Monarfloor
Acoustic Systems

Monarfloor® Acoustic Systems
Mini Product Guide

Proven Sound Reduction Solutions from **Monarfloor®**

Monarfloor® Acoustic Systems is well recognised as the market leader for high performance acoustic systems in the UK, offering a one-stop source of products, service and technical support.
Monarfloor®'s product range is one of the largest in the UK covering new-build, conversion and refurbishment applications whether the structure is timber frame, steel frame, concrete or masonary.

Monarfloor® Acoustic Systems for Distributors

Monarfloor® has become one of the world's leading acoustic brands, and as a result our products are always in demand. Architects, contractors and installers - across the building sector – increasingly specify Monarfloor Acoustic systems because they know our products deliver excellent, guaranteed performance.

To satisfy our customers, we rely on our distributors to make sure our products are available and, in return, we work hard to ensure distributors have access to the product range they need. We also provide sales and marketing support, product updates, application training, and the technical back up required to make sure the right product is specified, whatever the application.

Why should distributors choose Monarfloor® Acoustic Systems?

- Easy to access product information and advice.
- Sales and marketing support.
- Product and application training.
- Regular promotions and customer incentives.
- Latest product news.

Product Range

Our acoustic products range encompasses traditional Floating Floor Treatment systems (FFTs) (many of which were developed by us and are now universally accepted as the industry standard and have been proven in use over and over again) through to innovative second generation systems specially developed for use in new-build projects. That means you'll always be able to go straight to the solution you need without going elsewhere.

Traditional Floating Floor Treatments (FFTs)

All systems feature low resonance acoustic chip (LRAC) foams which are proven not to compress or deteriorate over the lifetime of a building. Options include timber floor overlays, timber floor direct-to-joist treatments, systems for timber or steel frame structures and for concrete sub-floors. We are also one of the few manufacturers who hold full BBA certification for our systems.

Proven high performance floating floor treatments (FFTs) and Second Generation acoustic systems for new build, conversion, refurbishment and specifically designed to:

- Support floor loadings defined in BS: 6399-1:1996.
- Have superior performance - The recycled Low Resonance Acoustic Chip (LRAC) foam used has excellent impact improvement characteristics and superior stability within a single layer.
- Be flame retardant - All LRAC foam used in Monarfloor® systems is flame retardant.
- Conform to Robust Details - Many of Monarfloor's solutions are accepted for use within Robust Standard Details, and some are unique propriatory systems.
- Be quality assured - Monarfloor® products meet all current standards.
- Second Generation range - Due to continued research & development Monarfloor® have a unique Second Generation range that pushes the boundaries of sound insulation. Our range significantly reduces the flanking transmission paths, allowing construction onto continual slabs providing significant cost savings and ease of installation.

Manufactured in the UK

- All of Monarfloor®'s products are wholly manufactured in the UK and within 50 miles of our Manchester HQ, and are the only maufacturer to be able to offer this.
- We pride in being able to offer sustainably sourced products with full chain of custody, using the highest quality raw materials.

Made in UK

Choosing the **Right System**

Floating floors, soft bonded and floating screeds

Use the tables below to identify the construction you have to insulate and the Monarfloor® solution, then turn to the page shown for full details.

New-Build	Deck 9	Tri-Batten	Acoustic Batten
Timber Frame		10	10
Masonry Facade	6		
Supported by a sub-floor (decking ply or equivalent). Height critical			
Supported by sub-floor (decking ply or equivalent). Not height critical		10	10
Concrete Planks, in-situ slab, slab + shutter	6		10
Steel Joists	6		10

Conversion	Deck 9	Deck 18	Acoustic Strip	Structure Deck
Timber + Masonry Facade				
Floor to remain, height critical	6	6		
Floor to remain, height **not** critical		7		
Floor to be removed			8	9
Concrete Planks, slab, slab + shutter, beam + block				

Acoustic Cradle	Impact 18	Tri-Board	Tranquilt	Tranquility
11				
		12		
		12		
11				
11	11		18	19
11				19

Tri-Batten	Acoustic Batten	Acoustic Cradle	Impact 18	Tri-Board	Tranqui-lity
				12	19
	10				
10					
	10	11	11		19

Choosing the **Right System**

Flanking Conditions

New-Build	Bridgestop	Bridgestop Membrane	Wall Cap RDA2
Traditional masonry	14	14	14
Thin joint masonry	14	14	14
Timber frame		14	
Concrete frame		14	
Steel frame		14	

Wall Cap 200	Wall Cap 400	Wall Cap 100 Timber	Wall Cap 250 Timber	Wall Cap Lama-therm	Isolation Strips
15	15			16	21
15	15			16	21
		16	16	16	21
					21
					21

Product **Range**

Monarfloor® Deck Overlay Systems

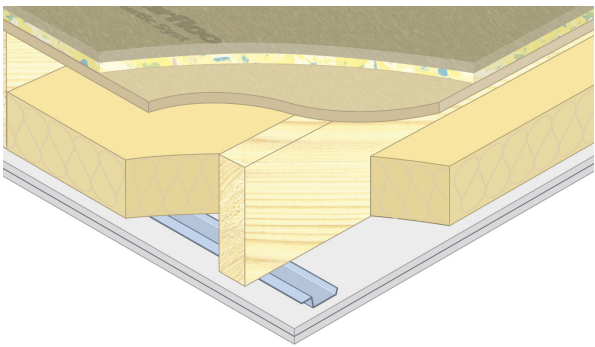
The simplest way of improving the impact sound performance of an existing floor is to overlay the floor with an isolating layer and a new wearing surface. Monarfloor® offers three deck overlay systems for such applications:

Monarfloor® Deck 9

RDL FFT5 - Resilient overlay shallow platform floor system

Overlay system for timber & concrete floors designed for projects where the increase in floor level has to be kept to a minimum. Deck 9 increases the floor level by only 17mm.

Product Data	
Board Size	1200mm x 600mm
Thickness	17mm
Board Weight	5.10kg (nominal)
Weight/m²	6.40kg (nominal)
DnT,w	57dB
DnT,w + Ctr	48dB
L'nT,w	48dB

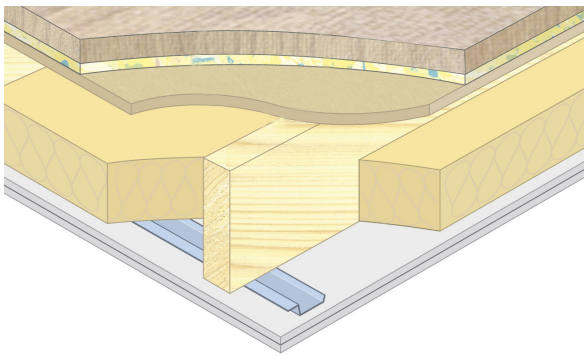


Monarfloor® Deck 18

Resilient overlay platform floor system

Overlay system for use with add in existing timber floors where the timber deck remains. Can also be used on steel frame floors over a sub-floor of chipboard and plasterboard.

Product Data	
Board Size	2400 x 600mm
Thickness	26mm
Board Weight	22.20kg (nominal)
Weight/m²	15.41kg (nominal)
DnT,w	58dB
DnT,w + Ctr	49dB
L'nT,w	49dB



Monarfloor® Deck 18 Decorative

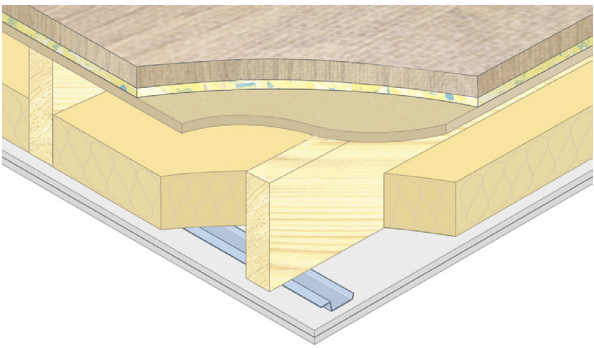
Resilient overlay platform floor system

Pre-finished deck overlay system for use with existing timber floors where the timber deck remains. Can be used on steel frame floors over a sub-floor of chipboard and plasterboard.

Product Data	
Board Size	2400 x 600mm
Thickness	26mm
Board Weight	22.20kg (nominal)
Weight/m²	15.41kg (nominal)
DnT,w	58dB
DnT,w + Ctr	49dB
L'nT,w	49dB

Installation

Monarfloor® Deck Overlay Systems may be used over 18mm chipboard, OSB board or a decking ply sub floor. They should be installed directly onto the sub-floor, in a broken bond pattern with all joints glued and perimeters flanked.



Monarfloor® Deck 22

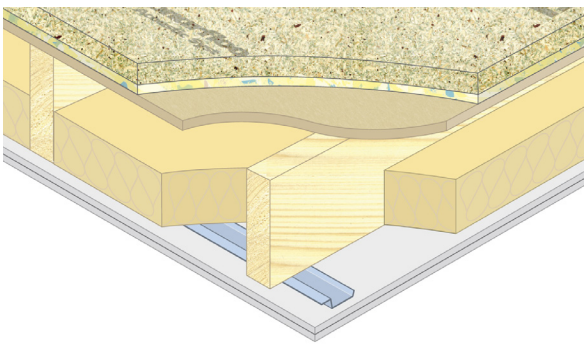
Resilient overlay platform floor system

Overlay system for existing timber floors designed for projects where a heavy application is anticipated.

Product Data	
Board Size	2400mm x 600mm
Thickness	30mm
Board Weight	29.90kg (nominal)
Weight/m²	20.76kg (nominal)
DnT,w	59dB
DnT,w + Ctr	49dB
L'nT,w	48dB

Installation

Monarfloor® Deck Overlay Systems may be used over 18mm chipboard, OSB board or a decking ply sub floor. They should be installed directly onto the sub-floor, in a broken bond pattern with all joints glued and perimeters flanked.



Monarfloor® Deck 22 Decorative

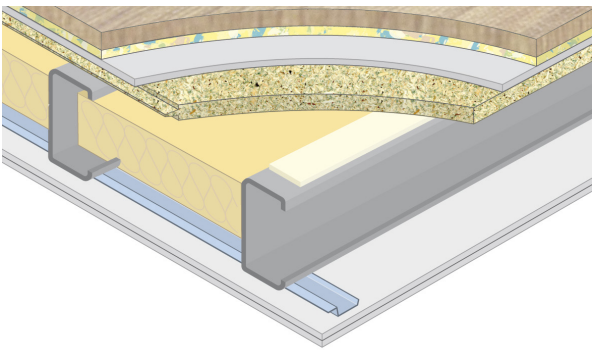
Resilient overlay platform floor system

Pre-finished deck overlay system for existing timber floors designed for projects where a heavy application is anticipated.

Product Data	
Board Size	2400mm x 600mm
Thickness	30mm
Board Weight	29.90kg (nominal)
Weight/m²	20.76kg (nominal)
DnT,w	59dB
DnT,w + Ctr	49dB
L'nT,w	48dB

Installation

Monarfloor® Deck Overlay Systems may be used over 18mm chipboard, OSB board or a decking ply sub floor. They should be installed directly onto the sub-floor, in a broken bond pattern with all joints glued and perimeters flanked.



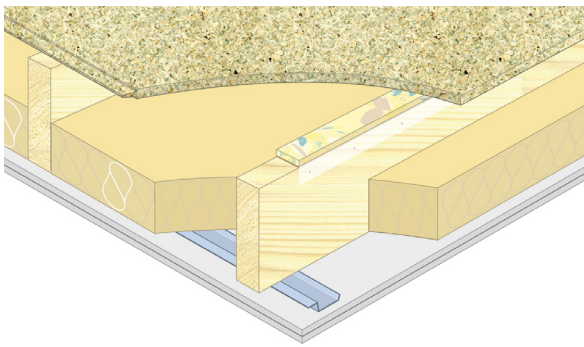
Monarfloor® Acoustic Strip

Reduces sound transmission through existing timber floors where the existing flooring will be removed.

Product Data	
Sizes	2400mm long x 45mm wide 2400mm long x 75mm wide
Thickness	21mm
DnT,w	57dB
DnT,w + Ctr	48dB
L'nT,w	51dB

Installation

Monarfloor® Acoustic Strip is fitted to the top of the exposed floor joists and fixed in place by nailing or stapling the securing membrane to the side of the joists. 22mm tongue and groove chipboard is then laid onto the Acoustic Strip in a broken bond pattern with all joints glued.



Monarfloor® Structure Deck

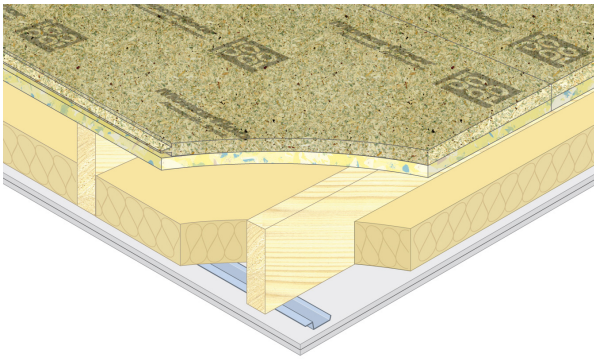
Resilient overlay platform direct to joist floor system

Reduces sound transmission through timber floors where the existing flooring will be removed.

Product Data	
Board Size	2400mm x 600mm
Thickness	37mm
Board Weight	27.10kg (nominal)
Weight/m²	18.81kg (nominal)
DnT,w	57dB
DnT,w + Ctr	48dB
L'nT,w	51dB

Installation

Monarfloor® Structure Deck should be laid directly onto the joists in a broken bond pattern with all joints glued and perimeters flanked.



Monarfloor® Tri-Deck

Resilient overlay platform direct to joist floor system

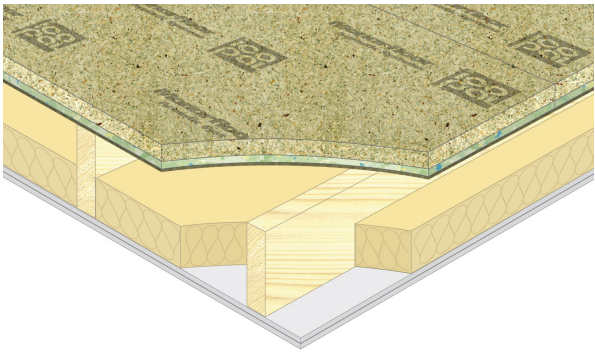
Reduces sound transmission through timber floors where the existing timber floor will be removed but access to work on the ceilings below is restricted.

Product Data	
Board Size	2400mm x 600mm
Thickness	35mm
Board Weight	30.50kg (nominal)
Weight/m²	21.18kg (nominal)
DnT,w	55dB
DnT,w + Ctr	46dB
L'nT,w	56dB

Installation

Monarfloor® Tri-Deck should be laid directly onto the joists in a broken bond pattern with all joints glued and perimeters flanked.

Note: Guidance should be sought if you are in any doubt as to the quality or density of the surrounding structural elements before proceeding.



Monarfloor® Acoustic Tri-Batten

RDL FFT1 Resilient composite deep batten system

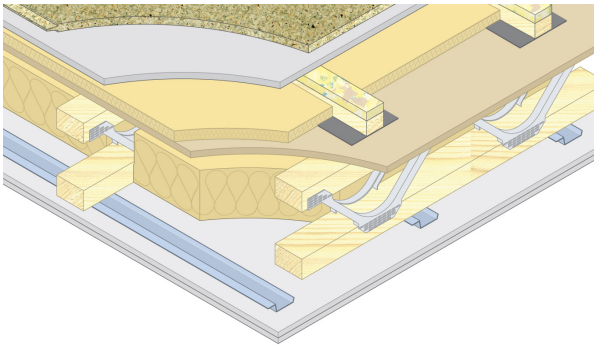
FFT3 Resilient composite standard batten system

Reduces sound transmission through timber floors within a timber-framed structure.

Product Data	
Size	1800mm long x 45mm wide
Thickness	53mm and 78mm available
DnT,w	57dB
DnT,w +	Ctr 48dB
L'nT,w	54Db

Installation

Monarfloor® Tri-Batten should be positioned on the existing subfloor and stapled in place through the geotextile mat. It should then be overlaid with plasterboard plank and chipboard flooring laid in a broken bond pattern.



Monarfloor® Acoustic Batten

RDL FFT1 Resilient composite deep batten system

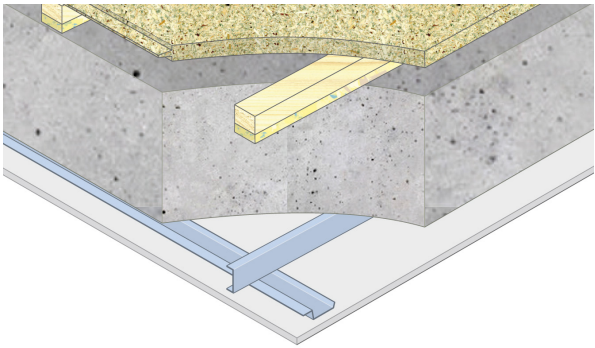
FFT3 Resilient composite standard batten system

For use on both timber frame and concrete floors and can be overlaid directly with an 18mm or 22mm chipboard deck.

Product Data	
Size	1800mm long x 45mm wide
Height	50, 80 or 75mm available (other sizes are available to special order)
DnT,w	60dB
DnT,w + Ctr	Complies with Robust Details Ref E-FC-1; E-FC-2; E-FS-1; E-FS-2; E-FT-1 and E-FT-2
L'nT,w	53dB

Installation

Monarfloor® Acoustic Batten is laid either foam side up or down at the appropriate centres with a continuous run of batten 50mm in from all perimeter walls. It should then be overlaid with 18mm or 22mm tongue and groove chipboard in a broken bond pattern with all joints glued.



Monarfloor® Acoustic Cradle

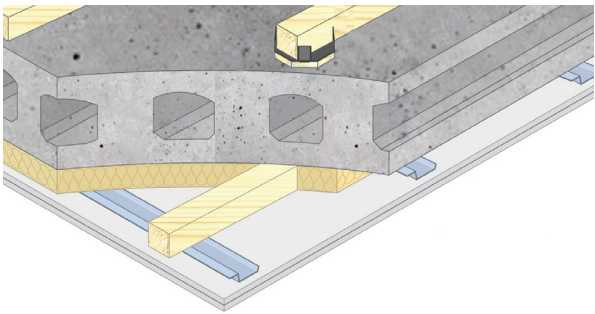
RDL FFT2 Resilient cradle and batten system

Reduces sound transmission through timber and concrete floors which are uneven or have a camber.

Product Data	
Size	105mm x 105mm
Height	60mm minimum (includes timber batten)
DnT,w + Ctr	Complies with Robust Details Ref E-FS-1, E-FC-1 and E-FC-2 performance
L'nT,w	50dB

Installation

Monarfloor® Acoustic Cradles are commonly set out at 450 to 600mm centres on the sub-floor. 45mm x 45mm softwood battens should then be fitted into each run of Acoustic Cradles. Monarfloor® Cradle Packers should be used to level the battens on each cradle. The battens should be overlaid with 18mm or 22mm chipboard laid in broken bond pattern with all joints supported and glued.



Monarfloor® Impact 18

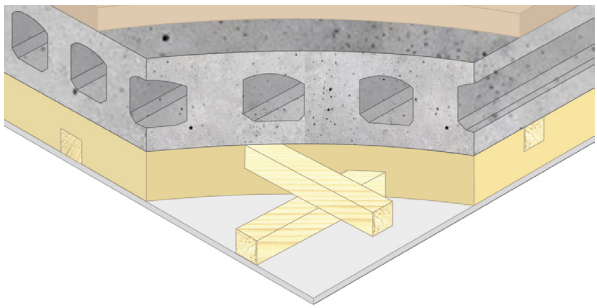
RDL FFT4 Resilient overlay platform floor system

Overlay system designed for use over a levelling screed. When installed as part of a complete sound reduction system it enables a concrete floor to meet the sound transmission regulations of Part E.

Product Data	
Board Size	2400mm x 600mm
Board Weight	22.20kg (nominal)
Weight/m²	15.42kg (nominal)
DnT,w	58dB
DnT,w + Ctr	Complies with Robust Details Ref E-FC-1, E-FC-2 and E-FS-1
L'nT,w	56dB

Installation

Monarfloor® Impact 18 should be installed in a broken bond pattern with adhesive applied to all tongue and groove joints, on a moisture control barrier with a min 80kg/m² sand/cement screed on a hollow core plank sub-floor.



Monarfloor® Tri-Board

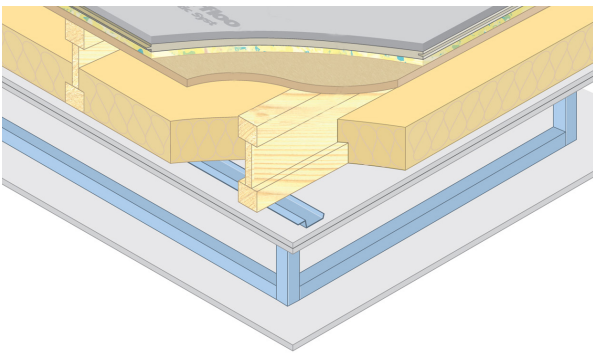
Resilient overlay shallow platform floor for new build timber frame dwellings

Overlay system designed to reduce sound transmission through timber floors in situations where the increase in floor height has to be kept to a minimum.

Product Data	
Board Size	1200mm x 600mm
Thickness	25mm
Board Weight	18kg (nominal)
Weight/m²	20.4kg
DnT,w	52db
DnT,w + Ctr	46db
L'nT,w	51db

Installation

Monarfloor® Tri-Board should be installed over a new sub-floor in a broken bond pattern with adhesive applied to all tongue and groove panel joints.



Innovative **Second Generation Systems**

Innovative and easy to install new-build solutions that, as well as helping you take the regulations in your stride, can give you a quick and easy route to cost-neutral Credits and also provide opportunities for further savings.

Second Generation Systems include:

- Monarfloor® Bridgestop® System - wall cavity isolation systems for use in party walls
- Monarfloor® Tranquilt - an innovative solution that greatly simplifies dealing with screeded floors.
- Monarfloor® Tranquility® - an easy to install lightweight self adhesive acoustic system that isolates wood and laminate floors from the sub floor preventing noise transmission
- Monarfloor® Wall Cap Systems – acoustic isolation systems for separating party cavity and flanking walls within multi-rise developments
- Monarfloor® Wall Cap Lamatherm Systems – reduces airborne sound transmission and convected heat loss at the party/ flanking wall vertical junction
- Monarfloor Wall Cap RDA2 - wall cavity isolation system for use in separating party cavity walls as specified within Robust Details Appendix A2

Innovative Second Generation Flanking Systems

Innovative, easy to install new-build and refurbishment solutions that, as well as helping you take the regulations in your stride, can give you a quick and easy route to cost-neutral Credits and also provide opportunities for further savings.to the page shown for full details.

New-Build
Flanking Solutions

Monarfloor® Bridgestop

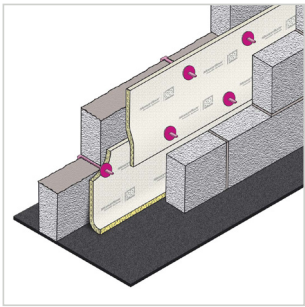
Acoustic isolation system for party walls on raft foundations or a continual slab

Monarfloor® Bridgestop isolates both masonry leafs from each other, preventing an acoustic bridge by the collection of mortar at the base of the cavity. Monarfloor® Bridgestop also isolates the party walls from the concrete sub-floor, reducing acoustic flanking and improving the damping.

Where used with a gas or radon barrier, Monarfloor® Bridgestop will ensure the integrity of the barrier from possible damage from mortar droppings.

Advantages

- Superior acoustic isolation performance.
- Can be used as an isolator for steel.
- Permits the use of a continual slab between dwellings.
- Specified within Robust Details E-WM-19 & A2.
- 4 Credits for the Code for Sustainable Homes.



Product Code	Description	Dimension	Weight (approx)	Unit of Sale
2003598	Monarfloor® Bridgestop Membrane	8 lin/m	15.2Kg	Per Roll
2003601	Monarfloor® Bridgestop System	8 lin/m	19.7Kg	Per Box

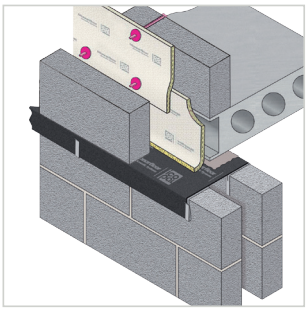
Monarfloor® Wall Cap RDA2

Acoustic isolation and energy insulating system for separating party cavity walls within multi rise new-build developments

Monarfloor® Wall Cap RDA2 isolates the party wall leaves from the separating floor, reducing the acoustic flanking sound transmission within the structure. Monarfloor® Wall Cap RDA2 ensures the integrity of acoustic treatments for party walls and floors, and can be used in both masonry and timber new-build developments.

Advantages

- Isolates the party floor from the party wall.
- Superior acoustic isolation.
- Easily installed within current standard wall constructions.
- Specified with Robust Details Appendix A2 as of November 2011.
- Effective edge sealing as defined in ADL1A (2010).



Product Code	Description	Dimension	Weight (approx)	Unit of Sale
2004126	Monarfloor® Wall Cap RDA2	8 lin/m	20Kg	Per Box

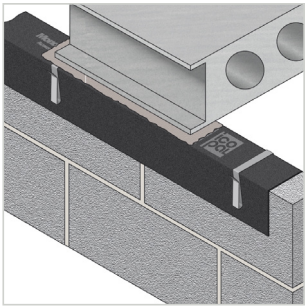
Monarfloor® Wall Cap 200

Acoustic isolation system for party walls on raft foundations or a continual slab

Monarfloor® Wall Cap 200 isolates the load-bearing leaves from the precast floor plank, reducing the acoustic flanking sound transmission within the structure. Monarfloor® Wall Cap 200 also ensures the integrity of acoustic treatments for party floors.

Advantages

- Isolates the precast floor plank from the flanking wall.
- Reduces the flanking sound transmission.
- Can be used as a flanking detail with any acoustic flooring.
- Easily installed within current standard wall constructions.
- Ensures the robustness of acoustic systems for party walls and party floors.
- 3-4 Code for Sustainable Homes Credits.



Product Code	Description	Dimension	Weight (approx)	Unit of Sale
2003747	Monarfloor® Wall Cap 200	3.8mm x 200mm x 8mm	8Kg	Per Box

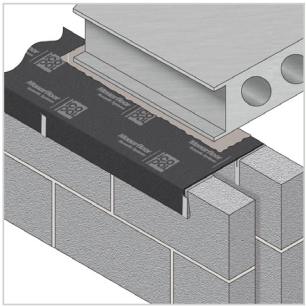
Monarfloor® Wall Cap 400

Acoustic isolation and energy insulating system for separating party cavity walls within multi-rise developments

Monarfloor® Wall Cap 400 isolates the load-bearing leaves from the precast floor plank, reducing the acoustic flanking sound transmission within the structure. Monarfloor® Wall Cap 400 also ensures the integrity of acoustic treatments for party walls and floors.

Advantages

- Isolates the floor from the party wall.
- Superior acoustic isolation.
- Easily installed within current standard wall constructions.
- 3-4 Code for Sustainable Homes Credits.
- Effective Edge Sealing as Defined in ADL1A (2010).



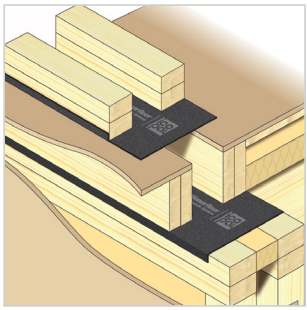
Product Code	Description	Dimension	Weight (approx)	Unit of Sale
2003748	Monarfloor® Wall Cap 400	3.8mm x 200mm x 8mm	16Kg	Per Box

Monarfloor® Wall Cap 100 Timber

Monarfloor Wall Cap 100 Timber isolates the timber stud from the separating floor joists, reducing the acoustic flanking sound transmission within the structure. Monarfloor Wall Cap 100 Timber also ensures the integrity of acoustic floating floor treatments for party floors.

Advantages

- Reduces the flanking sound energy.
- Easily on or off site installed within timber wall constructions.
- Ensures the robustness for party walls and floors.
- 3-4 Code for Sustainable Homes Credits.
- Unique product.
- Effective Edge Sealing as Defined in ADL1A (2010).



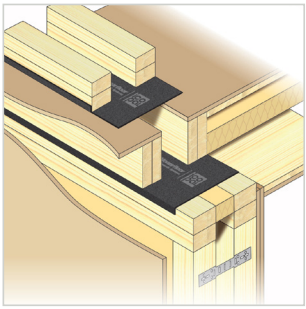
Product Code	Description	Dimension	Weight (approx)	Unit of Sale
3007363	Monarfloor® Wall Cap 100 Timber	3.8mm x 100mm x 8mm	3.8Kg	Per Box

Monarfloor® Wall Cap 250 Timber

Monarfloor Wall Cap 250 Timber isolates the timber twin stud from the separating floor joists, reducing the acoustic flanking sound transmission within the structure. Monarfloor Wall Cap 250 also ensures the integrity of acoustic floating floor treatments for party floors.

Advantages

- Reduces the flanking sound energy.
- Superior acoustic isolation.
- Ensures the robustness of other acoustic systems for party walls and party floors.
- 3-4 Code for Sustainable Homes Credits.
- Effective Edge Sealing as Defined in ADL1A (2010).



Product Code	Description	Dimension	Weight (approx)	Unit of Sale
3007364	Monarfloor Wall Cap 250 Timber	3.8mm x 250mm x 8mm	9.5Kg	Per Box

Monarfloor® Wall Cap - Lamatherm

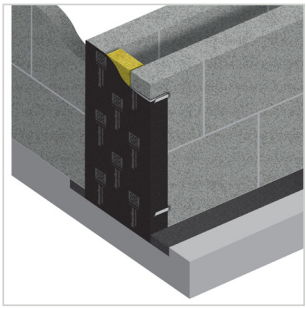
Acoustic isolation and energy insulating system for separating party cavity walls within multi rise attached developments

Monarfloor® Wall Cap - Lamatherm isolates both masonry leaves of the party wall from the flanking wall, reducing the acoustic flanking sound transmission within the structure.

Monarfloor® Wall Cap - Lamatherm also provides effective edge sealing at the party wall, and flanking wall junction, to reduce the thermal convection. The system also acts as the fire barrier for the party wall at this junction.

Advantages

- Easily installed within current standard wall constructions.
- Ensures the robustness of other acoustic systems for party walls.
- Effective Edge Sealing as Defined in ADL1A (2010) .
- Unique solution.



Product Code	Description	Dimension	Weight (approx)	Unit of Sale
2003860	Monarfloor® Wall Cap Lamatherm 85	85mm x 13.8m	22Kg	Per Box
2004109	Monarfloor® Wall Cap Lamatherm 90	90mm x 13.8m	23.5Kg	Per Box
2008361	Monarfloor® Wall Cap Lamatherm 110	110mm x 13.8m	26Kg	Per Box

New-Build
Floor Solutions

Monarfloor® Tranquilt

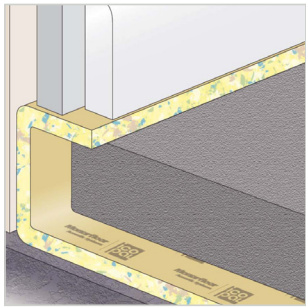
Lightweight acoustic isolation system for floating screeds

Monarfloor® Tranquilt reduces impact and flanking sound transmission within pre-cast and in-situ concrete separating party floors in new-build and refurbishment projects by forming an isolation layer between the sub-floor and the finished screed.

When installed as part of a complete sound reduction system it enables a concrete floor to surpass the performance requirments of Approved Document E of the Building Regulations, and provide high Credits towards EcoHomes & The Code for Sustainable Homes.

Advantages

- Superior dynamic stiffness and acoustic isolation.
- One part system.
- Lightweight and easy to handle and install.
- Specified within Robust Details E-FC-11.
- 4 Credits for the Code for Sustainable Homes.



Product Code	Description	Dimension	Weight (approx)	Unit of Sale
3006276	Monarfloor® Tranquilt	10mm x 1500mm x 20mm	17.5Kg	Per Roll

Product & Performance Data	
Composition	Composite system comprising a layer of LRAC foam sealed both sides with a polyethylene membrane
Material thickness	10mm
DnT,w + Ctr	50dB
LnT,w	≤50dB

Typical mean values based on 150mm precast planks.

Monarfloor® Tranquility

Acoustic bonded resilient system for party floors

Monarfloor® Tranquility reduces impact and flanking transmission through separating party floors by isolating wood and laminate floors from the concrete or timber sub floor.

Monarfloor® Tranquility is self adhesive and bonds direct to the sub-floor to reduce the impact noise whilst ensuring its robustness.

Monarfloor® Tranquility also improves the thermal comfort of the floor and can be laid in both new-build, conversion, and renovation projects.

Advantages

- One part self-adhesive system.
- Improves thermal comfort of the floor.
- Is suitable for hard or soft surface coverings.
- Complies with Robust Details E-FC-8.

Product Code	Description	Dimension	Weight (approx)	Unit of Sale
3005999	Monarfloor® Tranquility	8mm x 1500mm x 10mm	20Kg	Per Roll

Product & Performance Data	
Composition	Self adhesive composite system comprising a layer of LRAC foam sealed both sides with a polyethylene membrane
Material thickness	8mm
ΔLw (Part E):	37dB direct onto membrane 22dB with 6mm MDF overlay

Typical mean values based on 150mm precast planks.

Decorative Acoustic **Pannelling**

Monarfloor® Absorption Panels

Lightweight acoustic absorption panels designed to control reverberant noise in large volume spaces.

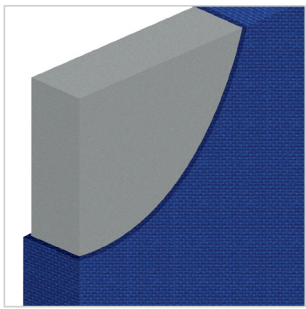
Monarfloor® Absorption Panels absorb high levels of sound energy within a room creating a softer, more comfortable acoustic environment.

Designed to control reverberant noise in schools and colleges (BB93), hospitals (HTM-08), multi-purpose halls and virtually any large volume spaces.

Monarfloor® Absorption Panels are specified to partially cover existing walls or ceilings and can be used to create new design features or enhance existing architectural features.

Advantages

- For use in most environments.
- High sound absorption capacity.
- Flame retardant.
- Large range of standard sizes.
- Easy to install.
- Lightweight.



Product Code	Description	Dimension	Weight (approx) Kg	Unit of Sale
3006261	Flat Absorption Panel	50 x 1250 x 2500mm	1.76	Per Panel
		50 x 1250 x 1250mm	0.88	Per Panel
		50 x 625 x 1250mm	0.44	Per Panel
		50 x 625 x 625mm	0.22	Per Panel
		40 x 1250 x 2500mm	1.43	Per Panel
		40 x 1250 x 1250mm	0.66	Per Panel
		40 x 625 x 1250mm	0.33	Per Panel
		40 x 625 x 625mm	0.22	Per Panel

Product Data	
Composition	Monarfloor® Absorption Panels are manufactured from sound absorbing melamine resin and thermoset plastic open-cell foam base board covered with a high quality acoustically transparent fabric Monarfloor® Absorption Panel Spacers are injection moulded plastic
Material thickness	Monarfloor® Absorption Panels - 40mm & 50mm

Monarfloor®
Accessories

Monarfloor® Flanking Band

An integral part to any acoustic floor, Monarfloor® Flanking Band can be used to isolate floating floor treatments, services or anything to be isolated from the structure.

Acoustic Flanking Band was designed to prevent the acoustic floating floor treatment making contact with the structure, reducing the flanking sound transmission. Supplied in standard & deep angled and flat versions to cover all applications, and floating floor installations. Special widths are available POA.

Advantages

- Seals between the structure and acoustic flooring system.
- Provides an expansion joint.
- Easily cut and formed to suit all applications.
- Can be bonded with Monarfloor® High Performance Acoustic Adhesive.
- Offers superior isolation performance.
- Various size options to suit all applications.

Product Code	Description	Dimension	Weight (approx)	Unit of Sale
3004547	Monarfloor® Angled Flanking Band	6mm x 30mm x 25mm x 10m	78g	Per Roll
3003345	Monarfloor® 75 Flat Flanking Band	6mm x 75mm x 10m	103g	Per Roll
3004524	Monarfloor® 150 Flat Flanking Band	6mm x 150mm x 10m	113g	Per Roll

Product Data	
Composition	Flexible 6mm foam band
Material thickness	6mm

Monarfloor® PVA and High Performance Acoustic Adhesives

Monarfloor® Adhesive is for use with Monarfloor® floating floor treatments and Second Generation systems, the adhesives have been designed not to have any reaction with Monarfloor® LRAC foam's.

Monarfloor® PVA Adhesive is a general purpose PVA adhesive for use with all Monarfloor® floating floor systems. Available in 1 litre and 5 litre containers, Monarfloor® PVA Adhesive has been tested to ensure it has no adverse effect with our LRAC foams.

Advantages

- Modified for use with Monarfloor® Acoustic Systems.
- Will not have any adverse effect when used with Monarfloor® LRAC Foams.
- Superior adhesion to most substrates.
- Non toxic and no specific COSHH issues.

Product Code	Description	Dimension	Weight (approx)	Unit of Sale
3003346	Monarfloor® Acoustic Adhesive	1 litre	-	Each
3003347	Monarfloor® Acoustic Adhesive	5 litre	-	Each

Monarfloor® High Performance Contact Adhesive

General purpose, high performance modified adhesive for use with Monarfloor® Second Generation Systems in all applications. Available in 500ml spray cans.

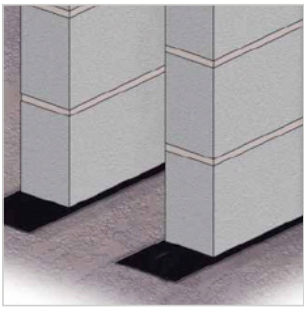
Monarfloor® Isolation Strip

A reinforced bitumen based product, designed for multi-purpose use to isolate studwork, masonry and steel reducing the flanking transmission within the structure. At only 3mm thick Monarfloor® Isolation Strip can easily be installed in any constructions and is more than capable of dealing with domestic loadings. Monarfloor® Isolation Strips can also be used as an acoustic DPC / DPM.

Monarfloor® Isolation Strip isolates walls / partitions & steel from the structure reducing the flanking sound transmission path within the building.

Advantages

- Superior acoustic isolation and damping.
- Isolator for timber, steel or masonry stud walls on timber or concrete sub-floors.
- Can be used as an isolator for steel.
- No adverse effect on the structural stability of the building.
- Various widths for all applications.
- Only 3mm.



Product Code	Description	Dimension	Weight (approx)	Unit of Sale
2003668	Monarfloor® Isolation Strip 150	3mm x 150mm x 8m	4.6Kg	Per Roll
2003670	Monarfloor® Isolation Strip 100	3mm x 100mm x 8m	3.1Kg	Per Roll

Part E **Compliance**

Acoustic performance of multi-storey and attached dwellings has never been higher on the agenda. With revisions to Part E for England & Wales, achieving compliance with the regulations is an even more complex challenge than before, particularly when dealing with low frequencies.

Performance Standards

Table 1a: Dwelling-houses and flats – performance standards for separating walls, separating floors, and stairs that have a separating function.

	Airborne sound insulation DnT.w+Ctr dB (mimimum values)	Impact sound insulation L1nT.w dB (mimimum values)
Purpose built rooms for residential purposes		
Walls	45	62
Floors and stairs	45	
Dwelling-houses and flats formed by material change of use		
Walls	45	62
Floors and stairs	45	

Table 1b: Rooms for residential purposes – performance standards for separating walls, separating floors, and stairs that have a separating function.

	Airborne sound insulation DnT.w+Ctr dB (mimimum values)	Impact sound insulation L1nT.w dB (mimimum values)
Rooms built for residential purposes		
Walls	43	62
Floors and stairs	45	
Rooms for residential purposes formed by material change of use		
Walls	43	64
Floors and stairs	43	

What is Part E?

The revisions to Part E of the Building Regulations 2003 address the noise levels suffered by occupants within multi-storey and attached dwellings, which result from inadequate sound insulation.

Why was Part E revised?

The problem of noise levels has increased in recent years through a combination of heightened expectations on the part of occupiers, more sound producing equipment and above all the poor success rate in achieving the sound insulation standards already in place.

What does Part E address?

Part E of the Building Regulations was revised to address those issues by:

- Extending the types of constructions covered by the regulations.
- Setting new acoustic performance levels for new-build and conversion / renovation projects.
- Dealing with reverberation in the common internal parts of buildings containing flats or rooms for residential purposes.
- Introducing pre-completion acoustic testing for separating walls and floors.
- Setting standards for acoustic conditions in schools (also see BB93).

All Monarfloor® products and systems surpass the performance requirements of Approved Document E of the Building Regulations.

Scottish **Standards**

Section 5.1 of the Scottish Building Standards states "Every building must be designed and constructed in such a way that each wall and floor separating one dwelling from another, or one dwelling from another part of the building, or one dwelling from a building other than a dwelling, will limit the transmission of noise to the dwelling to a level that will not threaten the health of the occupants or inconvenience them in the course of normal domestic activities."

Performance Standards

Recommended performance values for separating walls and separating floors are given below. Tests should be performed after construction, using the procedures given in annex 5.C. of the Scottish Standards.

	Individual Value
Airborne Sound Minimum values of weighted standardised level difference (DnT,w), as defined in BS EN ISO 717-1: 1997	
Walls	56dB
Floors	56dB
Impact Sound Maximum values of weighted standardised impact sound pressure level (L'nT,w) as defined in BS EN ISO 717-2: 1997	
Floors	56dB

Standard 5.1 does not apply to: fully detached houses or roofs or walkways with access solely for maintenance, or solely for the use of the residents of the dwelling below.

Acoustic Parameters

Performance values are given in terms of two acoustic parameters; one related to airborne sound, the other related to impact sound.

- Airborne Sound Insulation

  The airborne sound insulation characteristics of a wall or floor are identified by measuring the sound pressure level difference between the source room (the room with the noise source) and the receiving room (to which the noise is transmitted). The larger the difference, the higher the level of airborne sound insulation.

- Impact Sound Insulation

  Impact sound insulation is quantified by measuring the sound pressure level in the receiving room, rather than a difference in levels between rooms. Thus, a lower weighted sound pressure level represents a higher level of impact sound insulation.

Section 5 Robust Details

The use of Robust Details to demonstrate compliance with the relevant parts of Section 5 of the Building (Scotland) Regulations is enabled by approvals given under the Scottish Type Approval Scheme. The Scottish Association of Building Standards Managers (SABSM) Scottish Type Approval Scheme (STAS) provides a fast track route to approval through the regulatory procedures for standard buildings, modular buildings or building systems.

Most of Monarfloor®'s solutions will meet the requirements of Section 5 and can be found within Section 5 Example Constructions. For Section 5 Robust Details please see guidance within this document.

Robust **Details**

Robust Details Limited (RDL) provides a route to compliance for Part E of the Building Regulations (England and Wales). It may be used as an alternative to on-site pre-completion sound testing and is recognised in the Code for Sustainable Homes.

	Airborne sound insulation of separating walls and floors	Impact sound transmission of separating floors
Individual values must be	47dB DnT.W+CTR	60dB DnT.W+CTR
Mean values must be	50dB DnT.W+CTR	57dB DnT.W+CTR

Note: The mean value is calculated from the arithmetic mean of the 30 individual values, where the rounding is based on a single decimal place.

All Monarfloor® floating floor treatments (FFT's) comply with the performance criteria set out within Robust Details: Appendix A, C and D and can be used with all Robust Details floating floor solutions.

Monarfloor® Bridgestop is accepted for use within most Robust Detail Party Walls: Appendix A – August 2008 as an additional flanking detail where walls are to be built off a continual raft or slab.

A number of Monarfloor's 'Second Generation' products are accepted for use within Robust Details as propriatory flanking conditions CRD assessment for approval as Proprietary Robust Details.

Who are Robust Details?

Robust Details Ltd assess and approve new Part E Robust Details and provide a registration service that enables builders to use them in the construction of their new homes and avoid the delays and uncertainties of pre-completion sound testing.

Registering and building in accordance with Robust Details avoids the risk and uncertainty of remedial action being required on completed floor or wall constructions, with the potential delays in completing the property. Robust Details may only be used for new- build residential dwellings.

What is their role?

- Approve new Robust Details as a method of satisfying Building Regulations.
- Manage the use of Robust Details in the house-building industry by enabling builders or their representatives to use them in new, attached homes.
- Monitor the performance of Robust Details and withdraw any that consistently fail to meet the required standards.
- Promote the use of Robust Details and publish information to help the industry improve the sound insulation performance of separating walls and floors in new homes.
- RDL is the only authority able to undertake this role.

The Code for **Sustainable Homes**

The Code for Sustainable Homes has been introduced to drive a stepchange in sustainable home building practice. It is a standard for key elements of design and construction which affect the sustainability of a new home. It will become the single national standard for sustainable homes, used by home designers and builders as a guide to development and by home-buyers to assist in their choice of home.

The Sustainability Rating System

The Code uses a sustainability rating system, indicated by stars, to communicate the overall sustainability performance of a home. A home can achieve a sustainability rating from one to six stars depending on the extent to which it has achieved Code standards. One star is the entry level, above the level of the Building Regulations, and six stars is the highest level, reflecting exemplar development in sustainability terms. The sustainability rating which a home achieves represents its overall performance across the nine Code design categories.

Achieving a Sustainability Rating

Section 7 Health & Wellbeing 7.02: Sound

Between one and four stars are awarded for achieving higher standard of sound insulation than required by Part E of the Building Regulations and demonstrating it by either using postcompletion testing (PCT) or Robust Details (RD).

What will the Code provide?

It will form the basis for future developments of the Building Regulations in relation to carbon emissions from, and energy use in homes, therefore offering greater regulatory certainty to developers. If all the homes we need are built by 2050, as much as one-third of the total housing stock will have been built between now and then. Current house building plans therefore offer an important opportunity to build high standards of sustainability into the homes we will use in the future. The Code for Sustainable Homes will play a key role in enabling us to seize this opportunity, and to build a future housing stock which both meets our needs and protects the environment.

What are the benefits?

- For housing providers – improved comfort and satisfaction.

  Homes built to the Code will enhance the comfort and satisfaction of tenants. Costs may be saved in dealing with noise complaints.
- For consumers – improved well being.

  Homes built to Code standard will provide a more pleasant and healthy place to live, for example with more isolation of the passage of sound within the building from dwelling to dwelling.

Monarfloor® Acoustic Systems can give you a quick and easy route to either three or four Credits that are not only cost-neutral but also provide opportunities for further savings by, for example, allowing you to specify continuous raft foundation between dwellings.

Eco**homes**

Ecohomes aims to ensure that the performance standards for sound insulation in Approved Document E (2003 edition) are achieved through a commitment to pre-completion testing using, or checked by, test bodies with UKAS accreditation. It also aims to reward developments that make a commitment to achieve higher levels of sound insulation than the minimum performance standards in Approved Document E (2003 edition).

Performance Standards

Whilst the sound insulation components of the Building Regulations in Scotland and Northern Ireland differ from the English Part E (2003) Credits are not affected by those differences. The sound insulation levels set out in the English Regulations, Part E 2003, provide the highest standards throughout the UK and are therefore used as a basis for Ecohomes.

Credit Summary - Improvement on Part E Regulations (dB)

Credits	Airborne Sound DnT,w+Ctr	Impact Sound L'nT,w
1	0	0
2	0	0
3	+3	-3
4	+5	-5

The above table is a simplified form of the Credit requirements for reference only.

What Ecohomes Provides

Ecohomes is a version of BREEAM for homes. It provides an authoritative rating for converted or renovated homes, and covers houses, flats and apartments.

Ecohomes balances environmental performance with the need for a high quality of life and a safe and healthy internal environment. Many of the issues are optional, ensuring Ecohomes is flexible enough to be tailored to a particular development or market.

Ecohomes assessments can be carried out at both the design stage or post construction for major refurbishment and conversion projects.

In April 2007 the Code for Sustainable Homes replaced Ecohomes for the assessment of new housing in England. Ecohomes 2006 will continue to be used for refurbished housing in England, for all housing in Scotland and newly built housing not built by Registered Social Landlords in Wales.

Applicability

All dwellings, throughout the development, must meet the requirements of the relevant Ecohomes performance standards.

Irish
Regulations

Part E of the Second Schedule to the Irish Building Regulations 1997 requires that all dwellings be designed and constructed in such a way that the transmission of both airborne and impact sound noise between separating walls and floors be limited to a level that will not threaten the health of the occupants or inconvenience them in the course of normal domestic activities.

Performance Standards

Tests of performance values of individual and 4 and 8 pairs of rooms.

Irish Building Regulations Part E –
Sound Transmission Values (Mean)

	Individual Value	Mean Value (4 Pair rooms)	Mean Value (8 Pair rooms)
Airborne Sound			
Walls (min values)	49dB	53dB	52dB
Separating floors between rooms (max values)	49dB	53dB	51dB
Impact Sound			
Floors (max values)	65dB	61dB	62dB

Airborne sound –

weighted standardised level difference (DnT,w)

Impact sound –

weighted standardised sound pressure level (L'nT,w)

Acoustic Parameters

Performance values are given in terms of two acoustic parameters, one related to airborne sound, the other related to impact sound.

General Application

When determining how the guidance for resistance to transmission of sound applies to types of dwelling configurations, recognition should be given to the following:

Airborne Sound E1

- Walls – a wall which separates a dwelling from another dwelling or from another building, or separates a habitable room within a dwelling from another part of the same building which is not used exclusively with the dwelling, shall have reasonable resistance to airborne sound.
- Floors – a floor which separates a dwelling from another dwelling, or from another part of the same building which is not used exclusively with the dwelling, shall have reasonable resistance to airborne sound.

Impact Sound E1

- Floors – a floor above a dwelling which separates it from another dwelling or from another part of the same building which is not used exclusively with the dwelling, shall have reasonable resistance to impact sound.

Both the above do not apply to a wall or floor which separates a dwelling from another part of the same building if such part is used only occasionally for the inspection, maintenance or repair of the building, or of its services, fixed plant or machinery.

All Monarfloor® products and systems comply with Part E (Sound) of the Irish Building Regulations.

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