SUN BALLAST ®
Made to last
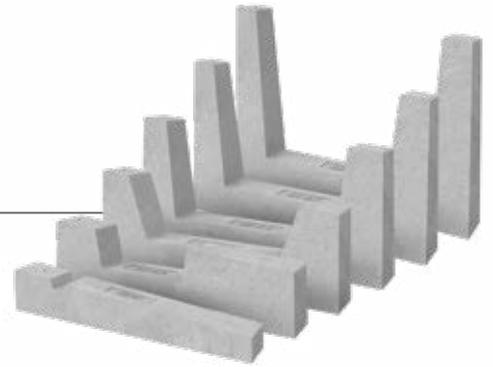**Patented systems**

Technical Sheet
Sail 5°

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

PATENTED
PATENTED

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°   140   990
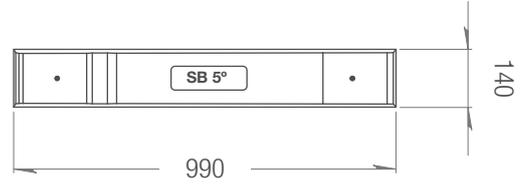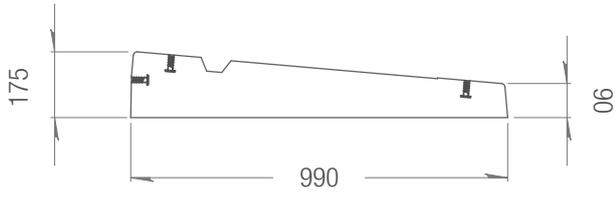
BALLAST 23005.2 DIMENSIONS

275   930   200

SB 5.2   140   930
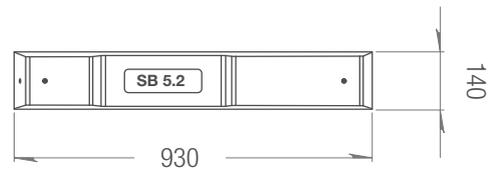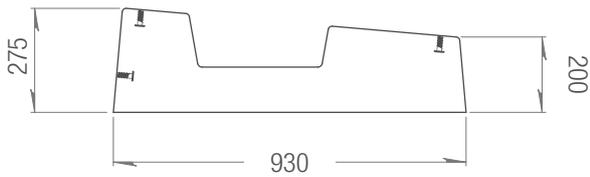
BALLAST 23005.3 DIMENSIONS

380   935   305

SB 5.3   140   935
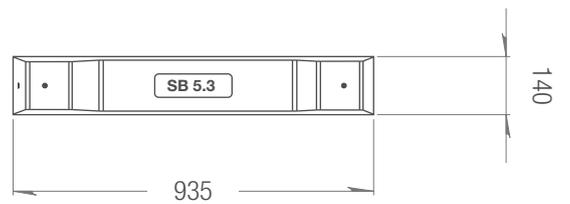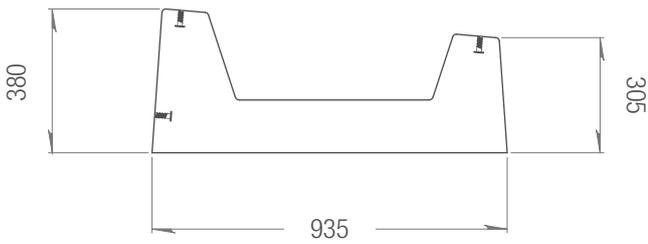
BALLAST 23005.4 DIMENSIONS

485 | 410 | 950 | SB 5.4 | 140 | 950
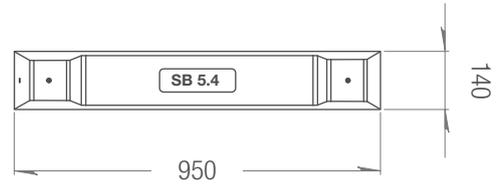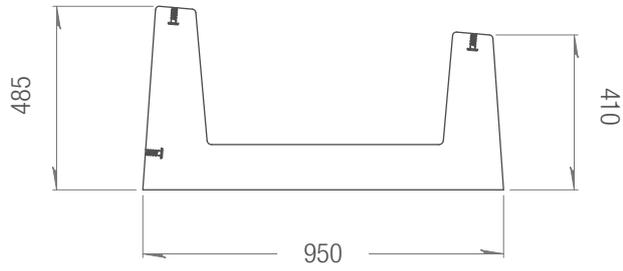
BALLAST 23005.5 DIMENSIONS

590 | 515 | 945 | SB 5.5 | 135 | 945
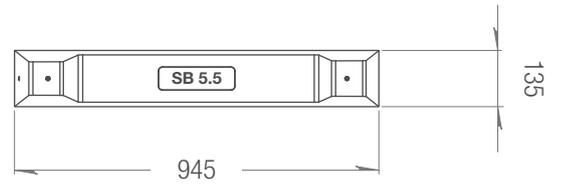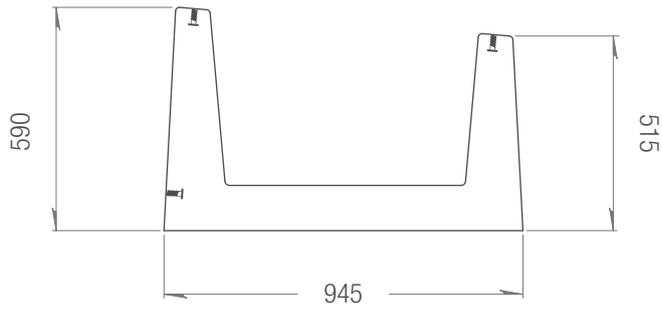
BALLAST 23005.6 DIMENSIONS
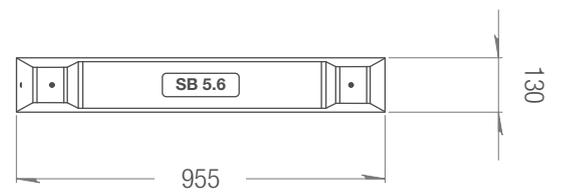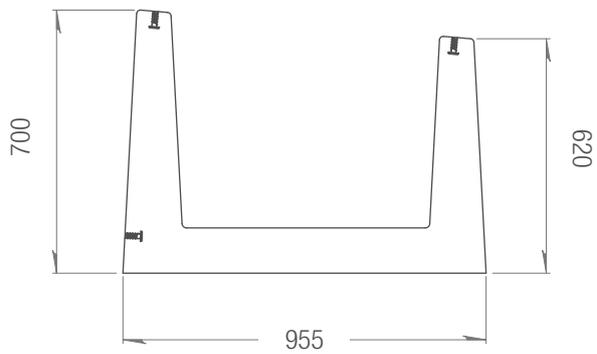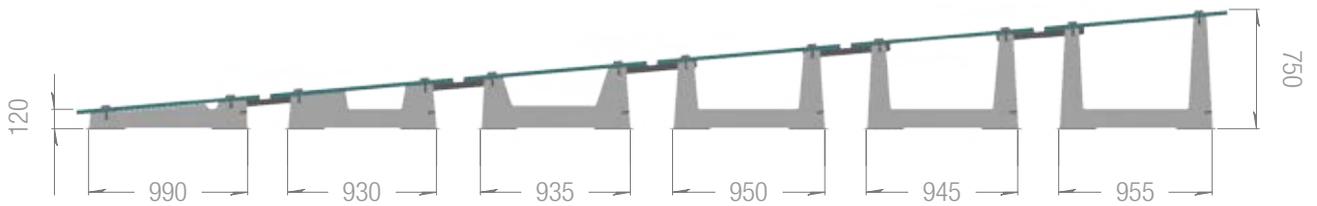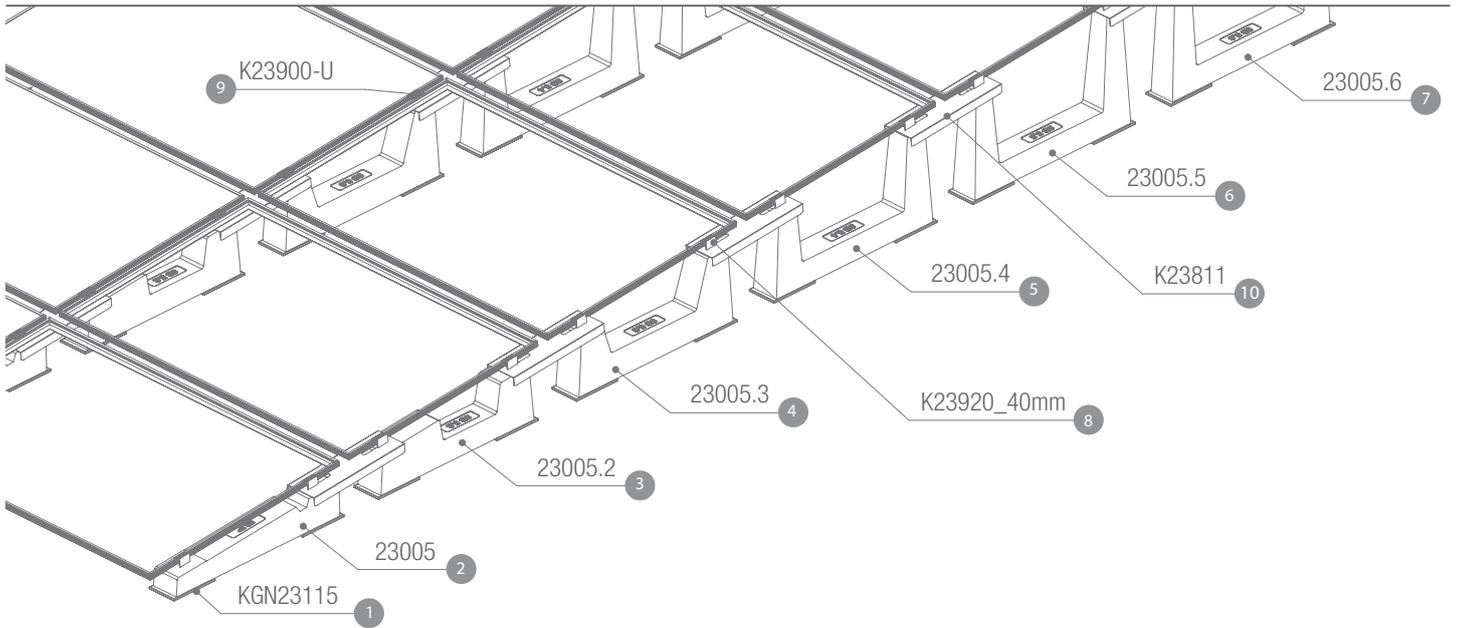
700 | 620 | 955 | SB 5.6 | 130 | 955

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

750
120
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

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

95
775
990   930   935   950   945   955

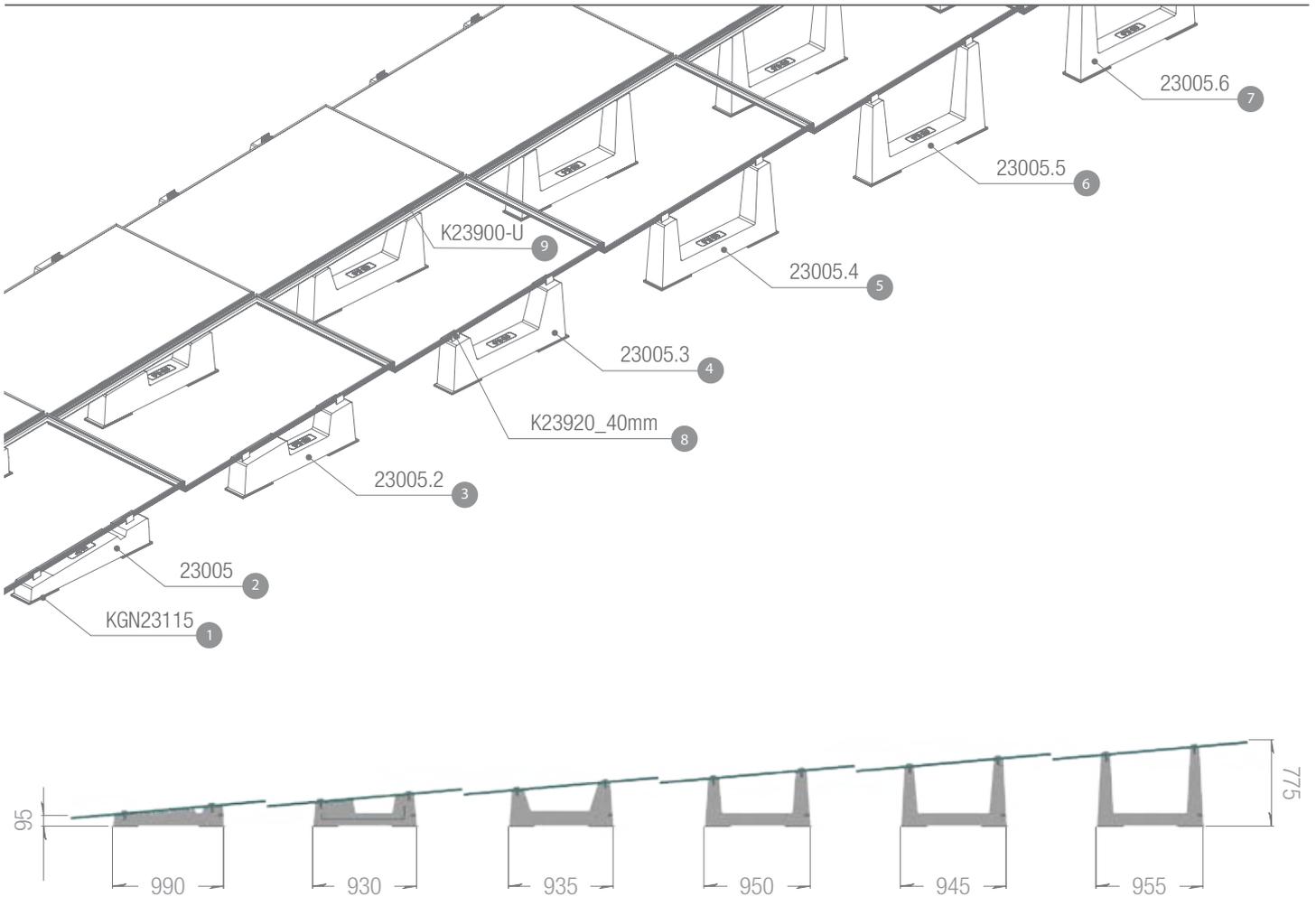|				
Sheathing KGN23115	**Ballast** 23005	**Ballast** 23005.2	**Ballast** 23005.3	**Ballast** 23005.4
①	②	③	④	⑤
Ballast 23005.5	**Ballast** 23005.6	**Terminal Clamp** K23920/U.50	**Central Clamp** K23900/U.50	
⑥	⑦	⑧	⑨	

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.

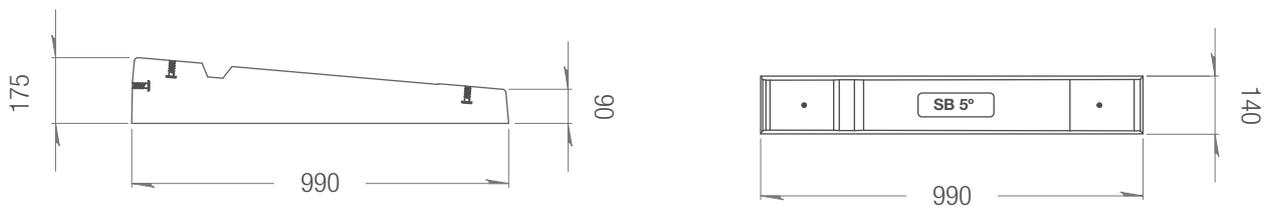The dimensions shown in the figure are all expressed in millimeters.
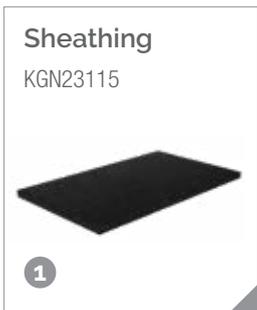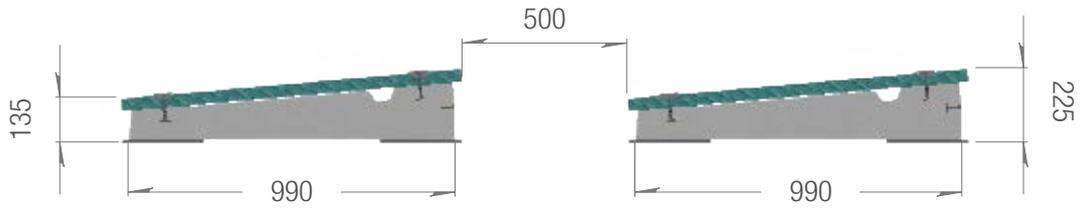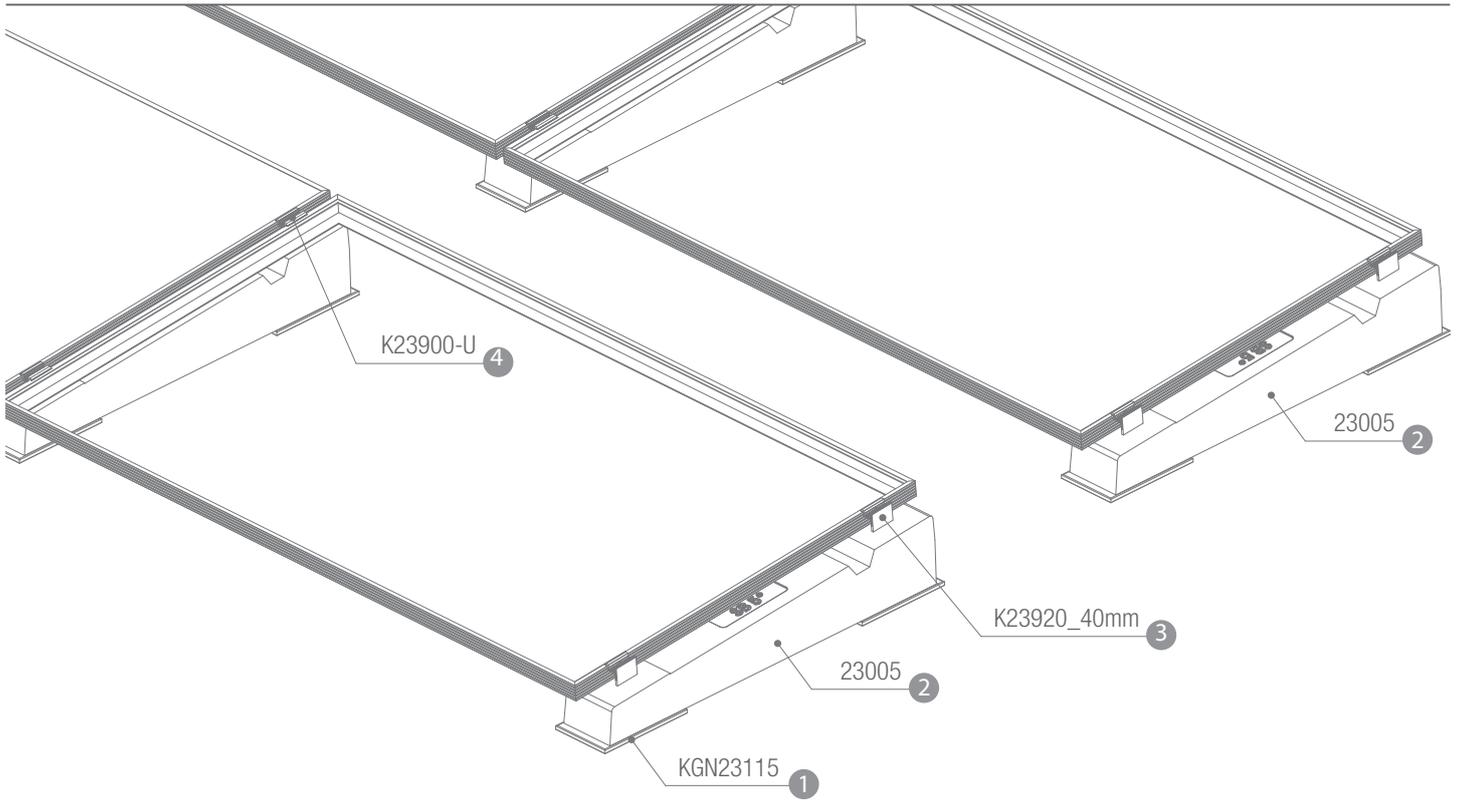
BALLAST 5°

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

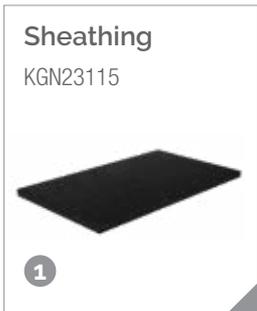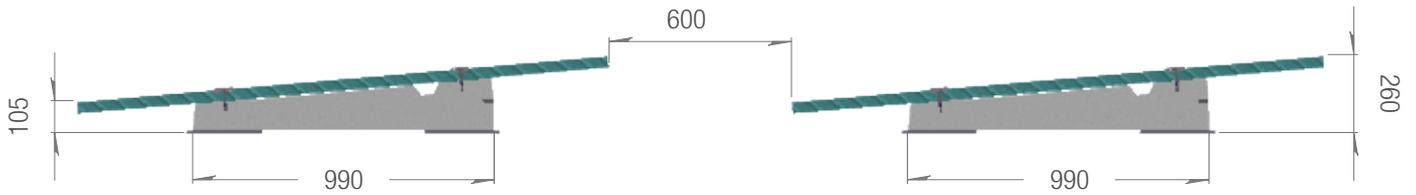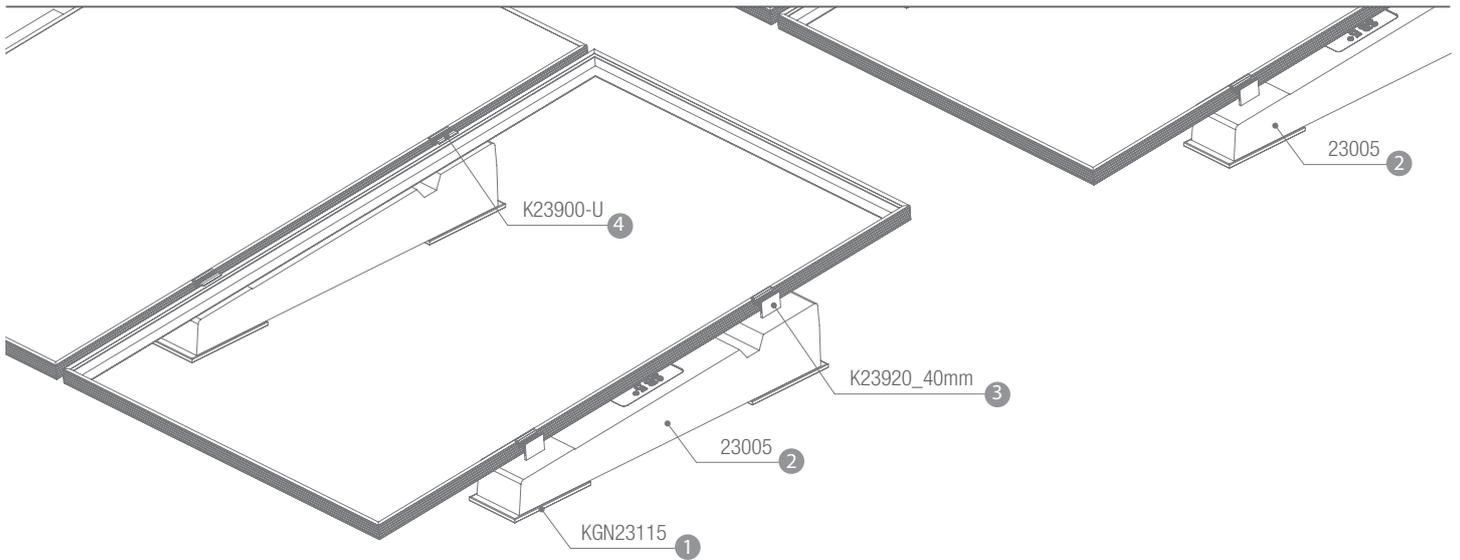## HORIZONTAL MODULE INSTALLATION - Short Side

K23900-U 4

23005 2

K23920_40mm 3

23005 2

KGN23115 1

500

135

225

990

990

Sheathing
KGN23115

1

Ballast
23005

2

Terminal Clamp
K23920/U.50

3

Central Clamp
K23900/U.50

4

SB-1125-1225

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.
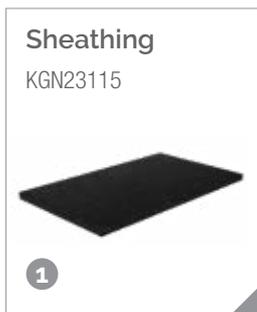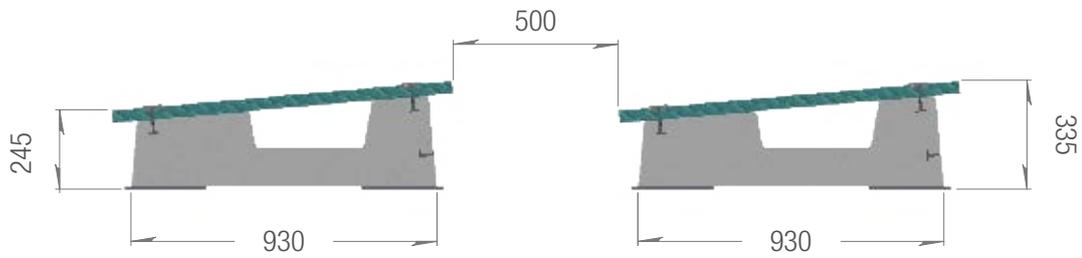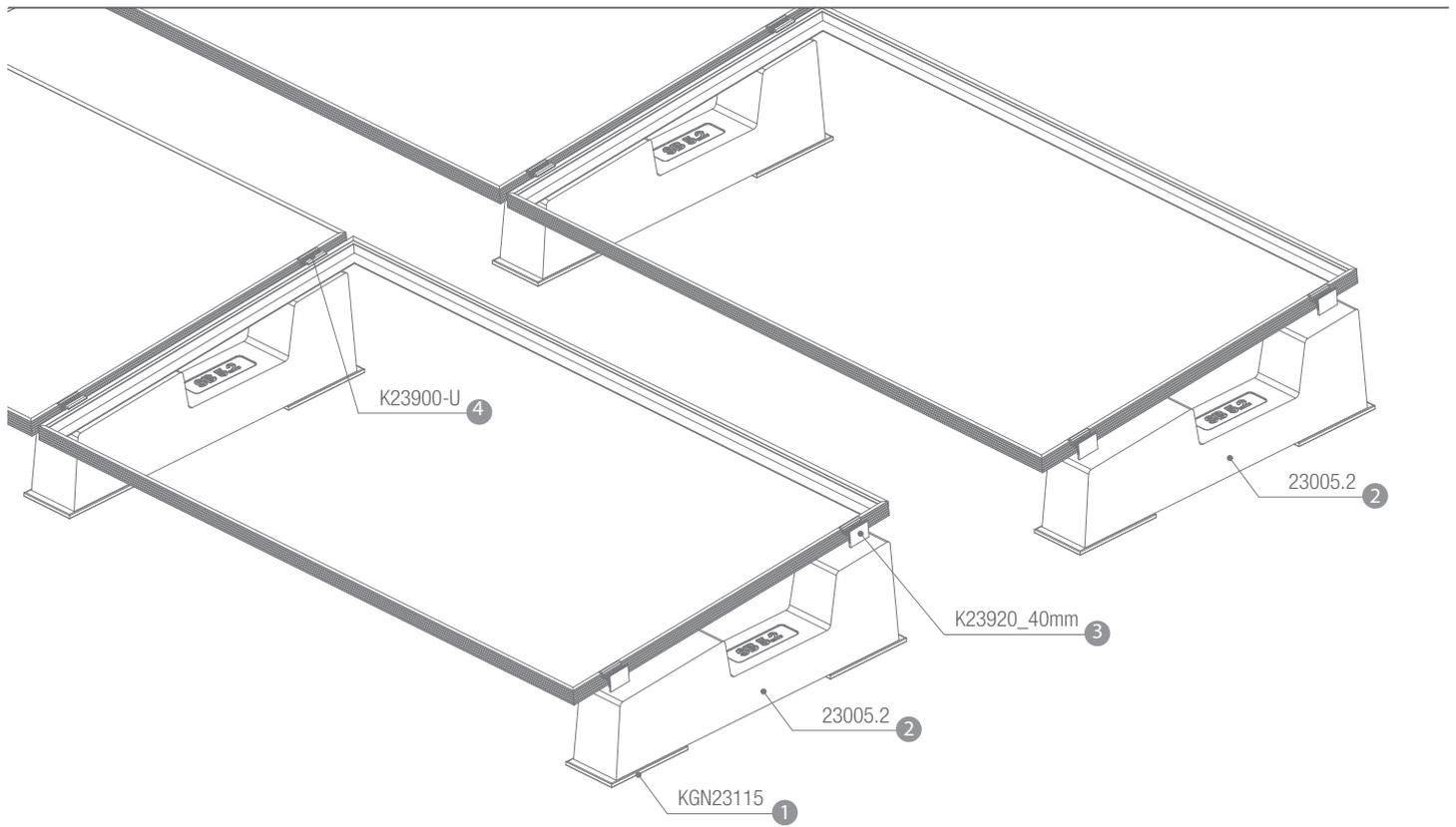
BALLAST 5.2°

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

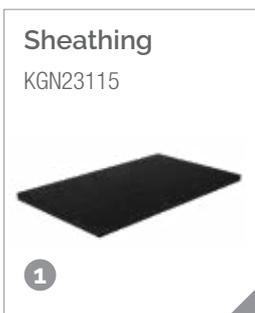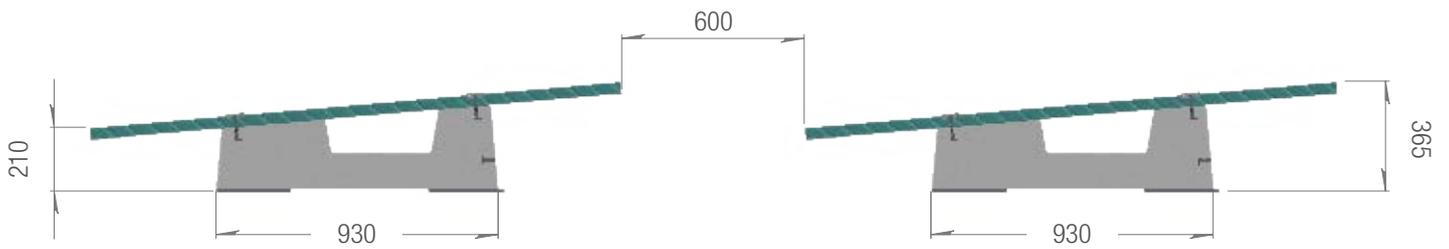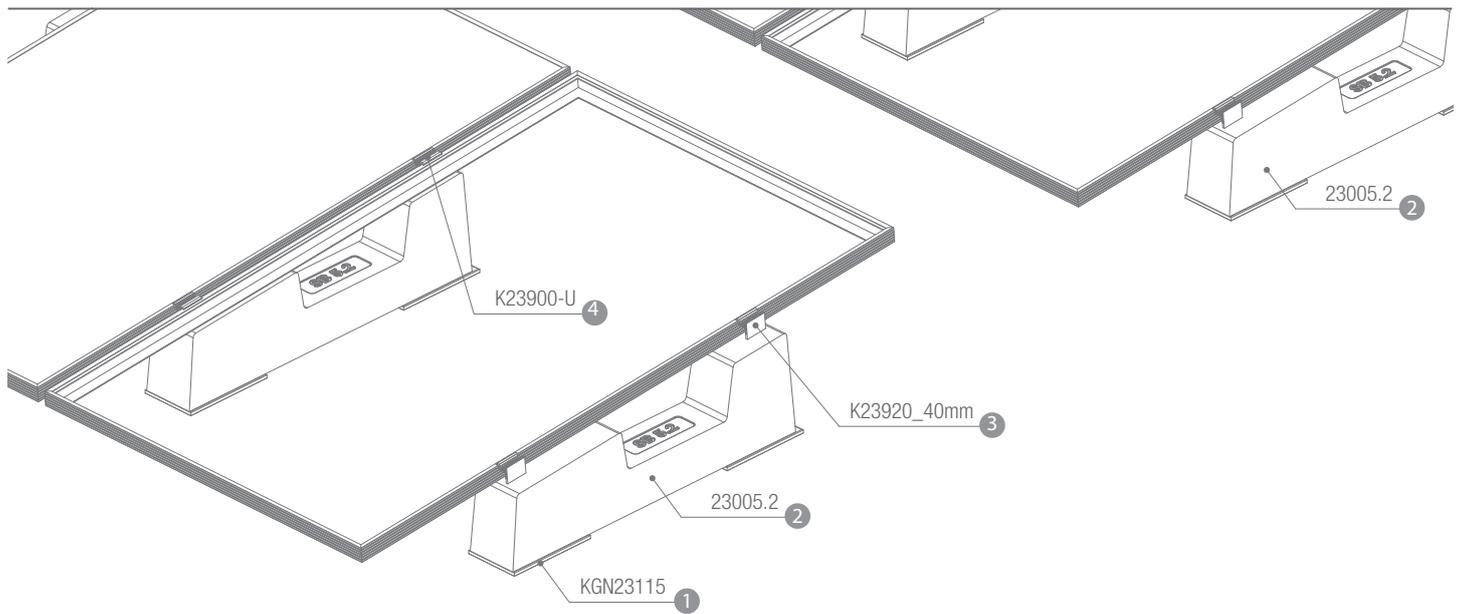## HORIZONTAL MODULE INSTALLATION - Short Side

K23900-U 4

23005.2 2

K23920_40mm 3

23005.2 2

KGN23115 1

500

245

930

335

930

Sheathing
KGN23115

1

Ballast
23005.2

2

Terminal Clamp
K23920/U.50

3

Central Clamp
K23900/U.50

4

VERTICAL MODULE INSTALLATION - Long Side

K23900-U ④

23005.2 ②

K23920_40mm ③

23005.2 ②

KGN23115 ①

600

210

930

365

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.

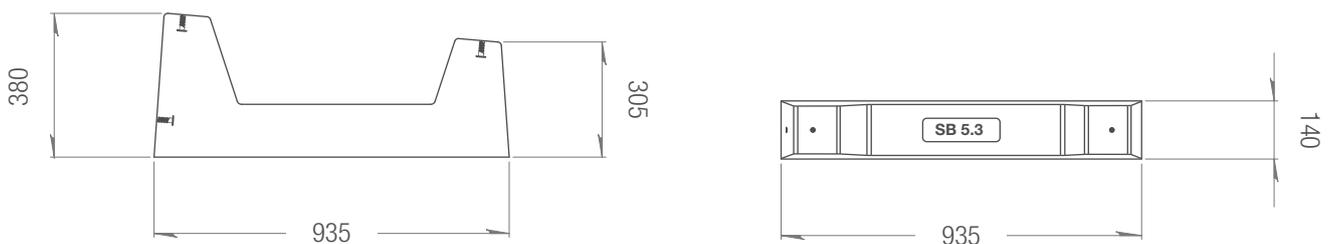The dimensions shown in the figure are all expressed in millimeters.
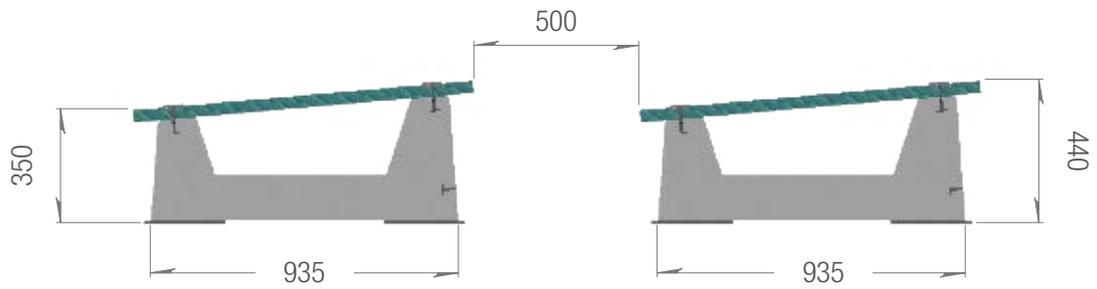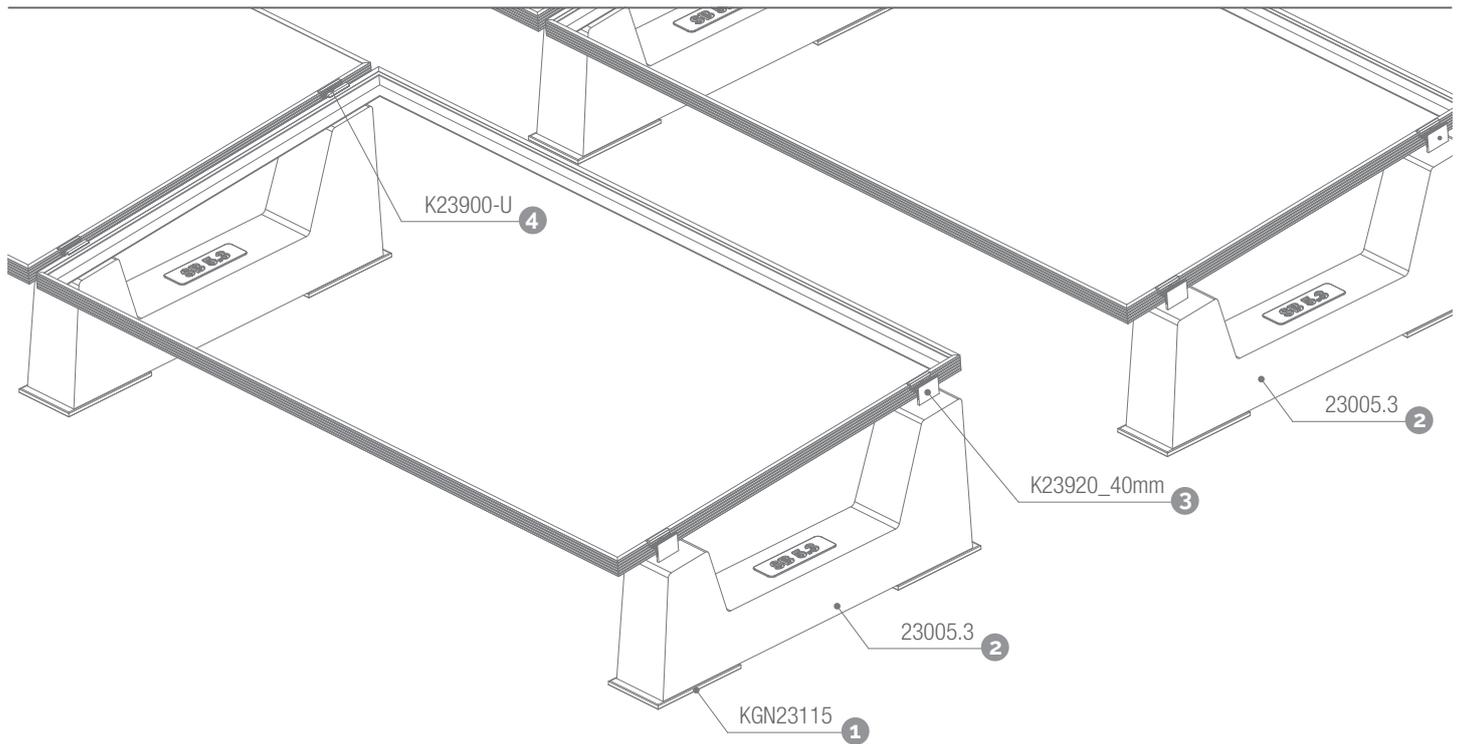
BALLAST 5.3°

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

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	Ballast	Terminal Clamp	Central Clamp
KGN23115	23005.3	K23920/U.50	K23900/U.50
①	②	③	④

VERTICAL MODULE INSTALLATION - Long Side

K23900-U 4

23005.3 2

K23920_40mm 3

23005.3 2

KGN23115 1

600

315

470

935

935

Sheathing	Ballast	Terminal Clamp	Central Clamp
KGN23115	23005.3	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.
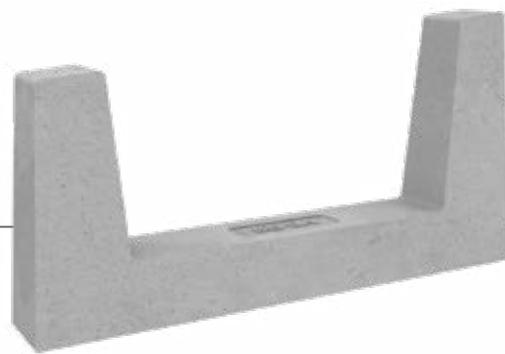
The measurements are based on the use of a panel with dimensions of 1722mm x 1134mm x 35mm. They vary depending on the size of the panel used.

Follow Sun Ballast®'s assembly instructions.
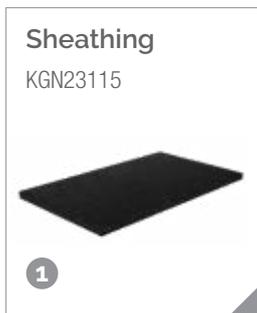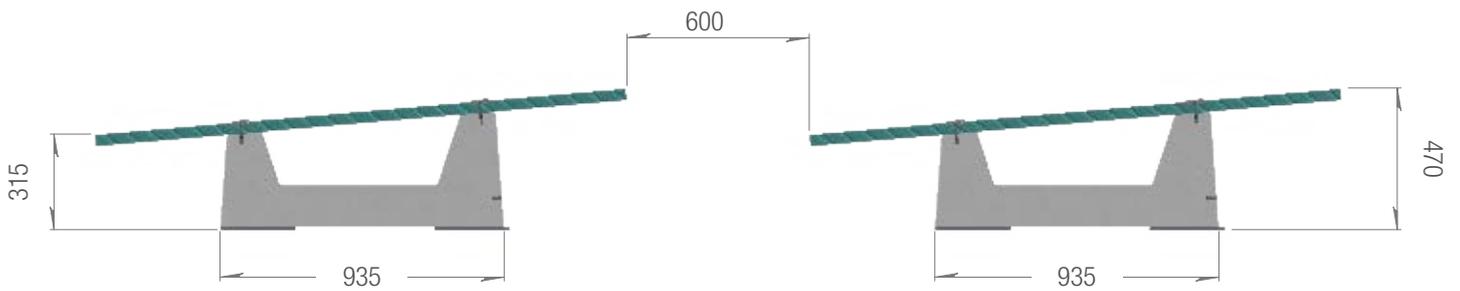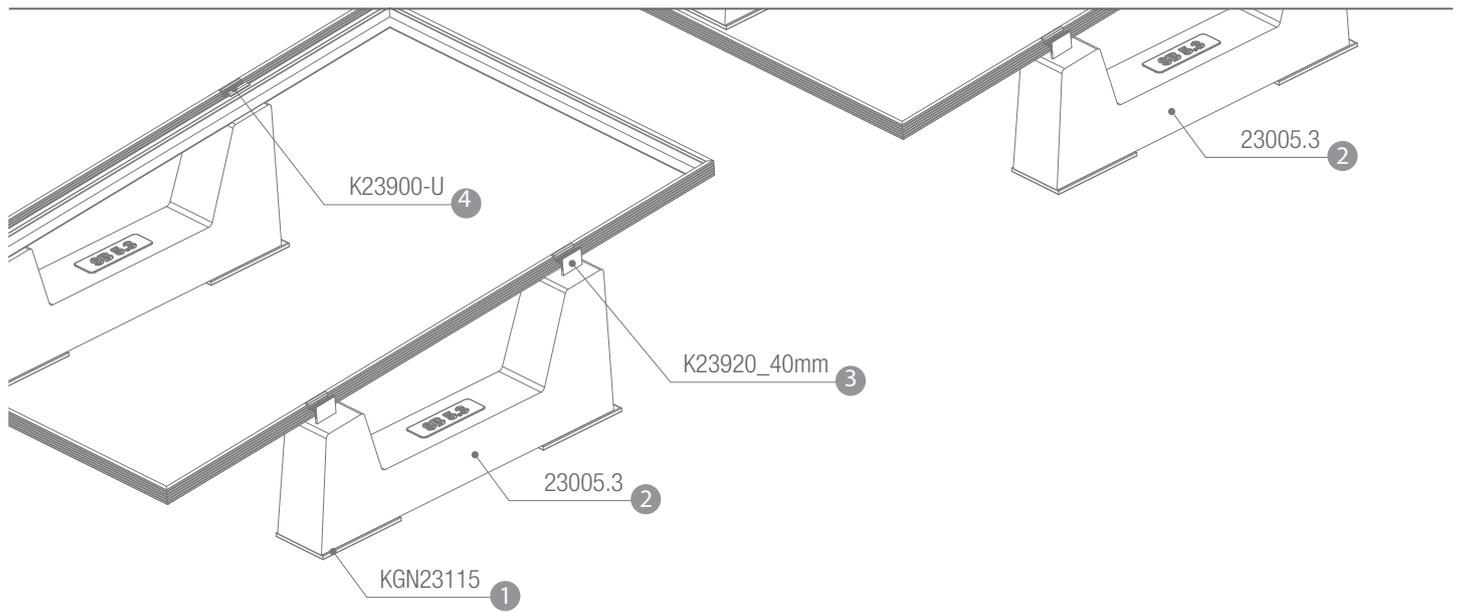
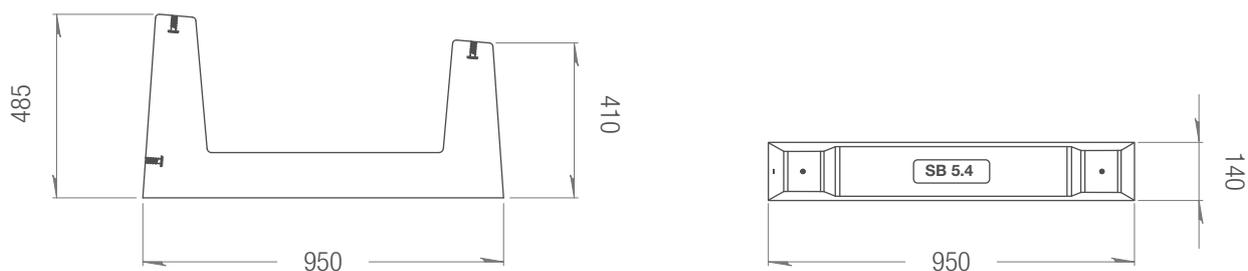The dimensions shown in the figure are all expressed in millimeters.
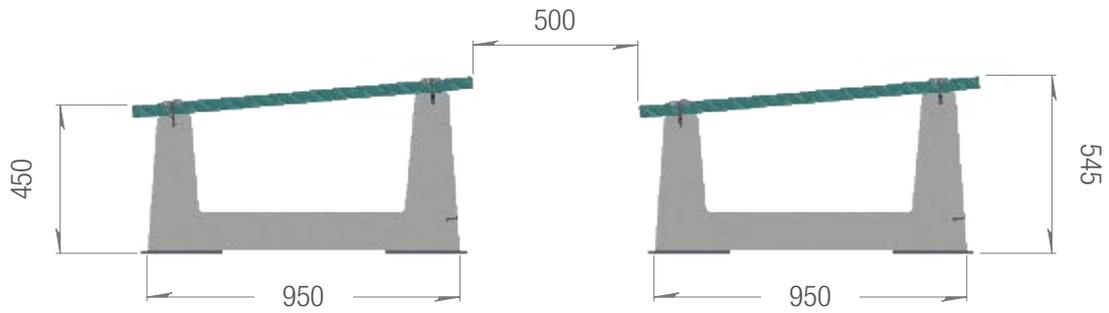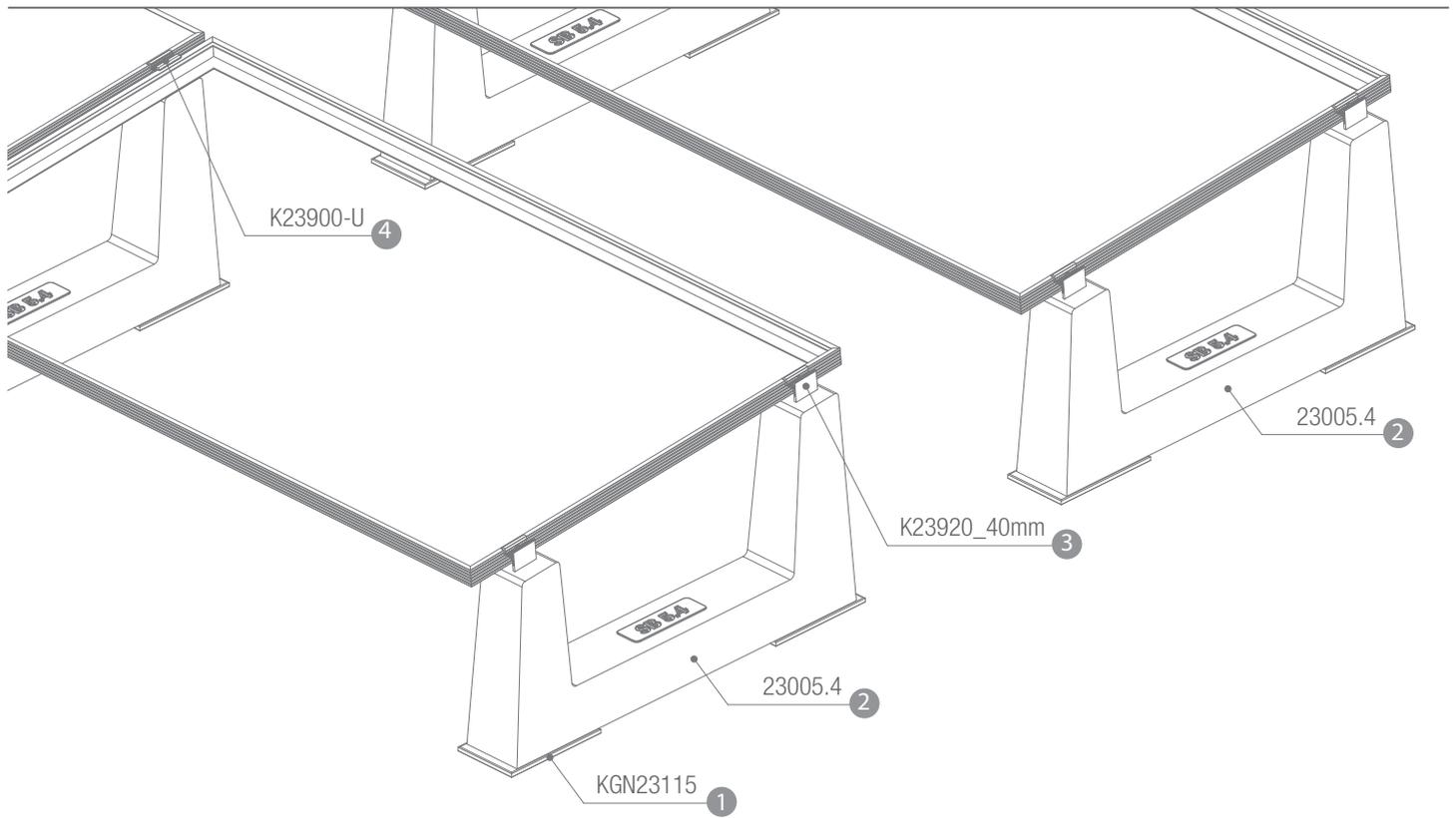
BALLAST 5.4°

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

HORIZONTAL MODULE INSTALLATION - Short Side

K23900-U ④

23005.4 ②

K23920_40mm ③

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
KGN23115
①

Ballast
23005.4
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.
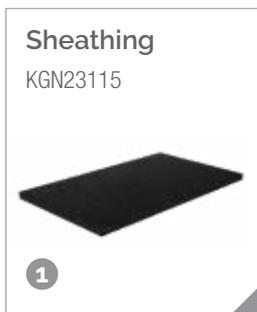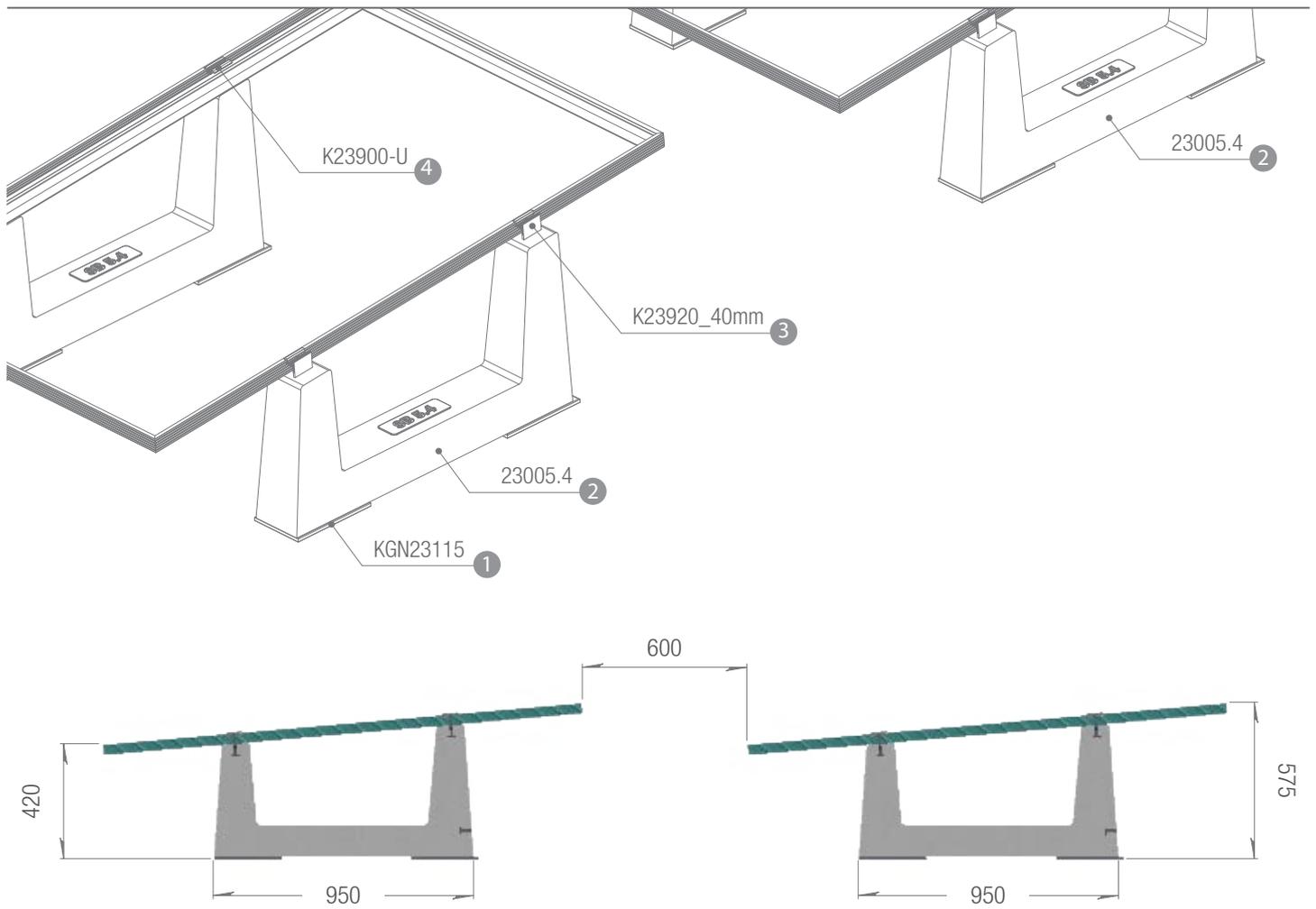
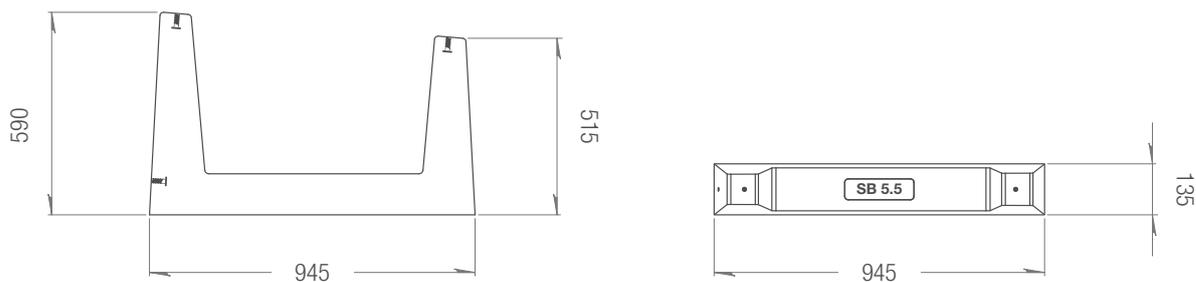The dimensions shown in the figure are all expressed in millimeters.
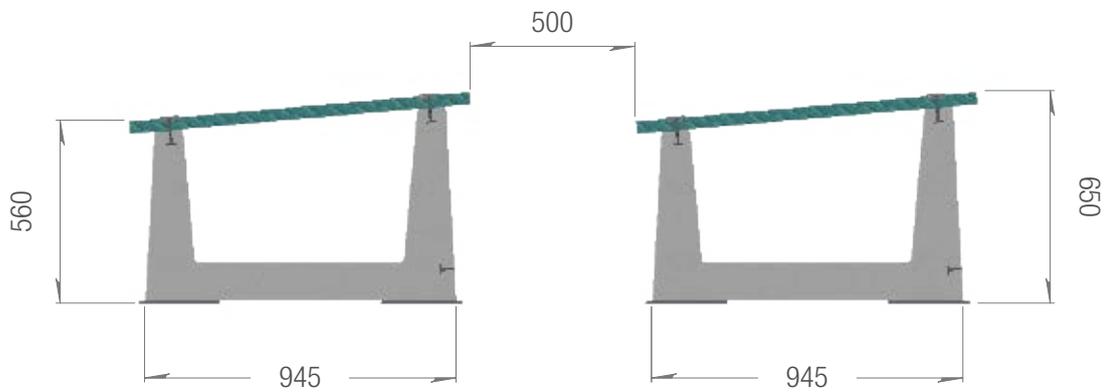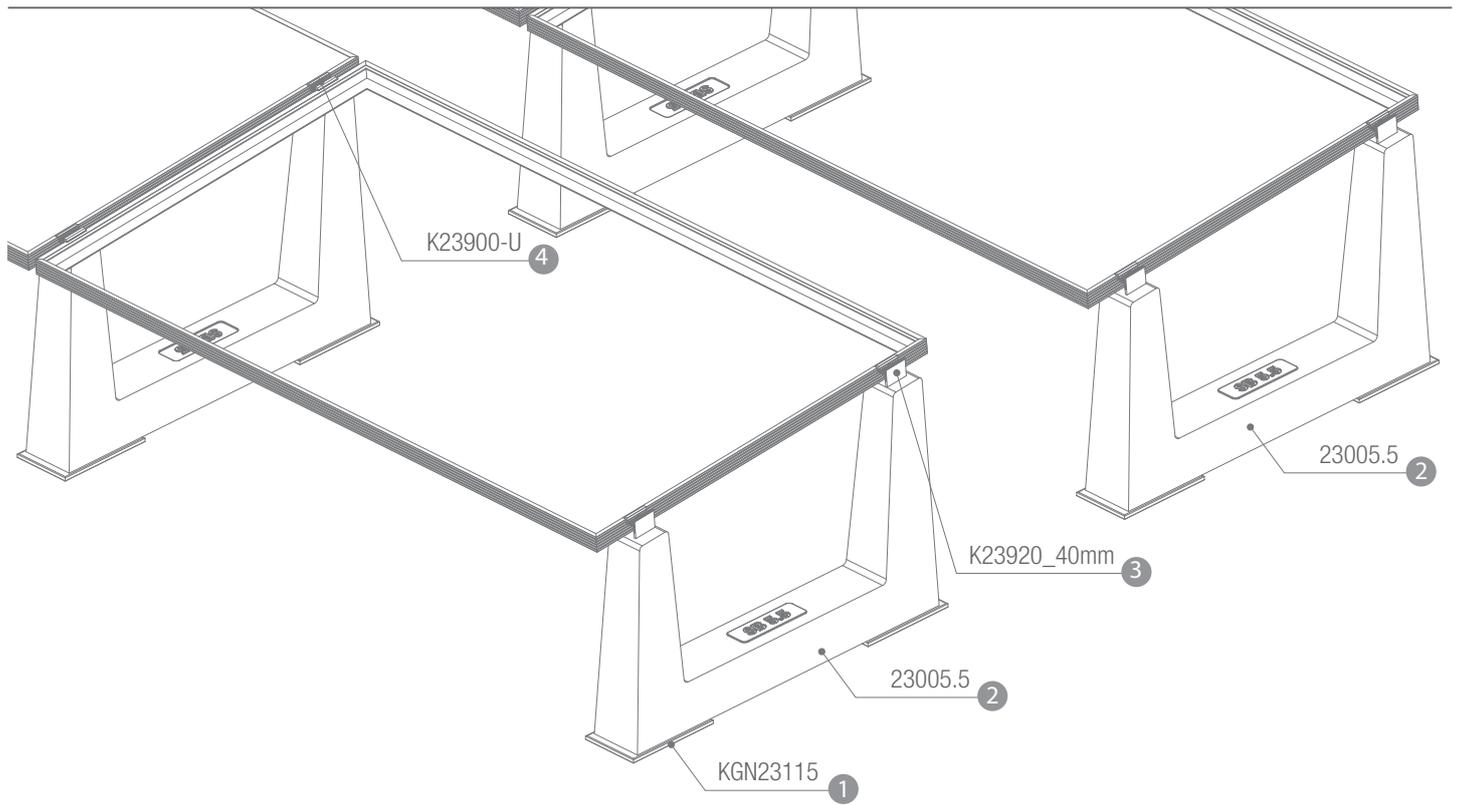
BALLAST 5.5°

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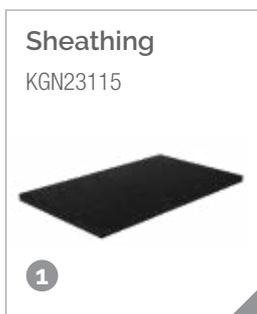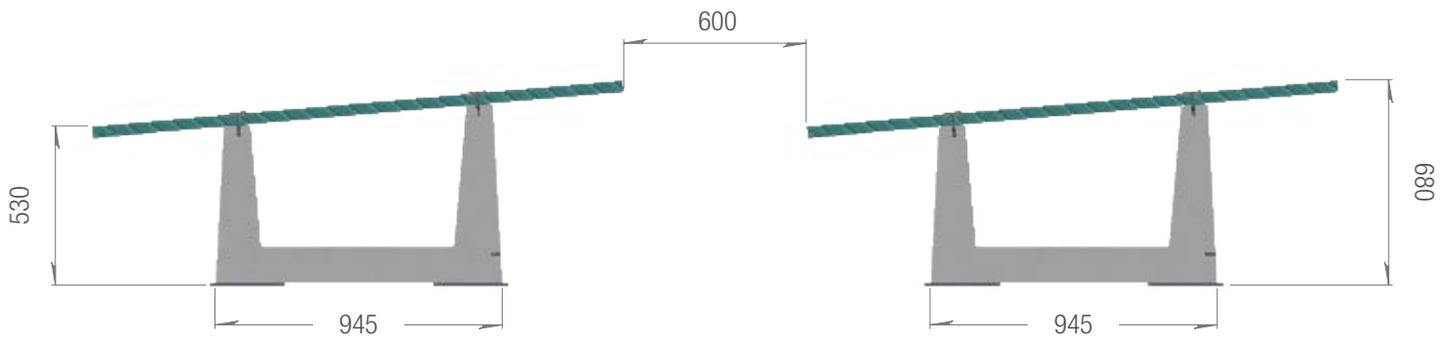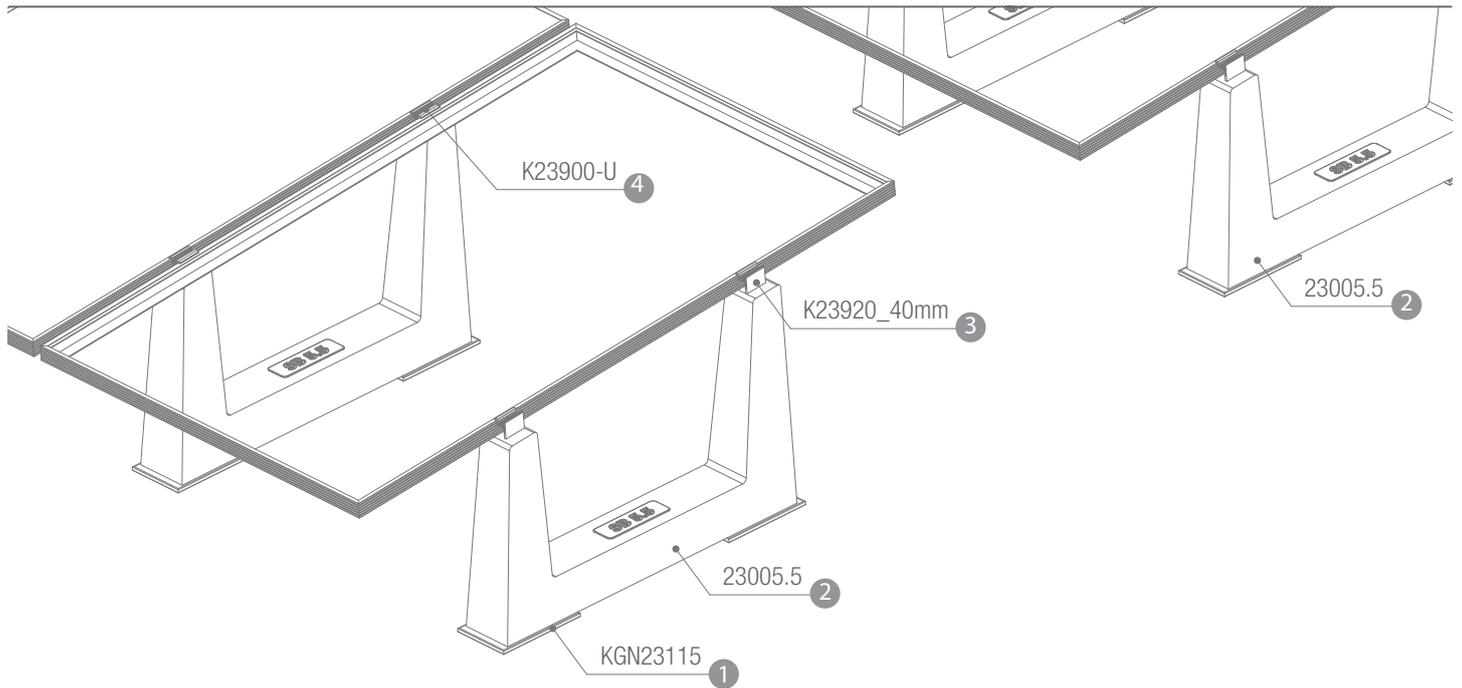
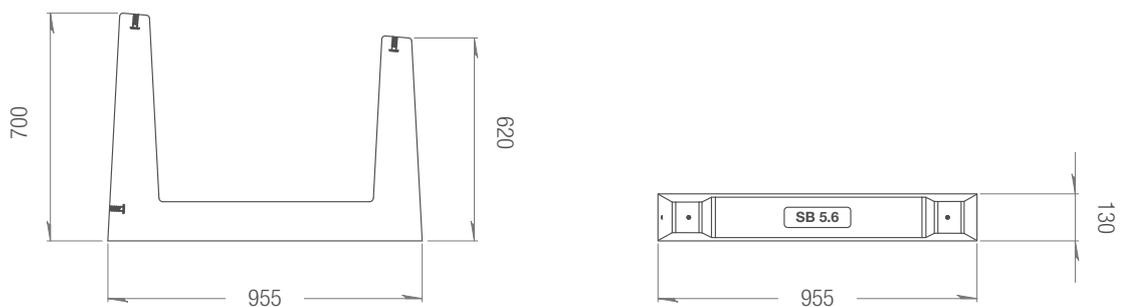The dimensions shown in the figure are all expressed in millimeters.
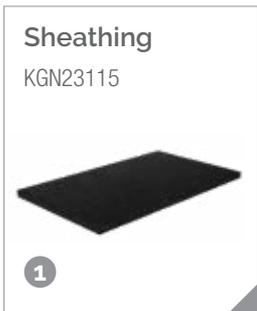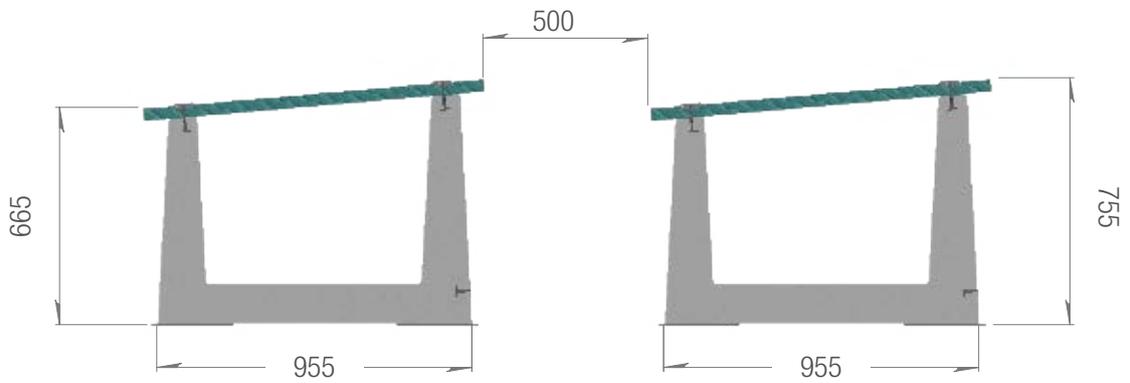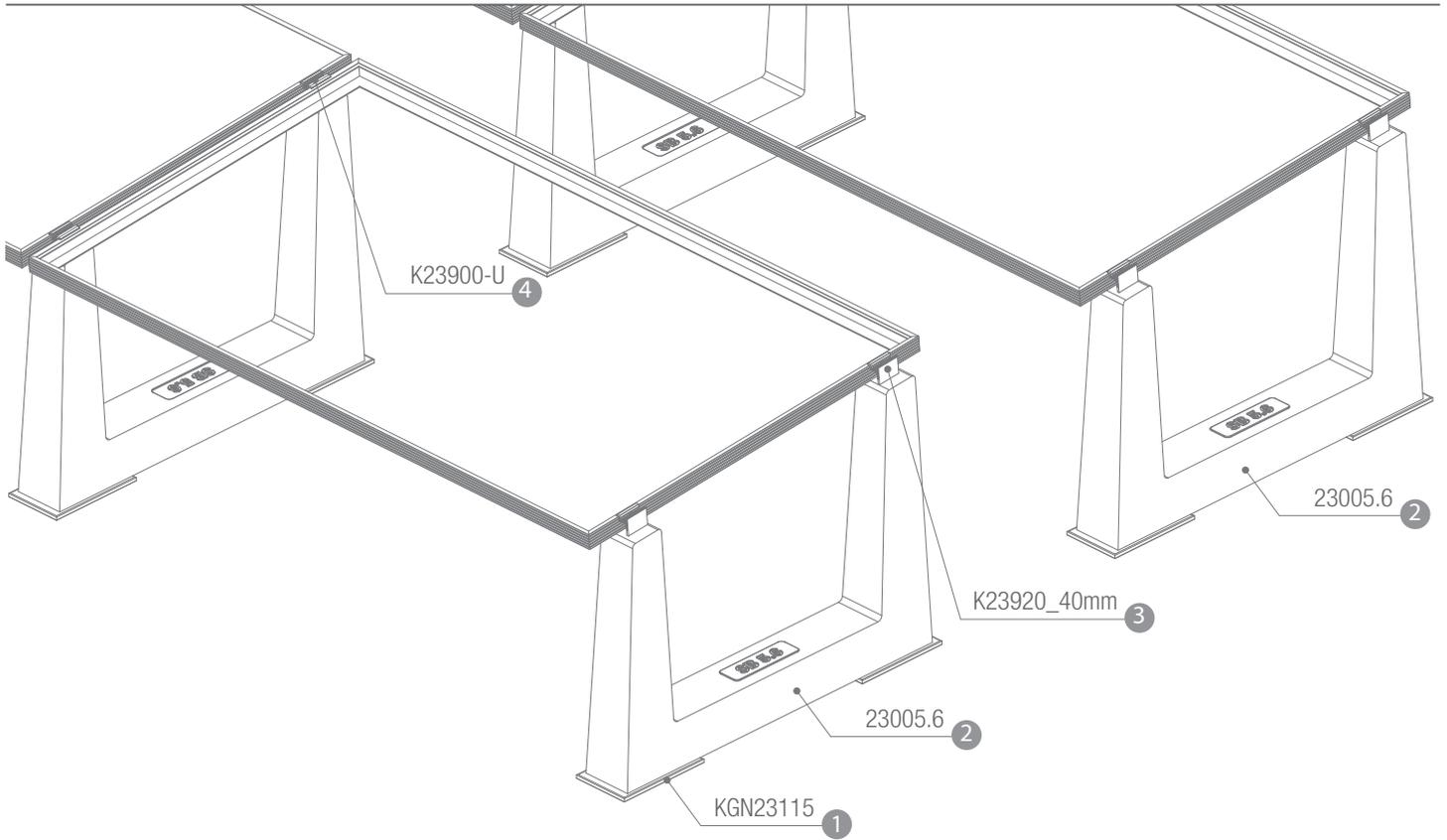
BALLAST 5.6°

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	Ballast	Terminal Clamp	Central Clamp
KGN23115	23005.6	K23920/U.50	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

785

955

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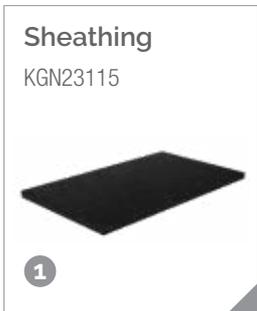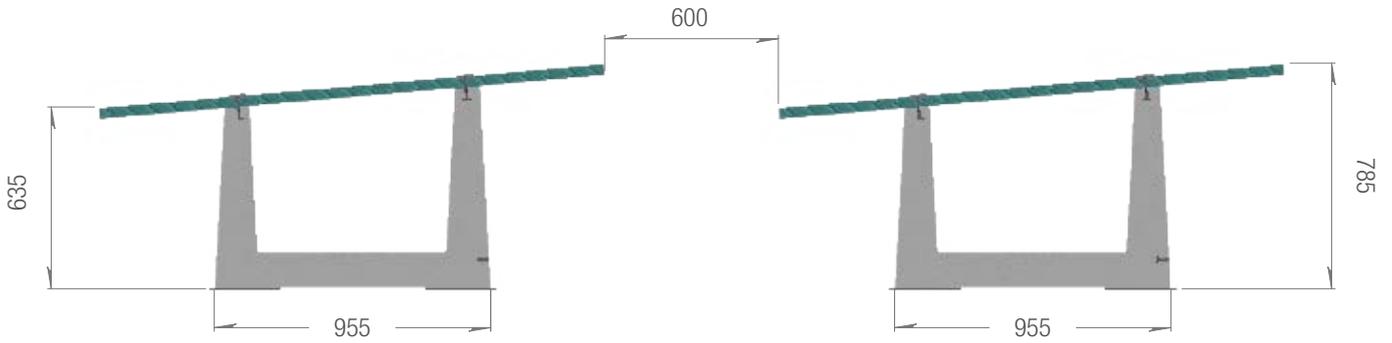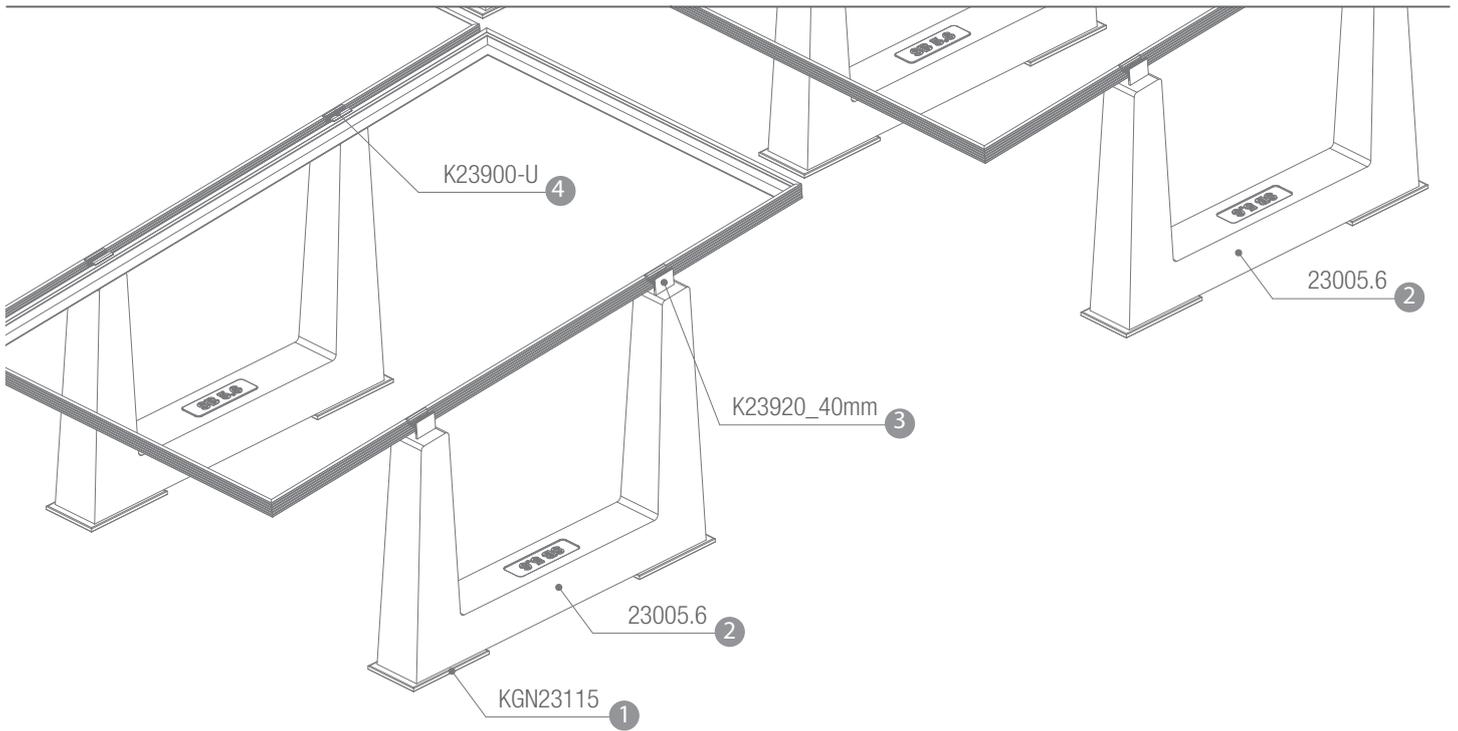
The dimensions shown in the figure are all expressed in millimeters.

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

SUN BALLAST ®

Made to last

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CONTACTS

INFORMATION AND FIRST CONTACT

info@sunballast.com

COMMERCIAL CONSULTING

commerciale@sunballast.com

TECHNICAL SUPPORT

tecnico@sunballast.com
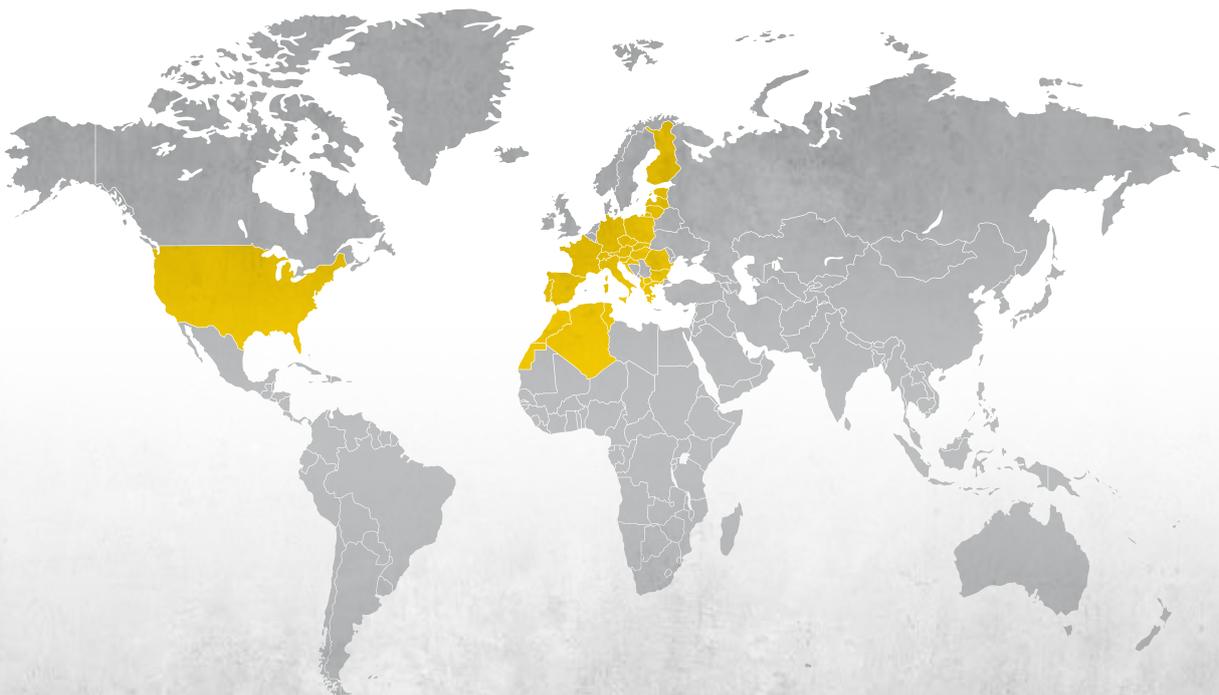
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