

OPF

One Part Flexible Adhesive for Floors and Walls



TECHNIK OPF is a cement polymer based tile adhesive for fixing coarse and fine ceramic products, split tiles, clinker and clinker strips, natural and artificial stone tiles (for marble use TECHNIK OPF WHITE) and insulation and construction boards on suitable surfaces such as plaster, concrete, brick walls, screeds.

TECHNIK OPF is highly flexible and is also suitable for fixing ceramic tiles on floor heating systems. TECHNIK OPF is suitable for indoor and outdoor use, including swimming pool applications and for normal and heavy duty floors.

- **Exceptional flexibility**
- **Very high bond strength**
- **Accommodates rough/uneven and large tiles**
- **Suitable for underfloor heating**
- **Suitable for timber**
- **Suitable for swimming pools**
- **Conforms to EN12004: C2TE**

Constitution:	Cement based formulation
Appearance:	Grey or white powder
Mix ratio:	Approx. 5.6 - 6.0 litres of water to 20 kg powder
Application temperature:	5°C to 25°C
Open time:	20 minutes at 20°C
Pot life:	5 hours at 20°C
Set time:	24 hours at 20°C
Coverage:	Approx 1.8 kg/m ² per mm thickness of adhesive
Colour:	Grey & white
Pack size:	20 kg
Note:	Times are quoted at 20°C and are temperature/humidity dependent

METHOD OF USE:

IMPORTANT: Before embarking on any work involving TECHNIK OPF the separate Material Safety Data Sheet, available online at www.bostik.co.uk, must be studied carefully by those carrying out the work. Tiling and grouting should be carried out in accordance with the relevant British Standards Codes of Practice.

PREPARATION:

Ensure that all surfaces are clean, dry, sound and free from dust, grease or any contaminating barrier.

Make good any unsound areas and remove flaky or peeling layers before tiling.

With new concrete, screeds and rendering, or new brickwork do not commence tiling for at least four weeks to allow for shrinkage.

Consult the Technik Primers Data Sheet for priming requirements.

Check before use that the colour of the adhesive does not cause staining or discolouration of light coloured or translucent tiles.

Ensure timber floors are strong and rigid enough to support the tiles without significant deflection. They must be covered with 18 mm exterior grade plywood rigidly fixed at a maximum of 300 mm centres.



APPLICATION:

Mix TECHNIK OPF with cold clean water to a smooth creamy consistency, ideally with a mechanical mixer (min. 600 watt) and the Technik paddle for the best results. Mix ratio is approx 5.6 - 6.0 litres of water to 20 kg of TECHNIK OPF. It is favourable to let the mixture stand for 3-5 minutes before use. No water should be added after the original mixing. Any of the mix not used within its pot life should be discarded.



For floor tile application apply the mixed adhesive direct to the floor in a uniform layer 3-6 mm thick. Press the dry tiles firmly into this layer of adhesive to ensure the absence of voids beneath the tiles. Alternatively, trowel the adhesive layer with a trowel having 20 mm notches at 30 mm centres, before pressing home the tiles.



APPLICATION CONTINUED:

For wall application apply a layer of adhesive about 3 mm thick and go over it with a notched trowel (6 mm x 6 mm notches at 12 mm centres). If deep studded tiles are being fixed it is recommended that the backs of the tiles are buttered with adhesive so as to avoid hollow areas.

Tiles must be fixed in position before surface drying of the adhesive occurs. This normally

occurs about 20 minutes after adhesive application but the time will vary according to atmospheric conditions. It is therefore important not to spread adhesive at any one time over an area greater than can be covered with tiles within the open time period, i.e. work small areas at a time.

Ceramic tiles should never be fixed with tight joints and should be laid evenly so that there are no protruding or raised edges. Gaps of about 2 mm should be left between wall tiles and at least 3 mm gaps between floor tiles.

Before using TECHNIK OPF on swimming pools consult the Technical Service Department for a detailed swimming pool specification.

GROUTING:

Ensure that the adhesive has completely set and that the tiles are firm before grouting. TECHNIK OPF should normally be set after 24 hours but a longer setting period may be required on sealed or impervious surfaces or at low ambient temperatures.

CLEANING:

Surplus adhesive should be removed immediately from the surface of the tiles and grout lines. Tools should be cleaned immediately with water.

COVERAGE:

Usage of material per unit area will vary in accordance with method of application, thickness of adhesive bed, profile of the tile back etc.,. As a guide assuming a 3 mm bed, allow 2 - 2.5 kg per m² for fl at backed tiles using a notched trowel. Allow 4 - 5 kg per m² when using the solid bed fixing method.

PACKAGING:

TECHNIK OPF is supplied in 20 kg bags.

STORAGE:

Store in unopened bags off the ground and in cool dry conditions, protect from excessive draught and use within 12 months of date stamped on the package.

SURFACE CONSIDERATIONS:

WALLS

NEW CONCRETE/MASONRY:

Before covering and after curing, concrete and masonry should be left to dry out by exposure to air for at least 6 weeks before a screed or bedding materials are applied, when cementitious material such as concrete dries the cement within the material shrinks. If this is not allowed to occur before tiling is applied, these shrinkage forces may be sufficient to break the bond between the concrete and the adhesive leading to a failure of the tiling.

NEW SAND/CEMENT RENDERING:

Before tiling, allow to dry out by exposure to air for at least 2 weeks or longer dependant on weather and humidity. Depending on the suction of the render prime using TECHNIK 918 PRIMER. High suction renders may require 4 treatments until excessive suction is controlled. Low suction should not require priming unless the surface is dusting.

GYPSUM PLASTER:

Before tiling, the plaster must be left for at least 4 weeks and be thoroughly dry. Prime using TECHNIK 918 PRIMER. Never tile onto a soft backing plaster. All plasterwork should be firm and soundly fixed to its substrate and be sufficiently strong to support the specified tiling. The maximum weight of tiling which can be supported by a dry, firmly adhered plaster background is 20 kg/m². Remove any defective areas, including badly cracked plaster, to straight horizontal and vertical edges. Smooth plaster should be mechanically roughened to provide a suitable key and primed using TECHNIK 918 PRIMER.

LIGHTWEIGHT BLOCKWORK WALLS:

Walls must be flat enough to receive a thin or thick bed fixing (max 6 mm thick solid bed). The block should be 6 weeks old and completely dry before tiling. Due to the inherent expansion and contraction of the lightweight block on exposure to water, it should be used only in dry conditions. The background should be free from dust, efflorescence and any loose materials. Prime with TECHNIK 918 PRIMER.

PLASTERBOARD:

Ensure that boards are dry, securely fixed and rigid and the face intended to receive the decorative finish is exposed. Plasterboard should be screwed into the supporting joists at maximum 300 mm centres. The weight of the tiling should not exceed 32 kg/m², generally equivalent to tiles with a thickness of 12.5 mm. If this value is exceeded the integrity of the board itself may fail. As the adhesive is affixed onto the paper side of the plasterboard there is no requirement to prime the system prior to tiling. Plasterboard and stud partitions are sensitive to water and in wet areas care should be made to prevent water ingress. In this situation we would recommend tanking out the installation with BOSTIK WATERTITE TANKING SYSTEM. When using moisture resistant plaster board allow longer drying times before grouting.

MARINE / WBP PLYWOOD:

Sheets must be dry, dust free and a minimum of 15 mm, securely fixed and rigid. They should be screwed to the supporting joists at maximum 300 mm centres vertically and horizontally. Only moisture resistant or exterior grade boards should be used. The surface, back and edges should be sealed with TECHNIK 918 PRIMER to prevent the ingress of ambient moisture. Check suitability of sheets for the intended application with the manufacturer. In wet areas we would recommend tanking out the installation with BOSTIK WATERTITE TANKING SYSTEM.

CHIPBOARD:

Chipboard is highly susceptible to dimensional instability through changes in ambient moisture levels. Chipboard should not be used to receive tiling unless the environment can be guaranteed to remain dry and stable over the life of the tiling. If considered satisfactory, boards should be screwed to the supporting joists at maximum 300 mm centres vertically and horizontally. Only moisture resistant or exterior grade boards should be used. The surface, back and edges should be sealed with BOSTIK P11 to prevent the ingress of ambient moisture. Check suitability of sheets for the intended application with the manufacturer. Incorporate TECHNIK ADFLEX into the mixture.

TILE BACKER BOARDS:

Ensure that boards are securely fixed, rigid and dust free. Boards should be screwed to the supporting joists at maximum 300 mm centres vertically and horizontally. All recommendations given by the board manufacturer should be followed. The weight of the tiling including adhesive and grout should not exceed 50kg/m². Do not seal or prime surfaces to be tiled.

GLAZED TILES:

Existing tiles must be firmly fixed to their bed and the bed and original substrate must be sufficiently strong to support the weight of new tiling. Tiles should be thoroughly cleaned to remove any oils or greases that may prevent good adhesion. Any loose or hollow sounding areas must be removed and made good before tiling. Prime with TECHNIK 918 PRIMER. Weight of tiling should not exceed the substrates maximum load capacity.

SWIMMING POOLS:

Contact Professional Tiling Technical Service Department for a detailed swimming pool specification.

PAINTED WALLS:

Ensure that paint is in a sound condition. Emulsion paints are generally insufficiently strong to hold tiles and must be abraded sufficiently to expose the background over at least 50% of the surface to be tiled. Prime using TECHNIK 918 PRIMER prior to tiling. Firmly fixed gloss paints may be suitable but removal is always recommended. Paint strippers should not be used as they can leave a de-bonding layer that reduces the bond strength of the adhesive. The weight of the tiling should not exceed the substrates maximum load capacity.

LOW STRENGTH BRICKWORK:

May require a sand cement render reinforced with expanded metal to distribute loading. Substrates to accept tiling outdoors should be laid to adequate falls to permit water to drain. Falls should be formed in the substrate and not the tile bed.

SURFACE CONSIDERATIONS CONTINUED:

FLOORS

NEW CONCRETE:

Before covering and after curing, concrete should be left to dry out by exposure to air for at least 6 weeks. The concrete should be tested to ensure the moisture level is below 75% relative humidity prior to tiling. Any falls required in the system should be formed in the new concrete and not the tiling layer. Alternatively, for early fixing, use reinforced decoupling matting system.

NEW SAND/CEMENT SCREEDS:

Before covering and after curing, screeds should be left to dry out by exposure to air for at least 3 weeks. It is recommended that screeds should have a relative humidity level of 75% as tested by an air hygrometer. The base should be level enough to receive a thin or thick bed fixing. If the substrate is dusting or the prosoy is high, prime with TECHNIK 918 PRIMER. Green screeds can be successfully tiled by using a reinforced decoupling matting system.

EXISTING CONCRETE/SCREED BASES:

Existing cementitious substrates should be sound and dry. Any unsound areas should be removed, replaced and treated as a new screed or concrete.

GYPSUM BASED SCREEDS:

Gypsum or anhydrite based screeds must be thoroughly dry before covering. It is recommended that a total moisture content of less than 0.5% is achieved prior to covering. The screed must be primed using BOSTIK P11 IMPERVIOUS SURFACE PRIMER or SCREEDMASTER EPOXY PRIMER. This type of substrate is sensitive to water; wet areas should be tanked with BOSTIK WATERTITE TANKING SYSTEM. Due to the complexity of this subject please contact the Bostik Technical Helpline on 01785 272727

PLYWOOD OVERLAY:

Plywood should be of WPB external or marine grade. The minimum recommendation thickness is 18 mm. Plywood sheets must be dry, dust free, and securely fixed and rigid. All joints should be supported by a joist or a noggin. They should be screwed to the supporting joists or noggins at maximum 300 mm centres. The surface, back and edges should be sealed with TECHNIK 918 PRIMER to prevent the ingress of ambient moisture. Check suitability of sheets for the intended application with the manufacturer. This type of substrate is sensitive to water, wet areas should be tanked with BOSTIK WATERTITE TANKING SYSTEM.

EXISTING FLOOR TILES:

All loose tiles should be removed and hollows filled before tiling. Existing tiles should be thoroughly cleaned and degreased before tiling to remove all contaminants. Consideration should be given to mechanically abrading the

tile surface, particularly with quarry tiles, to ensure a good bond can be formed. Prime with TECHNIK 918 PRIMER. Make sure the floor can take the extra weight within the new installation.

VINYL TILE/SHEET BASES:

Vinyl tiles should only be tiled if they are rigid and firmly fixed to their base, any loose areas should be removed and repaired with BOSTIK 300 leveller. The whole area should be thoroughly degreased and abraded with coarse sandpaper to form a key, prime with TECHNIK 918 PRIMER before fixing. Cushioned, soft types of flooring are not suitable and must be completely removed prior to tiling.

MASTIC ASPHALT BASES:

Asphalt must be rigid and solidly fixed. Only internal, flooring grade asphalt should be tiled. Never tile onto external roofing grade asphalt as this will be too soft to acceptably receive tiles. Thoroughly clean to remove all surface dirt and contaminants. Prime with BOSTIK P11 and level using BOSTIK 300 leveller. The surface must be sufficiently regular to receive an even bed thickness of adhesive.

UNDERFLOOR HEATING SYSTEMS:

TECHNIK RAPID SET FLEXIBLE is suitable with most under/tile/floor heating systems but due to the complexity of this subject please contact the Technik Technical Helpline on 01785 272727.

GRP GLASS REINFORCED POLYESTER

Check suitability of the GRP for the application with the manufacturer. Ensure the GRP is fixed solidly to the substrate and that the surface is clean, dry and free from any contaminants. Excessive surface wax should be removed using a suitable degreasing solvent. Abrasion may be used, but care should be taken not to penetrate the gel coat. Allow to fully cure before tiling commences. The GRP coating should be in a sound condition and free from crazing, cracking, movement and any wrinkles. Any exposed fibres will need sealing, wash with clean water and allow to fully dry before applying BOSTIK P11 PRIMER, tile with TECHNIK OPF with TECHNIK ADFLEX incorporated within the mixture. Drying time will be extended. If there is sufficient vertical deflection the adhesive may remain adhered but the deflection may crack the tile.

ACOUSTIC MATTING

Refer to the matting manufacture recommendations for installation of their matting. Ensure the matting is secured on an even and rigid base, the matting should be a Maximum of 4 mm thick when used in conjunction with all tiling installations.

Disclaimer - Please read carefully

This disclaimer is issued by Bostik Limited ("the Company") and applies to the use of any products supplied by the Company ("the Products") displayed on this Technical Data Sheet ("TDS"). Please read this disclaimer carefully before using any of the Products. Using this TDS and/or the Product constitutes your acceptance of this disclaimer. Its contents shall prevail over any directions of use and any disclaimer and/or exclusion or limitation of liability of the Company which may appear on the packaging of the Products.

This disclaimer sets out the entire financial liability of the Company (including any liability for the acts or omissions of its employees, agents and sub-contractors) to any user of the Products ("Product User") in respect of any use made or resale by the Product User, of any of the Products in this TDS.

This disclaimer does not affect the Company's liability for death or personal injury arising from the Company's negligence in respect of the Products, nor its liability for fraud, or fraudulent misrepresentation, nor any other liability which cannot be excluded or limited under applicable law.

The Company's total liability however arising and whether caused by tort (including negligence and breach of statutory duty), breach of contract or otherwise, arising in connection with the use made or resale by the Product User of any of the Products in this TDS shall be limited to the price paid for the Product by the Product User.

The Company shall not be liable to the Product User for any pure economic loss, loss of profit, loss of business, depletion of goodwill or otherwise, in each case whether direct, indirect or consequential, or any claims (including in respect of personal injury insofar as not caused by the Company's negligence) for consequential compensation whatsoever (howsoever caused) which arise out of or in connection with the use made or resale by the Product User of any of the Products in this TDS.

The Company shall not be liable to the Product User in relation to any loss for any use which is inappropriate or use which is otherwise than in accordance with the relevant instructions for use of the Products in this TDS or on the Product. Product Users are advised to confirm the suitability of the Products by their own tests.

This TDS covers just one of a large range of products supplied by the Company. Full information on these products and advice on application is freely available from our fully trained staff throughout the country. In addition, specialist technical advice is available from our Technical Services Department. This TDS supersedes all previous TDSs relating to the Products, and users of it must ensure that it is the current issue. Destroy all previous TDS, and if in any doubt, contact the Company, quoting the code number in the top right hand corner on the front of this document.



The Adhesive Company

Bostik Limited, Common Road, Stafford, ST16 3EH. Tel: 01785 272727 www.bostik.co.uk e-mail: techniktiling@bostik.com
Evide Industries Ltd., Newtown, Swords, Co. Dublin, Ireland. Tel: 01 862 4900