

Acoustic South East



Desktop Noise Impact Assessment – Indoor Padel

Report by: Scott Castle BSc (Hons) CEnvH, MCIEH MIOA

Date: 25/03/2026

Project: J4188

Issue 1

Site: **Units 1,2 and 3 Consort Way, Burgess Hill, RH15 9TJ**

Client: **PGQ Property**

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Issue 1	25/03/2026	Original Issue
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1 Introduction and Executive Summary

Acoustic South East have been appointed to undertake an acoustic assessment to support a planning application for indoor padel tennis.

Standards and guidance referenced for this assessment include:

- World Health Organisation Guidelines for Community Noise dated 1999 (Revised 2018)
- Sport England, Artificial Grass Pitch (AGP) Acoustics – Planning Implications (2015)

It is noted that the predictions are based only on buildings constructed around the padel site and not for the entirety of the commercial/industrial estate. However, based on the worst-case model results, 7dB has been predicted at the North of the site at the Victoria Road receptor position. This should be noted as being an external freefield sound pressure level.

Such a low noise level is significantly below the Sport England Guidance for the onset of moderate annoyance (50dB $L_{Aeq,1 \text{ hour}}$) and furthermore, also at such low levels that a 3dB change in the site soundscape at the receptor locations would not be triggered.

The results of indoor padel would certainly not be audible at any of the nearest residential properties and furthermore, the sound from passing vehicles on and around the industrial estate would be such that the sound pressure levels from padel being played (internally) would be comfortably below background and ambient noise levels and not be audible.

Contextually, there is a gym premises located South of the site (BYS Fitness) which would inevitably have classes and indoor sound pressure levels likely noisier than an indoor padel premises.

Based on the evidence presented, there is no reason why planning permission for a change of use should not be permitted on noise grounds.

2 Context, Noise Criteria & Noise Assessment Methodology

2.1 Context

A planning application is being made to Mid Sussex District Council for a change of use.

Specifically, the current use is E(g) which is offices/light industrial with a view to moving towards class E(d) for leisure purposes.

It is understood that Mid Sussex District Council Environmental Health department wish to see a desktop assessment in order to validate the application.

2.2 Site Location

The application site is detailed in red in Figure 1. As can be seen from Figure 2, the site is located within a built up Industrial Estate to the West of Burgess Hill.

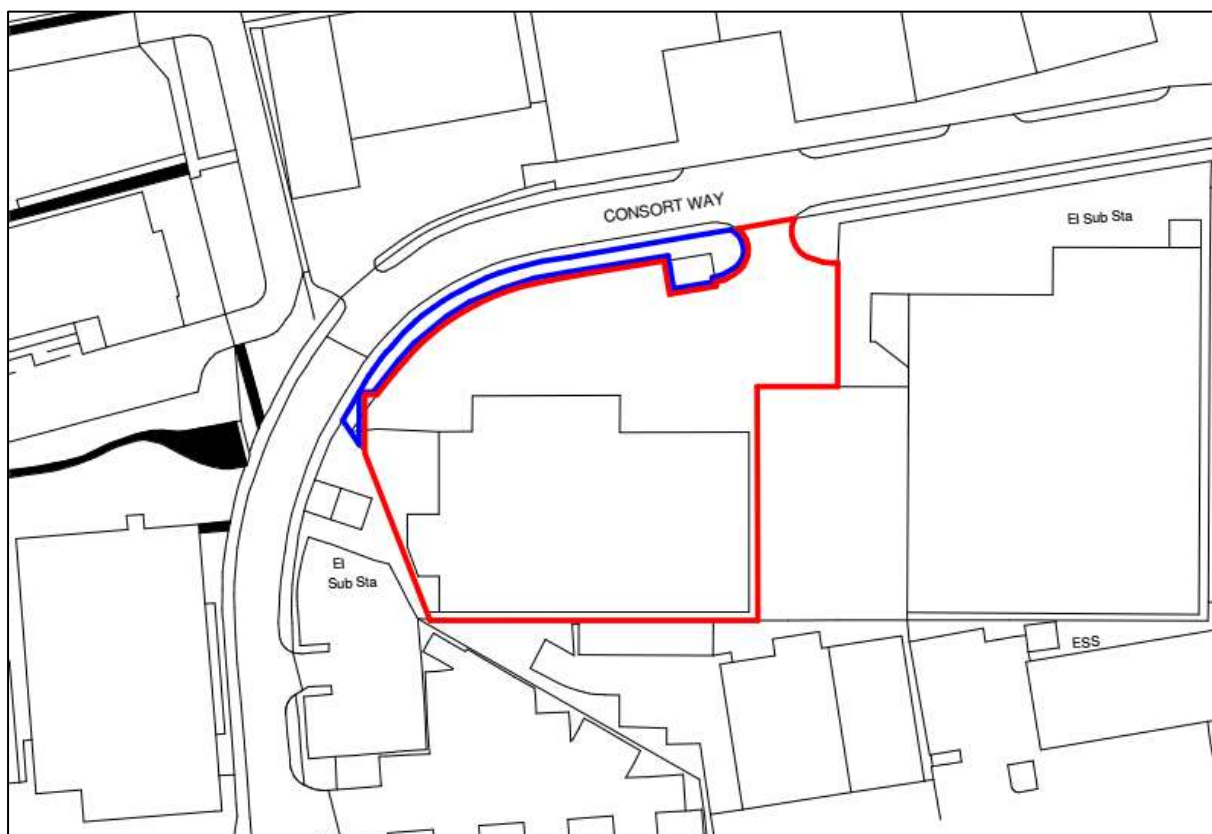


Figure 1. Site Location



Figure 2. Site Location and Context (Site Marked In Red)



Figure 3. Photograph of Newly Constructed Site

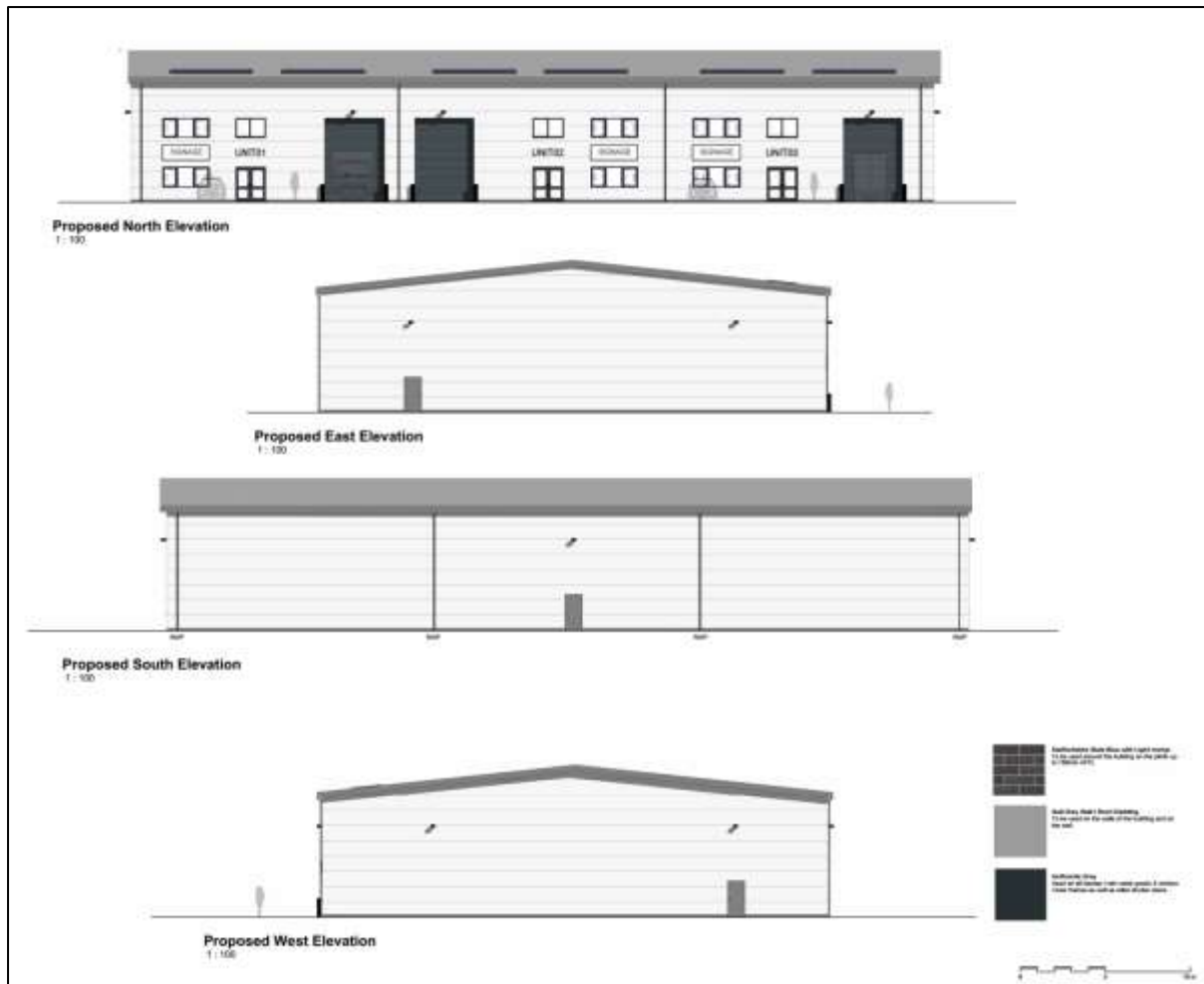


Figure 4. Elevational Drawings of the Application Site

2.3 Building Construction

The walls and roof are newly constructed with a Tata Trisomet/Trimapanel trapezoidal insulated panel system. The datasheet is included in Appendix A and the tested R_w of the panels is 29dB.

2.4 Nearest Residential Receptors

The nearest residential receptors are located on the fringes of the Industrial Estate and range from 120m to 335m in distance. None of the receptor locations will have a direct line of sight as there are numerous tall buildings in the way. Figure 5 below provides an account of the distances involved.

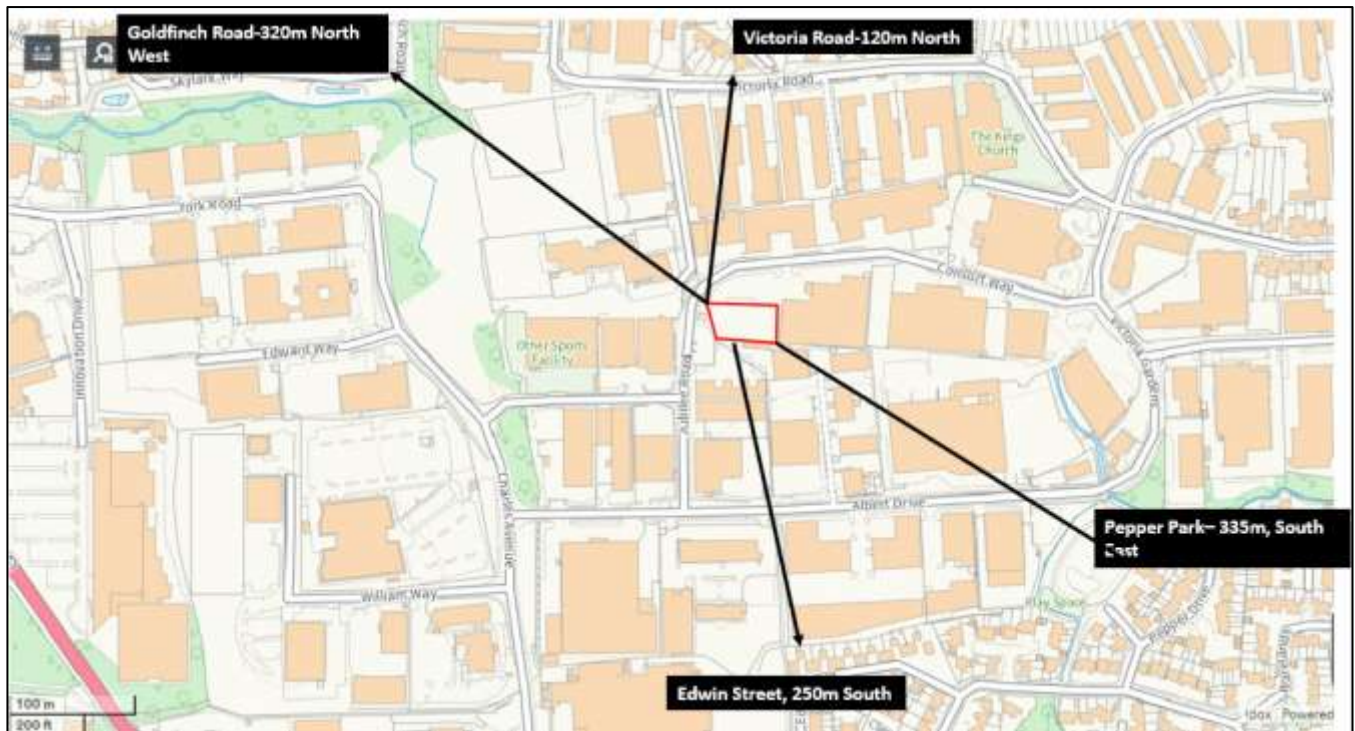


Figure 5. Residential Receptor Locations

2.5 Proposed Hours of Use

The site is proposed to be utilised 7 days a week, with opening hours of 07:00-23:00 hours.

3 Padel Tennis Noise Levels

Padel Tennis is played on a smaller court than a tennis court with a typical layout being 10 metres wide and 20metres in length.

A padel court consists of both glass edges and a metallic mesh area located at the centre of the court near to where the net separates the two playing halves. The areas are referred to as the window (glass area) and the cage (metal mesh area).

The glazed component of the court is effectively a U shape at each end of the court and measures 3metres in height and 4metres in length.

A game of Padel will typically last between 1 hour and 1.5 hours and is played with 4 people.

The game is played using carbon fibre bats as opposed to tennis racquets and scoring can and does utilise a ball striking the inside surface of the courts, be this the window or cage area.

Sound sources specific to Padel are therefore as follows:

- Ball impacts against racquets and court walls
- Player vocalisations (shouts, calls and general communication)
- Footsteps and Player movement
- Equipment Operation (ie ball machines)
- Background music.

In this instance, it is noted that the padel game is to be played internally, inside units 1-3 Consort Way.

3.1 Padel vs Tennis

In a White Paper by Clarke Saunders Associates dated August 2023 titled “Differences in Sound Characteristics of Padel and Tennis”, it is stated:

“It is clear that Padel features longer, more frequent extended rallies involving exchanges of volleys. Serving is always underarm in Padel, requiring less preparation and the contained court reduces time spent retrieving balls.

Tennis features more forceful hitting and more powerful serves, but less frequent impact sounds. Singles tennis features less frequent rallies of volleys than doubles. Padel is always played as a doubles sport by default.

Padel allows rebounds from the glass walls, and occasionally the ball is struck directly against the wall to rebound into play.”

3.2 Measured Sound Pressure Levels from Padel

Measurements were made at Smash Padel (Cuckfield) at 5m from the centre court line at 1.5m in height and at 5m from the glazed ends. The results were consistent with IoA Presentations on Padel indicating 60dB at 5m and 57dB at the glazed ends, centre also at 5m distance outside of the court.

A 10log relationship is therefore used to convert the 5m side measurement as a worst case to a 2m measurement. $10\log(2/5)$, thus adding another 4dB on making 64dB. It can therefore be assumed for the purposes of the model that 64dB $L_{Aeq,T}$ is the sound pressure level incident on the inside of the building structure. This sound pressure level is consistent with other indoor padel assessments reviewed.

4 Relevant Standards for Assessment

It is relevant to note that within the UK there is no current guidance for Padel Premises. The most closely aligned guidance used/applied is that of the Sport England Artificial Grass Pitches Guidance dated 2015. This is two-fold and references other guidance also:

- World Health Organisation Guidelines for Community Noise dated 1999. To avoid moderate annoyance during the daytime period (ie 07:00-23:00 hours) the noise level should not exceed 50dB $L_{Aeq,T}$. It is stated in the guidance that whilst the WHO guidance applies to a 16 hour day, it may be more relevant to consider an hour as the time descriptor.
- The AGP guidance also makes reference to a change in noise level and notes that a slight impact is considered for a 3dB change(increase), at the location of the noise sensitive receptor, considered against the soundscape without the activity occurring.

5 Computer Noise Modelling

In order to see how noise varies at different positions around the proposed development it is possible to produce a noise contour map. A computer noise model has been completed using the computer package IMMI. Drawings of the area have been used to complete the noise models and the topography of the location recreated. IMMI faithfully implements the propagation method of ISO-9613:1996; Acoustics – Attenuation of sound during propagation outdoors.

The noise modelling software predicts freefield and A weighted dB values.

5.1 Noise Model Inputs (Padel)

An area sound source was created to replicate Units 1-3 Consort Way, as this allows the application of roof and wall materials, as well as an internal sound pressure level.

As per Section 2.3 above, both the roof and walls were assigned a sound reduction index of 29dB.

For the roller shutter doors, these were assigned with an SRI of 22dB which have been measured on other projects.

Given the potential for multiple courts (ie up to 3), the internal sound pressure level was increased using $64+10\log(3)$ to 68.8dB internally.

The application building was set to 8.9m in height.

Clearly, there are a significant number of buildings and premises between the application site and the nearest residential receptors. The Mid Sussex District Council website was used to review planning applications for the nearest buildings to determine their apex heights for the buildings close to the application site. Where measurements could not be identified, due to the applications being around the 1980's and information not on the planning portal, a 7m roof height was applied.

Residential premises were entered into the model as 8m in height with receptor positions at 1.5m to replicate ground floor windows and 4.5m to replicate first floor windows.

5.2 Noise Model Outcomes

Based on the noise model inputs above, the 2D noise contours detail the propagation to the receptor positions.

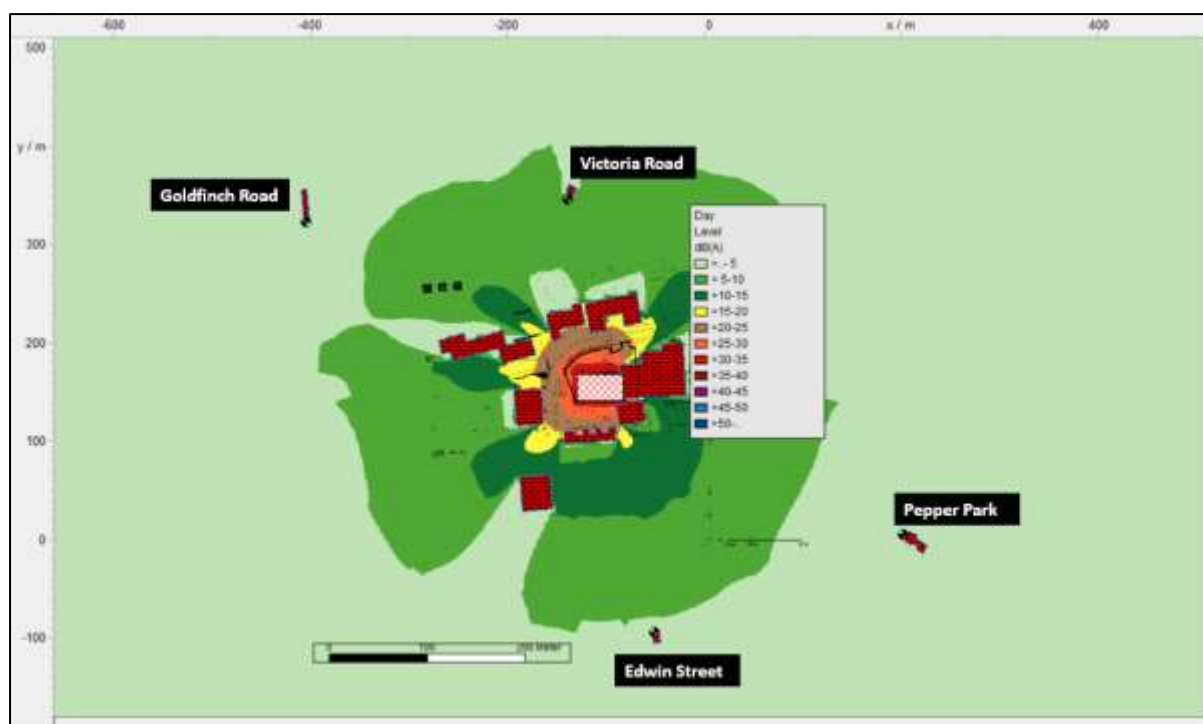


Figure 6. 2D Noise Contours

A tabulated version of the model predictions is presented below. These are noted to be significantly low noise levels.

Receptor Location	Predicted External SPL (Freefield)
GF Edwin	4.3
FF Edwin	4.5
GF Pepper Park	1.4
FF Pepper Park	1.5
GF Victoria	5.6
FF Victoria	7.0
GF Goldfinch	2.9
FF Goldfinch	3.0

Figure 7. Predicted External Sound Pressure Levels at receptor Locations at Ground Floor (GF) and First Floor(FF)

6 Discussion and Conclusion

It is noted that the predictions are based only on buildings constructed around the padel site and not for the entirety of the commercial/industrial estate. However, based on the worst-case model results, 7dB has been predicted at the North of the site at the Victoria Road receptor position. This should be noted as being an external freefield sound pressure level.

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The results of indoor padel would certainly not be audible at any of the nearest residential properties and furthermore, the sound from passing vehicles on and around the industrial estate would be such that the sound pressure levels from padel being played (internally) would be comfortably below background and ambient noise levels and not be audible.

Contextually, there is a gym premises located South of the site (BYS Fitness) which would inevitably have classes and indoor sound pressure levels likely noisier than an indoor padel premises.

Based on the evidence presented, there is no reason why planning permission for a change of use should not be permitted on noise grounds.

7 Appendix A – TATA Steel

Trimapanel® FW

Insulated secret fix micro-rib architectural wall panel system

Trimapanel® FW from Building Systems UK is an insulated secret fix micro-rib architectural wall panel with enhanced fire resistance that provides an architectural external aesthetic to your building facade.

Manufactured in factory conditions operating to quality management standard BS EN ISO 9001:2015, environmental management standard BS EN ISO 14001: 2015 and occupational health and safety management standard BS EN ISO 45001:2018.

Full traceability of all component materials and certified 'very good' to BRE's responsible sourcing standard BES 6001.

Table 1 - Range (U-value & weight)

Overall Thickness (mm)	90	120
U-value (W/m²K)	0.24	0.17
Weight (Kg/m²) *	12.67	13.85

* Weight based on standard combination of steel skin gauge

Table 2 - Dimensional scope

Cover width (mm)	+2
Thickness (mm)	+2
Squareness (mm)	<6
Length (mm) < 3 m	+5
Length (mm) > 3 m	+10
Maximum length (mm)	12000
Minimum length on-Line (mm)	2400
Minimum length off-Line (mm)	300

Figure 1. Trimapanel® FW cross section

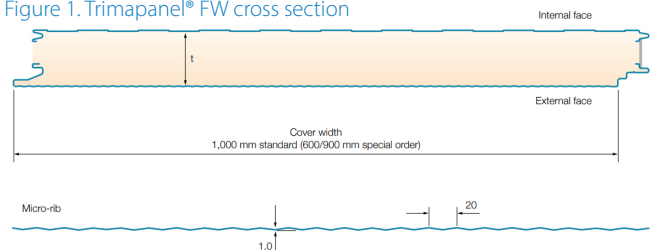


Table 3 - Flatness

For L = 200mm	0.6
For L = 400mm	1.0
For L > 700mm	1.5

(L = length of measurement between high points)
Tolerances are in accordance with BS EN 14509

Table 4 - Accessories and finishes

Accessories	Base Clip, Vertical Top Hat Joint, Formed Corners, Joint Fire seal, Fasteners
External finishes	Colorcoat® HPS200 Ultra, Colorcoat Prisma®
Standard internal finish	Colorcoat® PE15
Available internal finishes	Colorcoat® High Reflect, Colorcoat® HPS200 Ultra, Colorcoat® Prisma, Advantica® L Control

Platinum® Plus 25 year system guarantee.

Trimapanel® FW and a range of system components including fixings, wall lights, sealants and fillers are available with our Platinum® Plus system guarantee providing a complete building envelope solution guarantee for 25 years.

Colorcoat® HPS200 Ultra and Colorcoat Prisma® pre-finished steel offers long-term performance with the Confidex® Guarantee and providing peace of mind for up to 40 years. [Click here to learn more](#)



Our online specification generator tool has been designed to help you create the right specification to suit the needs of your project, making sure all roofing and cladding components listed are compatible and perform as a guaranteed system.



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Product performance

Table 5 - Resistance to fire (non-load bearing wall)

Product	Minimum Thickness (mm)	Orientation	External (unexposed) finish	Test Standard	Classification (BS EN 13501-2)		Max span (mm)
Trimapanel® FW	90	Horizontal	Colorcoat Prisma / HPS200 Ultra	EN 1364-1	IE15	E90	4000
Trimapanel® FW	90	Vertical	Colorcoat Prisma	EN 1364-1	IE20	E180	4000
Trimapanel® FW	90	Vertical	Colorcoat HPS200 Ultra	EN 1364-1	IE20	E120	4000

See Figure 2 for joint configuration.

Reaction to fire

- Trimapanel® FW Panels are classified B-s2,d0 according to the European Reaction to Fire classification system (Euroclasses) BS EN 13501-1: 2018 when tested to the internal face with the standard PE15 finish.

Third party accreditations

- LPCB (Loss Prevention Certification Board) approval to LPS 1181 Part 1.2 certified to EXT-B for all thicknesses.
- Approved to FM Class 4880, 4881 and 4471 to an unlimited wall height.
- Specification is critical for compliance. Our Technical Team can help you with your specification drafting - or you can use our [SPECGEN tool](#).



Weatherability

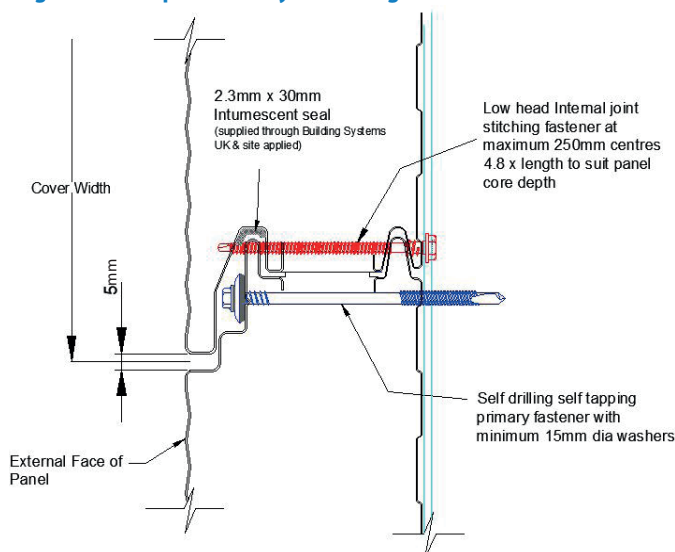
- In accordance with product standard BS EN 14509, the watertightness of a system should be tested to BS EN 12865. The standard advises that the system should achieve watertightness to a pressure of 600 Pa for normal conditions. Laboratory testing evidenced that the Trimapanel® FW system is water-tight up to a pressure of 1050 Pa.

Air-tightness

- In accordance with product standard BS EN 14509, the air tightness of a system should be tested to BS EN 12114. Laboratory tests evidenced that the Trimapanel® FW system has an air leakage as low as 0.48 m³/h/m².



Figure 2. Trimapanel® FW system fixing detail



Acoustic

- The sound reduction performance of the Trimapanel® FW system has been predicted using software developed by Building Systems UK. The results below are based on a 120mm panel thickness.

Table 6 - Sound reduction data

Frequency (Hz)	SRI Values (dB)*	Frequency (Hz)	SRI Values (dB)*
100	12.5	800	27.7
125	14	1000	29.4
160	15.7	1250	31.1
200	17.3	1600	23.6
250	19	2000	34.8
315	20.7	2500	35.8
400	22.4	3150	34.6
500	24.1	4000	32.2
630	25.9	5000	31.7

Weighted S.R.I RW = 29.0 dB

* The predicted sound reduction index values should only be used to provide guidance for preliminary design and/or appraisal of cladding systems. For information on other thicknesses or test evidence please contact the Building Systems UK Technical Department, email: technical.envelopeproducts@tatasteelurope.com

Span tables

The span tables below have been created in accordance with BS EN 14509. For the use of wall cladding only. The values are based on a maximum permitted deflection of span/150. Fastener performance has been taken into account within these tables based on a 2mm thick steel purlin/rail and assuming 2 fasteners per support.

The panel is assumed to have a minimal land of 60mm at each support position. If the perimeters above do not suit the specification of your project please contact Building Systems UK Technical Department who will be happy to adjust these to suit and produce a new set of load span data. Email: technical.envelopeproducts@tatasteeleurope.com

Table 7 - Trimapanel® FW 90 span table

Load Case	Span Condition	Span (mm)										
		1500	1750	2000	2250	2500	2750	3000	3250	3500	3750	4000
Safe imposed loading (kN/m ²)	Single	6.55	5.61	4.91	4.22	3.57	3.05	2.62	2.27	1.97	1.72	1.51
	Double	5.11	4.38	3.83	3.41	3.07	2.79	2.55	2.36	2.19	1.98	1.67
	Multi	5.11	4.38	3.83	3.41	3.07	2.79	2.55	2.36	2.19	2.04	1.84
Safe wind suction loading (kN/m ²)	Single	-5.62	-4.82	-4.22	-3.73	-3.02	-2.50	-2.10	-1.79	-1.54	-1.34	-1.18
	Double	-2.81	-2.41	-2.11	-1.87	-1.69	-1.53	-1.41	-1.30	-1.20	-1.12	-1.05
	Multi	-2.81	-2.41	-2.11	-1.87	-1.69	-1.53	-1.41	-1.20	-1.20	-1.12	-1.05

Table 8 - Trimapanel® FW 120 span table

Load Case	Span Condition	Span (mm)										
		1500	1750	2000	2250	2500	2750	3000	3250	3500	3750	4000
Safe imposed loading (kN/m ²)	Single	8.26	7.08	6.20	5.51	4.96	4.44	3.86	3.38	2.96	2.61	2.31
	Double	5.35	4.58	4.01	3.56	3.21	2.92	2.67	2.47	2.29	2.14	2.00
	Multi	5.35	4.58	4.01	3.56	3.21	2.92	2.67	2.47	2.29	2.14	2.00
Safe wind suction loading (kN/m ²)	Single	-5.62	-4.82	-4.22	-3.75	-3.37	-3.07	-2.79	-2.38	-2.05	-1.79	-1.57
	Double	-2.81	-2.41	-2.11	-1.87	-1.69	-1.53	-1.41	-1.30	-1.20	-1.12	-1.05
	Multi	-2.81	-2.41	-2.11	-1.88	-1.69	-1.53	-1.41	-1.30	-1.20	-1.12	-1.05

Site Guidance

Guidance on delivery, offload and construction can be [found here](#). These recommendations should be considered together with our typical construction details (see useful links opposite).

Packaging

Trimapanel® FW panels are stacked onto wooden pallets. The number of panels per pack will vary according to the length and depth of panel, typically panels are packed in stacks up to 1,100mm high.

Our pallets are sourced from an FSC certified supplier and are returnable for repair and recycling.

The panels are protected for transportation and storage by a baseboard and polymer shrink wrap. Local arrangements should be checked for recycling of these items.

Maximum pack size

Maximum number of panels within a pack for varying panel lengths

Table 9 - Core thickness (mm)	Panel Length (m)	No. of Panels
90	<5	11
	5 - 7	8
	7 - 9	6
	9 - 12	5
120	<5	6
	5 - 7	8
	7 - 9	6
	9 - 12	5

Watch our installation guides



Other useful links and downloads



- Declarations of performance
- BES 6001 Certification
- LPCB fire approval certification
- FM Approval certificate
- Vertical wall CAD drawings
- Horizontal wall CAD drawings
- Request a CPD

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Registered Office: 18 Grosvenor Place, London, SW1X 7HS, Registered in England No. 02280000

Doc No: BSUK-E-0005-08

Trisomet®

External trapezoidal insulated roof and wall panel system

Trisomet® is an insulated panel system suitable for both roof and wall cladding applications. A factory engineered one-fix component ensures consistent thermal and air tightness performance, and speed of installation. The wide spaced trapezoidal steel external skin provides optimum performance for water drainage, strength and walkability.

Manufactured in factory conditions operating to quality management standard BS EN ISO 9001:2015, environmental management standard BS EN ISO 14001: 2015 and occupational health and safety management standard BS EN ISO 45001:2018.

Full traceability of all component materials and certified 'very good' to BRE's responsible sourcing standard BES 6001.

Table 1 - U-values & weights

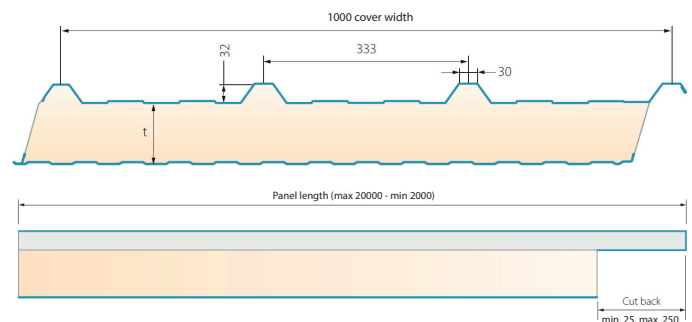
Overall Thickness	U-value (W/m²K)	Weight (kg/m²)*
40mm	0.46	9.23
60mm	0.33	10.01
80mm	0.25	10.40
100mm	0.20	11.22
120mm	0.16	12.03
135mm	0.15	12.76

* Weight based on standard combination of steel skin gauge

Table 2 - Dimensional scope

Cover width (mm)	+2
Thickness (mm)	+2
Squareness (mm)	<6
Cutback (mm)	-2 +5
Length (mm) < 3 m	+5
Length (mm) > 3 m	+10
Maximum length (mm)	20000
Minimum length on-Line (mm)	2000
Minimum length off-Line (mm)	300

Figure 1. Trisomet® cross section and cut back



All measurements are mm unless stated

* Recommended end laps are 50 mm for horizontal, 100 mm for vertical and 150 mm for roof applications.

Table 3 - Accessories and finishes

Accessories	Rooflight, fasteners, sealants, fillers
External finishes	Colorcoat HPS200 Ultra®, Colorcoat Prisma®, Colorcoat® LG
Standard internal finish	Colorcoat® PE15
Available internal finishes	Colorcoat® High Reflect, Colorcoat HPS200 Ultra®, Colorcoat Prisma®, Advantica® L Control

Platinum® Plus 25 year system guarantee.

Trisomet® and a range of system components including fixings, roof lights, sealants and fillers are available with our Platinum® Plus system guarantee providing a complete building envelope solution guarantee for 25 years.

Colorcoat HPS200 Ultra and Prisma® pre-finished steel offers long-term performance with the Confidex® Guarantee providing peace of mind for up to 40 years. [Click here to learn more](#)



Our online specification generator tool has been designed to help you create the right specification to suit the needs of your project, making sure all roofing and cladding components listed are compatible and perform as a guaranteed system.



[Click here to build your specification](#)

Product performance

Resistance to fire (non-load bearing wall)

- Building Systems UK have a library of test evidence in accordance with BS 476 part 22 and BS EN 1364-1.
- Design options for the application of Trisomet® panel system are considerable therefore to obtain the correct specification to meet your project needs, please contact our technical department or obtain a specification through the [SPECGEN tool](#).

Reaction to fire

- Trisomet® panels are classified B-s2,d0 according to the European Reaction to Fire classification system (Euroclasses) BS EN 13501-1: 2018 when tested on the standard internal face of the product.

Roof exposure to fire

- The Trisomet® roof system meets BROOF(t4) in accordance with BS EN 1187.

Third party accreditations

- LPCB (Loss Prevention Certification Board) approval to LPS 1181 Part 1.2 certified to EXT-B for all thicknesses.
- Approved to FM Class 4880, 4881 and 4471 to an unlimited wall height.
- Specification is critical for compliance. Our Technical Team can help you with your specification drafting - or you can use our [SPECGEN tool](#).



Thermal performance

- Trisomet® complies with the minimum requirements of the conservation of fuel and power sections of the Building Regulations for England and Wales (Part L2) and Scotland (Technical Handbook Section 6 Energy). The panel construction offers highly consistent insulation performance, and the site-formed junctions provide a practical and effective method of ensuring good thermal performance. Thermal performance is calculated in accordance with BS EN 14509 with U-values computer modelled in accordance with EN ISO 10211 and assessed using the methods and conventions set out in the Building Research Establishment's BR 443.

Air-tightness

- In accordance with product standard BS EN 14509, the air tightness of a system should be tested to BS EN 12114. In line with these testing requirements our laboratory tests evidenced that the Trisomet® system has an air leakage as low as 0.43 m³/h/m².

Weatherability and water penetration

- In accordance with product standard BS EN 14509, the watertightness of the Trisomet® system is tested to EN 12865. The standard advises that the system should achieve watertightness to a pressure of 600 Pa for normal conditions. In accordance with such testing requirements our laboratory testing shows evidence that the Trisomet® system is water-tight up to a pressure of 1200 Pa which far surpasses this requirement.

Acoustic performance

- The sound reduction performance of the Trisomet® system has been predicted using software developed by Building Systems UK. The results below are based on a 120mm panel thickness.

Table 4 - Sound reduction data

Frequency (Hz)	SRI Values (dB)*	Frequency (Hz)	SRI Values (dB)*
100	20.1	800	25.1
125	21.3	1000	29.8
160	22.6	1250	32.7
200	23.6	1600	37.2
250	24.3	2000	41.7
315	24.4	2500	45.7
400	23.5	3150	50.1
500	20.5	4000	54.5
630	20.5	5000	59.3

Weighted S.R.I RW = 29.0 dB

* The predicted sound reduction index values should only be used to provide guidance for preliminary design and/or appraisal of cladding systems. For information on other thicknesses or test evidence please contact the Building Systems UK Technical Department, email: technical.envelopeproducts@tatasteelurope.com

Span tables

The span tables below have been created in accordance with BS EN 14509. The values are based on a maximum permitted deflection of span/200. Fastener performance has been taken into account within these tables based on a 2mm thick steel rail and assuming 3 fasteners per support.

The panel is assumed to have a minimal land of 65mm at each support position. If the perimeters above do not suit the specification of your project please contact Building Systems UK Technical Department who will be happy to produce new load span data based on your requirements. Email: technical.envelopeproducts@tatasteelurope.com

Table 5 - Trisomet® 40 span table

Load case	Span condition	Span (mm)										
		1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200
Safe imposed loading (kN/m²)	Single	3.31	2.74	2.32	1.99	1.73	1.51	1.33	1.09	0.88	0.71	0.58
	Double	3.06	2.33	1.84	1.50	1.25	1.06	0.91	0.79	0.69	0.61	0.55
	Multi	3.31	2.66	2.10	1.71	1.42	1.21	1.04	0.91	0.80	0.71	0.64
Safe wind suction loading (kN/m²)	Single	-3.45	-2.88	-2.46	-2.14	-1.87	-1.65	-1.47	-1.32	-1.19	-1.07	-0.97
	Double	-3.10	-2.38	-1.91	-1.58	-1.35	-1.16	-1.02	-0.91	-0.82	-0.75	-0.68
	Multi	-3.45	-2.70	-2.16	-1.78	-1.51	-1.31	-1.15	-1.02	-0.92	-0.84	-0.77

Table 6 – Trisomet® 60 span table

Load case	Span condition	Span (mm)										
		1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200
Safe imposed loading (kN/m²)	Single	4.20	3.59	3.13	2.76	2.45	2.18	1.95	1.69	1.45	1.25	1.08
	Double	3.39	2.62	2.10	1.73	1.46	1.24	1.08	0.94	0.84	0.74	0.67
	Multi	3.82	2.93	2.34	1.92	1.62	1.39	1.20	1.06	0.94	0.84	0.76
Safe wind suction loading (kN/m²)	Single	-4.35	-3.75	-3.29	-2.92	-2.60	-2.34	-2.11	-1.91	-1.73	-1.58	-1.44
	Double	-3.44	-2.68	-2.17	-1.82	-1.55	-1.35	-1.19	-1.07	-0.96	-0.88	-0.81
	Multi	-3.85	-2.98	-2.40	-2.00	-1.70	-1.48	-1.31	-1.17	-1.06	-0.97	-0.89

Table 7 – Trisomet® 80 span table

Load case	Span condition	Span (mm)										
		1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200
Safe imposed loading (kN/m²)	Single	5.10	4.47	3.97	3.55	3.19	2.88	2.60	2.32	2.01	1.76	1.54
	Double	3.71	2.90	2.34	1.94	1.64	1.41	1.23	1.08	0.96	0.86	0.78
	Multi	4.12	3.19	2.56	2.12	1.80	1.55	1.35	1.19	1.06	0.95	0.86
Safe wind suction loading (kN/m²)	Single	-5.27	-4.63	-4.13	-3.72	-3.36	-3.05	-2.77	-2.52	-2.30	-2.11	-1.94
	Double	-3.76	-2.97	-2.42	-2.04	-1.75	-1.53	-1.35	-1.21	-1.10	-1.00	-0.92
	Multi	-4.16	-3.24	-2.63	-2.20	-1.89	-1.65	-1.46	-1.31	-1.19	-1.09	-1.00

Table 8 - Trisomet® 100 span table

Load case	Span condition	Span (mm)										
		1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200
Safe imposed loading (kN/m²)	Single	6.02	5.35	4.81	4.35	3.95	3.59	3.27	2.96	2.60	2.29	2.03
	Double	4.00	3.15	2.57	2.14	1.82	1.57	1.37	1.21	1.08	0.97	0.87
	Multi	4.39	3.43	2.78	2.31	1.97	1.70	1.49	1.32	1.18	1.06	0.96
Safe wind suction loading (kN/m²)	Single	-6.20	-5.53	-4.99	-4.53	-4.13	-3.77	-3.45	-3.15	-2.89	-2.66	-2.45
	Double	-4.07	-3.23	-2.66	-2.24	-1.93	-1.69	-1.50	-1.35	-1.22	-1.12	-1.03
	Multi	-4.45	-3.50	-2.86	-2.40	-2.07	-1.81	-1.61	-1.44	-1.31	-1.20	-1.11

Table 9 - Trisomet® 120 span table

Load case	Span condition	Span (mm)										
		1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200
Safe imposed loading (kN/m²)	Single	6.94	6.25	5.67	5.17	4.72	4.31	3.94	3.6	3.20	2.84	2.53
	Double	4.28	3.40	2.78	2.33	1.99	1.72	1.51	1.33	1.19	1.07	0.97
	Multi	4.66	3.66	2.98	2.49	2.12	1.84	1.61	1.43	1.28	1.16	1.05
Safe wind suction loading (kN/m²)	Single	-7.14	-6.44	-5.86	-5.36	-4.91	-4.50	-4.13	-3.80	-3.49	-3.22	-2.97
	Double	-4.36	-3.49	-2.88	-2.44	-2.11	-1.85	-1.64	-1.48	-1.34	-1.22	-1.13
	Multi	-4.73	-3.74	-3.07	-2.59	-2.23	-1.96	-1.74	-1.57	-1.42	-1.31	-1.20

Table 10 - Trisomet® 135 span table

Load case	Span condition	Span (mm)										
		1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200
Safe imposed loading (kN/m²)	Single	7.64	6.92	6.32	5.78	5.3	4.86	4.44	4.08	3.65	3.26	2.91
	Double	4.48	3.57	2.93	2.46	2.11	1.83	1.60	1.42	1.27	1.14	1.03
	Multi	4.85	3.83	3.13	2.62	2.24	1.94	1.71	1.51	1.36	1.22	1.11
Safe wind suction loading (kN/m²)	Single	-7.85	-7.12	-6.52	-5.98	-5.50	-5.06	-4.65	-4.28	-3.95	-3.64	-3.36
	Double	-4.57	-3.67	-3.04	-2.58	-2.23	-1.96	-1.74	-1.57	-1.42	-1.30	-1.20
	Multi	-4.93	-3.92	-3.23	-2.73	-2.36	-2.07	-1.84	-1.66	-1.51	-1.38	-1.28

Site Guidance

Guidance on delivery, offloadloading and construction can be [found here](#). These recommendations should be considered together with our typical construction details (see useful links opposite).

Packaging

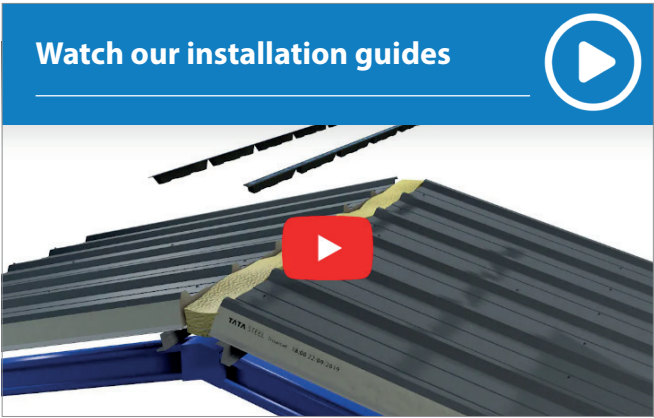
Trisomet® panels are stacked onto wooden pallets. The number of panels per pack will vary according to the length and thickness of panel, typically panels are packed in stacks up to 1100mm high and will have maximum weight of 1.5 tonnes.

Our pallets are sourced from an FSC certified supplier and are returnable for repair and recycling. The panels are protected for transportation and storage by a baseboard and polymer shrink wrap. Local arrangements should be checked for recycling of these items.

Maximum pack size

Maximum number of panels within a pack for varying panel lengths.

Table 11 - Panel thickness (mm)	Panel Length (m)	No. of Panels
40	2 – 7.5	19
	7.5 – 8	17
	8 – 9.5	15
	9.5 – 13	13
	13 – 16	9
	16 – 20	7
60	2 – 10	14
	10 – 11.5	11
	11.5 – 14.5	9
	14.5 – 18.5	7
80	18.5 – 20	5
	2 – 10	11
	10 – 13	9
	13 – 17.5	7
100	17.5 – 20	5
	2 – 12	9
	12 – 16	7
120	16 – 20	5
	2 – 16	8
135	16 - 20	5
	2 – 16	7



Other useful links and downloads

- Declarations of performance
- BES 6001 Certification
- LPCB fire approval certification
- FM Approval certificate
- Roof CAD drawings
- Vertical wall CAD drawings
- Horizontal wall CAD drawings
- Request a CPD



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