

Step-by-Step Application of EPS Insulation (External Walls)

1. Surface Preparation

- Clean the wall: remove dust, grease, loose plaster, or old paint.
- Level the surface: repair cracks and fill uneven areas with mortar.
- · Ensure the wall is dry and structurally sound.

2. Starter Track (Base Profile) Installation

- Fix an aluminum starter track at the bottom of the wall (above ground level, usually 30–40 cm).
- Use plugs and screws to secure it horizontally.
- This provides a straight line and protects the EPS from rising damp.

3. Adhesive Application

Use a special EPS adhesive mortar.

Apply either:

- Perimeter + dabs method: 3–4 dabs in the middle + a continuous strip around the board edges.
- Full-surface method (preferred for flat walls): spread adhesive evenly with a notched trowel.

4. EPS Board Fixing

- Start from the starter track and work upwards.
- Stagger boards in a brick-like pattern (avoid vertical continuous joints).
- Press each board firmly to the wall, ensuring no gaps.
- If small gaps remain, fill them with EPS strips (not foam).

5. Mechanical Fixings (Dowel Anchors)

- After adhesive cures (usually next day), install insulation fixings.
- · Drill holes through EPS and into the wall.
- Insert plastic dowels with large heads to secure the boards.
- Typically 6–8 fixings per board, more at corners and edges.

6. Surface Reinforcement (Base Coat + Mesh)

Apply the first layer of base coat plaster (adhesive mortar). Embed fiberglass reinforcing mesh into the wet layer. Overlap mesh by at least 10 cm at joints. Apply a second thin layer of mortar to fully cover the mesh. Ensure smooth, even surface.

7. Primer Application

- Once the base coat is cured (usually 3–5 days), apply a primer suitable for the chosen finish.
- · This improves adhesion and prevents uneven absorption.

8. Final Render (Top Coat)

- · Apply decorative finish (silicone, acrylic, or mineral render).
- Texture according to design (scraped, rolled, or floated finish).
- · Protect freshly applied render from rain and direct sun until dry.

9. Detailing

- · Seal around windows, doors, and sills with expansion tapes or sealant.
- · Fit corner beads and drip profiles where needed.
- Install finishing trims at the top edges to prevent water ingress.