

Technical guide

B | PLUS

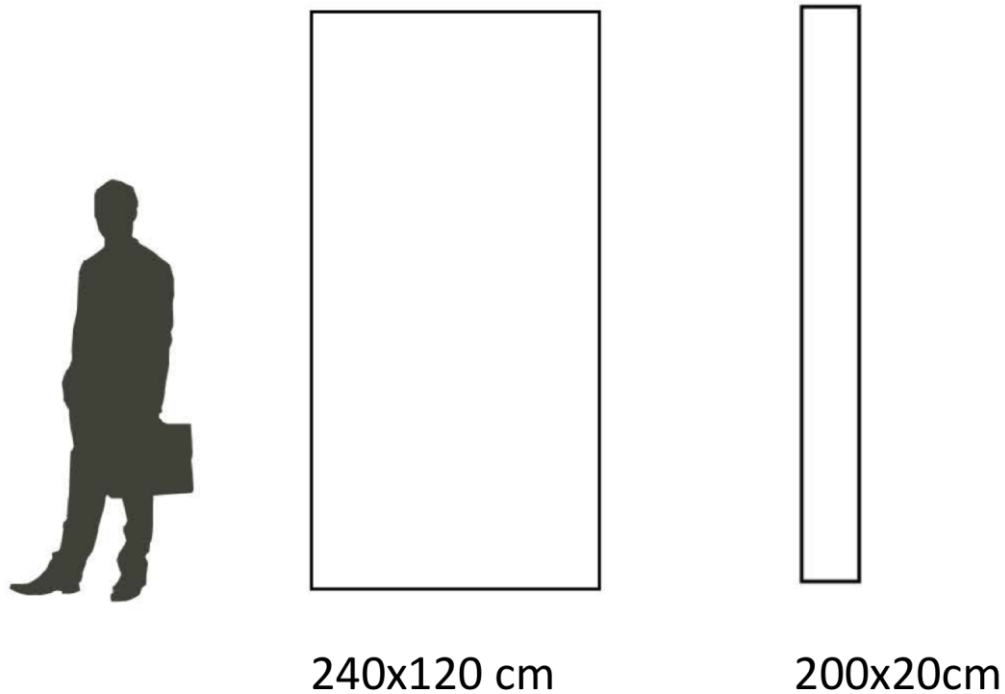
LARGE SIZE SURFACES

www.bpluslam.com

by BALDOCER

B|PLUS: SIZES

B|PLUS is a versatile and the latest's-generation porcelain material which responds to the present needs. B|PLUS allows to create unlimited spaces, satisfies any applications and brings new technical and aesthetical solutions.



B|PLUS: TECHNICAL CHARACTERISTICS



Impermeabilidad
Waterproof Qualities

Waterproof Qualities: Water absorption level almost nonexistent.



Anti hielo
Frost proof

Frost Resistance: High resistance to extreme freezing temperatures.



Resistencia al fuego
Fire Resistance

Fire Resistance: It does not emit smoke nor toxic substances.



Resistencia a la luz solar
Sunlight Resistance

Sunlight Resistance: UV Rays do not affect the color quality.



Resistencia al desgaste
Erosion Resistance

Erosion Resistance: High resistance to scratching and abrasion.



Resistencia a la flexión
Bending Strength

Bending Strength: High tensile strength level.



Resistencia a los químicos
Chemical Resistance

Chemical Resistance: Resistant to solvents, disinfectant and detergents.



Resistencia a las manchas
Staining resistance

Staining resistance: Porousness free. Stains remain on the surface and are easy to remove.



Fácil limpieza
Easy cleaning

Easy cleaning: No special cleaning products are required.



Sostenibilidad
Sustainability

Sustainability: Environmentally friendly as it is a 100% natural product.

B|PLUS: APPLICATIONS

Wall & Floor



Contract



Refurbishment



Façade



Furniture



B|PLUS: PACKAGING



B|PLUS sheets are placed and packed up in wooden crates sized 253x133x36. A double plastic foam sheet is placed over the wooden base of the crate. The plastic foam is 1cm and density 10. The crate's corners are reinforced both; internally with plastic foam corners and externally with metallic corners.

B|PLUS: PACKAGING

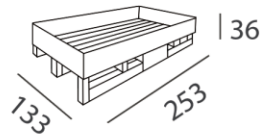


The crate's top is covered up with a UV resistant plastic. Afterwards, the crate is laminated and the appropriate marks and stickers are placed.

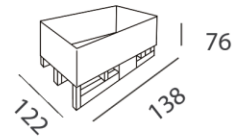


B|PLUS: PACKAGING

Wooden crate size: 253 x 133 x 36
Empty crate's weight: 100 kg.
Packing only for tiles sized 240x120 cm.



	PIEZA PIECE PIÈCE STUCK		CONTENIDO CAJÓN CRATE CONTENTS CONTENU DE LA CAISSE INHALT DER KISTE				
	m ²	kg	Pieza Piece Pièce Stuck	m ²	kg	kg Cajón Crate Caisse Kiste	Total Weight Gesamt kg
240x120 cm. 94,48"x47,24" Espesor Thickness 6 mm.	2,88	41,70	25	72	1042,5	100	1142,5
240x120 cm. 94,48"x47,24" Pulido/Polished Espesor Thickness 6 mm.	2,88	41,70	22	63,36	917,4	100	1017,4



	Pzas/Caja Pcs/Box	m ² /Caja m ² /Box	Kg/Caja Kg/Box	Cajas/Pallet Boxes/Pallet	m ² /Pallet m ² /Pallet	Kg/Palet Kg/Pallet
200x20 cm. 78,74"x7,87" Espesor Thickness 6 mm.	6	2,4	34	36	86,4	1360

20 FEET CONTAINER LOADING

Size	Internal	
Length	5,90m	19'4''
Width	2,34m	7'8''
Height	2,40m	7'10''

240x120: 12 crates x container

Important notice:

***For loading and unloading, it is necessary to use a fork-lift of 4.000kg which is able to manipulate the top two crates at the same time. Only when the appropriate fork-lift is available, it is recommended the maximum loading of 12 crates per container.**



20 FEET CONTAINER LOADING

Size	Internal	
Length	5,90m	19'4''
Width	2,34m	7'8''
Height	2,40m	7'10''

***When only a 2.000kg fork-lift is available then just 5 crates per line can be loaded (see picture). In that case, the maximum container's capacity will be 10 crates per container.**

***In order to fill up empty spaces, airbags are used on the sides of the container (see picture).**



40 FEET CONTAINER LOADING

Size	Internal	
Length	12,03m	39'6''
Width	2,34m	7'8''
Height	2,40m	7'10''

240x120: 24 crates per container

Important notice:

***For loading and unloading, it is necessary to use a fork-lift of 4.000kg which is able to manipulate the top two crates at the same time. Only when the appropriate fork-lift is available, it is recommended the maximum loading of 24 crates per container.**



40 FEET CONTAINER LOADING

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TRUCK LOADING

***Aprox. measures: Truck 12 -12,5 m**

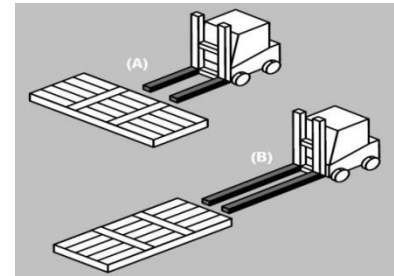
***Weight: 25.000-26.000 kgs**

***16 boxes 240x120 + 6 pallets with other material**



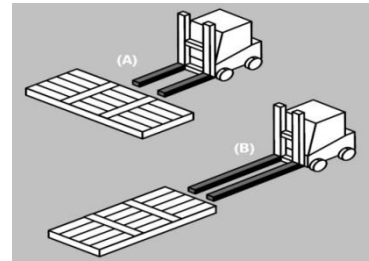
B|PLUS: HANDLING

A – Handling by the crate’s wide or horizontal side (recommended). The use of 1,20m shovels is recommended. Such shovels should be extend to their maximum length in order to cover the maximum feasible area of the crate. The use of a fork-lift of minimum 2.000 kg is recommended.



B|PLUS: HANDLING

B – Handling by the crate’s narrow or vertical side. The use of 2,20m shovels is recommended. Such shovels should be extended to the maximum in order to cover the maximum feasible area of the crate. The use of a fork-lift of minimum 2.500kg is recommended.



B|PLUS: HANDLING

It is required to arrange the right tools and equipment in order to ensure the optimal handling, cutting and drilling.

The following tools are required in order to handle B|PLUS sheets correctly:

1- Suction pads: The use of soft rubber suction pads which guaranty the piece adherence is highly recommended.

2- Tile frame with suction pads: They allow to carry out any sort of operations only with two workers. The tile frame is made of two rigid bars with suction pads all around the bar. Such suction pads hold the piece in every direction avoiding any feasible bending.



B|PLUS: HANDLING



The handling by the wide side (horizontal) is recommended using shovels 1,2m long. The fork-lift used should weight a minimum o 2.000kg



Once the crate is placed, the UV resistant plastic and the rest of the packaging should be removed using a cutter or similar.

B|PLUS: HANDLING



The sheet should be removed from the crate by two workers and always by its wide (horizontal side). The use of working gloves during all the handling is recommended.



Sheet should be handled with both hands and lifted carefully. Horizontal position should be kept all the time and both workers should move the sheet at the same time.

B|PLUS: HANDLING



Once the sheet has been lifted, it should be removed from the crate carefully and with help of your workmate.

After removal, the sheet should always be placed on top of protectors in order to avoid any damages or breakages on the piece.



B|PLUS: HANDLING



When moving the sheet it is very important to keep it in horizontal position all the time. Keeping the upright position, sheet should be hold on the top part and with both hands.



Surface of the working bench should be completely flat and clean before placing the sheet on top.

B|PLUS: HANDLING



It is essential the use of protectors when setting the B|PLUS sheet on the ground. In case that protectors are not at your disposal, plastic foam corners provided with the crates can be used.



B|PLUS: CUTTING AND DRILLING



An aluminium working bench with the right dimensions is recommended to ensure an optimal cutting and drilling of BPlus sheets. This type of bench guarantees flatness and stability of the piece.

It is recommended to visit a professional workshop (glass makers or marble cutters) when special cuttings such as curved or similar are needed.

Required tools for cutting:

- 1- Slim cutter system
- 2- Tile frame with suction pads or individual suction pads
- 3- Cutting pincers
- 4- Diamond disc sponge

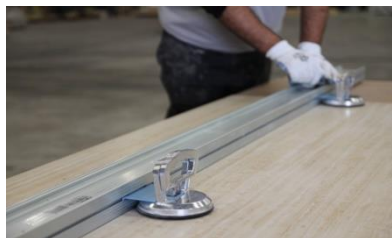


B|PLUS: CUTTING AND DRILLING



Cutting along the piece should be done keeping the same speed and pressure all the time.

Place B|PLUS sheet over the working bench. Mark, place and fix the cutting bar closing the suction pads. Cutting should start by the end part of the piece approximately 2-5 cm.



Move B|PLUS sheet at the end of the working bench so the piece stands out about 10-15 cm. Using the cutting pincers, press carefully until it clicks.

B|PLUS: CUTTING AND DRILLING



Use the same cutting pincers as base in one of the sides of the piece. Press carefully and remove the exceeding part. Finally, edges should be polished and cleaned using a diamond disc sponge.



B|PLUS: CIRCULAR DRILLING



For circular drilling, a diamond, glass or porcelain drill should be used for boreholes between 8-10mm depth.



A milling cutter should be used for boreholes superior to 8-10mm depth. It is recommended to drill the sheet using an angle of 75° approximately.



It is recommended to have an impact on the piece using an angle of approximately 75°

B|PLUS: RECTANGULAR DRILLING



For rectangular drilling, a driller with a diamond disc of 6-7mm should be used. The disc should mark the sheet using an angle of 75°. Then apply a constant and regular pressure and drill carefully. It is very important to keep wet either the diamond disc or the surface of BPlus sheet.

B|PLUS: RECTANGULAR DRILLING



Follow the marks in order to continue drilling with the diamond disc. When finish the process, excess bits should be removed. Finally place the selected overlay on the borehole.

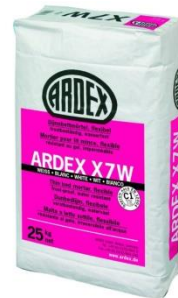


B|PLUS : INSTALLATION

Advices described below should be taken into account in order to achieve an optimal flooring or wall cladding installation.

Required tools for installation:

- 1- Tile frame with suction pads or individual suction pads
- 2- Level
- 3- Trowel
- 4- Rubber trowel
- 5- Spatula
- 6- Bucket
- 7- Tile spacers
- 8- Self-levelling spacers



B|PLUS: FLOORING INSTALLATION



Advices for flooring installation:

1-Surface must be completely clean: dust, grease and oil free. Also rest of painting, cement, resin or other particles should not shown.

2-Surface must be completely dry. In case that air gaps or bubbles are shown, the appropriate self-levelling products should be used.

3-Base must be stable, crack free and correctly hardened. In case that base is unstable and cracks are shown, an anti-breaking mesh should be used between the base and the piece.

4-Hardness and mechanical resistance should be the according to the tensions the material will support.

6-Likewise, expansion and perimeter joints should be accordingly.

B|PLUS: FLOORING INSTALLATION



Advices for installation over existing flooring

1-Check that existing flooring is completely clean, dry, solid, stable, well-fixed to the substrate and without any loose parts.

2-Uneven parts must be filled with the appropriate self-levelling products.

3-If installation is over ceramic tiles, natural, stone, marble, terracotta or PVC rest of oils, wax or grease should be removed. It is recommended to do a cleaning with abundant water and caustic soda and then thoroughly rinse. When cleaning with chemicals is not allowed, mechanical abrasion is recommended.

4-If installation is over parquet or wooden floors it is recommended to sand it until untreated wood is shown.

B|PLUS: FLOORING INSTALLATION

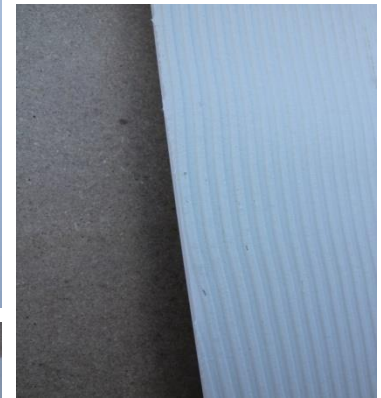
Before starting any works, surface must be completely flat, levelled and without air gaps. When necessary self-levelling products should be used.



Cement glue should be applied on a trowel of 3x3mm approximately. Afterwards glue should be extended all over the piece, always in the same direction and insisting on the angles and corners.



It is essential to apply the double glue technique when installing B|PLUS



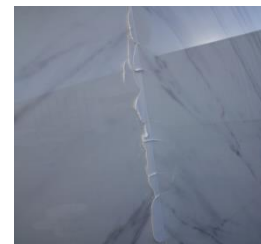
Then glue should be applied on the floor exceeding 5-10cm with respect to the size of the piece to ensure an optimal installation.

B|PLUS: FLOORING INSTALLATION

Carefully hit the surface using a rubber trowel and removing the air gaps or bubbles. Perfect adhesion of angles and corners should be always be checked.

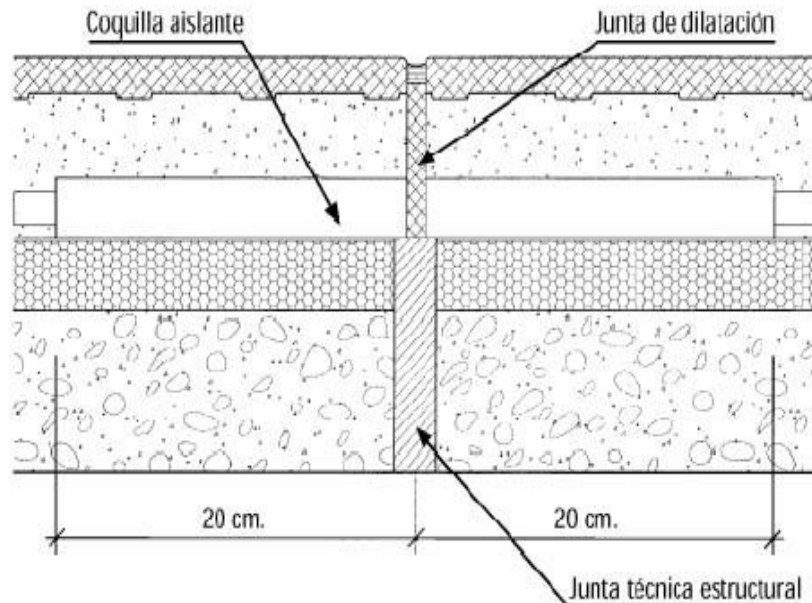


Remove the tile and self-levelling spacers and apply the grouting. Timing recommended by the adhesive supplier must be respected. Once the installation is finished flooring will be ready to walk on after 12-24 hours. It will depend on the adhesive used.



Use the self-levelling and tile spacers. 2mm expansion joints are recommended indoors and 5mm outdoors.

B|PLUS: EXPANSION JOINTS



It is essential to respect the substrate's existing joints during flooring installation. For vast areas partition joints between 8-10 mm are recommended with the following parameters:

For outdoor, high transit and subject to movement and bending areas, partition joints each 9-12sqm are recommended.

For indoor and stable areas, partition joints each 20-25 sqm are recommended.

In any circumstances, it is highly recommended to finish installation leaving at least 4-5mm joints in walls, columns, corners or angles and not fill such space while grouting. Expansion joints should be filled up with specific products or using profiles.

The architect or site manager would be responsible of establishing size and frequency of the joints.

B|PLUS: WALL CLADDING INSTALLATION



Technique and steps used for wall cladding is the same one as described for flooring installation

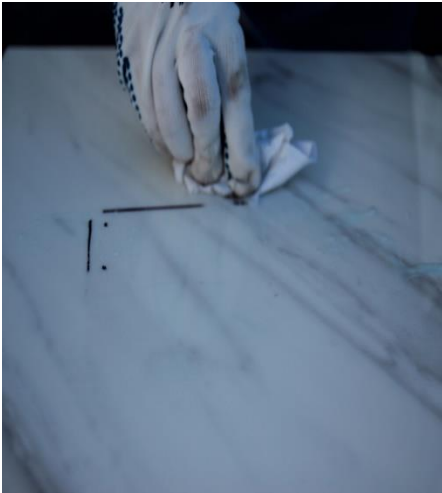
B|PLUS: WALL CLADDING INSTALLATION

Handling of the piece must be always between two workers. It is also recommended to apply the double glue technique and leave expansion joints of 2mm.



The use of a frame with suction pads or individual pads is highly recommended. It is also recommended the rubber trowel in order to avoid air gaps or bubbles underneath.

B|PLUS: CLEANING AND MAINTENANCE



Cleaning cement products

Cement, lime scale, grout and mortar stains can be removed using descaling products. Instructions of the manufacturers of such products should be followed. After the use of chemical products, the use of abundant water to rinse the surface is recommended.

Cleaning epoxy products

Epoxy products stains should be removed during the installation as soon as possible using a sponge and abundant and clean water. Afterwards, cleaning with an alkaline detergent should be done and instructions of the manufacturer of the alkaline detergent should be followed.



B|PLUS sheets are easy to clean. However, some measures should be taken in order to achieve the optimal result. It is essential to test the product previously in one side of the sheet in order to check the product does not alter the surface.

Cleaning during installation

Cleaning the surface while installing the material is the key. It is necessary to remove polluting agents such as cement coatings or mortar manually. If cements and mortar stains are not removed on the initial phase they can affect to the future maintenance. For vast areas, cleaning using mechanical brush with soft discs is recommended.

It is highly recommended to clean the surface while installation in order to avoid that products stick on the sheet heavily.

B|PLUS: MAINTENANCE

The use of abundant water and a highly effective neutral detergent it is recommended for a good maintenance of flooring. When dirt is intense and set, the advise of a professional should be followed up. It would be able to suggest the appropriate product.

The following FILA products or similar are recommended for the flooring maintenance:

Type of dirt	Recommended FILA product
Cement residues, calcareous residues, metallic scratches, oxide stores	DETERTEK
Epoxy, vitrified and resinous joint residues	FILACR10
Intense organic dirt (food, grease, oil), rubber, dyes, marker, plastic paint	FILAPS87
Graffiti, acrylic spray, alkyds and nitro synthetics	FILANOPAINT STAR
Wax, natural resins, waste from adhesive tapes, asphalt	FILASOLV

*Please, remind that polished porcelain is more liable scratches and stains of certain liquids such as oil, fizzi and alcoholic drinks, acids, etc. Therefore it is highly recommended immediate cleaning with water and neutral soap.

B|PLUS: RECOMMENDED ADHESIVE

Indoor and outdoor flooring	Type of adhesive
Concretes, ceramic tiles, terrazo map floor, natural stones	C2TES1 , C2ES2
Wood and plastics	R2, R2T
Metals	R2, R2T

Indoor wall cladding	Type of adhesive
Concretes, ceramic tiles, terrazo map floor, natural stones	C2TES1 , C2ES2

Outdoor wall cladding	Type of adhesive
Concretes	C2ES2, R2T

CODES USED ACCORDING TO REGULATION 12004

Type of adhesive	
C2TES1	Improved cement adhesive with enhanced parameters, reduced vertical slip and extended open time.
C2ES2	Improved cement adhesive, highly deformable and extended open time.
C2FTES2	Quick setting improved cement adhesive, highly deformable, inexistent vertical slip and extended open time.
C2FTS2	Quick setting improved cement adhesive, highly deformable and inexistent vertical slip.
R2	Improved reactive adhesive
R2T	Improved reactive adhesive and inexistent vertical slip.

COMMERCIAL NAMES OF THE ADHESIVES

Tipo adhesivo <i>Adhesive</i>	MAPEI	CERCOL	GECOL	WEBER	FIXCER	PUMA
C2TES1	Keraflex Maxi S1 (*)	F55 Cerfix	Flexible	Weber Col Flex	Tecnoflex	Pegoland Flex
C2ES2	Kerabond + Isolastic	F17/18 + F70 Cerlatex	---	---	---	Pegoland Flex Record
C2FTES2	Elastorapid (*)	---	---	---	---	---
C2FTS2	Keraquick + Latex Plus	F55 Light Plus Quick S2	---	---	Fixmax S2	---
R2	Keralastic	F40 Cerpoxy Art	Gecol Epoxy	---	---	---
R2T	Keralastic T	F40 Cerpoxy	---	---	Elasticer	---

* Este material está recomendado para piezas de superficie inferior a 5000cm²

* This material is only recommended for surfaces inferior to 5000cm²

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