



Arrotile®
Constrochem

ARROTILE SILVER

Interior Wall & Floor Tile
Adhesive



CLASS:

IS 15477:2019 TYPE 1 T



www.arrotile.com

Features / Benefits

- Signal Component, Just add Water.
- Interior Application, Polymer Based
- Easy to use & Economical
- Can Be used up to Maximum 12mm Bed Thickness
- Complies with IS 15477:2019 - Type 1T Adhesive Standards.
- Complies With A118.1T Shear Bond Strength Requirements.
- Complies With EN / ISO with C1T Classification

Complies

- IS 15477 : 2019 Type 1T Adhesive
- EN 12004 / ISO 13007 : C1T ADHESIVE
- ANSI : A 118.1 T

Working Properties (21° C)

Arrotile Silver Adhesive Mixed With Water.

Open Time	20 Minutes
Adjustability Time	20 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

- Concrete
- Concrete Masonry
- Cement Mortar Beds
- Cement Plaster
- Brick Masonry
- Cement Terrazzo
- Ceramic Tile*
- Existing Natural Stone*

* Surface to be cleaned and roughened before installation of tiles or stones.

Application

Designed especially for dry areas of interior floor and interior wall installations of all types of ceramic tile, semi-vitreous tile, precast terrazzo and small format natural stones over concrete and on a variety of cement-based substrates.



Performance Properties:
ARROTILE SILVER Adhesive mixed with Water

Applicable Standards:
IS15477:2019 / ANSI A118.1; EN 12004 & ISO 13007;

ANSI Data		
Property : Test method	Requirement	Typical Values
Open Time (20 Minutes at 28 days): ANSI A118.1 Clause – 5.3	≥ 75 psi (0.50 Mpa)	95 psi – 100 psi (0.65 – 0.69 Mpa)
Sag: ANSI A118.1 - Clause 6.0	≤ 0.02 Inches (0.50 mm)	0.016 – 0.018 Inches (0.40 -0.45 mm)
Glazed wall tile Shear Strength		
7 Days: ANSI A118.1 – Clause 7.1.2	>200psi (1.38Mpa)	200-225 psi (1.38 Mpa -1.55 Mpa)
7 Days Water immersion: ANSI A118.1 - Clause 7.1.3)	>150psi (1.03Mpa)	150-175 psi (1.03 Mpa -1.20 Mpa)
Porcelain Mosaic Tile Shear Strength		
1 Day: ANSI A118.1 – Clause 7.2.2	>50psi (0.34Mpa)	75 - 100 psi (0.51 – 0.69 Mpa)
7 Days: ANSI A118.1 – Clause 7.2.3	>150psi (1.03Mpa)	175 - 200 psi (1.20 – 1.38 Mpa)
7 Days Water immersion: ANSI A118.1 – Clause 7.2.4	>100psi (0.69Mpa)	150 - 175 psi (1.03 – 1.20 Mpa)
28 Days: ANSI A118.1 – Clause 7.2.5	>150psi (1.03Mpa)	175 - 200 psi (1.20 – 1.38 Mpa)
12 Weeks: ANSI A118.1 – Clause 7.2.6	>150psi (1.03Mpa)	175 - 200 psi (1.20 – 1.38 Mpa)

The adhesivemortar conforms to ANSI A118.1T

EN / ISO Data		
Property: Test Method	Requirement	Typical Values
Open Time: EN 1346	≥ 0.50 N/mm ²	0.65 – 0.69 N/mm ²
Slip Resistance: EN 1308	≤ 0.50 mm	0.40 - 0.45 mm
Tensile Adhesion Strength		
Initial: EN 1348 – Clause 8.2	≥ 0.50 N/mm ²	0.55 – 0.65 N/mm ²
After Water Immersion : EN 1348 - Clause 8.3	≥ 0.50 N/mm ²	0.55 – 0.65 N/mm ²
Heat Ageing: EN 1348 – Clause 8.4	≥ 0.50 N/mm ²	0.55 – 0.65 N/mm ²
Freeze-Thaw: EN 1348 – Clause 8.5	≥ 0.50 N/mm ²	0.55 – 0.65 N/mm ²

The adhesive mortar conforms to EN12004 / ISO 13007 as C1T

IS Data		
Property : Test method	Requirement	Typical Values
Tensile Adhesion		
Dry Condition – Annex A (Clause 5.1)	Minimum 0.50 N/mm ²	0.65 -0.75 N/mm ²
Shear Adhesion		
Dry Condition – Annex B (Clause 5.2)	Minimum 1.00 N/mm ²	1.10-1.20 N/mm ²
Slip Resistance		
Slip resistance– Annex E (Clause 5.5)	≤0.5mm	0.1-0.2 mm

The Adhesive mortar conforms to
IS 15477: 2019 - Type 1T Adhesive

Packaging:
40 kg bags

Colour:
Grey

Coverage :
Approx. 55-60 Sft per 20 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 SILVER POWDER into the mixing bowl. Use approximately 5.5 - 6.0L of water for 20 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

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.

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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