

Highly resilient,
advanced polymer modified
cementitious adhesive for fixing
large format tiles & stones designed
for both interior and exterior applications.



- EN12004:2017 C2 TE
- IS 15477:2019 Type 3 T

PRODUCT BENEFITS

- Designed for interior and exterior applications
- Tile-on-Tile and Wet-on-Wet systems
- Uni-component
- Extended open time
- Absorbs high loads
- Slip resistance
- High tensile strength
- Sustains heat ageing
- High deformation
- Good underwater shear bond
- Shock resistant

APPLICATION AREAS

- Walls
- Floors
- Showers
- Damp areas
- Swimming pools
- Shallow submerged areas
- Tile on tile applications
- Can be used as slurry bond adhesive in wet on wet applications
- Dry areas
- Worktops

PACKAGING SIZE 25 KG

USAGE

Materials

- Marbles
- Ceramic tile, Vitreous, Semi-vitreous tile
Glass mosaic tiles,
- Precast terrazzo and
- Natural stones

Substrates

- Cementitious screeds
- Lime/cement based mortars or renders
- Gypsum/Cement/ Calcium silicate boards **
- Fiber cement slabs
- Cellular Concrete
- Concrete/ Brick masonry
- Waterproofing and heating systems
- Ceramic/ Vinyl tiles and natural stones

** Contact the board manufacturer's data sheet for any specific recommendations before usage

COVERAGE

Approximately 75 - 80 sqft per 25 kg bag @3mm thickness**

**Coverage will vary depending on type and size of tile and substrate smoothness and evenness.

TECHNICAL DATA

• Form	Powder
• Colors	Grey and white
• Mixing Ratio	30-32 parts Water per 100 parts TSA ST by weight (7.5-8 litres of water every 25kg of TSA- ST)
• Pot Life	3 hours
• Shelf Life	1 year
• Time to traffic	24 hours
• Temperature Resistance	-30°C to150°C

Properties tested to IS15477:2019

Tensile Adhesion Strength (as per Annex A , Clause 5.1)	Desired Values	Actual Values
• Dry Condition	> 1.5 N/mm ²	> 1.58 N/mm ²
• Wet Condition	> 1.0 N/mm ²	> 1.10 N/mm ²
Shear Adhesion Strength (as per Annex B , Clause 5.2)		
• Dry Condition	> 1.5 N/mm ²	> 1.54 N/mm ²
• Heat Ageing Condition	> 1.0 N/mm ²	> 1.12 N/mm ²
• Wet Condition	> 1.0 N/mm ²	> 1.13 N/mm ²
Open Time (as per Annex C)	≥ 30 minutes	≥ 30 minutes
Slip Resistance as per Annex E, Clause 5.5	< 0.5 mm	0.26 mm

Properties tested to EN12004:2017

Tensile Adhesion Strength (as per EN 1348)	Desired Values	Actual Values
• 28 days in Normal Conditions	≥ 1.0 N/mm ²	> 1.54 N/mm ²
• Thermal Ageing at 70° C for 14 days	≥ 1.0 N/mm ²	> 1.14 N/mm ²
• Water Immersion for 21 days	≥ 1.0 N/mm ²	> 1.02 N/mm ²
• Freeze - thaw cycles	≥ 1.0 N/mm ²	> 1.0 N/mm ²
Open time @ 30 mins: Tensile Adhesion Strength (EN 1346)		≥ 0.65N/mm ²
Slip Resistance (as per EN 1308)	≤ 0.5 mm	≤ 0.5 mm

INSTRUCTIONS

SURFACE PREPARATION

- Surface temperature should be between 4° C to 40° C and structurally sound, clean and free of waxes, dirt and coatings, laitance, sealers or curing compounds.
- Dry, dusty concrete slabs or masonry should be dampened and excess water swept off.

APPLICATION METHOD

- Apply adhesive to the substrate with flat side of the trowel, pressing firmly into substrate.
- 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 tiles (18" x 36") 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.
- If adhesive is skinned over (not sticky), remove and replace with fresh adhesive.
- Grouting:- Grout installation should be done after a minimum of 24 hours curing time at 21° C
- During cold weather, protect finished work from traffic until fully cured.

PREPARING THE MIX

- Fill clean, potable water into a container.
- Add RachTR TSA ST powder into the mixing bowl. Use approximately
- Grey - 7 - 9 L of water for 25 kg of powder
- White- 7 - 9 L of water for 25 kg of powder
- Ensure proper and thorough mixing with slow speed mixer up till trowelable consistency.
- Adjust consistency if necessary.
- Apply with notch trowel.
- Use Gloves, Goggles and Respirators while applying

EMERGENCY/FIRST AID

- Ingestion: Do not induce vomiting. Call a physician
- Eye Contact: Flush thoroughly with water for at least 15 minutes. Remove contact lenses, if applicable, and continue flushing. Call a physician if eye irritation persists.
- Skin Contact: Wash skin with mild soap and water. Call a physician if skin irritation persists. Wash clothes before wearing again.
- Inhalation: Remove to fresh air. Call a physician if respiratory irritation persists.

STORAGE AND HANDLING

May be harmful if swallowed. May cause skin, eye and respiratory irritation. Do not inhale. Avoid prolong exposure to powder. Use in a well ventilated area. Do not ingest. KEEP OUT OF THE REACH OF THE CHILDREN. Do not freeze or store above 40° C. Do not mix with other chemicals

RachTR[®]
Global Excellence | Local Expertise

The above information is based on the latest stage of our development and application technology. Due to multiplicity of influencing factors, this information must be considered as non-binding. Because conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.



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PART A. PARTICULARS OF SAMPLE SUBMITTED

COMPLETE TEST CERTIFICATE

भाग 'अ' जमा किये गये नमूने का विवरण

परीक्षण प्रमाणपत्र सं/Test Certificate No:
NTH(NWR)/CIV(G)/25/5813_1

एस.आर.एफ. संख्या/SRF Number:
NTH(NWR)/CIV(G)/25/5813

जारी होने की तिथि/Date of issue
19 Nov, 2025

कोड सं/QR Code
: NTH250102247

a) जिसे जारी करना है/Issued To	:	RachTR Chemicals Private Ltd
b) पता/Address	:	RIICO Industrial Area, Plot No. G1-586, near Fire Station, Khushkhera, Rajasthan 301707, Bhiwadi, Alwar, Rajasthan, India - 301707
c) ग्राहक का संदर्भ सं एवं दिनांक/Customer's Ref. No.	:	Nil
d) नमूना मुहरबंद स्थिति/Sample Sealed Status	:	Not Applicable
e) परीक्षण सामग्री का विवरण/Description of Test item	:	Tile adhesive -Grade: RachTR TSA ECO+ White Type: 2T
f) नामपद्धति का विवरण/Description of Nomenclature	:	Tile adhesive -Grade: RachTR TSA ECO+ White Type: 2T
g) नमूने की विशिष्टता (यदि हो)/Product Specification(if any)	:	IS 15477 (2019) - Adhesives for Use with Ceramic, Mosaic and Stone Tiles- Specification (First Revision)
h) नमूना प्राप्ति की तिथि /Date of Receipt of the Test item	:	06 Oct, 2025
i) कार्य निष्पादन की तिथि/Date(s)of Performance of Tests	:	From: 09 Oct, 2025 To: 19 Nov, 2025
j) परिमाण/Quantity	:	1.0 Twenty kg
k) कोई अन्य सूचना / अंतिम तिथि, यदि हो/Any other Information / Expiry Date, If any	:	Tests as per IS 15477:2019
l) अनुभाग कोड/Section Code	:	25CV14FCN (Pages:3)
m) अनुभव प्रमाणपत्र संख्या/Section Certificate No.	:	25CV14FCN_1
n) प्रमाणपत्र का प्रकार/Certificate Type	:	New
o) संदर्भ प्रमाणपत्र संख्या/Reference Certificate No.	:	
p) टिप्पणी/Remarks	:	

Dr. Devendra Kumar Chaudhary
OIC SAMPLE CELL
Signed on: 19 Nov, 2025 19:07 PM

Note: 1.This Test Certificate shall not be reproduced except in full, unless permission for the reproduction of an approval
Signature Not Verified
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(SampleCell)

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IS 15477 (2019)

PART B. SUPPLEMENTARY INFORMATION

1.	नमूना लेने की प्रक्रिया का संदर्भ, जहां लागू हो। Reference to sampling procedure, wherever applicable.	Not Applicable
2.	परीक्षण रिपोर्ट से संबंधित मापन एवं परिमाण प्रसि हेतु सहायक प्रलेख जैसे ग्राफ, तालिका, चित्र और / अथवा फोटोग्राफ, यदि कोई हो। Supporting documents for the measurements taken and results derived like graphs, table sketches and or photographs as appropriate to test certificate, if any.	No
3.	सम्बद्ध मानक / कार्य निर्देशों में निर्धारित परीक्षण पद्धति से विचलन, यदि कोई हो। Deviation from the test methods as prescribed in relevant ISS/Work instruction, if any.	No
4.	परीक्षण सामग्री की पहचान/identification of Test item	Tile adhesive -Grade: RachTR TSA ECO+ White Type: 2T
5.	व्यावृत्त की प्राणाली की पहचान/Method(s) used for Test	IS 15477:2019
6.	नमूना प्रक्रिया जहां प्रासंगिक हो/Sampling Procedure where relevant	Not Applicable .
7.	पर्यावरण की स्थिति/Environmental Conditions	As per IS specification .
8.	उपयोग किए जाने वाले प्रमुख मानक/उपकरण/Major Standards/Equipments used	As per IS specification .
9.	कैलिब्रेशन स्थल/Site of Calibration	Not Applicable .
10.	मापन का पता लगाने की क्षमता/Traceability of Measurement	Not Applicable .

DEEPAK SRIVASTAVA
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PART C. TEST RESULT

S.No.	Clause No Table No. SI. No	Parameter - Method of test	Test Description	Min Limit	Max Limit	Unit	Result/ Observation
1	5.6	Deformability (for Vertical Application only)-Annex F of IS 15477:2019	Deformability (for Vertical Application only), mm	-	-	-	Test Not Applicable
2	5.2, Table 1, SI No (ii)-(b)	Shear adhesion Strength, (Heat aging condition)-Annex B of IS 15477:2019	Shear adhesion Strength, (Heat aging condition)-N/mm ²	1.0	-	N/mm ²	1.13
3	5.2, Table 1, SI No (ii)-(c)	Shear adhesion Strength, (Wet condition)-Annex B of IS 15477:2019	Shear adhesion Strength, (Wet condition)-N/mm ²	1.0	-	N/mm ²	1.25
4	5.2, Table 1, SI No (ii)-(a)	Shear adhesion Strength-(Dry Condition)-Annex B of IS 15477:2019	Shear adhesion Strength, (Dry condition)-N/mm ²	1.25	-	N/mm ²	1.30
5	5.1, Table 1, SI No (i)-(b)	Tensile adhesion Strength (Wet Condition)-Annex A of IS 15477:2019	Tensile adhesion Strength (Wet Condition)-N/mm ²	1.0	-	N/mm ²	1.02
6	5.1, Table 1, SI No (i)-(a)	Tensile adhesion Strength(Dry Condition)-Annex A of IS 15477:2019	Tensile Adhesion Strength, (Dry Condition)-N/mm ²	1.0	-	N/mm ²	1.04
7	5.5	Slip Resistance (For vertical application only)-Annex E of IS 15477:2019	Slip Resistance, mm	-	0.5	mm	0.30
8	5.4	Adjustment Time-Annex D of IS 15477:2019	Adjustment Time minutes	-	-	minutes	20 (Not declared)
9	5.3	Open time-Annex C of IS 15477:2019	Open time, minutes	-	-	minutes	20 (Not declared)

GOUTAM SAREN
 Lab Sc. Testing/Calibration Civil

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Part D.

REMARKS

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Notes

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