



PRODUCT DATA SHEET

modern line 

CONCRETE PAVERS
AND SLABS

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PRODUCT DATA SHEET - CONCRETE PAVERS AND SLABS

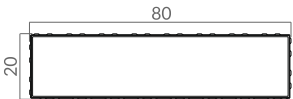
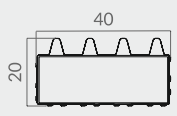
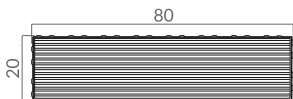
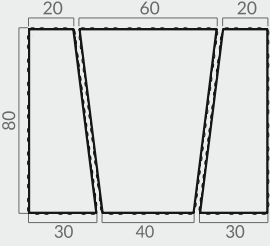
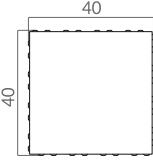
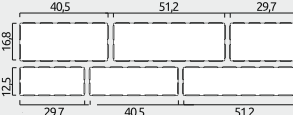
1.INTRODUCTION:

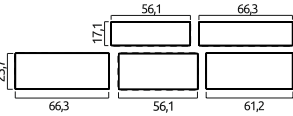
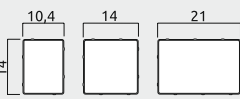
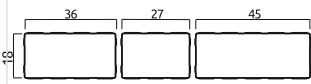
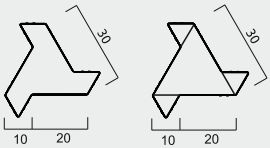
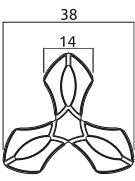
The Modern Line concrete products are a modern style range and a vanguard in spatial arrangement. Utilizing over 27 years of experience, we have created a series of concrete products that have been adapted to modern arrangements. Quality, technology and powerful minimalist design in the Scandinavian style - these are our priorities and challenges in terms of modern design. Modern Line is a solution for both public arcades, parking lots and courtyards, as well as private terraces and gardens.

2. PHYSICAL PROPERTIES - CONCRETE PAVERS AND SLABS:

PROPERTIES	SOLID, STYLE, MULTI, ECOSOLID, CUBE, SMART, MASTER, MASTER XL,		VJETRA®, V-VJETRA PERFECT, MANDAL	
	STANDARD	TYPICAL VALUES	STANDARD	TYPICAL VALUES
ABSORPTIVITY	PN-EN 1339	class 2 „B” < 5%	PN-EN 1338	class 2 „B”
FROST-RESISTANCE	PN-EN 1339	class 3 „D”	PN-EN 1338	class 3 „D”
DIMENSIONAL DEVIATIONS	PN-EN 1339	class 1 „N” height +/- 3 mm width, length t +/- 5mm	PN-EN 1338	height +/- 3 mm width, length +/- 2mm
BENDING STRENGHT	PN-EN 1339	class 1 „S”	PN-EN 1338	3,6MPa (tensile splitting strength)
WEAR RESISTANCE	PN-EN 1339	class 4 „I”	PN-EN 1338	class 4 „I”
SLIP RESISTANCE	PN-EN 1339	sufficient	PN-EN 1338	sufficient

3. PRODUCT DATASHEET-TECHNICAL DETAILS

PRODUCT NAME	DIMENSIONS (CM)	THICKNESS (CM)	NUMBER ON THE PALLET /NUMBER OF LAYERS ON PALLET /PALLET'S WEIGHT	COLORS	USE
SOLID		7	48 pcs./8 layers /1200 kg	white, gray, steel, carbon,	Terraces, alleyways and garden paths, pavements, courtyards, passages, driveways, car parks up to 3.5 t. Use with a traffic load of up to 3.5 t is subject to the roadbase being constructed in accordance with the IBDIM (Road and Bridge Research Institute) guidelines contained in the product documentation.
eco SOLID		7	120 pcs/8 layers /1260 kg	white gray steel carbon	External pavements - biologically active - Terraces, alleyways and garden paths, pavements, courtyards, passages, also driveways and car parks up to 3.5 t. Use with a traffic load of up to 3.5 t is subject to the roadbase being constructed in accordance with the manufacturer's guidelines contained in the product documentation.
STYLE		7	48 pcs/8 layers /1200 kg	white gray steel carbon	Terraces, alleyways and garden paths, pavements, courtyards, passages (pedestrian traffic only).
MULTI		7	8 sets/8 layers /1050 kg	white gray steel carbon	Terraces, alleyways and garden paths, pavements, courtyards, passages, driveways and car parks up to 3.5 t. Use with a traffic load of up to 3.5 t is subject to the roadbase being constructed in accordance with the manufacturer's guidelines contained in the product documentation.
CUBE		5	60 pcs/10 layers /1100 kg	white gray steel carbon	Terraces, alleyways and garden paths, pavements, courtyards, passages (pedestrian traffic only).
MASTER		8	8,36m2/8 layers /1470 kg	white gray steel carbon	Terraces, alleyways and garden paths, pavements, courtyards, passages, driveways and car parks up to 3.5 t. Use with a traffic load of up to 3.5 t is subject to the roadbase being constructed in accordance with the manufacturer's guidelines contained in the product documentation.

PRODUCT NAME	DIMENSIONS (CM)	THICKNESS (CM)	NUMBER ON THE PALLET /NUMBER OF LAYERS ON PALLET /PALLET'S WEIGHT	COLORS	USE
MASTER XL		8	8,36m2/8 layers /1470kg	white gray steel carbon	Terraces, alleyways and garden paths, pavements, courtyards, passages, driveways and car parks up to 3.5 t. Use with a traffic load of up to 3.5 t is subject to the roadbase being constructed in accordance with the manufacturer's guidelines contained in the product documentation.
PERFECT		6	10,66 m2/9 layers /1440 kg	white gray steel carbon	Terraces, alleyways and garden paths, pavements, courtyards, passages, driveways and car parks up to 3.5 t. Use with a traffic load of up to 3.5 t is subject to the roadbase being constructed in accordance with the manufacturer's guidelines contained in the product documentation.
SMART		8	7,68 m2/8 layers /1340 kg	white gray steel, carbon	Terraces, alleyways and garden paths, pavements, courtyards, passages, driveways and car parks up to 3.5 t. Use with a traffic load of up to 3.5 t is subject to the roadbase being constructed in accordance with the manufacturer's guidelines contained in the product documentation.
VJETRA® V-VJETRA		8	4,98 m2/8 layers /950 kg	white gray steel, carbon	40% an more of biologically active surface: pedestrian traffic (Vjetra®, V-Vjetra) 1%-40% biol. active surface: pedestrian traffic, vehicle traffic load up to 3.5 t. (Vjetra®, V-Vjetra) 0% biologically active surface: pedestrian traffic, vehicle traffic up to 3.5t. (Vjetra®, V-Vjetra); vehicle traffic up to 12 t: low traffic volume (Vjetra®)
MANDAL		10	5,44 m2/8 layers /670 kg	white gray steel, carbon	17% biol.active surface: pedestrian traffic, vehicle traffic up to 3.5t., vehicle traffic up to 12 t. (low traffic volume) 37% biol. active surface: pedestrian traffic, vehicle traffic up to 3.5 t.

4. USE:

Concrete is not resistant to scratches and impact, especially with the use of sharp objects.

4.1 Use in winter—Concrete products are resistant to weather conditions, including temperatures below zero, which allows their operational use outdoors all year round. Do not use de-icing agents and sharp tools for removing snow and ice from the concrete.

5. MAINTENANCE AND CLEANING:

Any dirt should be removed on a regular basis, as leaving it can cause stains and discoloration. Wash with a pressure washer.

6. IMPREGNATION:

Due to the coating on the production line, the Modern Line pavements do not require impregnation. The durability of the varnish coating is up to a year, depending on the intensity of use. After this period the pavement should be renovated.

7. PACKAGING:

Concrete pavements are properly secured and transported on specially designed pallets in two sizes (a euro pallet with the dimensions of 1200cmx800 cm or a special pallet with the dimensions of 1200cmx1000cm). The pavements are arranged in layers for transport. The number of layers varies depending on the type of product (in accordance with the table: Product Data Sheet). The layers are separated in a manner that secures them against scratches. In the case of Solid, Style, EcoSolid, Cube panels, there is a sheet of styrofoam between the pallet and the lower layer. The ecoSolid panel has an additional protection of the "teeth" in the form of wooden spacers.

Protection of pavements for transport after they are arranged on the pallet is executed through:

- covering them with see-through foil and then a foil with visual identification of the brand - the Modern Line logo.

- durable and stable fastening of the panels to the pallet with fastening belts (vertical and horizontal).

8. TRANSPORT AND COMMISSIONING:

8.1 Transport: The Modern Line pavements packed on pallets in various sizes can be transported by cars. Extreme caution should be exercised during transport. The pallets should not be tipped over and thrown. Stacking - a maximum of 3 pallets, in the case of Smart sett - 4. Unloading and transport at the construction site should be performed using forklifts. The fork spacing should be adapted to the size of the pallet. Avoid pallet bending. Move slowly and carefully.

8.2 Commissioning:

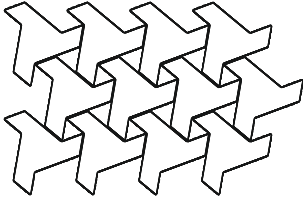

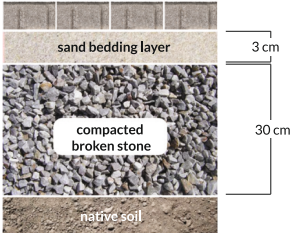

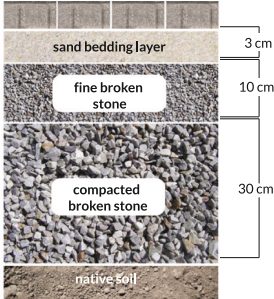

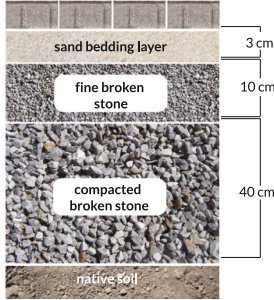
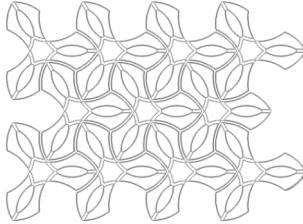
Upon delivery of the pavement one should immediately perform a quantitative and qualitative commissioning of the products. The client should immediately report any irregularities to the manufacturer.


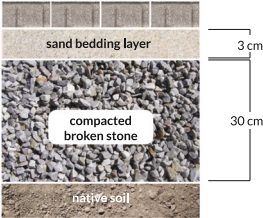

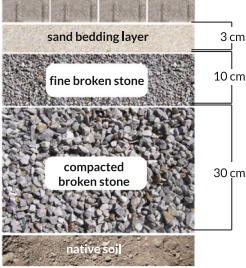
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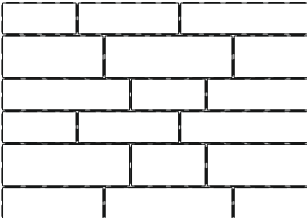

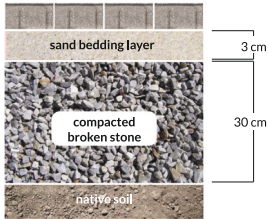
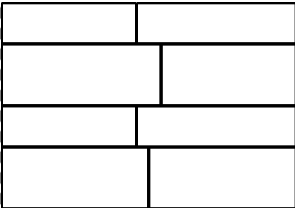

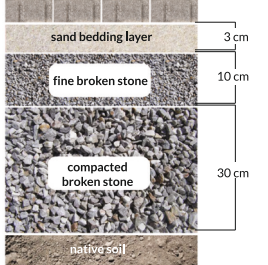

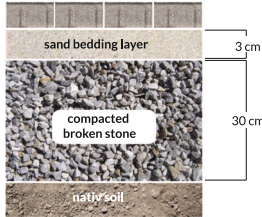
The pallets should be stored only on a flat surface. Stacking - a maximum of 3 pallets vertically, in the case of Smart sett - 4 pallets vertically. It is not allowed to exceed the number of pieces/m² per pallet (according to item 4 "Product data sheet"). Packaging does not secure products against the impact of atmospheric conditions. As a result of natural physical and chemical processes occurring directly in the concrete and its surrounding, discolorations and efflorescences may appear on products being stored - these are not flaws of the product, but they affect its aesthetic.

10. INSTALLATION:

Correct execution of the substructure is a condition necessary for proper placement of the pavement. Installation in accordance with construction practice.

PRODUCT'S NAME/ LAYOUT OF ELEMENTS ON A PALLET*	NOTES	INSTALLATION
<p>VJETRA®/V-VJETRA</p> 	<p>The sett with a straight edge line and flat surface (Vjetra®) or flat surface with relief (V-Vjetra). Spacers of classic size. The pattern consists of 1element. The sett is made in double-filling technology. Joint width 3-5 mm.</p>	<p> Pedestrian traffic</p>  <p> Pedestrian and vehicle traffic to 3.5 t.</p>  <p> Vehicle traffic above 3.5 t.</p> 
<p>MANDAL</p> 	<p>The sett with a flat surface with relief and Spacers of classic shape and enlarged size. The pattern consists of 1 element. The sett is made in double-filling technology. Joint width 3-5 mm.</p>	

PRODUCT'S NAME/ ELEMENTS' LAYOUT ON A PALLET*	NOTES	EXAMPLE OF INSTALLATION
MULTI	Trapezoid-shaped panel and flat surface secured around the circumference with a special profiling. Spacers in a special enlarged size. The pattern consists of three elements. Joint width 3-5 mm.	
eco SOLID	Longitudinal panel with a straight edge line and flat surface secured around the circumference with a special profiling. Spacers in a special enlarged size. The pattern consists of one repeating element. Joint width 3-5 mm.	<div>  Pedestrian traffic </div> 
SOLID	Longitudinal panel with a straight edge line and flat surface secured around the circumference with a special profiling. Spacers in a special enlarged size. The pattern consists of one repeating element. Joint width 3-5 mm.	
PERFECT	The sett with a straight edge line secured with microphase and flat face surface. Spacers of a classic size. The pattern consists of 3 elements packed jointly. Joint width 3-5 mm.	<div>  Pedestrian and vehicle traffic to 3.5t. </div> 
SMART	The sett with a straight edge line and flat surface. Spacers in a special enlarged size. The pattern consists of 3 elements packed jointly. The sett is made in double-filling technology. Joint width 3-5 mm.	

PRODUCT'S NAME/ ELEMENTS' LAYOUT ON A PALLET*	NOTES	EXAMPLE OF INSTALLATION
MASTER 	<p>The sett with a straight edge line and flat surface. Blocky spacers of classic size. The pattern consists of 6 elements packed jointly. The sett is made in double-filling technology. joint width 3-5 mm.</p>	 Pedestrian traffic 
MASTER XL 	<p>The sett with a straight edge line and flat surface. Blocky spacers of classic size. The pattern consists of 5 elements packed jointly. The sett is made in double-filling technology. joint width 3-5 mm.</p>	 Pedestrian and vehicle traffic to 3.5t. 
STYLE	<p>Longitudinal panel with a straight edge line and ribbed surface secured around the circumference with a special profiling. Spacers in a special enlarged size. The pattern consists of one repeating element. Maintain caution while installing and using due to the possible mechanical damage of the surface. Placement with maintaining proper drainage of water required.</p>	 Pedestrian traffic 
CUBE	<p>Square panel with a flat face surface secured around the circumference with a round edge. Enlarged spacers. The pattern consists of one element. The panel is made in double-filling technology. Joint width 3-5 mm.</p>	

*For technological reasons arrangement of elements on the pallet may change.

All surfaces should be executed in accordance with the guidelines of GDDKIA (General Directorate for National Roads and Motorways) No. D-05.03.23.

11. CERTIFICATES AND STANDARDS:

11.1. PAVING STONES:

products in compliance with standards

-PN-EN 1338:2005+AC:2007, Concrete paving blocks-- Requirements and test methods

11.2. SLABS:

products in compliance with standards:

PN-EN 1339:2005+AC:2007 – „Concrete paving slabs. Requirements and test methods.”

