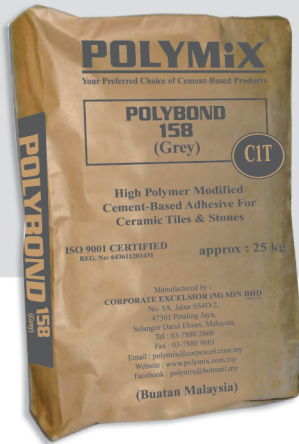


POLYBOND™ Standard 158

(formerly known as POLYBOND Tiles Adhesive)

Polymer Modified Cement-based Tile Adhesive, with No Vertical Slip and High Bond Strength



ADVANTAGES

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

DESCRIPTION OF PRODUCT

POLYBOND™ Standard 158 is a polymer modified water resistant cement-based thin to medium bed adhesive specially formulated for vertical and horizontal installation of ceramic, porcelain and homogeneous tiles of medium to large sizes and natural stones.

APPLICATION METHOD AND THICKNESS

POLYBOND™ Standard 158 is highly suitable to be used for both internal and external application with recommended average bedding thickness of 5 to 8mm, using either the **Single Bonding Method** of notched troweling onto substrate alone or the **Double Bonding Method 1 of Wet on Wet** application.

Single Bonding Method

Notched troweling onto substrate and install tiles progressively at not more than a rate of 1m²/time.

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.

Classification in Compliance with EN 12004 : C1T
Description : normal (1) slip resistant (T) cementitious adhesive (C)
Classified as C1T

RECOMMENDED SUBSTRATE

- Base cement-sand site mix plaster or screed.
- Factory pre-mix render or screed.
- Sound and primed concrete substrate.

NOT RECOMMENDED

POLYBOND™ Standard 158 is not recommended for use onto wood, metal, plastic, cement asbestos board or painted surfaces.

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	1.35
• Wet Density in kg/litre	1.85
APPLICATION DETAILS	
• Coverage @ full body	Approx. 1.380 kg/m ² /mm
• Coverage @ notched trowel	Approx. 0.675 kg/m ² /mm
• Recommended Bed Thickness	5 - 8 mm
• Coverage	Approx. 6 - 10 kg/m ² at 5 - 8 mm (please refer to *Table for Coverage)
Open time	Approx. 15 - 20 minutes
Pot life	Approx. 1 - 2 hours
Adjustability time after placement	10 - 15 minutes (may vary depending on porosity of substrate)
Setting time	20 hours
Mixing Ratio	6.0 - 7.0 litres of water to 25kg
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. Surface should preferably have a texture similar to light broom finish.
- Base cement-sand site mix plaster or factory premix render must be cured (minimum > 28 days), wood floated or steel trowelled to desired flatness of 2mm over 1.2m tolerance, free from loose particles, grease, oil and not to be subjected to further shrinkage crack after tiles installation and best not to have vibration in the vicinity during tiles installation.
- Check the verticality and alignment of the base plaster to avoid thick application of adhesive. Otherwise, apply a levelling coat of **POLYMiX® Coarse** or **POLYMiX® Fine Mortar Base Coat** to level to the desired flatness of 2mm over 1.2m tolerance.
- All the leveling coat if any onto the base plaster must be at least 1 month old prior to tiles installation.
- Check the flatness to ensure no hollowness, cracking and conform to flatness required and dampen by light misting with water if too dry to reduce rapid water absorption. Repair all defects or redo whenever necessary.

PREPARING AND MIXING

Mix thoroughly a bag of 25kg **POLYBOND™ Standard 158** with approximately 6.0 - 7.0 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 158** 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 **Single Bonding Method** and or **Double Bonding Method 1** and progressively onto the fresh adhesive bed and firmly fix it to ensure good contact between the tiles and substrate. Tiles must be fully bedded with **POLYBOND™ Standard 158** and ensure voids free behind the tiles. Any adjustment of tiles shall be done within 15 - 20 minutes after installation with **POLYBOND™ Standard 158**. 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 158**. For each application, do not apply **POLYBOND™ Standard 158** beyond a working area that cannot be completed within 15 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

Single Bonding Method	Double Bonding Method 1 (Wet On Wet)
<ul style="list-style-type: none"> • Notched Trowel onto Substrate Firmly apply POLYBOND™ Standard 158 with a notched trowel onto substrate to achieve good contact and build up to the required thickness. Best is to start off with a uniform layer onto the substrate first, and then only scratch to adjust to the thickness with the recommended notch trowel size. 	<ul style="list-style-type: none"> • Notched Trowel onto Substrate Firmly apply POLYBOND™ Standard 158 with a notched trowel at 5 - 8mm 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.
<ul style="list-style-type: none"> • Back Buttering onto Underside of Tiles Apply a thin coat of POLYBOND™ Standard 158 of 2-3mm 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 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™ Standard 158** 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 shiny and glossy appearance) has started to form prior to tiling.
- Any adjustment of tiles shall be done within 10-15 minutes after installation of **POLYBOND™ Standard 158**. 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 each application, do not apply **POLYBOND™ Standard 158** beyond a working area that cannot be completed within 10-15 minutes. Remove surplus adhesive from the tile surface and joints with a damp cloth. Avoid installation of the tile grout and any heavy loading of 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/alderate the **POLYBOND™ Standard 158** 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.