POLYBOND™ Standard 269

High Performance Polymer Modified Cement-based Tile and Stone Adhesives with No Vertical Slip, High Bond Strength and Extended Open Time

Classification in Compliance with EN 12004 : C2TE
Description : improved (2) slip resistant (T) cementitious adhesive (C) with extended open time (E), classified as C2TE

ADVANTAGES

- Single component and user friendly
- Excellent high bond strength
- Long open time
- Excellent workability with anti-slip
- No pre-soaking of tiles
- Non-toxic and non-flammable
- No additive or latex is required
- Cost effective with high productivity

DESCRIPTION OF PRODUCT

POLYBOND™ Standard 269 is a high polymer modified water resistant cement-based medium to thick bed adhesive specially formulated for demanding vertical and horizontal installation of ceramic, porcelain and homogeneous tiles of size larger than 600mm x 600mm and natural stones.

RECOMMENDED SUBSTRATE

- Sound concrete substrate.
- Lightweight blockwall substrate.
- Base cementitious-sand site mix plaster or screed.
- Factory premix render or screed.

NOT RECOMMENDED

POLYBOND™ Standard 269 is not recommended for use onto wood, metal, plastic, cement asbestos board or painted surfaces.

APPLICATION METHOD AND THICKNESS

POLYBOND™ Standard 269 is highly suitable to be used for both internal and external application with recommended average bedding thickness of 6 to 9mm, using either the **Double Bonding Method 1** of **Wet on Wet** application or the **Double Bonding Method 2** of **Wet on Dry** application.

Double Bonding Method 1 : Wet on Wet Application

Notched trowel onto substrate and back buttering onto underside of tiles and install progressively at not more than a rate of 1m²/time.

Double Bonding Method 2 : Wet on Dry Application

Notched trowel onto substrate and left to cure for a minimum of 7 days and back buttering onto underside of tiles and install progressively at not more than a rate of 1m²/time.

TECHNICAL SPECIFICATION

PHYSICAL PROPERTIES	
• Components	Water soluble polymers & chemical additives, dry graded silica sand > 95% SiO^2, non reactive limestone fillers and portland cement
• Colour Availability	Grey
• Maximum Grain Size	1.00 mm
• Dry Density in kg/litre	1.38
• Wet Density in kg/litre	1.70
APPLICATION DETAILS	
• Coverage @ full body	Approx. 1.40 kg/m²/mm
• Coverage @ notched trowel	Approx. 0.70 kg/m²/mm
• Recommended Bed Thickness	6 - 9 mm
• Coverage	Approx. 8 - 12 kg/m² at 6 - 9 mm (please refer to *Table for Coverage)
Open time	Approx. 30 minutes
Pot life	Approx. 1 - 2 hours
Adjustability time after placement	15 - 20 minutes (may vary depending on porosity of substrate)
Setting time	24 hours
Mixing Ratio	7.0 - 8.0 litres of water to 25kg
PERFORMANCE PROPERTIES Tensile Adhesion Strength (EN 1348:2007)	
• Initial Adhesion Strength (after 28 days)	> 1.0 N/mm²
• Adhesion Strength after heat exposure	> 1.0 N/mm²
• Adhesion Strength after immersion in water	> 1.0 N/mm³
• Adhesion Strength after freeze/thaw cycles	> 1.0 N/mm⁴
Open Time (EN 1346:1997)	> 0.5 N/mm² ilt 30 minutes
Slip Resistance (EN 1308:1999)	< 0.50mm
Resistance to mild acid	Fair
Resistance to dampness	Excellent
Thermal expansion	Similar to concrete

SURFACE PREPARATION, INSPECTION AND RECTIFICATION

- Clean surface to remove oil, dust, laitances and any unsound material by soft brushing and / or vacuuming. Honey-combed or uneven substrate shall be patched prior to application. Prewet the surface if necessary under extreme conditions.
- **Concrete must be fully cured at minimum 28 days.** Weak concrete and cement laitances on surface must be removed. Weak concrete patches to be hacked off and repaired with polymer-modified mortar. Pinholes are best to be filled with rubbing a sponge with wet cement slurry and immediately remove the wet excess cement on the surface by wiping over with a wet sponge with water, dampen-ing the surface simultaneously. Prime the surface if the concrete is very porous with **POLYBOND™ Sealer DPPS.**
- Check the verticality and alignment of the concrete wall to avoid thick application of adhesive. Otherwise, apply a levelling coat of **POLYMIX® Thin Render Premium** to level to the desired flatness of 2mm over 1.2m tolerance.
- Check the verticality and alignment of the Lightweight Block Wall to avoid thick application of adhesive. Otherwise, apply a leveling coat of **POLYMIX® Coarse Mortar Base Coat** to level to the desired flatness of 2mm over 1.2m tolerance. All Lightweight Block Wall & the levelling coat must be at least 1 month old prior to tiles installation.
- All Cementitious Waterproofing Coating must be at least one month old prior to tiles installation

PREPARING AND MIXING

Mix thoroughly a bag of 25kg **POLYBOND™ Standard 269** with approximately 7.0 - 8.0 litres of clean water with a power mixer and mix continuously for 3 - 5 minutes until a homogeneous paste is achieved. Re-mix the material before re-use if the material is left undisturbed for more than 30 minutes.

APPLICATION

Firmly apply freshly mixed **POLYBOND™ Standard 269** with a notched trowel onto substrate to achieve good contact and build up to the required thickness within the recommended range. Lay the tiles immediately with the **Double Bonding Method 1** or the **Double Bonding Method 2** and progressively onto the fresh adhesive bed for the **Wet on Wet** and the cured adhesive bed for the **Wet on Dry** and firmly fix it to ensure good bonding between the tiles and substrate. Tiles must be fully bedded with **POLYBOND™ Standard 269** and ensure voids free behind the tiles. Any adjustment of tiles shall be done within 15-20 minutes after installation with **POLYBOND™ Standard 269**. Any tile adjustment beyond this time shall require the removal of the existing adhesive and the substrate shall be applied with a fresh coat of **POLYBOND™ Standard 269.** For the application on **Wet on Wet,** do not apply **POLYBOND™ Standard 269** beyond a working area that cannot be completed within 20-25 minutes. Remove surplus adhesive from the tile surface and joints with a damp cloth. Avoid installation of tile grout and any heavy loading of newly installed tile surface within 24 hours.

PROCEDURES OF BONDING METHOD

Double Bonding Method 1 (Wet On Wet)	Double Bonding Method 2 (Wet On Dry)
• Notched Trowel onto Substrate Firmly apply **POLYBOND™ Standard 269** with a notched trowel at 6-9mm preferably in horizontal pattern for wall (and depending on the sizes and as per recommendation for the suitable trowel size for respective coverage) onto the substrate to achieve good contact and build up to the required thickness. Best is with a uniform layer onto the substrate first, then only adjust the thickness with recommended notch trowel size.	• Notched Trowel onto Substrate Firmly apply **POLYBOND™ Standard 269** with a notched trowel at 3-4mm in horizontal pattern (for wall) onto the substrate to achieve good contact. Best is with a uniform layer onto the substrate first, then only scratch to adjust the thickness with the recommended notch trowell size.
	• Curing of Notched Trowelled **POLYBOND™ Standard 269** The uniformly notched adhesive on the substrate is the left undisturbed for a minimum of 7 days to cure for proper bonding. This layer will also serve as the key coat for the subsequent & better bonding to the **POLYBOND™ Standard 269** on the underside of the tiles.

- Back Buttering onto Underside of Tiles
  Apply a thin coat of **POLYBOND™ Standard 269** of 2-3mm for **Wet on Wet** and 4-9mm for **Wet on Dry** onto the underside of the tiles by the Back-Buttering Method to ensure the entire tile back is fully covered with adhesive. Once the adhesive is properly applied onto the underside of tile, it is important to ensure that the adhesive does not skin prior to installation.

INSTALLATION OF TILES

- Install the tiles immediately and progressively onto the freshly notched trowel bed for **Wet on Wet** and cured notched trowel bed for **Wet on Dry** and to continuously ensure good contact between the tiles and substrate by pressing the tiles firmly with a slight twisting action. Tiles must be fully bedded with **POLYBOND™ Sta ndard 269** to ensure voids free beneath the tiles. Gently tap the tiles to the finish level and position for maximum contact with the adhesive.
- Re-trowel over the area of the adhesive to break the skin if skinning (a shinny and glossy appearance) has started to form prior to tiling.
- Any adjustment of tiles shall be done within 20-30 minutes after installation of **POLYBOND™ Standard 269.** Any tile adjustment beyond this time shall require the removal of the existing adhesive and the substrate shall be applied with a fresh coat of adhesive for the **Wet on Wet.**
- For each application, do not apply **POLYBOND™ Standard 269** beyond a working area that cannot be completed within 20-30 minutes. Remove surplus adhesive from the tile surface and joints with a damp cloth or sponge. Avoid installation of the tile grout and any heavy loading on newly installed tile surface within 24 hours.
- It is recommended to leave a minimum of 3mm at tile joints in between all tiles for ease of grouting and expansion/contraction purpose.

PACKAGING AND STORAGE

- Packing : 25kg / bag
- Shelf Life : 6 months in original packing
- Storage : Keep in cool and dry condition

PRECAUTION

- Do not dilute/alduterate the **POLYBOND™ Standard 269** with OPC/sand/additional additive other than recommended.
- Do not dampen the applied adhesive to artificially prolong open time.
- Light foot traffic is only allowable after a minimum of 24 hours.
- Tile joint grouting after 8 hours (wall) and 24 hours (floor).
- Protect the applied adhesive against high humidity or running water until the material is fully cured.