

ARDEX MRF

Moisture Resistant External Feather Finish

Fully resistant to moisture and water

Provides a smooth surface over a variety of substrates

Non-sanded - install from a true feather edge up to 12mm

Rapid drying - install floorcoverings after 30 minutes

Suitable for internal and external use

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ARDEX MRF

Moisture Resistant External Feather Finish

DESCRIPTION

ARDEX MRF Moisture-Resistant, Rapid-Drying, Skimcoat Patching Underlayment is a trowel-grade underlayment formulated from a blend of Portland cement and other hydraulic cements that provides a smooth surface prior to the installation of ARDEX Moisture Control Systems or moisture-resistant adhesives and flooring.

SUBSTRATE PREPARATION

ARDEX MRF is suitable for installation over the following substrates:

- Concrete
- Existing adhesive residue on concrete contact ARDEX Technical Services
- Gypsum
- Wood
- Other non-porous substrates contact ARDEX Technical Services

Acid etching, adhesive removers, solvents and sweeping compounds are NOT acceptable means for cleaning the substrate. Substrate and ambient temperatures must be a minimum of 5°C for the installation of ARDEX MRF.

ARDEX MRF will bond to standard absorbent concrete and wood without the use of a primer, as well as to certain nonporous substrates, including burnished concrete, terrazzo and ceramic, quarry and porcelain tiles. Gypsum and epoxy coating systems must be primed.

Concrete Preparation

All concrete substrates must be solid, structurally sound, thoroughly clean and free of oil, wax, grease, asphalt and latex compounds, curing compounds, sealers and any contaminant that might act as a bond breaker. If necessary, mechanically clean the floor down to sound, solid concrete by shot blasting or similar. Over-watered, frozen or otherwise weak concrete surfaces must also be removed down to sound, solid concrete by mechanical methods. Sanding equipment is not an effective method to remove curing and sealing compounds.

Adhesive Residues on Concrete Preparation

Contact ARDEX Technical Services.

Gypsum Preparation

For interior areas that do not have excessive moisture, ARDEX MRF can be installed over gypsum underlayments that are sound, solid, well-bonded and properly primed. The gypsum must be thoroughly clean and free of dirt, debris, sealers and any contaminant that might act as a bond breaker. If necessary, mechanically clean the floor down to sound, solid gypsum by shot blasting or similar. Please be

advised, however, that the fact remains that the substrate is gypsum, and therefore has inherent weakness. ARDEX MRF will provide a solid surface to which new flooring can bond, but cannot change the fact that a weak substrate lies below.

Double priming of the gypsum is necessary to consolidate what may be a dusty surface prior to installing ARDEX MRF. Make an initial application of ARDEX P 51 Primer mixed with 3 parts water, and apply using a soft push broom. Do not leave any bare spots. Remove all puddles and excess primer. Allow thorough drying such that the film of primer does not re-emulsify in water (approximately 1 to 3 hours) before proceeding with the second application of ARDEX P 51 diluted 1:1 with water. Allow thorough drying to a clear, thin film (min. 3 hours, max. 24 hours).

Wood Preparation

The interior wood subfloor must be constructed according to prevailing building codes, and must be solid and securely fixed to provide a rigid base free of undue flex. Any boards exhibiting movement must be refastened to create a sound surface. The surface of the wood must be clean and free of oil, grease, wax, dirt, varnish, shellac and any contaminant that might act as a bond breaker. If necessary, sand down to bare wood. A commercial drum sander can be used to sand large areas. Do not use solvents, strippers or cleaners. Vacuum all dust and debris. It is the responsibility of the installation contractor to ensure that the wood subfloor is thoroughly clean and properly anchored prior to the installation of any ARDEX material.

Some flooring manufacturers recommend that a finishgrade wood underlayment be installed over the existing wood subfloor. If necessary, ARDEX MRF can be used to smooth fasteners and/or joints in the wood underlayment. Please note that the wood underlayment must be suitable for the installation of the specific floor covering and must be installed in accordance with the wood underlayment manufacturer's recommendations.

Other Non-Porous Substrates

In interior areas that do not have excessive moisture, ARDEX MRF can also be applied over clean, sound and solidly bonded terrazzo, burnished concrete and epoxy coating systems. In interior and exterior areas, ARDEX MRF can be applied over clean, sound and solidly bonded ceramic, quarry and porcelain tiles. The substrate must be clean, including the complete removal of existing waxes and sealers, dust, dirt, debris and any other contaminant that may act as a bond breaker. Substrate preparation must be by mechanical means, such as shot blasting or similar.

Epoxy coating systems must be primed with ARDEX P 82. Follow the mixing instructions on the container, and apply with a short-nap or sponge paint roller, leaving a thin coat of primer. Do not leave any bare spots. Back roll with a dry roller to remove excess primer. ARDEX P 82 should

be applied within 1 hour of mixing. Allow primer to dry to a thin, slightly tacky film (min. 3 hours, max. 24 hours). Follow the coverage instructions in the ARDEX P 82 technical data sheet.

Joints and Cracks

Under no circumstances should ARDEX MRF be installed over any moving joints or moving cracks. All existing expansion joints, isolation joints and construction joints, as well as all moving cracks, must be honored up through the underlayment and flooring. Please be advised that while dormant control joints and dormant cracks may be filled with a trowel-grade material such as ARDEX MRF prior to installing finish flooring, this filling is not intended to act as a repair method that will eliminate the possibility of joints and cracks telegraphing.

ARDEX MRF is a non-structural material, and, therefore, will not restrain movement within the substrate. This means that while some dormant joints and dormant cracks may not telegraph up into the finish flooring, cracks will telegraph in any area that exhibits movement, such as an active crack, an expansion or isolation joint, or an area where dissimilar substrates meet. Contact ARDEX for suitable products for concrete repair.

MIXING

For one 4.5 kg bag of ARDEX MRF, use 1.65 L of clean water. Pour the water in the mixing container first, and then add the ARDEX MRF. Mix with an ARDEX a suitable Mixing Paddle and a 12 mm heavy-duty drill (min. 650 rpm). Mechanical mixing will produce a creamier, smoother consistency without the need for additional water. DO NOT OVERWATER! Additional water will weaken the compound and lower its strength. To mix smaller quantities by hand, use 3.25 parts of powder to 1 part of water by volume. Use a margin trowel and mix vigorously for 2 - 3 minutes.

Just prior to application on the substrate, the mixture should be stirred again to ensure a creamy, smooth, lump-free consistency. The pot life of ARDEX MRF is approximately 15 - 20 minutes at 23°C. If stiffening or surface skinning occurs within this time, remix before using. DO NOT ADD MORE WATER.

COVERAGE

Approximately 0.56kg powder/mm/m²

3mm thickness: 2.6m² per 4.5kg bag 1.5mm thickness: 5.2m² per 4.5kg bag Skim coat: 18 - 23m² per 4.5kg bag

APPLICATION

Apply the ARDEX MRF to the substrate with the flat side of a steel trowel (keying in) to obtain a solid mechanical bond before applying the desired thickness. Use sufficient pressure to fill all defects and to feather the product onto the subfloor surface.

For interior applications, ARDEX MRF can be installed from a true featheredge up to 12 mm over large areas. It can also be installed up to any thickness in small, well defined areas, such as thresholds and birdbaths, as well as for height transitions. For exterior applications, ARDEX MRF can be installed at a skim coat over large areas and up to 6 mm in small, well-defined areas. There is no minimum thickness requirement for this product. Use the least amount possible to attain the desired smoothness. The thickness of the application should be calculated based on the surface profile of the substrate and the specified tolerances of the floor covering.

INSTALLATION OF FLOOR COVERINGS

Standard floor coverings such as ceramic tile, VCT, sheet vinyl and carpet can be installed approximately 30 minutes after installing a skim coat application of ARDEX MRF (23°C). If installing wood flooring, or if a high performance adhesive such as an epoxy or urethane will be used, allow the ARDEX MRF to cure for 16 hours. All flooring adhesives that are compatible with concrete are compatible with ARDEX MRF. Ensure the patch is dry, and refer to the flooring manufacturer's specific recommendations for installing over cementitious underlayments.

It is important to note that many different types of adhesives are used to install floor coverings, and their absorbency into cementitious substrates can vary significantly. If it is found that the adhesive being used is drying more quickly over the ARDEX MRF than over adjacent concrete, we recommend priming the underlayment surface with ARDEX P 51 diluted 1:3 with water. Allow the primer to dry thoroughly (1 - 3 hours), and proceed with the installation of the adhesive. The use of the primer will even out the open time of the adhesive without affecting the bond or the longterm performance. Please note that this application is for interior areas that do not have excessive moisture.

ARDEX MRF requires no special curing procedures and is ready to receive ARDEX MC Rapid once it has fully cured (minimum 2 hours at 23°C).

LIMITATIONS

ARDEX MRF is not to be used as a permanent wear surface, even if coated or sealed. ARDEX MRF must be covered by a suitable floor covering material, such as carpet, vinyl flooring, ceramic tile, etc.

While ARDEX MRF is unaffected by water, the surface of the concrete must be dry during application of the ARDEX MRF. This product is not a vapour barrier, and it will allow free passage of moisture. Follow the directives of the floor covering manufacturer regarding the maximum allowable substrate moisture content and test the substrate prior to

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installing ARDEX MRF. Where substrate moisture exceeds the maximum allowed by the floor covering manufacturer, it is recommended to use ARDEX MC Moisture Control Systems. ARDEX MRF is not a waterproofing compound. Where waterproofing is needed, use a suitable ARDEX Waterproofing System. For further information, please refer to the ARDEX technical data sheets.

STORAGE

ARDEX MRF has a shelf life of 12 months if stored in dry conditions in unopened packaging.

Protect unused material by removing air from bad and sealing tightly.

TECHNICAL DATA

Characteristic	Result	
Mixing Ratio	3.25:1 (Powder:Water)	
Coverage	Approx. 0.56kg powder/mm/m ²	
Dry time (at 23°C) Pot life Full cure Ready for standard floor coverings Ready for ARDEX MC Rapid Ready for timber flooring	15 - 20 minutes 2 hours 30 minutes 2 hours 16 hours	
Suitable for castor wheels (EN 12 529)	Yes	
VOC	0	
Shelf life	12 months unopened	

PACKAGING

Product name	Size	Code
ARDEX MRF	4.5kg bag	30490

Toll Free Technical Services: 0800 227 339 (New Zealand)

The technical details, recommendations and other information contained in this data sheet are given in good faith and represent the best of our knowledge and experience at the time of printing. It is your responsibility to ensure that our products are used and handled correctly and in accordance with any applicable New Zealand & Australian Standards, our instructions and recommendations and only for the uses they are intended. We also reserve the right to update information without prior notice to you to reflect our ongoing research and development program. Country specific recommendations, depending on local standards, codes of practice, building regulations or industry guidelines, may effect specific installation recommendations. The supply of our products and services is also subject to certain terms, warranties and exclusions, which may have already been disclosed to you in prior dealings or are otherwise available to you on request. You should make yourself familiar with them.

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