



ARDEX DS 40

Impact Sound Reduction and Decoupling System

Provides crack bridging function - allowing safe installation onto critical substrates

Pre-cut mats, simplify handling and installation

Mat thickness of 4.5mm to minimise build height

Tile over directly with ARDEX tile adhesives

Reduces the transmission of impact and air-borne sound - impact sound reduction 14 dB (field result 18 dB when using ARDEX X56 adhesive)

For renovation and new construction, domestic and commercial areas with loads up to 2 kN/m²

Suitable for heated screeds

Low VOC content - meets Green Building Council of Australia Green Star IEQ-13 requirements

ARDEX Australia Pty Ltd
20 Powers Road
Seven Hills NSW 2147
1300 788 780
technicalservices@ardexaustralia.com
www.ardexaustralia.com

ARDEX New Zealand Ltd
15 Alfred Street
Onehunga, Auckland, 1061
Phone: 0800 227 339
Email: info@ardexaustralia.com
www.ardex.nz.co

ARDEX DS 40

Impact Sound Reduction and Decoupling System

DESCRIPTION

ARDEX DS 40 is an acoustic mat designed to effectively reduce impact sound. Permanently elastic material with mineral fillers and PU binders. Sanded surface and fleece backed.

AREAS OF APPLICATION

Internal floor (for external applications contact ARDEX Australia).
For renovation and new construction, domestic and commercial areas with loads up to 2 kN/m².
Decoupling and sound reduction system for the installation of tiles, slabs, natural stone and concrete pavers.
Suitable for use in domestic bathrooms/ wet areas with ARDEX Waterproofing Systems.

TO (SUBSTRATES)

Concrete, sand:cement screeds
Heated screeds
Dry screed systems
Wooden floors and wooden particle board
Old tiles and slabs

SUBSTRATE PREPARATION

All substrates must be dry, firm, load bearing and free from dust and release agents.
Uneven concrete surfaces have to be primed with ARDEX Multiprime and levelled with ARDEX LQ 92.
Commercial grade vinyl (without foam backing) must be sanded and cleaned.
Porous substrates should be primed with ARDEX Multiprime.
Dense, smooth, impervious or wood surfaces should be primed with ARDEX P 82 or ARDEX P 9.
The DS 40 is crack-bridging up to 1mm.

Concrete

This includes precast, in-situ and wood floated concrete. As concrete exhibits drying shrinkage, allow to cure for at least 4 weeks prior to tiling. Any surface laitance, concrete sealers, curing compounds, and other materials should be removed from the surface prior to tiling. Steel trowel finished concrete should be roughened mechanically to remove laitance and provide a good key for tiling. The surface shall be true and level and pitched to drains where required. The concrete should have adequate surface profile (e.g. broom finish) to provide a mechanical key. Smooth surfaces and/or dense concrete greater than 35MPa must be mechanically prepared prior to tiling.

Cement Render/Screeds

New renders and screeds should be finished with a wood float to the required surface regularity. Screeds shall be pitched to drains where required. Allow at least 7 days to cure prior to tiling.

Compressed Fibre-Cement Sheet Internal Applications

These sheets must be fixed strictly in accordance with manufacturer's instructions and be deemed suitable for the application by the manufacturer.
Tiling over compressed fibre-cement sheet for external flooring applications should be carried out as per sheet manufacturer's recommendations and Australian Standard AS 3958.

ARDEX Liquid Applied Undertile Waterproofing Membranes.

ARDEX undertile waterproofing must be applied according to instructions and thoroughly dry prior to tiling.

Existing Ceramic Tiles (Internal Only)

These include sound, clean, glazed and unglazed tiles. Existing tiles must be firm and stable. Roughen the surface by mechanical means, clean off contamination and dust before tiling. Ensure that at least 80% of the glaze is removed.

FIXING TECHNIQUE

Refer to Technical Bulletin TB147 for detailed systems.
To avoid transmission of sound to adjoining walls/columns, install sound strips along the perimeters.

Lay the ARDEX DS 40 mats and cut where necessary. The ARDEX DS 40 can be easily cut with a carpet knife from the reverse side.
Apply ARDEX X 56 adhesive with a 3mm notch trowel (if the surface is rough use a 4mm notch trowel). Lay the ARDEX DS 40 within the open time of the adhesive with fleece side into the fresh mortar bed. Press the mat in with a trowel or float or metal roller. Make sure the mats are fixed without any gaps. Should adhesive come through the joints please take up the mat and clean it and repeat installation. Fix the mats in a brick pattern (or broken bond pattern) to avoid cross joints.

Installation of tiles can be done 2 - 4 hours after installation of the ARDEX D 40 mat (allow the ARDEX X 56 to set). Prior to the installation of tiles/slabs please check the joints in the ARDEX DS 40 mat and fill any gaps with a neutral cure silicone.

For fixing tiles the following adhesives can be used. Acoustic performance may vary marginally depending on adhesive used:-

- ARDEX X 56 (fast setting and flexible) can be used where movement is anticipated (e.g. post tension concrete), or
- ARDEX STS 8 (for stable concrete, and mixed with Ardion 90 where movement is anticipated), or
- For the installation of moisture sensitive natural stones, ARDEX S 28 Neu (mixed with Ardion 90) is recommended.

Ensure solid bedding of tiles by occasionally removing tiles and checking that there are no voids in the adhesive layer. Apply more adhesive by buttering the back of the tile and/or using a larger size notched trowel to spread the adhesive on the substrate.

The coverings to be installed should have a minimum size of 15x15 cm and a minimum breaking strength of 1500 N. Stoneware tiles should be at least 8mm thick and natural stone should be at least 15mm thick.

Wet areas

Suitable for domestic (not public) wet areas/ bathrooms.
Once the DS 40 has been installed, ensure that mats are butt joined, filling any gaps with a neutral cure silicone/or polyurethane sealant. Allow the sealant to cure. Next install a screed with falls to waste.
Once the screed is dry (seven days), the area should be waterproofed with ARDEX WPM002 (Superflex two part) as per instructions on same. Allow the membrane to dry before tiling.
Alternatively the screed can be installed first, followed by the mat, then membrane (minimum 2mm dry film thickness) and lastly tiled. For detailed wet area specification contact ARDEX.

For grouting use ARDEX grout mixed with flexible additive.

COVERAGE

ARDEX DS 40 mats are 750 x 500 x 4.5mm. Each mat will cover 0.375m² with a pack of 10 covering 3.75m². A pallet of 300 mats will cover 112.50m².

PACKAGING

Cartons of 10 mats, 300 mats to a pallet.

SHELF LIFE

ARDEX DS 40 has a shelf life of 36 months when stored in the original unopened packaging, in a dry place at 23°C and 50% relative humidity.

Pay attention to the following:

Apply ARDEX DS 40 at temperatures above + 5°C.
• Acoustic ratings are based on specific floor/ceiling configuration and may therefore vary on site. Site evaluation is needed to determine the most suitable system for the project.
• Construction and movement joints in the substrates have to be brought up to the tile surface.
• Do not use ARDEX DS 40 in permanently wet areas (e.g. public showers).

SAFETY PRECAUTIONS

This product is considered non hazardous in normal usage. The presence of cement in the product gives an alkaline mortar which may cause some irritation if prolonged contact with skin takes place.

Avoid contact with skin and eyes; in case of contact with the eyes, rinse immediately with plenty of water and seek medical advice; wear suitable gloves and eye protection and keep the product out of the reach of children. Avoid generation of airborne dust during mixing. If swallowed do not induce vomiting, give a glass of water and contact a doctor.

For further material safety data, consult the latest Safety Data Sheet.

TECHNICAL DATA

Colour: Green
Weight: 5.1kg/m²

Impact Sound Reduction acc.

DIN EN ISO 140-8: 14 dB
Fire Rating: B2 mat only
B1 with tile

Thermal Transfer

Resistance: 0.036 m² K/W
Thermal Conductivity: 0.11 W/mK

Vapour Transmission rate μ: 450

Resistant To Chair Castors: Yes

Suitable for Underfloor Heating: Yes

Toll Free Technical Services:

1800 224 070 (Australia)
0800 227 339 (NZ)

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DISCLAIMER

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