

# Glasroc<sup>®</sup> X

Gypsum board for exterior applications







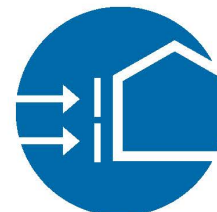
GLASROC<sup>®</sup> X, THE BOARD WITH HIGH RESISTANCE TO MOISTURE AND MOULD, FOR EXTERIOR APPLICATIONS

# Glasroc® X

Glasroc® X is a high performance board with a gypsum core containing special additives for moisture and mould resistance. Glasroc® X is reinforced board with a glass-mat on both surfaces and finished with a UV resistant coating, providing outstanding performance in humid environments.

This non-paper faced board, free from cellulose content and therefore has a strong inherent resistance to mould growth, which is perfect for wet areas and high-humidity environments including exterior applications.

Glass-mats have a physical anchorage in with the gypsum core ensuring a strong bond with the gypsum core that creates a monolithic board of high strength, solidity and exceptional integrity.



Glasroc® X is an ideal substrate for Direct Render application (also known as Direct Apply Systems). This high performance board can be used for areas requiring high protection against water and it has been designed especially for exterior applications. This board is a perfect solution for exterior ceilings, external walls systems and façade cladding systems.

Glasroc® X is available 1200mm wide in either 2400 or 3000mm length (other lengths can be available to order depending on quantities required) with longitudinal tapered or squared edges depending on the finishing system.

Inorganic glass mat surface with strong visual branding for instant product identification and provides a surface that has high resistance to mould and water penetration.



Glass fiber reinforced gypsum core, moisture and mould resistance and very low water absorption.



# BOARD PROPERTIES

SPECIFICATIONS		Value	Unit
Board Classification (EN 15283-1)		GM-H1	
Thickness		12,5	mm
Width		1200	mm
Standard length		2400,3000	mm
Weight		10,9	kg/m <sup>2</sup>
Total water absorption (EN 520)		≤ 5 (H1)	%
Surface water absorption (EN 520)		< 45	g/m <sup>2</sup>
Mould resistant (ASTM D3273)		10 (No mould)	-
UV resistant		12	months
Dimensional	Thermal expansion (EN 14581)	0.8 x 10 <sup>-5</sup>	°C <sup>-1</sup>
	Moisture expansion (EN 12467)	0.005	mm/m·1%RH (30-90 %RH)
Flexural strength	Longitudinal	≥ 540	N
	Transversal	≥ 210	N
Minimum bending radius		1.5	M
Thermal conductivity λ		0.1865	W/mK
Vapour diffusion μ		18.2	-
Fire reaction (EN 13501-1)		A1	-



# PRODUCT FEATURES

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Exterior Application



Impact Resistance



Moisture and Mould Resistance



Flexibility



Fire Resistance



Easy to Score and Snap



Dimensional Stability



Easy to screw fix



Energy Efficiency



Easy to Handle



Low Environmental Impact



High Labour Productivity



Tapered Edge

# APPLICATIONS

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## EXTERNAL CEILINGS

Semi-exposed ceiling areas above balconies



## BALCONIES

Wall linings for balconies and terraces



## FAÇADE

Wall linings for ventilated or non-ventilated façades

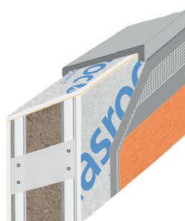






### EAVES

Linings for eaves and soffits



### FASCIAS

Façade fronts



### ARCHES

Linings to curved surfaces such as arches and columns with minimum bending radius 1,5 m

# SURFACE FINISHES

## Direct Render System



Direct Render finishing is used for the construction of external walls in which the board is exposed to the external environment. The render should be a compatible basecoat mortar. It must be used a reinforcement mesh and finish the system using an acrylic based skim coat.

# SOLUTIONS

## EXTERNAL WALL SYSTEMS

### External wall with Direct Render System



1. Internal board(s) / Solid wall
2. Metal Frame
3. Insulation
4. Glasroc X Board
5. weberbase coat X
6. Fiber mesh 160g
7. weberbase skim ultra bond

Used as an external board for direct rendering on single façade walls.

### External cladding system with metal frame



Used in the renovation of buildings including a new external cladding system with a ventilated or non-ventilated cavity held in place using a metal profiles frame.



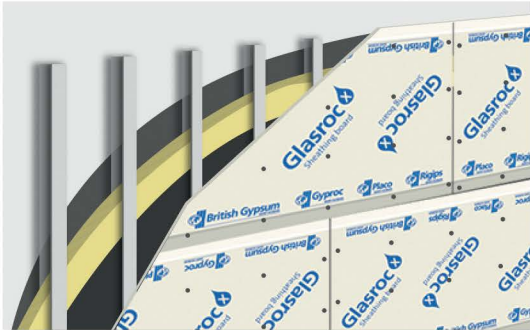


Saint-Gobain façade wall system enhance the freedom of designer to design the building without limits. The system provided easy and convenience of installation. Excellent in both thermal resistance properties and soundproofing.



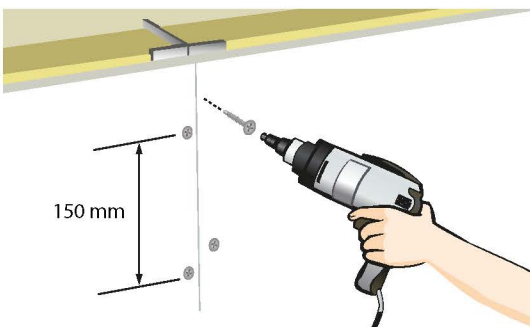
# INSTALLATION GUIDE

## 1. INSTALLATION OF GLASROC® X BOARDS



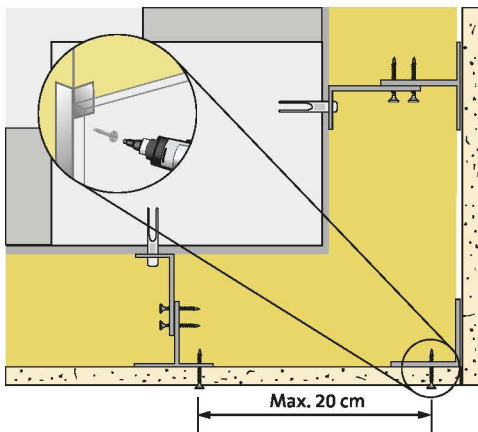
### 01 Gypsum Boards

For all exterior applications, boards can be installed vertically and horizontally starting at least 20 cm from the bottom, or waterproofed first 20 cm, to avoid direct contact with the ground (for interior application, 2 cm from the floor and 1 cm from ceiling) and a joint gap around 3 mm between boards. Boards should be fixed to metal profiles. The thickness and spacing of these profiles are calculated in accordance with local regulations to support the self-weight of boards and wind factors, with spacings from 400 - 600 mm centres.



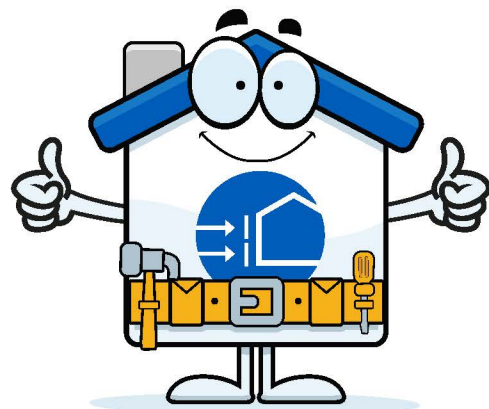
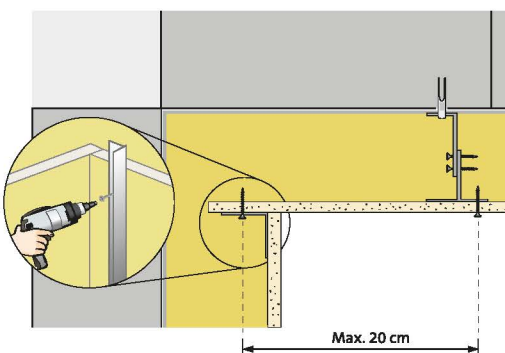
### 02 Board fixing

Boards should be fixed using self-tapping screws appropriate for the board type and thickness of the metal profiles at no greater than 150 mm centres - no less than 10 mm from the board edges. It is recommended to use a stagger pattern of at least 20 mm for the fixings. Screw heads should finish flush with the board surface without damage to the core.

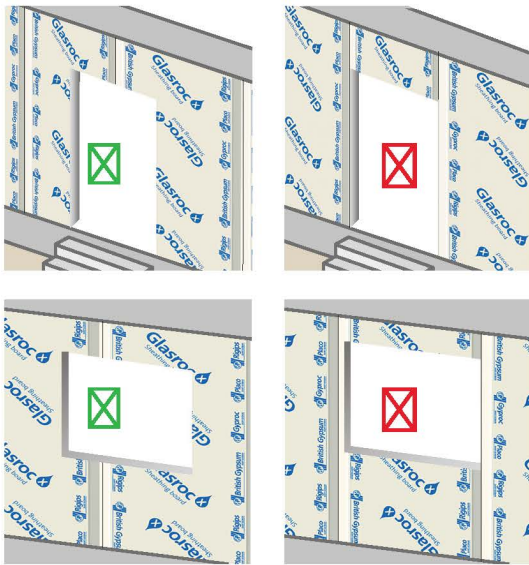


### 03 Corner reinforcement

For inner and outer corners, the board can overlap the last profile by a maximum of 20 cm. In all cases the edge of the board must be reinforced with an angle profile.





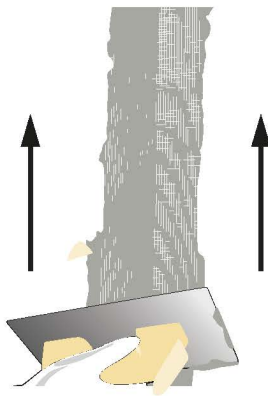


## 04 Doors and windows areas

For gap formation for windows and doors, joints between boards may not coincide with the plumb line of lintels, window cases or door jambs, as there should be at least 40 cm between vertical joints and 15 cm between horizontal joints.

All joinery work must be fixed to independent frames so as not to transfer loads onto the boards.

In sections used for forming window sills, boards should ensure a slope of at least 10° for water drainage.

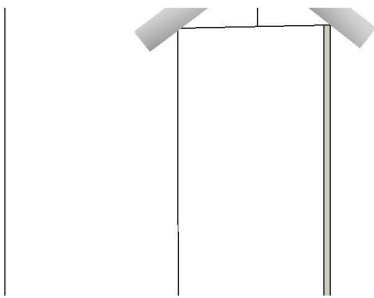


## 05 Joint treatment

Joint treatment is determined in each case by the type of application of Glasroc® X and surface covering.

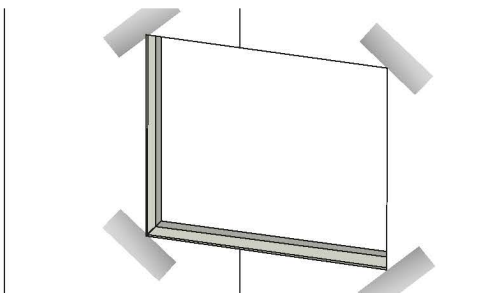
When boards are not exposed to the outside (cavity or sidings systems and external walls with cladding systems over), simple sealing with an outdoor mastic or adhesive tape will be sufficient, provided it overlaps joints and connections by at least 10 cm on all sides to ensure continuity of the seal.

Where boards require a direct finish, a band of not less than 15 cm in width should be applied using the render plus 160 reinforcing mesh overlapped at least 15 cm at joints and connections to ensure continuity.

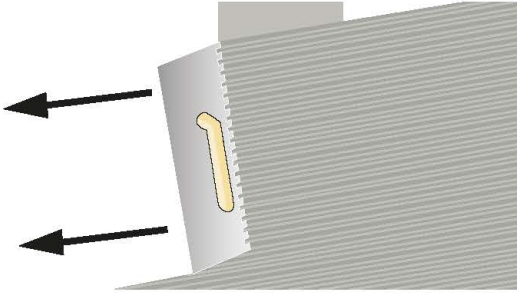


## 06 Window angles and lintels

To prevent the appearance of cracks at angles forming gaps when the boards will be given a direct render coat, diagonal bands measuring 20 x 40 cm minimum of 160 reinforcing mesh should be placed at 45° before applying the render. Similarly, the edges of these gaps should be reinforced with PVC profiles.

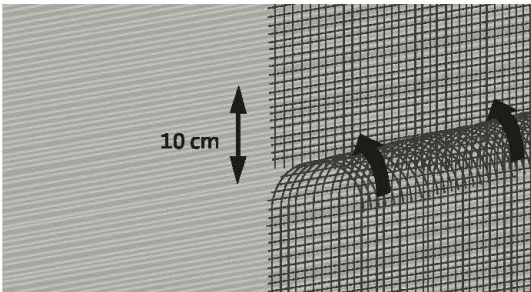


## 2. SURFACE COVERING SOLUTIONS "DIRECT RENDER" FINISHING



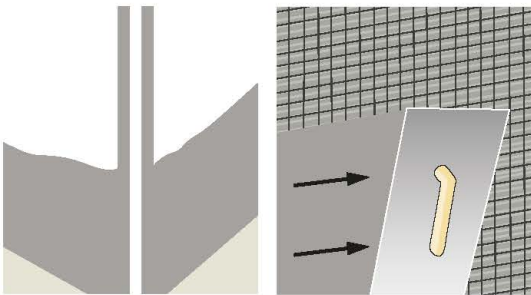
### 07A Basecoat

The application of weberbase coat X must be carried out after joint treatment. A first coat of about 2 mm in thickness is applied over the whole surface.



### 08A Mesh 160g

Over the fresh coat of rendering, 160 mesh should be applied so as to overlap with mesh joints at least 10 cm to ensure continuity. The mesh must be completely covered by the render using the appropriate trowel.



### 09A Basecoat, second layer

A second coat is then applied to cover the entire surface with a total thickness of 4 to 5 mm, smooth and ready for the application of skim coat.

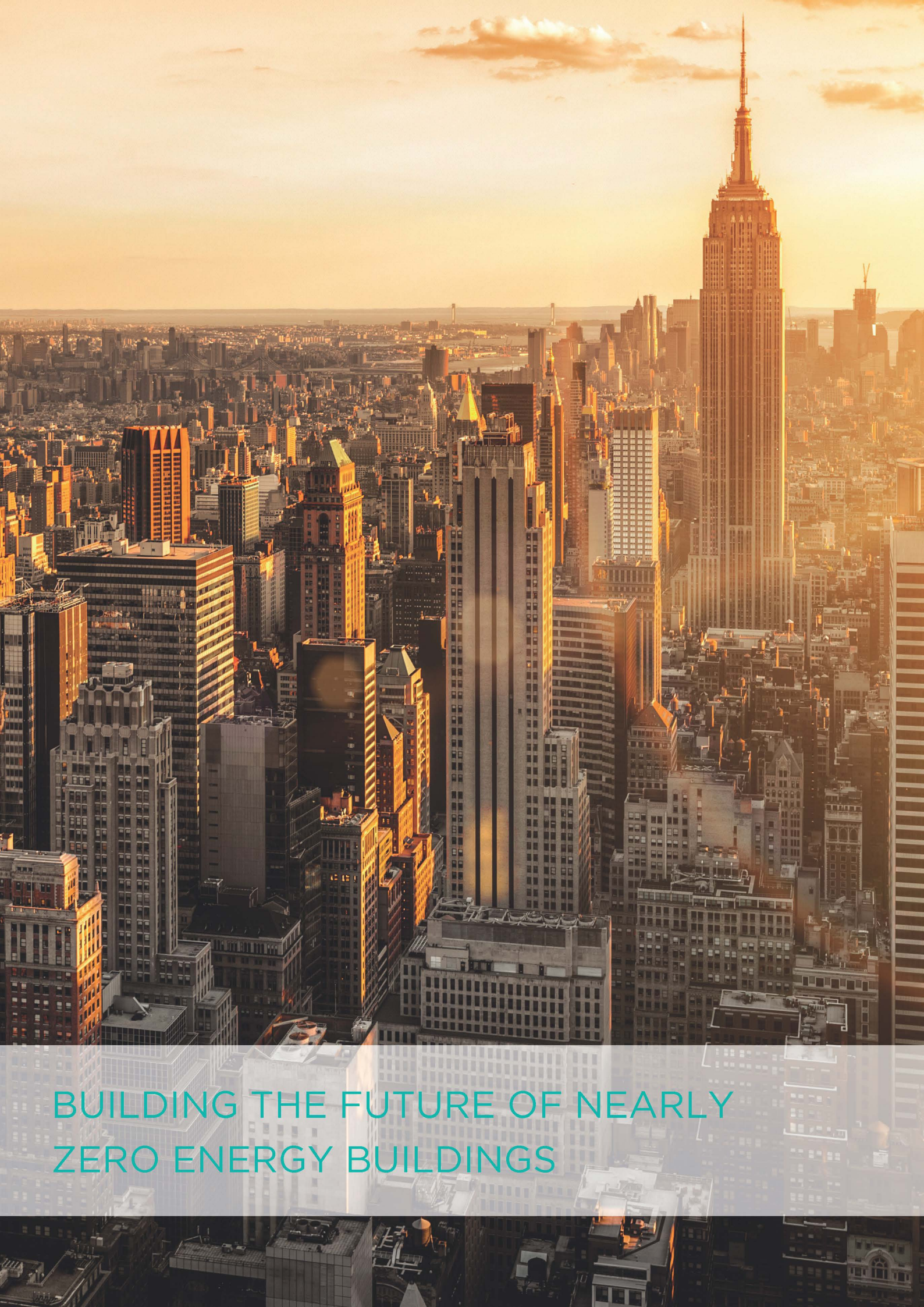


### 10A Skim coat

After the appropriate drying time of the first render coat as recommended by the manufacturer, usually around 48 hrs, a weberbase ultra bond skim coat should be applied.

Once the skim coat is completely dry, apply paint or wall decoration.



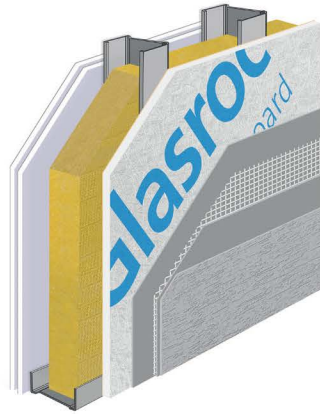


BUILDING THE FUTURE OF NEARLY  
ZERO ENERGY BUILDINGS



# COMPONENTS

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Direct Render System



## Gypsum Board

Glasroc® X is a reinforced gypsum board with high impact resistance and UV ray resistance. Specially designed for external applications.



## Screw

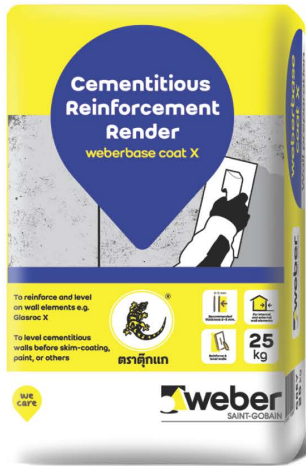
Dry wall screw



## PU Sealant

Elastic PU mastic suitable for outdoors or sealing joints between boards exposed to an air cavity or protected cavity.





## weberbase coat X

High performance undercoat paste suitable for direct finishes and application with fiberglass mesh 160g.



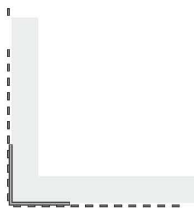
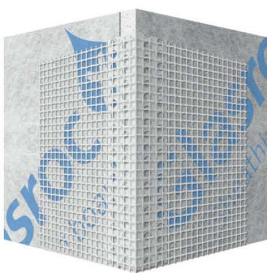
## Mesh 160g

Roll of fiberglass mesh combined with anti-alkali surface treatments for reinforcement of undercoat surfaces over Glasroc X boards with render.



## Skim coat

weberbase skim ultra bond is ready-to-use acrylic white skim coat for perfectly smooth finishing on walls, columns, and ceilings.



## Corner PVC Profile

PVC profile with integrated mesh for reinforcement of inside and outside corners in façade surface coverings with direct finishes.







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04/2021

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