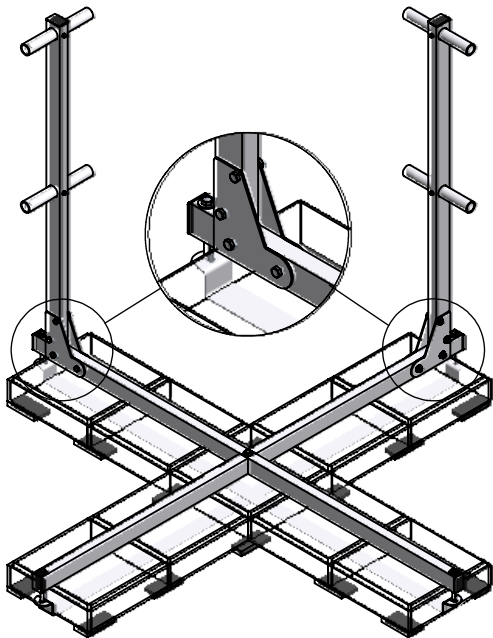
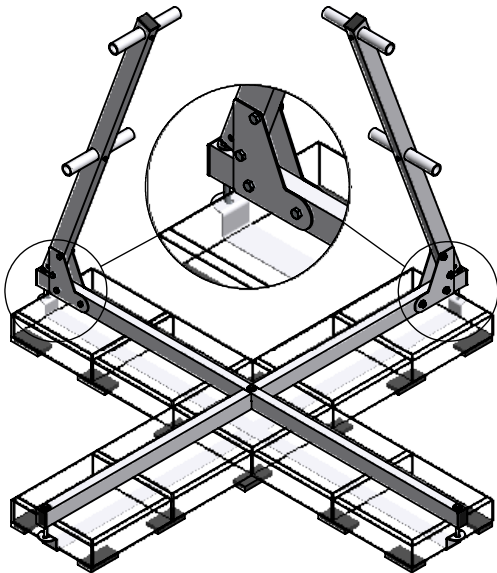


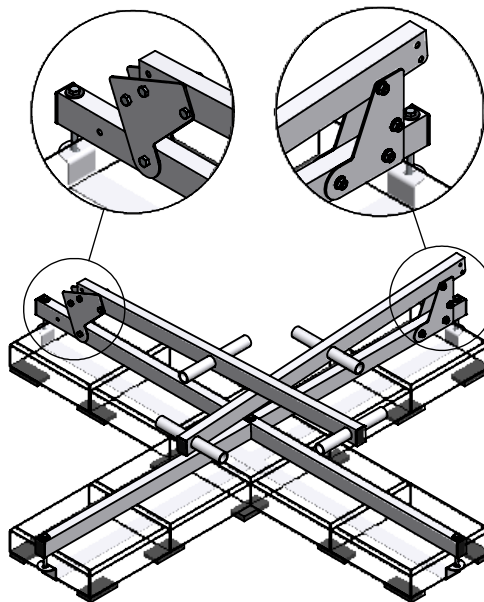
90 Degree Configuration



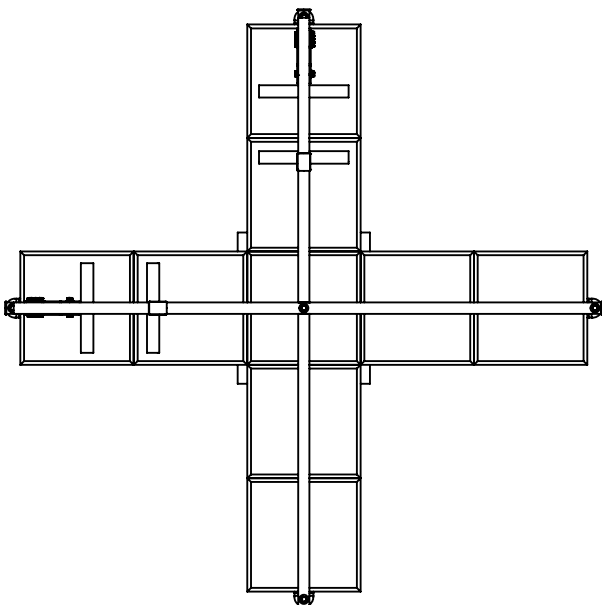
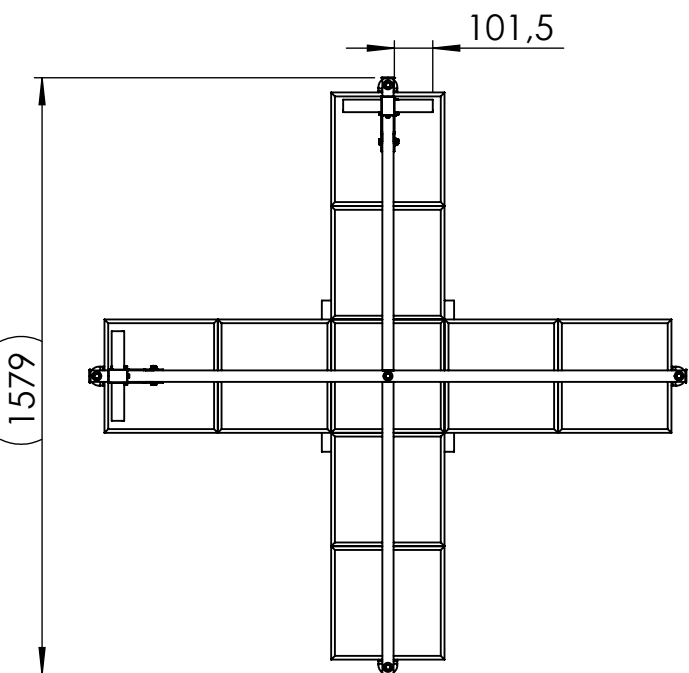
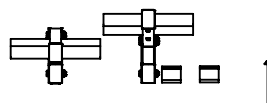
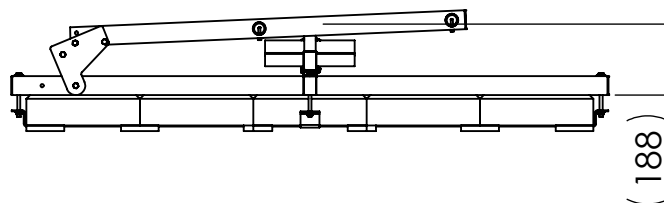
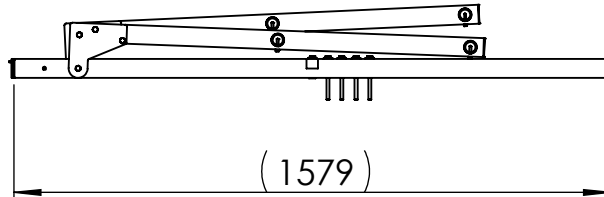
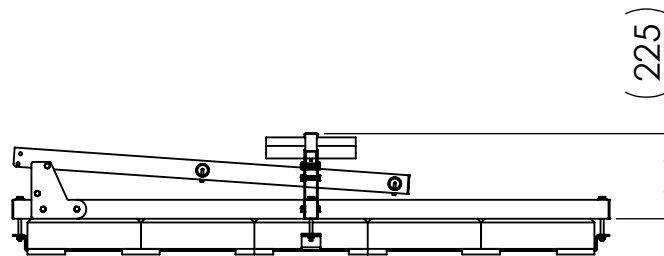
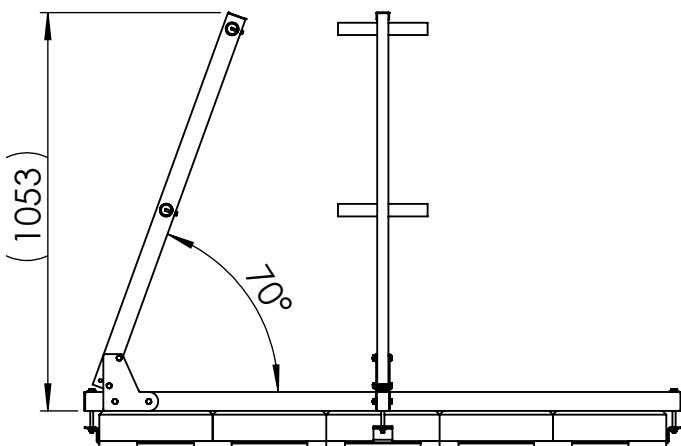
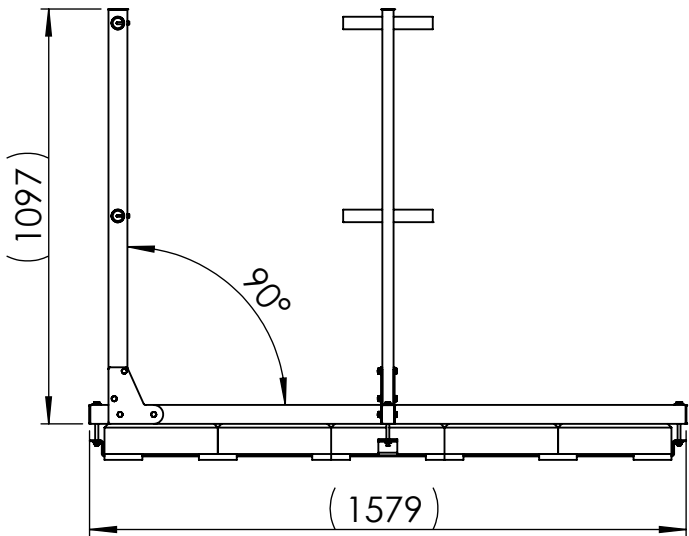
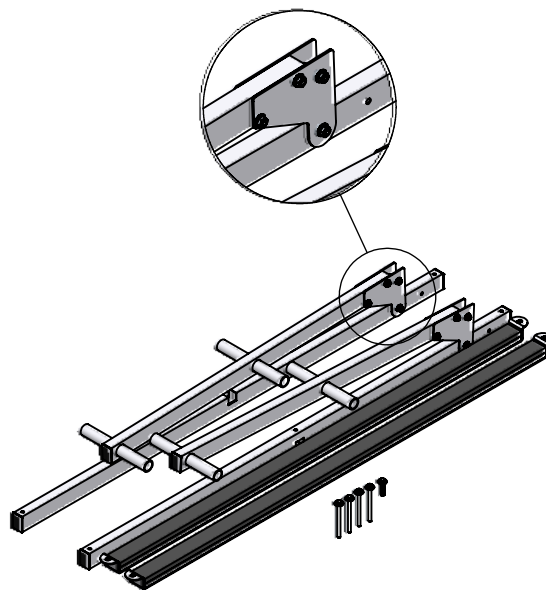
70 Degree Configuration



Flat 70 Degree Config



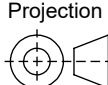
Transport



Ballast is configurable and conform Eurocode 1991-1-4
***N.B. Some countries have extended regulations in regard to compliance**



Scale: 1:20
Units: mm



Description:

PG-1500X-1500

Drawing number:

25.218-004-900_05

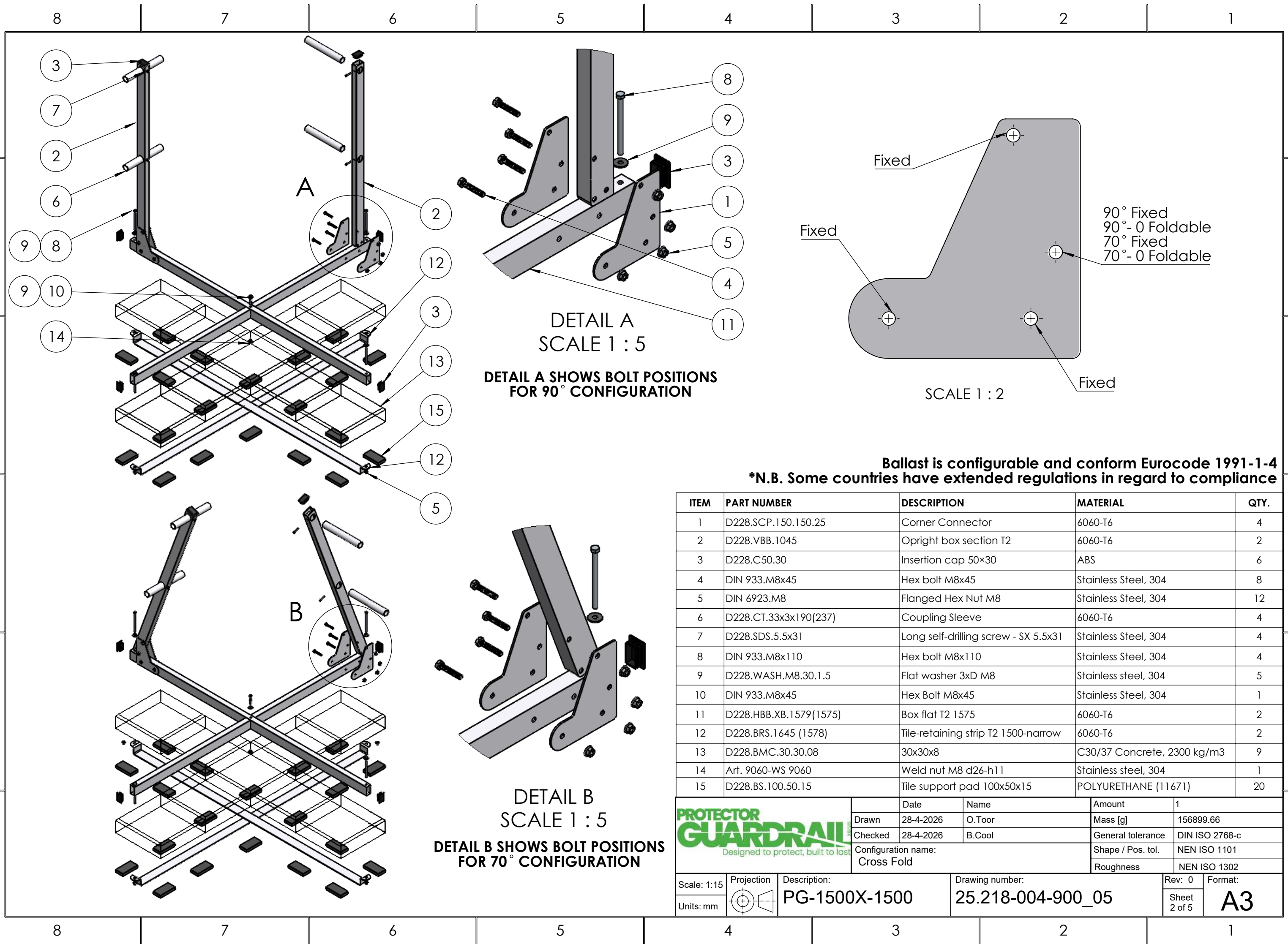
Rev: 0

Sheet
1 of 5

Format:

A3

Date	28-4-2026	Name	O.Toor	Amount	1
Drawn	28-4-2026	Checked	B.Cool	Mass [g]	156899.66
Configuration name:				General tolerance	DIN ISO 2768-c
Cross Fold				Shape / Pos. tol.	NEN ISO 1101
				Roughness	NEN ISO 1302



Ballast is configurable and conform Eurocode 1991-1-4
*N.B. Some countries have extended regulations in regard to compliance

ITEM	PART NUMBER	DESCRIPTION	MATERIAL	QTY.
1	D228.SCP.150.150.25	Corner Connector	6060-T6	4
2	D228.VBB.1045	Opright box section T2	6060-T6	2
3	D228.C50.30	Insertion cap 50×30	ABS	6
4	DIN 933.M8x45	Hex bolt M8x45	Stainless Steel, 304	8
5	DIN 6923.M8	Flanged Hex Nut M8	Stainless Steel, 304	12
6	D228.CT.33x3x190(237)	Coupling Sleeve	6060-T6	4
7	D228.SDS.5.5x31	Long self-drilling screw - SX 5.5x31	Stainless Steel, 304	4
8	DIN 933.M8x110	Hex bolt M8x110	Stainless Steel, 304	4
9	D228.WASH.M8.30.1.5	Flat washer 3xD M8	Stainless steel, 304	5
10	DIN 933.M8x45	Hex Bolt M8x45	Stainless Steel, 304	1
11	D228.HBB.XB.1579(1575)	Box flat T2 1575	6060-T6	2
12	D228.BRS.1645 (1578)	Tile-retaining strip T2 1500-narrow	6060-T6	2
13	D228.BMC.30.30.08	30x30x8	C30/37 Concrete, 2300 kg/m3	9
14	Art. 9060-WS 9060	Weld nut M8 d26-h11	Stainless steel, 304	1
15	D228.BS.100.50.15	Tile support pad 100x50x15	POLYURETHANE (11671)	20

PROTECTOR GUARDRAIL Designed to protect, built to last			Date	Name	Amount	1	
		Drawn	28-4-2026	O.Toor	Mass [g]	156899.66	
		Checked	28-4-2026	B.Cool	General tolerance	DIN ISO 2768-c	
		Configuration name: Cross Fold			Shape / Pos. tol.	NEN ISO 1101	
					Roughness	NEN ISO 1302	
Scale: 1:15	Projection	Description: PG-1500X-1500		Drawing number: 25.218-004-900_05		Rev: 0	Format: A3
Units: mm						Sheet 2 of 5	

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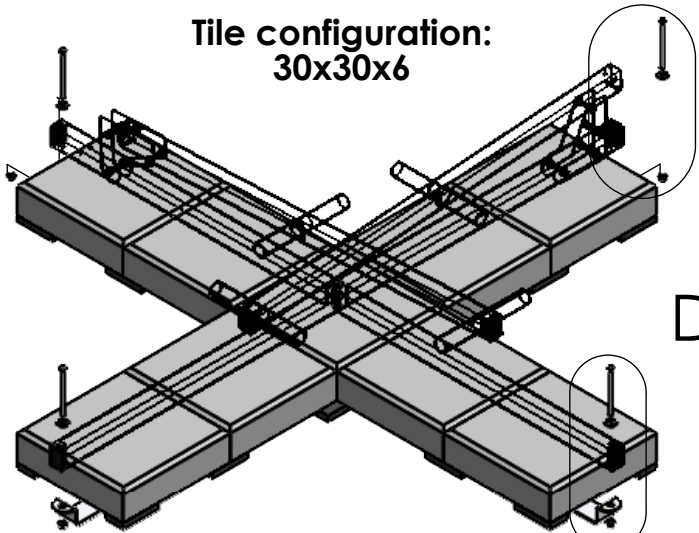
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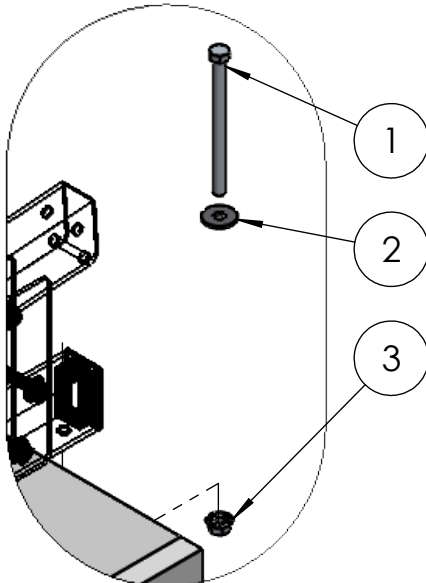
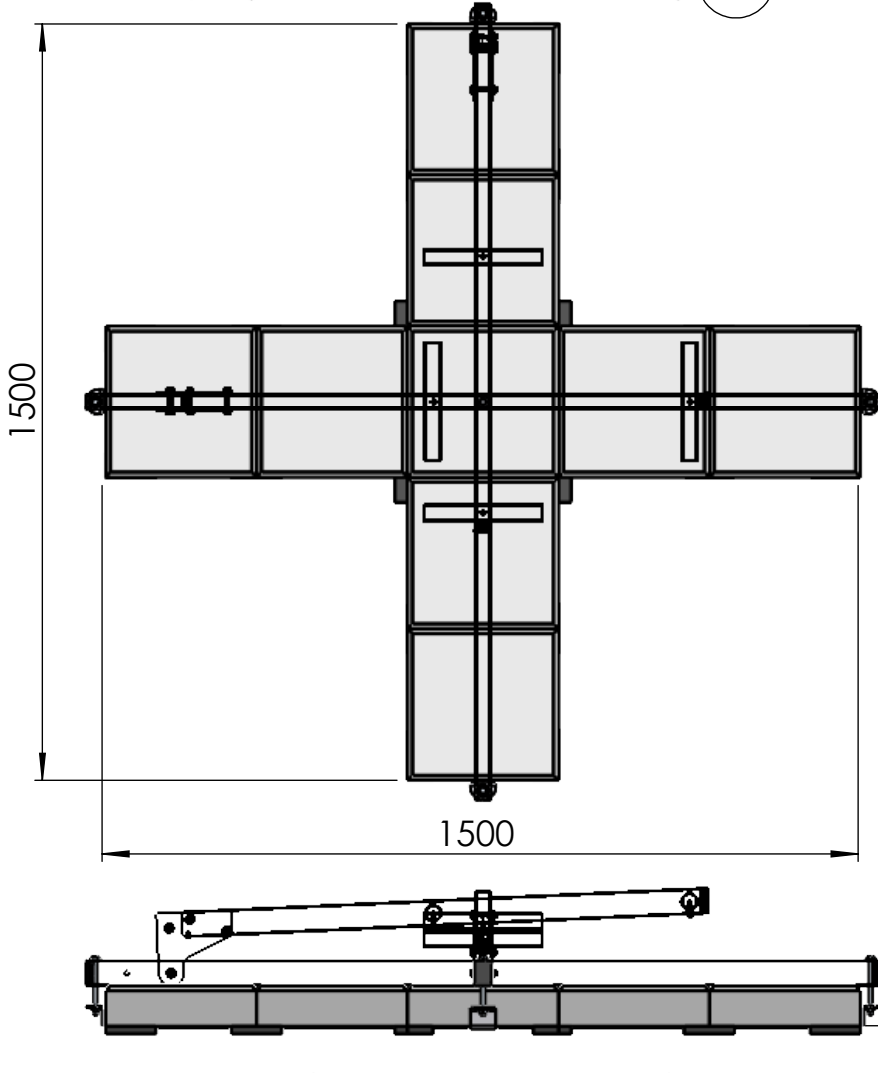
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Tile configuration:
30x30x6

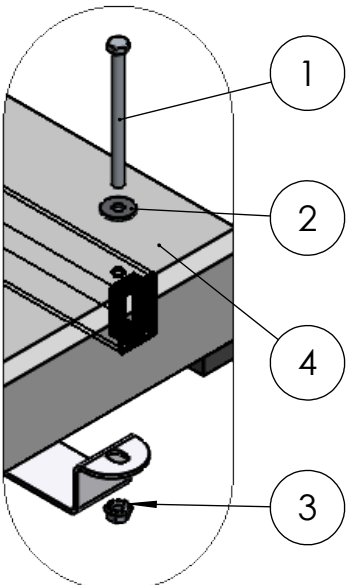


C

D



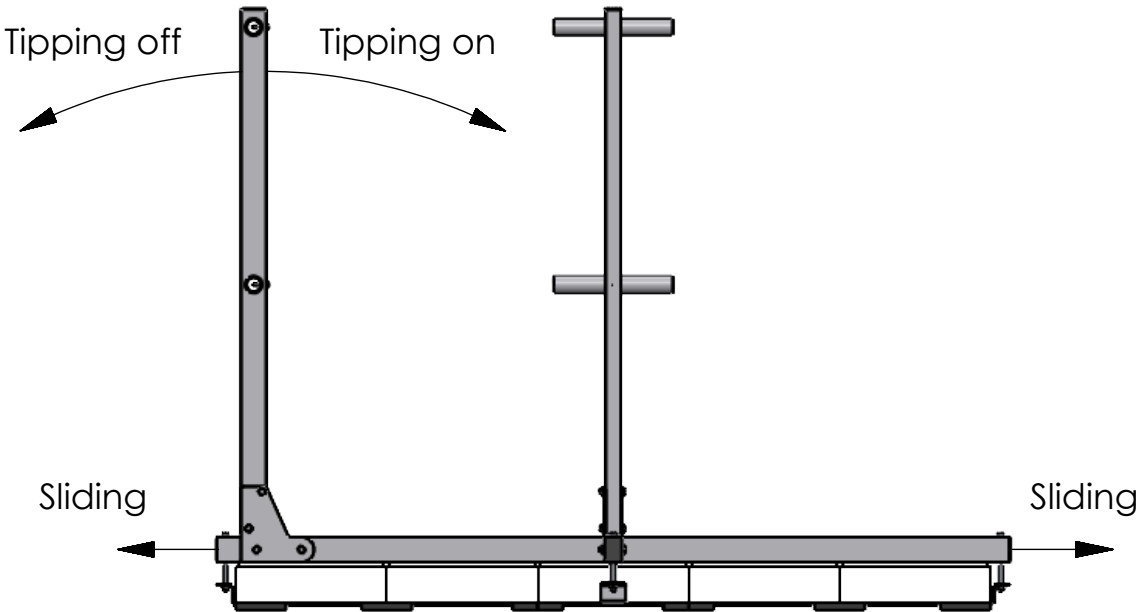
DETAIL C
SCALE 1 : 5



DETAIL D
SCALE 1 : 5

Declaration of Performance - on/off - sliding					
Stanchion type	Counterweight system	Stanchion distance	Max q _{onroof_safe} (N/m ²)	Max q _{offroof_safe} (N/m ²)	Max q _{sliding_safe} (N/m ²)
1500X	30x30x8	3m	2365	2157	2057
1500X	30x30x8	4m	1890	1699	1651

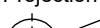
Declaration of Performance - Applied local load					
Stanchion type	Counterweight system	Stanchion distance	Applied local load per stanchion (kN)	Applied average distributed load (kN/m)	Applied Pressure on surface (N/cm ²)
1500X	30x30x8	3m	1,57	0,39	0,52
1500X	30x30x8	4m	1,58	0,4	0,53

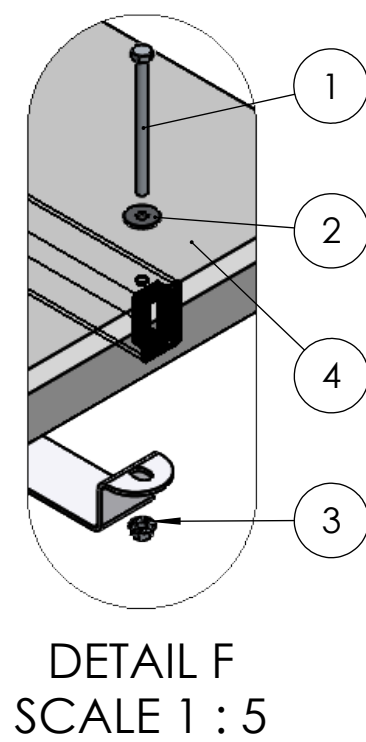
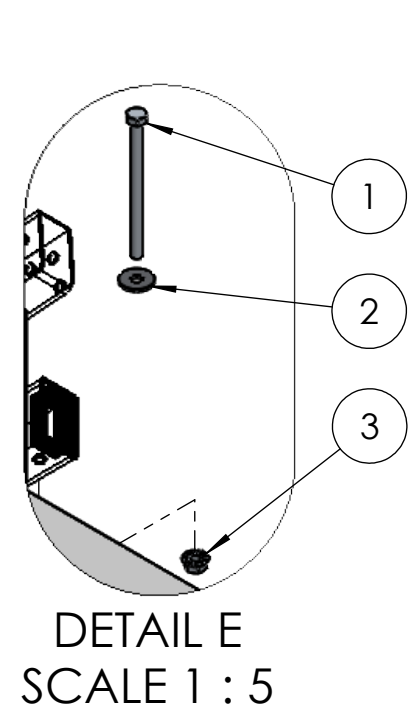
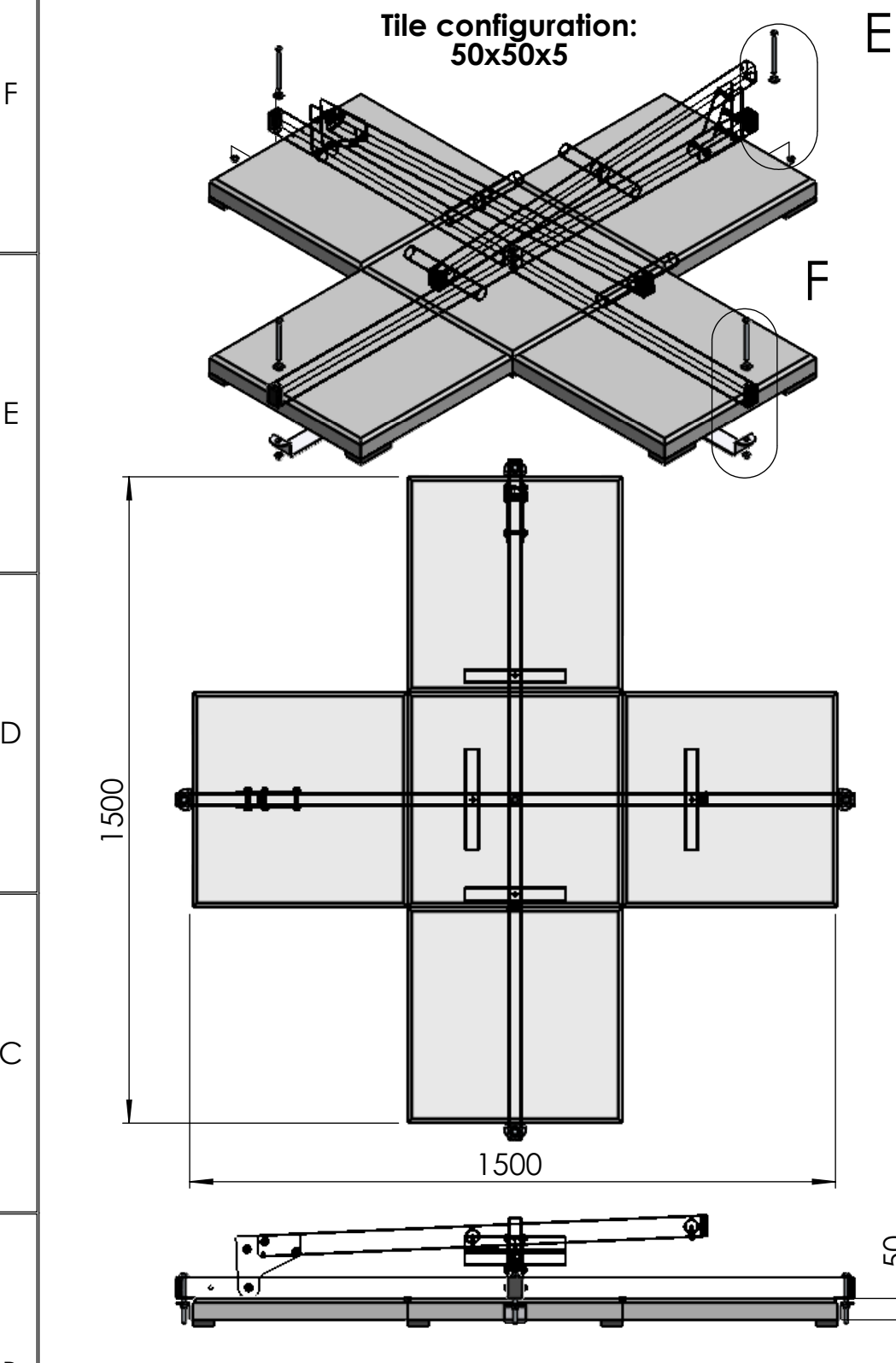


Declaration of Performance (tipping on/off roof & sliding)
The DOP calculation demonstrates that the stanchion provides safe resistance against tipping on the roof and off the roof, with a maximum allowable on-roof load of $q_{onroof_safe} = X \text{ N/m}^2$, an off-roof load of $q_{offroof_safe} = Y \text{ N/m}^2$, and a maximum sliding resistance of $q_{sliding_safe} = Z \text{ N/m}^2$ for the selected configuration. Minor variations occur between the 90°, 70° and 0° stanchion orientations; however, the lowest (most limiting) performance values have been used to ensure a robust safety margin. Loads specified are desing values of the loads. A safety factor $\gamma_M = 1,5$ is included in absence of national regulations.

Declaration of Performance (local load)
The DOP local load assessment confirms that the stanchion applies the following loads onto the roof: applied point load of A kN, an average distributed load of B kN/m and a surface pressure of C N/cm². Differences between the 90°, 70° and 0° stanchion positions are negligible, and the lowest (most limiting) performance value has been selected to guarantee a robust safety margin. Loads specified are characteristic loads. $\gamma_M = 1,3$ applies in absence of national regulations.

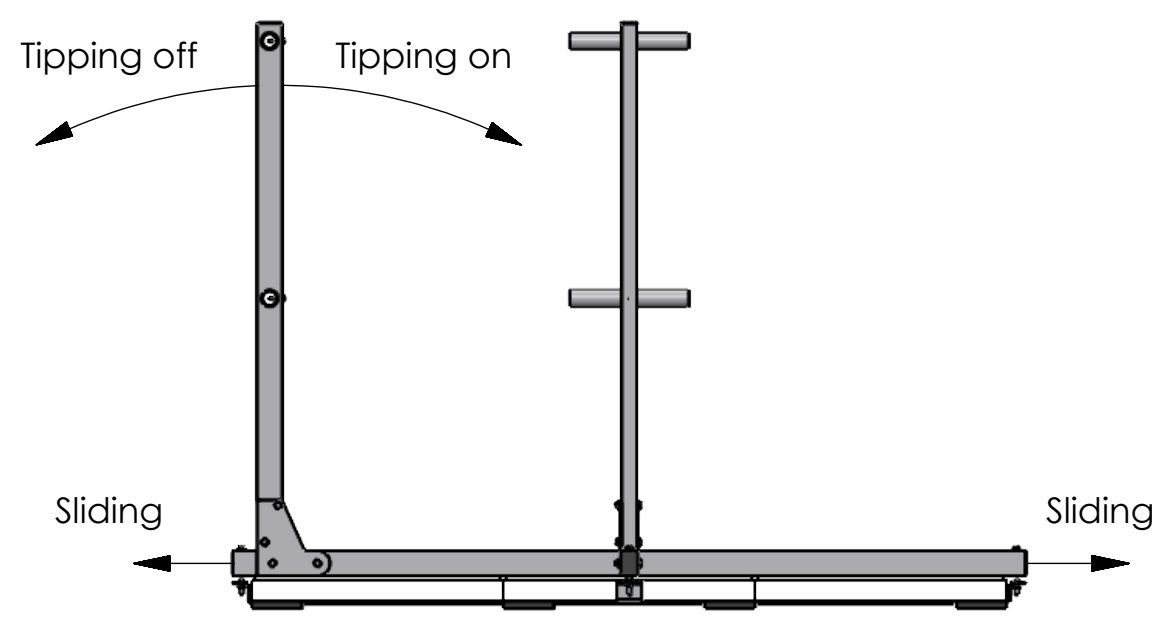
ITEM	PART NUMBER	DESCRIPTION	MATERIAL	QTY.
1	DIN 933.M8x110	Hexagon bolt M8x110	Stainless Steel, 304	4
2	D228.WASH.M8.30.1.5	Large washer 3xD M8	Stainless steel, 304	5
3	DIN 6923.M8	Flanged Hex Nut M8	Stainless Steel, 304	12
4	D228.BMC.30.30.08	30x30x8	C30/37 Concrete, 2300 kg/m ³	9

PROTECTOR GUARDRAIL Designed to protect, built to last			Date	Name	Amount	1	
		Drawn	28-4-2026	O.Toor	Mass [g]	156899.66	
		Checked	28-4-2026	B.Cool	General tolerance	DIN ISO 2768-c	
		Configuration name: Cross Fold			Shape / Pos. tol.	NEN ISO 1101	
					Roughness	NEN ISO 1302	
Scale: 1:15	Projection	Description: PG-1500X-1500		Drawing number: 25.218-004-900_05		Rev: 0	Format: A3
Units: mm						Sheet 3 of 5	



Declaration of Performance - on/off - sliding					
Stanchion type	Counterweight system	Stanchion distance	Max q_onroof_safe (N/m2)	Max q_offroof_safe (N/m2)	Max q_sliding_safe (N/m2)
1500X	50x50x5	3m	2292	2084	1990
1500X	50x50x5	4m	1833	1642	1598

Declaration of Performance - Applied local load					
Stanchion type	Counterweight system	Stanchion distance	Applied local load per stanchion (kN)	Applied average distributed load (kN/m)	Applied Pressure on surface (N/cm2)
1500X	50x50x5	3m	1,52	0,38	0,51
1500X	50x50x5	4m	1,53	0,38	0,51



Declaration of Performance (tipping on/off roof & sliding)

The DOP calculation demonstrates that the stanchion provides safe resistance against tipping on the roof and off the roof, with a maximum allowable on-roof load of $q_{onroof_safe} = X \text{ N/m}^2$, an off-roof load of $q_{offroof_safe} = Y \text{ N/m}^2$, and a maximum sliding resistance of $q_{sliding_safe} = Z \text{ N/m}^2$ for the selected configuration. Minor variations occur between the 90°, 70° and 0° stanchion orientations; however, the lowest (most limiting) performance values have been used to ensure a robust safety margin. Loads specified are desing values of the loads. A safety factor $\gamma M = 1,5$ is included in absence of national regulations.

Declaration of Performance (local load)

The DOP local load assessment confirms that the stanchion applies the following loads onto the roof: applied point load of A kN, an average distributed load of B kN/m and a surface pressure of C N/cm². Differences between the 90°, 70° and 0° stanchion positions are negligible, and the lowest (most limiting) performance value has been selected to guarantee a robust safety margin. Loads specified are characteristic loads. $\gamma M = 1,3$ applies in absence of national regulations.

ITEM	PART NUMBER	DESCRIPTION	MATERIAL	QTY.
1	DIN 933.M8x110	Hexagon bolt M8x110	Stainless Steel, 304	4
2	D228.WASH.M8.30.1.5	Large washer 3xD M8	Stainless Steel, 304	5
3	DIN 6923.M8	Flanged Hex Nut M8	Stainless Steel, 304	12
4	D228.BT.50.50.05	50x50x5	C30/37 Concrete, 2300 kg/m3	5

PROTECTOR
GUARDRAIL
Designed to protect, built to last

Scale: 1:15
Units: mm

Projection

Description:
PG-1500X-1500

Date
28-4-2026

Name
O.Toor

Amount
1

Mass [g]
156899.66

General tolerance
DIN ISO 2768-c

Shape / Pos. tol.
NEN ISO 1101

Roughness
NEN ISO 1302

Drawing number:
25.218-004-900_05

Rev: 0
Sheet 4 of 5

Format:
A3

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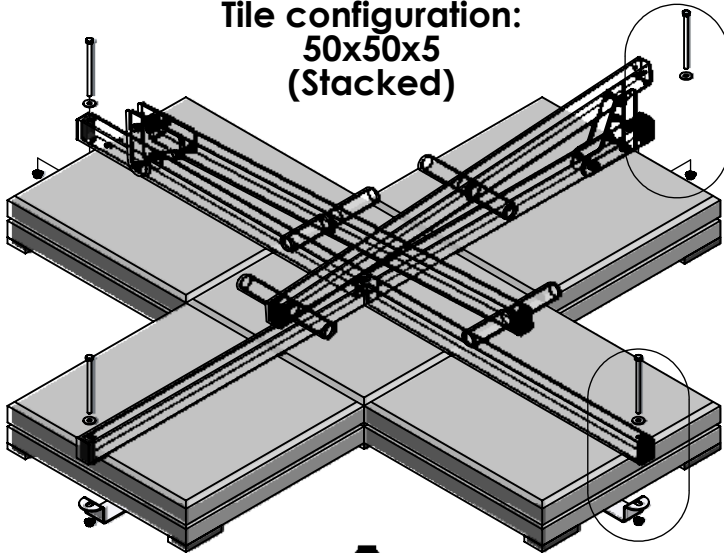
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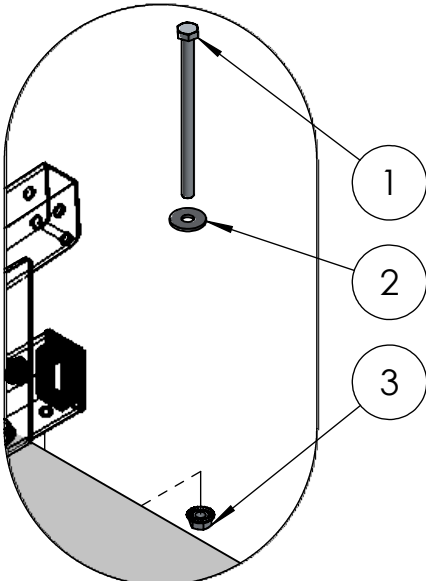
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Tile configuration:
50x50x5
(Stacked)

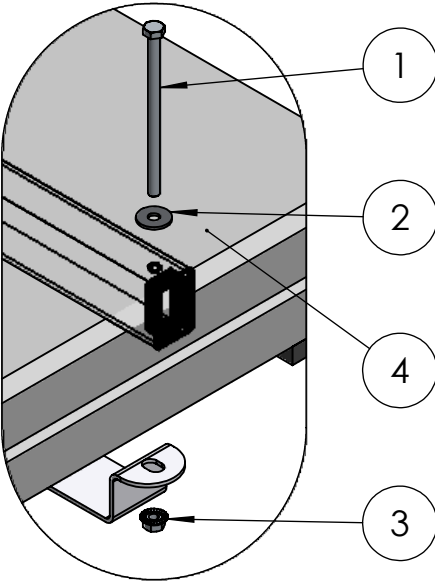


H

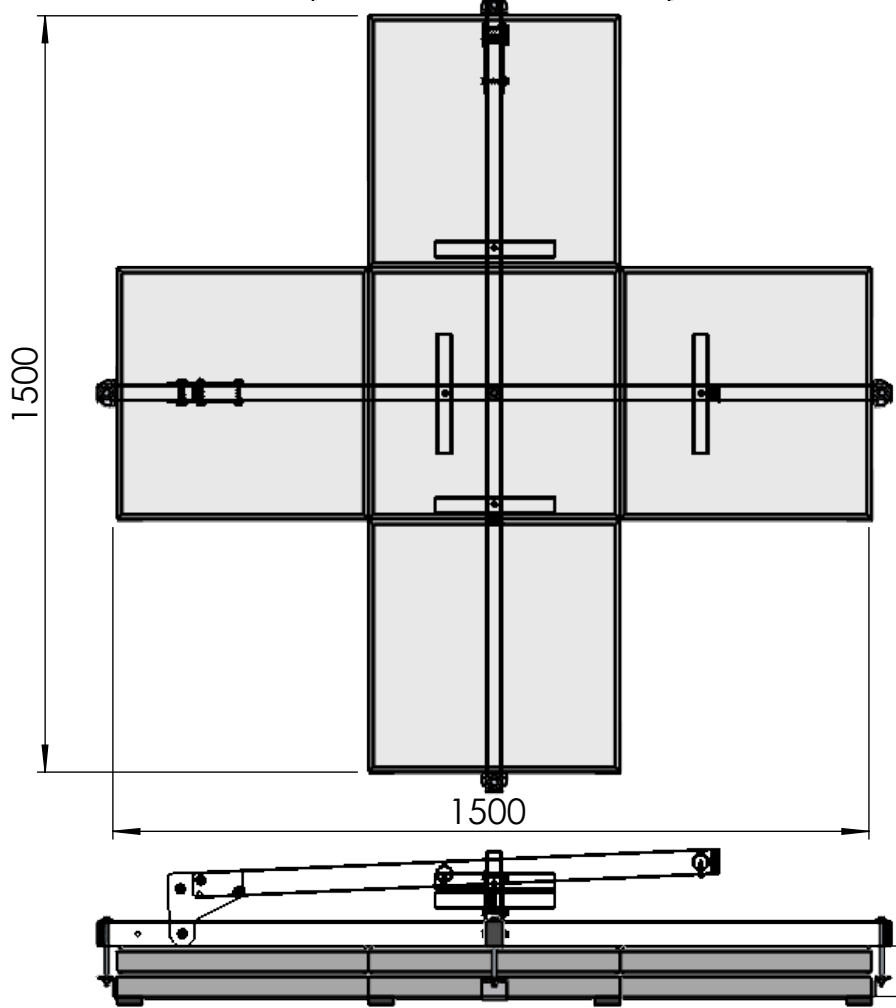
G



DETAIL G
SCALE 1 : 5



DETAIL H
SCALE 1 : 5



100

Declaration of Performance (tipping on/off roof & sliding)

The DOP calculation demonstrates that the stanchion provides safe resistance against tipping on the roof and off the roof, with a maximum allowable on-roof load of $q_{onroof_safe} = X \text{ N/m}^2$, an off-roof load of $q_{offroof_safe} = Y \text{ N/m}^2$, and a maximum sliding resistance of $q_{sliding_safe} = Z \text{ N/m}^2$ for the selected configuration. Minor variations occur between the 90°, 70° and 0° stanchion orientations; however, the lowest (most limiting) performance values have been used to ensure a robust safety margin. Loads specified are desing values of the loads. A safety factor $\gamma_M = 1,5$ is included in absence of national regulations.

Declaration of Performance (local load)

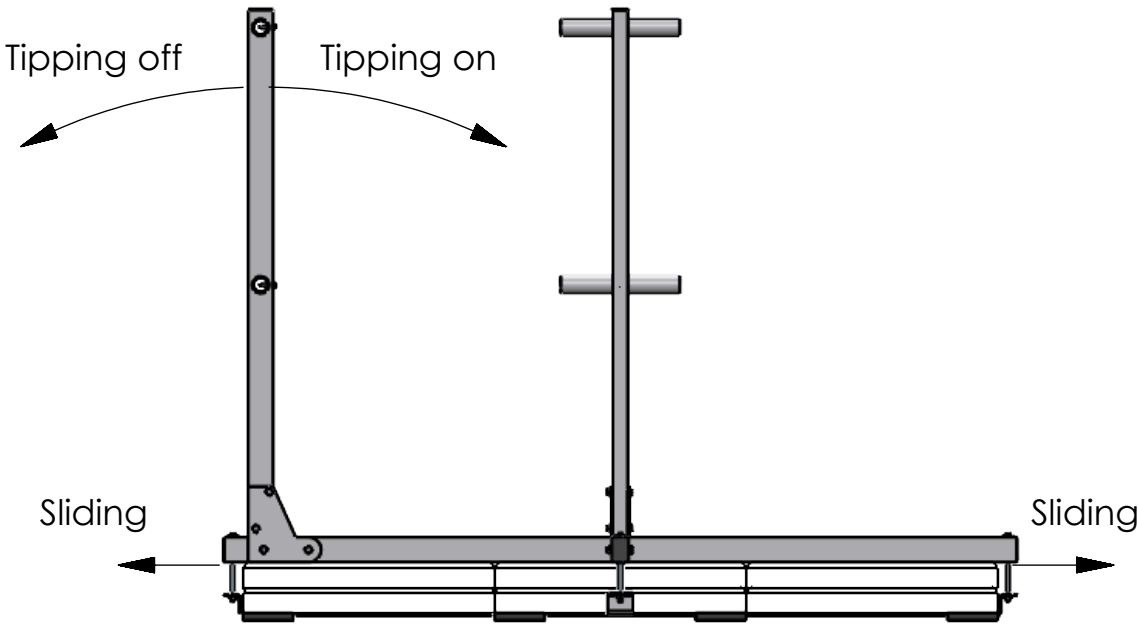
The DOP local load assessment confirms that the stanchion applies the following loads onto the roof: applied point load of A kN, an average distributed load of B kN/m and a surface pressure of C N/cm². Differences between the 90°, 70° and 0° stanchion positions are negligible, and the lowest (most limiting) performance value has been selected to guarantee a robust safety margin. Loads specified are characteristic loads. $\gamma_M = 1,3$ applies in absence of national regulations.

Declaration of Performance - on/off - sliding

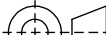
Stanchion type	Counterweight system	Stanchion distance	Max q_{onroof_safe} (N/m ²)	Max $q_{offroof_safe}$ (N/m ²)	Max $q_{sliding_safe}$ (N/m ²)
1500X	50x50x5 (stacked)	3m	4276	4069	3796
1500X	50x50x5 (stacked)	4m	3395	3204	3035

Declaration of Performance - Applied local load

Stanchion type	Counterweight system	Stanchion distance	Applied local load per stanchion (kN)	Applied average distributed load (kN/m)	Applied Pressure on surface (N/cm ²)
1500X	50x50x5 (stacked)	3m	2,89	0,72	0,96
1500X	50x50x5 (stacked)	4m	2,91	0,73	0,97



ITEM	PART NUMBER	DESCRIPTION	MATERIAL	QTY.
1	DIN 933.M8x110	Hexagon bolt M8x130	Stainless steel, 304	4
2	D228.WASH.M8.30.1.5	Large washer 3xD M8	Stainless steel, 304	5
3	DIN 6923.M8	Flanged Hex Nut M8	Stainless Steel, 304	12
4	D228.BT.50.50.05	50x50x5	C30/37 Concrete, 2300 kg/m3	10

PROTECTOR GUARDRAIL Designed to protect, built to last			Date	Name	Amount	1	
		Drawn	28-4-2026	O.Toor	Mass [g]	156899.66	
		Checked	28-4-2026	B.Cool	General tolerance	DIN ISO 2768-c	
		Configuration name: Cross Fold			Shape / Pos. tol.	NEN ISO 1101	
					Roughness	NEN ISO 1302	
Scale: 1:15	Projection	Description: PG-1500X-1500		Drawing number: 25.218-004-900_05		Rev: 0	Format: A3
Units: mm						Sheet 5 of 5	