



HIR[®]
YOUR BUILDING MASTER



AMERICAN
TECHNOLOGY



GERMAN
TECHNOLOGY



TECHNICAL DATA

DELTA + HIR TILE ADHESIVE

Category: C2TES1



INDIA'S 1st 100% Silica
Based Mortar



No Extra Cement
And No Sand



Polymer Modified Gel
Based Technology



German And
American Tech



Self Curing



Stronger Bonding



Easy To Make
And Clean



Reduce Labour
Cost



DESCRIPTION

HIR Delta+ formulated to achieve C2TES2 category of tiles adhesive according to ISO standards. HIR Delta+ tiles adhesive performed well in extreme conditions to fix marble, tile, stone on wall and floor. HIR Delta tiles adhesive is more flexible, more improved quality and high performance. Due to flexible nature this HIR tiles adhesive can tolerate vibration and deformation to an extent. HIR Delta+ tiles adhesive is recommended to fix vitrified tiles, marble, natural stone, artificial or composite stone, etc of large sizes on wall and framing in 3mm thickness.

AREA OF APPLICATION

- Interior and Exterior application of tiles and stone.
- Use over concrete Cement, Plaster, blocks, Steel and Plywood.
- Used on Approved Waterproofing membranes.

RECOMMENDED USE

- Fixing tiles on tiles, stone, marble on floor upto 1200mm x2400mm any size
- Fixing tiles, stone, marble on floor upto any size 1200mm x 2400mm any size
- Fixing tiles on wall up to 1600mm x 3200mm any size
- Framing 1200mm x 3200mm large format tiles and marble

Coverage: 0.495kg/Sq.Ft/3mm Thickness*

FEATURES

- Dual Bonding Strength
- Highly Flexible
- High Deformation S2
- Better Pot Life
- Long Extended Open Time
- Easy to clean
- 100% silica sand

BENEFITS OF HIR TILES ADHESIVE

- Stronger Improved Bond Strength
- Longer working Time and Zero wastage
- More strength
- No spots on tiles after fixing
- No hollow
- No shrinkage and Resist temperature variation with better bonding and Preserve Mother Nature

SURFACE PREPARATION BEFORE USING TILES ADHESIVE

- Floor and wall should be clean, free from dust, loose particles, oil or greasy material.
- New concrete slab or screed have fully cured 7 to 14 days.
- Waterproof membranes have cured, minimum 24 to 48 hours before tiles application.
- Wall should not be painted or wall putty or hollow or weakly plastered.
- If it is painted or wall putty remove it with grinder and make surface rough for better bonding.
- Surface should be moist and water free.
- Wall tiles should be dip in water for 30 minutes before using.
- Vitrified, Porcelain tiles or digital tiles should be clean and free from dust or other foreign materials.

MAKING OF TILES ADHESIVE

- Take Delta+ 5 liter liquid polymer in clean bucket and add gradually 20kg HIR Delta + HIR Tiles adhesive. (slight water can be added in hot weather condition) Add tiles adhesive to liquid for uniform mixture. If liquid is added to tiles adhesive leads to lumps formation and forms air bubbles. This in future leads to failure of tiles and adhesive bonding.
- Mix powder and liquid additive together until smooth paste consistency is achieved using mixture machine at medium to high speed simultaneously.
- Gradually mix using mixture machine at medium to high speed simultaneously for 3 minutes.
- Keep mixture on standby for 5 minutes. Again mix it for 1 minute before use.
- Use tiles adhesive within time period of mentioned pot life using right method of trowel.

HOW TO APPLY TILES ADHESIVE IN RIGHT WAY

- Use notched trowel from of 6 mm that gives bed thickness from 3 mm respectively.
- Back butter thin layer of HIR tiles adhesive on tiles/marble/stone using flat side of trowel.
- Comb on additional adhesive with the notched side of the trowel in one direction straight either vertical or horizontal.
- Place the clean tiles/marble/stone on correct tiles adhesive bed thickness.
- Move the tiles/marble/stone in opposite direction to that of tiles adhesive troweled.
- By doing this we will get + 90% bonding between tiles/marble/stone and tiles adhesive.
- Use spacers if tiles/marble/stone fix in exterior area, exposed to sun and water like parking and veranda or if fixing tiles on exterior wall.

PRECAUTIONS WHILE USING TILES ADHESIVE. ERRORS TO AVOID WHILE USING TILES ADHESIVE

- Choose correct tiles adhesive. Selection of tiles adhesive depends on
 1. **Size of tiles:** stone, marble
 2. **Type of tiles:** stone, marble
 3. **Area of application:** interior or exterior
 4. **Height of application**
- Keep HIR Tiles Adhesive in company packing away from moisture, water and direct sunlight.
- Correct surface preparation and cleaning, curing of tiles/marble/stone before using.
- Use whole pack in one go or keep it away from moisture, water and direct sunlight.

PREPARATION OF TILES ADHESIVE

- Use tiles adhesive within time of pot life. Increase in atmospheric temperature reduces pot life. Pot life of any product mentioned by any company is according to standardized temperature, relative humidity. So actual pot life may vary. If tiles adhesive used after pot life leads to bond failure between tiles and adhesive.
- Move of trowel in one direction is must. Make sure to slight movement of tiles/marble/stone in opposite direction to remove air bubble and hollow space for 90% plus bonding.
- Traditional movement of trowel leads to formation of air pockets and lower bonding %.
- Use spacer if laying tiles on exterior wall or floor to avoid bending and hollowing of tiles in future.
- Use spacer and fill epoxy if laying tiles in bathroom to avoid water leakage.
- Avoid using of floor and grouting for 24 hours to 48 hours depending upon atmospheric temperature and weather.
- Avoid vibration or repairing of wall and surrounding nearby walls if tiles is fix on wall for 24 hours to 48 hours at least.

PHYSICAL PROPERTY

FORM	PART A	POWDER
	PART B	LIQUID
COLOUR	PART A	GREY
	PART B	WHITE
BASE		MINERAL
ADHESIVE THICKNESS		3MM
BULK DENSITY	PART A	1.38KG/LTR
	PART B	1KG/LTR
MIX DENSITY		1.80KG/LTR
TEMPERATURE RANGE OF APPLICATION		From +10° C to +35° C

TECHNICAL DATA

POT LIFE (30°C)	1 HOURS
OPEN TIME (30°C)	30 minutes
ADJUSTING TIME B111 Tiles (30°C)	20 minutes
ADJUSTING TIME B1a Tiles (30°C)	30 minutes
TENSILE ADHESION STRENGTH 28Days	≥ 2.5 N/mm ²
LIGHT FOOT TRAFFIC	48 HOURS
HEAVY FOOT TRAFFIC	72 HOURS
SWIMMING POOL	14 DAYS
GROUTING IN WALL	12 HOURS

SAFETY FEATURES:

Wear suitable protective clothing, gloves and goggles. After contact with skin, wash immediately with plenty of clean water. In case of contact with eyes rinse immediately with plenty of clean water and seek medical advice. Keep out of reach of children.

PACK: 20KG + 5LTR

SELF LIFE: 12 Month in original packaging ,protected from direct sunlight and stored in dry condition.

NOTE:

Working time/setting time will vary slightly with temperature: higher temperatures = shorter; lower temperatures = longer.