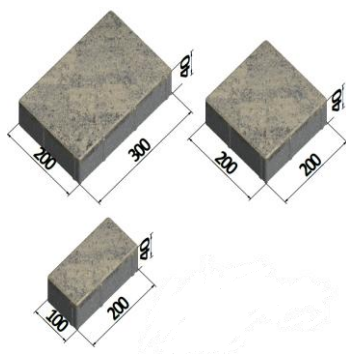


Slabs type KOMBI 4 cm - model SYMM 311							
		Dimensions: 200 x 100 x 40 mm 200 x 200 x 40 mm 300 x 200 x 40 mm		Spacers: vertical, 1,5 mm			
		Weight/piece: ~ 1,73 kg ~ 3,5 kg ~ 5,2 kg		Bevels: oblique at 35°			
		Quantity per m²: 8,33 pieces		Weight on m²: ~ 90 kg			
Production plant:		Verești , județul Suceava; Bolintin Vale , județul Giurgiu; Zimandu Nou , județul Arad; Prejmer , județul Brașov; Ovidiu , județul Constanța.					
Types:		Vibropressed concrete product made in a double layer, with a flat surface with straight bevels on the upper part. The wear layer is made with selected grades to improve the structure and durability of the product. The thickness of the wear layer is at least 4 mm.					
Available colour range:		Grey; Anthracite; Cream; White; Grey-Anthracite; Orange-Anthracite; White-Anthracite; Grey-Orange-Anthracite; Cream-Brown; White-Orange; White-Travertine; Brown-White-Orange. The product is coloured only in the wear layer.					
Palletizing:		Plant	Quantity	Rows/ Pallet	Pieces/ Row	Total Pieces	Weight
		Verești, Bolintin Vale, Prejmer – L2, Zimandu Nou, Ovidiu.	16,2 m²	15	12/12/6	180/180/ 90	~1700 kg
Technical specifications according to SR EN 1339:2004		Specification			Performance		
		Permissible deviations from rated dimension L x l			± 2 mm		
		Permissible deviations from rated thickness			± 3 mm		
		Maximum difference of diagonals d ≤ 850 mm			± 5 mm		
		Characteristic bending strength			min. 3,50 Mpa		
		Water absorption			max. 6 %, Class 2, Marking B		
		Freeze-thaw resistance			max.1 Kg/m², Class 3, Marking D		
		Abrasion resistance			max.18000 mm³ / 5000 mm², Class 4, Marking I		
		Slip/skid resistance			Appropriate		
		Reaction to fire			Class A 1		
		Reaction to external fire			Appropriate		
		Asbestos emission			Concrete slabs do not contain asbestos		
		Durability of resistance			No decreases in resistance were observed over time.		
		Hazardous substances			N/A		
Applicability:							
		Concrete elements are designed to withstand repeated freeze-thaw cycles.					

	Concrete elements have high wear resistance, ensuring durability under heavy traffic conditions and exposure to environmental factors.
	The product is recommended for pedestrian traffic.
	The products contain dyes that are resistant to the sun's ultraviolet radiation.
	Guarantee of product certification in accordance with EU regulations 305/2011.
	The Aqua Protect system is developed to protect the pavement from water infiltration in the SELECT gama.
Other specifications:	
Sustainability in the production of concrete elements:	The use of new generation cement with low CO2 emissions in our production process brings significant benefits in terms of both performance and sustainability. Thus, we actively contribute to reducing our carbon footprint and protecting the environment. We also rely on electricity generated by our own photovoltaic parks, thus reducing our dependence on conventional sources and promoting the use of renewable resources. This sustainable approach allows us to reduce our environmental impact, optimize production costs and offer our customers products made with responsibility towards nature.
Warranty:  	SYMMETRICA S.R.L. offers a 10-year warranty on Select paving elements from the date of purchase, provided that the beneficiary complies with the required handling, storage and maintenance conditions as well as the attached installation recommendations. Select paving has a lifespan of approx. 25 years.
Recommendations for the maintenance of paving elements:	We recommend using sand to increase grip on paved surfaces during winter. Caution! Do not use sodium chloride (salt) for this purpose. Do not use metal tools such as picks or crowbars to remove ice formed on the pavement.
Colours and structure:	Variations in colour and texture may occur due to the natural nature of the raw materials used in production. The dyes used are resistant to ultraviolet radiation from the sun. Over time, exposure to wear and weathering may lead to changes in the colour and texture of the paving surface, but these differences tend to even out with use. To obtain a surface with a special appearance and a uniform texture, we recommend that products taken from several delivered pallets (2-3 pallets) be used for assembly. From a technical point of view, small variations in colour and structure are inevitable, but these do not affect the resistance of the concrete elements and, as such, cannot be the subject of complaints.
Efflorescence:	Efflorescence occurs due to the hardness of the water and the limescale filler in the cement used, which is deposited on the surface of the concrete after the water evaporates. This phenomenon cannot be completely avoided from a technical point of view and does not in any way influence the technical characteristics of the concrete products. Under normal atmospheric conditions and through the use of the surface, this efflorescence diminishes over time and will generally not occur again. Efflorescence does not affect the quality of the products and is not considered a product defect or a reason for complaint.
Complaints:	To avoid any discrepancies between the order placed and the products received, we recommend a detailed check upon delivery. If discrepancies are observed between the order and the delivered products or a quality deficiency of the products, these will be reported to Symmetrica representatives before the assembly is carried out. The colour differences between the images in the promotional materials and the products are due to the typographical conditions and are not subject to complaint.
Contact details:	www.symmetrica.ro info@symmetrica.ro Tel: (+40) 230 522 619

Installation procedure for vibropressed slabs:
To install the pavement and curbs, it is necessary to establish the exact configuration of the land to be landscaped, making a sketch of the areas to be paved. Then, depending on the type of site (garden, alley, sidewalk, roadway, storage platform, industrial hall) and the models to be made, the type, thickness, colours and the required number of paving elements are established.
Assembly steps:
1. Marking the paving area In this stage, the paving area is measured and then delimited with wooden/metal stakes and string.
2. Removal of the green layer On the area to be paved, the surface soil layer is removed in a thickness of 100-350 mm. In the case of industrial platforms or areas with heavy and very heavy traffic, the thickness of the uncovered layer will be determined depending on the nature of the terrain. If the surface is flat, for drainage, a slight slope will be created during excavation. All roots and weeds will be removed. The voids will be filled with gravel / ballast and compacted, subsequently compacting the entire surface of the paving platform. To improve the load-bearing capacity of the soil and prevent the gravel layer from penetrating into the soil, geotextile sheets can be used between the soil and the base layer.
3. Making the base layer On the uncovered surface, the base layer (ballast or crushed stone) is placed with variable thickness depending on the final destination of the paved area. Also, the choice of base layer differs from job to job depending on the expected use of the paved surface. The flexible base layer of ballast or crushed stone mixtures is recommended for paving elements generally installed on portions that are not constantly and continuously loaded with very high loads. Depending on the traffic requirements, the base layer will have the following configuration: ▪ pedestrian traffic (for pavement with a thickness of 3 - 4 cm): compacted ballast layer with a thickness of 10 - 15 cm; ▪ light car traffic, maximum 3.5 t (for the select pavement range and for all types of slabs regardless of thickness): ballast layer according to the pavement thickness; ▪ light vehicle traffic, maximum 7.5 t (for pavement thickness 5 - 6 cm): compacted ballast layer with a thickness of 15 - 25 cm; ▪ heavy vehicle traffic, maximum 40 t (for pavement thickness 7 - 8 cm): compacted ballast layer with a thickness of 25 - 30 cm; ▪ heavy vehicle traffic, maximum 60 t (for pavement thickness 10 - 12 cm): compacted ballast layer with a thickness of 35 - 45 cm. The base layer material is distributed evenly on the embankment and levelled. The paved surface must have a drainage slope of 1%. This slope is achieved using metal rods that are inserted into the gravel layer, measuring the exact difference in level. The rods are supports for the levelling ruler. The gravel is compacted, in successive layers with a thickness of 10-20 cm, using a vibrating plate (130-500 kg in service) or a vibrating roller depending on the thickness of the layer to be compacted.
4. Laying a sand base layer A layer of dry sand (0-4 mm apron) with a thickness of between 30-50 mm is placed over the compacted foundation layer, called the paving bed. The sand layer thus laid is compacted with a vibrating plate, then "loss" sand is spread and levelled. The sand layer must be perfectly smooth, without marks. The prepared sand surface will not be used for traffic. For the final calculation of the height of the pavement, it is good to know that, in the end, by vibrating the pavement mounted on the sand, the height will decrease by 20 mm.
5. Installation of vibropressed concrete slabs Installation of paving elements on the sand layer is done by simply placing them in the desired configuration. A 2-3 mm joint remains between the paving elements. Levelling is done using a rubber hammer, with light taps towards the corners of the element. After finishing the installation of the paving elements on the sand layer, fine sand (granules of maximum 2 mm) will be spread in the joints, after which the paved surface will be swept thoroughly. For the final compaction of the paved surface, a plate vibrator (70-100 kg in service) will be used, with or without a rubber mat, depending on the type of pavement installed. If necessary, the joints will be refilled and the surface will be swept again. Fixing and vibrating the pavement is done in dry weather.

CROSS-SECTION 1 - 1
