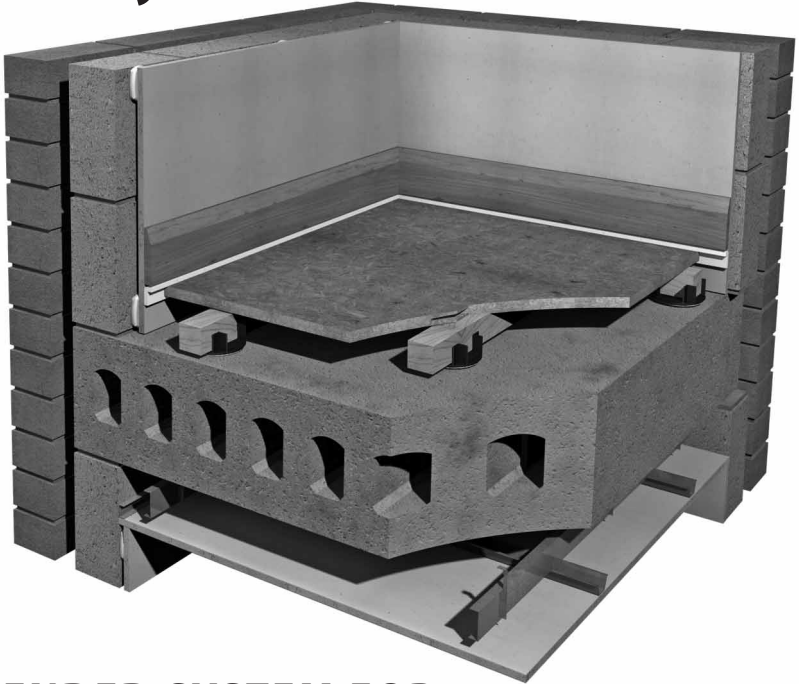


# Cradle System

## Installation instructions



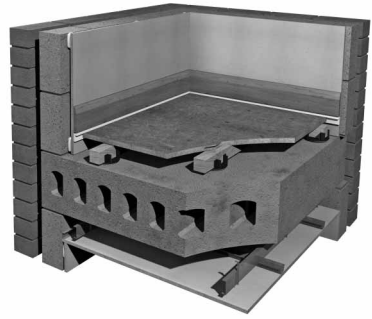
### SUSPENDED SYSTEM FOR UNEVEN CONCRETE FLOORS

- New build
- Conversions
- In conjunction with  
underfloor heating systems



## PRODUCT DATA

Overall size:	96mm diameter x 43mm height
Height of base plate:	8mm
Resilient layer:	Isopoli HD



## DESCRIPTION

- ❑ The isocheck Acoustic Cradle system is designed to reduce sound transmission through concrete floors.
- ❑ To be used over hollow core, in-situ or supported metal deck concrete floors for new build or conversions.
- ❑ Isocheck cradle systems are dry floating floors which provide an easily levelled under structure for supporting chipboard, plywood or hardboard flooring.

- 18mm or 22mm chipboard floor over Isocheck Cradle with a (commonly used) strength-graded 45mm x 45mm batten @ 400mm centres.
- min. 150mm hollow core concrete plank min. 300kg/m<sup>2</sup> excluding screed **or** 130mm min. in-situ concrete (80mm min. fully supported) on profiled metal deck.
- metal frame suspended ceiling with 75mm void and 10kg/m<sup>2</sup> plasterboard **or** with 100mm void and 8kg/m<sup>2</sup> plasterboard.

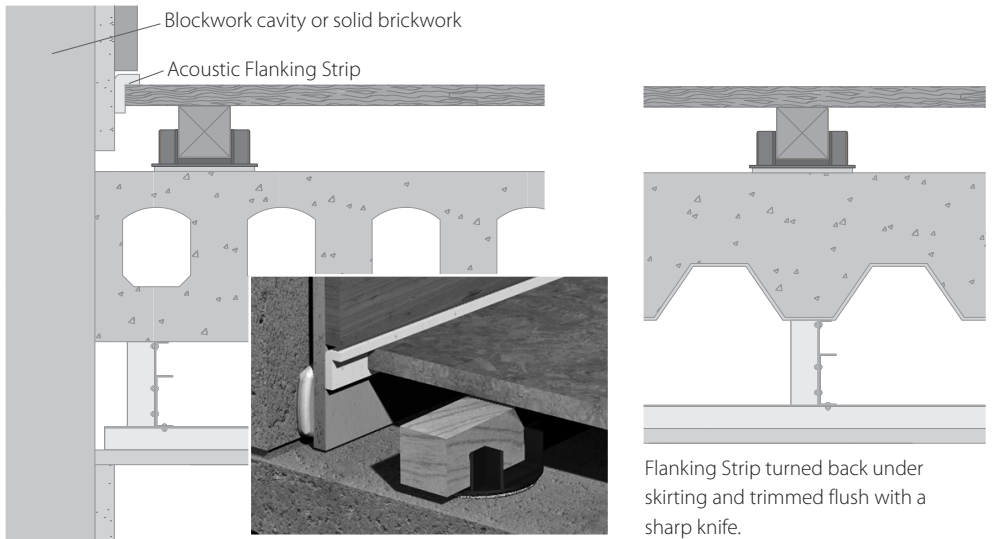
## PREPARATION

- ❑ Concrete ground level supported floors must have a damp proof membrane and screed complying with the appropriate Codes of Practice and Building Regulations.
- ❑ Areas of structural floor beneath each intended cradle position should be smooth, flat and level to facilitate ease of the batten installation.
- ❑ The building must be weatherproof and all wet trades completely dried out before commencing installation of the flooring system. All joints and air paths between concrete units and at perimeter walls must be carefully and thoroughly grouted for effective performance of acoustic floors. Components exposed to wet conditions such as ingress of rain or plumbing leaks should be discarded and replaced.
- ❑ Excessive moisture from cast in-situ slabs and screeds which have not dried out can have adverse effects on flooring materials and timber components.

- ❑ The provision of access to services is most successful if the location of services is detailed at an early stage. Services should be kept at least 150mm away from walls to allow space for perimeter support Battens.
- ❑ BS 8201:2011 states that "it is reasonable to recommend that the concrete be considered dry when the relative humidity falls to 75% or less" (when tested by use of a hygrometer). Where the dryness of concrete can not be guaranteed it is recommended that a vapour barrier is installed (minimum 1000 gauge).

## PARTITIONS

- ❑ Masonry internal non load bearing Partitions should be erected from the sub-floor and not on top of the floating floor.
- ❑ Lightweight timber or metal stud partitions with plasterboard linings may be constructed from the floating floor by forming a ladder frame structure directly beneath the sole plate using noggins of approx. 100mm supported on Cradles.



- ❑ The position of the partitions should be marked on the structural floor before commencing the floor installation to ensure satisfactory support is provided and that services are correctly positioned.

#### AREAS OF HEAVY LOADING

- ❑ In areas where heavy loadings are anticipated, such as kitchens and bathrooms the Support Batten centres should be reduced to 300mm. In cases of extraordinary loading, advice should be sought from the specifier or manufacturer. Storage heaters are considered to be an extraordinary loading and will require support direct from the sub-floor, independent of the flooring system. Isomass's Sales Department are available to provide advice where required.

#### ACCESS PANELS

- ❑ Isocheck cradle Flooring Systems are ideal for providing partial access to services. The Cradle Plate is designed to accept support Battens running in both directions where necessary to provide secure support for access panels. Access panels should be square edged and supported along all edges by Support Battens. The panels should be screwed to the battens without bridging the resilient layer.

#### INSTALLATION - CRADLES AND SUPPORT BATTENS

- ❑ Support Battens and Cradles must be laid in accordance with centre's specified.
- ❑ To ensure consistent levels throughout the building, commence in corridor areas proceeding to rooms. In each area work to a datum using isocheck packers and elevating blocks to overcome low areas or cambers. Ensure that each Cradle is sitting on a level, flat spot. Cradles should not rock or lie at an angle.
- ❑ Set out the Cradles and Support Battens around the perimeter of the room so that the Support Battens are approximately 50mm from perimeter walls. Then lay the remainder of Support Battens levelling with the self-locating packers as required.
- ❑ Where Support Battens meet, the Cradle should be positioned so that it equally supports both ends.
- ❑ When laying alternate rows of Support Battens, commence with a half-length so that the joints are staggered.

## INSTALLATION - SERVICES

- ❑ The standard 8mm Resilient Cradle Support will not allow for services to run underneath the Support Batten. In this instance cut the Support Battens and place approximately 25mm either side of the pipe. Fully support the Battens with additional Cradles. Additional noggins may also be required to properly support the deck.
- ❑ Do not notch Support Battens.
- ❑ If it is intended that services run under the Support Battens a deeper Resilient Cradle Support should be specified and adequate clearance provided beneath the Support Batten. In acoustic systems ensure that gaps where services come through the flooring are sealed to prevent airborne sound leakage.

## INSTALLATION - PACKING

- ❑ In order to achieve a level floor, place the correct combination of packers within the shoulders of the Cradle plate to a maximum of 5mm from the top. Gluing of packing is not normally necessary, as the packing pieces are self-locating.
- ❑ If packing exceeds 75% of the depth of the Cradle Plate shoulders then it is recommended that packing pieces be glued with PVA adhesive to the Cradle Plate, to each other and to the Supporting Batten.

## INSTALLATION - PERIMETERS

- ❑ Ensure that there is an expansion gap of at least 6mm between the edges of the flooring and at the perimeter walls. This gap must also be maintained at doorframes and filled with an angled Flanking Strip.

## INSTALLATION - THRESHOLDS

- ❑ A Support Batten on Cradles should be placed across the threshold for additional support. The chipboard should be configured so as to ensure no but joints are present.

## INSTALLATION - FLANKING STRIP

- ❑ Insert the 5mm thick 'L' shaped Acoustic Flanking Strip around the perimeter of the room in the 10mm gap between the flooring and the perimeter wall. When the skirting board is being fixed to the wall lightly trap the Flanking Strip between the bottom of the skirting and the flooring panel and neatly trim off the excess.
- ❑ It is essential to isolate the skirting from the floor surface to prevent impact sound flanking transmission.

**If in doubt on any area, please call Isomass prior to commencement of work.**

Every effort has been taken in the preparation of this sheet 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 isomass building products.



Units 10 & 11, Avenue Business Park, Off Brockley Road,  
Elsworth, Cambridgeshire CB23 4EY

Tel: 0845 838 33 99 • Fax: 0845 838 33 89 • Email: [info@isomass.co.uk](mailto:info@isomass.co.uk) • [www.isomass.co.uk](http://www.isomass.co.uk)