

## Temporary and mobile ground protection systems

### Product information and technical data

Applications of our products for mobile ground protection:



Heavy load transports



Temporary walkways



Concerts and events



Esthetic event floors



Mobile installation surfaces for cranes



Line construction



Mobile parking lots



Mobile logistics



Wind power plant construction



Tent floors



Road construction and access roads



Special projects

produced by:

**OKULEN**<sup>®</sup>

Technische Kunststoffe  
Engineering Plastics

## VARIO mat mini AS

### Material:

High molecular weight polyethylene

**Dimensions:** 600 x 2000 mm

**Usable Surface:** 1,2 m<sup>2</sup>

**Total thickness:** 17 mm

**weight circa. :** 13,5 kg

### Surface:

Top 5 mm profile

Underside Anti-slip fluting

**Qty. handles:** 2

### Assembly options:

6 pcs. Ø 22 mm

**Colour:** black multi-coloured

**Load bearing capacity (circa):**

30t (depending on the substrate)

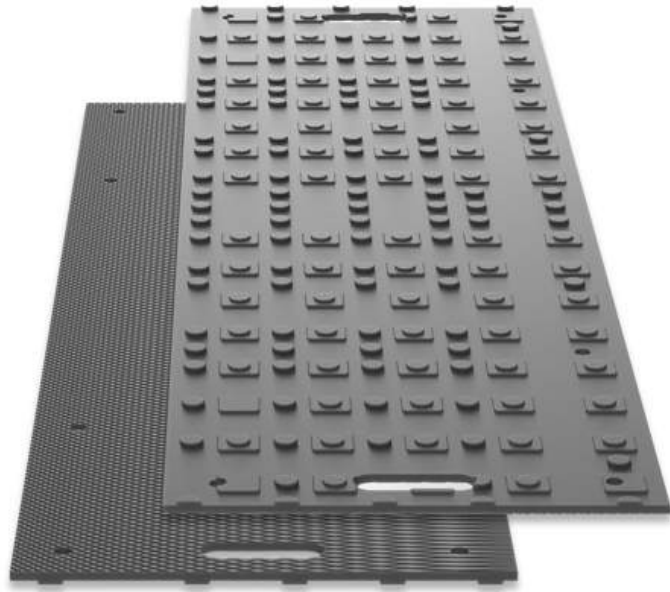
### Transport capacity:

1620units (1944m<sup>2</sup>) **Lorry**

810 units (972m<sup>2</sup>) **20'-Container**

1710 units (2052m<sup>2</sup>) **40'-**

**Container**



### Fields of application:



Road construction  
and access roads



Concerts and  
events



Temporary  
walkways



Mobile logistics



Line  
construction



Mobile parking  
lots

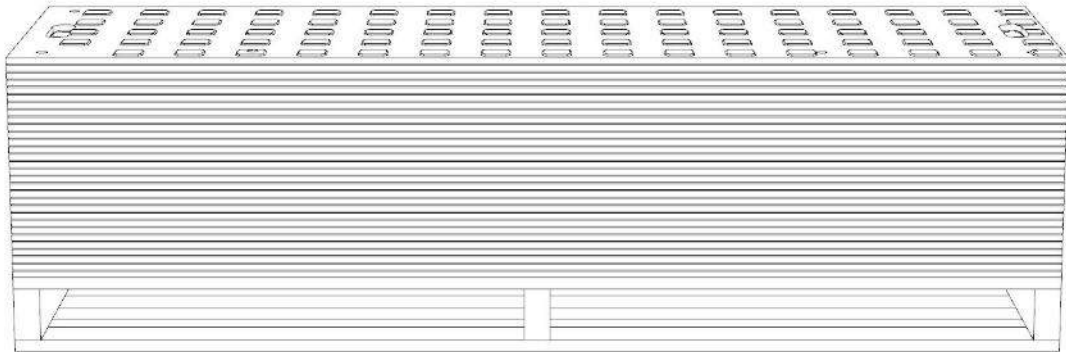


## General information

### Unloading:

The panels can be unloaded from a lorry using a forklift truck or a crane. When lifting, special care must be taken to ensure that the panels cannot slip or fall off.

**Storage:** Never stack more than 30 panels on a pallet.

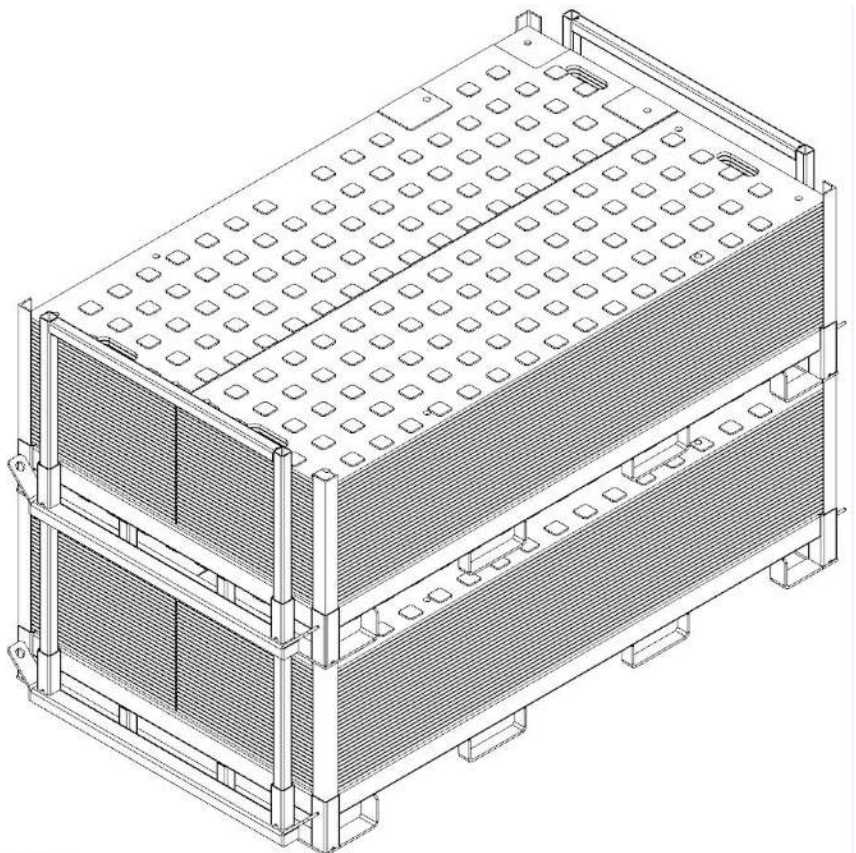


### Storage:

Never stack more than 50 panels on a stake rack.

Do not move more than 2 stake racks at a time using a forklift truck.

Move only one stake rack at a time using a chain sling.



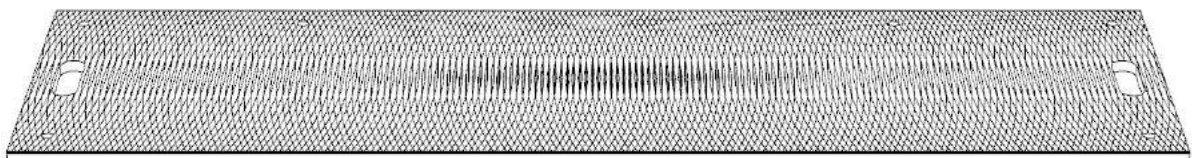
**Use of the panels:**

The upper side is engineered with approx. 5 mm high nubs.



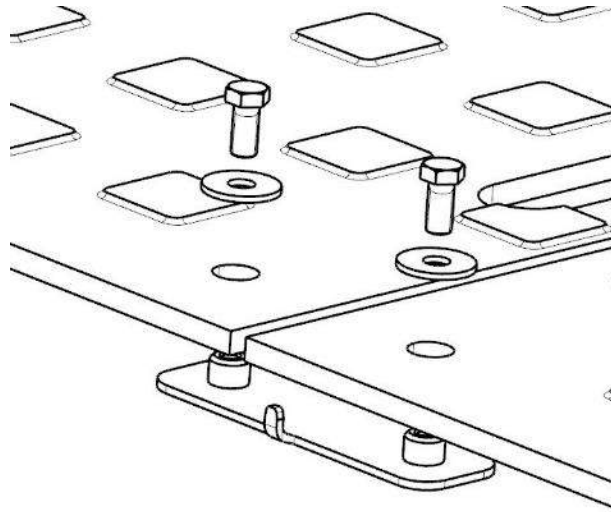
**Use of the panels:**

The underside is striated/roughened.



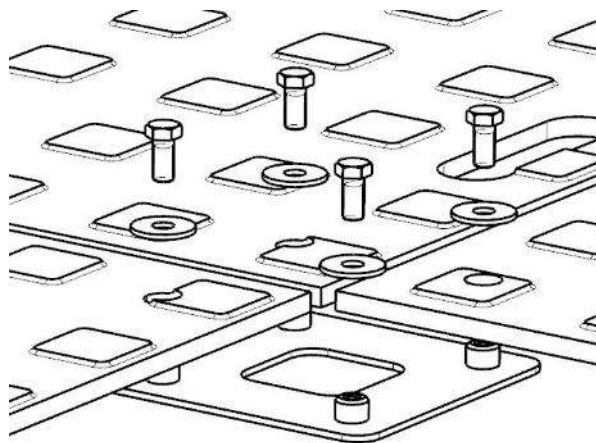
**Connecting 2 panels:**

Connect and screw the panels using the 2-way metal connector, 2 washers and 2 hexagonal screws (M10x16mm). All adjacent panels must be connected in this way.



**Connecting 4 panels:**

Connect and screw the panels using the 4-way metal connector, 4 washers and 4 hexagonal screws (M10x16mm). All adjacent panels must be connected in this way.



produced by:

**OKULEN**<sup>®</sup>

Technische Kunststoffe  
Engineering Plastics

## **VARIO** mat basic AS

### Material:

High molecular weight polyethylene

**Dimensions:** 1000 x 2000 mm

**Usable Surface:** 2 m<sup>2</sup>

**Total thickness:** 12 mm

**weight circa. :** 19,5 kg

### Surface:

Top unprofiled

Underside Anti-slip fluting

**Qty. handles:** 2

### Assembly options:

4 pcs. Ø 22 mm

**Colour:** multi-coloured (konfetti)

**Load bearing capacity (circa):**

50t (depending on the substrate)

### Transport capacity:

1050units (2100m<sup>2</sup>) **Lorry**

600units (1200m<sup>2</sup>) **20'-Container**

1200 units (2400m<sup>2</sup>) **40'-**

**Container**



### Fields of application:



Road construction  
and access roads



Concerts and  
events



Temporary  
walkways



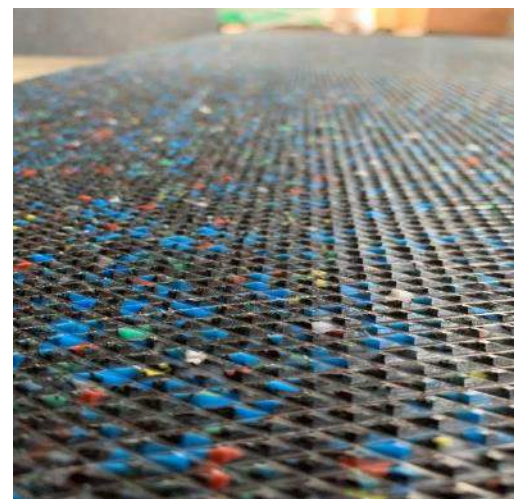
Mobile logistics



Line  
construction



Mobile parking  
lots

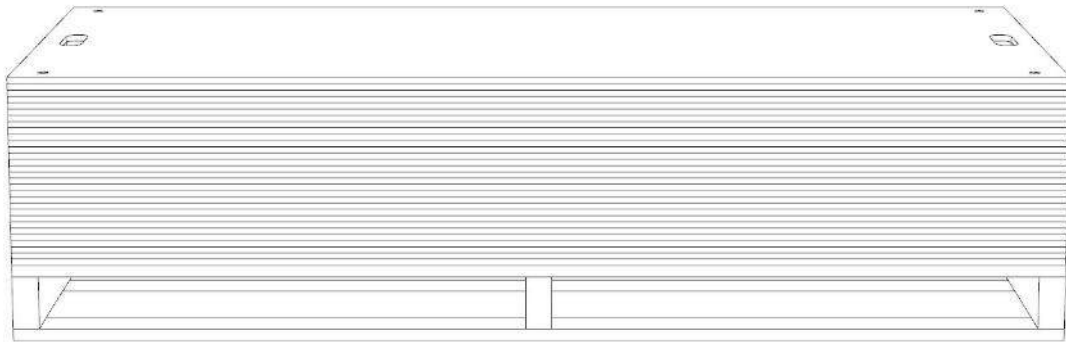


## General information

### Unloading:

The panels can be unloaded from a lorry using a forklift truck or a crane. When lifting, special care must be taken to ensure that the panels cannot slip or fall off.

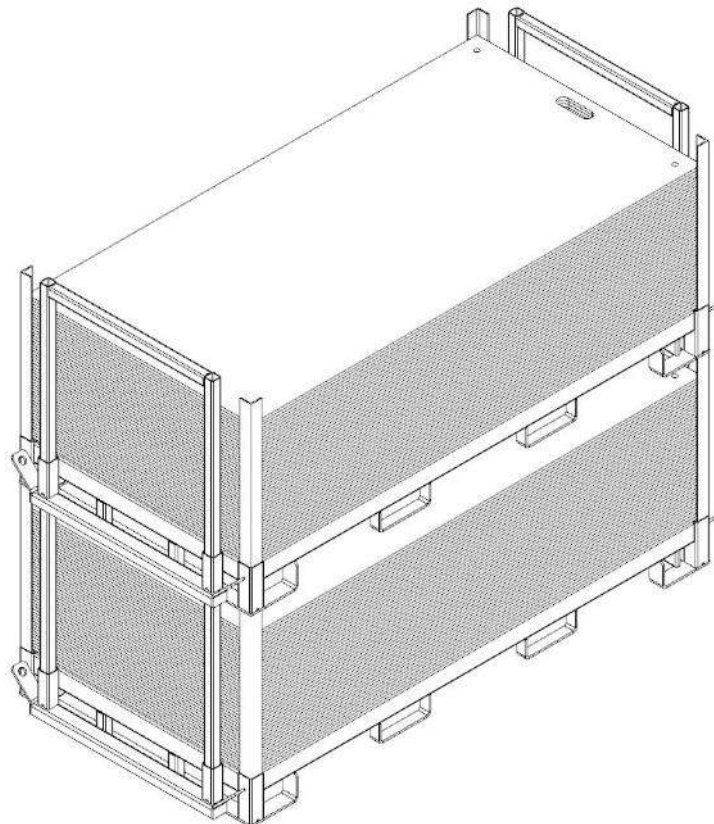
**Storage:** Never stack more than 30 panels on a pallet.



**Storage:** Never stack more than 45 panels on a stake rack.

Do not move more than 2 stake racks at a time using a forklift truck.

Move only one stake rack at a time using a chain sling.



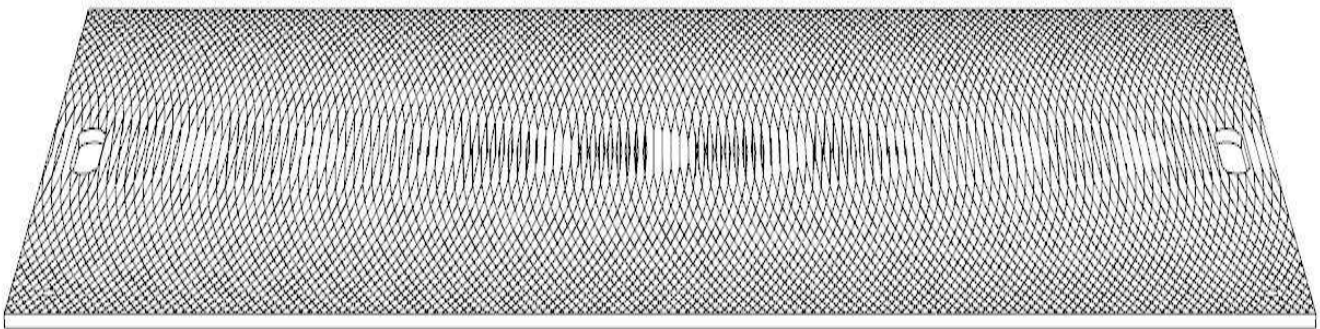
**Use of the panels:**

The upper side is smooth.



**Use of the panels:**

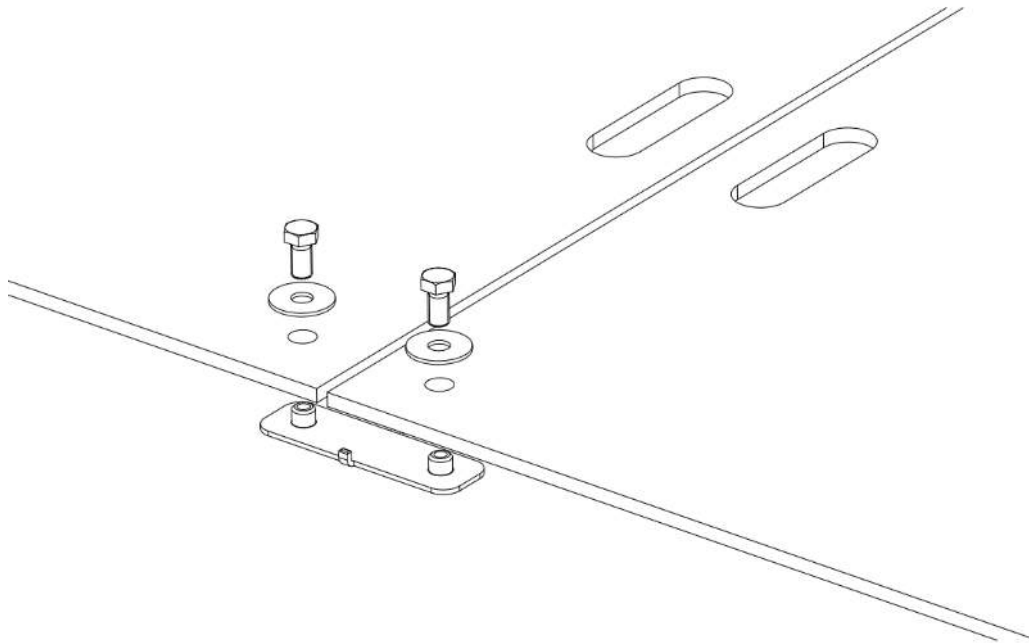
The underside is striated/roughened.





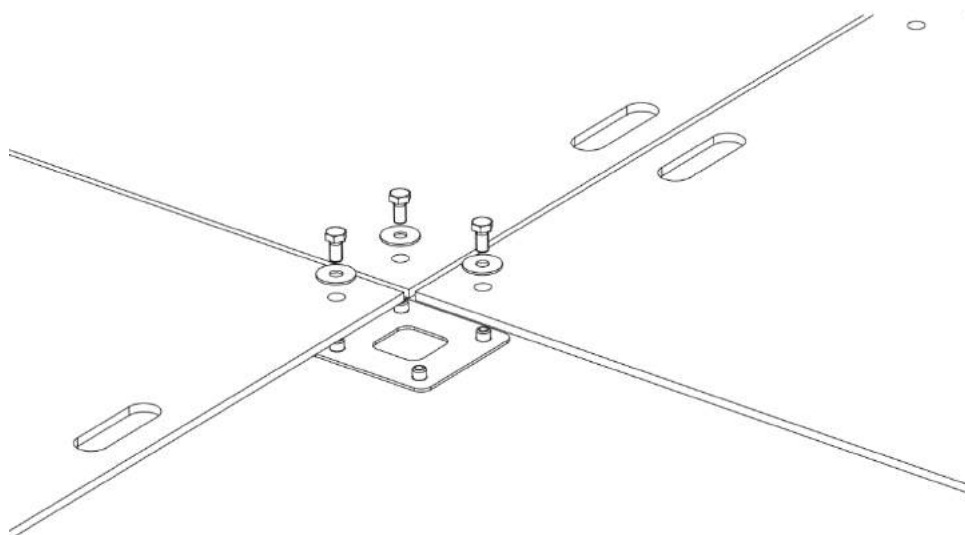
**Connecting 2 panels:**

Connect and screw the panels using the 2-way metal connector, 2 washers and 2 hexagonal screws (M10x16mm). All adjacent panels must be connected in this way.



**Connecting 4 panels:**

Connect and screw the panels using the 4-way metal connector, 4 washers and 4 hexagonal screws (M10x16mm). All adjacent panels must be connected in this way.



produced by:

**OKULEN**<sup>®</sup>

Technische Kunststoffe  
Engineering Plastics

## VARIO mat 1 AS

### Material:

High molecular weight polyethylene

**Dimensions:** 1200 x 2000 mm

**Usable Surface:** 2,4 m<sup>2</sup>

**Total thickness:** 17 mm

**weight circa. :** 27 kg

### Surface:

Top 5 mm profile

Underside Anti-slip fluting

**Qty. handles:** 4

### Assembly options:

12 pcs. Ø 22 mm

**Colour:** black multi-coloured

**Load bearing capacity (circa):**

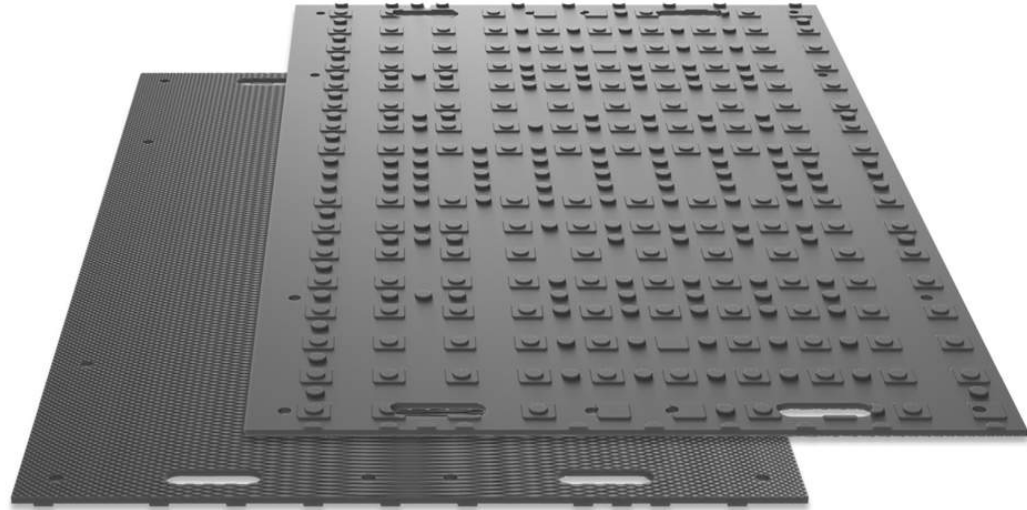
60t (depending on the substrate)

**Transport capacity:**

810units (1944m<sup>2</sup>) **Lorry**

360 units (864m<sup>2</sup>) **20'-Container**

810 units (1944m<sup>2</sup>) **40'-Container**



### Fields of application:



Road construction  
and access roads



Concerts and  
events



Temporary  
walkways



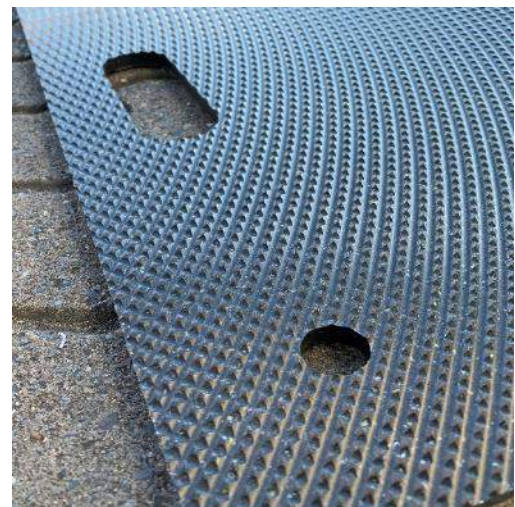
Mobile logistics



Line  
construction



Mobile parking  
lots

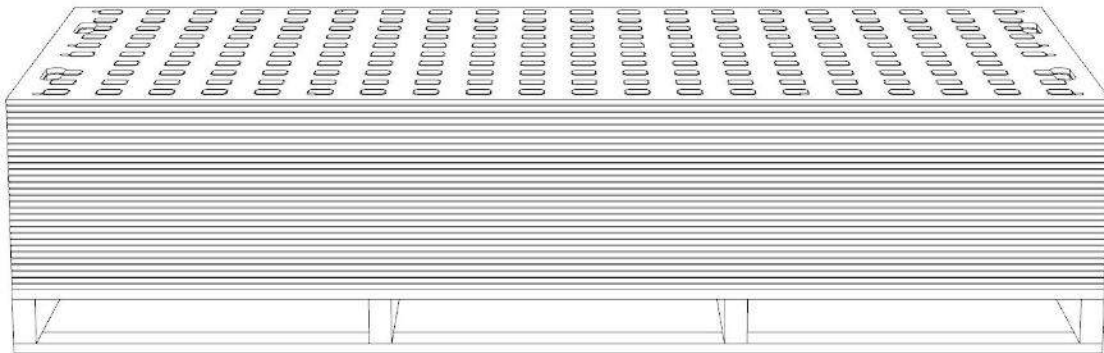


## General information

### Unloading:

The panels can be unloaded from a lorry using a forklift truck or a crane. When lifting, special care must be taken to ensure that the panels cannot slip or fall off.

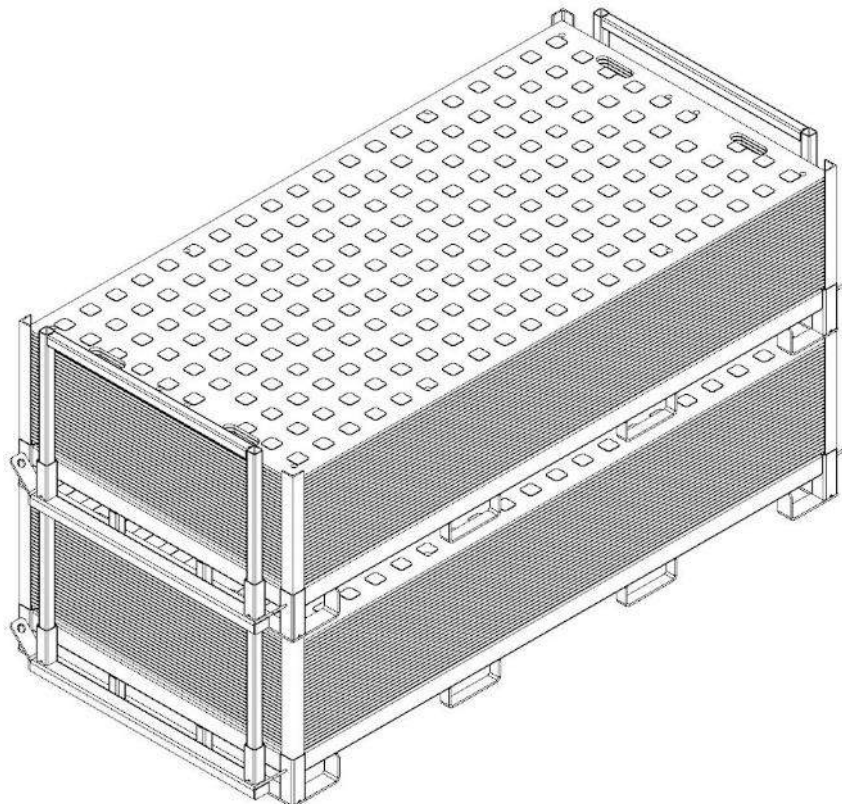
**Storage:** Never stack more than 30 panels on a pallet.



**Storage:** Never stack more than 25 panels on a stake rack.

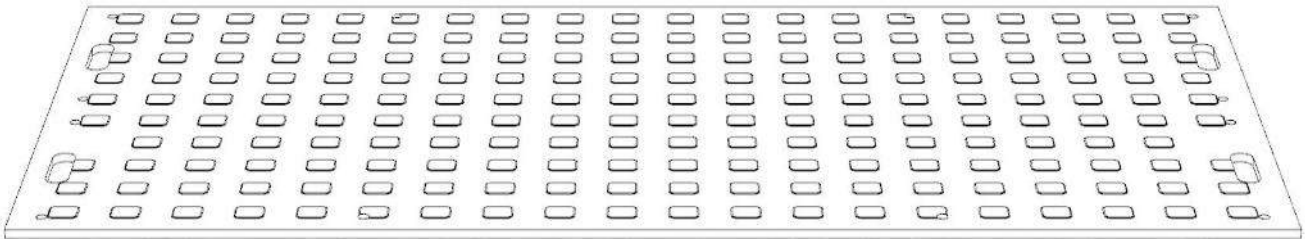
Do not move more than 2 stake racks at a time using a forklift truck.

Move only one stake rack at a time using a chain sling.



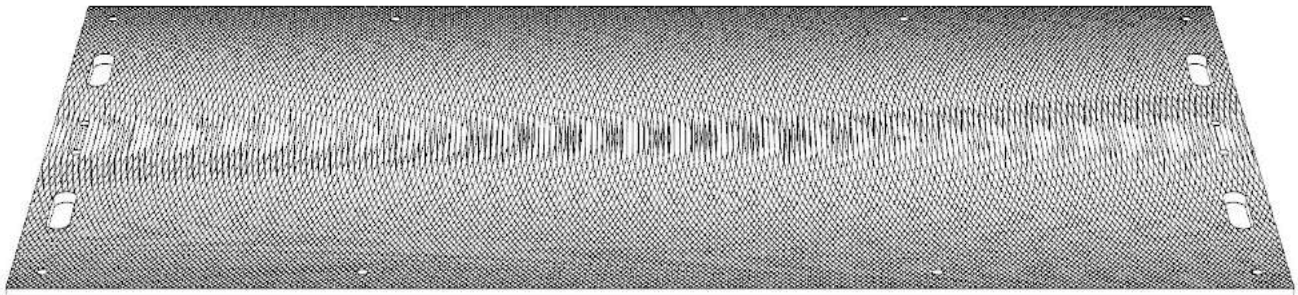
**Use of the panels:**

The upper side is engineered with approx. 5 mm high nubs.



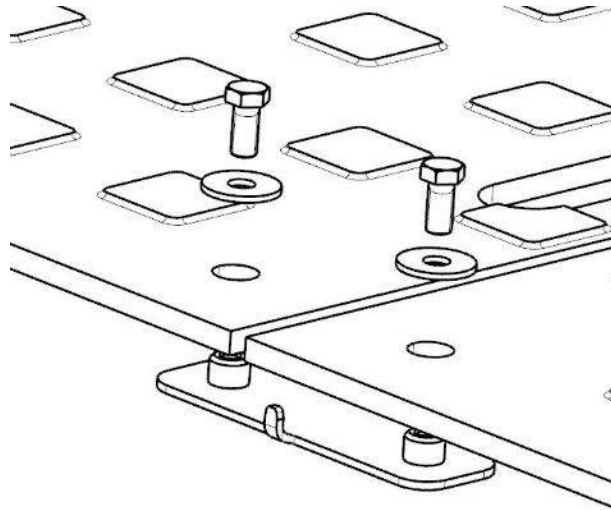
**Use of the panels:**

The underside is striated/roughened.



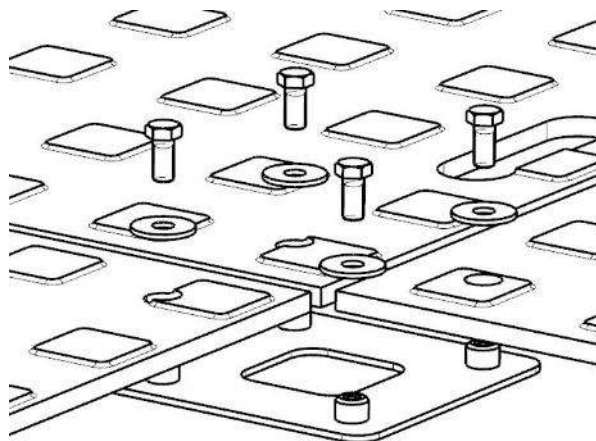
**Connecting 2 panels:**

Connect and screw the panels using the 2-way metal connector, 2 washers and 2 hexagonal screws (M10x16mm). All adjacent panels must be connected in this way.



**Connecting 4 panels:**

Connect and screw the panels using the 4-way metal connector, 4 washers and 4 hexagonal screws (M10x16mm). All adjacent panels must be connected in this way.



produced by:

**OKULEN**<sup>®</sup>

Technische Kunststoffe  
Engineering Plastics

## **VARIO** mat 1+ AS

### Material:

High molecular weight polyethylene

**Dimensions:** 1200 x 2400 mm

**Usable Surface:** 2,88 m<sup>2</sup>

**Total thickness:** 17 mm

**weight circa. :** 32 kg

### Surface:

Top 5 mm profile

Underside Anti-slip fluting

**Qty. handles:** 4

### Assembly options:

12 pcs. Ø 22 mm

**Colour:** black multi-coloured

**Load bearing capacity (circa):**

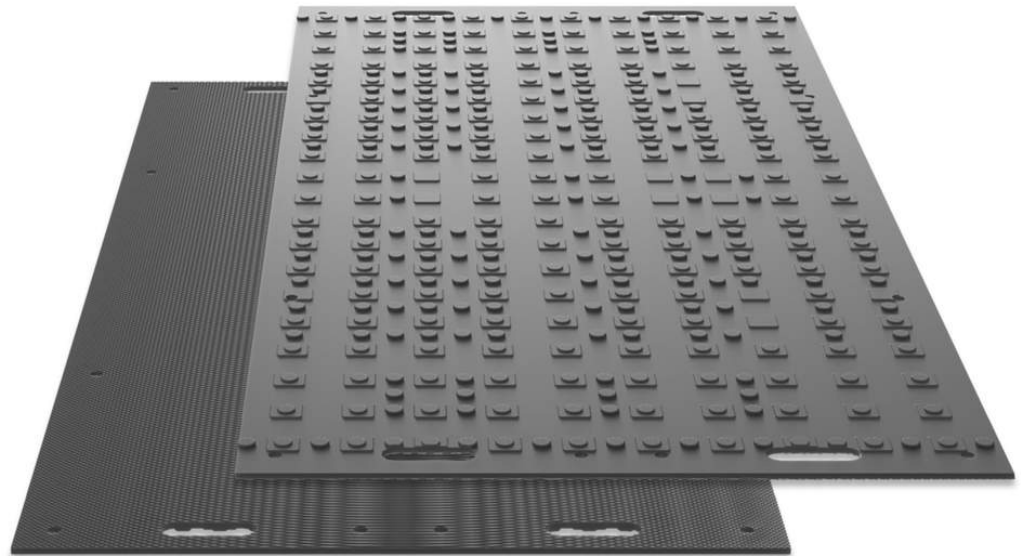
60t (depending on the substrate)

**Transport capacity:**

690units (1987m<sup>2</sup>) **Lorry**

180units (518m<sup>2</sup>) **20'-Container**

360 units (1036m<sup>2</sup>) **40'-Container**



### Fields of application:



Road construction  
and access roads



Concerts and  
events



Temporary  
walkways



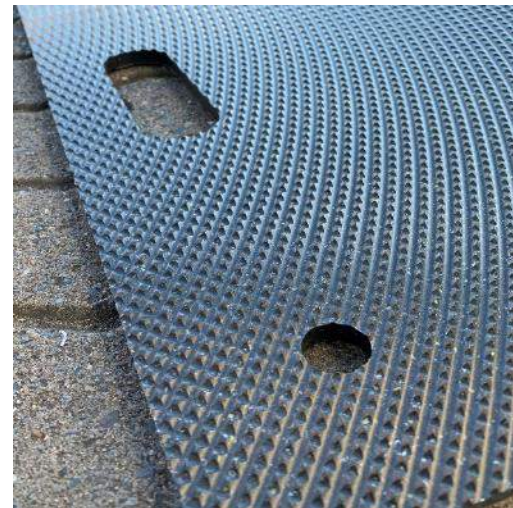
Mobile logistics



Line  
construction



Mobile parking  
lots

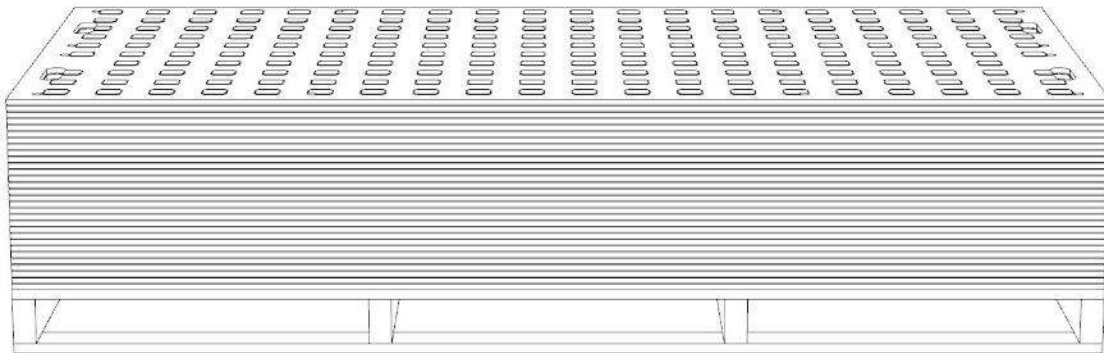


## General information

### Unloading:

The panels can be unloaded from a lorry using a forklift truck or a crane. When lifting, special care must be taken to ensure that the panels cannot slip or fall off.

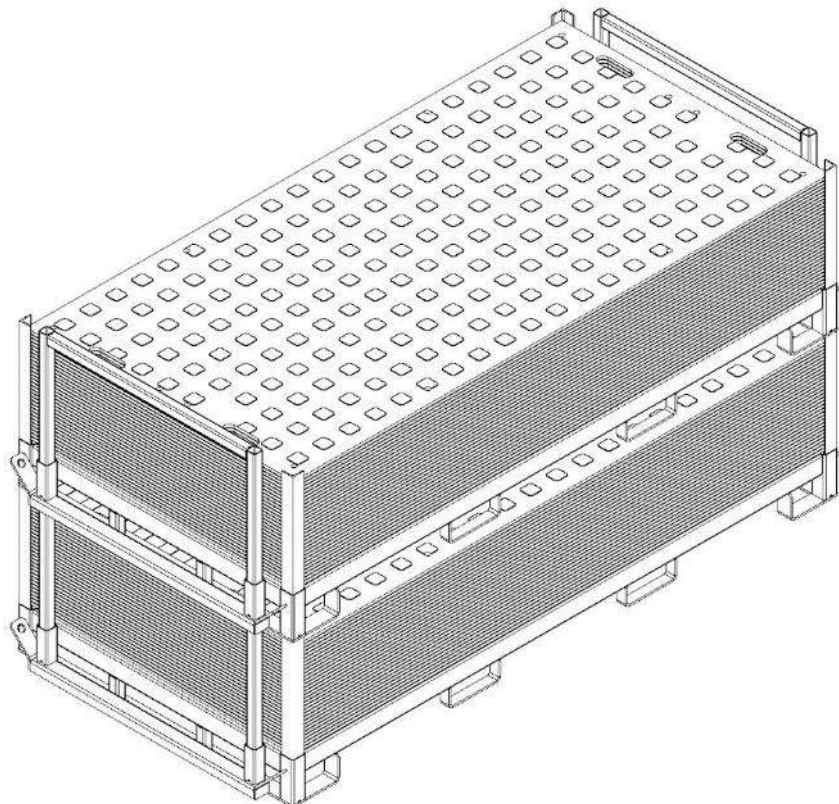
**Storage:** Never stack more than 30 panels on a pallet.



**Storage:** Never stack more than 25 panels on a stake rack.

Do not move more than 2 stake racks at a time using a forklift truck.

Move only one stake rack at a time using a chain sling.



produced by:

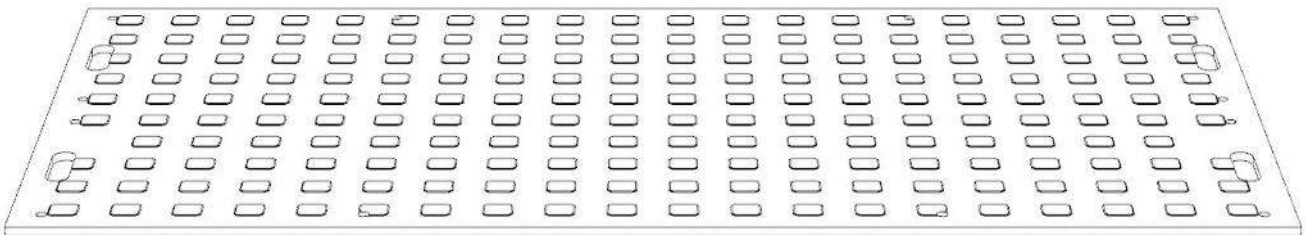
**OKULEN**<sup>®</sup>

Technische Kunststoffe  
*Engineering Plastics*

**VARIO**  
mat 1+ AS

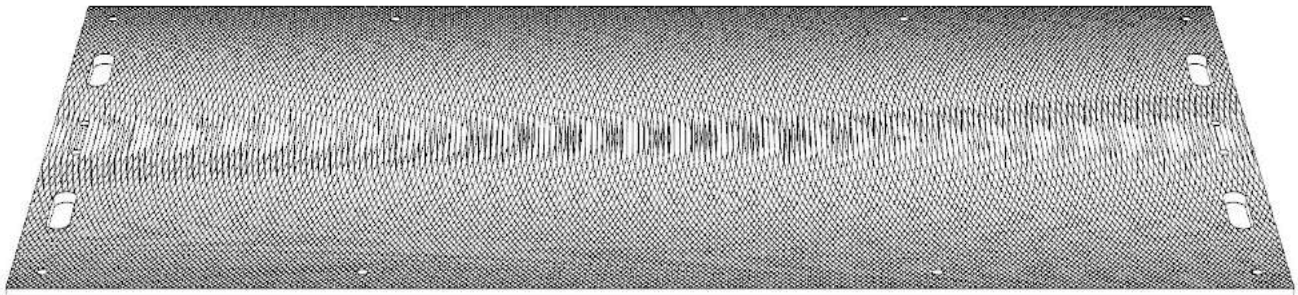
**Use of the panels:**

The upper side is engineered with approx. 5 mm high nubs.



**Use of the panels:**

The underside is striated/roughened.





produced by:

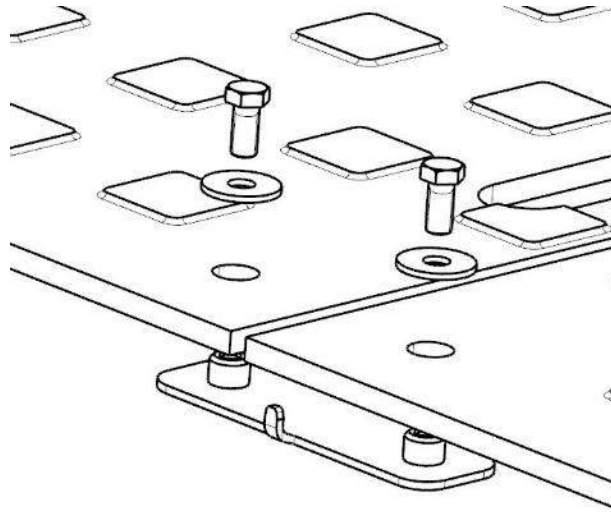
**OKULEN**<sup>®</sup>

Technische Kunststoffe  
*Engineering Plastics*

**VARIO**  
mat 1+ AS

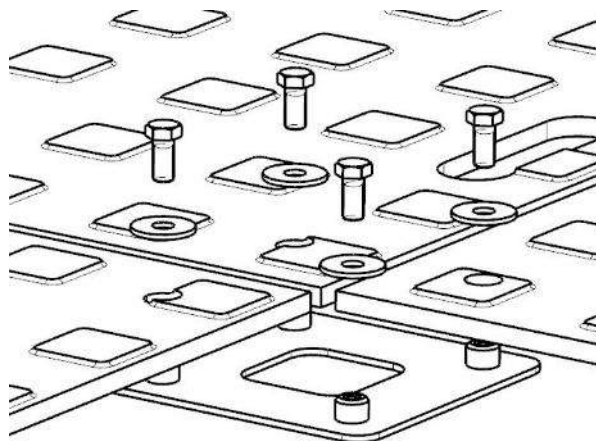
**Connecting 2 panels:**

Connect and screw the panels using the 2-way metal connector, 2 washers and 2 hexagonal screws (M10x16mm). All adjacent panels must be connected in this way.



**Connecting 4 panels:**

Connect and screw the panels using the 4-way metal connector, 4 washers and 4 hexagonal screws (M10x16mm). All adjacent panels must be connected in this way.



produced by:

# OKULEN®

Technische Kunststoffe  
Engineering Plastics

## VARIO mat 2

### Material:

High molecular weight polyethylene

**Dimensions:** 1000 x 2000 mm

**Usable Surface:** 1,71 m<sup>2</sup>

**Total thickness:** 31,5 mm

**weight circa. :** 41 kg

### Surface:

Top 5 mm profile

Underside 2,5 mm profile

### Assembly options:

7 / 5 pcs. M16

**Colour:** black multi-coloured

**Load bearing capacity (circa):**

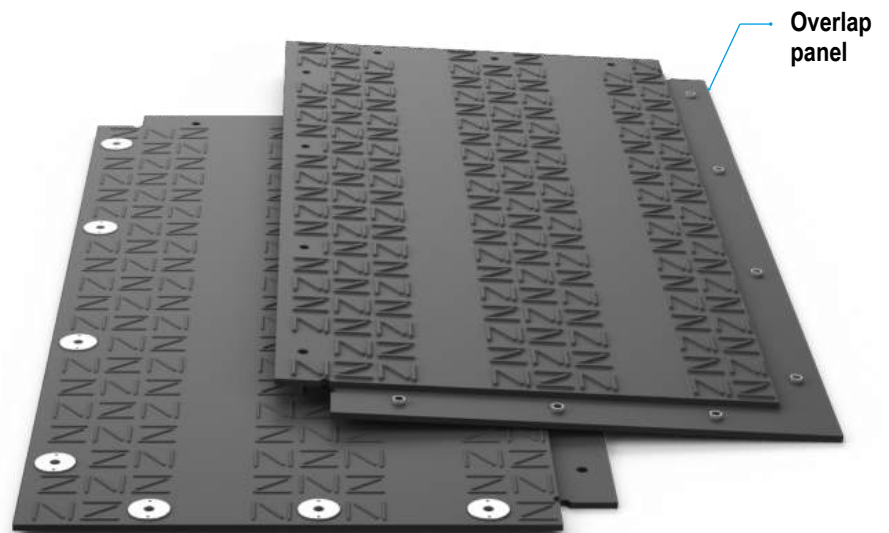
130t (depending on the substrate)

**Transport capacity:**

520units (889m<sup>2</sup>) **Lorry**

200units (342m<sup>2</sup>) **20'-Container**

400 units (684m<sup>2</sup>) **40'-Container**



### Fields of application:



Mobile installation  
surfaces for cranes



Heavy load  
transports



Mobile logistics



Wind power  
plant  
construction



Temporary  
walkways



Road construction  
and access roads



Line  
construction



Concerts and  
events



Mobile parking  
lots

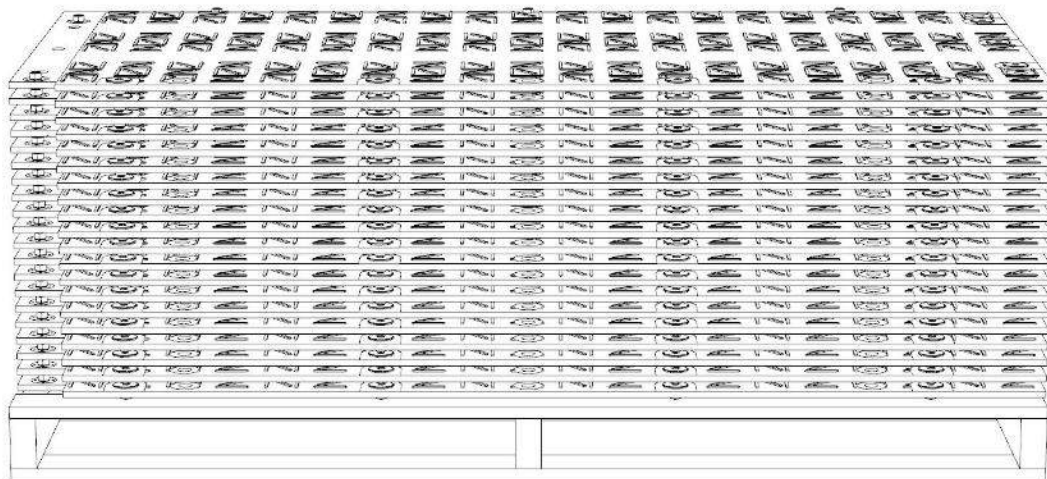


## General information

### Unloading:

The panels can be unloaded from a lorry using a forklift truck or a crane. When lifting, special care must be taken to ensure that the panels cannot slip or fall off.

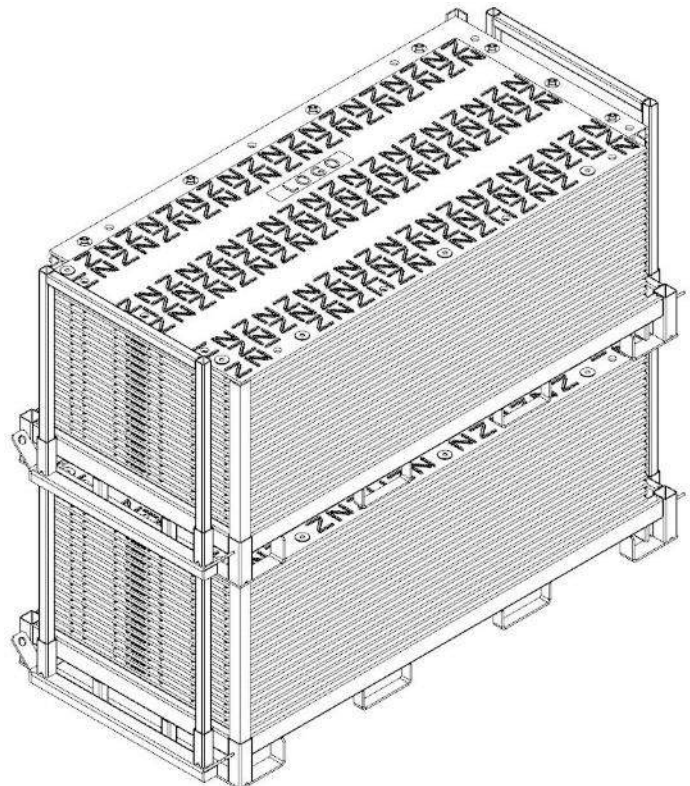
**Storage:** Never stack directly more than 20 panels at a time.



**Storage:** Never stack more than 20 panels on a stake rack.

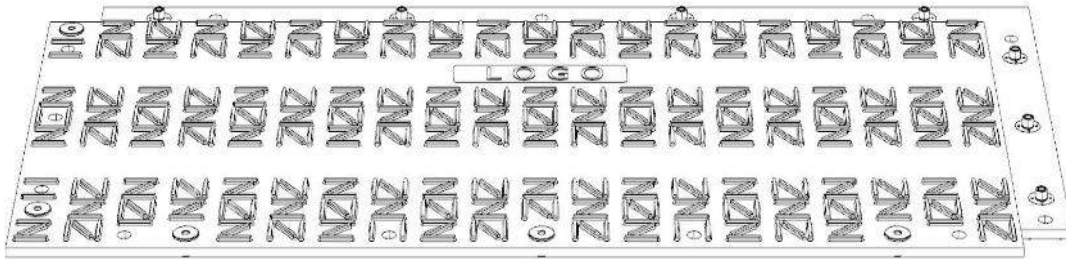
Do not move more than 2 stake racks at a time using a forklift truck.

Move only one stake rack at a time using a chain sling.

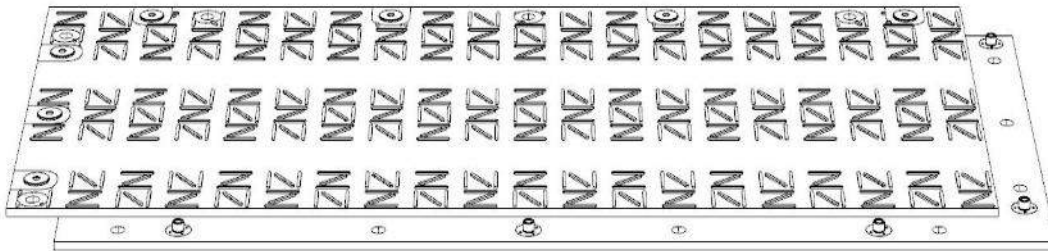


**Use of the panels:**

Both sides of the panel can be used. The upper side has a high profile surface (suitable for the use of construction vehicles).

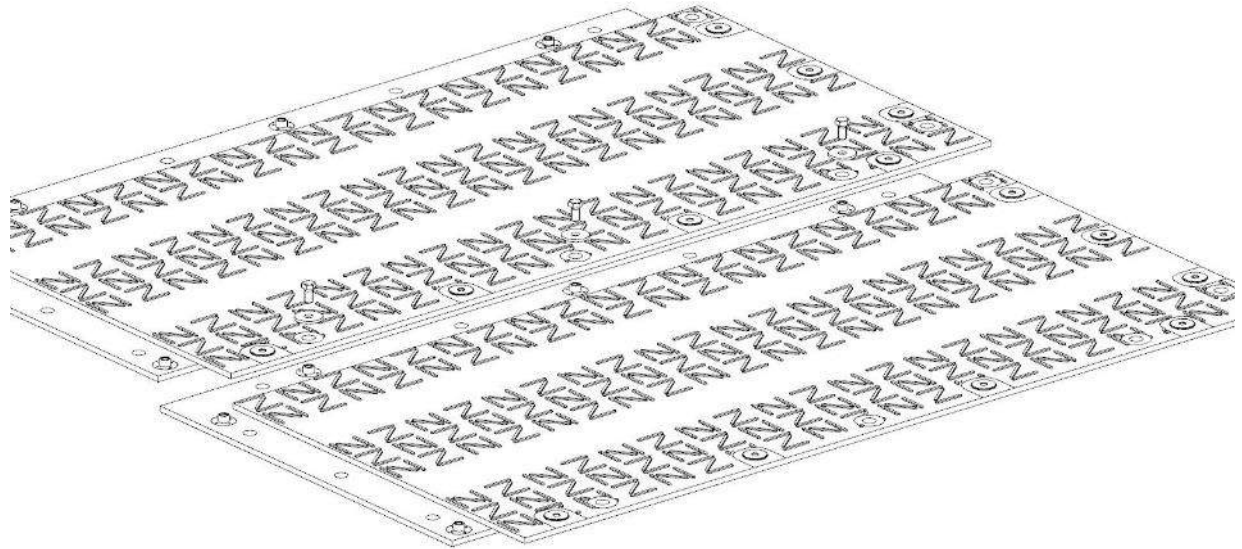


The underside has a lower profile pattern (suitable for predominant use by pedestrians).



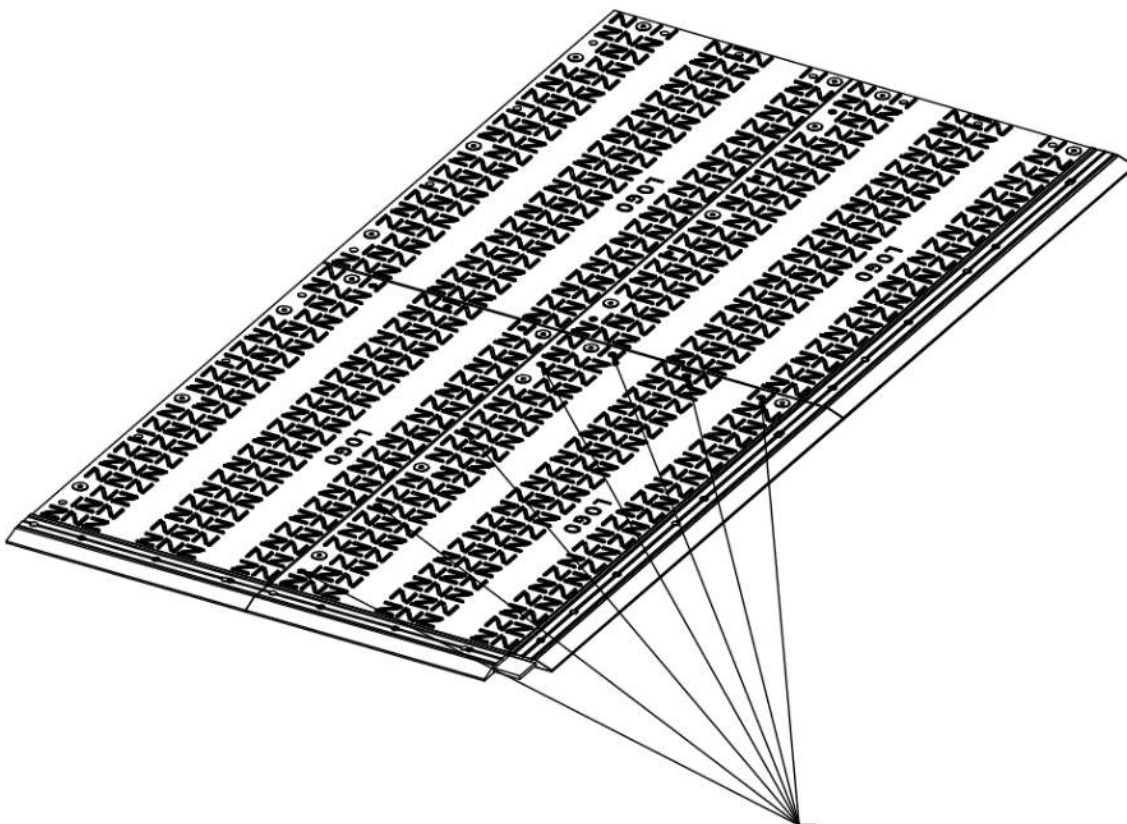
### Connecting the panels:

The panels are connected and screwed together using washers and screws (M16x30mm). All adjacent panels must be connected in this way. Always install the panels so that the surfaces of the same type face upwards.



### Connecting the panels together (vehicle side):

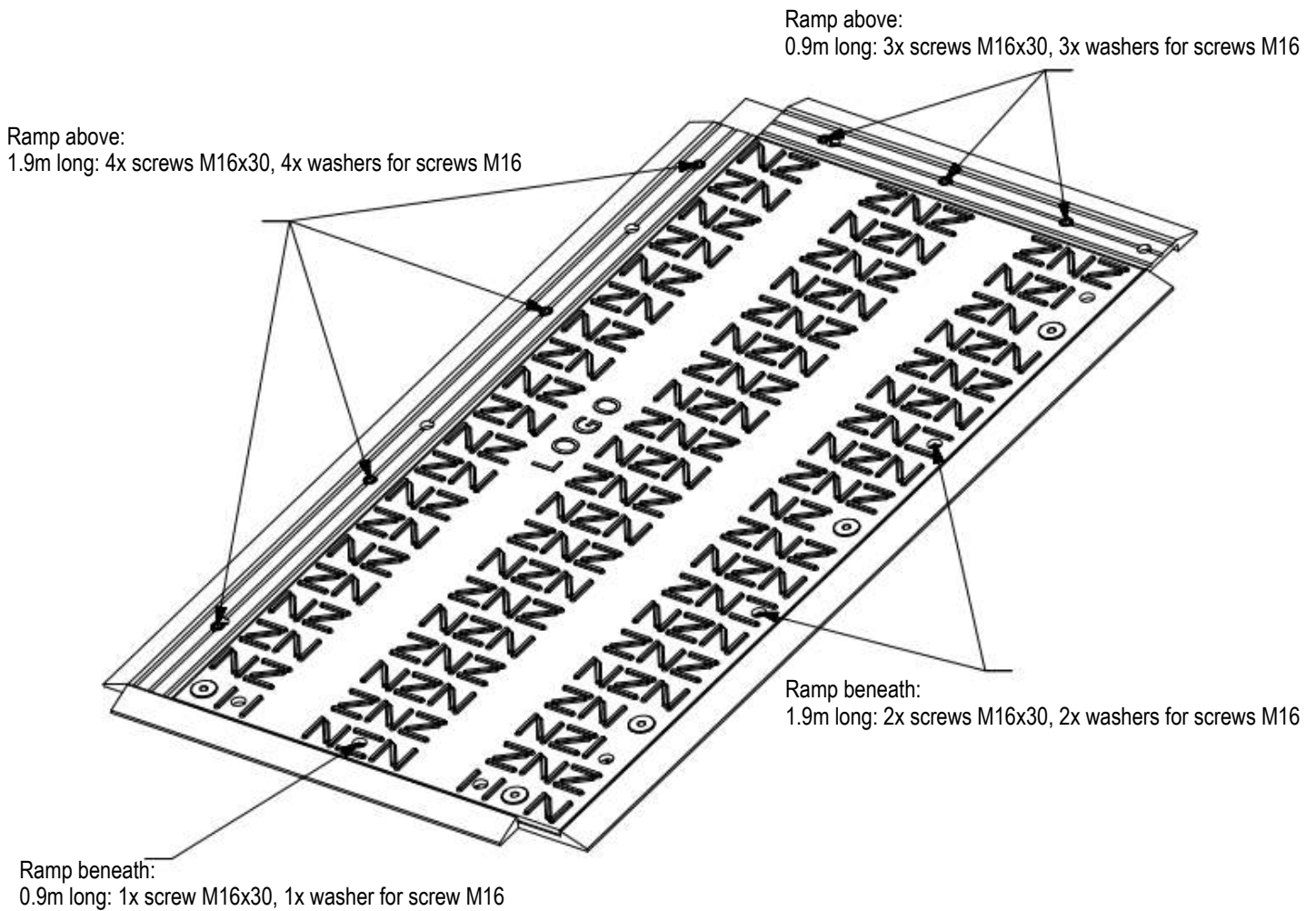
The panels are connected and screwed together using washers and screws (M16x30mm). All adjacent panels must be connected in this way. Always install the panels so that the surfaces of the same type face upwards.



2m side: 4x screws M16x30, 4x washers for screws M16  
1m side: 3x screws M16x30, 3x washers for screws M16

**Connecting the panels to the ramps (vehicle side):**

The panels are connected and screwed together using washers and screws (M16x30mm). All adjacent panels must be connected in this way. Always install the panels so that the surfaces of the same type face upwards.

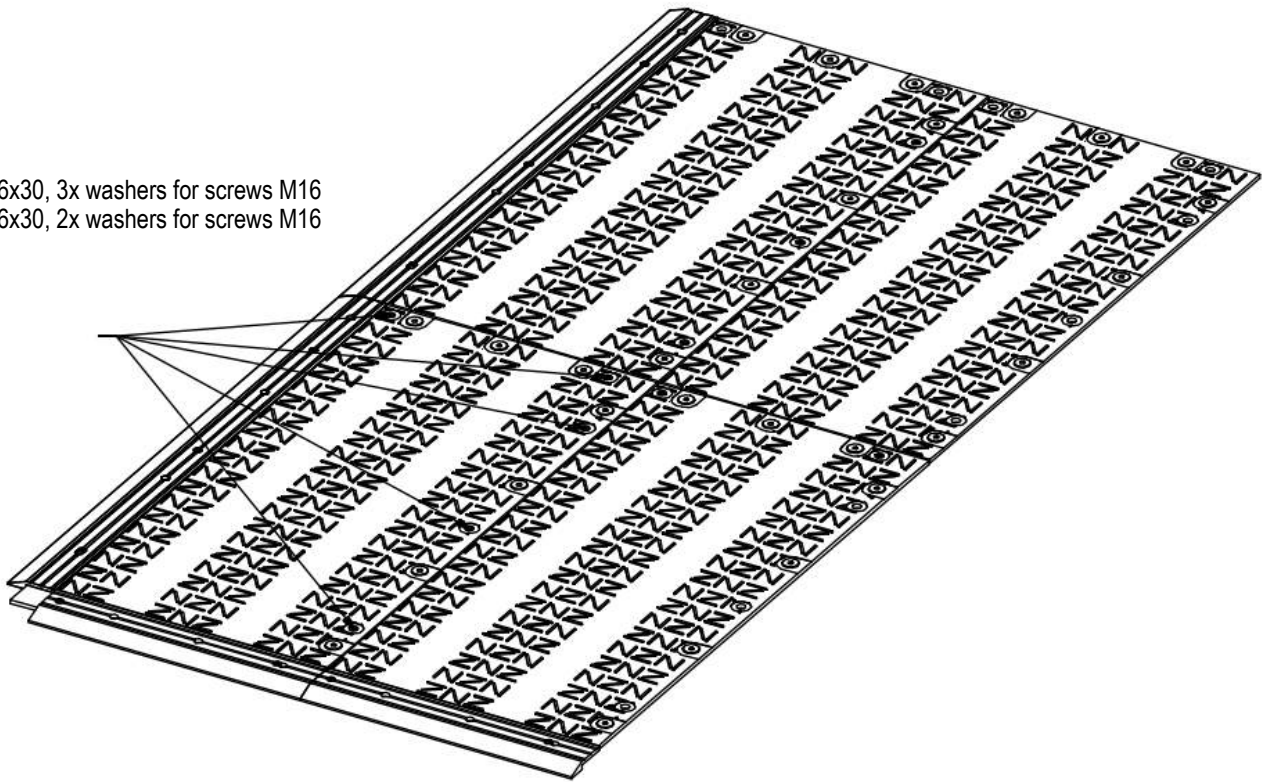


The design of the ramps installed above or beneath the panels, regardless of whether they are used for the vehicle or pedestrian side, is identical. Only the number of connection options differs on the vehicle and pedestrian sides.

### Connecting the panels together (pedestrian side):

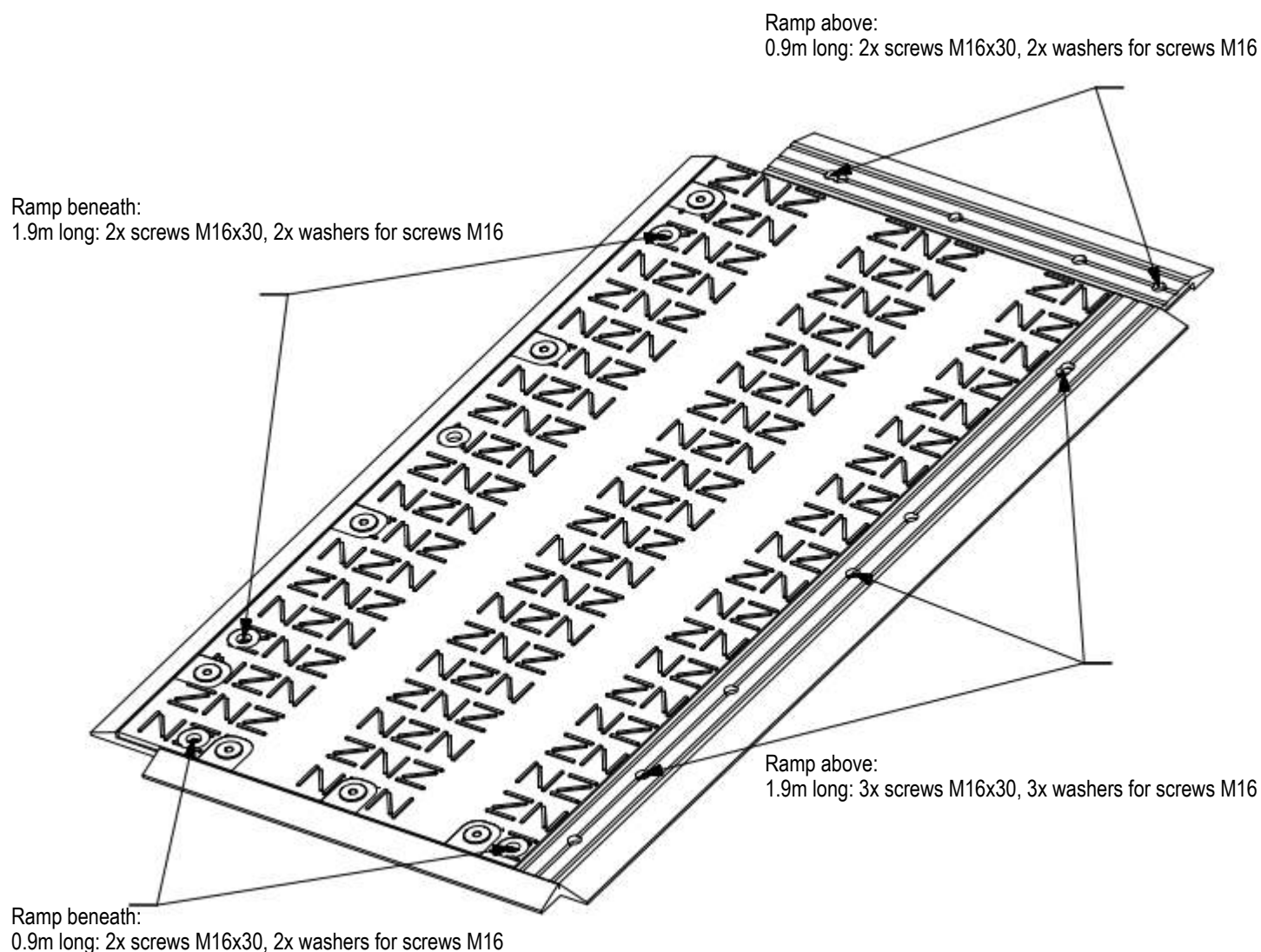
The panels are connected and screwed together using washers and screws (M16x30mm). All adjacent panels must be connected in this way. Always install the panels so that the surfaces of the same type face upwards.

2m side: 3x screws M16x30, 3x washers for screws M16  
1m side: 2x screws M16x30, 2x washers for screws M16



**Connecting the panels to the ramps (pedestrian side):**

The panels are connected and screwed together using washers and screws (M16x30mm). All adjacent panels must be connected in this way. Always install the panels so that the surfaces of the same type face upwards.



The design of the ramps installed above or beneath the panels, regardless of whether they are used for the vehicle or pedestrian side, is identical. Only the number of connection options differs on the vehicle and pedestrian sides.



produced by:

**OKULEN**<sup>®</sup>

Technische Kunststoffe  
Engineering Plastics

## VARIO mat 3

### Material:

High molecular weight polyethylene

**Dimensions:** 2000 x 3000 mm

**Usable Surface:** 6 m<sup>2</sup>

**Total thickness:** 45,5 mm

**weight circa. :** 221 kg

### Surface:

Top 5 mm profile

Underside 2,5 mm profile

### Assembly options:

10 pcs. M16

**Colour:** black multi-coloured

### Load bearing capacity (circa):

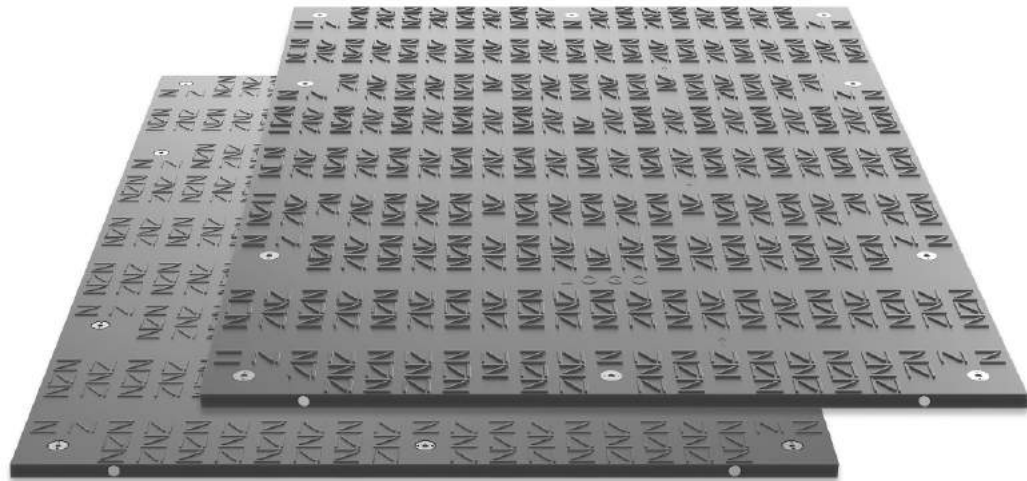
150t (depending on the substrate)

### Transport capacity:

100units (600m<sup>2</sup>) **Lorry**

40units (240m<sup>2</sup>) **20'-Container**

100 units (600m<sup>2</sup>) **40'-Container**



### Fields of application:



Mobile installation  
surfaces for  
cranes



Heavy load  
transports



Mobile logistics



Wind power  
plant  
construction



Temporary  
walkways



Road construction  
and access roads



Line  
construction



Concerts and  
events



Mobile parking  
lots

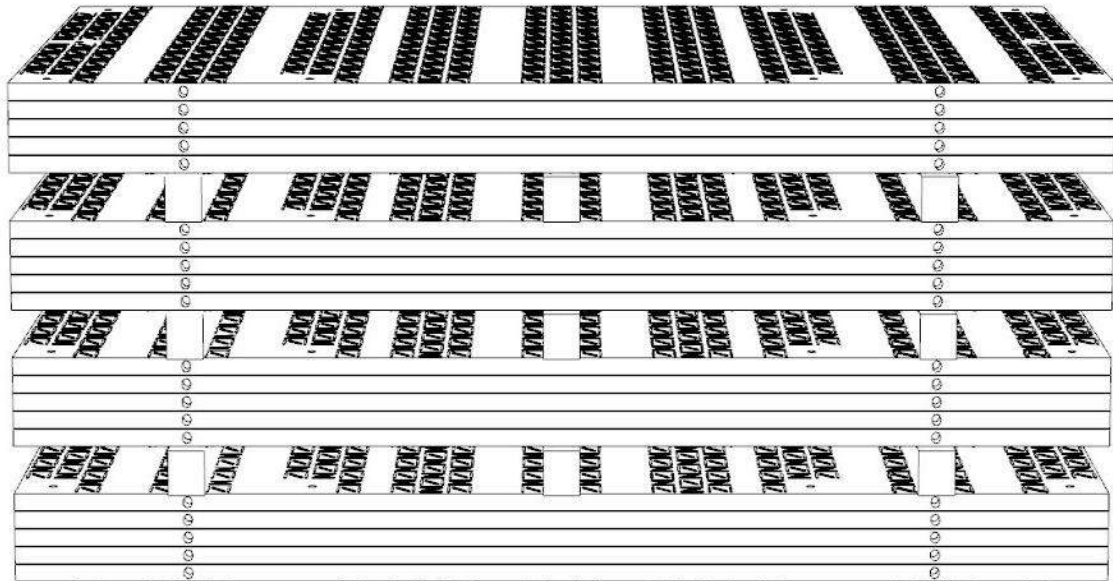


## General information

### Unloading:

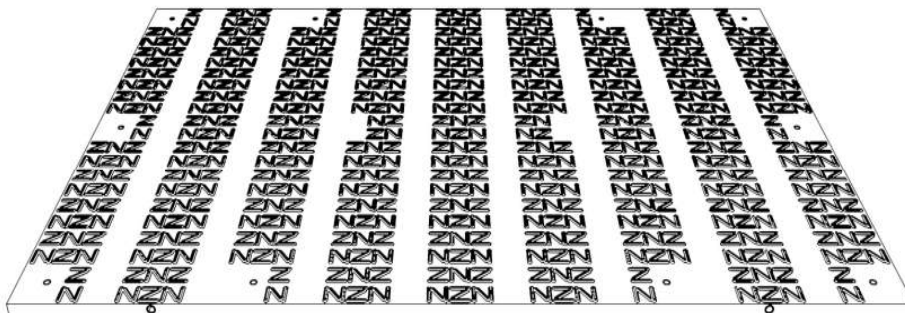
The panels can be unloaded from a lorry using a forklift truck. When lifting, special care must be taken to ensure that the panels cannot slip or fall off. The panels can also be unloaded and installed using a crane.

**Storage:** Never stack directly more than 5 panels at a time. It is recommended to stack a maximum of 4 packs of 5 panels on top of each other. Each package can be separated by 3 square timbers (thickness 100mmx100mm) to allow later lifting by forklift truck.

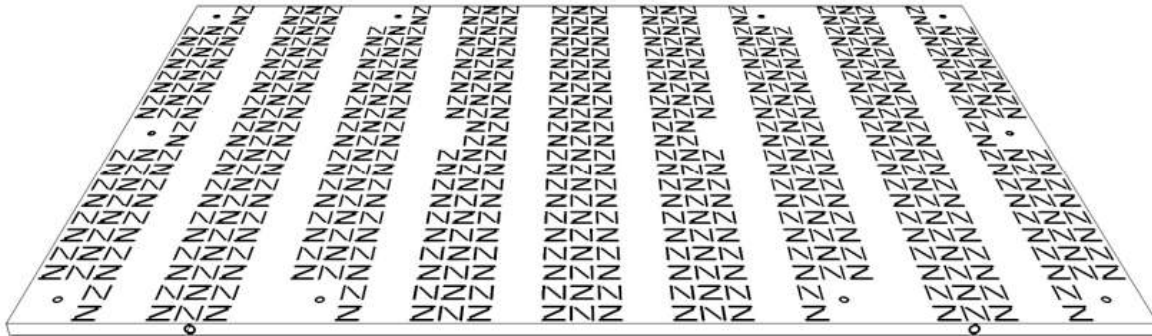


### Use of the panels:

Both sides of the panel can be used. The upper side has a high profile surface (suitable for the use of construction vehicles).

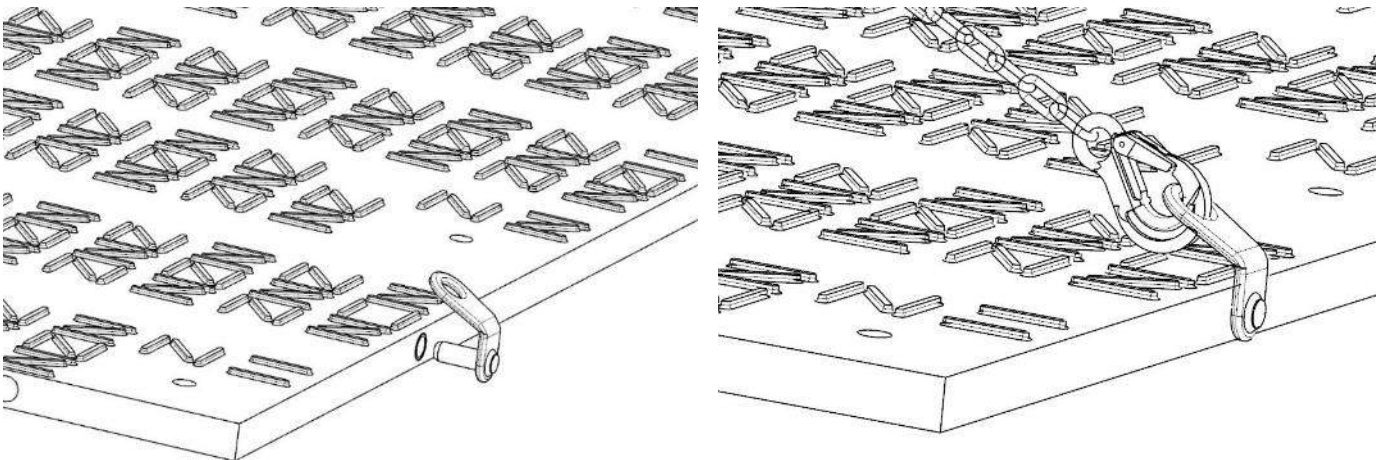


The underside has a lower profile pattern (suitable for predominant use by pedestrians).

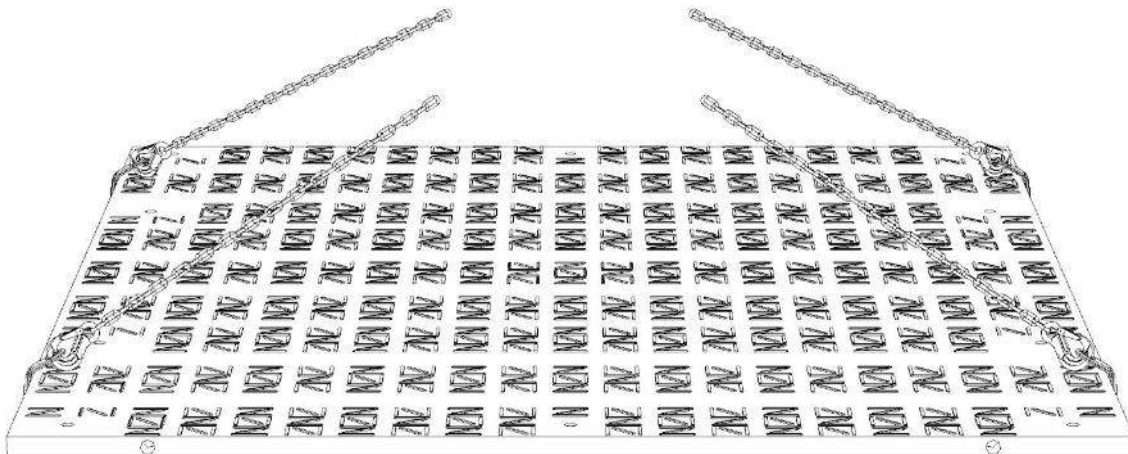


### Lifting and laying:

Each panel has 4 lifting lugs. A lifting device must be inserted into each eyelet. These devices must in turn be connected to a lifting hook (on a chain sling).

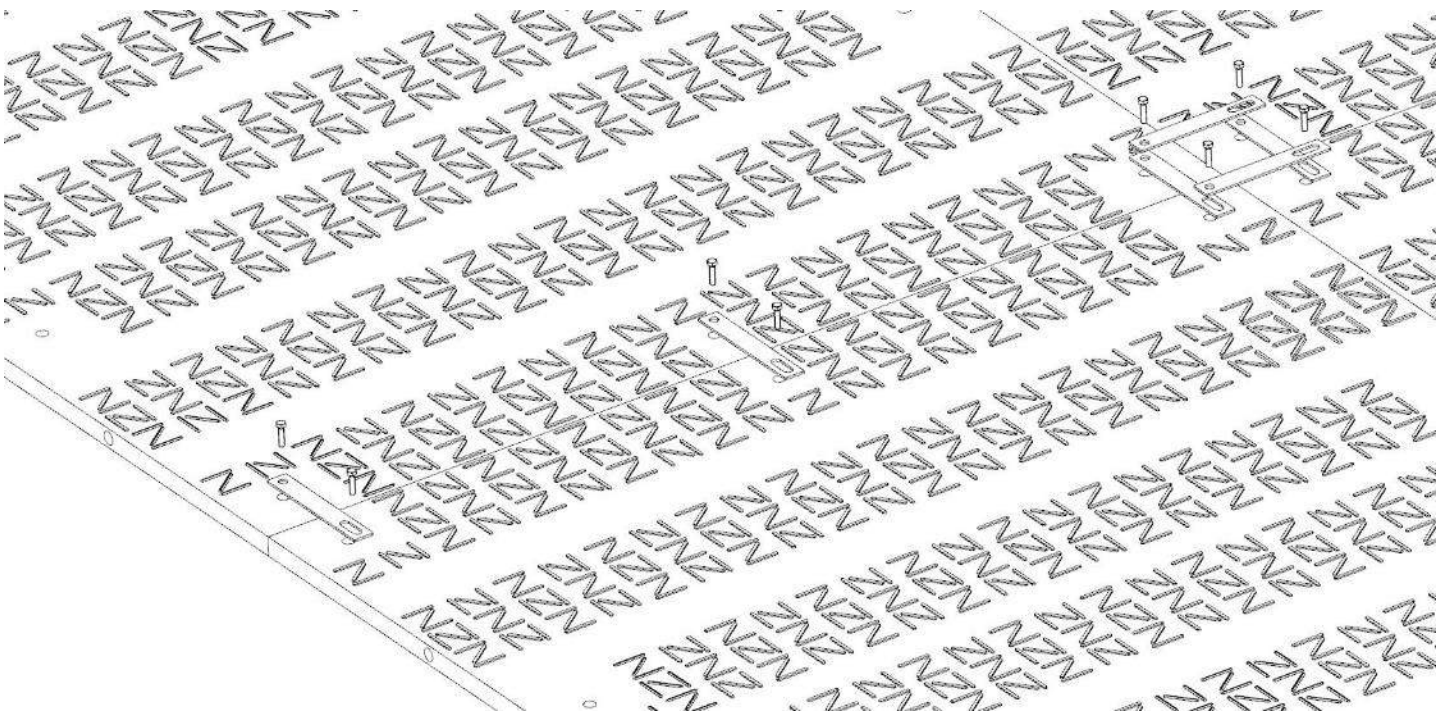
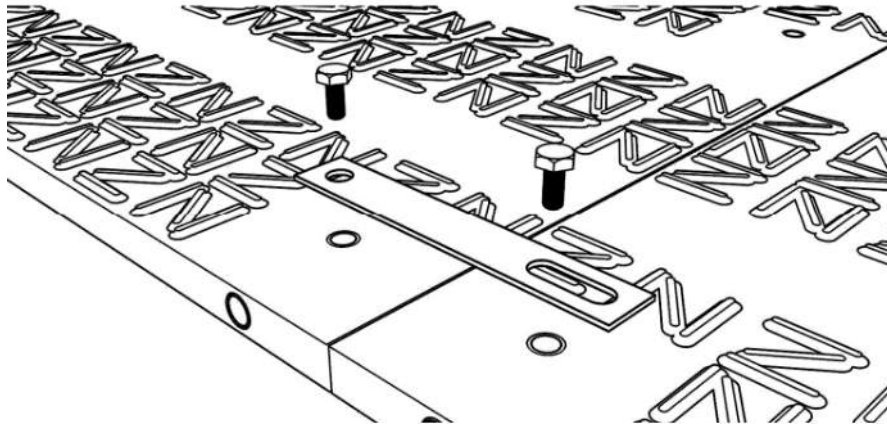


With the help of the chain sling, the panel can be moved to the desired position and installed.



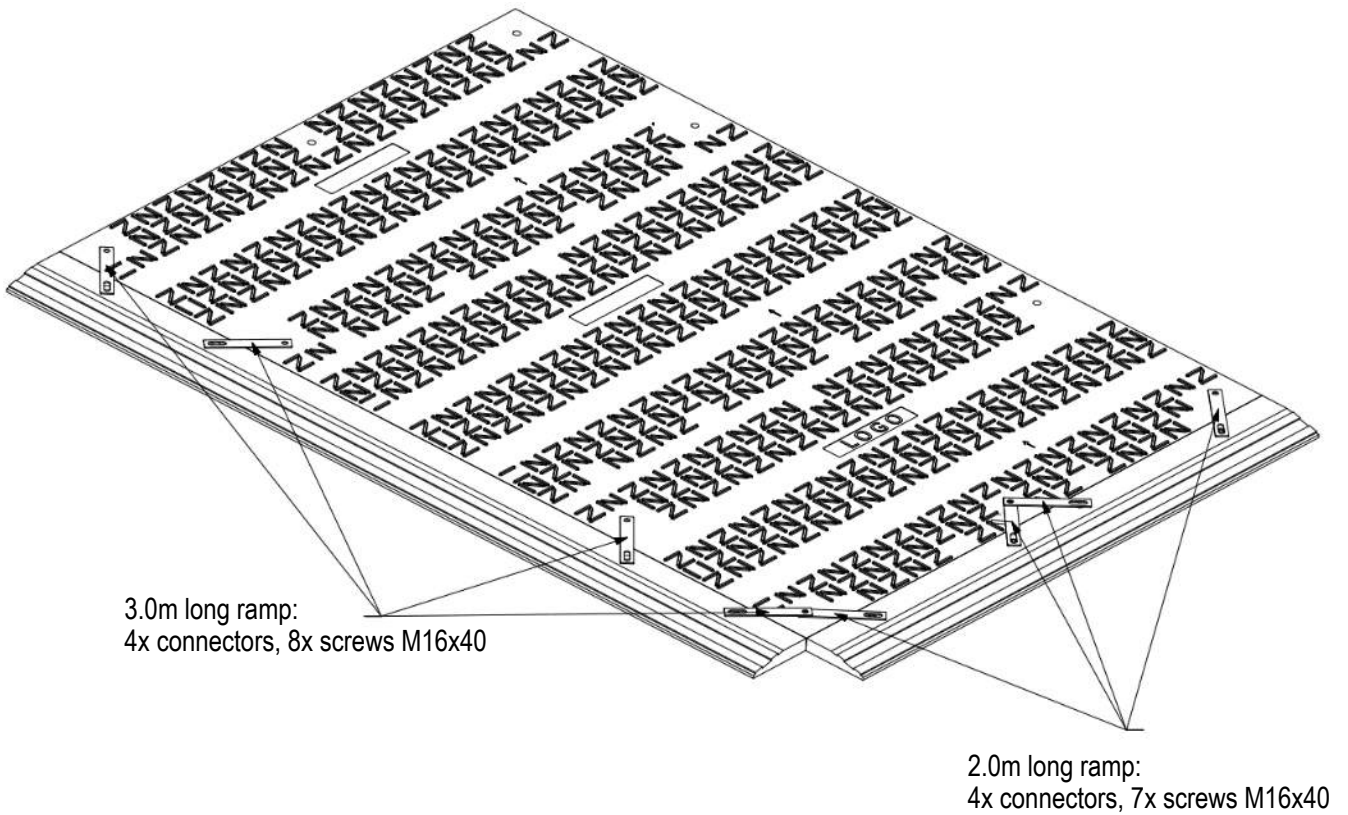
**Connecting the panels:**

Connect and screw the panels together using the metal connectors and two hexagonal screws (M16x40mm) per connector. All adjacent panels must be connected in this way. Always install the panels so that the surfaces of the same type face upwards.



### Connecting the panels to the ramps:

Connect and screw the panels using the metal connectors and the hexagonal screws (M16x40mm). All adjacent panels must be connected in this way. Always install the panels so that the surfaces of the same type face upwards.



produced by:

**OKULEN**<sup>®</sup>

Technische Kunststoffe  
Engineering Plastics

# VARIO mat 3 OL AS

**Material:**

High molecular weight polyethylene

**Dimensions:** 2090 x 3060 mm

**Usable Surface:** 5,4 m<sup>2</sup>

**Total thickness:** 44,5 mm

**weight circa. :** 238 kg

**Surface:**

Top 5 mm profile

Underside Anti-slip fluting

**Assembly options:**

10 pcs. M16

**Colour:** black multi-coloured

**Load bearing capacity (circa):**

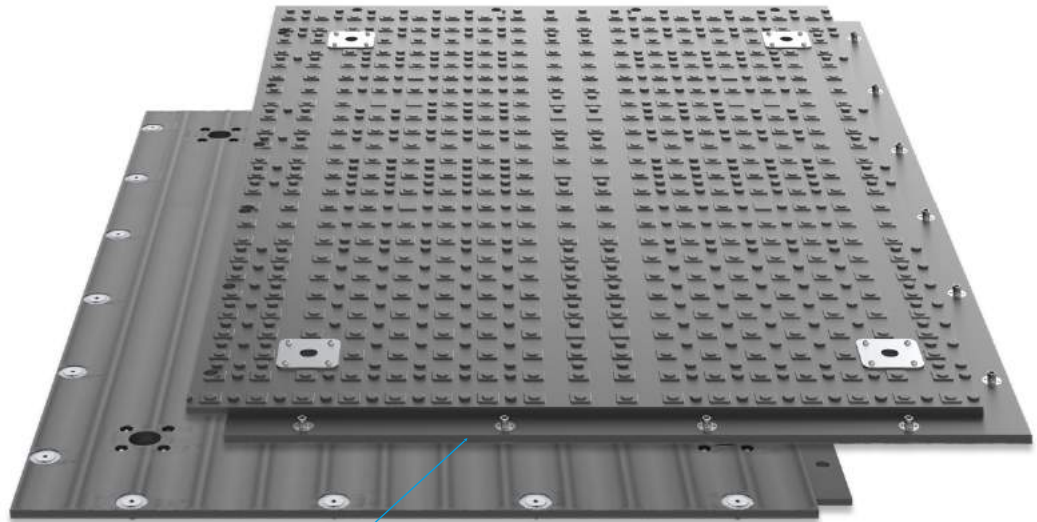
150t (depending on the substrate)

**Transport capacity:**

100units (540m<sup>2</sup>) **Lorry**

40units (216m<sup>2</sup>) **20'-Container**

100 units (540m<sup>2</sup>) **40'-Container**



Overlap panel

**Fields of application:**



Mobile installation  
surfaces for  
cranes



Heavy load  
transports



Mobile logistics



Wind power  
plant  
construction



Temporary  
walkways



Road construction  
and access roads



Line  
construction



Concerts and  
events



Mobile parking  
lots



produced by:

**VARIO**  
mat 3 OL AS

**OKULEN**<sup>®</sup>  
Technische Kunststoffe  
Engineering Plastics

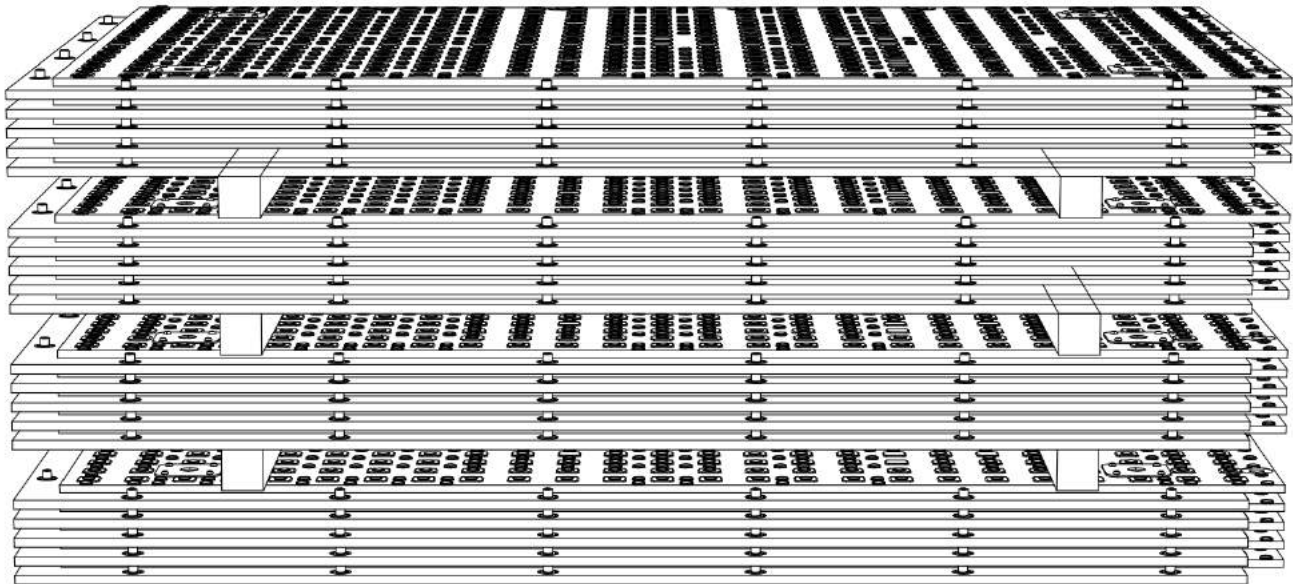
## General information

### Unloading:

The panels can be unloaded from a lorry using a forklift truck. When lifting, special care must be taken to ensure that the panels cannot slip or fall off. The panels can also be unloaded and installed using a crane.

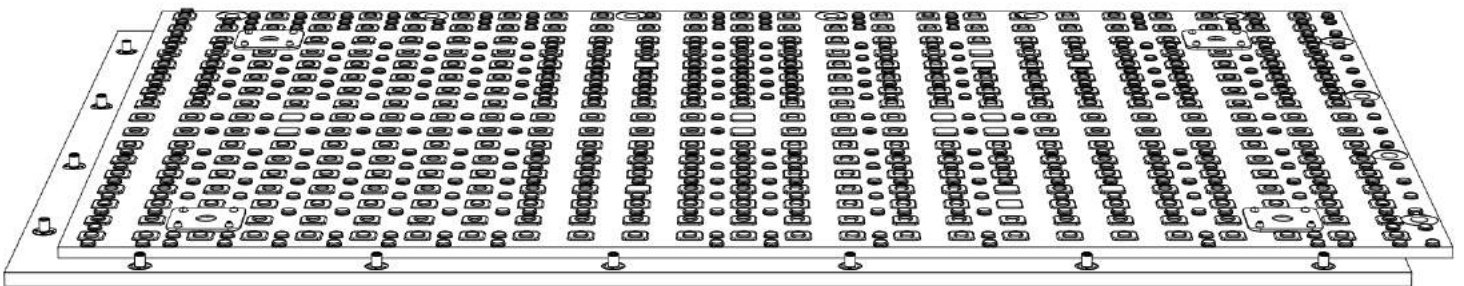
### Storage:

Never stack directly more than 5 panels at a time. It is recommended to stack a maximum of 4 packs of 5 panels on top of each other. Each package can be separated by 3 square timbers (thickness 100mmx100mm) to allow later lifting by forklift truck.



### Use of the panels:

The plate is to be used with the profiling on the top. (suitable for the use of construction vehicles)



produced by:

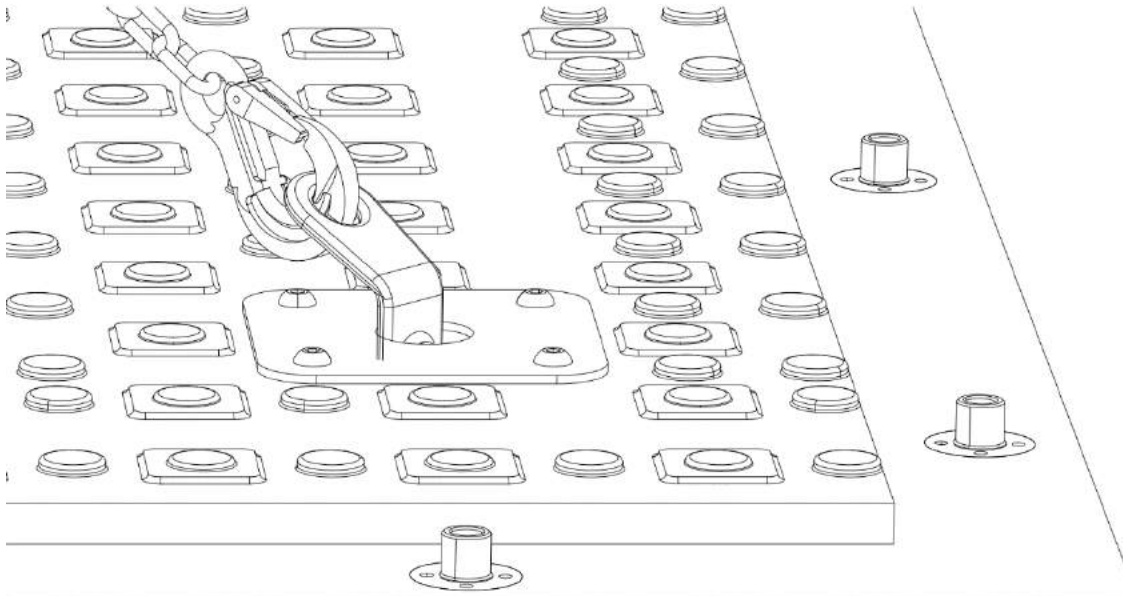
**VARIO**  
mat 3 OL AS

**OKULEN**<sup>®</sup>

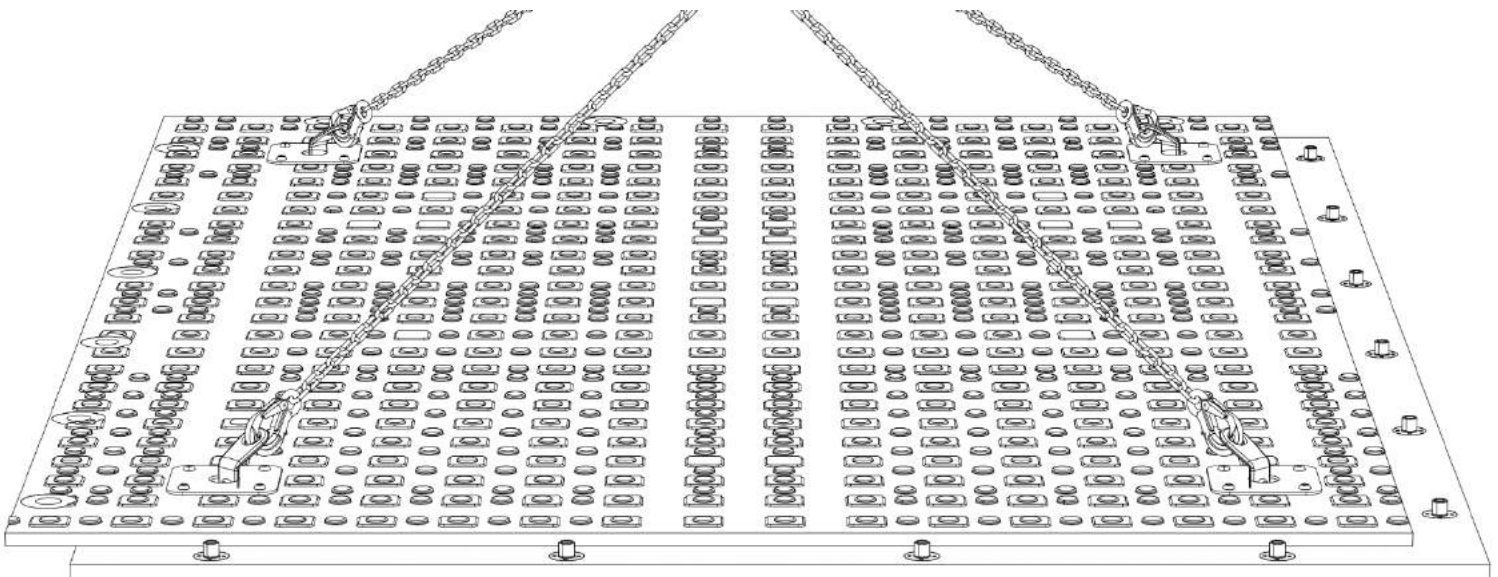
Technische Kunststoffe  
Engineering Plastics

**Lifting and laying:**

Each panel has 4 lifting lugs. A lifting device must be inserted into each eyelet. These devices must in turn be connected to a lifting hook (on a chain sling).



With the help of the chain sling, the panel can be moved to the desired position and installed.





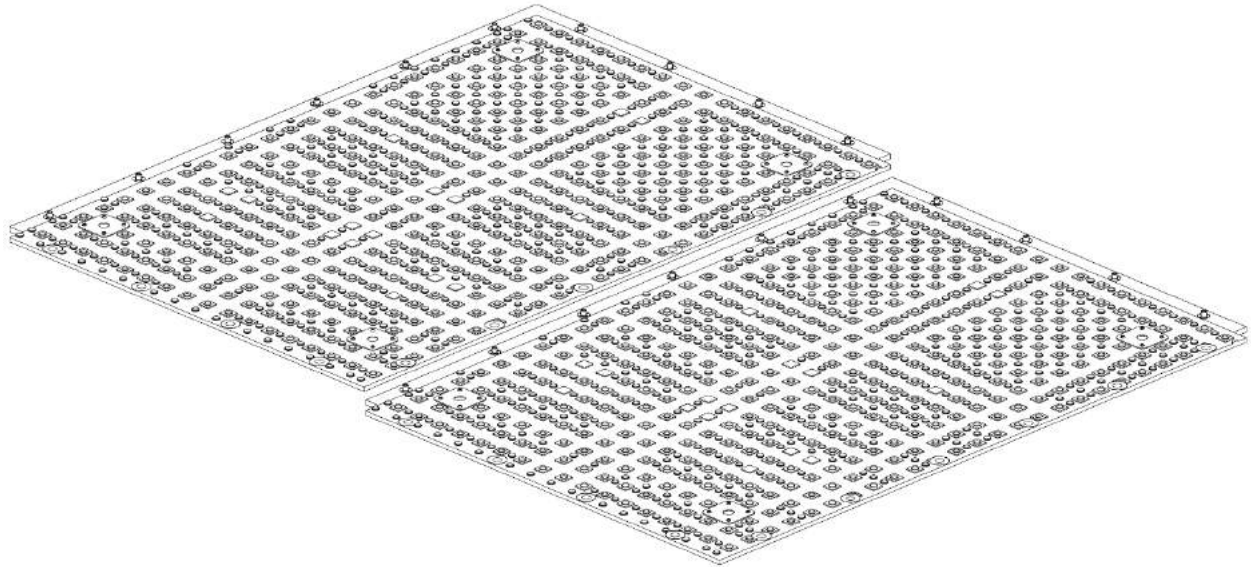
produced by:

**VARIO**  
mat 3 OL AS

**OKULEN**<sup>®</sup>  
Technische Kunststoffe  
Engineering Plastics

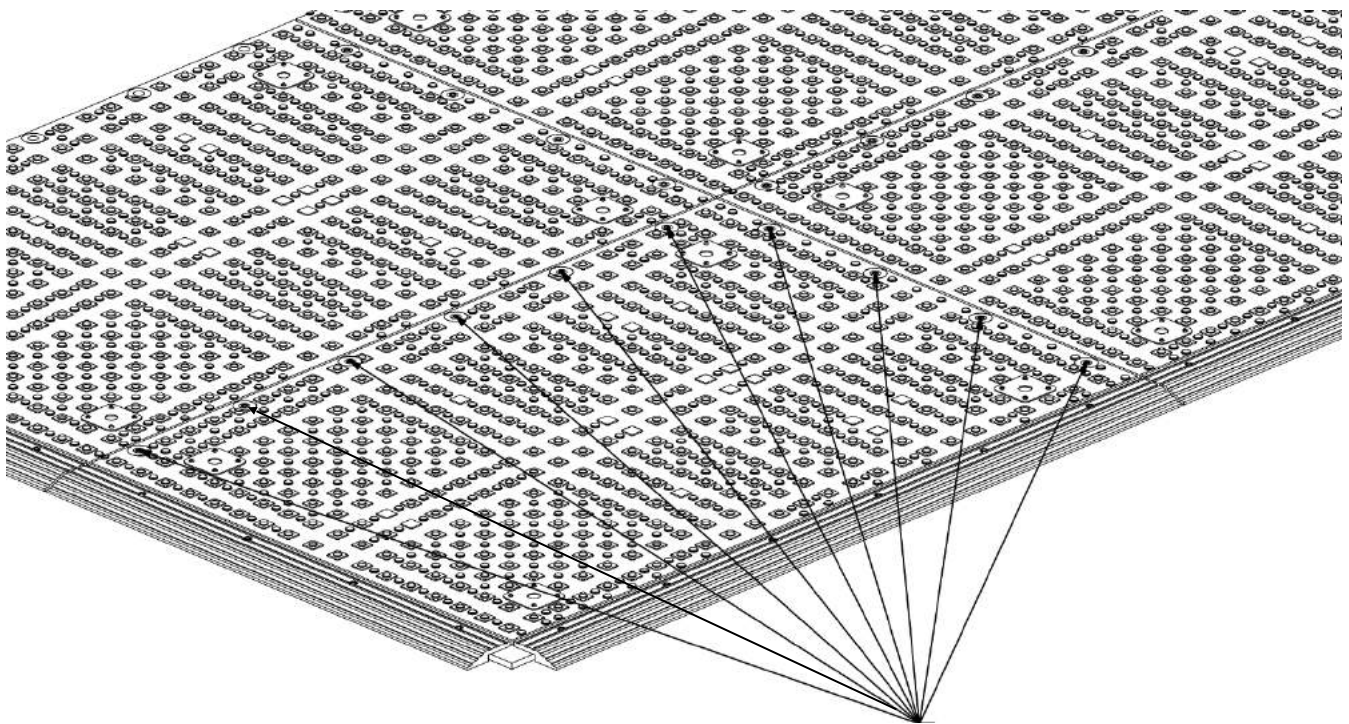
**Connecting the panels:**

The panels are connected and screwed together using washers and screws (M16x40mm). All adjacent panels must be connected in this way. Always install the panels so that the surfaces of the same type face upwards.



**Connecting the panels together (vehicle side):**

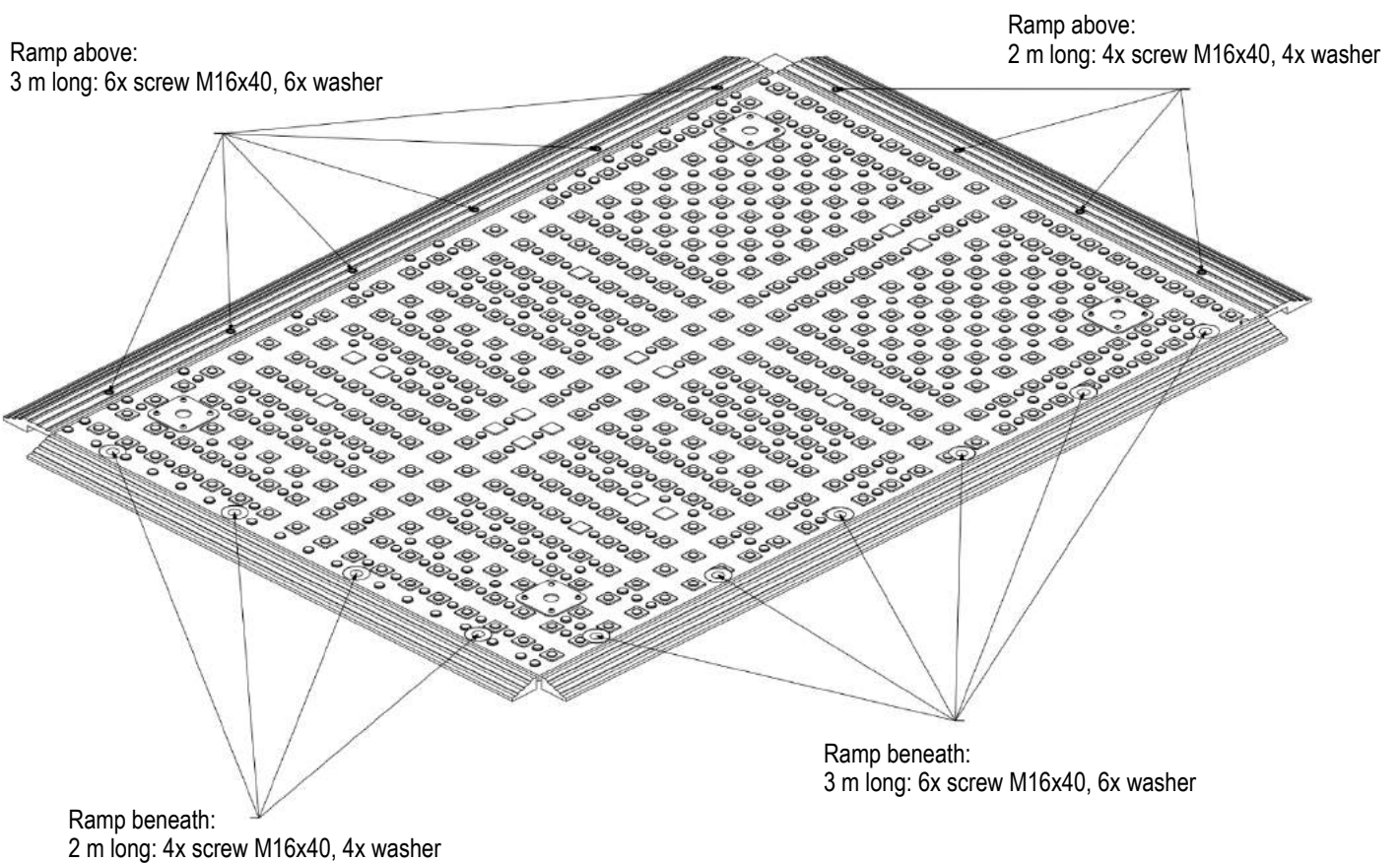
The panels are connected and screwed together using washers and screws (M16x40mm). All adjacent panels must be connected in this way. Always install the panels so that the surfaces of the same type face upwards.



3m side: 6x screw M16x40, 6x washer  
2m side: 4x screw M16x40, 4x washer

**Connecting the panels to the ramps (vehicle side):**

The panels are connected and screwed together using washers and screws (M16x40mm). All adjacent panels must be connected in this way. Always install the panels so that the surfaces of the same type face upwards.



produced by:

**OKULEN**<sup>®</sup>

Technische Kunststoffe  
Engineering Plastics

# VARIO mat 4

**Material:**

High molecular weight polyethylene

**Dimensions:** 2000 x 4100 mm

**Usable Surface:** 7,6 m<sup>2</sup>

**Total thickness:** 45,5 mm

**weight circa. :** 281 kg

**Surface:**

Top 5 mm profile

Underside 2,5 mm profile

**Assembly options:**

12 pcs.

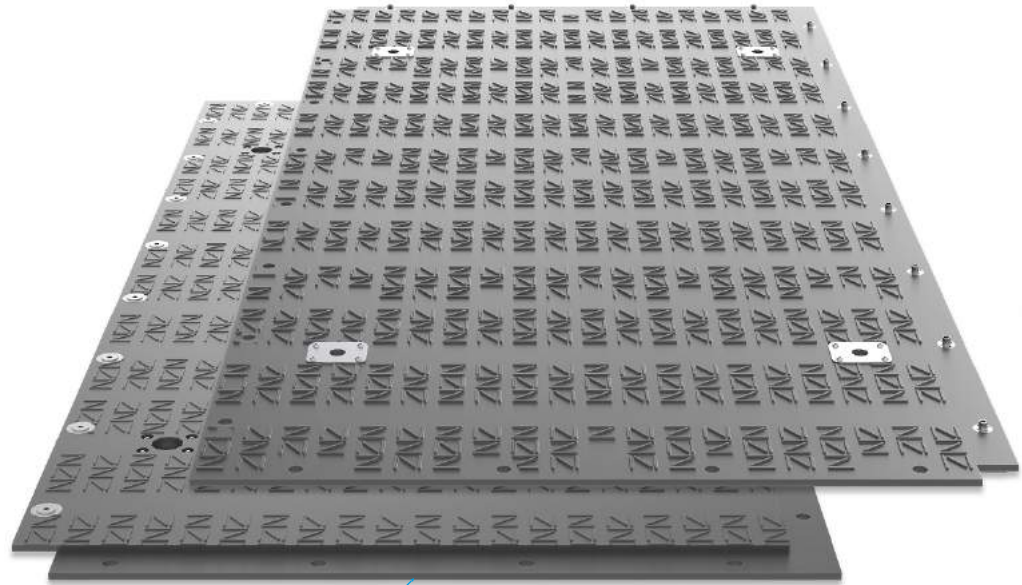
**Colour:** black multi-coloured

**Load bearing capacity (circa):**

260t (depending on the substrate)

**Transport capacity:**

50 units (380m<sup>2</sup>)



Overlap panel

**Fields of application:**



Mobile installation surfaces for cranes



Heavy load transports



Mobile logistics



Wind power plant construction



Temporary walkways



Road construction and access roads



Line construction



Concerts and events



Mobile parking lots

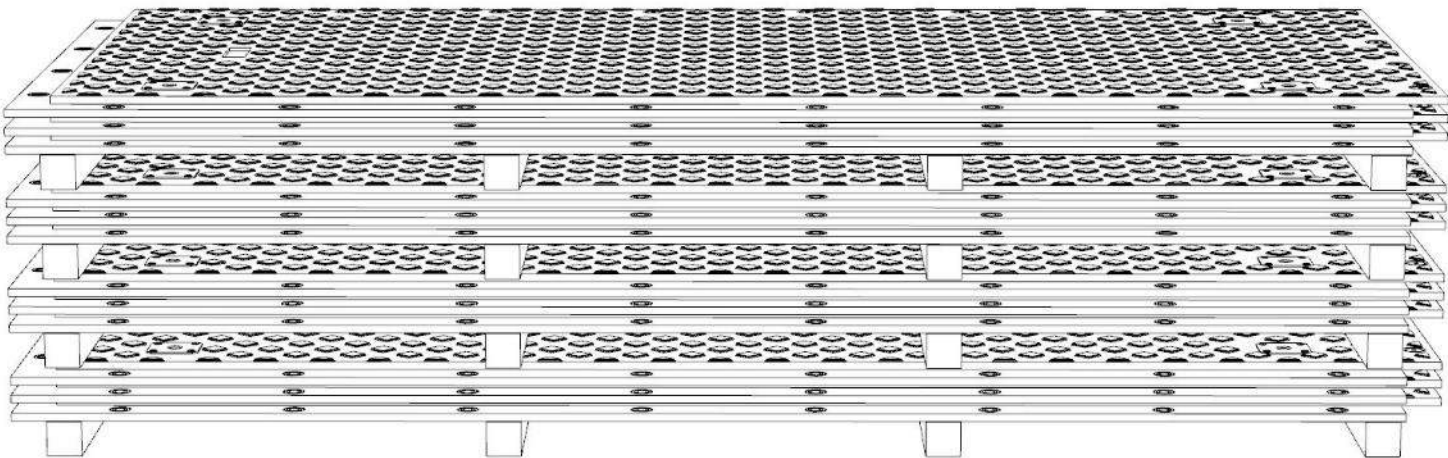


## General information

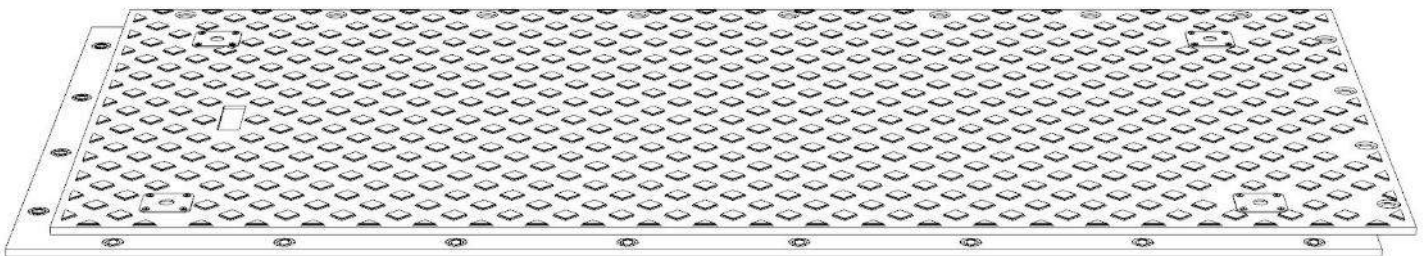
**Unloading:**

The panels can be unloaded from a lorry using a forklift truck. When lifting, special care must be taken to ensure that the panels cannot slip or fall off. The panels can also be unloaded and installed using a crane.

**Storage:** Never stack directly more than 3 panels at a time. It is recommended to stack a maximum of 4 packs of 3 panels on top of each other. Each package can be separated by 4 square timbers (100mmx100mm) to allow later lifting by forklift truck.

**Use of the panels:**

Single-sided use. The upper side has a high profile surface (suitable for the use of construction vehicles).



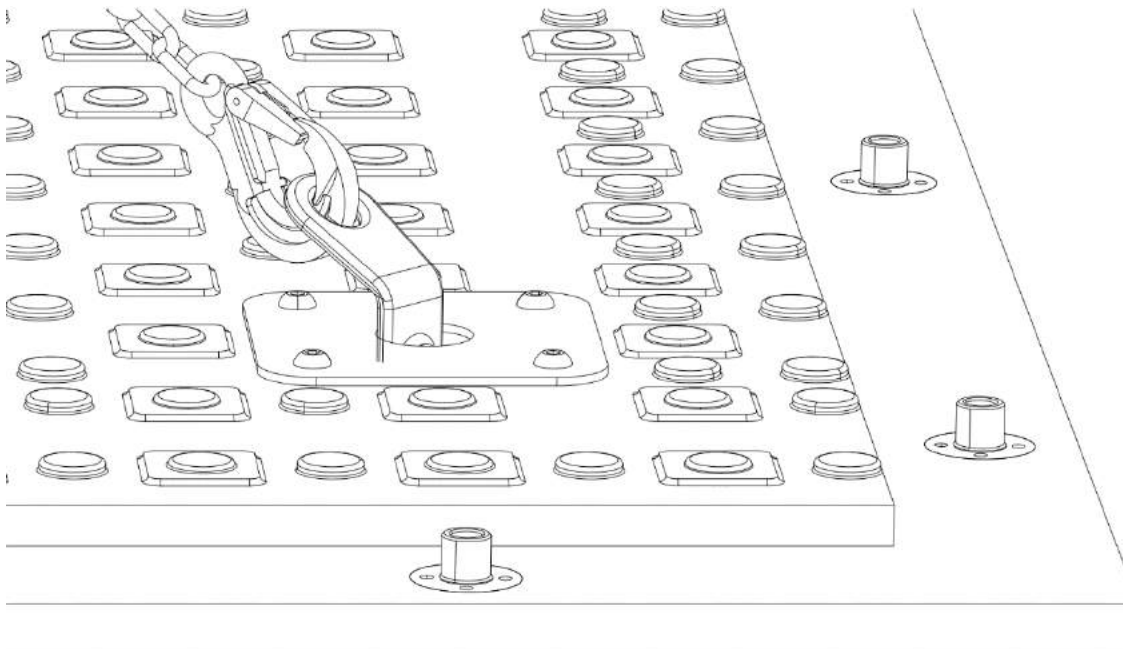
produced by:

**VARIO**  
mat 4

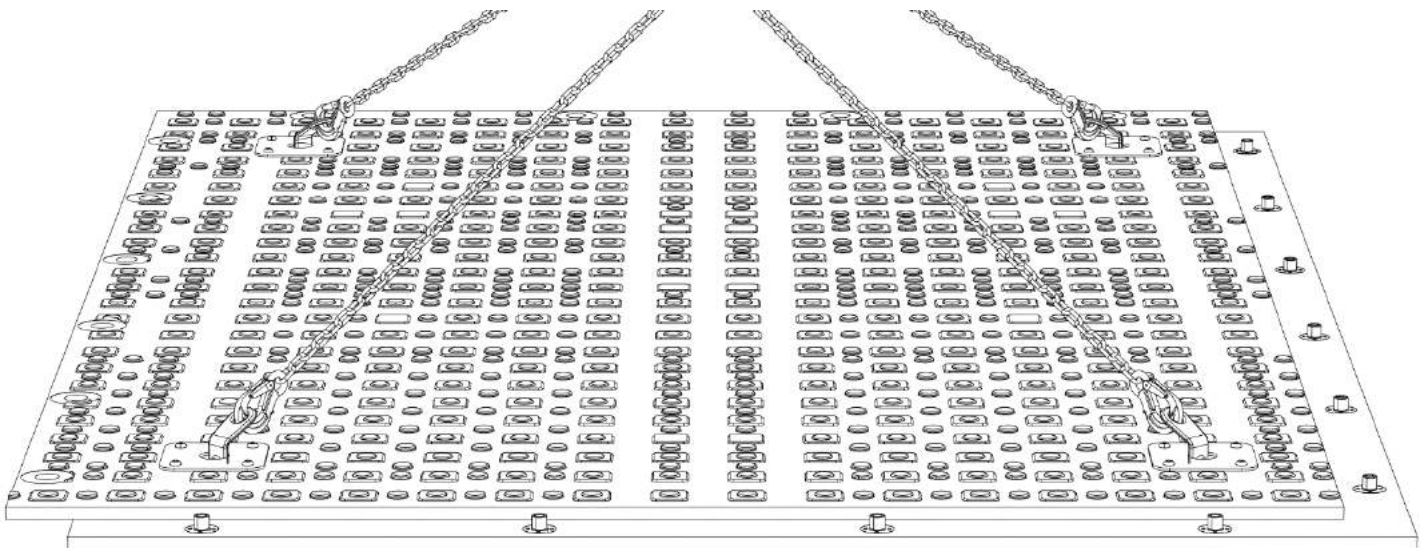
**OKULEN**<sup>®</sup>  
Technische Kunststoffe  
Engineering Plastics

**Lifting and laying:**

Each panel has 4 lifting lugs. A lifting device must be inserted into each eyelet. These devices must in turn be connected to a lifting hook (on a chain sling).



With the help of the chain sling, the panel can be moved to the desired position and installed.



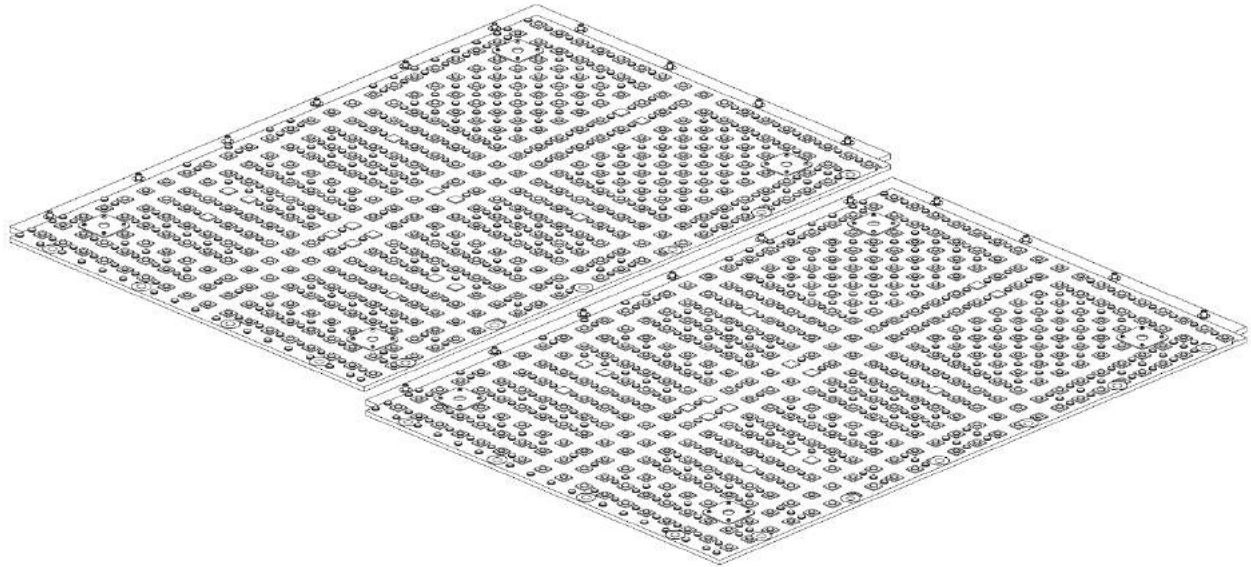
produced by:

**VARIO**  
mat 4

**OKULEN**<sup>®</sup>  
Technische Kunststoffe  
Engineering Plastics

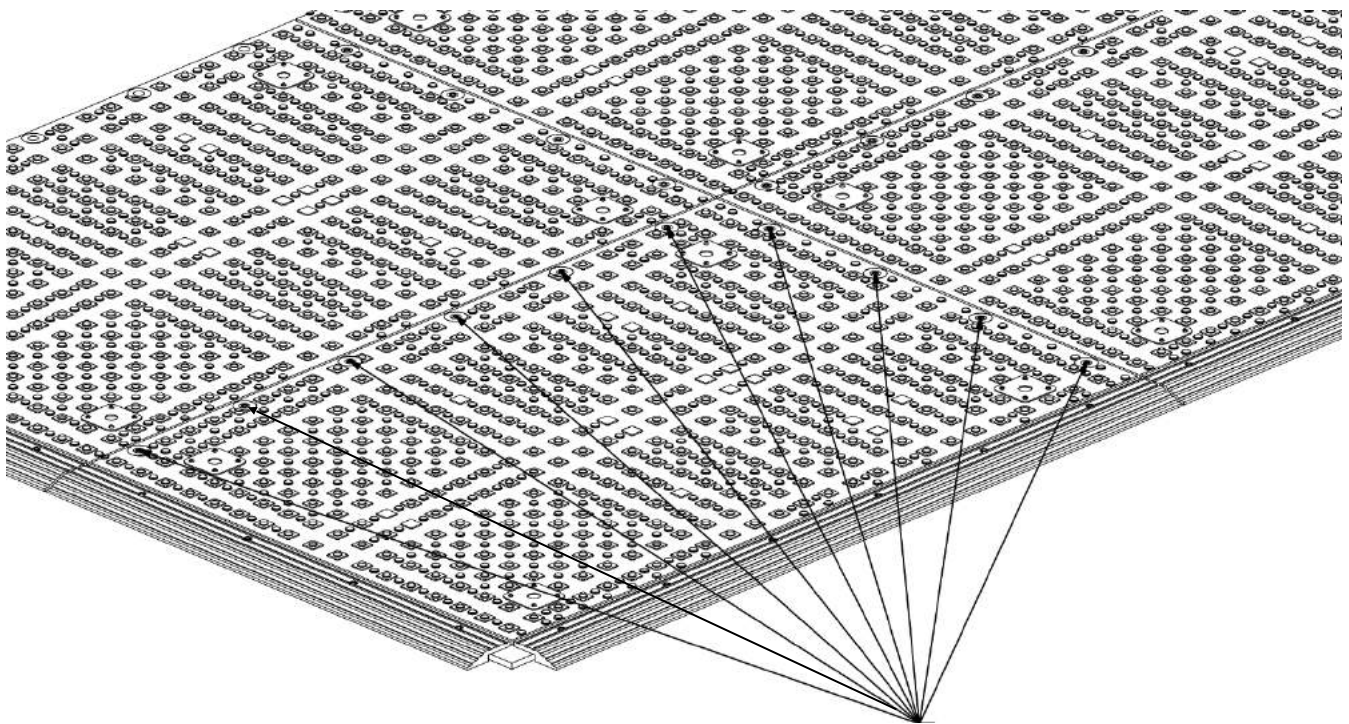
**Connecting the panels:**

The panels are connected and screwed together using washers and screws (M16x40mm). All adjacent panels must be connected in this way. Always install the panels so that the surfaces of the same type face upwards.



**Connecting the panels together (vehicle side):**

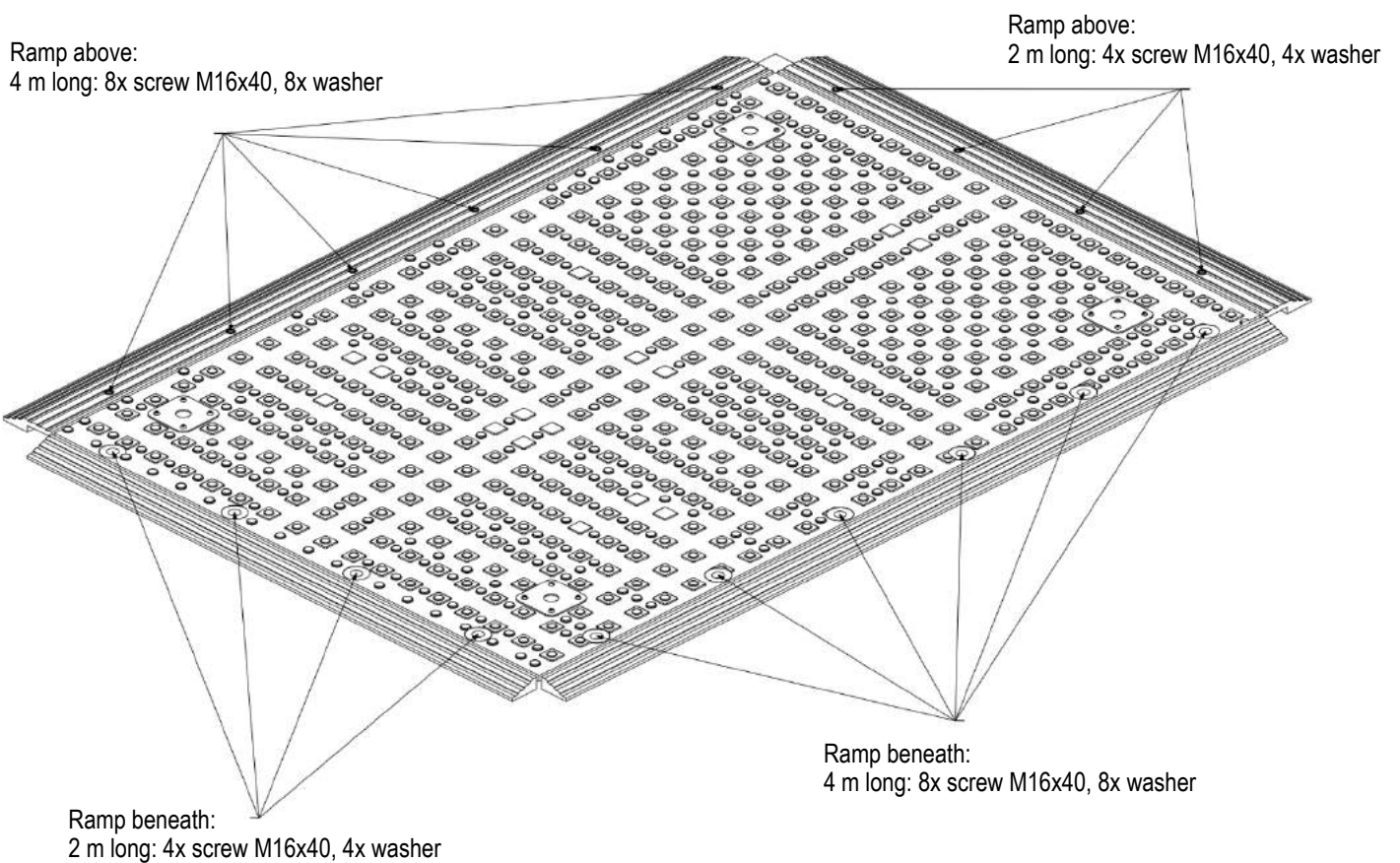
The panels are connected and screwed together using washers and screws (M16x40mm). All adjacent panels must be connected in this way. Always install the panels so that the surfaces of the same type face upwards.



4m side: 8x screw M16x40, 8x washer  
2m side: 4x screw M16x40, 4x washer

### Connecting the panels to the ramps (vehicle side):

The panels are connected and screwed together using washers and screws (M16x40mm). All adjacent panels must be connected in this way. Always install the panels so that the surfaces of the same type face upwards.



produced by:

**OKULEN**<sup>®</sup>

Technische Kunststoffe  
Engineering Plastics

# VARIO mat F

## Material:

High molecular weight polyethylene

**Dimensions:** 2400 x 3000 mm

**Usable Surface:** 7,2 m<sup>2</sup>

**Total thickness:** 32,5 mm

**weight circa. :** 195 kg

## Surface:

Top 5 mm profile

Underside unprofiled

## Assembly options:

4 pcs. M16

**Colour:** black multi-coloured

**Load bearing capacity (circa):**

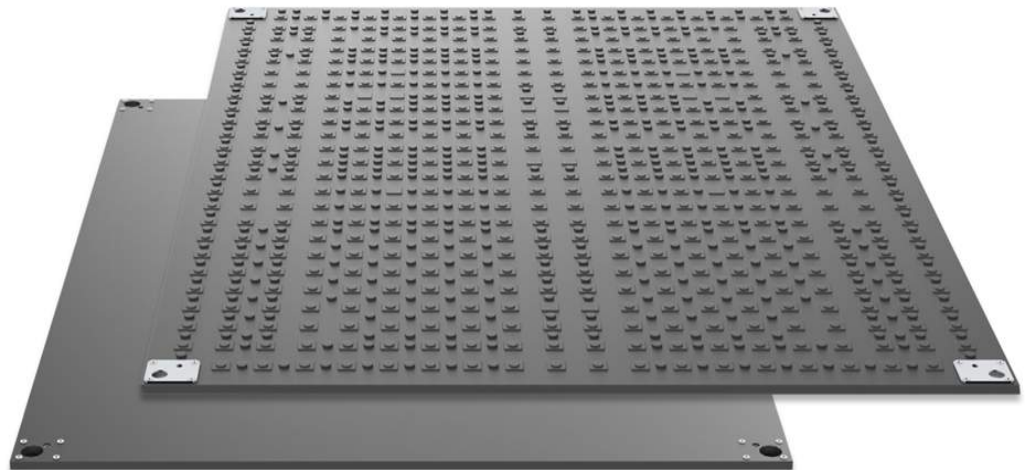
130t (depending on the substrate)

**Transport capacity:**

100units (720m<sup>2</sup>) **Lorry**

40units (288m<sup>2</sup>) **20'-Container**

100 units (720m<sup>2</sup>) **40'-Container**



## Fields of application:



Mobile installation  
surfaces for cranes



Heavy load  
transports



Mobile logistics



Wind power plant  
construction



Temporary  
walkways



Road construction  
and access roads



Line  
construction



Concerts and  
events



Mobile parking  
lots



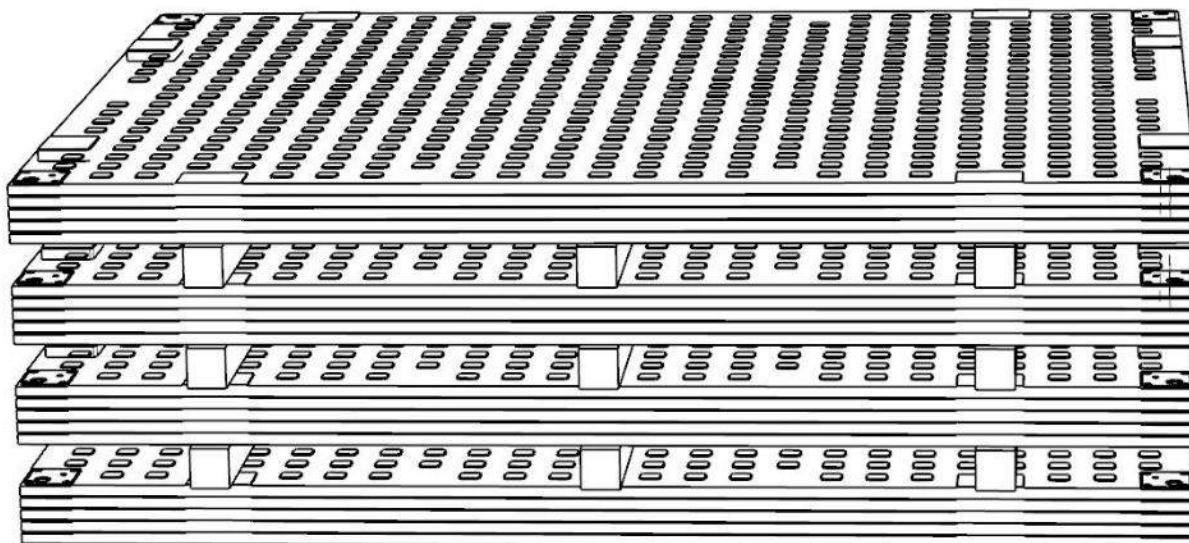


## General information

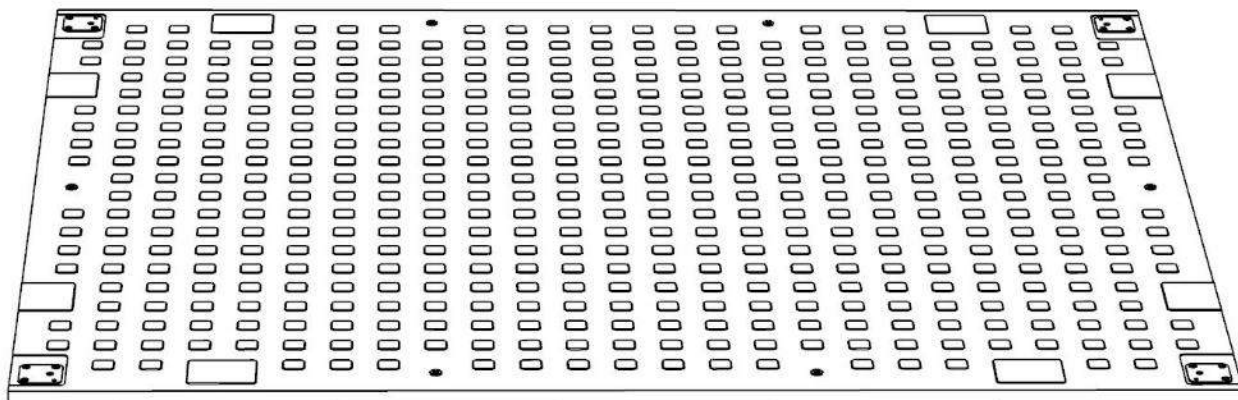
**Unloading:**

The panels can be unloaded from a lorry using a forklift truck. When lifting, special care must be taken to ensure that the panels cannot slip or fall off. The panels can also be unloaded and installed using a crane.

**Storage:** Never stack directly more than 5 panels at a time. It is recommended to stack a maximum of 4 packs of 5 panels on top of each other. Each pack can be separated by 3 square timbers (100mmx100mm) to allow later lifting by forklift truck.

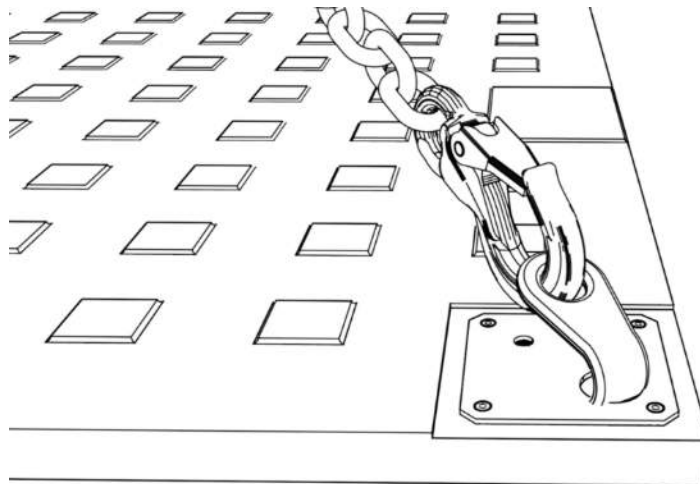
**Use of the panels:**

Single-sided use. The upper side is engineered with a tread pattern.

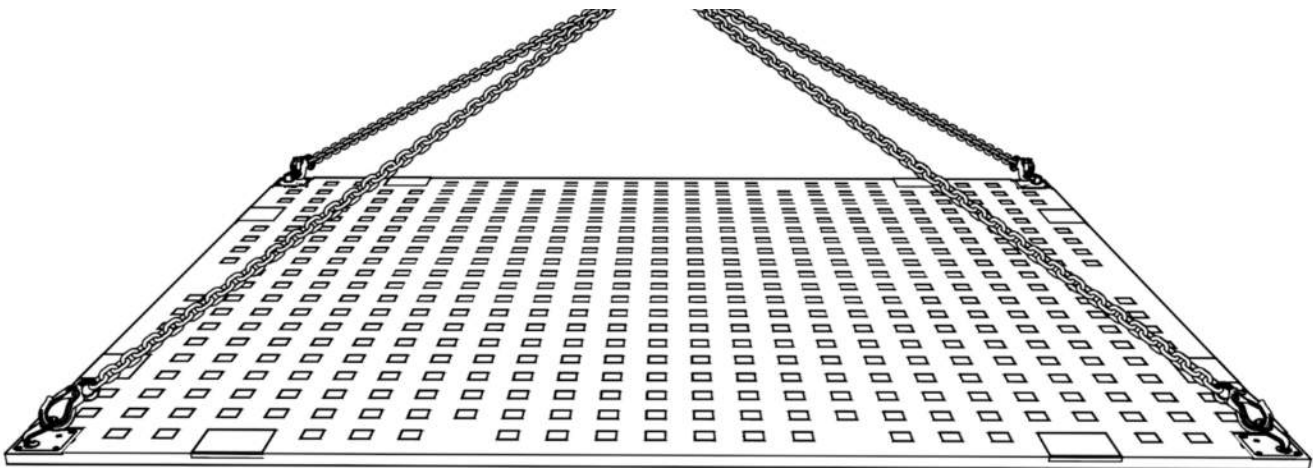


### Lifting and laying:

Each panel has 4 lifting lugs. A lifting device must be inserted into each eyelet. These devices must in turn be connected to a lifting hook (on a chain sling).

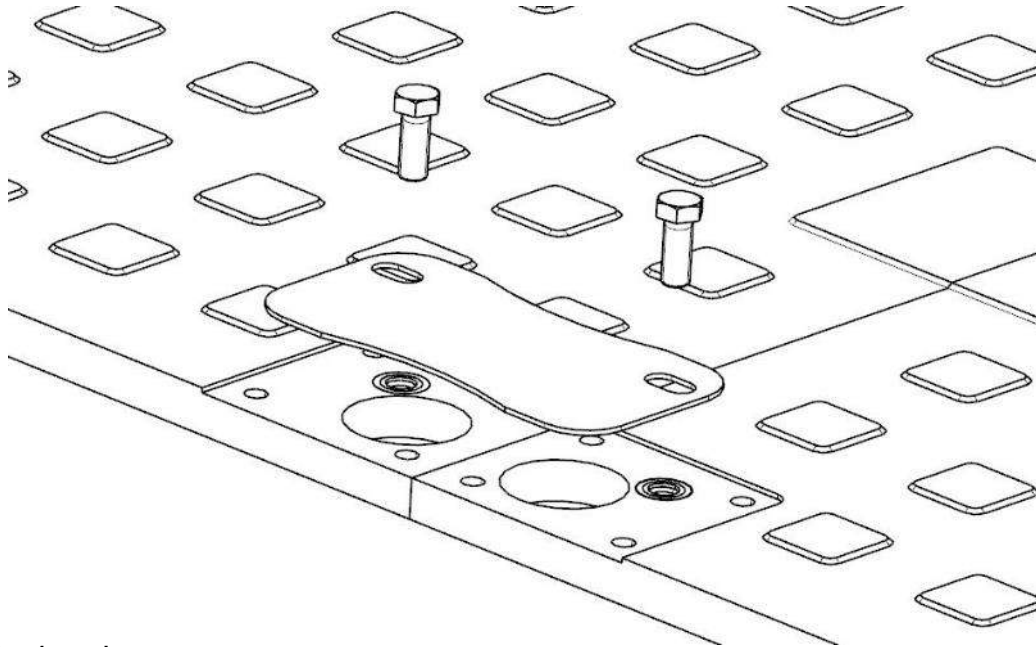


With the help of the chain sling, the panel can be moved to the desired position and installed.

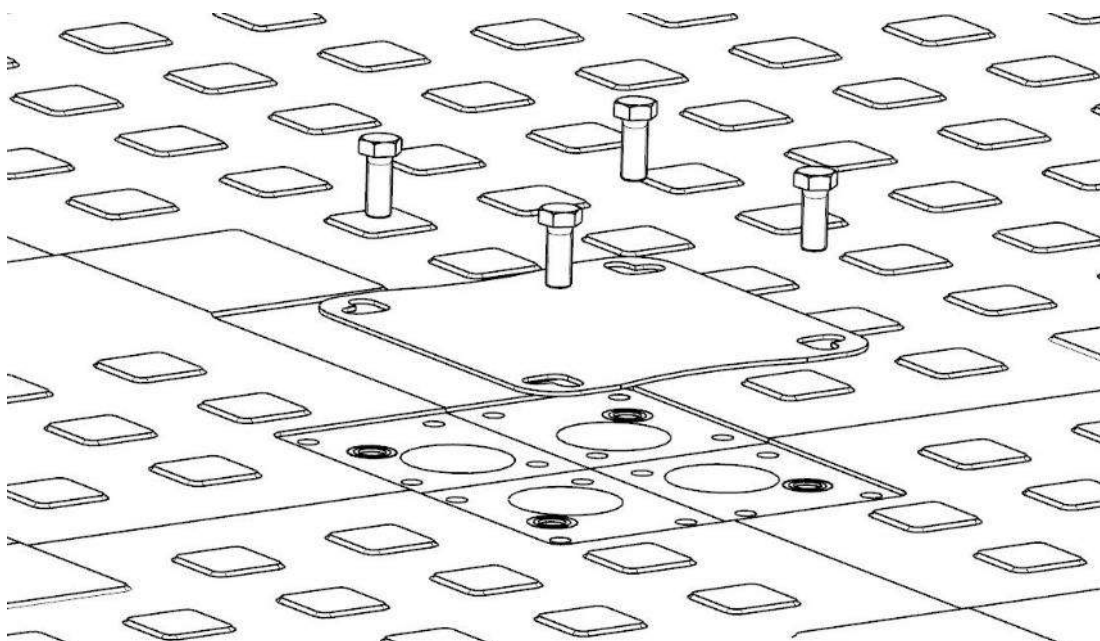


**Connecting 2 panels:**

Connect and screw the panels together using the 2-way connecting cover panel and 2 hexagonal screws (M16x30mm).  
All adjacent panels must be connected in this way.

**Connecting 4 panels:**

Connect and screw the panels together using the 4-way connecting cover panel and 4 hexagonal screws (M16x30mm).  
All adjacent panels must be connected in this way.



produced by:

**OKULEN**<sup>®</sup>

Technische Kunststoffe  
Engineering Plastics

## **VARIO** mat TT AS

### Material:

High molecular weight polyethylene

**Dimensions:** 2500 x 3000 mm

**Usable Surface:** 7,5 m<sup>2</sup>

**Total thickness:** 43 mm

**weight circa. :** 283 kg

### Surface:

Top 5 mm profile

Underside Anti-slip fluting

### Assembly options:

10 pcs. M16

**Colour:** black multi-coloured

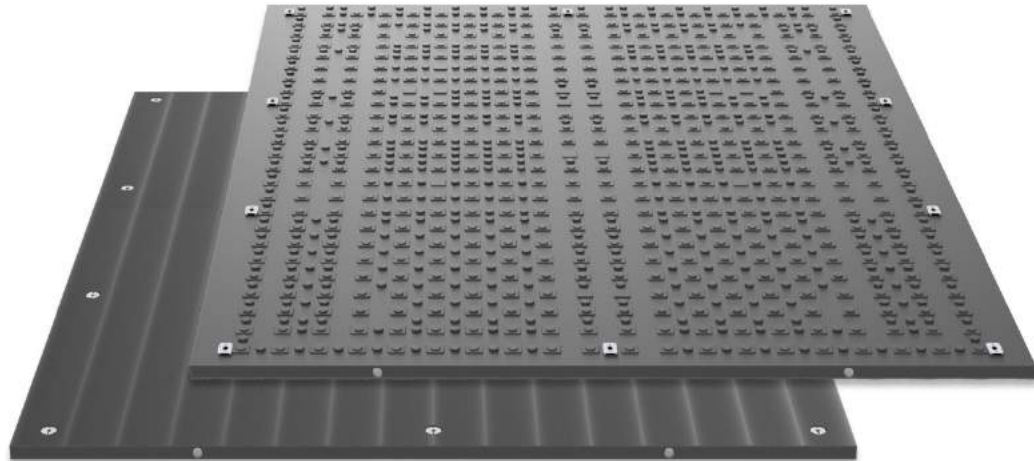
**Load bearing capacity (circa):**

180t (depending on the substrate)

**Transport capacity:**

80 units (600m<sup>2</sup>) **Lorry**

50 units (375m<sup>2</sup>) **40' High Cube container**



### Fields of application:



Mobile installation surfaces for cranes



Heavy load transports



Mobile logistics



Wind power plant construction



Temporary walkways



Road construction and access roads



Line construction



Concerts and events



Mobile parking lots

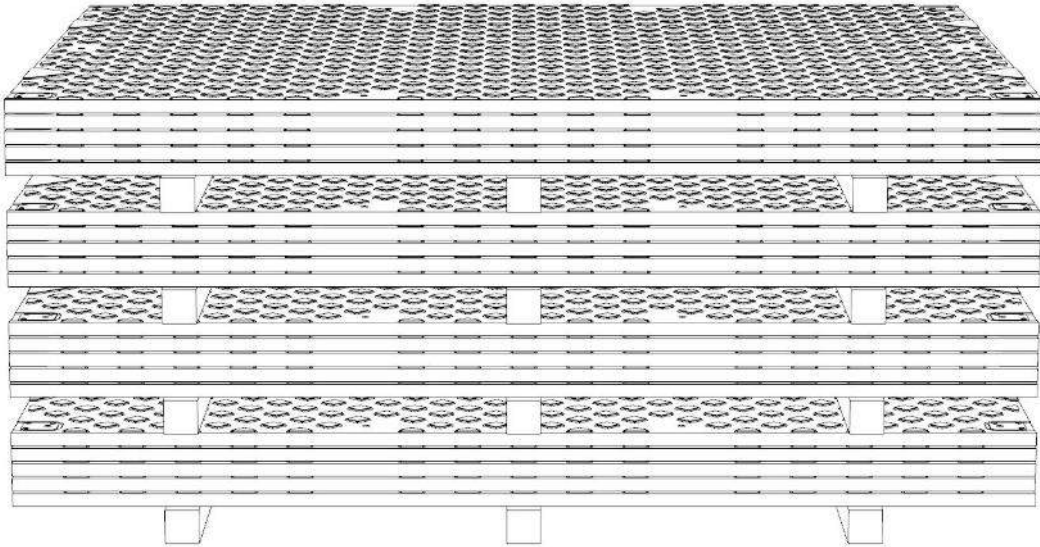


## General information

### Unloading:

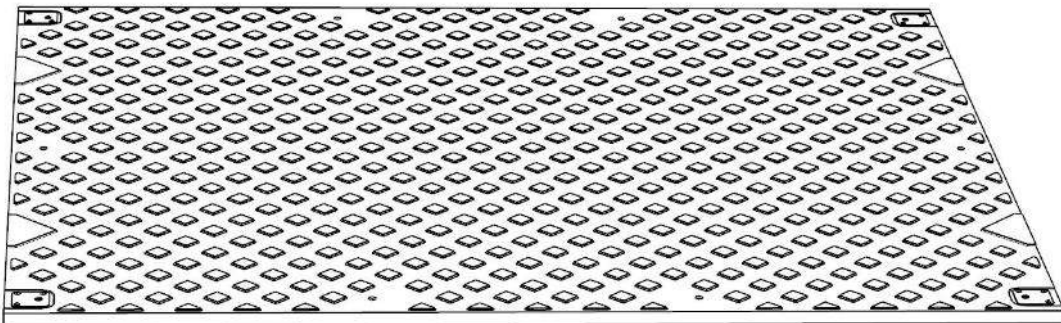
The panels can be unloaded from a lorry using a forklift truck. When lifting, special care must be taken to ensure that the panels cannot slip or fall off. The panels can also be unloaded and installed using a crane.

**Storage:** Never stack directly more than 5 panels at a time. It is recommended to stack a maximum of 4 packs of 5 panels on top of each other. Each package can be separated by 3 square timbers (100mmx100mm) to allow later lifting by forklift truck.

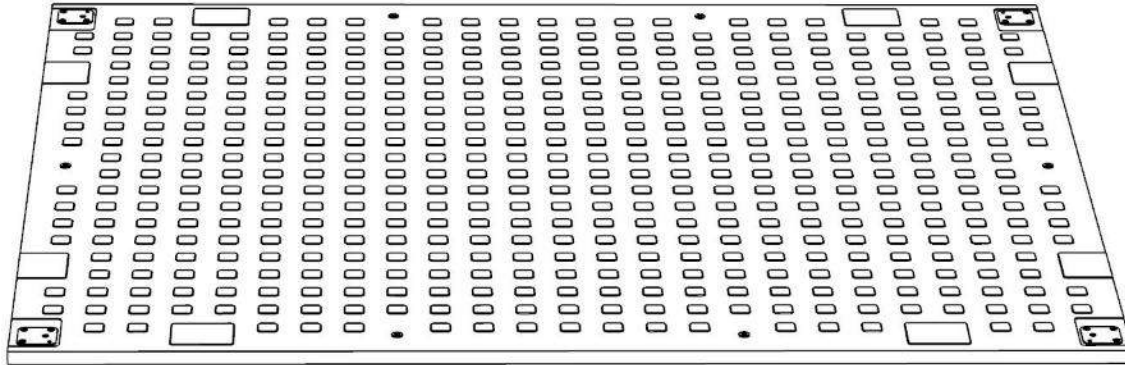


### Use of the panels:

Both sides of the panel can be used. The upper side has a high profile surface (suitable for the use of construction vehicles).

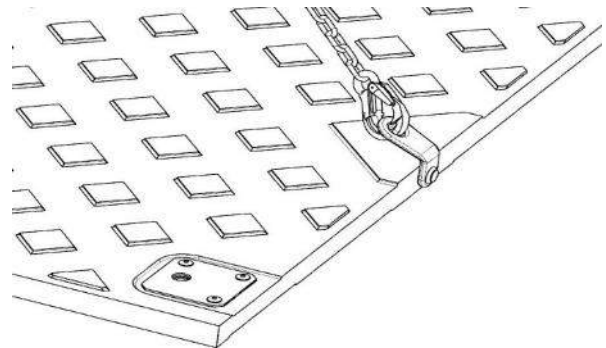
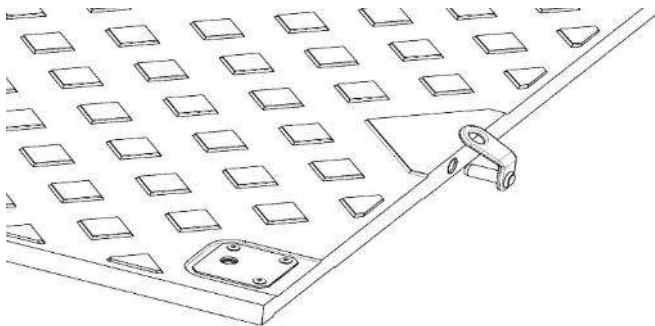


The underside has a lower profile pattern (suitable for predominant use by pedestrians).

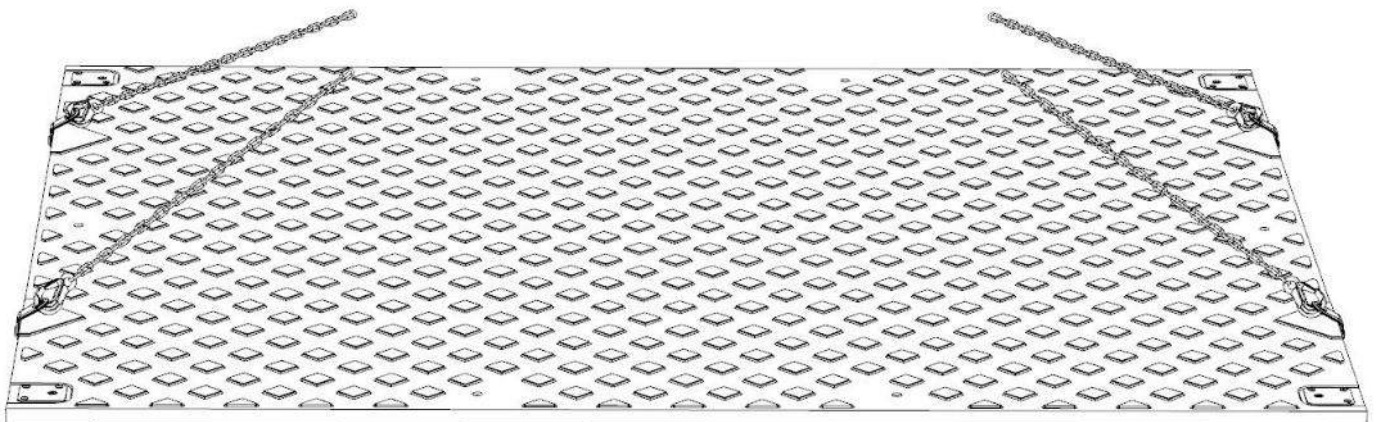


**Lifting and laying:**

Each panel has 4 lifting lugs. A lifting device must be inserted into each eyelet. These devices must in turn be connected to a lifting hook (on a chain sling).

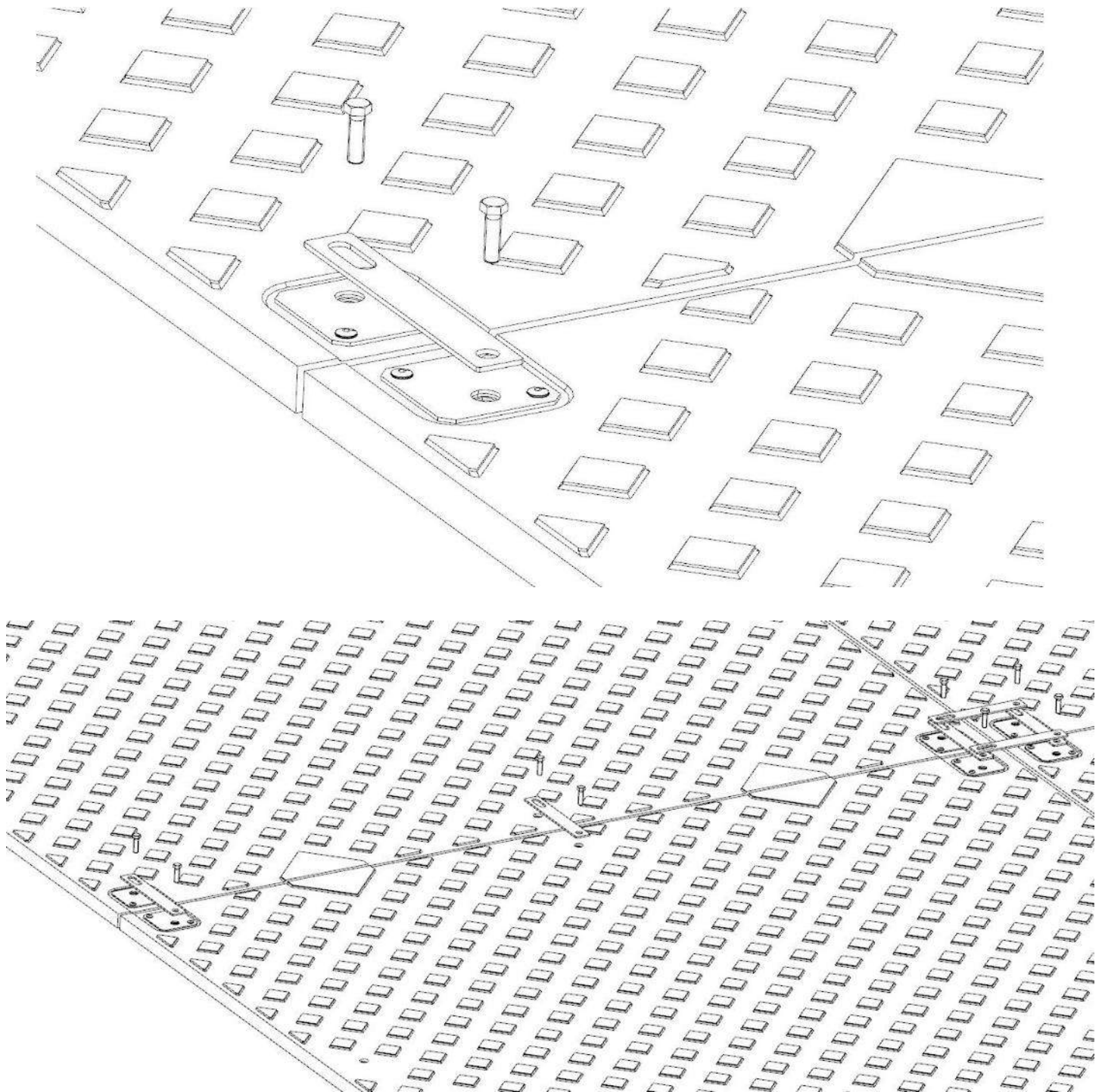


With the help of the chain sling, the panel can be moved to the desired position and installed.



**Connecting the panels:**

Connect and screw the panels together using the metal connectors and two hexagonal screws (M16x40mm) per connector. All adjacent panels must be connected in this way. Always install the panels so that the surfaces of the same type face upwards.



### Technical data of the varioMAT series

Material: High molecular weight polyethylene

Melting point: 135 – 140°C

Inflammation temperature: > 330°C

According to ISO 11359, the material is subject to a coefficient of linear thermal expansion of approximately 0.2 mm per 1000 mm length per 1°C.

Flammability (self-classification) DIN 4102: class B2

Flammability (self-classification) UL 94: class HB

Very good wear and impact resistance, even at high and very low temperatures (-50°C).

The high proportion of high and ultra-high molecular weight regenerated polyethylene makes the vario series remarkable in terms of quality and environmental protection.

References since 2010 in the following areas: oil and gas, construction sites, heavy construction, wind farms, events and concerts, as well as overhead line construction.

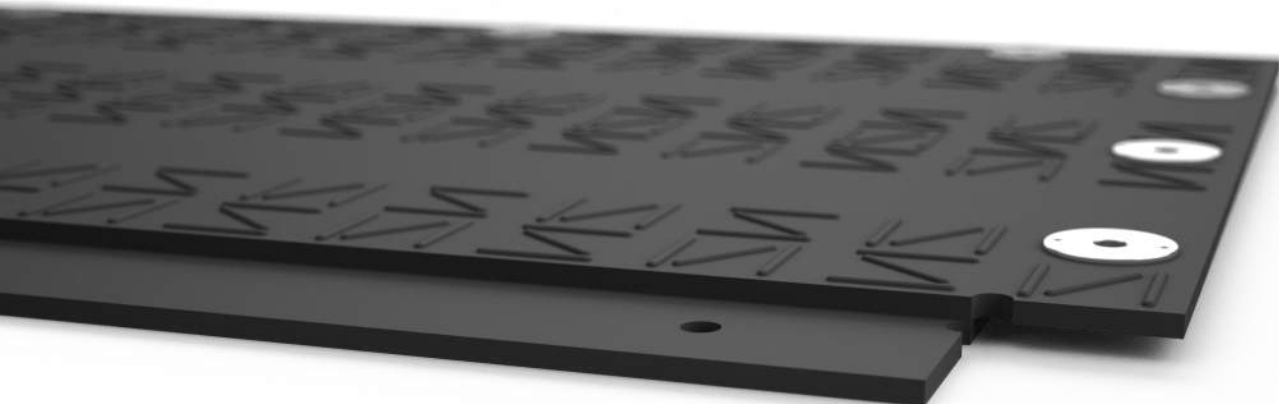
### Characteristics

The varioMAT panels are screwed together, creating a stable road or working platform, both in length and width, for the safe movement of vehicles and handling of loads.

The load-bearing capacity of the substrate is thus considerably optimised, soil compaction is minimised and damage to vegetation is avoided. Thanks to the different traction surfaces on both sides of the panels, depending on the model, the varioMAT panels are versatile. The low profile surface on one side is particularly suitable for pedestrians, cyclists and wheelchair users as well as cars. Thicker profiles on the other side, on the other hand, ensure optimum traction for heavy vehicles, even in difficult terrain. Depending on their size, the varioMAT panels can be installed by hand or with the aid of a crane lorry and guarantee safe access right from the start of the assembly process.

### Logistics

varioMAT panels are lighter than most alternative mobile roadway panels. This means that more panels can be loaded on a lorry or in a container, which reduces transport costs.





## Safety instructions

1.  
All models of the varioMAT product family (hereinafter "**panels**") are designed exclusively for use by professionals in the industrial sector.
2.  
If these panels are made available to a third party (i.e. not the purchaser), the purchaser must be expressly informed of the safety instructions. He must be provided with a copy of these safety instructions. This also applies to all persons who are responsible for the use (in particular storage, loading and unloading, as well as laying) of the panels.
3.  
The panels are designed and suitable for use as a traction aid (e.g. for driving vehicles). They are not suitable for securing existing ground against slipping (especially sloping ground or slippery surfaces). The panels may only be subjected to a load if it is ensured that the substrate does not give way and/or that slipping of the substrate and/or the panels is impossible. This applies in particular if the panels are used by vehicles and/or a crane.
4.  
The panels must not be used to fill uneven surfaces (e.g. holes in the ground, trenches, etc.). The panels are not dimensionally stable and will deform if they are not laid directly on an existing substrate. The panels should preferably be laid on a flat surface.
5.  
Any force acting on the panels may cause them to deform. This may result in a risk of falling, e.g. due to unevenness, raised edges, etc.
6.  
The surface of the panels may be slippery in the event of moisture, frost, fallen leaves, heavy soiling and/or similar phenomena. This can lead to a risk of falling. In this case, the profiling of the panels may not guarantee a firm grip on the panels.
7.  
The surface of the panels can heat up considerably in strong sunlight. Physical contact must be urgently avoided in these cases.
8.  
The panels must not be used as a base for playgrounds (places of any kind intended for children/infants). The panels may contain substances that are hazardous to health when placed in the mouth.
9.  
Stumbling may occur when walking on the panels (especially in the transition areas between two interconnected panels). This is particularly true when wearing shoes that do not have a firm, flat sole (for example, women's shoes with heels).  
  
If the panels are to be stepped on by people, it is imperative to ensure that the screws are fully screwed into the panels and that only the screw heads protrude from the surface of the panels. For the product varioMAT F, varioMAT 3 OL AS and varioMAT 4, it is recommended to close the holes in the lifting lugs after installation using the covering accessories offered by the seller.
10.  
If the panels are used at large events, visitors should be informed that the panels may have irregularities and are not suitable for walking without sturdy footwear.

## Safety instructions (continued)

**11.**

The panels may be driven over by tracked vehicles. However, this should only be done after appropriate protection has been put in place. Turning tracked vehicles without a chain guard can damage the nub pattern and connectors.

**12.**

Panels do not allow air or light to pass through. Plants under the panels (especially turf) can be damaged / irreparably destroyed by prolonged use.

**13.**

The panels are made of high molecular polyethylene. The melting point is approximately 135 - 140°C. The ignition temperature is > 330°C Flammability (self-classification) DIN 4102: class B2; Flammability (self-classification) UL 94: class HB].

Suitable extinguishing media: Water, water spray, carbon dioxide, foam, dry chemical extinguishing powder

**14.**

The varioMAT 3, varioMAT 3 OL AS, varioMAT 4, varioMAT TT AS and varioMAT F panels can be loaded and unloaded by means of a forklift truck or a crane. It is strongly advised not to lift them by hand.

VarioMAT basic AS, varioMAT mini AS, varioMAT 1 AS, varioMAT 1+ AS, varioMAT 2 and varioMAT 2 AS type panels are man-handleable.

**15.**

Due to the shape of the panels, they may slip if they are not lifted/unloaded horizontally. The same applies in case of heavy rain or thunderstorms, etc. The panels must also be secured with suitable lashings during transport.

**No person must be in the immediate vicinity of the panels when loading/unloading them.** Improper handling can result in serious injury or death.

**16.**

If a chain sling is used (and a crane, if necessary), the panels may only be lifted using the lifting devices adapted for this purpose and specified in this sheet. Before each lifting operation, ensure that the load handling attachments are firmly inserted and cannot slip. The instructions given above under "General information" must be adhered to.

**17.**

If the panels are installed in combination, all adjacent panels must be firmly connected to each other so that they cannot slip. For this purpose, the accessories listed in this sheet, in particular screws and metal connectors, must be used. The panels must be laid in such a way they each point upwards / downwards with the same profile thickness. Improper connection can result in damage, especially to vehicles used on the panels.

**18.**

The ground protection panels may only be driven over at a speed of max. 10 km/h.

**19.**

The ground protection panels are suitable for truck axle loads up to 12 t.

**Lifting device**

Load capacity 4 units: 500 kg  
Load capacity 1 unit: 170kg

This lifting device must be used for the following models:

**varioMAT 3**  
**varioMAT TT AS**

**Lifting device**

Load capacity 4 units: 500 kg  
Load capacity 1 unit: 170kg

This lifting device must be used for the following models:

**varioMAT F, varioMAT 3 OL AS**  
**varioMAT 4**

**Stake rack**

Stake racks do for a flexible storage system.

available for

**varioMAT 1 AS**  
**varioMAT 1+ AS**  
**varioMAT 2, varioMAT basic AS**

**Screws and washers**

Commercially available screws can be used with all products. Please use screws that do not exceed the maximum length.

M10 x 16

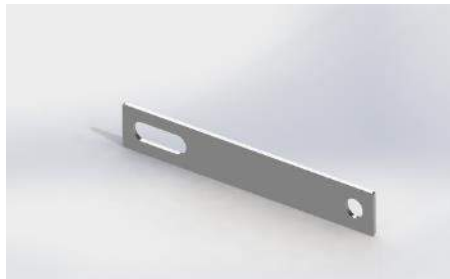
**varioMAT mini AS, varioMAT 1 AS,**  
**varioMAT 1+ AS, varioMAT basic AS**

M16 x 30

**varioMAT 2, varioMAT 2 AS,**  
**varioMAT F**

M16 x 40

**varioMAT 3, varioMAT 3 OL AS,**  
**varioMAT TT AS, varioMAT 4**

**Metal connector (universal)**

Metal connectors are used to screw the ground protection panels together. They are suitable for the following models :

**varioMAT 3**  
**varioMAT TT AS**  
**varioMAT 3 ramp**

**2-way metal connector**

The ground protection panels are connected by the new all-metal 2-way connectors and M10 screws. These connectors are suitable for the following products:

**varioMAT mini AS, varioMAT 1 AS,**  
**varioMAT 1+ AS, varioMAT basic AS**



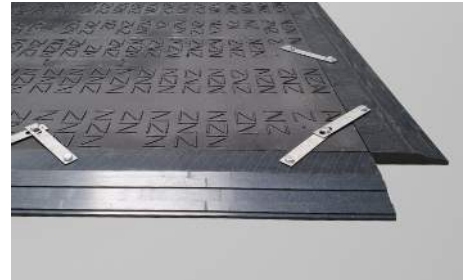
**Ramp, above**

Mounting "over" the overlapping edge.  
**varioMAT 2, Length 900 mm**  
**varioMAT 2, Length 1900 mm**  
**varioMAT 3 OL AS, Length 1900mm**  
**varioMAT 3 OL AS, Length 2900 mm**  
**varioMAT 4, Length 1900mm**  
**varioMAT 4, Length 3900 mm**



**varioMAT 2 - Ramp, beneath**

Mounting "under" the overlapping edge.  
**varioMAT 2, Length 900 mm**  
**varioMAT 2, Length 1900 mm**  
**varioMAT 3 OL AS, Length 1900mm**  
**varioMAT 3 OL AS, Length 2900 mm**  
**varioMAT 4, Length 1900mm**  
**varioMAT 4, Length 3900 mm**



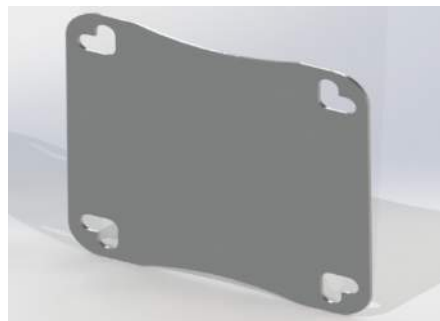
**Ramp**

Mounting butt before edge  
**varioMAT 3, Length 2000 mm**  
**varioMAT 3, Length 3000 mm**



**4-way metal connector**

The ground protection panels are connected by the new all-metal 4-way connectors and M10 screws. These connectors are suitable for the following products:  
**varioMAT mini AS, varioMAT 1 AS, varioMAT 1+ AS, varioMAT basic AS**



**4-way connecting cover panel**

These connectors are suitable for the following products:  
**varioMAT F**  
**varioMAT 3**



**2-way connecting cover panel**

These connectors are suitable for the following products:  
**varioMAT F**  
**varioMAT 3**

produced by:

**OKULEN**®

Technische Kunststoffe  
*Engineering Plastics*



produced by:

**OKULEN**®

Technische Kunststoffe  
*Engineering Plastics*

---

### **Innovative floor protection**

We develop and produce products, such as mobile construction site panel systems, which are state-of-the-art and convince with their unique properties.

Our temporary ground protection panels and mobile construction site roads are used, for example, in the construction and civil engineering sector, for earthworks or at open-air events. We offer cost-effective solutions for demanding and constantly changing conditions. Temporary accesses and walkways as well as ground protection elements are our speciality.

We help you achieve your strategic business objectives, avoid environmental damage, save time and reduce project costs.

Whatever project you are considering, our products make it easy and fast to install temporary access roads and lanes or mobile construction site roads.

We would be happy to inform you about your contact person in your area.