

TECHNICAL GUIDE



TRACKWALL®

VERSION 1.4

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The selection of cladding plays a vital role in defining a building's aesthetics, functionality, and overall performance. One increasingly favoured solution is the use of brick slips. These thin slices of genuine brick, also known as brick veneers or brick tiles, replicate the look of traditional brickwork while allowing for quicker and more efficient installation.

Our TRACKWALL® Panel enhances this approach by offering a comprehensive, pre-engineered solution that streamlines the installation process and ensures durability, thermal efficiency, and compliance with modern building standards. Whether it's a new build, refurbishment, or extension, the TRACKWALL® system provides a flexible and reliable method for incorporating brick slips into the design.

By using the TRACKWALL® system, architects and designers gain greater creative freedom to achieve specific visual outcomes or authentically reproduce historic architectural styles — all while benefiting from the performance and ease-of-use that the system offers.

THEY ARE AESTHETICALLY PLEASING

Brick slips provide the timeless and classic appeal of traditional brickwork, offering a wide range of colours, textures, and patterns to suit various design styles and architectural contexts. They can enhance the visual appeal of a building, creating a warm and inviting atmosphere.

VERSATILE DESIGN OPTIONS

With brick slips, designers have the flexibility to achieve different visual effects, from rustic to modern, and can incorporate architectural details and features. The availability of various brick slip sizes and customisation options allows for creative expression and customisation.

EASE OF INSTALLATION MEANS REDUCTION IN BUILD PROGRAMME

Brick slips are relatively easy to install compared to traditional bricks. They are lightweight and thin, making them suitable for retrofit projects and reducing the need for heavy structural support. This is a great benefit when working at height. The use of adhesives simplifies the installation process and accelerates project timelines. Brick slip panels can also ease the installation process.

SPACE EFFICIENCY

Brick slips provide a cladding solution that doesn't compromise interior space. They occupy less space compared to traditional brick walls while maintaining the desired aesthetic appeal. With increasing insulation requirements this space saving cladding can prove very useful on tight sites.

WEATHER RESISTANCE AND DURABILITY & LESS RELIANCE ON GOOD WEATHER

High-quality brick slips are designed to withstand the UK's climate and are resistant to weathering, UV radiation, and environmental factors. They have a long lifespan and require minimal maintenance. They also do not depend on weather conditions to be installed like traditional brick & mortar.

REDUCED IMPACT ON THE ENVIRONMENT & LESS WASTE

Using brick cladding can reduce the impact on the environment due to its use of brick slips, which are typically 20% of bricks. Thinner pieces of clay require less material and embodied energy to produce them, as well as less (or an elimination of) cement due to a reduced mortar depth.

SO WHAT ARE BRICK SLIPS....

A brick slip is a slim section of brick that is used to clad buildings, as an alternative to traditional brick.

Brick slips are made by either slicing off the face of a standard brick or firing the pre-moulded slips in a kiln in the same way as conventional brick is made.

WHAT IS THE SIZE OF A BRICK SLIP?

The standard size of a brick slip is 215mm x 65mm x 22mm. This means that they look exactly like a standard brick when they are installed. The thickness allows for the mortar to be applied in the joints to give the same finish as standard brick wall finish.

Brick slips can vary in thickness, ranging from 7mm, but usually they are around 20-22mm. Other custom thicknesses are available & we can offer any size tracker on our panel to accommodate.

HOW ARE BRICK SLIPS USED?

Brick slips can be installed in both external and internal situations. Brick slips are often used to provide feature walls to a new kitchen extension or perhaps give an industrial or rustic feel to a living room.

They can also be seen on chimney breasts, or in bathrooms. If you are considering installing brick slips internally, be sure to check the building regulations for full requirements. **

Please see our Fire Track Product for bespoke Fire Chambers

Externally brick slips are often used as a cladding alternative to a traditional brick system. The brick slips are light weight and easy to install, but we'll explore the benefits of brick slips later. For this article, we are mainly focusing on the use of brick slips as an external cladding.

There are multiple different types of brick slip system, our Trackwall® System is the most used system which is an adhesive fix. Brick slips are then adhered to the boards on site once they have been erected. The system and process used will depend on a variety of factors including size of project, budget, and other project requirements and specifications.

ADHESIVE FIX BRICK SLIP SYSTEM

The adhesive fix option for brick slips requires the slips to be fixed to the substrate or an EWI system (external wall insulation) using an adhesive. The slips are then pointed with a mortar to achieve the traditional appearance of a standard masonry wall.

Adhesives include sand/cement mortar, epoxy and polyester resin-based systems, cement-based adhesives, rubber latex-based materials and silicone-based adhesives.

The adhesive brick slip system can be applied directly to substrates including ICF, masonry and blockwork provided the correct adhesive is used. If the construction is in the form of timber frame, steel frame or SIPS, an external wall insulation (EWI) or carrier board is required.

The adhesive brick slip system provides the option to externally insulate the construction, reducing thermal bridging.

The choice of jointing and mortar options can impact the overall appearance and durability of the brick slip cladding.

Consider factors such as the desired aesthetic, weather resistance, and compatibility with the brick slips and substrate. Proper jointing techniques, such as pointing, should be employed to achieve a clean and professional finish.

Vertical movement joints must be provided at maximum 7m intervals, but this may vary according to manufacturer recommendations.

There are several manufacturers that provide detailed information on the design and installation of adhesive brick slip systems.

Moisture Management and Insulation

Robust moisture management and high-performance insulation are fundamental to mitigating moisture ingress, reducing thermal bridging, and enhancing overall energy efficiency within the building envelope.

Moisture Resistance and Drainage

Moisture intrusion presents a significant risk to both the structural integrity of the cladding system and the underlying building envelope. To mitigate this, it is essential to employ correct installation practices, including the integration of a continuous moisture barrier and an efficient drainage plane to manage water ingress. In zones subject to severe weather exposure, the specification of advanced, high-performance breather membranes may be necessary to ensure robust moisture control and long-term durability.

Meticulous detailing around openings and projections is essential to ensure effective resistance to water ingress and to maintain the integrity of the building envelope.

Vapour Barriers and Insulation Behind Brick Slips

Insulation is a critical component in improving the building's thermal performance. To minimize heat transfer, prevent interstitial condensation, and enhance overall energy efficiency, a continuous layer of thermal insulation—paired with an appropriate vapour control layer—should be installed behind the brick slips. Ensuring compliance with relevant building regulations and industry standards is essential to achieving effective and durable insulation performance within the cladding system.

Ensuring Proper Ventilation

Adequate ventilation behind the brick slips is essential to allow any moisture that penetrates the cladding to escape and prevent the buildup of condensation. Proper detailing and the use of ventilation systems, such as weep holes or air gaps, should be incorporated to facilitate proper airflow and moisture control. Manufacturers will provide detailed guidance on how their system should be designed and installed.

The NHBC guidelines state that timber and steel framed backing walls should have a cavity between the wall and the insulation, which is a minimum of 15mm wide drained and vented for timber frame and drained for steel frame. Some manufacturers may recommend a wider cavity, be sure to check your system requirements.

Fire Safety

The brick slip system must comply with all fire safety regulations and British Standards. Fire and cavity barriers must be installed as required according to the regulations.

The NHBC offers extended guidance for cavity barrier requirements to cavities within masonry substrates - stating the locations as:

- The edges of cavities including eaves and verges, around opening such as windows and doors and entry/exit points for services.
- The junction between an external cavity wall and every compartment floor and compartment wall.

For the full NHBC guide refer to the resources at the end of this article.

When specifying brick slips in the United Kingdom, it is important to consider the following regulations and British standards:

Building Regulations

Compliance with the Building Regulations is essential to ensure the safety, performance, and durability of the cladding system. The following areas are particularly relevant:

Part A: Structural Safety: The cladding system, including the brick slips and supporting structure, must comply with the requirements for structural stability and load-bearing capacity.

Part B: Fire Safety: The fire performance of the cladding system, including the spread of fire and the use of fire-resistant materials, must meet the prescribed standards.

Part C: Site Preparation and Resistance to Moisture: The cladding system should be designed and installed to prevent water penetration and manage moisture effectively, in accordance with the requirements for weather resistance and dampness control.

Part L: Conservation of Fuel and Power: The insulation properties and thermal performance of the cladding system, including the use of insulation materials behind the brick slips, must meet the energy efficiency requirements.

British Standards

Adhering to relevant British Standards ensures that the brick slips and their installation meet industry-accepted quality and performance standards. The following standards are particularly relevant:

BS EN 771-1: Specification for Clay Masonry Units: This standard specifies requirements for clay bricks, including their dimensions, compressive strength, and durability.

BS EN 1209-2: Natural Stone Products: Cladding: This standard applies to natural stone cladding products, including brick slips made from natural stone. It covers aspects such as dimensional tolerances, flexural strength, and freeze-thaw resistance.

BS 8298: Code of Practice for the Design and Installation of Natural Stone Cladding and Lining: This code of practice provides guidance on the design, installation, and maintenance of natural stone cladding systems, including brick slips made from natural stone.

BS 5262: Code of Practice for External Rendering: This code of practice covers external rendering, including the application of brick slips as part of the rendering system.

BS 8000-11: Workmanship on Building Sites: Part 11: Code of Practice for Tiling and Slating of Roofs and Walls: This code of practice provides guidance on the installation of tiles and slates, including brick slips used as wall cladding.

It is important to consult the latest versions of these regulations and standards, as they may be subject to updates and revisions. Additionally, local authorities, building control bodies, and industry associations may have additional guidelines or requirements specific to the area or sector. Therefore, it is recommended to seek professional advice and engage with relevant authorities to ensure compliance and best practices when specifying brick slips in construction projects.

Fire Resistance: The Fibre Cement Board Fulfils the requirements of the reaction to fire classification A1 of EN 13501-1 :2007+A1 :2009

Board dimensions: Trackwall® is available in any size or shape as a bespoke cutting service.

Our standard sizes are: 2396mm x 1125mm
1190mm x 1125mm

Track sizes can be altered to accommodate any Metric or Imperial Brick Slip size

Panel Thickness:	12mm
Minimum Dry Weight Per Panel:	2396 x 1125mm 36.2Kg / 1190 x 1125mm 18.1 Kg
Tolerance in Length:	±2mm (TS EN 12467)
Tolerance in Width:	± 3 mm (TS EN 12467)
Tolerance in Thickness:	± %10 t (t: board thickness)
Deviation in Perpendicular on Edges:	≤ ± 2mm/m (TS EN 12467)
Deviation in Straightness on Edges:	≤ 0,1 % x edge length
Surface Appearance:	Untextured, Grooved.
Dry Apparent Density:	min 1200 kg/m ³ (1,2 g/cm ³)
Bending Strength:	≥ 7 N/mm ²
Compressive Strength:	>35 MPa (After 24 hours of conditioning in 20 + 2 °C water) >40MPa (After 7 days of conditioning in laboratory)
Frost Resistance:	Resistant to frost according to TS EN 12467
Water Resistance:	Resistant to water (According to TS EN 12467)
pH Value:	10,5 -12
Formaldehyde Emission:	It does not contain any Formaldehyde adhesive

Coefficient of Thermal Conductivity:	$\lambda = 0,2166 \text{ W/mK}$ (TS EN 12667)
Thermal Resistance:	$55,401 \times 10^{-3} \text{ m}^2\text{K/W}$ (TS EN 12667)
Coefficient of Thermal Expansion:	$0,00493 \text{ mm/mK}$ (DIN 51045)
Modulus of Elasticity:	$\geq 4000 \text{ N/mm}^2$ Average of the values parallel and perpendicular To the direction of production in ambient laboratory conditions
Water Absorption:	2 hours, by weight $<15\%$ (Of a board in ambient laboratory conditions)
Porosity:	$< 30\%$ (Of a board in ambient laboratory conditions)
Water Vapour Permeation Resistance:	$\mu = 13,31$ (TS EN ISO 12572)
Mean Water Vapour Resistance Value:	$0,187 \text{ m}^2\text{hPa/mg}$ (TS EN 12086)
Moisture Movement 30-90% Relative Humidity:	0.05%
Increase in Thickness:	$< 1 \%$ (After 24 hours in water)
Hot Water Effect:	It is resistant to hot water according to TS EN 12467
Soaking – Drying:	It is resistant to soaking and drying according to TS EN 12467

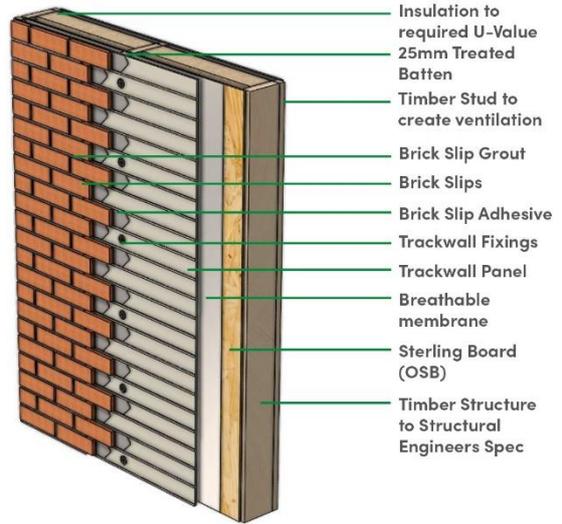
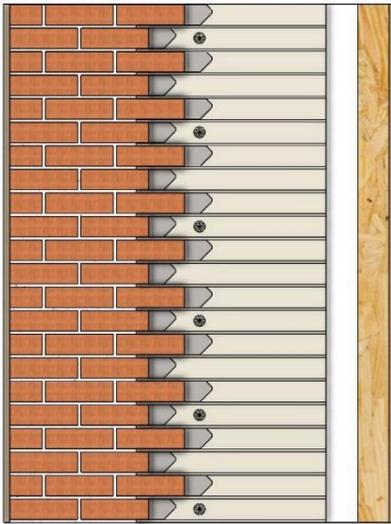
Lucideon Test Table

Test	Method	Requirement	Summary of Results
Hygrothermal Behavior	EAD 090019-00-0404 – Annex D EAD 090062-00-0404 – Annex M	No cracking, blistering, peeling or delamination	No Defects
Freeze/Thaw	EAD 090019-00-0404 – Annex E EAD 090062-00-0404 – Annex M	No cracking, blistering, peeling or delamination	No Defects
Bond Strength – Wall	EAD 090019-00-0404 – Cl. 2.2.8	$\geq 0.08 \text{ N/mm}^2$ or cohesive failure of insulation*	0.47 N/mm^2
Impact Resistance – Wall	EAD 090019-00-0404 – Annex C EAD 090062-00-0404 – Annex G	Hard body Category I, II, III or IV	Category I
	EAD 090019-00-0404 – Annex C EAD 090062-00-0404 – Annex G	Soft body Category I, II, III or IV	Category I

TIMBER FRAME SYSTEM



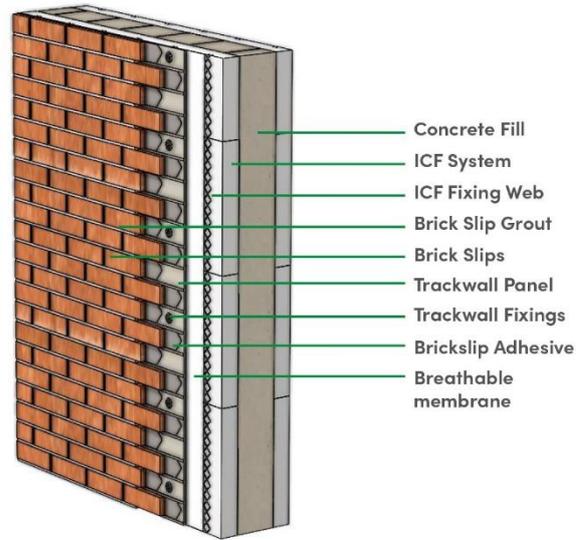
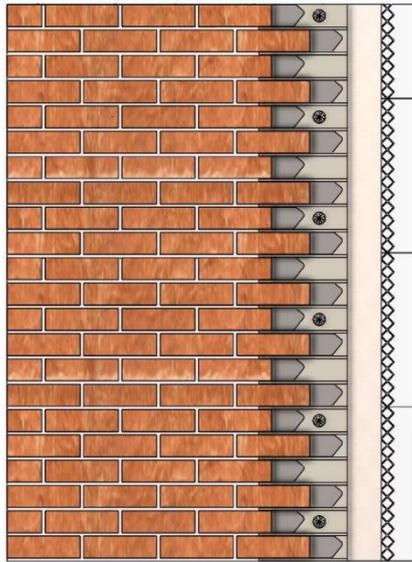
Timber Frame System



ICF WALL SYSTEM



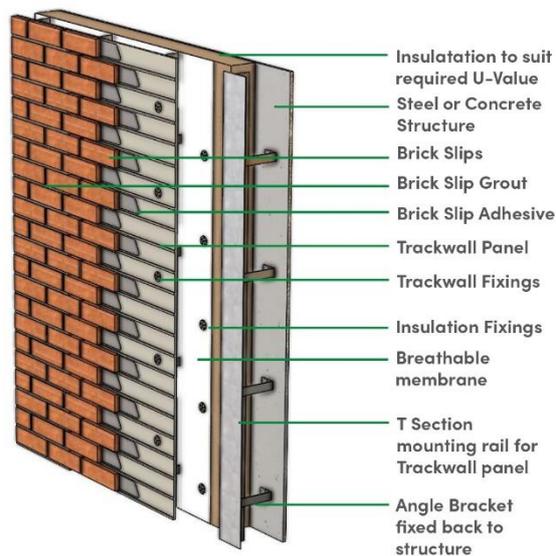
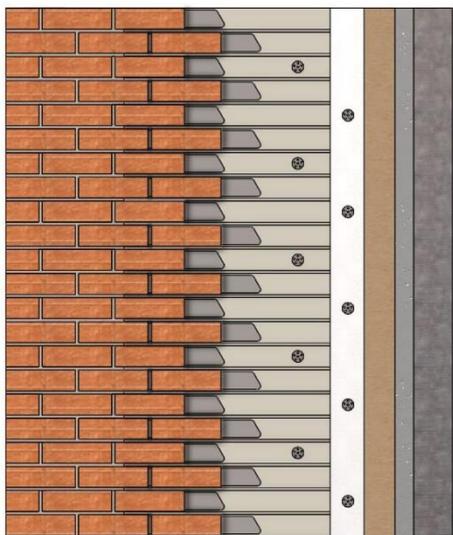
ICF System



SFS WALL SYSTEM



SFS Frame System



Brick Slip Adhesive:**Adhesive Description and Application Guidance:**

The adhesive is a high-performance, flexible bonding agent designed for both internal and external wall and floor applications. Comprising cementitious binders, precisely graded mineral fillers, performance-enhancing additives, and a high concentration of redispersal polymer powder, the formulation offers superior adhesion and extended open time. It is specifically engineered for the installation of brick slips and natural stone onto a variety of substrates, including sand/cement render, brickwork, and blockwork. The product is also compatible with external wall insulation systems (EWIS).

Mixing Instructions:

Using a paddle mixer, blend the dry adhesive powder with clean, cold water until a smooth, lump-free, and cohesive paste is achieved—one that maintains its form when peaks are created. Ensure all powder is fully incorporated, with no dry pockets remaining. For ease of handling and cleanup, a flexible mixing bucket is recommended. To maintain optimal consistency during application, stir the mixture periodically. While a small amount of additional water may be introduced to regain workability, repeated rehydration of the same mix should be avoided to preserve performance characteristics.

Please always resort to the manufacturer's guidelines for installation and mixing processes

Lime Mortar:

Lime mortar is a traditional type of mortar made by mixing lime, sand, and water. Unlike modern cement-based mortars, lime mortar sets more slowly and remains more flexible, which makes it especially suitable for historic buildings and structures where breathability and movement accommodation are important.

Key Components:

1. **Lime** – Typically either:
 - **Hydraulic lime** (sets with water, contains natural clay impurities)
 - **Non-hydraulic lime** or **lime putty** (sets by reacting with carbon dioxide from the air)
2. **Sand** – Provides bulk and structure.
3. **Water** – Activates the lime and helps create a workable paste.

Types of Lime Mortar:

- **Non-Hydraulic Lime Mortar (Air Lime):** Sets slowly by carbonation (absorbing CO₂ from the air). Remains softer and highly breathable.
- **Hydraulic Lime Mortar:** Sets faster due to the presence of reactive silicates and aluminates. Comes in grades (NHL 2, 3.5, 5) based on strength.

Advantages:

- **Breathability:** Allows moisture to escape from the wall, reducing trapped dampness.
- **Flexibility:** Accommodates minor structural movement, reducing the risk of cracking.
- **Reversible:** Can be removed more easily than cement mortars, important for conservation.
- **Eco-friendly:** Produces less CO₂ during manufacture than Portland cement.

Please always resort to the manufactures guidelines for installation and mixing processes

PLEASE ALWAYS REFER TO YOUR SUPPLIER/RETAILER FOR ANY QUESTIONS BEFORE
INSTALLATION

DATA RESOURCES

NHBC Requirements for cavity barriers to concealed spaces located behind cladding with masonry substrates to houses and flats 6.1/3.4

https://www.nhbc.co.uk/binaries/content/assets/nhbc/tech-zone/nhbc-standards/tech-guidance/6.1/requirements_for_cavity_barriers.pdf

Technical Data

<https://www.betopan.net/en/>

<https://www.limetec.co.uk/datasheets/Limepoint-Mortar-Datasheet.pdf>

Approved Documents

<https://www.gov.uk/government/collections/approved-documents>

STORING, STACKING & TRANSPORT

The Panels should be stored in a closed standard packaging on a dry and flat floor in a well ventilated enclosed space.

If it becomes necessary to temporarily store the boards outdoors, they must be placed in sealed standard packaging and stored either under a watertight roof or beneath a waterproof, weather-resistant PE (Polyethylene) or PVC tarpaulin on a flat, water-tight surface. The tarpaulin should be positioned and secured to allow airflow from the top of the pallet. Whenever a board is removed from the package, the packaging must be immediately resealed to maintain protection.

If packages need to be stacked, only packages of the same size should be placed on top of one another, ensuring that the pallet legs are aligned vertically. The total stack height must not exceed 3 meters. Adequate spacing should be maintained between stacks positioned side by side.

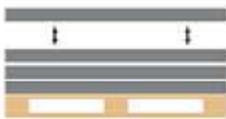
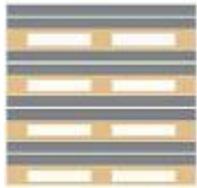
It is recommended that boards be transported primarily using pallets. If manual handling is required, each board should be carried by at least two people, one at a time, in an upright position with the edges parallel to the ground. Special care must be taken to avoid damaging the corners and edges during transport.

Boards should be stored horizontally on pallets, whether in the warehouse or at the construction site. If temporary placement on wedges is required, they must be laid horizontally on uniformly sized wedges spaced no more than 50 cm apart. Boards should never be stored leaning—either horizontally or vertically—against walls or similar surfaces.

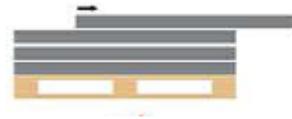
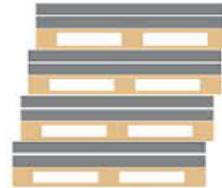
Damage occurring during transportation is not covered under our warranty, as domestic sales are delivered on a Free on Truck (FOT) basis from our factory. It is the buyer's responsibility to arrange and cover transportation insurance.

Our panel Trackwall® is under a 5 year guarantee against production problems from the Panel Manufacturer.

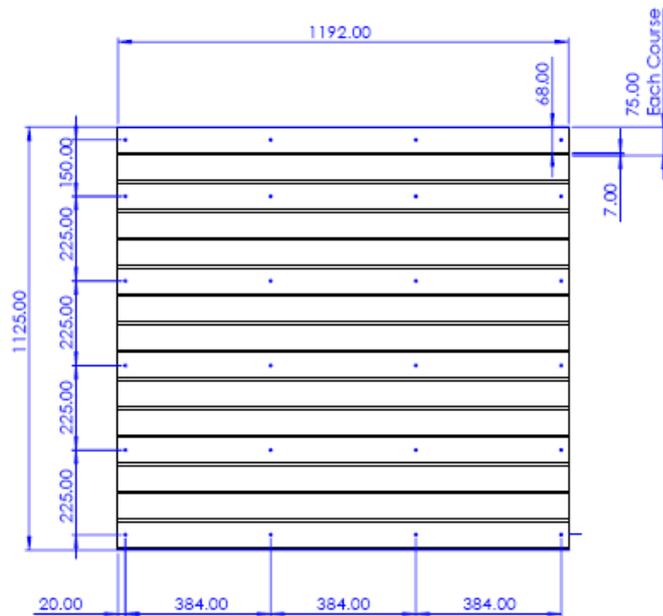
CORRECT



NOT CORRECT



PANEL FIXING POINT DETAIL



UNIT 4, WINSTON AVENUE, CROFT
LEICESTERSHIRE, LE9 3GQ
www.retailhouse.co.uk
Tel. 01455 289213

NOTES	
REVISIONS	
V1 - First Issue - 25/06/25	
SCALE @ A3	1:10
CLIENT	
Hormigon	
PROJECT TITLE	
Trackwall Standard Panels	
PROJECT NUMBER	
J5297	
DRAWING TITLE	
Standard Panel Details Fixing Locations	

THE ABOVE ILLUSTRATION APPLIES TO OUR HALF SIZE PANEL 1125 X 1192 – PLEASE DOUBLE THE AMMOUNT OF FIXINS FOR OUR 1125 X 2396 FULL SIZE PANEL

PLEASE INFORM YOUR RETAILER WITH SUBSTRUCTRE DRAWINGS & DETAILS FOR FIXING INFORMATION

PLEASE REVERT TO OUR WARRANTY DOCUMENT WITH OUR TERMS AND CONDITIONS FOR FURTHER INFORMATION THESE CAN BE FOUND ON OUR WEBSITE OR SUPPLIED BY YOUR TRACKWALL® RETAILER