Federation Stone Great Britain

ARDEX



The Experts In Natural Stone Installation

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Our company's heritage dates back more than 50 years and, as a global manufacturer of high performance speciality building materials, ARDEX has remained at the forefront of the UK tiling and flooring industries.

Operating across 50 sites worldwide, we are a premium supplier of products for subfloor preparation, and the installation and finishing of natural stone. ARDEX products have been specified on many prestigious projects, from the world's largest shopping mall in Dubai, to London's most iconic hotel, The Savoy.

As well as providing RIBA approved CPD seminars, which allow natural stone floor and wall tiles to be specified with confidence, ARDEX are active members of The Stone Federation, The Tile Association and the British Adhesives and Sealants Association (BASA), and strive to promote professionalism, technical standards and best practice within the tiling industry.

ARDEX manufacture products you can trust; all of our products are produced in accordance with ISO 14001 and ISO 9001.

Specification Support At Every Stage

When specifying ARDEX you can rely on our expert team for ongoing support at every stage of the process, from rapid response to specification writing, to installation visits and on-site testing. National Building Specification clauses provide best practice, guidance and support for your tiling specifications, and we regularly partner with complementary product manufacturers to provide project warranties.
Our purpose built training academy enables us to bring all parties involved in an ARDEX specification together, from the client through to the main or sub-contractors, ensuring total confidence in the specification and subsequent on-site application.

For the latest and most up to date information and advice, you can visit the ARDEX CPD ACADEMY at:

www.ardexcpdacademy.com

The academy allows you to earn CPD points by taking one of our RIBA approved CPD seminars online, including 'Specifying Natural Stone Tiling with Confidence'. Technical guidance, product information and project case studies are also available to download, making the ARDEX CPD Academy an essential tool in the specification process.



A Perfect Finish Every Time

When correctly specified and installed natural stone will create a visually stunning and durable statement, and it is this combination of beauty and durability that has inspired designers and architects and made natural stone finishes an enduring choice over the centuries.

Natural stones such as granite, marble and limestone are naturally durable materials that will last a lifetime but, like any product, when not installed correctly may cause a number of problems that will negatively affect the design and vision of the installation.

A smooth, level base is essential in achieving a perfect tiling finish, and ARDEX are the experts in subfloor preparation.

Unsightly staining is frequently caused when moisture from traditional tile adhesives and grouts migrates into the stone, dissolving existing materials such as iron oxides or organic deposits, which can discolour the face or edges of natural stone tiles.



ARDEX ‘RAPIDRY FORMULA’ TECHNOLOGY

ARDEX have developed a system of products specifically designed to eliminate these problems, ensuring risk free installation and a perfect finish every time.

ARDEX Natural Stone products, incorporating unique ‘RAPIDRY FORMULA’ technology, have been developed to provide practical solutions, with the mix water literally ‘locked’ within the mortar, virtually eliminating the risk of water staining, curling and warping in moisture sensitive natural stone.

Another key feature is rapid, controlled drying and hardening, allowing natural stone tiles to be walked on and grouted in the shortest possible time.

ARDEX Natural Stone products:

- Ensure a smooth, level base prior to fixing natural stone
- Allow the fixing and grouting of moisture sensitive natural stone that is prone to water staining, curling or warping
- Enable natural stone floors to be walked on in the shortest time possible
- Offer a complete project solution, including screeding, levelling and smoothing, fixing, grouting and silicones
- Can be used to fix uncalibrated natural stone
- Ensure solid bed fixing is achieved



Eliminating Moisture Problems

The main problems associated with natural stone tiles are discolouration and staining, and these typically occur during the bedding and grouting process. Most of these problems arise when moisture from traditional tile adhesives and grouts migrates into the stone, creating visible discolouration on the face or edges of the tile.

Water Staining

Some forms of discolouration are often not uniform, which can mean that the appearance of the installed tiles differs noticeably from an unfixed tile.

ARDEX RAPIDRY products literally lock the mix water into the mortar, virtually eliminating water staining.

Blob Fixing

Differential discolouration of natural stone tiles, due to water absorption, can arise when the tiles have not been solidly bedded. This effect is often the result of a fixing technique known as blob fixing, which can lead to the blobs being visible through the tile.

ARDEX pourable and semi-pourable Natural Stone Tile Adhesives ensure solid bed fixing is easily achieved, without the need to butter the back of the tile.

Curling and Warping

The effects of moisture can also cause curling and warping in thin natural stone tiles. Certain large format, resin-based agglomerated natural stone tiles are particularly prone to this effect, as the backs of the tiles are wetted by moisture from the adhesive bed. In some extreme cases, especially with 'green marble', warping can occur within minutes. Advice in BS 5385-5 advises the use of quick drying adhesives to avoid this, and the ARDEX range of RAPIDRY Natural Stone Tile Adhesives provides a solution to this problem.

Picture Framing

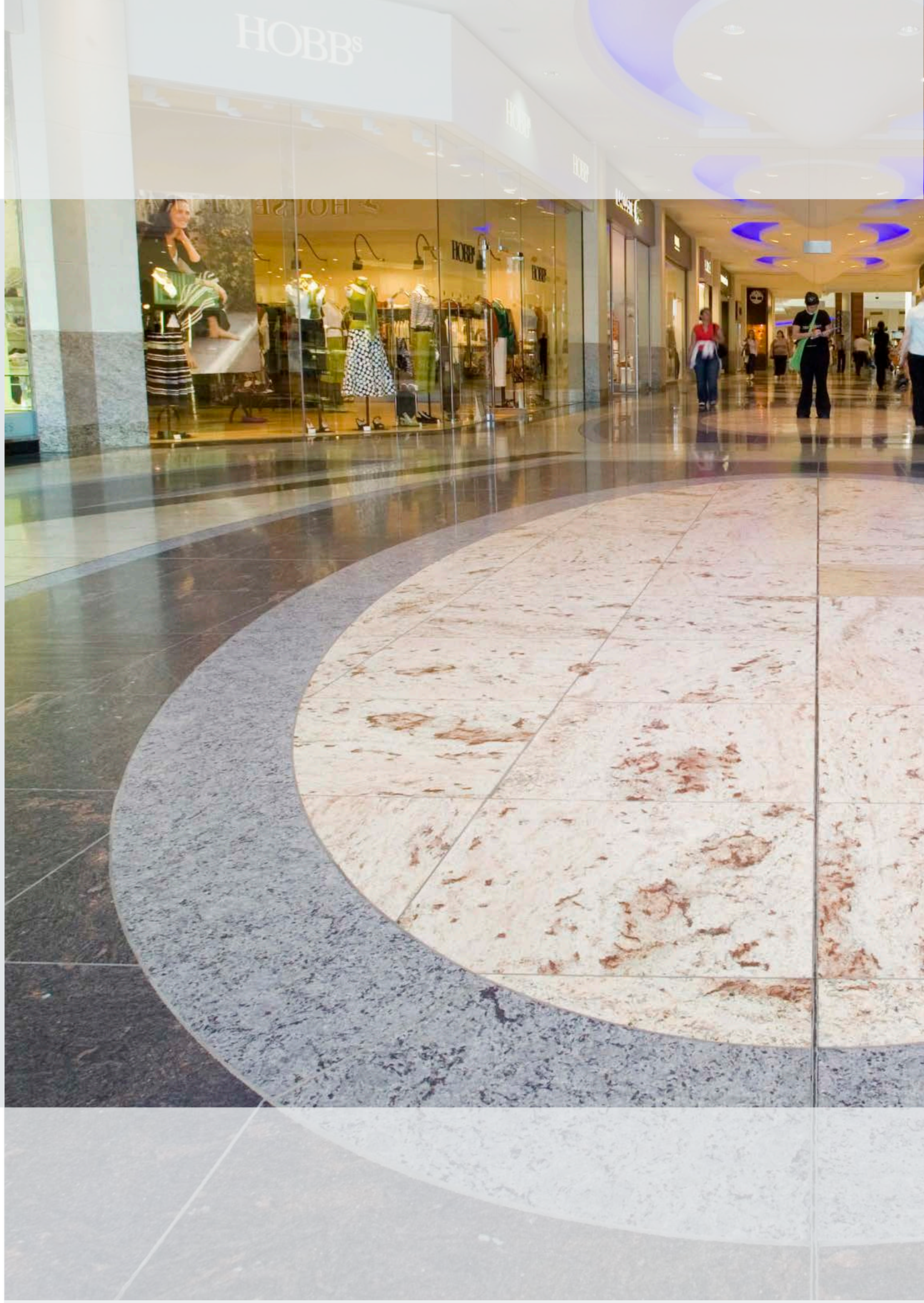
Natural stone tiles that are particularly porous might also suffer from water staining to the edges of the tile. This is caused by the water from the grout penetrating into the edge and face of the tile, and is commonly known as 'picture framing'. This effect can be minimised with the use of ARDEX MG Rapid Drying Marble and Natural Stone Tile Grout.











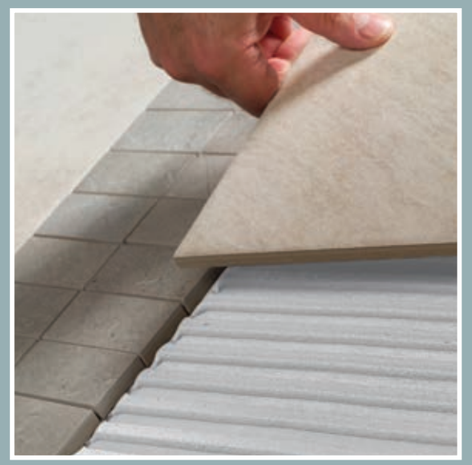
Best Practice Considerations Prior To Fixing Natural Stone

Natural stone, when correctly selected and installed, can enhance the overall look and value of an installation. The Stone Federation is the official trade association of the natural stone industry, and is able to provide expert advice on all aspects of the industry, from technical standards, to advice and guidance in sourcing appropriate materials.



As stone is a naturally occurring product, it's best to ensure that sufficient stone is specified from one batch, and that the tiles are mixed so that shades are blended effectively. Some natural stone tiles are also packed wet, so will need to dry out prior to fixing.

It's important to check that the substrate to be tiled is dimensionally stable and able to support the weight of the tiling. For wall tiling, the ideal substrate is render, concrete or concrete blockwork, for other backgrounds the following guidance is given to both tile and adhesive weight limits:

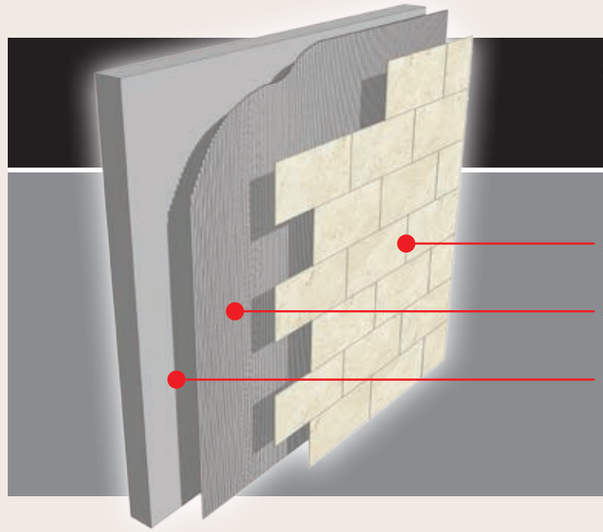


- The maximum weight of tiling which can be supported by a dry, well-adhered gypsum plaster background is 20kg/m^2.
- The weight of tiling direct to a plasterboard background should not exceed 32kg/m^2.

Installation should follow the guidance provided in BS 5385 and Code of Practice BS 8000-11:2011.

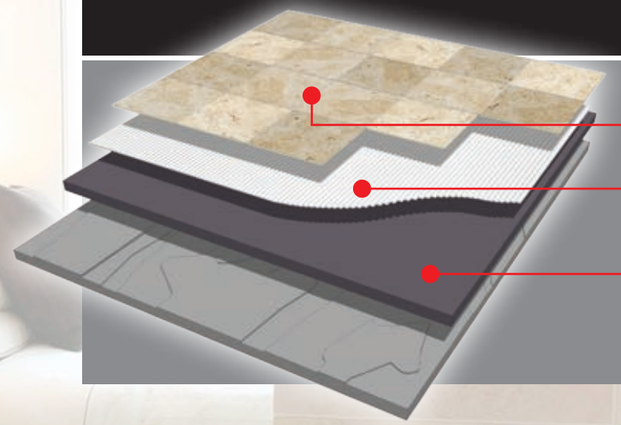
Natural Stone Specification Diagrams

TILING ONTO DRY INTERNAL WALLS



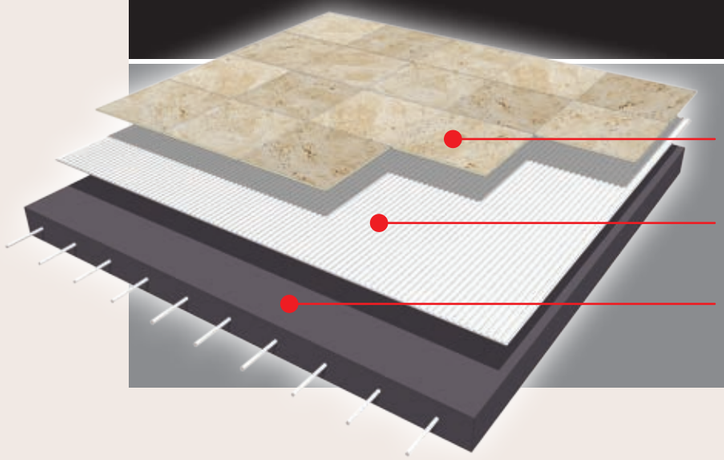
- ARDEX MG Natural Stone Tile Grout
- ARDEX S 27 Natural Stone Tile Adhesive
- Internal Wall

TILING ONTO AN UNEVEN SUBFLOOR



- ARDEX MG Natural Stone Tile Grout
- ARDEX S 27 or ARDEX S 28 Natural Stone Tile Adhesive
- ARDEX K 15 HB Levelling and Smoothing Compound

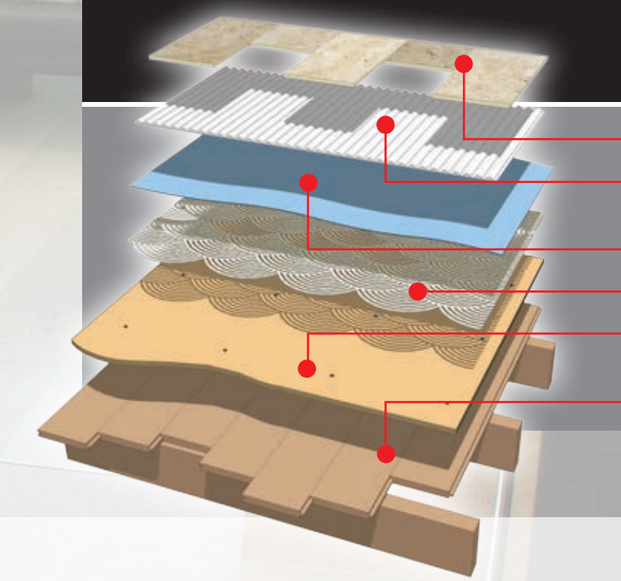
TILING ONTO A HEATED SCREED



- ARDEX MG Natural Stone Tile Grout
- ARDEX S 27 or ARDEX S 28 Natural Stone Tile Adhesive
- Heated Sand/Cement Screed*

*For advice on when to specify a decoupling mat, please contact the ARDEX Technical team.

TILING ONTO A TIMBER SUBFLOOR



- ARDEX MG Natural Stone Tile Grout
- ARDEX S 27 or ARDEX S 28 Natural Stone Tile Adhesive
- ARDEX DS 20 Decoupling Mat*
- ARDEX AF 200 Matting Bonding Adhesive
- Suitable grade and thickness of plywood in accordance with BS 5385-3: 2007
- Wooden Floor

*For advice on when to specify a decoupling mat, please contact the ARDEX Technical team.

Advanced Products For Natural Stone

THE TILE ASSOCIATION AWARDS 2014
WINNER OF BEST INNOVATION

ARDEX are the experts in subfloor preparation, and to achieve the surface regularity demanded by BS 5385, it's important, particularly with uncalibrated stone, to ensure that the subfloor and fixing products are designed for the job in hand. ARDEX offer a total system solution for natural stone installation, including Floor Screeds, Levelling and Smoothing Compounds, Tile Adhesives, Tile Grouts and Silicones.

Screeds

ARDEX offer specialist fast track solutions for screeding, with rapid drying and hardening products.

ARDEX A 38 - Rapid Hardening and Drying Cement for Floor Screeds

Rapid hardening screed for internal and external use. Receives natural stone tiles directly after only 4 hours for bonded, unbonded and floating screeds.

PUMPABLE · EXTERIOR USE · RAPIDRY FORMULA



ARDEX A 35 MIX - Rapid Drying Pre-Blended Screeding & Screed Repair Mortar

Unique pre-blended screed repair mortar. Can be walked on after 3 hours and tiled 24 hours after application, regardless of thickness.

RAPIDRY FORMULA



Rapid Repair Mortars

ARDEX Rapid Repair Mortars enable fast track repairs to be carried out to small internal or external areas like damaged screeds or concrete steps.

ARDEX ARDURAPID A 45 - Rapid Drying & Hardening Internal Repair Mortar

Ideal for the rapid repair of small internal areas e.g. concrete steps.
Can receive natural stone tiles after 1½ hours regardless of thickness, and is slump free.

RAPIDRY FORMULA



ARDEX A 46 - Rapid Setting & Hardening External Repair Mortar

Ideal for the rapid repair of small external areas e.g. concrete steps. The rapid hardening properties of ARDEX A 46 mean that it can receive natural stone after 2-3 hours.

EXTERIOR USE



Levelling & Smoothing Compounds

A smooth, level base is essential in achieving the perfect tiling finish, and ARDEX Levelling and Smoothing Compounds are an ideal, cost effective way to achieve this. For larger projects, many compounds can be pumped at a rate of 300-400m² per hour.

ARDEX K 15-HB - High Build Rapid Drying Subfloor Levelling & Smoothing Compound

Creates a smooth and level finish prior to fixing natural stone tiles with the appropriate ARDEX Tile Adhesive. Walkable in 2 hours and, regardless of thickness, natural stone tiles can be fixed after 4 hours.

PUMPABLE · RAPIDRY FORMULA



ARDEX K 301 - Exterior Self-Smoothing Levelling and Resurfacing Compound

Ideal for levelling large external areas of uneven or damaged concrete.
Walkable in 2-3 hours and natural stone tiles can be fixed after 24 hours.

PUMPABLE · EXTERIOR USE

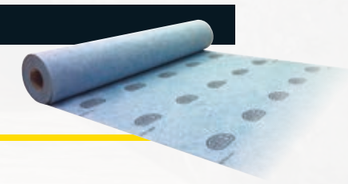


Decoupling and Matting Bonding Adhesive

ARDEX provide a solution for decoupling domestic and commercial floors.

ARDEX DS 20 - Decoupling Mat

Decoupling fleece that minimises tension between the subfloor and natural stone tile.
Bridges static cracks up to 3mm and minimises build height.



ARDEX AF 200 - Matting Bonding Adhesive

Instantly bonds matting systems to the floor, eliminating curling and allowing tiling to commence immediately.



Advanced Products For Natural Stone

THE TILE ASSOCIATION AWARDS 2014
WINNER OF BEST INNOVATION

Natural Stone Tile Adhesives

ARDEX Natural Stone Tile Adhesives incorporate ARDEX RAPIDRY FORMULA Technology which reduces the risk of water staining, curling and warping in moisture sensitive natural stone.

ARDEX S 27 - MICROTEC Rapid Hardening and Rapid Drying Natural Stone Wall and Floor Tile Adhesive



Reduces the risk of water staining, curling and warping in moisture sensitive natural stone.
Can be trafficked and grouted 2 hours after fixing, regardless of bed thickness.
30 minute open time. ARDEX 27 W is ideal for fixing translucent marble and light coloured natural stone.

RAPIDRY FORMULA

ARDEX S 28 - MICROTEC Rapid Hardening and Rapid Drying Semi-Pourable Natural Stone Floor Tile Adhesive



Reduces the risk of water staining, curling and warping in moisture sensitive natural stone tiles.
Semi-pourable consistency is ideal for solid bed fixing large format natural stone floor tiles.
ARDEX 28 W is ideal for fixing translucent marble and light coloured natural stones.

RAPIDRY FORMULA

ARDEX S 20 - Flexible Rapid Hardening & Drying Natural Stone Tile Adhesive



For bed thicknesses from 5mm to 20mm. ARDEX S 20 virtually eliminates the risk of water staining and is ideal for uncalibrated natural stone. Can be trafficked and grouted 3 hours after fixing. ARDEX S 20 White is ideal for fixing translucent marble and light coloured natural stones.

GREY WHITE RAPIDRY FORMULA

ARDEX X 32 - Rapid Hardening & Rapid Drying Natural Stone Tile Adhesive



For bed thicknesses from 3mm to 30mm. ARDEX X 32 can be used externally and is ideal for fixing uncalibrated natural stone. Reduces the risk of water staining and can be grouted and trafficked just 3 hours after fixing.

EXTERIOR USE RAPIDRY PLUS FORMULA

ARDEX X 7001 - MICROTEC Rapid Drying Pourable Floor Tile Adhesive



Pourable adhesive ideal for fixing large format natural stone floor tiles. Achieves solid bed fixing without the need to butter the back of the tile, and tiles can be trafficked and grouted 2 hours after fixing.

RAPIDRY FORMULA

ARDEX also manufacture a range of adhesives suitable for non-moisture sensitive natural stone. Please contact the ARDEX technical team for further information.



Grout Selection

Specifying tile grout is the final part of the installation process, and ARDEX Tile Grouts are available in a wide range of colours that complement any project. ARDEX Tile Grouts retain their colour integrity, and through advanced production processes, high quality raw materials and effective control systems, provide excellent colour consistency across the range.

The ARDEX Tile Grout Colour Selector can assist in colour specifications and is available to order by calling 01440 714939.

ARDEX MG - Rapid Drying Marble and Natural Stone Tile Grout



Virtually eliminates the risk of water staining to the edges of moisture sensitive natural stones.
For internal use on joint widths up to 8mm, ARDEX MG can be trafficked 90 minutes after application. Available in Light Grey, Dark Grey, White, Limestone and Sandstone.

RAPIDRY FORMULA

ARDEX-FLEX FS - Flexible Tile Grout with Built-In Admix



Water and dirt repellent flexible tile grout for joints up to 4mm wide. For use in internal and external locations, including swimming pools. Available in a range of 32 colours for non-moisture sensitive natural stones.

EXTERIOR USE

ARDEX-FLEX FL - Rapid Setting & Hardening Flexible Tile Grout with Built-In Admix



Water and dirt repellent flexible tile grout for joints from 3mm to 15mm wide. Can be trafficked 90 minutes after application. For use in internal and external locations, including swimming pools. Available in a range of 32 colours for non-moisture sensitive natural stones.

EXTERIOR USE

Silicones

ARDEX have developed a range of silicones to work with natural stone for sealing wall and floor joints.

ARDEX ST - Natural Stone Silicone



An interior and exterior grade silicone, specially designed to work with natural stone and to virtually eliminate the risk of moisture staining around tile edges. ARDEX ST contains fungicides to combat mould growth, and is weather resistant and UV stable. Available in Transparent and 6 colours that complement the ARDEX Tile Grout range.

EXTERIOR USE



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