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# ARDEX DS 40

## Impact sound reduction and decoupling system

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Reduces the transmission of impact and air-borne sound – impact sound reduction 14 dB (field result 18dB when using ARDEX X 56 adhesive)

Provides crack bridging function - allowing safe installation onto critical substrates.

For renovation and new construction, domestic and commercial areas with loads up to 2 kN/m<sup>2</sup>

Minimum build height of 4.5mm

Pre-cut mats, simplify handling and installation

Suitable for heated screeds

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ARDEX Australia Pty Ltd  
20 Powers Road  
Seven Hills NSW 2147  
Tel: (02) 9851 9100  
Fax: (02) 9674 5621  
Email: [techinfo@ardexaustralia.com](mailto:techinfo@ardexaustralia.com)  
Internet: [www.ardex.com](http://www.ardex.com)

ARDEX New Zealand Ltd  
32 Lane St, Woolston  
Christchurch, New Zealand  
Tel: (03) 384 3029  
Fax: (03) 384 9779  
Email: [techinfo@ardexaustralia.com](mailto:techinfo@ardexaustralia.com)  
Internet: [www.ardex.com](http://www.ardex.com)

# ARDEX DS 40

## Impact sound reduction and decoupling system

### 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/m<sup>2</sup>.

Decoupling and sound reduction system for the installation of tiles, slabs, natural stone and concrete pavers onto substrates such as:

- concrete, sand cement screed
- heated screeds
- dry screed systems
- wooden floors & wooden particle board
- old tiles and slabs

Suitable for use in domestic bathrooms/ wet areas.

### DESCRIPTION

Permanently elastic material with mineral fillers and PU binders. Sanded surface and fleece backed.

### SUBSTRATE PREPARATION

All substrates must be dry, firm, load bearing and free from dust and release agents.

Uneven 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.

The DS 40 is crack-bridging up to 1mm.

### APPLICATION

Refer to Technical Bulletin TB147.

To avoid transmission of sound to adjoining walls/ columns, install sound strips along the perimeters. Alternatively use a bond breaker and fill the perimeter joint with a neutral cure silicone.

Lay the ARDEX DS 40 mats and cut where necessary. The ARDEX DS 40 mats 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 DS 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
- Pourable mortar such as ARDEX FB9L for large format tiles.
- For the installation of moisture sensitive natural stones, ARDEX S16 (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 WPM 002( 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.

## GENERAL INFORMATION

- 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.

Pay attention to the following:

- Construction and movement joints in the substrates have to be brought up to the tile surface.
- Do not use ARDEX DS40 in permanently wet areas (e.g. public showers).

## TECHNICAL DATA

According to ARDEX quality standards:

<b>Size of the Mat</b>	750mm x 500mm x 4.5mm 0.375 m <sup>2</sup> /Mat
<b>Weight</b>	approx. 5.1 kg/m <sup>2</sup>
<b>Color</b>	Blue
<b>Impact sound reduction acc. DIN EN ISO 140-8</b>	14 dB
<b>Fire rating</b>	B2 only mat B1 with Tile
<b>Thermal transfer resistance</b>	0.036 m <sup>2</sup> K/W
<b>Thermal conductivity</b>	0.11 W/mK
<b>Vapor transmission rate <math>\mu</math></b>	450
<b>Resistant to chair castors</b>	Yes
<b>Suited for floorheating</b>	Yes
<b>Packaging</b>	Pallet or Carton: Carton : 10 mats = 3.75m <sup>2</sup> Pallet: 300 mats = 112.50m <sup>2</sup>
<b>Storage</b>	Can be stored for approx. 36 month in dry rooms

## DISCLAIMER

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Country specific recommendations, depending on local standards, codes of practice, building regulations or industry guidelines, may effect specific installation recommendations.

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### **ARDEX Australia Pty Ltd**

New South Wales	Ph (02) 9851 9100	Fax (02) 9838 7970
Queensland	Ph (07) 3817 6000	Fax (07) 3881 3188
Victoria/Tasmania	Ph (03) 9308 9255	Fax (03) 9308 9332
South Australia	Ph (08) 8268 2511	Fax (08) 8345 3207
Western Australia	Ph (08) 9455 1644	Fax (08) 9455 1227

### **ARDEX New Zealand Ltd**

Auckland	Ph (09) 5800 005	Fax (09) 5799 963
Wellington	Ph (04) 5685 949	Fax (04) 5686 376
Christchurch	Ph (03) 3843 029	Fax (03) 3849 779

**Technical Services Toll Free: 1800 224 070**