

PRODUCT & PREPARATION GUIDE

FLOOR LEVELLING COMPOUNDS | DPM'S REPAIR MORTARS | PRIMERS | ADHESIVES







TRADE QUALITY YOU CAN TRUST

The Setcrete[™] range of products is formulated and manufactured by F. Ball and Co. Ltd., the UK's leading manufacturer of flooring adhesives and floor preparation products. The company has developed an innovative range of straight forward floor preparation products which are now available to the general building trade for the first time.



SETCRETE PRODUCTS
INCORPORATE THE LATEST
TECHNOLOGY TO PRODUCE
HIGH PERFORMANCE
FLOOR PREPARATION
AND ADHESIVE PRODUCTS
THAT ARE EASY TO USE
AND DELIVER A HIGH
QUALITY FINISH.

FLOOR LEVELLING COMPOUND SELECTOR

FLOORCOVERING COMPATIBILITY

	2K PRO	HIGH PERFORMANCE	DEEP BASE	RAPID SET 30	LATEX	UNIVERSAL	EXTERIOR
General/ Light-Duty Areas	✓	√	✓	/	√	√	/
Medium-Duty Areas	✓	√	✓	/	√		/
Conservatories/ Heavy-Duty Areas	√	√	√	1			/
Over Plywood		√					
Over Adhesive Residues	√						
Over Underfloor Heating	✓	✓	√	1	1		
Exterior Use							/
Application Thickness (mm)	2-30"	2-15	5-50	2-10	2-10	3-6	5-50"
Moisture Tolerant/ Use Beneath DPM	✓						/
Prime With Setcrete Acrylic Primer		√	✓	1	1	√	/

^{*}Minimum 5mm when used as a wearing surface/Maximum 10mm when used on plywood.

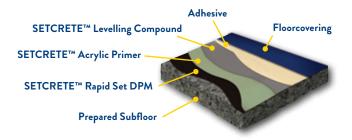
**See datasheet for filled mix information.



	2K PRO	HIGH PERFORMANCE	DEEP BASE	RAPID SET 30	LATEX	UNIVERSAL	EXTERIOR
Textile i.e. Carpets & Carpet Tile	√	✓	√	1	/	✓	
Ceramic/Porcelain/ Quarry Tile	√	✓	√	1	1	√	/
Laminate	√	√	√	1	1	√	
Wood Block/Plank	√	√	√	1			
Resilient (Linoleum/ Vinyl/PVC/Rubber)	√	√		1	/		
Water Based Epoxy Floor Paint		√					/
Artifical Grass							/



STANDARD FLOOR STRUCTURE



PREPARED SUBFLOOR

Prior to the application of any Setcrete Floor Preparation Product, ensure the subfloor is sound, clean, dry and free from contamination.



SETCRETE RAPID SET DPM

SETCRETE™ RAPID SET DPM provides a barrier to residual construction moisture and rising damp, preventing moisture from adversely affecting subsequent floorcovering installations.



SETCRETE ACRYLIC PRIMER

Must be used in all circumstances to gain good adhesion to the subfloor and also to prevent the unacceptable rapid drying of the floor levelling compound.

SETCRETE LEVELLING COMPOUND

Select the correct Setcrete Floor Levelling Compound based on the substrate, depth required, time sensitivity, type of decorative floorcovering to be installed and potential floor traffic that the surface is likely to be subject to.

ADHESIVE & FLOORCOVERING

Choose the appropriate adhesive dependent on the floorcovering to be applied. For wood flooring installations please use SETCRETE™ FLEXIBLE WOOD FLOORING ADHESIVE where applicable.





2K PRO



- Application thickness from 2-30mm*
- Excellent self-levelling properties
- Suitable direct to adhesive residues
- · Fast setting and fast drying
- · No need for a primer





FLOOR LEVELLING COMPOUND

A high performance, fast setting, fast drying, two component floor levelling compound. Suitable for use direct to adhesive residues and SETCRETE™ RAPID SET DPM.

SETCRETE™ 2K PRO is designed for preparing sound internal subfloors prior to the installation of new floorcoverings. It is particularly suitable for direct application over old adhesives residues (such as bitumen, ceramic and carpet tile tackifiers) without the need for priming.

Its fast setting and fast drying properties enable a walk-on time of just 90 minutes and installation of new floorcoverings from only 4 hours.

*Application thickness 2-10mm unfilled and up to 30mm filled.

HIGH PERFORMANCE



- Application thickness from 2–15mm*
- For smoothing plywood and uneven concrete floors
- Fast drying lay floorcoverings from 6 hours
- Can be used as a wearing surface



FLOOR LEVELLING COMPOUND AND WEARING SURFACE

A fibre reinforced, flexible, fast drying floor levelling compound and wearing surface for use in light to heavy duty internal applications over plywood subfloors as well as concrete and sand/cement screeds.

SETCRETE™ HIGH PERFORMANCE is suitable for use over a wide range of absorbent subfloor types including plywood, sand/cement screed and concrete. It is also suitable for use over non-absorbent subfloors. When used as a wearing surface in areas which may come into direct contact with water or other fluids, the surface must be sealed.

*The versatility of the product allows for application between 2–10mm on plywood and up to 15mm on concrete. A minimum 5mm thickness must be applied when used as a wearing surface.

For quick and easy coverage calculations, visit www.setcrete.co.uk



SEEP BASE



- Application thickness from 5-50mm
- Walk on hard from 90 minutes
- Fast drying lay floorcoverings from 6 hours – even when applied at 50mm
- Excellent self-levelling and flow properties





FLOOR LEVELLING COMPOUND

A high strength, high performance floor levelling compound that is designed to raise floor levels and to smooth uneven floors prior to the installation of a floorcovering.

SETCRETE™ DEEP BASE is designed to raise floor levels quickly and economically and for smoothing uneven floors in light to heavy-duty internal applications. The versatility of the product allows for application between 5–50mm in one application.

SETCRETE™ DEEP BASE utilises the latest fast drying cement technology to achieve a walk-on time of as little as 90 minutes. It produces a stronger and less friable surface than traditional sand/cement screeds and, as it is a water mix, it offers the advantages of being economical and latex free.

RAPID SET 30



- Application thickness from 2–10mm
- Foot traffic from 30 minutes
- Rapid setting bond floorcoverings from 2 hours
- Advanced technology
- Excellent self-levelling properties





FLOOR LEVELLING COMPOUND

A rapid setting, rapid drying floor levelling compound for use in light to heavy duty internal areas prior to the installation of a floorcovering.

SETCRETE™ RAPID SET 30 utilises the latest advances in cement technology to achieve a walk-on time of as little as 30 minutes and its rapid drying formula means that new floorcoverings can be installed from just 2 hours. As it is a water mix, it also offers the advantages of being economical and latex free.

SETCRETE™ RAPID SET 30 is suitable for use over a wide range of absorbent subfloor types, including sand/cement screed and concrete. It is also suitable for use over non-absorbent subfloors, providing they are dry, sound, well adhered and suitably prepared.

For quick and easy coverage calculations, visit www.setcrete.co.uk





- Self-smoothing properties
- Low odour
- Walk on hard from 2 hours





FLOOR LEVELLING COMPOUND

A floor levelling compound for use in light to medium traffic internal areas prior to the installation of a floorcovering.

SETCRETE™ LATEX is suitable for use over a wide range of absorbent subfloor types including sand/cement screed and concrete. It is also suitable for use over non-absorbent subfloors such as ceramics, granolithic, terrazzo, epoxy and polyurethane resins and quarry tiles, providing they are dry, sound, well adhered and suitably prepared.

UNIVERSAL



- Application thickness from 3-6mm
- Self smoothing properties
- · Walk on hard from 3 hours
- Low odour





FLOOR LEVELLING COMPOUND

A floor levelling compound for use in general light traffic internal areas prior to the installation of a floorcovering.

SETCRETE™ UNIVERSAL is suitable for use over a wide range of absorbent subfloor types including sand/cement screed and concrete. It is also suitable for use over non-absorbent subfloors such as ceramics, granolithic, terrazzo and quarry tiles, providing they are dry, sound, well adhered and suitably prepared.



EXTERIOR



- Suitable for exterior use
- Can be used under an external covering
- Suitable as a standalone wearing surface





FLOOR LEVELLING AND RESURFACING COMPOUND

A non-structural grade exterior floor levelling compound, suitable for use under external coverings, such as artificial grass or tiles. It can also be used as a standalone wearing surface.

SETCRETE™ EXTERIOR is a non-structural exterior grade smoothing compound for use in light to medium duty applications to smooth and level rough or mechanically damaged concrete or sand/cement screeds. It is ideally suited for areas such as balconies, patios, garages and walkways and is unaffected by rain or frost. It is also suitable for smoothing subfloors prior to the application of a suitable non-slip coating or external covering.

SETCRETE™ EXTERIOR can also be left as a standalone wearing surface in both interior and exterior areas.

*Application thickness 5-15mm unfilled and up to 50mm filled.

For quick and easy coverage calculations, visit www.setcrete.co.uk

APID SET DPM



- One coat application system
- 3 hour curing time
- Allows early installation of floorcoverings in fast track projects
- Pigmented to aid coverage control



Curing time

DAMP PROOF MEMBRANE

Solvent free, two part epoxy resin damp proof membrane. Suppresses residual construction moisture and rising damp in flooring installations, in one application.

SETCRETE™ RAPID SET DPM is a solvent free, two part epoxy resin system which cures to provide a damp proof membrane.

SETCRETE™ RAPID SET DPM provides a barrier to residual construction moisture and rising damp, preventing moisture from adversely affecting subsequent floorcovering installations. The product is applied in one coat and has a curing time from just 3 hours, allowing early installation of floorcoverings in fast track building programmes.

Where the intended subfloor is uneven, either SETCRETE™ EXTERIOR or SETCRETE™ 2K PRO can be used prior to applying SETCRETE™ RAPID SET DPM to gain the best possible results.



REPAIR

CONCRETE



• Ready to use - just add water

- Interior and exterior use
- Excellent freeze/ thaw resistance
- Suitable for vertical and horizontal application





CONCRETE REPAIR MORTAR

An easy to use, single component mortar for the non-structural repair of damaged or worn concrete. Available in 2.5kg, 5kg and 10kg units.

SETCRETE™ CONCRETE REPAIR is suitable for use on both internal and external applications and can be applied to horizontal and vertical concrete surfaces.

It is ideal for the non-structural repair of lower strength concrete elements such as concrete walls, door frames, window frames, render repairs.

SETCRETE™ CONCRETE REPAIR can be easily applied in thicknesses from 5mm-20mm horizontally in a single application and up to 10mm for vertical applications.

EPAIR MORTAR 2



- Ready to use just add water
- Interior and exterior use
- Mixed to fixed from 30 minutes
- Suitable for vertical and horizontal application





RAPID SET REPAIR MORTAR

Single component, fast setting mortar for repairing a wide range of concrete surfaces.

SETCRETE™ RAPID SET REPAIR MORTAR is an economical and easy to use mortar for repairing damaged or worn concrete.

It is suitable for use on both internal and external applications and can be applied to horizontal and vertical concrete surfaces.

SETCRETE™ RAPID SET REPAIR MORTAR has been specifically designed for improved durability and freeze-thaw resistance. When mixed it forms a thixotropic mortar that can be easily applied in thicknesses from 3–25mm horizontally in a single application and up to 10mm for vertical applications.

For quick and easy coverage calculations, visit www.setcrete.co.uk



ACRYLIC PRIMER



- General purpose primer for both absorbent and non-absorbent surfaces
- Promotes good adhesion for levelling compounds
- Pigmented to aid coverage control



GENERAL PURPOSE PRIMER

An emulsion primer designed to promote the adhesion of SETCRETE™ LEVELLING COMPOUNDS to smooth absorbent and non-absorbent surfaces.

SETCRETE™ ACRYLIC PRIMER prevents unacceptably rapid drying of SETCRETE™ LEVELLING COMPOUNDS over absorbent subfloors, and promotes adhesion to non-absorbent surfaces. It is suitable for use over normal underfloor heating installations and is coloured green to provide the user with visual control of coverage uniformity.

SETCRETE™ ACRYLIC PRIMER must be applied to subfloors prior to the application of a SETCRETE™ FLOOR LEVELLING COMPOUND.

WOOD FLOORING ADHESIVE



- Quick setting
- Solvent free
- Suitable for a wide range of wood floorcoverings
- Can be applied directly to SETCRETE™ RAPID SET DPM (within 24 hours of the cure time of the membrane)

FLEXIBLE WOOD FLOORING ADHESIVE

Highly flexible, moisture curing, modified polyurethane wood adhesive that can be used in a wide range of wood flooring applications.

SETCRETE™ RAPID SET FLEXIBLE WOOD FLOORING

ADHESIVE is a highly flexible adhesive suitable for the installation of wood blocks, engineered, solid plank or wood strip flooring. It is quick setting and develops a high bond strength. It is also suitable for use over underfloor heating systems.

SETCRETETM RAPID SET FLEXIBLE WOOD FLOORING ADHESIVE can be applied to SETCRETETM HIGH PERFORMANCE or DEEP BASE Floor Levelling Compounds or structurally sound, smooth, dry subfloors of concrete and sand/cement screeds. SETCRETETM RAPID SET FLEXIBLE WOOD FLOORING ADHESIVE can also be applied directly to SETCRETETM RAPID SET DPM, within 24 hours of the membrane curing.

FLOOR TYPES FLOOR TYPES

FLOORCOVERING INSTALLATION GUIDE

Surface preparation is a vital part of any flooring installation. Improper or inadequate preparation can cause premature failure of the system.

It is the intention of this Floorcovering Installation Guide to describe the different types of procedures available to produce the most acceptable substrate possible, ready for the installation of one or more of our products.

(I) FLOOR CONDITION

Before the application of any Setcrete Floor Levelling Compounds, ensure the subfloor is sound, clean and dry. Most Setcrete levelling compounds are suitable for internal use only. Setcrete Exterior is suitable for exterior application.

ADHESIVE RESIDUES

In most cases', adhesive residues must be removed by mechanical methods, such as scraping, shot blasting or grinding. The floor should then be primed with Setcrete Acrylic Primer prior to the application of a levelling compound.

Setcrete 2K Pro levelling compound has been specially formulated for direct application over adhesive residues (including bitumen and carpet tile tackifiers) without the need for priming, providing the subfloor is suitably dry, the residue is minimal and it is not water softenable.

Any remaining adhesive residues on wooden floors should be overpinned with a minimum 6mm flooring grade plywood and thoroughly secured at 100–150mm centres (see wooden floors).

ASPHALT

Asphalt must be flooring grade quality, compliant with BS 8204, and suitable for the intended use of the floor. The asphalt must be in good condition, sound and strong. It should show no signs of rutting or softening and be free from any form of contamination.

The surface should be cleaned with an appropriate floor cleaner, rinsed with clean water and allowed to dry. The surface should then be primed with neat Setcrete Acrylic Primer and allowed to dry followed by the application of 3mm of Setcrete High Performance Floor Levelling Compound or Setcrete 2K Pro can be applied direct without the need to prime.

Please note the thickness of the floor levelling compound should be kept to a minimum and must not exceed 6mm.

CERAMIC, TERRAZZO & QUARRY TILES

Providing tiles are protected by a DPM and well-bonded to a solid base and are not cracked or lipped, they can be over-coated with a levelling compound. All surfaces must be de greased, rinsed and allowed to dry to remove traces of contamination (e.g. polish) and grout lines lightly raked. Glazed or heavily contaminated surfaces should be mechanically prepared by shot blasting or grinding. All debris from these processes should be removed.

The surface should then be primed using neat Setcrete Acrylic primer, prior to the application of a levelling compound.

If Setcrete 2K pro is to be applied, priming is not always necessary.

PAINT SURFACES

Some paint or coatings can be over-coated with a levelling compound, but generally it is recommended that paint is totally removed by mechanical means, such as shot blasting.

Traditional floor paints (e.g. oil-based or acrylic emulsion) must be totally removed. Epoxy or polyurethane paints can be over-coated, providing they are in good condition and well-adhered to the subfloor. The coating should be de greased, rinsed and allowed to dry.

In practice it is normally difficult to ascertain the type of paint that has been used and often it is brittle, worn or flaking off and, as such, complete removal is the preferred option.









WOODEN FLOORS

Wooden subfloors must be structurally sound, secure, level, clean and dry. Suspended timber floors at ground level must have adequate underfloor ventilation to ensure the moisture content of the wood is maintained at equilibrium. Worn or uneven floorboards should be replaced or levelled by sanding, planning or patch-filling. The subfloor should then be overlaid with flooring grade plywood (min 6mm; compliant with EN314-2 Class 3) and installed according to BS 5325 and BS 8203 standards.

Wood blocks laid on ground floors must be well-bonded to the subfloor, which itself must have an effective damp-proof membrane. Otherwise, wood blocks and adhesive must be fully removed and Setcrete Rapid Set DPM applied. Dry, well-bonded wood blocks can be overlaid with flooring grade plywood as described above.

Wood mosaic panels should be treated as wood blocks, but require overpinning with flooring grade plywood in all cases. This is not practical on solid floors and panels and adhesive will have to be removed.

The prepared subfloor should then be primed with diluted Setcrete Acrylic Primer and once dry, a 2–10mm layer of Setcrete High Performance Floor Levelling Compound can be applied.

SAND/CEMENT SCREEDS

Sand/cement screeds must be suitably prepared; sound and dry (<75% RH) and free from contamination that may prevent adhesion. They must be fully cured, with any laitance or surface treatments removed. They must be tested in accordance with BS5325, BS8201 and BS8203.

CALCIUM SULPHATE SCREEDS

Calcium sulphate screeds, including anhydrite and Alpha hemihydrate screeds, should be sound and stable with all surface laitance removed. Checks must be made to determine the moisture of the floor using a hygrometer.

The prepared subfloor should be primed with Setcrete Acrylic Primer prior to the application of the appropriate Setcrete floor levelling compound. They must be tested in accordance with BS5325, BS8201 and BS8203.

For all other floor types please contact the Setcrete Technical Department on 01538 361 633.

STEP 1 CHECK IT

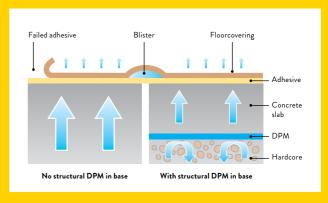
An initial check for the presence of moisture in the subfloor can be made using a radio frequency moisture meter. If moisture is present, the precise level must be measured.

THE MOISTURE PROBLEM

If a subfloor contains excess moisture it poses a serious risk to the floor installation if not dealt with.

Moisture may be present for three reasons:

- The subfloor doesn't have a damp proof membrane (DPMs were not mandatory in buildings before 1965) or the DPM may be damaged. This allows moisture from the ground to rise up through the subfloor.
- 2. A newly laid screed will contain moisture from the mixing process. This will dry out over time, but takes around one day per millimetre thickness of screed to reach an acceptable level. For example, a 50mm thick floor slab will take 50 days to dry.
- 3. A flood or burst pipe may cause the floor slab to absorb water.



Floorcovering traps moisture release causing blisters or damage to adhesive layer allowing floorcovering to lift.

MOISTURE MEASUREMENT & CONTROL

MOISTURE MEASUREMENT & CONTROL

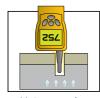
If a floorcovering is installed over a subfloor that has excess moisture, the moisture will rise to the surface of the subfloor and become trapped under the floorcovering, which may result in blistering or failure of the adhesive, causing the floorcovering to lift.

The only remedy to this scenario is to completely remove the entire floorcovering and adhesive and either let the subfloor dry out or apply Setcrete Rapid Set DPM.

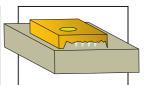
The presence of moisture in a subfloor cannot be accurately determined visually, by touch or by smell. It must be checked for and measured using the correct equipment.



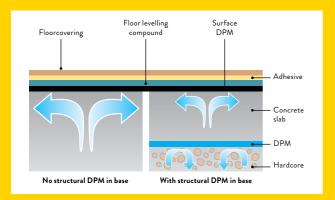
Radio meters detect the presence of moisture



Moisture probes measure humidity within the slab



Digital hygrometers are sealed to the slab and accurately measure relative humidity



Surface Damp Proof Membrane controls moisture release and allows floorcovering to be installed.

STEP 2 MEASURE IT

Accurately measure the moisture levels in the subfloor using a digital hygrometer. If the relative humidity (RH) is below 75%, it is safe to proceed with the installation. If it is above 75% RH, go to step 3.



ACCURATE MOISTURE MEASUREMENT

If it is suspected that moisture is present in a subfloor or checks with a handheld radio frequency moisture meter indicate the presence of moisture, accurate moisture measurement of the subfloor is required.

Measurements should be made using a pre-calibrated digital hygrometer at a number of points across the floor area (a number of hygrometers can be used around a room at the same time to accelerate the process).

The digital hygrometer(s) must be temporarily sealed to the subfloor and left for a minimum of four hours (longer for power floated concrete slabs) until a steady reading has been obtained.

An alternative measurement method is to use a Protimeter MMS2 in conjunction with humidity boxes (similar to those used with a digital hygrometer) or using moisture probes that are inserted into pre-drilled holes in the subfloor.

For both methods equipment data sheets should be consulted for detailed instructions on equipment operation and interpretation of results.

"If wood floors are to be installed, the maximum recommended moisture reading should be below 65% RH, although the flooring manufacturer should be consulted.



STEP 3 SOLVE IT

If relative humidity is over 75%, the subfloor must be left to dry or Setcrete Rapid Set DPM should be applied.



DAMP PROOF MEMBRANE

A surface damp proof membrane (DPM) is designed to control water vapour transmission and prevent the risk of moisture damage to flooring installations.

Setcrete Rapid Set DPM is a solvent-free, two part epoxy resin that achieves protection for subfloors with up to 98% RH. Setcrete Rapid Set DPM requires only a single coat application and cures in as little as 3 hours at 20°C.

See product data sheet for detailed information or consult Setcrete Technical Department.



"A SURFACE DAMP PROOF MEMBRANE (DPM) IS DESIGNED TO CONTROL WATER VAPOUR TRANSMISSION"

OTHER CONSIDERATIONS FOR DAMP FLOORS

Setcrete's specialist range of floor levelling compounds can be used in conjunction with Setcrete Rapid Set DPM to provide solutions for other common situations.

For example:

- Setcrete 2K PRO and Exterior floor levelling compounds can be used to level damp, uneven subfloors prior to the application of Setcrete Rapid Set DPM.
- When time is important, Setcrete Rapid Set 30 can be used over Setcrete Rapid Set DPM. Setcrete Rapid Set 30's unique rapid setting, rapid drying technology allows the floor to be smoothed and levelled and is ready to receive new floorcoverings from 2 hours.

For details of other products that can be used in conjunction with DPM's please contact Setcrete's Technical Service Department, view the website on-line at www.setcrete.co.uk or see individual product data sheets.

UNDERFLOOR HEATING SYSTEMS

Most Setcrete products are suitable for use with underfloor heating systems. Due to the wide range of systems available, we would always recommend contacting the underfloor heating system manufacturer or the Setcrete Technical Service Department further information.

Contact Setcrete Technical Service Department on 01538 361633

Monday - Friday 8.30am - 5.00pm



DEMONSTRATION VIDEOS

Quick tuition on how to mix and apply our products.

SUBFLOOR PREPARATION GUIDE

Find your subfloor type using the online Setcrete Subfloor Preparation Guide. Allows users to find out more about the subfloor type and gives guidance on the remedial work that is required prior to the application.

PRODUCT SELECTOR

Take the uncertainty out of product selection. Obtain a full product specification.

COVERAGE CALCULATOR

Once the right product(s) have been specified it is important to know what quantity of material is required. Easy quantity calculations are only a click away.

MERCHANT LOCATOR

Find your nearest Setcrete stockist.

TECHNICAL SUPPORT

Call our team for expert advice on 01538 361633.

PRODUCT DATA SHEETS

Find out more about our products and their uses.

SAFETY DATA SHEETS

Helpful information regarding product contents that are often used to fulfill COSHH assessments.



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