



**weberset monohiflex**



**Suitable solution for fixing large format thin tile, impregnated and composite stones, specially used for cladding**



## Product description

**weberset monohiflex** is a single component, high performance, Highly polymer modified adhesive for impregnated, artificial, natural stones & also suitable for fixing large format thin tiles on a variety of substrates, where nominal to moderate substrate movement is expected. It is suitable for both vertical as well as horizontal application and specially designed for cladding in indoor as well as outdoor. It is supplied as ready-to-mix at site.

## Features and benefits

- Especially suited for fixing impregnated, artificial\*, and natural stones, composite marbles & large format thin tiles.
- Ready-to-mix, single component system.
- Excellent adhesion properties, even with impregnated stones no slip is observed on vertical applications.
- Self-curing property, which allows for hassle free application, with minimum labor.
- No shrinkage, prevents debonding, and gives longer life to tiles and stones.
- Suitable for heavy duty applications with moderate structural/substrate movements.
- No-Sag formula allows for hassle free application on vertical walls, without any slippage.
- Highly polymer modified, provides high structural adhesion, which allows to be used on a variety of substrates, for fixing a variety of tiles and stones.
- Low VOC for healthy living.
- Recommended for wall and floor in internal, external and submerged areas.
- Installed floor can be made available for foot traffic after 24 hours.
- Product can be used for new construction, as well as for renovation over existing floors & facades.
- No hacking of substrate is required to achieve the bonding.

- Suitable for application in both wet & dry areas.
- Useful for bed thickness of 3-12 mm, may go upto 15 mm in limited extent.

## Areas of application

Refer tile/substrate sheet for details

## Compliance / Standards

Specially formulated as per the requirements C (Cementitious) 2 (improved) T (Slip resistant) E(Extended Open time)and S2 (Deform-able) of ISO 13007 and EN 12004. Also complies to IS 15477:2019 (Type 4 & S2) and ANSI A118.15.

## Limitations

- Do not use on wet screed or plaster. Surface must be fully cured.
- Use on gypsum plaster or boards, fiber cement boards, or other drywall partitions, strictly in accordance with the tile substrate recommendation table.
- Can only be used on cementitious waterproofing. Do not use on epoxy or polyurethane water proofing.
- Do not use for Installing glass tiles or metal tiles. Use only weberfix PU/ weberfix PU Hiflex for fixing glass and metal tiles.
- Do not use on high temperate maintain ideal temperature of substrate below 35°C during application.
- Do not use on Metal, rubber, plastics, vinyl, linoleum surface, painted substrates. Use weberfix PU / weberfix PU Hiflex.
- Do not use on surfaces subjected to moderate vibrations. For high vibrations prone area use weberfix drywall/ weberfix PU/ weberfix Pu Hiflex for such areas.
- For high porous stone, sample to be done in small area to check for stone stains.

- It is not recommended for artificial stone for external area.
- Spot bonding is not recommended with weberset monohiflex. Use weberfix Spot on.

## Method of Application

### Preparing the substrate

- Clean the substrate of oil stains and bond inhibiting compounds. Also remove dirt, dust and laitance if any using high pressure water jet or any other suitable method.
- Ensure that the substrate is flat, stable, well adhered and has a normal absorption. For fresh plasters & screeds ensure complete curing as recommended.
- Concrete screeds, renders and block work should be sufficiently cured to avoid shrinkage cracks.
- Correct the local undulation/damage on the substrate at least 48 hours before the application of weberset monohiflex.
- Saturate the surface well and remove excess water before application of the tile adhesive.

#### Note:-

- In case of higher undulation, a neat coat of SBR LitX to be applied on the substrate, followed by application of weberwall premium plaster, to smoothen the surface (Refer technical data sheet of weber SBR LitX for further details).
- In case of oil stains, use of surfactants may be necessary, followed by proper cleaning with water, to avoid debonding of tiles.
- Leave expansion joints of atleast 10 mm thickness, after every 20 feet in the substrate.
- Mechanical clamping shall be adopted as per standard BS 5385 / IS 15477-2019.
- Do not cover expansion joints with adhesive. It can be filled with appropriate flexible sealant.

### Preparing the mix

- Gradually add 2.75 to 3 parts of weberset monohiflex to 1 part of clean water (by volume)

and mix it to a lump-free, smooth, workable paste using a suitable stirrer/low-speed drill mix/or any other appropriate tool.

- After mixing, allow the mixture to stand for 2 minutes for it to mature.

#### Note:-

- Do not attempt to extend the pot life by adding water to the mix.
- Do not add any additional substance, like cement, sand etc. to the mix. These may adversely affect the performance of the product.

### Applying the mix

- Apply the adhesive onto the substrate covering up to 1 m<sup>2</sup> at a time (or no more than what can be tiled within 30 minutes). Unfavorable weather conditions like strong sun, dry wind, high temperature etc. can reduce open time. Highly absorbent substrate can reduce the open time, even to just a few minutes. It is therefore necessary that careful checks be made to ensure that a skin does not form on the surface of the spread adhesive. If not, re-freshen the adhesive by respreading with a notched trowel.
- It is not recommended to wet the adhesive with water once a skin has formed because, instead of dissolving the skin, the water will form an anti-adhesive film leading to debonding of tile/stone from the surface.
- Apply weberset monohiflex over the surface using the straight edge of the notched trowel and then comb the applied adhesive using the notched side of the trowel to achieve the desired thickness.
- Double buttering is recommended for heavier sizes of tiles/stones.
- If the adhesive is buttered to the tile/stone, then ensure proper coverage of the tile surface to evade voids.

- Ensure adequate gap or use spacer in between subsequent stones/tiles to accommodate thermal expansion and contraction.
- Joint width shall be as per the tile manufacturer recommendation in case of tile and in case of stone the Joint width shall be as per recommendation of architect/site engineer. In any case the joint width shall not be less than 2 mm.

**Note:-** The size of the notch trowel and the angle of application will determine the bed thickness as per the following formula:

$$\text{Bed Thickness} = \frac{\text{NW} \times \text{NH} \times \sin \theta}{(\text{NG} + \text{NW})}$$

Where:

- NW is the width of the notch.
- NG is the Gap in between the notches.
- NH is the Height of the notch.
- $\theta$  is the angle of application.

### Tile/substrate application table

Substrate type	Substrate ↓	Tiles →												
		Ceramic tiles	Terracota	Ceramic mosaic	Quarry tile	Vitrified tiles	Marble mosaic	Natural stone	Porcelain tiles	Pavers	Brick	Precast terrazzo	Artificial stones*	Impregnated stones
Cementitious	Cement-based screeds and mortars	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Cement-based plasters/renders	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Existing floor	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Concrete masonry	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Cement terrazzo	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Blocks	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Self levelling screeds	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Cementitious waterproofing	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Drywall	Gypsum board	•	•	•◇	•	×	×	×	×	×	×	×	×	×
	Bison panel board	•	•	•◇	•	×	×	•◇	×	×	×	×	×	×
	Plaster board	•	•	•◇	•	×	×	•◇	×	×	×	×	×	×
	Tile backer board	•	•	•◇	•	×	×	×	×	×	×	×	×	×
	Cement backer board	•	•	•◇	•	×	×	•◇	×	×	×	×	×	×
Others	Brick masonry	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Gypsum plaster	•	•	•	•	•	•	×	•	×	×	•	•	•
	Underfloor heating installation	✓	✓	✓	✓	✓	✓	✓	✓	×	×	✓	✓	✓
Tiles	Ceramic tile	✓	✓	◇	✓	✓	◇	✓	✓	×	×	✓	✓	✓
	Vitrified tile	✓	✓	◇	✓	✓	◇	✓	✓	×	×	✓	✓	✓
	Stone	✓	✓	◇	✓	✓	◇	✓	✓	×	×	✓	✓	✓

◇ without plastic mesh

• with primer 401

\*Application of Artificial stone is applicable only on Internal floor area only

## Installing the tiles

- Clean the stone/tile with water before installation.
- Bed the tiles firmly into the adhesive with a slight sliding and/or twisting action/shear, to ensure a good and uniform contact.
- It is good practice to lift an occasional tile after fixing, to verify that the required contact is being achieved.
- In wet areas, external areas and all floors, the final adhesive bed should be free from voids.
- If necessary, tiles should be adjusted, within 30 minutes of installation.
- Carefully clean off any excess adhesive from the tiles and joints with a damp sponge or cloth before it sets. Leave for at least 24-48 hours before grouting.
- More time may be required before grouting when tiling onto impervious or sealed surfaces or higher bed thickness.
- For swimming pools with large tile (excluding glass mosaic), leave at least 3 days before grouting and then a further 14-21 days before filling.

### Note to Specifier-

- To use on gypsum plaster, ensure priming is done with **weber primer 401**.
- Use **weber primer 401**, corner treatment with **weber stickon tape** and two component **weber waterseal 321** for comprehensive waterproofing, before application of **weberset monohiflex**, where required.
- In case of highly dusty or porous substrate, apply one coat of **weber primer 401**.
- To prevent any discoloration of natural stone, treat with under-tile impregnator **webersys stoneprotect**.
- To get excellent stain resistance on stone, use hydrophobic and oliophobic impregnator **webersys stoneseal**.
- To match joint with the color of tile/stone, use **weberepox easy / other epoxy grouts** available in more than 40 colors.

- To get invisible joints between stones, fill with specially formulated **weber pearl armor** specialty grout.
- To get high aesthetic appeal, fill joints with **weber knight armor** specialty grout.
- When natural stone is treated with **webersys stoneseal** as an impregnator to prevent capillary movement of slurry to avoid patches on top of stone, needs to be fixed with **weberset monohiflex**.

## Grouting and sealing

- Joints to be grouted after 24 hours of application of **weberset monohiflex** using **weberjoint poxy**. It can also be grouted with **webercolor fine** along with **weber groutadd**.

## Ready for use

Surfaces are ready for use, after 14 days, post completion of grouting.

## Coverage

Approx (Grey) - 1.6 - 1.69 kg/sq. m per mm of thickness

Approx (White) - 1.6 - 1.7 kg/sq. m per mm of thickness.

Note:- Ensure all surfaces are clean, smooth and plum, leveled, free of defects, and without undulations for maximum coverage.

## Packaging

20 Kgs BOPP bag with moisture protection and enhanced shelf life.

## Shelf Life

1 year from month and year of manufacturing, for unopened bags and can, stored in dry condition.

## Technical standards and performance

### ISO 13007 & EN 12004

Classification	Property	Requirement	weberset monohiflex
C2 - Improved cementitious adhesives (additional characteristics)	Tensile adhesion strength	$\geq 1.0 \text{ N/mm}^2$	1.8 N/mm <sup>2</sup>
	Tensile adhesion strength after water immersion	$\geq 1.0 \text{ N/mm}^2$	1.65 N/mm <sup>2</sup>
	Tensile adhesion strength after heat ageing	$\geq 1.0 \text{ N/mm}^2$	1.58 N/mm <sup>2</sup>
T - Slip resistance	Slip	$\leq 0.5 \text{ mm}$	No slip
E - Extended open time	Extended open time tensile adhesion strength	$\geq 0.5 \text{ N/mm}^2$ after not less than 30 min	0.88 N/mm <sup>2</sup>
S - Transverse deformation	Deformable adhesive (S2)	$> 5 \text{ mm}$	$> 7 \text{ mm}$

### ANSI A118.15

Condition	Property	Requirement	weberset monohiflex
Glazed tile shear strength	7 days dry	$\geq 450 \text{ psi (3.1 N/mm}^2)$	4.05 N/mm <sup>2</sup>
	7 days water immersion	$\geq 250 \text{ psi (1.7 N/mm}^2)$	2.32 N/mm <sup>2</sup>
	28 days heat aging	$\geq 450 \text{ psi (3.1 N/mm}^2)$	3.72 N/mm <sup>2</sup>
Impervious mosaic (Porcelain) tile shear strength	1 day	$\geq 100 \text{ psi (0.69 N/mm}^2)$	1.02 N/mm <sup>2</sup>
	7 days dry	$\geq 300 \text{ psi (2.07 N/mm}^2)$	2.75 N/mm <sup>2</sup>
	28 days dry	$\geq 400 \text{ psi (2.8 N/mm}^2)$	3.86 N/mm <sup>2</sup>
	7 days water immersion	$\geq 200 \text{ psi (1.38 N/mm}^2)$	1.87 N/mm <sup>2</sup>
	28 days head aging	$\geq 400 \text{ psi (2.8 N/mm}^2)$	4.21 N/mm <sup>2</sup>
Quarry tile shear strength	28 days dry	$\geq 150 \text{ psi (1.03 N/mm}^2)$	1.48 N/mm <sup>2</sup>

## Technical parameters

Physical state color	White
Bulk density	1.2 to 1.3 g/cc
Mixing ratio (powder to liquid)	2.75 to 3 parts of powder to 1 part of water
Pot life	4 hours
Open time	30 min
Adjustability time	25 min
Ready for grouting on walls	24 hours
Ready for grouting on floor	24 hours
Set to light foot traffic ready-to-use	48 hours
Deformability	>5 mm
Slip resistance @ 50 kg/sqm	0.3 mm
Thickness	3 - 15 mm

### Condition of Sale

Sold subject to the company's condition of sale which are available on request.

### Caution

There may be irritation caused in eyes and skin in case of contact for a very long time. Please seek medical help if the problem persists for a long time. The product is recommended to be applied with gloves.

### Disclaimer

The user should determine the usability of the product for its intended use. Our products are manufactured under the Saint-Gobain quality standards, and subjected to strict quality control procedures. Since the company has no control over site conditions and installation procedures, the company will not be responsible under any circumstances for any loss, damage or liability from incorrect usage.



FDS / SDS / DoP  
Product information



<https://goo.gl/d39avs>

Scan QR code to download android app for product information and technical data for our complete product range, directly from your smartphone.



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