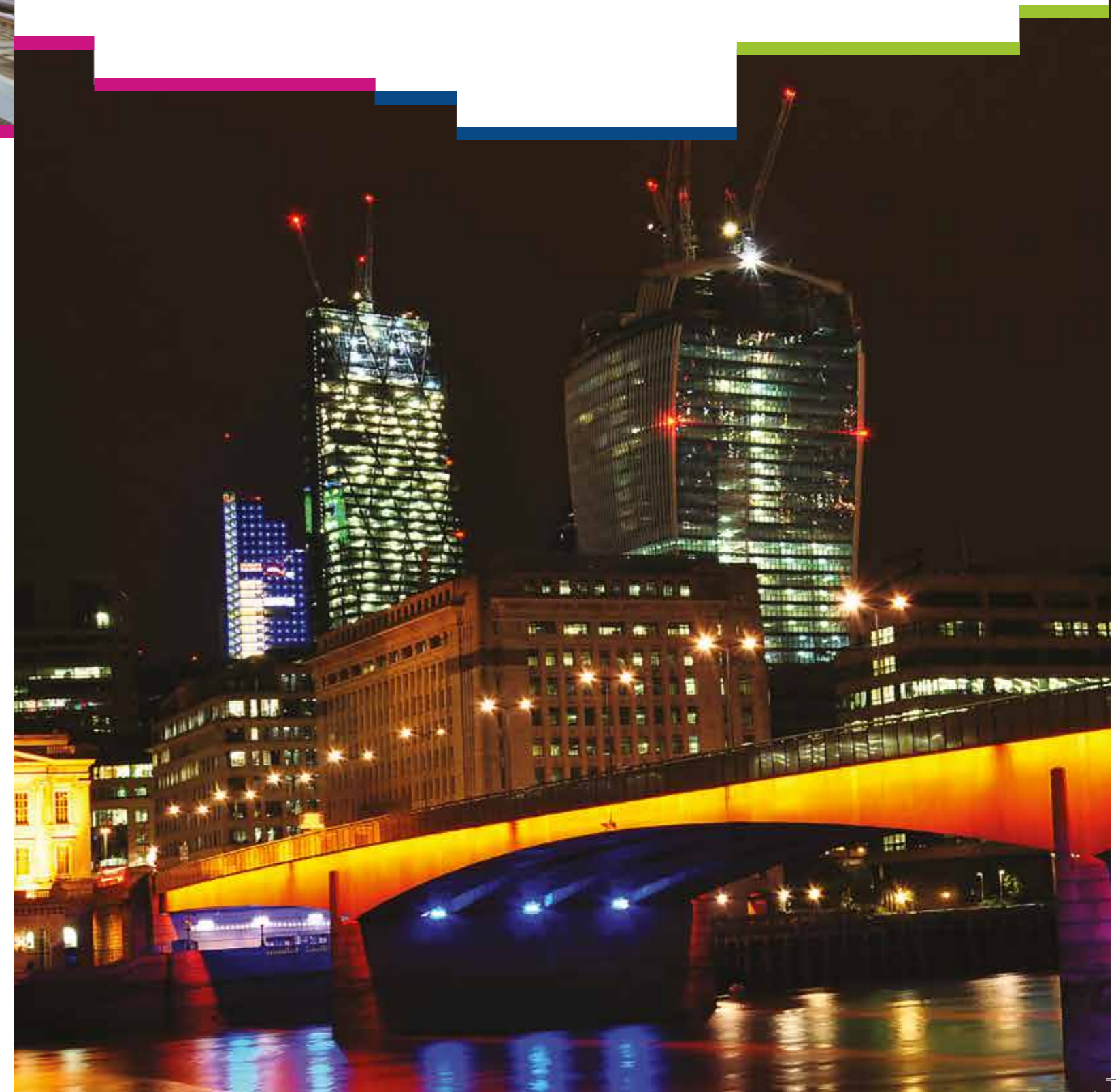




raise your expectations



raise your expectations





# Welcome to Kingspan Access Floors



the people who raise your expectations

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Kingspan Access Floors is the world's largest supplier of raised access flooring and the only access flooring company in the UK to offer an all-embracing 25 year Total System Warranty.

We have a proud tradition of helping to add the finishing touches to some of the most prestigious buildings in the UK and throughout the world.

## Kingspan Group

We are part of the €1.6 billion turnover Kingspan Group, which is the world's leading provider of high performance, sustainable building products and solutions for the international property and construction industry. The Kingspan Group is recognised throughout the construction industry for its commitment to innovation, design, quality and technical expertise.

The solution is...

# Kingspan Access Floors

Kingspan Access Floors are available from either Kingspan's in house contracting team or our established network of contracting partners.

## Our product ranges

Since we began manufacturing access flooring in the 1980s, we have supplied 60 million m<sup>2</sup> of floor panels to projects throughout the world.

We manufacture a wide range of steel encapsulated floor panels, high quality panels laminated with vinyl, HPL, wood, stone or granite and systems offering enhanced acoustic properties.



## Health & safety

Health & Safety is of paramount importance to Kingspan and our customers. We believe we have the best Health & Safety record in the access flooring industry, and we have invested substantially in ensuring that we maintain that record and build on our success.

Our Construction Health & Safety Manager ensures that our floor systems are installed safely by working closely with contractors to achieve the best Health & Safety results. For every project,

Kingspan prepares a Site Operations Plan that records our method statements, risk assessments and COSHH information.

Kingspan has come top in a number of Health & Safety KPI assessments operated by contractors and we have also won many Health & Safety awards. Our Directors and Senior Managers are all IOSH Directing Safety qualified and all contracts personnel are qualified to the highly recognised Site Manager Safety Training Scheme (SMSTS).

Floor voids are available with standard product from 20mm up to 2000mm and we can also design bespoke systems for any height and any loading requirement.

The Kingspan range is designed and manufactured to the global raised flooring specifications e.g. PSA PF2 PS; BS EN 12825.

See page 14 for our full range	<b>PSA Range</b>	p15
	<b>BSEN Range</b>	p18
	<b>Acoustideck</b>	p23

# Total System Warranty



Our unique Total System Warranty guarantees the performance of our encapsulated systems for an unprecedented 25 years. While some manufacturers guarantee their products for specific isolated areas of performance, few can offer assurance across the whole spectrum of testing standards.

The Total System Warranty covers all the key performance areas for our systems in a single comprehensive package. As part of this package, Kingspan offers technical support through design and construction. We also provide a site inspection service throughout the contract period as part of our after care service.

# Our manufacturing Facilities

'Our UK factory has the world's largest access flooring manufacturing capacity'

Kingspan is proud to be a British company whose UK factory has the world's largest access flooring manufacturing capacity – enabling us to produce up to 4.5 million sq m of access flooring a year. Our fully automated and flexible manufacturing facilities enable us to provide exceptional product quality and to respond swiftly to the most demanding of delivery requests.



# Technical Support



RIBA CPD ensures that you maintain the skills required to remain competent, protecting you and your practice. You can book online at

[kingspanaccessfloors.co.uk/book-a-cpd](http://kingspanaccessfloors.co.uk/book-a-cpd)

 TECHNICAL SUPPORT HELPLINE  
**01482 713 137**

Whether you are an architect, interior designer, contractor or distributor, our technical support team will quickly provide you with all the information you need.

## Quality control

Effective quality control is key to the success of our manufacturing operation. Our quality control team test samples of all raw materials delivered to Kingspan to ensure that it meets the designated structural performance, we also carry out detailed checks on our panels throughout the production process.



## Product testing

Our systems are put through a series of rigorous tests in our extensive in-house test facility – they can be subjected to extremes of temperature, lateral loads, rolling loads and if necessary, loadings beyond those required by the standard specifications.

Kingspan's in house test facility is more technically advanced than most external testing facilities. We have invested heavily during recent years to ensure that our customers are able to use our in house facility and witness testing for themselves.

Kingspan uses independent testing houses to confirm that our products meet the two main standards – Industry main standard PSA MOBPF2/5PU performance spec and BS EN 12825.

Due to our investment in computer controlled automated test rigs, we are the only raised flooring company in the UK equipped to carry out BS EN 12825 testing in house in accordance with the standard.

# Kingspan

## and the Environment



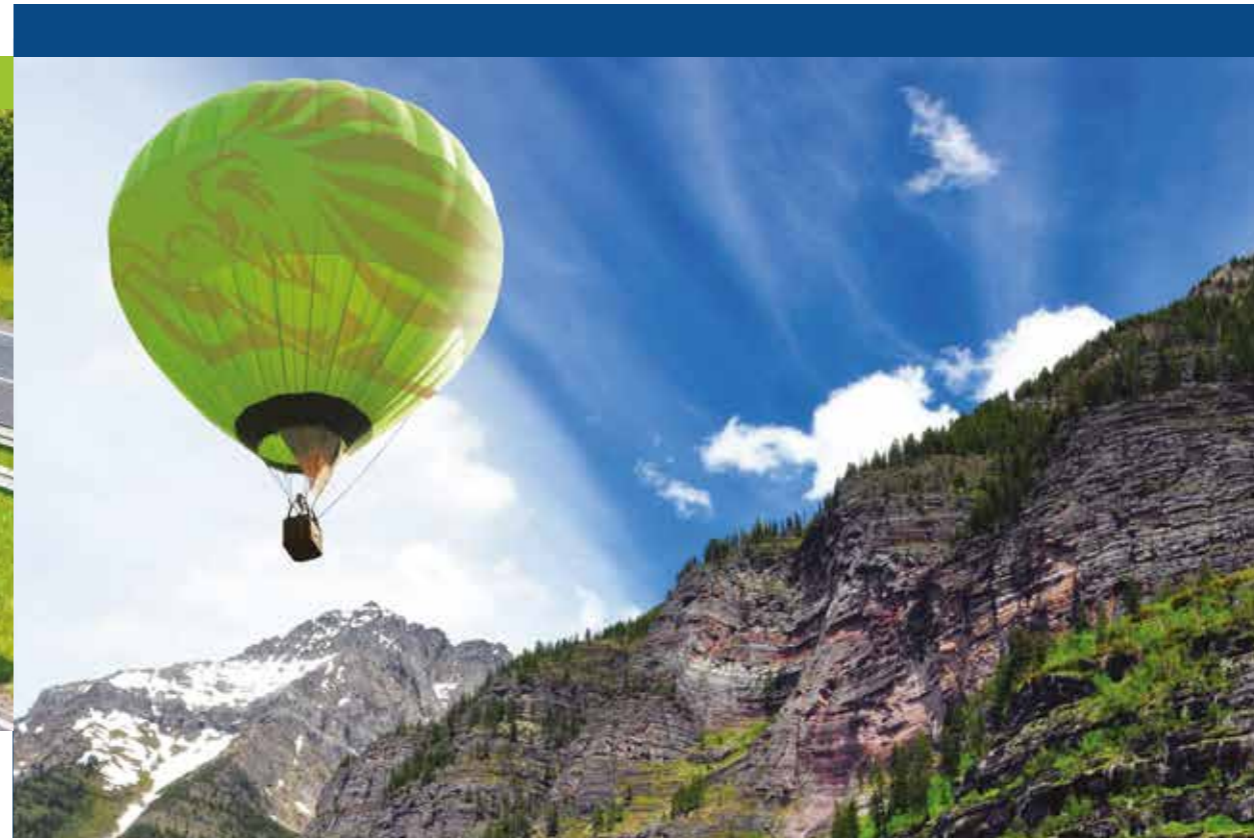
'Vehicles use Euro 5 diesel engines with reduced emissions & our motor car fleet is replaced on a regular basis'

We are committed to reducing the impact of our business, operations, products and services on the environment. Through the design and manufacture of our products we can also help our customers to achieve the same objectives – for example, our access flooring ranges can help organisations gain LEED, BREEAM and Ska environmental assessment standards.



### FSC Third Party chain of custody

Our ranges were the first in the world to have third party chain of custody certification in 2007 under the Forest Stewardship Council® (FSC®) scheme to promote responsible management of the world's forests.



### Recycling

Kingspan is the only access flooring manufacturer in the UK to operate a recycling scheme to reduce the amount of waste for landfill.

Less than 5% from our Hull manufacturing site now goes to landfill – general waste is compacted for recycling, production waste chipboard and sawdust, cardboard, metal and vinyl waste are collected for recycling and pallets are reworked or turned into biofuel.



As part of our recycling scheme, we can offer a service that receives site returns of off-cut Kingspan panels from our customers. The steel and chipboard in the off-cuts are then separated in a £250,000 shredder (pictured) at our Hull site and then recycled so they can be put back into the manufacturing process.

### Net Zero Energy

As a Kingspan Group company, we have set ourselves the challenge of achieving net zero energy at our manufacturing site by 2020. As part of this commitment we have invested in new, energy saving production equipment, have installed 1,000 photovoltaic solar panels and also entered into a green energy contract to purchase electricity from renewable sources.

For further information of the availability of this service please contact our Technical Helpline.



# Environmental Product Declaration



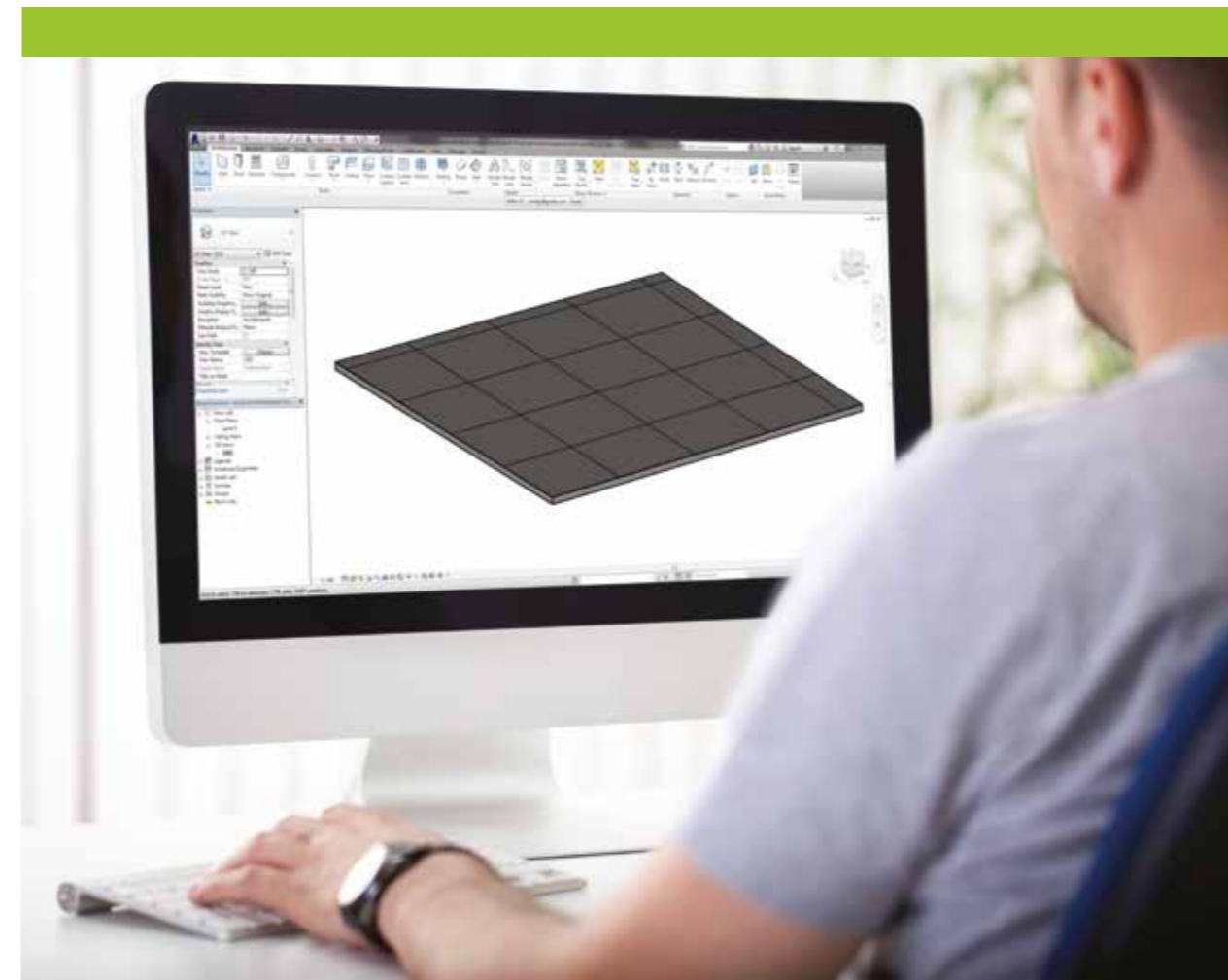
'Kingspan Access Floors is proud to announce we have become the first raised access flooring manufacturer in the world to issue an EPD'

An EPD is an internationally recognised disclosure of a product's environmental impact based on a life cycle assessment.

The goal of an EPD is transparency, knowing what's in the product you chose and its environmental impact.

The EPD was issued by Atkins Ltd on 23 September 2013 and was prepared in accordance with ISO 14025 EPD: BSEN 15804:2012

# Building Information Modelling



Kingspan Access Floors is now registered on the National BIM Library [www.nationalbimlibrary.com](http://www.nationalbimlibrary.com) – the construction industry's free to use resource of objects covering all major building fabric systems.

3D objects of selected Kingspan Access Floors products, are available for architects to download and incorporate into their designs.

Our downloadable 3D product range images also incorporates information such as dimensions and clearances to show how they fit into an overall design.

Visit [kingspanaccessfloors.co.uk/bim](http://kingspanaccessfloors.co.uk/bim) for more information.

# Product Range

## Technical Information

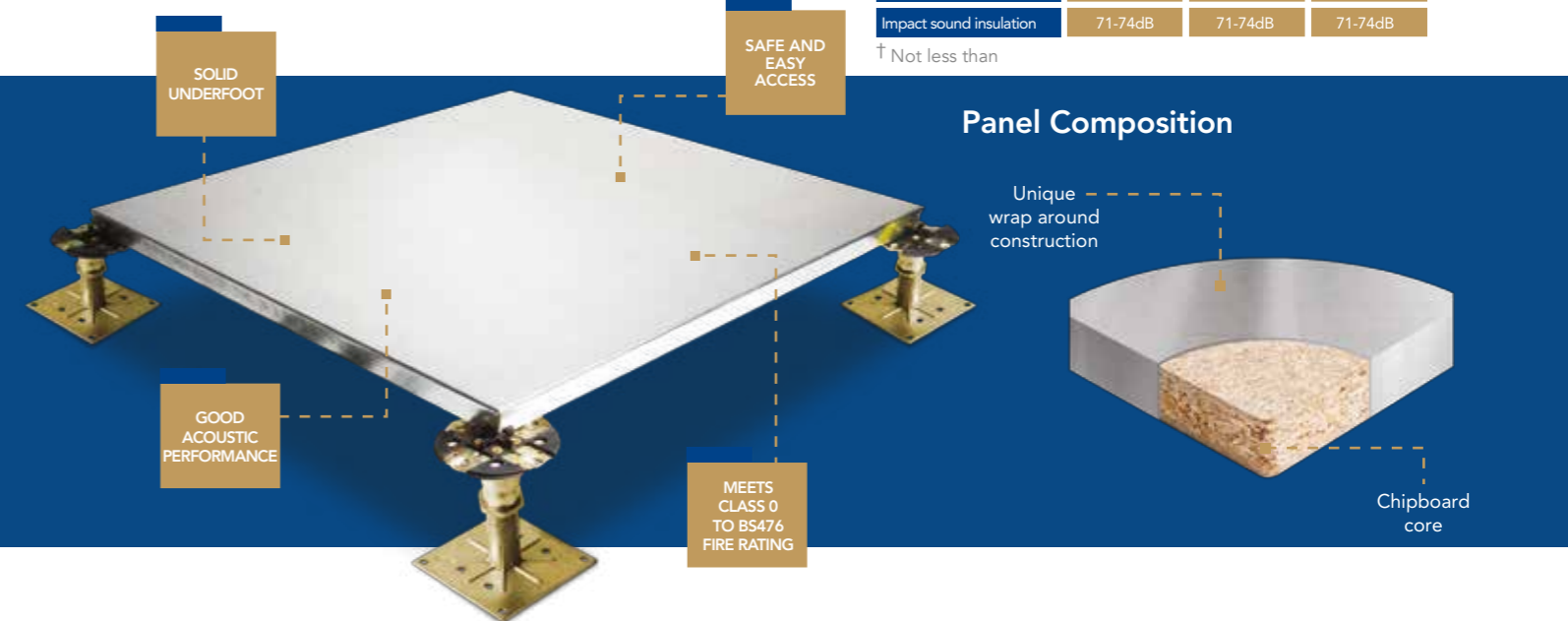


# RG PSA

A loose lay access flooring system with a unique wrap around construction in light, medium or heavy grades.

Product performance (based upon a full Kingspan system)			
	RLG	RMG	DRF
Point load 25x25mm sq	1.5kN †	3kN †	4.5kN †
Load over 300x300mm sq	2.7kN †	4.5kN †	N/A †
UDL /SGM	6.7kN/m <sup>2</sup> †	8kN/m <sup>2</sup> †	12kN/m <sup>2</sup> †
Airborne sound insulation	39-41dB	39-41dB	39-41dB
Impact sound insulation	71-74dB	71-74dB	71-74dB

† Not less than



- This loose lay floor system is tested in accordance with PSA MOB PS/SPU specification. Panel deflection at centre edge must not exceed 2.4mm based on 24 hour testing.
- Performs to a safety factor of 3 x static load.
- Finished floor heights from 57mm to 1200mm are available using standard pedestals. For heights outside of this range alternative pedestals are available.
- Structural performance based upon a full Kingspan system i.e. panels & pedestals.

Construction	
Category	Loose lay
Core material	High density particle board
Panel construction	Galvanised steel encapsulated particle board core

Panel dimensions			
	RLG600	RMG600	DRF600
Panel thickness (nominal)	31mm	31mm	32mm
System weight (typical)	31kg/m <sup>2</sup>	36kg/m <sup>2</sup>	44kg/m <sup>2</sup>
Panel size	600mm square		

## Our Product Ranges

Our varied product range is designed to meet the needs of a variety of buildings and uses, each system is designed and manufactured to the pre-eminent raised flooring specifications i.e. PSA PF2 PS; BS EN 12825.

Floor voids are available with standard product from 20mm up to 2000mm and we can also design bespoke systems for any height and any loading requirement. 600mm x 900mm panels are also available in order to minimise perimeter cutting.



PSA

# FDEB PSA

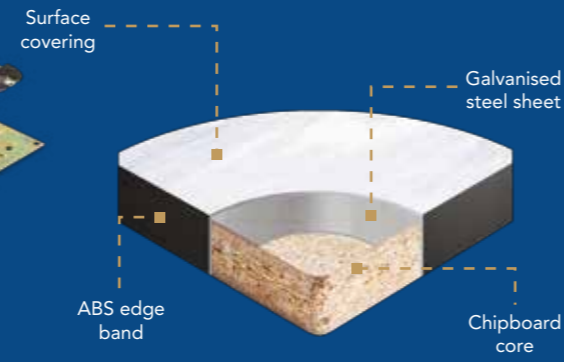
A loose lay access flooring system featuring a full depth edge band, galvanised steel sheet laminates and a variety of finishes.

## Product performance (based upon a full Kingspan system)

	FDEB 30	FDEB 38
Panel grade	Medium	Heavy *
Point load 25x25mm sq	3kN †	4.5kN †
Load over 300x300mm sq	4.5kN †	N/A †
Uniformly distributed load	8kN/m <sup>2</sup> †	12kN/m <sup>2</sup> †

† Not less than  
\*FDEB 38 requires a structural stringer system to achieve heavy grade

### Panel Composition



# TL Series PSA

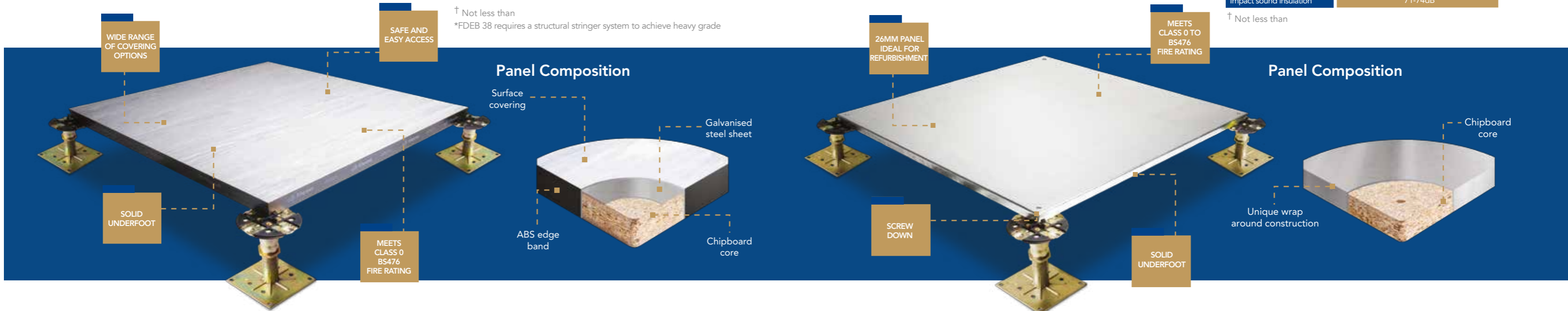
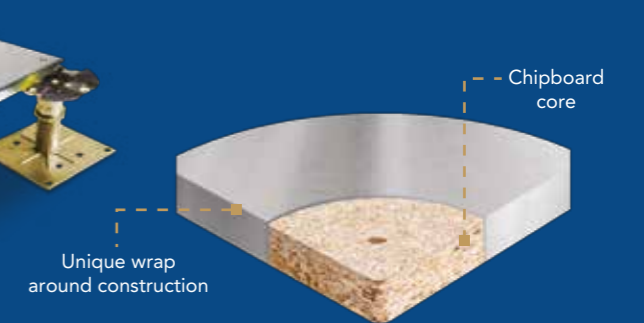
A slim, medium grade access flooring system featuring a unique wrap around construction and screw corner locking.

## Product performance (based upon a full Kingspan system)

	TLM 26
Point load 25x25mm sq	3kN †
Load over 300x300mm sq	4.5kN †
Uniformly distributed load	8kN/m <sup>2</sup> †
Airborne sound insulation	39-41dB
Impact sound insulation	71-74dB

† Not less than

### Panel Composition



### Construction

Category	Loose lay
Core material	High density particle board
Panel construction	Galvanised steel sheet top & bottom with edge banding

### Panel dimensions

	FDEB 30	FDEB 38
Panel thickness (nominal)	31mm *	39mm *
System weight (typical)	42kg/m <sup>2</sup>	52kg/m <sup>2</sup>
Panel size	600mm square	

\*excluding finish

- This loose lay floor system is tested in accordance with PSA MOB PS/SPU specification. Panel deflection at centre edge must not exceed 2.4mm based on 24 hour testing.
- Safety factor of 3 x static load.
- Finished floor heights from 60mm to 1200mm are available using standard pedestals. For heights outside of this range alternative pedestals are available.
- Extra Heavy Grade to the requirements of PSA MOB PF2 PS/SPU is available using FDEB 38 heavy grade with bolt on structural stringers.
- Structural performance based upon a full Kingspan system i.e. panels & pedestals.
- For FDEB 38 the structural stringer must be employed at all heights.



- This floor system is tested in accordance with PSA MOB PS/SPU specification. Panel deflection at centre edge must not exceed 2.4mm based on 24 hour testing.
- Finished floor heights from 57mm to 1200mm are available using standard pedestals. For heights outside of this range alternative pedestals are available.
- Structural performance based upon a full Kingspan system i.e. panels & pedestals.



### Construction

Category	Screw down
Core material	High density particle board
Panel construction	Galvanised steel encapsulated particle board core

### Panel dimensions

Panel thickness (nominal)	26mm
System weight (typical)	32kg/m <sup>2</sup>
Panel size	600mm square

PSA



PSA



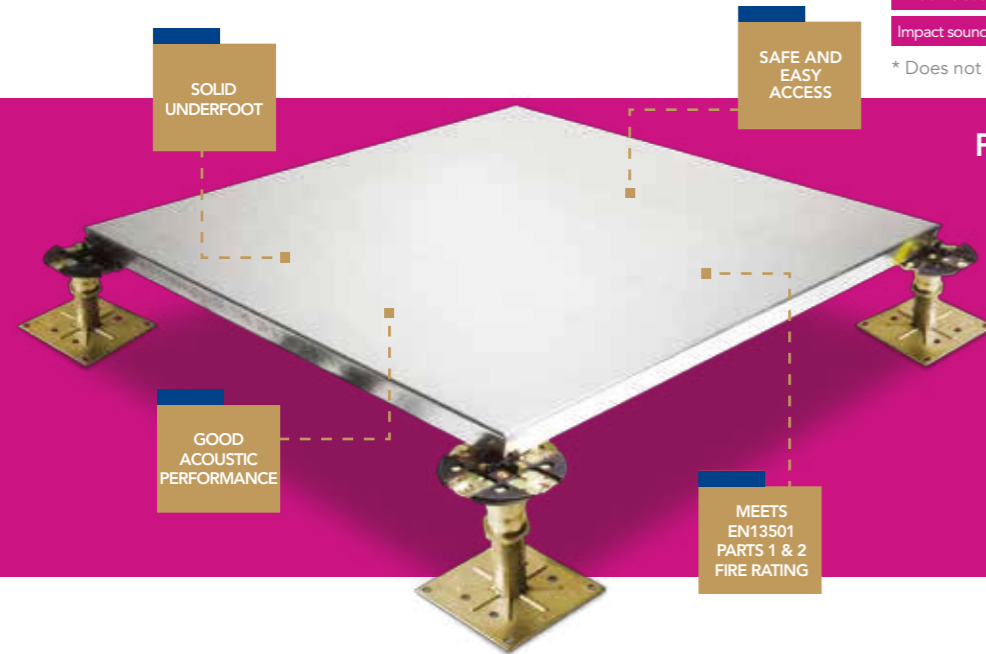
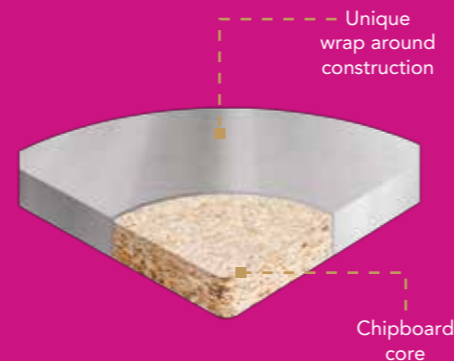
# RG BSEN

A loose lay access flooring system with a unique wrap around construction, available in three panel types.

Product performance (based upon a full Kingspan system)			
	RG3	RG5	RG6
Ultimate load	In excess of 8kN	In excess of 10kN	In excess of 12kN
Working load with a safety factor of 3	2.67kN	3.33kN	4kN
Working load with a safety factor of 2	4kN	5kN	6kN
Uniformly distributed load*	15kN/m <sup>2</sup>	20kN/m <sup>2</sup>	25kN/m <sup>2</sup>
Airborne sound insulation	38-44dB	38-44dB	38-44dB
Impact sound insulation	67-69dB	67-69dB	67-69dB

\* Does not form part of BSEN 12825.

## Panel Composition



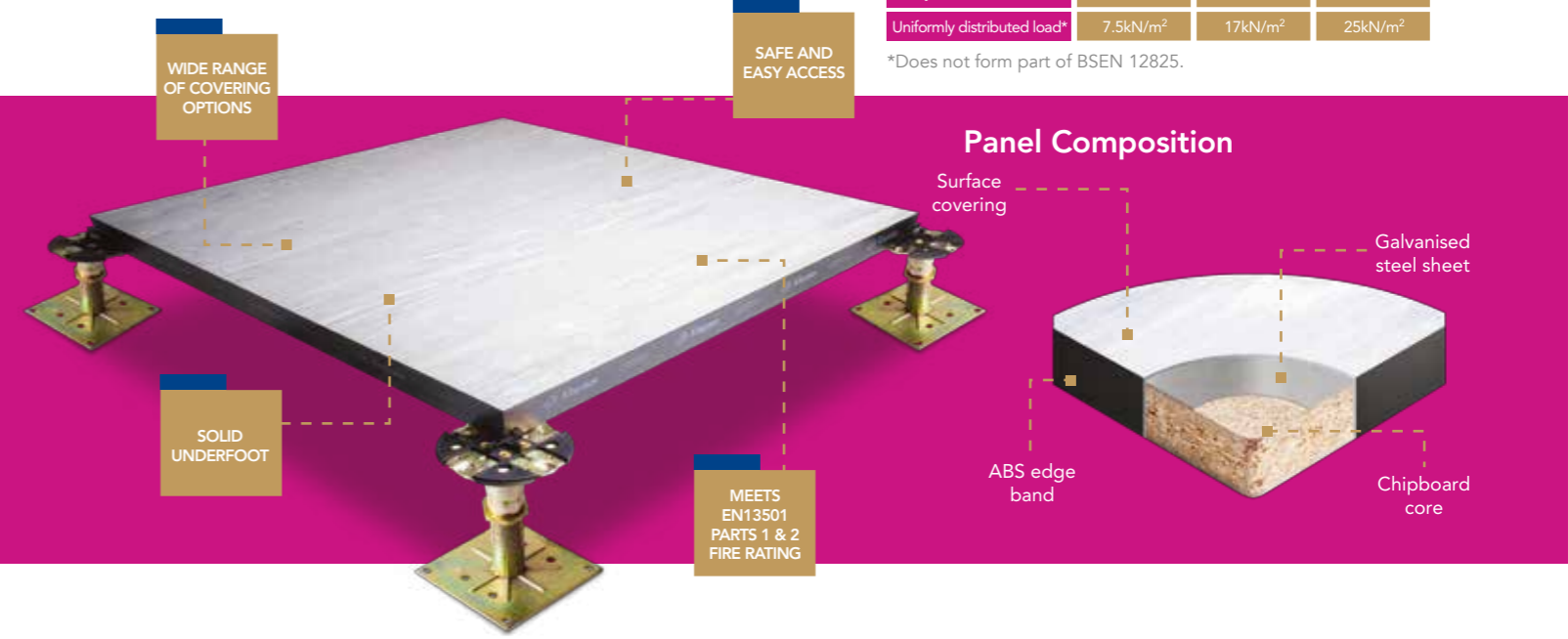
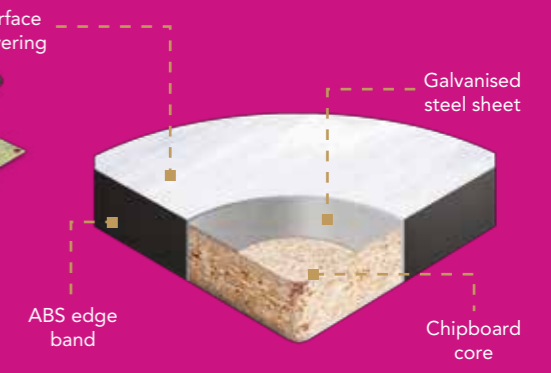
# FDEB BSEN

A loose lay access flooring system featuring a full depth edge band, galvanised steel sheet laminates and a variety of finishes.

Product performance (based upon a full Kingspan system)			
	FDEB 1	FDEB 4	FDEB 6
Ultimate load	In excess of 4kN	In excess of 9kN	In excess of 12kN
Working load with a safety factor of 3	1.33kN	3kN	4kN
Working load with a safety factor of 2	2kN	4.5kN	6kN
Uniformly distributed load*	7.5kN/m <sup>2</sup>	17kN/m <sup>2</sup>	25kN/m <sup>2</sup>

\*Does not form part of BSEN 12825.

## Panel Composition



Construction	
Category	Loose lay
Core material	High density particle board
Panel construction	Galvanised steel encapsulated particle board core

Panel dimensions			
	RG3	RG5	RG6
Panel thickness (nominal)	31mm	31mm	32mm
System weight (typical)	31kg/m <sup>2</sup>	36kg/m <sup>2</sup>	44kg/m <sup>2</sup>
Panel size	600mm square		

- Tested in accordance with European Standard BS EN12825 for raised access floors.
- Finished floor heights from 60mm to 370mm are available using standard pedestals. For heights outside of this range alternative pedestals are available. Low finished floor heights are achievable. Please contact head office for more details.
- The classifications given are based on the use of the Kingspan range of pedestals.
- Uniformly distributed loads do not form part of EN12825 and are therefore indicative ONLY.



- Tested in accordance with European Standard BS EN12825 for raised access floors.
- Finished floor heights from 60mm to 1200mm are available using one of our standard pedestals. For heights outside of this range alternative pedestals are available.
- The classifications given are based on the use of the Kingspan range of pedestals.
- Uniformly distributed loads do not form part of EN12825 and are therefore indicative ONLY.



Construction	
Category	Loose lay
Core material	High density particle board
Panel construction	Galvanised steel sheet, bottom or top & bottom with edge banding

Panel dimensions			
	FDEB 1	FDEB 4	FDEB 6
Panel thickness (nominal)	31mm	31mm	39mm
System weight (typical)	30kg/m <sup>2</sup>	36kg/m <sup>2</sup>	52kg/m <sup>2</sup>
Panel size	600mm square		

BSEN



BSEN



# TL Series BSEN

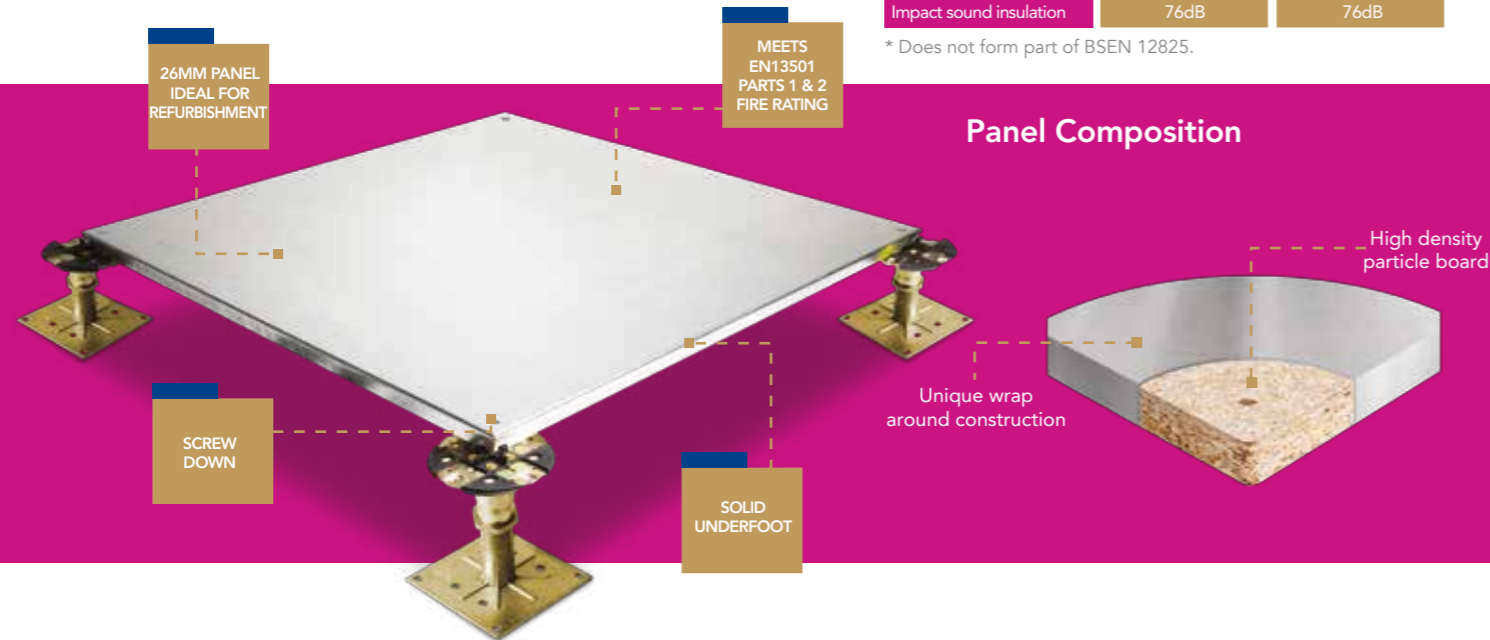
A slim, BSEN grade access flooring system featuring a unique wrap around construction and screw corner locking.

## Product performance (based upon a full Kingspan system)

	TL3	TL5
Ultimate load	In excess of 8kN	In excess of 10kN
Working load with a safety factor of 3	2.67kN	3.3kN
Working load with a safety factor of 2	4kN	5kN
Uniformly distributed load*	15kN	20kN
Airborne sound insulation	30dB	30dB
Impact sound insulation	76dB	76dB

\* Does not form part of BSEN 12825.

### Panel Composition



### Construction

Category	Screw down
Core material	High density particle board
Panel construction	Galvanised steel encapsulated particle board core

### Panel dimensions

	TL3	TL5
Panel thickness (nominal)	26mm	26mm
System weight (typical)	30kg/m <sup>2</sup>	32kg/m <sup>2</sup>
Panel size	600mm square	

- Tested in accordance with European Standard BS EN12825 for raised access floors.
- Finished floor heights from 60mm to 375mm are available using one of our standard pedestals. For heights outside of this range alternative pedestals are available.
- The classifications given are based on the use of the Kingspan range of pedestals.
- Uniformly distributed loads do not form part of EN12825 and are therefore indicative ONLY.



# D-Lock BSEN

An economical solution, the D-Lock has a unique lock down system limiting movement and adding security.

## Product performance (based upon a full Kingspan system)

	D-Lock 30	D-Lock 38
Ultimate load	In excess of 4kN	In excess of 6kN
Working load with a safety factor of 3	1.33kN	2kN
Working load with a safety factor of 2	2kN	3kN
Uniformly distributed load*	7.5kN/m <sup>2</sup>	10kN/m <sup>2</sup>

\*Does not form part of BSEN 12825.

### Panel Composition



### Construction

Category	Lock down
Core material	High density particle board
Panel construction	Machined particle board with lock down provision

### Panel dimensions

	D-Lock 30	D-Lock 38
Panel thickness (nominal)	30mm	38
System weight (typical)	26kg/m <sup>2</sup>	31kg/m <sup>2</sup>
Panel size	600mm square	

- Tested in accordance with European Standard BS EN12825 for raised access floors.
- Finished floor heights from 73mm to 380mm are available using one of our standard pedestals. For heights outside of this range alternative pedestals are available.
- The classifications given are based on the use of the Kingspan range of pedestals.
- Uniformly distributed loads do not form part of EN12825 and are therefore indicative ONLY.



BSEN



BSEN



# Pedestals and Accessories



**Europed**  
Europed fully complies with the requirements of BSEN 12825 specification

**Alpha V**  
Alpha V Pedestal fully complies with light, medium & heavy grade requirements of the PSA MOB PF2 PS/SPU spec.

**Alpha III**  
Alpha III Pedestal fully complies with heavy and extra heavy grade requirements of the PSA MOB PF2 PS/SPU spec.

**Dimensions**  
Height range: 16 - 347mm  
Height adjustment: +/- 40mm  
Base: 80mm

**Dimensions**  
Height range: 20 - 620mm  
Height adjustment: +/- 40mm  
Base: 100mm

**Dimensions**  
Height range: >= 250mm  
Height adjustment: +/- 40mm  
Base: 120mm

# Acoustideck

Ideal for accommodation buildings where noise reduction is important, the Acoustideck system features a snap-on flexible polymer based acoustic pad.

**Product performance** (based upon a full Kingspan system)

Based on Eurocode 5 (EC5) and factored according to EC1

	25mm*	30mm	38mm
Point load capacity (SLS)	2.0 kN	2.7 kN	4.0 kN
Application	Residential	Commercial/education	Commercial/education

\*Moisture resistant available      SLS: Serviceability limit state

**Panel Composition**

- INTER-CHANGABLE PANELS & VARIABLE HEIGHTS
- ACCOMMODATES VARIABLE SURFACES & LEVELS
- EXCEEDS IMPACT SOUND REQUIREMENTS OF DOCUMENT E
- SNAP-ON POLYMER ACOUSTIC PADS
- Chipboard
- Machined lock down provision

## Pedestal Usage Guide

	BSEN Europed	PSA Alpha V	PSA Alpha III	Stringer
D-Lock	✓			
C-Dec	✓			
Acoustideck	✓	✓		
RG Series PSA		✓	✓	>600mm
RG Series BSEN	✓	✓	✓	>600mm
Torlock PSA		✓	✓	Airseal only
Torlock BSEN	✓	✓	✓	Airseal only
FDEB PSA 30		✓	✓	>450mm
FDEB PSA 38		✓	✓	All heights
FDEB BSEN	✓	✓	✓	>450mm

See specific panel datasheet for more information

- Where a stringer is recommended for system heights  $\geq 450\text{mm}$  and  $\geq 600\text{mm}$  the light clip on stringer is provided only to aid stability at installation; it is not a requirement to achieve system load rating.
- For FDEB 38 the structural stringer must be employed at all heights.
- For Extra Heavy rating the box stringer must be employed with the correct version of the Alpha 3 pedestal.
- Where a requirement for zinc whisker free is specified nickel plated versions are available to special order.



- Acoustic performance achieves the requirements of part E of Building regulations when used as part of Robust Detail floor construction E-FC-1, E-FC-2 & EFC 7.
- Laboratory impact transmission performance when tested in accordance with 'Appendix D' of RD is:  $rd\Delta Lw = 19\text{dB}$ .
- Finished floor heights from 45mm to 370mm are available using one of our range of standard pedestals.
- For heights outside of this range alternative pedestals are available.



## Construction

Panel material	High density chipboard
Support	Zinc plated pedestals
Support fixing	1 part adhesive
Damping media	Moulded TPR pad - thermo plastic rubber
Panel attachment	Clamping washer and screw

## Heights & regulations

Finished floor heights	45mm to 370mm
Robust details compliance	$rd\Delta Lw$ 17dB
Kingspan rating	$rd\Delta Lw$ 19dB (E-FC-1, E-FC-2, E-FC-7)
Building regulations	Part E compliant



BSEN

# Materials and Finishes

We can find a raised flooring solution for all your bespoke finishes, from natural woods and modern ceramics through to steel & vinyl



The versatility of a Kingspan raised access floor means that interior designers and property investors don't have to compromise on creativity when adding the finishing touches to the floor.

You can add high quality architectural finishes such as granite, marble, natural stone, timber, vinyl or HPL in any application to give almost infinite design flexibility.

Floor finishes will often be part of the designer's overall concept for the interior – Kingspan is available to work with you and provide advice on how your choice of finishes can be incorporated into the raised floor to combine the practical aspects of a service void with the designer's creativity.

When considering the use of natural finishes, please consult Kingspan Access Floors Technical Services early in the design stage.



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