

# **ARROTILE PLATINUM PLUS**

Super Flex Multipurpose Floor and Wall Tile and Stone Adhesive



**CLASS:** IS15477:2019TYPE4TS1



# **Features / Benefits**

- Signal Component, Just add Water.
- Bond to Various Substrates
- Easy to use & Economical
- High strength with various Substrate.
- Water & Shock Resistance
- Complies with IS 15477:2019 Type4 T S1 Adhesive Standards.
- Complies With ANSI 118.4ET Shear bond Strength Requirements
- Complies with EN/ISO with C2TES1 Classification.

### **Complies**

- IS 15477 : 2019 Type 4 T S1 Adhesive
- EN 12004 / ISO 13007 : C2TES1 ADHESIVE

- ANSI : A 118.4 ET

# Working Properties (21° C)

Arrotile Platinum Plus High Polymer Adhesive Mixed With Water.

Open Time	25 Minutes
Adjustability Time	25 Minutes
Pot Life	4 Hours
Time to Heavy Traffic	24 Hours

Specifications subject to change without notification. Results shown are typical but reflect test procedures used. Actual field performance will depend on installation methods and site conditions. **Suitable Substrate** 

- Brick Masonry Surface
- Concrete Surfaces
- Cement Terrazzo
- Quarry, Cement Body Tiles
- Cement & Concrete Masonry
- Trimix / VDF Concrete
- Ceramic Tile, Vitrified Tile and Natural Stone
- Cement Backer Board\*
- Calcium Silicate Board\*
- Gypsum Wallboard\*

# **Application**

Design Especially for Interior and Exterior Floor and Wall Installations of all types of ceramic tile vitreous/vitrified, semi-vitreous tile, glass mosaic tiles, precast terrazzo, and natural stones over concrete and on a variety of substrates. Good underwater shear bond allows this product to be used for wet areas like swimming pools, sauna, water bodies and washrooms. Can also be used as slurry bond adhesive in wet on wet application tile on tile application.

#### **Performance Properties:**

ARROTILE PLATINUM PLUS High Polymer Adhesive mixed with Water

#### **Applicable Standards:**

IS15477:2019 / ANSI A118.4; EN 12004 & ISO 13007;

ANSI Data				
Property : Tes	Requirement	Typical Values		
method				
Open Time (30				
Minutes at 28				
days): ANSI	≥ 75 psi	130 psi – 150 psi		
	(0.50 Mpa)	(0.89 – 1.03 Mpa)		
A118.4 Clause –				
5.3				
		0.008 – 0.012 Inches		
Clause 6.0	(0.50 mm)	(0.20-0.30 mm)		
Glazed	d wall tile She	ar Strength		
7 Days: ANSI	200			
A118.4 – Clause	>300psi	350-375 psi		
7.1.2	(2.07 Mpa)	(2.40 Mpa -2.57 Mpa)		
7 Days Water				
immersion: ANSI	>200nci	250-275 psi		
	>200psi			
A118.4 - Clause	(1.38Mpa)	(1.72 Mpa -1.89 Mpa)		
7.1.3)				
	n Mosaic Tile S	Shear Strength		
1 Day: ANSI	> 75psi	125 - 175 psi		
A118.4 – Clause				
7.2.2	(0.50 Mpa)	(0.86 – 1.20 Mpa)		
7 Days: ANSI				
A118.4 – Clause	>200psi	275 - 325 psi		
7.2.3	(1.38Mpa)	(1.89 – 2.23 Mpa)		
7 Days Water	450	005 075 1		
immersion: ANSI	>150psi	225 - 275 psi		
A118.4 – Clause	(1.03Mpa)	(1.55 – 1.89 Mpa)		
7.2.4				
28 Days: ANSI	> 200 noi	200 250 pci		
A118.4 – Clause	>200psi	300 - 350 psi		
7.2.5	(1.38 Mpa)	(2.06 – 2.40 Mpa)		
28 Days : W/				
FreezeThaw				
	>175psi	275 - 325 psi		
cycling. ANSI	(1.20Mpa)	(1.89 – 2.23 Mpa)		
A118.4 – Clause		• *		
7.2.5				
12 Weeks: ANSI	>200psi	300 - 350 psi		
A118.4 – Clause	(1.38Mpa)	(2.06 – 2.40 Mpa)		
7.2.7	(1.30Mpa)	(2.00 – 2.40 Mpa)		
Quarry Tile Shear Strength				
28 Days : ANSI				
A118.4 – Clause	>150psi	250 - 300 psi		
7.3.2	(1.03Mpa)	(1.72 – 2.06 Mpa)		
28 Days : W/				
FreezeThaw	>100psi	200 - 250 psi		
cycling. ANSI	(0.69Mpa)	(1.37 – 1.72 Mpa)		
A118.4 – Clause	(0.0714104)	(1.07 1.72 Mpa)		
7.3.3				

The adhesive mortar conforms to ANSI A118.4ET

### Packaging:

25 kg bags **Colour:** Grey and white

EN / ISO Data				
Property: Test Method	Requirement	Typical Values		
Open Time: EN 1346	≥ 0.50 N/mm²	0.85 – 1.10 N/mm²		
Slip Resistance: EN 1308	≤ 0.50 mm	0.20 - 0.30 mm		
Tensile Adhesion Strength				
Initial: EN 1348 <i>–</i> Clause 8.2	≥ 1.00 N/mm²	1.50 – 2.00 N/mm²		
After Water Immersion : EN 1348 - Clause 8.3	≥ 1.00 N/mm²	1.50 – 1.75 N/mm²		
Heat Ageing: EN 1348 – Clause 8.4	≥ 1.00 N/mm²	1.15 – 1.40 N/mm²		
Freeze Thaw: EN 1348 – Clause 8.5	≥ 1.00 N/mm²	1.75 – 2.00 N/mm²		
Transverse Deformation: EN12002	≥ 2.5mm <5.00mm	2.55 mm-2.65 mm		

The adhesive mortar conforms to EN12004 / ISO 13007 as C2TE S1  $\,$ 

IS Data					
Property : Test method	Requirement	Typical Values			
TensileAdhesion					
Dry Condition  – Annex A (Clause 5.1 )	Minimum 1.5 N/mm²	1.70-1.80 N/mm <sup>2</sup>			
Wet Condition  – Annex A (Clause 5.1)	Minimum 1.0 N/mm²	1.50-1.60 N/mm <sup>2</sup>			
Shear Adhesion					
Dry Condition – Annex B (Clause 5.2)	Minimum 1.5 N/mm²	1.80-1.90 N/mm <sup>2</sup>			
Heat Ageing – Annex B (Clause 5.2 )	Minimum 1.0 N/mm²	1.20-1.30 N/mm <sup>2</sup>			
Wet Conditions – Annex B (Clause 5.2)	Minimum 1.0 N/mm²	1.30-1.40 N/mm <sup>2</sup>			
	Slip Resi <b>s</b> ance				
Slip Resistance- Annex E (Clause 5.5)	≤0.5 mm	0.3-0.4 mm			
TransverseDeformation					
Transverse Deformation: (Clause 5.6)	≥ 2.5mm <5.00mm	2.55 mm - 2.65 mm			

The Adhesive mortar conforms to IS 15477: 2019 - Type 4 T S1 Adhesive

#### **Coverage**:

Approx. 68-75 Sft per 25 kg pack using 6mm x 6mm square notched trowel for a bed of 3mm.

Coverage will vary depending on trowel notch size, type and size of tile and substrate smoothness and evenness

### Installation

#### **Surface Preparation:**

All surfaces should be between 40° F(4°C) and 104° F(40°C) and structurally sound, clean and free of all dirt, oil, grease, loose peeling paint, laitance, concrete sealers or curing compounds.

Check the surface to be true to plumb. All slabs must be plumb and true to within ¼" (6mm) in 10 ft(3m). Rough or uneven concrete surfaces should be made smooth with Screed/Plaster material to provide a wood float (or better) finish.

Dry, dusty concrete slabs or masonry should be dampened and excess water swept off. Installation may be made on a damp surface. New concrete slabs shall be damp cured and 28\* days old before application.

\*No minimum cure time for concrete slabs when thin-set mortar is mixed with latex additive.

Expansion joints shall be provided through the tile work from all construction or expansion joints in the substrate. Do not cover expansion joints with thin set mortar. Follow ANSI Specification AN-3.8 "Requirements for Expansion Joints"

#### MIXING :

Place clean, potable water into a clean mixing bowl. Add ARROTILE PLATINUM PLUS High Flex powder into the mixing bowl. Use approximately 6.8 - 7.5L of water for 25 kg of powder. Mix by hand or with a slow speed mixer to a smooth, trowelable consistency. Allow adhesive to slake for 5 minutes. Adjust consistency if necessary. Remix and apply with the proper sized notched trowel.

#### NOTE :

Addition of ARROTILE PLOYMIX latex admix\*, partially or completely replacing water would enhance the bond strength, flexibility of the thinset mortar.

\* Contact ARROTILE technical services for large format tile or stone installations on exterior surfaces.

# **Application**

#### a) TILE/STONE

Apply adhesive to the substrate with the flat side of the trowel, pressing firmly to work into surface. Comb on additional adhesive with the notched side. Use the proper sized notched trowel to ensure full bedding of the tile. Spread as much adhesive as can be covered with tile in 10 minutes. Back butter large format tiles (> 12"x12") to provide full bedding and firm support. Place tiles into wet, sticky adhesive and beat in using a beating block and rubber mallet to embed tile and adjust level. Check adhesive for complete coverage by periodically removing a tile and inspecting bedding adhesive transfer onto back of tile. Use of Arrotile spacers is recommended to provide grout joints between tiles / stones. The joint width shall be as per the recommendation of architect / engineer. Remove the spacers when the adhesive is set firm.

If adhesive is skinned over (not sticky), remove and replace with fresh adhesive.

#### **b) GLASS MOSAIC TILES**

The Arrotile Platinum High Flex adhesive shall be applied to the surface to be tiled with a notched trowel using a scraping motion to work the adhesive into good contact with the surface to be covered. Notch trowel with notches approximately 4mm is recommended to get a bed thickness of 1.5-2mm. V-notch of 3mm also can be used to get bed thickness of 1.5mm. Apply only so much that can be covered with tile within 10-15 minutes or while the adhesive surface is still tacky. The Glass Mosaic tiles shall then be set in place and beaten gently with mallet or grouting float to insure 100% full bedding. Tiles shall be aligned to achieve uniform joints and then allowed to set until firm. Excess adhesive must be cleaned from the surface of the tile with a wet cloth or sponge while the adhesive is fresh and has not hardened.

#### NOTE TO THE SPECIFIER AND INSTALLER:

After the tiles are set firm, the face of the sheets of front mounted glass mosaic tiles shall then be dampened and the face mount paper can be removed.

While installing tile/stone on the external walls and floors, we need to provide the joints by creating spaces between the tiles/stones and fill them up with Arrotile cement based grout mixed with Arrotile Ploymix (In the absence of spacer joints, the surface movements can push tiles/stones away from the substrate causing de-bonding of tiles or stones)

The exterior tile / stone installations are provided with joints (spaces) on the periphery of the area without allowing the tile / stone to be bound by the peripheral masonry work or plaster.

#### **HOT & COLD WEATHER TILING:**

\* Please refer technical document on Hot & Cold weather tiling.

#### **Grouting:**

Grout installation shall be commenced after a minimum of 24 hours curing time at 70°F (21° C). Grout with Arrotile grout mixed with Arrotile polymix For maximum stain resistance of Internal spacer joints applications, use Arropoxy Tile grout Stainfree Grout.

For Feedback / Suggestion & Complaints: Arrotile Constrochem

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