

P R E beton

Products





Standards:



Concrete quality MSZ EN 12390-3



Dimensional Accuracy MSZ EN 13369



Weight ~2500kg/m 3



Colour

MSZ EN 12878

UV resistance

MSZ EN 12878



Fire resistance MSZ EN 1992-1-2



Frost resistance MSZ EN 4798



Sealing MSZ 4798 MSZ EN 12390-8



Wearing quality MSZ EN 4798



Surface roughness SB 2



Surface pattern

Surface possibilities:



shuttered



gentle drywall compound



rough drywall compound



washed



sandblasted



stickered



polished



deep polished



embossed

Standard colours:



white cement



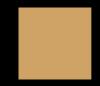
grey cement



white cement 110



grey cement 110



white cement 910



grey cement 910



white cement 306



grey cement 306



white cement GN



grey cement GN



As a member of Market Group, PREbeton Ltd. manufactures, assembles and processes prefabricated reinforced concrete structures.

Its services include design, manufacturing, transportation, and assembly, enabling it to provide quality construction in a full range of structural projects.

Its products have conformity marks, licenses and certificates according to Hungarian legislation.

The company operates according to the MSZ EN ISO 9001 quality management system, thus ensuring consistently high quality.



Planning:

PREbeton Ltd. manufactures the prefabricated reinforced concrete structures with its own designers and commissioned product design subcontractors. The product design department has many years of design and construction experience, they can ensure the parallel implementation of several projects at the same time. With the help of BIM systems and a modern design software environment, consistently high quality can be achieved. The further training of colleagues is ongoing to maintain competitiveness.



Product manufacturing:

The company manufactures the prefabricated reinforced concrete elements on a 6-hectare factory site in Erdőtelek. Production takes place in two heated, winterized production halls with the most modern technologies. Based on the product plans, the elements are manufactured with the help of a unique template park and own concrete plant, in the case of individual products with wood and steel hybrid formwork, for the preparation of which our own joinery and locksmith factory is available.



Transport:

The Company implements the fast and flexible transportation of its self-manufactured building blocks to the construction site with the help of its subcontractors. It can undertake the transportation of products up to 36 meters in length and up to 30 tons.



Structural assembly:

Under the supervision and direction of the construction manager, the construction of the frame structure is carried out by subcontractor assembly teams in the quality required by the current legislation and in maximum compliance with occupational safety regulations. Thanks to its mounting capacity, it is possible to carry out several construction sites at the same time.



Rebar machining:

The rebar machining department is equipped with fully automated rebar cutting and bending machines. Hungary's state-of-the-art technological machinery enables machining of rebar coils up to 16 mm diameter and fiber bars up to D40 mm diameter. Rebar orders can also be processed completely digitally using BVBS files.

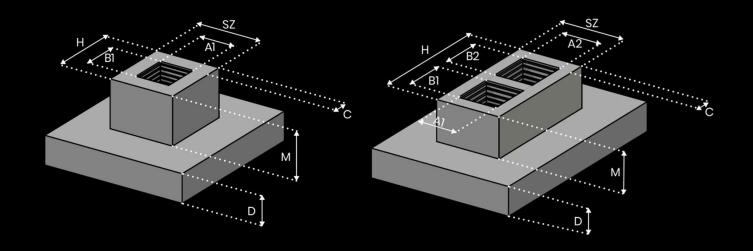


Foundation

Nowadays, the impaction of the pillars of reinforced concrete frame structures is ensured by prefabricated cup necks. For the base bodies, the cup neck is prefabricated, the base block is a monolithic reinforced concrete structure (flat foundation) but can be used in combination with any deep foundation method. (well foundation, basic block, micro or macro pile etc.)

The inner wall of the cup has a ribbed surface (the side surface of the pillar is also ribbed), so in case of proper concreting

The pillar works together with the cup almost monolithically.



notation	geometry
М	75, 85, 95, 105, 115, 125, 130, 135, 140, 145, 150 cm
SZ	100, 120, 130, 140, 150, 160, 170 cm
Н	100 -320 cm
С	15, 20, 25, 30, 35 cm
D	monolithic
Concrete cover	c = 2,5 cm - 5 cm

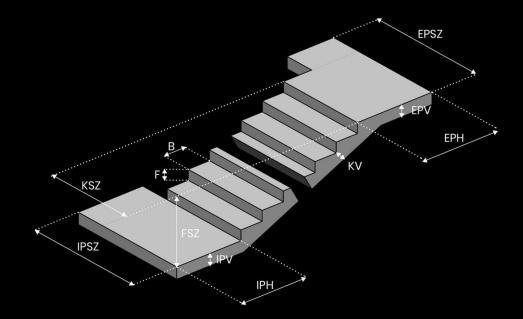




Stairs

In order to speed up construction work, prefabricated stairs and rest areas provide an economically favorable, fast and accurate option.

- Labour-intensive on-site formwork can be replaced
- Thanks to the well-thought-out construction system, the speed of construction is accelerated
- The batteries can be loaded immediately after placement
- Due to the formwork palette, there is a wide variety of sizes
- Stairs can be made without rest or with lower and/or upper rest
- Sound protection system can be delivered ready for delivery attached to the product.
- The stairs are made with all common up and entry sizes
- The steps can be made in faceted, rounded or cornered designs
- The upper surface of the staircase is made of apparent concrete quality, while the lower surface is plastered, prepared for painting and peeling
- The elements are delivered to the installation site "Just in time", which are placed by the construction company



notation	geometry
flight width (KSZ)	max 250 cm
upper landing width (EPSZ)	max 250 cm
lower landing width (IPSZ)	max 250 cm
landing thickness (IPV,EPV)	min 12 cm
flight thickness (KV)	min 12 cm
lower landing lenght(IPH)	max 150 cm
upper landing lenght (EPH)	max 150 cm
run (B)	20-32 cm
rise (F)	15-20 cm
number of rise (FSZ)	max 24 pc

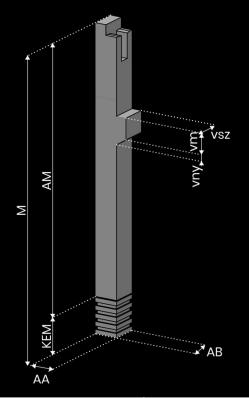


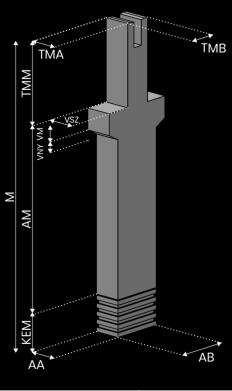
Column

Industrial hall pillars can be made in the required length and cross section based on static calculations.

Brackets can also be constructed receive to connecting beams and crane tracks at the desired places. The design of 4-sided brackets should be avoided for manufacturing reasons! The head design of the pillars can be chosen based on the type of beams.

Products can be made in single or multi-storey versions.





notation	AA	ВВ	ТМА	ТМВ	M
geometry	200-2000 mm	200-2000 mm	200-2000 mm	200-2000 mm	100-3000 cm

notation	ТММ	KEM	АМ	vsz	vm	vny
geometry	calculated					

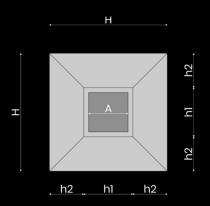


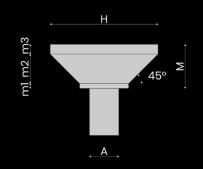
Colum heads

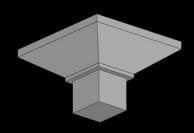
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notation	geometry
А	150, 200, 250, 300, 350, 400, 450, 500, 550, 650, 800, 850, 1000 mm
Н	consulted
М	consulted
hl	A + 50 mm
h2	(H - h1) / 2
ml	25 mm
m2	consulted
m3	<250 mm



Beams

During beam production, costefficiency is important, based on loads and spans, soft iron and prestressed beam production, which is determined by the static designer. By installation, we can talk about roof supports, intermediate slab beams and footbeams.

Roof supports may be made with cross-sections I, T, trapezoidal (V) and rectangular (N), with a parallel belt along their ridge lines or with a roof slope of 0 to 9 % in 1 or 2 directions.

Slab beams can be made in I, inverted, T, L, trapezoidal rectangular cross sections.

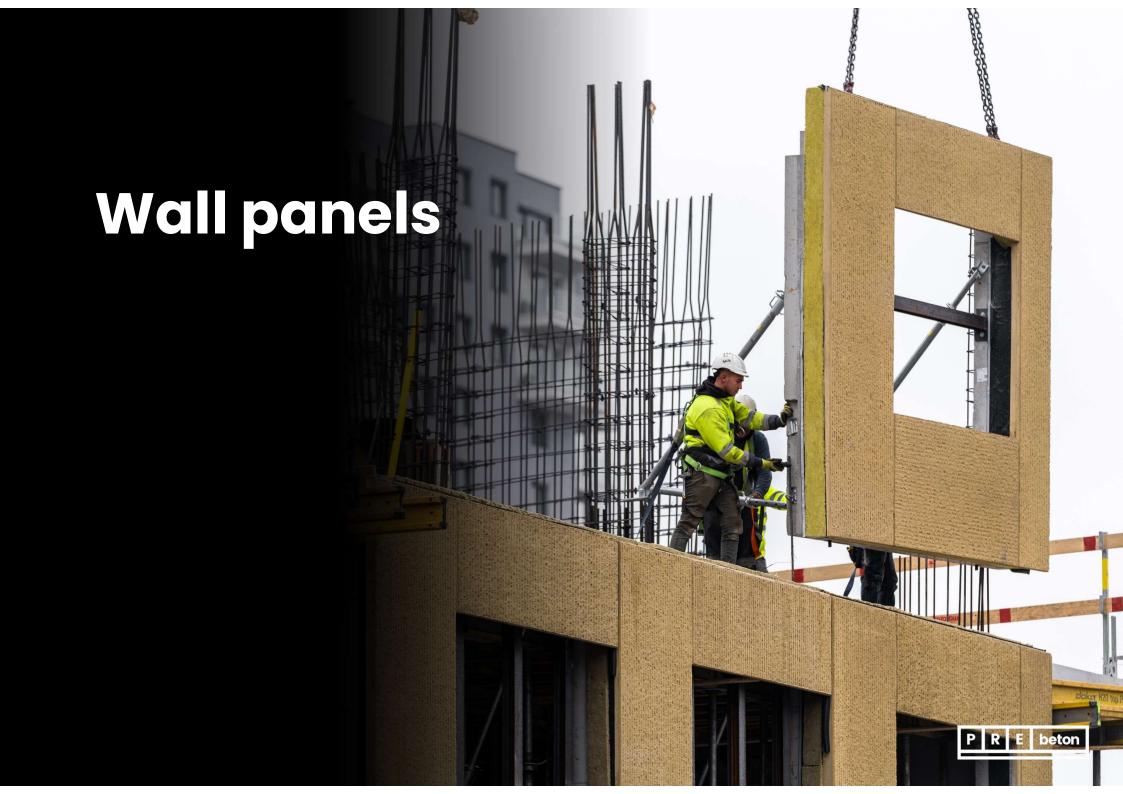
The design of the holder is always individually, taking done into account the customer's needs and complying with the relevant regulations and standards.

Beam cross-sections:

 \geq GV **GN1** GN₂ GN3 GII GI2 GT

notation	L	M	M′	
geometry	max 40 m	max 1800 mm	calculated	



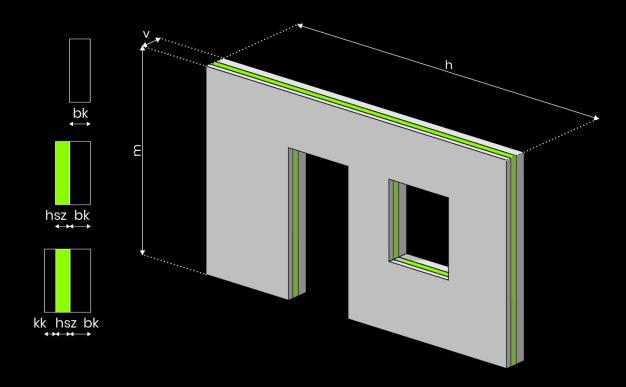


Wall panels

For construction sites where construction time is the most important consideration, or where a high-quality exterior appearance is required without scaffolding of buildings, our prefabricated sandwich wall elements are an excellent solution. Wall panels are suitable for residential, office and industrial buildings, as well as load-bearing and also as a frame filling device.

According to their structural design, they consist of a heat-insulating plate placed between two layers of reinforced concrete.

Thermal insulation can be made of polystyrene, rock wool in accordance with legal requirements or other load-bearing insulation material.



notation	h	m	v	bk	hsz	kk
geometry	max 10 m	max 4 m	max 75 cm	16-30 cm	2-20 cm	7 cm

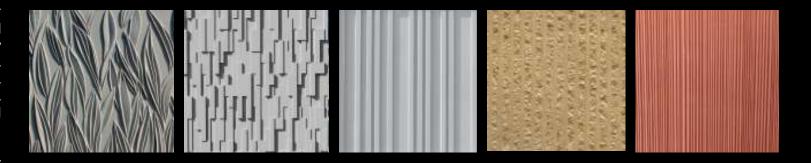


Wall panels

Facade surface design:

In terms of surface design, our company offers several solutions. Formworked, finely puttyed, coarsely puttyed, roughened, sandblasted, polished or deep sanded, embossed and sticked solutions are also available.

With formwork stickers, almost any wall surface pattern can be created.





Our panels are coloured in material and can be made in both standard and custom colours.





Plinth wall panel

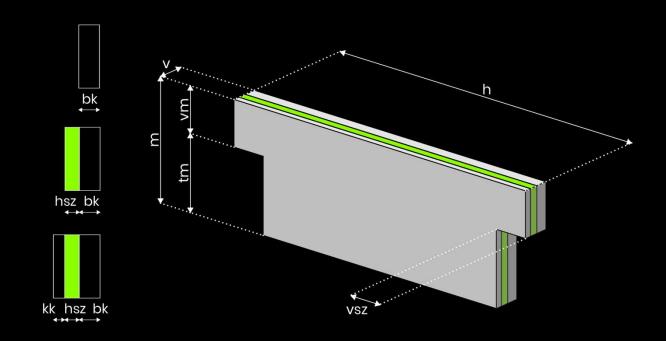
Prefabricated plinth can be made with one, two or three layers, open or closed cellular thermal insulation.

The single-layer structure is made with a design without thermal insulation.

In a two-layer structure, I layer of heat insulator is placed on the outside of the self-supporting panel.

In a three-layer structure, an intermediate heat-insulating plate is placed between the load-bearing inner bark and the external, visible bark.

The elements are attached to the pillars and foundation bodies by fittings placed during production.



notation	h	m	V	vm	VSZ	tm	bk	hsz	kk
geometry	max 10 m	40-400 cm	10-40 cm	0-100 cm	0-150 cm	=m-vm	10-40 cm	2-20 cm	7-15 cm





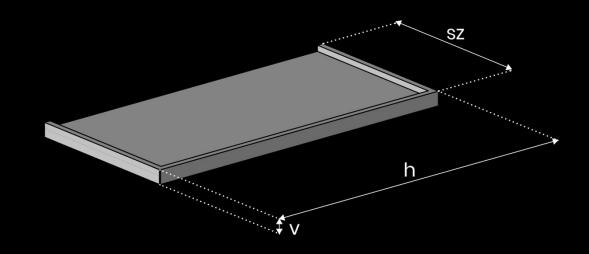
Balcony

Prefabricated balcony slabs can be a rational and cost-effective solution in construction.

Thanks to its design, it can be installed quickly and safely, so it can be used for new structures or renovation of existing buildings.

Benefits:

- · visible surfaces can be formworked
- walking surfaces do not require additional cladding or treatment
- border, rivers, slope integrated
- On-site formwork and concreting can be replaced
- does not require scaffolding
- · construction time is significantly shortened
- high quality
- Retrofitting independent of monolithic part of a building
- Just in Time delivery



notation	h	m	V	pillar diameter	Thermal break
geometry	max 250 cm	max 12 cm	min 14 cm	min 10 cm	min 8 cm



Loading docks



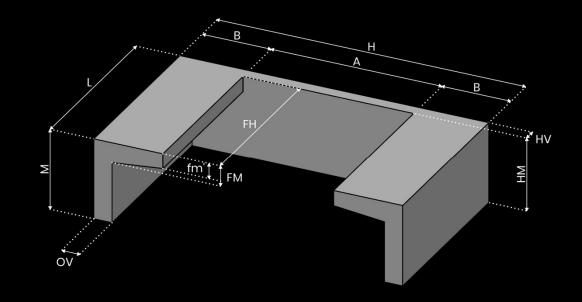
Docking station

The truck docking shaft is an excellent structure for accessing warehouses, goods loaders and department stores by truck and forklift.

The elements made by our company are manufactured and delivered in one piece, making installation easier, and if required, the elements can be manufactured separated on their axis of symmetry.

Our docking stations are designed to accommodate several types of scissor lift or tilt ramps.

In order to work with the building structure, the docking element is formed with appropriate connecting ironing.



notation	Н	A	В	FM	fm
	3400 mm		760 mm		200 mm
geometry	3200 mm	max 4 m	660 mm	230 mm	205 mm
	3000 mm		560 mm		210 mm

notation	HV	М	НМ	L	ov
geometry	140 mm	230-1400 mm	230-1400 mm	140-3000 mm	200 mm



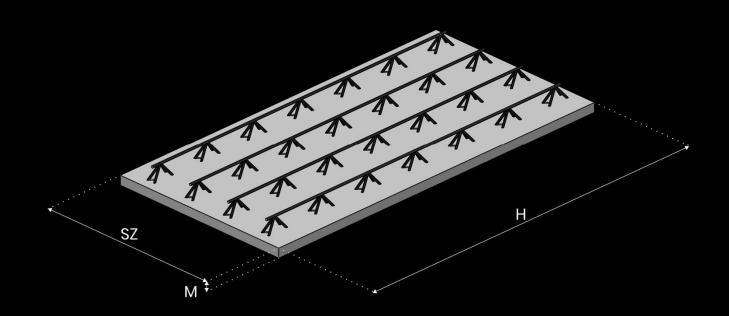
Streched slab panel

It provides a solution for fast feasible

slab construction, a prestressed slab manufactured by our company. The panels consist of 14 cm precast reinforced concrete slab and on-site reinforced wall concrete. The resulting slabs fully comply with both the static and fire safety conventional reinforced concrete slab structure.

Benefits of using a prestressed slab:

- faster, easier execution
- no support is required up to certain dimensions
- its lower surface is smooth and easy to prepare for painting
- individual building geometry can also be used



notation	geometry			
SZ	1195 mm			
М	140 mm			
Н	based on the table			
Strand qty	16, 18 pc			

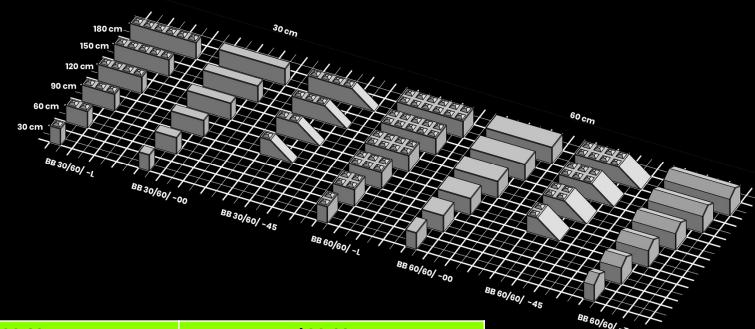




Concrete block

With our concrete blocks – also known as Lego bricks – we offer a flexible and cost-effective product for temporary buildings, warehouses, bulk material storage, partitioning and retaining walls.

Thanks to the simple application, no mounting material is required.



type	width 30 cm	width 60 cm	
	lenght		
L	30, 60, 90., 120, 150, 180 cm	30, 60, 90., 120, 150, 180 cm	
00	30, 60, 90., 120, 150, 180 cm	30, 60, 90., 120, 150, 180 cm	
45	90., 120, 150, 180 cm	90., 120, 150, 180 cm	
Т	-	30, 60, 90., 120, 150, 180 cm	

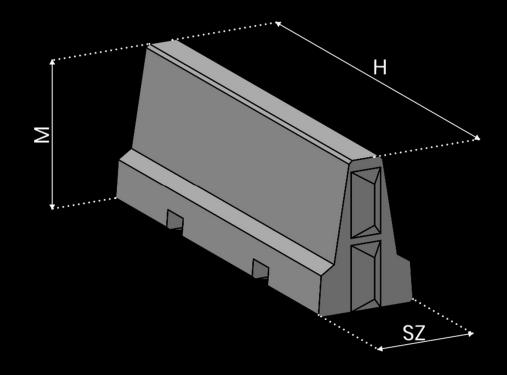
The height of the concrete blocks is uniformly 60 cm

Road divider

Quick and easy installed element for delimitation, road separation or restrict vehicle entry, that also can function as a base for fencing.

Items are not certified.

Not for public roads, but can be used without problems on private roads and private areas.



notation	н	М	SZ	volume
geometry	2000 mm	900 mm	450 mm	0,65 m³