

# **SUN** **BALLAST** <sup>®</sup>

**Made to last**  
**Patented systems**

**TECHNICAL**  
**DATA SHEETS**

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SYSTEM:

**CONNECT 5°**

ART. 23005.CF/.CR/.CRT



<b>Material</b>	The main material of SUN BALLAST® ballasts is concrete, which allows low wear and tear over time and the ability to withstand even the most intense disturbances and different climatic conditions		
<b>Compatible accessories</b>	Rubber protection sheath (KGN23115), No-Flex (K23712), Universal junction plate (K23804), U-Block XS (23015.CRP)		
<b>Application</b>	Any type of flat roof with a slope of max. 5°, on the ground, on beaten earth, or on paved surfaces		
<b>Angle of Inclination</b>	5°	<b>Module positioning</b>	Horizontal

**Front Ballast Art. 23005.CF**

Ballast weight	20 kg	Pallet dimensions	70 cm x 98 cm h = 85 cm
Quantity per pallet	32 pieces	Pallet weight	640 kg

**Central Ballast Art. 23005.CR**

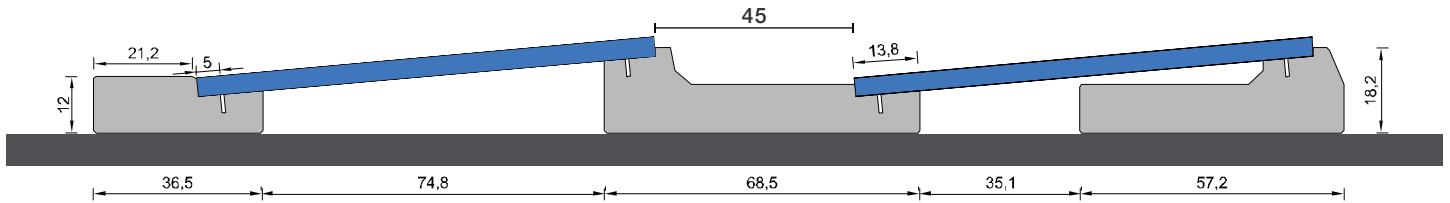
Ballast weight	16 kg	Pallet dimensions	88 cm x 65 cm h = 57 cm
Quantity per pallet	36 pieces	Pallet weight	576 kg

**Terminal Ballast Art. 23005.CRT**

Ballast weight	35 kg	Pallet dimensions	90 cm x 98 cm h = 45 cm
Quantity per pallet	16 pieces	Pallet weight	560 kg

## HORIZONTAL PANEL LAYING

Recommended minimum distance between module rows 45



### INFO

- The torque applied must refer to the mechanical standard conforming to the bolt in use, with M8 stainless steel bolts using a torque of 12 - 14 Nm.
- Avoid impact wrenches.
- Always refer to the information given in the panel manufacturer's installation sheet.
- Follow the Sun Ballast® installation instructions.
- The dimensions shown are all in centimeters.
- For further information, please visit [www.sunballast.en](http://www.sunballast.en)

SYSTEM:

# 5° SAIL SHAPED CONNECT

ART. 23005.CF/.CRC/.CRR/.CRTT



<b>Material</b>	The main material of SUN BALLAST® ballasts is concrete, which allows low wear and tear over time and the ability to withstand even the most intense disturbances and different climatic conditions		
<b>Compatible accessories</b>	U-Block (23030.CRP), Rubber protection sheath (KGN23115), No-Flex (K23712), Universal junction plate (K23804)		
<b>Application</b>	Any type of flat roof with a slope of max. 5°, on the ground, on beaten earth, or on paved surfaces		
<b>Angle of Inclination</b>	5°	<b>Module positioning</b>	Horizontal

## Front Ballast Art. 23005.CF

Ballast weight	20 kg	Pallet dimensions	70cm x 98cm h = 85 cm
Quantity per pallet	32 pieces	Pallet weight	640 kg

## Central Ballast Art. 23005.CRC

Ballast weight	20 kg	Pallet dimensions	88cm x 65cm h = 57 cm
Quantity per pallet	24 pieces	Pallet weight	480 kg

## Central Ballast Art. 23005.CRR

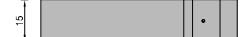
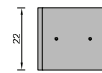
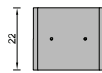
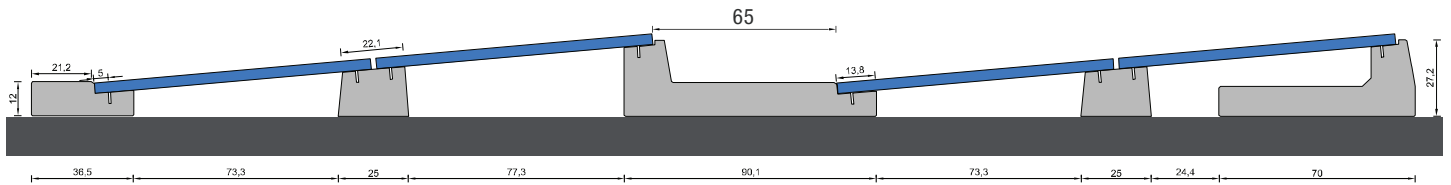
Ballast weight	28 kg	Pallet dimensions	88cm x 65cm h = 57 cm
Quantity per pallet	18 pieces	Pallet weight	504 kg

## Terminal Ballast Art. 23005.CRTT

Ballast weight	33 kg	Pallet dimensions	90 cm x 98 cm h= 45 cm
Quantity per pallet	24 pieces	Pallet weight	792 kg

## HORIZONTAL PANEL LAYING

Recommended minimum distance between module rows 65



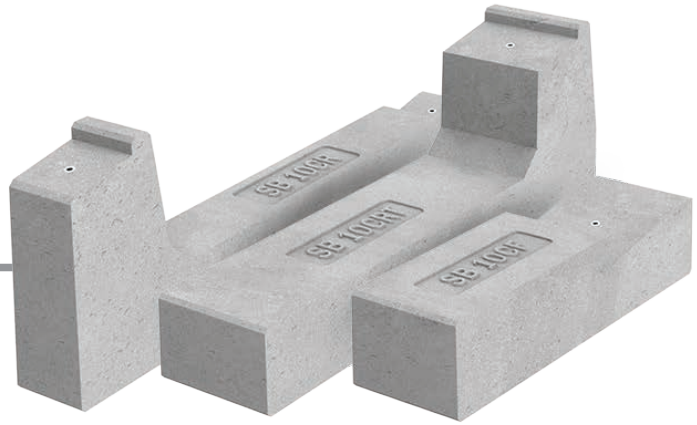
### INFO

- The torque applied must refer to the mechanical standard conforming to the bolt in use, with M8 stainless steel bolts using a torque of 12 - 14 Nm.
- Avoid impact wrenches.
- Always refer to the information given in the panel manufacturer's installation sheet.
- Follow the Sun Ballast® installation instructions.
- The dimensions shown are all in centimeters.
- For further information, please visit [www.sunballast.en](http://www.sunballast.en)

SYSTEM:

**CONNECT 10°**

ART. 23010.CF/.CR/.CRT



<b>Material</b>	The main material of SUN BALLAST® ballasts is concrete, which allows low wear and tear over time and the ability to withstand even the most intense disturbances and different climatic conditions		
<b>Compatible accessories</b>	U-Block (23030.CRP), Rubber protection sheath (KGN23115), No-Flex (K23712), Junction plate for ballast (K23804)		
<b>Applicazione</b>	Any type of flat roof with a slope of max. 5°, on the ground, on beaten earth, or on paved surfaces		
<b>Angle of Inclination</b>	10 °	<b>Module positioning</b>	Horizontal

**Front Ballast Art. 23010.CF**

<b>Ballast weight</b>	20 kg	<b>Pallet dimensions</b>	90 cm x 98 cm h= 35 cm
<b>Quantity per pallet</b>	24 pieces	<b>Pallet weight</b>	480 kg

**Central Ballast Art. 23010.CR**

<b>Ballast weight</b>	22 kg	<b>Pallet dimensions</b>	120 cm x 80 cm h= 46 cm
<b>Quantity per pallet</b>	24 pieces	<b>Pallet weight</b>	528 kg

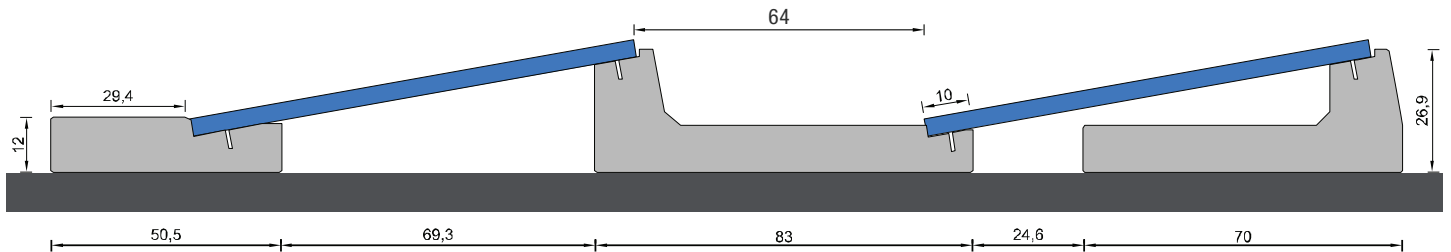
**Terminal Ballast Art. 23010.CRT**

<b>Ballast weight</b>	33 kg	<b>Pallet dimensions</b>	120 cm x 70 cm h= 46 cm
<b>Quantity per pallet</b>	14 pieces	<b>Pallet weight</b>	462 kg



## HORIZONTAL PANEL LAYING

Recommended minimum distance between module rows 64



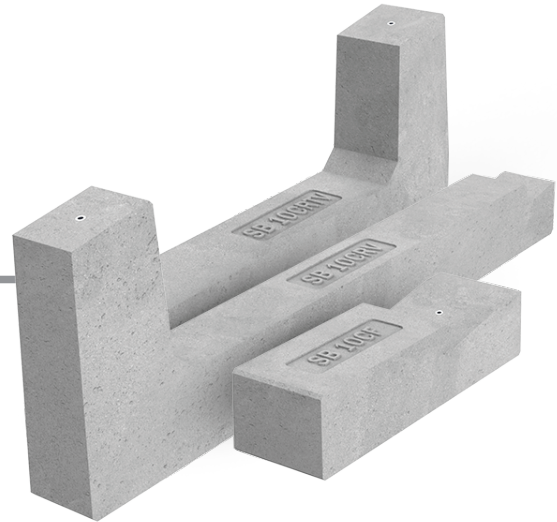
### INFO

- The torque applied must refer to the mechanical standard conforming to the bolt in use, with M8 stainless steel bolts using a torque of 12 - 14 Nm.
- Avoid impact wrenches.
- Always refer to the information given in the panel manufacturer's installation sheet.
- Follow the Sun Ballast® installation instructions.
- The dimensions shown are all in centimeters.
- For further information, please visit [www.sunballast.en](http://www.sunballast.en)

SYSTEM:

**CONNECT 10°**

ART. 23010.CF/.CRV/.CRTV



<b>Material</b>	The main material of SUN BALLAST® ballasts is concrete, which allows low wear and tear over time and the ability to withstand even the most intense disturbances and different climatic conditions		
<b>Compatible accessories</b>	U-Block (23030.CRP), Rubber protection sheath (KGN23115), Junction plate for ballast (K23804)		
<b>Applicazione</b>	Any type of flat roof with a slope of max. 5°, on the ground, on beaten earth, or on paved surfaces		
<b>Angle of Inclination</b>	10 °	<b>Module positioning</b>	Vertical

**Front Ballast Art. 23010.CF**

<b>Ballast weight</b>	20 kg	<b>Pallet dimensions</b>	80 cm x 80 cm h= 42 cm
<b>Quantity per pallet</b>	24 pieces	<b>Pallet weight</b>	480 kg

**Central Ballast Art. 23010.CRV**

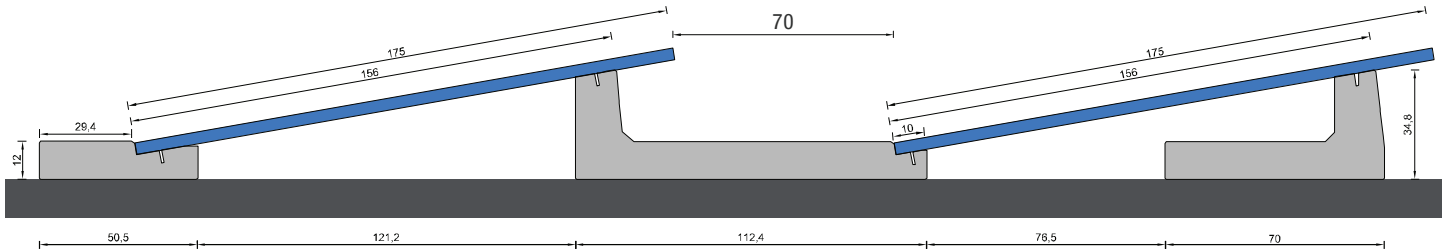
<b>Ballast weight</b>	38 kg	<b>Pallet dimensions</b>	84 cm x 98cm h= 60 cm
<b>Quantity per pallet</b>	16 pieces	<b>Pallet weight</b>	608 kg

**Terminal Ballast Art. 23010.CRTV**

<b>Ballast weight</b>	33 kg	<b>Pallet dimensions</b>	70 cm x 98 cm, h= 50 cm
<b>Quantity per pallet</b>	16 pieces	<b>Pallet weight</b>	528 kg

## VERTICAL PANEL LAYING

Recommended minimum distance between module rows 70



### INFO

- The torque applied must refer to the mechanical standard conforming to the bolt in use, with M8 stainless steel bolts using a torque of 12 - 14 Nm.
- Avoid impact wrenches.
- Always refer to the information given in the panel manufacturer's installation sheet.
- Follow the Sun Ballast® installation instructions.
- The dimensions shown are all in centimeters.
- For further information, please visit [www.sunballast.en](http://www.sunballast.en)

SYSTEM:

**CONNECT 15°**

ART. 23015.CF/.CR/.CRT



<b>Material</b>	The main material of SUN BALLAST® ballasts is concrete, which allows low wear and tear over time and the ability to withstand even the most intense disturbances and different climatic conditions		
<b>Compatible accessories</b>	U-Block (23030.CRP), Rubber protection sheath (KGN23115), No-Flex (K23712), Universal junction plate (K23804)		
<b>Application</b>	Any type of flat roof with a slope of max. 5°, on the ground, on beaten earth, or on paved surfaces		
<b>Angle of Inclination</b>	15 °	<b>Module positioning</b>	Horizontal

**Front Ballast Art. 23015.CF**

<b>Ballast weight</b>	21 kg	<b>Pallet dimensions</b>	98 cm x 90 cm h = 44 cm
<b>Quantity per pallet</b>	30 pieces	<b>Pallet weight</b>	630 kg

**Central Ballast Art. 23015.CR**

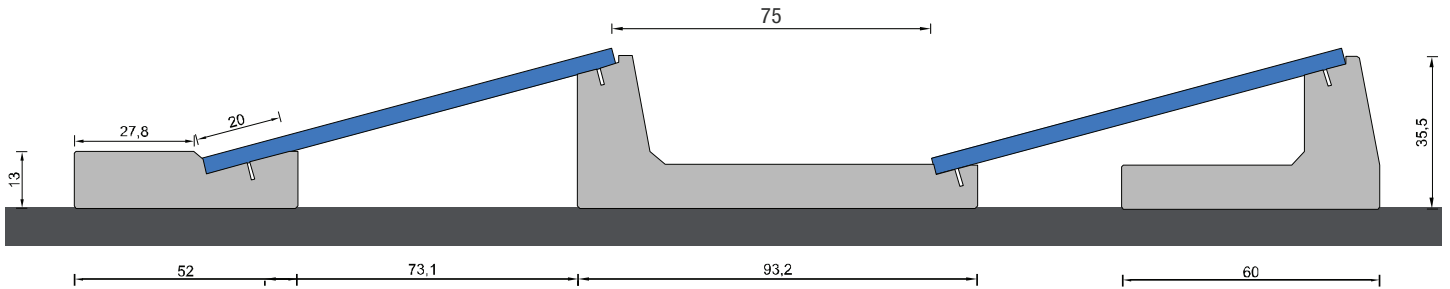
<b>Ballast weight</b>	28 kg	<b>Pallet dimensions</b>	98 cm x 90 cm h = 61 cm
<b>Quantity per pallet</b>	20 pieces	<b>Pallet weight</b>	560 kg

**Terminal Ballast Art. 23015.CRT**

<b>Ballast weight</b>	30 kg	<b>Pallet dimensions</b>	80 cm x 80 cm h = 57 cm
<b>Quantity per pallet</b>	14 pieces	<b>Pallet weight</b>	420 kg

## HORIZONTAL PANEL LAYING

Recommended minimum distance between module rows 75



### INFO

- The torque applied must refer to the mechanical standard conforming to the bolt in use, with M8 stainless steel bolts using a torque of 12 - 14 Nm.
- Avoid impact wrenches.
- Always refer to the information given in the panel manufacturer's installation sheet.
- Follow the Sun Ballast® installation instructions.
- The dimensions shown are all in centimeters.
- For further information, please visit [www.sunballast.en](http://www.sunballast.en)

# SYSTEM: CONNECT 20°

ART. 23020.CF/.CR/.CRT



<b>Material</b>	The main material of SUN BALLAST® ballasts is concrete, which allows low wear and tear over time and the ability to withstand even the most intense disturbances and different climatic conditions		
<b>Compatible accessories</b>	U-Block (23030.CRP), Rubber protection sheath (KGN23115), No-Flex (K23712), Junction plate for ballast (K23804)		
<b>Application</b>	Any type of flat roof with a slope of max. 5°, on the ground, on beaten earth, or on paved surfaces		
<b>Angle of Inclination</b>	20 °	<b>Module positioning</b>	Horizontal

## Front Ballast Art. 23020.CF

<b>Ballast weight</b>	22 kg	<b>Pallet dimensions</b>	70 cm x 98 cm h = 52 cm
<b>Quantity per pallet</b>	30 pieces	<b>Pallet weight</b>	660 kg

## Central Ballast Art. 23020.CR

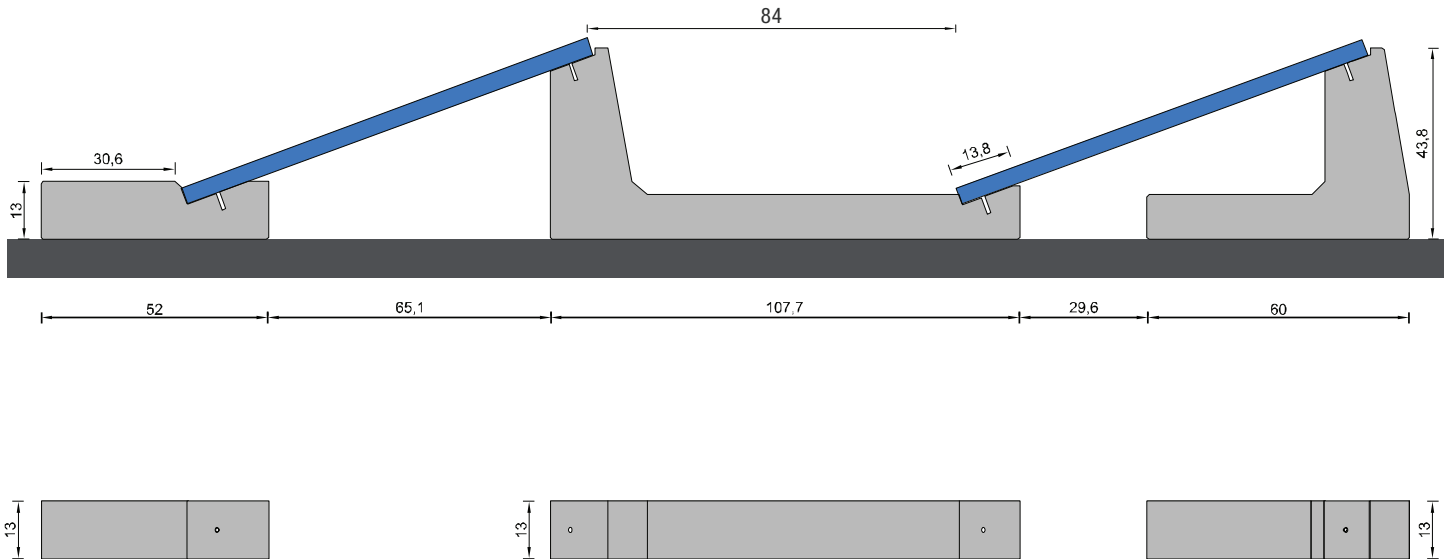
<b>Ballast weight</b>	33 kg	<b>Pallet dimensions</b>	90 cm x 86 cm h = 64 cm
<b>Quantity per pallet</b>	18 pieces	<b>Pallet weight</b>	594 kg

## Terminal Ballast Art. 23020.CRT

<b>Ballast weight</b>	35 kg	<b>Pallet dimensions</b>	70 cm x 98 cm h = 70 cm
<b>Quantity per pallet</b>	16 pieces	<b>Pallet weight</b>	560 kg

## HORIZONTAL PANEL LAYING

Recommended minimum distance between module rows 84



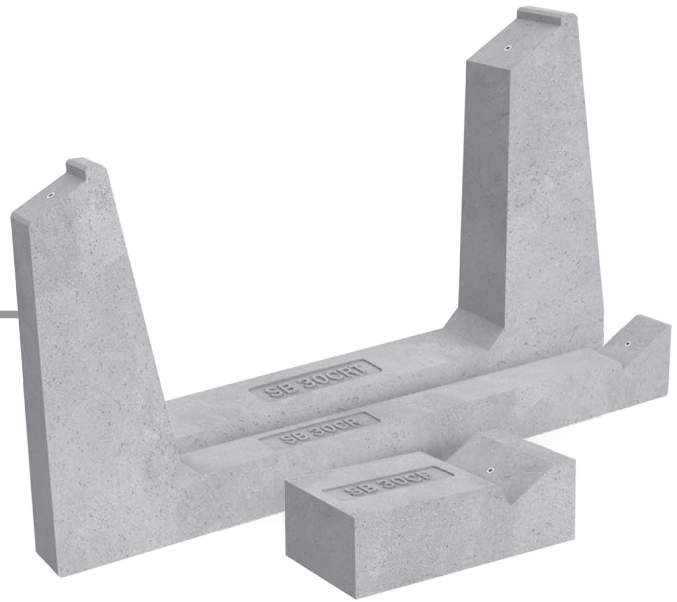
### INFO

- The torque applied must refer to the mechanical standard conforming to the bolt in use, with M8 stainless steel bolts using a torque of 12 - 14 Nm.
- Avoid impact wrenches.
- Always refer to the information given in the panel manufacturer's installation sheet.
- Follow the Sun Ballast® installation instructions.
- The dimensions shown are all in centimeters.
- For further information, please visit [www.sunballast.en](http://www.sunballast.en)

SYSTEM:

**CONNECT 30°**

ART. 23030.CF/.CR/.CRT



<b>Material</b>	The main material of SUN BALLAST® ballasts is concrete, which allows low wear and tear over time and the ability to withstand even the most intense disturbances and different climatic conditions		
<b>Compatible accessories</b>	U-Block (23030.CRP), Rubber protection sheath (KGN23115), No-Flex (K23712), Universal junction plate (K23804)		
<b>Application</b>	Any type of flat roof with a slope of max. 5°, on the ground, on beaten earth, or on paved surfaces		
<b>Angle of Inclination</b>	30 °	<b>Module positioning</b>	Horizontal

**Front Ballast Art. 23030.CF**

<b>Ballast weight</b>	20 kg	<b>Pallet dimensions</b>	86 cm x 86 cm h = 60 cm
<b>Quantity per pallet</b>	30 pieces	<b>Pallet weight</b>	600 kg

**Central Ballast Art. 23030.CR**

<b>Ballast weight</b>	45 kg	<b>Pallet dimensions</b>	125 cm x 69 cm h = 58 cm
<b>Quantity per pallet</b>	12 pieces	<b>Pallet weight</b>	540 kg

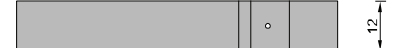
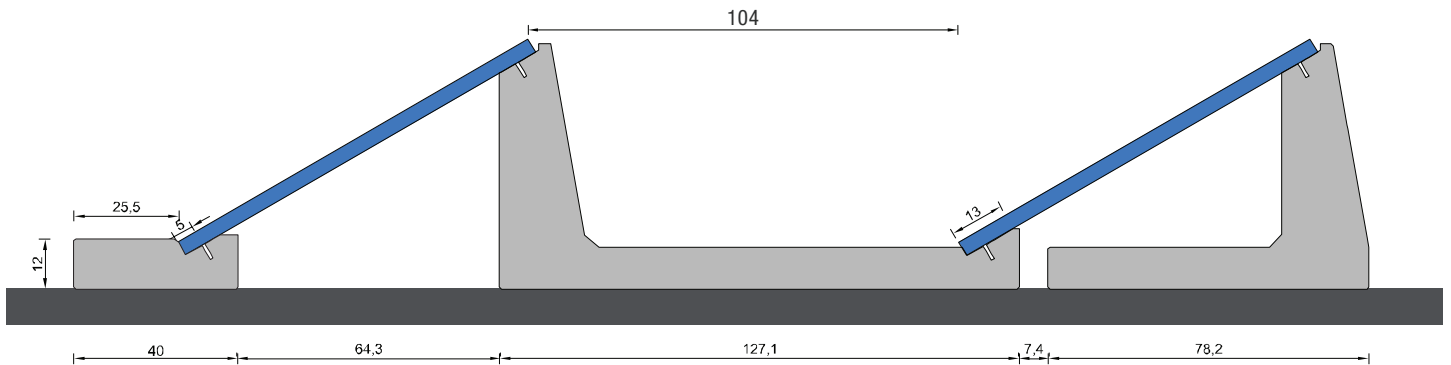
**Terminal Ballast Art. 23030.CRT**

<b>Ballast weight</b>	45 kg	<b>Pallet dimensions</b>	75 cm x 65 cm h = 84 cm
<b>Quantity per pallet</b>	12 pieces	<b>Pallet weight</b>	540 kg



## HORIZONTAL PANEL LAYING

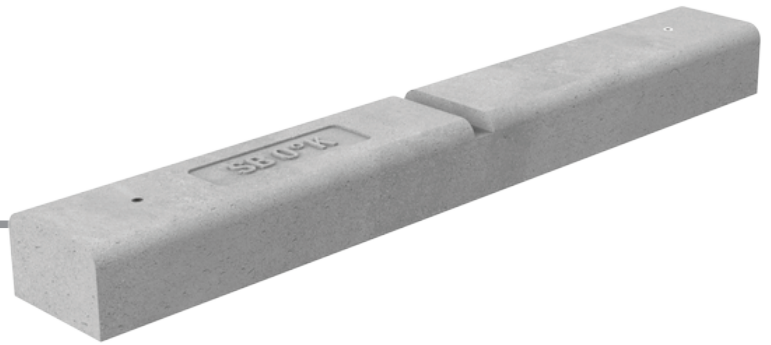
Recommended minimum distance between module rows 104



### INFO

- The torque applied must refer to the mechanical standard conforming to the bolt in use, with M8 stainless steel bolts using a torque of 12 - 14 Nm.
- Avoid impact wrenches.
- Always refer to the information given in the panel manufacturer's installation sheet.
- Follow the Sun Ballast® installation instructions.
- The dimensions shown are all in centimeters.
- For further information, please visit [www.sunballast.en](http://www.sunballast.en)

# BALLAST 0°

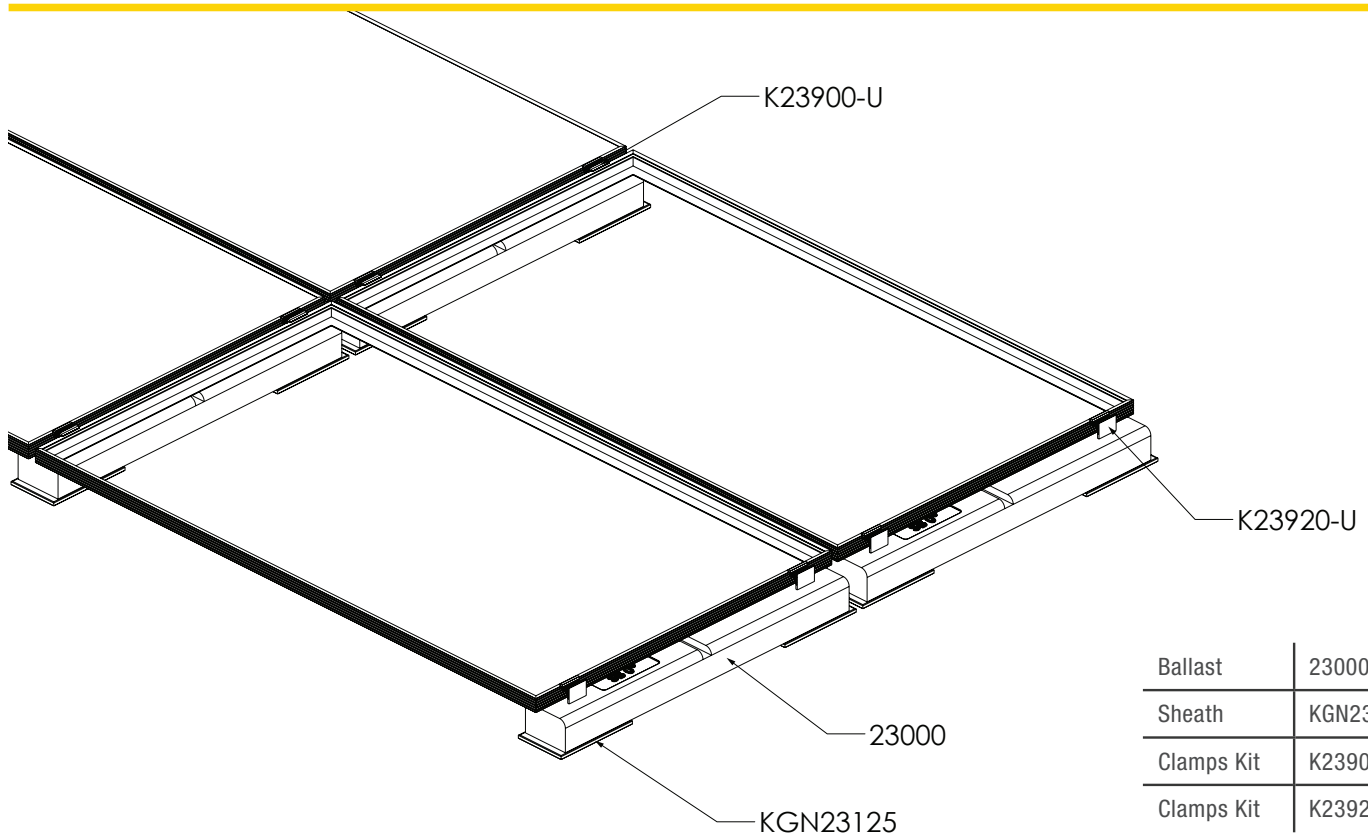


ART. 23000

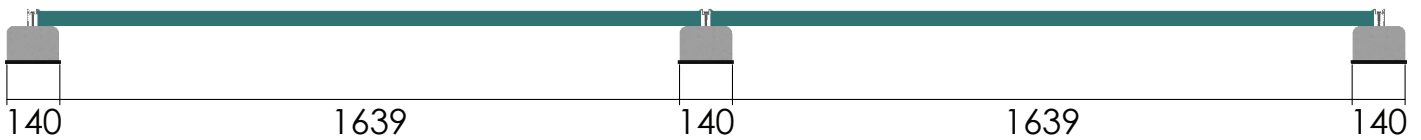
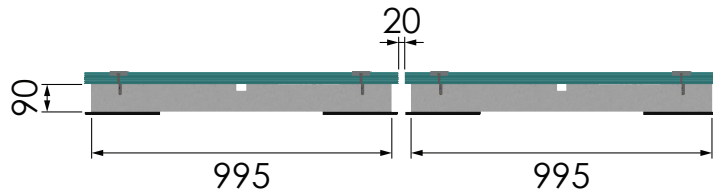
<b>Material</b>	The main material of SUN BALLAST® ballasts is concrete, which allows low wear and tear over time and the ability to withstand even the most intense disturbances and different climatic conditions		
<b>Compatible accessories</b>	Rubber protection sheath (KGN23125), Universal junction plate (K23804)		
<b>Application</b>	Any type of flat roof with a slope of max. 5°, on the ground, on beaten earth, or on paved surfaces		
<b>Angle of Inclination</b>	0°	<b>Module positioning</b>	Horizontal / Vertical

## Ballast Art. 23000

<b>Ballast weight</b>	30 kg	<b>Pallet dimensions</b>	90 cm x 98 cm h = 35 cm
<b>Quantity per pallet</b>	18 pieces	<b>Pallet weight</b>	540 kg



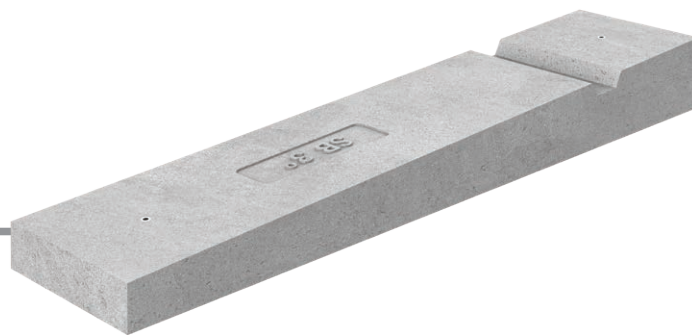
Ballast	23000
Sheath	KGN23125
Clamps Kit	K23900-U
Clamps Kit	K23920-U



## INFO

- The torque applied must refer to the mechanical standard conforming to the bolt in use, with M8 stainless steel bolts using a torque of 12 - 14 Nm.
- Avoid impact wrenches.
- Always refer to the information given in the panel manufacturer's installation sheet.
- Follow the Sun Ballast® installation instructions.
- The dimensions shown are all in millimeters.
- For further information, please visit [www.sunballast.en](http://www.sunballast.en)

# BALLAST 3°

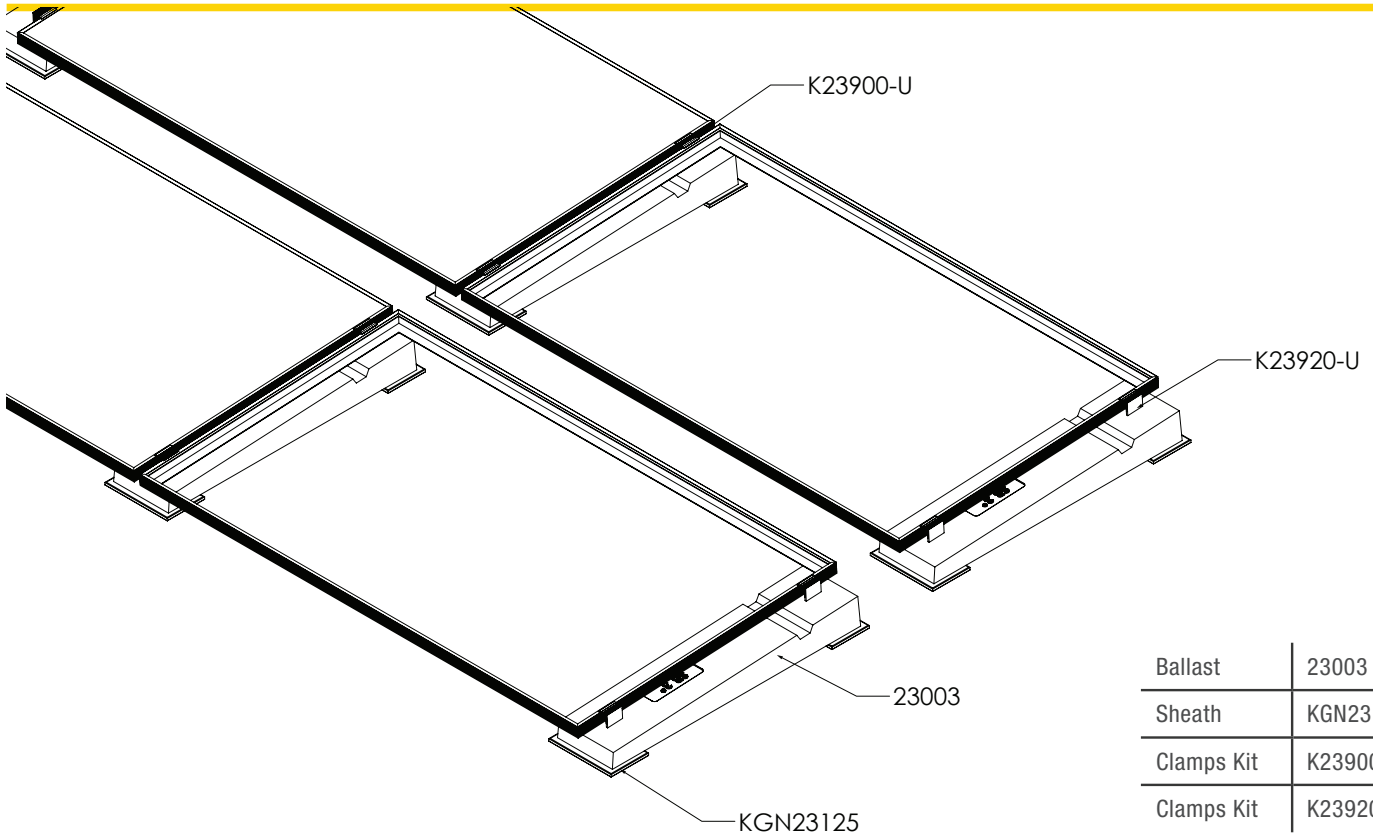


ART. 23003

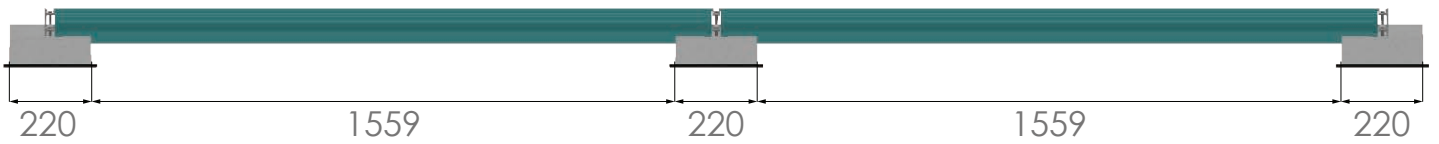
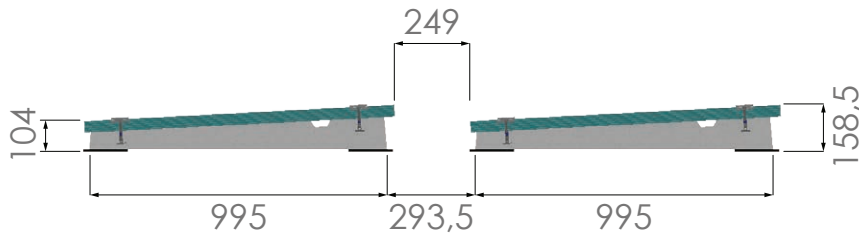
<b>Material</b>	The main material of SUN BALLAST® ballasts is concrete, which allows low wear and tear over time and the ability to withstand even the most intense disturbances and different climatic conditions		
<b>Compatible accessories</b>	Rubber protection sheath (KGN23125), No-Flex (K23712), Universal junction plate (K23804)		
<b>Application</b>	Any type of flat roof with a slope of max. 5°, on the ground, on beaten earth, or on paved surfaces		
<b>Angle of Inclination</b>	3°	<b>Module positioning</b>	Horizontal / Vertical

## Ballast Art. 23003

<b>Ballast weight</b>	41 kg	<b>Pallet dimensions</b>	98 cm x 65 cm h = 46 cm
<b>Quantity per pallet</b>	12 pieces	<b>Pallet weight</b>	492 kg



Ballast	23003
Sheath	KGN23125
Clamps Kit	K23900-U
Clamps Kit	K23920-U



## INFO

- The torque applied must refer to the mechanical standard conforming to the bolt in use, with M8 stainless steel bolts using a torque of 12 - 14 Nm.
- Avoid impact wrenches.
- Always refer to the information given in the panel manufacturer's installation sheet.
- Follow the Sun Ballast® installation instructions.
- The dimensions shown are all in centimeters.
- For further information, please visit [www.sunballast.en](http://www.sunballast.en)

# BALLAST 5°L

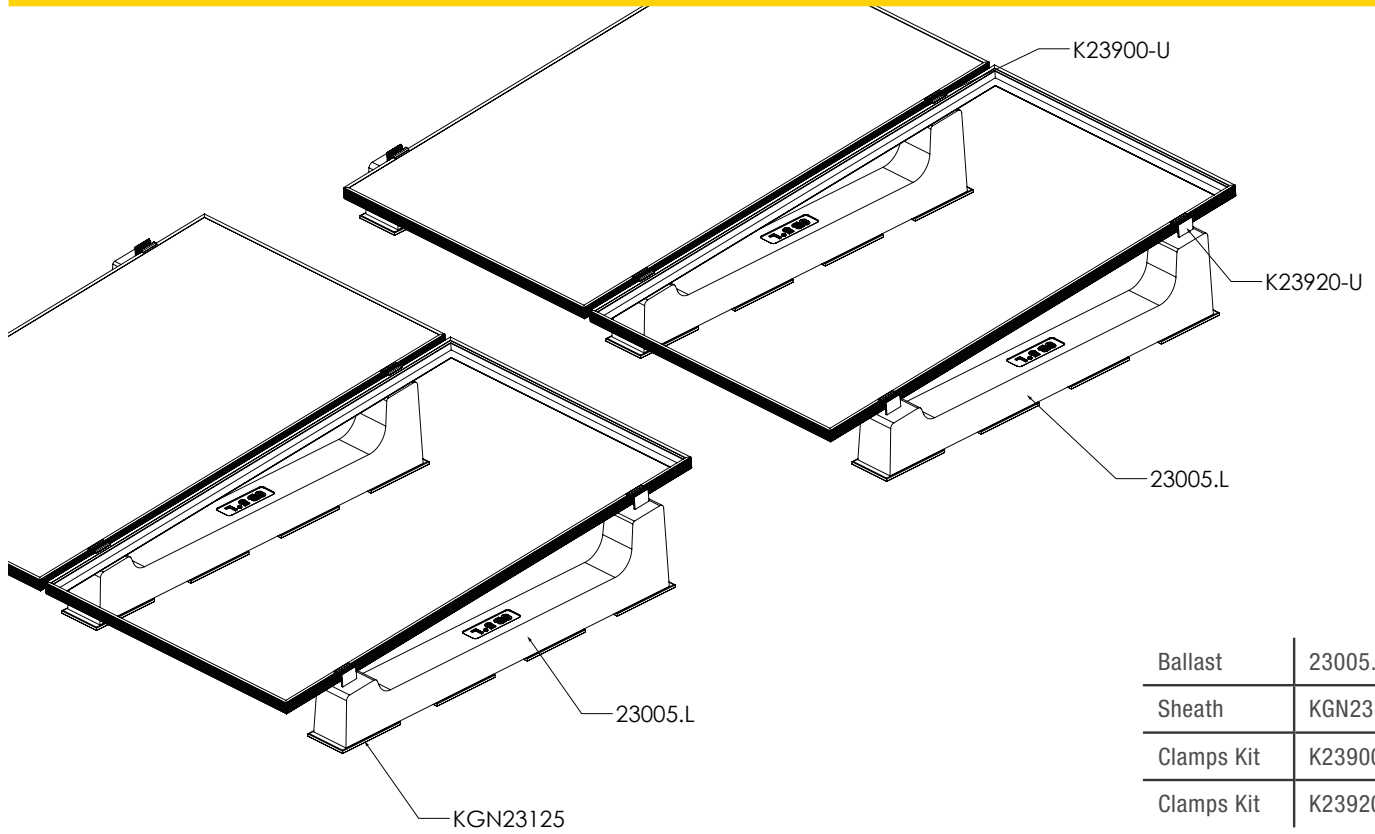
ART. 23005.L



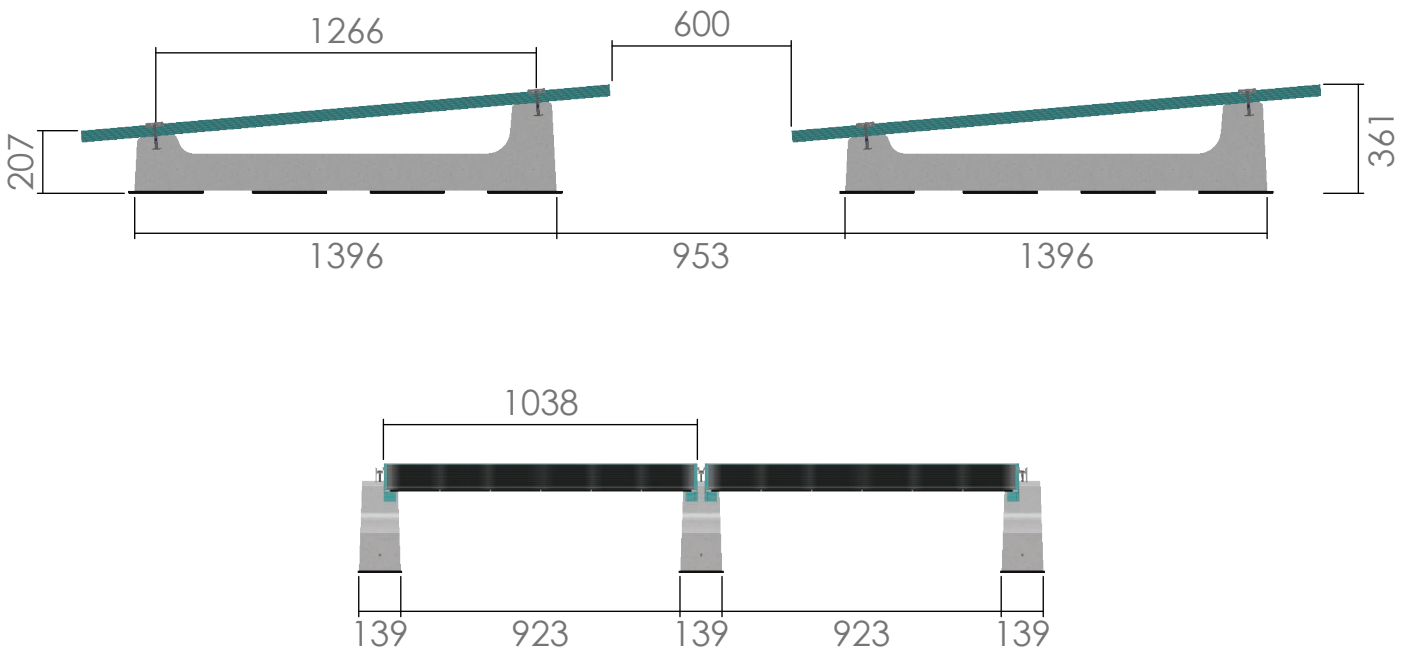
<b>Material</b>	The main material of SUN BALLAST® ballasts is concrete, which allows low wear and tear over time and the ability to withstand even the most intense disturbances and different climatic conditions		
<b>Compatible accessories</b>	U-Block (23030.CRP), Sheathing (KGN23125), Cablowind (CW.CABLOWIND.95)		
<b>Application</b>	Any type of flat roof with a slope of max. 5°, on the ground, on beaten earth, or on paved surfaces		
<b>Angle of Inclination</b>	5°	<b>Module positioning</b>	Vertical

## Ballast Art. 23005.L

<b>Ballast weight</b>	65 kg	<b>Pallet dimensions</b>	141 cm x 73 cm h = 70 cm
<b>Quantity per pallet</b>	10 pieces	<b>Pallet weight</b>	670 kg



Ballast	23005.L
Sheath	KGN23125
Clamps Kit	K23900-U
Clamps Kit	K23920-U

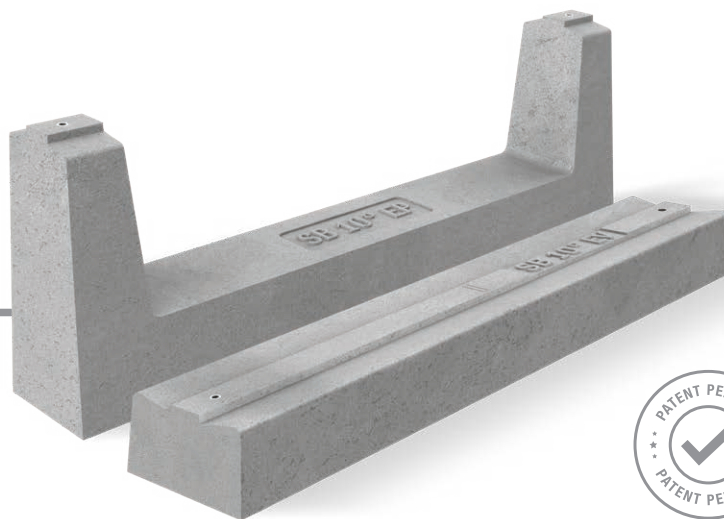


## INFO

- The torque applied must refer to the mechanical standard conforming to the bolt in use, with M8 stainless steel bolts using a torque of 12 - 14 Nm.
- For this type of ballast the sheaths provided and to be installed are double as per estimate provided.
- Avoid impact wrenches.
- Always refer to the information given in the panel manufacturer's installation sheet.
- Follow the Sun Ballast® installation instructions.
- The dimensions shown are all in millimeters.
- For further information, please visit [www.sunballast.en](http://www.sunballast.en)

# SISTEMA: EASYWEST

ART. 23010.EV/.EP



<b>Materiale</b>	Il materiale principale delle zavorre SUN BALLAST® è il calcestruzzo, che permette una bassa usura nel tempo e la capacità di resistere anche alle perturbazioni più intense e a diverse condizioni climatiche		
<b>Accessori compatibili</b>	U-Block (23030.CRP), Guaina (KGN23115)		
<b>Applicazione</b>	Qualsiasi tipologia di tetto piano con pendenza max 5°, a terra, su terreni battuti con materiale inerte o pavimentazioni		
<b>Angolo di Inclinazione</b>	10°	<b>Posizionamento modulo</b>	Orizzontale

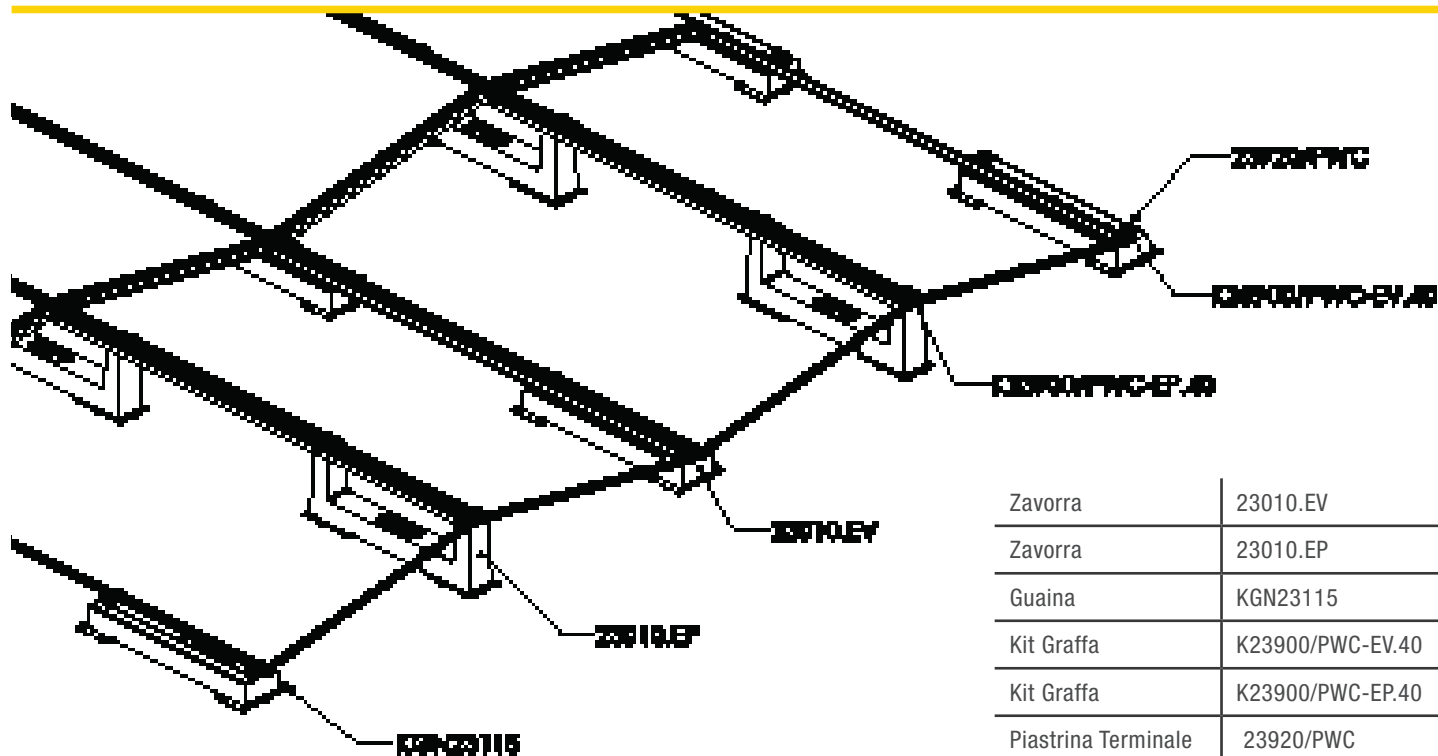
## Zavorra Art. 23010.EV

<b>Peso zavorra</b>	28 kg	<b>Dimensioni bancale</b>	92 cm x 87 cm x h 51 cm
<b>Quantità per bancale</b>	20 pezzi	<b>Peso bancale</b>	576 kg

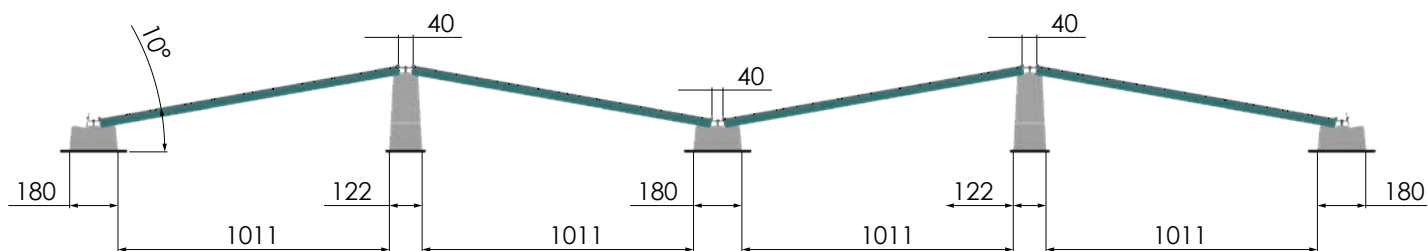
## Zavorra Art. 23010.EP

<b>Peso zavorra</b>	28 kg	<b>Dimensioni bancale</b>	124 cm x 87 cm x h 72 cm
<b>Quantità per bancale</b>	20 pezzi	<b>Peso bancale</b>	582 kg



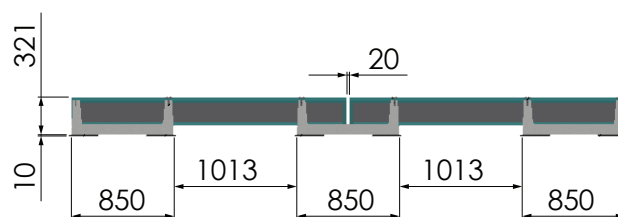
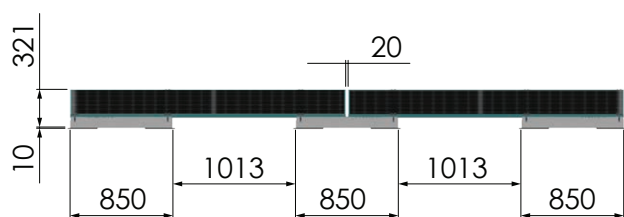


Zavorra	23010.EV
Zavorra	23010.EP
Guaina	KGN23115
Kit Graffa	K23900/PWC-EV.40
Kit Graffa	K23900/PWC-EP.40
Piastrina Terminale	23920/PWC



23010.EV

23010.EP

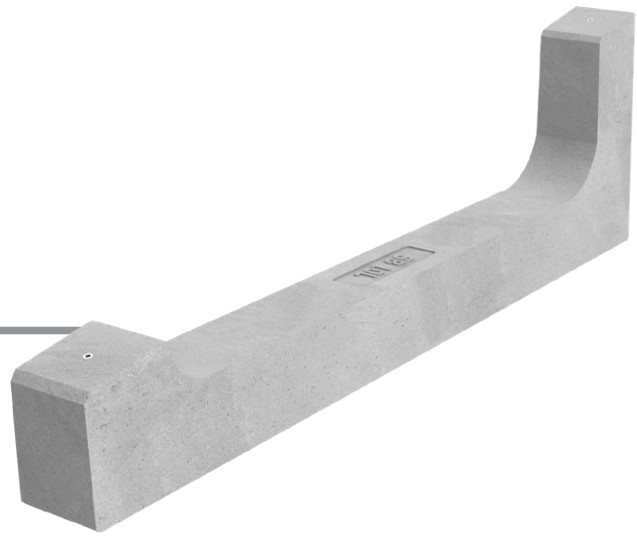


## INFO

- La coppia applicata deve fare riferimento allo standard meccanico conforme al bullone in uso, con bulloni M8 in acciaio inox impiegare una coppia di serraggio di 12 - 14 Nm.
- Evitare gli avvitatori ad impuls.
- Si consiglia di consultare sempre le informazioni indicate nella scheda di montaggio del produttore del pannello.
- Seguire le istruzioni di montaggio Sun Ballast®.
- Le dimensioni presenti in figura sono tutte espresse in millimetri.
- Per qualsiasi altra informazione visita il sito [www.sunballast.it](http://www.sunballast.it)

# BALLAST 10°L

ART. 23010.L

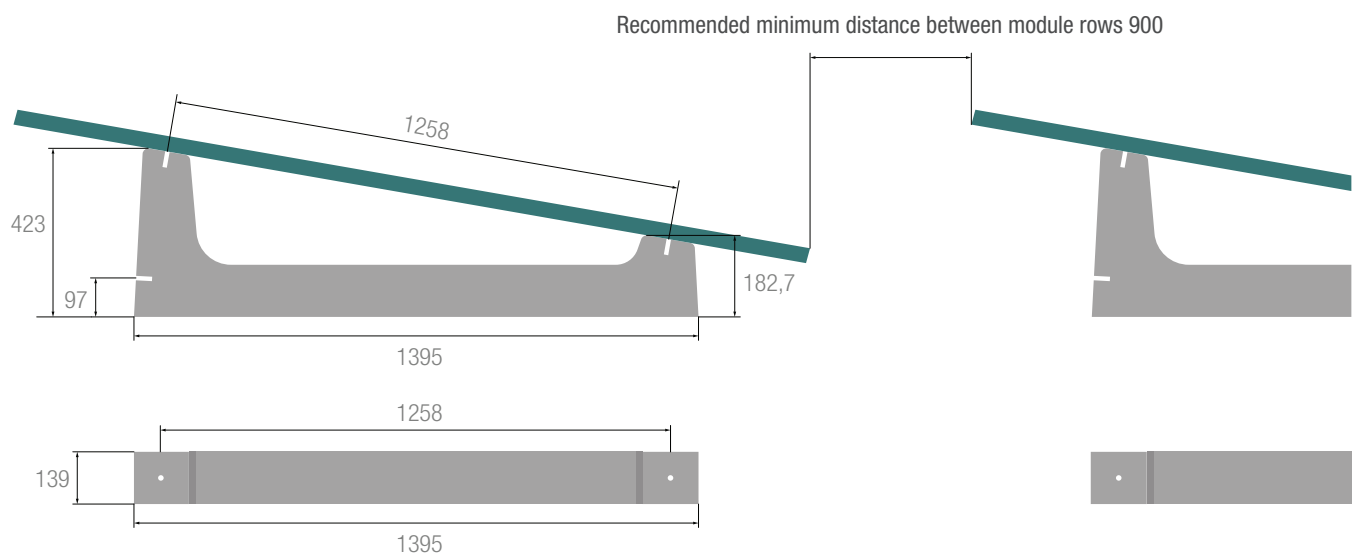


<b>Material</b>	The main material of SUN BALLAST® ballasts is concrete, which allows low wear and tear over time and the ability to withstand even the most intense disturbances and different climatic conditions		
<b>Compatible accessories</b>	U-Block (23030.CRP), Sheathing (KGN23125), Cablowind (CW.CABLOWIND.95)		
<b>Application</b>	Any type of flat roof with a slope of max. 5°, on the ground, on beaten earth, or on paved surfaces		
<b>Angle of Inclination</b>	10°	<b>Module positioning</b>	Vertical

## Ballast Art. 23010.L

<b>Ballast weight</b>	70 kg	<b>Pallet dimensions</b>	138 cm x 70 cm h = 72 cm
<b>Quantity per pallet</b>	10 pieces	<b>Pallet weight</b>	720 kg

## VERTICAL PANEL LAYING

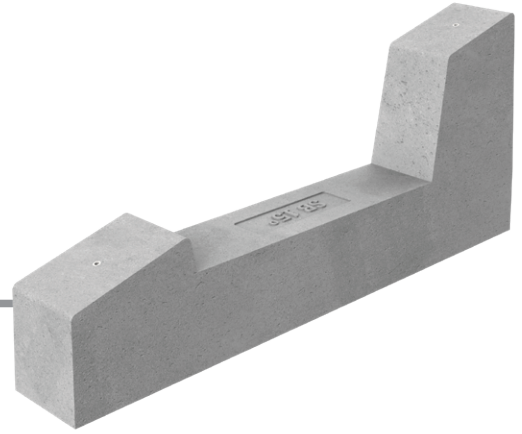


### INFO

- The torque applied must refer to the mechanical standard conforming to the bolt in use, with M8 stainless steel bolts using a torque of 12 - 14 Nm.
- For this type of ballast the sheaths provided and to be installed are double as per estimate provided.
- Avoid impact wrenches.
- Always refer to the information given in the panel manufacturer's installation sheet.
- Follow the Sun Ballast® installation instructions.
- The dimensions shown are all in millimeters.
- For further information, please visit [www.sunballast.en](http://www.sunballast.en)

# BALLAST 15°

ART. 23015



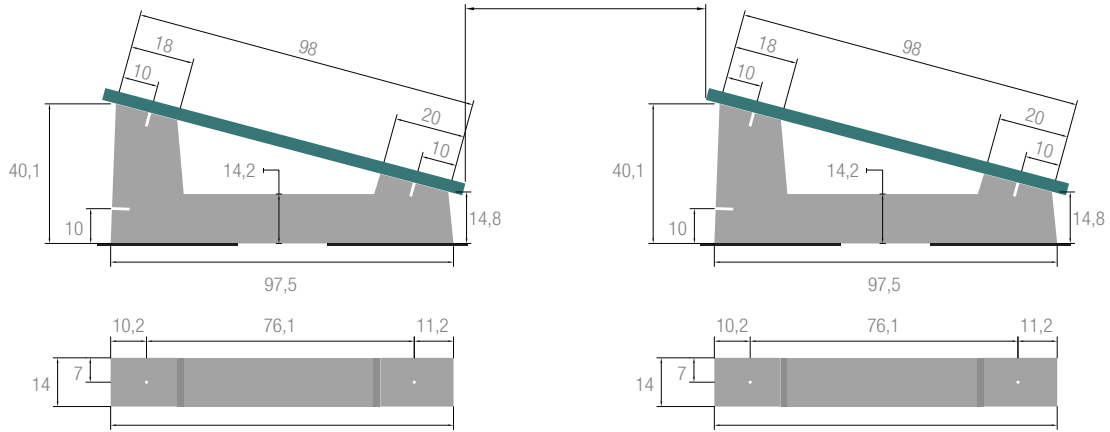
<b>Material</b>	The main material of SUN BALLAST® ballasts is concrete, which allows low wear and tear over time and the ability to withstand even the most intense disturbances and different climatic conditions		
<b>Compatible accessories</b>	U-Block (23030.CRP), Sheathing (KGN23125), Cablowind (CW.CABLOWIND.95 - CW.CABLOWIND.165 - CW.CABLOWIND.185), No-Flex (K23712)		
<b>Application</b>	Any type of flat roof with a slope of max. 5°, on the ground, on beaten earth, or on paved surfaces		
<b>Angle of Inclination</b>	15°	<b>Module positioning</b>	Horizontal / Vertical

## Ballast Art. 23015

<b>Ballast weight</b>	60 kg	<b>Pallet dimensions</b>	70 cm x 98 cm x h 62 cm
<b>Quantity per pallet</b>	10 pieces	<b>Pallet weight</b>	600 kg

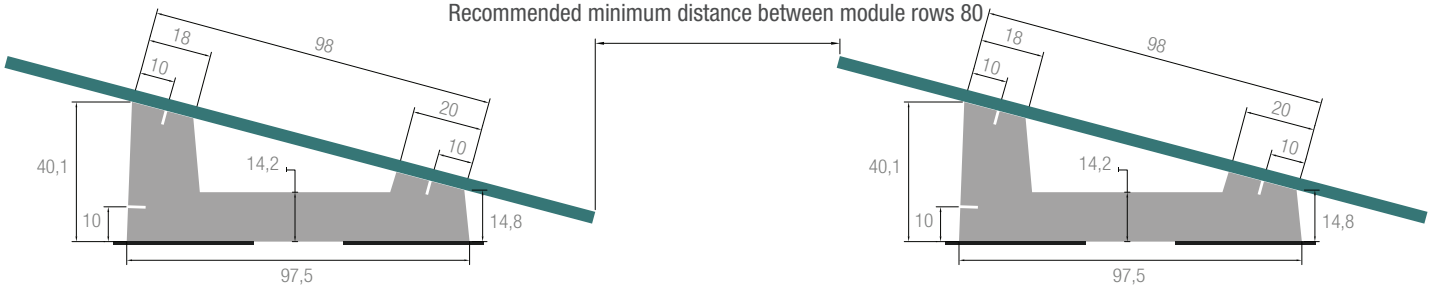
## HORIZONTAL PANEL LAYING

Recommended minimum distance between module rows 80



## VERTICAL PANEL LAYING

Recommended minimum distance between module rows 80



### INFO

- The torque applied must refer to the mechanical standard conforming to the bolt in use, with M8 stainless steel bolts using a torque of 12 - 14 Nm.
- Avoid impact wrenches.
- Always refer to the information given in the panel manufacturer's installation sheet.
- Follow the Sun Ballast® installation instructions.
- The dimensions shown are all in centimeters.
- For further information, please visit [www.sunballast.en](http://www.sunballast.en)

# BALLAST 20°

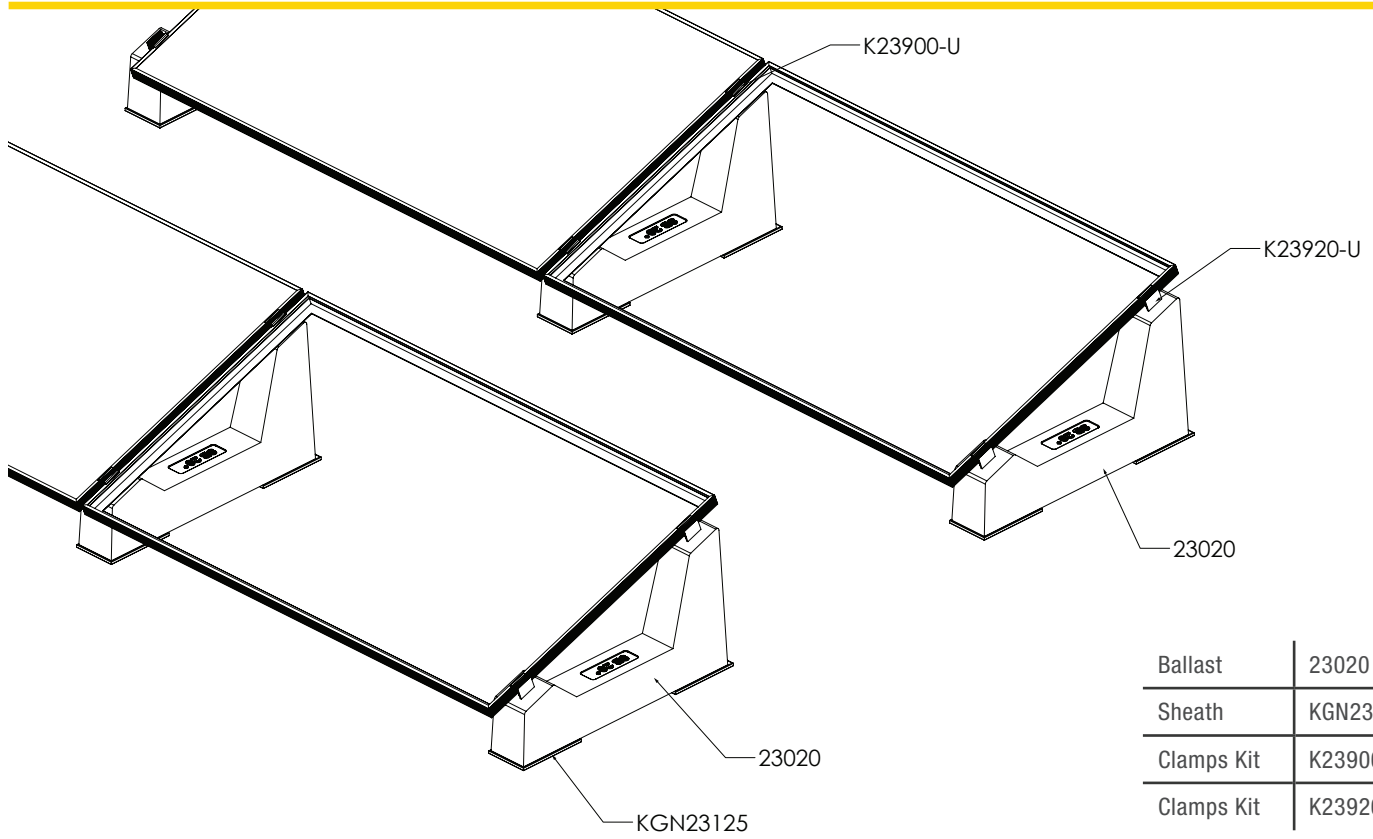
ART. 23020



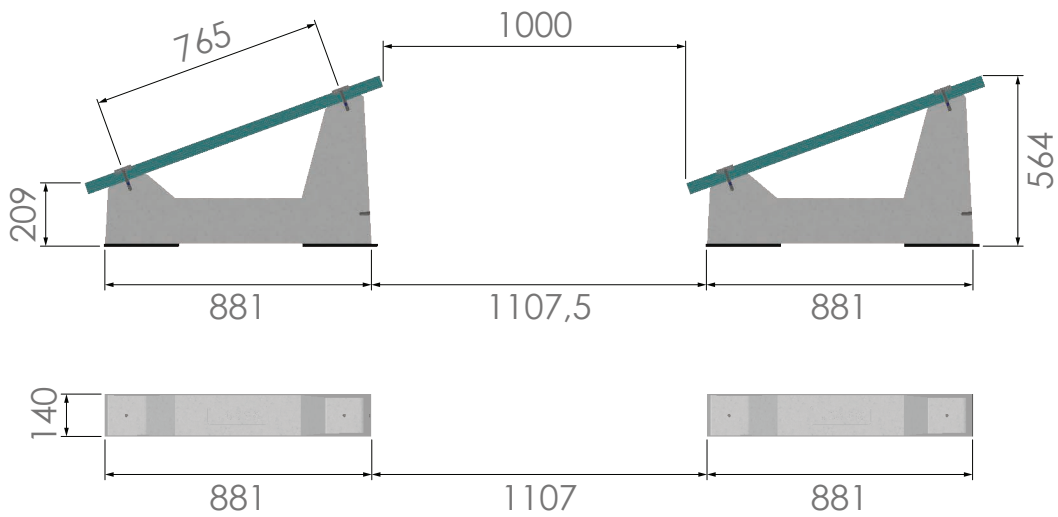
<b>Material</b>	The main material of SUN BALLAST® ballasts is concrete, which allows low wear and tear over time and the ability to withstand even the most intense disturbances and different climatic conditions		
<b>Compatible accessories</b>	U-Block (23030.CRP), Rubber protection sheath (KGN23125), Cablowind (CW.CABLOWIND.95 - CW.CABLOWIND.165 - CW.CABLOWIND.185), No-Flex (K23712), Universal junction plate (K23804)		
<b>Application</b>	Any type of flat roof with a slope of max. 5°, on the ground, on beaten earth, or on paved surfaces		
<b>Angle of Inclination</b>	20°	<b>Module positioning</b>	Horizontal / Vertical

## Ballast Art. 23020

<b>Ballast weight</b>	62 kg	<b>Pallet dimensions</b>	70 cm x 90 cm h = 103 cm
<b>Quantity per pallet</b>	10 pieces	<b>Pallet weight</b>	620 kg



Ballast	23020
Sheath	KGN23125
Clamps Kit	K23900-U
Clamps Kit	K23920-U

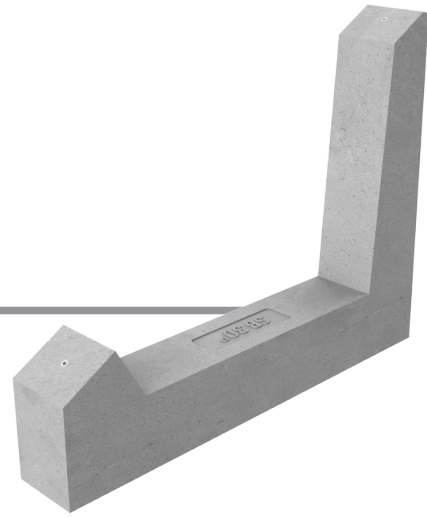


## INFO

- The torque applied must refer to the mechanical standard conforming to the bolt in use, with M8 stainless steel bolts using a torque of 12 - 14 Nm.
- Avoid impact wrenches.
- Always refer to the information given in the panel manufacturer's installation sheet.
- Follow the Sun Ballast® installation instructions.
- The dimensions shown are all in millimetres.
- For further information, please visit [www.sunballast.en](http://www.sunballast.en)

# BALLAST 30°

ART. 23030



<b>Material</b>	The main material of SUN BALLAST® ballasts is concrete, which allows low wear and tear over time and the ability to withstand even the most intense disturbances and different climatic conditions		
<b>Compatible accessories</b>	U-Block (23030.CRP), Rubber protection sheath (KGN23115), Cablowind (CW.CABLOWIND.95 - CW.CABLOWIND.165 - CW.CABLOWIND.185), No-Flex (K23712), Universal junction plate (K23804)		
<b>Application</b>	Any type of flat roof with a slope of max. 5°, on the ground, on beaten earth, or on paved surfaces		
<b>Angle of Inclination</b>	30°	<b>Module positioning</b>	Horizontal / Vertical

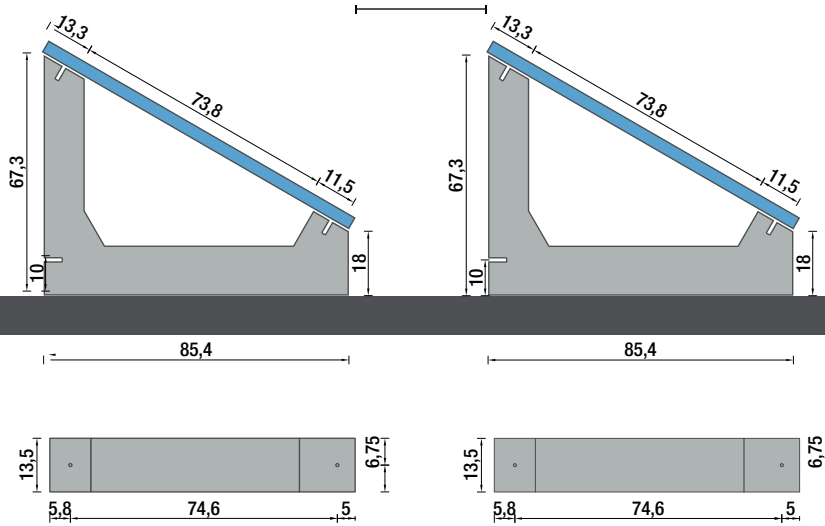
## Ballast Art. 23030

<b>Ballast weight</b>	58 kg	<b>Pallet dimensions</b>	86 cm x 86 cm h = 92 cm
<b>Quantity per pallet</b>	10 pieces	<b>Pallet weight</b>	580 kg



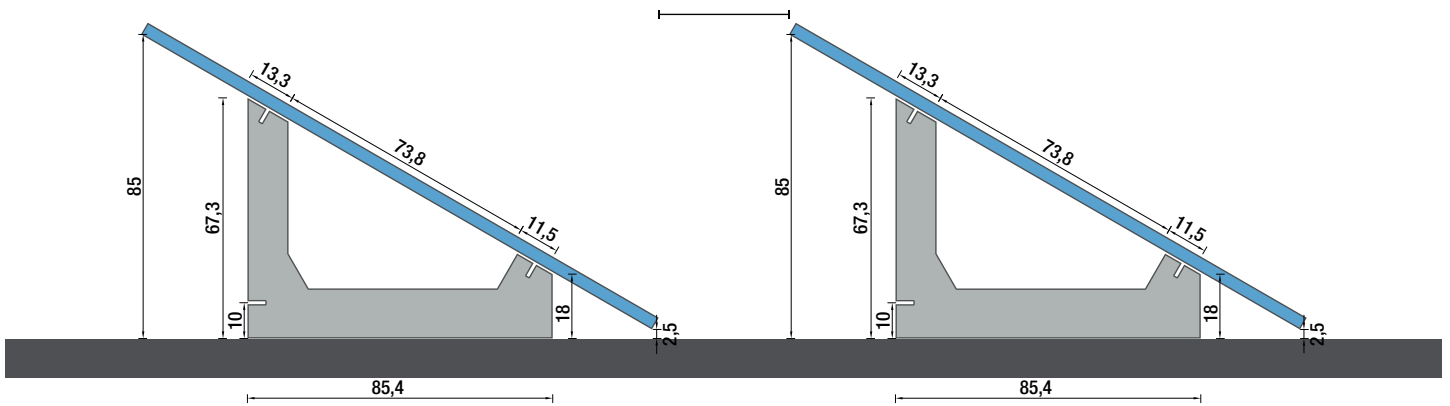
## HORIZONTAL PANEL LAYING

Recommended minimum distance between module rows 100



## VERTICAL PANEL LAYING

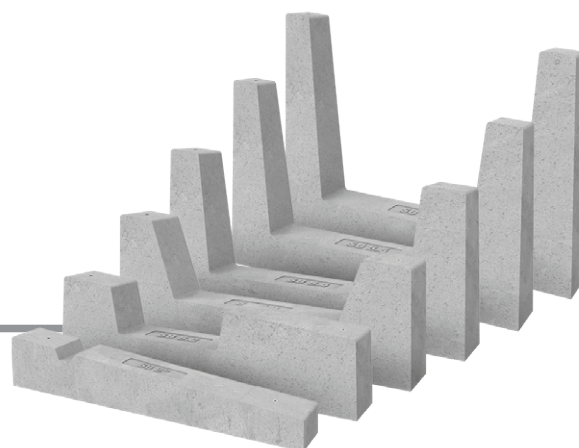
Recommended minimum distance between module rows 100



### INFO

- The torque applied must refer to the mechanical standard conforming to the bolt in use, with M8 stainless steel bolts using a torque of 12 - 14 Nm.
- Avoid impact wrenches.
- Always refer to the information given in the panel manufacturer's installation sheet.
- Follow the Sun Ballast® installation instructions.
- The dimensions shown are all in millimeters.
- For further information, please visit [www.sunballast.en](http://www.sunballast.en)

# SYSTEM: SAIL SHAPED 5°



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

<b>Material</b>	The main material of SUN BALLAST® ballasts is concrete, which allows low wear and tear over time and the ability to withstand even the most intense disturbances and different climatic conditions		
<b>Compatible accessories</b>	U-Block (23030.CRP), Rubber protection sheath (KGN23125), Cablowind (CW.CABLOWIND.95 - CW.CABLOWIND.165 - CW.CABLOWIND.185), No-Flex (K23712), Universal junction plate (K23804)		
<b>Application</b>	Any type of flat roof with a slope of max. 5°, on the ground, on beaten earth, or on paved surfaces		
<b>Angle of Inclination</b>	5°	<b>Module positioning</b>	Horizontal / Vertical

## Ballast Art. 23005

Ballast weight	39 kg	Pallet dimensions	58 cm x 96 cm, h = 77 cm
Quantity per pallet	14 pieces	Pallet weight	546 kg

## Ballast Art. 23005.2

Ballast weight	41 kg	Pallet dimensions	58 cm x 96 cm, h = 74 cm
Quantity per pallet	12 pieces	Pallet weight	492 kg

## Ballast Art. 23005.3

Ballast weight	49 kg	Pallet dimensions	70 cm x 98 cm, h = 74 cm
Quantity per pallet	12 pieces	Pallet weight	588 kg

## Ballast Art. 23005.4

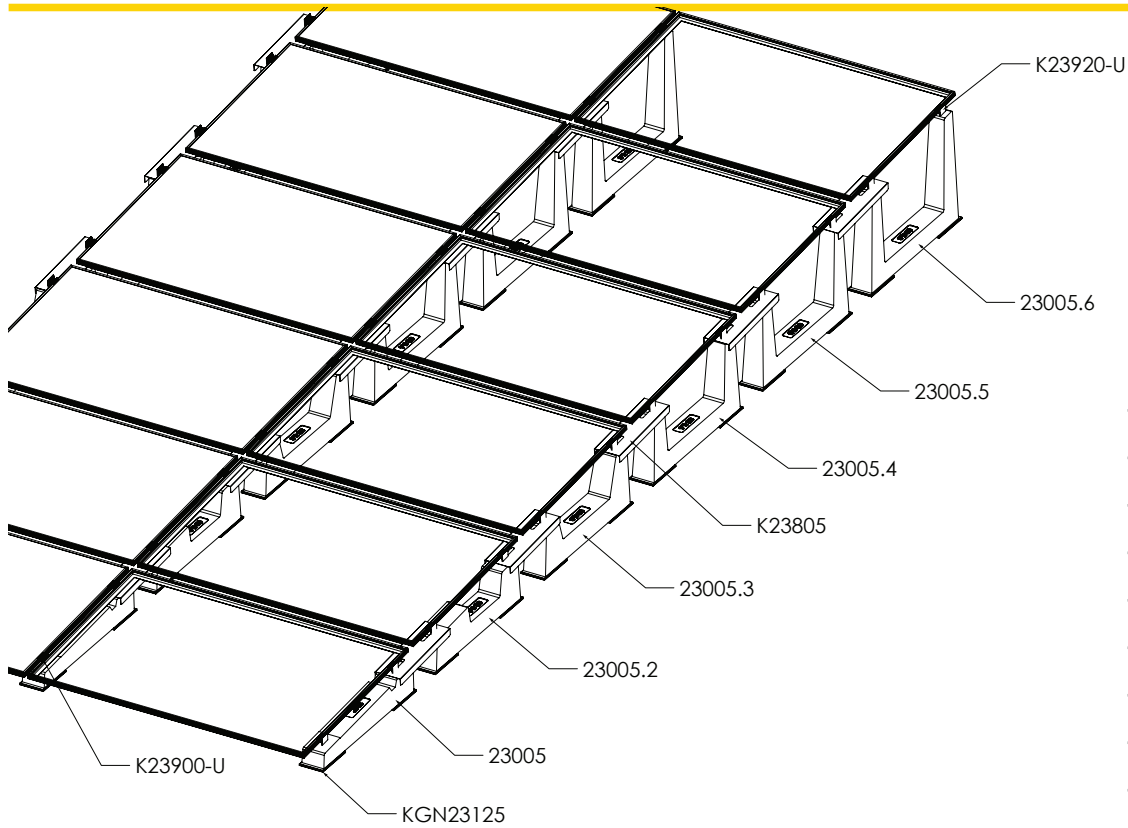
Ballast weight	53 kg	Pallet dimensions	70 cm x 98 cm, h = 87 cm
Quantity per pallet	10 pieces	Pallet weight	530 kg

## Ballast Art. 23005.5

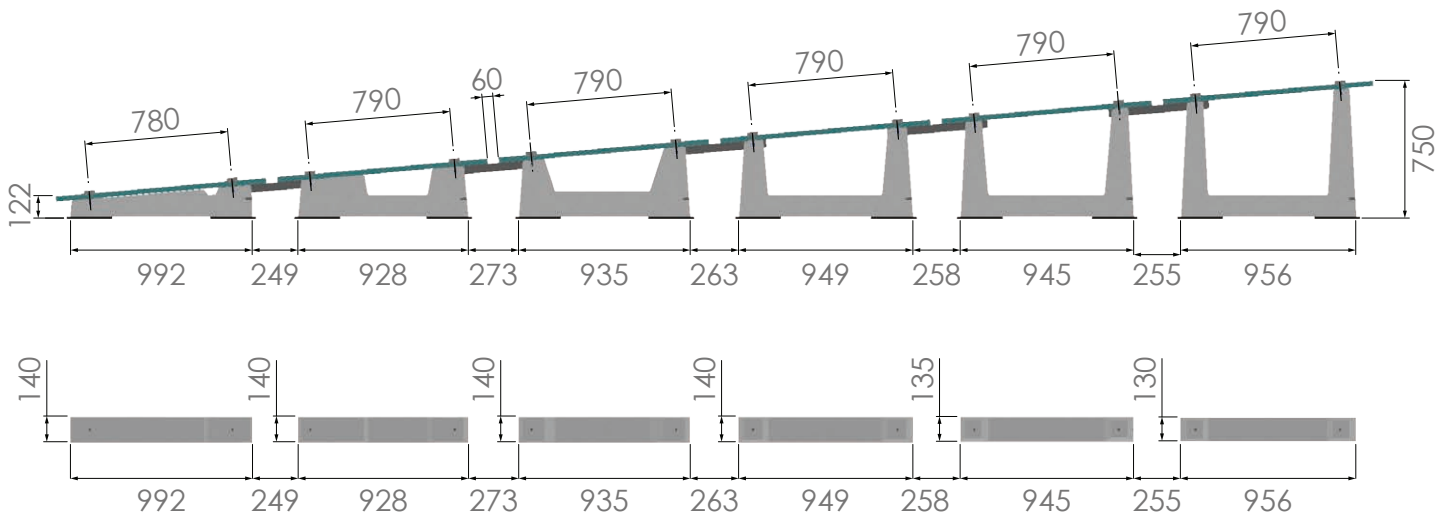
Ballast weight	59 kg	Pallet dimensions	70 cm x 98 cm, h = 87 cm
Quantity per pallet	10 pieces	Pallet weight	590 kg

## Ballast Art. 23005.6

Ballast weight	64 kg	Pallet dimensions	70 cm x 98 cm, h = 87 cm
Quantity per pallet	8 pieces	Pallet weight	512 kg



Ballast	23005
Ballast	23005.2
Ballast	23005.3
Ballast	23005.4
Ballast	23005.5
Ballast	23005.6
Sheath	KGN23125
Clamps Kit	K23900-U
Clamps Kit	K23920-U
Junction plate	K23805

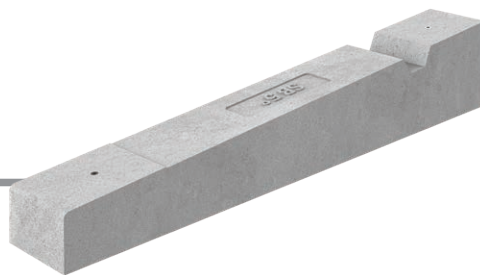


## INFO

- The torque applied must refer to the mechanical standard conforming to the bolt in use, with M8 stainless steel bolts using a torque of 12 - 14 Nm.
- Avoid impact wrenches.
- Always refer to the information given in the panel manufacturer's installation sheet.
- Follow the Sun Ballast® installation instructions.
- The dimensions shown are all in millimeters.
- For further information, please visit [www.sunballast.en](http://www.sunballast.en)

# BALLAST 5°

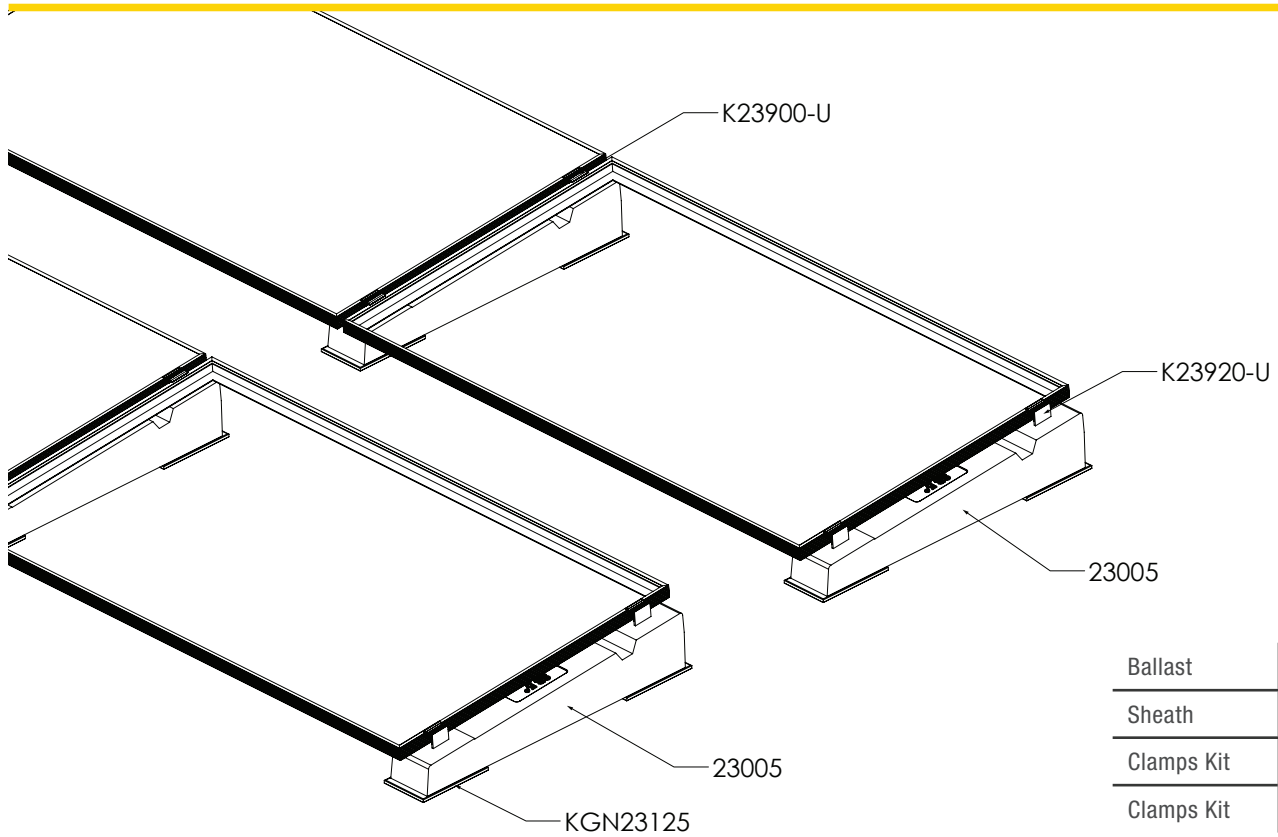
ART. 23005



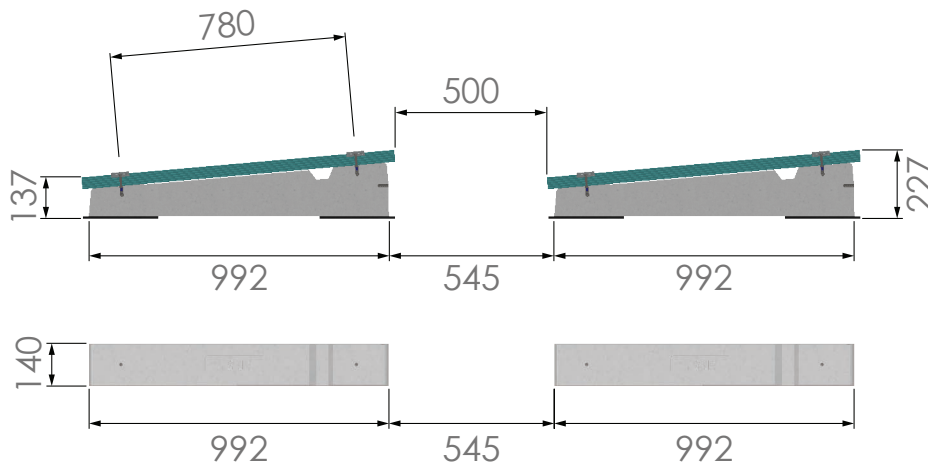
<b>Material</b>	The main material of SUN BALLAST® ballasts is concrete, which allows low wear and tear over time and the ability to withstand even the most intense disturbances and different climatic conditions		
<b>Compatible accessories</b>	Sheathing (KGN23125), Cablowind (CW.CABLOWIND.95 - CW.CABLOWIND.165 - CW.CABLOWIND.185), No-Flex (K23712), Junction plate for ballast (K23804)		
<b>Application</b>	Any type of flat roof with a slope of max. 5°, on the ground, on beaten earth, or on paved surfaces		
<b>Angle of Inclination</b>	5°	<b>Module positioning</b>	Horizontal / Vertical

## Ballast Art. 23005

<b>Ballast weight</b>	39 kg	<b>Pallet dimensions</b>	110 cm x 98 cm h = 35 cm
<b>Quantity per pallet</b>	14 pieces	<b>Pallet weight</b>	546 kg



Ballast	23005
Sheath	KGN23125
Clamps Kit	K23900-U
Clamps Kit	K23920-U

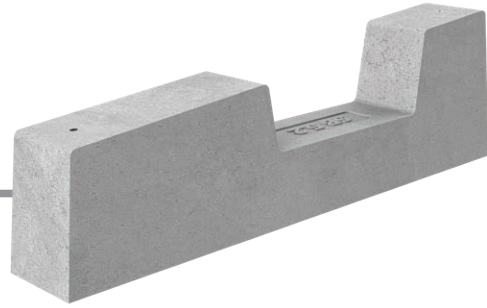


## INFO

- The torque applied must refer to the mechanical standard conforming to the bolt in use, with M8 stainless steel bolts using a torque of 12 - 14 Nm.
- Avoid impact wrenches.
- Always refer to the information given in the panel manufacturer's installation sheet.
- Follow the Sun Ballast® installation instructions.
- The dimensions shown are all in millimeters.
- For further information, please visit [www.sunballast.en](http://www.sunballast.en)

# BALLAST 5°.2

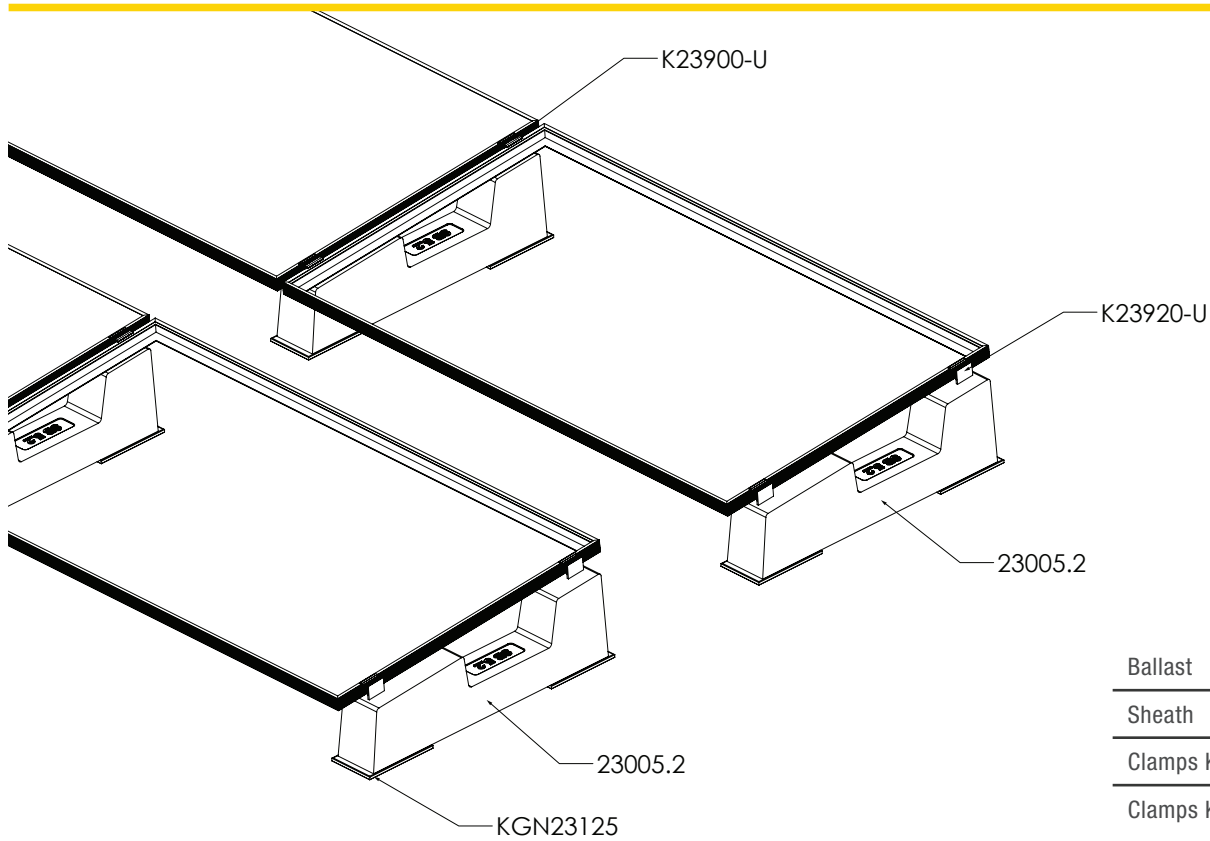
ART. 23005.2



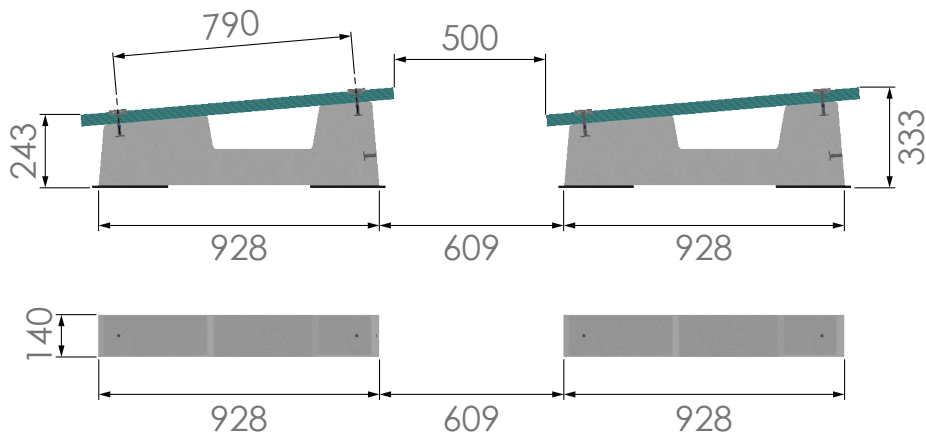
<b>Material</b>	The main material of SUN BALLAST® ballasts is concrete, which allows low wear and tear over time and the ability to withstand even the most intense disturbances and different climatic conditions		
<b>Compatible accessories</b>	U-Block (23030.CRP), Sheathing (KGN23125), Cablowind (CW.CABLOWIND.95 - CW.CABLOWIND.165 - CW.CABLOWIND.185), No-Flex (K23712), Junction plate for ballast (K23804)		
<b>Application</b>	Any type of flat roof with a slope of max. 5°, on the ground, on beaten earth, or on paved surfaces		
<b>Angle of Inclination</b>	5°	<b>Module positioning</b>	Horizontal / Vertical

## Ballast Art. 23005.2

<b>Ballast weight</b>	41 kg	<b>Pallet dimensions</b>	90 cm x 98 cm h = 35 cm
<b>Quantity per pallet</b>	12 pieces	<b>Pallet weight</b>	492 kg



Ballast	23005.2
Sheath	KGN23125
Clamps Kit	K23900-U
Clamps Kit	K23920-U



## INFO

- The torque applied must refer to the mechanical standard conforming to the bolt in use, with M8 stainless steel bolts using a torque of 12 - 14 Nm.
- Avoid impact wrenches.
- Always refer to the information given in the panel manufacturer's installation sheet.
- Follow the Sun Ballast® installation instructions.
- The dimensions shown are all in millimeters.
- For further information, please visit [www.sunballast.en](http://www.sunballast.en)

# BALLAST 5°.3

ART. 23005.3

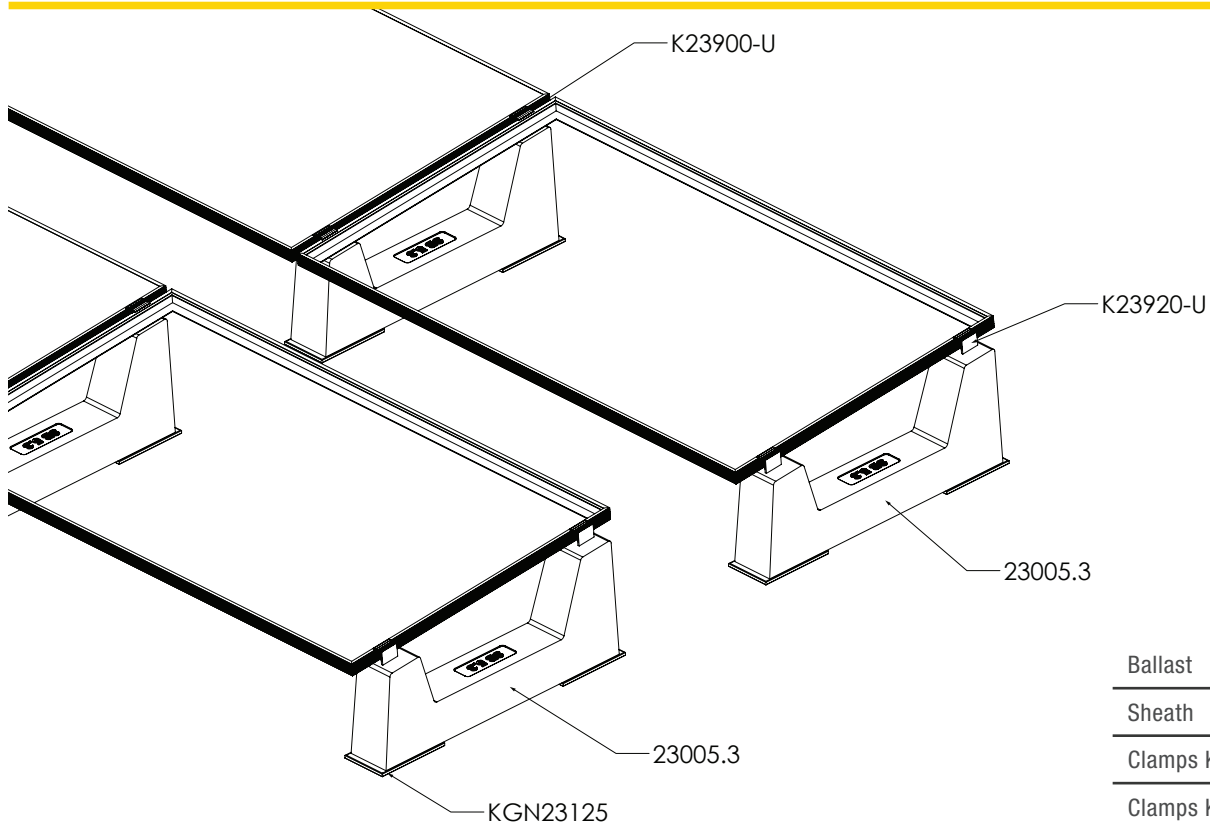


<b>Material</b>	The main material of SUN BALLAST® ballasts is concrete, which allows low wear and tear over time and the ability to withstand even the most intense disturbances and different climatic conditions		
<b>Compatible accessories</b>	U-Block (23030.CRP), Sheathing (KGN23125), Cablowind (CW.CABLOWIND.95 - CW.CABLOWIND.165 - CW.CABLOWIND.185), No-Flex (K23712), Junction plate for ballast (K23804)		
<b>Application</b>	Any type of flat roof with a slope of max. 5°, on the ground, on beaten earth, or on paved surfaces		
<b>Angle of Inclination</b>	5°	<b>Module positioning</b>	Horizontal / Vertical

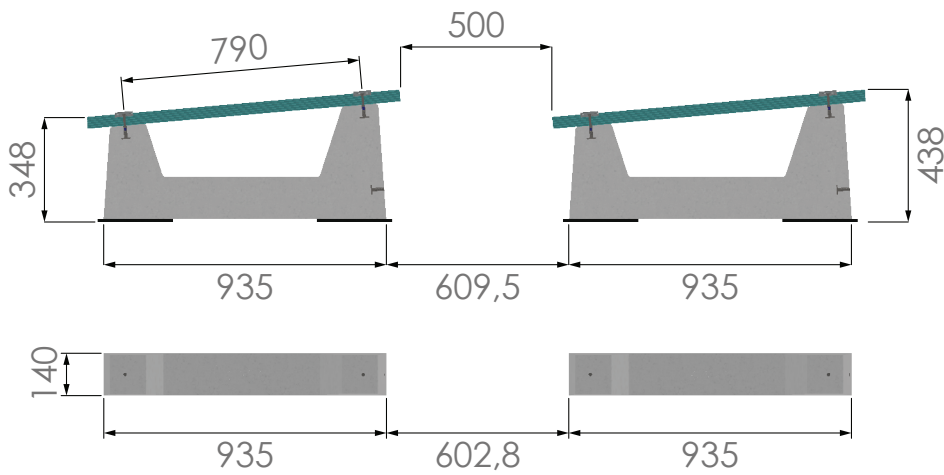
## Ballast Art. 23005.3

<b>Ballast weight</b>	49 kg	<b>Pallet dimensions</b>	130 cm x 98 cm h = 35 cm
<b>Quantity per pallet</b>	12 pieces	<b>Pallet weight</b>	588 kg





Ballast	23005.3
Sheath	KGN23125
Clamps Kit	K23900-U
Clamps Kit	K23920-U



## INFO

- The torque applied must refer to the mechanical standard conforming to the bolt in use, with M8 stainless steel bolts using a torque of 12 - 14 Nm.
- Avoid impact wrenches.
- Always refer to the information given in the panel manufacturer's installation sheet.
- Follow the Sun Ballast® installation instructions.
- The dimensions shown are all in millimeters.
- For further information, please visit [www.sunballast.en](http://www.sunballast.en)

# BALLAST 5°.4

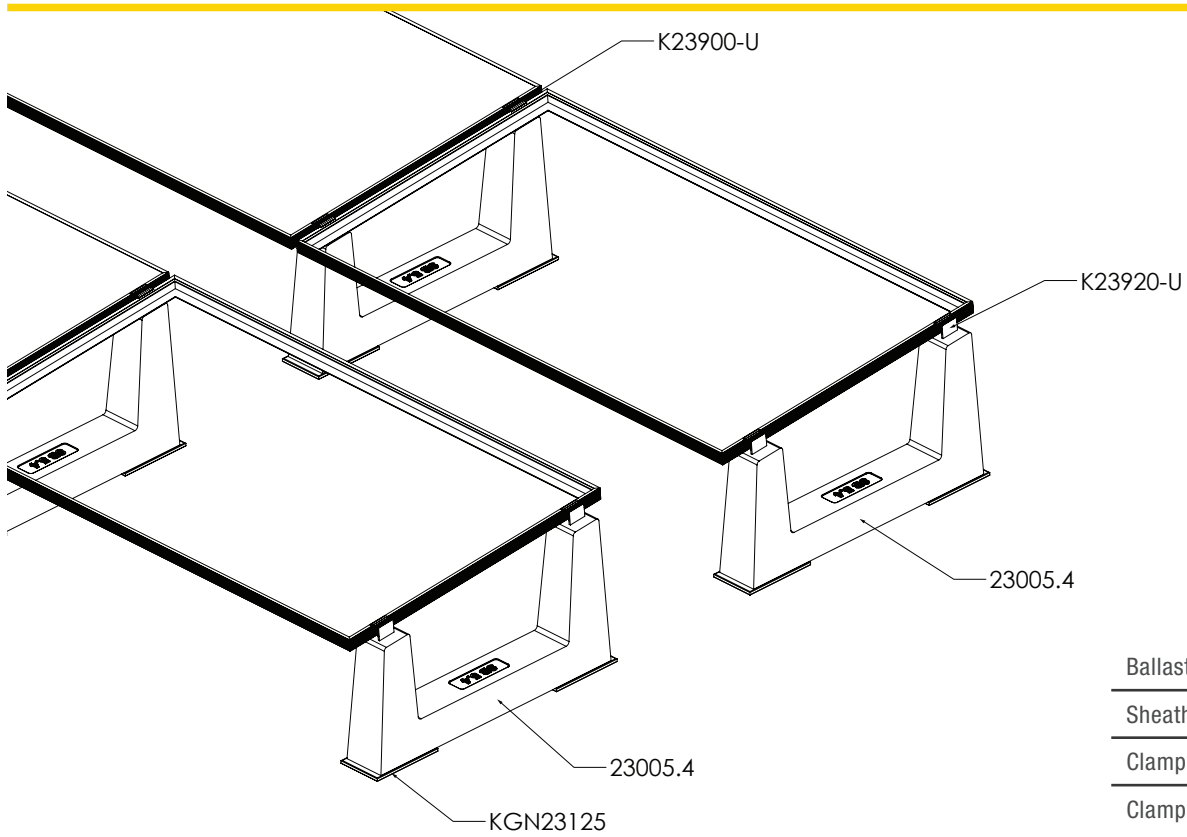
ART. 23005.4



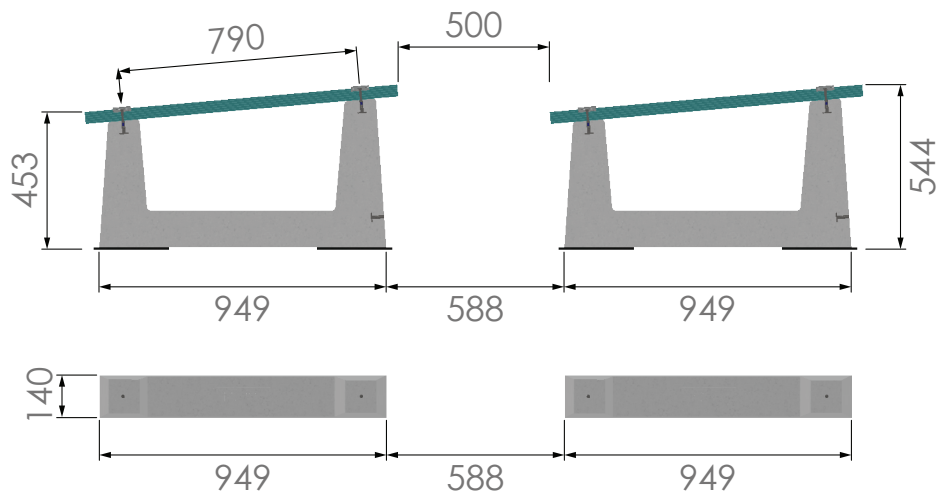
<b>Material</b>	The main material of SUN BALLAST® ballasts is concrete, which allows low wear and tear over time and the ability to withstand even the most intense disturbances and different climatic conditions		
<b>Compatible accessories</b>	U-Block (23030.CRP), Sheathing (KGN23125), Cablowind (CW.CABLOWIND.95 - CW.CABLOWIND.165 - CW.CABLOWIND.185), No-Flex (K23712), Junction plate for ballast (K23804)		
<b>Application</b>	Any type of flat roof with a slope of max. 5°, on the ground, on beaten earth, or on paved surfaces		
<b>Angle of Inclination</b>	5°	<b>Module positioning</b>	Horizontal / Vertical

## Ballast Art. 23005.4

<b>Ballast weight</b>	53 kg	<b>Pallet dimensions</b>	90 cm x 98 cm h = 74 cm
<b>Quantity per pallet</b>	12 pieces	<b>Pallet weight</b>	530 kg



Ballast	23005.4
Sheath	KGN23125
Clamps Kit	K23900-U
Clamps Kit	K23920-U



## INFO

- The torque applied must refer to the mechanical standard conforming to the bolt in use, with M8 stainless steel bolts using a torque of 12 - 14 Nm.
- Avoid impact wrenches.
- Always refer to the information given in the panel manufacturer's installation sheet.
- Follow the Sun Ballast® installation instructions.
- The dimensions shown are all in millimeters.
- For further information, please visit [www.sunballast.en](http://www.sunballast.en)

# BALLAST 5.5°

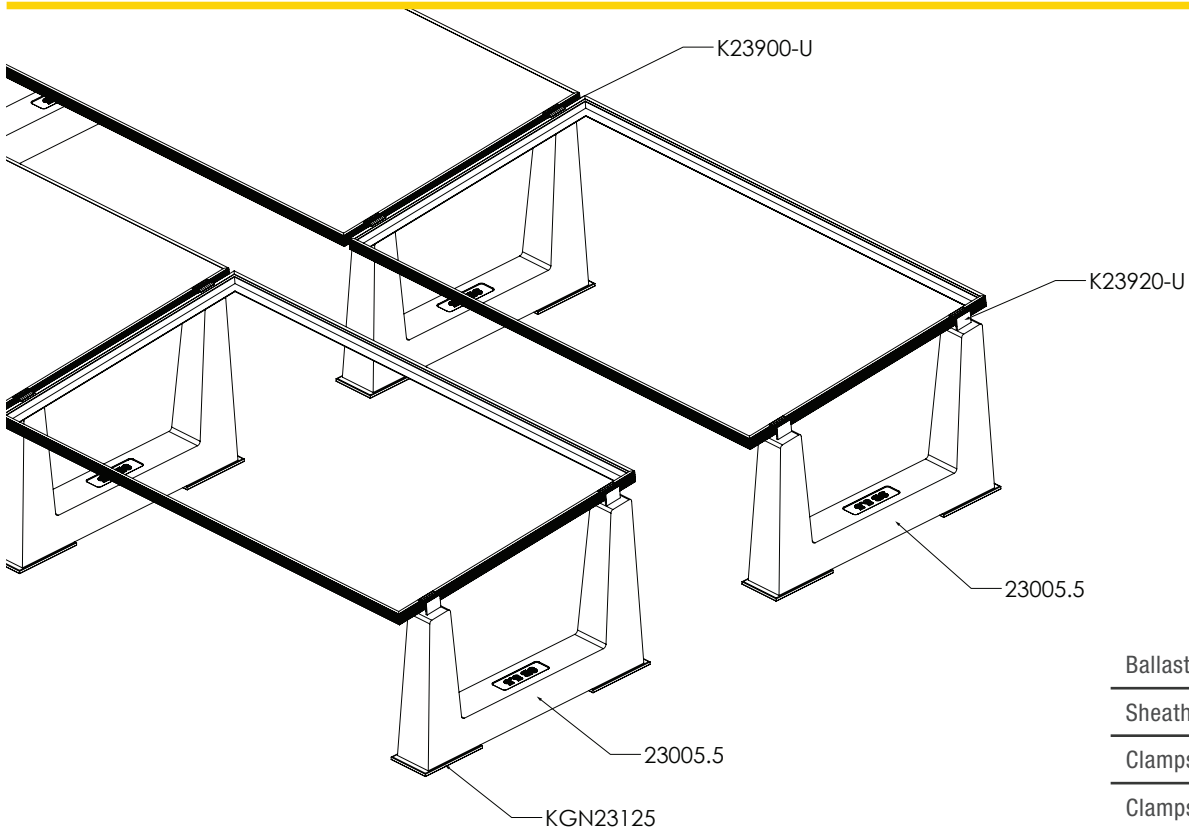
ART. 23005.5



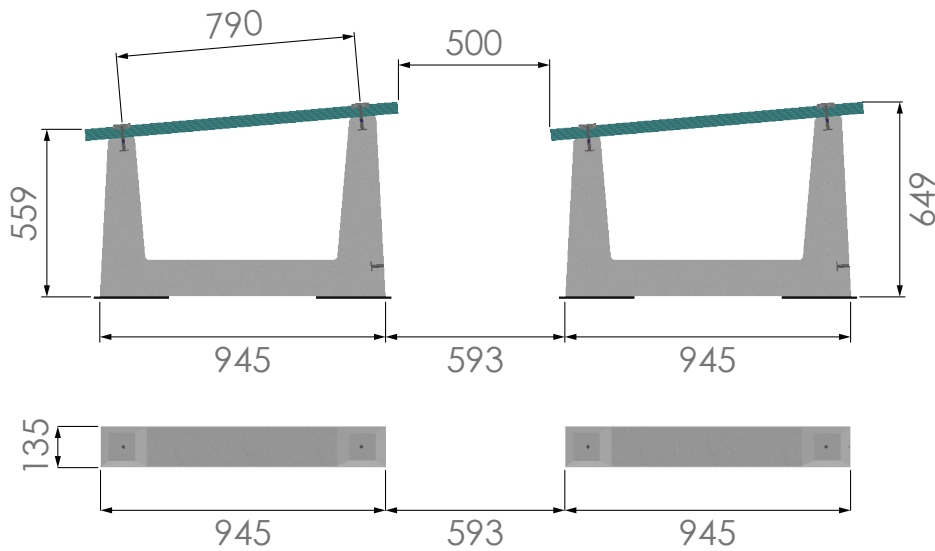
<b>Material</b>	The main material of SUN BALLAST® ballasts is concrete, which allows low wear and tear over time and the ability to withstand even the most intense disturbances and different climatic conditions		
<b>Compatible accessories</b>	U-Block (23030.CRP), Sheathing (KGN23125), Cablowind (CW.CABLOWIND.95 - CW.CABLOWIND.165 - CW.CABLOWIND.185), No-Flex (K23712) , Junction plate for ballast (K23804)		
<b>Application</b>	Any type of flat roof with a slope of max. 5°, on the ground, on beaten earth, or on paved surfaces		
<b>Angle of Inclination</b>	5°	<b>Module positioning</b>	Horizontal / Vertical

## Ballast Art. 23005.5

<b>Ballast weight</b>	59 kg	<b>Pallet dimensions</b>	110 cm x 98 cm h = 74 cm
<b>Quantity per pallet</b>	10 pieces	<b>Pallet weight</b>	600 kg



Ballast	23005.5
Sheath	KGN23125
Clamps Kit	K23900-U
Clamps Kit	K23920-U



## INFO

- The torque applied must refer to the mechanical standard conforming to the bolt in use, with M8 stainless steel bolts using a torque of 12 - 14 Nm.
- Avoid impact wrenches.
- Always refer to the information given in the panel manufacturer's installation sheet.
- Follow the Sun Ballast® installation instructions.
- The dimensions shown are all in millimeters.
- For further information, please visit [www.sunballast.en](http://www.sunballast.en)

# BALLAST 5°.6

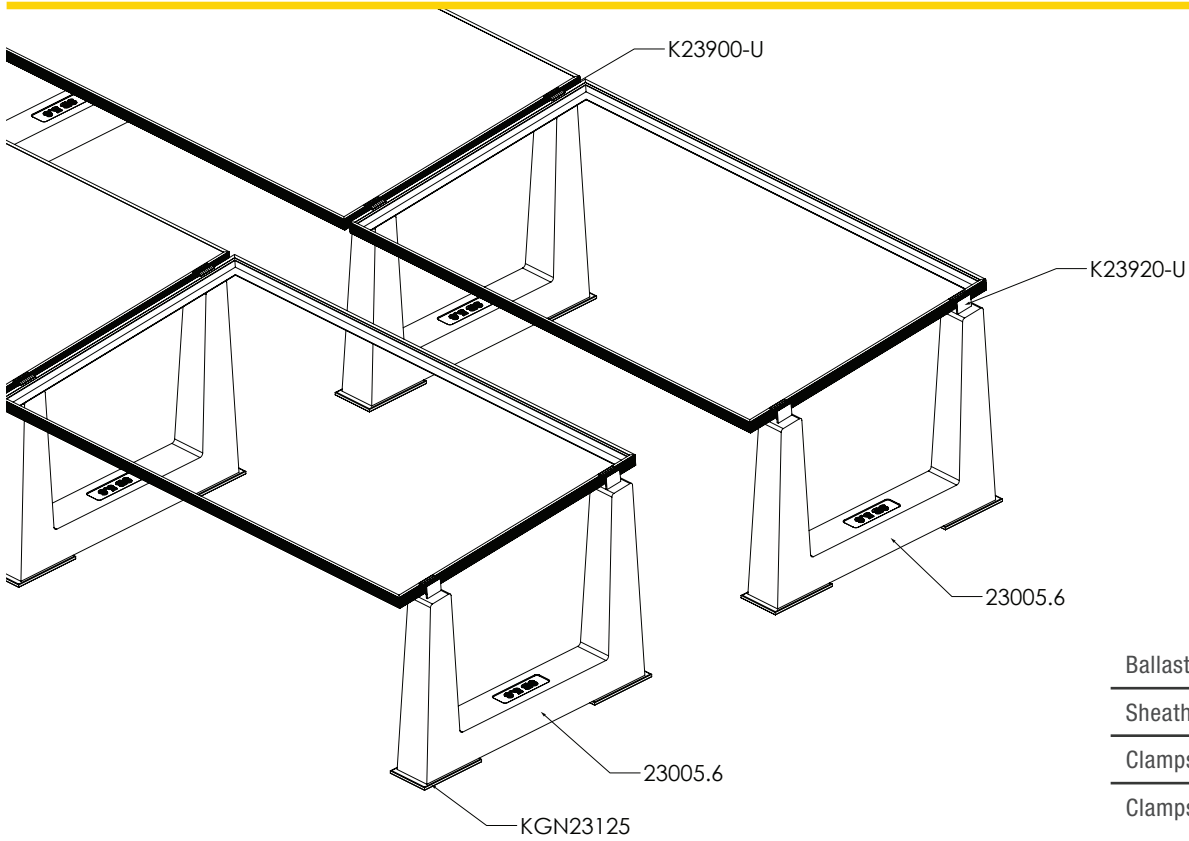
ART. 23005.6



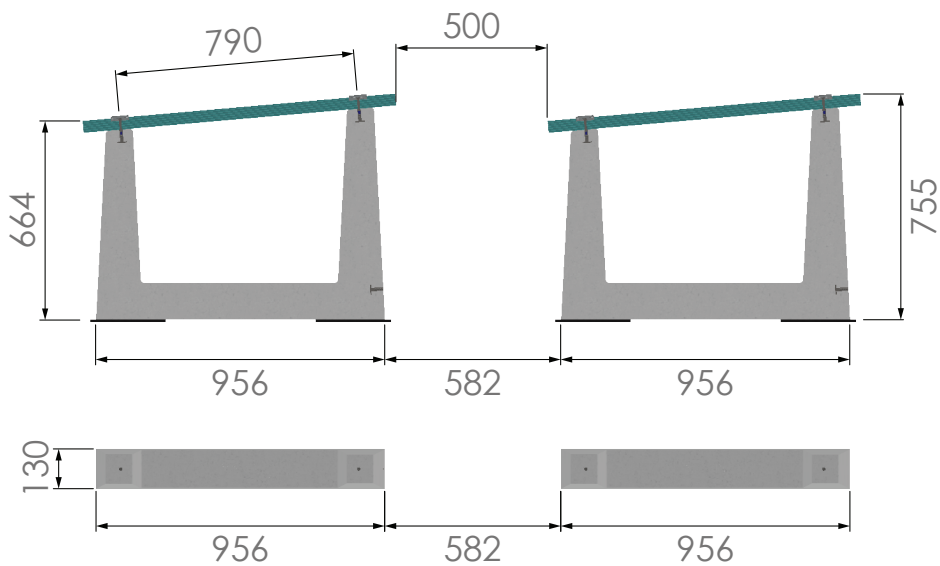
<b>Material</b>	The main material of SUN BALLAST® ballasts is concrete, which allows low wear and tear over time and the ability to withstand even the most intense disturbances and different climatic conditions		
<b>Compatible accessories</b>	U-Block (23030.CRP), Sheathing (KGN23125), Cablowind (CW.CABLOWIND.95 - CW.CABLOWIND.165 - CW.CABLOWIND.185), No-Flex (K23712), Junction plate for ballast (K23804)		
<b>Application</b>	Any type of flat roof with a slope of max. 5°, on the ground, on beaten earth, or on paved surfaces		
<b>Angle of Inclination</b>	5°	<b>Module positioning</b>	Horizontal / Vertical

## Ballast Art. 23005.6

<b>Ballast weight</b>	64 kg	<b>Pallet dimensions</b>	130 cm x 98 cm h = 61 cm
<b>Quantity per pallet</b>	8 pieces	<b>Pallet weight</b>	512 kg



Ballast	23005.6
Sheath	KGN23125
Clamps Kit	K23900-U
Clamps Kit	K23920-U

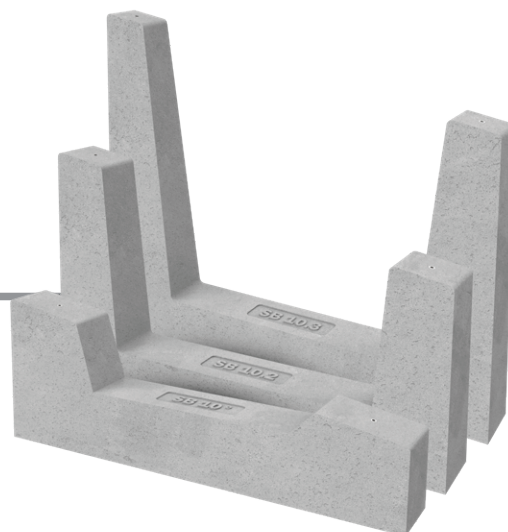


## INFO

- The torque applied must refer to the mechanical standard conforming to the bolt in use, with M8 stainless steel bolts using a torque of 12 - 14 Nm.
- Avoid impact wrenches.
- Always refer to the information given in the panel manufacturer's installation sheet.
- Follow the Sun Ballast® installation instructions.
- The dimensions shown are all in millimeters.
- For further information, please visit [www.sunballast.en](http://www.sunballast.en)

# SISTEMA: VELA 10°

ART. 23010/.2/.3



<b>Materiale</b>	Il materiale principale delle zavorre SUN BALLAST® è il calcestruzzo, che permette una bassa usura nel tempo e la capacità di resistere anche alle perturbazioni più intense e a diverse condizioni climatiche		
<b>Accessori compatibili</b>	U-Block (23030.CRP), Guaina (KGN23115), Cablowind (CW.CABLOWIND.95 - CW.CABLOWIND.165 - CW.CABLOWIND.185), No-Flex (K23712), Piastra di giunzione sistema a vela (23811)		
<b>Applicazione</b>	Qualsiasi tipologia di tetto piano con pendenza max 5°, a terra, su terreni battuti con materiale inerte o pavimentazioni		
<b>Angolo di Inclinazione</b>	10 °	<b>Posizionamento modulo</b>	Orizzontale

## Zavorra Art. 23010

Peso zavorra	60 kg	Dimensioni bancale	100 cm x 73 cm h = 67 cm
Quantità per bancale	10 pezzi	Peso bancale	630 kg

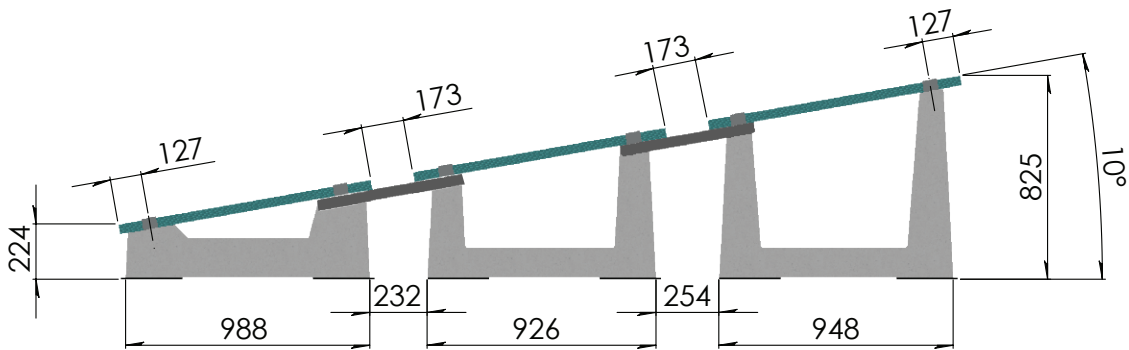
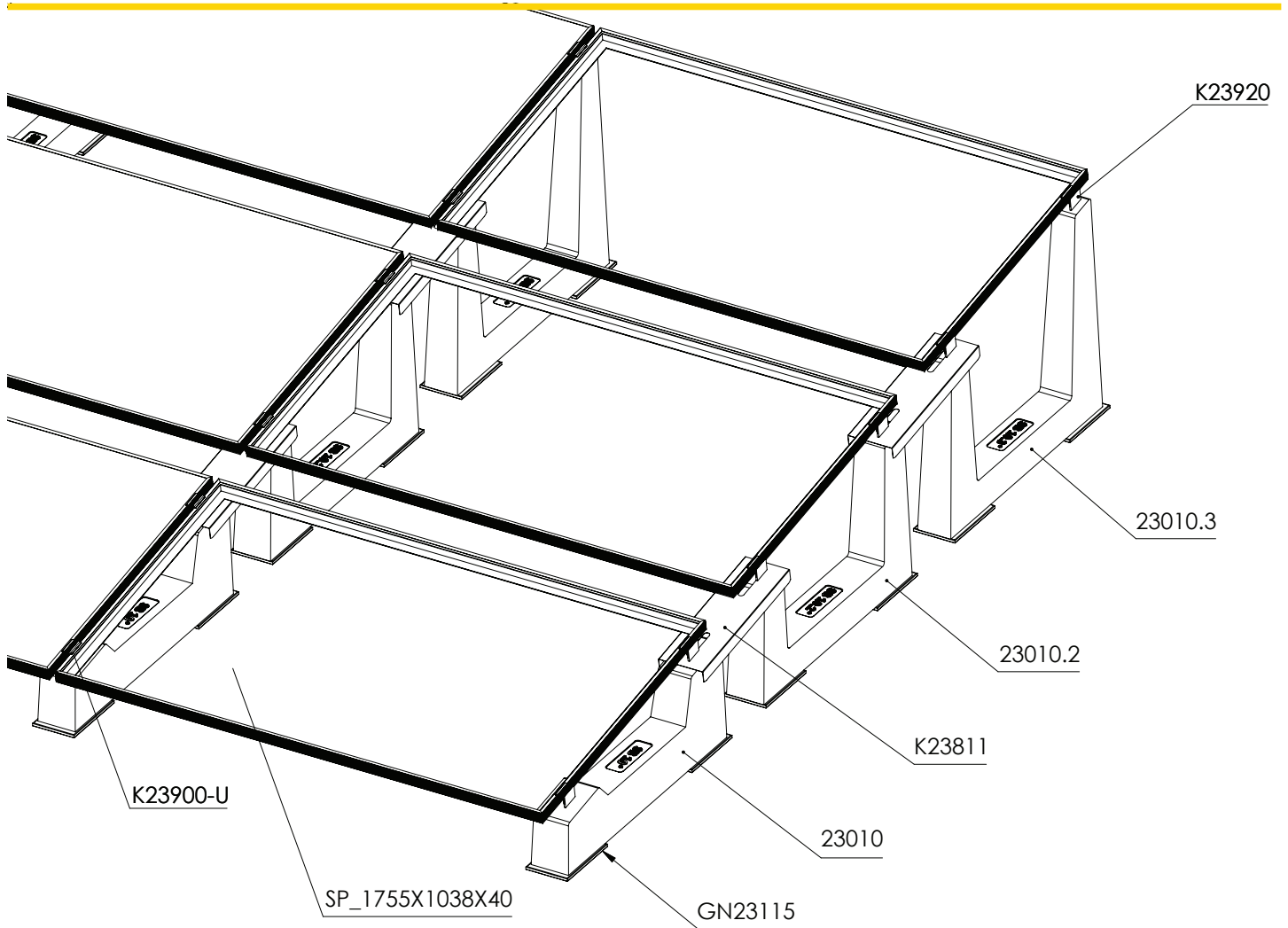
## Zavorra Art. 23010.2

Peso zavorra	60 kg	Dimensioni bancale	109 cm x 56 cm h = 72 cm
Quantità per bancale	8 pezzi	Peso bancale	510 kg

## Zavorra Art. 23010.3

Peso zavorra	65 kg	Dimensioni bancale	112 cm x 77 cm h = 66 cm
Quantità per bancale	8 pezzi	Peso bancale	557 kg





## INFO

- The torque applied must refer to the mechanical standard conforming to the bolt in use, with M8 stainless steel bolts using a torque of 12 - 14 Nm.
- Avoid impact wrenches.
- Always refer to the information given in the panel manufacturer's installation sheet.
- Follow the Sun Ballast® installation instructions.
- The dimensions shown are all in millimeters.
- For further information, please visit [www.sunballast.en](http://www.sunballast.en)

# BALLAST 10°

ART. 23010

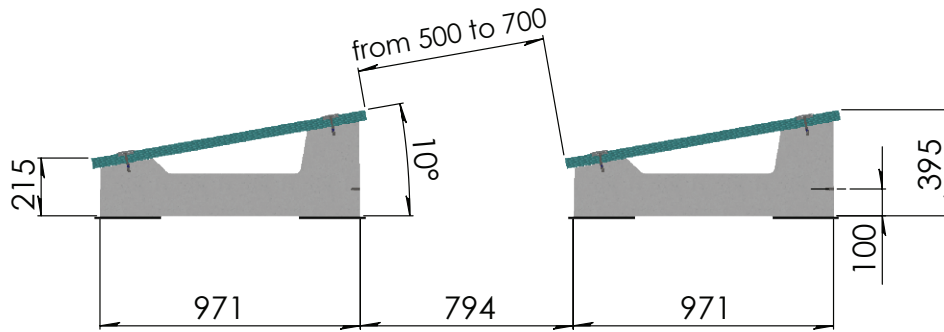


<b>Material</b>	The main material of SUN BALLAST® ballasts is concrete, which allows low wear and tear over time and the ability to withstand even the most intense disturbances and different climatic conditions		
<b>Compatible accessories</b>	U-Block (23030.CRP), Rubber protection sheath (KGN23115), Cablowind (CW.CABLOWIND.95 - CW.CABLOWIND.165 - CW.CABLOWIND.185), No-Flex (K23712), Junction plate for Sail System (23811)		
<b>Application</b>	Any type of flat roof with a slope of max. 5°, on the ground, on beaten earth, or on paved surfaces		
<b>Angle of Inclination</b>	10 °	<b>Module positioning</b>	Horizontal / Vertical

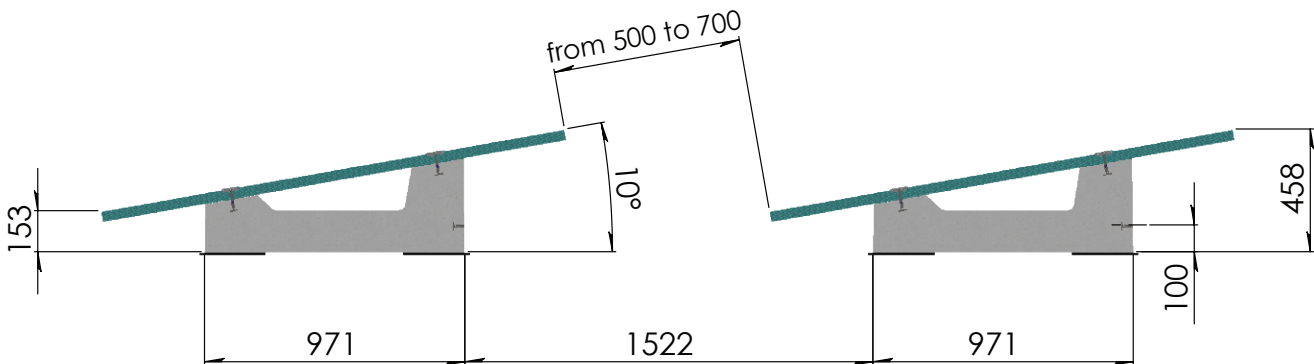
## Ballast Art. 23010

<b>Ballast weight</b>	60 kg	<b>Pallet dimensions</b>	100 cm x 73 cm h = 67 cm
<b>Quantity per pallet</b>	10 pieces	<b>Pallet weight</b>	630 kg

## HORIZONTAL PANEL LAYING



## VERTICAL PANEL LAYING

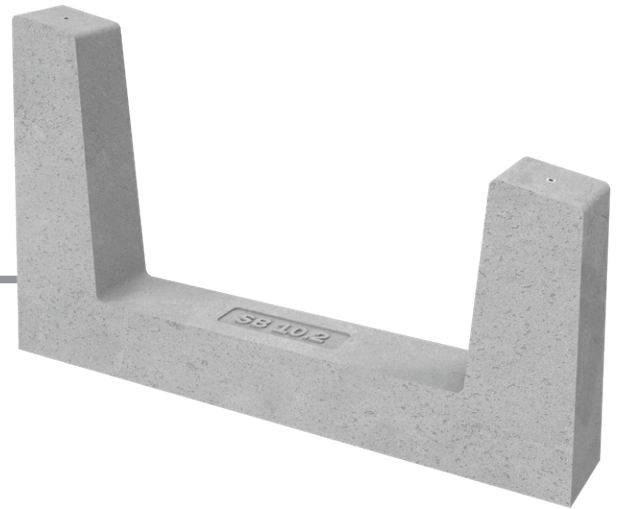


### INFO

- The torque applied must refer to the mechanical standard conforming to the bolt in use, with M8 stainless steel bolts using a torque of 12 - 14 Nm.
- Avoid impact wrenches.
- Always refer to the information given in the panel manufacturer's installation sheet.
- Follow the Sun Ballast® installation instructions.
- The dimensions shown are all in millimeters.
- For further information, please visit [www.sunballast.en](http://www.sunballast.en)

# BALLAST 10°.2

ART. 23010.2

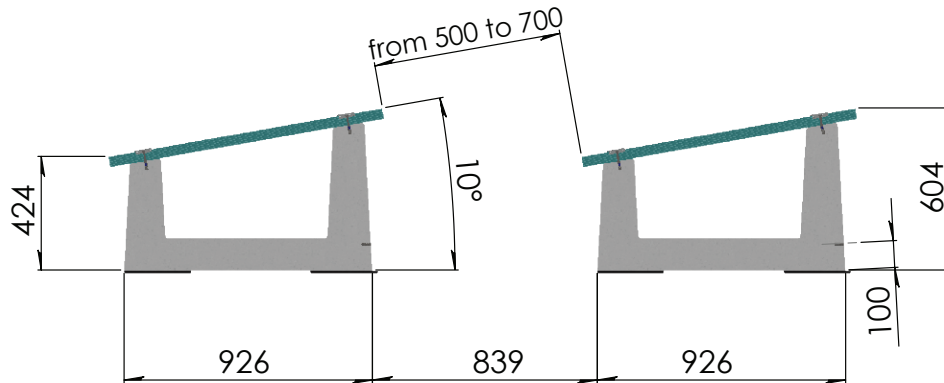


<b>Material</b>	The main material of SUN BALLAST® ballasts is concrete, which allows low wear and tear over time and the ability to withstand even the most intense disturbances and different climatic conditions		
<b>Compatible accessories</b>	U-Block (23030.CRP), Rubber protection sheath (KGN23115), Cablowind (CW.CABLOWIND.95 - CW.CABLOWIND.165 - CW.CABLOWIND.185), No-Flex (K23712), Junction plate for Sail System (23811)		
<b>Application</b>	Any type of flat roof with a slope of max. 5°, on the ground, on beaten earth, or on paved surfaces		
<b>Angle of Inclination</b>	10 °	<b>Module positioning</b>	Horizontal / Vertical

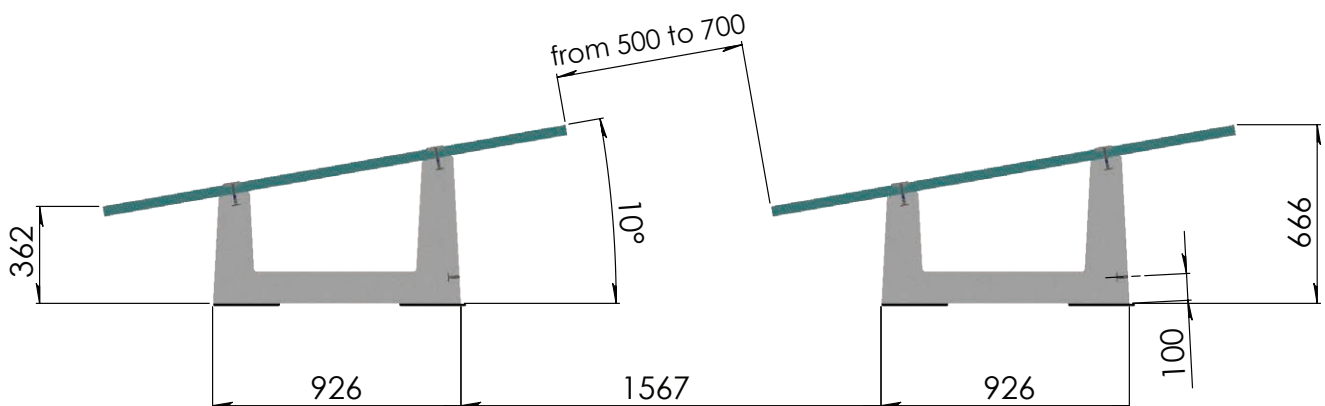
## Ballast Art. 23010.2

<b>Ballast weight</b>	60 kg	<b>Pallet dimensions</b>	109 cm x 56 cm h = 72 cm
<b>Quantity per pallet</b>	8 pieces	<b>Pallet weight</b>	510 kg

## HORIZONTAL PANEL LAYING



## VERTICAL PANEL LAYING



### INFO

- The torque applied must refer to the mechanical standard conforming to the bolt in use, with M8 stainless steel bolts using a torque of 12 - 14 Nm.
- Avoid impact wrenches.
- Always refer to the information given in the panel manufacturer's installation sheet.
- Follow the Sun Ballast® installation instructions.
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# BALLAST 10°.3

ART. 23010.3

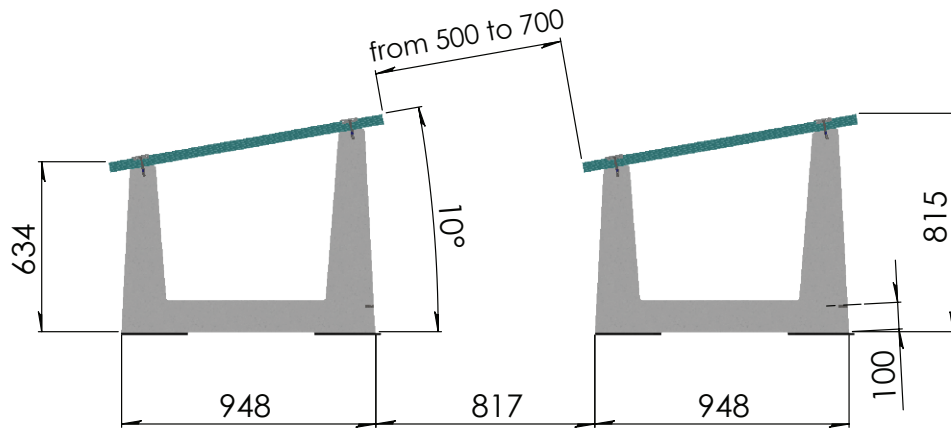


<b>Material</b>	The main material of SUN BALLAST® ballasts is concrete, which allows low wear and tear over time and the ability to withstand even the most intense disturbances and different climatic conditions		
<b>Compatible accessories</b>	U-Block (23030.CRP), Rubber protection sheath (KGN23115), Cablowind (CW.CABLOWIND.95 - CW.CABLOWIND.165 - CW.CABLOWIND.185), No-Flex (K23712), Junction plate for Sail System (23811)		
<b>Application</b>	Any type of flat roof with a slope of max. 5°, on the ground, on beaten earth, or on paved surfaces		
<b>Angle of Inclination</b>	10 °	<b>Module positioning</b>	Horizontal

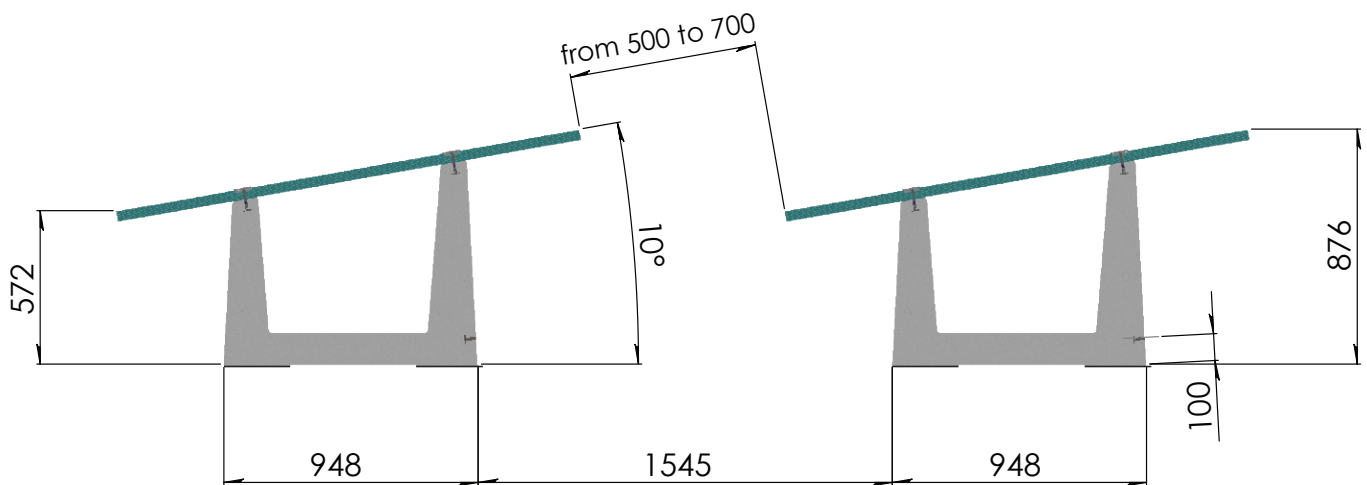
## Ballast Art. 23010.3

<b>Ballast weight</b>	65 kg	<b>Pallet dimensions</b>	112 cm x 77 cm h = 66 cm
<b>Quantity per pallet</b>	8 pieces	<b>Pallet weight</b>	557 kg

## HORIZONTAL PANEL LAYING



## VERTICAL PANEL LAYING



### INFO

- The torque applied must refer to the mechanical standard conforming to the bolt in use, with M8 stainless steel bolts using a torque of 12 - 14 Nm.
- Avoid impact wrenches.
- Always refer to the information given in the panel manufacturer's installation sheet.
- Follow the Sun Ballast® installation instructions.
- The dimensions shown are all in millimeters.
- For further information, please visit [www.sunballast.en](http://www.sunballast.en)

# TECHNICAL REQUIREMENTS

<b>Designation:</b>	<b>Designation: Unreinforced precast concrete ballast.</b> (Inside there is an iron rod to increase mechanical elasticity)
<b>Article:</b>	<b>Sun Ballast (Patented System)</b>

Basic Srl, 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 (spelling correction) renders this declaration of technical requirements null and void. The technical characteristics of the product are listed below.

## TECHNICAL CHARACTERISTICS

- Exposure class: XC4;
- Strength class: C32/40;
- Minimum cement content: 340 kg/m<sup>3</sup>;
- Fire resistance class: Class 0 (Italian class) A1 (European class with ref. UNI EN 13501-1:2019);
- Maximum H<sub>2</sub>O penetration depth under pressure 500 kPa: 15 mm;
- Average H<sub>2</sub>O penetration depth under pressure 500 kPa: 10 mm;
- Weight tolerance: ±5%;
- 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.







**Made to last**  
**Patented systems**



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