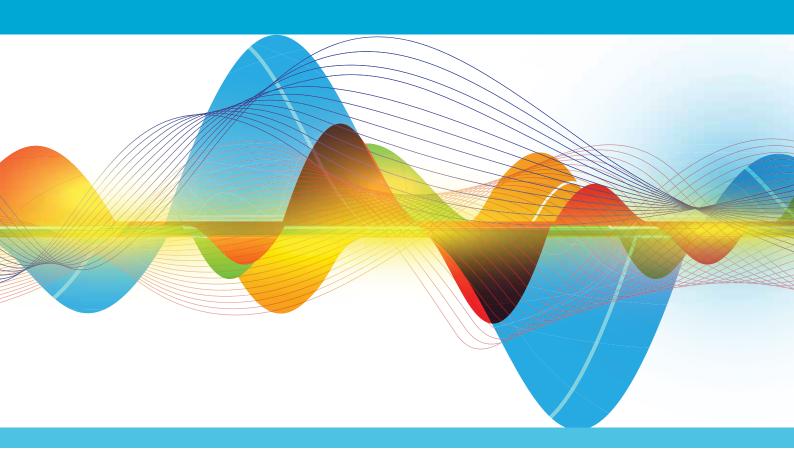
# Acoustic Floor Solutions

FOR REFURBISHMENT AND NEW BUILD







The A. Proctor Group Ltd, a family-owned company in its fourth generation, has been providing solutions and products to the construction industry for over 50 years. We provide a wide range of high quality, innovative solutions which are designed to meet the continuously evolving requirements of the construction industry.

We have been providing innovative solutions to acoustic flooring problems for over 20 years. Our unrivalled expertise has been gained via extensive research and development, both at our own acoustic laboratory and through the close links we have established with acoustic specialists at Napier, Sheffield Hallam and Heriot-Watt universities. The end result is that we are able to offer unique acoustic floating floor solutions which will provide answers for the majority of floor constructions.

Profloor Systems are designed to meet the requirements of the Building Regulations and Robust Details for impact and airborne sound. Solutions are available for timber and concrete floors on both new build and refurbishment projects.

## A. Proctor Group's Acoustic Credentials



APPROVED FOR ROBUST DETAILS



TECHNICAL SUPPORT LINE



ACOUSTIC LABORATORY



COMPETITIVELY PRICED



REFURBISHMENT AND NEW BUILDS



**CONCRETE & TIMBER FLOORING SOLUTIONS** 

#### Our environmental commitments

#### PEFC™ & FSC® CERTIFIED

PEFC & FSC certified stocks upon request, subject to availability. Look for FSC certified products.









# The Acoustic Problem Fundamentals of Sound Transmission

#### Impact Sound

In buildings, noise travels in two main ways. One is impact- or structure-borne sound. This is where mechanical or kinetic energy is being imparted directly to the structure as the result of steady vibrations or impacts. These are then transmitted to other rooms in the building, causing a partition, structure or surface to vibrate, thereby creating sound.

The main sources of structure-borne sound are people (footsteps, slamming doors etc), plant machinery, services and household appliances.

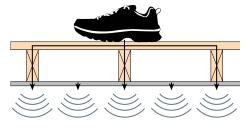
#### Airborne Sound

Airborne sound can be transferred from the source along a continuous path to a listener. Examples of how sound can be transmitted through the structure could be small holes or openings in the construction, ductwork or 'forced' transmission through partitions or floors.

Airborne sound is affected by:

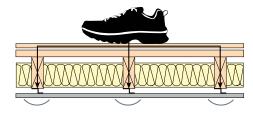
- Gaps in joints
- Cracks in masonry or plasterwork
- Insufficient sealant around pipes etc passing through the structure
- Mass of the construction
- Effectiveness of isolation and absorption layers

#### Without Isolation



Greater noise transfer

#### With Isolation



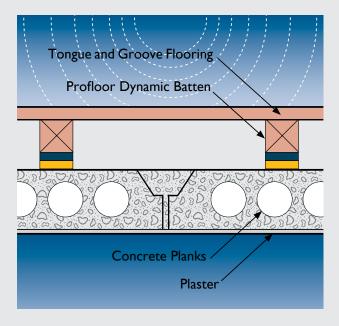
Reduced noise transfer

#### The Solution

Real-world experience and lab analysis has shown that highly resilient materials such as open-cell foam or vertical fibres, whether used in strip form or as a distributed layer, will provide excellent long-term isolation of impact sound and deliver optimum deflection and durability.

Some materials will initially provide adequate deflection, but over a period of time their effectiveness can often be severely impaired, owing to poor resilience or creep under continued dynamic loading (foot traffic). It is therefore essential that the resilient material provides both adequate deflection and long term durability.

The best materials available to date which are proven to provide these combined properties are open-cell polymer foam and vertical polyester fibres. The combination of these is the key to the success of the A. Proctor Group's range of Profloor products.



## Meeting performance requirements & Robust Details

Unwanted noise is a disturbing aspect of modern life, and is often a significant nuisance within buildings, with domestic dwellings particularly vulnerable to noise transmitted from attached properties.

The current edition of Approved Document E (England & Wales), as well as Section 5 (Scotland), Technical Booklet G (Northern Ireland) and Guidance Document E (Eire) set minimum requirements for resistance to the passage of sound. In some cases, the requirement is made to carry out pre-completion testing of sound and transmission within rooms for residential purposes, houses or flats formed by conversion of other buildings, and new-build houses or flats. The regulations also permit the use of Robust Details (the scheme operated by Robust Details Ltd.) in new houses and flats as an alternative to pre-completion testing.

Pre-completion testing is one of the biggest impacts in the Approved Document, as it is required to be carried out on 10% of dwelling types in each development in order to prove compliance.

Where pre-completion testing is required, separating walls and floors must not only have improved design detailing, but also be designed to include the sound transmission effects of all adjoining wall and floor elements. Additionally, because the standard of workmanship in the construction of a building is at least as important in reducing noise as the design itself, it is necessary for builders as well as designers to understand the principles of design which lead to good resistance of sound passage, as well as observing correct procedures during the construction process.

Where a Robust Detail will be used, it is important that the wall or floor is built in accordance with the step-by-step guidelines contained within the Robust Detail. The products used need to meet the criteria set out in the Robust Details Handbook. However there are a plethora of products available on the market today, and it can be difficult to distinguish certified products from those with unsubstantiated acoustic performance claims.

The A. Proctor Group was heavily involved in the Robust Detail process, representing Proprietary Acoustic Systems Manufacturers in the HBF Working Parties in addition to conducting benchmark testing to prove the performance of the Profloor range. As a result of this close involvement, the company is able to provide flexibility in design using any of the base constructions within Robust Details (see following pages).

#### England and Wales: Approved Document E

Element	Airborne Sound – Site Test DnT,w + Ctr	Impact Sound – Site Test L,nT,w
Separating floors & stairs in dwellings and rooms for residential purposes (new build)	Minimum 45dB	Maximum 62dB
Separating floors & stairs in dwellings and rooms for residential purposes (change of use)	Minimum 43dB	Maximum 64dB

#### Scotland: Section 5

Element	Airborne Sound – Site Test DnT,w + Ctr	Impact Sound – Site Test L,nT,w
Separating floors & stairs in dwellings and rooms for residential purposes (new build)	Minimum 56dB	Maximum 56dB
Separating floors & stairs in dwellings and rooms for residential purposes (conversions)	Minimum 53dB	Maximum 58dB

#### Northern Ireland: Technical Booklet G

Element	Airborne Sound – Site Test DnT,w + Ctr	Impact Sound – Site Test L,nT,w
Separating floors & stairs in dwellings and rooms for residential purposes (new build)	Minimum 45dB	Maximum 62dB
Separating floors & stairs in dwellings and rooms for residential purposes (change of use)	Minimum 43dB	Maximum 64dB

#### Eire: Guidance Document E

	Floors
Airborne sound (minimum values)*	53dB
Impact sound (maximum values)**	58dB

<sup>\*</sup> Airborne sound - Weighted Standardised Level Difference (DnT,w) \*\* Impact sound - Weighted Standardised Sound Pressure Level (L,nT,w)

## Robust Detail - Floor System Selection

# England, Wales & Northern Ireland

	E-FT-I Timber I-Joists	E-FT-2 Solid Timber Joists	E-FT-3 Posi-Joist/Presweb Metal Web Joists
BASE FLOOR DETAIL			
	15mm floor decking (min) 240mm (min) timber I-joists 100mm (min) quilit insulation (10-33kg/m²) between joists	11mm floor decking (min) 220mm (min) timber solid joists 100mm (min) quilt insulation (10-36kg/m³) between joists	18mm OSB floor decking (min) 253mm (min) posi-joist web metal web joists 100mm (min) quilt insulation (10-36kg/m³) between joists

FFT1 Resilient Composite Deep Batten			
Profloor Dynamic Batten Type 81, 91 Profloor Excel Batten Type 75, 85			
FFT2 Resilient Cradle & Batten System			
Profloor Levelling System	_	_	_
FFT3 Resilient Composite Standard Batten			
Profloor Dynamic Batten Type 55, 67 Profloor Excel Batten Type 61 Profloor Solo Batten Type 40, 52	_	_	_
FFT5 Resilient Overlay Shallow Platform Sys	tem		
Profloor Dynamic Deck 26	_	_	_
Profloor Micro Deck 17	_	_	_
Profloor Excel Deck 31	_	_	_
Profloor Solo Deck 23	_	_	_

In order for separating elements to avoid the requirement for pre-completion acoustic testing plots must be registered with Robust Details Ltd (RDL) and that construction must be strictly in accordance with the relevant requirements of the Robust Details Part E Handbook. Design and construction of separating floors in accordance with the Robust Details should not be attempted without access to the full, published details in order to ensure that all requirements, including that of flanking constructions, are met.

# Robust Detail - Floor System Selection

# England, Wales & Northern Ireland

E-FC-I Pre-Cast Concrete Plank	E-FC-2 In-Situ Concrete Slab	E-FS-I Steel/Concrete Composite	E-FC-7 Beam And Block*
0 0 00			
150mm (min) precast concrete floor plank – 300kg/m² (min) mass per unit area. 40mm (min) screed directly applied to plank – cement/sand or proprietary screed nominal 80kg/m² mass per unit area (see appendix A: Robust details handbook).	250mm (min) in-situ concrete slab, 2400kg/m³ (min) density without screed, or 200mm (min) in-situ concrete slab, 2400kg/m³ (min) density with screed. 40mm (min) screed directly applied to slab – cement/sand or proprietary screed nominal 80kg/m² mass per unit area (see appendix A: Robust details handbook).	In-situ concrete slab supported by 'Shallow' or 'Deep' profiled metal decking. Overall distance from top surface of concrete to underside of ceiling treatment 300mm (min). Concrete thickness – 80mm (min) at shallowest point, and – 130mm (min) at deepest point. Concrete density 2200kg/ m³ (min).	Beam and block floor with precast or in-situ edge beams. beam and block, min 100mm thick dense aggregate infill blocks, min 50mm concrete topping, min strength class C20, to floor blocks, min 300kg/m² combined mass per unit area.
FFT1 Resilient Composite Deep Ba	atten		

FFT1 Resilient Composite Deep Ba	atten					
Can be used, but FFT3 recommended	Can be used, but FFT3 recommended	Can be used, but FFT3 recommended	Can be used, but FFT3 recommended			
FFT2 Resilient Cradle & Batten Sys	tem					
FFT3 Resilient Composite Standard	Batten					
FFT5 Resilient Overlay Shallow Pla	FFT5 Resilient Overlay Shallow Platform System					
			_			
			_			
			_			
			_			

<sup>\*</sup> not Northern Ireland

# Robust Detail – Floor System Selection Scotland only

	V-FT-I Timber I-Joists	V-FT-2 Solid Timber Joists	V-FS-1 Steel/Concrete Composite
240mm (min) timber I-joists 240mm (min) timber 100mm (min) quilt insulation 100mm (min) quilt in		I Imm floor decking (min) 240mm (min) timber solid joists 100mm (min) quilt insulation (10-36kg/m²) between joists	In-situ concrete slab supported by 'Shallow' or 'Deep' profiled metal decking. Overall distance from top surface of concrete to underside of ceiling treatment 300mm (min). Concrete thickness – 80mm (min) at shallowest point, and – I 30mm (min) at deepest point. Concrete density 2200kg/ m³ (min).
FFT 80 Resilient Composite Deep Batten			
Profloor Dynamic Batten, Type 91			
FFT1 Resilient Composite Deep Batten – S	uitable On Concrete Base		
Profloor Dynamic Batten, Type 81, 91 Profloor Excel Batten, Type 75, 85	_	_	_
FFT2 Resilient Cradle & Batten System			
Profloor Levelling System	_	_	
FFT3 Resilient Composite Standard Batten			
Profloor Dynamic Batten, Type 55, 67 Profloor Excel Batten, Type 61 Profloor Solo Batten, Type 52	_	_	
FFT5 Resilient Overlay Shallow Platform Sy	stem		
Profloor Dynamic Deck 26	_	_	
Profloor Micro Deck 17	_	_	
Profloor Excel Deck 31	_	_	
Profloor Solo Deck 23	_	_	

In order for separating elements to avoid the requirement for pre-completion acoustic testing plots must be registered with Robust Details Ltd (RDL) and that construction must be strictly in accordance with the relevant requirements of the Robust Details Part E Handbook. Design and construction of separating floors in accordance with the Robust Details should not be attempted without access to the full, published details in order to ensure that all requirements, including that of flanking constructions, are met.



## Robust Details: Floating Floor Treatments

There are 5 Floating Floor Treatments (FFTs) that can be used depending on the base.

FFT 1: Resilient composite deep batten system APG Solution:

Profloor Dynamic Batten Type 81 & 91, Profloor Excel Batten Type 75 & 85

FFT 2: Resilient cradle and batten system

APG Solution:

**Profloor Levelling System** 

FFT 3: Resilient composite standard batten system APG Solution:

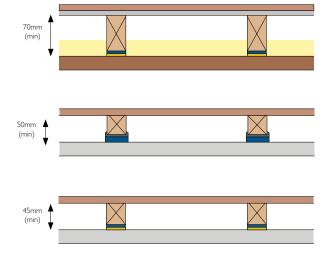
Profloor Dynamic Batten Type 55 & 67 Profloor Excel Batten Type 61 Profloor Solo Batten Type 52

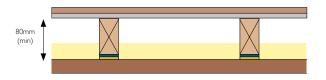
FFT 5: Resilient overlay shallow platform floor system APG Solution:

Profloor Dynamic Deck 26, Profloor Excel Deck 31, Profloor Micro Deck 17, Profloor Solo Deck 23

FFT80 (Scotland): Resilient composite deep batten system APG Solution:

Profloor Dynamic Batten Type 91 Profloor Excel Batten 85





# **Product Selector**

Battens			7		
Properties	Unit	Profloor Dynamic Batten	Profloor Excel Batten	Profloor Solo Batten	Profloor Levelling System
Resilient layer composition		Open & Closed Cell	VOF	Closed Cell	Closed Cell PE
Resilient layer nominal thickness	mm	22	13	7	10
Overall nominal thickness	mm	55 / 67 / 81 / 91	61 / 75 / 85	40 / 52	range 33 - 185
Batten length	m	2.4	2.4	2.4	2.4
FFT compliant	-	1,3 & 80*	I & 3	3 (utilising 52mm batten)	2 (on concrete floor)
Timber or Concrete Floor		Both	Both	Concrete	Both

<sup>\*</sup> Scotland only

Decks		3		,	The same of the sa
Properties	Unit	Profloor Dynamic Deck 26	Profloor Excel Deck 31	Profloor Micro Deck 17	Profloor SoloDeck 23
Resilient layer composition	-	Open & Closed Cell	VOF	Open & Closed Cell	Composite PU
Type and thickness of board	-	18mmT&G Chipboard	18mmT&G Chipboard	9mmT&G MDF	18mm T&G Chipboard
Resilient layer nominal thickness	mm	8	13	8	5
Overall nominal thickness	mm	26	31	17	23
Board size	m	0.6 × 2.4	0.6 × 2.4	0.6 × 1.2	0.6 × 2.4
FFT compliant**	-	5	5	5	5
Timber or Concrete Floor		Both	Both	Both	Both

<sup>\*\*</sup> Only FFT5 compliant on concrete floor. Can be used on timber, but wouldn't be RD compliant.



## Profloor Dynamic Batten

## Type 55 / 67 / 81 / 91

Profloor Dynamic Batten provides excellent levels of impact and airborne sound insulation. The unique dual foam not only provides high performance characteristics, but also enables minor irregularities in the surface of the sub-floor to be addressed.

- Robust Detail-compliant FFT1, FFT3 & FFT80 (Scotland)
- Designed to improve both airborne & impact sound performance
- Foam will not degrade through time unlike some fibrous materials
- Can be used on timber or concrete floors
- Moisture-resistant impregnated battens are available
- Non-load bearing partitions can be built off the finished floor
- FSC certified PEFC available on special request

- Foams are biologically stable
- Timber in battens is kiln dried to below 20% moisture content
- 2.4m length batten for quicker installation
- 45mm wide battens
- Suitable for new build & refurbishment
- 8 10mm compression under load

#### **Physical Properties**

Alternative batten sizes and lengths may be available on request.

Standard Sizes
55mm × 45mm × 2400mm 67mm × 45mm × 2400mm 81mm × 45mm × 2400mm 91mm × 45mm × 2400mm
Flanking Strip
100mm x 5mm (10m rolls) 125mm x 5mm (10m rolls) 150mm x 5mm (10m rolls)
Support Battens
43mm × 45mm × 2400mm 55mm × 45mm × 2400mm 70mm × 45mm × 2400mm 80mm × 45mm × 2400mm

#### Robust Details

FFT	RD Type
FFT I Resilient composite deep batten system Suitable for use on the RD floors shown in right hand column >	E-FT-1 (using 81mm batten) E-FT-2 (using 81mm batten) E-FT-3 (using 81mm batten) E-FS-2 (using 81mm batten)
FFT3 Resilient composite batten system Suitable for use on the RD floors shown in right hand column >	E-FC-I E-FC-2 E-FC-7 E-FS-I V-FS-I
FFT80 Resilient composite deep batten system Suitable for use on the RD floors shown in right hand column >	V-FT-1 (using 91mm batten) V-FT-2 (using 91mm batten) V-FS-1 (using 91mm batten)

#### Accessories

**Profloor Support Batten:** Incorporating 10mm foam. Supplied in 2.4m lengths.

Used around the perimeter and for areas where loads exceeding 1.5kN/m² and up to 4kN/m² in concrete floors.

**Profloor Flanking Strip:** Profloor Flanking Strip is used at all perimeters to isolate the flooring boards from the wall structure, and also the skirting boards from the flooring. It is available in 5mm thickness with various widths to suit Profloor System.

Profloor Adhesive Iltr: Profloor Adhesive is used to bond the flooring to the battens and also at the Tongue & Groove joints.



## **Profloor Excel Batten**

## Type 61 / 75 / 85

Profloor Excel Batten provides exceptional levels of impact and airborne sound insulation using a unique vertically oriented fibre as the resilient layer. The cavity created by the batten can be used to accommodate services.

- Robust Detail-compliant FFT1 & FFT3
- Designed to reduce both airborne and impact sound performance
- Single Batten for use in main floor area, perimeters, kitchens and bathrooms
- High performance resilient layer 16mm
- Unique vertical oriented fibres act like springs
- Limited long-term deflection or 'creep' ensures sustained performance
- 2.4m length batten for quicker installation
- Moisture resistant impregnated battens are available
- Suitable for new build and refurbishment
- Nominal 3mm compression under normal load
- FSC certified

#### **Physical Properties**

Alternative batten sizes may be available on request.

Standard Sizes	Flanking Strip
61mm × 45mm × 2400mm	100mm × 5mm (10m rolls)
75mm × 45mm × 2400mm	125mm × 5mm (10m rolls)
85mm × 45mm × 2400mm	150mm × 5mm (10m rolls)

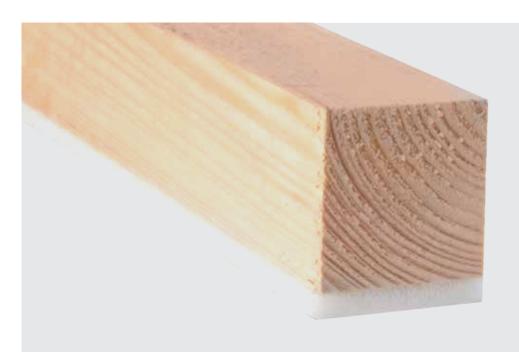
#### Robust Details

FFT	RD Type
FFT I Resilient composite deep batten system Suitable for use on the RD floors shown in right hand column >	E-FT-1 (using 75mm batten) E-FT-2 (using 75mm batten) E-FT-3 (using 75mm batten) E-FS-2 (using 75mm batten)
FFT3 Resilient composite batten system Suitable for use on the RD floors shown in right hand column >	E-FC-1 V-FS-1 E-FC-2 E-FC-7 E-FS-1

#### Accessories

**Profloor Flanking Strip:** Profloor Flanking Strip is used at all perimeters to isolate the flooring boards from the wall structure, and also the skirting boards from the flooring. Available in 5mm with various widths to suit Profloor Systems.

Profloor Adhesive Iltr: Profloor Adhesive is used to bond the flooring to the battens and also at the T & G joints.



## **Profloor Solo Batten**

## Type 40 / 52

Profloor Solo Batten comprises a dressed softwood timber batten, with an integral closed cell resilient layer.

- For use with concrete subfloors only, Robust Detail-compliant FFT3 (using 52mm batten)
- Economical product
- Ideal where a service run is required
- Suitable for new build and refurbishment
- 2.4m length batten for quicker installation
- FSC certified

#### **Physical Properties**

Alternative batten sizes and lengths may be available on request.

Standard Sizes	Flanking Strip
40mm × 45mm × 2400mm 52mm × 45mm × 2400mm	100mm × 5mm (10m rolls) 125mm × 5mm (10m rolls) 150mm × 5mm (10m rolls)

#### **Robust Details**

FFT	RD Type
FFT 3	E-FC-1 (using 52mm batten)
Resilient composite batten system	E-FC-2 (using 52mm batten)
Suitable for use on the RD floors shown in	E-FC-7 (using 52mm batten)
right hand column >	E-FS-1 (using 52mm batten)
	V-FS-1 (using 52mm batten)

#### **Accessories**

**Profloor Flanking Strip:** Profloor Flanking Strip is used at all perimeters to isolate the flooring boards from the wall structure, and also the skirting boards from the flooring. Available in 5mm with various widths to suit Profloor Systems.

Profloor Adhesive Iltr: Profloor Adhesive is used to bond the flooring to the battens and also at the T & G joints.



## **Profloor Levelling System**

The Profloor Levelling System allows a level finished floor to be installed on a cambered, stepped, or uneven sub-floor. Robust Detail constructions can be finished with a levelling system that provides the final level and takes out any irregularities, particularly in a mortar screed surface. Ideal for both new build and refurbishment.

- Robust Detail-compliant FFT2
- Can provide impact and airborne sound insulation on concrete floors with a mass greater than 300Kg/m²
- Provides a level finished floor on uneven sub-floor, eliminating costly remedial work
- Services can be placed in cavity created
- Quick to install
- FSC certified

- No need to glue packing pieces
- Total floor depth of system (including an 18mm board finish) can be as low as 51mm and as high as 203mm
- Allows for application of a variety of floor surfaces i.e. chipboard, plywood or hardwood
- Dry construction means no drying out delays
- Bespoke depths / applications on request

#### Accessories

Profloor Levelling Packers: Injection moulded packing pieces in 2mm, 3mm and 5mm suitable for use with the Profloor Levelling System.

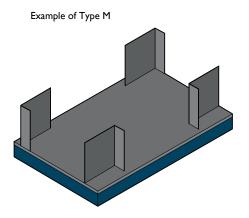
**Profloor Flanking Strip:** Profloor Flanking Strip is used at all perimeters to isolate the flooring boards from the wall structure, and also the skirting boards from the flooring. Available in 5mm, 7mm and 10mm thickness with various widths to suit Profloor Systems.

Profloor Adhesive Iltr: Profloor Adhesive is used to bond the flooring to the battens and also at the T & G joints.

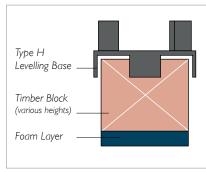
Timber Batten: Kiln dried plain softwood batten can be supplied with the Profloor Levelling System.

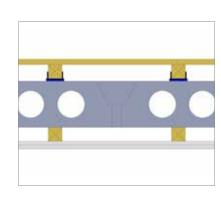
#### Types of base

Levelling bases are manufactured from injection-moulded high grade polymer,  $70 \text{mm} \times 100 \text{mm}$  in three types: Types L & M with 10 mm foam bonded to the base, and Type H for deeper floors, with the foam bonded to timber blocks, which are bonded to the base of the cradle. Profloor Packers in 2 mm, 3 mm and 5 mm thickness are inserted in the cradles to adjust the final level of the floor.



Example of Type H







## Profloor Dynamic Deck 26

Profloor Dynamic Deck 26 System provides a high degree of isolation resulting in significant improvements in impact sound insulation.

- Robust Detail-compliant FFT5
- Standard thickness 26mm
- Hi-Load Grade available
- Suitable for both timber and concrete floors
- Simple to install-no multi-layer build up
- Dynamic Deck utilises 18mm P5 T&G moisture-resistant chipboard
- Patented edge support strip prevents joint fracture
- Foams are biologically stable
- Suitable for new build and refurbishment
- FSC certified

#### **Physical Properties**

Standard Sizes	Flanking Strip
26mm × 600mm × 2400mm	150mm x 7mm (10m rolls) with or without double-sided tape

#### **Robust Details**

FFT	RD Type
FFT 5	E-FC-I
Resilient overlay shallow platform floor	E-FC-2
system. Suitable for use on the following RD	E-FS-I
floors shown in right hand column >	V-FS-I

#### **Accessories**

Profloor Dynamic Deck Hi-Load: Used for floors with higher loadings (up to 4.0kN/m²) i.e. kitchens & bathrooms

**Profloor Flanking Strip:** Profloor Flanking Strip is used at all perimeters to isolate the flooring boards from the wall structure, and also the skirting boards from the flooring. Available in 7mm with various widths to suit Profloor Systems.

**Profloor Adhesive 11tr:** Profloor Adhesive is used at the T & G joints between decks.



## Profloor Excel Deck 31

Profloor Excel Deck System 31 comprises a unique resilient layer bonded to flooring grade tongue and groove chipboard, providing enhanced acoustic performance.

- Robust Detail-compliant FFT5
- Exceptional airborne and impact sound insulation
- Can be used on timber or concrete floors
- Standard thickness 31mm
- Hi-load grade available
- FSC certified

#### **Physical Properties**

Standard Sizes	Flanking Strip
31mm × 600mm × 2400mm	125mm × 10mm (10m rolls) with or without double-sided tape

#### Robust Details

FFT	RD Type
FFT 5	E-FC-I
Resilient overlay shallow platform floor	E-FC-2
system. Suitable for use on the RD floors	E-FS-I
shown in right hand column >	V-FS-I

#### Accessories

Profloor Excel Deck Hi-load: Used for floors with higher loadings (up to 4.0kN/m²) i.e. kitchens & bathrooms.

**Profloor Flanking Strip:** Profloor Flanking Strip is used at all perimeters to isolate the flooring boards from the wall structure, and also the skirting boards from the flooring. Available in 10mm with various widths to suit Profloor Systems.

Profloor Adhesive 11tr: Profloor Adhesive is used at the T & G joints between decks.



## Profloor Micro Deck 17

Profloor Micro Deck 17 system utilises a 1200mm x 600mm moisture resistant MDF panel, making installation easier in confined spaces.

- Robust Detail-compliant FFT5
- Standard thickness 17mm
- Ideal for situations where floor-to-ceiling height is critical
- Hi-load grade available
- Improves impact sound
- Suitable for both timber and concrete floors
- Micro Deck utilises a 9mm moisture resistant MDF
- Patented edge support strip prevents joint fracture
- Foams are biologically stable
- Simple to install no multi-layer build up
- Suitable for refurbishment and new build
- FSC certified

#### **Physical Properties**

Standard Sizes	Flanking Strip
17mm × 600mm × 1200mm	125mm × 7mm (10m rolls) with or without double-sided tape

#### Robust Details

FFT	RD Type
FFT 5	E-FC-I
Resilient overlay shallow platform floor	E-FC-2
system. Suitable for use on the RD floors	E-FS-I
shown in right hand column >	V-FS-1

#### **Accessories**

Profloor Micro Deck Hi-load: Used for areas with higher loadings (up to 4.0kN/m²) i.e. kitchens & bathrooms.

**Profloor Flanking Strip:** Profloor Flanking Strip is used at all perimeters to isolate the flooring boards from the wall structure, and also the skirting boards from the flooring. Available in 7mm thickness with various widths to suit Profloor Systems.

Profloor Adhesive Iltr: Profloor Adhesive is used at the T & G joints between decks.



## Profloor Solo Deck 23

Profloor Solo Deck 23 System is an economical product designed to enable compliance with Building Regulation requirements.

- Robust Detail-compliant FFT5
- Intended for use with concrete subfloors
- Certified for use with relevant RD Floor constructions
- Recycled composite resilient layer
- One type satisfies requirements of both standard and hi-load areas (domestic applications)
- Suitable for new build and refurbishment
- FSC certified

#### **Physical Properties**

Standard Sizes	Flanking Strip
23mm × 600mm × 2400mm	125mm × 5mm (10m rolls) with or without double-sided tape

#### Robust Details

FFT	RD Type
FFT 5	E-FC-I
Resilient overlay shallow platform floor	E-FC-2
system. Suitable for use on the RD floors	E-FS-I
shown in right hand column >	V-FS-I

#### **Accessories**

**Profloor Flanking Strip:** Profloor Flanking Strip is used at all perimeters to isolate the flooring boards from the wall structure, and also the skirting boards from the flooring. Available in 5mm with various widths to suit Profloor Systems.

**Profloor Adhesive Iltr:** Profloor Adhesive is used at the T & G joints between decks.



## Ethafoam® 2222

ETHAFOAM 2222 is a closed-cell polyethylene foam material designed for use as a resilient acoustic insulation layer in concrete floor structures.

- $\bullet$  Superior impact sound insulation conforms to European Building Standards.
- Ethafoam 2222 has the Technical Approval: ITB AT-15-7860/2015
- Minimal moisture retention closed-cell structure allows use in humid environments.
- Lightweight easy to install.
- Low profile installation minimal increase in floor height.
- Ageing resistant formulated to withstand degradation caused by alkaline in concrete floors.
- Highly resilient withstands the rigours of an on-site environment.
- Versatile can be installed as single or multiple layers dependent on space and performance requirement.

#### **Physical Properties**

Properties	Test Method	Unit	Value
Roll size			1.5m × 75m
Thickness	EN 823	mm	5
Weight per roll			20.18 kg
Compressive Strength 25% Compression 50% Compression Short term compressibility	ISO 3386 EN 12431	kPa mm	>20 >70 <1
Density	ISO 845 / EN 1602	Kg/m³	33
Impact sound insulation	EN ISO 140-7 EN ISO 10140-3: 2010	L'nT,w (dB) $\Delta L_{w}$ (dB)	52 20
Airborne sound insulation	EN ISO 140-4	DnT,w + Ctr (dB)	48
Thermal Conductivity	ISO8301	W/mK	0.04
Dynamic Stiffness	EN29052-1 / ISO 9052-1	MN/m³	>50
Ageing resistance	SPO414 ISO1798	years	50
Water absorption (after 28 days)	EN 12087	volume %	<2



### Gloucester Docks, Gloucestershire

As part of the regeneration of the Gloucester Dock area, Crest Nicholson has created a stunning collection of one and two bedroom apartments overlooking the Barge Arm canal inlet.

Once again, to ensure that homeowners live in peace and quiet, Crest Nicholson has installed Profloor Micro Deck to the floors of this prestigious development. The A. Proctor Group Ltd is one of the leading manufacturers and suppliers of acoustic flooring systems. Its in-house acoustics laboratory develops acoustic products that conform to the increasingly exacting standards demanded by Building Regulations Document "E" and also the "Robust Detail".

## Lincoln Court, Watford

Profloor Levelling System from the A. Proctor Group has once again been specified to enable a level finished floor to be installed on uneven concrete floors. The Lincoln Court development at Haines Way consists of 22 new affordable homes available for rent from Watford Community Housing Trust.

Having successfully used Profloor Levelling System on a number of projects, Jarvis Contracting Ltd consulted with the manufacturers on the most suitable solution to accommodate the required floor build up.

Developed to allow a level finished floor to be installed on a cambered, stepped, or uneven sub-floor, Profloor Levelling System is typically used to take out the irregularities in mortar screeded floors. The floor is levelled by inserting packers in each levelling base to adjust the level of the timber battens, and create a level finished floor, with no need for wet trades in the process.

Profloor Levelling System is ideal for conversions and new build developments of properties and flats where impact and airborne sound reduction is mandatory. It is easy to install, and enables developers and contractors to fully meet the performance requirements of the current building regulations.







## Mitchams Park, Cambridge

An innovative new residential development on the site of the old former Cambridge City Football Club has achieved a high performance acoustic flooring solution using the Profloor Dynamic Deck System from The A. Proctor Group Ltd.

The Mitchams Park site consists of a series of contemporary I & 2 bedroom apartments, 2, 3, 4 & 5 bedroom family houses and townhouses for leading developer Crest Nicholson. Formation Architects were appointed by Crest Nicholson in conjunction with Camal Architects of Cambridge for the design. An exciting regeneration of the former Cambridge City Football Club grounds, the development pays homage to the beautiful game in some of the landscape features, such as the central, pitch-like green, and the planted 'players tunnel' linking two of the garden areas.

Achieving compliance with impact and airborne sound reduction as identified in key building regulations such as Approved Document E and Robust Details was central to the specification of Profloor Dynamic Deck, which is easy to install, and enables developers and contractors to meet the current legislative performance requirements.

The Profloor Dynamic Deck 26 system provides a high degree of isolation resulting in significant improvements in impact sound insulation and is suitable for both timber and concrete floors, and for new build or refurbishment projects.

Situated close to the heart of Cambridge, the Mitchams Park, development was shortlisted for the Housing Design Awards 2015.

## Lesbourne Road, Reigate

The A. Proctor Group Ltd, renowned for providing high quality, innovative solutions for the construction industry has supplied its Profloor Levelling System to contractors Andrew Towns Wadey Builders to help with the conversion of a Grade II listed building in Reigate to residential flats. The Linden Court development in Lesbourne Road designed by PRP Architects will provide 38 new homes.

The former office buildings required a floating floor acoustic treatment to the existing out of level floors, and Profloor Levelling System was selected as the ideal solution.

Developed to allow a level finished floor to be installed on a cambered, stepped, or uneven sub-floor, Profloor Levelling System is typically used on structural concrete floors where the differences in level are too great. The floor is levelled by inserting packers in each levelling base to adjust the level of the timber battens, and create a level finished floor, with no need for wet trades in the process.

Offering the perfect solution for conversions and new build developments of flats where impact and airborne sound reduction is mandatory, the Profloor Levelling System is easy to install, and enables developers and contractors to meet the performance requirements of the current building regulations.





Profloor Levelling System



### **Technical Services**

The technical back-up provided by the A. Proctor Group has always been an integral part of our offering to customers, with an outlook based on advanced technical solutions, rather than being commodity-driven. Our dedicated technical team is focused on providing high quality advice and support to our customers, from drawing board to site.

Our experienced in-house technical staff are fully trained on industry-standard software and procedures across our product ranges. This allows our customers to specify and install our products safe in the knowledge that we will assist fully throughout the process.

#### Laboratory Acoustic Testing

Our in-house acoustics laboratory provides facilities for the testing of airborne and impact sound transmission for our own product development and as a stand-alone facility for clients wishing to obtain acoustic data on their products.

#### **Batten Overlay Drawings**

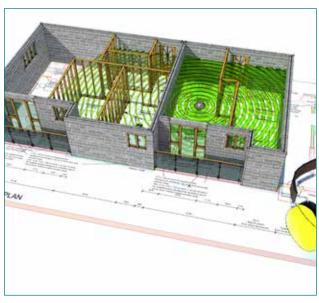
Layout drawings for batten systems showing positioning of battens and giving a total quantity can be provided in CAD as overlay.

#### **Acoustic Flooring Take-Offs**

Quantity take-offs for acoustics deck and batten systems from plan, including estimates for flanking strip, glues, mineral fibre quilts etc.



Laboratory Acoustic Testing



Batten Overlay Drawings

## Accessories

Accessory		Profloor Dynamic Batten	Profloor Excel Batten	Profloor Solo Batten	Profloor Dynamic Deck 26
Profloor Flanking Strip		<b>✓</b>	$\checkmark$	✓	✓
Profloor Support Batten	MAISIS	<b>√</b>			
Profloor Adhesive ILtr		<b>√</b>	<b>√</b>	✓	✓
Profloor Dynamic Deck Hi-Load					✓

Accessory		Profloor Excel Deck 31	Profloor Solo Deck 23	Profloor Micro Deck 17	Profloor Levelling System
Profloor Flanking Strip	-05	$\checkmark$	✓	✓	✓
Profloor Support Batten	MIISIS				
Profloor Adhesive ILtr	4	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
Profloor Dynamic Deck Hi-Load					
Profloor Excel Deck Hi-Load		✓			
Profloor Micro Deck Hi-Load				✓	
Profloor Levelling Packers					✓
Timber Batten					<b>✓</b>



"I believe the success of the A.Proctor Group is down to a solid foundation of innovation backed up by an excellent loyal and committed team, every one of them playing an important role in our continued success. Scotland provides us with a unique platform to launch our ideas, systems and products. I am fiercely proud of this heritage and our brand."

**Keira Proctor**Managing Director

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