

Styro EDFS

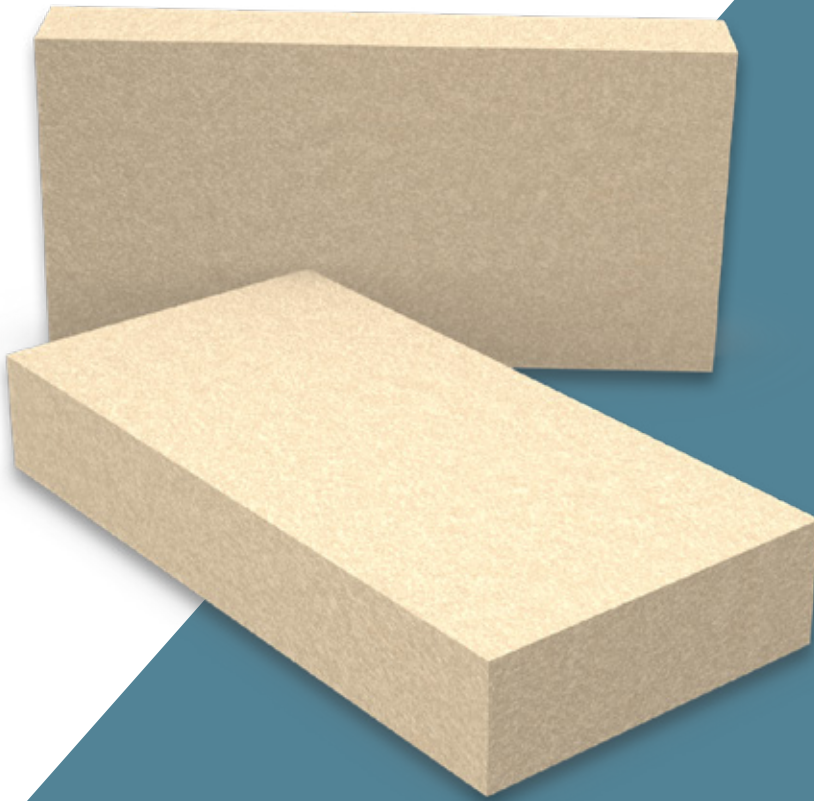
EXTERIOR DECORATION FACADE SYSTEM

Precision panels for
Limitless Possibilities

Product Overview

Styro EDFS

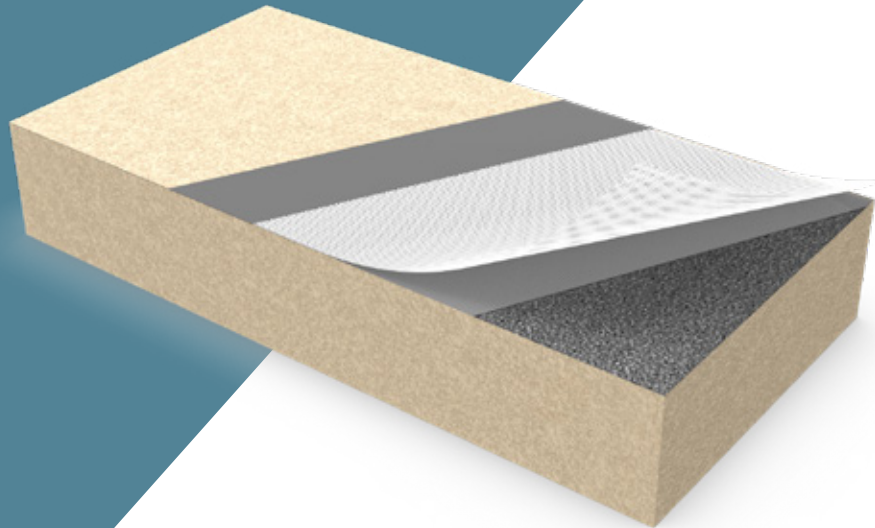
EXTERIOR DECORATION FACADE SYSTEM



STYRO EDFS Panels with EPS core, cement coating, and reinforced fiber mesh are advanced construction panels designed for both structural and non-structural applications.

These panels consist of a lightweight EPS core for thermal insulation, encased in a cementitious coating for durability, and further reinforced with fiber mesh to improve tensile strength and impact resistance.

This makes them ideal for façade cladding.



HIGH
PERFORMANCE
INSULATION



INTEGRATED
WATERPROOFING



ENHANCED
FIRE SAFETY



SUPERIOR
MOISTURE AND
VAPOUR CONTROL



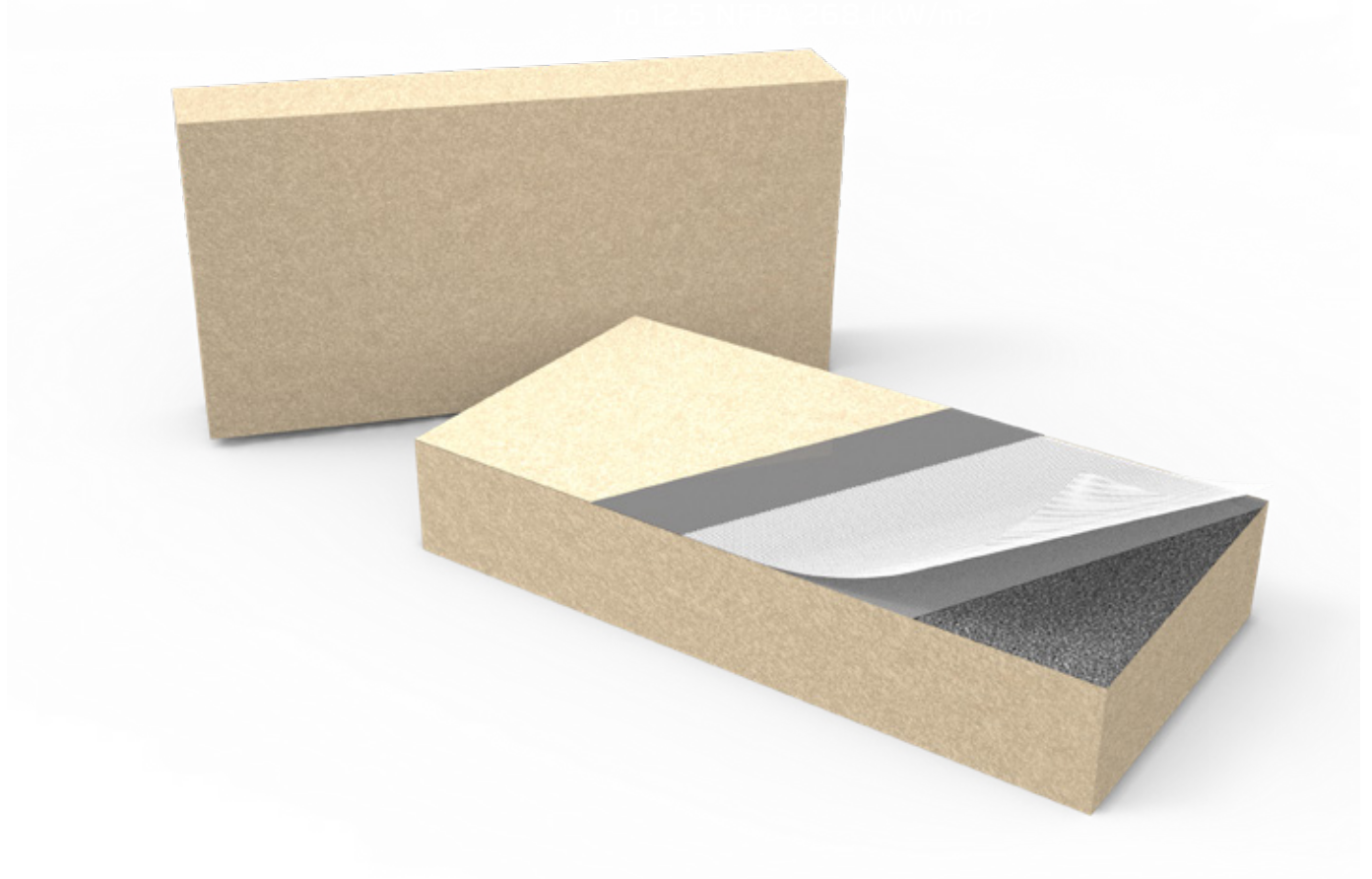
HIGH COMPRESSIVE
AND FLEXURAL
STRENGTHa



EFFICIENT
INSTALLATION
PROCESS

Technical Data Sheet (TDS)

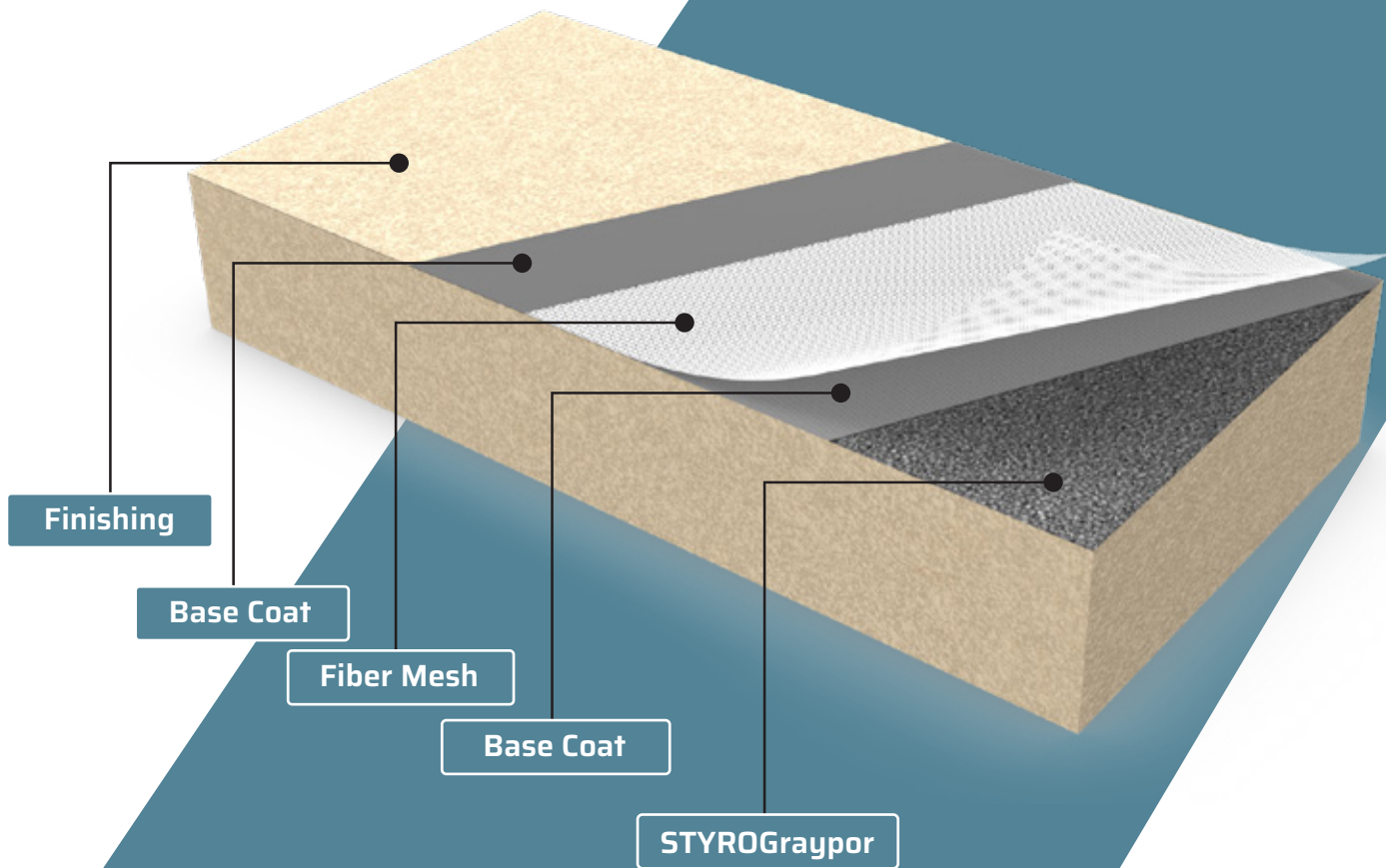
STYRO EDFS	
Properties	Values
Density	90 ASTM D 1622 (kg/m ³) 800 - 1200
Thickness	200mm
Compressive strength	ASTM D 1621 (kpa) @ 10% deformation
Thermal conductivity (Core Material)	0.0297 0.29
U value	ASTM C 518 (W/m.k) @ 35° celsius
Tensile Adhesion	120 ASTM C 297 (kpa)
Impact resistance	Upto 4 ASTM E 2486 (Joule) with single mesh
Water absorption	0.58 ASTM C 272 (kg/m ²) @ 24 hrs immersion < 0.5
Dimensional stability	ASTM D 2126 (%) @ 70°
Reaction to fire	Class B EN13501-1
Ignition resistance	No surface ignition when exposed



Sections

Styro EDFS

EXTERIOR DECORATION FACADE SYSTEM

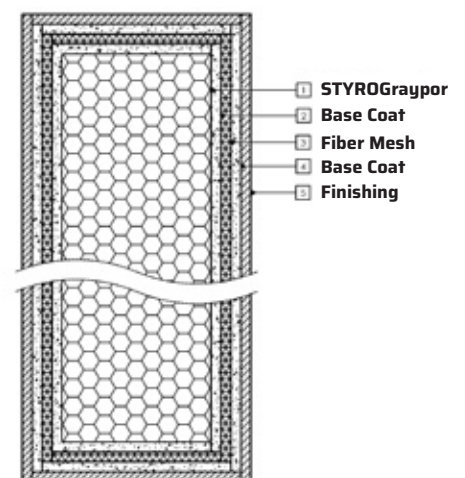


The STYRO EDFS panel system is a versatile construction solution for both residential and commercial buildings.

It consists of prefabricated EPS-cement-fiber mesh panels used as external walls, or cladding systems.

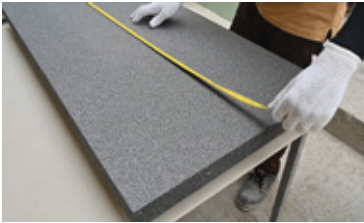
The panels provide thermal insulation, structural integrity, and a durable surface ready for finishing.

The system is suitable for fast-track projects, offering reduced construction time and improved building performance.

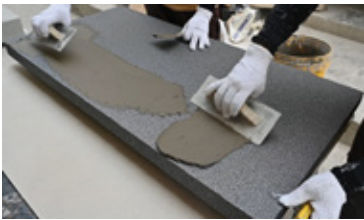


SECTION A-A
SCALE 1 : 1

First basecoat with Notch trowel & fibermesh



As a first step, need to check the dimensions of board like length, width, Thickness, Flatness & Squareness. It should be under the tolerance.



Basecoats are applied to the face of the STYROGraypor 180 board by Using a stainless steel trowel, apply an even layer of basecoat approximately 1.6mm to 2mm thick onto the surface of the STYROGraypor 180.



Mixation of basecoat



Applying first base coat on top face & all sides (Max 1.6 - 2 mm thick).



Immediately embed the reinforcing mesh (160 gsm) into the fresh basecoat, trowelling it from the center and outward to its edges, cutting off any accumulated excess basecoat. Mesh need to be wrapped at the 4 sides of board with basecoat



After 70% curing apply basecoat on the top face of board with 5 x 5 mm square notched trowel method.



The notched pattern should cover the entire top face of the board from edge to edge.



Final panel with covered pattern.

Installation of Panel, Fastener



Prior to start any activity in the site, substrate inspection need to be done.

Prior to applying the STYRO EDFS panel to the wall, a strip of reinforcing mesh is adhered to the base, top, sides & windows of the substrate (Back wrapping). This mesh will eventually wrap around the edge of the STYRO EDFS.



Apply adhesive to the back side of STYRO EDFS panel of 10 mm x 10 mm by notched-trowel method.



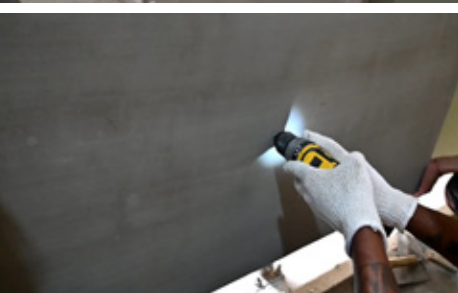
The notched pattern should cover the entire board from edge to edge. To ensure sufficient bonding and coverages of the adhesive, STYRO EDFS panel should be visible in between the notches of adhesive. Adhesive should only be applied to the back-facing side of the insulation board. Remove any adhesive from STYRO EDFS edges. Slide and push the STYRO EDFS into place on the wall using caution not to dent or damage the design.



Apply pressure over the entire surface of insulation to accomplish STYRO EDFS contact, high initial grab, and overall level surface.



Stagger vertical joints of STYRO EDFS panel in successive courses to produce running bond pattern.



Mechanical fixation - Install top surface of fastener heads flush with plane of STYRO EDFS. Install fasteners into or through substrates with 30 mm penetration for concrete & masonry substrate.

Joint treatment, Corner beads & back wrapping mesh



All joints need to be treated with joint fiber mesh (width min 100 mm) & STYRO bond DP



After joint treatment, Aluminium corner profile (23x23mm) need to be installed by STYRO bond DP



All back wrapping mesh need to be wrapped on STYRO EDFS panel with STYRO bond DP. Kept curing for 24 hrs.



After curing, the surface need to be sanded to remove the excess material and uneven surface above the STYRO EDFS panel.

Final finish coat



Apply first coat of Decorend fine with thickness of 3 - 4 mm. In this coat all undulation should be covered. Make sure all edges should be in 90° angle.



After curing, (Minimum 24 - 48 hrs) the final coat of Decorend fine need to be apply.

The thickness of final coat should be maximum 2 mm and proper finishing need to be done.

CONTACT US TODAY

Abu Dhabi

P.O. Box: 9108
Abu Dhabi, UAE

+971 2 551 3688

Dubai

P.O. Box: 48562
Dubai, UAE

+971 4 892 2814

Sharjah

P.O. Box: 29272
Sharjah, UAE

+971 6 534 4504

Oman

P.O. Box: 1335
Muscat, Oman

+968 2 412 4561



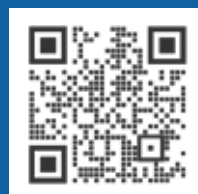
EXPANDED POLYSTYRENE SOLUTIONS

www.styrouae.com

+600 520 006

info@styrouae.com

Follow Us



Disclaimer:

The information provided in this leaflet is only intended to give guidance in selecting and using STYROsystems. While we make every effort to ensure its accuracy, neither STYROInsulations Mat. Ind. LLC and its branches nor any of its employees or affiliates warrant or assume any legal liability or responsibility for the completeness or usefulness of any failure in installation or constructing any structure installation or building caused by using this leaflet. Readers are advised to independently verify this information prior to relying on it. In particular, readers must obtain appropriate independent advice on the use in specific structures, installations or buildings to ensure compliance with all regulations, including health and safety regulations. STYROInsulations Mat. Ind. LLC reserves the right to amend technical specification.