TECHNICAL
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CONNECT 5°

ART. 23005.CF/CR/CRT

The perfect balance between strength and lightness: the Connect system links modules and ballasts into a single reticular structure, reducing roof loads and transportation costs, while ensuring perfectly balanced weight distribution.

Tilt angle	5°
Module positioning	Horizontal - Short side
Compatible accessories	Sheathing (KGN23115), Universal clamps (K23900/U.50, K23920/U.50), PowerClamp (K23900/PWC.50, 23920/PWC), Junction plate (K23804), U-Block (23015.CRP), No-Flex (K23712)

BALLAST ART. 23005.CF

Ballast weight	20 kg	**Pallet dimensions**	900x740x656h mm
Quantity per pallet	32 pieces	**Pallet weight**	654 kg

BALLAST ART. 23005.CR

Ballast weight	16 kg	**Pallet dimensions**	1210x690x428h mm
Quantity per pallet	26 pieces	**Pallet weight**	431 kg

BALLAST ART. 23005.CRT

Ballast weight	35 kg	**Pallet dimensions**	1150x890x493h mm
Quantity per pallet	16 pieces	**Pallet weight**	576 kg

BALLAST 23005.CF DIMENSIONS

120
90
365

SB 5ºCF
220
365
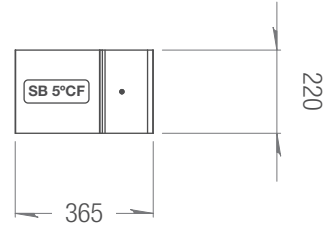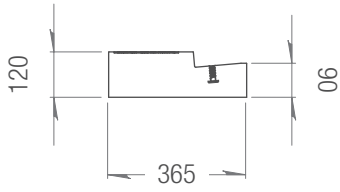
BALLAST 23005.CR DIMENSIONS

170
90
685

SB 5ºCR
90
685
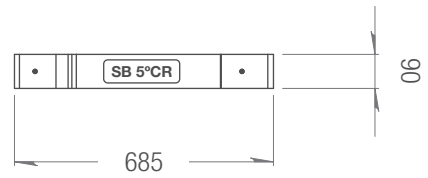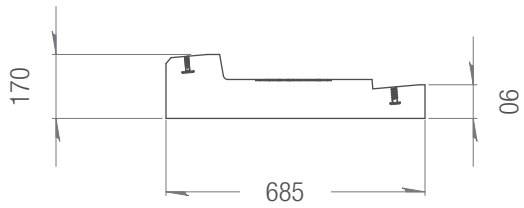
BALLAST 23005.CRT DIMENSIONS
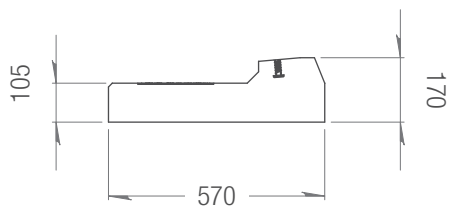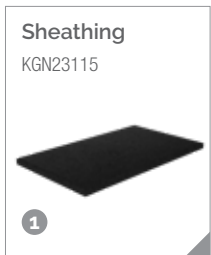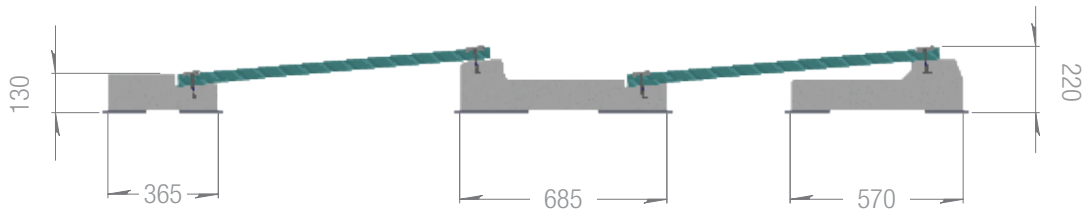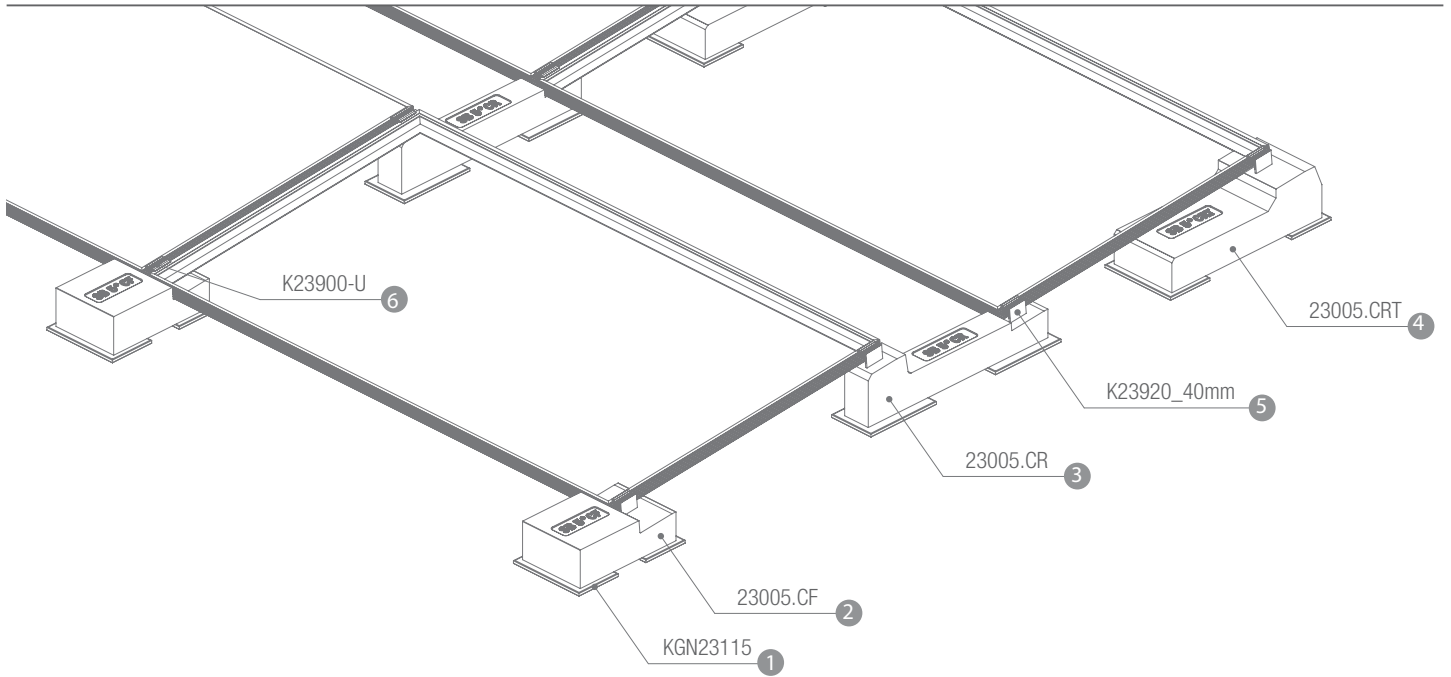
105
170
570

SB 5ºCRT
220
570

HORIZONTAL MODULE INSTALLATION - Short Side

K23900-U ⑥

23005.CRT ④

K23920_40mm ⑤

23005.CR ③

23005.CF ②

KGN23115 ①

130   220

365   685   570

Sheathing KGN23115 ①	Ballast 23005.CF ②	Ballast 23005.CR ③	Ballast 23005.CRT ④	Terminal Clamp K23920/U.50 ⑤	Central Clamp K23900/U.50 ⑥

INFO

The distance between the rows is indicative and not binding; it may vary depending on the project.

The measurements are based on the use of a panel with dimensions of 1722mm x 1134mm x 35mm. They vary depending on the size of the panel used.

Follow Sun Ballast®'s assembly instructions.

The dimensions shown in the figure are all expressed in millimeters.

SAIL CONNECT 5°

ART. 23005.CF/CRC/CRR/CRTT

The Sail Shaped Connect system by Sun Ballast is designed for the horizontal mounting of two consecutive rows of photovoltaic panels, connected through the typical reticular structure of the Connect system. It allows for optimised space on the roof by eliminating the gap between rows. The system also ensures high wind resistance, reduced roof loads, and maximum versatility in the presence of roof obstacles.

Tilt angle	5°
Module positioning	Horizontal – Short Side
Compatible accessories	Sheathing (KGN23115), Universal clamps (K23900/U.50, K23920/U.50), PowerClamp (K23900/PWC.50, 23920/PWC), Junction plate (K23804), U-Block (23015.CRP - 23030.CRP), No-Flex (K23712)

BALLAST ART. 23005.CF

Ballast weight	20 kg	Pallet dimensions	900x740x656h mm
Quantity per pallet	32 pieces	Pallet weight	654 kg

BALLAST ART. 23005.CRC

Ballast weight	20 kg	Pallet dimensions	1010x670x492h mm
Quantity per pallet	24 pieces	Pallet weight	493 kg

BALLAST ART. 23005.CRR

Ballast weight	28 kg	Pallet dimensions	930x910x540h mm
Quantity per pallet	18 pieces	Pallet weight	517 kg

BALLAST ART. 23005.CRTT

Ballast weight	33 kg	Pallet dimensions	1220x710x537h mm
Quantity per pallet	16 pieces	Pallet weight	543 kg

BALLAST 23005.CF DIMENSIONS

120   90   365

SB 5°CF   220   365

BALLAST 23005.CRC DIMENSIONS

157   176   250

SB 5°CRC   220   250

BALLAST 23005.CRR DIMENSIONS

255   90   900

SB 5°CRR   100   900
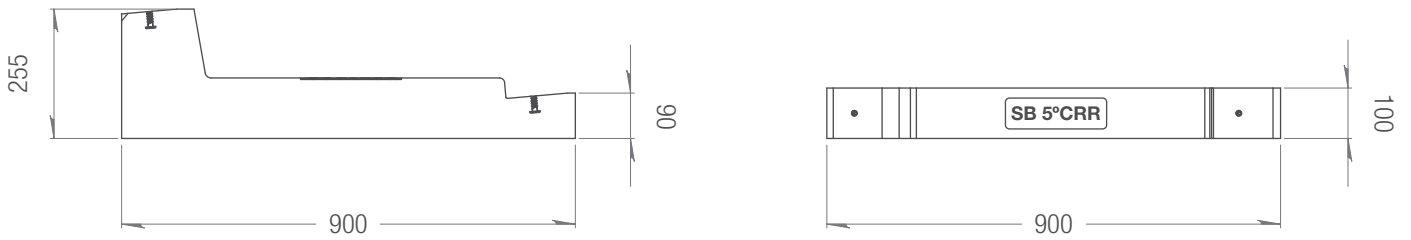
BALLAST 23005.CRTT DIMENSIONS
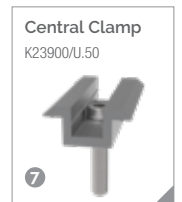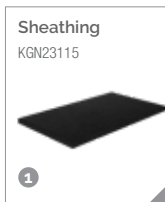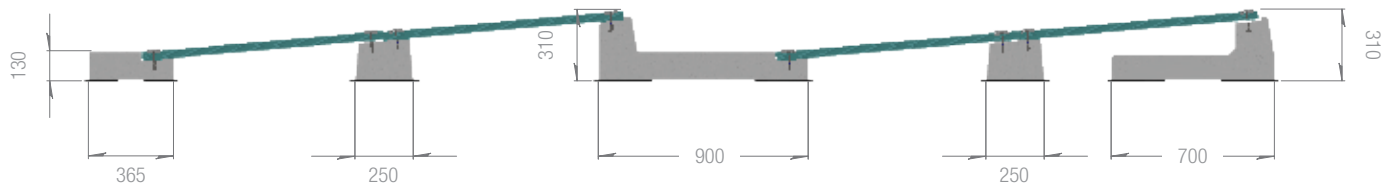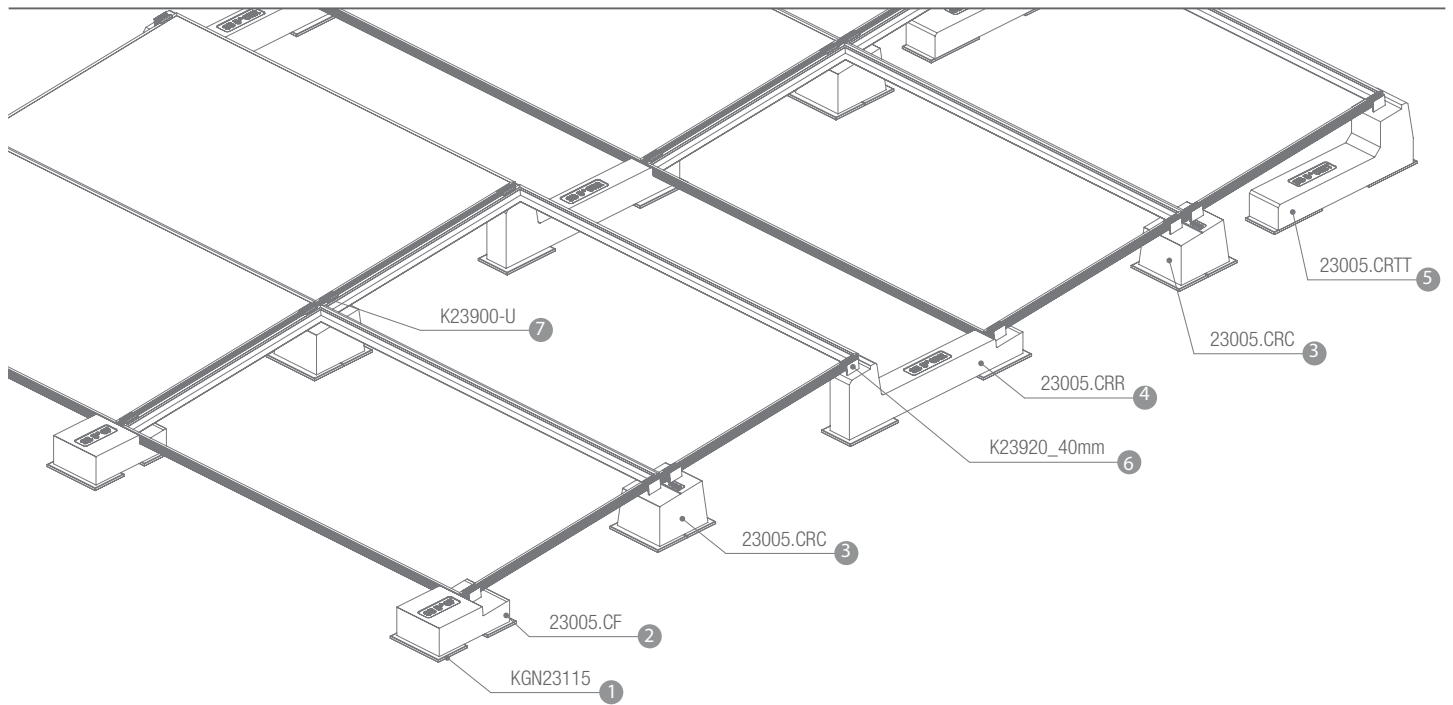
105   270   700

SB 5° CRTT   150   700

HORIZONTAL MODULE INSTALLATION - Short Side

K23900-U ⑦

23005.CRTT ⑤

23005.CRC ③

23005.CRR ④

K23920_40mm ⑥

23005.CRC ③

23005.CF ②

KGN23115 ①

130 · 365 · 250 · 310 · 900 · 250 · 700 · 310

Sheathing KGN23115 ①	Ballast 23005.CF ②	Ballast 23005.CRC ③	Ballast 23005.CRR ④	Ballast 23005.CRTT ⑤	Terminal Clamp K23920/U.50 ⑥	Central Clamp K23900/U.50 ⑦

INFO

The distance between the rows is indicative and not binding; it may vary depending on the project.

The measurements are based on the use of a panel with dimensions of 1722mm x 1134mm x 35mm. They vary depending on the size of the panel used.

Follow Sun Ballast®'s assembly instructions.

The dimensions shown in the figure are all expressed in millimeters.

CONNECT 10°

ART. 23010.CF/CR/CRT

The perfect balance between strength and lightness: the Connect system links modules and ballasts into a single reticular structure, reducing roof loads and transportation costs, while ensuring perfectly balanced weight distribution.

Tilt angle	10°
Module positioning	Horizontal - Short side
Compatible accessories	Sheathing (KGN23115), Universal clamps (K23900/U.50, K23920/U.50), PowerClamp (K23900/PWC.50, 23920/PWC), Junction plate (K23804), U-Block (23015.CRP - 23030.CRP), No-Flex (K23712)

BALLAST ART. 23010.CF

Ballast weight	20 kg	**Pallet dimensions**	1150x1020x392h mm
Quantity per pallet	28 pieces	**Pallet weight**	576 kg

BALLAST ART. 23010.CR

Ballast weight	22 kg	**Pallet dimensions**	1190x840x530h mm
Quantity per pallet	24 pieces	**Pallet weight**	543 kg

BALLAST ART. 23010.CRT

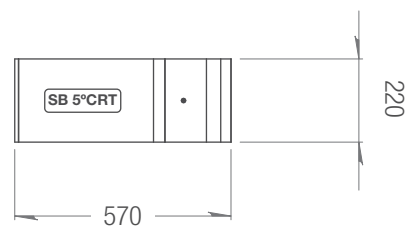| **Ballast weight**	33 kg	**Pallet dimensions**	1120x710x533h mm
Quantity per pallet	14 pieces	**Pallet weight**	476 kg

BALLAST 23010.CF DIMENSIONS

105 · 120 · 505 · 160 · 505

SB 10ºCF
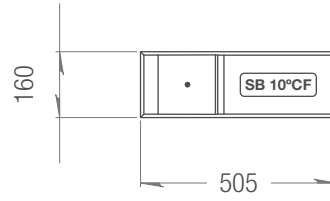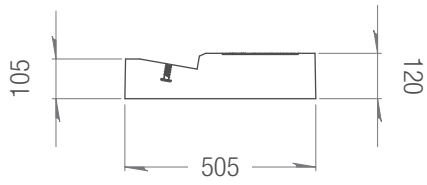
BALLAST 23010.CR DIMENSIONS

260 · 95 · 830 · 95 · 830

SB 10ºCR
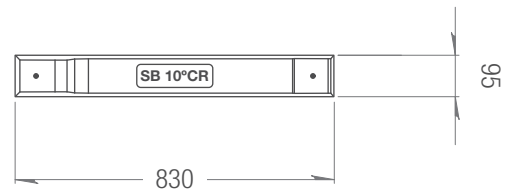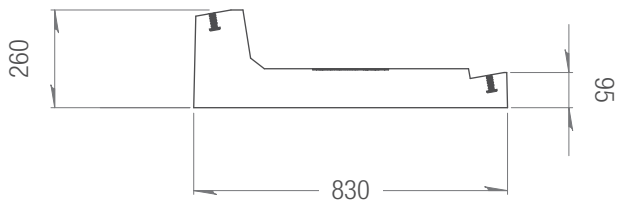
BALLAST 23010.CRT DIMENSIONS
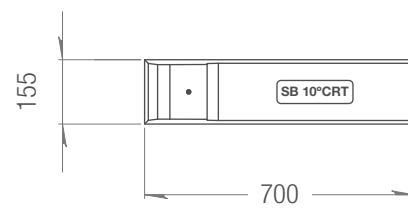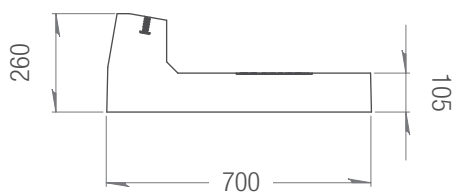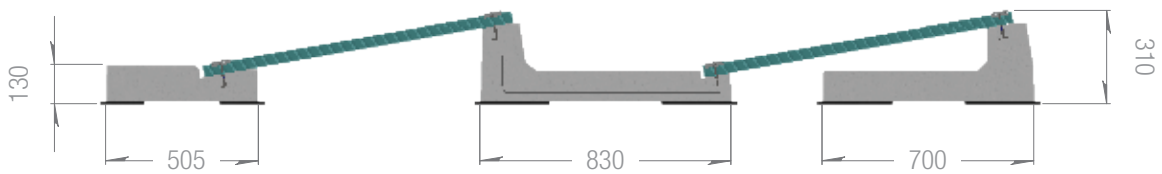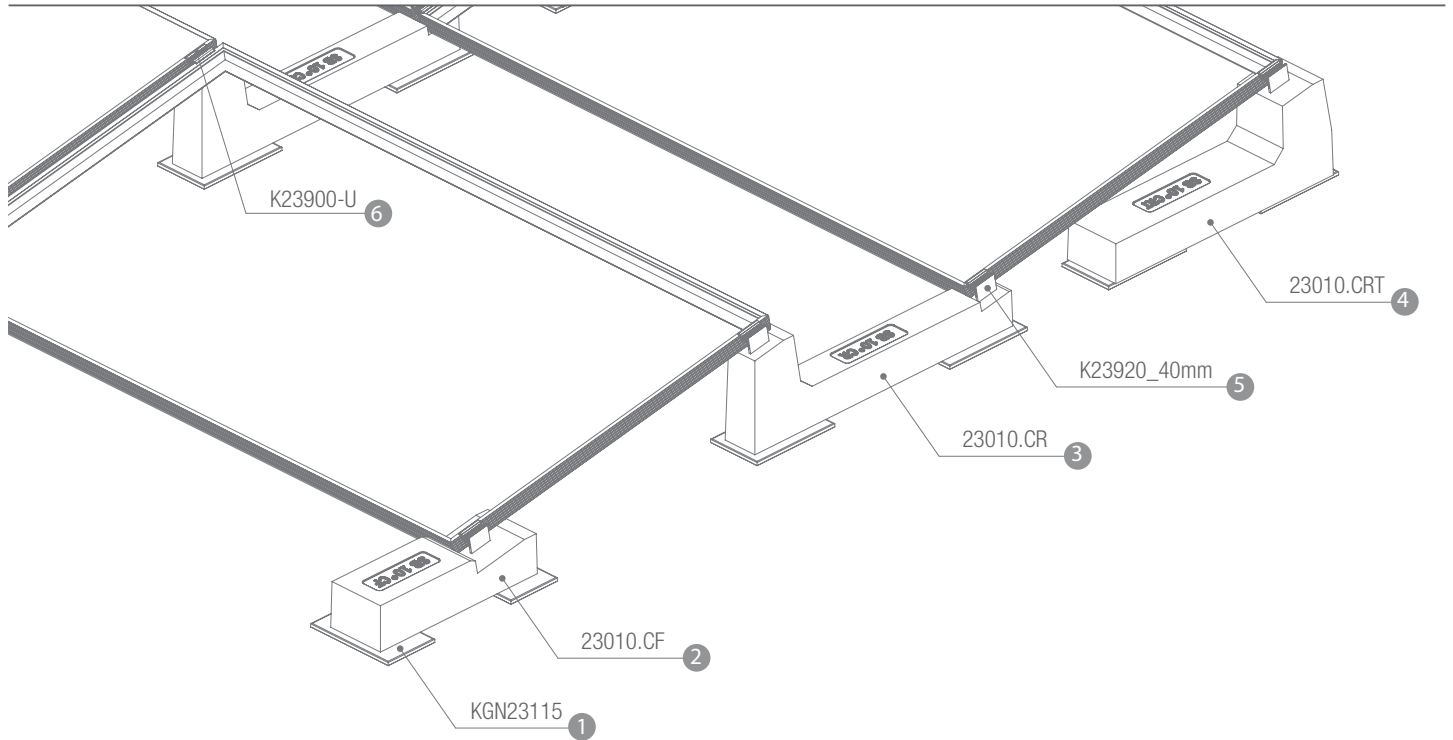
260 · 105 · 700 · 155 · 700

SB 10ºCRT

HORIZONTAL MODULE INSTALLATION - Short Side

K23900-U ⑥

23010.CRT ④

K23920_40mm ⑤

23010.CR ③

23010.CF ②

KGN23115 ①

130   505   830   700   310

① Sheathing KGN23115	② Ballast 23010.CF	③ Ballast 23010.CR	④ Ballast 23010.CRT	⑤ Terminal Clamp K23920/U.50	⑥ Central Clamp K23900/U.50

INFO

The distance between the rows is indicative and not binding; it may vary depending on the project.

The measurements are based on the use of a panel with dimensions of 1722mm x 1134mm x 35mm. They vary depending on the size of the panel used.

Follow Sun Ballast®'s assembly instructions.

The dimensions shown in the figure are all expressed in millimeters.

CONNECT 10°.V

ART. 23010.CF/CRV/CRTV

The perfect balance between strength and lightness: the Connect system integrates modules and ballasts into a single reticular structure, reducing roof loads and transport costs, while ensuring perfectly balanced weight distribution. The system is available with a 10° tilt angle, allows for vertical panel mounting, and enables easy and fast installation on any type of flat roof.

Tilt angle	10°
Module positioning	Vertical - Long side
Compatible accessories	Sheathing (KGN23115), Universal clamps (K23900/U.50, K23920/U.50), PowerClamp (K23900/PWC.50, 23920/PWC), Junction plate (K23804), U-Block (23015.CRP - 23030.CRP)

BALLAST ART. 23010.CF			
Ballast weight	20 kg	**Pallet dimensions**	1150x1020x392h mm
Quantity per pallet	28 pieces	**Pallet weight**	576 kg

BALLAST ART. 23010.CRV			
Ballast weight	38 kg	**Pallet dimensions**	860x1130x613h mm
Quantity per pallet	16 pieces	**Pallet weight**	621 kg

BALLAST ART. 23010.CRTV			
Ballast weight	33 kg	**Pallet dimensions**	1110x710x626h mm
Quantity per pallet	18 pieces	**Pallet weight**	608 kg

BALLAST 23010.CF DIMENSIONS

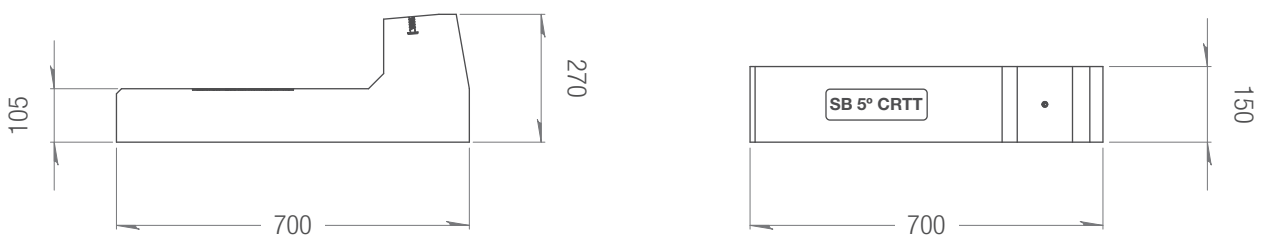120 | 105
505

SB 10ºCF | 160
505
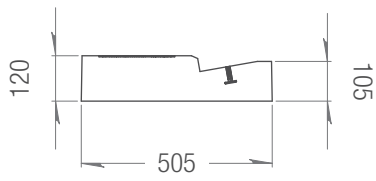
BALLAST 23010.CRV DIMENSIONS

340 | 100
1120

SB 10º CRV | 105
1120
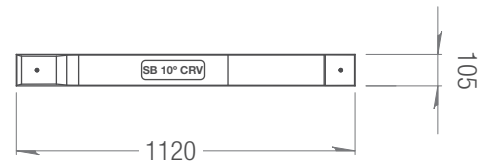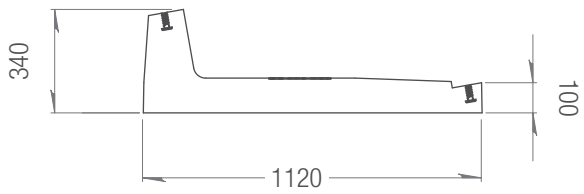
BALLAST 23010.CRTV DIMENSIONS
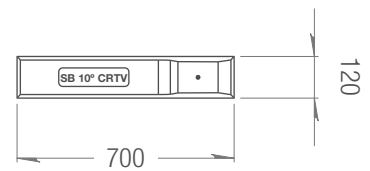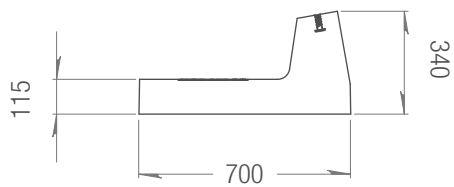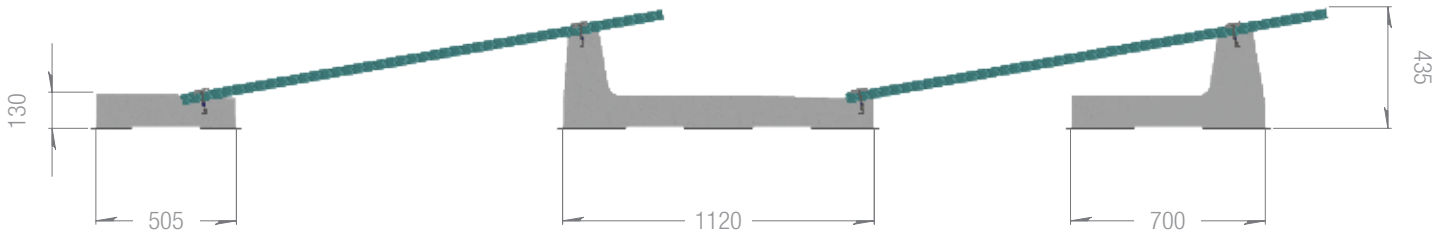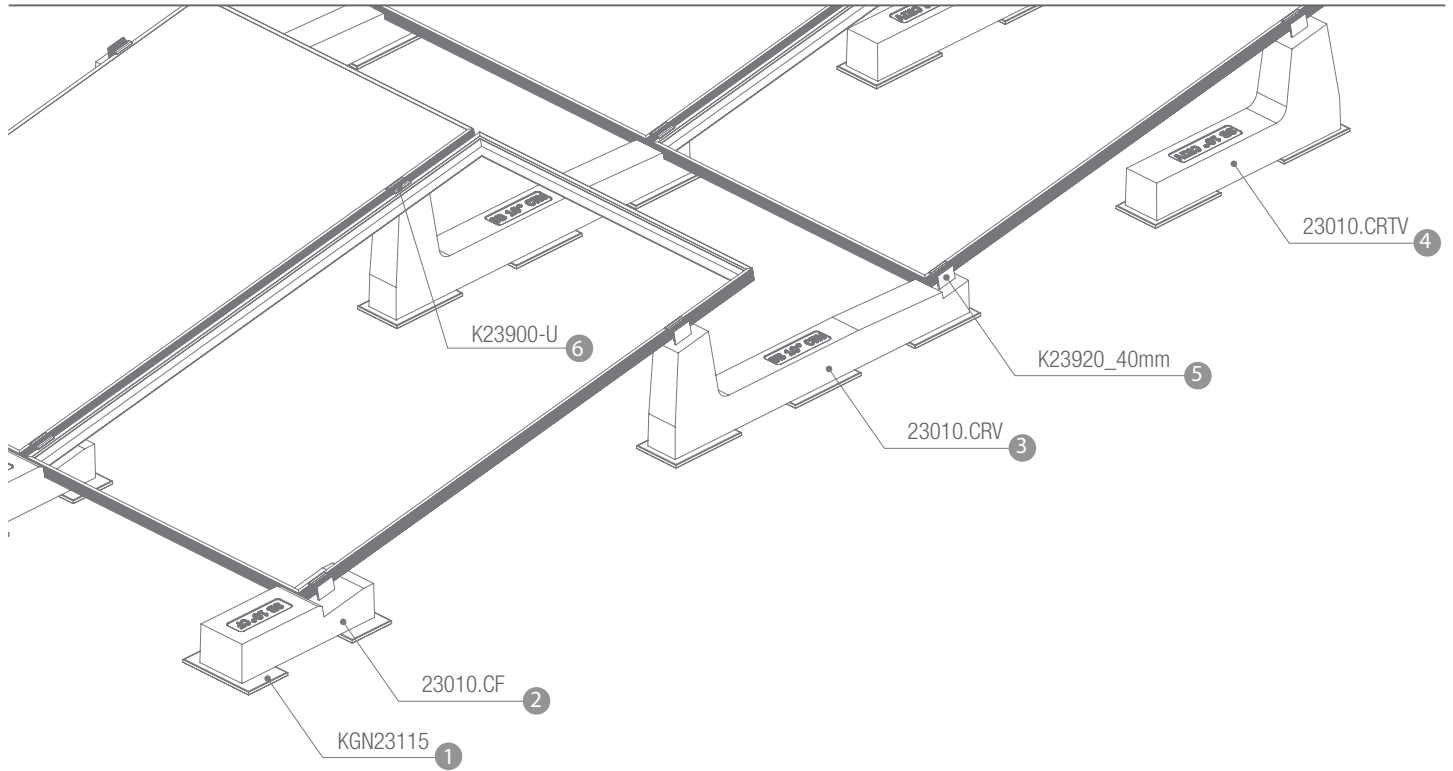
115 | 340
700

SB 10º CRTV | 120
700

VERTICAL MODULE INSTALLATION - Long Side

23010.CRTV ④

K23900-U ⑥

K23920_40mm ⑤

23010.CRV ③

23010.CF ②

KGN23115 ①

435

130

505

1120

700

Sheathing	Ballast	Ballast	Ballast	Terminal Clamp	Central Clamp
KGN23115	23010.CF	23010.CRV	23010.CRTV	K23920/U.50	K23900/U.50
①	②	③	④	⑤	⑥

INFO

The distance between the rows is indicative and not binding; it may vary depending on the project.

The measurements are based on the use of a panel with dimensions of 1722mm x 1134mm x 35mm. They vary depending on the size of the panel used.

Follow Sun Ballast®'s assembly instructions.

The dimensions shown in the figure are all expressed in millimeters.

CONNECT 15°

ART. 23015.CF/CR/CRT
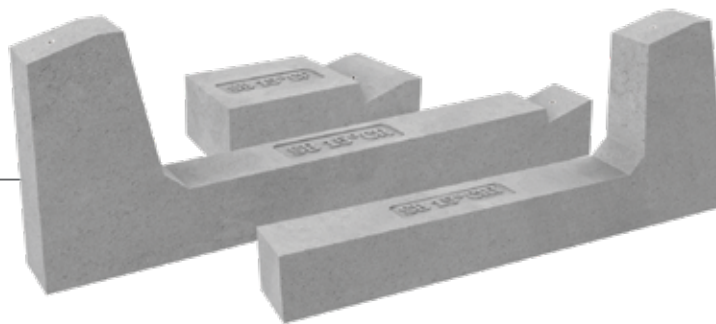
The perfect balance between strength and lightness: the Connect system links modules and ballasts into a single reticular structure, reducing roof loads and transportation costs, while ensuring perfectly balanced weight distribution.

Tilt angle	15°
Module positioning	Horizontal - Short side
Compatible accessories	Sheathing (KGN23115), Universal clamps (K23900/U.50, K23920/U.50), PowerClamp (K23900/PWC.50, 23920/PWC), Junction plate (K23804), U-Block (23015.CRP - 23030.CRP), No-Flex (K23712)

BALLAST ART. 23015.CF			
Ballast weight	21 kg	**Pallet dimensions**	1080x1070x412h mm
Quantity per pallet	28 pieces	**Pallet weight**	604 kg

BALLAST ART. 23015.CR			
Ballast weight	30 kg	**Pallet dimensions**	1020x940x614h mm
Quantity per pallet	20 pieces	**Pallet weight**	614 kg

BALLAST ART. 23015.CRT			
Ballast weight	30 kg	**Pallet dimensions**	830x810x616h mm
Quantity per pallet	14 pieces	**Pallet weight**	432 kg

SB-1125-1225

BALLAST 23015.CF DIMENSIONS

125

130

530

150

SB 15°CF

530
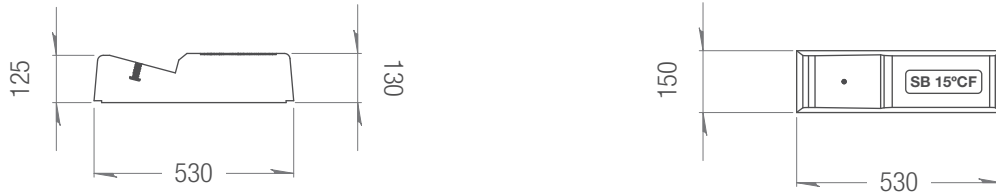
BALLAST 23015.CR DIMENSIONS

335

100

930

100

SB 15°CR

930
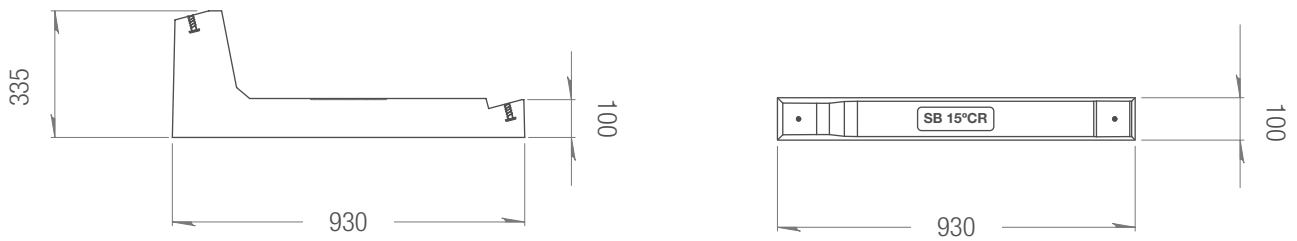
BALLAST 23015.CRT DIMENSIONS
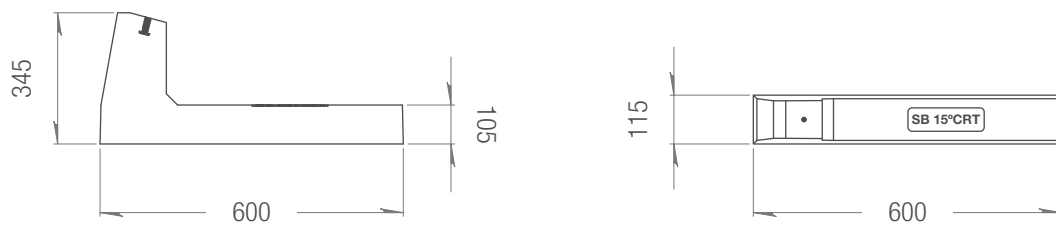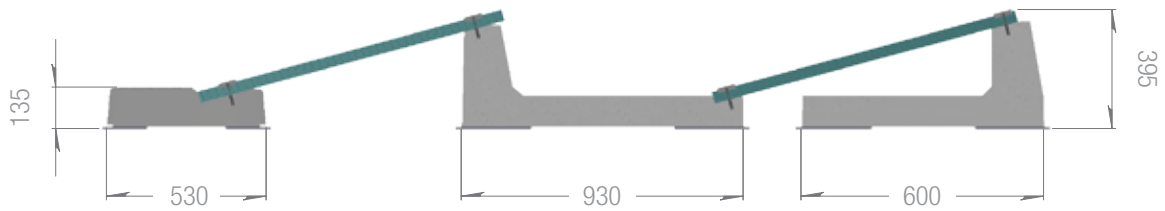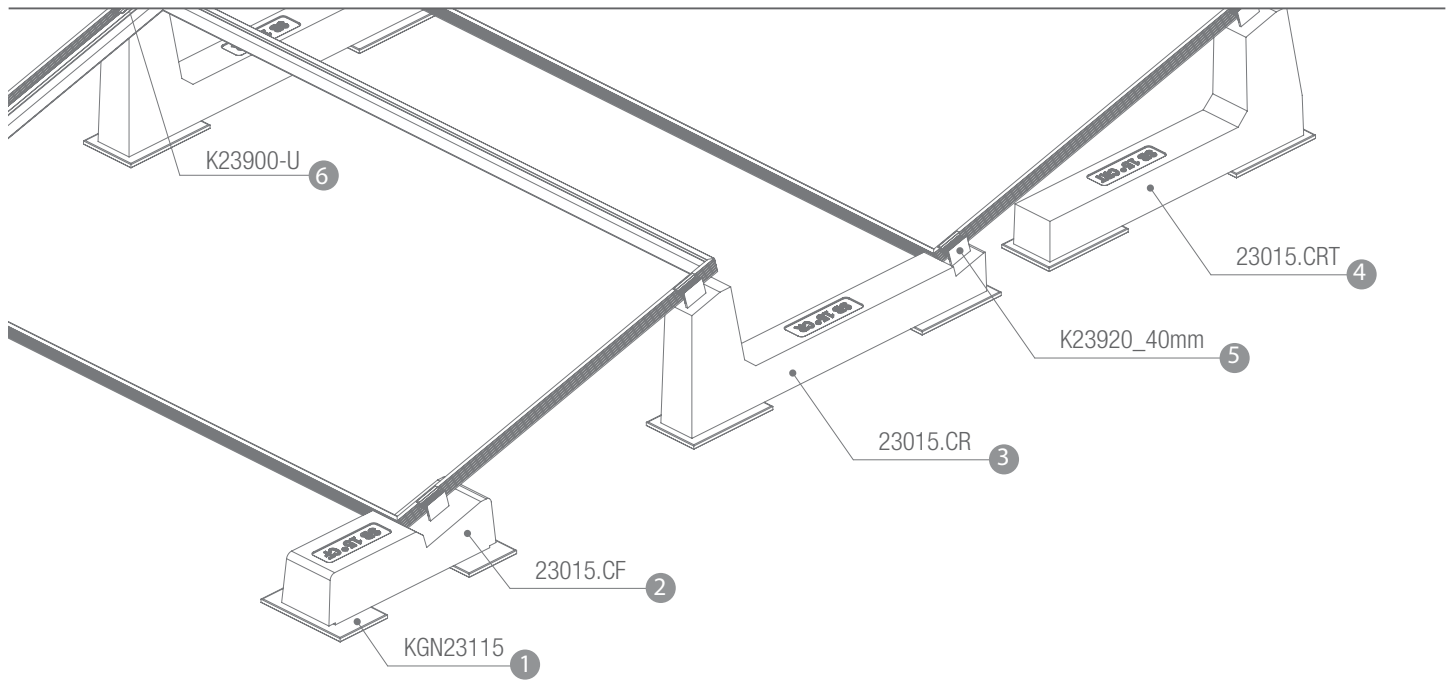
345

105

600

115

SB 15°CRT

600

INDEX

HORIZONTAL MODULE INSTALLATION - Short Side

K23900-U ⑥

23015.CRT ④

K23920_40mm ⑤

23015.CR ③

23015.CF ②

KGN23115 ①

135   530   930   600   395

Sheathing	Ballast	Ballast	Ballast	Terminal Clamp	Central Clamp
KGN23115	23015.CF	23015.CR	23015.CRT	K23920/U.50	K23900/U.50
①	②	③	④	⑤	⑥

INFO

The distance between the rows is indicative and not binding; it may vary depending on the project.

The measurements are based on the use of a panel with dimensions of 1722mm x 1134mm x 35mm. They vary depending on the size of the panel used.

Follow Sun Ballast®'s assembly instructions.

The dimensions shown in the figure are all expressed in millimeters.

CONNECT 20°

ART. 23020.CF/CR/CRT

The perfect balance between strength and lightness: the Connect system links modules and ballasts into a single reticular structure, reducing roof loads and transportation costs, while ensuring perfectly balanced weight distribution.

Tilt angle	20°
Module positioning	Horizontal - Short side
Compatible accessories	Sheathing (KGN23115), Universal clamps (K23900/U.50, K23920/U.50), PowerClamp (K23900/PWC.50, 23920/PWC), Junction plate (K23804), U-Block (23015.CRP - 23030.CRP), No-Flex (K23712)

BALLAST ART. 23020.CF

Ballast weight	22 kg	**Pallet dimensions**	1050x1010x412h mm
Quantity per pallet	28 pieces	**Pallet weight**	630 kg

BALLAST ART. 23020.CR

Ballast weight	33 kg	**Pallet dimensions**	880x1090x729h mm
Quantity per pallet	18 pieces	**Pallet weight**	607 kg

BALLAST ART. 23020.CRT

|			
Ballast weight	35 kg	**Pallet dimensions**	1080x610x736h mm
Quantity per pallet	16 pieces	**Pallet weight**	575 kg

BALLAST 23020.CF DIMENSIONS

130

520

SB 20ºCF

140

520
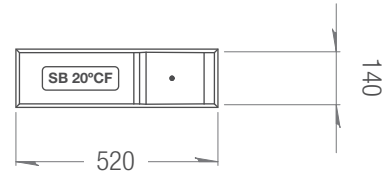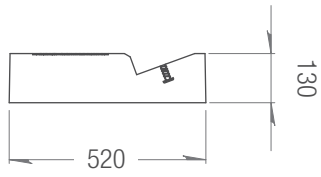
BALLAST 23020.CR DIMENSIONS

430

120

1075

SB 20ºCR

95

1075
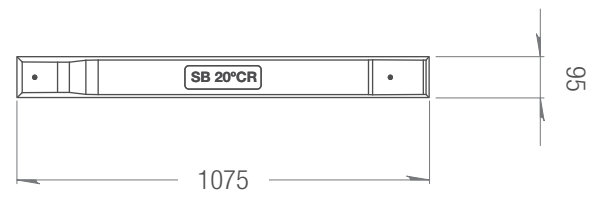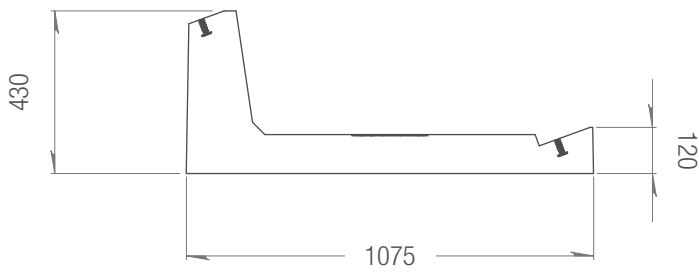
BALLAST 23020.CRT DIMENSIONS
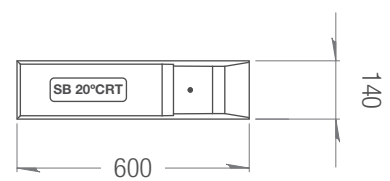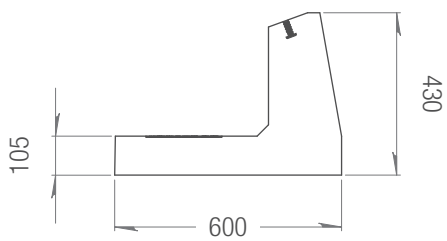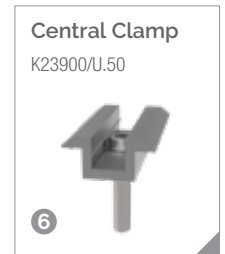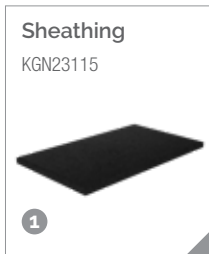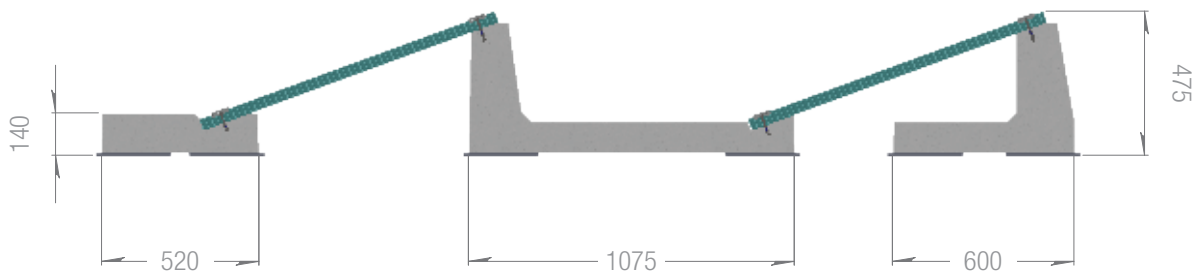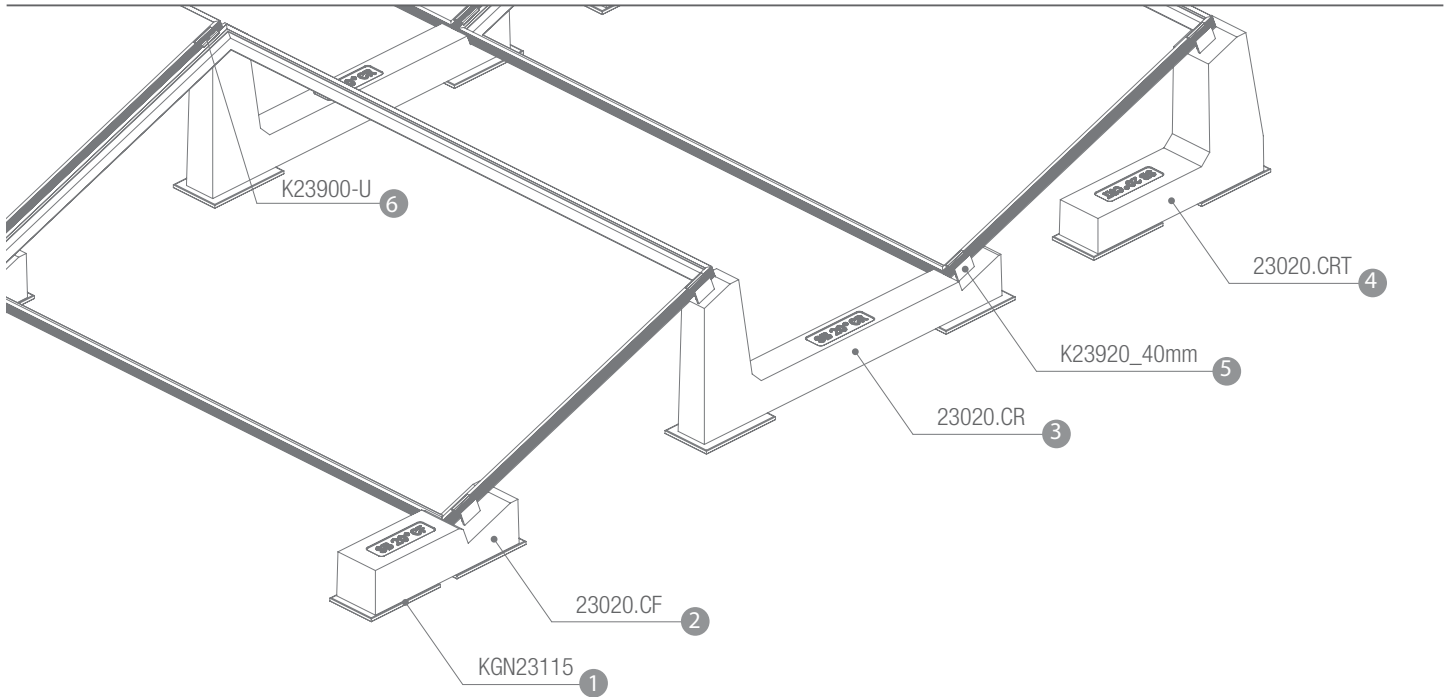
430

105

600

SB 20ºCRT

140

600

HORIZONTAL MODULE INSTALLATION - Short Side

K23900-U ⑥

23020.CRT ④

K23920_40mm ⑤

23020.CR ③

23020.CF ②

KGN23115 ①

140

520

1075

475

600

Sheathing KGN23115	**Ballast** 23020.CF	**Ballast** 23020.CR	**Ballast** 23020.CRT	**Terminal Clamp** K23920/U.50	**Central Clamp** K23900/U.50
①	②	③	④	⑤	⑥

INFO

The distance between the rows is indicative and not binding; it may vary depending on the project.

The measurements are based on the use of a panel with dimensions of 1722mm x 1134mm x 35mm. They vary depending on the size of the panel used.

Follow Sun Ballast®'s assembly instructions.

The dimensions shown in the figure are all expressed in millimeters.

CONNECT 30°

ART. 23030.CF/CR/CRT

The perfect balance between strength and lightness: the Connect system links modules and ballasts into a single reticular structure, reducing roof loads and transportation costs, while ensuring perfectly balanced weight distribution.

Tilt angle	30°
Module positioning	Horizontal - Short side
Compatible accessories	Sheathing (KGN23115), Universal clamps (K23900/U.50, K23920/U.50), PowerClamp (K23900/PWC.50, 23920/PWC), Junction plate (K23804), U-Block (23015.CRP - 23030.CRP), No-Flex (K23712)

BALLAST ART. 23030.CF

Ballast weight	21 kg	**Pallet dimensions**	1230x810x402h mm
Quantity per pallet	24 pieces	**Pallet weight**	520 kg

BALLAST ART. 23030.CR

Ballast weight	45 kg	**Pallet dimensions**	1280x730x740h mm
Quantity per pallet	12 pieces	**Pallet weight**	558 kg

BALLAST ART. 23030.CRT

Ballast weight	44 kg	**Pallet dimensions**	730x790x788h mm
Quantity per pallet	10 pieces	**Pallet weight**	452 kg

SB-1125-1225

BALLAST 23030.CF DIMENSIONS

125
400

SB 30ºCF
400
200

BALLAST 23030.CR DIMENSIONS

615
1270
135

SB 30ºCR
1270
90
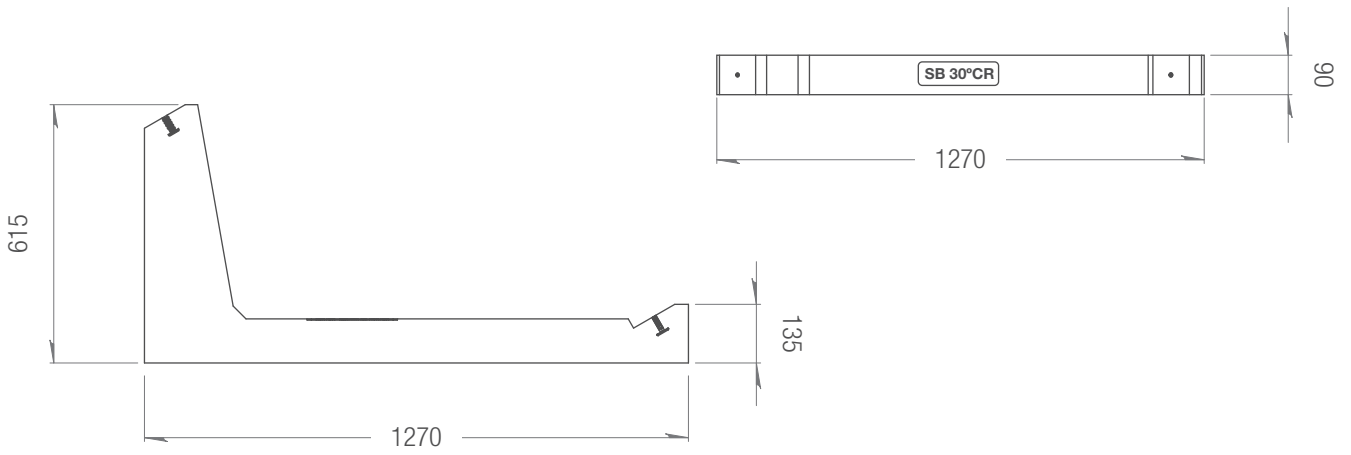
BALLAST 23030.CRT DIMENSIONS
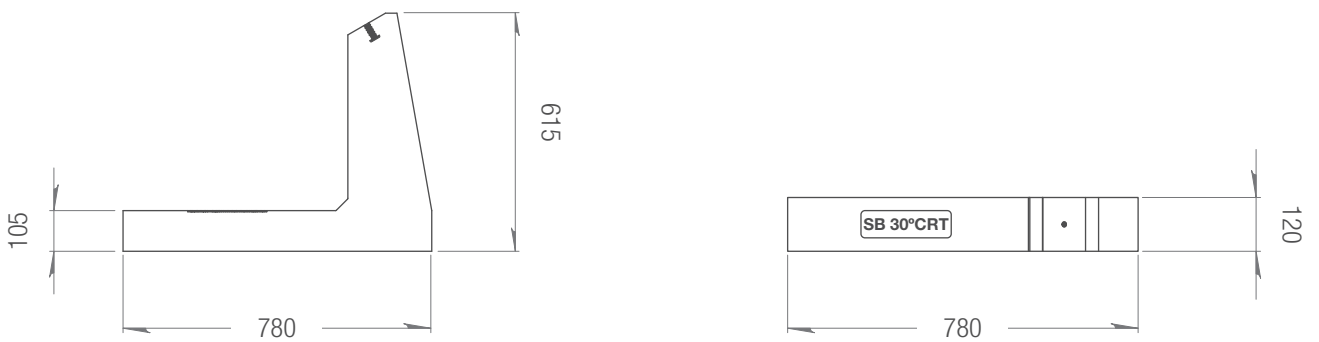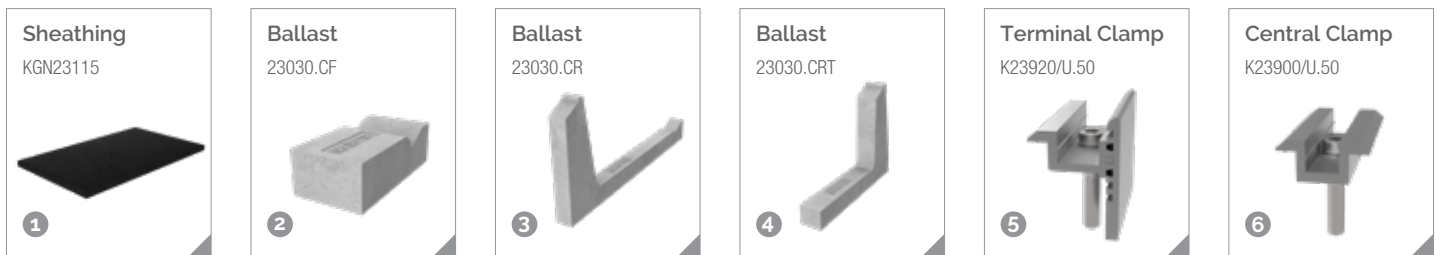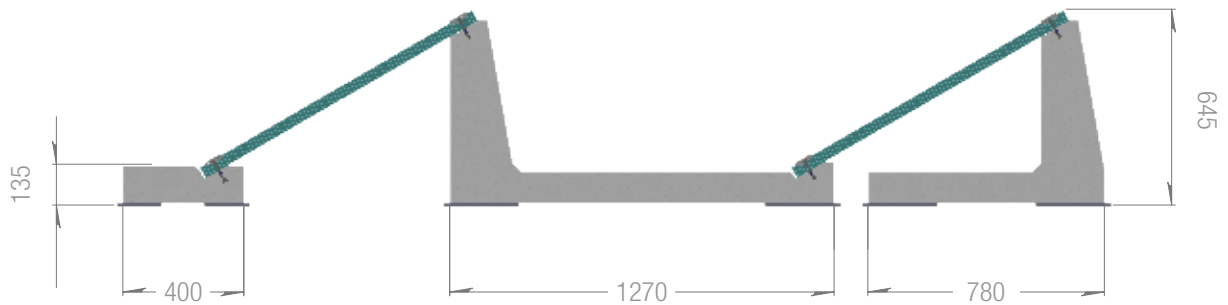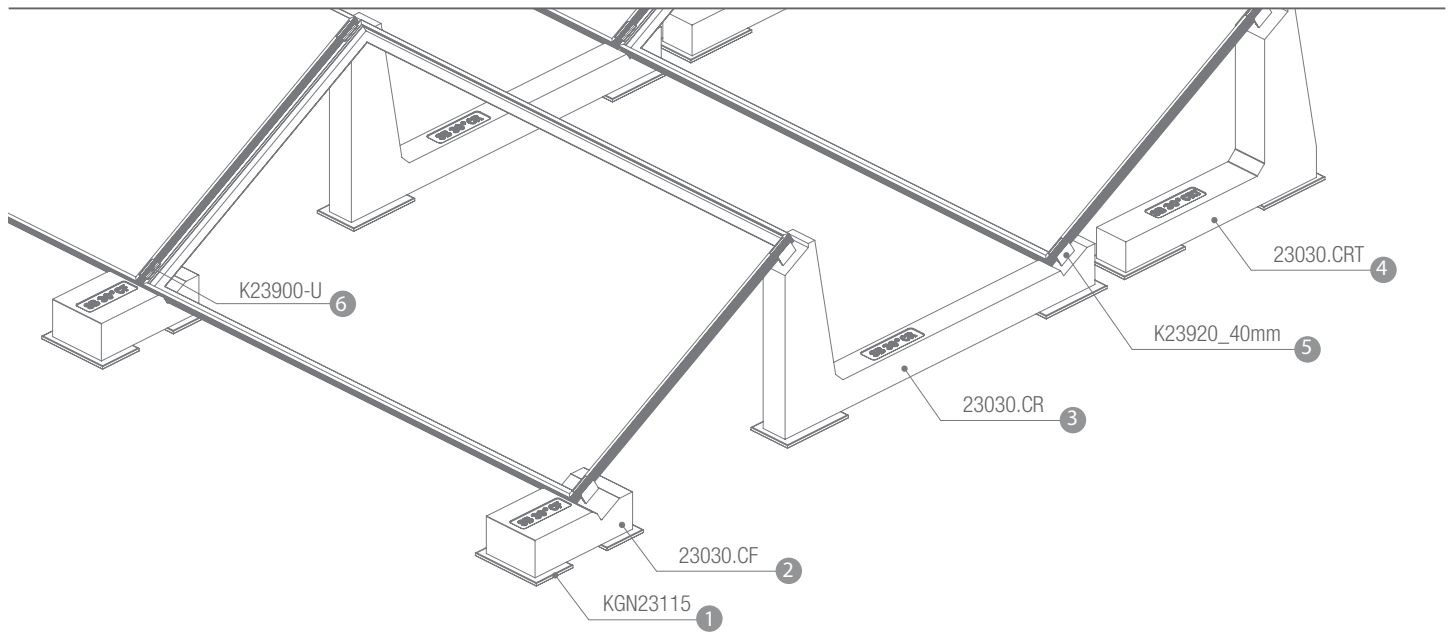
615
105
780

SB 30ºCRT
780
120

HORIZONTAL MODULE INSTALLATION - Short Side

K23900-U ⑥

23030.CRT ④

K23920_40mm ⑤

23030.CR ③

23030.CF ②

KGN23115 ①

135

645

400

1270

780

Sheathing	Ballast	Ballast	Ballast	Terminal Clamp	Central Clamp
KGN23115	23030.CF	23030.CR	23030.CRT	K23920/U.50	K23900/U.50
①	②	③	④	⑤	⑥

INFO

The distance between the rows is indicative and not binding; it may vary depending on the project.

The measurements are based on the use of a panel with dimensions of 1722mm x 1134mm x 35mm. They vary depending on the size of the panel used.

Follow Sun Ballast®'s assembly instructions.

The dimensions shown in the figure are all expressed in millimeters.

INDEX

BALLAST 0°

ART. 23000

The Single-Row system offers a simple and highly versatile solution: available in a wide range of tilt angles from 0° to 30°, the ballasts allow for mounting of the panels vertically, horizontally, or with an East-West orientation. The mounting system enables flexible modulation of the distance between rows, ensuring an easy and fast installation, even in the presence of roof obstacles.

Tilt angle	0°
Module positioning	Horizontal - Short side / Vertical - Long side
Ballast weight	30 kg
Quantity per pallet	18 pieces
Pallet dimensions	1015x870x434h mm
Pallet weight	552 kg
Compatible accessories	Sheathing (KGN23115), Universal clamps (K23900/U.50, K23920/U.50), PowerClamp (K23900/PWC.50, 23920/PWC), Junction plate (K23804), No-Flex (K23712)

BALLAST DIMENSIONS

90
995

140
SB 0°
995

HORIZONTAL MODULE INSTALLATION - Short Side

K23900-U

4

23000

2

K23920_40mm

3

23000

2

KGN23115

1

20

140

995

995

Sheathing KGN23115	**Ballast** 23000	**Terminal Clamp** K23920/U.50	**Central Clamp** K23900/U.50
1	2	3	4

VERTICAL MODULE INSTALLATION - Long Side

K23900-U
4

23000
2

K23920_40mm
3

23000
2

KGN23115
1

20

140

995

995

Sheathing	Ballast	Terminal Clamp	Central Clamp
KGN23115	23000	K23920/U.50	K23900/U.50
1	2	3	4

INFO

The distance between the rows is indicative and not binding; it may vary depending on the project.

The measurements are based on the use of a panel with dimensions of 1722mm x 1134mm x 35mm. They vary depending on the size of the panel used.

Follow Sun Ballast®'s assembly instructions.

The dimensions shown in the figure are all expressed in millimeters.
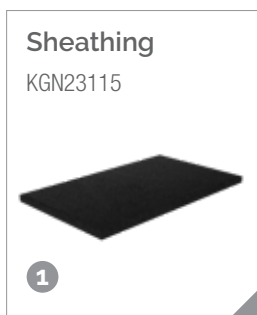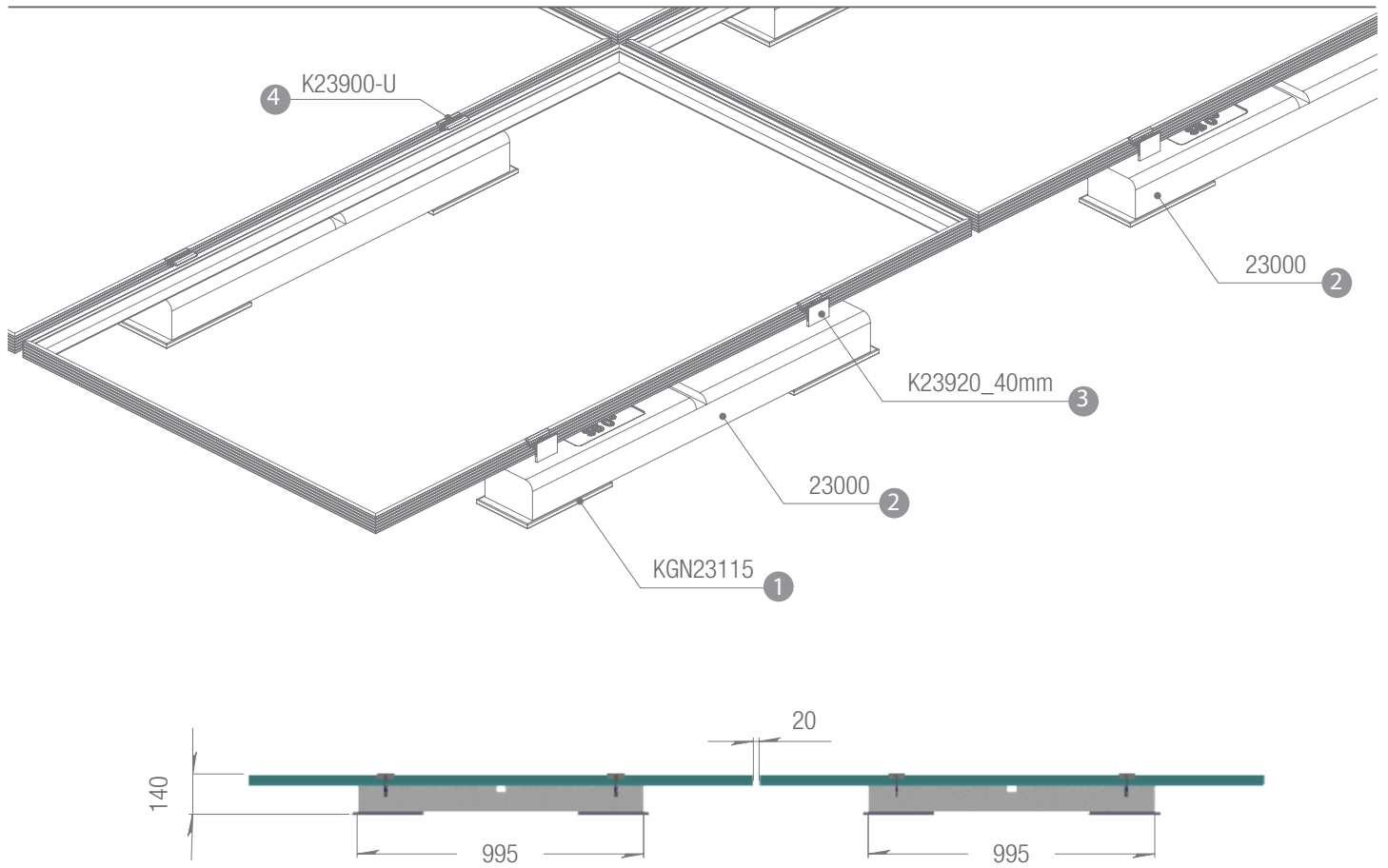
BALLAST 0°

ART. 23000.H20

The Single-Row system offers a simple and highly versatile solution: available in a wide range of tilt angles from 0° to 30°, the ballasts allow for mounting of the panels vertically, horizontally, or with an East-West orientation. The mounting system enables flexible modulation of the distance between rows, ensuring an easy and fast installation, even in the presence of roof obstacles.
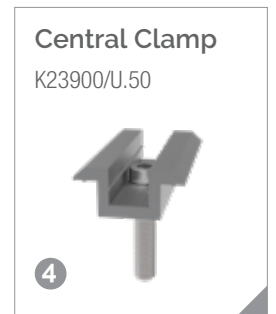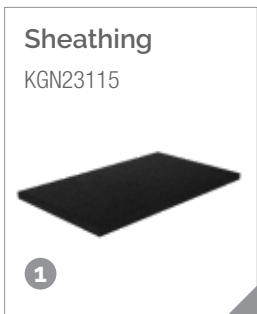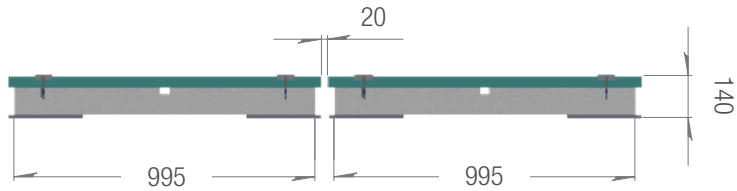
Tilt angle	0°
Module positioning	Horizontal - Short side / Vertical - Long side
Ballast weight	45 kg
Quantity per pallet	12 pieces
Pallet dimensions	1000x930x552h mm
Pallet weight	552 kg
Compatible accessories	Sheathing (KGN23115), Universal clamps (K23900/U.50, K23920/U.50), PowerClamp (K23900/PWC.50, 23920/PWC), Junction plate (K23804), U-Block (23015.CRP - 23030.CRP), No-Flex (K23712), Cablowind (CW.CABLOWIND.95 - CW.CABLOWIND.160 - CW.CABLOWIND.185)

BALLAST DIMENSIONS

200

980

SB 0° H20

150

980

INDEX

HORIZONTAL MODULE INSTALLATION - Short Side

K23900-U **4**

2 23000.H20

K23920_40mm **3**

23000.H20 **2**

KGN23115 **1**

62

250

980   980

Sheathing	Ballast	Terminal Clamp	Central Clamp
KGN23115	23000.H20	K23920/U.50	K23900/U.50
1	**2**	**3**	**4**

VERTICAL MODULE INSTALLATION - Long Side

4 K23900-U

23000.H20 2

K23920_40mm 3

23000.H20 2

KGN23115 1

250

20

980

980

Sheathing	Ballast	Terminal Clamp	Central Clamp
KGN23115	23000.H20	K23920/U.50	K23900/U.50
1	2	3	4

INFO

The distance between the rows is indicative and not binding; it may vary depending on the project.

The measurements are based on the use of a panel with dimensions of 1722mm x 1134mm x 35mm. They vary depending on the size of the panel used.

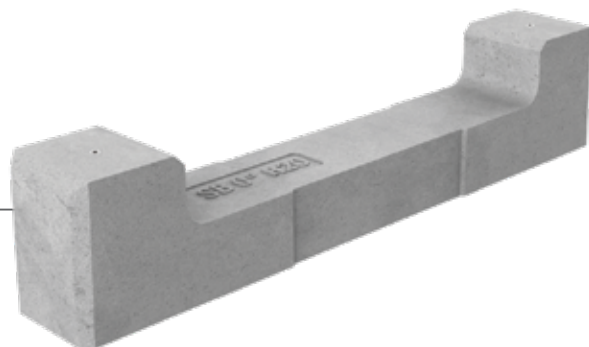Follow Sun Ballast®'s assembly instructions.

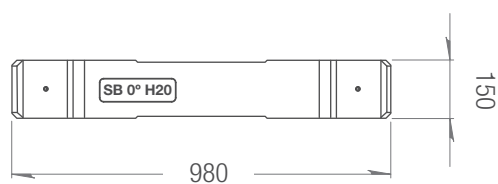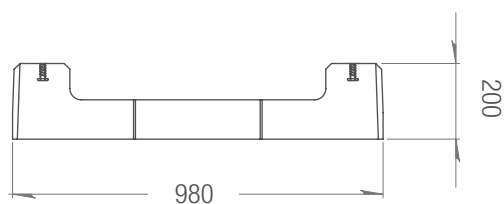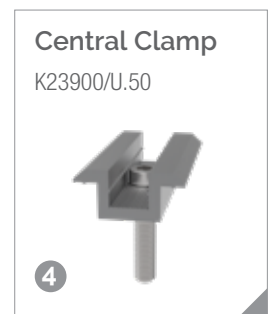The dimensions shown in the figure are all expressed in millimeters.
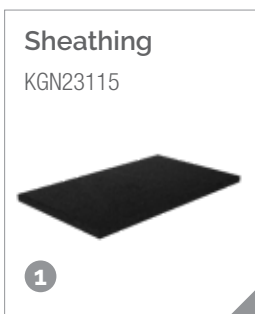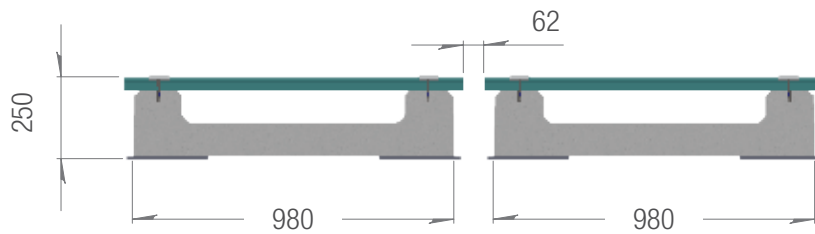
BALLAST 0°

ART. 23000.HI

The Single-Row system offers a simple and highly versatile solution: available in a wide range of tilt angles from 0° to 30°, the ballasts allow for mounting of the panels vertically, horizontally, or with an East-West orientation. The mounting system enables flexible modulation of the distance between rows, ensuring an easy and fast installation, even in the presence of roof obstacles.

Tilt angle	0°
Module positioning	Horizontal - Short side / Vertical - Long side
Ballast weight	70 kg
Quantity per pallet	8 pieces
Pallet dimensions	1000x1420x576h mm
Pallet weight	576 kg
Compatible accessories	Sheathing (KGN23115), Universal clamps (K23900/U.50, K23920/U.50), PowerClamp (K23900/PWC.50, 23920/PWC), Junction plate (K23804), U-Block (23015.CRP - 23030.CRP), No-Flex (K23712), Cablowind (CW.CABLOWIND.95 - CW.CABLOWIND.160 - CW.CABLOWIND.185)

BALLAST DIMENSIONS

HORIZONTAL MODULE INSTALLATION - Short Side

K23900_U

④

K23920_40mm

③

23000.HI

②

23000.HI

②

KGN23115

①

20

750

980

980

Sheathing	Ballast	Terminal Clamp	Central Clamp
KGN23115	23000.HI	K23920/U.50	K23900/U.50
①	②	③	④

VERTICAL MODULE INSTALLATION - Long Side

4 K23900-U

23000.HI 2

K23920_40mm 3

23000.HI 2

KGN23115 1

20

750

980   980

Sheathing	Ballast	Terminal Clamp	Central Clamp
KGN23115	23000.HI	K23920/U.50	K23900/U.50
1	2	3	4

INFO

The distance between the rows is indicative and not binding; it may vary depending on the project.

The measurements are based on the use of a panel with dimensions of 1722mm x 1134mm x 35mm. They vary depending on the size of the panel used.

Follow Sun Ballast®'s assembly instructions.

The dimensions shown in the figure are all expressed in millimeters.
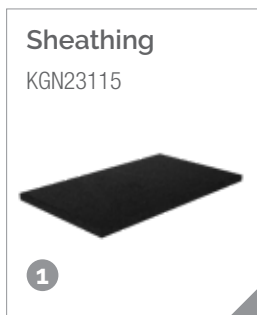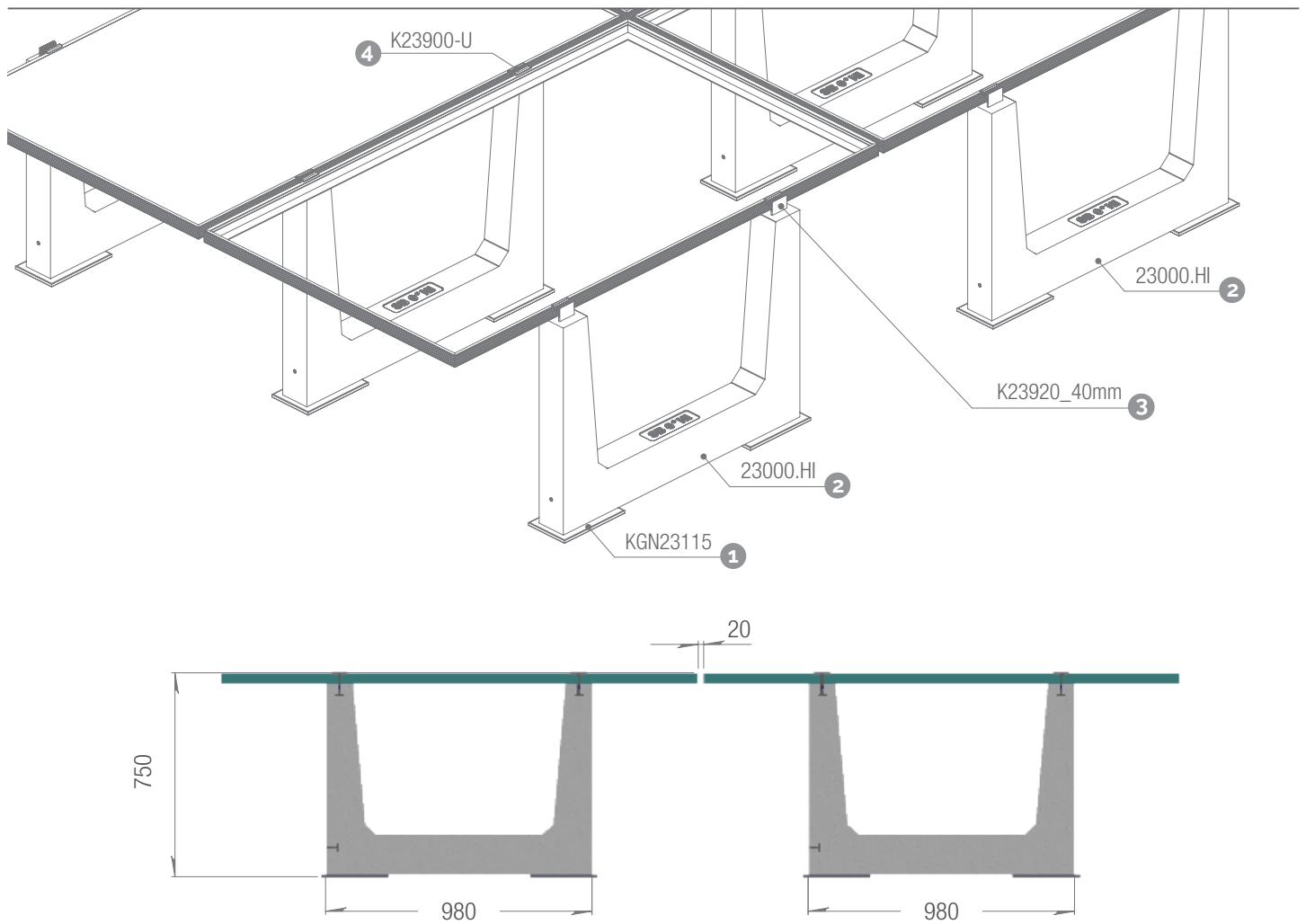
BALLAST 0°

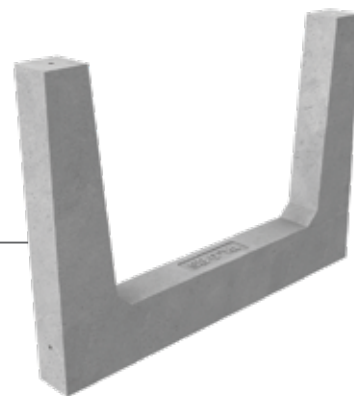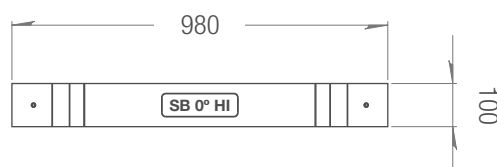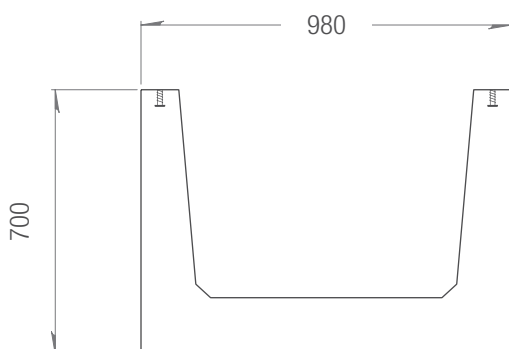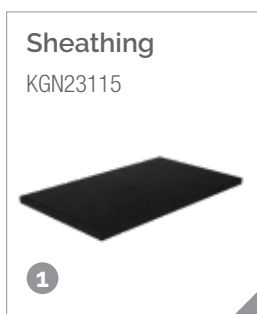ART. 23000.KP

The Single-Row system offers a simple and highly versatile solution: available in a wide range of tilt angles from 0° to 30°, the ballasts allow for mounting of the panels vertically, horizontally, or with an East-West orientation. The mounting system enables flexible modulation of the distance between rows, ensuring an easy and fast installation, even in the presence of roof obstacles.

Tilt angle	0°
Module positioning	Horizontal - Short side / Vertical - Long side
Ballast weight	60 kg
Quantity per pallet	9 pieces
Pallet dimensions	1015x900x434h mm
Pallet weight	552 kg
Compatible accessories	Sheathing (KGN23115), Universal clamps (K23900/U.50, K23920/U.50), PowerClamp (K23900/PWC.50, 23920/PWC), Junction plate (K23804), No-Flex (K23712)

BALLAST DIMENSIONS

995

90

995

290

SB 0° KP

HORIZONTAL MODULE INSTALLATION - Short Side

K23900-U
4

23000.KP
2

K23920_40mm
3

23000.KP
2

KGN23115
1

20

140

995

995

Sheathing
KGN23115

1

Ballast
23000.KP

2

Terminal Clamp
K23920/U.50

3

Central Clamp
K23900/U.50

4

VERTICAL MODULE INSTALLATION - Long Side

K23900-U
4

23000.KP
2

K23920_40mm
3

23000.KP
2

KGN23115
1

20

140

995

995

Sheathing KGN23115 **1**	Ballast 23000.KP **2**	Terminal Clamp K23920/U.50 **3**	Central Clamp K23900/U.50 **4**

INFO

The distance between the rows is indicative and not binding; it may vary depending on the project.

The measurements are based on the use of a panel with dimensions of 1722mm x 1134mm x 35mm. They vary depending on the size of the panel used.

Follow Sun Ballast®'s assembly instructions.
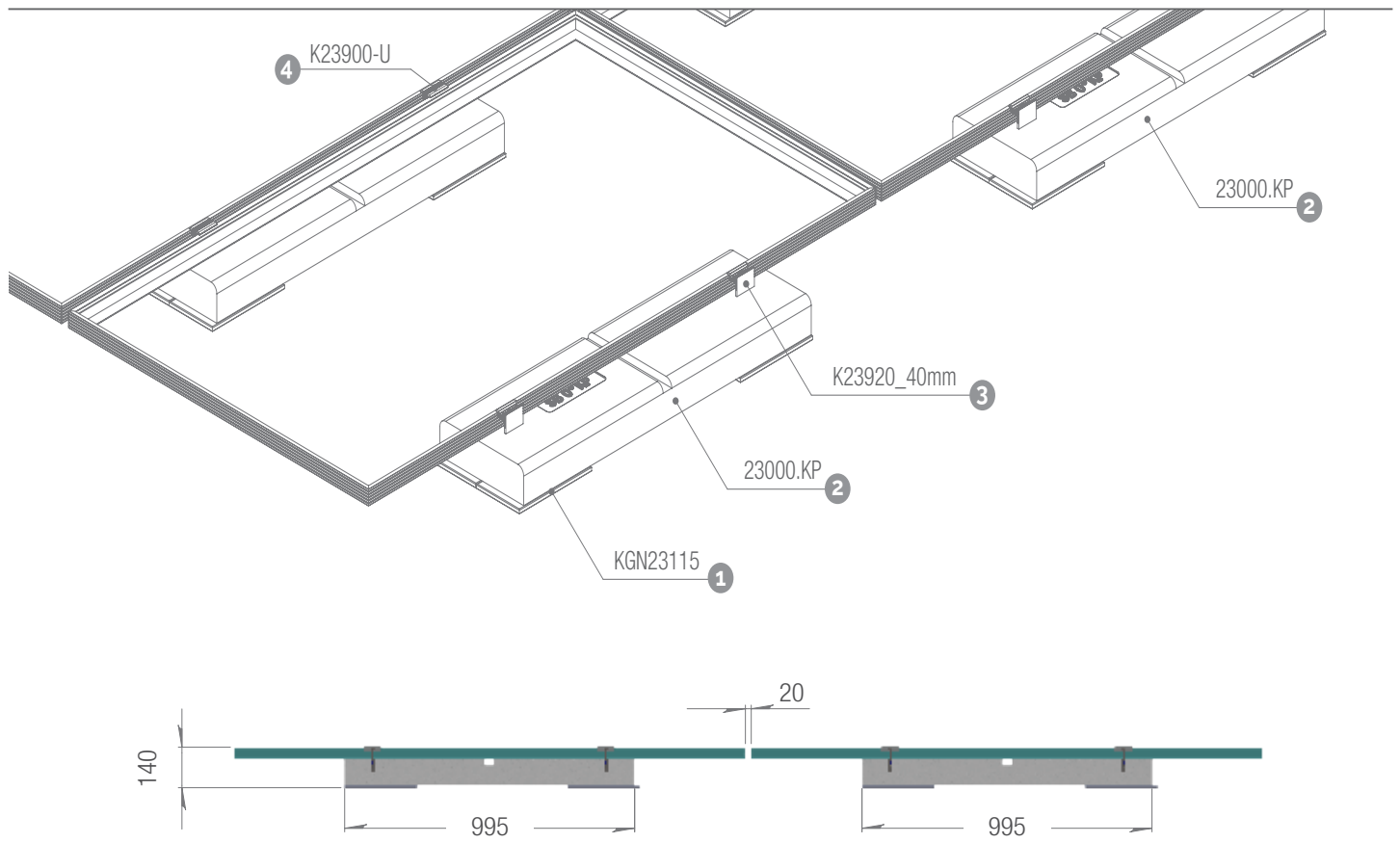
The dimensions shown in the figure are all expressed in millimeters.

BALLAST 3°

ART. 23003

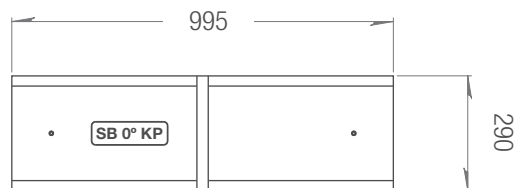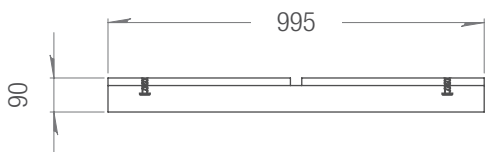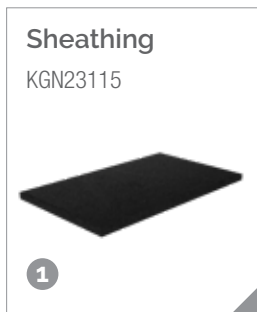The Single-Row system offers a simple and highly versatile solution: available in a wide range of tilt angles from 0° to 30°, the ballasts allow for mounting of the panels vertically, horizontally, or with an East-West orientation. The mounting system enables flexible modulation of the distance between rows, ensuring an easy and fast installation, even in the presence of roof obstacles.

Tilt angle	3°
Module positioning	Horizontal - Short side / Vertical - Long side
Ballast weight	41 kg
Quantity per pallet	12 pieces
Pallet dimensions	1000x700x500h mm
Pallet weight	504 kg
Compatible accessories	Sheathing (KGN23115), Universal clamps (K23900/U.50, K23920/U.50), PowerClamp (K23900/PWC.50, 23920/PWC), Junction plate (K23804), No-Flex (K23712)

BALLAST DIMENSIONS

HORIZONTAL MODULE INSTALLATION - Short Side

4 K23900-U

23003 2

K23920_40mm 3

23003 2

KGN23115 1

200

105

160

995

995

Sheathing
KGN23115

1

Ballast
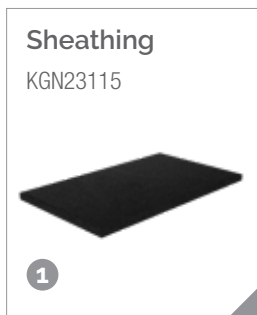23003

2

Terminal Clamp
K23920/U.50

3

Central Clamp
K23900/U.50

4

VERTICAL MODULE INSTALLATION - Long Side

K23900-U ①

23003 ②

K23920_40mm ③

23003 ②

KGN23115 ①

300

85

995

175

995

Sheathing	Ballast	Terminal Clamp	Central Clamp
KGN23115	23003	K23920/U.50	K23900/U.50
①	②	③	④

INFO

The distance between the rows is indicative and not binding; it may vary depending on the project.

The measurements are based on the use of a panel with dimensions of 1722mm x 1134mm x 35mm. They vary depending on the size of the panel used.

Follow Sun Ballast®'s assembly instructions.

The dimensions shown in the figure are all expressed in millimeters.

BALLAST 5°L

ART. 23005.L

The Mono-XL ballasts with a 10° tilt angle offer a simple and versatile solution for large-size PV panels: vertical mounting ensures high holding strength and stability, while the ability to freely adjust the spacing between rows allows for quick installation, even in the presence of roof obstacles.

Tilt angle	5°
Module positioning	Vertical – Long Side
Ballast weight	65 kg
Quantity per pallet	10 pieces
Pallet dimensions	1410x720x620h mm
Pallet weight	661 kg
Compatible accessories	Sheathing (KGN23115), Universal clamps (K23900/U.50, K23920/U.50), PowerClamp (K23900/PWC.50, 23920/PWC), U-Block (23015.CRP - 23030.CRP)

BALLAST DIMENSIONS
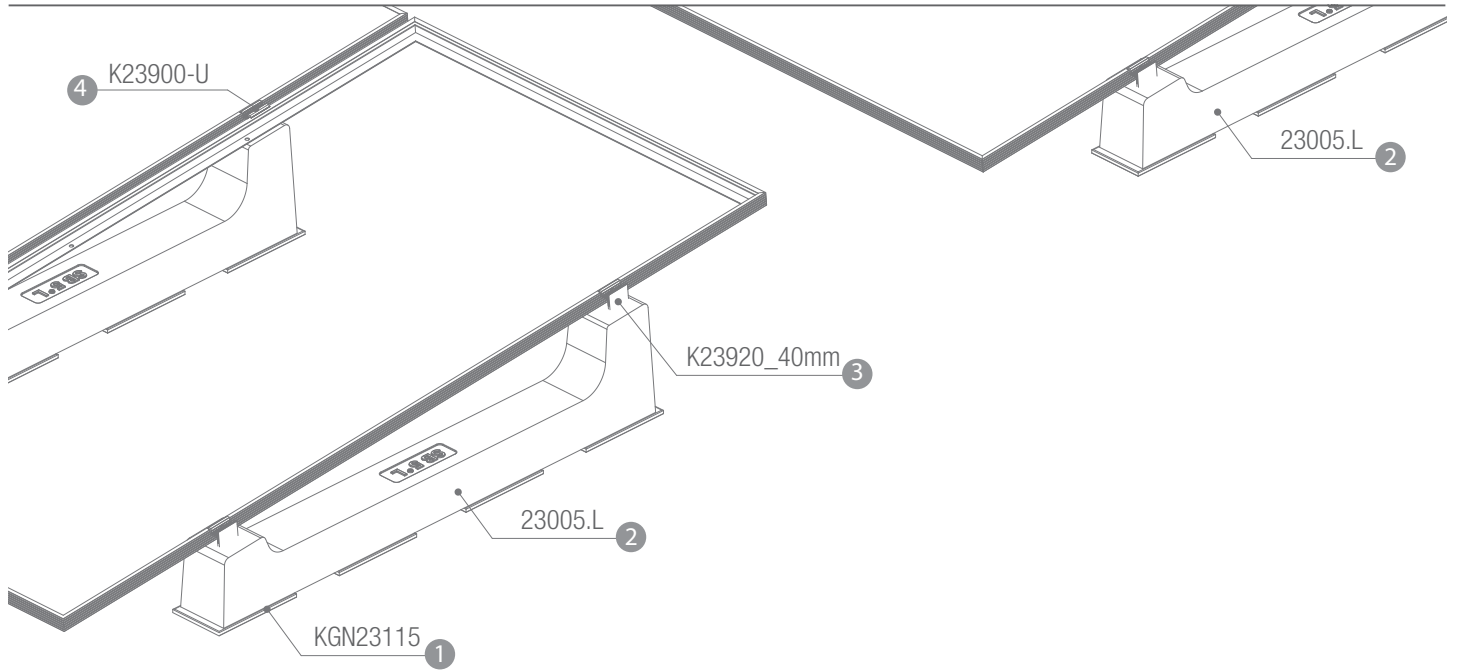
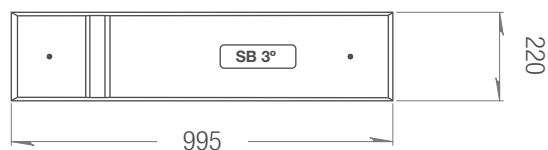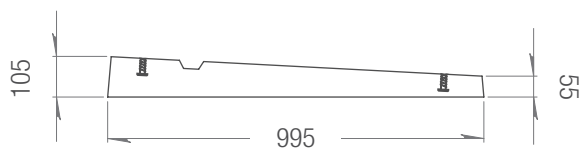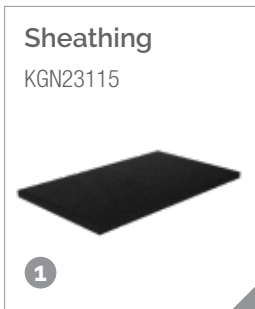290 · 175 · 1395

140 · SB 5°L · 1395

VERTICAL MODULE INSTALLATION - Long Side

4 K23900-U

23005.L 2

K23920_40mm 3

23005.L 2

KGN23115 1

700

180

380

1395

1395

Sheathing	Ballast	Terminal Clamp	Central Clamp
KGN23115	23005.L	K23920/U.50	K23900/U.50
1	2	3	4

INFO

The distance between the rows is indicative and not binding; it may vary depending on the project.

The measurements are based on the use of a panel with dimensions of 2278mm x 1134mm x 35mm. They vary depending on the size of the panel used.

Follow Sun Ballast®'s assembly instructions.

The dimensions shown in the figure are all expressed in millimeters.
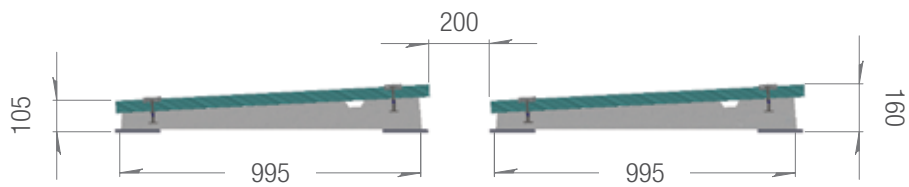
INDEX

BALLAST 10°L

ART. 23010.L

The Mono-XL ballasts with a 10° tilt angle offer a simple and versatile solution for large-size PV panels: vertical mounting ensures high holding strength and stability, while the ability to freely adjust the spacing between rows allows for quick installation, even in the presence of roof obstacles.

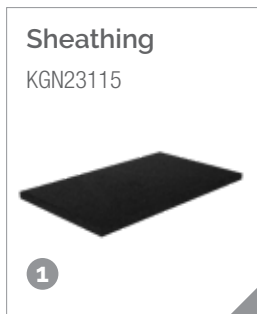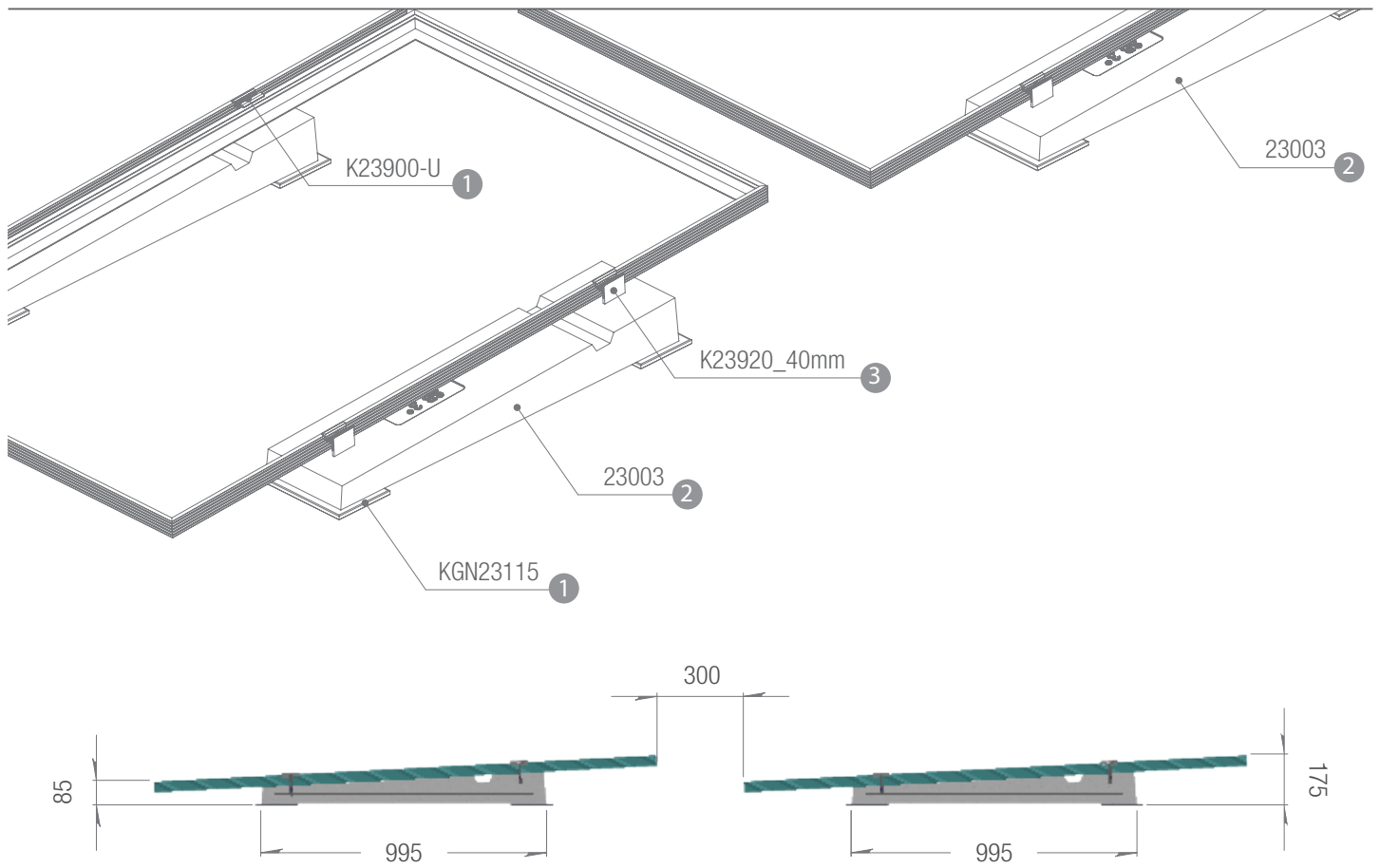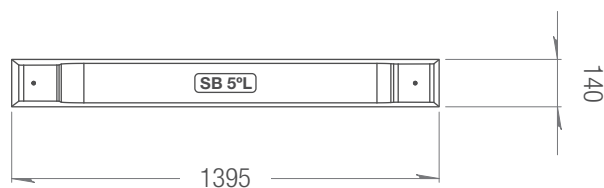|	
Tilt angle	10°
Module positioning	Vertical – Long Side
Ballast weight	70 kg
Quantity per pallet	10 pieces
Pallet dimensions	1410x740x760h mm
Pallet weight	712 kg
Compatible accessories	Sheathing (KGN23115), Universal clamps (K23900/U.50, K23920/U.50), PowerClamp (K23900/PWC.50, 23920/PWC), U-Block (23015.CRP - 23030.CRP), Junction plate (K23804), Cablowind (CW.CABLOWIND.95)

BALLAST DIMENSIONS
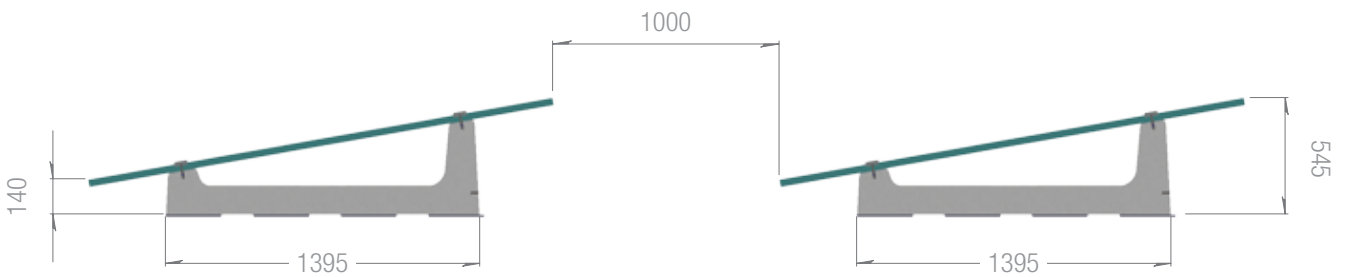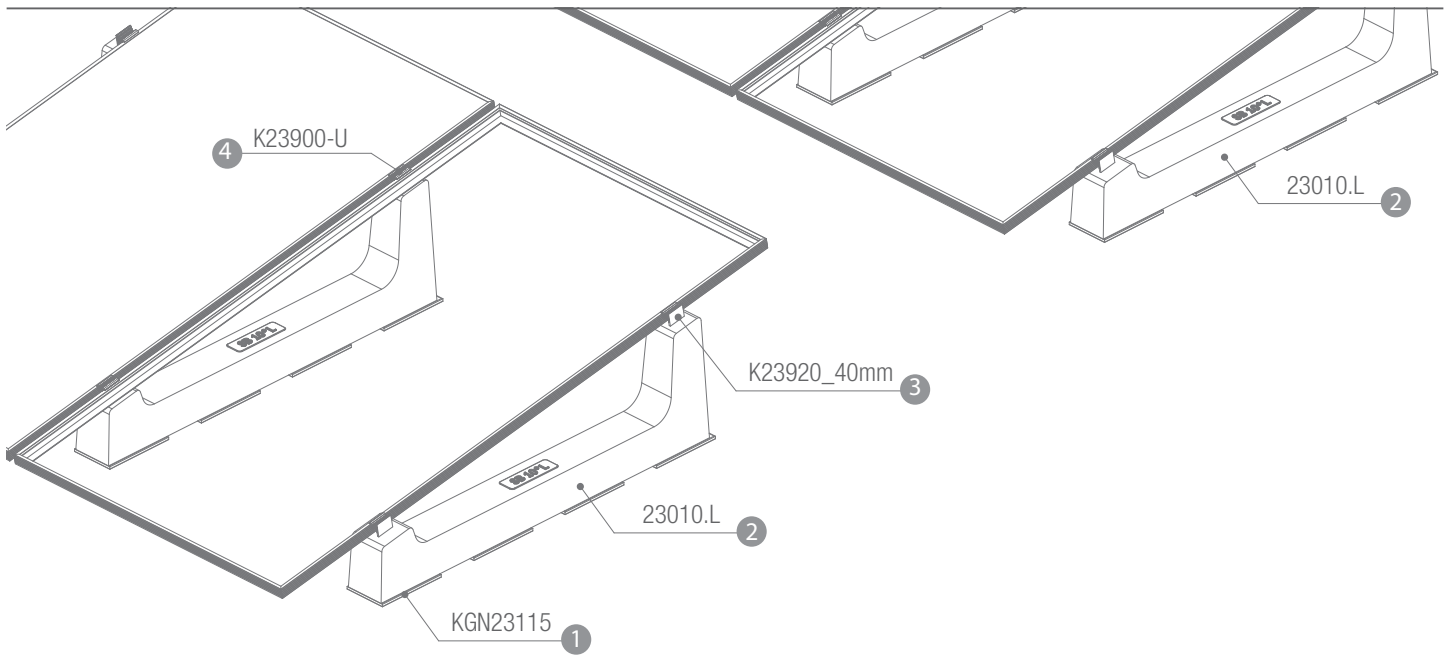
420

185

1395

SB 10°L

140

1395

VERTICAL MODULE INSTALLATION - Long Side

K23900-U ④

23010.L ②

K23920_40mm ③

23010.L ②

KGN23115 ①

1000

545

140

1395

1395

Sheathing	Ballast	Terminal Bracket	Central Bracket
KGN23115	23010.L	K23920/U.50	K23900/U.50
①	②	③	④

INFO

The distance between the rows is indicative and not binding; it may vary depending on the project.

The measurements are based on the use of a panel with dimensions of 2278mm x 1134mm x 35mm. They vary depending on the size of the panel used.

Follow Sun Ballast®'s assembly instructions.

The dimensions shown in the figure are all expressed in millimeters.
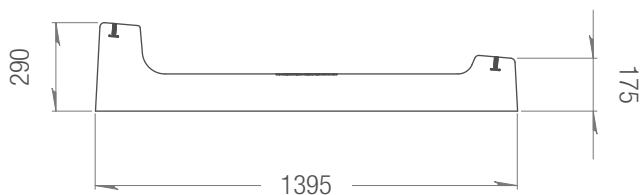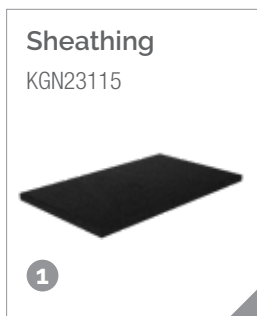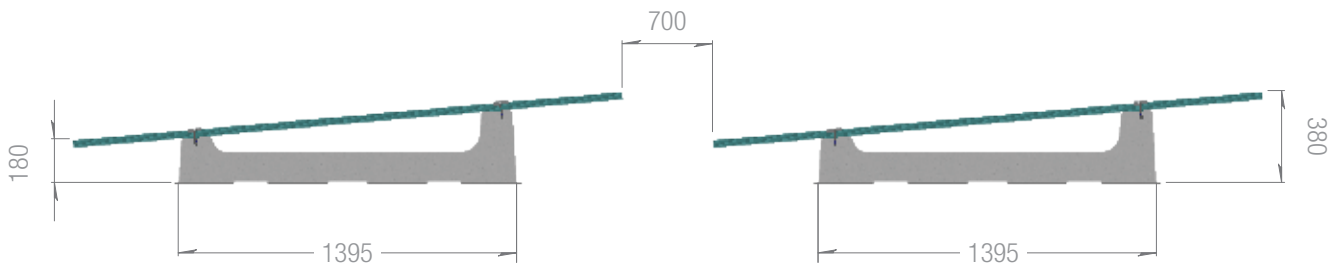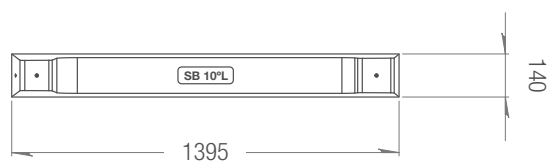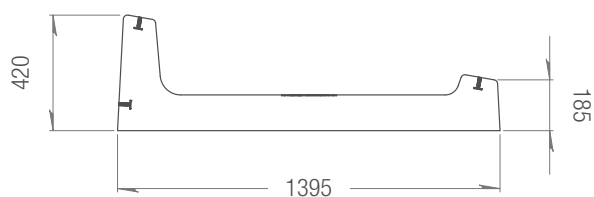
BALLAST 15°

ART. 23015
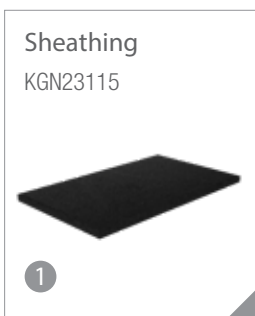
The Single-Row system offers a simple and highly versatile solution: available in a wide range of tilt angles from 0° to 30°, the ballasts allow for mounting of the panels vertically, horizontally, or with an East-West orientation. The mounting system enables flexible modulation of the distance between rows, ensuring an easy and fast installation, even in the presence of roof obstacles.

Tilt angle	15°
Module positioning	Horizontal - Short side / Vertical - Long side
Ballast weight	60 kg
Quantity per pallet	8 pieces
Pallet dimensions	990x720x690h mm
Pallet weight	610 kg
Compatible accessories	Sheathing (KGN23115), Universal clamps (K23900/U.50, K23920/U.50), PowerClamp (K23900/PWC.50, 23920/PWC), Junction plate (K23804), U-Block (23015.CRP - 23030.CRP), No-Flex (K23712) Cablowind (CW.CABLOWIND.95 - CW.CABLOWIND.160 - CW.CABLOWIND.185)

BALLAST DIMENSIONS

HORIZONTAL MODULE INSTALLATION - Short Side

K23900-U ④

23015 ②

K23920_40mm ③

23015 ②

KGN23115 ①

700

180

450

975

975

Sheathing	Ballast	Terminal Clamp	Central Clamp
KGN23115	23015	K23920/U.50	K23900/U.50
①	②	③	④

VERTICAL MODULE INSTALLATION - Long Side

K23900-U **4**

23015 **2**

K23920_40mm **3**

23015 **2**

KGN23115 **1**

800

545

90

975

975

Sheathing
KGN23115

1

Ballast
23015

2

Terminal Clamp
K23920/U.50

3

Central Clamp
K23900/U.50

4

INFO

The distance between the rows is indicative and not binding; it may vary depending on the project.

The measurements are based on the use of a panel with dimensions of 1722mm x 1134mm x 35mm. They vary depending on the size of the panel used.
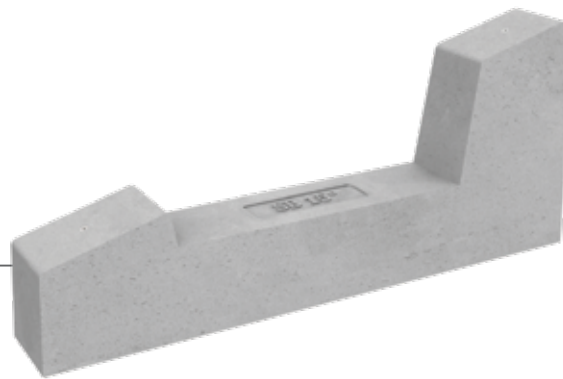
Follow Sun Ballast®'s assembly instructions.
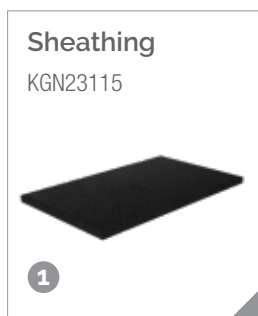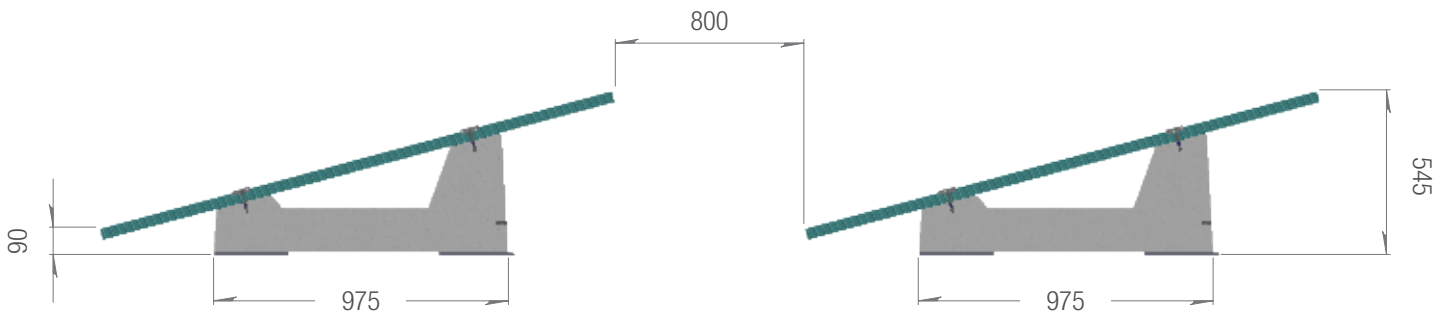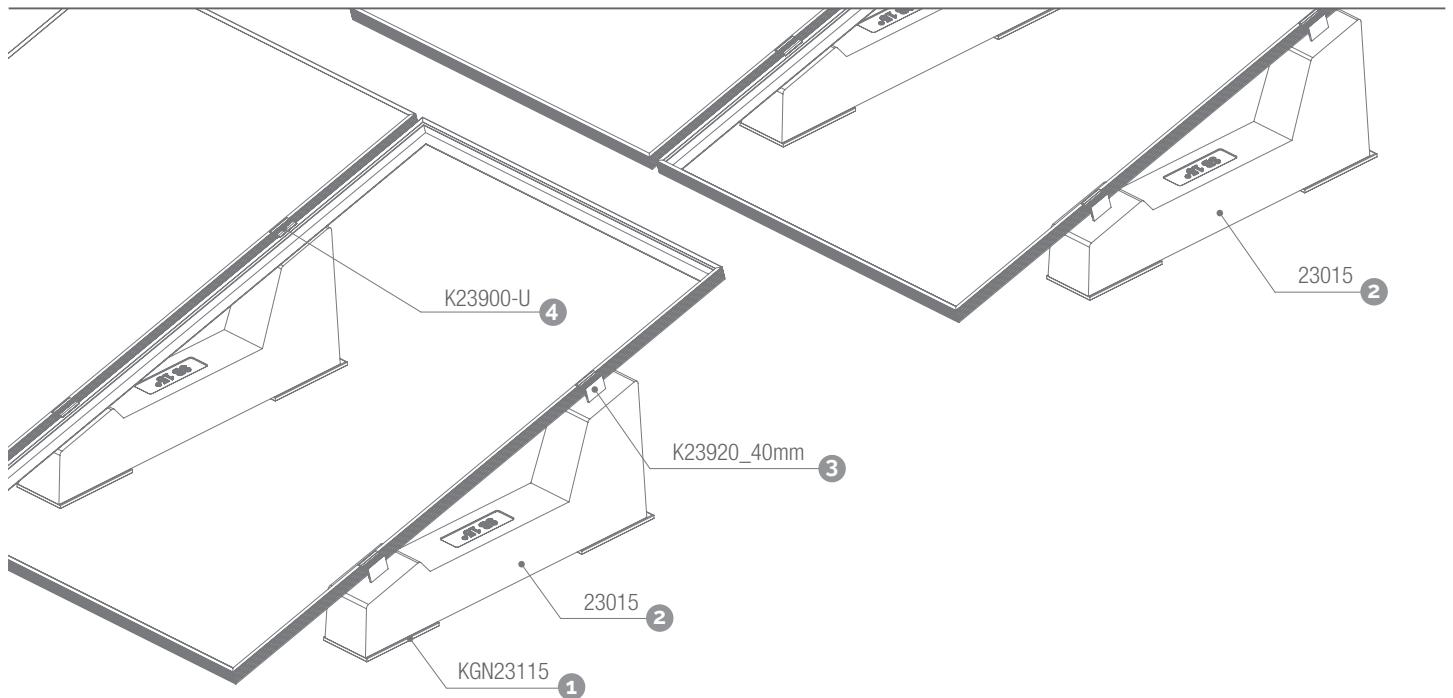
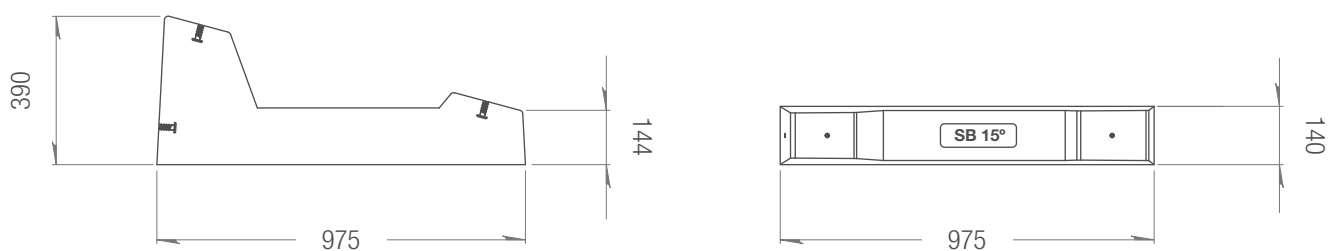The dimensions shown in the figure are all expressed in millimeters.
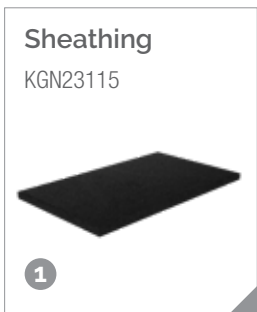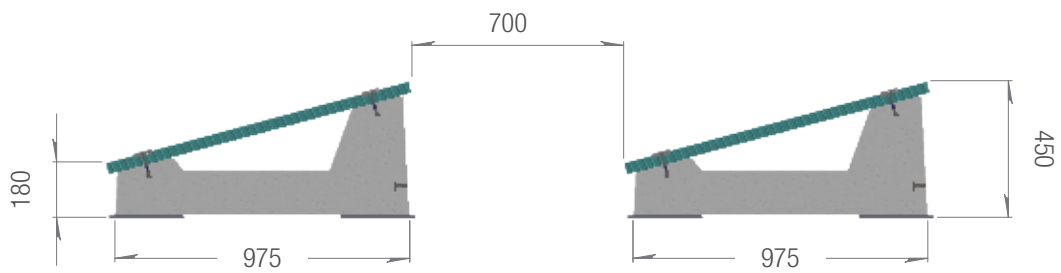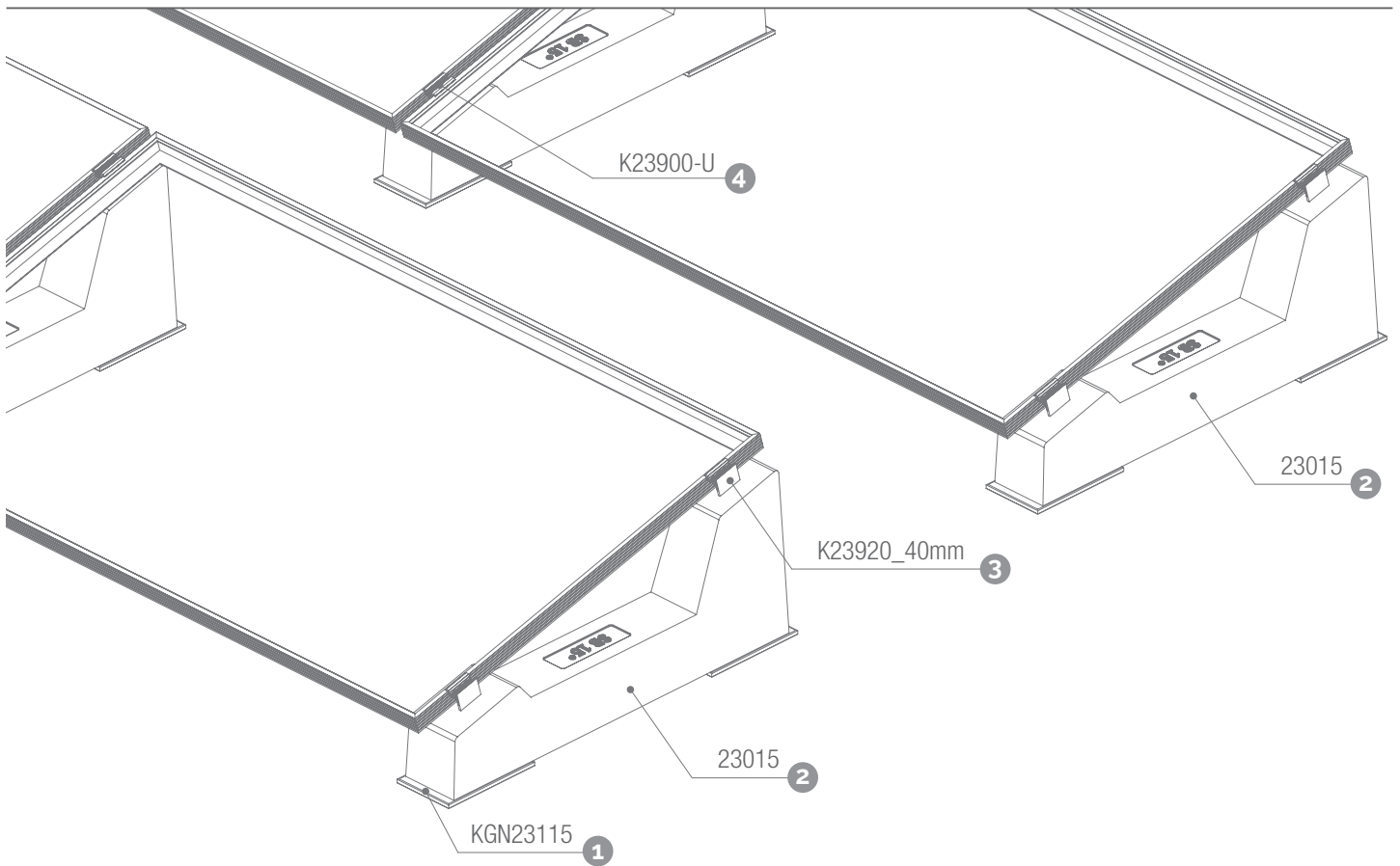
BALLAST 20°

ART. 23020

The Single-Row system offers a simple and highly versatile solution: available in a wide range of tilt angles from 0° to 30°, the ballasts allow for mounting of the panels vertically, horizontally, or with an East-West orientation. The mounting system enables flexible modulation of the distance between rows, ensuring an easy and fast installation, even in the presence of roof obstacles.

Tilt angle	20°
Module positioning	Horizontal - Short side / Vertical - Long side
Ballast weight	61 kg
Quantity per pallet	10 pieces
Pallet dimensions	700x900x890h mm
Pallet weight	626 kg
Compatible accessories	Sheathing (KGN23115), Universal clamps (K23900/U.50, K23920/U.50), PowerClamp (K23900/PWC.50, 23920/PWC), Junction plate (K23804), U-Block (23015.CRP - 23030.CRP), No-Flex (K23712) Cablowind (CW.CABLOWIND.95 - CW.CABLOWIND.160 - CW.CABLOWIND.185)

BALLAST DIMENSIONS

HORIZONTAL MODULE INSTALLATION - Short Side

K23900-U **4**

K23920_40mm **3**

23020 **2**

KGN23115 **1**

800

565

210

880

880

Sheathing	Ballast	Terminal Clamp	Central Clamp
KGN23115	23020	K23920/U.50	K23900/U.50
1	**2**	**3**	**4**

VERTICAL MODULE INSTALLATION - Long Side

K23900-U ④

K23920_40mm ③

23020 ②

KGN23115 ①

900

685

90

880

880

| Sheathing KGN23115 ① | Ballast 23020 ② | Terminal Clamp K23920/U.50 ③ | Central Clamp K23900/U.50 ④ |

INFO

The distance between the rows is indicative and not binding; it may vary depending on the project.

The measurements are based on the use of a panel with dimensions of 1722mm x 1134mm x 35mm. They vary depending on the size of the panel used.

Follow Sun Ballast®'s assembly instructions.
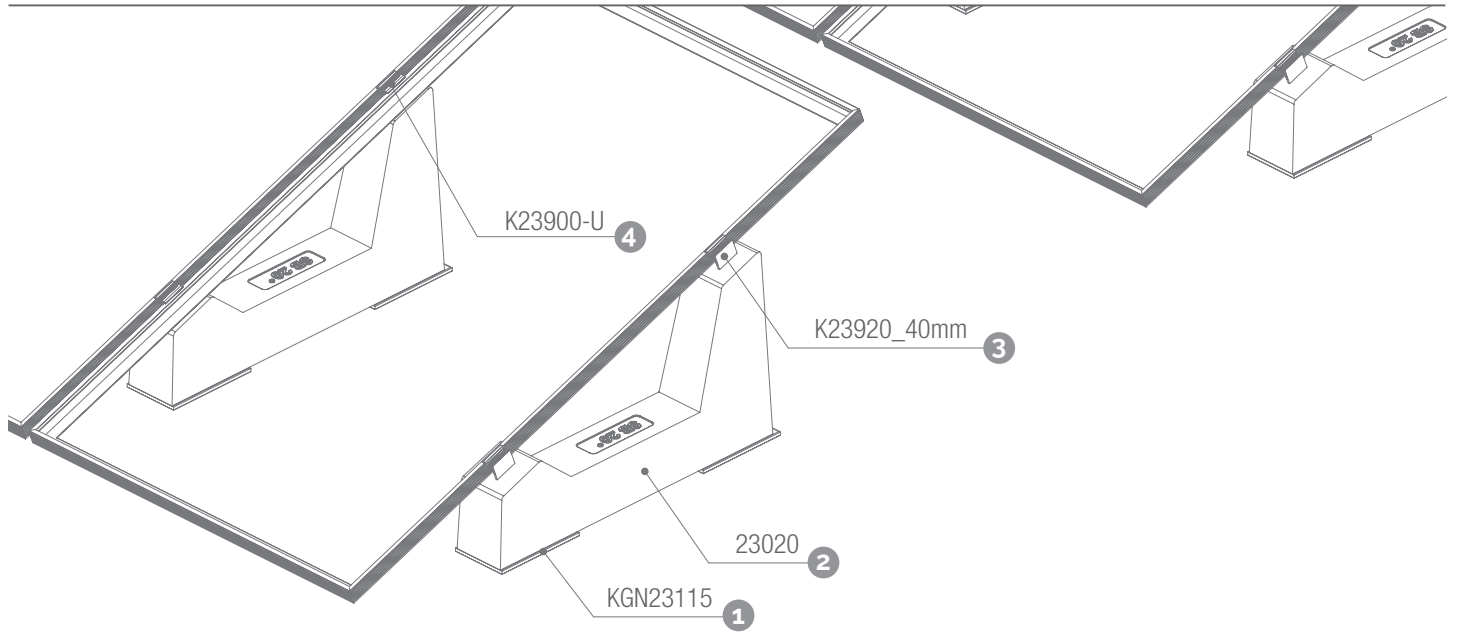
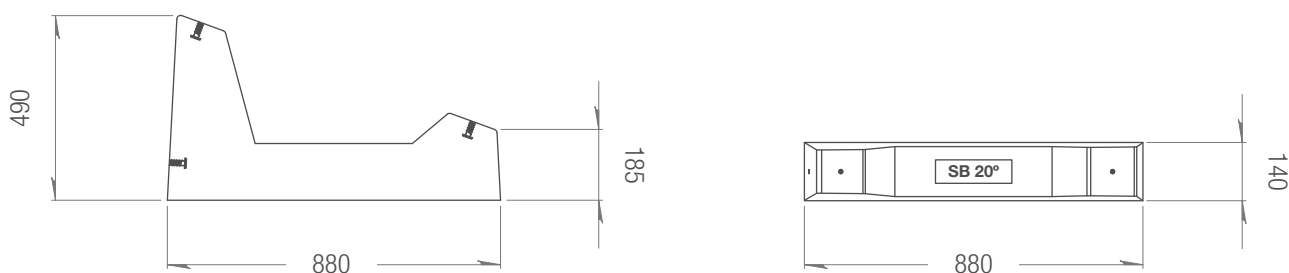The dimensions shown in the figure are all expressed in millimeters.
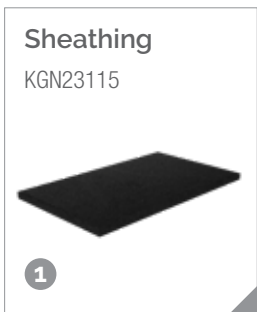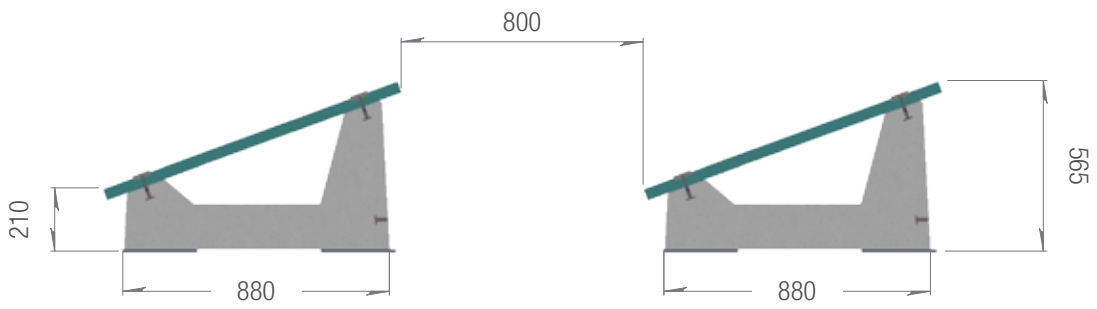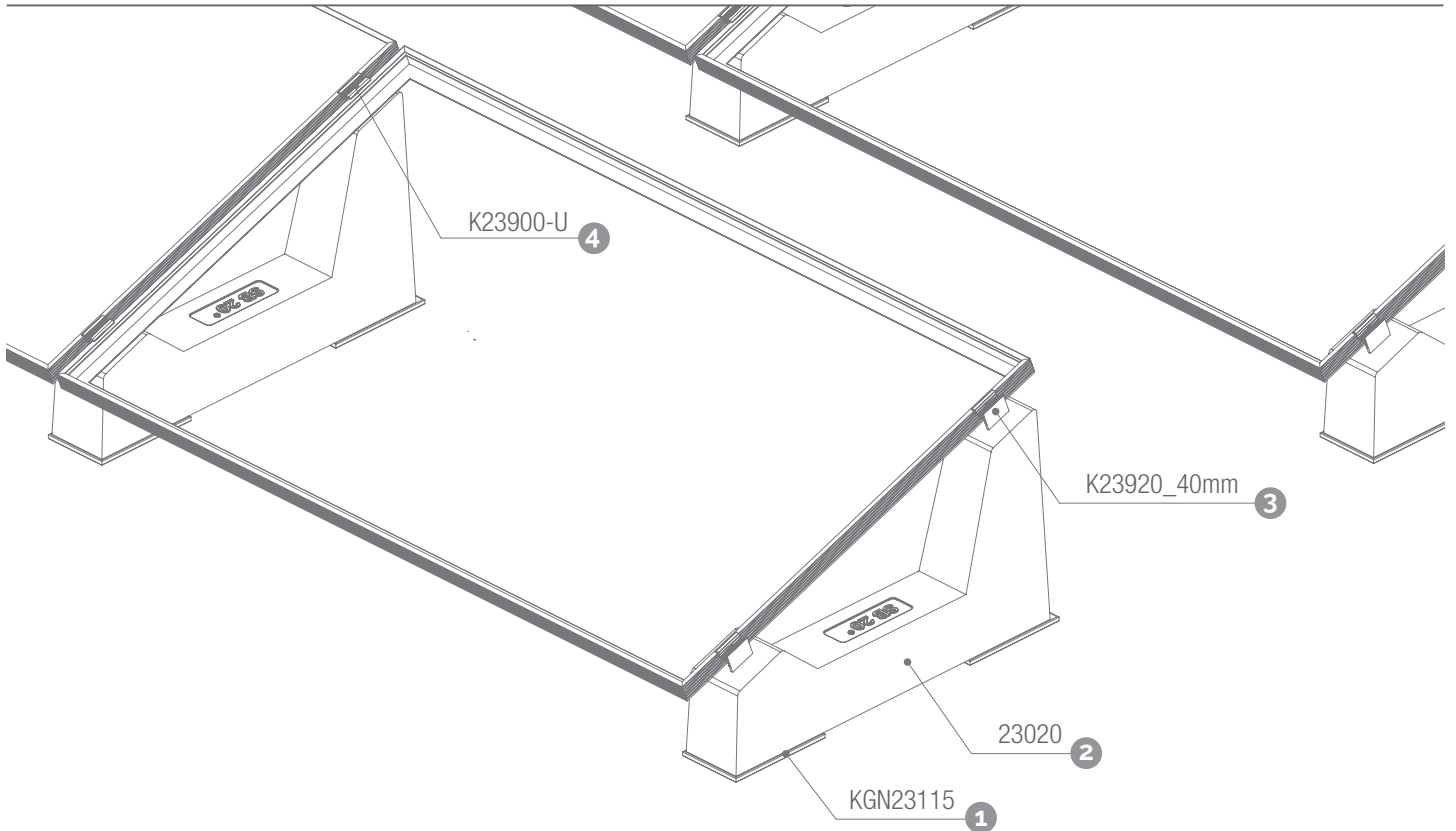
BALLAST 30°

ART. 23030

The Single-Row system offers a simple and highly versatile solution: available in a wide range of tilt angles from 0° to 30°, the ballasts allow for mounting of the panels vertically, horizontally, or with an East-West orientation. The mounting system enables flexible modulation of the distance between rows, ensuring an easy and fast installation, even in the presence of roof obstacles.

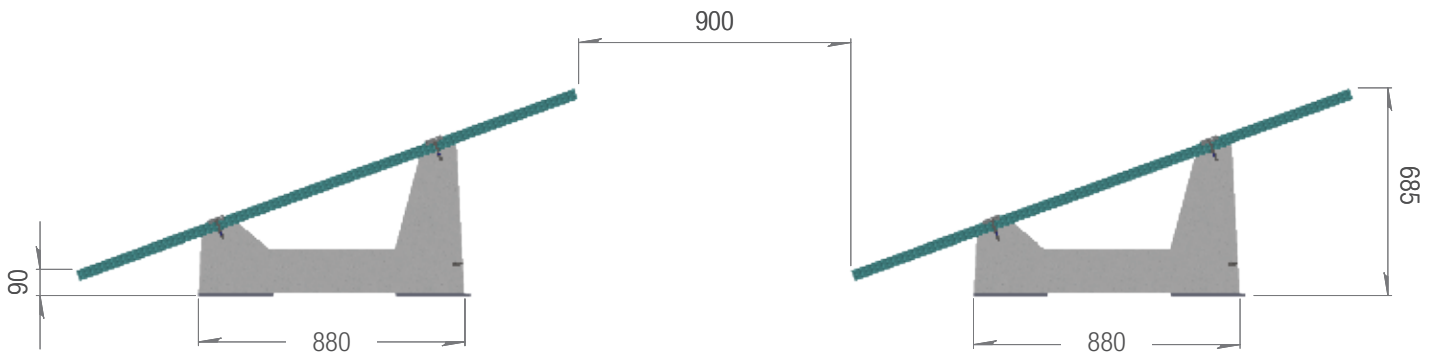|	
Tilt angle	30°
Module positioning	Horizontal - Short side / Vertical - Long side
Ballast weight	59 kg
Quantity per pallet	10 pieces
Pallet dimensions	860x860x838h mm
Pallet weight	604 kg
Compatible accessories	Sheathing (KGN23115), Universal clamps (K23900/U.50, K23920/U.50), PowerClamp (K23900/PWC.50, 23920/PWC), Junction plate (K23804), U-Block (23015.CRP - 23030.CRP), No-Flex (K23712) Cablowind (CW.CABLOWIND.95 - CW.CABLOWIND.160 - CW.CABLOWIND.185)

BALLAST DIMENSIONS

HORIZONTAL MODULE INSTALLATION - Short Side

K23900-U ③

K23920_40mm ③

23030 ②

23030 ②

KGN23115 ①

900

720

210

855

855

Sheathing	Ballast	Terminal Clamp	Central Clamp
KGN23115	23030	K23920/U.50	K23900/U.50
①	②	③	④

VERTICAL MODULE INSTALLATION - Long Side

K23900-U ③

K23920_40mm ③

23030 ②

KGN23115 ①

1000

970

90

855

855

Sheathing	Ballast	Terminal Clamp	Central Clamp
KGN23115	23030	K23920/U.50	K23900/U.50
①	②	③	④

INFO

The distance between the rows is indicative and not binding; it may vary depending on the project.

The measurements are based on the use of a panel with dimensions of 1722mm x 1134mm x 35mm. They vary depending on the size of the panel used.

Follow Sun Ballast®'s assembly instructions.

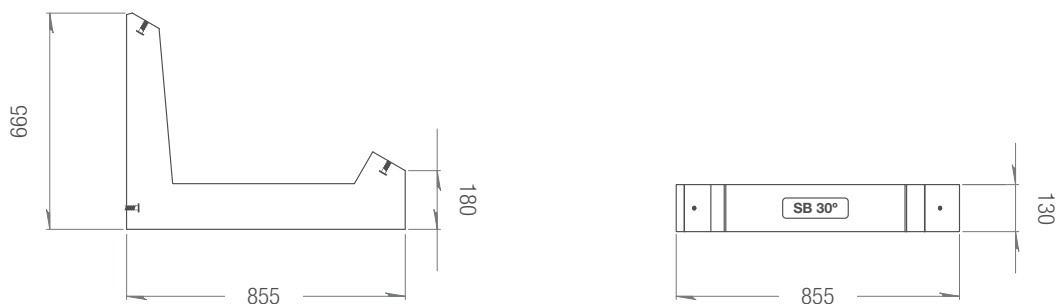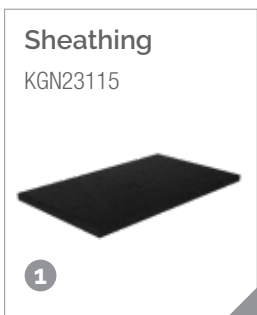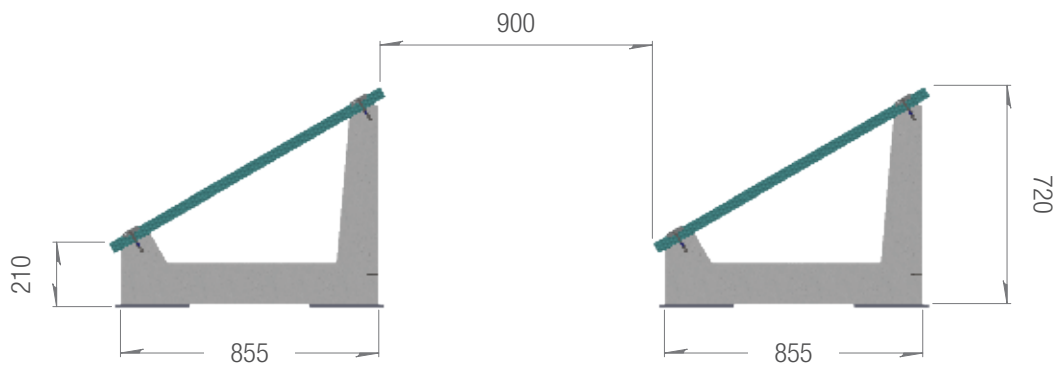The dimensions shown in the figure are all expressed in millimeters.

SAIL 5°

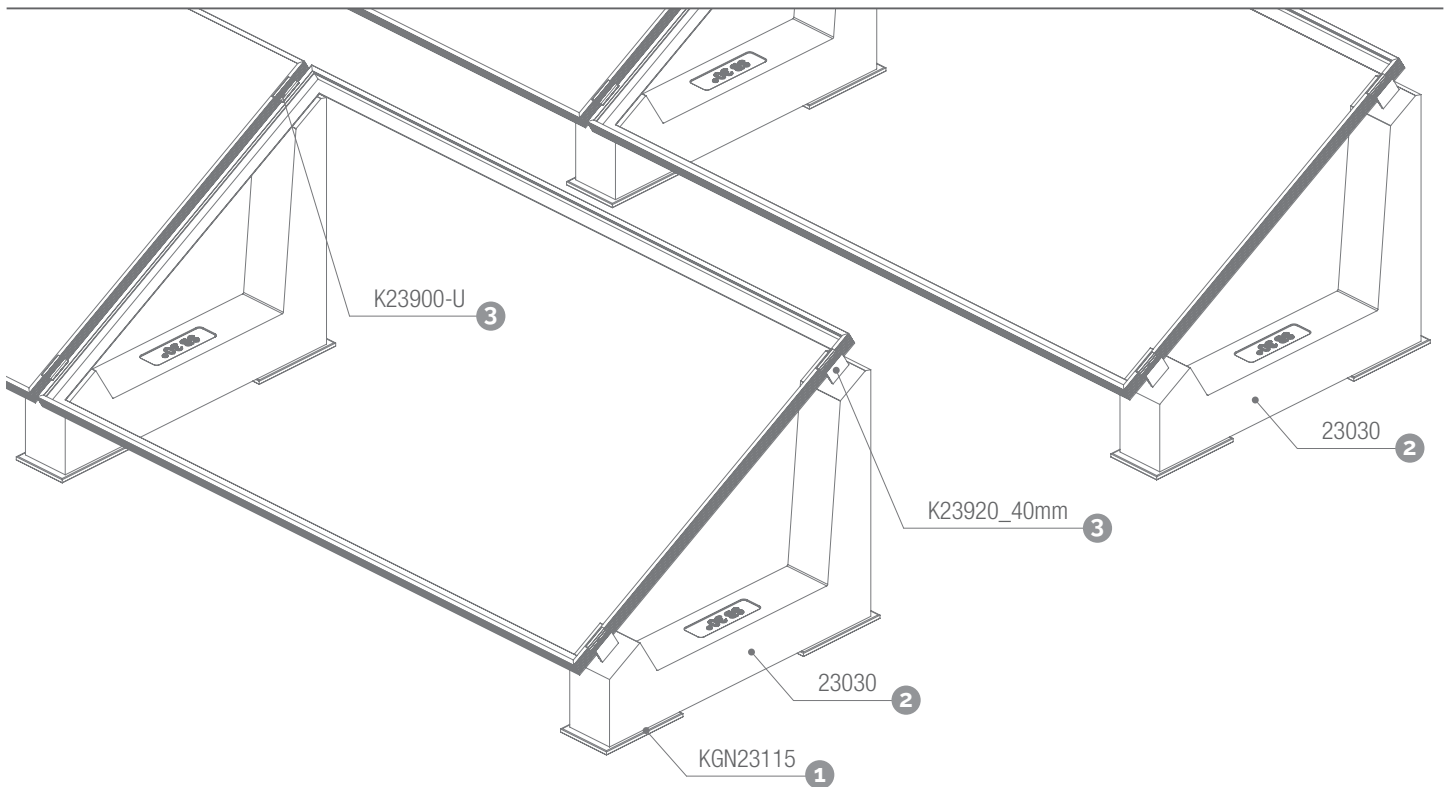ART. 23005/.2/.3/.4/.5/.6

The Sail system with a 5° tilt angle allows for the installation of six consecutive rows of photovoltaic panels, with adjustable spacing between modules to fully optimize the available space. The ballasts can also be used in single-row configurations, ensuring easy and fast management of roof obstacles.

Tilt angle	5°
Module positioning	Horizontal – Short Side / Vertical – Long Side
Compatible accessories	Sheathing (KGN23115), Universal clamps (K23900/U.50, K23920/U.50), PowerClamp (K23900/PWC.50, 23920/PWC), Junction plate for Sail system (23811), Junction plate (K23804), U-Block (23015.CRP - 23030.CRP), Cablowind (CW.CABLOWIND.95 - CW.CABLOWIND.160 - CW.CABLOWIND.185), No-Flex (K23712)

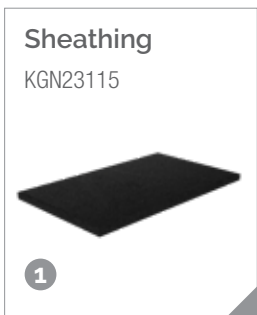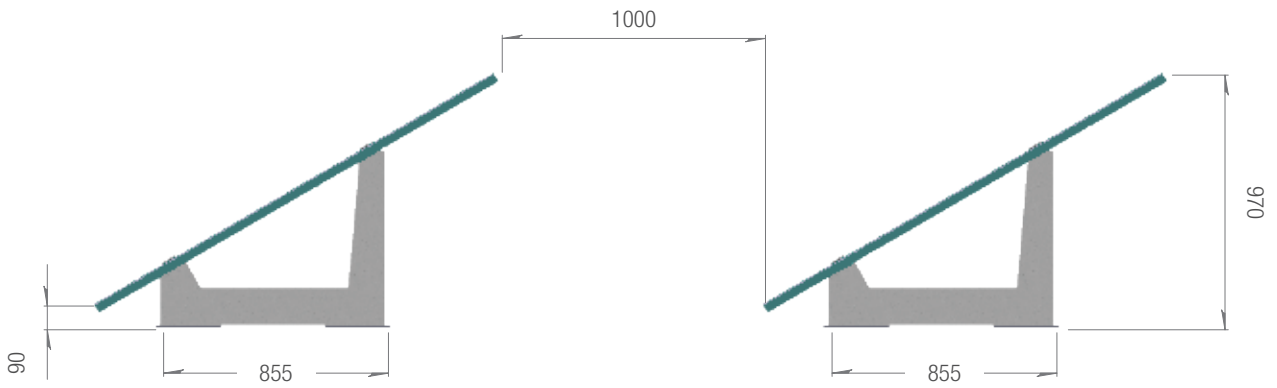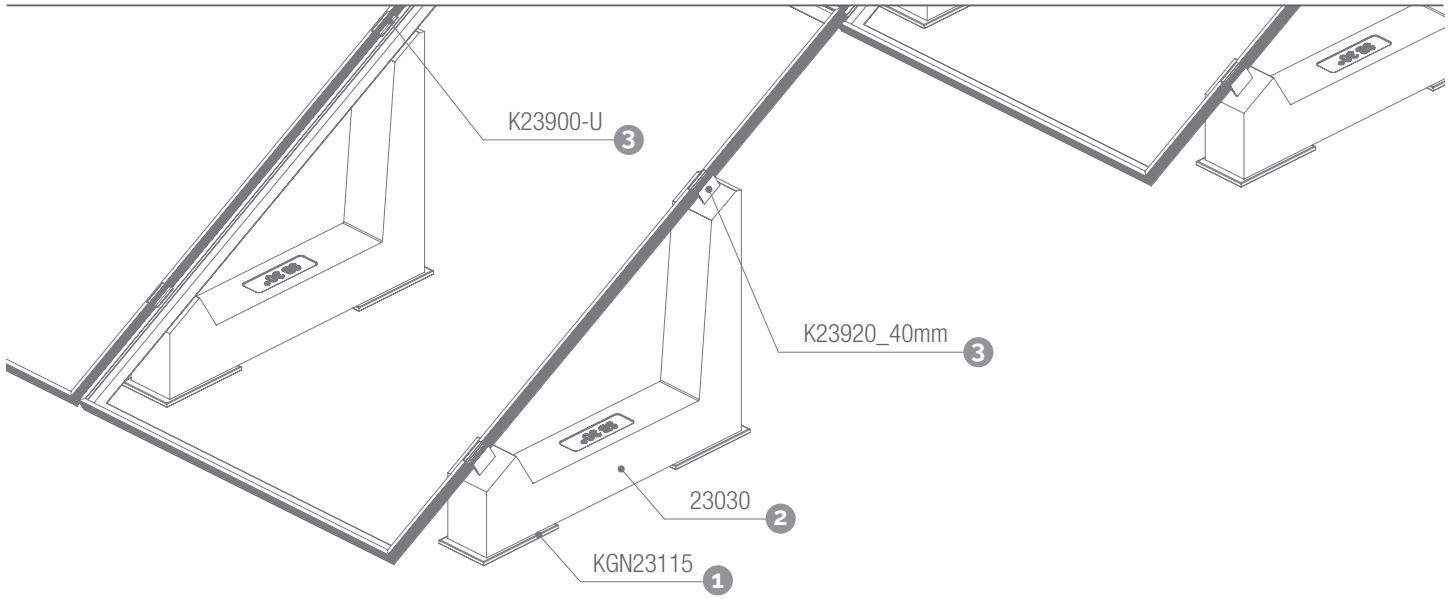| BALLAST ART. 23005	
Ballast weight	40 kg
Quantity per pallet	14 pieces
Pallet dimensions	1010x1020x417h mm
Pallet weight	573 kg

BALLAST ART. 23005.2	
Ballast weight	55 kg
Quantity per pallet	10 pieces
Pallet dimensions	950x730x627h mm
Pallet weight	560 kg

BALLAST ART. 23005.3	
Ballast weight	61 kg
Quantity per pallet	10 pieces
Pallet dimensions	950x730x838h mm
Pallet weight	620 kg

BALLAST ART. 23005.4	
Ballast weight	61 kg
Quantity per pallet	8 pieces
Pallet dimensions	970x590x1050h mm
Pallet weight	498 kg

BALLAST ART. 23005.5	
Ballast weight	61 kg
Quantity per pallet	8 pieces
Pallet dimensions	1100x670x629h mm
Pallet weight	500 kg

BALLAST ART. 23005.6	
Ballast weight	67 kg
Quantity per pallet	8 pieces
Pallet dimensions	1100x770x629h mm
Pallet weight	548 kg

BALLAST 23005 DIMENSIONS

175 — 990 — 90

SB 5° — 990 — 140
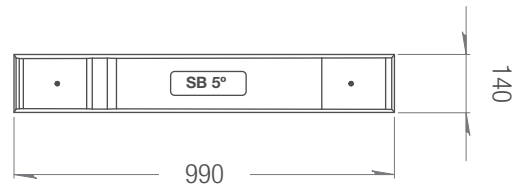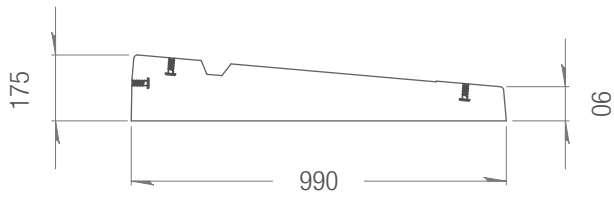
BALLAST 23005.2 DIMENSIONS

275 — 930 — 200

SB 5.2 — 930 — 140
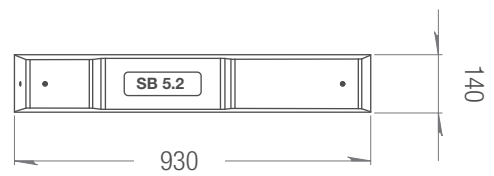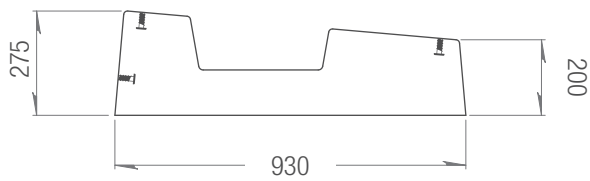
BALLAST 23005.3 DIMENSIONS

380 — 935 — 305

SB 5.3 — 935 — 140
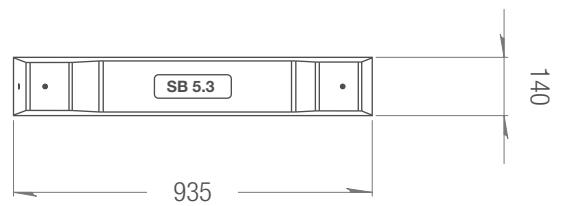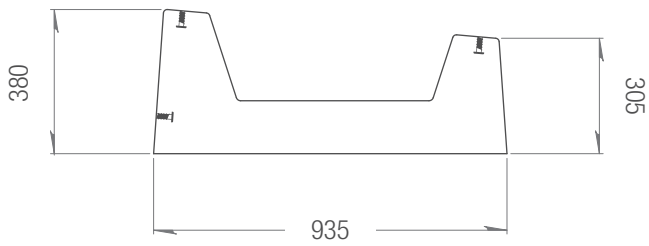
BALLAST 23005.4 DIMENSIONS

485 410 950 SB 5.4 950 140
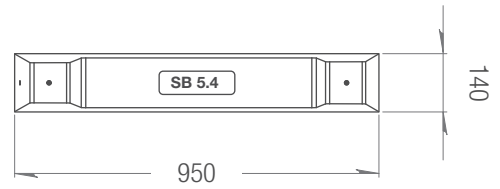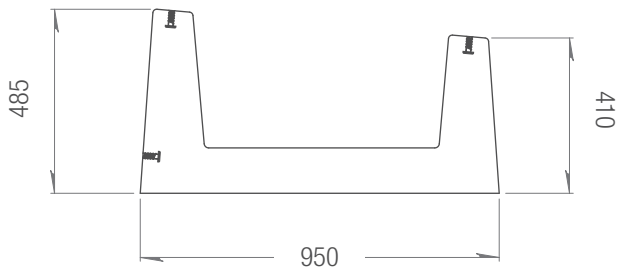
BALLAST 23005.5 DIMENSIONS

590 515 945 SB 5.5 945 135
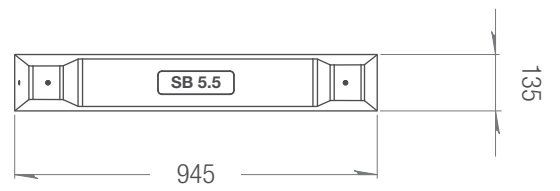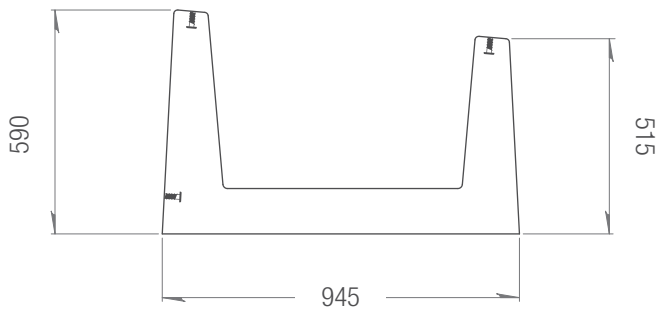
BALLAST 23005.6 DIMENSIONS

700 620 955 SB 5.6 955 130

HORIZONTAL MODULE INSTALLATION - Short Side

K23900-U ⑨

23005.6 ⑦

23005.5 ⑥

23005.4 ⑤

K23811 ⑩

23005.3 ④

K23920_40mm ⑧

23005.2 ③

23005 ②

KGN23115 ①

120

750

990   930   935   950   945   955

Sheathing	Ballast	Ballast	Ballast	Ballast
KGN23115	23005	23005.2	23005.3	23005.4
①	②	③	④	⑤

Ballast	Ballast	Terminal Clamp	Central Clamp	Junction Plate
23005.5	23005.6	K23920/U.50	K23900/U.50	K23811
⑥	⑦	⑧	⑨	⑩

INFO

The distance between the rows is indicative and not binding; it may vary depending on the project.

The measurements are based on the use of a panel with dimensions of 1722mm x 1134mm x 35mm. They vary depending on the size of the panel used.

Follow Sun Ballast®'s assembly instructions.

The dimensions shown in the figure are all expressed in millimeters.

VERTICAL MODULE INSTALLATION - Long Side

23005.6 7
23005.5 6
K23900-U 9
23005.4 5
23005.3 4
K23920_40mm 8
23005.2 3
23005 2
KGN23115 1

95 | 990 | 930 | 935 | 950 | 945 | 955 | 775

Sheathing KGN23115	Ballast 23005	Ballast 23005.2	Ballast 23005.3	Ballast 23005.4
1	2	3	4	5

Ballast 23005.5	Ballast 23005.6	Terminal Clamp K23920/U.50	Central Clamp K23900/U.50
6	7	8	9

INFO

The distance between the rows is indicative and not binding; it may vary depending on the project.

The measurements are based on the use of a panel with dimensions of 1722mm x 1134mm x 35mm. They vary depending on the size of the panel used.

Follow Sun Ballast®'s assembly instructions.

The dimensions shown in the figure are all expressed in millimeters.

BALLAST 5°

ART. 23005

The Single-Row system offers a simple and highly versatile solution: available in a wide range of tilt angles from 0° to 30°, the ballasts allow for mounting of the panels vertically, horizontally, or with an East-West orientation. The mounting system enables flexible modulation of the distance between rows, ensuring an easy and fast installation, even in the presence of roof obstacles.

Tilt angle	5°
Module positioning	Horizontal - Short side / Vertical - Long side
Ballast weight	40 kg
Quantity per pallet	14 pieces
Pallet dimensions	1010x1020x417h mm
Pallet weight	573 kg
Compatible accessories	Sheathing (KGN23115), Universal clamps (K23900/U.50, K23920/U.50), PowerClamp plate (K23900/PWC.50, 23920/PWC), Junction plate (K23804), No-Flex (K23712), Cablowind (CW.CABLOWIND.95 - CW.CABLOWIND.160 - CW.CABLOWIND.185)

BALLAST DIMENSIONS

HORIZONTAL MODULE INSTALLATION - Short Side

K23900-U (4)

23005 (2)

K23920_40mm (3)

23005 (2)

KGN23115 (1)

500

135

225

990

990

Sheathing	Ballast	Terminal Clamp	Central Clamp
KGN23115	23005	K23920/U.50	K23900/U.50
(1)	(2)	(3)	(4)

VERTICAL MODULE INSTALLATION - Long Side

K23900-U **4**

23005 **2**

K23920_40mm **3**

23005 **2**

KGN23115 **1**

600

105

260

990

990

Sheathing
KGN23115

1

Ballast
23005

2

Terminal Clamp
K23920/U.50

3

Central Clamp
K23900/U.50

4

INFO

The distance between the rows is indicative and not binding; it may vary depending on the project.

The measurements are based on the use of a panel with dimensions of 1722mm x 1134mm x 35mm. They vary depending on the size of the panel used.

Follow Sun Ballast®'s assembly instructions.
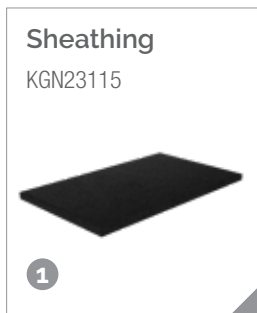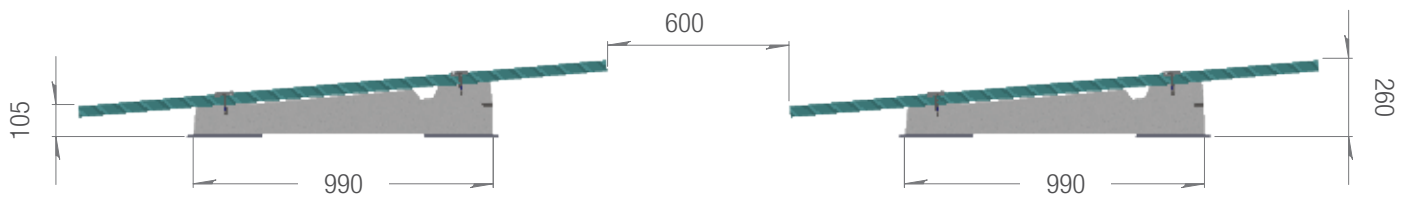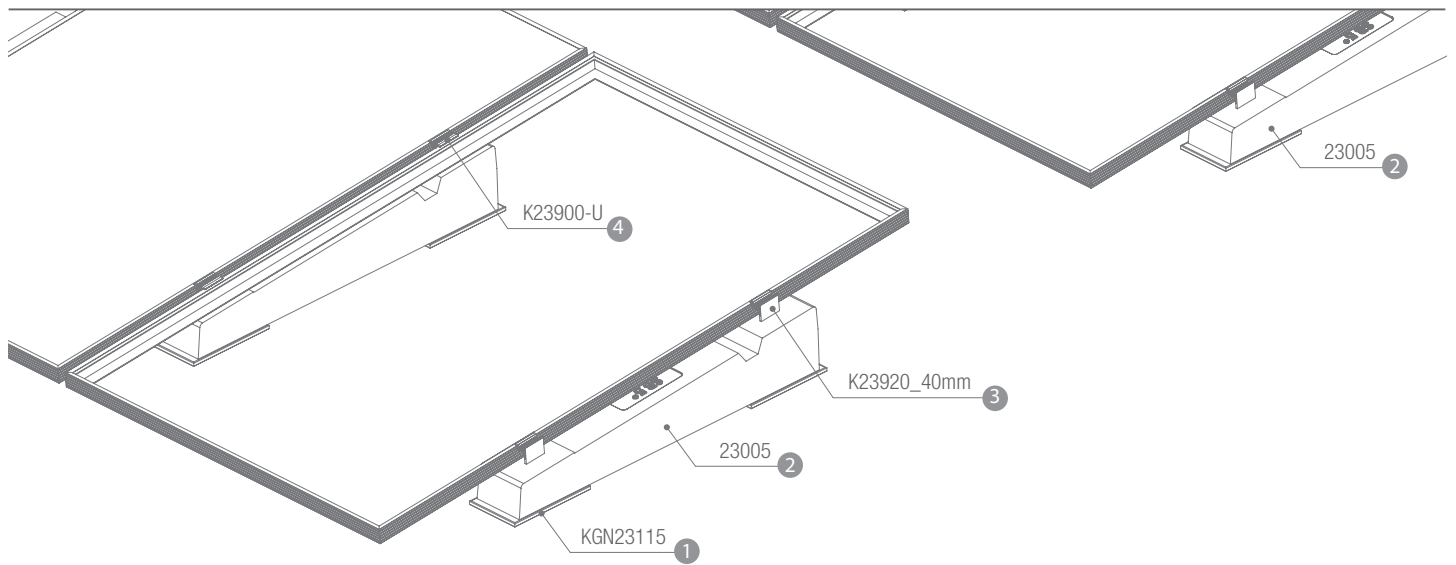
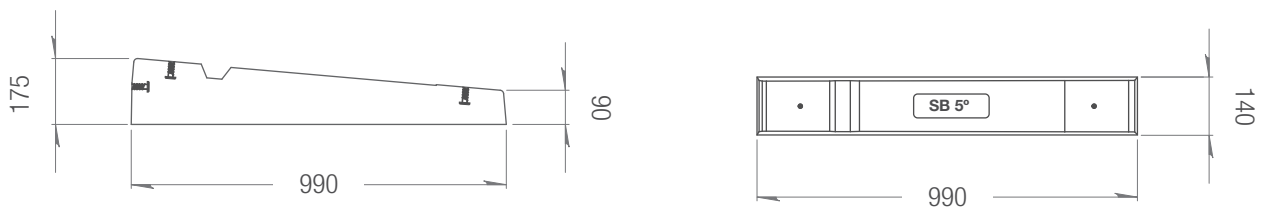The dimensions shown in the figure are all expressed in millimeters.

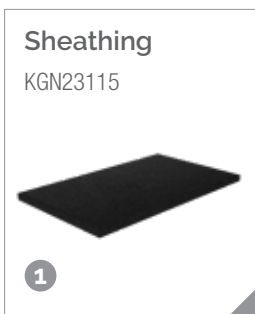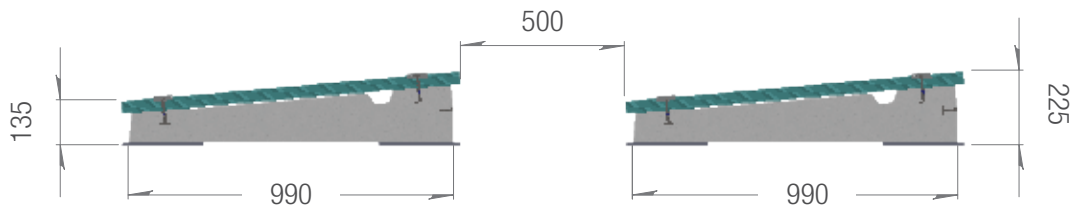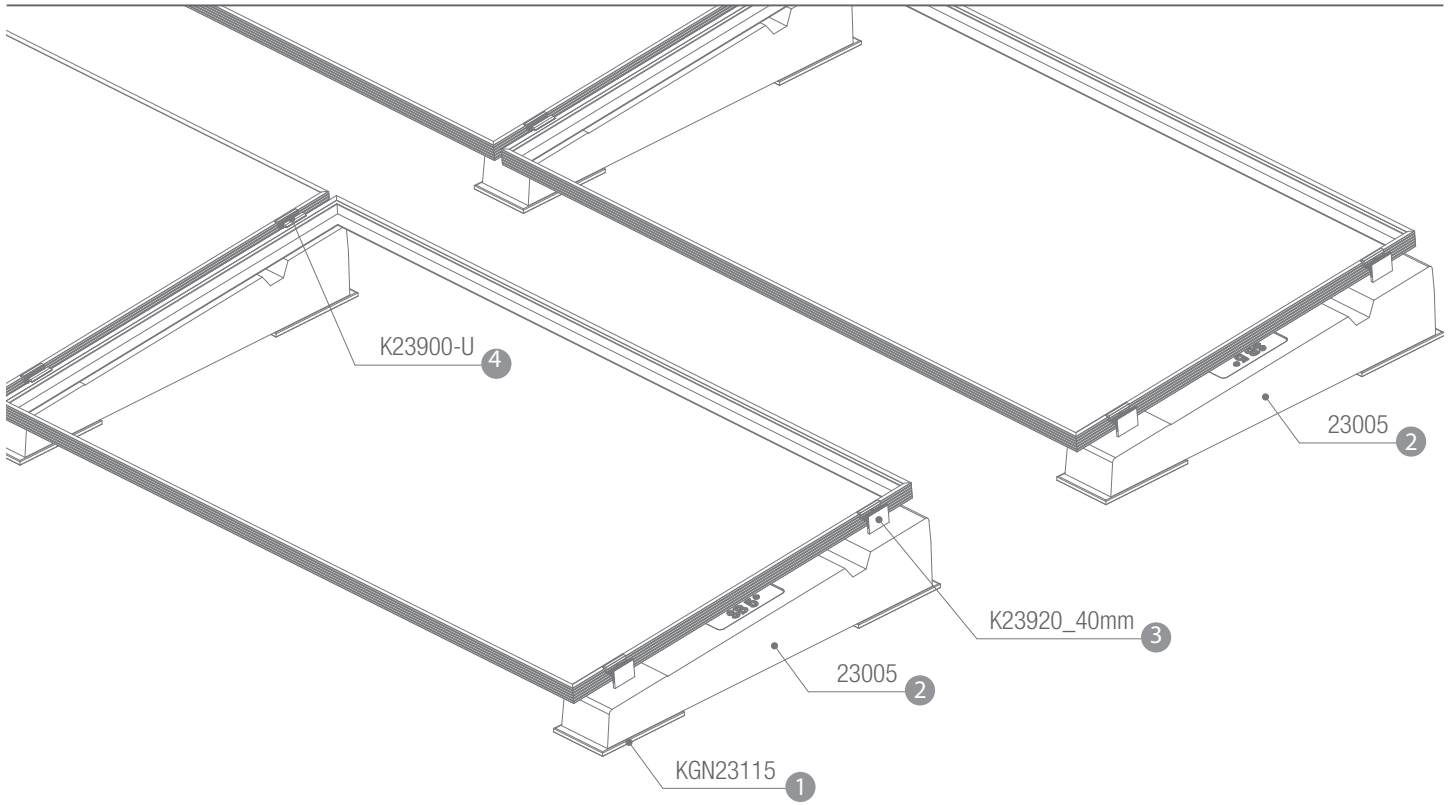# BALLAST 5.2°

ART. 23005.2

The Single-Row system offers a simple and highly versatile solution: available in a wide range of tilt angles from 0° to 30°, the ballasts allow for mounting of the panels vertically, horizontally, or with an East-West orientation. The mounting system enables flexible modulation of the distance between rows, ensuring an easy and fast installation, even in the presence of roof obstacles.

Tilt angle	5.2°
Module positioning	Horizontal - Short side / Vertical - Long side
Ballast weight	55 kg
Quantity per pallet	10 pieces
Pallet dimensions	950x730x627h mm
Pallet weight	560 kg
Compatible accessories	Sheathing (KGN23115), Universal clamps (K23900/U.50, K23920/U.50), PowerClamp plate (K23900/PWC.50, 23920/PWC), Junction plate (K23804), U-Block (23015.CRP - 23030.CRP), No-Flex (K23712) Cablowind (CW.CABLOWIND.95 - CW.CABLOWIND.160 - CW.CABLOWIND.185)

BALLAST DIMENSIONS

275   930   200   SB 5.2   930   140

HORIZONTAL MODULE INSTALLATION - Short Side

K23900-U 4

23005.2 2

K23920_40mm 3

23005.2 2

KGN23115 1

500

245

930

335

930

Sheathing	Ballast	Terminal Clamp	Central Clamp
KGN23115	23005.2	K23920/U.50	K23900/U.50
1	2	3	4

VERTICAL MODULE INSTALLATION - Long Side

K23900-U ④

23005.2 ②

K23920_40mm ③

23005.2 ②

KGN23115 ①

600

210

365

930

930

Sheathing	Ballast	Terminal Clamp	Central Clamp
KGN23115	23005.2	K23920/U.50	K23900/U.50
①	②	③	④

INFO

The distance between the rows is indicative and not binding; it may vary depending on the project.

The measurements are based on the use of a panel with dimensions of 1722mm x 1134mm x 35mm. They vary depending on the size of the panel used.

Follow Sun Ballast®'s assembly instructions.

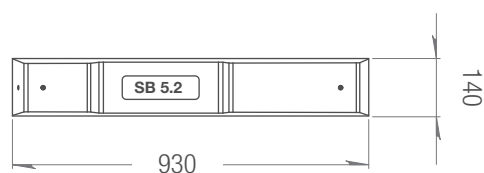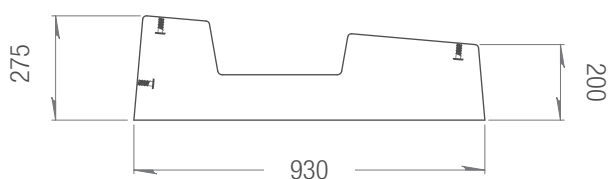The dimensions shown in the figure are all expressed in millimeters.
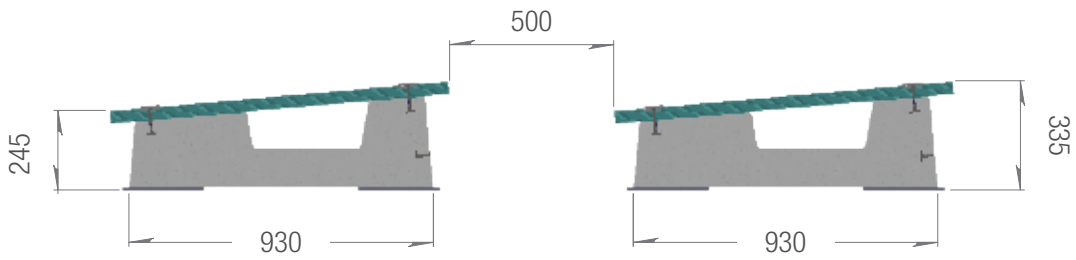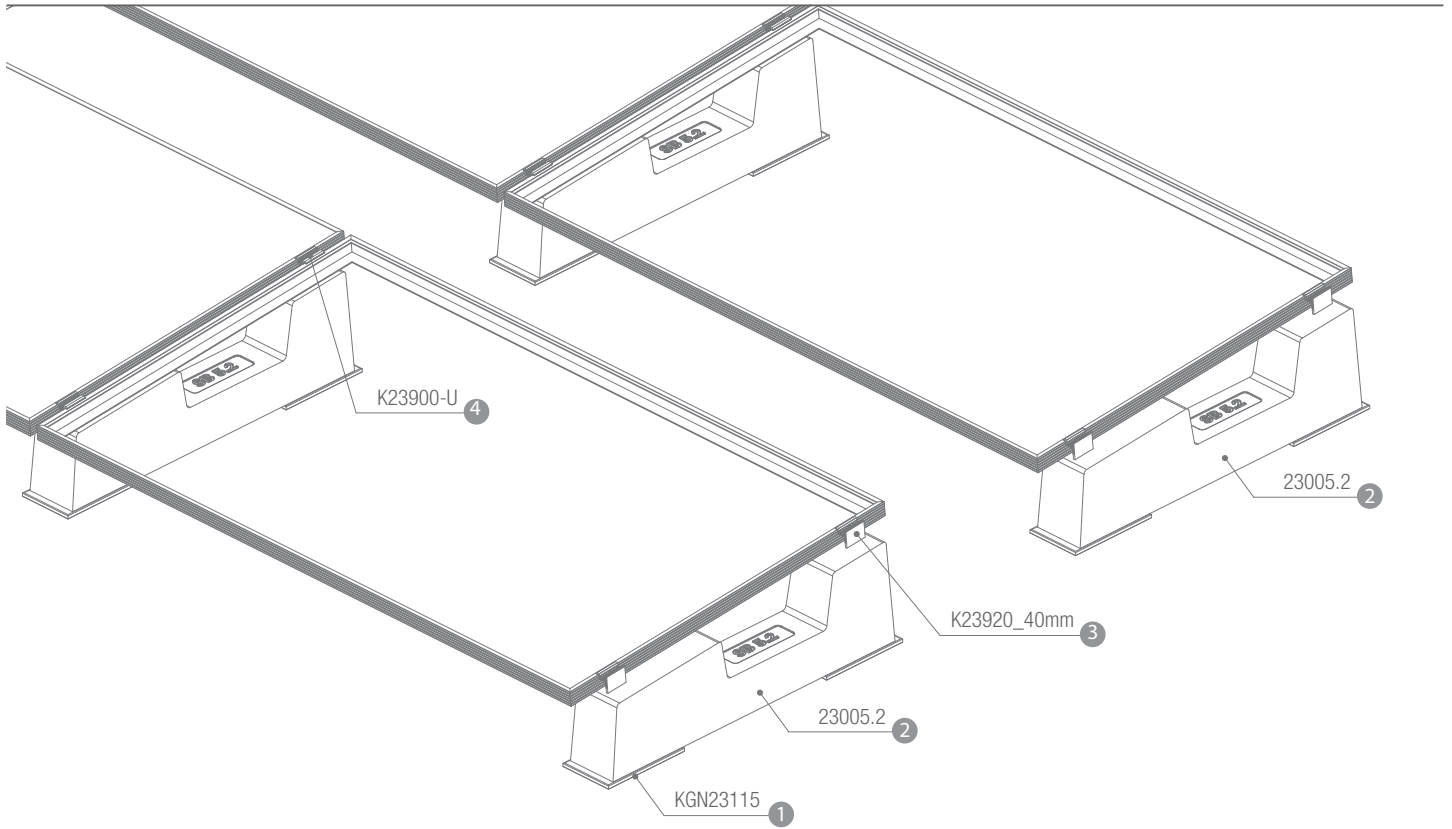
BALLAST 5.3°

ART. 23005.3

The Single-Row system offers a simple and highly versatile solution: available in a wide range of tilt angles from 0° to 30°, the ballasts allow for mounting of the panels vertically, horizontally, or with an East-West orientation. The mounting system enables flexible modulation of the distance between rows, ensuring an easy and fast installation, even in the presence of roof obstacles.

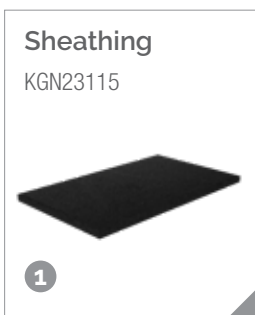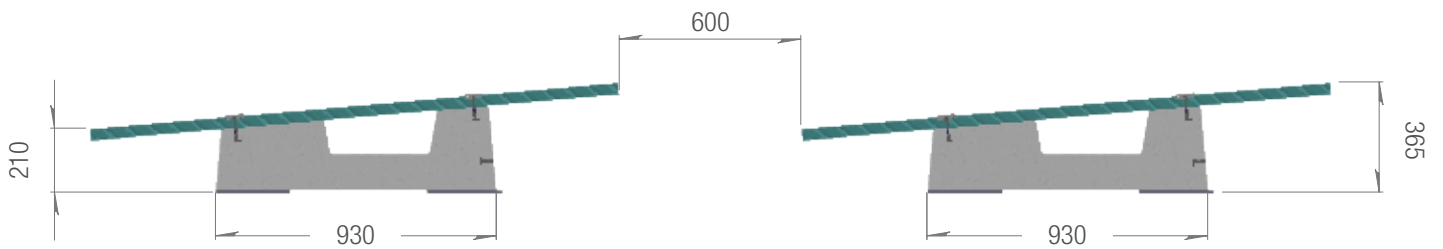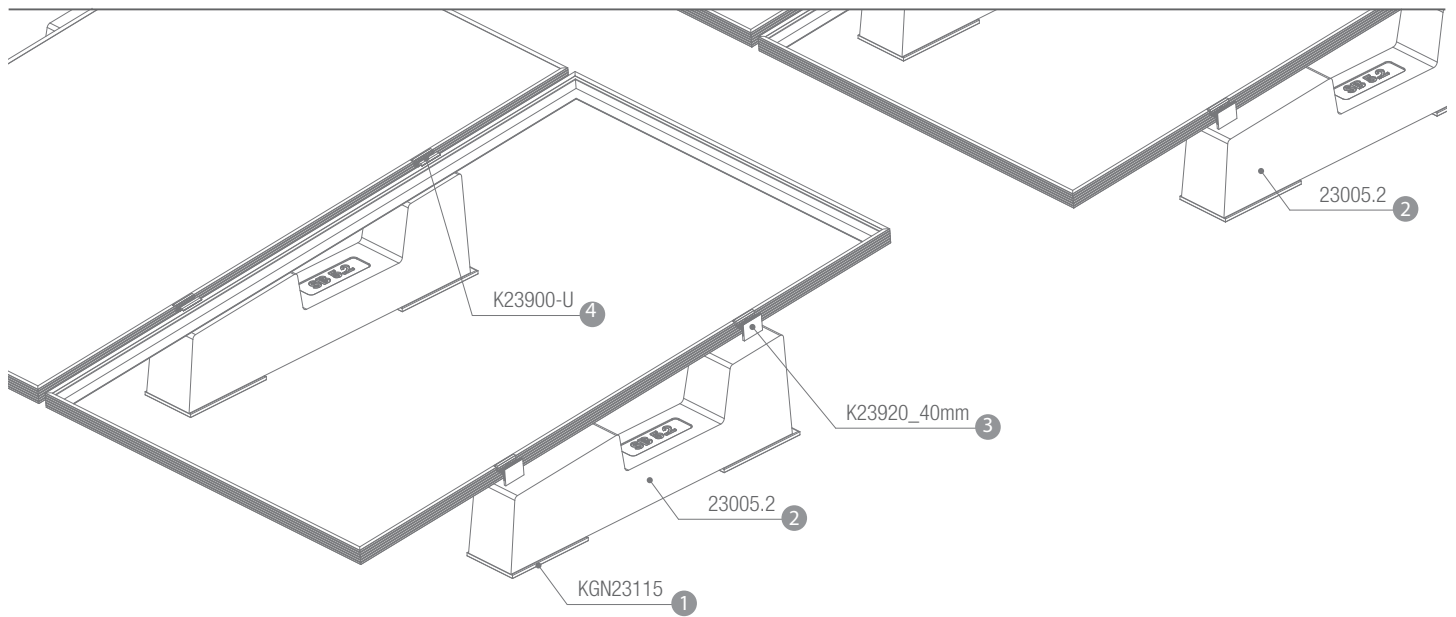|	
Tilt angle	5.3°
Module positioning	Horizontal - Short side / Vertical - Long side
Ballast weight	61 kg
Quantity per pallet	10 pieces
Pallet dimensions	950x730x838h mm
Pallet weight	620 kg
Compatible accessories	Sheathing (KGN23115), Universal clamps (K23900/U.50, K23920/U.50), PowerClamp (K23900/PWC.50, 23920/PWC), Junction plate (K23804), U-Block (23015.CRP - 23030.CRP), No-Flex (K23712) Cablowind (CW.CABLOWIND.95 - CW.CABLOWIND.160 - CW.CABLOWIND.185)

BALLAST DIMENSIONS

SB-1125-1225

HORIZONTAL MODULE INSTALLATION - Short Side

K23900-U **4**

K23920_40mm **3**

23005.3 **2**

23005.3 **2**

KGN23115 **1**

500

350

440

935

935

Sheathing
KGN23115
1

Ballast
23005.3
2

Terminal Clamp
K23920/U.50
3

Central Clamp
K23900/U.50
4

VERTICAL MODULE INSTALLATION - Long Side

K23900-U ④

23005.3 ②

K23920_40mm ③

23005.3 ②

KGN23115 ①

600

315

935

470

935

Sheathing
KGN23115

①

Ballast
23005.3

②

Terminal Clamp
K23920/U.50

③

Central Clamp
K23900/U.50

④

INFO

The distance between the rows is indicative and not binding; it may vary depending on the project.

The measurements are based on the use of a panel with dimensions of 1722mm x 1134mm x 35mm. They vary depending on the size of the panel used.

Follow Sun Ballast®'s assembly instructions.

The dimensions shown in the figure are all expressed in millimeters.

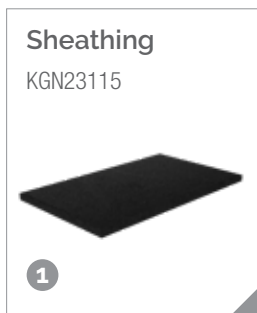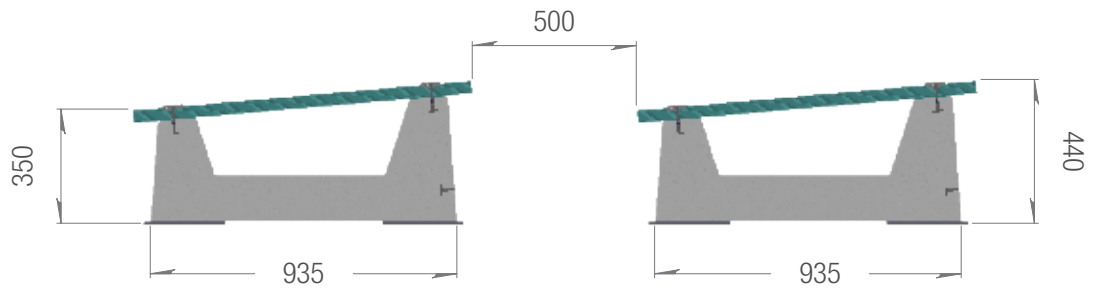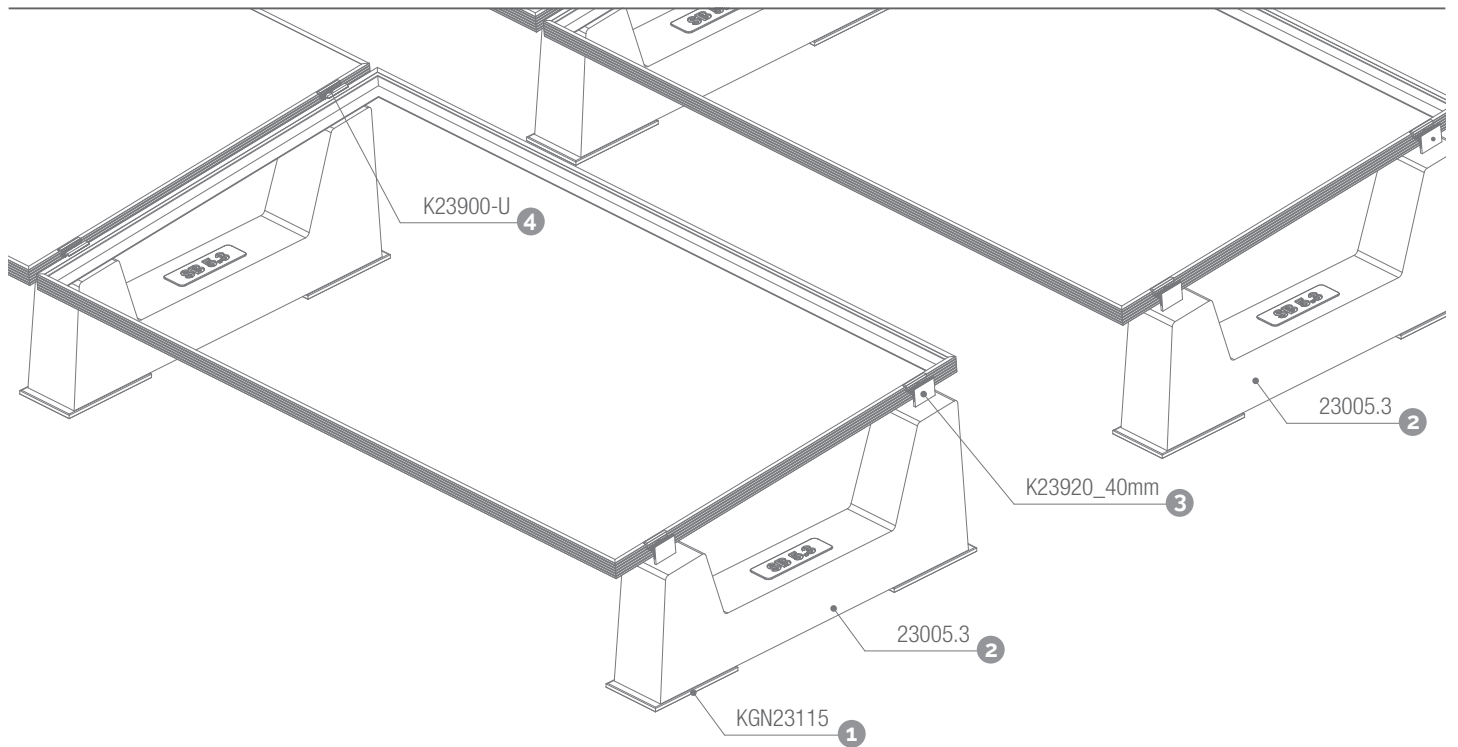# BALLAST 5.4°

ART. 23005.4

The Single-Row system offers a simple and highly versatile solution: available in a wide range of tilt angles from 0° to 30°, the ballasts allow for mounting of the panels vertically, horizontally, or with an East-West orientation. The mounting system enables flexible modulation of the distance between rows, ensuring an easy and fast installation, even in the presence of roof obstacles.

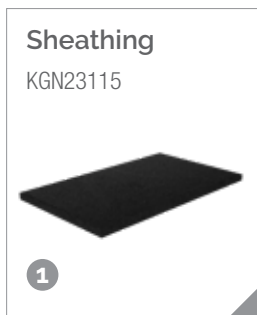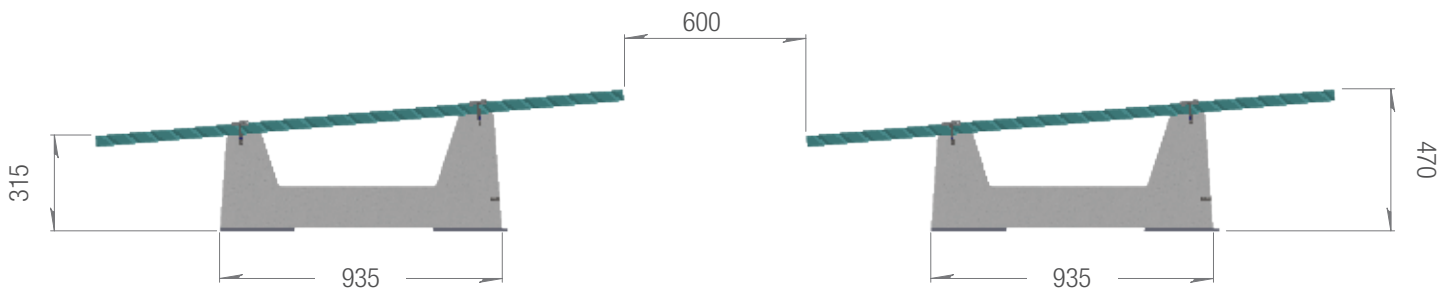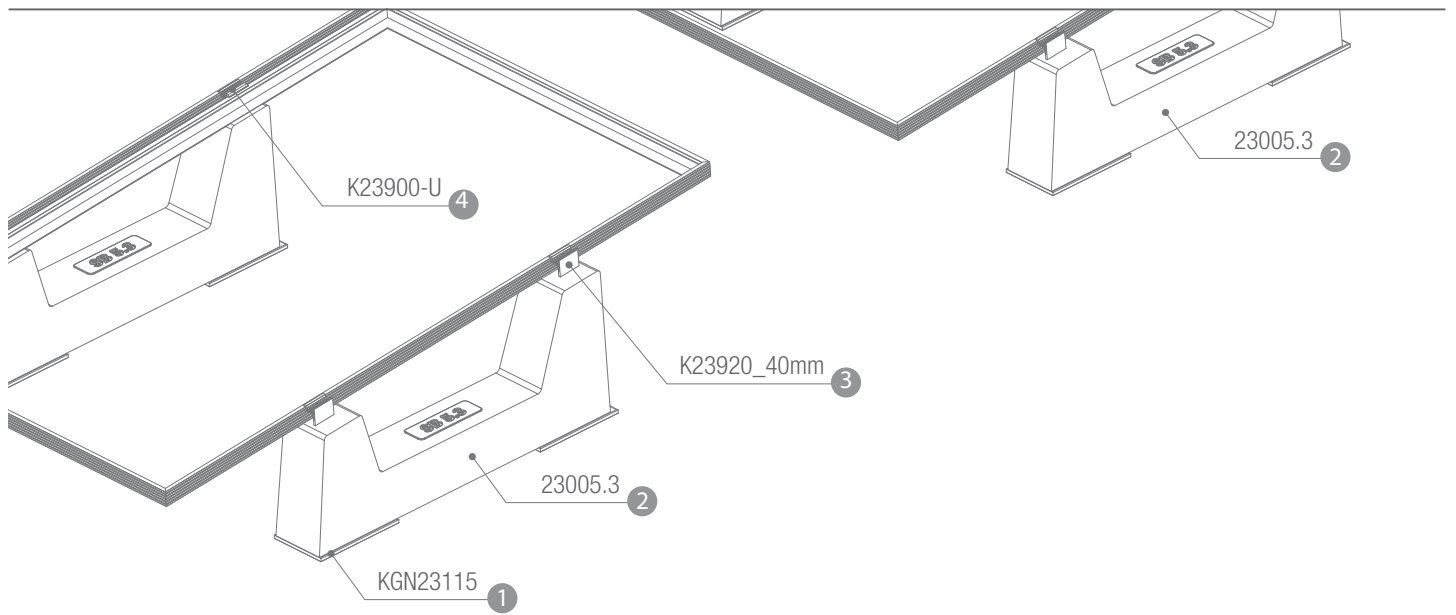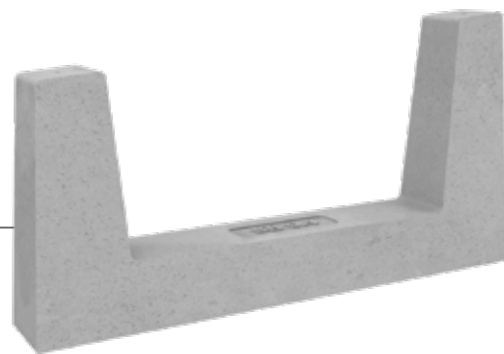|	
Tilt angle	5.4°
Module positioning	Horizontal - Short side / Vertical - Long side
Ballast weight	61 kg
Quantity per pallet	8 pieces
Pallet dimensions	970x590x1050h mm
Pallet weight	498 kg
Compatible accessories	Sheathing (KGN23115), Universal clamps (K23900/U.50, K23920/U.50), PowerClamp (K23900/PWC.50, 23920/PWC), Junction plate (K23804), U-Block (23015.CRP - 23030.CRP), No-Flex (K23712) Cablowind (CW.CABLOWIND.95 - CW.CABLOWIND.160 - CW.CABLOWIND.185)

BALLAST DIMENSIONS

SB-1125-1225

HORIZONTAL MODULE INSTALLATION - Short Side

K23900-U ④

K23920_40mm ③

23005.4 ②

23005.4 ②

KGN23115 ①

500

450

545

950

950

Sheathing	Ballast	Terminal Clamp	Central Clamp
KGN23115	23005.4	K23920/U.50	K23900/U.50
①	②	③	④

VERTICAL MODULE INSTALLATION - Long Side

K23900-U ④

23005.4 ②

K23920_40mm ③

23005.4 ②

KGN23115 ①

600

420

575

950

950

Sheathing	Ballast	Terminal Clamp	Central Clamp
KGN23115	23005.4	K23920/U.50	K23900/U.50
①	②	③	④

INFO

The distance between the rows is indicative and not binding; it may vary depending on the project.

The measurements are based on the use of a panel with dimensions of 1722mm x 1134mm x 35mm. They vary depending on the size of the panel used.

Follow Sun Ballast®'s assembly instructions.

The dimensions shown in the figure are all expressed in millimeters.

BALLAST 5.5°

ART. 23005.5

The Single-Row system offers a simple and highly versatile solution: available in a wide range of tilt angles from 0° to 30°, the ballasts allow for mounting of the panels vertically, horizontally, or with an East-West orientation. The mounting system enables flexible modulation of the distance between rows, ensuring an easy and fast installation, even in the presence of roof obstacles.
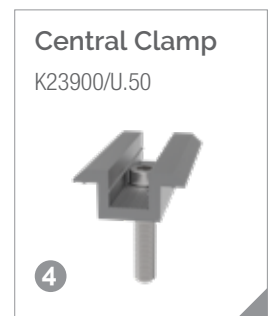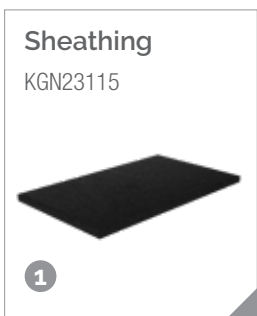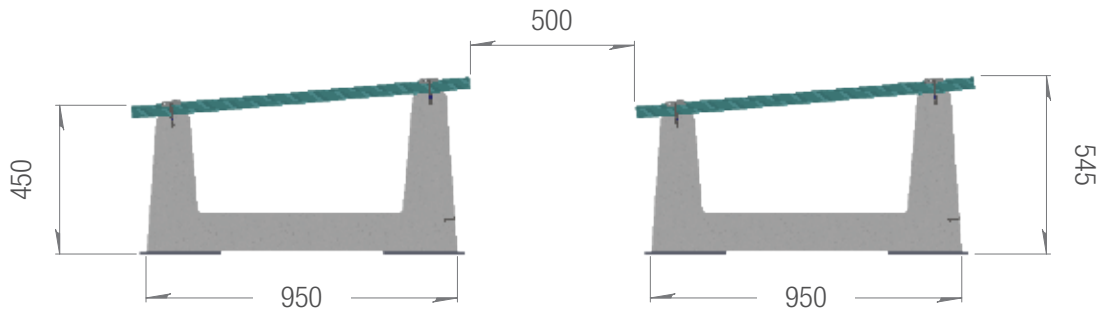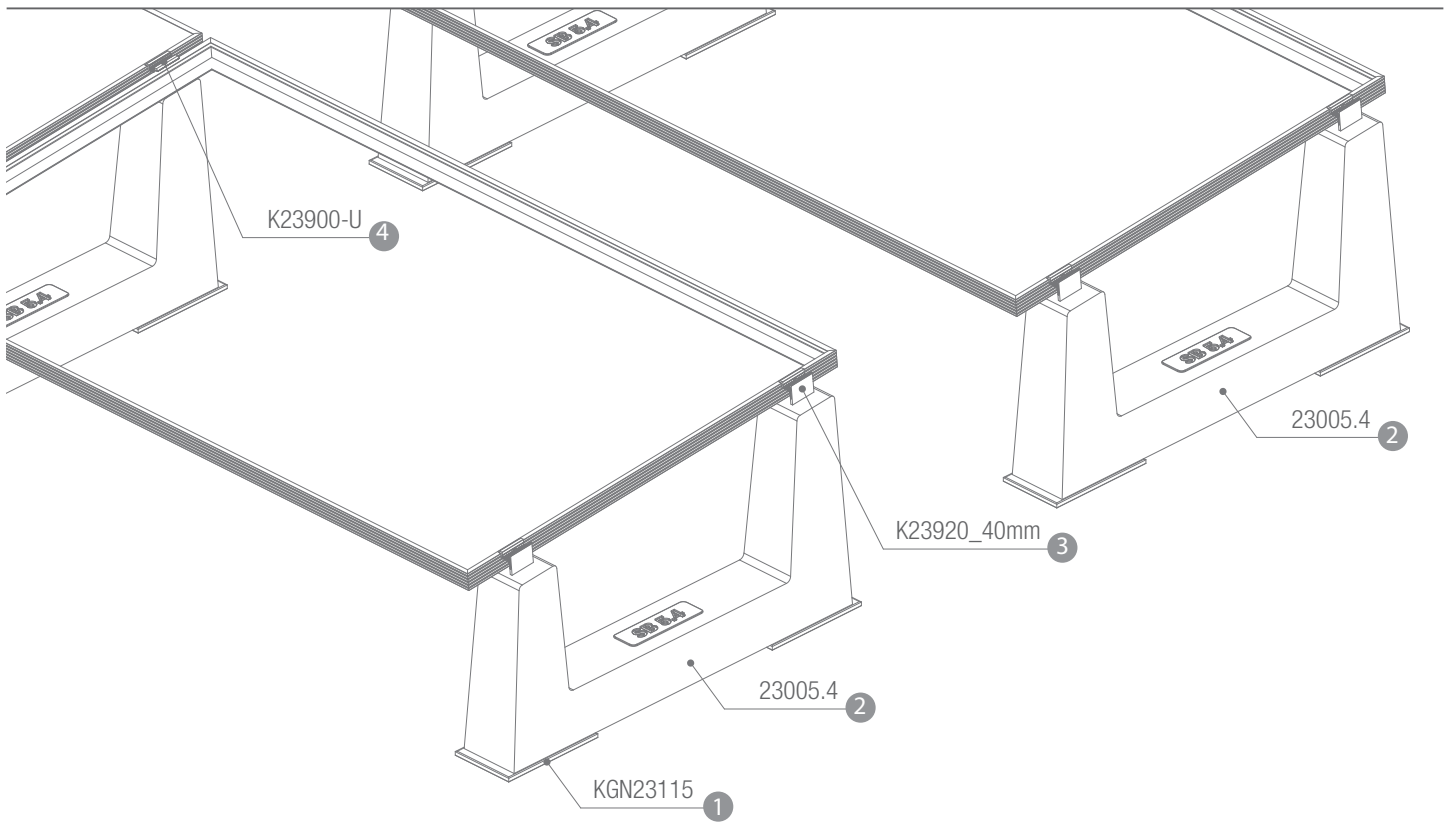
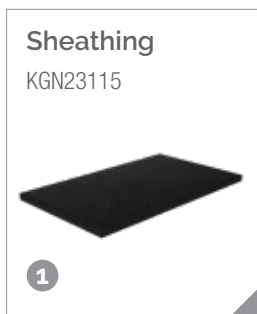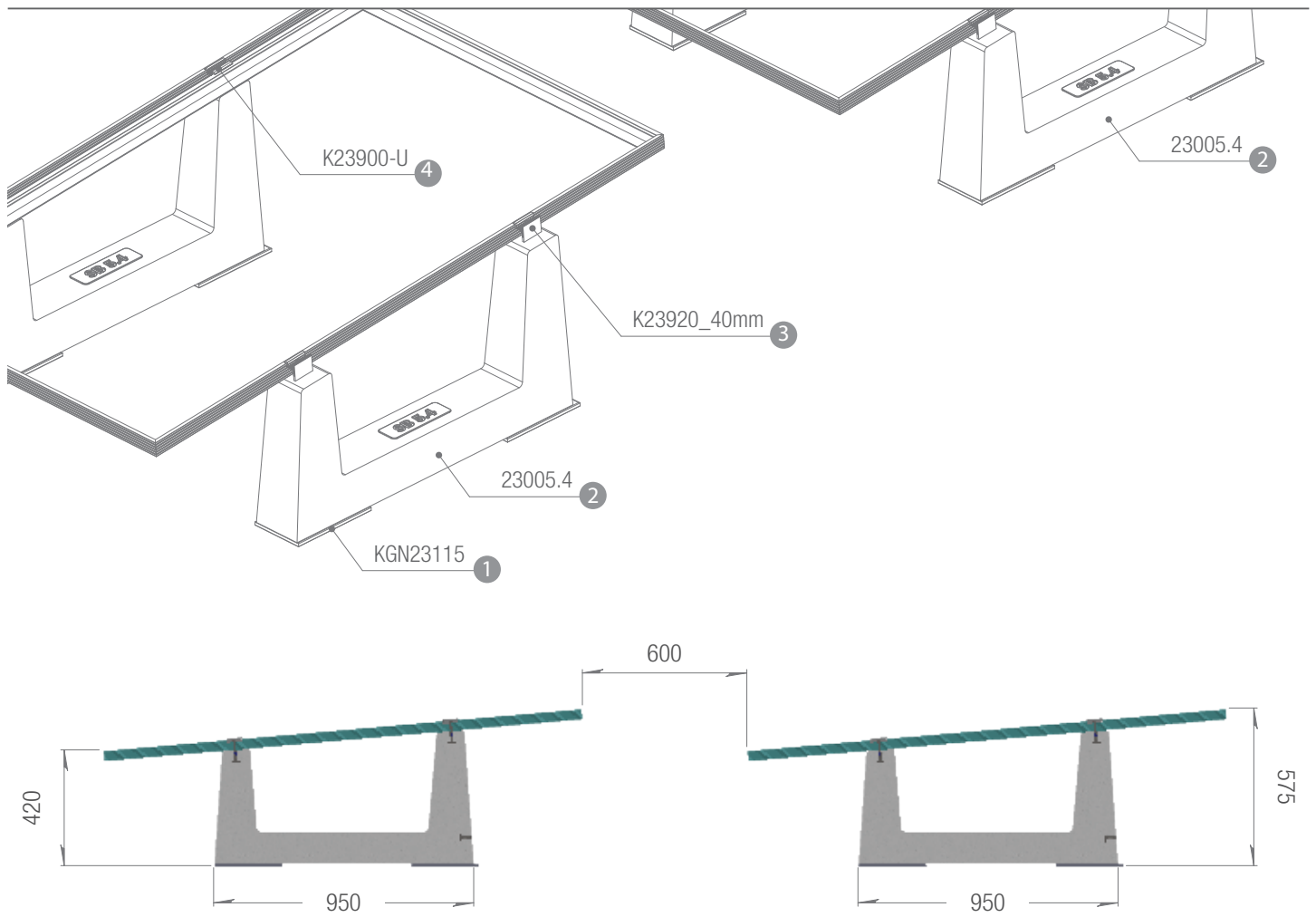|	
Tilt angle	5.5°
Module positioning	Horizontal - Short side / Vertical - Long side
Ballast weight	61 kg
Quantity per pallet	8 pieces
Pallet dimensions	1100x670x629h mm
Pallet weight	500 kg
Compatible accessories	Sheathing (KGN23115), Universal clamps (K23900/U.50, K23920/U.50), PowerClamp (K23900/PWC.50, 23920/PWC), Junction plate (K23804), U-Block (23015.CRP - 23030.CRP), No-Flex (K23712) Cablowind (CW.CABLOWIND.95 - CW.CABLOWIND.160 - CW.CABLOWIND.185)

BALLAST DIMENSIONS

HORIZONTAL MODULE INSTALLATION - Short Side

K23900-U ④

23005.5 ②

K23920_40mm ③

23005.5 ②

KGN23115 ①

500

560

650

945

945

Sheathing	Ballast	Terminal Clamp	Central Clamp
KGN23115	23005.5	K23920/U.50	K23900/U.50
①	②	③	④

VERTICAL MODULE INSTALLATION - Long Side

K23900-U 4

K23920_40mm 3

23005.5 2

23005.5 2

KGN23115 1

600

530

680

945

945

Sheathing	Ballast	Terminal Clamp	Central Clamp
KGN23115	23005.5	K23920/U.50	K23900/U.50
1	2	3	4

INFO

The distance between the rows is indicative and not binding; it may vary depending on the project.

The measurements are based on the use of a panel with dimensions of 1722mm x 1134mm x 35mm. They vary depending on the size of the panel used.

Follow Sun Ballast®'s assembly instructions.

The dimensions shown in the figure are all expressed in millimeters.
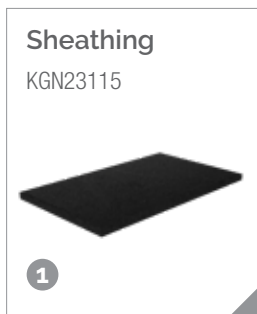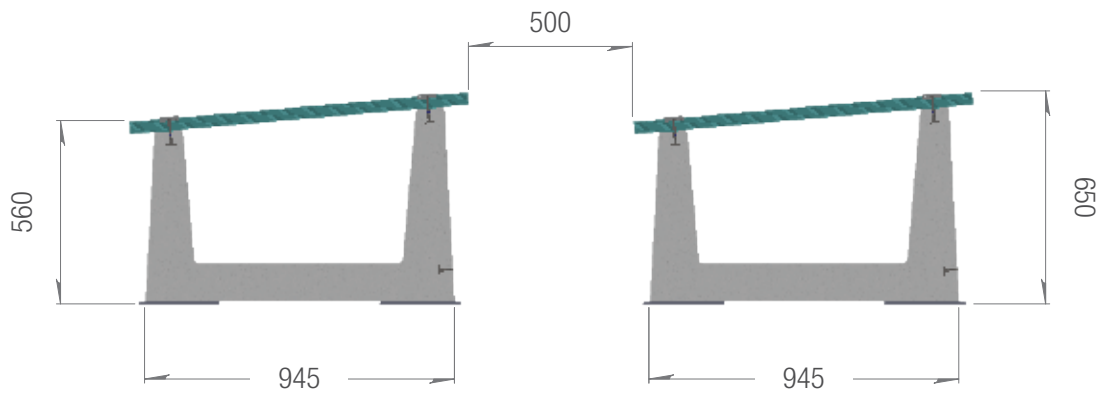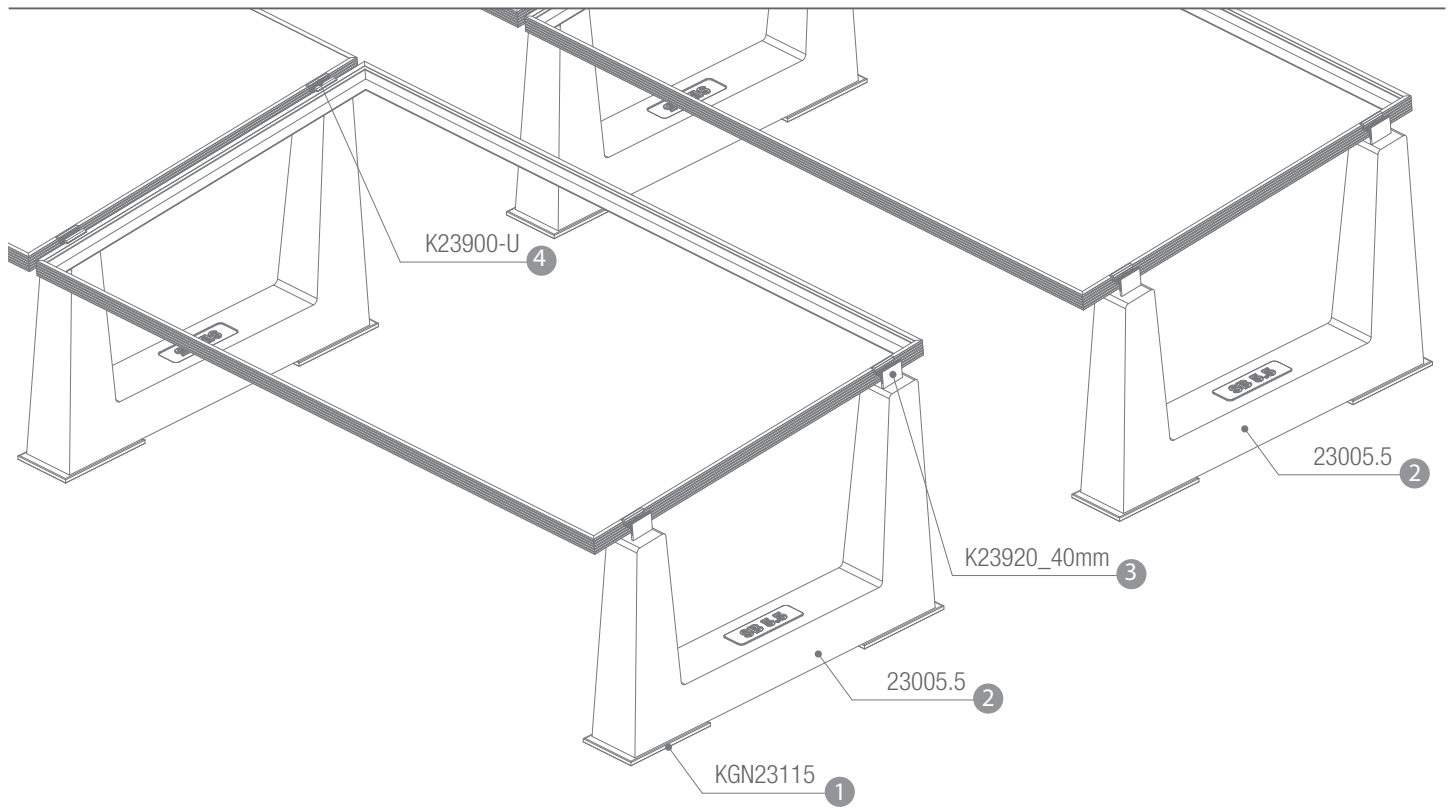
BALLAST 5.6°

ART. 23005.6

The Single-Row system offers a simple and highly versatile solution: available in a wide range of tilt angles from 0° to 30°, the ballasts allow for mounting of the panels vertically, horizontally, or with an East-West orientation. The mounting system enables flexible modulation of the distance between rows, ensuring an easy and fast installation, even in the presence of roof obstacles.

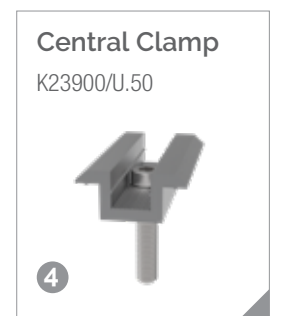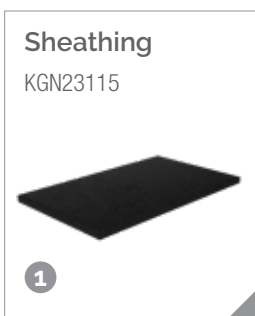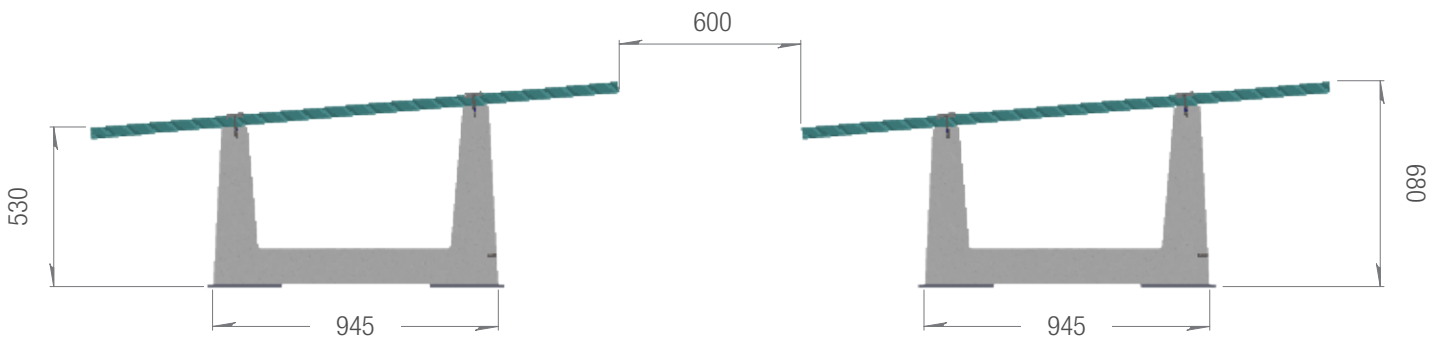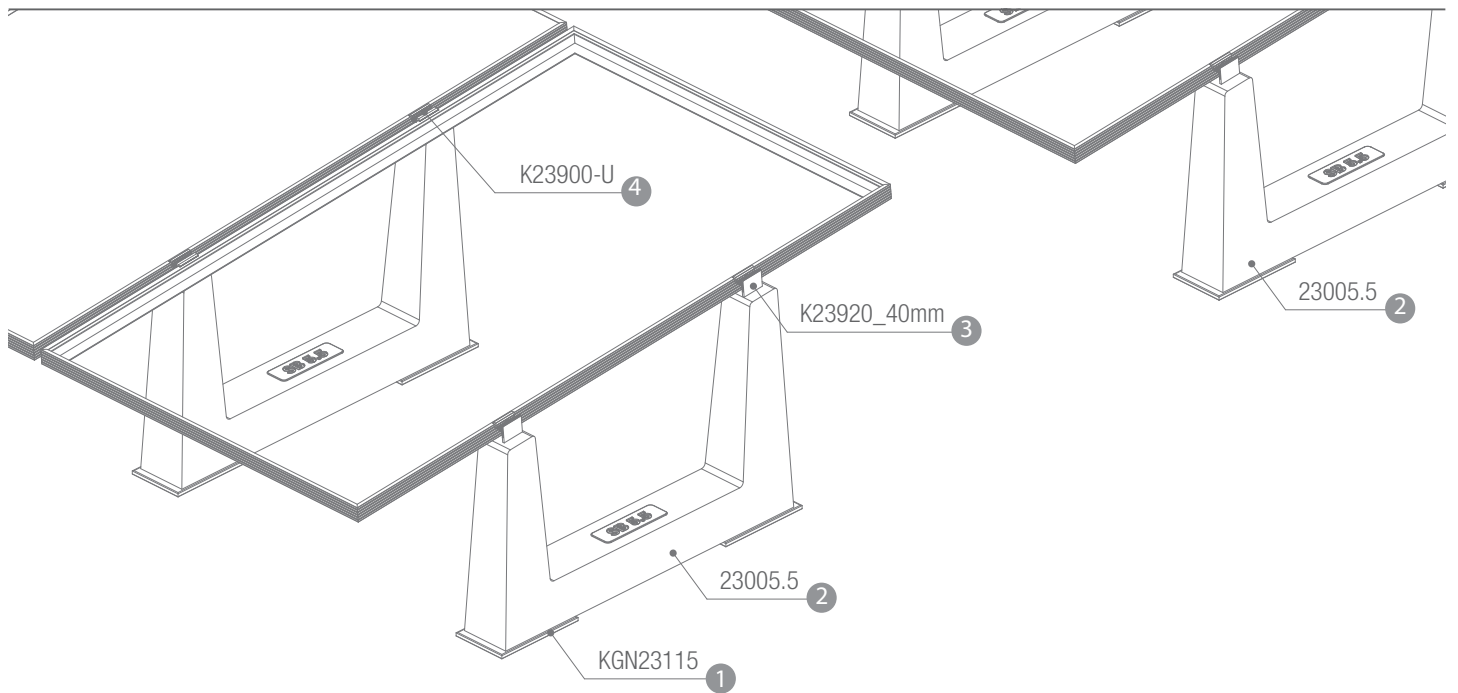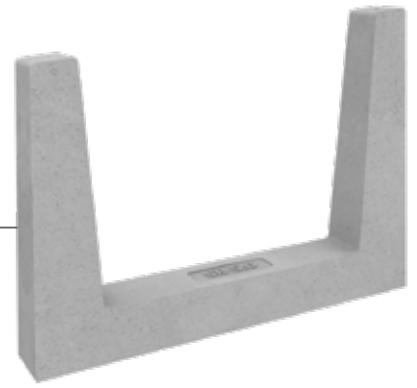|	
Tilt angle	5.6°
Module positioning	Horizontal - Short side / Vertical - Long side
Ballast weight	67 kg
Quantity per pallet	8 pieces
Pallet dimensions	1100x770x629h mm
Pallet weight	548 kg
Compatible accessories	Sheathing (KGN23115), Universal clamps (K23900/U.50, K23920/U.50), PowerClamp (K23900/PWC.50, 23920/PWC), Junction plate (K23804), U-Block (23015.CRP - 23030.CRP), No-Flex (K23712) Cablowind (CW.CABLOWIND.95 - CW.CABLOWIND.160 - CW.CABLOWIND.185)

BALLAST DIMENSIONS

HORIZONTAL MODULE INSTALLATION - Short Side

K23900-U 4

23005.6 2

K23920_40mm 3

23005.6 2

KGN23115 1

500

665

755

955

955

Sheathing KGN23115	**Ballast** 23005.6	**Terminal Clamp** K23920/U.50	**Central Clamp** K23900/U.50
1	2	3	4

VERTICAL MODULE INSTALLATION - Long Side

K23900-U ④

23005.6 ②

K23920_40mm ③

23005.6 ②

KGN23115 ①

600

635

955

785

955

Sheathing	Ballast	Terminal Clamp	Central Clamp
KGN23115	23005.6	K23920/U.50	K23900/U.50
①	②	③	④

INFO

The distance between the rows is indicative and not binding; it may vary depending on the project.

The measurements are based on the use of a panel with dimensions of 1722mm x 1134mm x 35mm. They vary depending on the size of the panel used.

Follow Sun Ballast®'s assembly instructions.

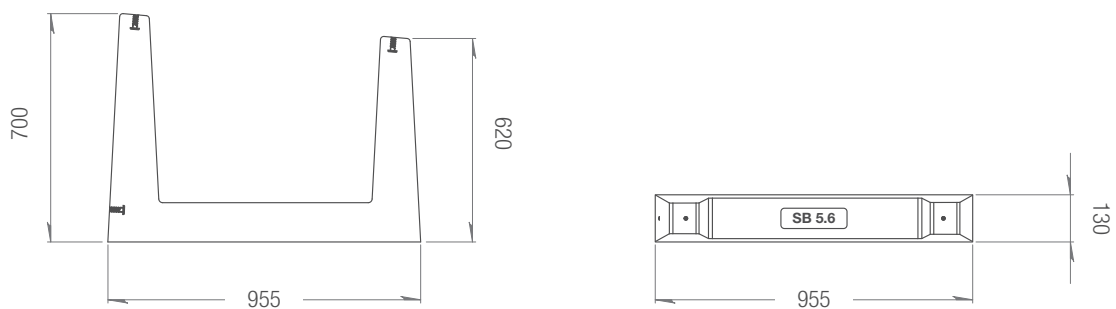The dimensions shown in the figure are all expressed in millimeters.
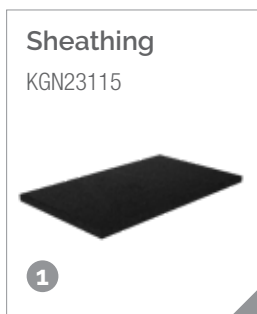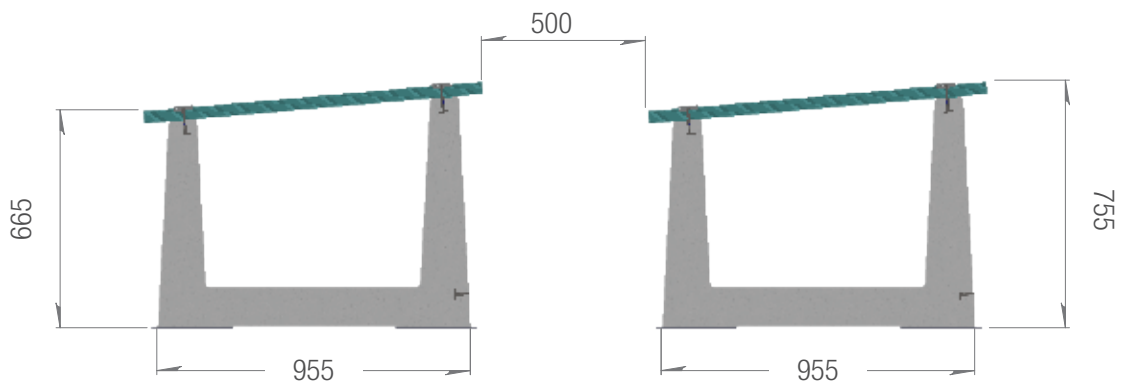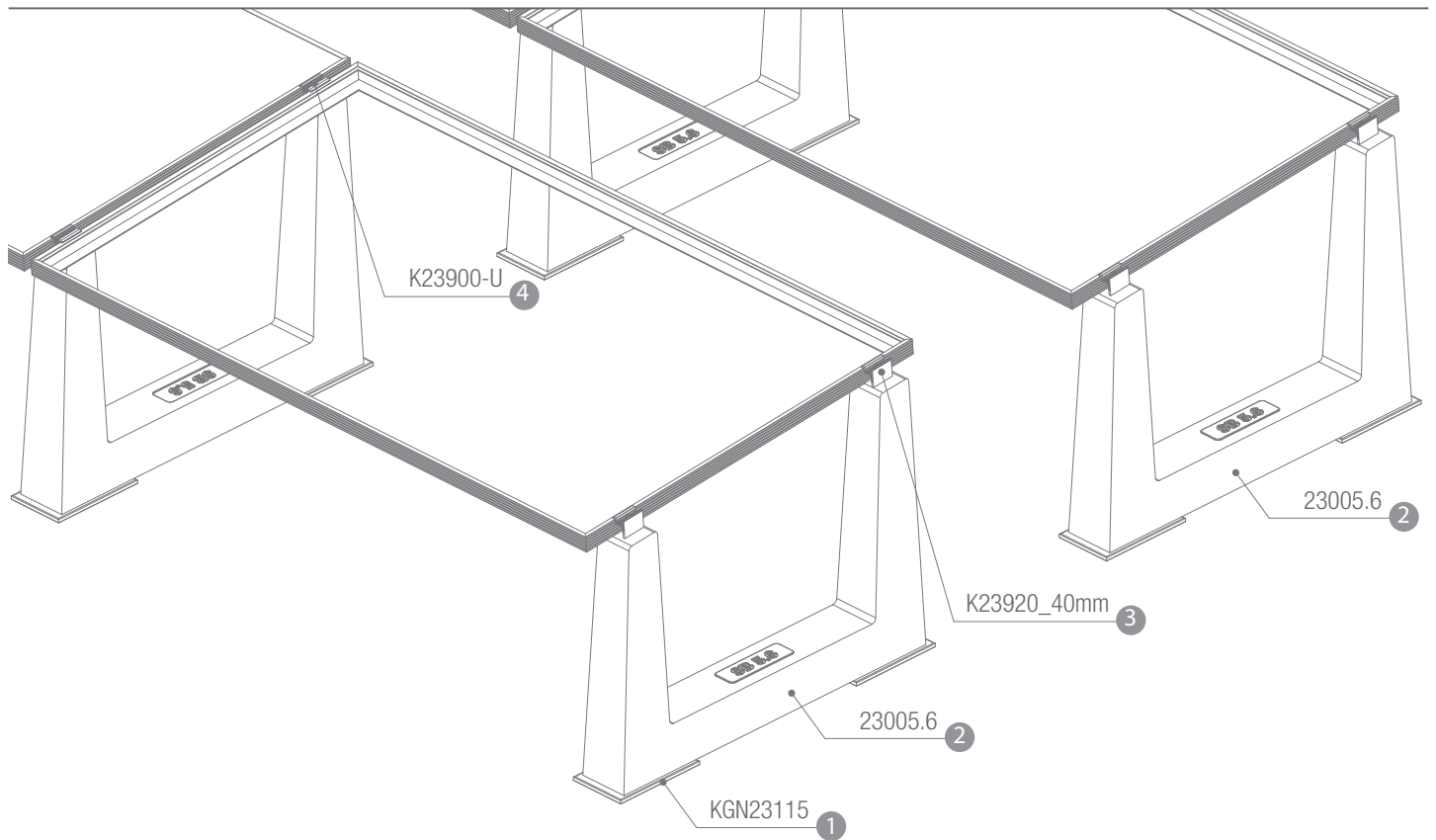
SAIL 10°

ART. 23010/.2/.3

The Sail system with a 10° tilt angle allows the installation of three consecutive rows of photovoltaic panels, with adjustable spacing between modules to fully optimize the available space. The ballasts can also be used in single-row configurations, ensuring quick and easy management of roof obstacles.

Tilt angle	10°
Module positioning	Horizontal - Short side / Vertical - Long side
Compatible accessories	Sheathing (KGN23115), Universal clamps (K23900/U.50, K23920/U.50), PowerClamp (K23900/PWC.50, 23920/PWC), Junction plate for Sail system (23811), Junction plate (K23804), U-Block (23015.CRP - 23030.CRP), Cablowind (CW.CABLOWIND.95 - CW.CABLOWIND.160 - CW.CABLOWIND.185), No-Flex (K23712)

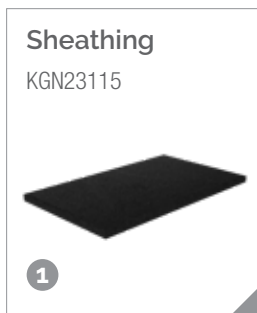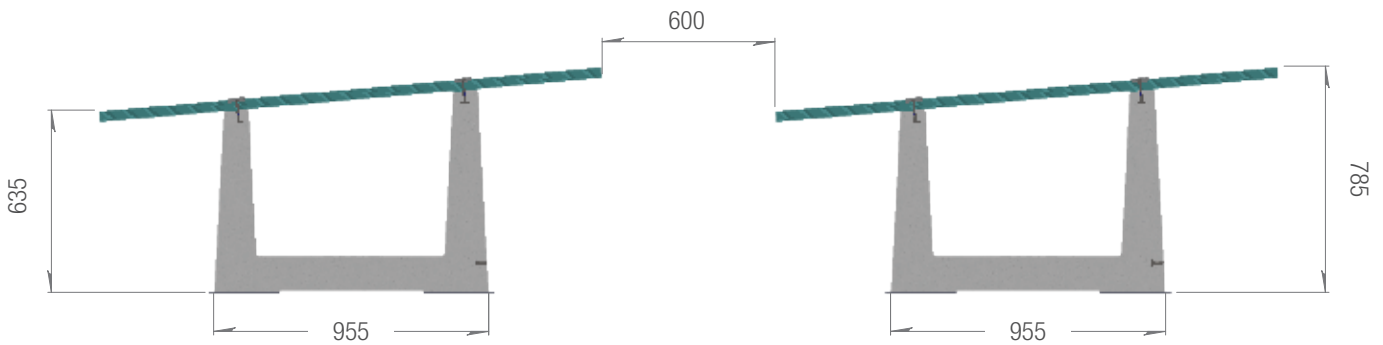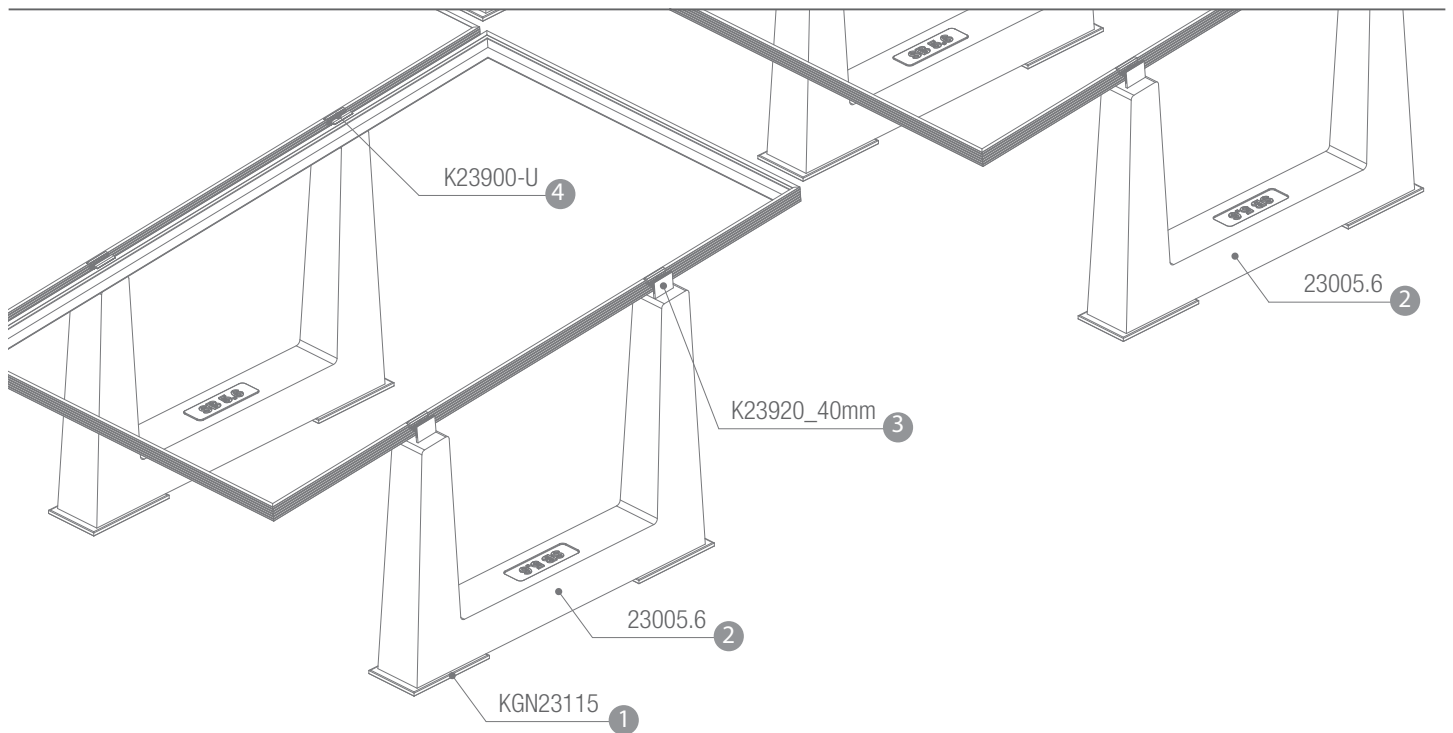### BALLAST ART. 23010

Ballast weight	60 kg	**Pallet dimensions**	1000x720x682h mm
Quantity per pallet	10 pieces	**Pallet weight**	612 kg

BALLAST ART. 23010.2

Ballast weight	60 kg	**Pallet dimensions**	1100x570x729h mm
Quantity per pallet	8 pieces	**Pallet weight**	494 kg

BALLAST ART. 23010.3

Ballast weight	65 kg	**Pallet dimensions**	1125x775x668h mm
Quantity per pallet	8 pieces	**Pallet weight**	537 kg

BALLAST 23010 DIMENSIONS

350
180
990
SB 10°
990
135
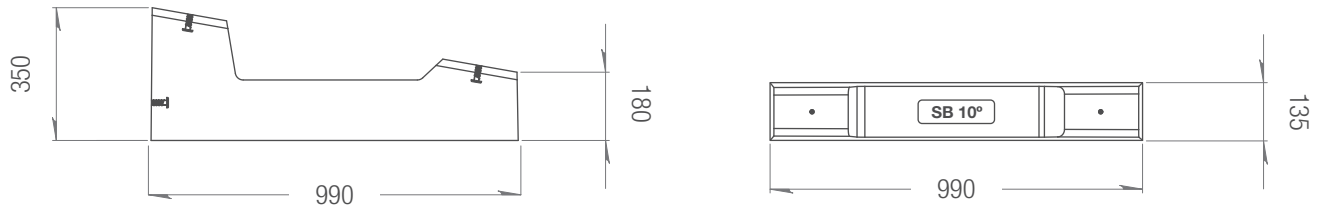
BALLAST 23010.2 DIMENSIONS

550
400
925
SB 10.2
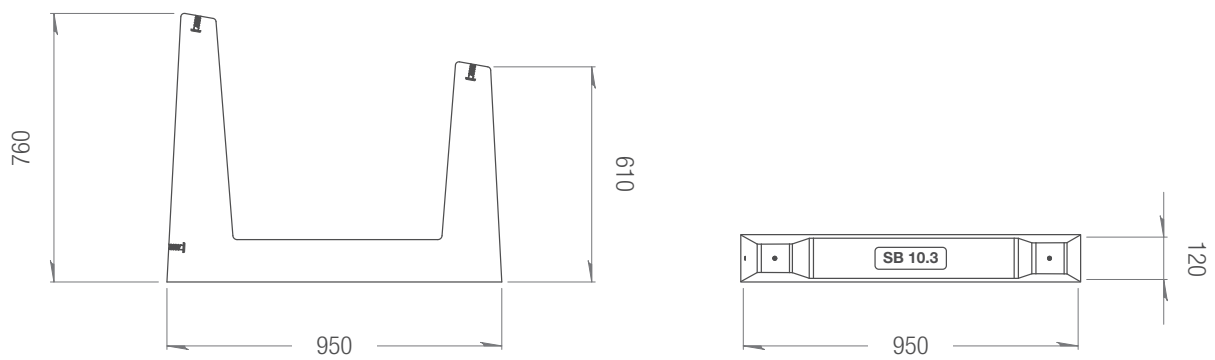925
135
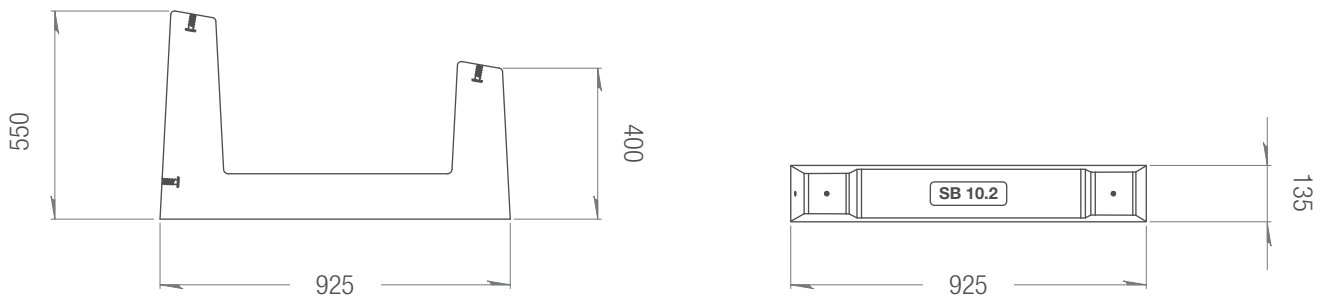
BALLAST 23010.3 DIMENSIONS

760
610
950
SB 10.3
950
120

HORIZONTAL MODULE INSTALLATION – Short Side

K23900-U ⑥

23010.3 ④

K23920_40mm ⑤

23010.2 ③

23010 ②

KGN23115 ①

825

224

990   925   950

Sheathing	Ballast	Ballast	Ballast	Terminal Clamp	Central Clamp	Junction Plate
KGN23115	23010	23010.2	23010.3	K23920/U.50	K23900/U.50	K23811
①	②	③	④	⑤	⑥	⑦

INFO

The distance between the rows is indicative and not binding; it may vary depending on the project.

The measurements are based on the use of a panel with dimensions of 1722mm x 1134mm x 35mm. They vary depending on the size of the panel used.

Follow Sun Ballast®'s assembly instructions

The dimensions shown in the figure are all expressed in millimeters.

VERTICAL MODULE INSTALLATION – Long Side

6 K23900-U

K23920_40mm 5

23010.3 4

23010.2 3

23010 2

KGN23115 1

160

890

990

925

950

Sheathing	Ballast	Ballast	Ballast	Terminal Clamp	Central Clamp
KGN23115	23010	23010.2	23010.3	K23920/U.50	K23900/U.50
1	2	3	4	5	6

INFO

The distance between the rows is indicative and not binding; it may vary depending on the project.
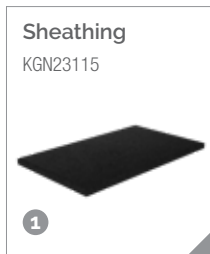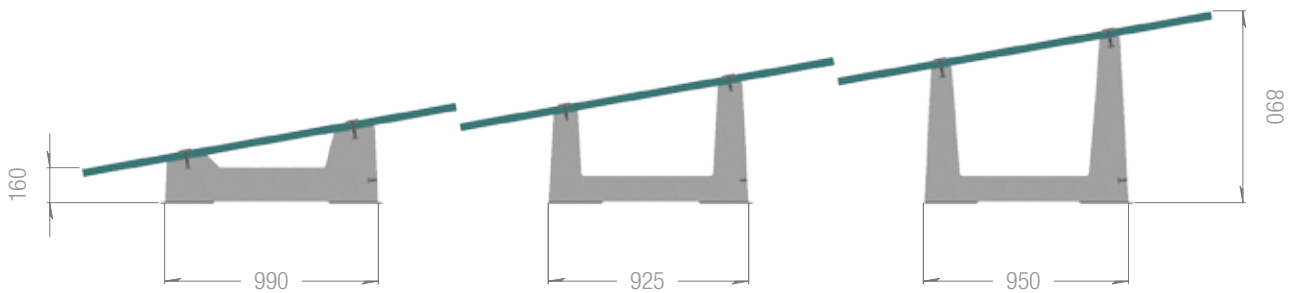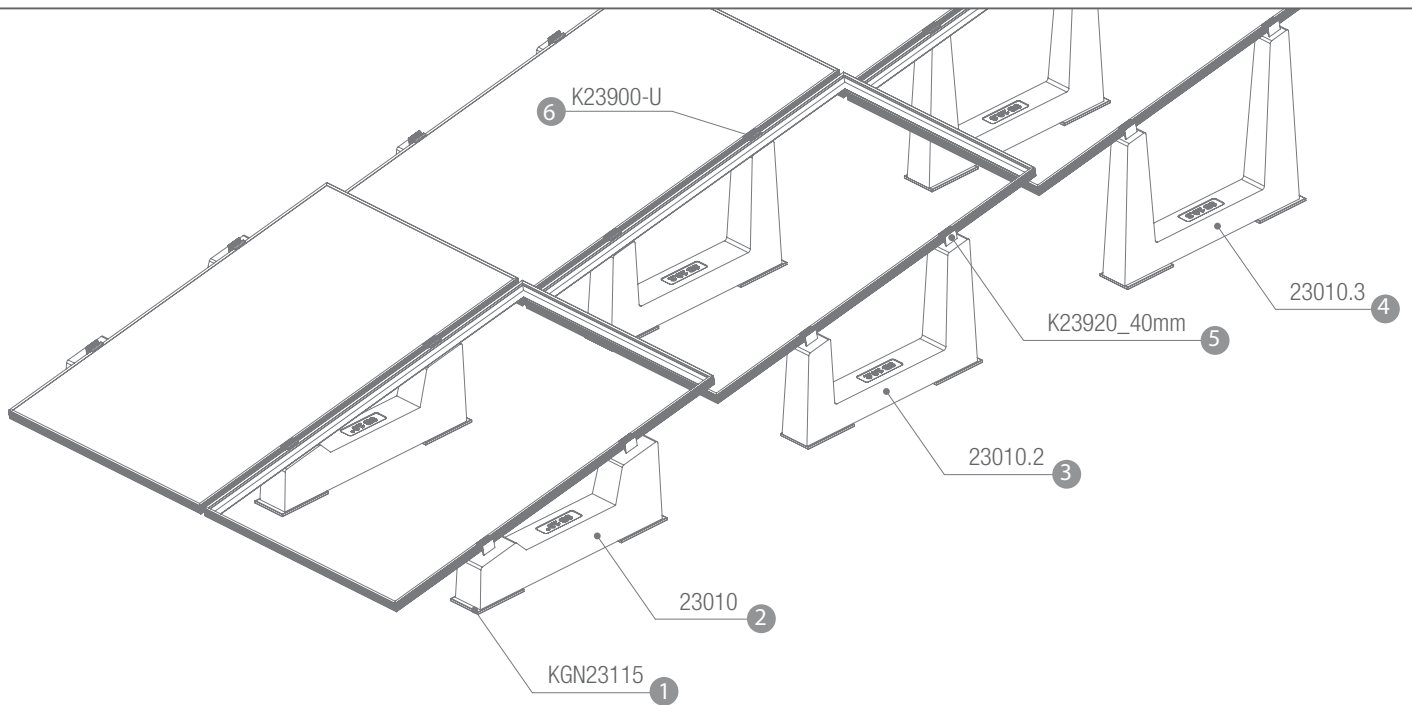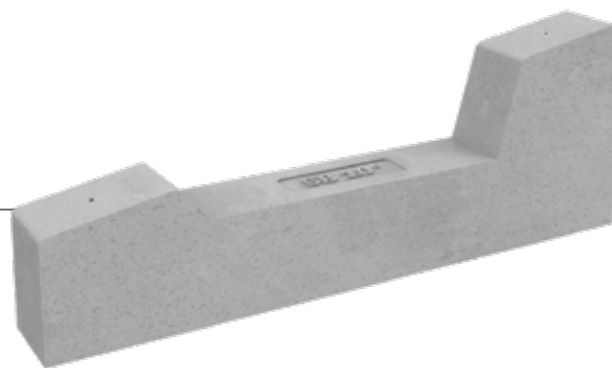
The measurements are based on the use of a panel with dimensions of 1722mm x 1134mm x 35mm. They vary depending on the size of the panel used.

Follow Sun Ballast®'s assembly instructions.

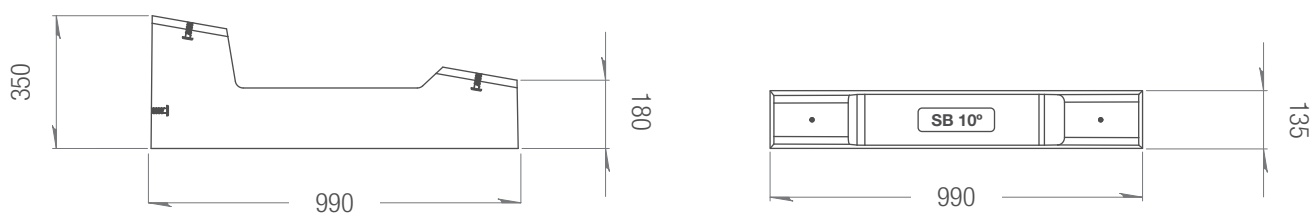The dimensions shown in the figure are all expressed in millimeters.

BALLAST 10°

ART. 23010

The Single-Row system offers a simple and highly versatile solution: available in a wide range of tilt angles from 0° to 30°, the ballasts allow for mounting of the panels vertically, horizontally, or with an East-West orientation. The mounting system enables flexible modulation of the distance between rows, ensuring an easy and fast installation, even in the presence of roof obstacles.

Tilt angle	10°
Module positioning	Horizontal - Short side / Vertical - Long side
Ballast weight	60 kg
Quantity per pallet	10 pieces
Pallet dimensions	1000x720x682h mm
Pallet weight	612 kg
Compatible accessories	Sheathing (KGN23115), Universal clamps (K23900/U.50, K23920/U.50), PowerClamp (K23900/PWC.50, 23920/PWC), Junction plate (K23804), U-Block (23015.CRP - 23030.CRP), No-Flex (K23712) Cablowind (CW.CABLOWIND.95 - CW.CABLOWIND.160 - CW.CABLOWIND.185)

BALLAST DIMENSIONS

HORIZONTAL MODULE INSTALLATION - Short Side

K23900-U **4**

23010 **2**

K23920_40mm **3**

23010 **2**

KGN23115 **1**

600

225

405

970

970

Sheathing	Ballast	Terminal Clamp	Central Clamp
KGN23115	23010	K23920/U.50	K23900/U.50
1	**2**	**3**	**4**

VERTICAL MODULE INSTALLATION - Long Side

K23900-U ④

23010 ②

K23920_40mm ③

23010 ②

KGN23115 ①

700

165

970

470

970

Sheathing	Ballast	Terminal Clamp	Central Clamp
KGN23115	23010	K23920/U.50	K23900/U.50
①	②	③	④

INFO

The distance between the rows is indicative and not binding; it may vary depending on the project.

The measurements are based on the use of a panel with dimensions of 1722mm x 1134mm x 35mm. They vary depending on the size of the panel used.

Follow Sun Ballast®'s assembly instructions.

The dimensions shown in the figure are all expressed in millimeters.

BALLAST 10.2°

ART. 23010.2

The Single-Row system offers a simple and highly versatile solution: available in a wide range of tilt angles from 0° to 30°, the ballasts allow for mounting of the panels vertically, horizontally, or with an East-West orientation. The mounting system enables flexible modulation of the distance between rows, ensuring an easy and fast installation, even in the presence of roof obstacles.

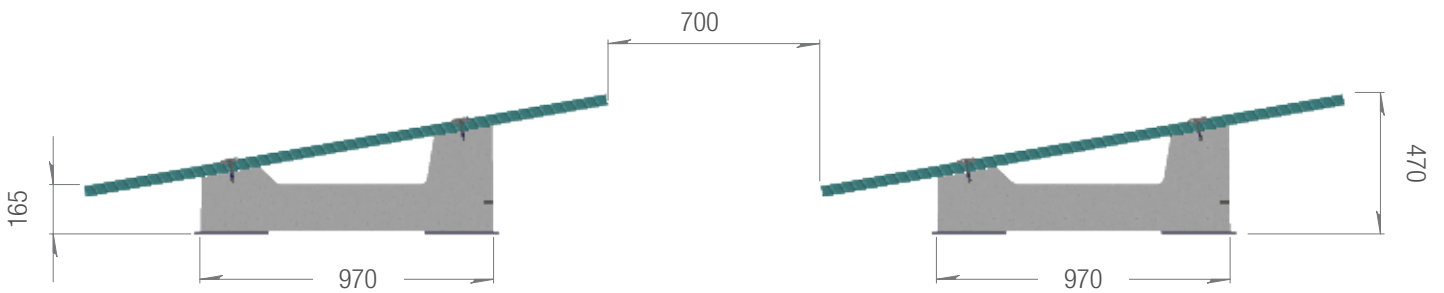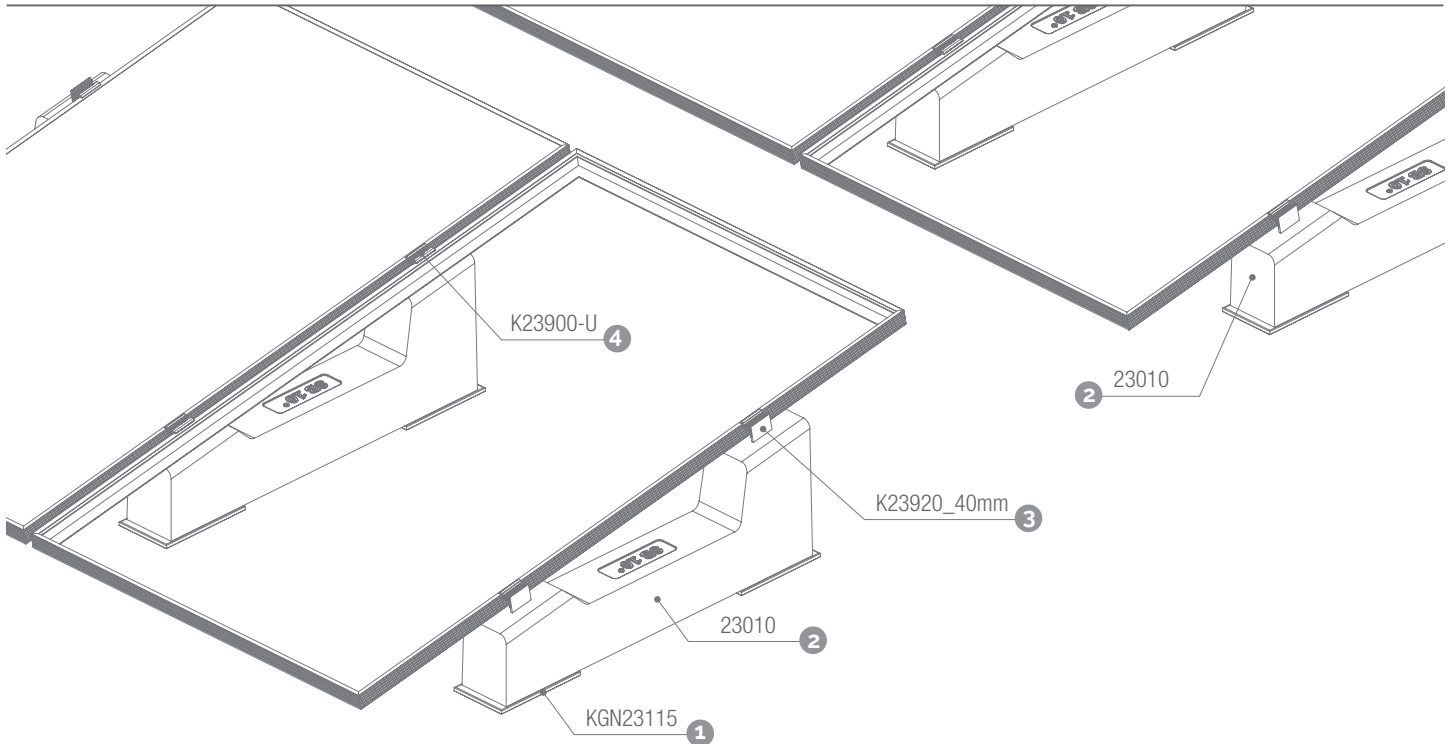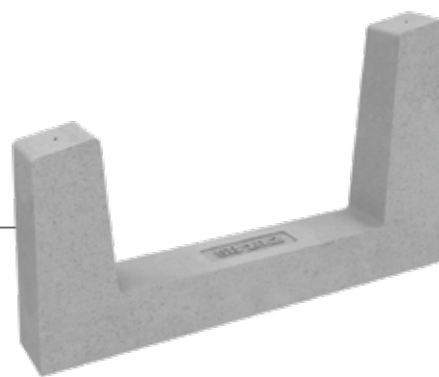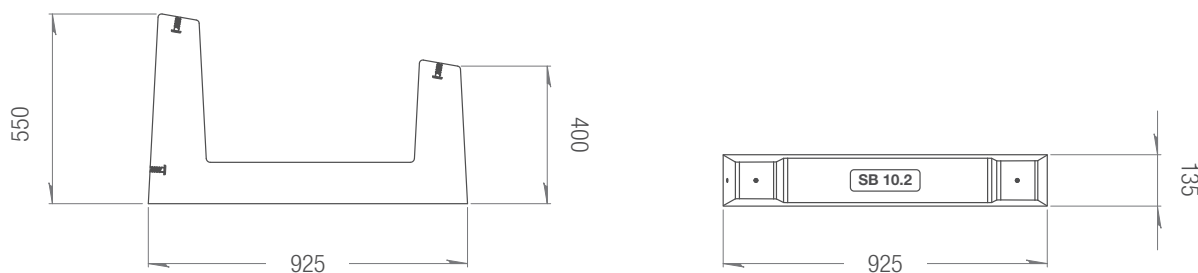|	
Tilt angle	10°
Module positioning	Horizontal - Short side / Vertical - Long side
Ballast weight	60 kg
Quantity per pallet	8 pieces
Pallet dimensions	1100x570x729h mm
Pallet weight	494 kg
Compatible accessories	Sheathing (KGN23115), Universal clamps (K23900/U.50, K23920/U.50), PowerClamp (K23900/PWC.50, 23920/PWC), Junction plate (K23804), U-Block (23015.CRP - 23030.CRP), No-Flex (K23712) Cablowind (CW.CABLOWIND.95 - CW.CABLOWIND.160 - CW.CABLOWIND.185)

BALLAST DIMENSIONS

HORIZONTAL MODULE INSTALLATION - Short Side

K23900-U **4**

K23920_40mm **3**

23010.2 **2**

23010.2 **2**

KGN23115 **1**

600

425

615

925

925

Sheathing	**Ballast**	**Terminal Clamp**	**Central Clamp**
KGN23115	23010.2	K23920/U.50	K23900/U.50
1	**2**	**3**	**4**

VERTICAL MODULE INSTALLATION - Long Side

K23900-U **4**

23010.2 **2**

K23920_40mm **3**

23010.2 **2**

KGN23115 **1**

700

370

925

675

925

Sheathing
KGN23115

1

Ballast
23010.2

2

Terminal Clamp
K23920/U.50

3

Central Clamp
K23900/U.50

4

INFO

The distance between the rows is indicative and not binding; it may vary depending on the project.

The measurements are based on the use of a panel with dimensions of 1722mm x 1134mm x 35mm. They vary depending on the size of the panel used.

Follow Sun Ballast®'s assembly instructions.
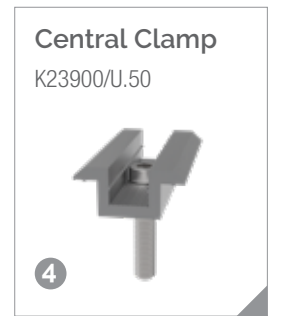
The dimensions shown in the figure are all expressed in millimeters.

BALLAST 10.3°

ART. 23010.3

The Single-Row system offers a simple and highly versatile solution: available in a wide range of tilt angles from 0° to 30°, the ballasts allow for mounting of the panels vertically, horizontally, or with an East-West orientation. The mounting system enables flexible modulation of the distance between rows, ensuring an easy and fast installation, even in the presence of roof obstacles.
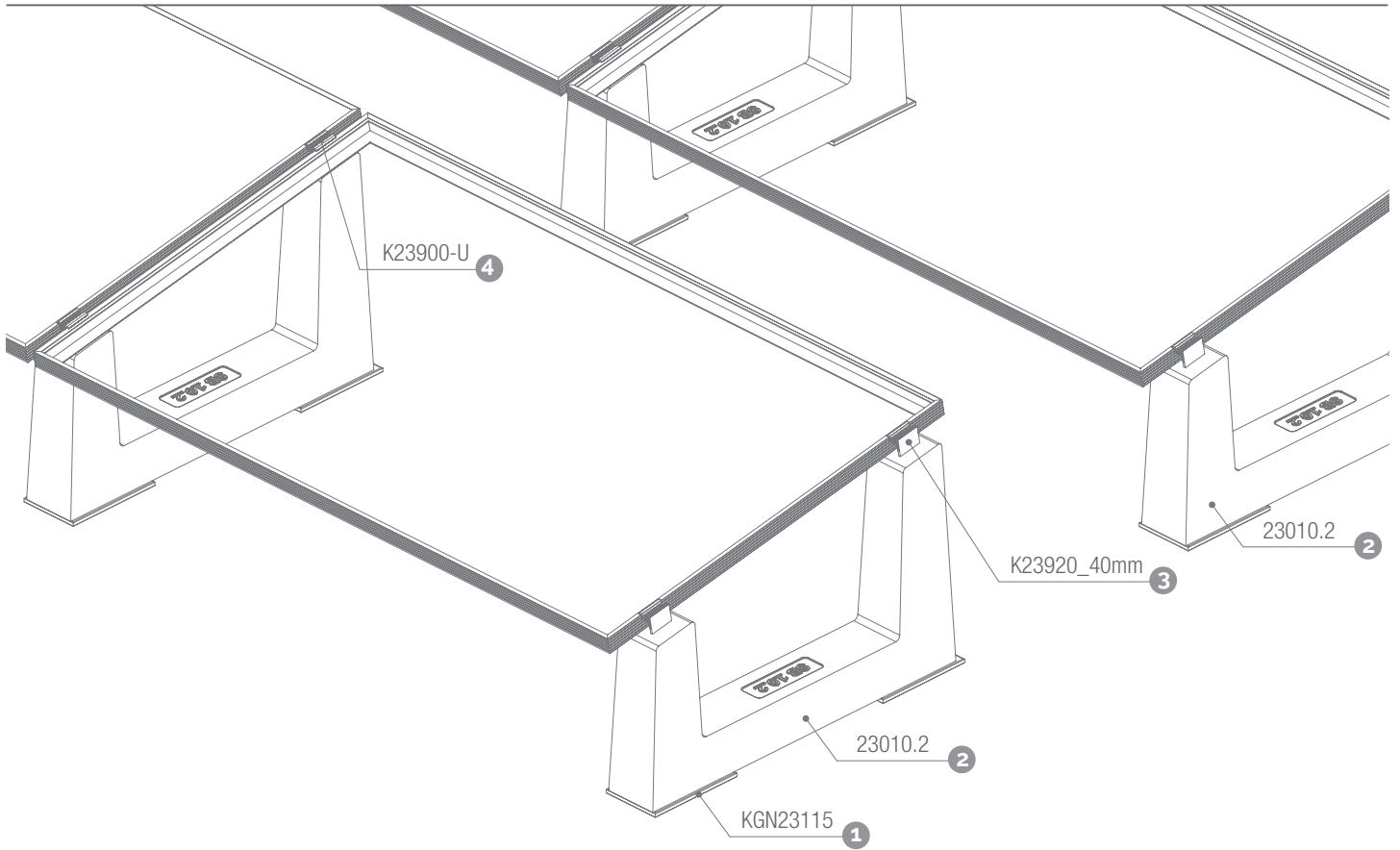
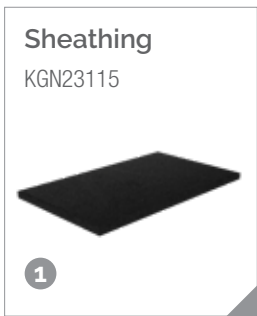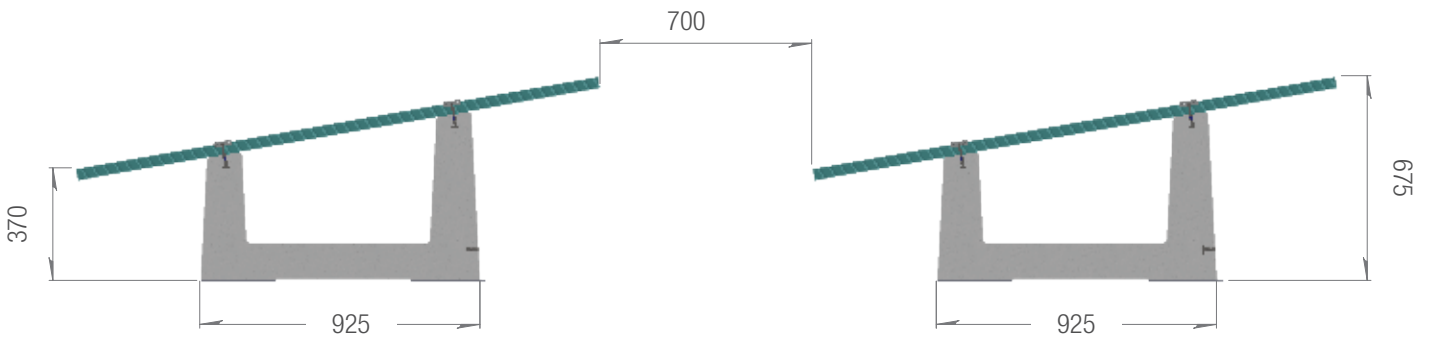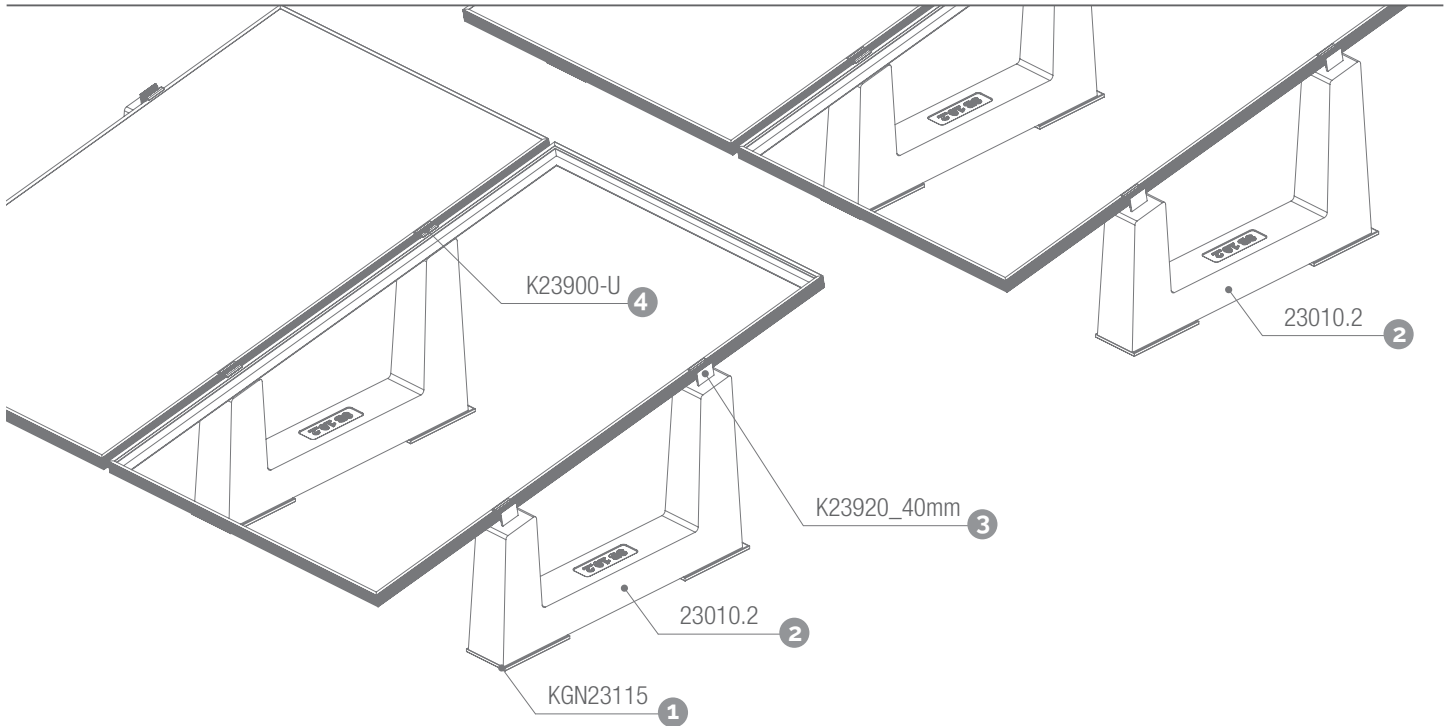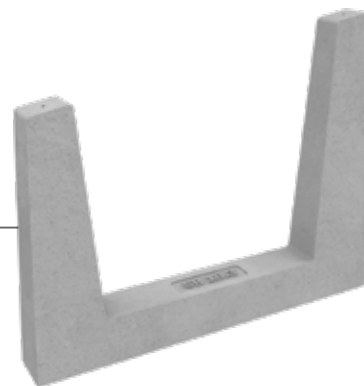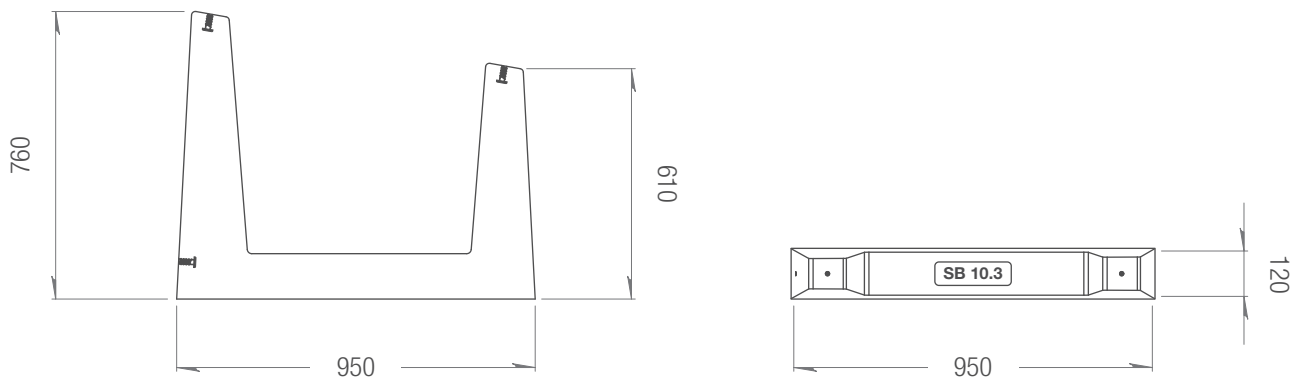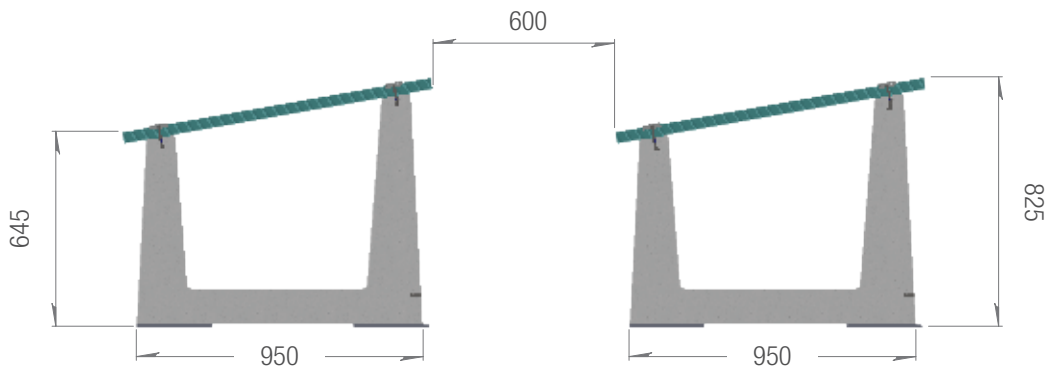|	
Tilt angle	10°
Module positioning	Horizontal - Short side / Vertical - Long side
Ballast weight	65 kg
Quantity per pallet	8 pieces
Pallet dimensions	1125x775x668h mm
Pallet weight	537 kg
Compatible accessories	Sheathing (KGN23115), Universal clamps (K23900/U.50, K23920/U.50), PowerClamp (K23900/PWC.50, 23920/PWC), Junction plate (K23804), U-Block (23015.CRP - 23030.CRP), No-Flex (K23712) Cablowind (CW.CABLOWIND.95 - CW.CABLOWIND.160 - CW.CABLOWIND.185)

BALLAST DIMENSIONS

760

610

950

SB 10.3

120

950

SB-1125-1225

HORIZONTAL MODULE INSTALLATION - Short Side

K23900-U **4**

23010.3 **2**

K23920_40mm **3**

23010.3 **2**

KGN23115 **1**

600

645

825

950

950

Sheathing	**Ballast**	**Terminal Clamp**	**Central Clamp**
KGN23115	23010.3	K23920/U.50	K23900/U.50
1	**2**	**3**	**4**

VERTICAL MODULE INSTALLATION - Long Side

K23900-U (4)

K23920_40mm (3)

23010.3 (2)

23010.3 (2)

KGN23115 (1)

700

580

890

950

950

Sheathing	Ballast	Terminal Clamp	Central Clamp
KGN23115	23010.3	K23920/U.50	K23900/U.50
(1)	(2)	(3)	(4)

INFO

The distance between the rows is indicative and not binding; it may vary depending on the project.

The measurements are based on the use of a panel with dimensions of 1722mm x 1134mm x 35mm. They vary depending on the size of the panel used.

Follow Sun Ballast®'s assembly instructions.
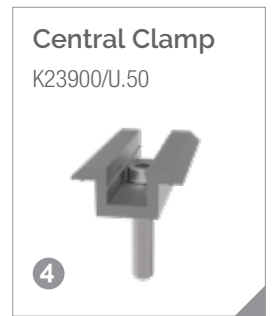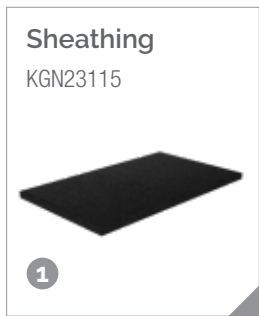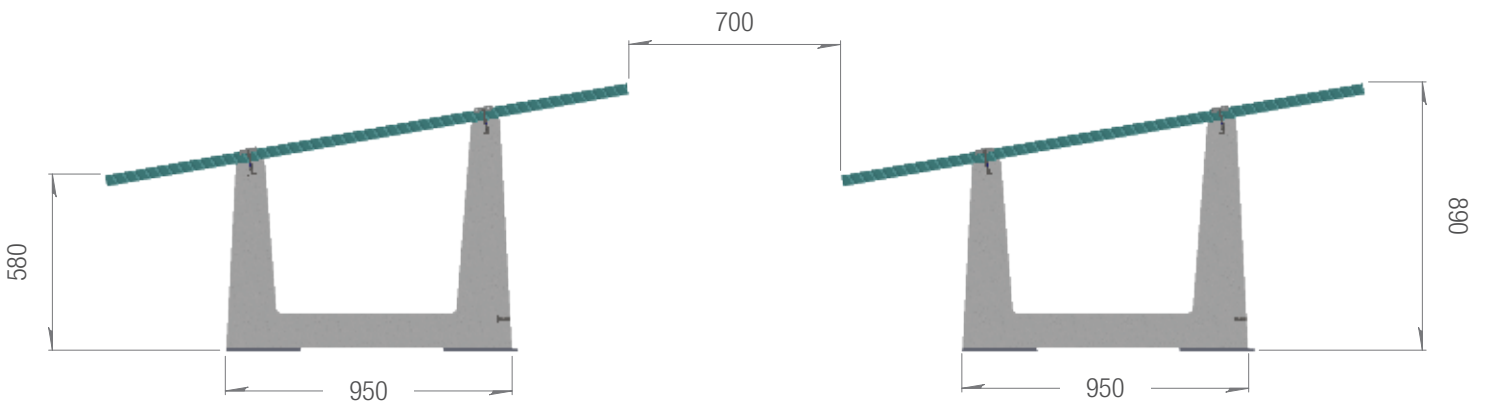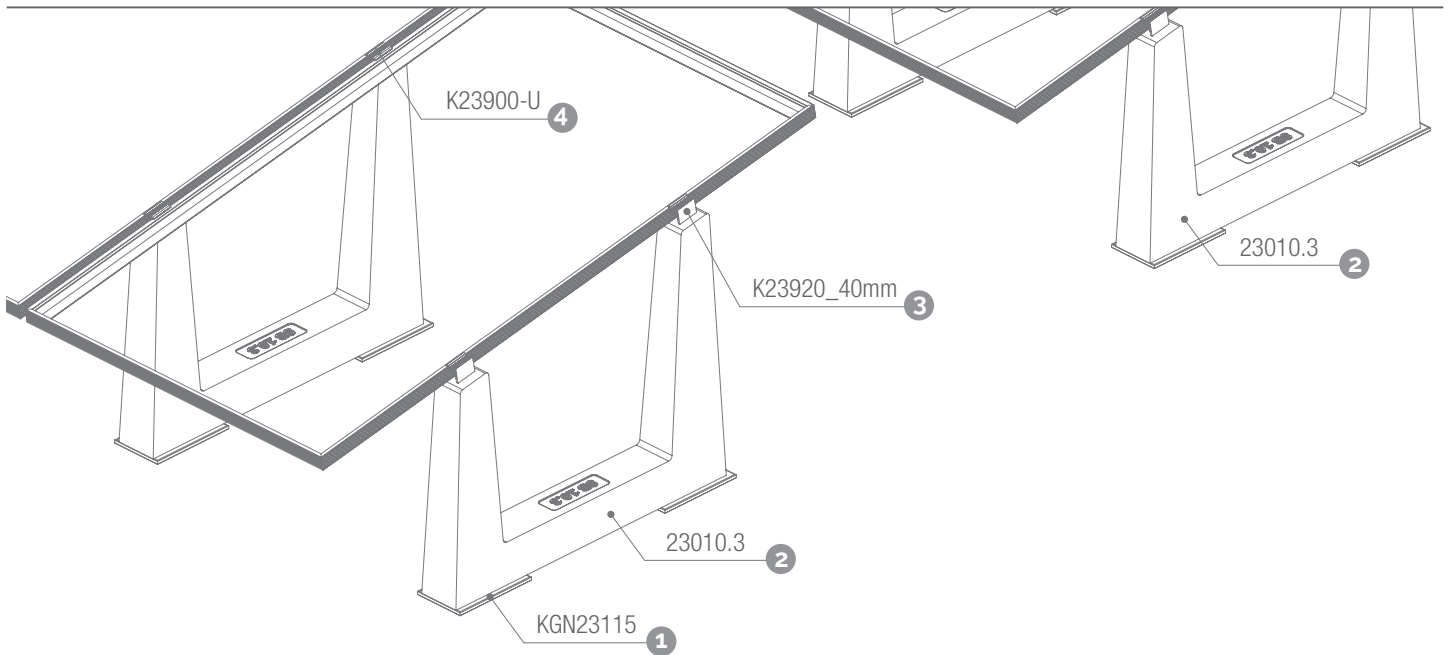
The dimensions shown in the figure are all expressed in millimeters.

INDUSTRIAL-XL 5°

ART. 23005.XLF/.XLC/.XLT

Designed for large-size panels used in large-scale PV plants, the Industrial-XL system ensures the highest level of safety and reliability. Its special reticular configuration with vertical mounting at a 5° tilt guarantees maximum wind resistance and compliance with all support parameters, while simultaneously reducing both the cost per kW and the roof loads.

Tilt angle	5°
Module positioning	Vertical - Long Side
Compatible accessories	Sheathing (KGN23138), Universal clamps (K23900/U.50, K23920/U.50), PowerClamp (K23900/PWC.50, 23920/PWC), U-Block (23015.CRP - 23030.CRP)

BALLAST ART. 23005.XLF

Ballast weight	45 kg	**Pallet dimensions**	1400x1080x333h mm
Quantity per pallet	12 pieces	**Pallet weight**	558 kg

BALLAST ART. 23005.XLC

Ballast weight	56 kg	**Pallet dimensions**	1643x670x651h mm
Quantity per pallet	10 pieces	**Pallet weight**	563 kg

BALLAST ART. 23005.XLT

Ballast weight	45 kg	**Pallet dimensions**	1213x768x453h mm
Quantity per pallet	12 pieces	**Pallet weight**	553 kg

BALLAST 23005.XLF DIMENSIONS
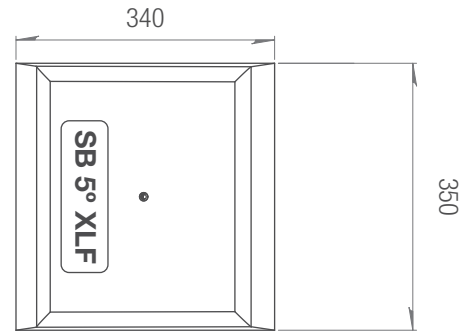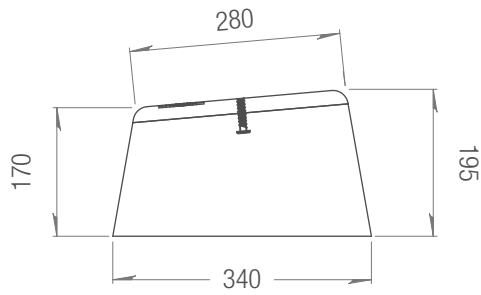
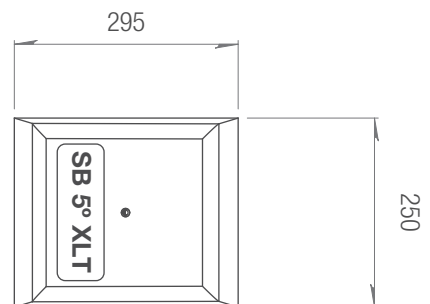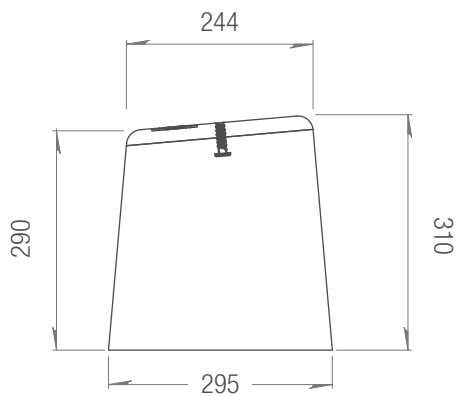## BALLAST 23005.XLC DIMENSIONS
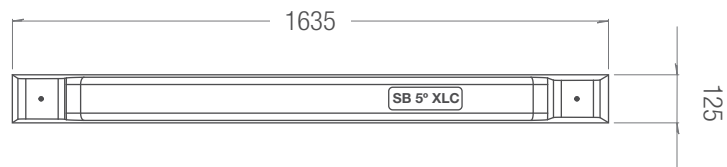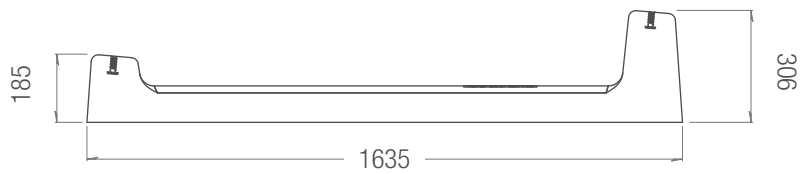
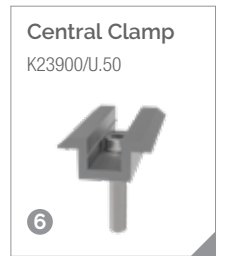## BALLAST 23005.XLT DIMENSIONS

VERTICAL MODULE INSTALLATION - Long Side
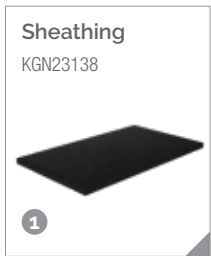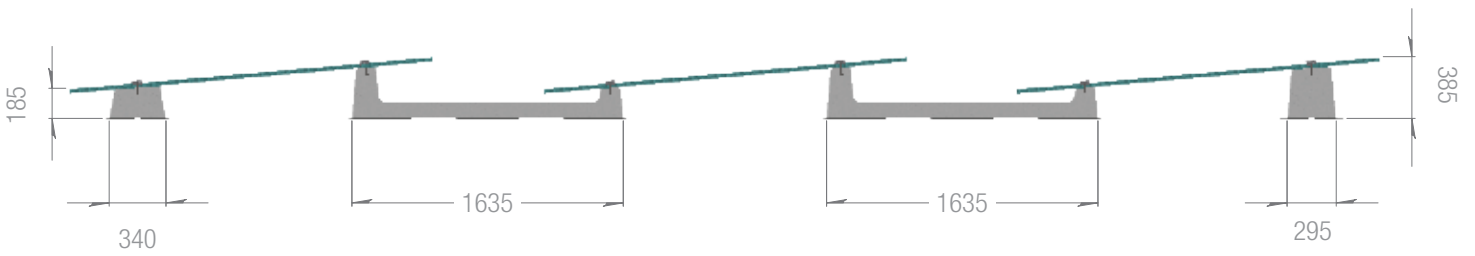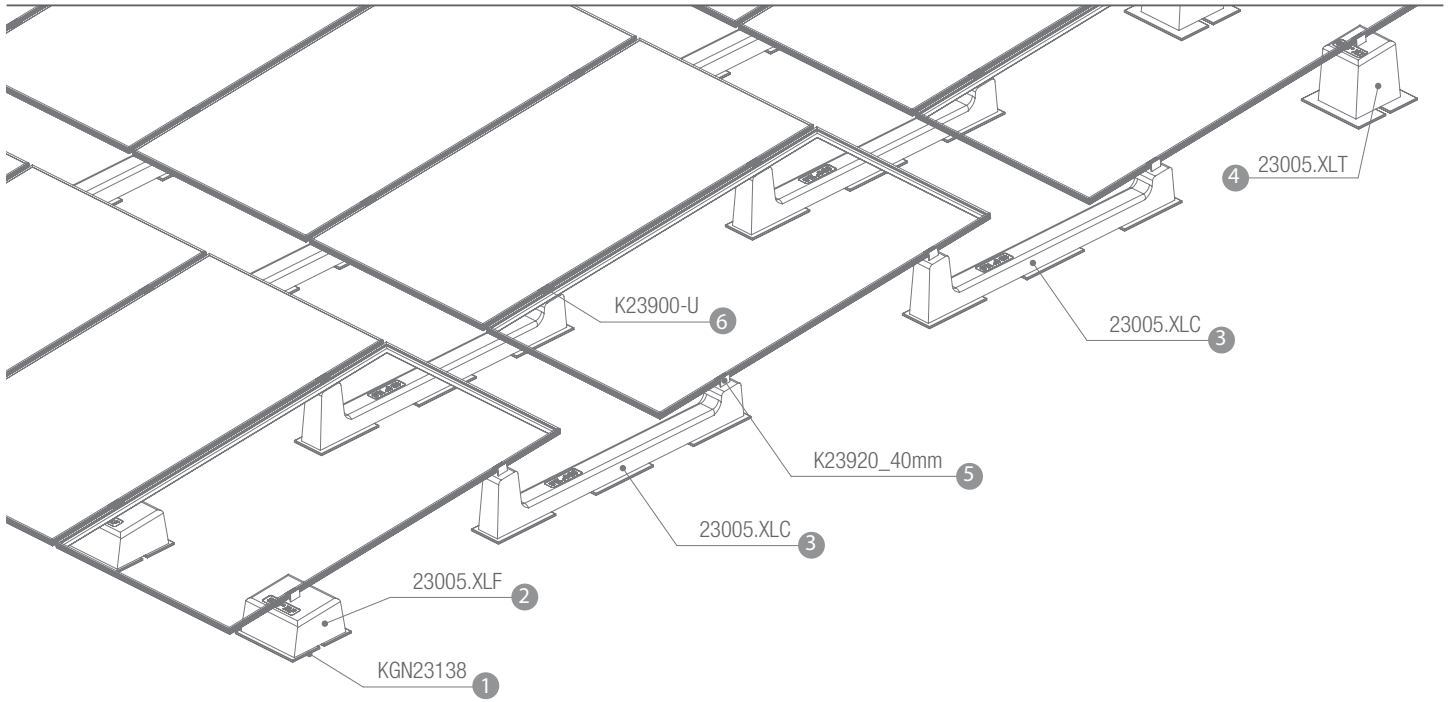
23005.XLT 4

K23900-U 6

23005.XLC 3

K23920_40mm 5

23005.XLC 3

23005.XLF 2

KGN23138 1

185

385

340

1635

1635

295

Sheathing	Ballast	Ballast	Ballast	Terminal Clamp	Central Clamp
KGN23138	23005.XLF	23005.XLC	23005.XLT	K23920/U.50	K23900/U.50
1	2	3	4	5	6

INFO

The distance between the rows is indicative and not binding; it may vary depending on the project.

The measurements are based on the use of a panel with dimensions of 2278mm x 1134mm x 35mm. They vary depending on the size of the panel used.

Follow Sun Ballast®'s assembly instructions.

The dimensions shown in the figure are all expressed in millimeters.

EASYWEST 10°

ART. 23010.EV/.EP

Minimal roof load, high wind resistance, and compatibility with any type of module: the EasyWest system is designed to provide East-West installations on flat roofs with a support system that is extremely lightweight, easy to handle, robust, and quick to install, suitable for both standard panels and large-size modules.
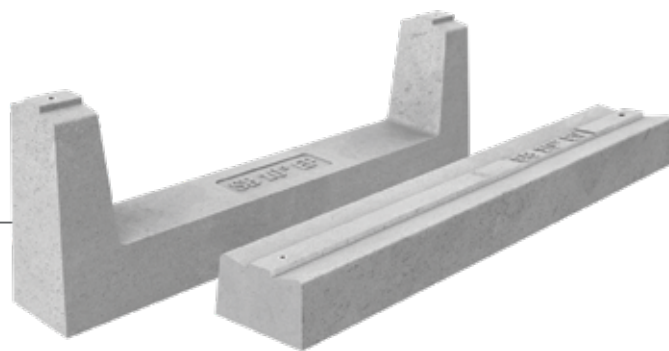
Tilt angle	10°
Module positioning	Horizontal – Long Side
Compatible accessories	Sheathing (KGN23115), PowerClamp (K23900PWC-EV.40, K23900PWC-EP.40, 23920/PWC), U-Block (23015.CRP - 23030.CRP)

BALLAST ART. 23010.EV

Ballast weight	28 kg	**Pallet dimensions**	850x920x518h mm
Quantity per pallet	20 pieces	**Pallet weight**	571 kg

BALLAST ART. 23010.EP

Ballast weight	30 kg	**Pallet dimensions**	850x1270x735h mm
Quantity per pallet	20 pieces	**Pallet weight**	615 kg

BALLAST 23010.EV DIMENSIONS

90

850

180

SB 10º EV

850
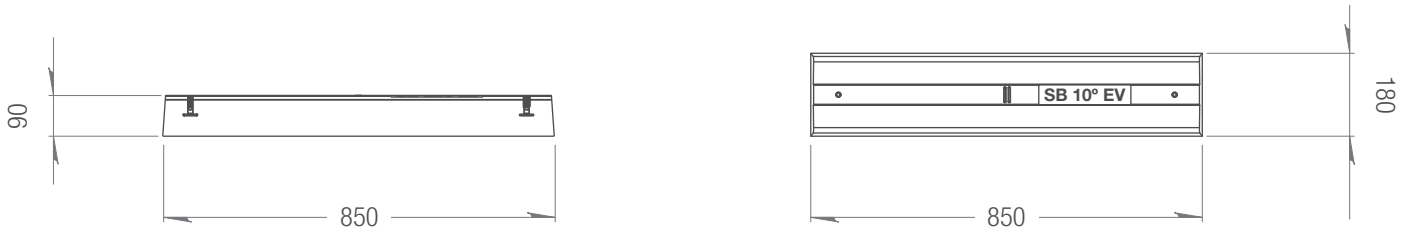
BALLAST 23010.EP DIMENSIONS
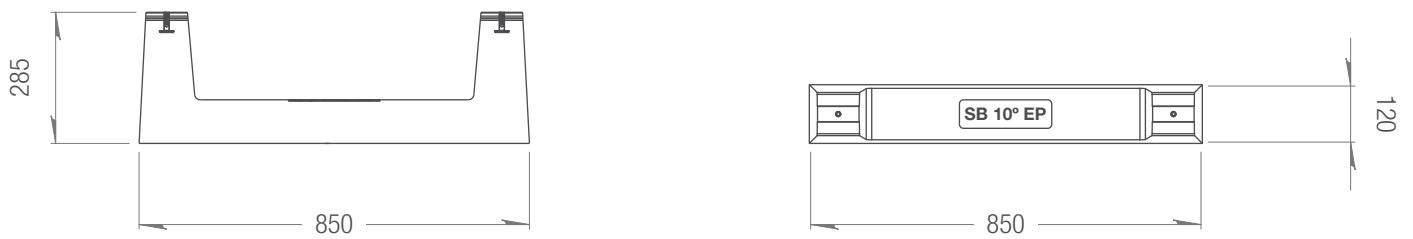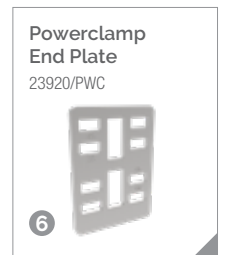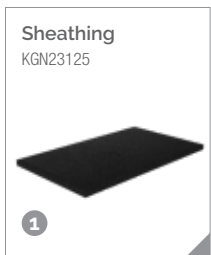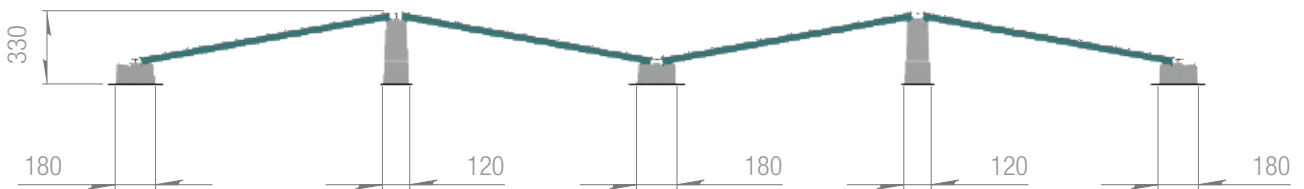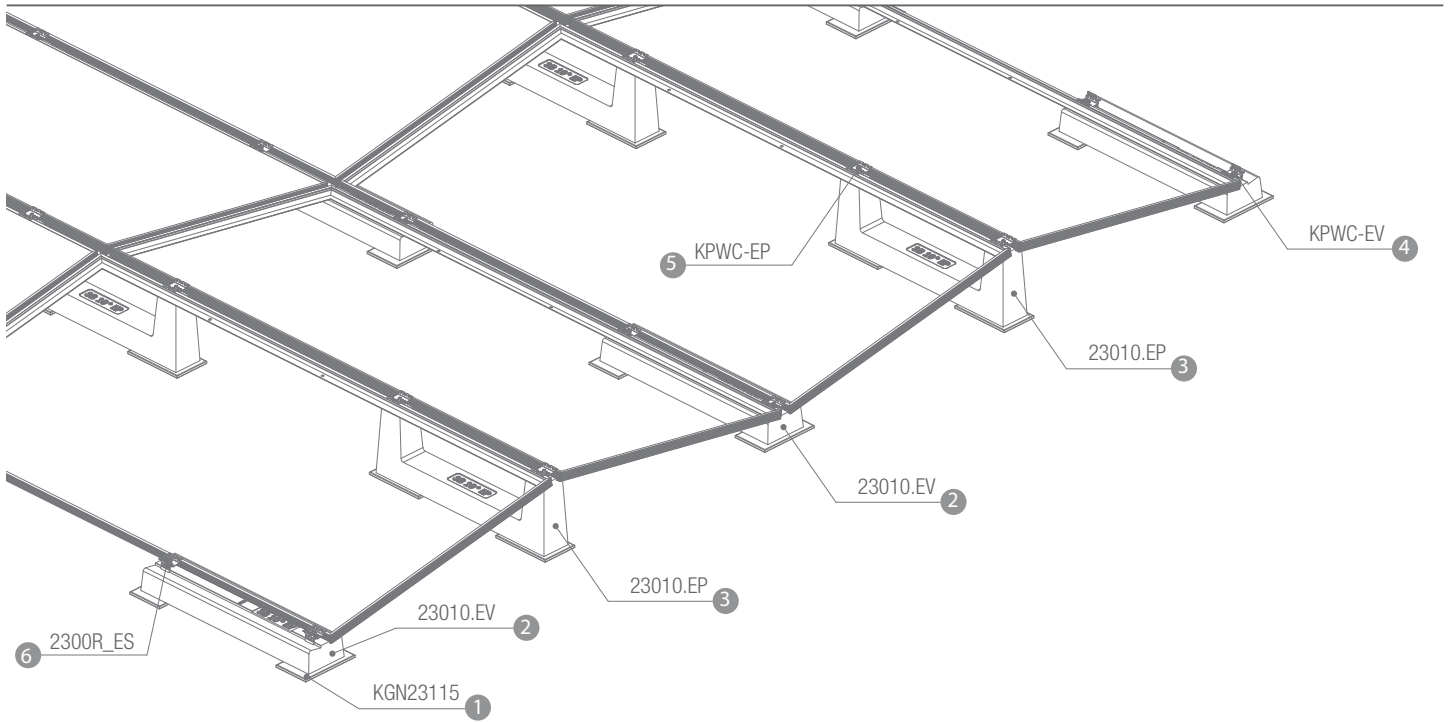
285

850

SB 10º EP

120

850

HORIZONTAL MODULE INSTALLATION - Long Side

Sheathing
KGN23125

1

Ballast
23010.EV

2

Ballast
23010.EP

3

Easywest EV Clamp
KPWC-EV

4

Easywest EP Clamp
KPWC-EP

5

Powerclamp End Plate
23920/PWC

6

INFO

The distance between the rows is indicative and not binding; it may vary depending on the project.

The measurements are based on the use of a panel with dimensions of 2278mm x 1134mm x 35mm. They vary depending on the size of the panel used.

Follow Sun Ballast®'s assembly instructions.

The dimensions shown in the figure are all expressed in millimeters.

TECHNICAL CHARACTERISTICS

Description:

Precast unreinforced concrete ballast.
(Inside, there is an iron rod to increase mechanical flexibility)

- Exposure class: XC4;
- Strength class: C32/40;
- Minimum cement content: 340 kg/m3;
- Fire resistance class: Class 0 (Italian class) A1 (European class with ref. UNI EN 13501-1:2019);
- Maximum H2O penetration depth under pressure 500 kPa: 15 mm;
- Maximum H2O penetration depth under pressure 500 kPa: 15 mm;
- Weight tolerance: ±5%;
- Measurement: ±5 mm;
- Determination of pullout force of M8 threaded insert embedded in CLS element by direct pulling of M8 threaded bar screwed into it.

Results of the tensile test at 15 KN (1530 kg):

No slipping of the threaded insert;

Fracture of the threaded bar.

BASIC S.R.L Benefit Corporation, in the person of its legal representative, declares that production complies with UNI EN 206 and UNI 11104 standards, instructions, and procedures of the quality management system by UNI EN ISO 9001:2015 with TUV certification.

Any modification made to the product referred to in this declaration without the manufacturer's authorization voids this declaration of technical requirements. The technical characteristics of the product are listed below.

BASIC S.R.L Benefit Corporation
Operations Office: Via Danubio, n.8 42124 Reggio Emilia (RE)
Registered Office: Contrada Monticello S.N.C 85042 Lagonegro (PZ)
VAT - 02557770357 - SDI: W7YVJK9

Business Contacts
+39 0522 960926
info@sunballast.com
www.sunballast.com
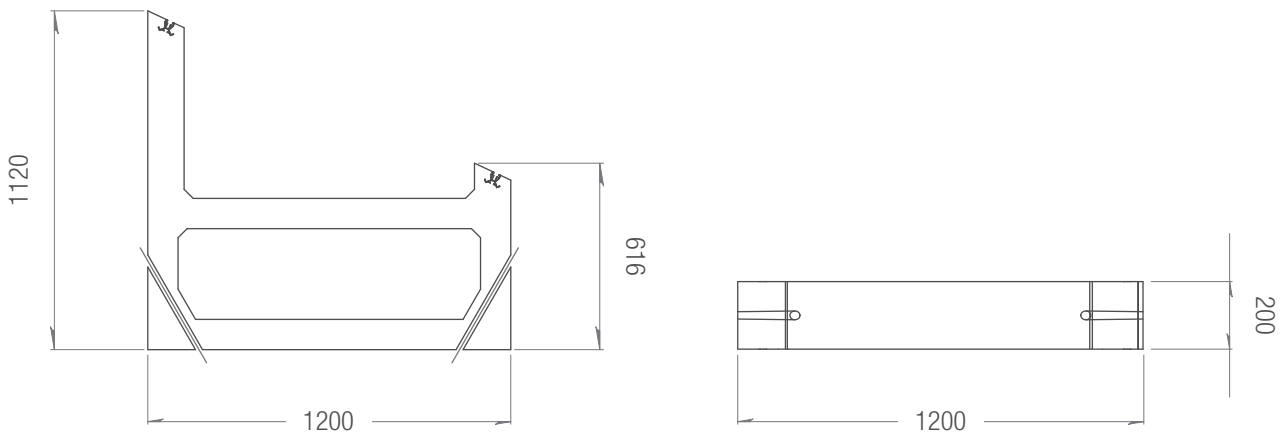
BALLAST 25°

ART. 23025

Big Ballast is specially designed for ground-mounted PV systems, offering top performance and great versatility. With a 25° tilt and vertical mounting, it fits perfectly with large panels and more.

Its height makes mowing grass underneath easy. The strong structure ensures stability and quick installation even on uneven ground Plus, its smart design helps with handling and can hold electrical conduits for a cleaner, faster, and more cost-effective setup.
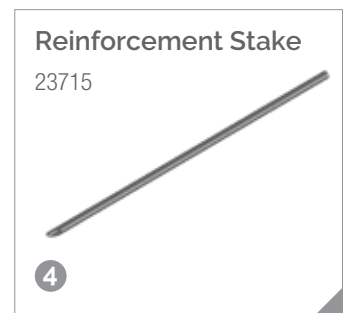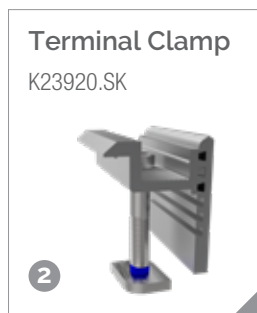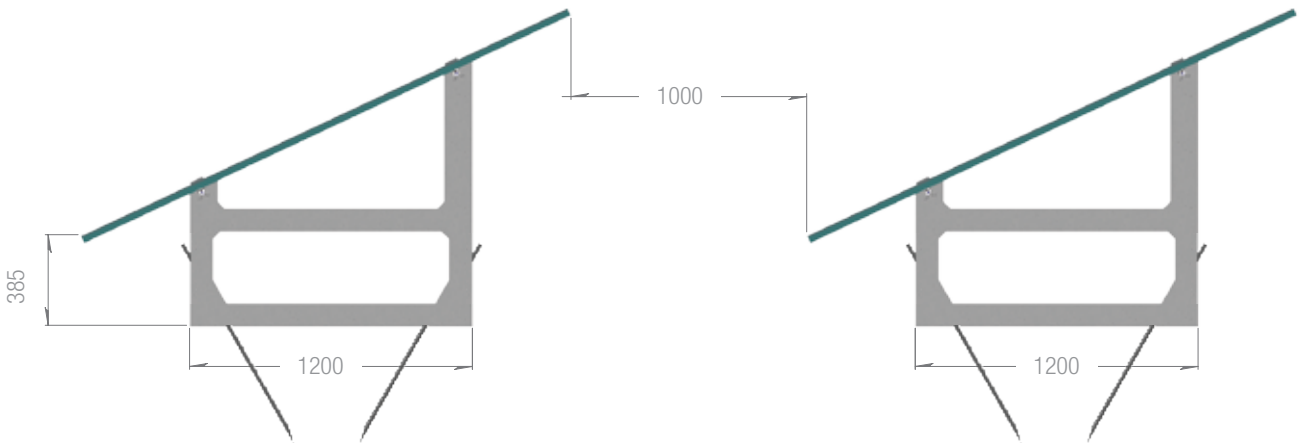
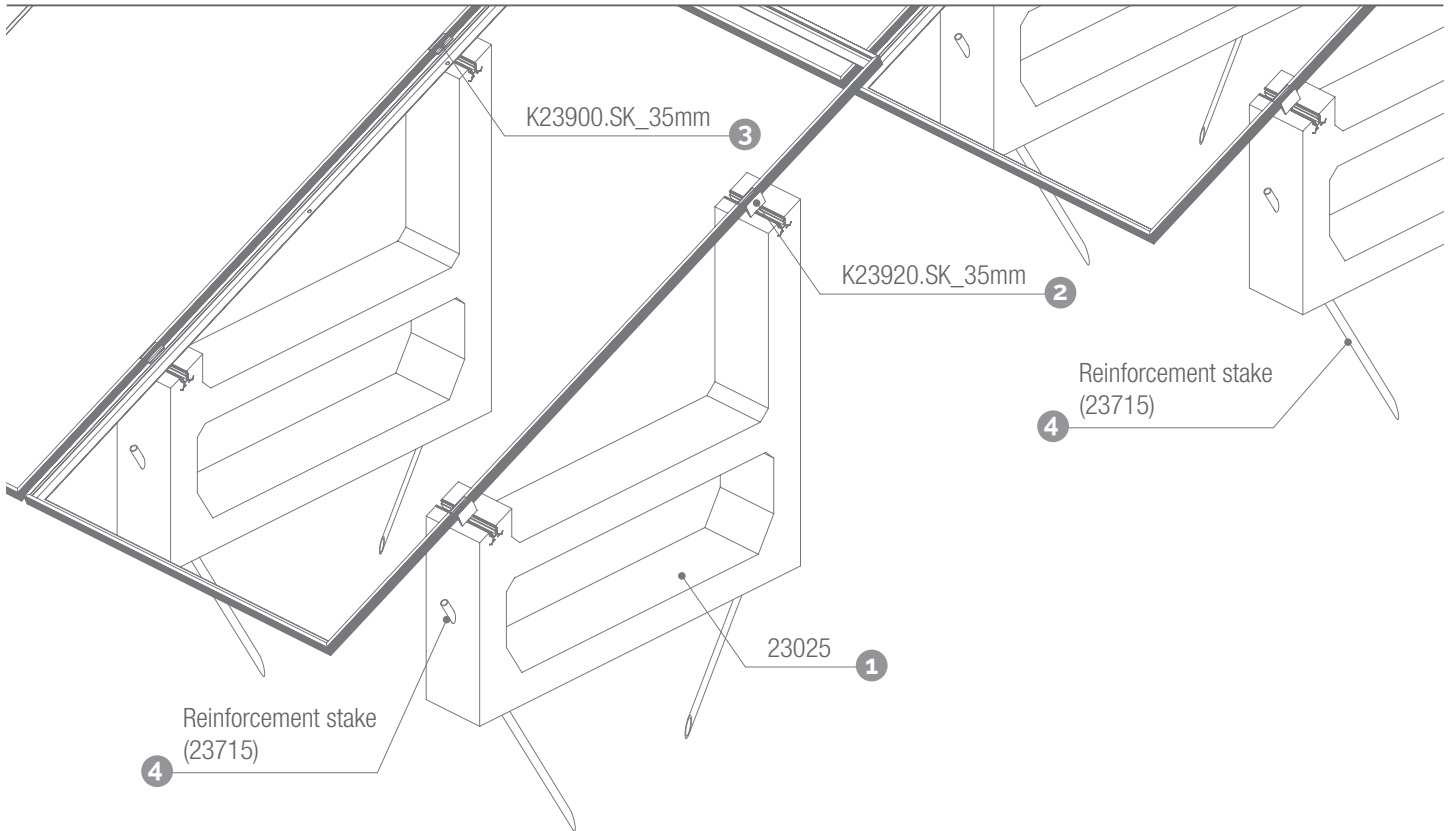For tougher projects like soft soils or windy areas special holes let you add reinforcement stakes (provided by Sun Ballast) to boost stability even more.

Tilt angle	25°
Module positioning	Vertical - Long side
Ballast weight	182 kg
Compatible accessories	Reinforcement stake (23715) Universal clamps (K23920.SK, K23900.SK)

BALLAST DIMENSIONS

VERTICAL MODULE INSTALLATION - Long Side

K23900.SK_35mm ③

K23920.SK_35mm ②

Reinforcement stake (23715) ④

23025 ①

Reinforcement stake (23715) ④

1000

385

1200

1200

Ballast
23025
①

Terminal Clamp
K23920.SK
②

Central Clamp
K23900.SK
③

Reinforcement Stake
23715
④

TECHNICAL CHARACTERISTICS BALLAST 25°

Description:

Precast unreinforced concrete ballast.
(Inside, there is an iron rod to increase mechanical flexibility)

- Exposure class: XC4;

- Strength class: C32/40;

- Minimum cement content: 340 kg/m3;

- Fire resistance class: Class 0 (Italian class) A1 (European class with ref. UNI EN 13501-1:2019);

- Maximum H2O penetration depth under pressure 500 kPa: 15 mm;

- Maximum H2O penetration depth under pressure 500 kPa: 15 mm;

- Weight tolerance: ±5%;

- Measurement: ±5 mm;

BASIC S.R.L Benefit Corporation, in the person of its legal representative, declares that production complies with UNI EN 206 and UNI 11104 standards, instructions, and procedures of the quality management system by UNI EN ISO 9001:2015 with TUV certification.

Any modification made to the product referred to in this declaration without the manufacturer's authorization voids this declaration of technical requirements. The technical characteristics of the product are listed below.

SUN BALLAST

Made to last

Patented systems

CONTACTS

INFORMATION AND FIRST CONTACT

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tecnico@sunballast.com
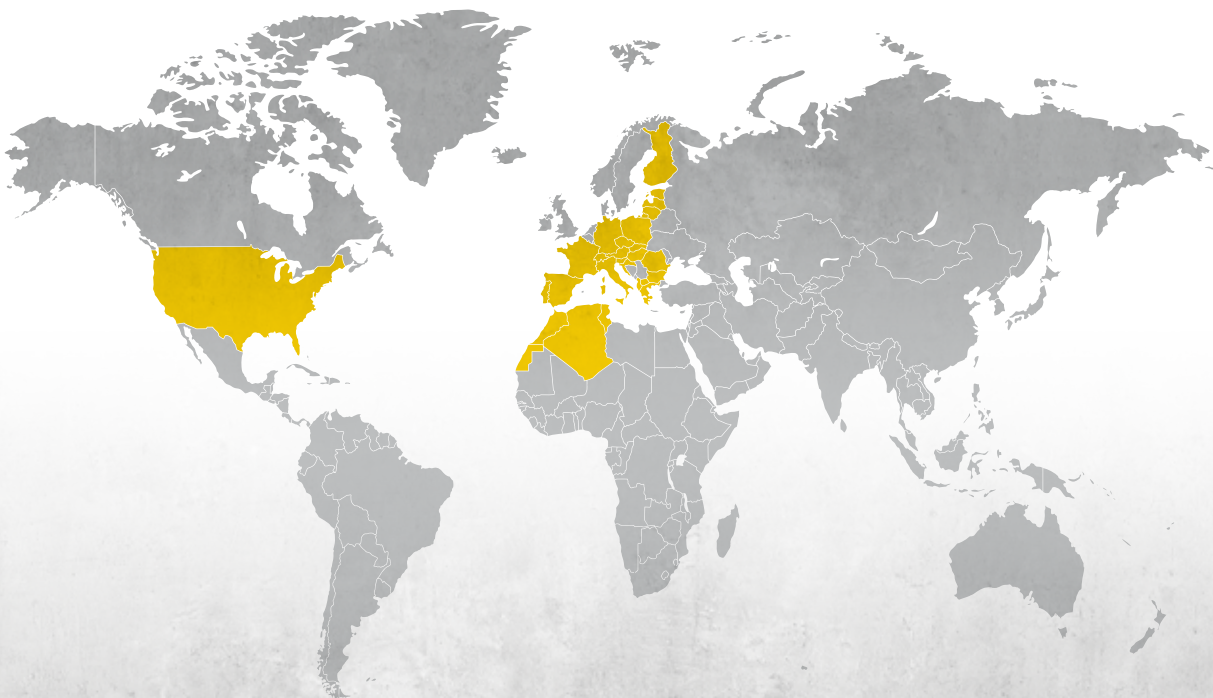
MADE TO LAST.

www.sunballast.com