

DESCRIPTION

ADH-55 is a premium, flexible, high strength, non slip/non slump, cement-based powder mastic style tile adhesive used for wall / floor, internal / external applications.

FEATURES & BENEFITS

- **C2** - High Adhesion Strength
- **E** - Extended Open Time
- **T** - Non-Slip/Non-Slump
- **S2** - Highly Deformable Adhesive
- ≤1mm crack bridging capability
- Accommodates thermal movement
- Hydrate curing
- Superior workability
- Water washable & low odour

SUITABLE FOR

- Swimming Pools (adhesive & grouting)
- Existing Tiles
- Concrete
- Sand & cement screeds
- Rendered surfaces
- FC Sheet & Plasterboard
- ACT WP-1 and ACT Australia approved under tile waterproofing membranes
- Areas covered under AS3958.1-2007
- Large Format Tiles

PERFORMANCE DATA

Exceeds the performance requirements of AS4992
Tensile Adhesive Strength ≥ 1.0MPa (28 days).

COVERAGE

20kg bag will cover 9m² with 10mm notch trowel.

POT LIFE

3hrs at 23C⁰ and 50% RH.

SETTING TIME

24hrs at 23C⁰ and 50% RH.

SHELF LIFE

In unopened original packaging for up to 12mths when stored in a cool, dry environment off the floor.

SUBSTRATE PREPARATION

All substrates to be tiled must be clean, dry, free from dust, wax, oil, grease, laitance, curing compounds, paints (incl overspray), coatings and all contaminants which may cause adhesion failure.

Fibrous cement sheeting & plasterboard must be fixed as per manufacturers recommendations and should be sponged down with clean water to remove dust.

Waterproof boards such as Scyon Secura and Cemintel Constructafloor must be primed with ACT **PR-1** or if in wet area waterproofed with ACT **WP-1**.

If tiling over existing tiles, tiles must be sound and not loose or drummy, tiles must be clean and free from any contaminants which may cause adhesion failure, if in doubt, good practice is to run a grinder over the surface to remove possible unknown contaminants. Ensure all dust is removed prior to spreading adhesive.

PRIMING

In normal circumstances no priming is required as ACT **ADH-55** has unique **Infused Primer Technology (IPT)**. To test substrate sponge liberal amounts of water onto the substrate and ensure water absorption is taking place. If so, then only sponge down with clean water prior to spreading adhesive. If water is beading or no absorption is taking place then prime with ACT **PR-1** impervious primer.

MIXING

20kg of ACT **ADH-55** powder will require approximately **5 litres** of clean drinking water. Slowly add **ADH-55** powder into a clean bucket with the measured water. Slowly mix with a quality drill & mixing paddle to ensure a smooth, lump free tooth paste consistency. Leave the mix for 3 minutes then re-stir. The adhesive is now ready for use.

MOVEMENT JOINTS

Movement joints must be incorporated within the tiling system in accordance with AS3958.1-2007. Ensure movement joints are free of all adhesive and grout residue.

APPLICATION

All workmanship must be in accordance with AS3958.1-2007. After mixing adhesive, apply the adhesive with the appropriate size notch trowel for the application. Ensure to work the adhesive to the substrate for good adhesion. Adhesive should sit up and not slump whilst being wet and tacky prior to laying tiles.

Open time is approximately **30 mins** at 23C⁰. If the adhesive has skinned over prior to laying tiles then remove and apply fresh adhesive. Ensure minimum adhesive bed thickness is 2mm for wall & 4mm for floor applications depending on size of tile. Do not tile in temperatures below 5C⁰ and greater than 34C⁰.

DRYING

Allow minimum **7hrs** for the adhesive to cure and set prior to grouting. For impervious substrates such as waterproofing membranes and or non-absorbent tiles further curing time will be required depending site conditions and ambient temperatures. Ensure adhesive has set prior to grouting.

GROUTING

Use ACT Australia recommended grouts such as **Spectrum Futura** and **GRT-20**. Ensure grout joints are clean of any adhesives residue prior to application of grout.

SAFETY DIRECTIONS

ACT Australia supports best practice in material handling. Appropriate gloves, dust masks, safety glasses and protective clothing should be worn. If product comes in contact with skin, wash off with soapy water. Avoid inhaling dust by wearing appropriate dust mask. If swallowed, drink plenty of drinkable water and seek medical advice. In case of contact with the eyes, rinse with clean water or eye wash solution and seek medical advice.

LIMITATIONS

- Not suitable for tiling directly over 100% polyurethane or fibreglass waterproofing membranes.
- Not suitable for tiling directly over plastics and metals.
- Not suitable for tiling directly over Masonite, MDF, timber, plywood or particleboard.
- Not suitable for moisture sensitive stone such as green marble or man-made conglomerate products.
- External tiling should not exceed 2.7m in height.
- Suspended concrete slabs must conform to AS3958.1-2007 for maximum deflection. All post-tensioned concrete slabs must be treated as flexible substrate.
- If in doubt, contact **ACT Australia Technical Services** for further information and advice.

