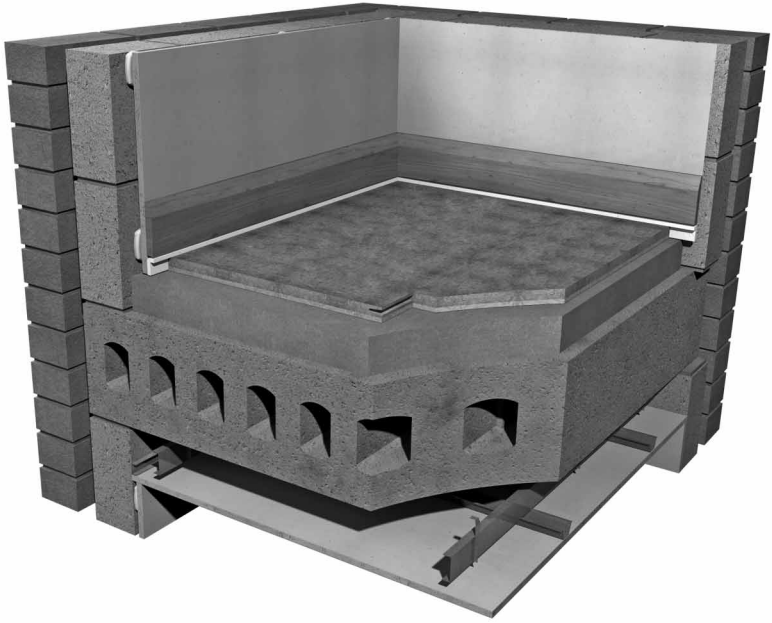
isocheck™
acoustic insulating products

Issue 3.3 • April 2024

One of the isomass systems range

27C, 23C, 18C & 14C Systems

Installation instructions



OVERLAY PLATFORM SYSTEM FOR CONCRETE FLOORS

- New build
- Refurbishments
- Conversions
- Robust detail compliant

E1 NEWBUILD · E1 CHANGE · DOMESTIC · Rd ROBUST

N · R · C

NHBC TESTED BY NHBC ACOUSTIC SERVICES

Institute of Acoustics Sound • Noise • Vibration 1974–2024 Sponsoring Organisation

MADE IN THE UK

QAS International ISO 9001:2015 REGISTERED COMPANY

Recyclable post-use

PRODUCT DATA

Overall size:	Isocheck 27C	2400 x 600 x 27mm
	Isocheck 23C	2400 x 600 x 23mm
	Isocheck 18C	2400 x 600 x 18mm
	Isocheck 14C	1200 x 600 x 14mm
Resilient layer:		5.5mm Isopoli cross linked foam
Weight:	Isocheck 27C	22.8kg per sheet
	Isocheck 23C	18.8kg per sheet
	Isocheck 18C	13.0kg per sheet
	Isocheck 14C	5.15kg per sheet

DESCRIPTION

- ❏ Isocheck 27C, 23C, 18C & 14C systems are designed to reduce airborne sound transmission and also reduce impact sound transmission through concrete floors.
- ❏ To be used over concrete floors for new build projects, refurbishments and conversions.

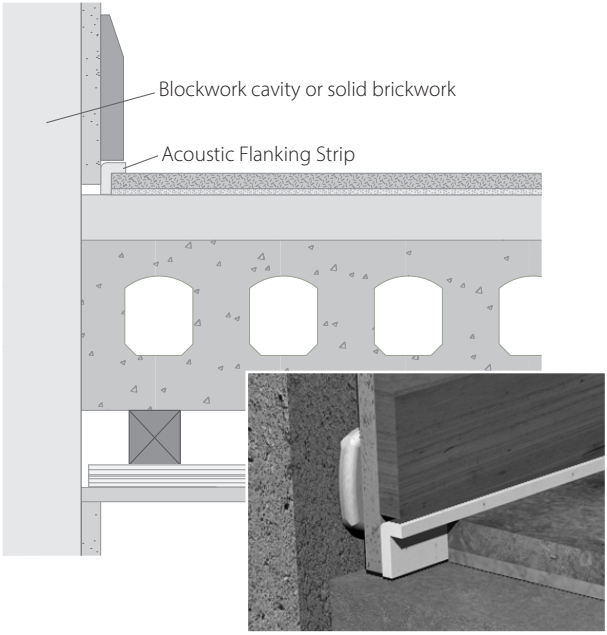
- Isocheck 27C, 23C, 18C or 14C.
- ≥300kg/m^2 hollow core concrete with 80kg/m^2 sand/ cement screed or 40mm screed.
- min. 75mm void formed by metal frame suspended ceiling system with ≥10kg/m^2 gypsum board ceiling
  or 50 x 75mm timber battens and ≥10kg/m^2 gypsum board ceiling supported on resilient bars @ 400mm centres, perpendicular to the battens min. 75mm below underside of sub-floor.

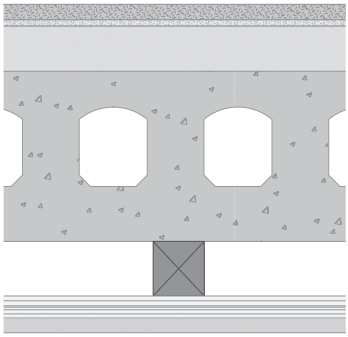
INSTALLATION - GENERAL

- ❏ Apply Isocheck Acoustic Angled Flanking Band on the edges of the Isocheck boards just before they are pushed against the perimeter walls to isolate the board from the wall.
- ❏ Board fitting should begin at the furthest point from the entrance and marked out so as not to finish with any panels less than 200mm wide.
- ❏ The decking must be laid in broken bond pattern, with all joints glued and staggered.
- ❏ No Mechanical fixings should be used.
- ❏ Isocheck adhesive is applied to both the top of the tongue and the bottom of the groove on each side of each joint.
- ❏ The boards are then pushed tightly together. Surplus adhesive should be wiped away from the surface with a damp cloth.

PREPARATION

- ❏ The presence of steel work, lift shafts and even ceiling penetrations can often impair acoustic performance. If any of these (or other issues not previously declared) are present on your site, please contact us for additional advice.
- ❏ Floor should be a level screed / concrete with a smooth surface, or an in-situ concrete base. The floors should be level, sufficiently dry and swept clean to allow the Isocheck 27C, 23C, 18C or 14C to be laid flat, without any irregularities of sufficient height to bridge the resilient layer.
- ❏ Installation of isocheck should **not** commence until roof, window glazing and wet trades are completed and the structure is watertight. Leave overnight for adhesive to cure before trafficking the newly installed system.





Flanking Strip turned back under skirting and trimmed flush with a sharp knife.

- ❏ Isocheck 27C, 23C, 18C & 14C must be kept in a dry storage area. Deliveries should be scheduled to coincide with availability of suitable dry storage areas.

INSTALLATION - DOORS, ARCHITRAVES & SKIRTINGS

- ❏ Door openings should have linings fitted prior to the installation of the acoustic floor. The Isocheck boards should be carefully detailed to ensure a good fit. Although not ideal architraves and stops can be fixed after floor installation, leaving a 2/3mm gap from the surface of the floor.
- ❏ To prevent flanking transmission all skirting must be isolated from the floor surface. Before incorporation, place isocheck Flanking Strip around the edge of the Isocheck 27C, 23C, 18C & 14C boards before pushing into position.

STUD PARTITIONING

- ❏ Stud partitioning should be built from the sub floor wherever possible. If it is your intention to build off the top of Isocheck 27C, 23C, 18C & 14C additional advice should be sought. It is good practice to isolate all partitions built from the sub-floor with Isocheck Flanking Strip as this will improve the performance of the walls as well as the floors.

FLANKING STRIPS

- ❏ Isocheck Flanking Strips provide isolation of the flooring system from all vertical structures and penetrations. The Flanking Strip is trapped to the wall and returned down over the Isocheck board as the perimeter boards are placed. The skirting board is then fixed to the wall securing the Flanking Strip between the skirting board and the Isocheck.
- ❏ After the skirting board is installed, simply trim the Flanking Strip flush with a sharp knife.

PROTECTION

- ❏ The finished Isocheck 27C, 23C, 18C & 14C system should be protected with an appropriate layer immediately after being in-stalled to prevent damage by any following tradesmen.

HANDLING

- ❏ Some Isocheck boards may be HEAVY. Please observe proper lifting methods and if transporting around site, by hand. Care should also be taken to protect hands from splinters during manual handling.

CUTTING

- ❏ The cutting of boards, either by hand or machine, will produce dust that may be an irritant if inhaled. USE dust masks when carrying out any cutting operations.

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

INSTALLATION - KITCHENS & BATHROOMS

- ❏ Appliances and sanitary ware, with rigid plumbing connections that penetrate the system, should be isolated from the floating floor by cutting a hole up to 10mm larger than the service diameter and filling the gap with an acoustic sealant. Ideally kitchen worktops should be isolated from the wall with Impacta pads and trimmed flush with surface before tiling commences.
- ❏ In a kitchen, we recommend the kitchen units are installed on the sub-floor on pads, so that the isocheck boards can terminate at the legs of the units. The plinth can then be installed to the kitchen unit legs, making a neat, flush finish.
- ❏ Lay the floor in areas where appliances will sit, allowing for adequate height below the work surfaces. If installing the units on the floating floor additional advice should be sought to reduce the potential for unwanted impact flanking noise.
- ❏ In a bathroom, we recommend the bath should be supported from the sub-floor on isolation pads, and the floating floor terminate at the legs of the bath as close as possible. The bath panel can then be installed making a neat, flush finish. Plywood the same height as the Isocheck should be laid under the bath, toilet and wash basin area and the joints filled with silicon or an alternative acoustic sealant where necessary.

INSTALLATION - CEILINGS

- ❏ Ceiling boards should be installed first, especially before any dry-lining of walls (such as dot & dab) to prevent potential flanking transmission. Ceilings should be boarded with a minimum mass of 10kg/m^2, preferably with a minimum void of 75mm and fixed to resilient bars or suspended from a metal frame system in accordance with manufacturers recommendations.

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.

isomass® building acoustics

Unit 14 Papworth Business Park, Stirling Way,
Papworth Everard, Cambridgeshire CB23 3GY

Tel: 0330 175 8228 • Email: info@isomass.co.uk • www.isomass.co.uk