





Application

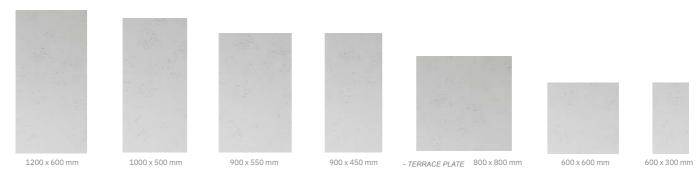
- INTERIORS, FACADES, FENCES AND SMALL ARCHITECTURE

Architectural concrete VHCT is a simple form of interiors with a modern character. Precise technology allows to obtain slabs with high aesthetic values. Surfaces of the concrete can be smooth, porous, coloured or with exposed aggregate. This gives the possibility for a wide range of applications in interiors and facades. Concretes combine quality, aesthetics and naturalness. A wide palette of colors, easy drilling and cutting allow creating interesting arrangements.

High frost resistance, low water absorption, resistance to UV radiation architectural concrete is perfect for facades or fences. VHCT concrete panels are fixed with visible and invisible anchors and also with glue. Additional surface impregnation guarantees durability. Minimalist style of architectural concrete is a way into the future of bold architecture, including small ones.



















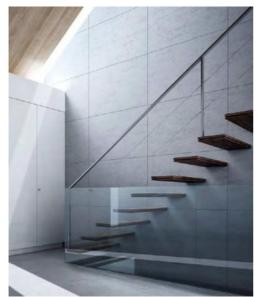








1200 x 600 mm





600 x 600 mm







- TERRACE PLATE



800 x 800 mm



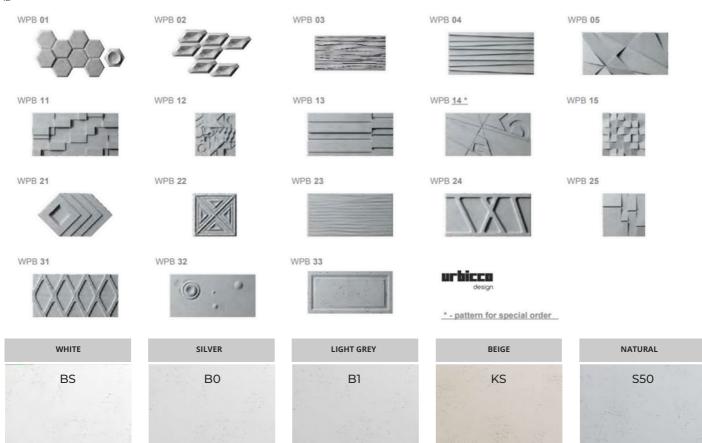
1200 x 600 mm

The concrete shapes are so rich that every customer will find an exciting inspiration. Our product range includes panels with classic 2D structures and sophisticated, abstract and mesmerizing 3D panels. Our years of experience and great creativity allow us to offer unique spatial patterns that will change every arrangement. We are sure that 3D architectural concrete panels will meet the expectations of even the most demanding customers and present any interior design with a distinctive and impressive look. When betting on this natural, high-quality finishing material, it is possible to obtain an impressive visual effect.





3D COLLECTION



WPB 06 WPB 07 **WPB 08** WPB 09 **WPB 10 WPB 16 WPB 17 WPB 18** WPB 19 **WPB 20** WPB 26 WPB 27 **WPB 28** WPB 29 * **WPB 30 GUARANTEE OF QUALITY** APPLICATING COMPANY CHEMISTRY



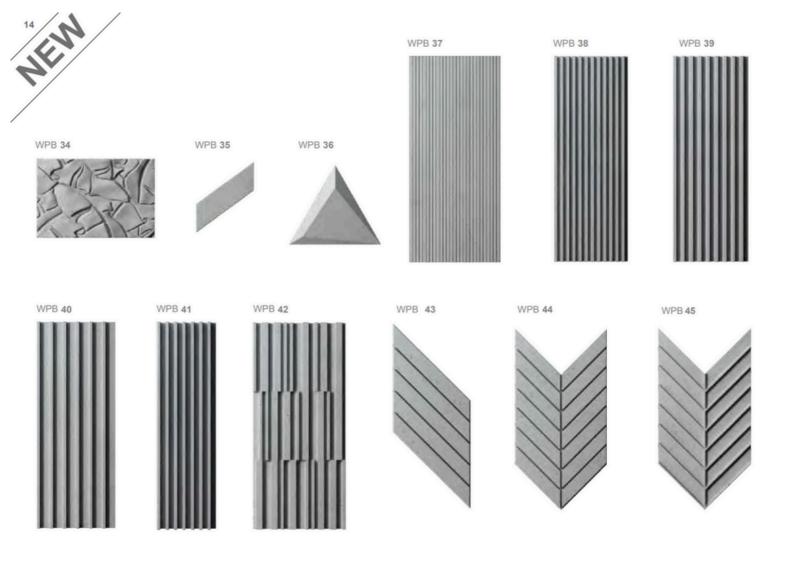


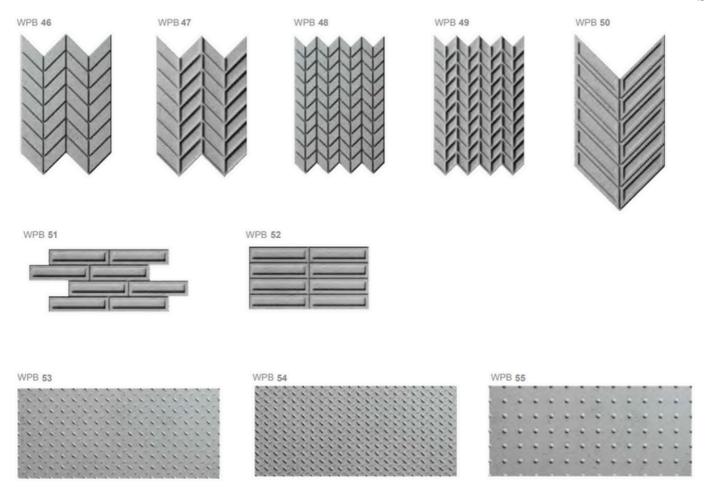












16

WPB **O1**

0,48 m2

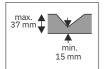


975 x 650 x 35 mm

0,06 m2



260 x 300 x 37 mm





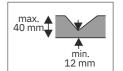




0,07 m2



448 x 200 x 40 mm







1000 x 500 x 32 mm













1200 x 600 x 40 mm















1200 x 600 x 48 mm















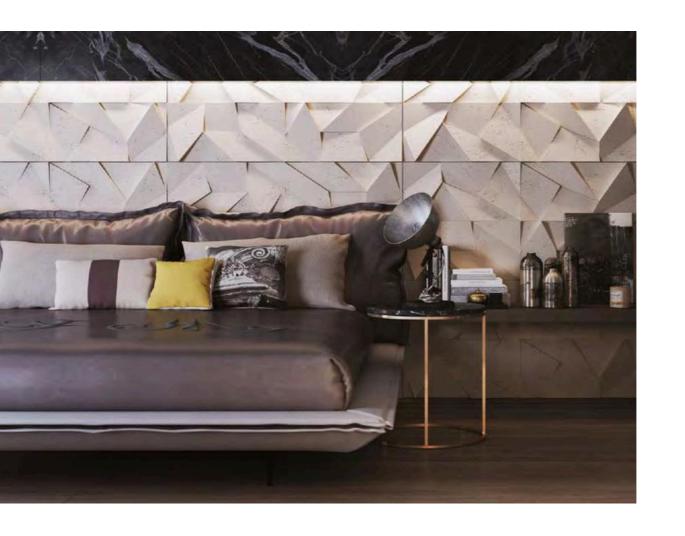


600 x 600 x 38 mm











1200 x 600 x 45 mm









PB 08



1200 x 600 x 40 mm









1200 x 600 x 40 mm















600 x 600 x 40 mm









1200 x 600 x 40 mm















600 x 600 x 40 mm









1200 x 600 x 40 mm













600 x 600 x 40 mm







30



600 x 600 x 45 mm











1200 x 600 x 30 mm











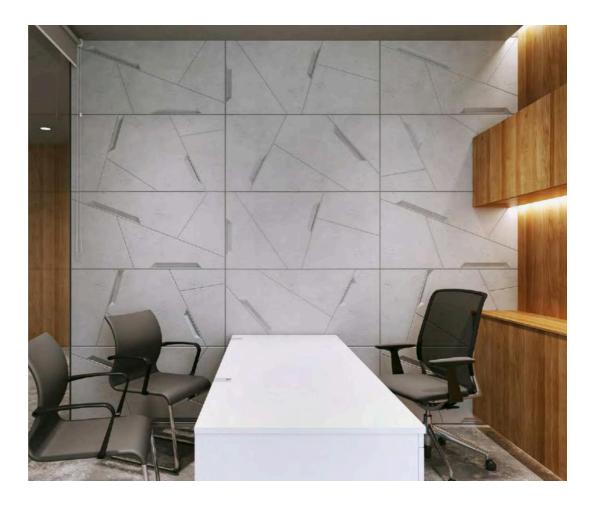


1200 x 600 x 30 mm













1200 x 600 x 45 mm







0,45 m2



1050 x 600 x 45 mm













600 x 600 x 40 mm











1200 x 600 x 25 mm















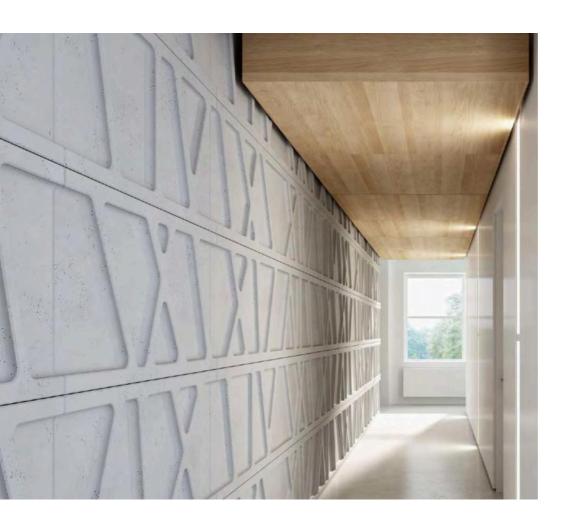


1200 x 600 x 45 mm









38



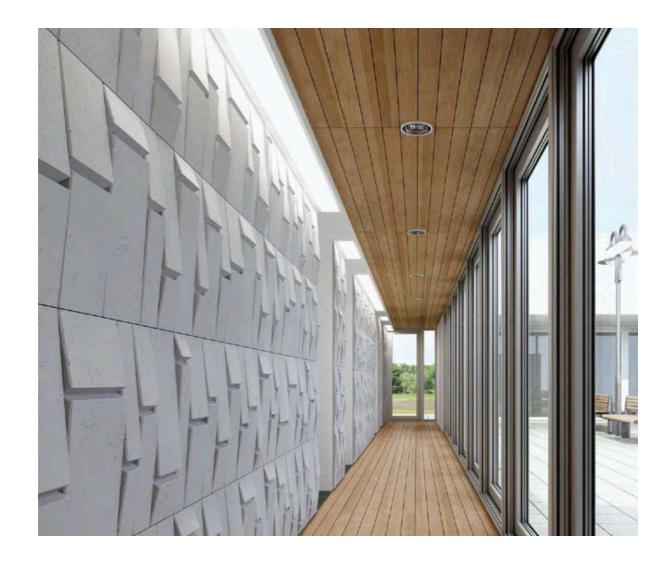


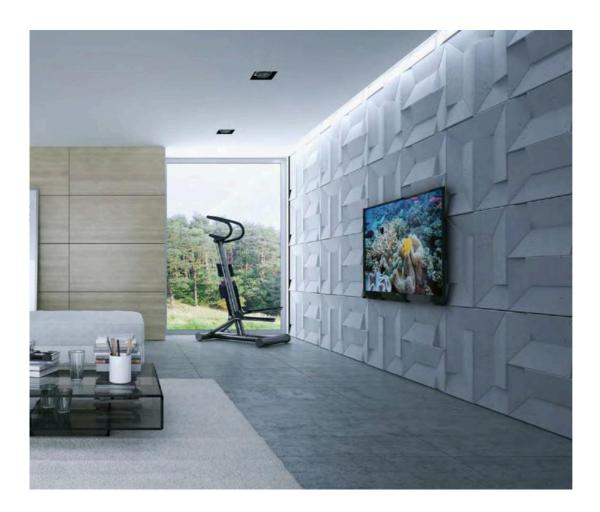
600 x 600 x 45 mm















600 x 600 x 45 mm







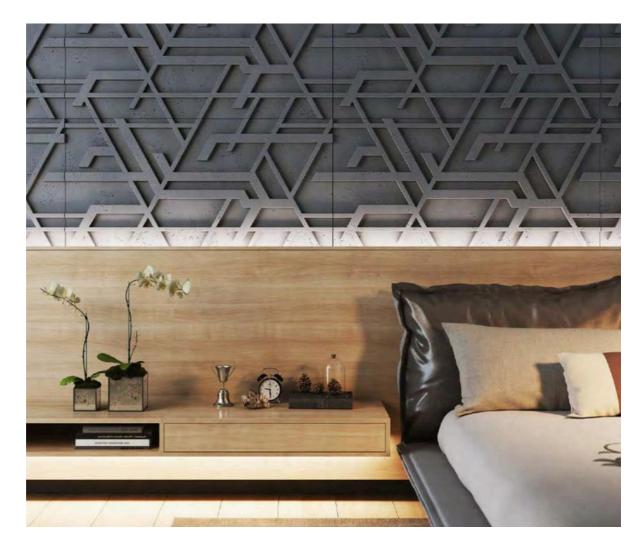


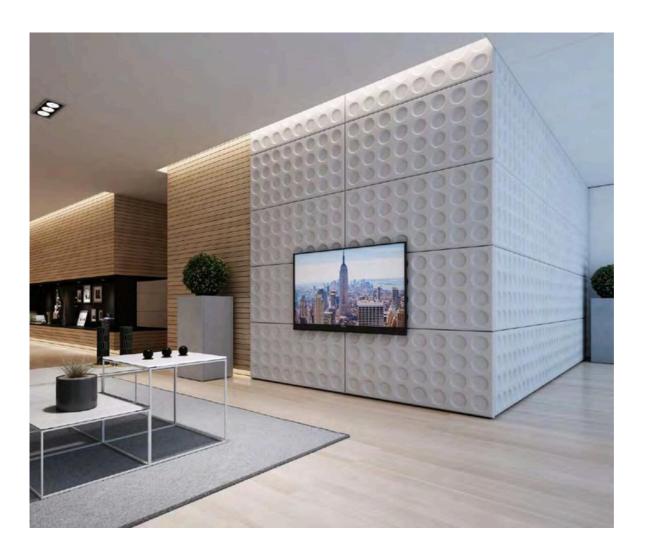
1200 x 600 x 35 mm













1200 x 600 x 30 mm





42



1200 x 600 x 20 mm











1200 x 600 x 30 mm









44





1200 x 600 x 40 mm











1200 x 600 x 30 mm



600 x 600 x 30 mm











720 x 480 x 40 mm











395 x 117 x 20 mm









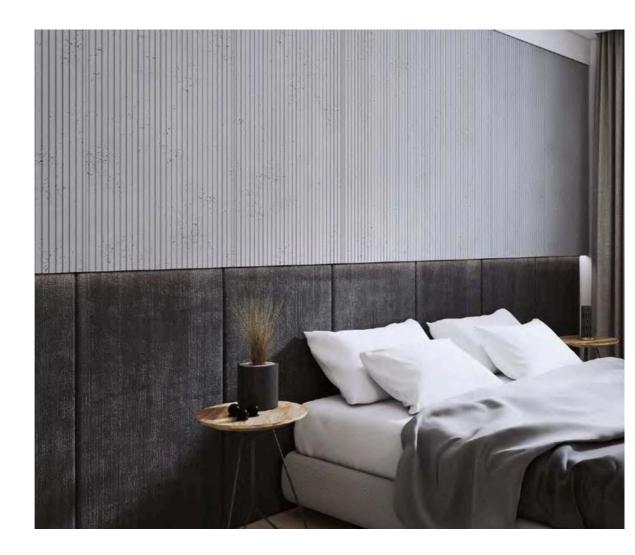
0,81 m2



1350 x 600 x 12 mm











600 x 600 x 30 mm





0,65 m2

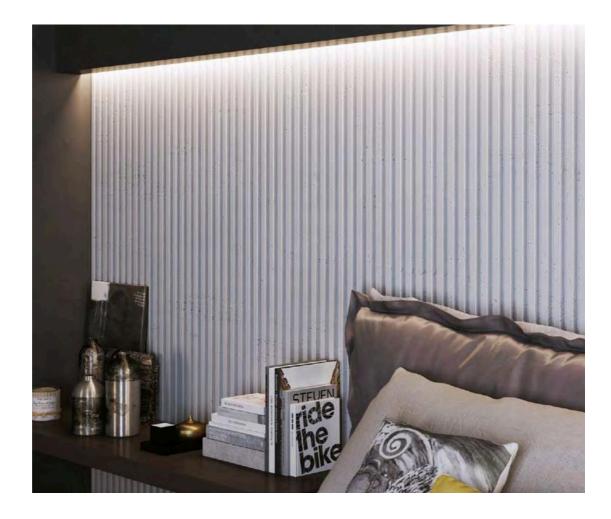


1350 x 478 x 30 mm











VPB **39**



1350 x 489 x 30 mm







PBW 40



1350 x 478 x 30 mm













1350 x 380 x 30 mm







PBW 42

0,65 m2

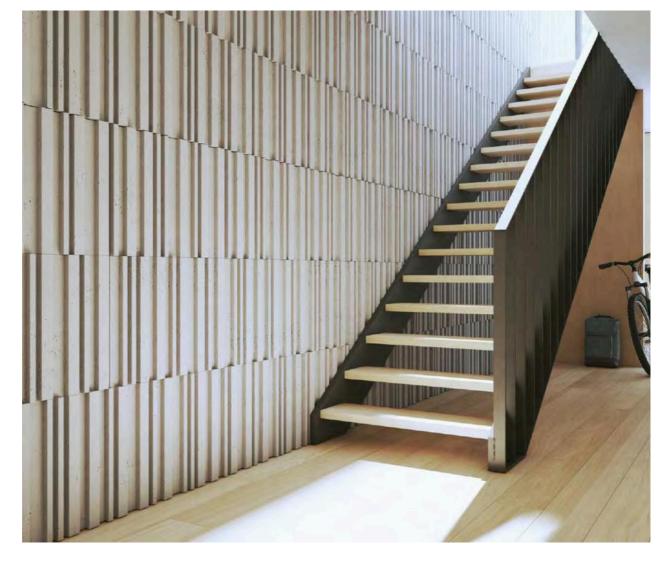


1350 x 478 x 30 mm











0,35 m2



121 x 501 x 25 mm











0,53 m2



1188 x 600 x 25 mm











0,53 m2



1188 x 600 x 25 mm









PBW 46

0,47 m2



939 x 600 x 25 mm







0,53 m2



1188 x 600 x 25 mm









1188 x 935 x 25 mm











0,51 m2



1188 x 935 x 25 mm













1156 x 600 x 20 mm











0,33 m2



800 x 414 x 20 mm









0,33 m2



1053 x 414 x 20 mm











0.81 m²



1350 x 598 x 13 mm











1350 x 598 x 13 mm











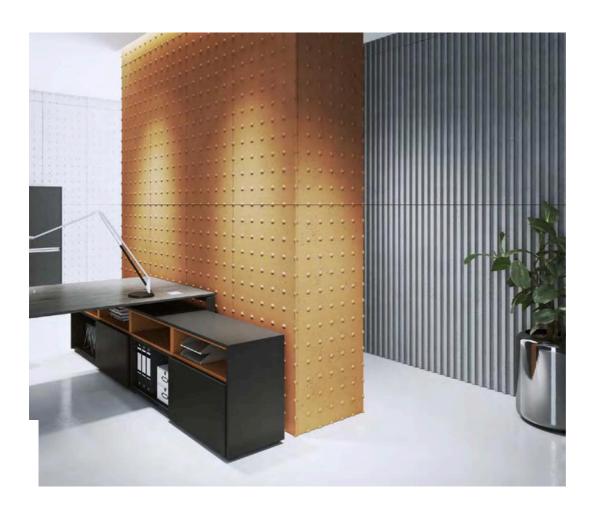


1350 x 598 x 13 mm







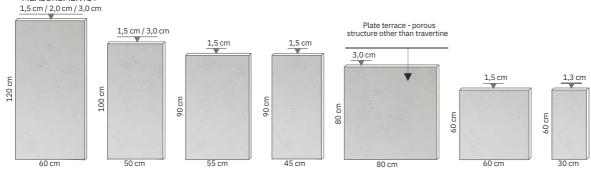


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VHCT VHCT Quality Certificate
Architectural concrete holds the CE mark
and is produced according to the
and is produced according to the
Concrete walls PN-EN 14992 + A1. 2012
Concrete walls PN-EN 14992 + A1. 2012
Patio slabs measuring 80×80/30 (cm)
meet the requirements of standard PNEN 13748 – 2: 2006 / Apl. 2: 2006 Terrazzo tiles. Part 2: Terrazzo tiles for
oxternal Uses.

TYPE OF PANEL		TECHNICAL DATA			
FORMAT (cm)		PACKAGE	NUMBER OF PIECES ON A PALLET	WEIGHT (1 piece)	MONTAGE
length / width / thickness	SZT / M2	SZT / M2	SZT / M2	KG	
60 x 30 x 1	5,55	5 / 0,9 1	240 / 43,2	3,3	GLUE BOLTS
60 x 60 x 2	2,77	/ 0,36 1 /	64 / 23,04	13	GLUE-BOLTS
60 x 60 1,5	2,77	0,361/	64 / 23,04	11	GLUE-BOLTS
90 x 45 x 1,5	2,5	0,4051/	25 / 10,125	10	GLUE-BOLTS
90 x 55 x 1,5	2,02	0,495	25 / 12,375	11,5	GLUE-BOLTS
100 x 50 x 1,5	2	1/0,5	32 / 17,5	15,2	GLUE-BOLTS
100 x 50 x 2	2	1/0,5	32 / 17,5	15,2	GLUE-BOLTS
120 x 60 x 1,5	1,4	1/0,72	25 / 18	22	GLUE-BOLTS
120 x 60 x 2	1,4	1/0,72	30 / 21,6	26	GLUE-BOLTS
120 x 60 x 3	1,4	1/0,72	26 / 18,72	33	GLUE-BOLTS
80 x 80 x 3	1,56	1/0,64	22 / 14,08	42	STABLE AREA

MEASUREMENTS:



DECLARED PROPERTIES

ESSENTIAL CHARACTERISTICS	PROPERTIES	HARMONISED TECHNICAL SPECIFICATION
Concrete cladding	Strength class 30/37	
Tensile strength in bending	≥ 2,0 (Mpa)	
Density class	1,8	
Dimension tolerance	Class A (±3 mm)	
Reaction to fire	Euroclass A1	
Water vapour permeability	μ = 5/15	PN-EN 14992+A1:2012 PN-EN 13369:2013-09
Dimensional stability under the influence of moisture and drying. Shrinkage due to drying out (inside/outside)	0,60/0,34 (mm/m)	
Insulation from direct airborne sound	Gross density ≤ 1800 kg/m3	
Resistance to freezing and thawing with de-icing agents	< 0,6 kg/m2	
Wear resistance class	4	
Application	outdoor / indoor	

All work must be carried out in accordance with the rules of the art. The above description has been drawn up based on the knowledge and experience of the manufacturer. At the construction site, always check individual conditions for installation.

Rubber

Mounting pin invisible



MOUNTING SYSTEM OF CONCRETE PANELS

(standard version) - internal and external application:

without substructure

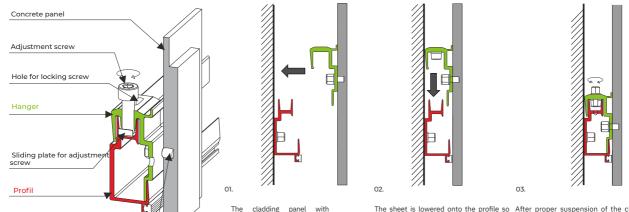
Rubber

Use of rubber between the sheet and the mounting profile eliminates noise which may arise in the case of vibrations caused by wind. VHCT offers such a solution as the only supplier of this type of construction. Rubber can also be used for slight adjustment of the plane of deformed sheet by placing it in places where the sheet touches the horizontal profile.

Sliding plate for adjustment screw

element of the profile.

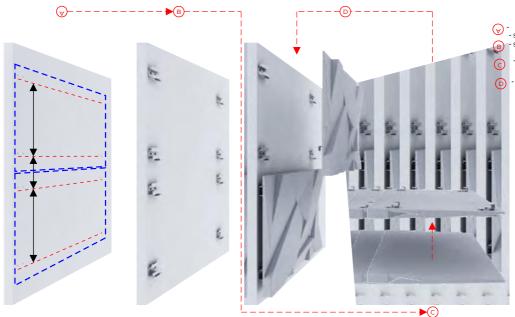
The use of a rustless pad under the adjustment screw protects the aluminium profile against dial a hole. The adjustment screw can move along the axis of the profile. Profile features protection as use only supplier of such structures.



attached hangers is attached so that the

hanger was above the profile.

The sheet is lowered onto the profile so. After proper suspension of the cladding panel on the that the hanger is placed on the proper profile, it is screwed with an elevation screw and the adjustment of the level and height is made.

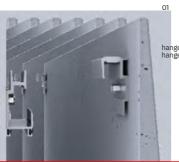


- preparation of the holes for mounting rails - screwing the rails

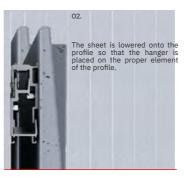
screwing hangers into prepared holes

- affixing the hangers in the selected places

- suspension of panels / adjustment

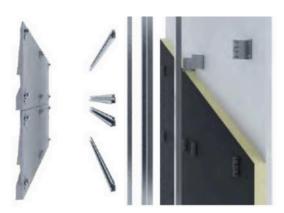


The cladding panel with attached hangers is attached so that the hanger was above the profile.



03.

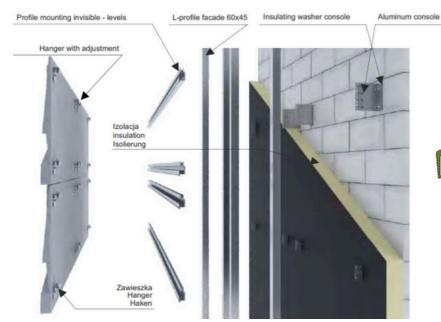
After proper suspension of the cladding panel on the profile, it is screwed with an elevation screw and the adjustment of the level and height is made.

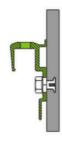


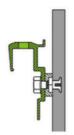
MOUNTING SYSTEM OF CONCRETE PANELS

- internal and external application:









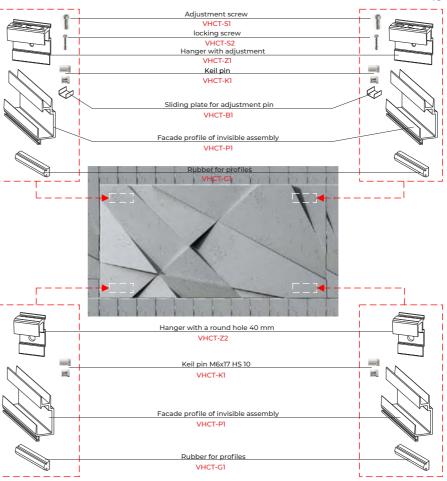


Keil pin: - direct installation without a spacer

Keil pin: - direct installation with a spacer

SFS pin: - direct installation without a spacer





CONCRETE CONNECT





CEMENT ADHESIVE VHCT-SILVER TYPE C2TE



PERFECT GRUNT VHCT PROFESSIONAL DEEPLY PENETRATING PRIMER





WHITE









GUARANTEE OF QUALITY APPLICATING COMPANY CHEMISTRY









ENGLISH □ **IMPORTANT**

A VHCT concrete panels are not DIY products and need to be stored, unpacked, handled and installed ONLY by experienced professionals. A Make sure to provide adequate support for the panels after removing the safety tape. Use extreme caution to avoid the risk of accidents or damaging the panels. A Before installation, the panels need to acclimatise to the room conditions for at least 48 hours. Allow uniform air access to both sides of each individual panel. We recommend using polystyrene spacers. A When using water-based adhesives for installation, both the VHCT panels and the designated wall/surface should always be primed before installation. Water-based glue application without the use of any primer may bend already installed concrete panels and cause discolouration. A Exposure of the panels to humidity and weather conditions may damage their structure and cause alterations. (e.g. bending, swelling, breaking, discolouration, etc.). Please carefully follow the storage, maintenance and installation instructions provided.

PRODUCT DESCRIPTION:

VHCT architectural concrete is intended for decoration of interior walls and facades in accordance with the applicable application harmonized technical specification. Made by the casting method, it has the following properties: diverse structure, shades characteristic of natural stone, delicate point discoloration, aesthetic and decorative finish with deviations of up to \pm 3 mm. The VHCT concrete used for the production of concrete panels is of high quality, it has product type tests, it is a subject to factory and external quality control.

BEFORE INSTALLATION

In order to maintain the natural appearance of the wall, it is recommended to take the boards from different places on the pallet. At this stage, it is necessary to re-check the colours of all panels. 3. The dimensions of the boards may slightly vary in length and width, within the declared tolerance.

4. The cement-lime wall should be well cleaned of dust and paint. Clean the boards from dust from the gluingside, 5, Make sure that the wall is load-bearing and properly primed. Apply primer to the wall with a brush until it is completely saturated. Absorbency should be checked one hour after the last application of the primer and repeat until successful, depending on the absorbency of the wall. PERFECT GRUNT should be used for priming VHCT. After priming, wait 8-24 hours for the primer to dry, and before gluing panels. 6. The panels should be placed in front of the wall in order to place them on the wall according to the pattern and shade. Before installation, check the color and type of panelsagain, 7. The panels should be impregnated (if additionally required) in a horizontal position using VHCT PERFECT IMPREGNAT, Excess impregnation, which concrete does not absorb, should be removed immediately, e.g. with a sponge roller. 8. Impregnation should be performed first on two or three panels and after approx. 2 hours if the boards are dry as a whole (no traces of wet impregnation), continue impregnation on subsequent boards.

STORAGE

Concrete panels should be stored in a vertical position, leaning against the wall with the long edge of the board, in a dry position and a ventilated room. Store without wrappingfoil. Do not store the concrete panels outdoors. The method of packing prevents air access to the boards, which may or may not affect the colors discolor the boards if panels are not property unpacked and stored.

INSTALLATION

For gluing concrete slabs use: - VHCT CONCRETE CONNECT for most types of substrate: glass, sanitary ceramics, porcelain, painted, enameled, glazed surfaces, plaster, building ceramics, clinker, concrete (including: wet concrete), epoxy substrates. polyester, polyurethane, HPL, styrodur, PVC and plastics of a similar type, metals and their alloys (copper, lead, zinc, aluminum, etc.), steel (galvanized, stainless, enameled), impregnated wood, cork, MDF, OSB, chipboard and other woodbased materials. For connections with highly porous or absorbent substrates, it is recommended to use VHCT PRIMER. In case of doubt, carry out an adhesion test. We recommend using glues: - VHCT SILVER - for cement, concrete and ceramic substrates - has accelerated setting and reduced drying time. for discoloration-sensitive materials. - VHCT ELASTIC - for plasterboards - has accelerated setting and shortened drying time, contains a special elasticity additive, negligible shrinkage, for materials sensitive to discoloration.

Adhesive methods: A: Installation with glue:VHCT SILVERandVHCT ELASTIC Follow the adhesive manufacturer's recommendations, in particular with regard to the amount of water! It is recommended to glue dry boards to the socalledcomb, a) the substrate must be load-bearing, free from loose fragments, cleaned, dusted off and degreased; b) the adhesive should cover at least 90% of the board surface in contact with the wall, gaps in the adhesive mass can lead to cracks in the plate; c) it is forbidden to make a "frame" with glue on the board, gluing the so-called method "on glue dabs; d) it is not allowed to use glue thicknesses greater than 10 mm, with glue thickness greater than this may occur discoloration. deformation, cracks in the panel; e) it is not allowed to hit the boards with a hammer or hand when sticking, he sure to press the boards down until obtaining permanent connection of the adhesive on the entire surface of the board with the wall: f) when fixing the board to the wall, make a minimum circular movement in order to set the board and pressing the glue to achieve the effect referred to in point B.e); g) panels with even temperature of panels should be installed in the room where they are installed: h) should be installed at temperatures between 5 and 25 degrees Celsius; i) the comb (trowel) should be applied in such a way that it does not cross, i.e. from left to right or top to bottom (or vice versa), but never both! B. Installation with glue: VHCT CONCRETE CONNECT a) the substrate must be load-bearing, free of loose fragments, cleaned, dusted off and degreased; b) a reinforced construction squeezer designed for thick masses should be used; c) the adhesive should be squeezed through the attached applicator with the 'V' notch, holding the cartridge at an angle of 90 ° to substrate; d) the adhesive should be applied in vertical, parallel strips at intervals of 20 cm (depending on the load); e) the glued elements should be joined together and pressed within 10 minutes from applying the glue; Walls made of gypsum plaster are not a stable surface, they are not suitable for installation and we recommend individual consultations with a specialist installer. An example of mounting on walls with plasterboard or with gypsum plaster: → anchored plaster board + GRUNT VHCT + VHCT CONCRETE CONNECT adhesive: → anchored OSB board + GRUNT VHCT + VHCT CONCRETE CONNECT adhesive. OSB board - remove the varnish by sanding. Use clean gloves during assembly. Any stains should be removed immediately after they appear, before drying. Install architectural concrete slabs with a gap of about 3-4 mm between the slabs, leaving a gap. Without fillings, keep dilatation from walls and ceiling. All

concrete works should be performed with diamond tools and drill bits should be used intended for use in concrete without impact. Acceptable cleaning agents: soapy water, fine polishing sandpaper 2000. Installation on the facades should be based on the design and good construction practice. The type of installation system is selected individually.

DECLARED PERFORMANCE:

Characteristic of the material: Concrete claddingelement Bending tensile strength - ≥ 2,0 (MPa) Density class - 2.2

Dimensional tolerances: Class A (±3 mm)

Reaction to fire: Euroclass A1

Water vapor permeability coefficient: µ = 5/15 Dimensional stability under the influence of moisture and drying.: 060 mm/m. Shrinkage due to drying out (inside / outside): 0.34mm/m.

Insulation against direct airborne sounds: Gross density 2200 kg / m3 ≤ Resistance to freezing and thawing with participation de-icing agent: < 0.6 kg/m2.

All works should be performed in accordance with the

construction practice. The above description has been prepared according to the state of the Art and the Producer's experience. Always check your own installation conditions on site. The technical data sheet does not replace the professional knowledge of the installer!

IMPORTANT INFORMATION

The information contained in this document results from our experience and previous knowledge, however, it is not binding. The conditions of a particular implementation should be judged onsite and considered on a case-by-case basis, e.g. wall type or place of installation, purpose and expected effects. In any case, the general principles of construction technique and the guidelines given by the material manufacturers must be observed. Installation should always be carried out by professionals experienced in this type of work. The manufacturer is not responsible for incorrect installation, not compliant with the information included in this Manual and in the documents referenced therein, including Adhesive Information Cards, in particular for the wrong assessment of the load capacity and the condition of the construction of the wall. By placing an order, the buyer declares that he is familiar with the features of architectural concrete, including those listed in this Manual and accepts them. The buyer also acknowledges and accepts the possibility of visual, aesthetic and colour differences in relation to marketing materials, photos, visualisations and samples.