



Monarfloor® Acoustic Cradle System



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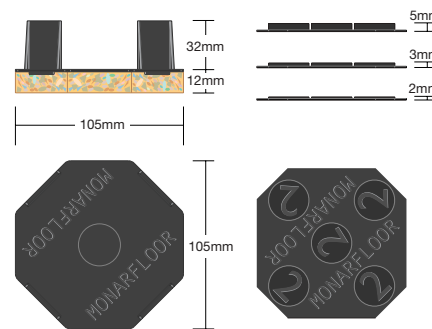
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Product Data

Components	uPVC base plate with four batten restraints, 10mm LRAC foam type IV
Thickness	12mm to top of base plate, 44mm to top of restraints
Dimensions	105mm x 105mm x 44mm High
Construction	150mm concrete slab + Monarfloor® Acoustic Cradle + 45mm battens + 18mm or 22mm chipboard
Performance L'nT,w	Complies with proposed RSD Performance MF1 = Mean 48dB SF2 = Mean 38dB
Performance D'nT,w + C_{tr}	Complies with proposed RSD Performance MF1 = Mean 54dB SF2 = Mean 56dB



Accessories

- 2mm, 3mm & 5mm Cradle packers
- Monarfloor® Flanking Band

Product developing and testing

Icopal Limited are committed to a rolling programme of continuous development to ensure optimum standards of acoustic performance. Each product has been thoroughly tested on site to reflect an accurate expectation of performance on a given floor construction.

All acoustic tests wherever possible are carried out by a NAMAS accredited or ANC registered testing house, ensuring continuity and reliability in the way tests are performed and calculated.

The solutions we offer are the most appropriate from a cost and performance point of view.

Technical services

Icopal's technical department is experienced in a wide range of flooring applications and can advise on all aspects of acoustic flooring design and specification. We can undertake site visits to provide contractors with advice and assistance at every stage of a project from concept to completion.

Quality assurance

All Monarfloor® products are manufactured under strict quality guidelines. As part of our commitment to the highest standard of quality and service, Icopal Limited operates in accordance with



Certificate No. Q05556
 ISO 9001 : 2000

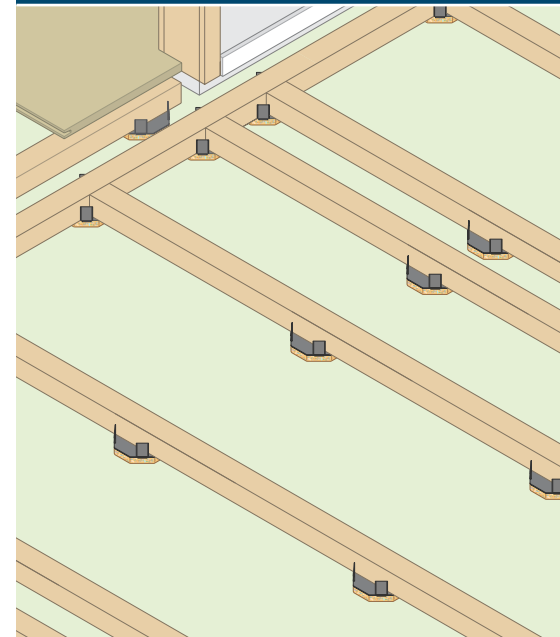
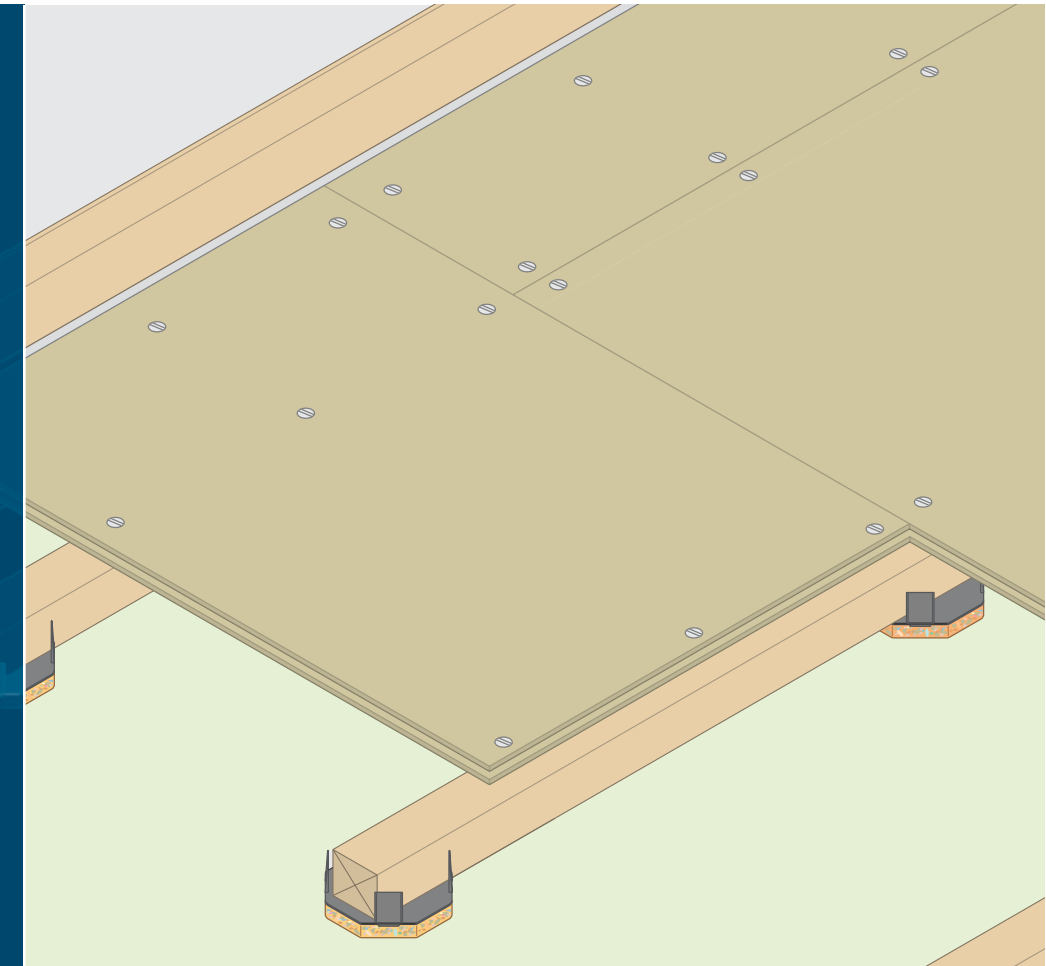
Availability

The Monarfloor® range of products are available from our nationwide network of stockists. Please contact Icopal Limited for details of your nearest stockist.

Packaging, delivery and storage

Monarfloor® Acoustic Cradles and cradle packers are delivered to site in boxes that are palletised in accordance with site program. All components should be stored in dry, well ventilated conditions.

**Reducing
 Transmission
 of Impact
 and Airborne
 Noise Through
 Concrete Floors**



Every effort has been taken in the preparation of this brochure to ensure the accuracy of representations contained herein. Recommendations as to the use of materials, construction details and methods of installation are given in good faith and relate to typical situations. However, every site has different characteristics and reliance should not be placed upon the foregoing recommendations. Advice can be given as to specific applications of the products, upon request to Icopal Limited, Monarflex Acoustic Systems.

Monarfloor® - Acoustic Cradle System

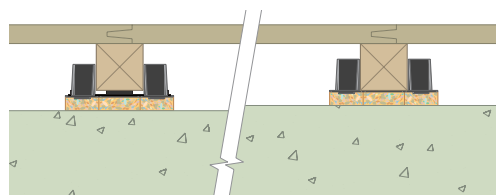


Icopal Limited is one of the UK's leading manufacturers of acoustic flooring systems for the construction industry. This brochure describes the use of the Monarfloor® Acoustic Cradle to reduce sound transmission on both new build and refurbishment projects.

Monarfloor® Acoustic Cradle

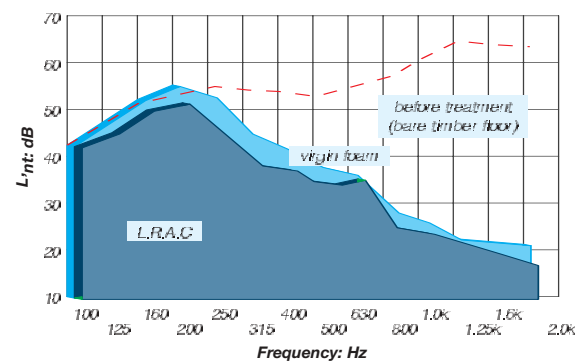
Monarfloor® Acoustic Cradle reduces the transmission of impact and airborne sound through concrete floors by acoustically isolating the bearing surface from the structural floor. The Acoustic Cradle consists of a uPVC moulding, comprising a base plate with four upright batten restraints bonded to a base of LRAC acoustic foam. The cradle is used to support 45mm wide timber battens, which in turn support the flooring deck.

Using the Monarfloor® Acoustic Cradle with Monarfloor® Cradle Packers allows level floors to be formed even on uneven concrete slabs.



LRAC Foam

Research has shown that reconstituted foams, particularly Low Resonance Acoustic Chip (LRAC), have lower natural frequencies than virgin open or closed cell foams, resulting in a balance of excellent impact improvement characteristics and superior stability within a single layer.



Design Considerations

Monarfloor® Acoustic Cradle should be installed at the spacings shown in the table. These figures are based upon domestic loadings - please contact Icopal Limited for recommendations for commercial projects.

In kitchens and bathrooms, where high loads are expected beneath kitchen units, baths and toilet pans, batten should be spaced at 300mm with cradles at 400mm centres. Cross battens should be used to provide additional support under specific appliances.

At perimeters a continuous run of battens should be installed 50mm from the wall, with cradles spaced at 450mm centres. At openings the edges of the flooring deck should be supported with an additional batten.

Any partitions should be built off the structural concrete slab, not the flooring deck.

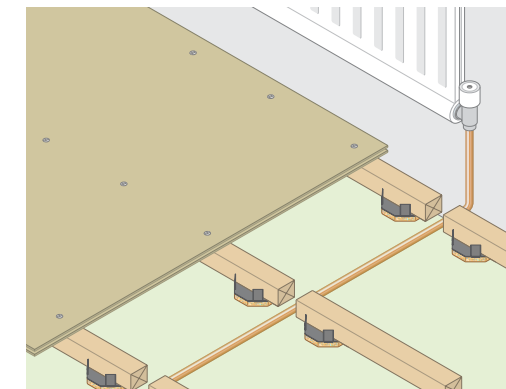
Flooring type	Cradle cntrs.	Batten cntrs.
18mm Chipboard	450mm	450mm
22mm Chipboard	600mm	600mm

Cradle and batten spacings

To prevent flanking transmission of sound, the flooring deck should be separated from the walls with Monarfloor® flanking band.

Services

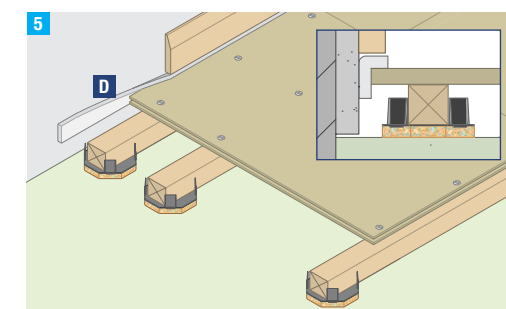
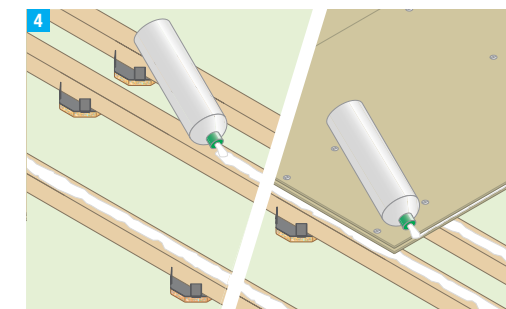
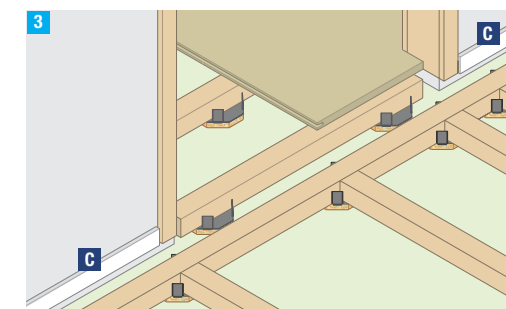
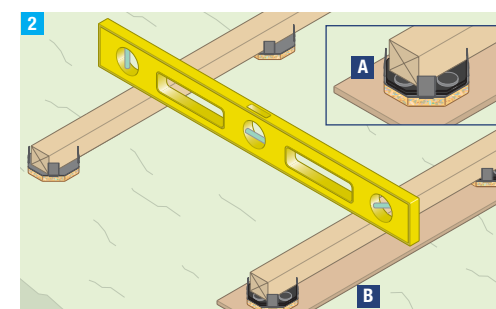
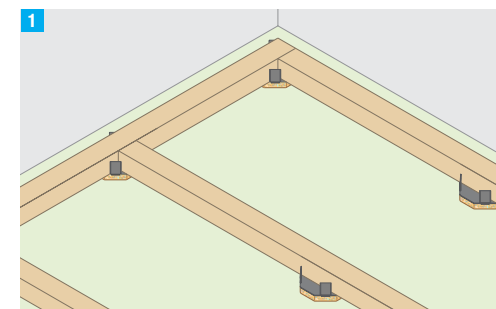
Monarfloor® Acoustic Cradle provides a space beneath the flooring deck for service runs. However, services should not interfere with the positioning of cradles; where service runs cross battens additional cradles or battens may be required to maintain the stability of the floor. Service pipes penetrating the flooring deck should not touch it and the holes should be sealed with flexible sealant.



Installation

Do not install Monarfloor® Acoustic Cradle until the building is weathertight and all wet trades finished.

Before laying the cradles, battens and flooring use a level to establish the highest point of the slab. Ensure the surface of the slab is clean, dry and smooth with any holes filled with mortar.



Installation sequence

- Set out cradles and battens at recommended centres, beginning at the highest point of the floor. Set out a perimeter batten 50mm from the walls. Place additional battens at openings (see 3) and to support board edges (see 4).
- Ensure the battens are level along their length and with each other. Use Monarfloor® Cradle Packers between the base plate and the underside of the battens (A) to take up irregularities in the floor slab; for deep depressions (>20mm) use strips of plywood (B) beneath the cradles.
- Apply Monarfloor® self-adhesive flanking band (C) to the walls at the level of the flooring deck.
- Lay the t & g flooring panels in brick bond with all joints fully glued. Screw the t & g panels to the battens.
- Fold down the flanking band onto the deck (D), and fix the skirting. Trim off any protruding strip.