TATA STEEL

TATA

Building Systems UK

A Tata Steel enterprise

Building envelope and decking systems

Our full range at a glance

Contents

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Tata Steel

Used globally, supplied locally, our innovative construction products have inspired pioneering sustainable projects world-wide.

Creating steel now for a sustainable future

To help shape tomorrow's society and contribute to a sustainable future, we are building a leading European steel business that is sustainable in every sense. Our work on building transparent and responsible supply chains is being delivered through certification to BES 6001, the BRE responsible sourcing standard. Our sustainable reporting, through Environment Product Declarations (EPDs), is helping our customers to demonstrate their commitment to the environment securing increased points in sustainability certification schemes such as BREEAM and LEED.

Innovative products

Responsibly sourced, our construction products include lightweight composite floor decks that are quick to construct and capable of covering long spans to create flexible open spaces; steel tubes that support pioneering buildings world-wide and help supply gas from the North Sea to market; and our world-class Colorcoat® products that are used together with our cladding systems to craft inspiring energy-efficient buildings that can withstand the most demanding applications.

These innovative products are supported through the services we offer ranging from the provision of guarantees, sustainable certification and digital data, to technical advice and software to help you with the design and installation of our products. Our guarantees show how we are taking a wider responsibility for our products and the building envelope systems they become part of, taking full responsibility for their performance and quality.

Passionate people

What makes us different is our approach to business. We believe our strength is how we build collaborative relationships that create new successes for our customers. Taking a proactive approach, we are unique in sharing our deep knowledge of steel, advising on how to best use our construction products with designs tailored to meet clients requirements from energy efficiency to longevity.

Smart steel for a smarter future

Digitalisation runs through all aspects of our life – we are working with many companies, organisations and influencers to help drive digital standards, adoption and capability.

Our pioneering digital tools are award winning, enabling secure access to all our product information – how you want, when you want, to the level of detail you want, and in the format you want.

We are focused on how our digital tools and platforms can help drive the digital transformation of the construction industry. Through managed, structured, interpolatable data, many benefits can be realised in terms of supply chain efficiency, sustainability, circular economy and productivity.

Manufactured in the UK

Our comprehensive range of building envelope and structural products are all made in the UK through our Shotton site in North Wales. They are produced by a fully integrated UK supply chain which covers steelmaking through to galvanizing and deck roll forming lines.

With such a diverse product portfolio and over 60 years' experience, we are uniquely able to offer the specifier an unbiased solution to meet the design criteria for any project.

Our sustainable approach

Acting now to protect tomorrow, Tata Steel are committed to reducing embodied carbon by delivering carbon neutrality by 2050 and minimising whole life carbon by working together with customers.

Our comprehensive range of steel faced roof and wall cladding and metal decking profiles are the most durable on the market, having achieved the highest sustainability standards including accreditation to BES 6001, the Responsible Sourcing Standard for construction products.

Our digital tools like our DNA profiler and our Combined Platform will assist in your efficient design and responsible procurement.

EPDs

As the first manufacturer to become an Environmental Product Declaration (EPD) programme operator, Tata Steel now has the ability to create product specific EPDs for our systems that comply with EN 15804 and ISO 14025 standards.

Being able to supply product specific Type III externally verified EPDs, along with BES 6001 responsible sourcing certification, assists our construction supply chains to accrue points under building certification schemes, such as LEED and BREEAM, on their projects.

In addition, the level of transparency and reporting afforded by our operatorship of an EPD programme, helps optimum resource decisions to be made and demonstrates the sustainability of steel and our steel building products.

BIM: the way you want it

The DNA profiler is the first product data tool of its kind that will allow you to access Tata Steel's product data using a large range of BIM software formats. You can now search for any of our construction products for your building envelope or metal decking solution including ComFlor®, Formawall®, RoofDek, Trimapanel®, Trisobuild® and Trisomet®. Bespoke models can be created on request for Trisobuild® Tailored or Trisobuild® Linear Plank products.

Each of the DNA Profiler's data-rich BIM objects feature contact details, mechanical properties, performance characteristics, maintenance requirements and guarantee periods. This powerful resource is free for download and can be found at www.tatasteelDNAprofiler.com

COMBINED platform

The COMBINED platform is a building envelope design and configuration plug-in tool created for professional architects, specifiers, contractors and procurement managers.

The plug-in works directly with the Revit, ArchiCAD, Allplan, SketchUp and AutoCAD platforms, providing an interface through which architectural professionals can independently configure and manage a system build-up from the full range of Tata Steel building envelope products.

These plug-ins can be accessed directly via our website www.tatasteeleurope.com

For more information on our building envelope or structural products, please contact:
T: +44 (0) 1244 892199

For technical advice on our building envelope products:
E: technical.envelopeproducts@tatasteeleurope.com

For technical advice on our structural products:
E: technical.structuralproducts@tatasteeleuorpe.com

Building Systems UK

A Tata Steel enterprise

Formawall®, Trimapanel® and Trisomet®

Steel faced insulated roof and wall sandwich panels

Tata Steel offers the most extensive and efficient range of fully traceable steel faced PIR insulated panels. Designed and developed to provide high quality building envelope solutions, our panels are suitable for a variety of markets.

Built to last, the single-fix component offers vast design possibilities with smooth-faced and trapezoidal profiled products available in both Colorcoat HPS200 Ultra® and Colorcoat Prisma® pre-finished steel which offer an extensive colour choice.

Our panels are manufactured in factory conditions operating to Quality Management standard BS EN ISO 9001:2015 and Environmental Management standard BS EN ISO 14001:2015 with full traceability of all component materials and certified 'Very Good' to BRE's responsible sourcing standard BES 6001.

Platinum® Plus – a guarantee of enduring performance

The most comprehensive building envelope guarantee available, made unique with our technical support from specification to completion, and beyond – including those all-important final checks during installation.

We provide technical assistance at every stage of the project, with a single point of contact to ensure your specification meets the needs of the building owner.

Platinum® Plus incorporates the highest quality components that provide you with unrivalled choice and flexibility in the specification of your building envelope solution. With coverage for 25 years the guarantee is both direct with Tata Steel and transferrable with ownership of the building.

Using our online specification tool guarantees compliance to Platinum® Plus so that the roofing and cladding components listed are compatible and perform together as a building envelope system for superior asset protection. Alternatively, our product information is also available via NBS Chorus.

Complex buildings need tailored solutions

Design your specification around the particular requirements of the building and its function using our online specification builder, complete with 3D product previews and access to our full range of colours.

Designed by our technical team, the online tool is a valuable resource that will help you create Platinum® Plus specifications to suit the needs of your project, making sure all roofing and cladding components listed are compatible and perform as a system.

The specification builder gives you free access to our technical team who will support you from design to completion – including those all-important final checks during installation. The specification builder is super easy to use and all your specifications can be managed and stored for easy access in 'My projects'.

Reaction and resistance to fire

All our steel faced insulated roof and wall panels are supplied in accordance with the Building Regulations. Our panels are fully tested and classified for reaction and resistance to fire with insurance approval to the Loss Prevention Certification Board (LPCB) LPS 1181-1 and FM Global.

Underpinned by Confidex®

Our portfolio of high quality panels is available as standard with the market leading Colorcoat HPS200 Ultra® and Colorcoat Prisma® pre-finished steel which are covered by the Confidex® Guarantee, offering long-term performance and assurance for up to 40 years.

Technical support freely available

The products are fully tested by third parties for criteria such as thermal performance, fire safety, air-tightness, and resistance to water penetration. This together with our extensive and unbiased technical support sets us apart. We will recommend the most appropriate system for your project to provide you with a building envelope solution that meets your requirements, performance criteria and is long lasting.

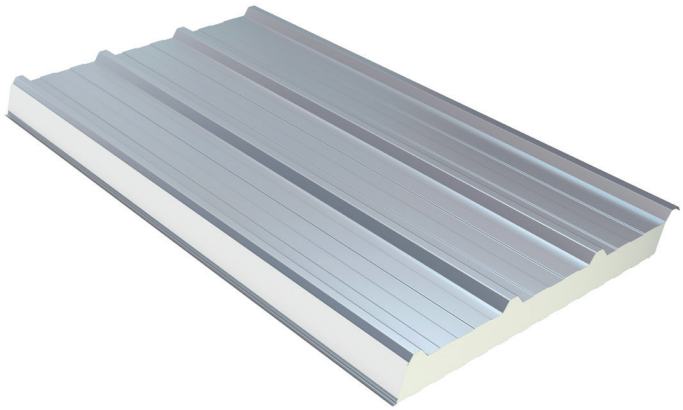
We offer support on:

- Specification writing.
- Detail design.
- Wind and snow load calculations.
- Advice on maximising BREEAM credits.
- U-value calculation.
- Load span checks.
- Acoustic SRI predictions.
- Building Regulation advice.
- Assistance with SBEM.
- Condensation risk analysis.
- Fire performance.
- LCA calculations and product specific EPDs to EN 15804 including modules A, C and D.

For further information on any of our panel products or help creating your Platinum® Plus specification or using the tool, please contact our Technical Department:
T: +44 (0) 1244 892199
E: technical.envelopeproducts@tatasteeleurope.com
www.tatasteeleurope.com/speccreator

Trisomet®

Our trapezoidal roof and wall panel is manufactured as a single component allowing fast installation.

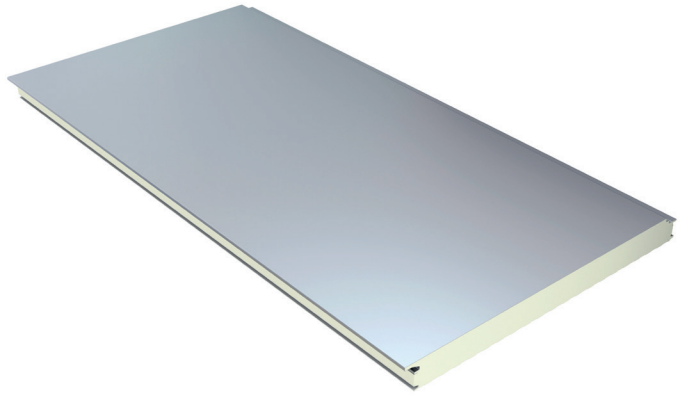


Suitable for roof and wall applications, Trisomet® benefits include:

- Core depths from 40mm to 135mm providing U-values down to 0.15W/m²K.
- Approved to FM Class 4880, 4881 and 4471 to an unlimited wall height.
- LPCB (Loss Prevention Certification Board) approval to LPS 1181 Part 1.
- Fire resistance performance of up to 30 minutes insulation and 4 hours integrity achievable with standard fixing and sealing methods.
- When used in conjunction with Colorcoat HPS200 Ultra®, PV modules can be installed at any point throughout the Confidex® duration and will be covered for the remainder of the guarantee period. Future proofing your building so that it is PV ready.
- Technical data and drawings available in BIM ready format.

Formawall®

A smooth-faced, flat, secret fix, insulated panel that provides a high-end architectural appearance.



Formawall® is available in Colorcoat Prisma® pre-finished steel in a range of colours. Suitable for high-end aesthetically pleasing wall applications, Formawall® offers the following benefits:

- Core depths from 70mm to 120mm providing U-values down to 0.17W/m²K.
- Approved to FM Class 4880 and 4881 to an unlimited wall height.
- LPCB (Loss Prevention Certification Board) approval to LPS 1181 Part 1 helps reduce insurance premiums and assures reaction to fire performance.
- Fire resistance performance of 15 minutes insulation and 4 hours integrity achievable with enhanced fixing methods (horizontally or vertically laid).
- Technical data and drawings available in BIM ready format.

PLATINUM® PLUS SYSTEM GUARANTEE

LPCB

FM APPROVED

confidex

BES 6001 Responsible Sourcing www.greenbooklive.com

EPD THIRD PARTY VERIFIED ISO 14025 & EN 15804

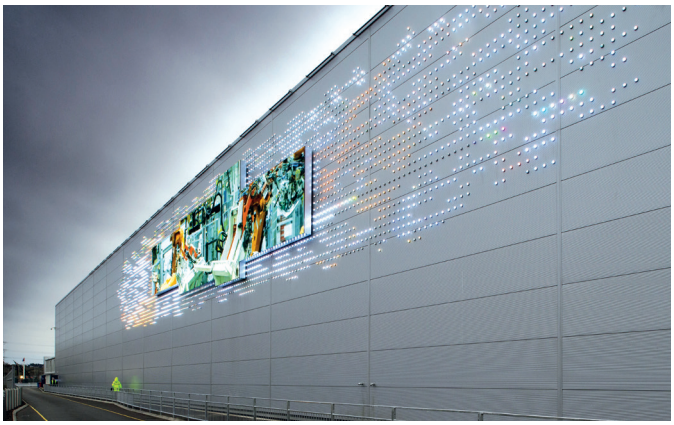
Trimapanel®

Our insulated architectural wall panels provide the ability to create a simplistic design with a one piece component.

The Trimapanel® family includes a range of steel faced insulated architectural wall panels, from micro-rib to smooth finishes, providing attractive external aesthetics.

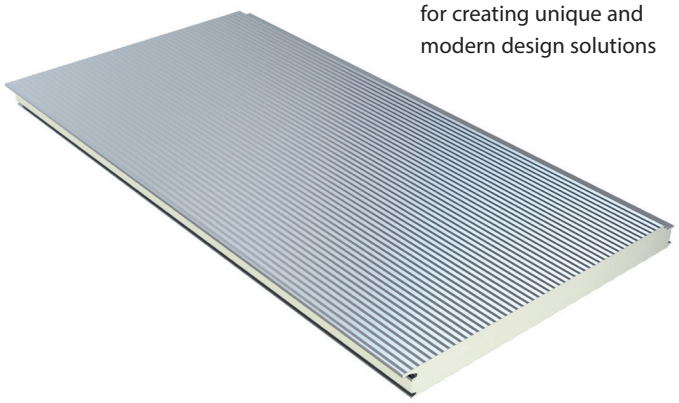
Suitable for wall applications, Trimapanel® benefits include:

- Core depths from 70mm to 120mm providing U-values down to 0.17W/m^{2}K.
- Flexible design allows vertical and horizontal panel installation.
- Secret-fix joint design allows primary fixings to be hidden from view, providing an uninterrupted external surface.
- Available with a wide range of flashing options, ancillaries and fabricated corner and curved panel options.
- Approved to FM Class 4880 and 4881 to an unlimited wall height.
- LPCB (Loss Prevention Certification Board) approval to LPS 1181 Part 1.
- Fire resistance performance of 15 minutes insulation and 4 hours integrity achievable with enhanced fixing methods.
- Technical data and drawings available in BIM ready format.



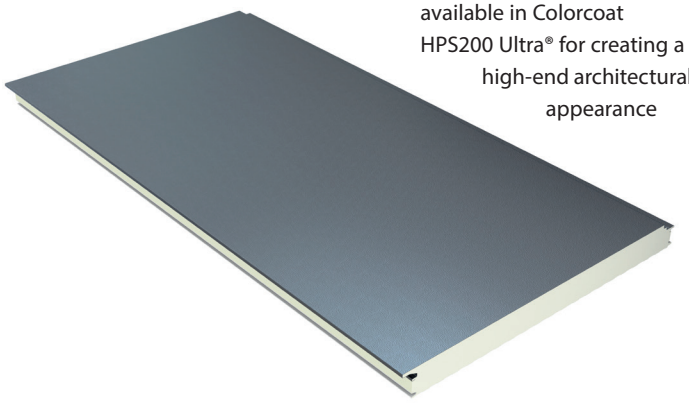
Trimapanel® micro-rib

Architectural wall panel for creating unique and modern design solutions



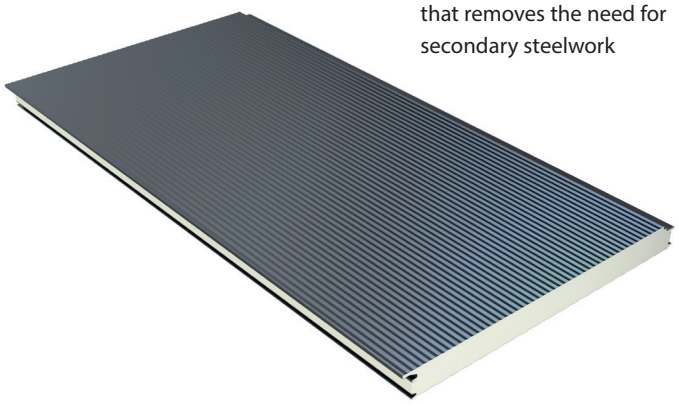
Trimapanel® flat

Smooth finish panel available in Colorcoat HPS200 Ultra® for creating a high-end architectural appearance



Trimapanel® FTF (frame to frame)

Enhanced long-span panel that removes the need for secondary steelwork



Building Systems UK

A Tata Steel enterprise

Trisobuild®

Site assembled roofing and cladding systems

Tata Steel offers a comprehensive range of Trisobuild® systems tailored to meet the requirements of your building specification. Our internal and external profiles offer design flexibility with an offering from 19mm to 46mm deep and a choice of perforated liners for acoustic applications.

Trisobuild® systems can be tailored to meet your design requirements including fire resistance and acoustic performance. All our Trisobuild® systems comprise of a Colorcoat® pre-finished steel trapezoidal liner profile, a spacer system, an insulation layer and a Colorcoat® pre-finished steel external weathering profile.

Our site assembled roof and cladding systems are manufactured in factory conditions operating to Quality Management standard BS EN ISO 9001:2015 and Environmental Management standard BS EN ISO 14001:2015 with full traceability, all our steel profile components are certified 'Very Good' to BRE's responsible sourcing standard BES 6001.

Platinum® Plus – a guarantee of enduring performance

Platinum® Plus is a system guarantee for 25 years, derived from a tailored specification to suit your building function. Our reputable supply chain partners and commitment to responsible sourcing creates an enhanced building envelope system that is robust and proven. Platinum® Plus offers enduring durability and building performance, lowering cost of ownership through the life of the building.

Made unique with our technical support from specification to completion, and beyond – including those all-important final checks during installation. Technical assistance is provided at every stage of the project, with a single point of contact to ensure your specification meets the needs of the building owner. The guarantee is direct with Tata Steel and is fully transferable on change of ownership of the building.

Platinum® Plus covers our roof and wall cladding systems, and combined with our supply chain partners supporting high-quality components means we are able to provide design flexibility and integrity of the overall system from end-to-end.

Reaction and resistance to fire

When used as an external wall, Trisobuild® systems using Colorcoat HPS200 Ultra® pre-finished steel as their external finish can be used where B-s3, d2 or equivalent are required in accordance with Table 12.1 (note 2) of the Approved Document B (fire). This allows use in all building types except for 'relevant buildings' as defined in Regulation 7(4). For buildings of this type Colorcoat Prisma® pre-finished steel should be used as the external finish which provides an A1 classification.

Trisobuild® wall systems have been third party assessed for fire resistance performance and have been shown to provide up to 4 hours fire integrity resistance and 1 hour fire insulation resistance. Detail specifications are available from our Technical department. All Trisobuild® roof systems when finished in Colorcoat HPS200 Ultra® will achieve a $B_{ROOF}(t4)$ in accordance with EN 1187. All Trisobuild® roof systems when finished in Colorcoat Prisma® are deemed to meet all requirement for roofing without need to test. This means that all Trisobuild® roof systems can be specified for all roofing applications.

No-fuss online specification tool

Our online specification builder is super easy to use, complete with 3D product previews and access to our full range of colours, and can be found at www.tatatsteelconstruction.com/specbuilder Manage all your specifications from 'My projects'.

Instaloc® Plus spacer system

The Instaloc® Plus spacer system from Tata Steel provides a stronger design than a conventional spacer. This design is incorporated into both Trisobuild® roof and vertical wall systems and provides a stable platform with depths available from 140mm up to 400mm in 20mm increments. This increased strength allows designers to specify deeper systems to comply with the demands of lower U-value requirements. Comprehensive testing has shown that the bracket spacing can extend to 1200mm in most load cases, saving time and material cost as well as complementing standard insulation quilt widths.

Technical support freely available

All our products are fully tested by third parties for criteria such as thermal performance, fire safety, air-tightness, and resistance to water penetration. This together with our extensive and unbiased technical support sets us apart. We will recommend the most appropriate system for your project to provide you with a building envelope solution that meets your requirements, performance criteria and is long lasting.

We offer support on:

- Specification writing.
- Detail design.
- Wind and snow load calculations.
- U-value calculation.
- Load span checks.
- Acoustic SRI predictions.
- Building Regulations advice.
- Assistance with SBEM.
- Advice on maximising BREEAM credits.
- Condensation risk analysis.
- Fire performance.
- LCA calculations and product specific EPDs to EN 15804 including modules A, C and D.

For further information on our Trisobuild® products or advice on the Instaloc® Plus system, please contact our Technical Department:
T: +44 (0) 1244 892199
E: technical.envelopeproducts@tatasteeleurope.com
www.tatasteeleurope.com

PLATINUM® PLUS SYSTEM GUARANTEE

LPCB LOSS PREVENTION CERTIFICATION BOARD

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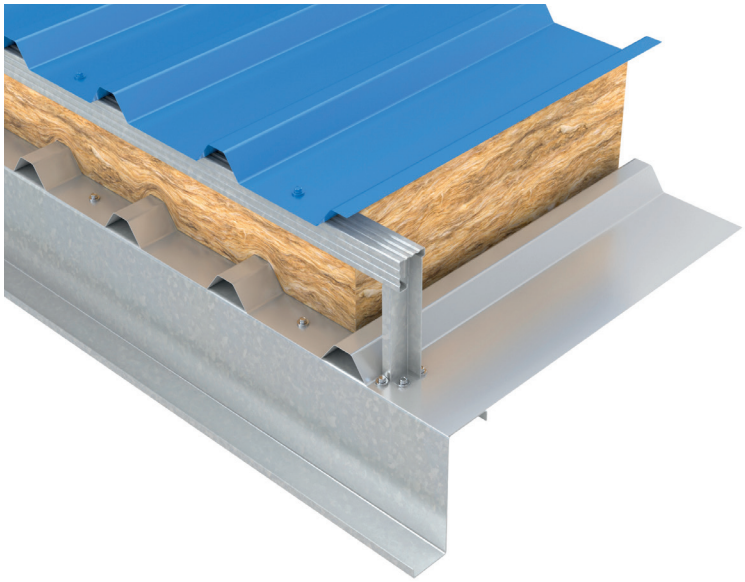
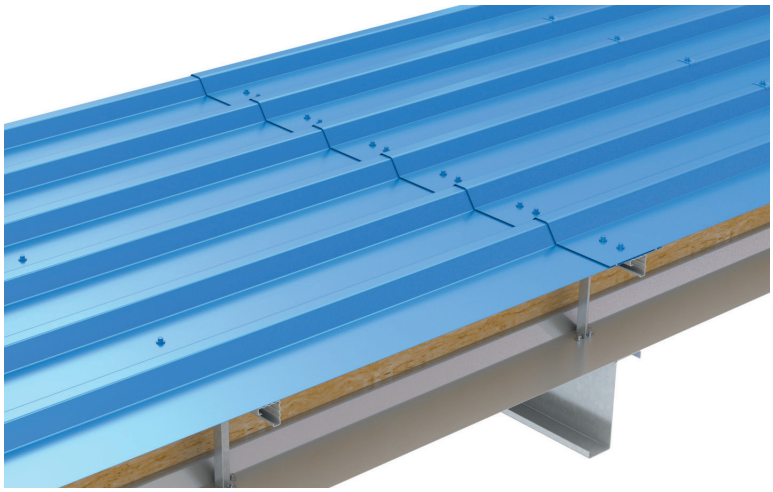
EPD THIRD PARTY VERIFIED ISO 14025 & EN 15804

Trisobuild® R and RWL



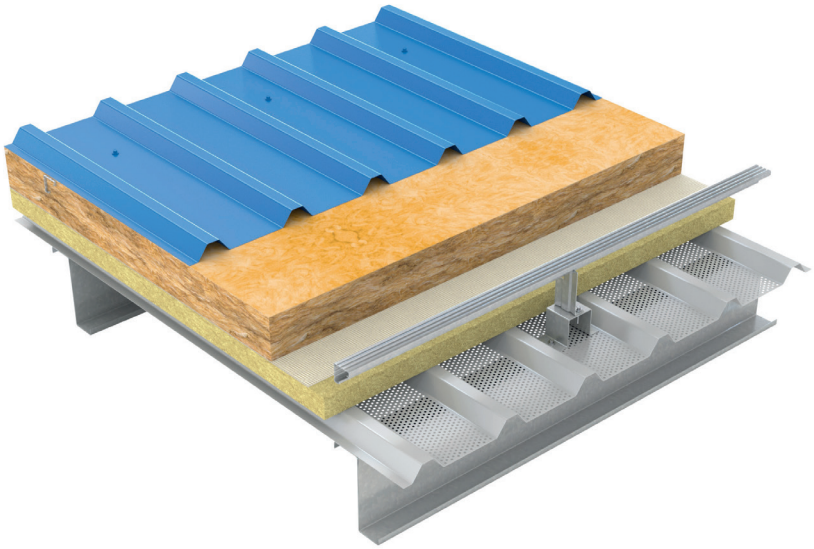
Roof and walkable liner (R and RWL) systems are fully compliant with ACR non-fragility standards. Our roof systems can be adapted to suit a wide range of U-value performances with proven air-tightness that meet and surpass all Building Regulation requirements. Available with a walkable liner option and a range of GRP in plane rooflight options to provide natural diffused daylight into your building.

Trisobuild® CR



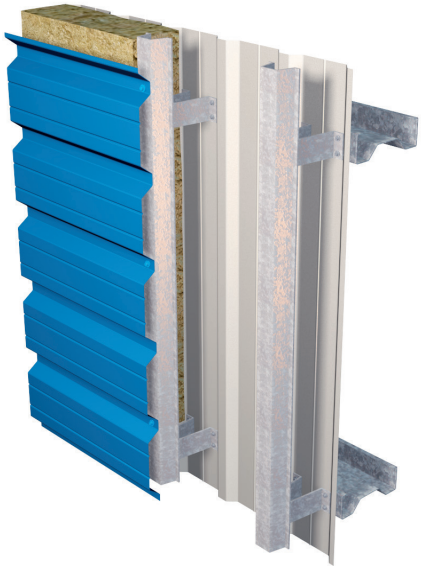
The curved roof (CR) system provides the same flexibility as our standard roof systems, with the addition of enhanced detailing providing proven weather tightness performance down to a naturally curved 40m radii. Advice and specification can be tailored to the project requirements.

Trisobuild® SA1



Our range of sound absorption (SA) systems are suitable for roof and wall applications, that can be specified to meet the required acoustic performance standards for your project. Whether you are looking to consider sound reduction, sound absorption or rain noise reduction, our engineers will be able to design a system that meets your needs.

Trisobuild® HW



Horizontal wall (HW) systems include Tata Steel's vertically laid liner on standard horizontal secondary cladding rails. With an Instaloc® HW spacer system which spans easily between the support points to carry a range of standard horizontally laid external trapezoidal, plank and sinusoidal profiles. These options can be expanded upon using our additional range of special profiles, providing a unique look for any project.

Trisobuild® VW

Vertical wall (VW) systems can be specified with non-combustible components that are available in a range of standard trapezoidal and sinusoidal profiles. The beauty here is that the system can be tailored to your specific requirements, incorporating unique aesthetics using Tata Steel's extensive range of profiles.

Trisobuild® FW

Our Trisobuild® fire wall (FW) systems are unique in offering specifications that will provide fire insulation resistance ratings of 15, 30 and 60 minutes, together with 4 hours fire integrity resistance for all systems. The systems can be specified as vertical or horizontal, they can achieve their declared performance with standard installation methods and do not require internal stitching.

Insurance requirements

Trisobuild® systems can meet the requirements of the insurance based tests and are seen as not contributing significantly to the fire load in the building. Trisobuild® roof and wall systems are approved to LPS1181-1 by the Loss Prevention Council Board (LPCB).

For more information on our full Triosbuild® range, please visit our website or contact our Technical Department:
T: +44 (0) 1244 892199
E: technical.envelopeproducts@tatasteeleurope.com
www.tatasteeleurope.com

Trisobuild®
Roof profiles

Tata Steel offers an attractive range of roof profiles to meet both the aesthetic and structural requirements of the designer.

Load/span figures

The load/span information in the table below is based on safe loads over a 1.8m span and a deflection limit of L/200 and should be used as a guide only. For full load span table information please visit our website or contact the Technical Department.

Curving

Although the self curve minimum values shown have been chosen with aesthetics in mind some stress marking may be present in the profile trough. The factory curved data relates to a single convex curve.

For further information on the design and detailing of Trisobuild® CR systems, double or wave curves please contact our Technical Department:
T: +44 (0) 1244 892199
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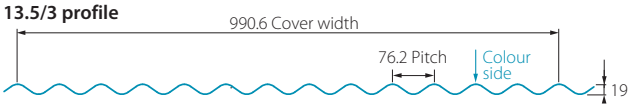
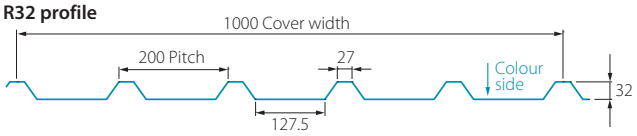
www.tatasteeleurope.com

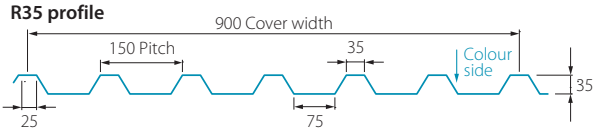
13.5/3 profile



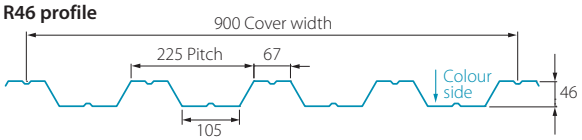
R32 profile



R35 profile



R46 profile



Note: All measurements in diagram are in mm.

Roof profile range

Profile	Material and available finish	Gauge (mm)	Weight (kg/m²)	Max. load for a 1.8m span						Max. sheet length	Min. convex self curve (m)	Min. factory curve (mm)*	Min. roof pitch***
				Imposed load (kN/m²)			Wind suction load (kN/m²)						
				Single span	Double span	Multi span	Single span	Double span	Multi span				
13.5/3	Steel (H, HDS, P & LG)	0.7	6.90	0.37	1.00	1.00	–	1.21	1.47	8000	30	NA	10
R32	Steel (H, HDS, P & LG)	0.7	6.76	1.38	1.24	1.50	1.47	1.75	2.18	16000	40	400	4
	Aluminium (MF, SA & CA)	0.9	2.99	0.60	1.18	1.42	0.90	1.59	1.98	16000	40	1000	4
R35	Steel (H, HDS, P & LG)	0.7	7.08	2.11	1.81	2.18	2.43	2.56	3.19	16000	55	NA	4
R46	Steel (H, HDS, P & LG)	0.7	7.36	3.01	1.82	2.15	3.87	4.07	5.10	16000	55	400	4
	Aluminium (MF, SA & CA)	0.9	3.25	1.74	1.63	1.92	2.31	3.61	4.51	16000	55	1000	4

Key:
H – Colorcoat HPS200 Ultra®
HDS – Colorcoat HPS200 Ultra® double sided
P – Colorcoat Prisma®
LG – Colorcoat® LG
MF – Mill finish aluminium
SA – Stucco embossed aluminium**
CA – Pre painted aluminium**

For an up to date list of our standard colours please contact our sales department.

* Measured to inside face.
** Subject to min order quantities.
*** Min. pitch after design deflections.

Profile manufacturing tolerance (This applies to all profiles)

Cover width (mm)	± 5
Squareness (mm)	< 0.5% of cover width
Length (mm) < 3m	+ 10, -5
Length (mm) > 3m	+ 20, -5

Tolerance is in accordance with BS EN 14782

General reference

All measurements throughout this brochure are referenced in mm unless stated otherwise. Technical illustrations are not to scale.

Trisobuild®
Wall profiles

Tata Steel offers an attractive and economic range of wall profiles to meet the aesthetic requirements of the designer.

Load/span figures

The load/span information in the table below is based on a span of 1.5m and a deflection limit of L/150 and should be used as a guide only. For full load span table information please visit our website or contact the Technical Department.

Curving

The factory curved data relates to a single convex curve.

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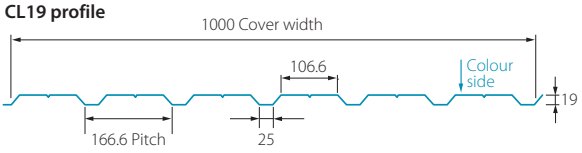
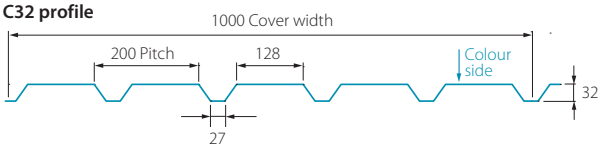
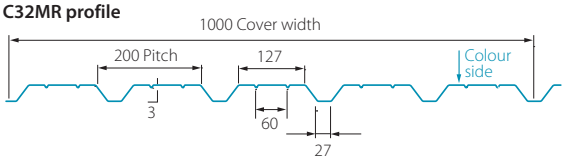
CL19 profile



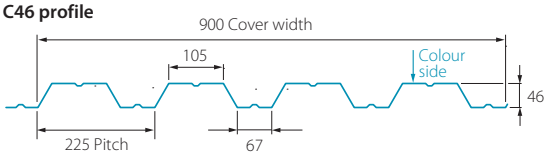
C32 profile



C32MR profile



C46 profile



Note: All measurements in diagram are in mm.

Wall profile range

Profile	Material and available finish	Gauge (mm)	Weight (kg/m²)	Max. load for a 1.5m span						Max. sheet length	Min. factory curve (mm*)	Suitable for horizontal use?
				Imposed load (kN/m²)			Wind suction load (kN/m²)					
				Single span	Double span	Multi span	Single span	Double span	Multi span			
13.5/3	Steel (H, HDS, P & LG)	0.7	6.90	1.01	1.60	1.94	1.01	1.60	1.94	8000	NA	Yes
	Aluminium (MF, SA & CA)	0.9	3.05	0.48	1.15	1.15	0.48	1.15	1.15	8000	NA	Yes***
CL19	Steel (H, HDS, P & LG)	0.5	4.53	0.53	0.74	0.89	0.79	0.84	1.05	10000	350	No
	Steel (H, HDS, P & LG)	0.7	6.34	0.91	1.35	1.64	1.22	1.50	1.88	10000	400	Yes***
C32 and C32MR	Steel (H, HDS, P & LG)	0.5	4.83	1.37	0.92	1.09	1.38	1.37	1.71	16000	400	No
	Steel (H, HDS, P & LG)	0.7	6.77	2.38	1.74	2.09	2.46	2.38	2.98	16000	400	Yes*** (MR only)
	Aluminium (MF, SA & CA)	0.9	2.99	1.49	1.58	1.89	1.45	2.31	2.89	16000	1000	Yes*** (MR only)
C46	Steel (H, HDS, P & LG)	0.5	5.25	1.78	1.26	1.47	3.45	3.08	3.86	16000	400	No
	Steel (H, HDS, P & LG)	0.7	7.36	3.67	2.44	2.86	5.82	5.50	6.88	16000	400	Yes***
	Aluminium (MF, SA & CA)	0.9	3.25	2.99	2.10	2.44	2.99	2.06	2.39	16000	1000	Yes***

Key:
H – Colorcoat HPS200 Ultra®
HDS – Colorcoat HPS200 Ultra® double sided
P – Colorcoat Prisma®
LG – Colorcoat® LG
MF – Mill finish aluminium
SA – Stucco embossed aluminium**
CA – Pre painted aluminium**

For an up to date list of our standard colours please contact our sales department.

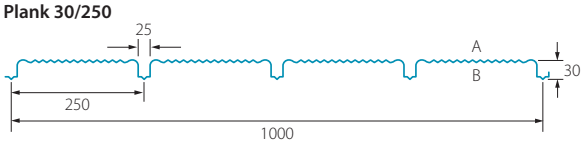
* Measured to inside face.
** Subject to min order quantities.
*** For horizontal cladding Tata Steel recommend the allowable variation in the outer flange level of the cladding rail with respect to a vertical datum line is L/600 (where L is the rail spacing).

Trisobuild®
Special wall profiles

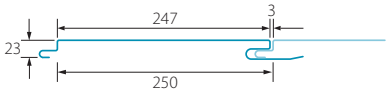
Tata Steel offers an attractive range of special order wall profiles in a range of finishes and colours to meet the aesthetic requirements of the designer.

Plank profiles

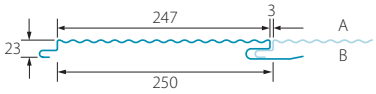
Plank 30/250



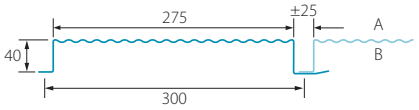
Plank 23/250



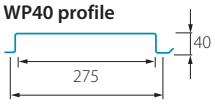
Plank 23/250 micro



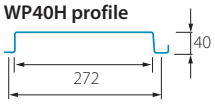
Plank 40/300 micro



WP40 profile



WP40H profile



Fabrications

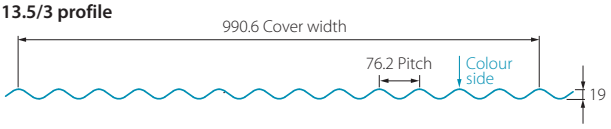
Tata Steel supply fabrications in a variety of girths to suit individual customers' requirements.

Alternative lengths are available upon request in girths between 250mm and 600mm. For high quality finishes a strippable film can be applied to the external surface for additional protection from scratches and scuff marks during subsequent handling and fixing.

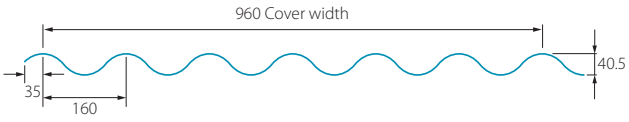
For further information on span tables, profile self weight, gauge options, external finish options and colour range, please contact our Technical Department:
T: +44 (0) 1244 892199
E: technical.envelopeproducts@tatasteeleurope.com
www.tatasteeleurope.com

Sinusoidal profiles

13.5/3 profile

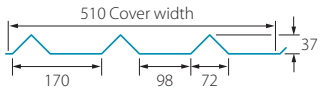


42/960 profile

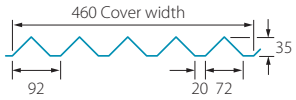


Pyramid profiles

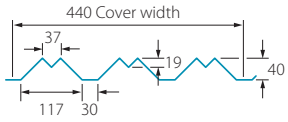
Pyramid 37/510



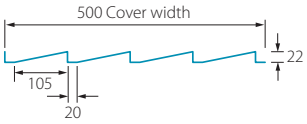
Pyramid 37/460



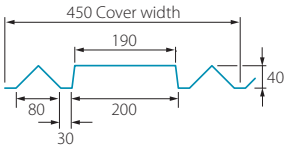
Diamond 40/440



PD 22/500

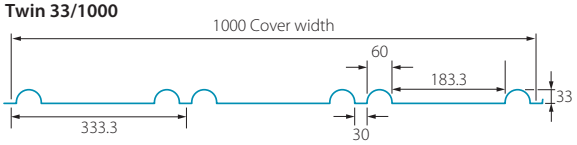


Pagode 40/450

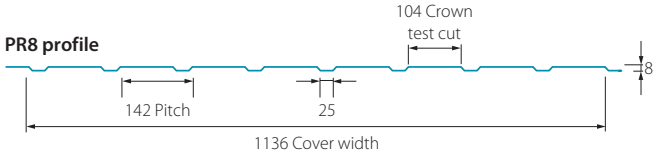


Special profiles

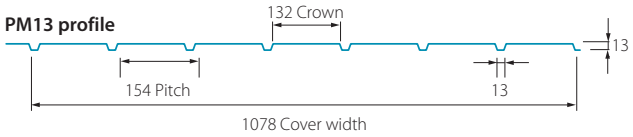
Twin 33/1000



PR8 profile



PM13 profile



Note: All measurements in diagram are in mm.

Trisobuild®
Liner profiles

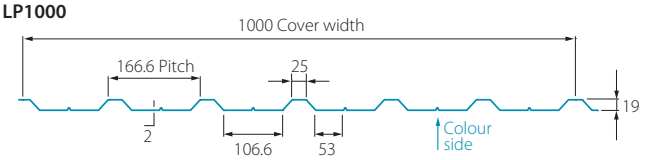
Tata Steel offers a range of liner profiles, which provide an attractive clean and highly reflective internal appearance. The RL32 liner can offer a working platform during the construction phase when specified non-perforated. When the RL32 is perforated it can facilitate various acoustic specifications, however should be classed as fragile.

Lengths
Long lengths are available, however for practical site handling purposes when using the 0.40mm gauge we would suggest these are kept to a maximum of 5.5m.

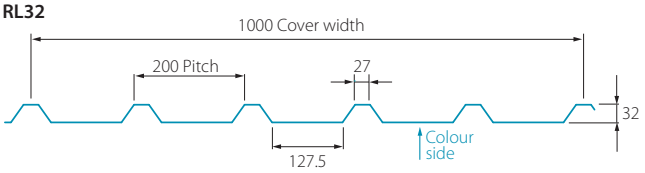
Spans
In a roof application, the spanning capabilities of the liner profiles are largely dependent upon their self-weight and the weight of the insulation they are required to support. If a working platform is required we recommend the RL32 in a 0.7mm steel thickness. If a non-fragility rating is required a maximum span and fixing arrangement will need to be specified.

For further information on non-fragility specifications, please contact our Technical Department:
T: +44 (0) 1244 892199
E: technical.envelopeproducts@tatasteeleurope.com
www.tatasteeleurope.com

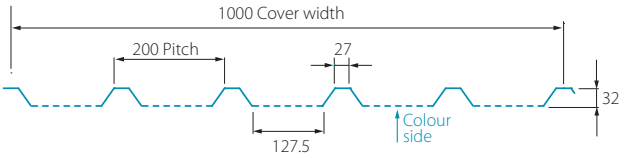
LP1000



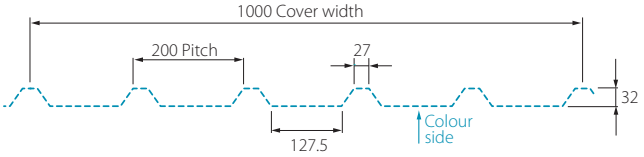
RL32



RL32 liner, trough perforated liner



RL32 liner, fully perforated liner



For structural desks and liner trays please refer to our RoofDek brochure, this can be found at www.tatasteeleurope.com

Note: All measurements in diagram are in mm.

Building Systems UK

A Tata Steel enterprise

Trisobuild® façade range
Non-combustible rainscreen systems

Tata Steel offers a range of innovative rainscreen façade options which are non-combustible and designed to be used on both new-build and refurbishment projects, creating clean linear lines and unique aesthetics through a wide range of profiles and extensive colour range.

Rainscreen façades comprise of a multi-part system, with the principal purpose of providing a high-value and often complex decorative façades, whilst providing protection to the underlying structure, allowing the building to breathe, without risk of interstitial condensation of structural degradation. These systems derive their performance from the ventilated zone between the insulation and the weathering screen, which minimises thermal cold bridging and allows for water to be drained from within the cavity and any remaining humidity to evaporate through the air gaps.

Acknowledging the growing concerns regarding the fire performance of such cladding systems, Tata Steel only offer façade systems comprising of non or limited combustible pre-finished steel products that are classified as A1 or A2-s1, d0 as defined by BS EN 13501-1:2018. We extend this to all components forming the system including rainscreen 'helping hand' support, fasteners and insulation elements and this is fully detailed and supported by our Platinum® Plus system guarantee.

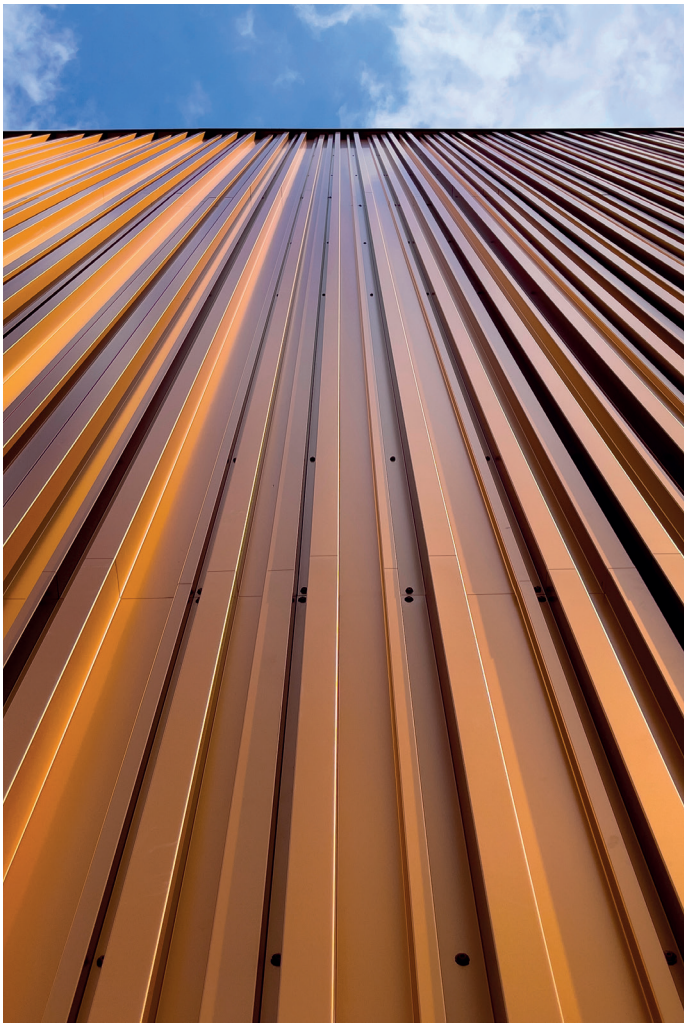
Platinum® Plus – a guarantee of enduring performance

Platinum® Plus is a system guarantee for 25 years, derived from a project specification to suit the building function. Our reputable supply chain partners and commitment to responsible sourcing creates an enhanced building envelope system that is both robust and proven. Platinum® Plus offers enduring durability and assured building performance, lowering the cost of ownership throughout the service life of the building.

Made unique with our technical support from specification to completion, and beyond – including those all-important final checks both during and post-installation. Technical assistance is provided at every stage of the project, with single point of contact to ensure your specification meets the needs of the building owner. An important feature of the guarantee, is that it is between the building owner and Tata Steel (without intermediaries) and is fully transferable on change of ownership of the building.

Technical support

All Tata Steel products are fully tested by third parties for criteria such as reaction and resistance to fire, thermal performance, hard and soft body impact and resistance to water penetration. This together with our extensive and unbiased technical support sets us apart. We will recommend the most appropriate system for your project to provide you with a building envelope solution that meets your requirements, performance criteria and maximises the service life of your build.



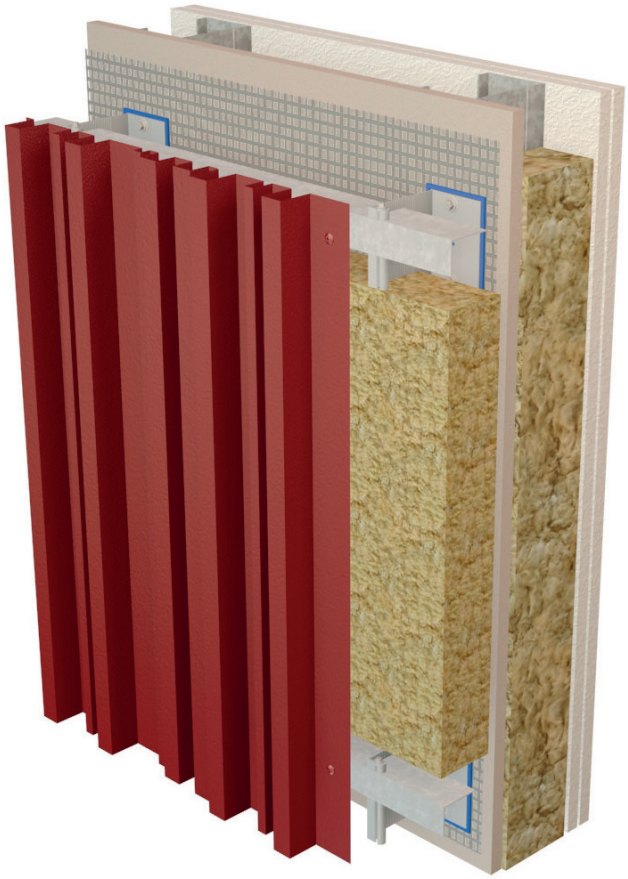
Product support is available to you directly through our online DNA Profiler, or the COMBINED (Connected & Managed Building Envelope Design) Platform which allows complete BIM integration with your existing CAD platform, providing a full suite of analysis features such as thermal performance, condensation risk analysis and wind and snow calculations in what is a unique and market leading design and configuration tool.

For further information on non-combustible rainscreen systems, please contact our Technical Department:
T: +44 (0) 1244 892199
E: technical.envelopeproducts@tatasteeleurope.com
www.tatasteeleurope.com

Trisobuild® façade range
Trisobuild® Tailored Profiles

Put your stamp on your building using the newly launched Trisobuild® Tailored Profile range. Naturally inspiring façades with depth of geometry and fabricated in the Colorcoat Prisma® palette to perfectly complement one another.

Trisobuild® Tailored Profiles are a bespoke set of new steel profiles which have been developed to create striking geometry and to challenge the concept of traditional façades in the UK. The exciting new profile shapes and bright and bold Colorcoat® palette offer unparalleled creative freedom for building modern and contemporary looking structures that will provide truly unique and sensational building façades.



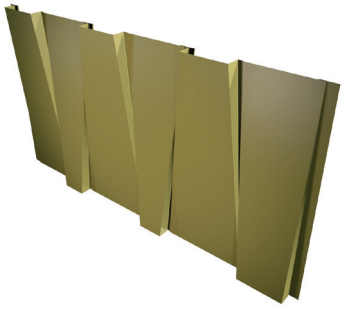
Trisobuild® Tailored Profiles components

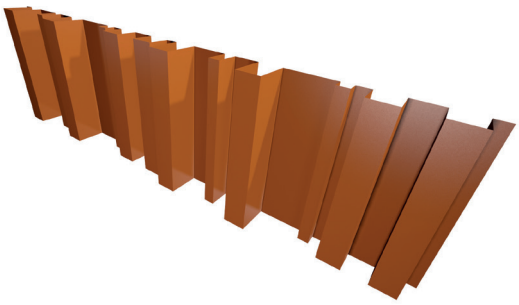
Outer sheet
Trisobuild® Tailored Profile range
Material: Colorcoat Prisma® including the option of a textured finish*, with 0.7mm metallic coated steel substrate
Cover widths: Varies by profile
Sheet lengths: 1m to 6m

Support system
Nvelope 'helping hand' system
Material: Mill finish aluminium or stainless steel
BBA Certificate: 19/5671
Bracket sizes: 40mm to 300mm

Fasteners
Material: Stainless steel only
Grade: A4 only

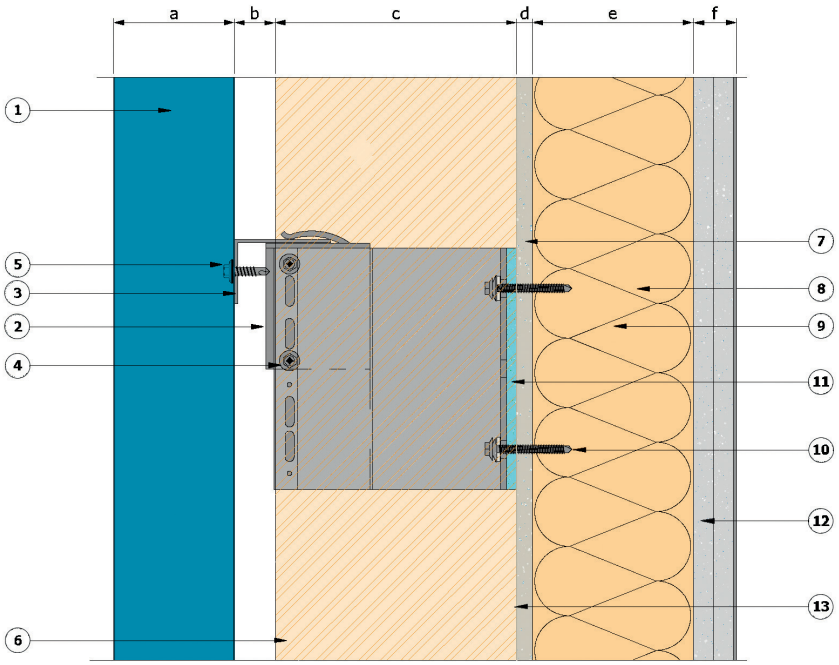
* See separate fire classification for Colorcoat Prisma® - textured.

Tapered Plank Profile


Castellated Profile


Louvred Profile


Vertical section



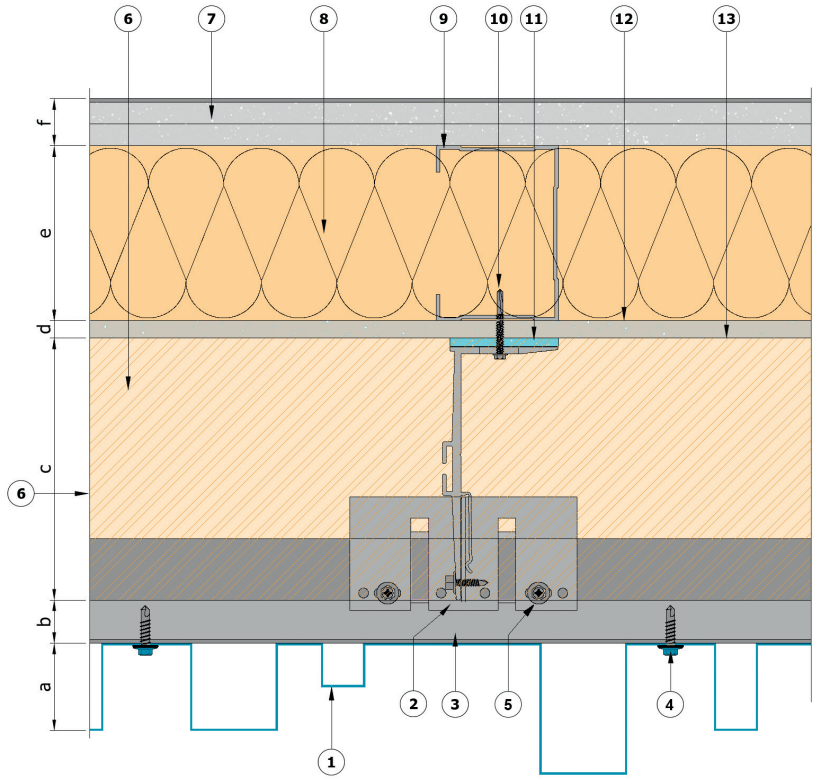
Parts list

1 Trisobuild® Tailored Profile (Colorcoat Prisma®).
2 Nvelope NH2 Aluminium carrier bracket (size TBC in specification).
3 Nvelope Aluminium 'L' rail (size TBC in specification).
4 Stainless steel fixing (TBC in specification).
5 Stainless steel fixing (TBC in specification).
6 Stone fibre slab insulation by others.
7 Wallboard by others.
8 Loose filled insulation by others.
9 SFS support structure by others.
10 Stainless steel fixing (TBC in specification).
11 Optional PVC thermal break - 5mm.
12 Cement particle board by others.
13 Breather membrane by others.

Legend

a Trisobuild® Tailored Profiles depth - varies.
b Cladding cavity (British standard - 25mm, NHBC - 38mm (baffled joints) and 50mm (open joints)
c Rigid sheet insulation (project specific depending on specified U-value).
d Sheeting board - 10mm or 12mm.
e SFS - 90mm to154mm (depending on system specification).
f Internal plasterboard - 30mm.

Horizontal section



Parts list

1 Trisobuild® Tailored Profile (Colorcoat Prisma®).
2 Nvelope NH2 Aluminium carrier bracket (size TBC in specification).
3 Nvelope Aluminium 'L' rail (size TBC in specification).
4 Color Headed Stainless steel fixing (TBC in specification).
5 Stainless steel fixing (TBC in specification).
6 Stone fibre slab insulation by others.
7 Wallboard by others.
8 Loose filled insulation by others.
9 SFS support structure by others.
10 Stainless steel fixing (TBC in specification).
11 Optional PVC thermal break - 5mm.
12 Cement particle board by others.
13 Breather membrane by others.

Legend

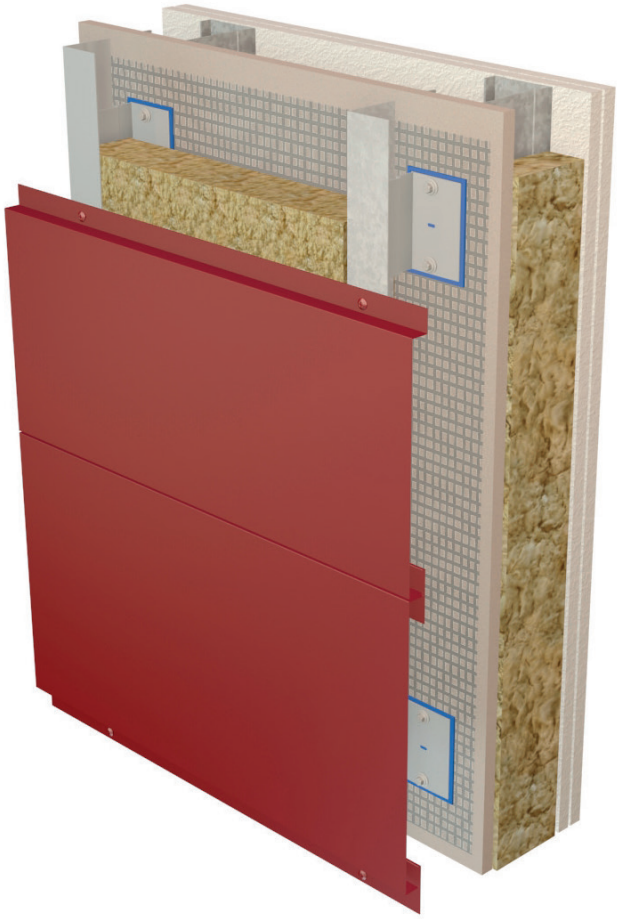
a Trisobuild® Tailored Profiles depth - varies.
b Cladding cavity (British standard - 25mm, NHBC - 38mm (baffled joints) and 50mm (open joints).
c Rigid sheet insulation (project specific depending on specified U-value).
d Sheeting board - 10mm or 12mm.
e SFS - 90mm to 154mm (depending on system specification).
f Internal plasterboard - 30mm.

Trisobuild® façade range

Trisobuild® Linear Plank

Versatile and cost-effective Trisobuild® Linear Plank is a concealed fix façade plank system with variable widths up to 500mm, available in a wide range of Colorcoat Prisma® finishes.

Traypanel systems were originally developed to provide an economic alternative to more sophisticated rainscreen systems, whilst continuing to offer an attractive and flexible façade option. Trisobuild® Linear Plank has been designed to allow freedom in orientation, flexibility in cover width, and the ability to include a variety of widths within the same façade. Manufactured from Colorcoat Prisma® pre-finished steel it allows the system to be classified as non-combustible and safely installed above 18m.



Trisobuild® Linear Plank components

Outer sheet

Trisobuild® Linear Plank Profile
Material: Colorcoat Prisma® including the option of a textured finish*, with 0.7mm or 1.2mm metallic coated steel substrate
Cover widths: 125mm, 300mm or 500mm (max) intermediate bespoke widths upon request
Sheet lengths: 1m to 6m

Support system

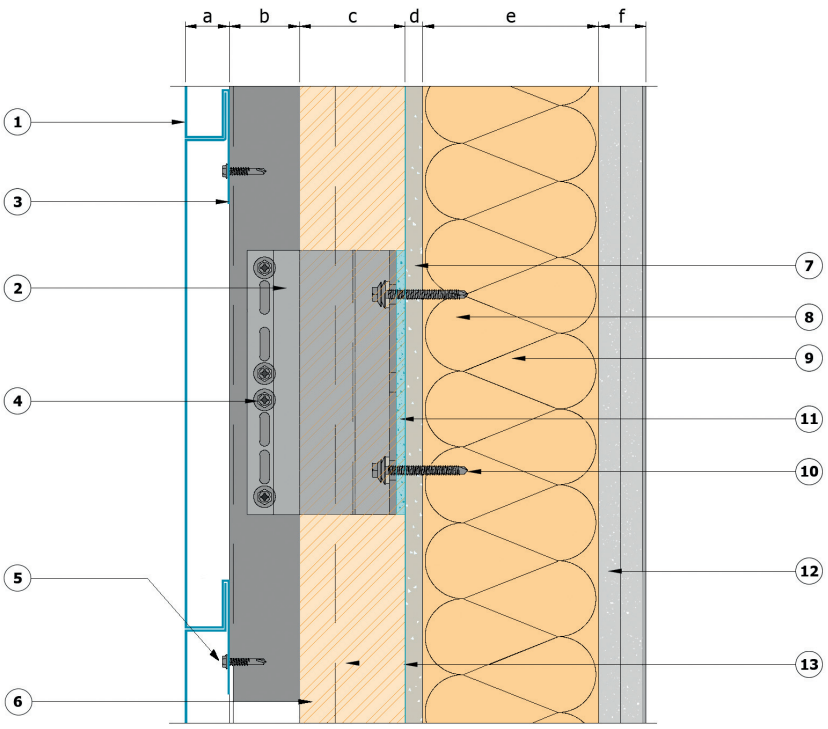
Nvelope 'helping hand' system
Material: Mill finish aluminium or stainless steel
BBA Certificate: 19/5671
Bracket sizes: 40mm to 300mm

Fasteners

Material: Stainless steel only
Grade: A4 only

* See separate fire classification for Colorcoat Prisma® - textured.

Vertical section



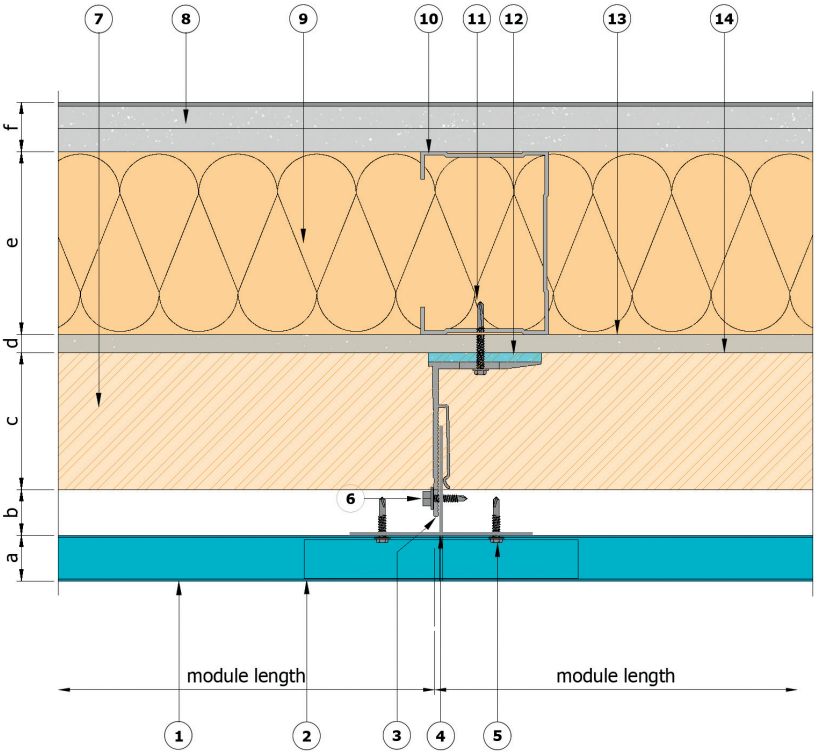
Parts list

1 Trisobuild® Linear Plank (1.2mm ColorCoat Prisma®).
2 Nvelope NV1 Aluminium carrier bracket (size TBC in specification).
3 Nvelope Aluminium 'T' rail (size TBC in specification).
4 Stainless steel fixing (TBC in specification).
5 Stainless steel fixing (TBC in specification).
6 Stone fibre slab insulation by others.
7 Wallboard by others.
8 Loose filled insulation by others.
9 SFS support structure by others.
10 Stainless steel fixing (TBC in specification).
11 Optional PVC thermal break - 5mm.
12 Cement particle board by others.
13 Breather membrane by others.

Legend

a Trisobuild® Linear Plank depth - 25mm.
b Cladding cavity: British standard - 25mm, NHBC - 38mm (baffled joints) and 50mm (open joints).
c Rigid sheet insulation (project specific depending on specified U-value).
d Sheeting board - 10mm or 12mm.
e SFS - 90mm to154mm (depending on system specification).
f Internal plasterboard - 30mm.

Horizontal section



Parts list

1 Trisobuild® Linear Plank (1.2mm ColorCoat Prisma®).
2 Plank Butt Strap.
3 Nvelope NV1 Aluminium carrier bracket (size TBC in specification).
4 Nvelope Aluminium 'T' rail (size TBC in specification).
5 Stainless steel fixing (TBC in specification).
6 Stainless steel fixing (TBC in specification).
7 Stone fibre slab insulation by others.
8 Wallboard by others.
9 Loose filled insulation by others.
10 SFS support structure by others.
11 Stainless steel fixing (TBC in specification).
12 Optional PVC thermal break - 5mm.
13 Cement particle board by others.
14 Breather membrane by others.

Legend

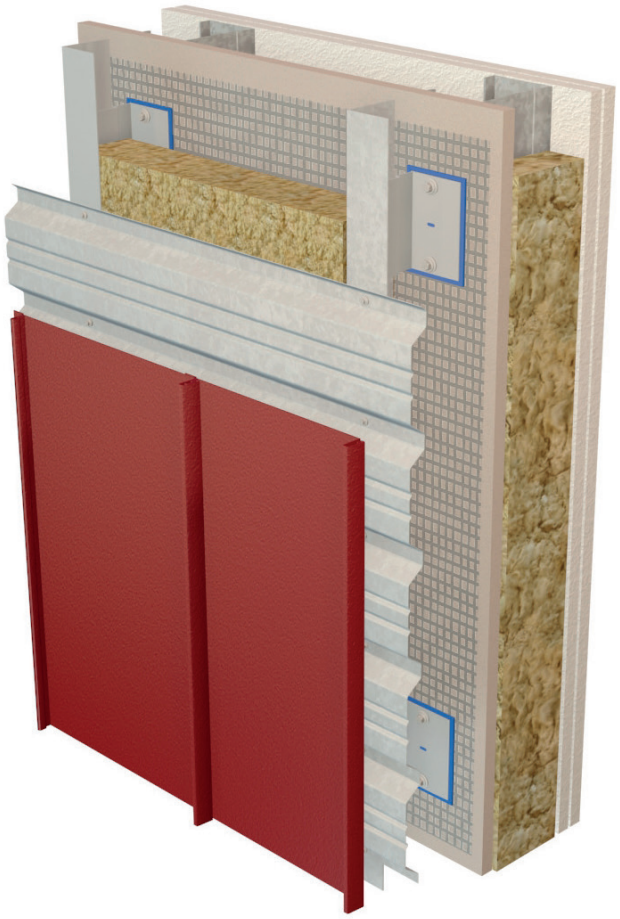
a Trisobuild® Linear Plank depth - 25mm.
b Cladding cavity: British standard - 25mm, NHBC - 38mm (baffled joints) and 50mm (open joints).
c Rigid sheet insulation (project specific depending on specified U-value).
d Sheeting board - 10mm or 12mm.
e SFS - 90mm to 154mm (depending on system specification).
f Internal plasterboard - 30mm.

Trisobuild® façade range

Trisobuild® Seam

Trisobuild® Seam is a long strip standing seam façade system which provides an aesthetic alternative to traditional hard metal systems for non-residential applications.

Fully supported standing seam cladding system are typically supported by and fixed back to continuous plywood or OSB backing boards which would of course provide little performance in a fire scenario and could not be utilised above 18m. In the Trisobuild® Seam façade system these combustible backing boards are replaced by a non-combustible steel deck, from the Tata Steel RoofDek range, which is directly affixed to the 'helping hand' bracket and rail system.



Trisobuild® Seam components

Outer sheet

Trisobuild® Seam Profile
CE Marked to BS EN 14783:2013
Material: Colorcoat Prisma® including the option of a textured finish*, with 0.7mm metallic coated steel substrate
BBA Certificate: 09/4698
Cover widths: 305mm or 514mm
Sheet lengths: 1m to 12.5m
Fixed back to steel backing sheet with fasteners at typically 180mm centres

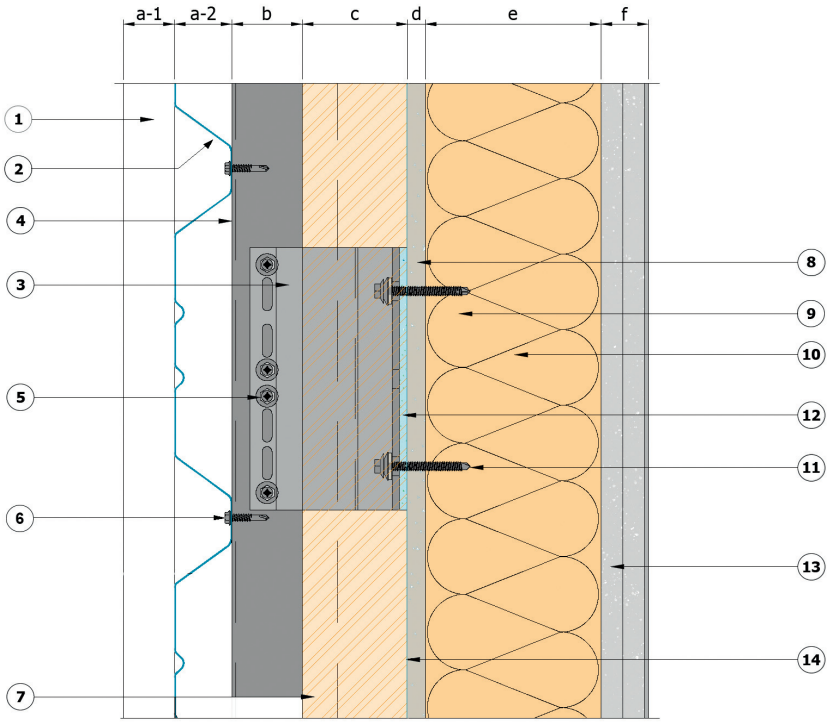
Decking profile

Trisobuild® D32S carrier
CE Marked to BS EN 1090-12009 +A1:2011
Material: Colorcoat® PE 15 (15 micron polyester)
Galvanized metallic coated steel
Cover width: 1000mm
Sheet lengths: 1m to 16m

* See separate fire classification for Colorcoat Prisma® - textured.

Image courtesy of Euro Tech Roofing Ltd

Vertical section



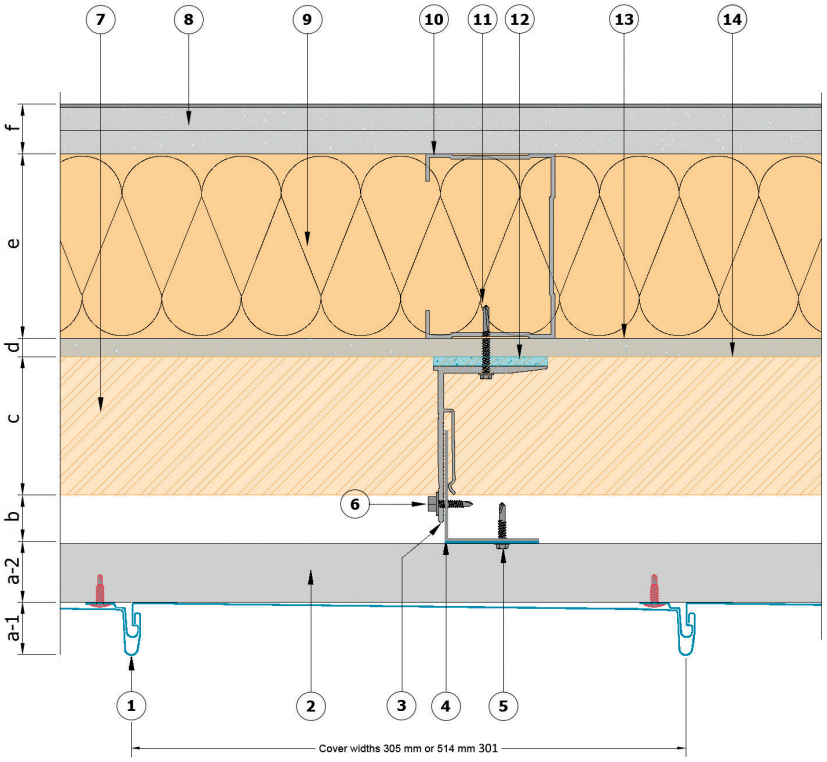
Parts list

1 Trisobuild® Seam.
2 Tata Steel's RoofDek D32S.
3 Nvelope NV1 Aluminium carrier bracket (size TBC in specification).
4 Nvelope Aluminium 'T' rail (size TBC in specification).
5 Stainless steel fixing (TBC in specification).
6 Tata Steel Urban Seam®.
7 Stone fibre slab insulation by others.
8 Wallboard by others.
9 Loose filled insulation by others.
10 SFS support structure by others.
11 Stainless steel fixing (TBC in specification).
12 Optional PVC thermal brea - 5mm.
13 Cement particle board by others.
14 Breather membrane by others.

Legend

a-1 Trisobuild® Seam - 29mm.
a-2 Tata Steel's RoofDek D32S - 32mm.
b Cladding cavity: British standard - 25mm, NHBC - 38mm (baffled joints) and 50mm (open joints).
c Rigid sheet insulation (project specific depending on specified U-value).
d Sheeting board - 10mm or 12mm.
e SFS - 90mm to 154mm (depending on system specification).
f Internal plasterboard - 30mm.

Horizontal section



Parts list

1 Trisobuild® Seam.
2 Tata Steel's RoofDek D32S.
3 Nvelope NV1 Aluminium carrier bracket (size TBC in specification).
4 Nvelope Aluminium 'L' rail (size TBC in specification).
5 Stainless steel fixing (TBC in specification).
6 Stainless steel fixing (TBC in specification).
7 Stone fibre slab insulation by others.
8 Wallboard by others.
9 Loose filled insulation by others.
10 SFS support structure by others.
11 Stainless steel fixing (TBC in specification).
12 Optional PVC thermal break - 5mm.
13 Cement particle board by others.
14 Breather membrane by others.

Legend

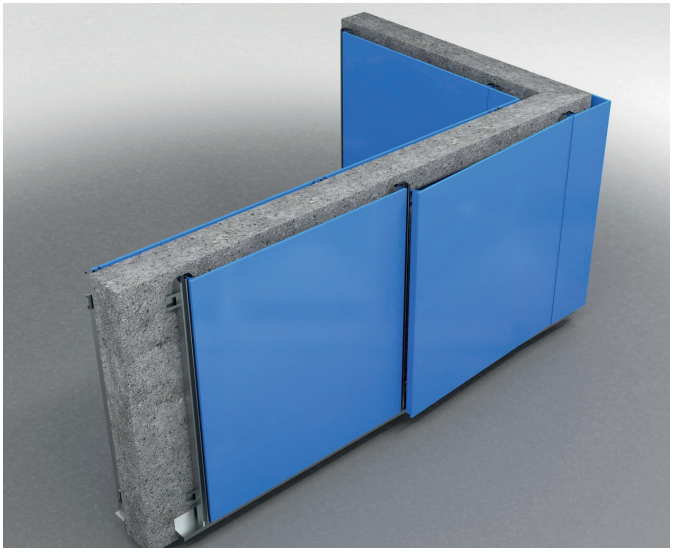
a-1 Trisobuild® Seam - 29mm.
a-2 Tata Steel's RoofDek D32S - 32mm.
b Cladding cavity: British standard - 25mm, NHBC - 38mm (baffled joints) and 50mm (open joints).
c Rigid sheet insulation (project specific depending on specified U-value).
d Sheeting board - 10mm or 12mm.
e SFS - 90mm to 154mm (depending on system specification).
f Internal plasterboard - 30mm.

Trimawall® Fast Fit

A pre-finished, demountable internal walling system

Created to help tackle the skills and supply chain shortages within construction, Trimawall® Fast Fit is a DfMA (Designed for Manufacture and Assembly) solution that can help unlock additional capacity both off-site and on-site, facilitating on-time, on-budget delivery of projects.

The Trimawall® universal mounting and panel system can be used throughout a building, both as a façade and internal fit out as a hybrid solution mounted over a wide range of structural wall types.



Future proofing buildings

The versatility of Trimawall® Fast Fit's individually demountable panels and accessible service cavity means that it can be installed, demounted and then reconfigured to adapt to changing needs of the building users.

Trimawall® Fast Fit delivers benefit for both construction companies and end clients

For Volumetric builders: With a systemised set of pre-cut, pre finished panels, off-site value can be maximised while factory productivity & output is increased.

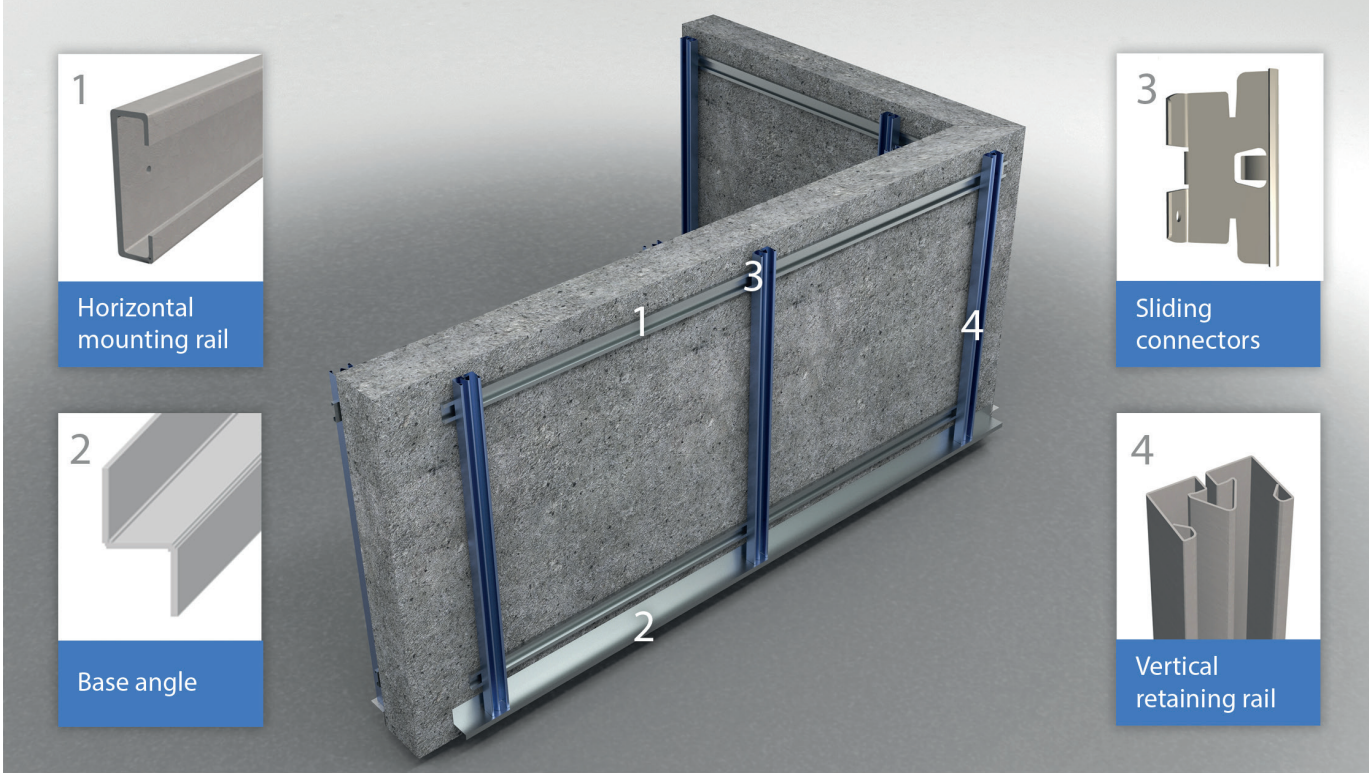
For Traditional construction: Having a single pre-finished panel, rated to severe duty deflection & patressesing standards helps to minimise deliveries to site, on site waste and the need for wet trade finishing, vastly simplifying crew logistics and condensing build schedules

For M&E Installers: The pre-cut panels and accessible service cavity eliminates the hassle of threading and wall rework, reducing on site errors, ensuring detail consistency, and facilitating a much faster, simpler M&E install.

For Schools: The durable magnetic Colorcoat® walling is perfect for classroom displays, maintaining its appearance term after term, avoiding the expense and disruption of regular repainting.

For Commercial Offices and Retail: The individually demountable panels allow spaces to be adapted to changing occupier requirements, with panels relocated, reconfigured or replaced, enabling building & brand refreshes to be conducted overnight.

Standard kit of parts - Four standard components provide a universal mounting solution:



Quick and easy installation

Part		Description	Material	Dimensions	Standard Lengths	Weight (kg/ln)
1	Horizontal Mounting Rail	Lipped C section provides main mechanical fix into structural wall	1.6mm Galvanised steel	55mm x 20mm	3000mm	1.5
2	Base Angle	Z profile create a level base for panels and support for skirting	2.0mm Galvanised Steel	65mm x 60mm x 65mm	3000mm	3
3	Sliding Connector	Twist in fit steel connetor allows easy positioniong of vertical rails	1.0mm eCoated spring steel	62mm x 32mm	n/a	n/a
4	Vertical Retaining Rail	Push fitted onto sliding connec-tors it then provides the receptor for Trimawall panels	1.0 mm Galvanised steel	53mm x 34mm	2800mm	1.7

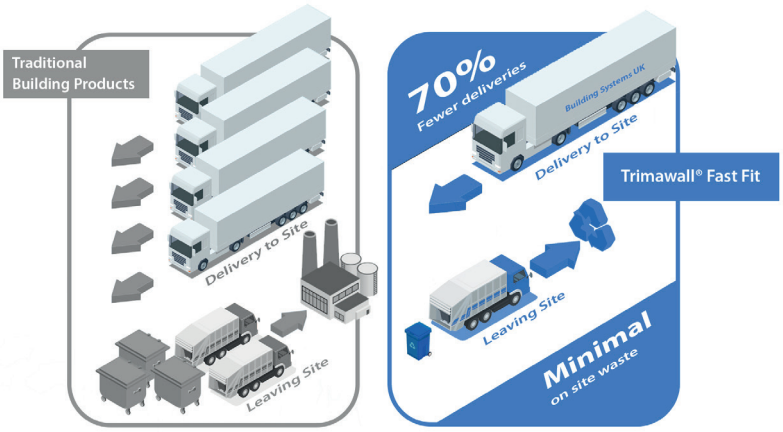
Sustainability

Trimawall® Fast Fit is manufactured and delivered as a kit of parts in order to minimise the environmental impact during construction and fit out.

One robust prefinished panel, reduces breakages / water damage during installation and minimises the use of sealants, glues, paints, further reducing waste disposal.

The 11mm thick Trimawall® panel incorporates a hygienic pre-finished front skin as part of a robust steel composite that provides all the requisite pattress strength required for Severe Duty rated walls.

Being delivered to site already cut to size with the Fast Fit clips pre-installed, Trimawall typically requires 70% less material deliveries and all but eliminates the on-site waste commonly associated with cutting, plastering & finishing internal walls.



Building Systems UK

A Tata Steel enterprise

ComFlor®
Steel composite floor decks

Tata Steel's ComFlor® is readily available and offers the most extensive, cost-effective and efficient range of composite floor deck profiles in Europe. Our range of seven unique profiles enable effective and efficient design, each intended specifically for a particular application area providing optimum composite floor deck performance.

ComFlor® is specifically designed for rapid installation of flooring and to facilitate lower mass buildings with long clear span composite concrete floors. Large areas of ComFlor® can be easily craned into position and in excess of 400m² laid by one team per day. With minimal mesh or fibre reinforcement and pumped concrete, the completed floor can quickly follow.

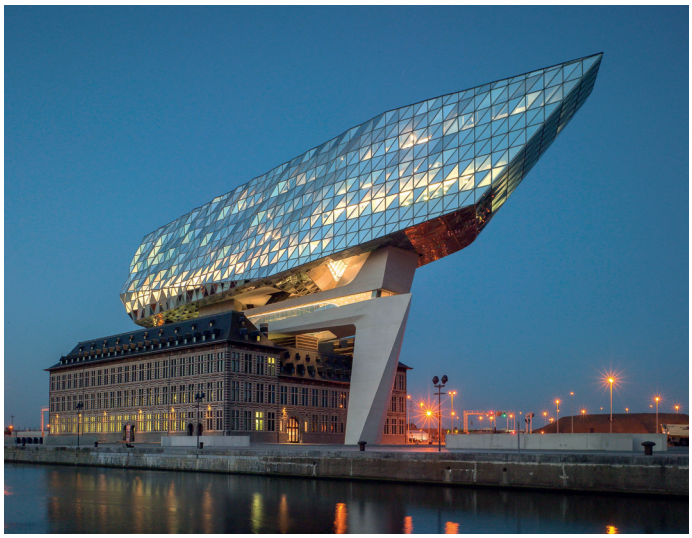
ComFlor® composite floor deck range

- Fast build time provided by quick installation and prop free concrete floors.
- High levels of fire resistance from all ComFlor® slabs with zero soffit protection.
- Colorcoat FD® pre-finished steel soffits offer significant extra protection and corrosion resistance.
- Full traceability of all components.
- Certified 'Very Good' to BREs responsible sourcing standard BES 6001 to maximised points in BREEAM.
- Covers unpropped construction from 2.5m to 4.8m.

ComFlor® deep deck range

- Long spanning capability between beams.
- Used with integrated beams (Slimdek®, Slimflor® and others) where the deck lands on an extended lower flange, giving reduced overall floor height.
- Services incorporated into profile zone, providing cost-effective, minimal depth floor construction.
- Low vibration design to meet the most stringent vibration requirements.
- Excellent fire ratings.
- Typical unpropped spans up to 6m, and propped spans to 9m.

For further information of our comprehensive range of ComFlor® products, please contact our Technical Department:
T: +44 (0) 1244 892199
E: technical.structuralproducts@tatasteeleurope.com
www.tatasteeleurope.com



The ComFlor® range

From 46mm to 225mm deep

- ComFlor® composite floor deck acts as a working platform.
- Act as a permanent formwork for the concrete slab.
- Provides fully integrated composite action between steel deck and slab.
- Allows composite action between the steel beam and slab via shear studs.

ComFlor® 46

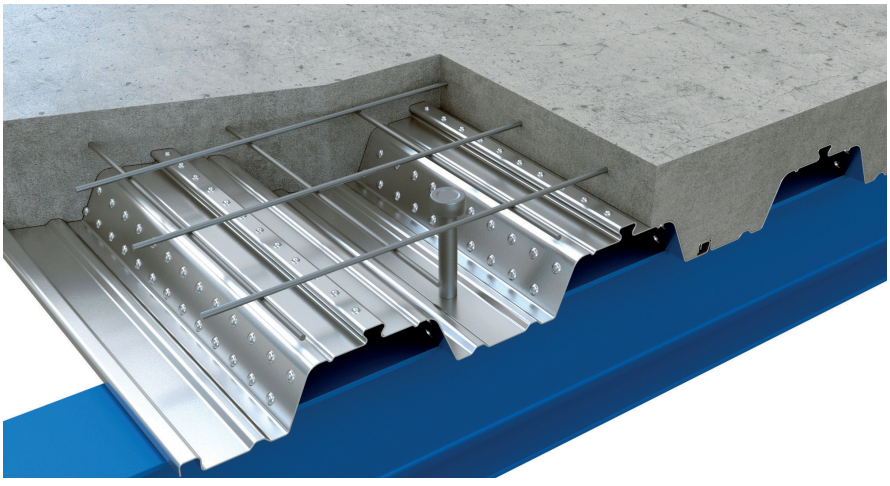
Classic composite flooring profile, easily transported, simple and efficient.

- Nestable. The simple trapezoidal shape neatly fits one profile into another, allowing more square metres per bundle.
- Low transport cost. Results in reduced environmental impact and in less crane time.
- Fast laying.
- Economic.

ComFlor® 51+

Contemporary new design of the original British re-entrant profile.

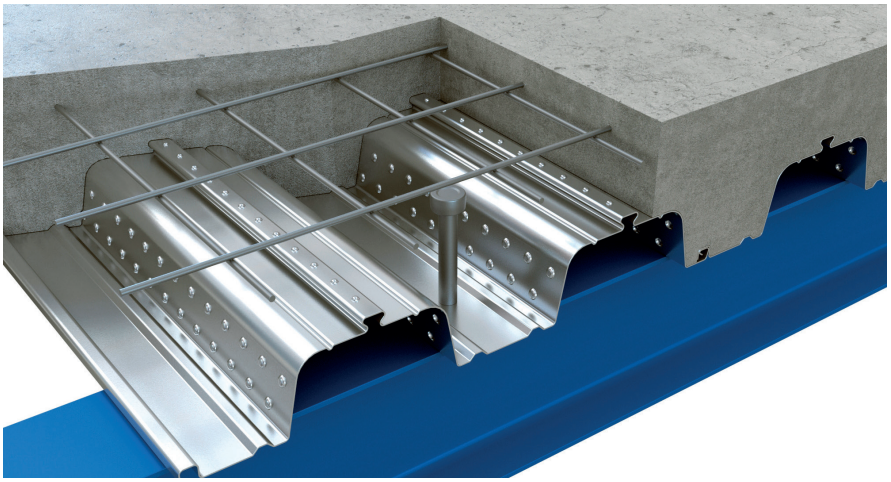
- Virtually flat soffit for a clean aesthetic appeal.
- Composite performance – floor slab. New embossments give even better shear key.
- Composite performance – beam. Due to effective shear stud performance.
- Fire and acoustic performance.
- Easy attachment for services.



ComFlor® 60

Most successful new generation combined trapezoidal and re-entrant 60mm profile.

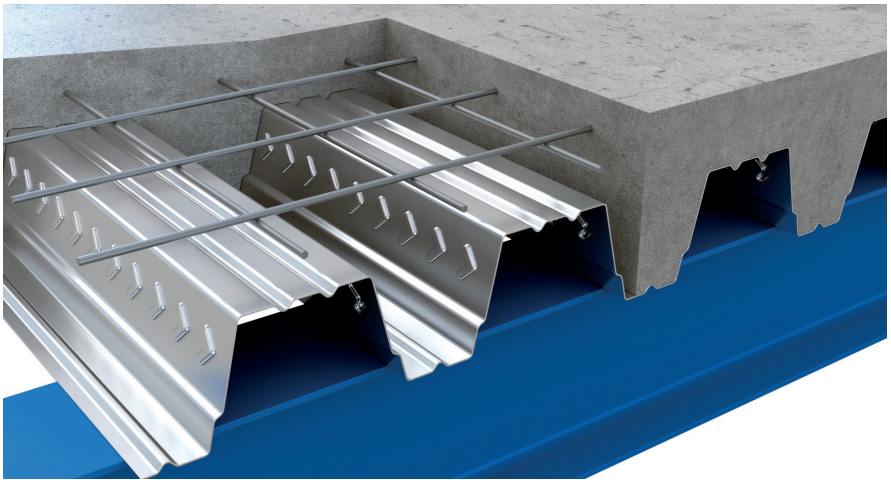
- Versatile. Combined round shouldered profile gives excellent span capability with straightforward service attachment.
- Low concrete and steel usage.
- Central stud placement.
- Closed ends.
- Available in Colorcoat FD® pre-finished steel to the soffit.
- 600mm cover.



ComFlor® 80

Combined trapezoidal and re-entrant 80mm composite profile with long span capability.

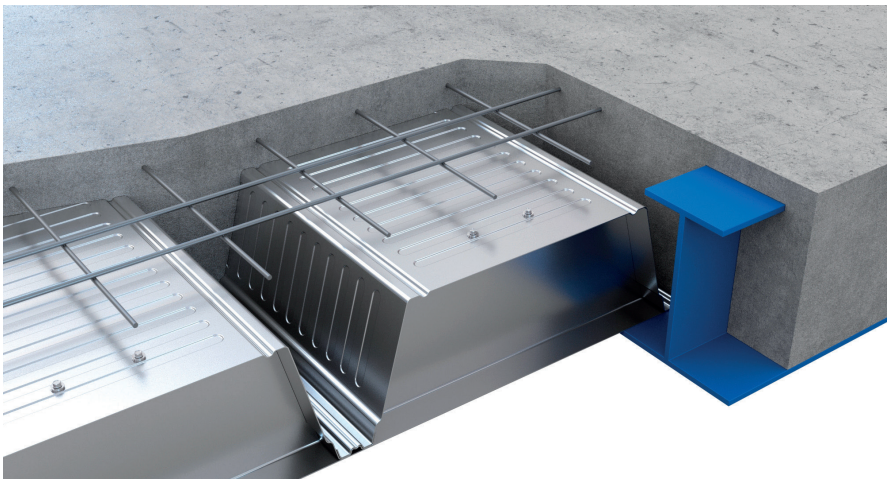
- Versatile. Combined profile allows easy service attachment, with trapezoidal spanning ability.
- Reduces the number of secondary beams.
- Central stud placement.
- Available in Colorcoat FD® pre-finished steel to the soffit.
- 600mm cover, as recommended by Health and Safety guidelines.



ComFlor® 100

Strong long span composite profile for non-composite beams.

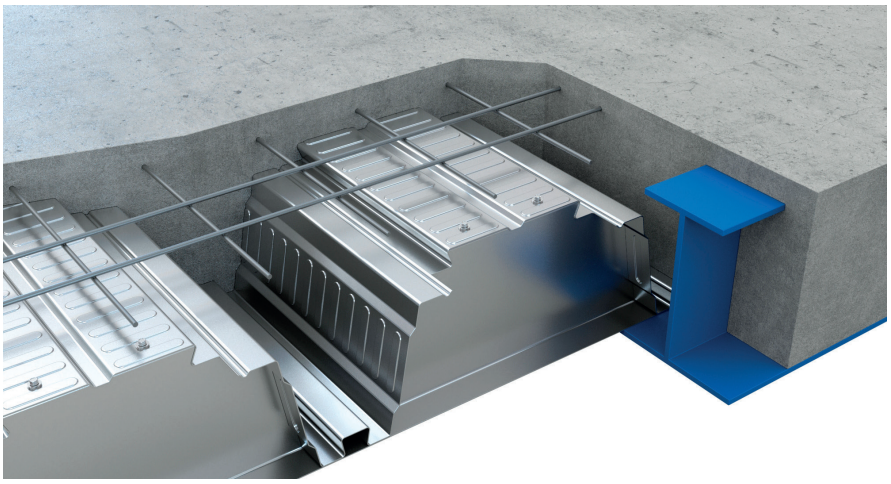
- Long span strength reduces or eliminates temporary propping.
- Fast laying.
- Suitable for use with concrete beams or non-composite steel beams.
- Nestable profile gives low transport and handling costs.



ComFlor® 210

The original deep ultra long span composite profile introduced for the first Slimflor® systems.

- Efficient. Cross stiffener technology and deep profile shape provides a very efficient metal deck and composite slab.
- Especially suited to bear on the extended lower flange of a steel beam, can also be used on the top flange.
- Nestable profile gives low transport and handling costs.



ComFlor® 225

High performance deep deck specifically designed for Slimdek® and all other integrated steel beam systems.

- Optimised profile design gives superb span capability and composite performance.
- Enables all the benefits of Slimdek® type systems. Including 6m unpropped spans, big open area and slimmer floor zone.
- Easy service attachment and integration.
- Provides reduced overall floor height with fewer steel beams which enables an extra floor every eight floors.

Building Systems UK

A Tata Steel enterprise

ComFlor®with Colorcoat FD® 170

Colorcoat FD® pre-finished steel is ideal when the exposed ComFlor® soffit is used as the building's interior, such as in car parks, offices and schools. It is available in two different coatings, both applied over the galvanized substrate to EN 10346:2015.

Colorcoat FD® 170 pre-finished steel is a tough 170 micron thick satin embossed plastisol coating with a guarantee of up to 25 years. It provides substantial additional protection to exposed soffits and offers great looking decks in both internal and external environments, with project specific guarantees available for both inland and coastal applications.

ComFlor® Active

ComFlor® Active is an innovative approach that permits circulation of cool or warm water through a network of water pipes embedded into the concrete to thermally activate the floor. This method provides highly effective cooling for office buildings and similar heating benefits in residential structures.

In both cases, the low temperature differential between the room temperature and the circulated water allows the use of low carbon technologies, rather than traditional carbon intensive heaters or chillers, to supply water at the required temperature. The low water temperature also reduces heat losses from the intermediate pipe-work and increases the system's overall efficiency.

Thermally activated traditional concrete slab floors provide a high comfort level, reduce the need for radiators and provide a self-regulating, energy-efficient system offering cooling and heating in a single package.

ComFlor® Active offers all these advantages, with some key extra features. Benefits include a large radiant surface to maximise output and optional Colorcoat FD® 170 pre-finished steel to further improve performance and offer an aesthetically appealing finish.

ComFlor® 9 software

Comprehensive ComFlor® 9 software for the design of composite floor slabs is freely available, to all professionals who register, at www.tatasteeleurope.com/Comflor

The software analyses each of the ComFlor® composite floor decks in construction stage, service stage and for fire resistance, under a wide range of loading configurations.

Professional support

Our dedicated structural team are available to provide support and advice on the best product for your project, and are on hand to help with:

- Design calculations (project specific).
- Software tools.
- Acoustic design.
- Vibration.
- Fire design.
- Slab penetrations and installation details.
- EPD – Environmental Performance Declaration.
- In-house CPD Seminars.

Tata Steel maintains a friendly technical help desk which is freely available to all Consulting Engineers and Contractors to assist with composite floor decking design issues.

For further information on our ComFlor® range of products, please contact our Technical Department:
T: +44 (0) 1244 892199
E: technical.structuralproducts@tatasteeleurope.com

Building Systems UK

A Tata Steel enterprise

RoofDek

Steel and aluminium roof decks

Tata Steel offers the most comprehensive range of structural roof decking all under one UK manufacturer's roof; with steel profiles in specific gauges that are FM Approved. We also supply additional profiles to complement our UK-manufactured range from Tata Steel in Europe.

- The most extensive cost-effective and efficient range of roof deck profiles in the UK. Huge span range from 1m to 12m.
- Technical support to aid design with Tedds RoofDek software and a free diaphragm service.
- Colorcoat HPS200 Ultra® pre-finished steel soffits offer significant additional protection for aggressive internal environments.
- Colorcoat® High Reflect provides maximum reflectivity for exposed soffits.
- FM Approved steel roof deck.

Roofing applications suitable for use on RoofDek:

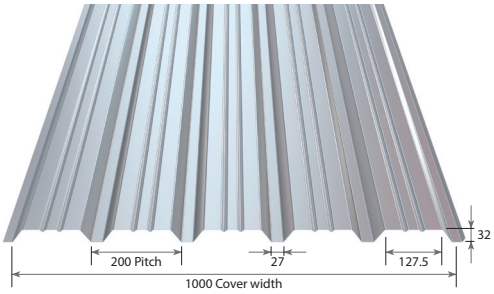
- Single ply membrane.
- Standing seam systems.
- Green roofs.
- Slates and tiles.
- Three ply felt.
- Asphalt.

The RoofDek range

Trapezoidal profiles 32mm to 60mm deep

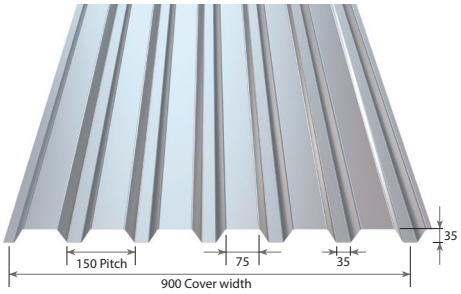
- Developed to optimise the designer's needs for efficiency, aesthetics and structural performance.
- RoofDek D35 and D46 can be supplied crimp curved down to 400mm radius.
- All can be self curved to 40m to 85m radius depending on profile and finish.
- Suitable for diaphragm design applications.

RoofDek D32S



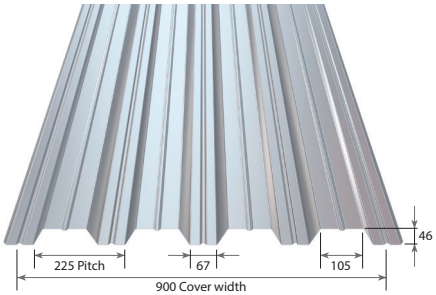
- Economy profile for use on purlins.
- Span range 0.6m to 2m.
- Steel 0.70mm, 0.90mm, 1.20mm galvanised or interior liner white finish.
- Available with Colorcoat® High Reflect.

RoofDek D35



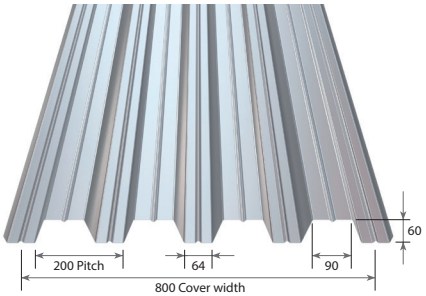
- Ideal for single ply on purlins.
- Span range 1.5m to 2.5m.
- Steel 0.70mm, 0.90mm, 1.20mm galvanised or interior liner white finish.
- Aluminium 0.90mm and 1.20mm.
- Available with Colorcoat® High Reflect.

RoofDek D46



- Efficient deck for use on purlins or main steel.
- Span range 2m to 3.5m.
- Steel 0.70mm, 0.90mm, 1.20mm galvanised or interior liner white finish.
- Colorcoat HPS200 Ultra® pre-finished steel 0.70mm.
- Aluminium 0.90mm and 1.20mm.
- Available with Colorcoat® High Reflect.

RoofDek D60

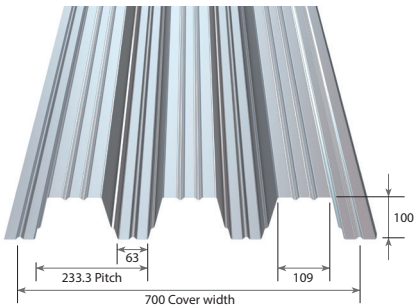


- Strong midspan profile for use on purlins or main steel.
- Span range 2.5m to 4m.
- Steel 0.70mm, 0.90mm, 1.20mm galvanised or interior liner white finish.
- Colorcoat HPS200 Ultra® pre-finished steel 0.70mm.
- Aluminium 0.90mm and 1.20mm.
- Available with Colorcoat® High Reflect.

Decks to span between main frames

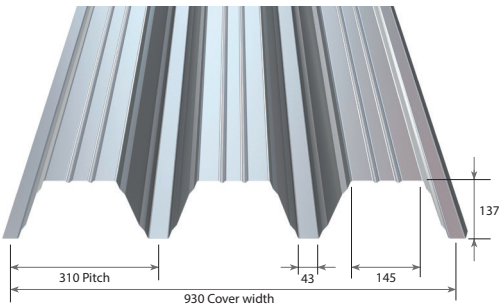
- Extensive structural roof deck range to span cleanly between main frames.
- Eliminates the cost and visual clutter of purlins and purlin bracing.
- By utilising diaphragm design, provided free of charge by Tata Steel, cross bracing can also be eliminated.
- Provides a beautiful clean uncluttered interior roof aesthetic that requires no ceilings.
- Supported by Tata Steel's technical service, providing full structural calculations to BS EN 1993-1-3 for steel and to BS EN 1999-1-4 for aluminium profiles.

RoofDek D100



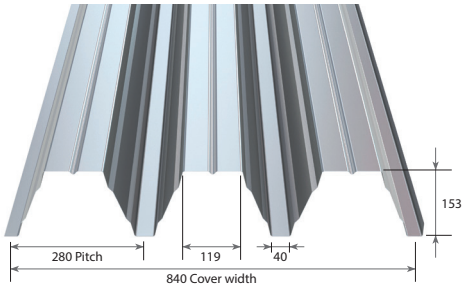
- Robust long span deck.
- Span range 4m to 6m.
- Steel 0.70mm, 0.90mm, 1.20mm galvanised or interior liner white finish.
- Colorcoat HPS200 Ultra® pre-finished steel 0.70mm.
- Aluminium 0.90mm and 1.20mm.
- Available with Colorcoat® High Reflect.

RoofDek D137



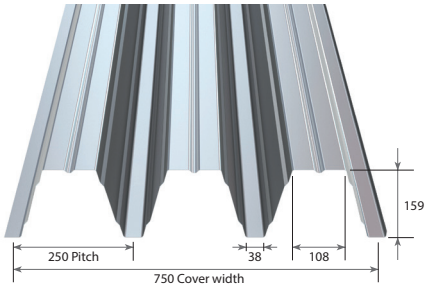
- Optimised low deflection design.
- Span range 4.5m to 7m.
- Steel 0.90mm, 1.25mm interior liner white finish.

RoofDek D153



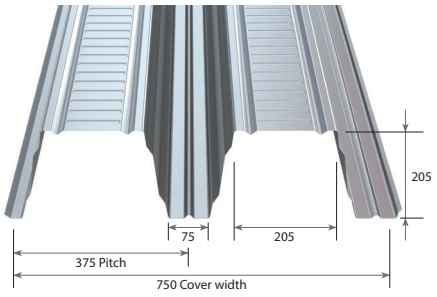
- Big brother to D137, extending span range.
- Span range 5m to 8m.
- Steel 0.75mm, 0.88mm, 1.25mm interior liner white finish.

RoofDek D159



- Strong and stiff profile for reliable long span performance.
- Span range 6m to 9m.
- Steel 1.25mm with interior liner white finish.
- Aluminium 1.50mm.
- Available with Colorcoat® High Reflect.

RoofDek D200



- Ultimate spanning ultra strong profile.
- Span range 9m to 11m; 12m for light load roofs.
- Steel 0.88mm, 1.25mm, 1.50mm interior liner white finish.

FM APPROVED

BES 6001 Responsible Sourcing www.greenbooklive.com

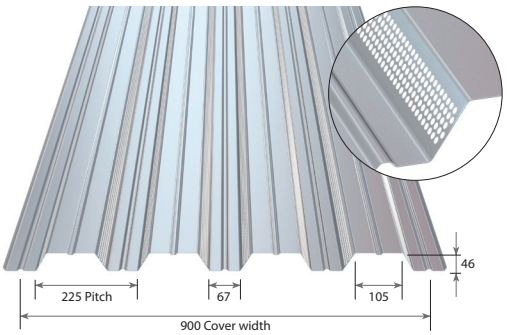
EPD THIRD PARTY VERIFIED ISO 14025 & EN 15804

For further information of our RoofDek products, please contact our Technical Department:
T: +44 (0) 1244 892199
E: technical.structuralproducts@tatasteeleurope.com
www.tatasteeleurope.com

Acoustic profiles

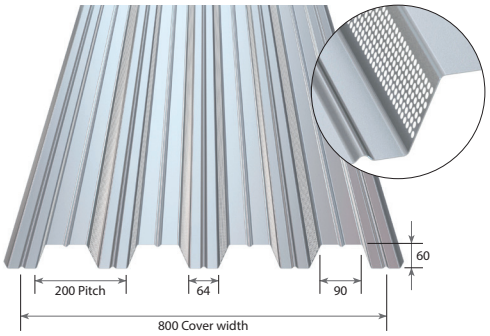
- Perforated web roof decking to provide acoustic absorption and structural support.
- RoofDek's tried and tested acoustic profiles achieve sound absorption ratings from A–D.
- Acoustic test data for absorption performance available.
- Open area as indicated below

RoofDek D46 perforated



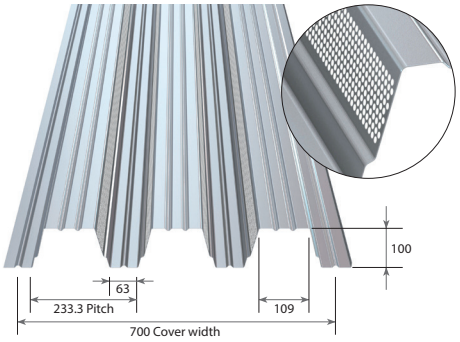
- 13.1% of cover area.
- 10.8% of exposed area.

RoofDek D60 perforated



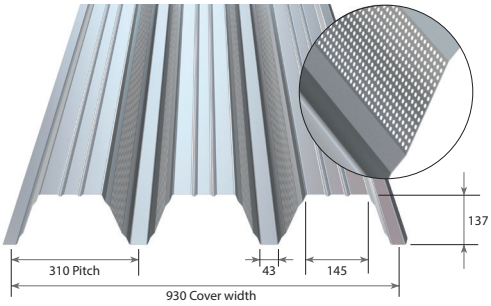
- 19.6% of cover area.
- 13.9% of exposed area.

RoofDek D100 perforated



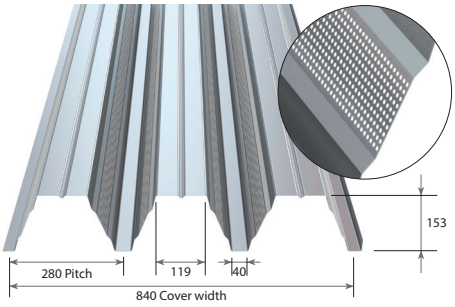
- 21.1% of cover area.
- 13.3% of exposed area.

RoofDek D137 perforated



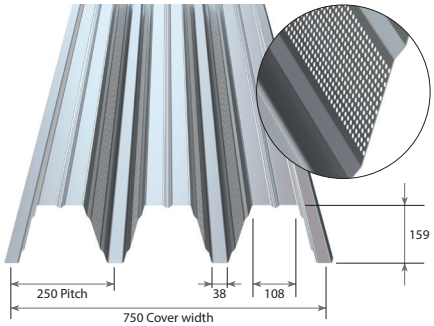
- 11.5% of cover area.
- 7.0% of exposed area.

RoofDek D153 perforated



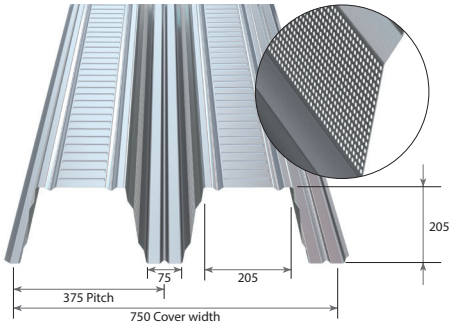
- 11.0% of cover area.
- 6.2% of exposed area.

RoofDek D159 perforated



- 14.2% of cover area.
- 7.6% of exposed area.

RoofDek D200 perforated

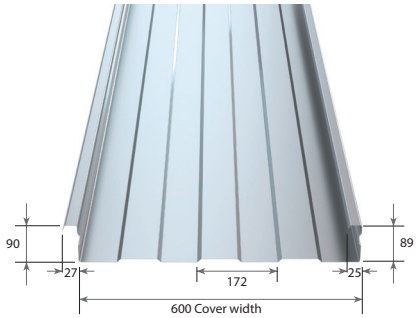


- 10.0% of cover area.
- 5.0% of exposed area.

Liner trays

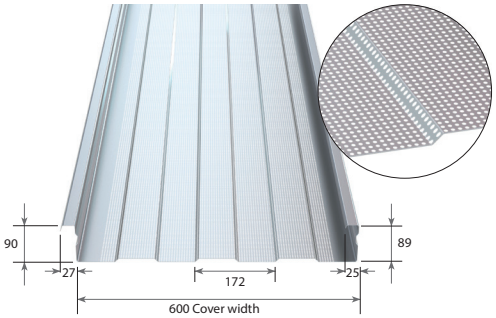
- Structural liner trays span across the main steels to provide a neat planar inner surface.
- Suitable for both roof and wall applications to support all roofing types and cladding.

RoofDek HLT90/600



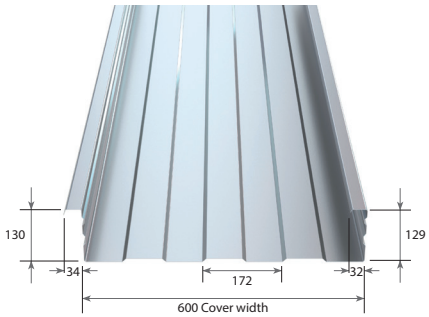
- Span range 3m to 4m.
- Steel 0.75mm, 1.00mm, 1.25mm with interior liner white finish.

RoofDek HLT90/600 perforated



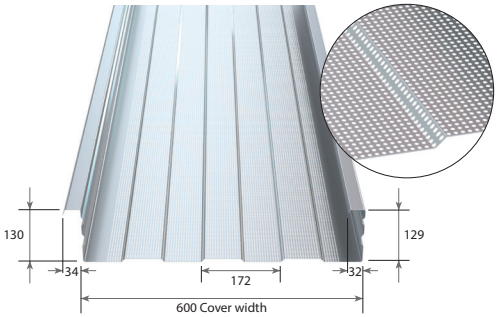
- Trough peforated.
- Open area 18.8%.

RoofDek HLT130/600



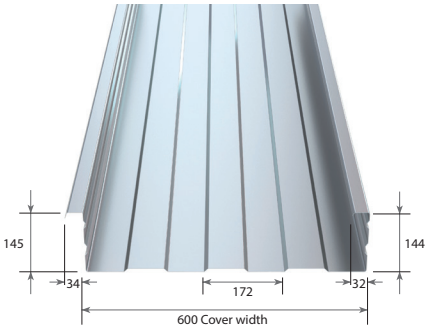
- Span range 4m to 6m.
- Steel 0.75mm, 1.00mm, 1.25mm with interior liner white finish.

RoofDek HLT130/600 perforated



- Trough peforated.
- Open area 18.8%.

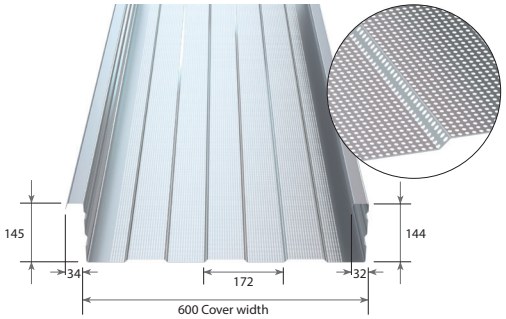
RoofDek HLT145/600



- Span range 5m to 6m*.
- Steel 0.75mm, 1.00mm, 1.25mm with interior liner white finish.

* *Limited by maximum sheet length of 12m.*

RoofDek HLT145/600 perforated



- Trough peforated.
- Open area 18.8%.

Design software and online RoofDek selector

RoofDek Analysis Tedds Software enables a full deck analysis to achieve optimum design.

RoofDek online selector provides a fast deck selection to find the right RoofDek profile
Visit: www.tatasteeleurope.com/roofdek

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Tata Steel maintains a friendly technical help desk which is freely available to all Consulting Engineers and Contractors to assist with roof decking design issues.

Design calculations and diaphragm design

The technical team are able to provide design calculations for live, dead, wind and snow drift loads and where required, diaphragm design calculations.

Sustainable roof deck

Factory produced with the backing of a robust quality management and environmental management standards. Full traceability of all components. Certified 'Very Good' to BREs responsible sourcing standard BES 6001.

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