Issue 2.12 July 2026

One of the isomass systems range

isocheck™ Impact Mat 100



RESILIENT IMPACT REDUCTION LAYER

- Refurbishments
- Conversions
- Listed buildings

Independently laboratory tested

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

MADE IN THE UK

QAS International ISO 9001:2015 REGISTERED COMPANY

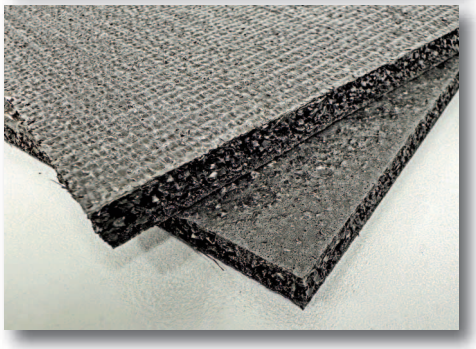
Taking the *mystery* out of Acoustics

DESCRIPTION

- Isocheck Impact Mat 100 is designed to reduce sound transmission through timber floors and staircases.
- Isocheck Impact Mat 100 is a 6.5mm thick layer of recycled rubber intended for excellent impact improvement and dynamic stiffness (structural memory). It is ideal for floor upgrades when looking to improve sound reduction on stairs and under engineered floors.
- When installed as part of a complete party floor construction the system enables a timber floor to meet the sound transmission standards of Approved Document E 2003 and amendments in 2004, 2010, 2013 & 2015.

APPLICATIONS

- To be used over floorboards for conversions, refurbishments or listed buildings requiring minimal structural change.



isocheck™ acoustic insulating products

isocheck™

impact noise reduction system

Product data

Overall size:	15sq.m roll
Resilient layer:	6.5mm Isolate R
Weight:	approx. 37.5kgs per roll (2.5kg/m²)
Tog rating:	1.1 tog

Acoustic Performance:

Isocheck Impact Mat 100 will achieve 31dB ΔLw in laboratory conditions and 19dB ΔLw with a timber laminate floor board on top.

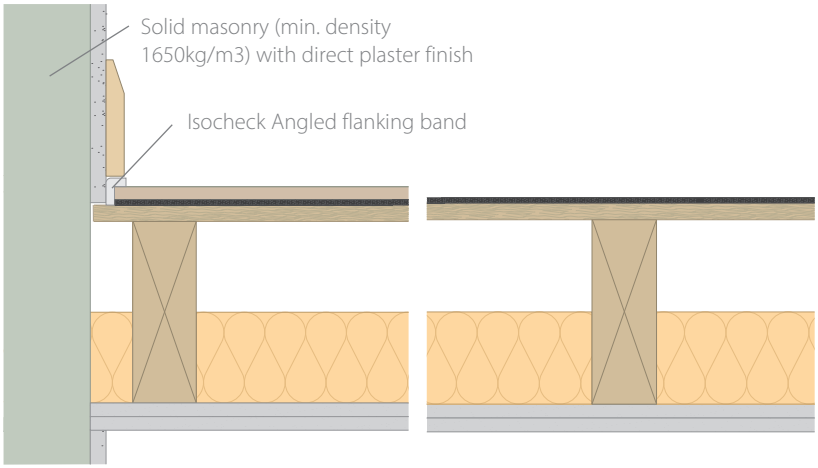
Compression - Test Performance to BS5808: 1991 / EN14499 : 2015

End of Use Classification	HC/U, Heavy Contract Use	
Work of compression Min 50 J/m²	86 J/m²	BS 4908 & BS 4052 & ISO 2094
Retention of work of compression (min. 40%)	91.5%	BS 4908 & BS 4052 & ISO 2094
Compression after Dynamic loading	2.1 mm	BS 4908 & BS 4052 & ISO 2094
Loss in thickness after Dynamic loading (Max 15%)	4.3%	BS 4052 & ISO 2094
Loss in thickness after static loading (max 15%)	8.7 %	ISO 3415/3416 & BS 4939
Breaking strength (length/width) min. 30N	744N/325N	EN ISO 13394 BS 2576
Extension under force (length/width) max. 15%@30N	2.1%/0.9%	ENISO 13394 BS 2576
Resistance to cracking (not greater than 50mm	Pass	EN 14499 & BS 5808

Thermal rating:

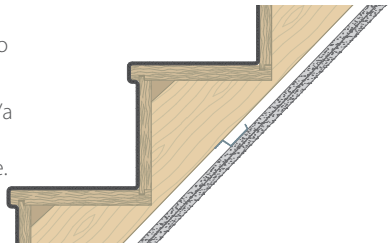
Isocheck Impact Mat 100 has the following rating:

U-Value: Approx. 0.91 Wm2K



- Isocheck Impact Mat 100 with or without timber laminate floor over.
- floorboards.
- 200mm x 70mm timber joists @ 450mm centres.
- 100mm 45Kg/m³ insulation between joists.
- lath and plaster ceiling or 25mm o/a double boarded ceiling (min. 20kg/m²) fixed to timber joists.
- Isocheck Angled Flanking Band reduces impact vibration leaking via structural walls and assists in reducing airborne sound paths.

- Isocheck Impact Mat 100 bonded to timber staircase.
- 20kg/m² double boarded 25mm o/a plasterboard on resilient bars @ 400mm centres laid across staircase.



SPECIFICATION

The acoustic floor shall be:

- Isocheck Impact Mat 100, supplied by Isomass Ltd. Unit 14 Papworth Business Park, Stirling Way, Papworth Everard, Cambridgeshire CB23 3GY and installed in accordance with manufacturer's instructions / recommendations.

INSTALLATION

- Lay Isocheck Impact Mat 100 over the entire level floor with all joints butted.
- Most t&g or interlocking laminate panel floor finishes can be laid directly onto Isocheck Impact Mat 100 although a 3mm layer of plywood over the Mat will improve stability. If in doubt please contact us with the floor specification.
- Finished timber floors should be isolated from the skirting using Isocheck Angled Flanking Band or Isolation Strip.
- Full installation instructions are available and must be used in conjunction when laying this floor system.

For advice on treatment of services and penetrations, consult our brochure or visit our website.

Please ask Isomass for guidance when considering the weight of any new blocks which will be incorporated in a wall directly surrounding a timber separating floor.

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 Ltd.

www.isomass.co.uk

isomass® building acoustics

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