

BRIGHT UNDULATING COLOURED AND GLAZED GLASS BLOCK



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1. CODE REGISTRY

Code	Description	Colour	(mm)	Weight (kg/pc.)	Pkg. / Pallet
VET02-5001	Bright undulating glass block	White	190 x 190 x 80	2,375	10 pc. / 360 pcs.
VET02-5002	Bright undulating glass block	White	240 x 240 x 80	2,375	5 pc. / 200 pcs.
VET02-5003	Bright right undulating glass block	White	190 x 90 x 80	1,400	10 pc. / 720 pcs.
VET02-5011	Bright undulating glass block	White	190 x 190 x 80	2,400	10 pc. / 360 pcs.
VET02-5011/E	Ultra-Bright undulating glass block	White	190 x 190 x 80	2,375	5 pz / 420 pz.
VET02-5016SA	Blue Satin undulating glass block	Blue	190 x 190 x 80	2,400 kg/pc.	10 pc. / 360 pcs.
VET02-5017SA	Pink Satin undulating glass block	Pink	190 x 190 x 80	2,400 kg/pc.	10 pc. / 360 pcs.
VET02-5026SA	Green Satin undulating glass block	Green	190 x 190 x 80	2,400 kg/pc.	10 pc. / 360 pcs.
VET02-5018SA	White Satin undulating glass block	White	190 x 190 x 80	2,400 kg/pc.	10 pc. / 360 pcs.
VET02-5016	Blue undulating glass block	Blue	190 x 190 x 80	2,100	10 pc. / 360 pcs.
VET02-5017	Pink undulating glass block	Pink	190 x 190 x 80	2,100	10 pc. / 360 pcs.
VET02-5026	Green undulating glass block	Green	190 x 190 x 80	2,100	10 pc. / 360 pcs.

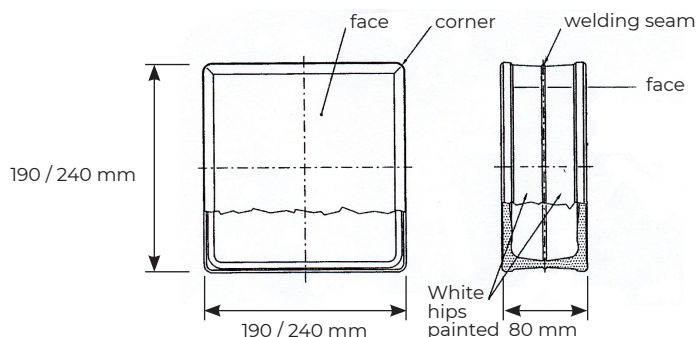
MATERIAL

Made of cast glass, laminated and varnished laterally to increase the gloss.

Essential features	Performance	Technical specification
Fire resistant	AI	EN 13501-1:2003
Fire resistance class	E 60	EN 13501-2:2023
Bullet penetration resistance	NPD**	EN 1522:2000
Burglary resistance	NPD**	EN 13541:2012
Resistance to temperature differences	NPD**	EN 356:2000
Resistance to temperature differences	30 K	EN 1051-2:2007
Mechanical strength (Compression force)	> 9 MPa	EN 1051-1:2003
Soundproofing	37 dB	EN 717-1:2020
Thermal insulation	3,0 Wm ⁻² K ⁻¹	EN 673:2011
Light transmission: clean sandblasted (on 1 side) sandblasted (on 2 side)	80 % 70 % 61 %	EN 410:2011
Light transmission: clean sandblasted (on 1 side)* sandblasted (on 2 side)	79 % 72/76 % 69 %	EN 410:2011

* First value i determine for radiation incidence onto non-sandblasted surface, second onto sandblasted one

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2. USE

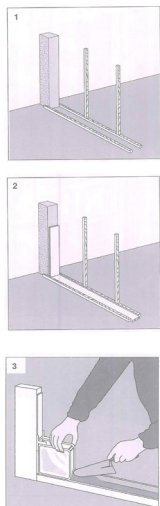
Used for a variety of architectural solutions also acting as a structural element of furniture.
It allows the passage of the light and/or singular chromatic effects in the environments.

Installation consists of three phases:

- Preliminary phase
- Installation phase
- Finishing phase

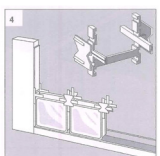
The walls must lean against and be anchored to rigid, appropriately sized supporting structures, these must be rimmed with rot-proof material that is thick, dense and hard enough to absorb structural expansion, settling and slipping.

PRELIMINARY PHASE



1. Make sure that the supporting structures are vertical and horizontal.
Place two wooden strips horizontally on the surface where the wall will be built.
The strips must follow the wall, and the distance between them must be equal to the thickness of the glass blocks you will be using.
Arrange the vertical guides, they must be plumb, and 100/120 cm apart to assure that the wall itself will be perfectly plumb. The wall must be perfectly vertical both lengthwise and upwards in order to avoid eccentric loads.
2. Place a slip joint into the horizontal strips to prevent expansion/friction between the base of the panel and the supporting surface.
Place the expansion/settling joints on the side and at the panel support points.
3. Use a trowel long enough to allow you to work easily between the vertical reinforcement bars.
Apply cement mortar between the base strips, it must be at least 1,5 cm thick and proportionate to the height of the wall.
Position the first row of glass blocks.

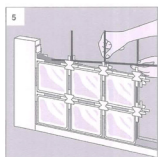
INSTALLATION PHASE



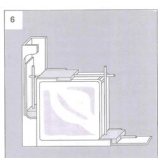
4. Build the first course perfectly level.
Use the **plastic spacers** to make even joints.
Apply mortar to the vertical spaces between the glass blocks you have just laid, temporarily remove the spacers as you work and then replace them.

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INSTALLATION PHASE

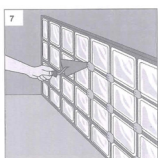


5. Place **the reinforcing rod** on the central wing of the spacer to prevent it to touch the glass block side. Apply the mortar without touching the spacer. Make sure that each glass block is surrounded by well compacted and evenly distributed mortar on all sides and that the bearing structures do not touch them. Insert the **reinforcement bars**, vertically and horizontally; the bars should not be more than 50 cm apart. Use a piece of wood to remove excess mortar from the joints before it hardens; this is in preparation for the finishing phase. Wipe the glass blocks with a wet sponge to remove any mortar residue. If the wall reaches to the ceiling, position the expansion/settling joint the same way you did on the sides.

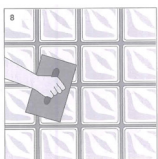


6. To guarantee stability for small and medium size walls, fix them to the adjacent supporting structures with the horizontal reinforcement bars inserted in the structures themselves. The diameter of the holes should be slightly bigger than that of the bars over a sufficient length so they also pass through the expansion/settling joint and they not tilt. For large walls it is better to use U-sections, which are plugged or cramped to the adjacent supporting structures. To prevent the metal from touching the glass, position the first row of glass blocks at least 10 mm from the wings of the section. When using U-sections, place the expansion/settling joint inside them.

FINISHING PHASE



7. Finish the joints only when the mortar is completely hardened. Remove the outer plates of the spacer using a tool that will not scratch the glass..



8. Apply the finishing, fill the joints well; use soft brushes and plastering trowels. Make a perimeter cordon, or part of the outside joint, using elastic sealant to prevent cracking along the expansion/settling joints. If the walls are to be exposed to water, use a transparent protective paint along the joints to enhance their water-proof features.

4. CLEANING AND MAINTENANCE

General information and precautions: Glass-cement surfaces are very easy to clean, but they are susceptible to surface opacification if not properly maintained. The use of oil- or wax-based detergents, abrasive compounds, hydrofluoric acid (HF), and highly alkaline solutions (e.g., sodium hydroxide or similar substances) is strictly prohibited. Cleaning operations must be carried out exclusively with the aid of soft, non-abrasive materials, such as microfiber cloths or synthetic sponges.

Types of Contaminants and Specific Cleaning Products

- **Inorganic Contaminants:** Residues from building materials (e.g., cement, plaster, glue) or calcium carbonate (lime) deposits require the use of an acid-based detergent with a pH value below 7. These formulations are effective in dissolving inorganic salts.
- **Organic Contaminants:** Greasy, oily, or other greasy stains must be treated with a basic (alkaline) degreasing detergent with a pH value above 7. The basic environment promotes the saponification of fats, facilitating their removal and preserving the integrity and shine of the glass surface.
- **Routine Maintenance:** For periodic cleaning and removal of light dirt, we recommend using a pH-neutral detergent (pH ≈ 7).

Treatment and Maintenance of Grout: Due to their intrinsic porosity, grout joints have a high tendency to absorb staining agents. To mitigate this phenomenon, the preventive application of epoxy-based waterproofing sealants is recommended before grouting. These compounds create a durable protective barrier that is resistant to degradation and dirt accumulation. After grouting, a water-repellent enamel specifically designed for cementitious joints can be applied to increase their impermeability.

Specific cleaning based on the nature of the joint:

- **Cementitious joints:** Characterized by an intrinsically basic pH (> 7), they require treatment with an acid-reacting detergent (pH < 7) that acts by neutralization for color restoration and removal of persistent stains.
- **Epoxy or silicone joints:** With a non-porous chemical nature and a tendency towards acidity (< 7), these joints must be treated with basic detergents (pH > 7) for effective cleaning.

Removal of salt efflorescence and mold: The appearance of mold is a direct indicator of the porosity of the joint and the consequent absorption of moisture. Fungal colonies can be removed by applying products based on hydrogen peroxide (active oxygen) or sodium hypochlorite (chlorine). To prevent recurrence, it is essential to apply a waterproofing treatment to the decontaminated and dry joint.

Management of Satin Finish Coatings: When installing bricks with a satin surface finish, it is crucial to take specific precautions. The protective polymer film applied during production must be kept in place until the grouting of the joints is complete. It should only be removed when this phase is nearing completion. Any adhesive residue left by the film can be removed with warm, slightly soapy water or, if more stubborn, with acetone or trichloroethylene, always using a soft, non-abrasive sponge.

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4. TECHNICAL SPECIFICATION

Specification	Description	Unity	Price
Dak.I.VET02.50xx	Supply and installation of glass brick produced according to high quality standards that ensures the maintenance of the characteristics (transparency, brightness, colour) over time. Available in various sizes and colours (see table) and with different textures depending on whether or corrugated steel. Made of cast glass, laminated and varnished laterally to increase the gloss. Used for a variety of architectural solutions also acting as a structural element of furniture. It allows the passage of the light and/or singular chromatic effects in the environments.		
Dak.I.VET02.5001	Dimension 190 x 190 x 80 mm.....	pc.	-
Dak.I.VET02.5002	Dimension 240 x 240 x 80 mm.....	pc.	-
Dak.I.VET02.5003	Dimension 190 x 90 x 80 mm.....	pc.	-
Dak.I.VET02.5011	Dimension 190 x 190 x 80 mm.....	pc.	-
Dak.I.VET02.5001/E	Dimension 190 x 190 x 80 mm.....	pc.	-
Dak.I.VET02.5017SA	Dimension 190 x 190 x 80 mm.....	pc.	-
Dak.I.VET02.5026SA	Dimension 190 x 190 x 80 mm.....	pc.	-
Dak.I.VET02.5016SA	Dimension 190 x 190 x 80 mm.....	pc.	-
Dak.I.VET02.5018SA	Dimension 190 x 190 x 80 mm.....	pc.	-
Dak.I.VET02.5017	Dimension 190 x 190 x 80 mm.....	pc.	-
Dak.I.VET02.5026	Dimension 190 x 190 x 80 mm.....	pc.	-
Dak.I.VET02.5016	Dimension 190 x 190 x 80 mm.....	pc.	-