

Technical Data Sheet

Date of compilation: 09/09/2021

ARC ULTRA-FLEX S2

DESCRIPTION

Arc Ultra-Flex S2 is a high specification, highly flexible (S2) and rapid setting cement based wall and floor tile adhesive. Ultra-Flex S2 is ideal when fixing to surfaces subject to limited movement and/or vibration. It is suitable for fixing a large variety of tiles to a large variety of substrates. A fast track adhesive, it can be used for tiling to green screeds. Its rapid setting capability allows for light foot traffic and grouting after 3 hours. It is ideal for areas subject to prolonged or permanent wet conditions such as swimming pools. Ultra-Flex S2 can be used internally and externally and it is unaffected by frost after setting. Designed for fixing tiles to surfaces subject to movement and/or vibration. Some tiles may not have the structure to absorb movement without cracking, please consult with the supplier of the tiles regarding this matter.



SUBSTRATE PREPARATION

The substrate must be structurally sound, dimensionally stable and strong enough to support the tiling installation and expected traffic. Surfaces to be tiled must be clean, suitably dry and free from contamination such as dust, paint, oils, grease, sealers or any other substance which may impair adhesion.

All tiling should be carried out to current best practice and relevant standards. For further information or details of substrates not covered below, consult Arc Tiling Guide.

Concrete: Concrete should be a minimum of 6 weeks old. Prime with Arc Tiler's Primer diluted 3 parts primer to 1 part water.

Power-floated concrete: Mechanically abrade surface and vacuum dust. Prime surface with 1 coat Arc Tiler's Primer Plus.

Sand Cement Screeds: New screeds should be a minimum of 4 weeks old. Prime with Arc Tiler's Primer diluted 3 parts primer to 1 part water.

Gypsum screeds: Screed must be confirmed dry and the residual moisture content must be below 0.5%. Mechanically abrade surface and vacuum dust. Prime surface with Arc Tiler's Primer diluted 3 parts primer to 1 part water followed by one neat coat of Arc Tiler's Primer.

Green Screeds: Newly installed sands and cement screeds should be a minimum of 4 days old and sufficiently strong to resist damage. Prime with Arc Tiler's Primer diluted 3 parts primer to 1 part water. As there is a greater risk from the effects of drying shrinkage,

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consider the inclusion of additional movement accommodation in both the screed and tiling.

Timber floors: Timber substrates must be sufficiently rigid and supported to be free from excessive deflection under expected loads. Arc recommend overlaying timber floors with Arc MagnaBoards, screw fixed at 150mm centres. Where plywood is used as overlay it must be exterior grade and a minimum of 15mm thick. Prime boards with Arc Tiler's Primer diluted 3 parts primer to 1 part water.

Underfloor Heating: Piped underfloor heating systems must have been fully commissioned to maximum running temperature. Turn off heating 24hrs prior to tiling (or in cold conditions to below 15°C). When tiling is completed allow 7 days before switching on heating and increase the temperature gradually by max 5°C per day.

Movement Joints: Ensure there is adequate provision of movement in the tiling installation by the inclusion of sufficient and adequate joints. This is particularly important on heated screeds and with larger tiles.

Priming: Generally prime absorbent surfaces with Arc Tiler's Primer diluted 3 parts primer to 1 part water and non-porous surfaces with 1 coat Arc Tiler's Primer Plus. Allow primer to dry before tiling.

MIX PREPARATION

Do not use when temperatures are below 5°C. Ultra-Flex S2 should be added to water in a clean container whilst mechanically stirring and mixed thoroughly to give a soft, slump-free, easily worked mortar. The recommended mixing proportions by volume are 1 part water to 3 parts powder (approx 5L water per 20kg bag). The consistency of the paste can be adjusted with slight additions of water or powder at the initial mixing phase, however part-used adhesive should never be "freshened up" with later water additions.

APPLICATION METHOD

For fixing ceramic tiles or mosaics, use a notched trowel to give a ribbed mortar bed on the substrate into which the tiles are firmly bedded with a twist and slide action to ensure full contact. Use a 3mm x 3mm notch at 6mm centres for mosaics and thin flat backed wall tiling, a 5mm x 5mm notch at 10mm centres for general wall tiling and 10mm x 10mm notch at 16mm centres for floor tiling. The position of the tiles can be adjusted up to 10 minutes after initial fixing. Open time of the exposed mortar bed is approximately 5-10 minutes, depending on surface porosity and site conditions. It is recommended that tiles with raised or studded back profiles, (or in situations where dampness is likely after tiling), should be buttered to ensure solid bed fixing. Do not trowel out an area of adhesive greater

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than can be tiled over within a 5-10 minutes period. Surfaces such as rutted concrete and masonry block-work which are rough and uneven may first be levelled with Arc Floor Levelling Compound. Adhesive should not exceed 6mm in depth. Back-butter large format tiles and natural stone tiles to achieve maximum bonding.

GROUTING

Grouting may proceed as soon as the tile bed is sufficiently firm, which for Ultra-Flex S2 will be after approximately 2-3 hours at room temperature. This period will be slowed by lower temperatures and accelerated by higher temperatures.

For wall joints up to 3mm wide use Arc Wall Tile Grout, however on flooring applications, joints of up to 20mm wide can be grouted using Arc Pro-Line Grout or Arc Flexi-Grout. Where tiles have been fixed on timber surfaces or in locations subject to immersion or persistent wetting, the use of Arc Flexi-Grout is recommended.

TILES & SUBSTRATES

SUITABLE TILES

Porcelain, Ceramics, Terracotta, Quarry, Quartz, Marble, Mosaics, Limestone, Travertine, Natural Stone, Slate.

SUITABLE SUBSTRATES

Plywood, Concrete, Plaster, Screeds, Backer Boards, Anhydrite Screed, Underfloor Heating, Plasterboard, Existing Tiles, Render, Brick & Block, Heated Screed, Vinyl Tiles, Fibre Cement, Asphalt Flooring.

TECHNICAL DATA

Pot Life	Open Time	Set Time	Coverage	Depth	EN
30 minutes	5-10 minutes	2-3 hours	4-5kg/m ²	3-6mm	12004:C2FS2

STORAGE & PACKAGING

This product has a shelf life of 12 months if stored in its original unopened packaging in normal dry conditions. It is supplied in 20kg multi-ply moisture resistant paper sacks.

HEALTH & SAFETY

For more information and precautions for use refer to the safety data sheet.

NOTE

All products should be sold in accordance with the manufacturer's instructions. The manufacturer cannot be held responsible where conditions of use are beyond our control. Full

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