gutter 3x (drilled)	PRT0P00633A	4	14661.92
1	Caniveau gauche 3x (troué)/Left gutter 3x (drilled)	PRT0P00630A	5	14661.94
1	Sealing joint plate	PRT00036	6	126.84
4	Squaring plate	PRT00018	7	450.39
1	Renfort spoiler x3 / Reinforcement spoiler x3	PRT0P00613A		3847.27
1	Spoiler avant x3 / Front spoiler x3	PRT0P00615A		11757.93
21	SCREW 4.8*38	V043V02		
1	ASSY	ASM0P00617A	8	
27	SHA BRIDE MODULE ARRIERE / SHA REAR MODULE CLAMP	PRT0P00594A	9	20.16
18	SHA ENTRETOISE SUPPORTS / SHA MOUNTING SPACER	PRT0P00582A	10	25.98
6	SHA GOUTIERE INTER-MODULES / SHA GUTTER BETWEEN MODULE	PRT0P00597A	11	475.51
3	SHA HABILLAGE DROIT / SHA RIGHT TRIM	PRT0P00601A	12	943.7
3	SHA HABILLAGE GAUCHE / SHA LEFT TRIM	PRT0P00602A	13	943.7
1	SHA LIAISON ARRIERE X3 / SHA REAR LINK X3	PRT0P00584A	14	9597.68
18	SHA PATTE MODULE AVANT / SHA FRONT MODULE BRACKET	PRT0P00595A	15	152.73
3	SHA SUPPORT ARRIERE X3 / SHA REAR SUPPORT X3	PRT0P00581A	16	27456.19
3	SHA SUPPORT AVANT X3 / SHA FRONT SUPPORT X3	PRT0P00578A	17	17976.5
1	Gutter outlet	PRT00106	18	23.03
1	Spoiler arrière x3 / Rear spoiler x3	PRT0P00638A	19	11762.5
2	Front closing metal sheet	PRT0P00640A	20	26.42
2	Rear closing metal sheet	PRT0P00639A	21	22.92
4	Spoiler closing metal sheet	PRT00108	22	14.67
70	Nut HM8 with serrated baseplate	V066V02	28	
50	Dome head stainless steel hex screw TBHc M8x12	V053V02	29	
20	Self-tapping screw 5.5x38 countersunk Torx	V046V02	30	
50	Self-tapping screw 4.8x50 countersunk Torx	V045V02	31	
20	Self-tapping screw 4.8x60 H head	V044V02	32	
25	Self-tapping screw 4.8x38 countersunk Torx	V043V02	33	
15	Rivet 4 x 16 BLACK	V042V02N	34	
15	Rivet 4 x 16 WHITE	V042V02B	35	
5	Self-tapping screw 3.5x25 countersunk Torx	V040V02	36	
20	Nut HM6	V025V02	37	
25	Screw CHc M6x40	V013V02	38	
35	Vis CHc M6x30	V012V02	39	
50	Screw TBHc M 5x35	V001V02	40	
45	Hammerhead screw M8x50 TYPE 28/15	V087V02	41	
25	Hammerhead screw M8x25 TYPE 28/15	V086V02	42	
20	Screw TBHc with baseplate M5x16	V088V02	43	
25	Screw H M6x80-18	V090V02	44	
25	Spoiler screw cover BLACK	V111V02N	45	
25	Spoiler screw cover WHITE	V111V02B	46	
50	Screw cover Torx 25 BLACK	V048V02N	47	
50	Screw cover Torx 25 WHITE	V048V02B	48	
20	Black leg screw cover	V049V02N	49	
20	White leg screw cover	V049V02B	50	
25	Self-tapping screw 4.8x25 cap head Torx	V112V02	51	
36	SHA CALAGE SOUS FACE / HONEYCOMB WEDGE	PRT0P00732AA	52	
72	SELF-TAPPING SCREW 4.8*19 DIN7504K	V035V02	53	
36	VITASEAL 600 20/5-10 5.6M LONG, 100MM	PDC0P00533A	54	
	DESCRIPTION			
FR	TOIT EVO 3x3 7016 MAT /9010 BRILLANT			
EN	ROOF EVO 3x3 7016 MAT/9010 GLOSS			

5320 x 800 x 350



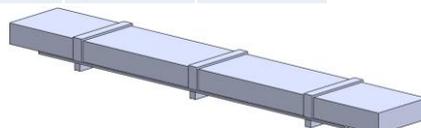
1) Installation guide

1.4) MPS SHADOW SOLAR EVOLUTION 4 X 3 kit



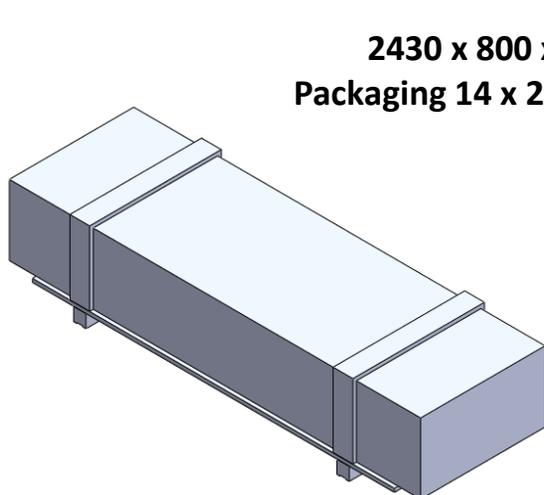
QTY.	DESCRIPTION	Drawing no.	Number	Unit weight (kg)
24	Single clamp	A001V40	1	23.78
8	COMPRESSION TAPE TRS 15/1-3M length 1400 mm	PDCOP00533A	2	41.76
8	COMPRESSION TAPE TRS 20/5-10 length 120 mm	PDCOP00533A	3	63
1	Caniveau central 4x (troué)/Central gutter 4x (drilled)	PRTOP00636A	23	19400.73
1	Caniveau droit 4x (percé)/Right gutter 4x (drilled)	PRTOP00634A	4	19389.14
1	Caniveau gauche 4x (percé)/Left gutter 4x (drilled)	PRTOP00612A	5	19389.17
1	Sealing joint plate	PRT00036	6	126.84
4	Squaring plate	PRT00018	7	450.39
1	Renfort spoiler x3 / Reinforcement spoiler x3	PRTOP00613A		3847.27
1	Spoiler avant x3 / Front spoiler x3	PRTOP00615A		11757.93
21	SCREW 4.8*38	V043V02		
1	ASSY	ASM0P00617A	8	
36	SHA BRIDE MODULE ARRIERE / SHA REAR MODULE CLAMP	PRTOP00594A	9	20.16
24	SHA ENTRETOISE SUPPORTS / SHA MOUNTING SPACER	PRTOP00582A	10	25.98
8	SHA GOUTIERE INTER-MODULES / SHA GUTTER BETWEEN MODULE	PRTOP00597A	11	475.51
4	SHA HABILLAGE DROIT / SHA RIGHT TRIM	PRTOP00601A	12	943.7
4	SHA HABILLAGE GAUCHE / SHA LEFT TRIM	PRTOP00602A	13	943.7
1	SHA LIAISON ARRIERE X3/ SHA REAR LINK X3	PRTOP00584A	14	9597.68
24	SHA PATTE MODULE AVANT / SHA FRONT MODULE BRACKET	PRTOP00595A	15	152.73
4	SHA SUPPORT ARRIERE X3 / SHA REAR SUPPORT X3	PRTOP00581A	16	27456.19
4	SHA SUPPORT AVANT X3 / SHA FRONT SUPPORT X3	PRTOP00578A	17	17976.5
1	Gutter outlet	PRT00106	18	23.03
1	Spoiler arrière x3 / Rear spoiler x3	PRTOP00638A	19	11762.5
2	Front closing metal sheet	PRTOP00640A	20	26.42
2	Rear closing metal sheet	PRTOP00639A	21	22.92
4	Spoiler closing metal sheet	PRT00108	22	14.67
70	Nut HM8 with serrated baseplate	V066V02	28	
50	Dome head stainless steel hex screw TBHc M8x12	V053V02	29	
20	Self-tapping screw 5.5x38 countersunk Torx	V046V02	30	
50	Self-tapping screw 4.8x50 countersunk Torx	V045V02	31	
20	Self-tapping screw 4.8x60 H head	V044V02	32	
25	Self-tapping screw 4.8x38 countersunk Torx	V043V02	33	
15	Rivet 4 x 16 BLACK	V042V02N	34	
15	Rivet 4 x 16 WHITE	V042V02B	35	
5	Self-tapping screw 3.5x25 countersunk Torx	V040V02	36	
20	Nut HM6	V025V02	37	
25	Screw CHc M6x40	V013V02	38	
35	Vis CHc M6x30	V012V02	39	
50	Screw TBHc M 5x35	V001V02	40	
45	Hammerhead screw M8x50 TYPE 28/15	V087V02	41	
25	Hammerhead screw M8x25 TYPE 28/15	V086V02	42	
20	Screw TBHc with baseplate M5x16	V088V02	43	
25	Screw H M6x80-18	V090V02	44	
25	Spoiler screw cover BLACK	V111V02N	45	
25	Spoiler screw cover WHITE	V111V02B	46	
50	Screw cover Torx 25 BLACK	V048V02N	47	
50	Screw cover Torx 25 WHITE	V048V02B	48	
20	Black leg screw cover	V049V02N	49	
20	White leg screw cover	V049V02B	50	
25	Self-tapping screw 4.8x25 cap head Torx	V112V02	51	
48	SHA CALAGE SOUS FACE / HONEYCOMB WEDGE	PRTOP00732AA	52	
96	SELF-TAPPING SCREW 4.8*19 DIN7504K	V035V02	53	
48	VITASEAL 600 20/5-10 5.6M LONG, 100MM	PDCOP00533A	54	
	DESCRIPTION			
FR	TOIT EVO 4x3 7016 MAT / 9010 BRILLANT			
EN	ROOF EVO 4x3 7016 MAT/9010 GLOSS			

5320 x 800 x 350



1) Installation guide

1.5) MPS SHADOW SOLAR EVOLUTION legs and trim



2430 x 800 x 550
Packaging 14 x 2 legs 2400



2430 x 200 x 100
Packaging 2 legs 2400
Or
3530 x 200 x 100
Packaging 2 legs 3500

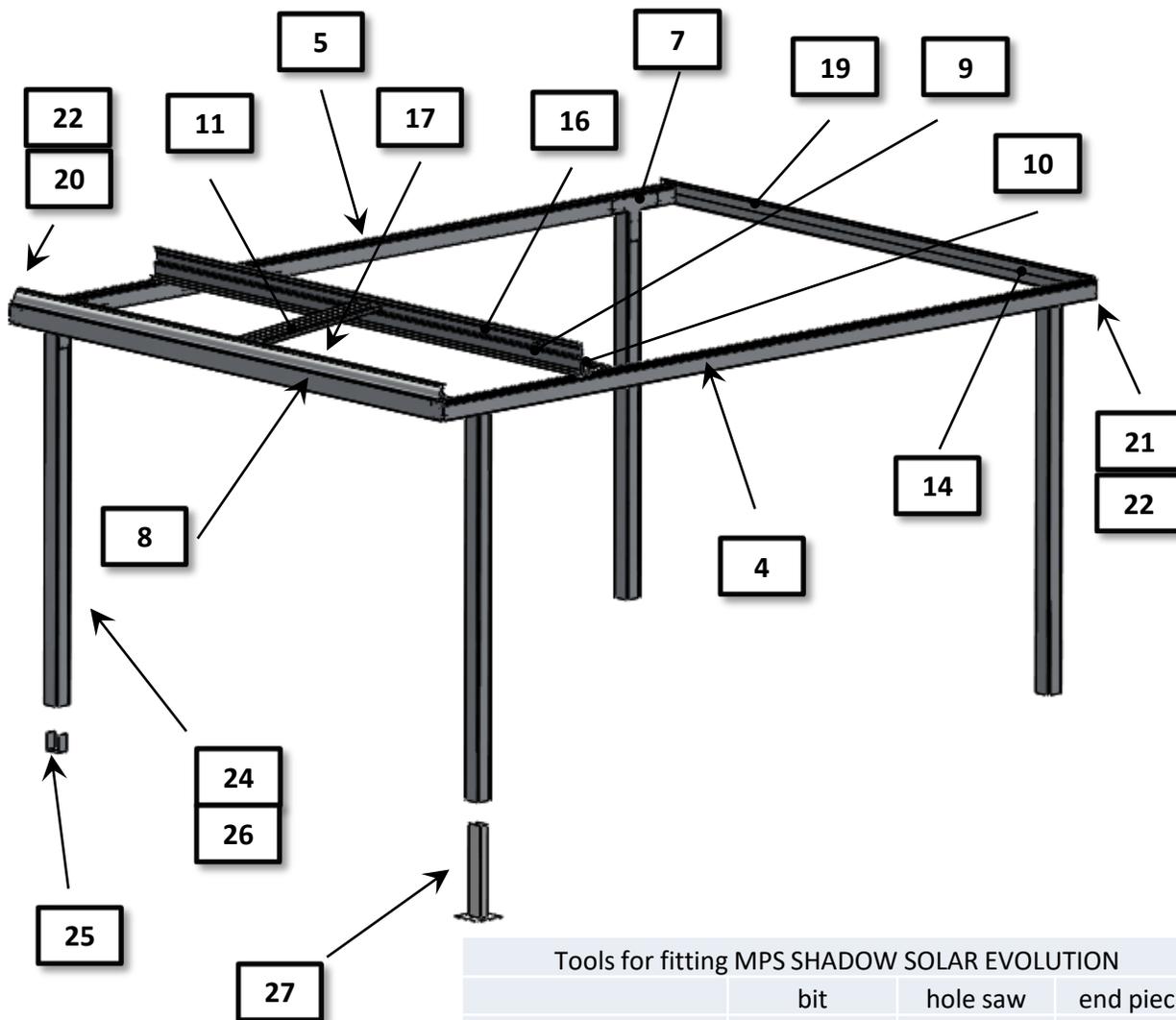
Description	Item code SHAS7057016M OR 9010	Number	Number/kit	Total weight (kg)
Leg (2.4 m)	PRT00012	24	2	17
Leg support	PRT00020	25	2	0.35
				17.35

Description	Item code SHAS7087016M OR 9010	Number	Number/kit	Total weight (kg)
Leg (3.5 m long)	PRTOP00447A	26	2	24.7
Leg support	PRT00020	25	2	0.35
				25.05



Description	Item code ASM0P00382A	Number	Number/kit	Total weight
Leg baseplate	PRTOP00173A	27	2	9
Screw 6.3x19	V062V02		10	
Leg baseplate black plug	V063V02N		10	
Leg baseplate white plug	V063V02B		10	

1.6) Representation of parts



Tools for fitting MPS SHADOW SOLAR EVOLUTION			
	bit	hole saw	end piece
H head spanner			10-13
Hex key			3-5
Drill	Ø3-Ø4-Ø5-Ø16	Ø40	
Screwdriver			TX25-TX10
Rivet gun			rivet Ø4

Module compatibility: 962 mm to 1030 mm wide
 1640 mm to 1700 mm long
 30 to 50 mm high

Scope:

Format	Wind zones 1-2-3 Eurocodes 1 NF-EN-1991	Max. pressure (daN/m ²)	Wind speed (m/s)
2x2	up to 900 m	220	39
3x3	up to 900 m	140	31
4x2	up to 900 m	180	36
4x3	up to 900 m	136	31

Information and images are non-contractual. We reserve the right to make technical changes without notice.

2.1

Preparing the gutter

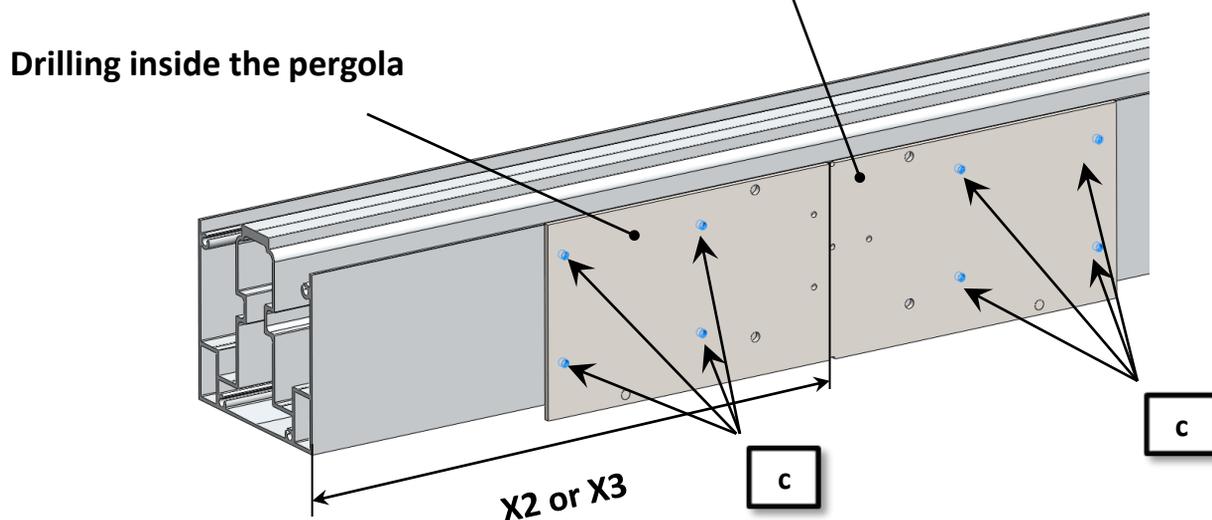
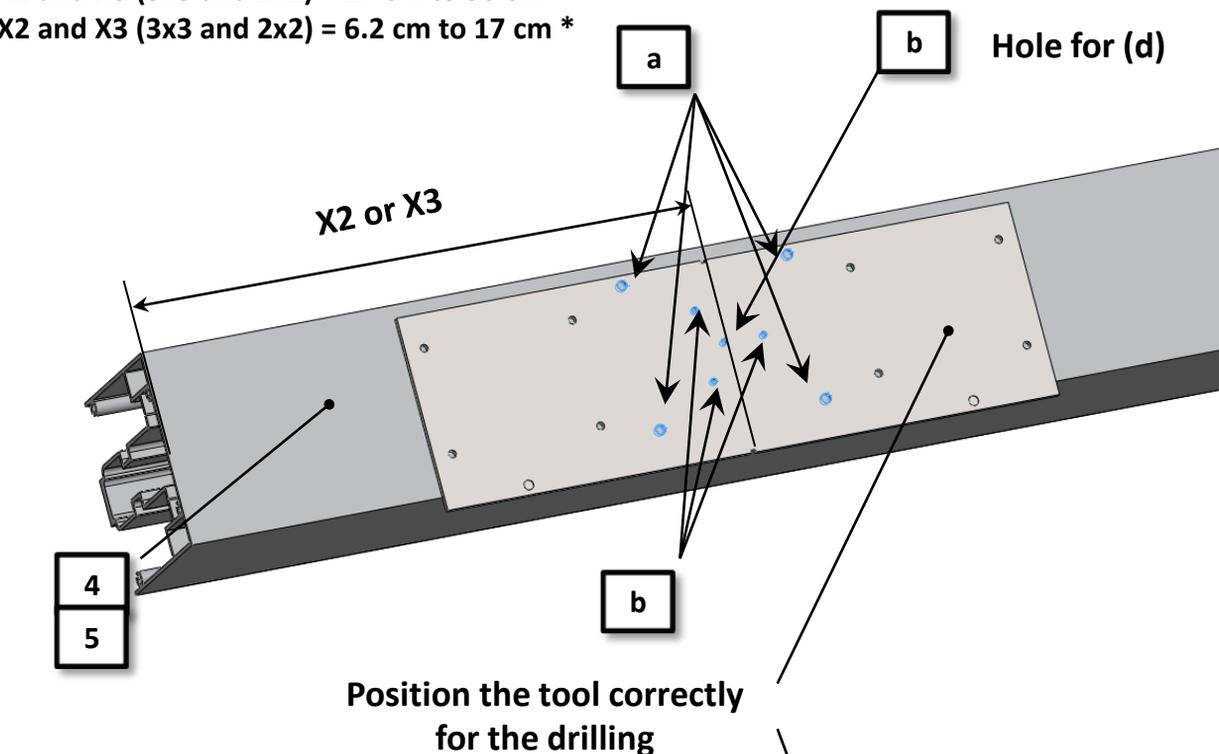


Watch out for the markings on (4) and (5): the profiles must be fitted in a certain direction.

X2 (4x3 and 4x2) = 100 cm to 120 cm

X2 and X3 (3x3 and 2x2) = 17 cm to 50 cm

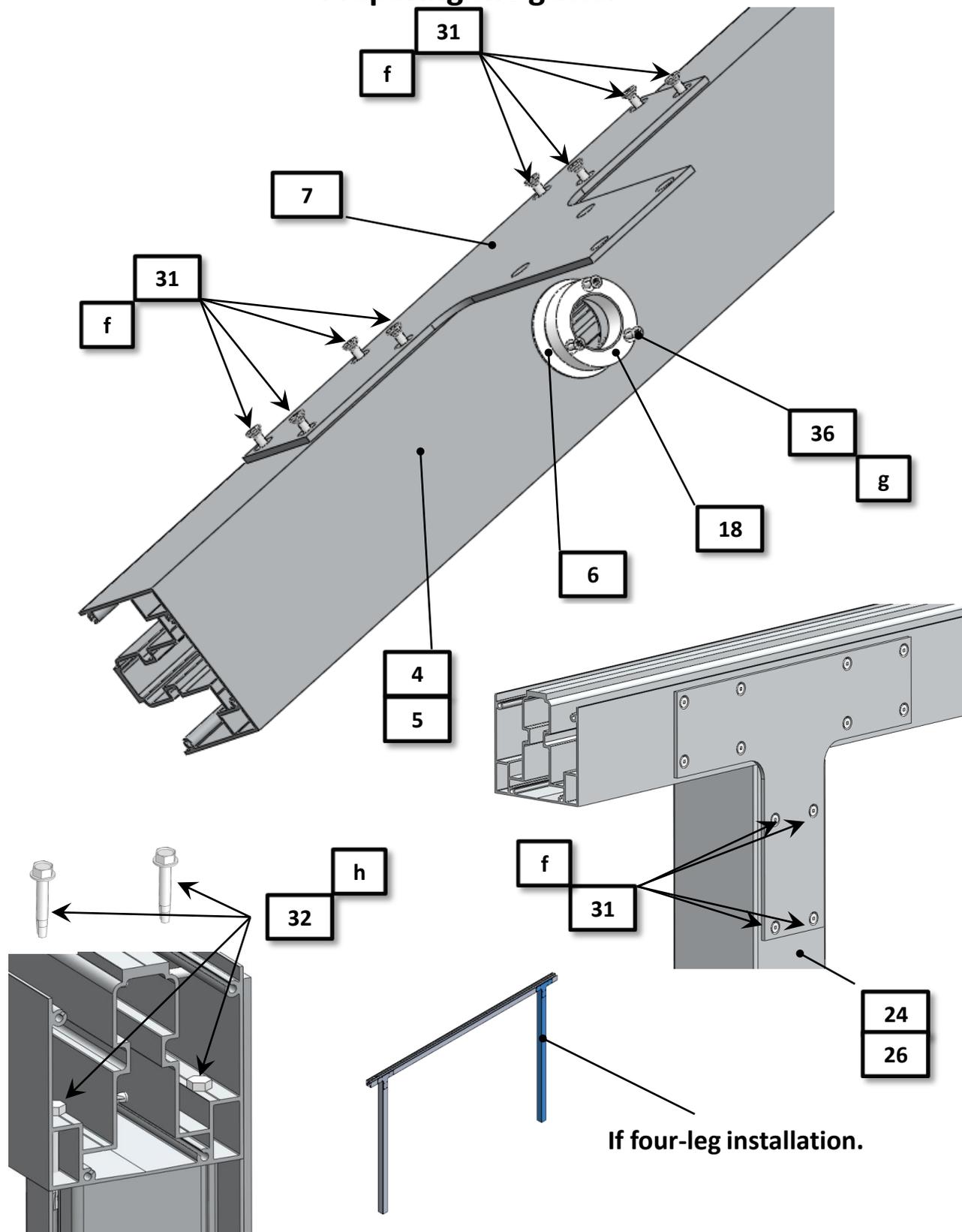
X2 and X3 (3x3 and 2x2) = 6.2 cm to 17 cm *



- a) Drill the two walls with a 5 mm diameter bit.
- b) Drill this wall solely and only runoff side with a 3 mm diameter bit.
- c) Drill the top of the walls twice and the bottom three times with a 4 mm diameter bit.
- d) Drill with a 40 mm diameter hole saw using hole (b) (rainwater runoff side only).
- * See paragraph 6

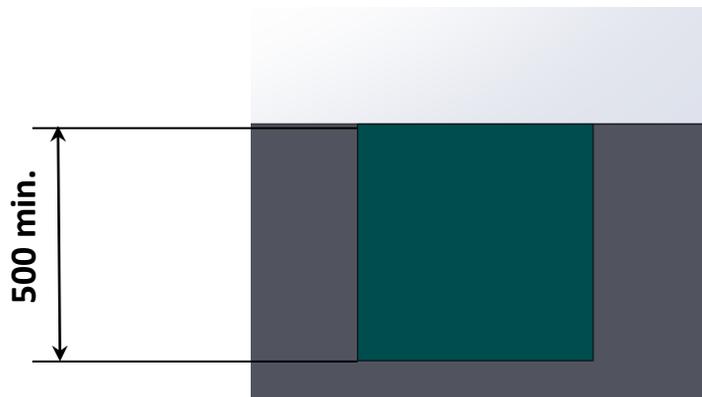
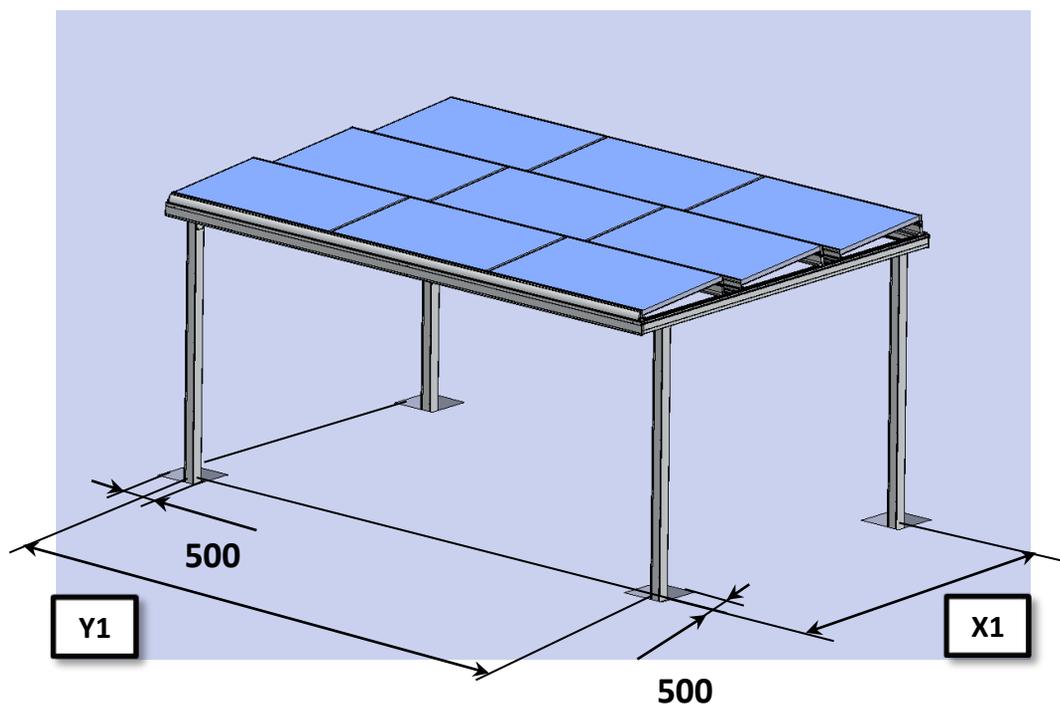
2.1

Preparing the gutter



- f) Screw (4 or 5) and (7) with the screws (31).
- g) Screw (4 or 5), (6) and (18) with the screws (36) (**rainwater runoff water side only**).
- h) Screw (4 or 5) and (24/26) with the screws (32). Remember to prepare the leg for runoff (see paragraph 6) if necessary.
- i) Remember to insert the screw covers provided for this purpose (47 or 48).

2.2 Preparing to fit the MPS SHADOW SOLAR EVOLUTION

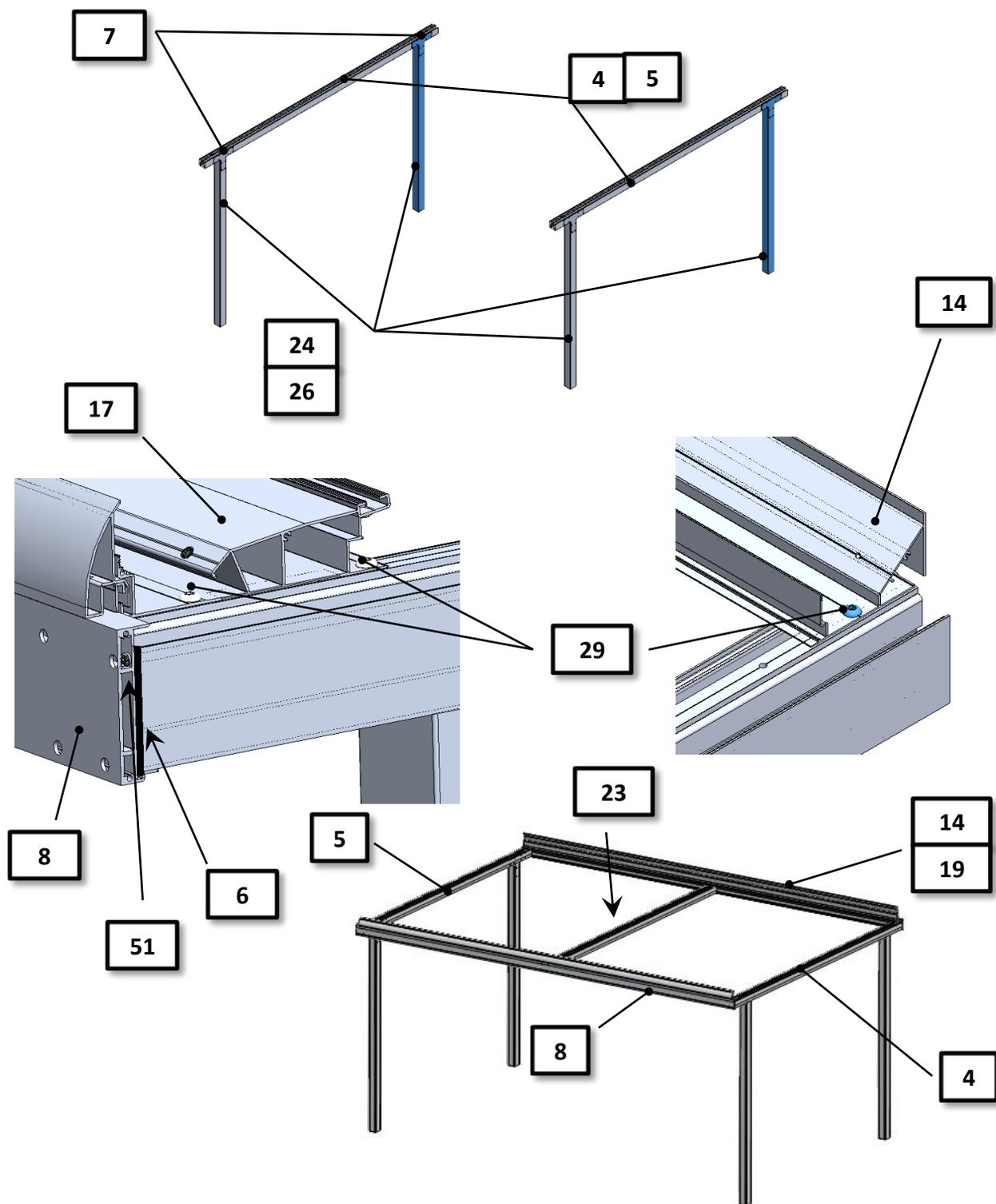


- a) Drill four holes 50 x 50 x 50 cm, making sure that the centre-to-centre distances and the squareness are correct.

Specification of the support for fixing the Shadow Solar Evolution:

- Concrete slab (density 2200 kg/m³), minimum 8 cm thick, over the entire Shadow Solar Evolution surface area.
- Or concrete studs (density 2200 kg/m³), with minimum size: 0.5x0.5x0.5 m at each Shadow Solar Evolution leg.

2.3 Fixing the structure

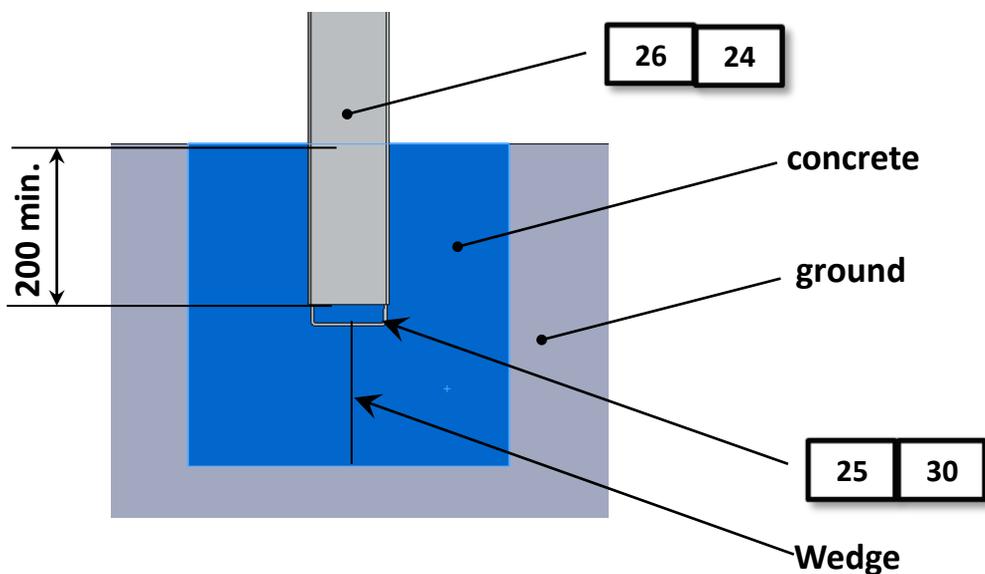
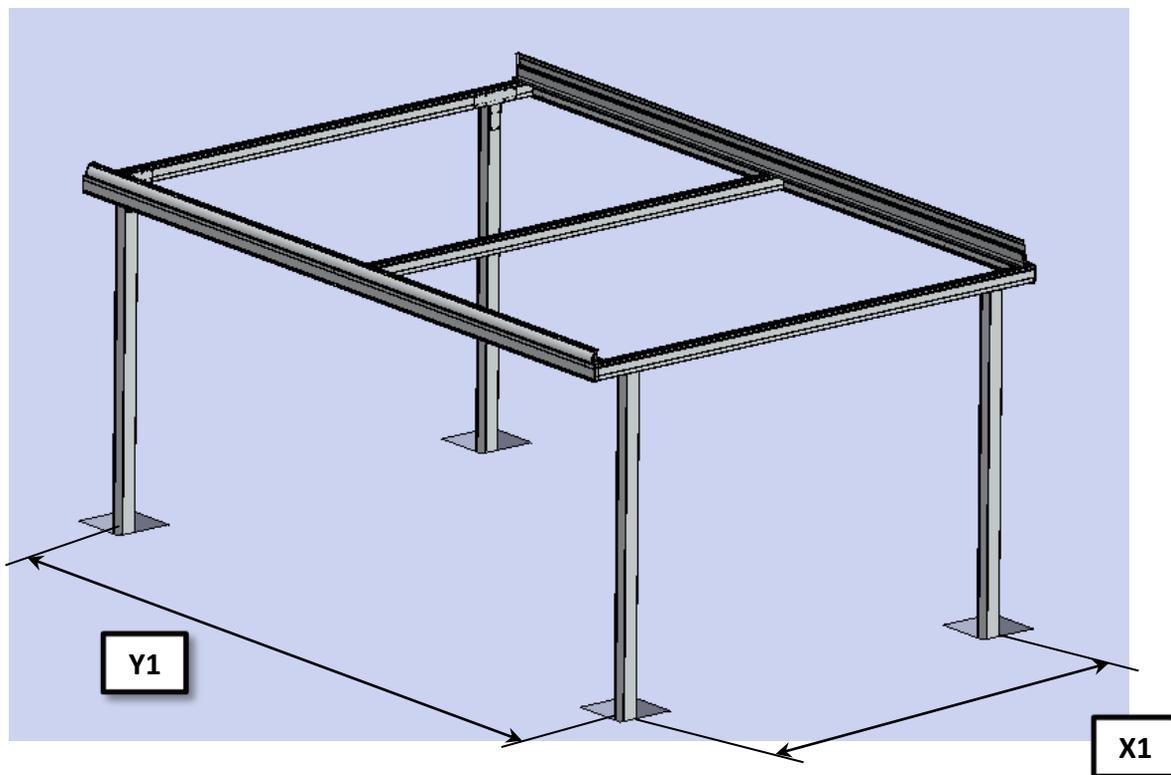


- Assemble (24/26), (4 or 5) and (7) to create the bases for fixing (17, 8) at the front and (14, 19) at the rear. You can use battens and clamps to help you keep the assembly vertical.
- Screw (17) and (14) into (4) and (5) with the screws (29); for (17), offer (8) up at the same time and screw in with (51).
Assemble (19) with (4 and 5), make sure you keep these elements perpendicular and follow the instructions on page 15.
- Repeat the operation with (23) and (8 and 19) and screw in with (51).

2.3

Fixing the structure

If four-leg installation



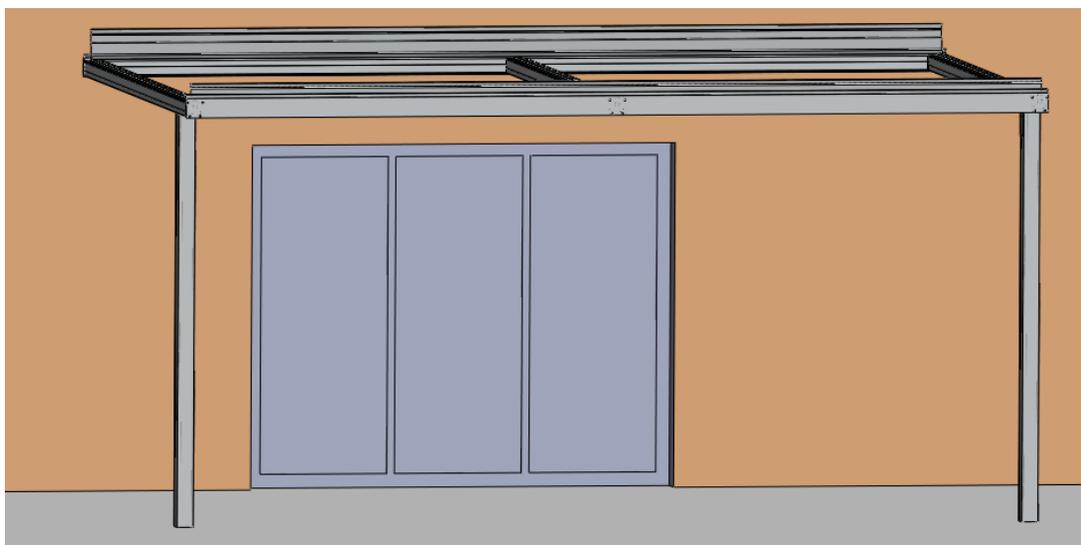
- Using a wedge (not supplied) at the bottom of the holes, adjust the height of the structure (make sure you create a slight slop for rainwater runoff).
- Centre the legs in the holes and respect dimensions X1 and Y1.
- Slope the leg direction slightly for rainwater runoff.

NB: the legs can also be fixed with baseplates: see Appendix 2, p. 29.

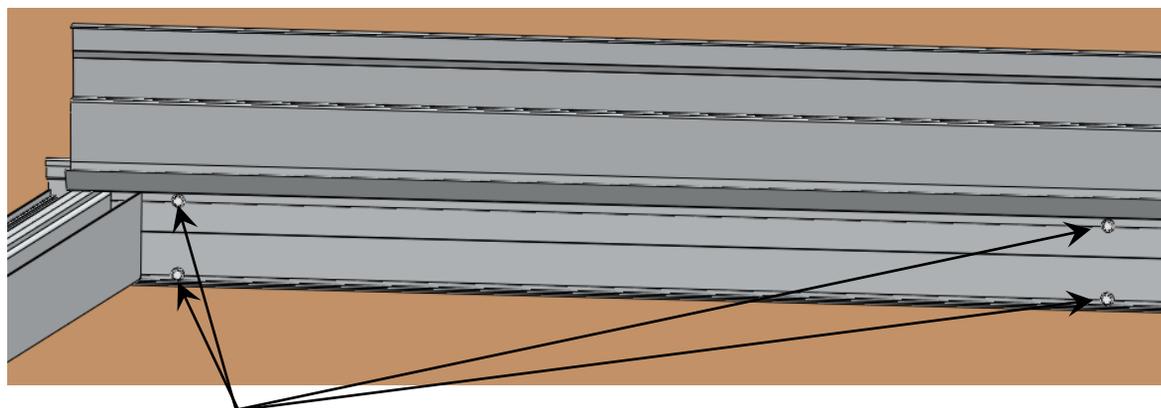
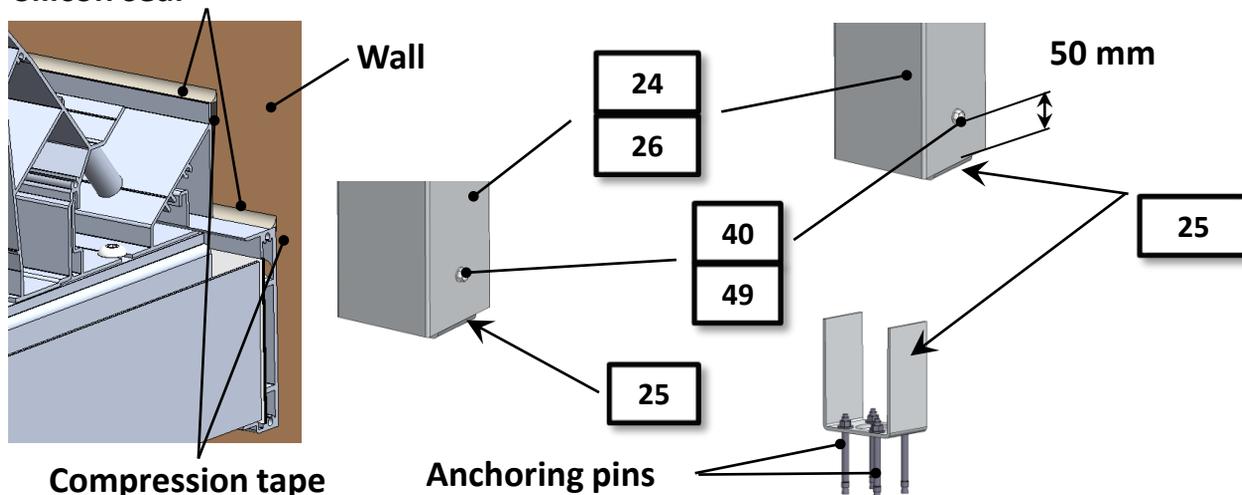
2.3

Fixing the structure

If two-leg installation



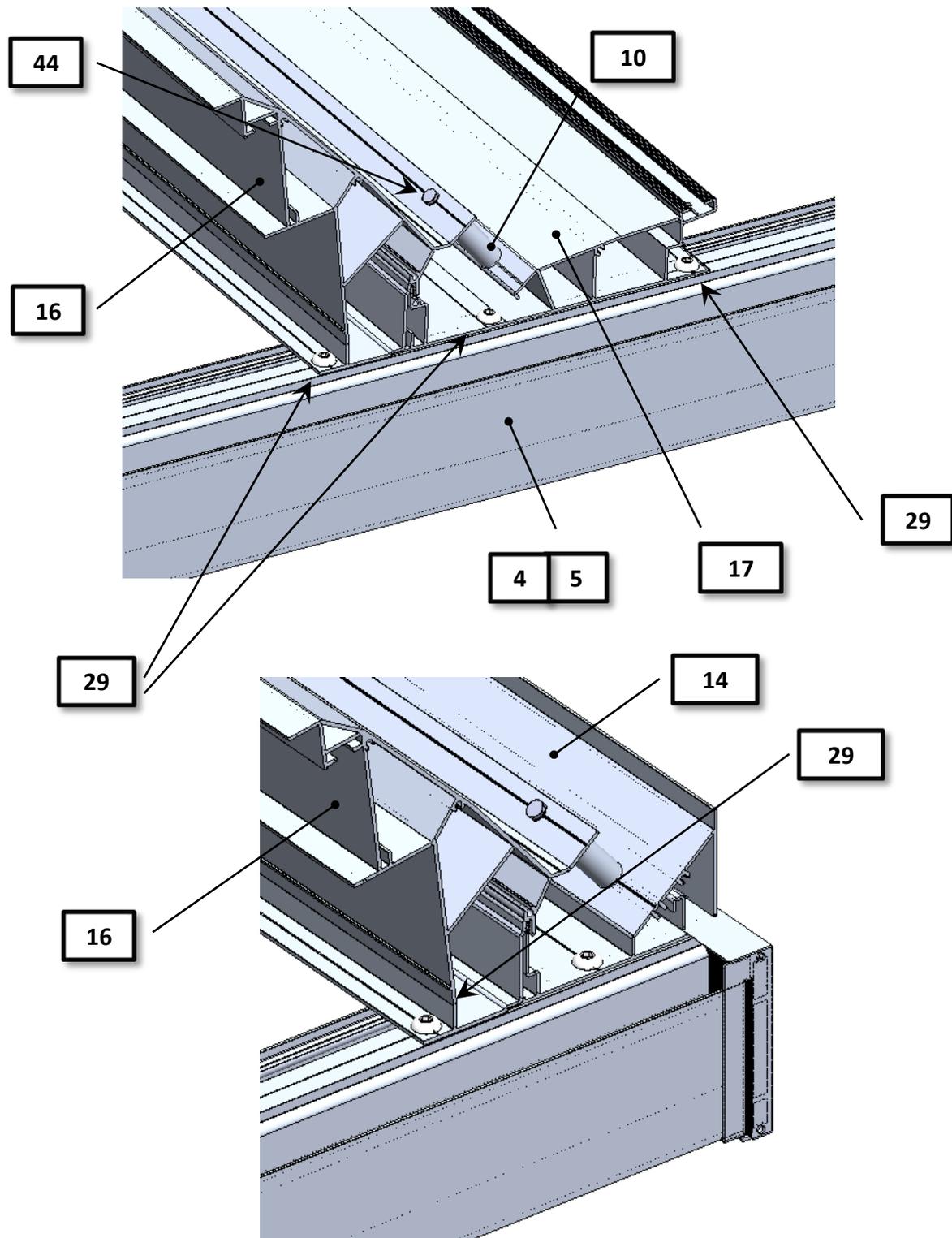
Silicon seal



Wall fastenings

- Fix the strip in the relevant holes drilled in advance in the front panel.
- Screw in the leg support (25) with anchoring pins with a peel load of at least 2900 N.
- Pre-drill the legs (26) with a diameter 4.5 bit to the dimension indicated.
- Push in and screw in (24/26) and (25) with the screws (40) and the screw covers (49).
- Important to achieve a good seal between the pergola and the wall (compression tape and silicon not supplied).

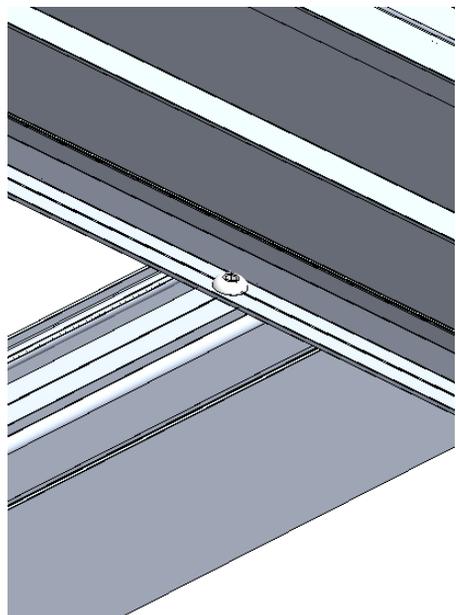
2.4 Fixing rows of modules



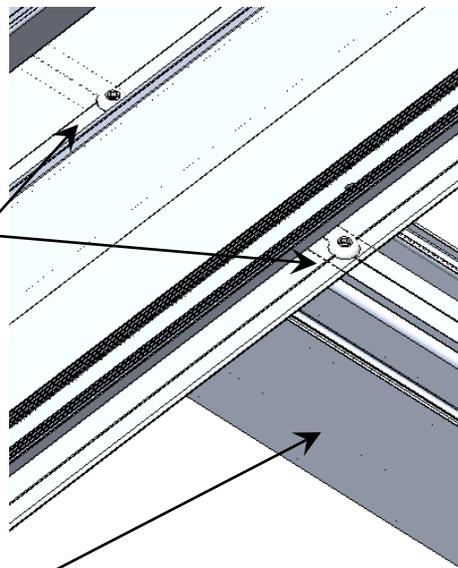
- Prepare the assembly of (17+16) with (10 and 44).
- Position the cross beams (16) and (17) and screw them with (29) onto (4) and (5).
- Repeat the operation as many times as there are lines of panels -1.
- At the last line, assemble (16) to (14) with (10 and 44), then screw with (29) onto (4 and 5).

2.4

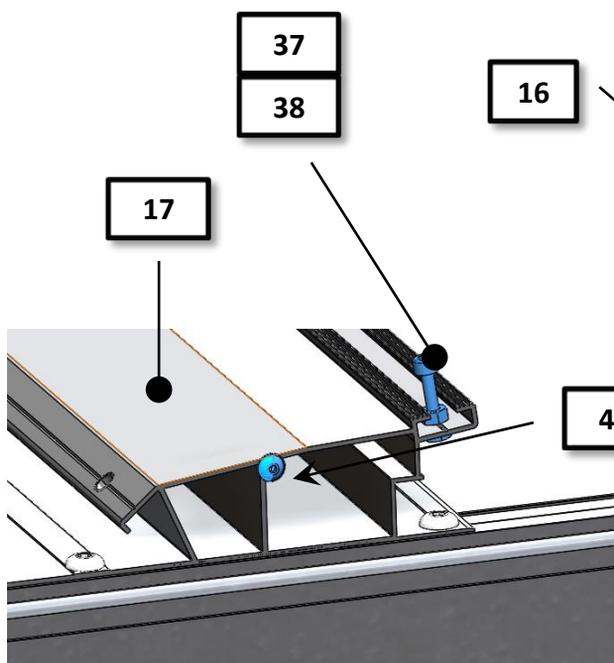
Fixing rows of modules



29



23



37
38

17

16

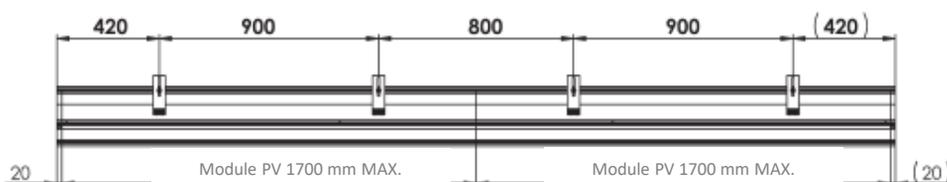
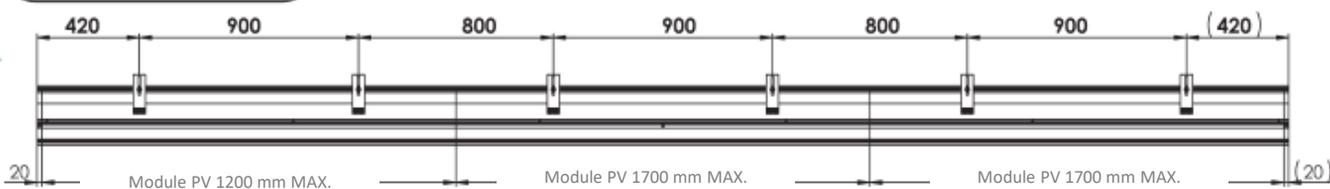
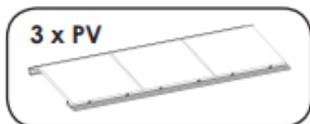
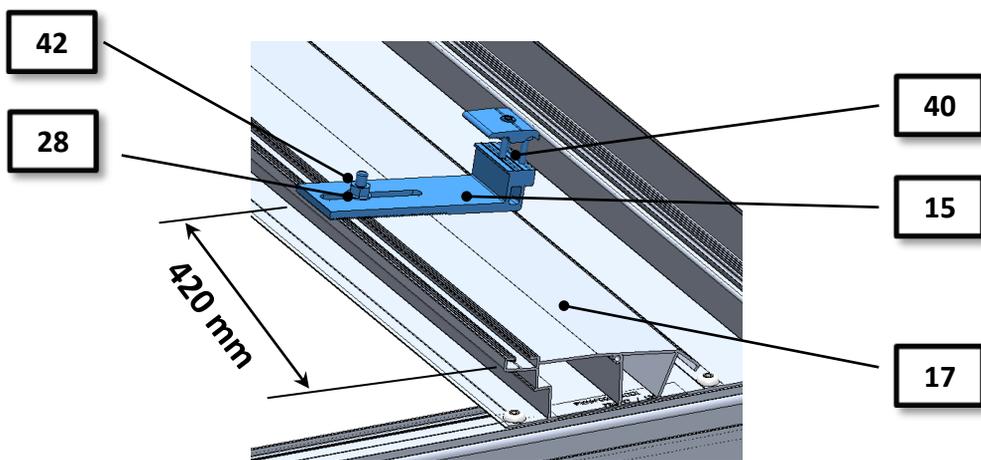
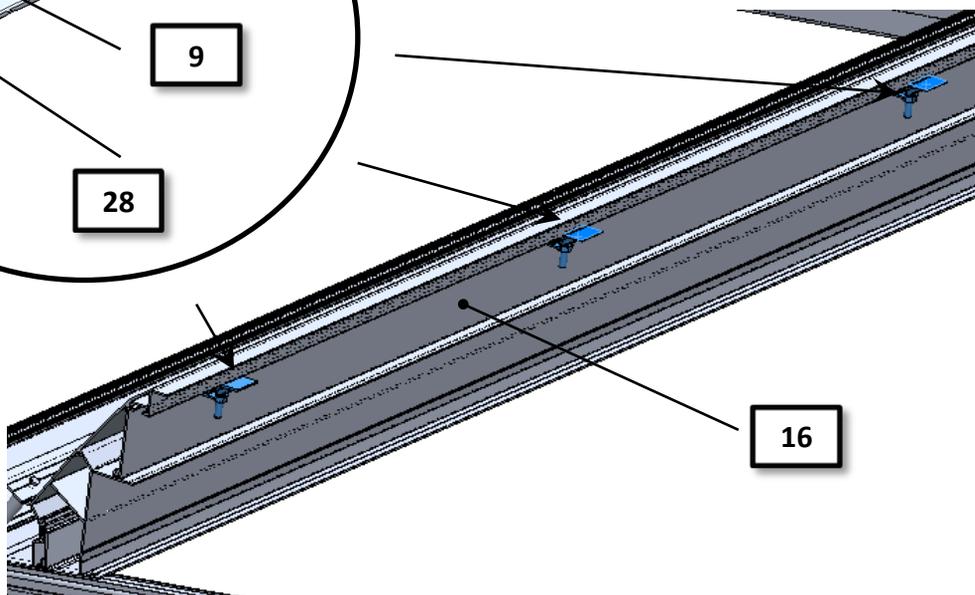
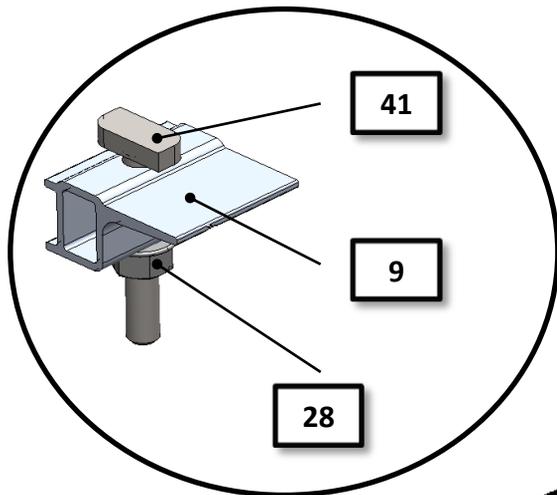
43



- Repeat the fixing between (23) and (16) - (17) if necessary.
- Screw (43) onto (17) and (16), they will serve to fix the side trims.
- Assemble (37 and 2x38) with (17), they will serve as side end stops for the panels.

2.5

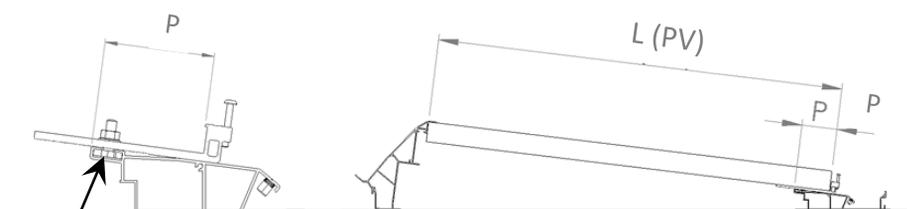
Module fixing



- Assemble (41), (9) and (28); prepare three assemblies per module which will be inserted into the profile (16) once the module has been set in place.
- Assemble (42), (28), (40) and (15) and slide the assembly into the profile (17).

2.5

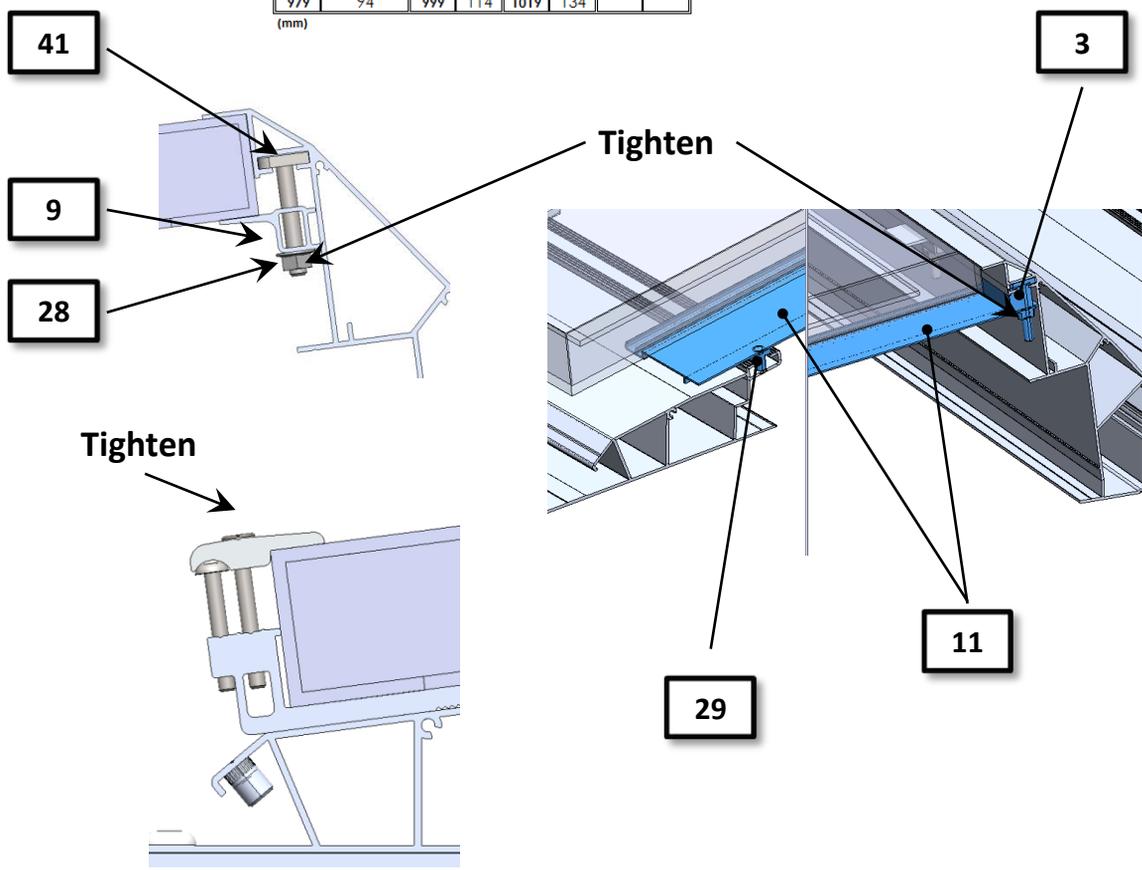
Module fixing



Tighten

L	P	L	P	L	P	L	P
		980	95	1000	115	1020	135
		981	96	1001	116	1021	136
962	77	982	97	1002	117	1022	137
963	78	983	98	1003	118	1023	138
964	79	984	99	1004	119	1024	139
965	80	985	100	1005	120	1025	140
966	81	986	101	1006	121	1026	141
967	82	987	102	1007	122	1027	142
968	83	988	103	1008	123	1028	143
969	84	989	104	1009	124	1029	144
970	85	990	105	1010	125	1030	145
971	86	991	106	1011	126		
972	87	992	107	1012	127		
973	88	993	108	1013	128		
974	89	994	109	1014	129		
975	90	995	110	1015	130		
976	91	996	111	1016	131		
977	92	997	112	1017	132		
978	93	998	113	1018	133		
979	94	999	114	1019	134		

(mm)



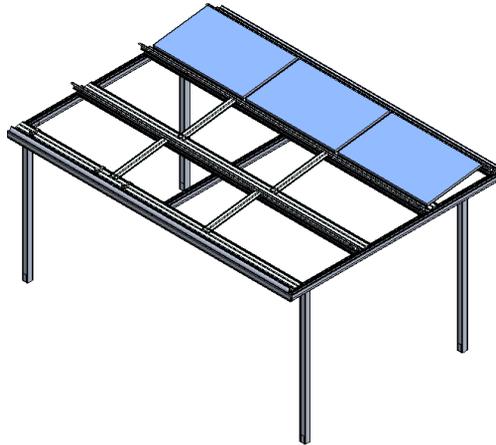
- c) Insert the screw (29) at each inter-panel position
- d) Adjust according to the panel width +5 mm.
- e) Put in the panel in place and tighten at the top.
- f) Between two modules, insert and tighten (11) where (3) has been glued at the top with (41-9-28).
- g) Once the row is complete, tighten the panels at the bottom.

Information and images are non-contractual. We reserve the right to make technical changes without notice.

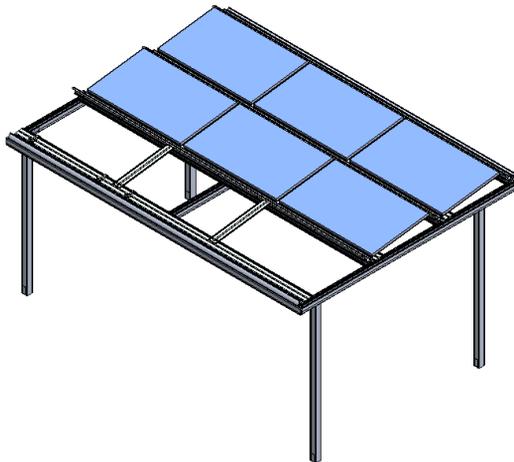
2.5

Module fixing order

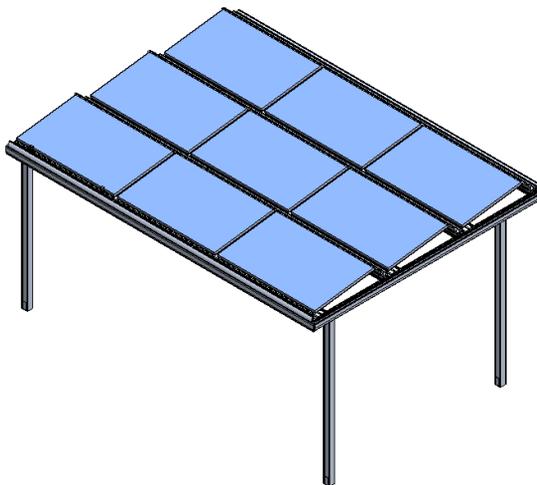
1



2



3



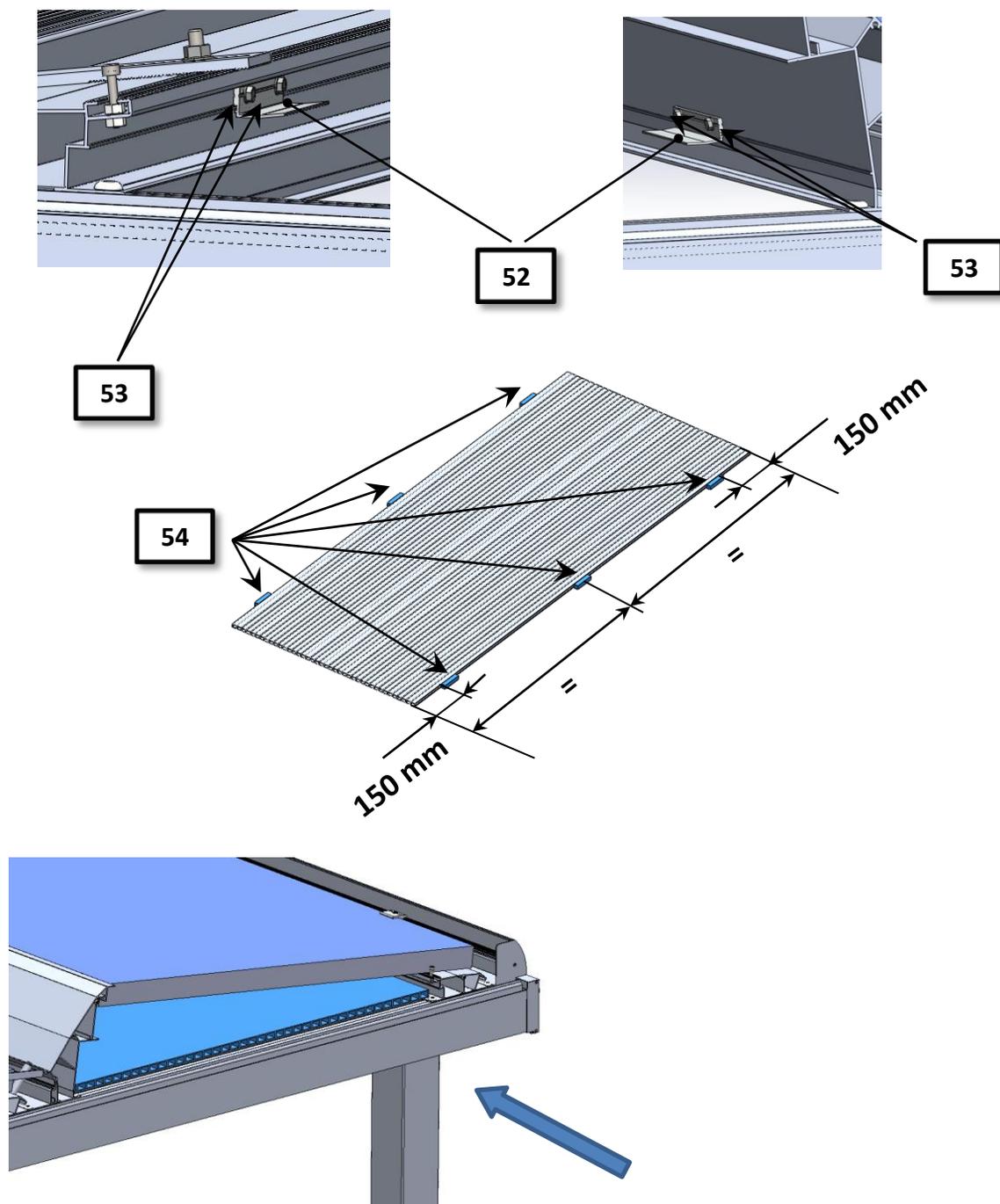
- g) Always start with the bottom line.
 h) Recommence fitting the panels line by line.

Wiring: see page 26.

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3.1 MPS SHADOW SOLAR EVOLUTION ceiling trim

Underside 980 mm wide

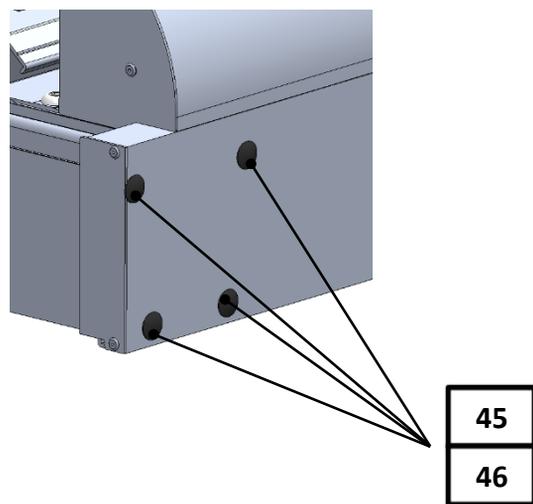
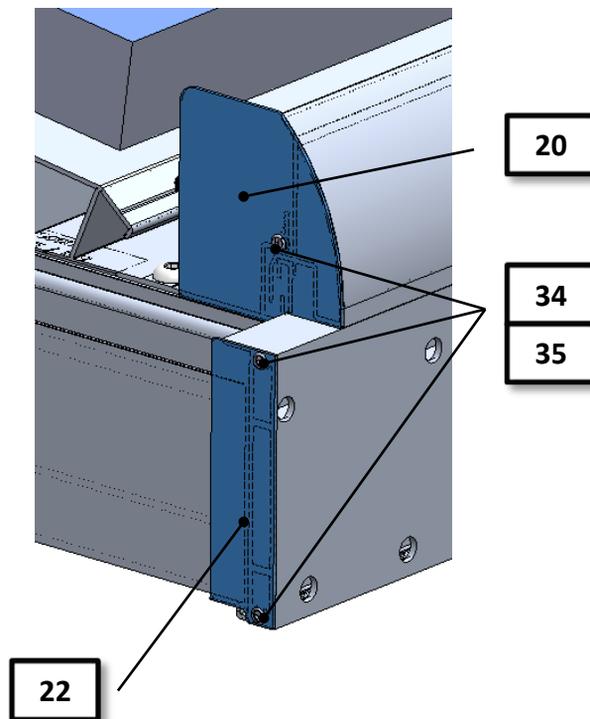
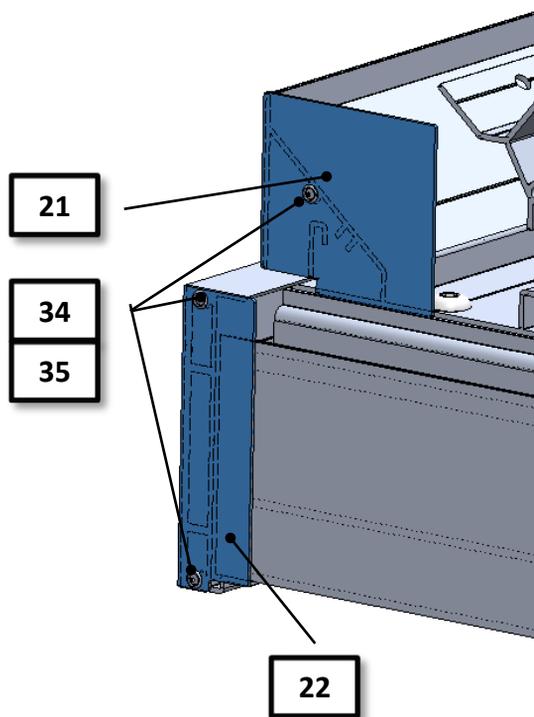


Place adhesive on the ends to prevent impurities from entering

	MPS SHADOW SOLAR EVOLUTION configuration			
	4x3	4x2	3x3	2x2
Underside length	5060 mm	3390 mm	5060 mm	3390 mm

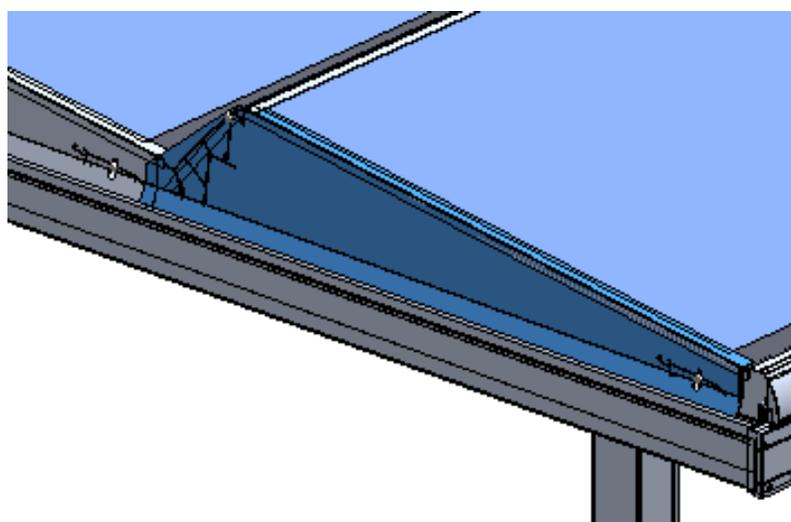
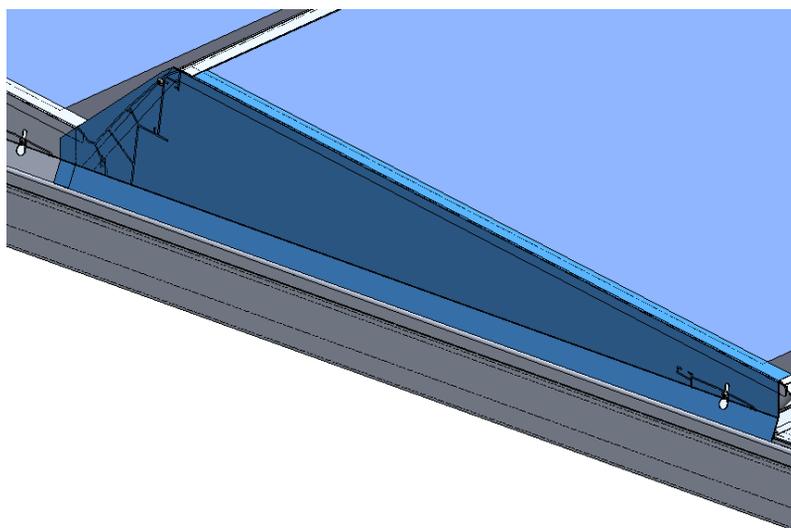
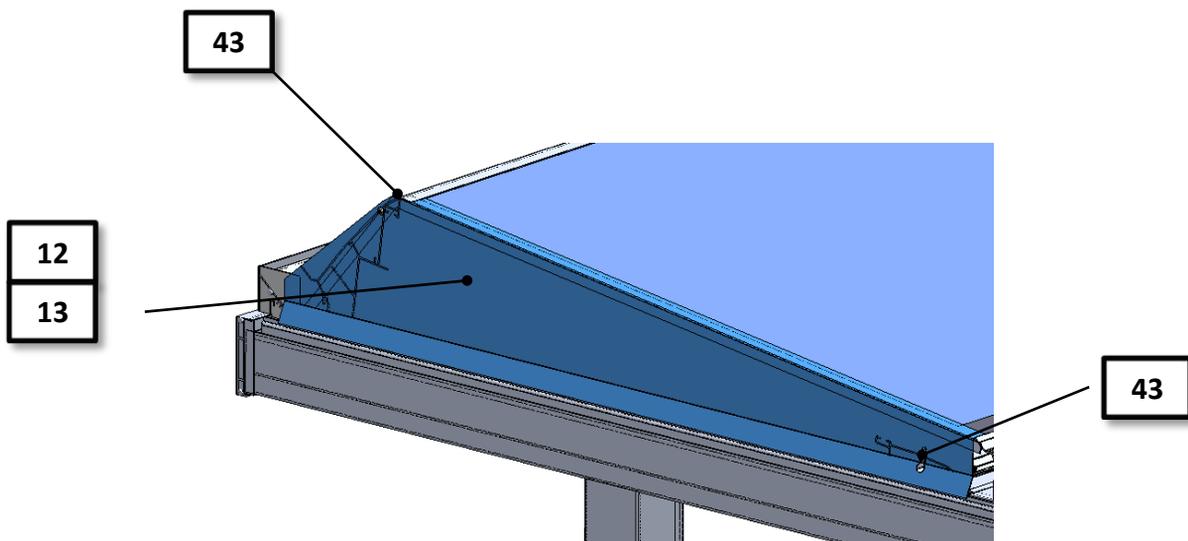
The securing brackets (52) should be distributed to hold the underside properly; screw them in with (53).

4.1 MPS SHADOW SOLAR EVOLUTION trim



- Fix the trims of profiles (20), (21) and (22) with the rivets (34) or (35).
- Repeat the operation in the four corners of the SHADOW SOLAR EVOLUTION.
- Insert the spoiler plugs in the holes provided for this purpose.

4.1 MPS SHADOW SOLAR EVOLUTION trim



- d) Screw (12) and (13) with the screws (43). Start with the bottom row.
- e) Do it again on each line of panels.

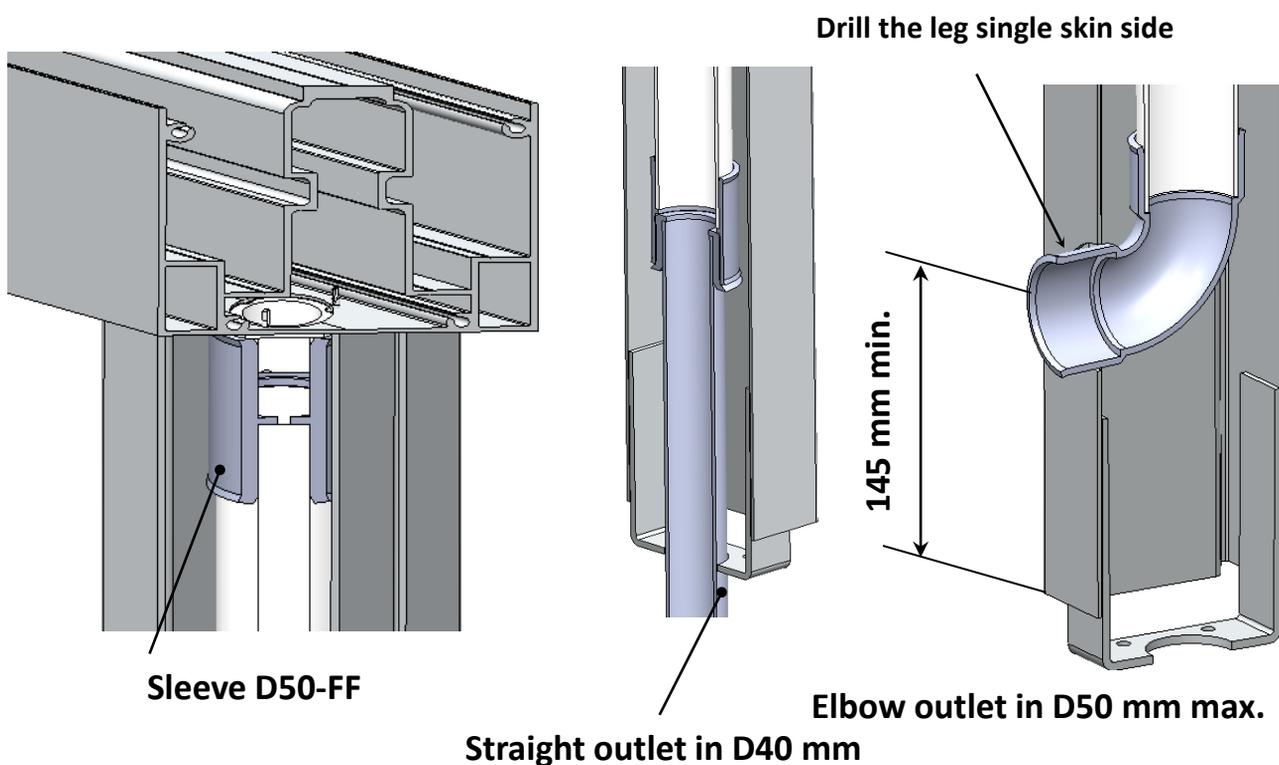
5.1

Rainwater runoff



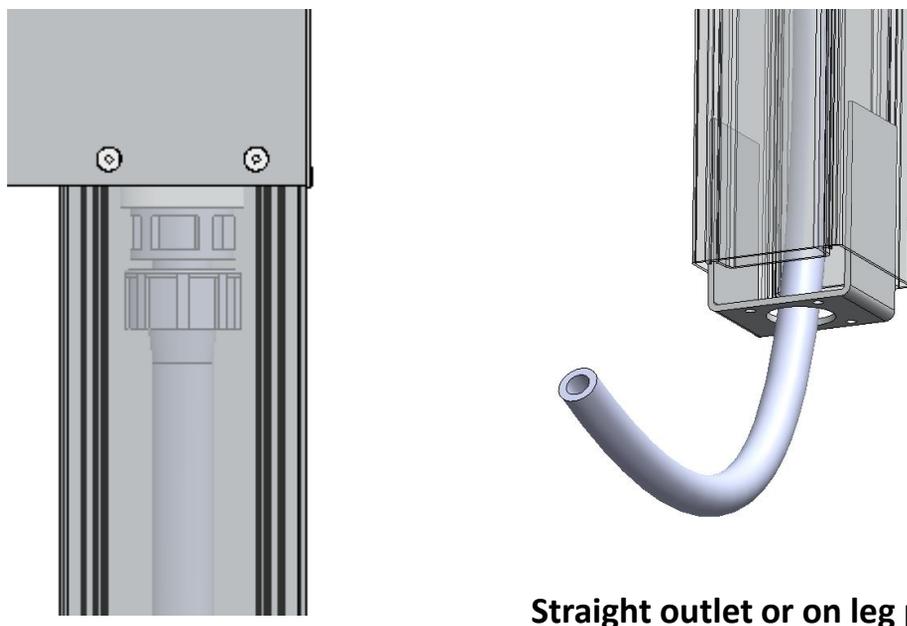
The runoff outlet must be on the bottom of the pergola

"Rigid" runoff with sleeve, tube and elbow diameter 50 mm

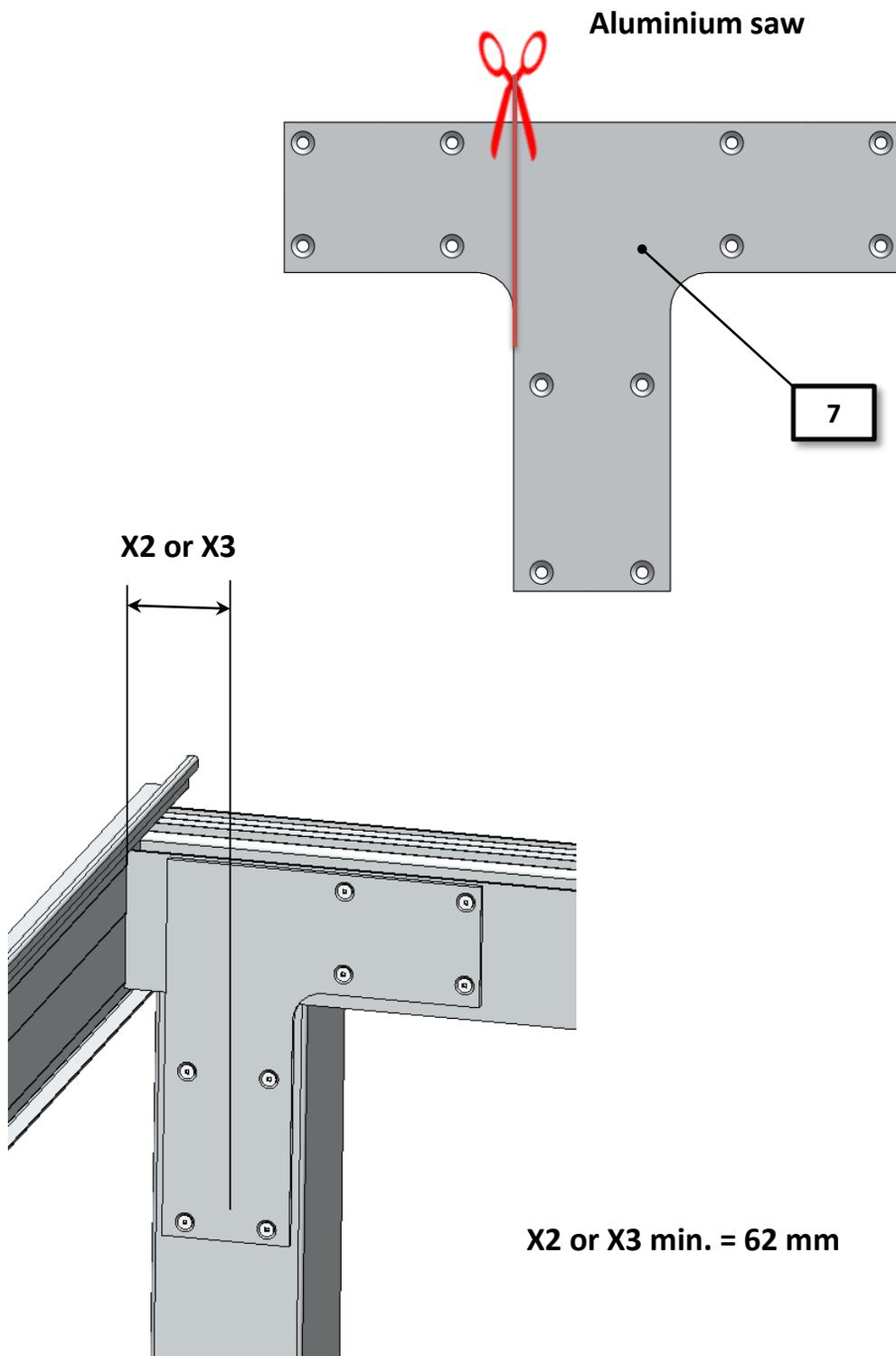


Straight outlet or on leg panel: parts not supplied in the kit

"Flexible" runoff connector end piece 1" and hose



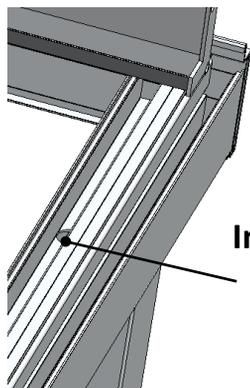
6.1 Dimension X-2 or X-3 of 62 mm to 170 mm



- Cut the squaring plate (7) aligned with the inner panel (plan to touch up the paintwork).
- The dimension X2 of the tool can thus vary between 62 mm and 170 mm.

7.1 Cable feed

- Cable feed line to line or inlet in the leg



Inlet in dry zone in the gutter

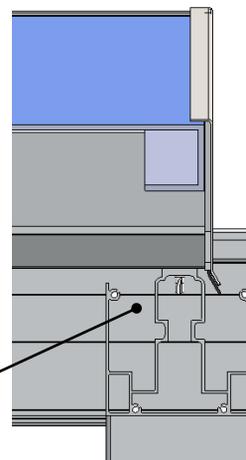
Drilling dry zone side in the gutter



Outlet in the leg

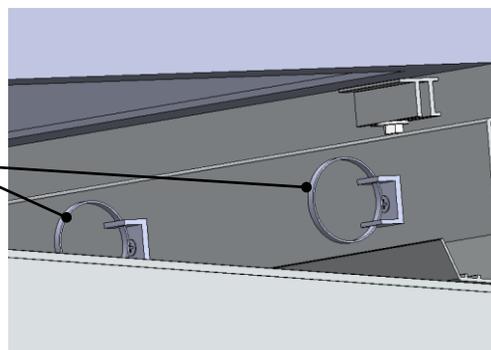


Feed in dry area from line to line

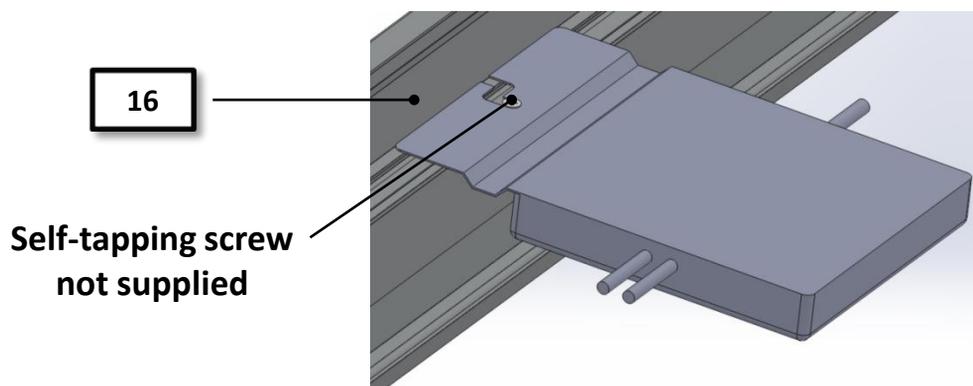


- Cable feed column to column

Use cable ties and straps screwed into the double skin of the profile (16)



7.2 Fixing micro-inverter or optimiser or monitoring box



16

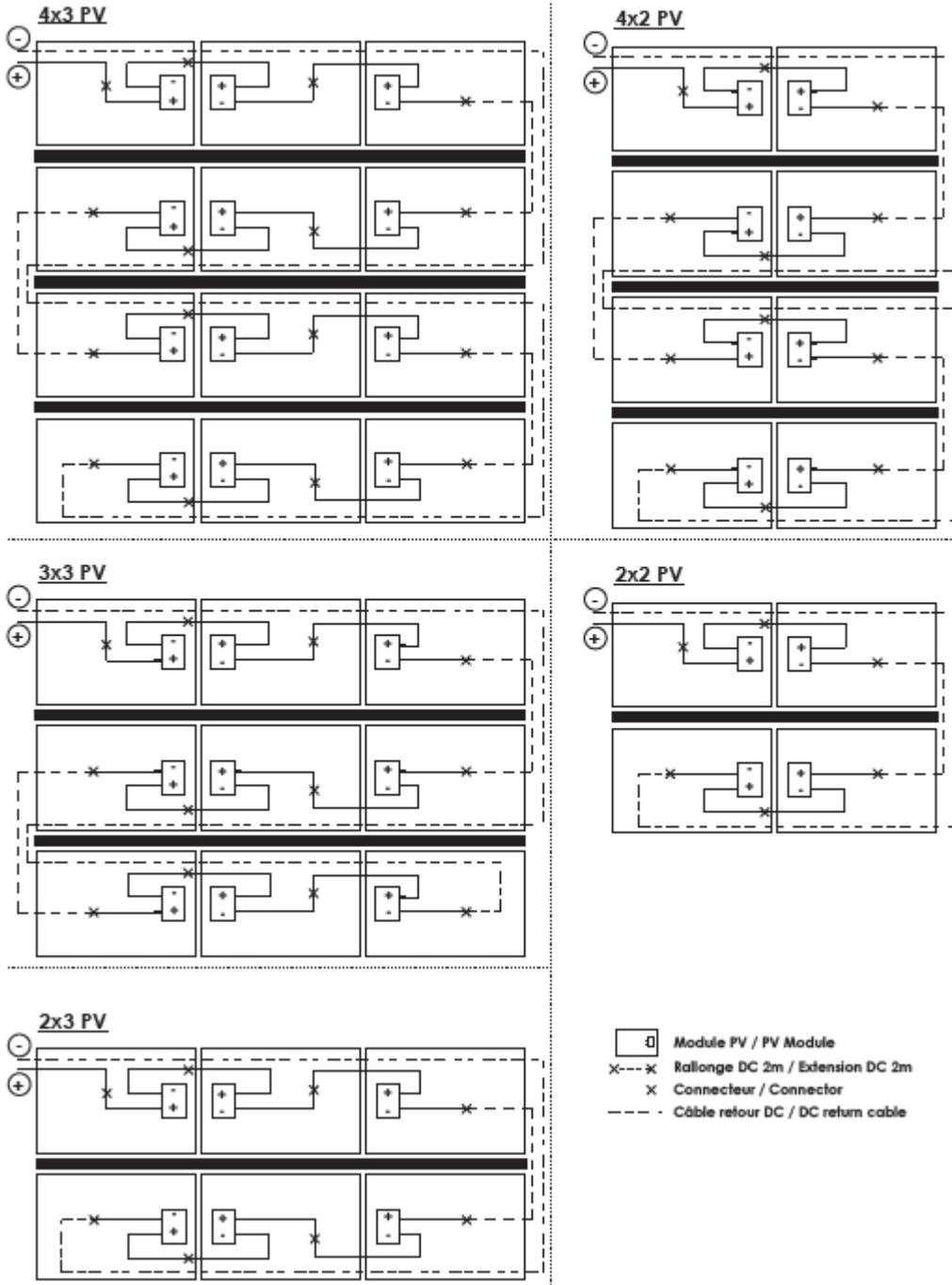
Self-tapping screw not supplied

Cable feed

7.2



Onduleur de chaîne / String Inverter



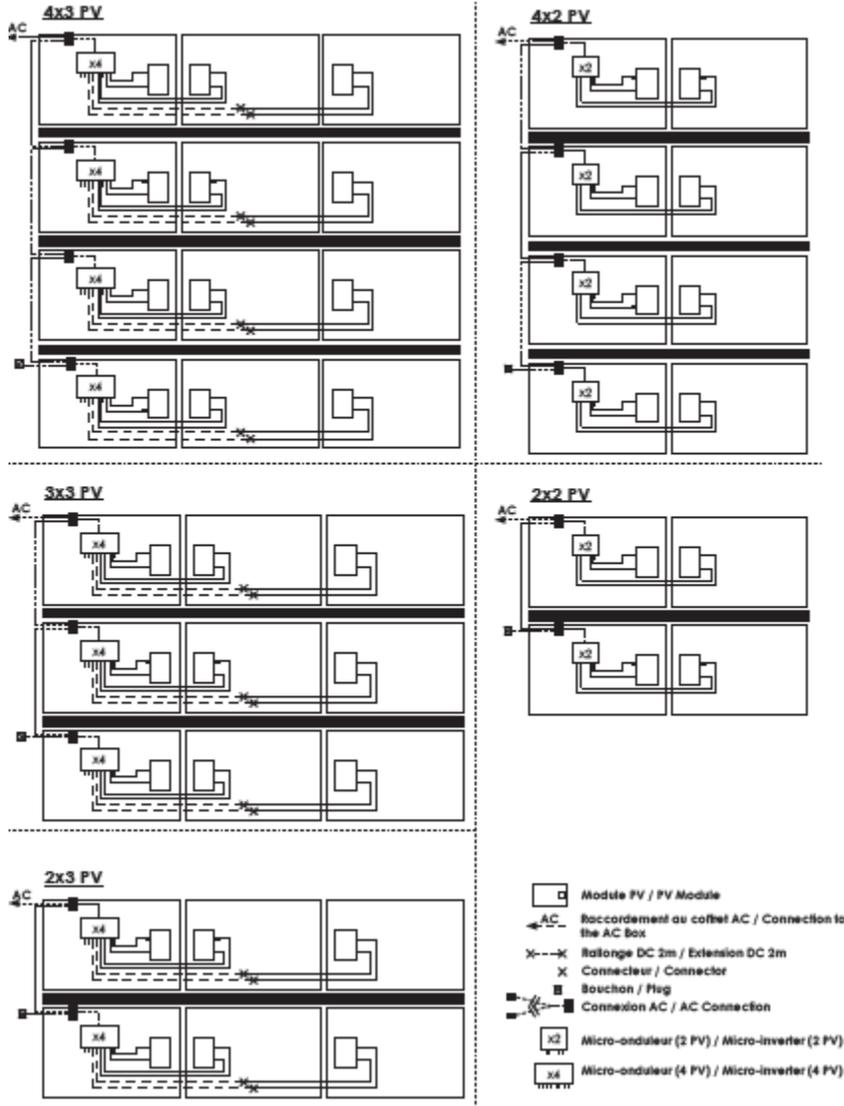
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Cable feed

7.2



Micro-onduleur multiple / Multiple Micro-inverter



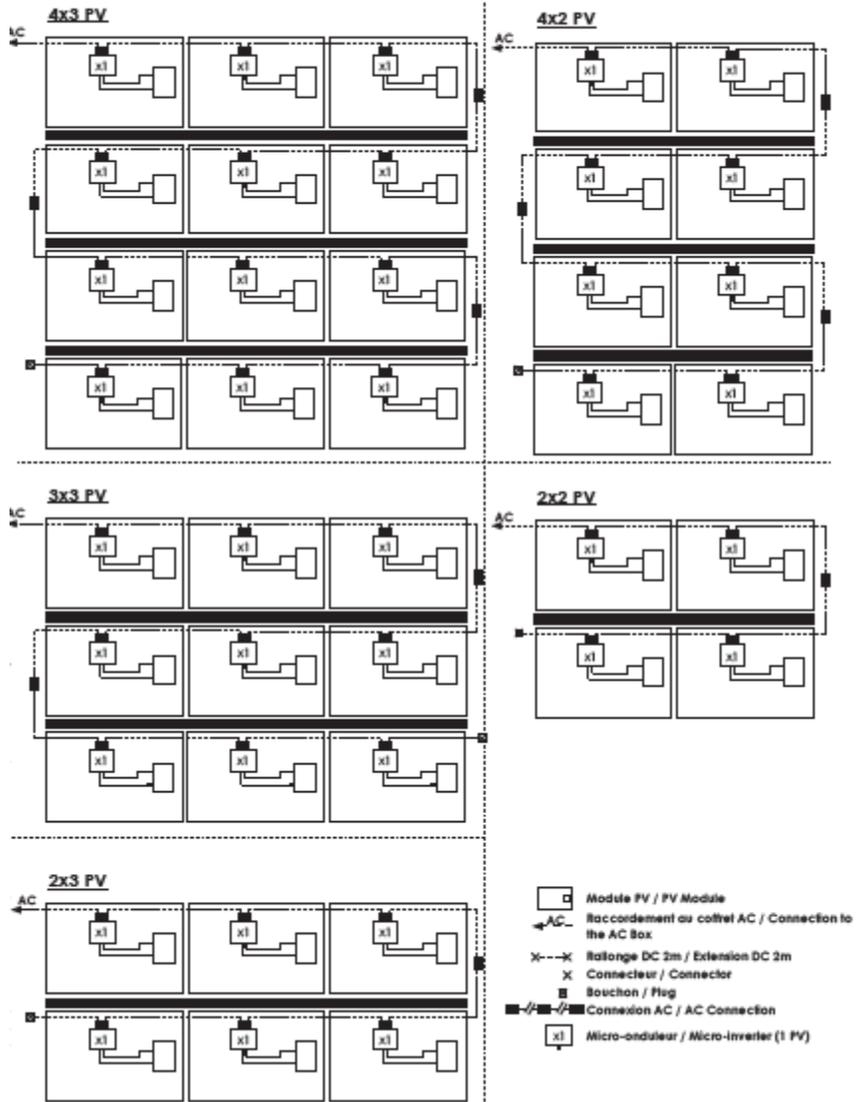
Information and images are non-contractual. We reserve the right to make technical changes without notice.

Cable feed

7.2



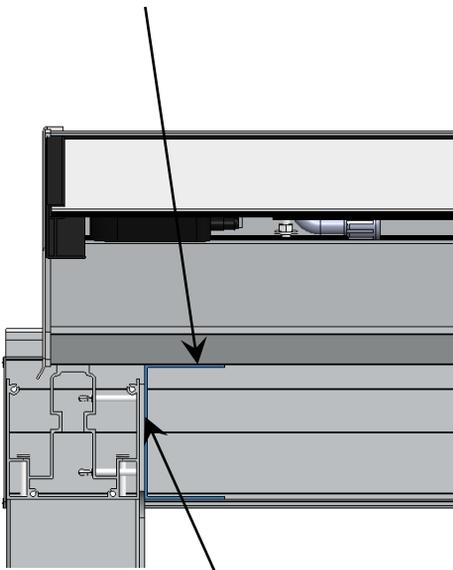
Micro-onduleur simple / Single Micro-inverter



Information and images are non-contractual. We reserve the right to make technical changes without notice.

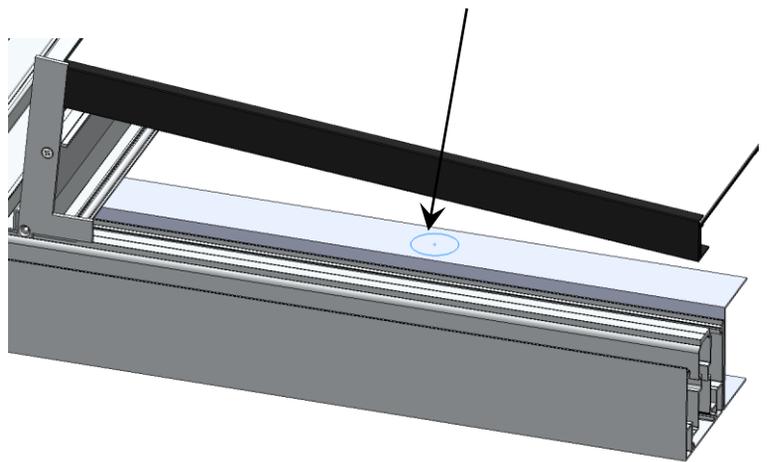
Appendix 1: Using DUALSUN hybrid panels

Using trunking adapted to the dimensions of heating pipes (100 m high max.) in a colour matching the MPS Shadow Solar Evolution.



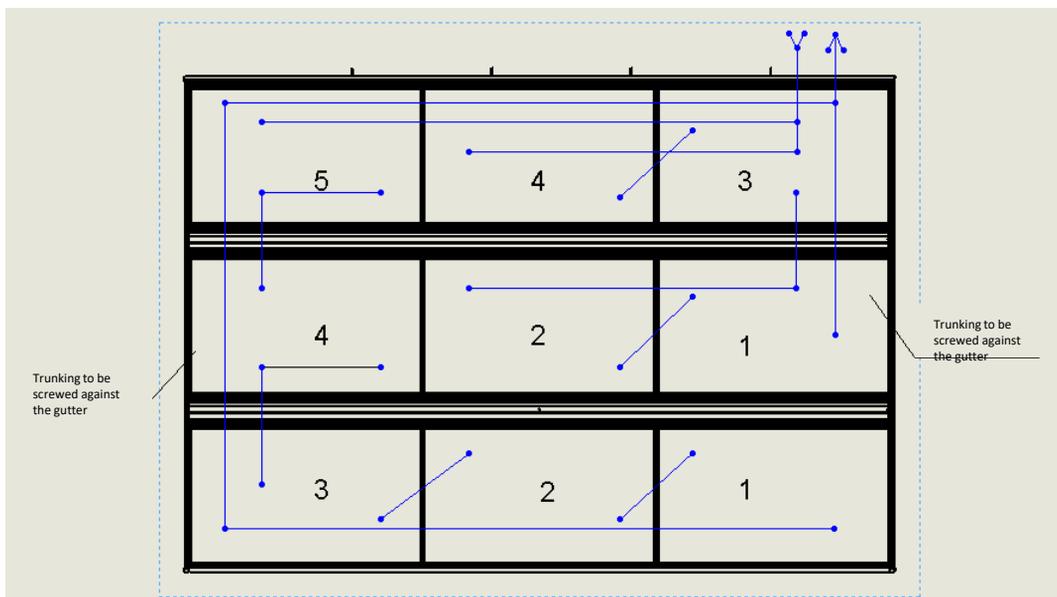
Fixing the trunking from the middle and at the top.

Cutting the trunking to feed the pipes, drilling the underside in line. Make sure that the pipe curve does not distort either the trunking or the underside.



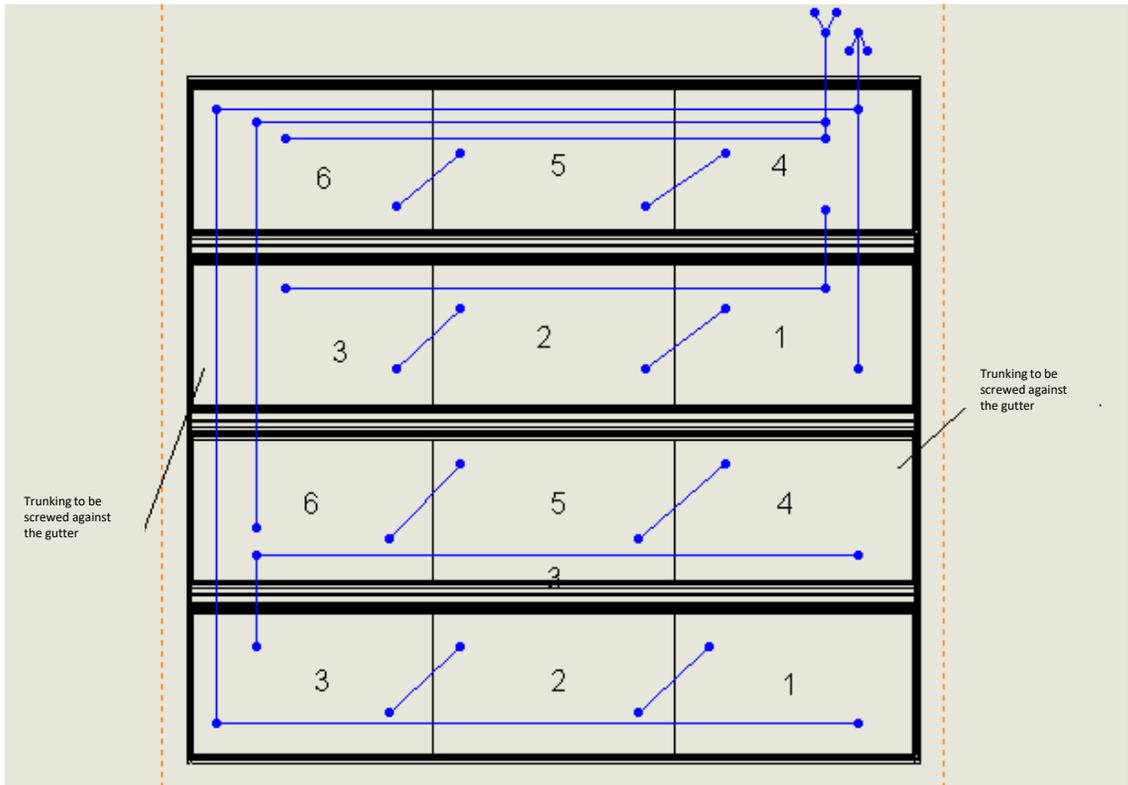
Routing the pipes according to the MPS Shadow Solar Evolution formats

Format 3x3

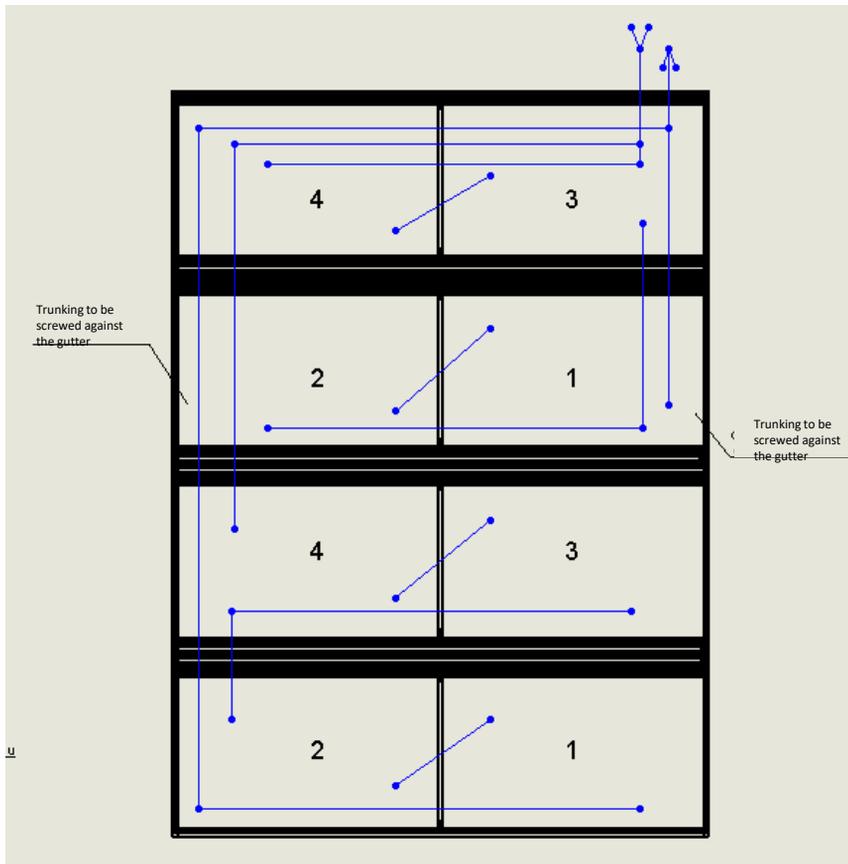


Appendix 1: Using DUALSUN panels

Format 4x3



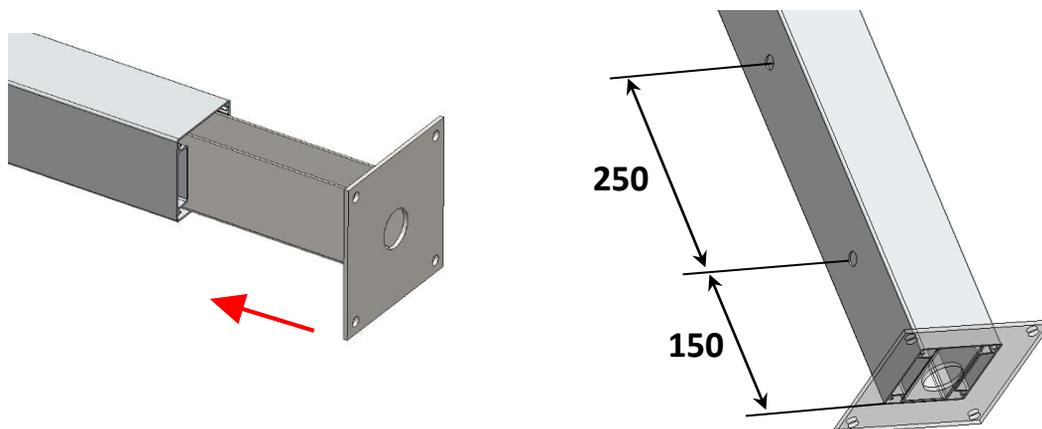
Format 4x2



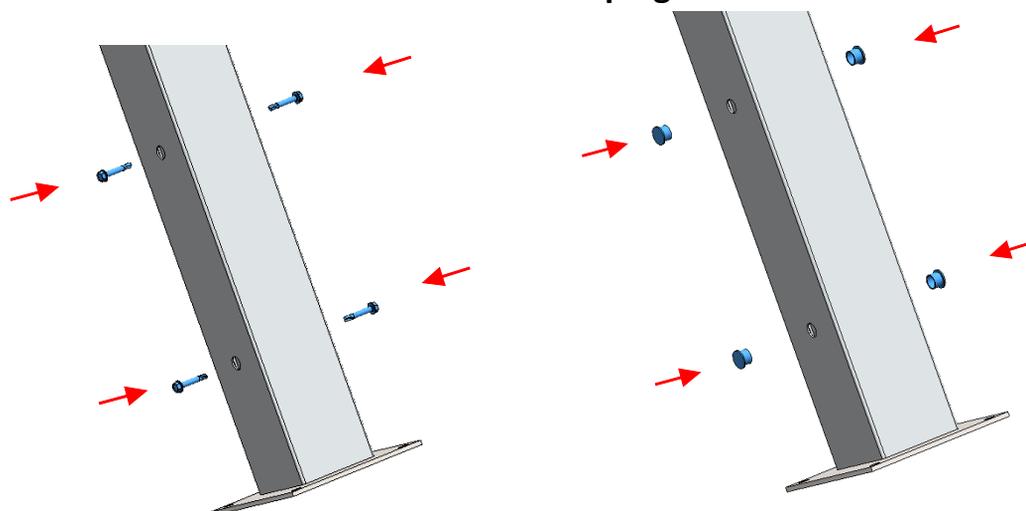
Information and images are non-contractual. We reserve the right to make technical changes without notice.

Appendix 2: Fitting leg baseplates

Slide the baseplate onto the left, then drill 4 holes D16 either side of the leg in the first skin.



Assemble the leg and baseplate with screws.
Insert the plugs.



Fix the baseplate with an appropriate fastener to the support and depending on the mechanical resistance stipulated by MPS. (minimum 2900 N peel load)

Specification of the support for fixing the Shadow Solar Evolution:

- Concrete slab (density 2200 kg/m³), minimum 8 cm thick, over the entire Shadow Solar Evolution surface area.
- Or concrete studs (density 2200 kg/m³), with minimum size: 0.5x0.5x0.5 m at each Shadow Solar Evolution leg.

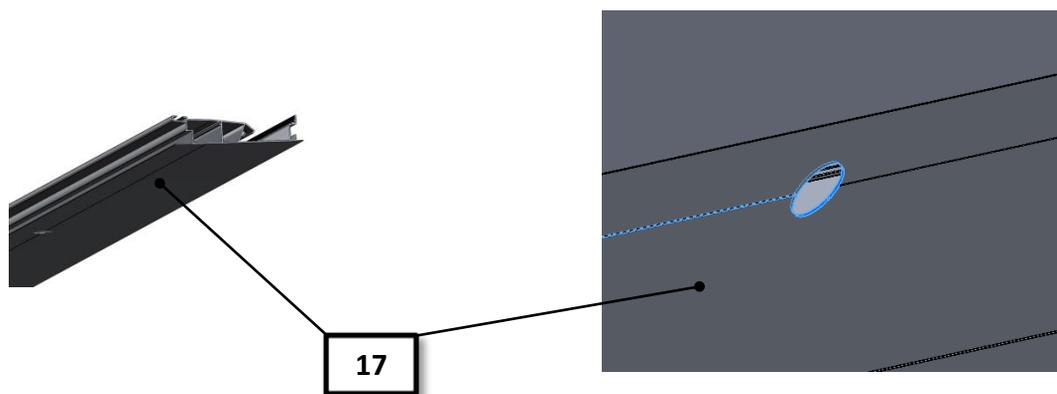
Kit reference: ASM0P00382AA

Description	Item code	Number/kit	Total weight
Leg baseplate	PRT0P00173AA	2	8
Screw 6.3x19	V062V02	10	
Leg baseplate black plug	V063V02N	10	
Leg baseplate white plug	V063V02B	10	

Caution, the baseplates are only valid for 2.4 m legs. Higher than this and the legs must be sealed in 30 cm of concrete. .

Appendix 3: Fitting Spot LED lighting

Spot LED can only be fitted on two consecutive lines of solar panels.
Drill the profile (17) diameter 43 mm using the groove as drilling axis.



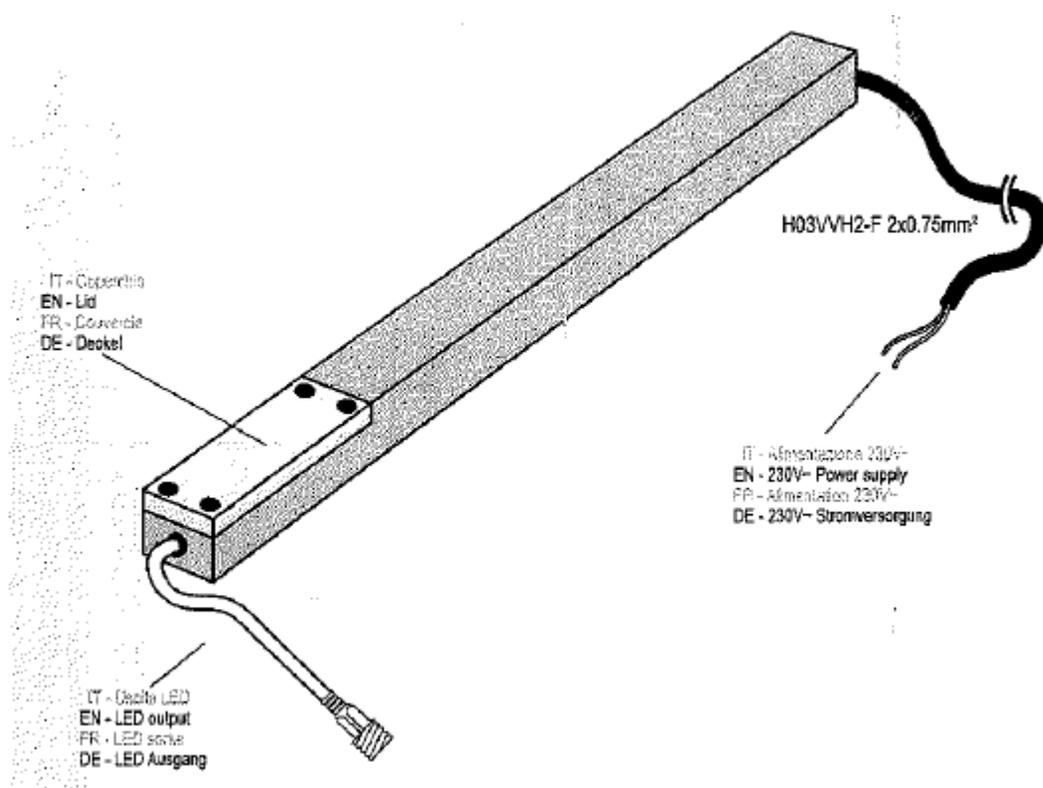
Connect the extension with the spot.



Use (17) as trunking and connect to the next spot.
To move from line to line, feed in the gutter in dry area.
Continue until the last spot LED.

Appendix 3: Fitting Spot LED lighting

**Connect the last extension to the power supply unit.
Insert the end plug into the other end.**

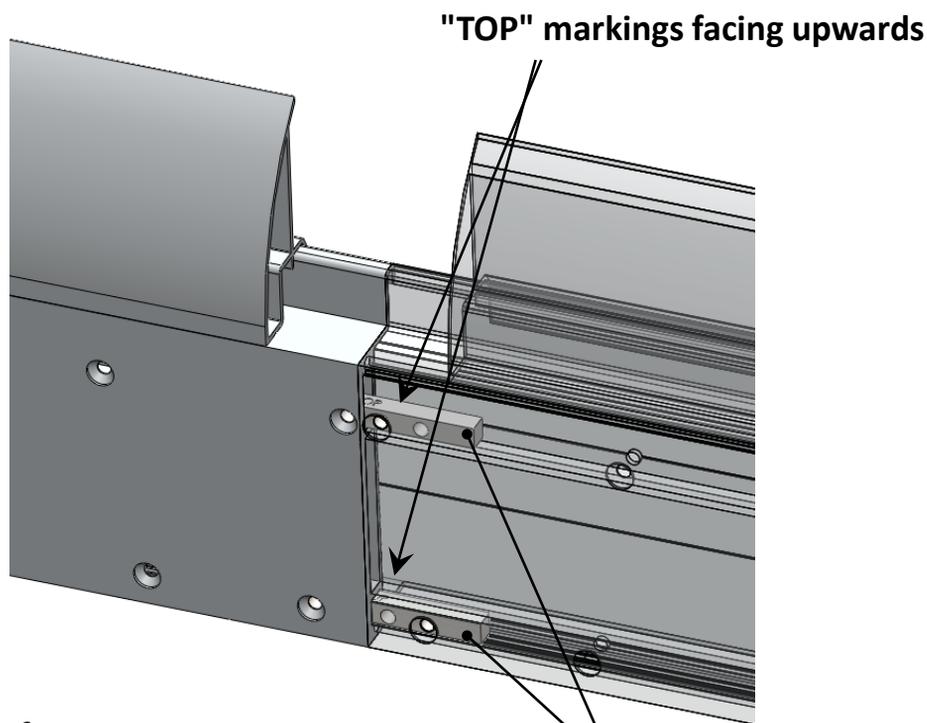


Connect the power supply unit to a power supply with an appropriate cable section, according to the electrical standards in force in the country.

For the synchronisation, consult the fitting instructions supplied with the kit.

Kit reference: PGOSLED02A

Appendix 4: Side-by-side assembly

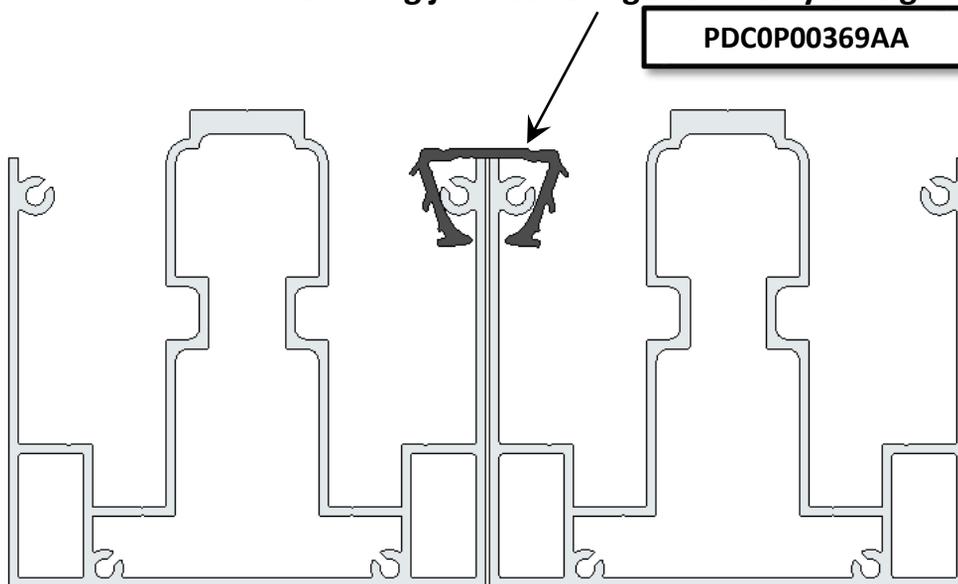


Kit reference:
ASM0P00393AA (=4xPRTOP00378AA)
+ PDC0P00369AA

PRTOP00378AA

Strip clip

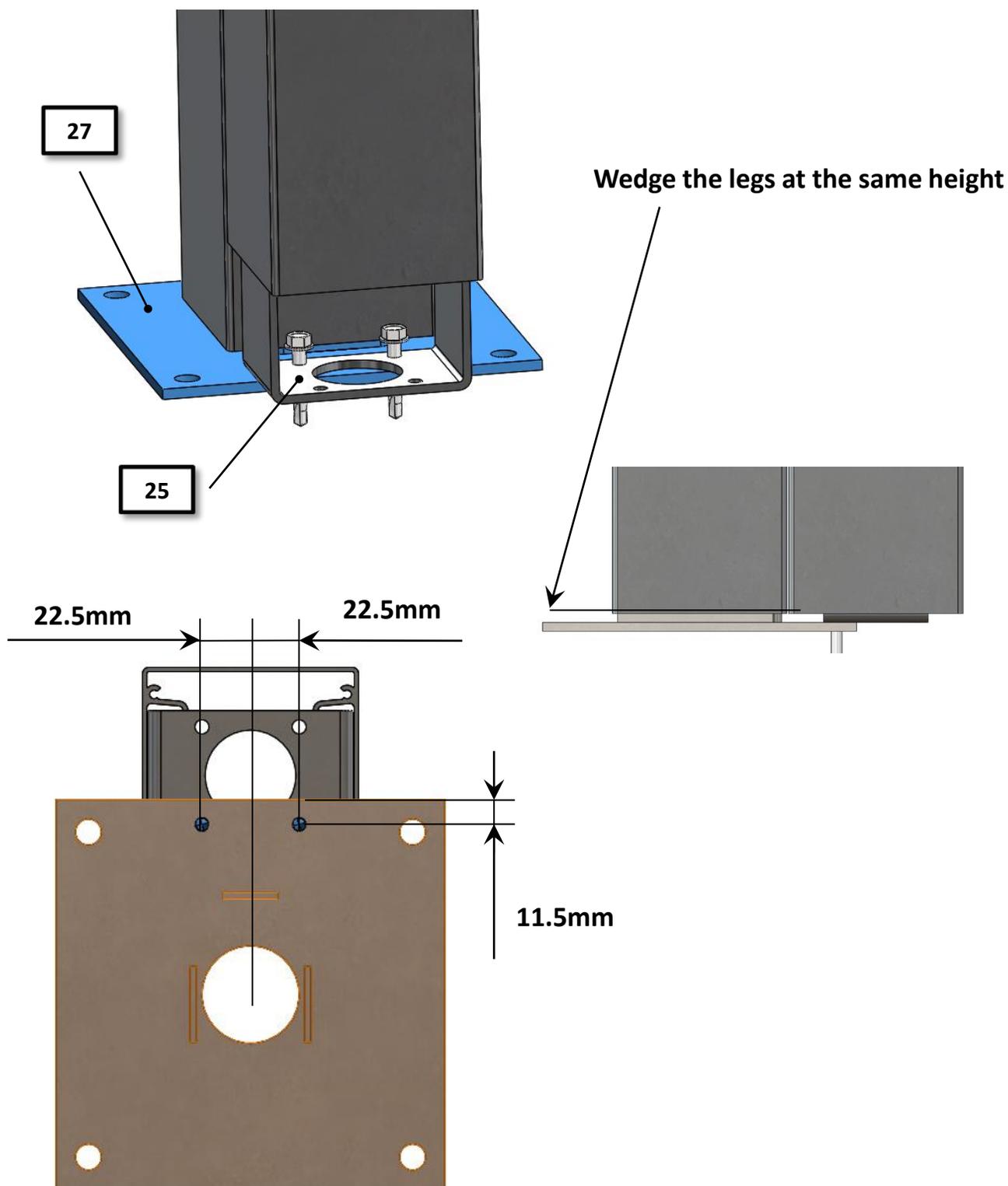
Assembling joint covering the side-by-side gutters



For a side-by-side Shadow Solar Evolution side assembly, insert the strip clips between 8 and 8 or 19 and 19 before the side fixing screws to assemble 4 and 5 and 8 or 19.

Then insert the assembling joint so that the side-by-side gutters are covered.

Appendix 4: Side-by-side assembly

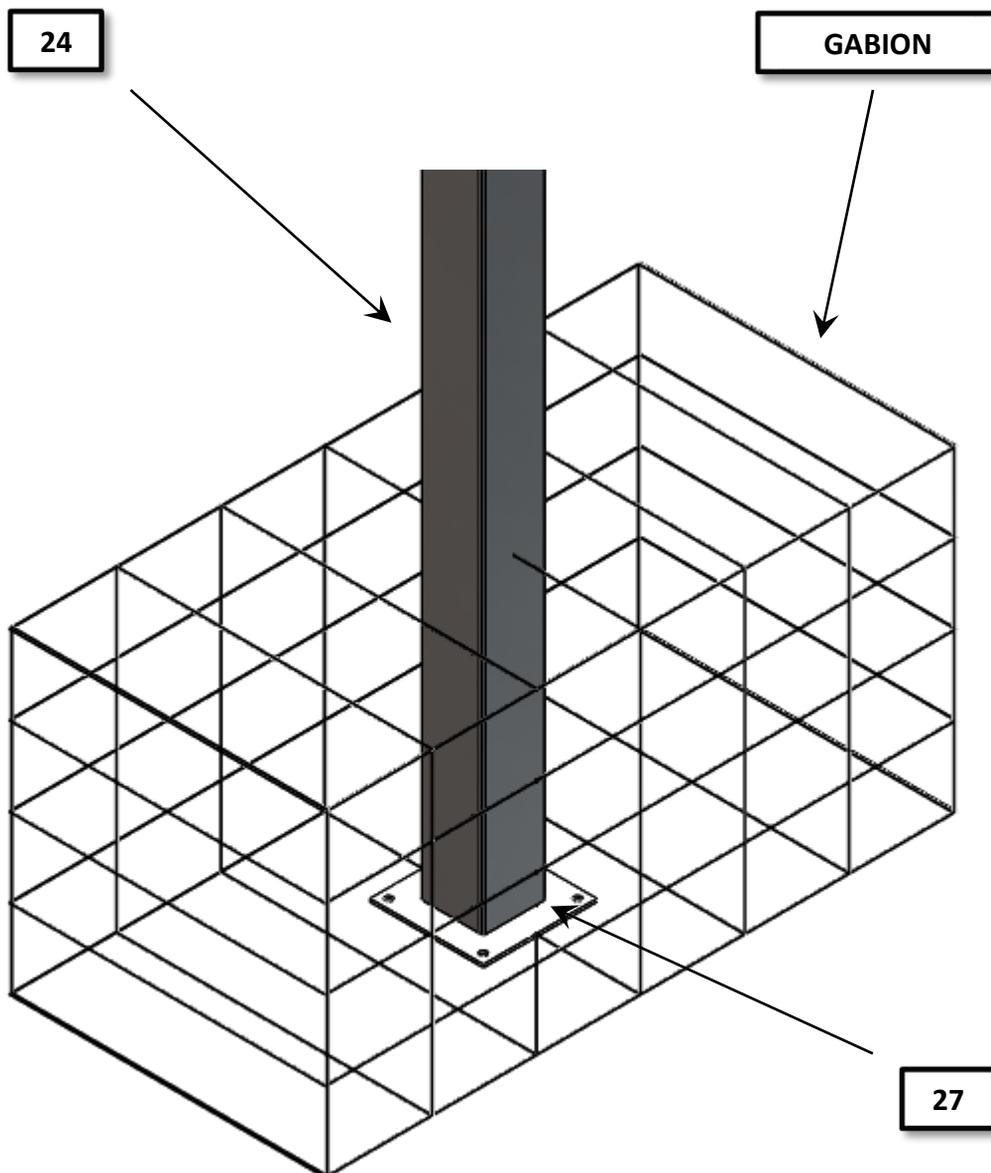


For a side-by-side Shadow Solar Evolution assembly with baseplate (27), use (25) to fix to (27).

Pre-drill (27) with a D4 bit to the dimensions indicated and fix (25) with the screws supplied with (27).

Wedge the legs thus side-by-side at the same height.

Appendix 5: Installation with Gabion



Assemble and screw (27) with (24) with the baseplate kit screws and position the leg in the Gabion.

The leg must be at least 20 cm from each side of the Gabion.

Fill the entire Gabion with the stones sized to fit it.

Format	Min. Gabion dimensions
2x2	4 x (50x50x50)
3x3	2x(50x50x50)+2x(50x100x50)
4x2	2x(50x50x50)+2x(50x100x50)
4x3	2x(50x50x50)+2x(50x100x50)