

TECHNICAL DATA SHEET

MCW Impact Plus15/12

High-Performance Acoustic Overlay Mat



MCW Impact Plus is an acoustic overlay mat designed to improve both impact and airborne sound insulation through timber and concrete floors.

The product combines either one or two high-density, 3mm acoustic barrier layers with a resilient chip-foam core. This composite construction delivers excellent acoustic performance while keeping the overall floor build-up to a minimum.

Key Benefits

- Reduces both impact and airborne sound transmission
- Suitable for timber and concrete subfloors
- Easily cut, trimmed and shaped on site
- Suitable for refurbishment, conversion and new-build projects
- Approved Document E in England and Wales

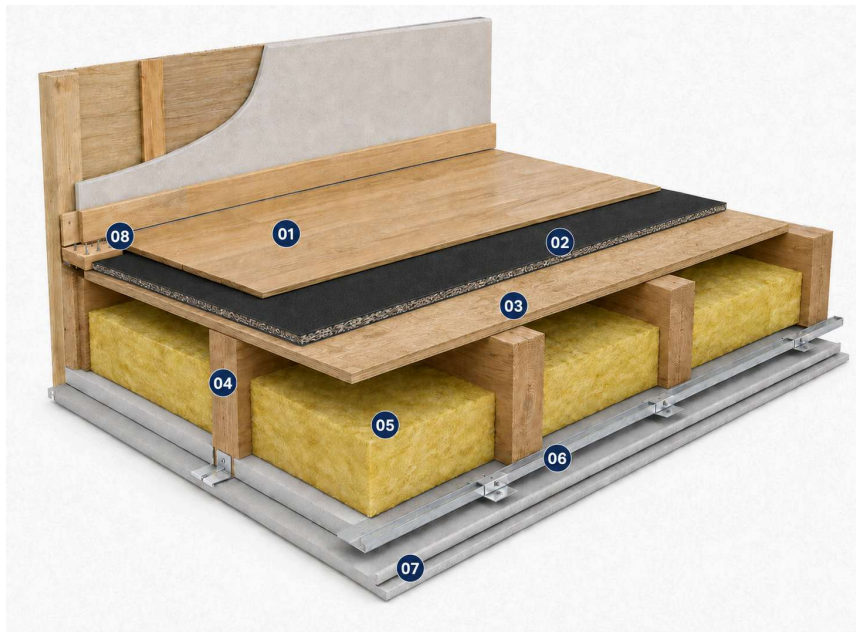
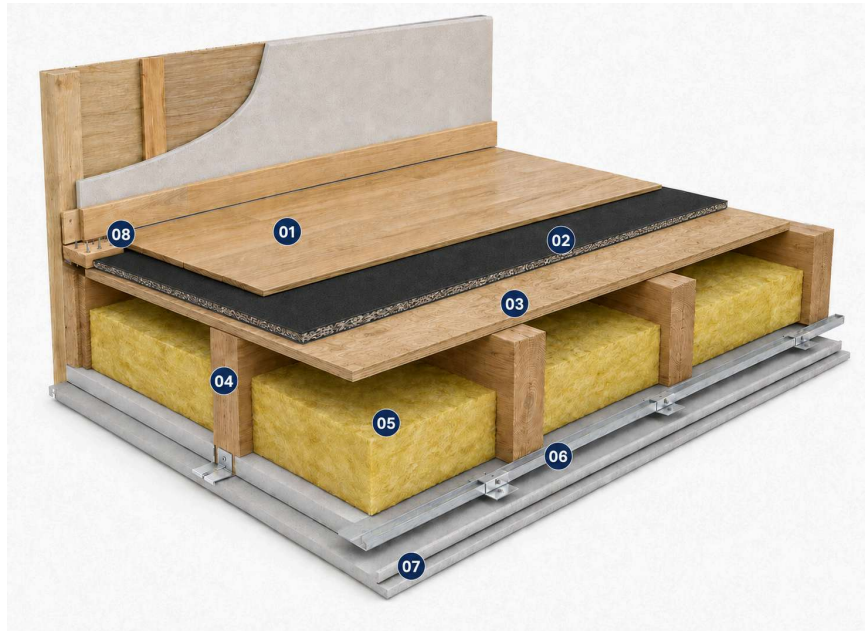
Technical details

Sheet Dimensions	1000mm x 1200mm
Sheet Thickness	12mm or 15mm
Sheet Weight	Approx 8kg (12mm) 11kg (15mm)
Construction 12mm	1 high density barrier layers with a resilient foam core
Construction 15mm	2 high density barrier layers with a resilient foam core

Impact Plus 15 Typical Flooring Build-up1

1. Floor finish
2. Impact Plus15
3. Structural timber subfloor
4. Timber joists
5. Acoustic mineral wool
6. Resilient bars
7. Two layers of acoustic plasterboard
8. *Carpet gripper support detail *if required

Acoustic Performance	
Ln,w	39dB
Rw + Ctr	51dB



Impact Plus 12 Typical Flooring Build-up1

1. Floor finish
2. Impact Plus12
3. Structural timber subfloor
4. Timber joists
5. Acoustic mineral wool
6. Resilient bars
7. Two layers of acoustic plasterboard
8. *Carpet gripper support detail *if required

Acoustic Performance	
Ln,w	38dB
Rw + Ctr	49dB

These results relate to the complete tested floor and ceiling construction and should not be interpreted as the performance of Impact Plus 15 in isolation. Actual site performance will depend on the existing structure, ceiling treatment, workmanship and flanking transmission.

INSTALLATION GUIDE

Storage and Handling

Store MCW Impact Plus indoors, in dry conditions and on a flat, level surface. Keep the sheets protected from moisture, excessive heat and damage before installation. Allow the product and associated floor finishes to acclimatise in accordance with the floor-finish manufacturer's recommendations.

Subfloor Preparation

The subfloor must be structurally sound, clean, dry, smooth and level. Remove dust, loose material, protruding fixings and other contaminants before installation.

Undulating timber floors may require an overlay of at least 6mm plywood to provide a smooth and adequately supported surface. Uneven concrete floors may require local repairs or a suitable levelling compound.

Any moisture-related requirements must be addressed before installation.

General Installation

1. Ensure the subfloor has been properly prepared.
2. Cut the Impact Plus using a sharp utility knife and straightedge.
3. Lay the sheets tightly together without gaps.
4. Stagger the joints between adjacent rows.
5. Do not overlap the sheets.
6. Avoid creating rigid connections through the acoustic layer.
7. Where loose-laid, secure the joints using a suitable black cloth jointing tape to prevent movement or curling.
8. Install the final floor finish in accordance with its manufacturer's instructions.

Carpet and Gripper Installation

MCW Impact Plus can act as an acoustic carpet underlay beneath most conventional broadloom carpets.

Install a suitable gripper support strip around the perimeter before laying the acoustic mat. Fix the carpet gripper through the support strip and into the subfloor using suitable fixings.

Leave approximately 5-8mm between the gripper and the wall or skirting to receive the carpet edge. Butt MCW Impacts Plus tightly against the gripper strip and tape the sheet joints.

Engineered Timber Flooring of 14mm or More

Interlocking or bonded T&G engineered timber flooring with a minimum thickness of 14mm may generally be floated directly over MCW Duo 15. The timber flooring joints must be offset from the MCW Impact Plus joints by at least 100mm.

Laminate and Engineered Timber Below 14mm

Thin laminate and engineered timber flooring may require additional support to prevent joint movement or damage.

Bond a minimum 5.5mm MDF or plywood overlay over MCW Impact Plus using a compatible adhesive. Stagger the overlay-board joints in relation to the acoustic mat joints and bond all T&G joints where applicable.

Bonded Carpet and Carpet Tiles

Bonded carpets and carpet tiles require a stable overlay to prevent the acoustic mat joints from showing through or causing creasing. Install a minimum 5.5mm MDF or plywood overlay, bonded using a compatible adhesive. Bond T&G joints where applicable before installing the floor covering.

Vinyl, Linoleum and Rubber Finishes

Bonded resilient finishes require a smooth, stable overlay to prevent movement or visible joint lines.

Install a minimum 5.5mm MDF or plywood overlay using a compatible adhesive. Additional sanding, filling or joint preparation may be required to provide a sufficiently smooth surface for the final finish.

Ceramic, Porcelain and Stone Tiles

Rigid tiled finishes require additional support to minimise movement and reduce the risk of cracked tiles or grout joints. Bond a minimum 15mm plywood overlay over MCW Impact Plus using a compatible adhesive. The complete construction must also meet the tile and adhesive manufacturers' requirements for rigidity and deflection.

Kitchens, Bathrooms and Sanitary Fittings

Kitchen units, baths and similar fixed items should be mechanically fixed directly to the structural subfloor. MCW Impact Plus should be neatly butted around the unit legs or supporting feet.

WC pans, basins and other pedestal-mounted items should be supported on plywood fixed directly to the subfloor. The plywood should:

- Match the thickness of MCW Impact Plus and any overlay board.
- Cover the complete footprint of the fitting.
- Be securely fixed to the structural subfloor.
- Butt MCW Impact Plus tightly against the plywood support to maintain a consistent finished floor level.

Important Installation Notes

- Always confirm compatibility with the final floor-finish manufacturer.
- Use only adhesives suitable for MCW Impact Plus, the overlay board and the selected floor finish.
- Do not bridge the acoustic layer with unnecessary mechanical fixings.
- Performance depends on the complete floor and ceiling construction, perimeter detailing and control of flanking sound.
- Where pre-completion testing is required, the complete specified system must be installed correctly.
- Seek project-specific technical advice where the existing floor construction or final finish differs from the arrangements described above.