



SOLID-115

Premium Grade Tile & Stone Adhesive



Features / Benefits

- Single component, just add water
- · High strength, polymer modified
- Economical & Easy to use
- · Bonds to various substrates
- · Complies with EN / ISO with a C2TE classification.
- Exceeds IS 15477:2019 Type 3T Adhesive standards.
- · Water and shock resistant.



High polymer modified thin-set adhesive for fixing all types of tiles and natural stone on interior and exterior, both vertical & horizontal applications on floor & wall in dry & wet conditions.





Substrate

- · Concrete & Concrete Masonry
- · VDF / Tremix Concrete
- Cement Mortar Beds
- Cement Plaster
- · Ceramic tile, Vitrified Tile and Natural Stone
- · Glass mosaic tile
- · Brick Masonry
- Cement Backer Board**
- · Cement Terrazzo
- Calcium Silicate Board**
- Gypsum Wallboard**

**Consult the backer board manufacturer's data sheet for the specific recommendations and load bearing capacity of specific board intended for use.

Application

Designed 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 applications, tile on tile applications.

Compliance

ISO 9001:2015







Authorised Signature

PERFORMANCE PROPERTIES

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APPLICATION PROPERTIES

TESTING PROPERTIES	TEST RESULTS	
Tentative Mixing Ratio (Powder: Water)	Grey-1:0.23-0.27 by weight White-1:0.24-0.28 by weight approx.	
Mixed Density	1.60-1.85 kg/litre	
Open Time (IS 15477: 2019)	Approx. 30 minutes	
Adjustability (IS 15477: 2019)	Approx. 35 minutes	
Pot Life	Approx. 120 minutes	
Sag/Slip	≤ 0.50 mm	
VOC Content (EPA 24)	< 1.20 gm/kg	
Application Temperature (substrates and materials)	5°C to 35°C	
Adhesive Thickness	3-12 mm	
Setting/Trafficable/Grouting Time	24 hours	

PERFORMANCE PROPERTIES AS PER IS 15477: 2019 (TYPE 3T)

TESTING PROPERTIES	REQUIREMENT	TEST RESULTS
a) Tensile Adhesion at Dry Condition after 28 days	≥ 1.50 N/mm²	1.55-1.68 N/mm²
b) Tensile Adhesion at Wet Condition	≥ 1.00 N/mm²	1.10-1.20 N/mm²
c) Shear Adhesion at Dry Condition	≥ 1.50 N/mm²	1.58-1.71 N/mm²
d) Shear Adhesion at Wet Condition	≥ 1.00 N/mm²	1.15-1.25 N/mm²
e) Shear Adhesion at Heat Ageing	≥ 1.00 N/mm²	1.10-1.20 N/mm²
f) Slip Resistance (T)	<u><</u> 0.50 N/mm²	0.28-0.40 mm

PERFORMANCE PROPERTIES AS PER ISO 13007 AND EN 12004 (C2TE)

TESTING PROPERTIES	REQUIREMENT	TEST RESULTS
a) Tensile Adhesion strength after 28 days	≥ 1.00 N/mm²	≥ 1.00 N/mm²
b) Tensile Adhesion strength after water immersion	≥ 1.00 N/mm²	≥ 1.00 N/mm²
c) Tensile Adhesion strength after heat ageing	≥ 1.00 N/mm²	≥ 1.00 N/mm²
d) Tensile Adhesion strength after freeze-thaw cycle	≥ 1.00 N/mm²	≥ 1.00 N/mm²
e) Slip Resistance	≤ 0.50 mm	<u><</u> 0.50 mm
f) Extended open time (at 30 minutes)	≥ 0.50 N/mm ²	≥ 0.50 N/mm²

Note: Test results are indicative as per testing method specified in standard. Test results may vary as per substrate, site condition & testing machine etc. Actual field performance will depend on installation methods and site conditions.

TECHNICAL DATA

Packaging:

20 kg bags

Colour:

Grey and white

Coverage:

Approx. 30-35 Sft per 20 kg pack using (12mm x 12mm) square notched trowel for a bed of 8mm.

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

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

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 (8mm) in 10ft (3m).

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 thinset mortar is mixed with **DUROMIX**.

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" or TCA Detail EJ171 "Expansion Joints". For tile installation over Cement Backer Board: follow TCA installation details W244.

For all stone with a back-protection mesh, it is important to remove the mesh first and also remove the epoxy layer by light grinding to ensure perfect bond with the adhesive.

Mixing:

Place clean, potable water into a clean mixing bowl. Add **SOLID-115** / **DRX-325** Premium Grade Tile & Stone Adhesive into the mixing bowl. Use approximately 5.5 - 6L 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 **DUROMIX Polymer Admix**, partially or completely replacing water would enhance the bond strength, flexibility of the thinset mortar.

* Contact **DUROXZ** 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 imbed 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 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.

TECHNICAL DATA

b) Glass Mosaic Tiles:

The SOLID-115 / DRX-325 Premium Grade Tile & Stone 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.

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.

c) Wet on Wet System

SOLID-115 / DRX-325 Premium Grade Tile & Stone Adhesive can also be used in slurry form in wet on wet conditions.

NOTE TO THE SPECIFIER AND INSTALLER:

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 Duropox - 99 cement based grout mixed with Duromix Polymer Admix. 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 Duropox - 99 Sanded or Unsanded Grout mixed with Duromix Polymer Admix.

For maximum stain resistance of Internal spacer joints applications, use Duropoxy - 15K Epoxy Grout.



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