GL-TS SYSTEM SPECIFICATION AND INSTALLATION GUIDE

GL PROFILES
FABRICATION SPECIALISTS

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INTRODUCTION

At GL Profiles, we manufacture and supply high-performance roofing and cladding components for modern industrial and commercial buildings. The GL-TS System is a fully site-assembled solution, giving contractors maximum flexibility during installation while maintaining the highest levels of performance.

Designed for built-up roof and wall applications, the system combines structural integrity with proven thermal, acoustic, and fire resistance. Built around our robust GL-Techbar spacer system, GL-TS delivers reliable building envelope performance across a wide range of project types — from new builds to refurbishments.

SYSTEM BENEFITS

- Fully site-assembled solution for roof and wall applications
- Designed to meet or exceed current Building Regulations, including Part L
- Compatible with a wide range of profile depths, finishes, and acoustic liners
- Integrated GL-Tech Bar system for structural stability
- Available with a full range of accessories and custom fabrication options
- Comprehensive technical support, including U-value calculations and load span checks

1st CLASS GUARANTEE

GL Profiles supply all components required to complete your new envelope system, GL Profiles 1st Class Guarantee provides 25 years cover on all products and up to 40 years on the outer sheets.

GL Profiles 1st Class Guarantee is provided for each individual component from our list of approved suppliers. It is issued directly to the building owner providing full security.

GL Profiles range of products are manufactured using Colorcoat® pre-finished steel products from Tata Steel that are guaranteed for up to 40 years and provide excellent colour and gloss retention and outstanding durability. Manufactured in accordance with the latest regulatory, quality, and environmental standards.

GL PROFILES
1st CLASS
★★★★★
BUILDING SERVICES

Key features of GL Profiles 1st Class Guarantee

- Contractor technical support, offering a comprehensive library of standard drawings. U-values, wind and snow load calculations.
- Can be supplied with Colorcoat Prisma® from Tata Steel which meets the highest European standards as per EN 10169:2022 for corrosion and UV resistance with revolutionary 3-layer technology.
- Both Colorcoat HPS200 Ultra® and Colorcoat Prisma® from Tata Steel have been independently tested for liberation of volatile organic compounds (VOC) against EN ISO 16000-9 and achieved an A+ rating.
- Future proof design and non-combustible insulation help minimise impact of change of tenant, insurance requirements or legislation amendments.
- We provide a full 25-year guarantee on all products, used in the envelope.
- Guarantee issued direct to building owner, providing a clear line of communication.

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GL PROFILES
FABRICATION SPECIALISTS

Confidex® Guarantee from Tata Steel

TS-GL envelope systems are manufactured from Colorcoat HPS200 Ultra® or Colorcoat Prisma® pre-finished steel from Tata Steel.

Both products come with the Confidex® Guarantee from Tata Steel. Offered direct to the building owner for the weatherside of industrial and commercial buildings when registered for online, and provide the most comprehensive cover for up to 40 years (subject to location).

GL Profiles 1st Class system Guarantee and the Confidex® Guarantee are fully transferable on change of building ownership and ensures no reduction in guarantee period or performance of the pre-finished steel when used in conjunction with framed, roof mounted Photovoltaic (PV) systems.

	Colorcoat HPS200 Ultra® Colours		Colorcoat Prisma® Colours		
	Signature Colour	**Classic & Matt**	**Solid, Metallic & Matt**	**Elements**	
INLAND	40 years	30 years	35 years	25 years	Roofs
	40 years	40 years	40 years	30 years	Walls
COASTAL	30 years	25 years	25 years	20 years	Roofs
	30 years	30 years	30 years	25 years	Walls

Table above only applies to projects in the UK.

Notes:
1. Figures under the Coastal heading are for buildings within 1 km of any coast.
2. Full terms and conditions of the Confidex® Guarantee are on the online application form, available at www.colorcoat-online.com/ registration
3. Confidex® must be registered within 3 months of the building completion date for the guarantee to be valid.
4. The Confidex® Guarantee periods on the diagram above are applicable to Zone 1.
For more information on other zones visit www.colorcoat-online.com/confidexmap

Please contact GL Profiles technical department to discuss your refurb or new envelope systems guarantee, as stainless-steel fixings may be required in certain locations. For all GL Profiles 1st Class Guarantee warranties please see GL Profiles warranty procedure documents. Including a list of approved suppliers.

PROFILE TYPES

Roof and Wall Profiles for Structural and Aesthetic Versatility

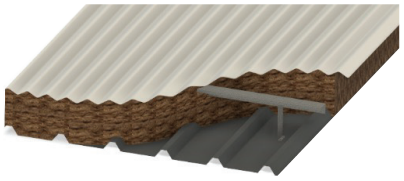
GL Profiles offers a range of high-performance steel profiles for roof and wall cladding applications. These profiles are engineered to meet both structural and architectural demands, with options for acoustic treatment and curved installations.

All profiles are manufactured in accordance with BS EN 14782, using high-quality pre-finished steel. A variety of colours and finishes are available upon request.

GL-TS-(1-4) ROOF SYSTEM

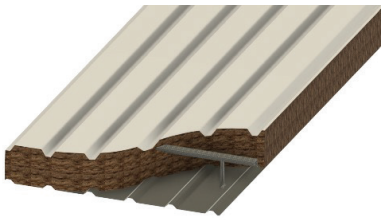
Profile Code	Depth (mm)	Cover Width (mm)	Gauge Options	Suitable for Self Curving	Notes
GL-32R	32	1000	0.7	Yes	Popular structural roof profile
GL-32WL	32	1000	0.7	Yes	Walkable Liner
GL-13.5/3	13.5	990	0.7	Yes	Often used for agricultural or utility roofs

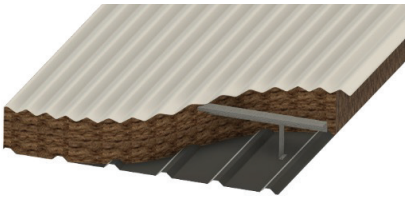
Note: All profiles available in a range of finishes including plastisol, polyester, and metallic coatings.



GL-TS-(5-8) WALL SYSTEM

Profile Code	Depth (mm)	Cover Width (mm)	Gauge Options	Horizontal Use
GL-32W	32	1000	0.5 / 0.7	Optional
GL-18W	19	1000	0.4 / 0.5 / 0.7	No
GL-13.5/3”	18	990	0.5 / 0.7	Optional





Note: All profiles available in a range of finishes including plastisol, polyester, and Prisma coatings.

SYSTEM REFERENCE GUIDE

To streamline communication during specification, technical design, and procurement, GL Profiles uses a clear and structured reference format for all GL-TS systems. Each system reference indicates the system type, external profile, insulation depth, and liner profile used.

Roof Systems	Description
GL-TS-1	GL-32R Outer Sheet, GL-32WL Inner Sheet
GL-TS-2	GL-32R Outer Sheet, GL-18W Inner Sheet
GL-TS-3	GL-13.5/3" Outer Sheet, GL-32WL Inner Sheet
GL-TS-4	GL-13.5/3" Outer Sheet, GL-18W Inner Sheet

Wall Systems	Description
GL-TS-5	GL-32W Outer Sheet Vertically Laid, GL-18W Inner Sheet Vertically Laid
GL-TS-6	GL-13.5/3" Outer Sheet Vertically Laid, GL-18W Inner Sheet Vertically Laid
GL-TS-7	GL-32W Outer Sheet Horizontally Laid, GL-18W Inner Sheet Vertically Laid
GL-TS-8	GL-13.5/3" Outer Sheet Horizontally Laid, GL-18W Inner Sheet Vertically Laid

GL-TS ROOF SYSTEM NOMINAL SQ MTR WEIGHTS

Bracket Height	Insulation Depth	Overall System Depth	Weight
120mm	120mm	152mm	13.55Kg/m2
140mm	140mm	172mm	13.79Kg/m2
160mm	160mm	192mm	14.02Kg/m2
180mm	180mm	212mm	14.27Kg/m2
200mm	200mm	232mm	14.51Kg/m2
220mm	220mm	252mm	14.75Kg/m2
240mm	240mm	272mm	15.00Kg/m2
260mm	260mm	292mm	15.25Kg/m2
280mm	280mm	312mm	15.50Kg/m2
300mm	300mm	332mm	15.74Kg/m2

U-VALUES

Illustrated U values,
using insulation lambda value of 0.040W/m²K
Typical U-values achieved in

Insulation Depth	Walls	Roofs
300	0.15	0.16
280	0.16	0.17
260	0.18	0.18
240	0.19	0.19
220	0.21	0.21
200	0.23	0.23
180	0.25	0.25
160	0.31	0.31
140	0.40	0.40
120	0.48	0.48

Note: The above tables should be used for guidance only. Due to the complex nature of heat flow through these systems (due to the way they are assembled) it is not possible to calculate U-values using the normal simplified methods. Rails at 1.20metre spacings, rail width 40mm and rail thickness 1.2mm.

ROOF SYSTEMS

Built-up Site-Assembled Roof Solutions Using the GL-Tech Bar

GL Profiles offers a range of high-performance built-up roof systems using the GL-TS configuration. All systems are site-assembled using profiled steel outer sheets, quilt insulation, and steel liner sheets supported by our GL-Techbar.

These systems are suitable for:

- Industrial and commercial buildings
- New build and refurbishment applications
- Self Curving and low-pitch roofing

GL-TS-(1-4) Roof System

Build-Up:

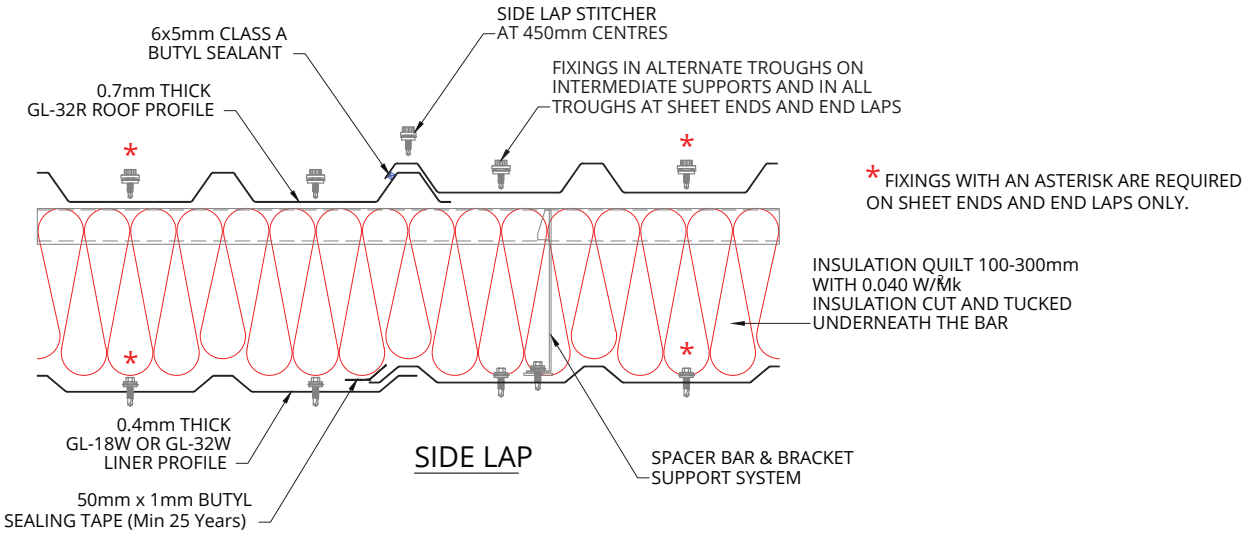
- External profiled steel sheet (e.g. GL-32R, GL-13.5/3")
- Glass or mineral wool quilt insulation
- Internal steel liner sheet (e.g. GL-32WL or GL-18W)
- GL-Tech Bar and bracket system
- Self-drilling fasteners through bar, bracket, and liner to steel purlins

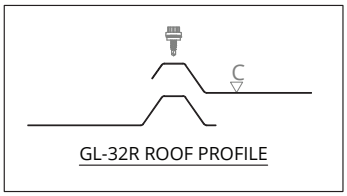
				Max Load at 1.5m Span Imposed Load		
Profile	**Material**	**Gauge (mm)**	**Weight (kg/m2)**	**Single Span**	**Double Span**	**Multi Span**
GL-32R	GP, LG, HPS & Prisma	0.7	6.76	2.5	1.79	2.15
GL-32WL	BWL	0.7	6.76	2.5	1.79	2.15
GL-13.5/3"	GP, LG, HPS & Prisma	0.7	6.76	0.62	1.03	1.03
GL-18W	BWL	0.4	3.8	0.65	0.58	0.71

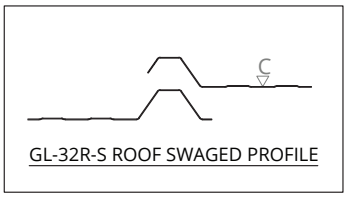
Key Features:

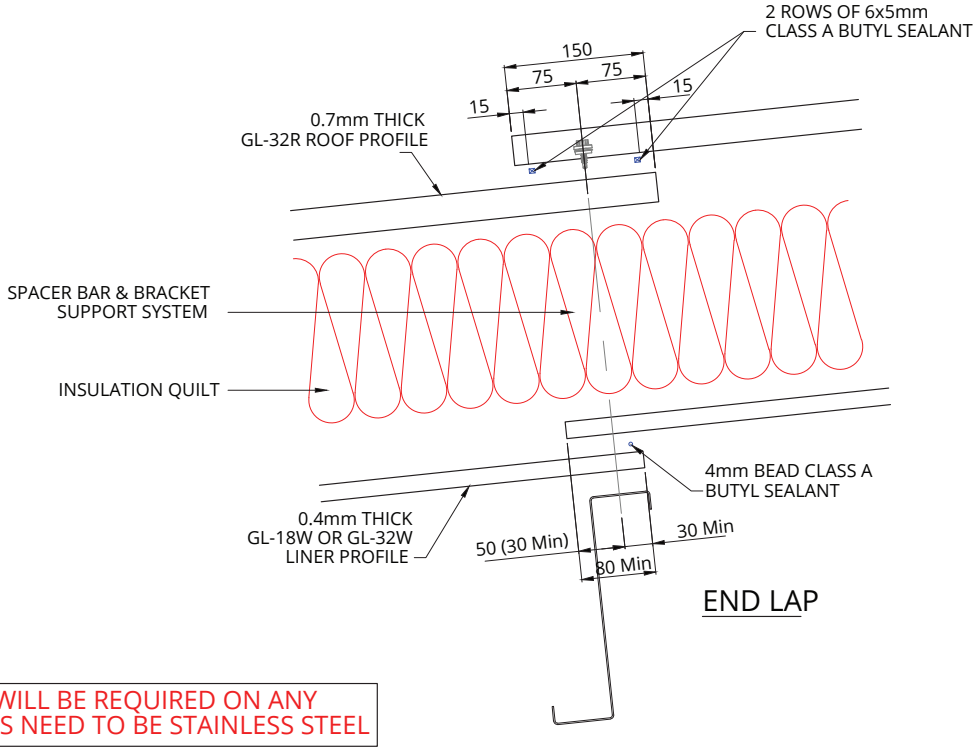
- Compatible with 100–300 mm insulation depths
- Maintains insulation continuity around bar and bracket
- Vapour control layer built into liner and bracket interface
- Supports U-values down to 0.15 W/m²K depending on build-up
- Fully walkable options available using GL-32WL

Buildup and Lap Detail



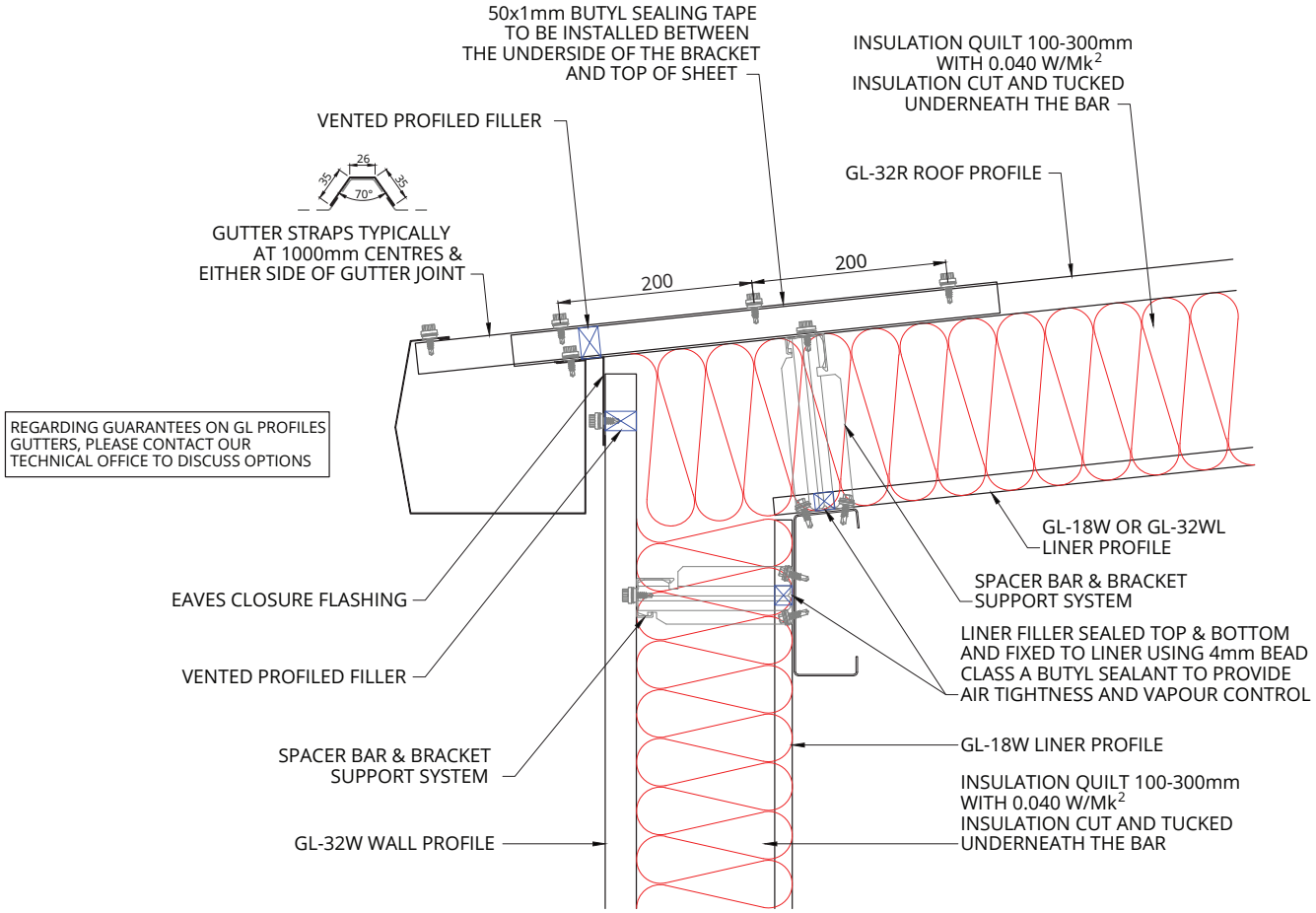


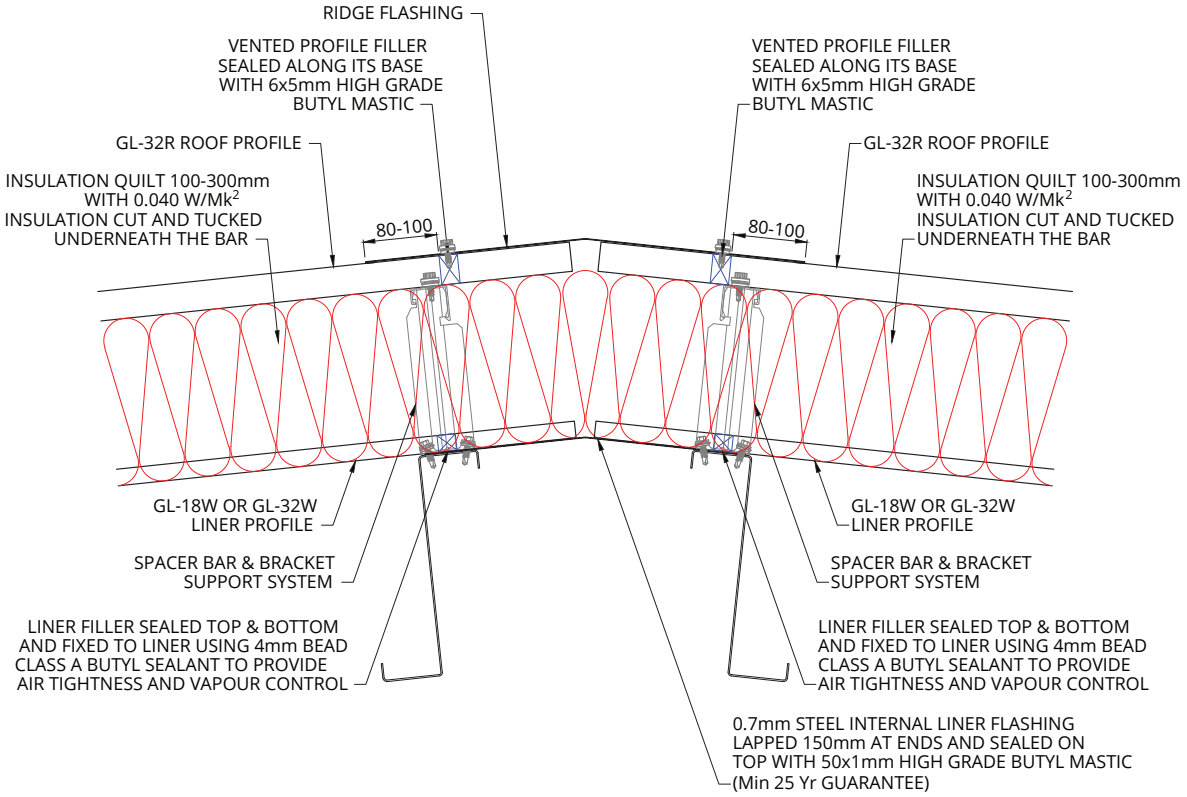




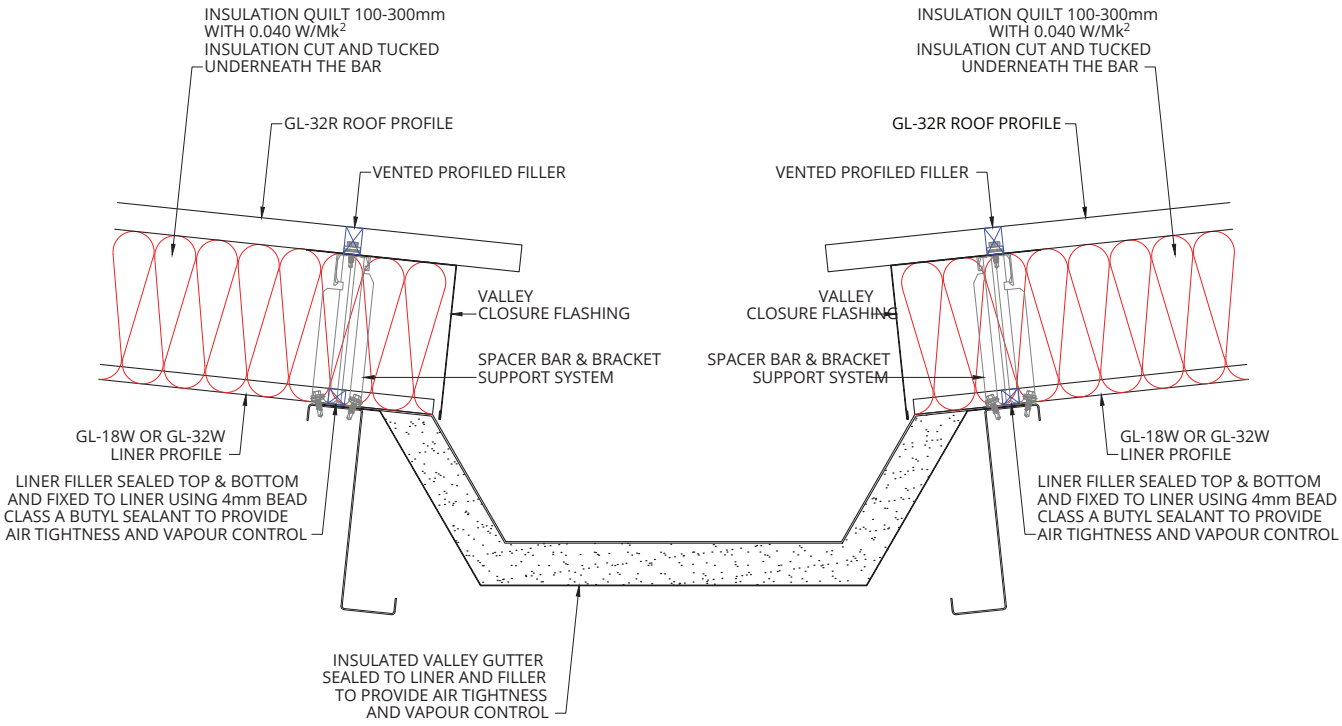
NOTE: IF A 25 YEAR GUARANTEE WILL BE REQUIRED ON ANY GL PROFILE SYSTEMS, ALL FIXINGS NEED TO BE STAINLESS STEEL

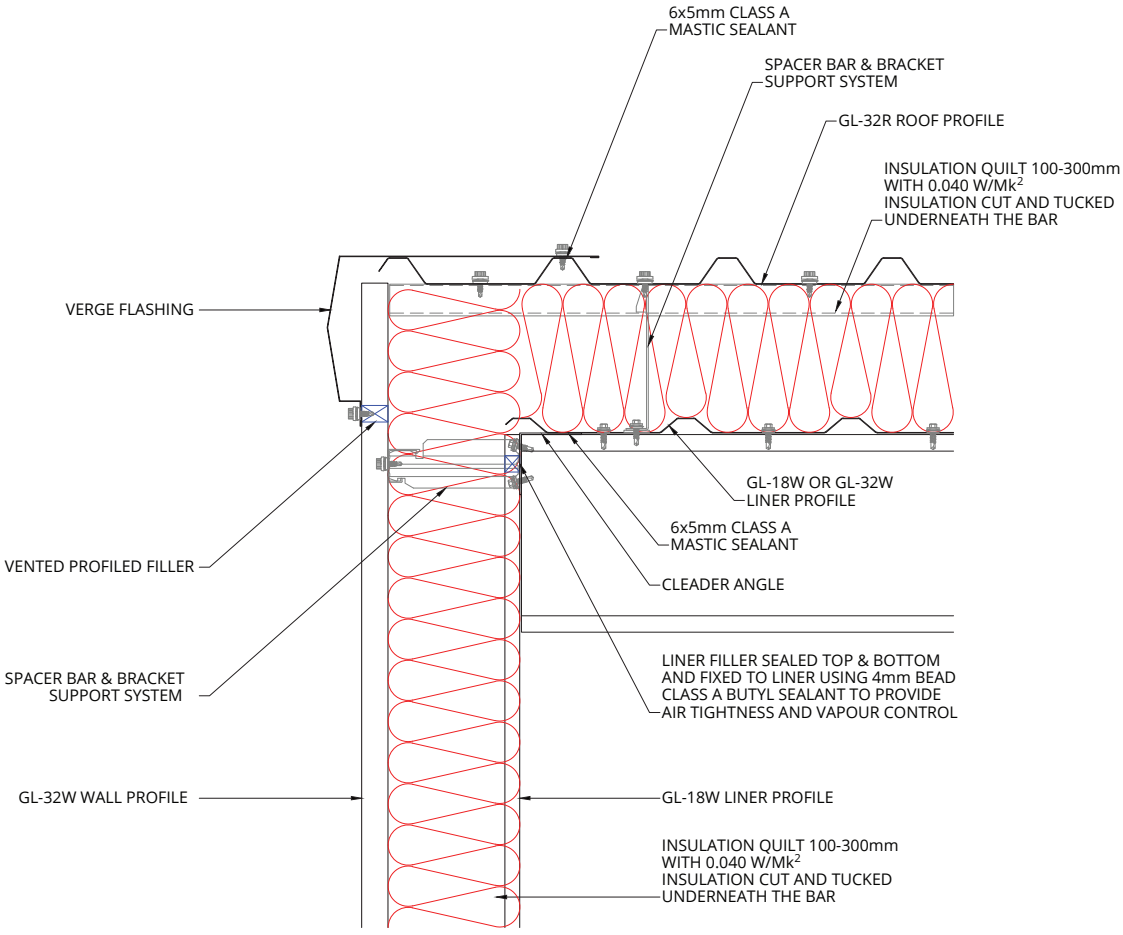
Eaves and Ridge Detail



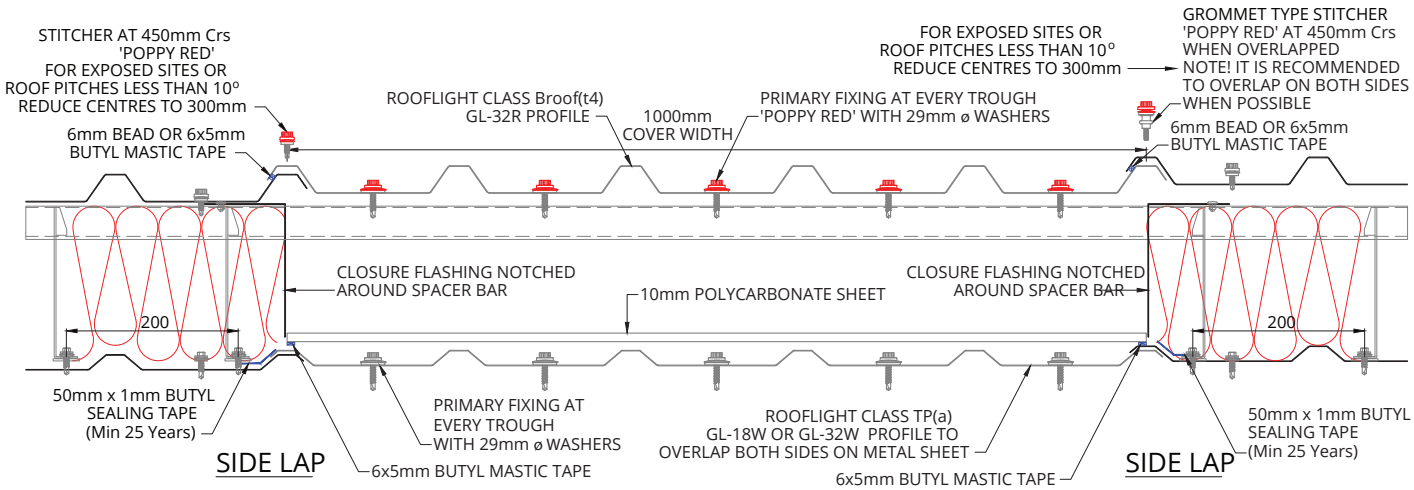


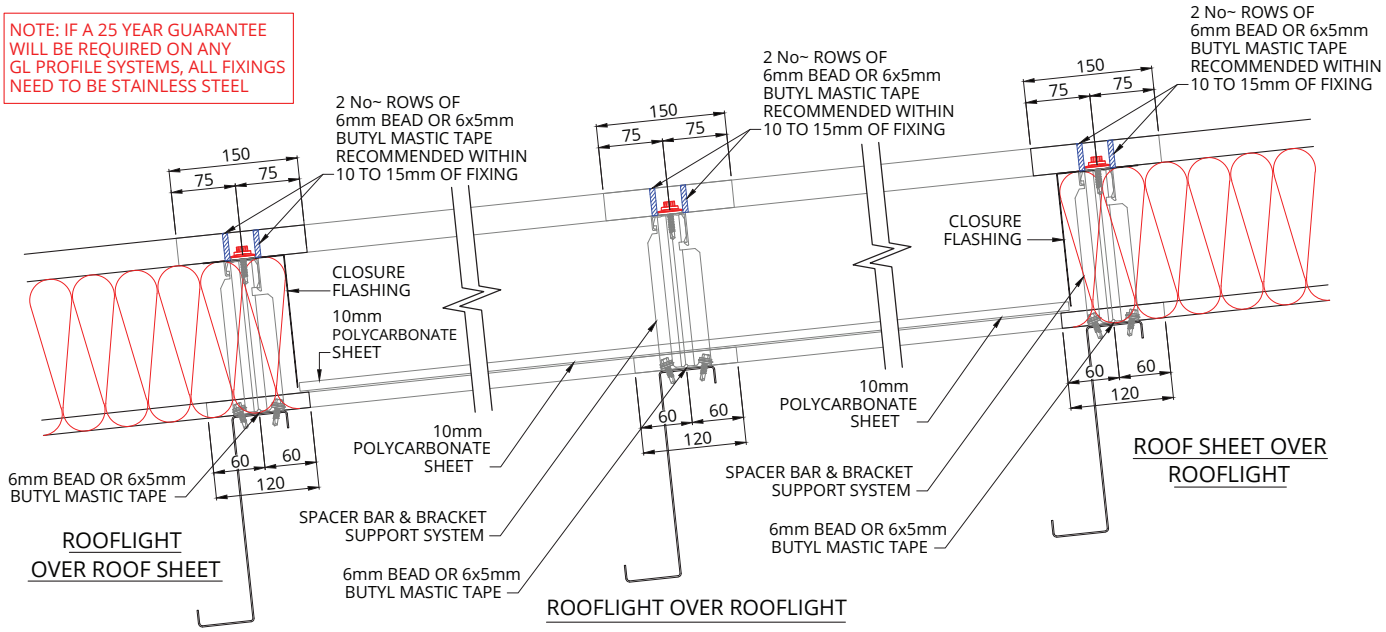
Valley and Barge Detail





Rooflight Detail





Minimum Classifications to achieve 25 year Guarantee

Walkable System

System	Outer Sheet	Liner Sheet	Non Fragility	Roof Access	4mm PC	Light Trans
GL-TS-1 (trapezoidal 32/32)	CE18E	CE30	B	Infrequent	1.72 W/(m²K)	51
GL-TS-1 (trapezoidal 32/32)	CE30E	CE30	B	Frequent	1.72 W/(m²K)	52
GL-TS-3 (sinusoidal / trap 32 liner)	CE18E	CE30	B	Infrequent	1.72 W/(m²K)	51
GL-TS-3 (sinusoidal / trap 32 liner)	CE30E	CE30	B	Frequent	1.72 W/(m²K)	52

Non Walk Liner (lining out first)

System	Outer Sheet	Liner Sheet	Non Fragility	Roof Access	4mm PC	Light Trans
GL-TS-2 (trapezoidal 32/18 liner)	CE24E	CE24	B	Infrequent	1.72 W/(m²K)	54
GL-TS-2 (trapezoidal 32/18 liner)	CE30E	CE24	B	Frequent	1.72 W/(m²K)	55
GL-TS-4 (sinusoidal / trap 18 liner)	CE24E	CE24	B	Infrequent	1.72 W/(m²K)	54
GL-TS-4 (sinusoidal / trap 18 liner)	CE30E	CE24	B	Frequent	1.72 W/(m²K)	55

Non Walk Liner (not lining out first)

System	Outer Sheet	Liner Sheet	Non Fragility	Roof Access	4mm PC	Light Trans
GL-TS-2 (trapezoidal 32/18 liner)	CE30E	CE18	B	Frequent	1.72 W/(m²K)	51
GL-TS-2 (trapezoidal 32/18 liner)	CE30E	CE18	B	Frequent	1.72 W/(m²K)	51
GL-TS-4 (sinusoidal / trap 18 liner)	CE30E	CE18	B	Frequent	1.72 W/(m²K)	51
GL-TS-4 (sinusoidal / trap 18 liner)	CE30E	CE18	B	Frequent	1.72 W/(m²K)	51

Important Notes for All Systems

- Purlin Spans: Must be between 1.35m - 2.0m
- Glass Content: All classifications apply to rooflights with minimum 33% glass content
- Roof System Classification: Roof system without rooflights must achieve same non-fragile classification
- Walking on rooflights should be avoided at all times
- We have taken out all mension of vertical figures. This is because currently for new builds you cannot use GRP in a vertical application to building regs.
- Regulatory Limit: Limiting U-value for rooflights assessed in horizontal plane is 2.2 W/(m²K)

Application Requirements

- **Internal Liners/Single Skin:** Must be TP(a) rated
  - Cannot be within 1.5m of compartment walls
  - Rigid classification can be used for thermoset rooflights in industrial and storage buildings only. See Rooflight Association quick guide 10EN for additional information
  - No limits on rooflight area, spacing, or percentage of floor area • Not permitted in protected stairways
- **External Roofs:** B_ROOF_(t4) classification allowed at any boundary distance • Any fire grade acceptable
  - Common practice: Grade 300 outer sheet + Grade 104 liner or equivalent
- **For 25 Year Systems:** All products must be as specified in GL Profiles technical drawings • Outer sheets must be classified with suffix E (e.g. CE30E)
- **Standards Reference:** Non-fragility Testing: ACR[M]001 • Product Standard: BS EN 1013:2012 • Source: The Rooflight Association Technical Document NTD03 / 2017

GL-TS-BROOF(t4)

Approved Document B (ADB), focused on fire safety, was updated on 30 August 2019. It removed the old BS 476-3:2004 National Classification as the main fire performance standard for roofs, replacing it with the European system (BS EN 13501-5). Scotland still uses both systems. This standard evaluates a roof's resistance to external fire but not internal fire exposure.

The European system rates roofs from best to worst: BROOF(t4), CROOF(t4), DROOF(t4), EROOF(t4), and FROOF(t4). Under Paragraph 14.3 of ADBv2, some materials don't require testing if listed under EU Decision 2000/553/EC and used per national rules. These are considered compliant via "Classification Without Further Testing" (CWFT).

CWFT applies to common, pre-approved products that meet strict EU/UK fire standards without additional testing. They must show consistent performance, follow allowed manufacturing tolerances, and be unaffected by environmental changes.

Two relevant EU decisions are:

- **1. 2005/403/EC** – Covers certain steel roof sheets rated BROOF(t1–t3), but not valid in England (which requires t4).
- **2. 2000/553/EC** – Lists roof coverings that meet fire rules without testing if national standards, meet the following requirements
    - The material type is approved,
    - It's at least 0.4mm thick,
    - It has an inorganic coating or one with low calorific value or mass.

Under 2000/553/EC, the GL Profiles roof systems meet these requirements.

All GL-TS roof systems finished in Colorcoat® HPS200 Ultra or Prisma® have been independently assessed and achieve BROOF(t4) classification in accordance with EN 13501-5. This makes them suitable for all roofing applications, including those requiring non-combustible performance.

Report by Joule Group (May 2025)

Valid for Colorcoat® HPS200 Ultra, Prisma, LG, and GP

Insulation: Knauf FactoryClad 40 (A1 rated) or equivalent

Spacer: GL-Techbar™

"In our professional opinion, the GL Profiles Ltd. GL-TS roofing system can be perceived as achieving classification BROOF(t4)."

"the GL Profiles Ltd. system can be considered satisfying the conditions of 2000/553/EC and thus can be considered to fulfil all of the requirements for the performance characteristic 'external fire performance' without the need for testing."

— Joule Group

WALL SYSTEMS

Versatile Built-Up Wall Solutions for Vertical or Horizontal Installation

The GL-TS wall systems provide a flexible, high-performance envelope solution for external wall cladding. Whether installed vertically or horizontally, the system offers excellent thermal, acoustic, and fire performance — all built around the robust GL-Tech Bar support system.

These systems are fully site-assembled and ideal for both new build and refurbishment applications.

GL-TS-VW – Vertical Wall Cladding System

Build-Up:

- External profiled steel cladding (e.g. GL-C32, GL-C46)
- Mineral or glass wool quilt insulation
- Steel internal liner (e.g. GL-LP1000)
- GL-Tech Bar with brackets fixed to structural rails
- Self-drilling fixings through bracket and liner into steelwork

				Max Load at 1.5m Span Imposed Load		
Profile	**Material**	**Gauge (mm)**	**Weight (kg/m2)**	**Single Span**	**Double Span**	**Multi Span**
GL-32W	GP, LG, HPS & Prisma	0.5	4.83	1.54	0.97	1.16
GL-32W	GP, LG, HPS & Prisma	0.7	6.76	2.5	1.79	2.15
GL-13.5/3"	GP, LG, HPS & Prisma	0.5	4.83	0.44	0.74	0.74
GL-13.5/3"	GP, LG, HPS & Prisma	0.7	6.76	0.62	1.03	1.03
GL-18W	BWL	0.4	3.8	0.65	0.58	0.71

Key Features:

- Suitable for insulation thicknesses up to 300mm
- Brackets spaced at up to 1.2m depending on wind loading
- Maintains continuous insulation layer with minimal bridging
- Compatible with standard and acoustic liner options

GL-TS-HW – Horizontal Wall Cladding System

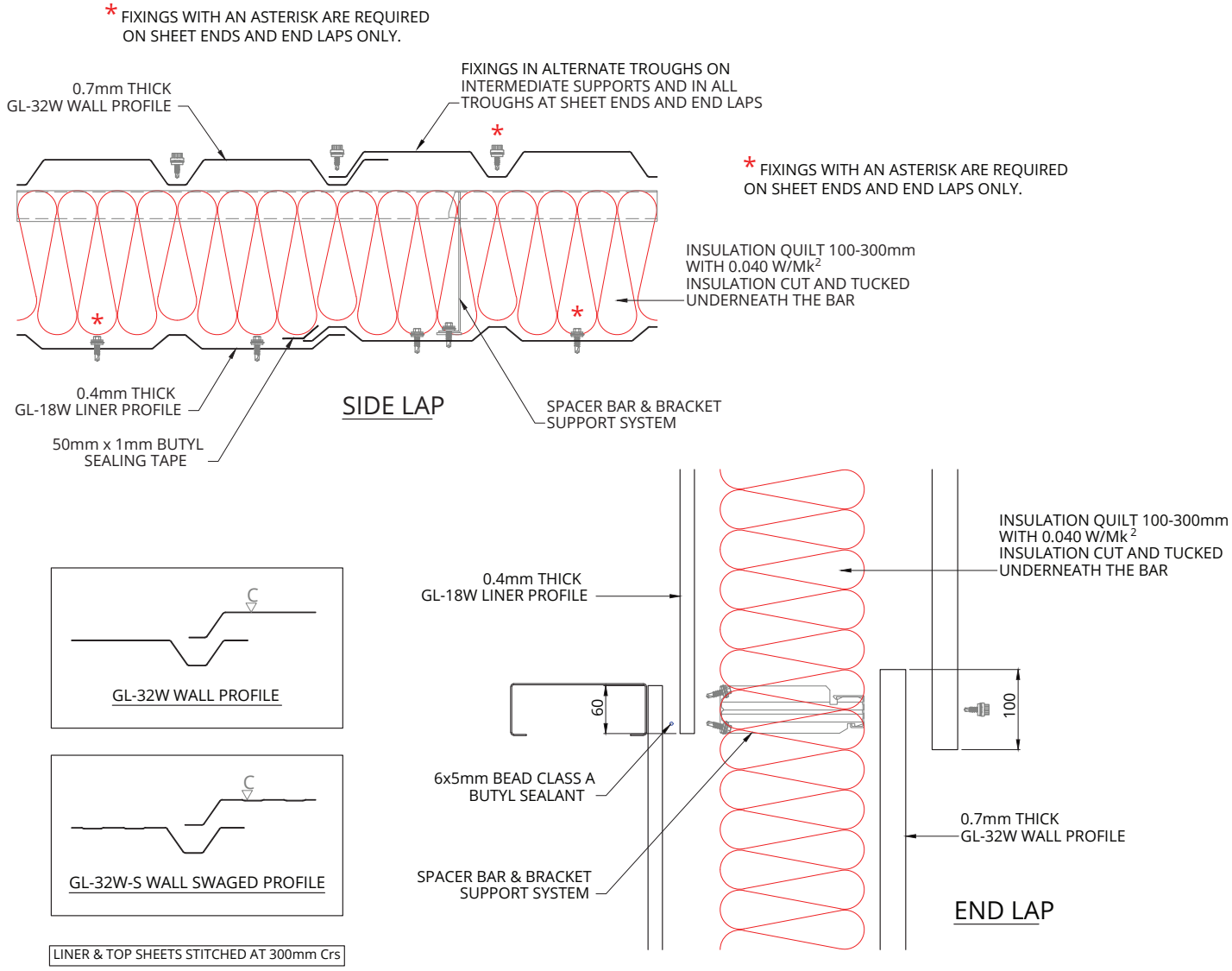
Build-Up:

- Horizontal external cladding fixed to vertical rails
- Vertical GL- Tophat Tech Bars supported by bespoke cleats or top-hats
- Continuous support for horizontally laid sheets
- Insulation quilt fitted behind bar to reduce compression

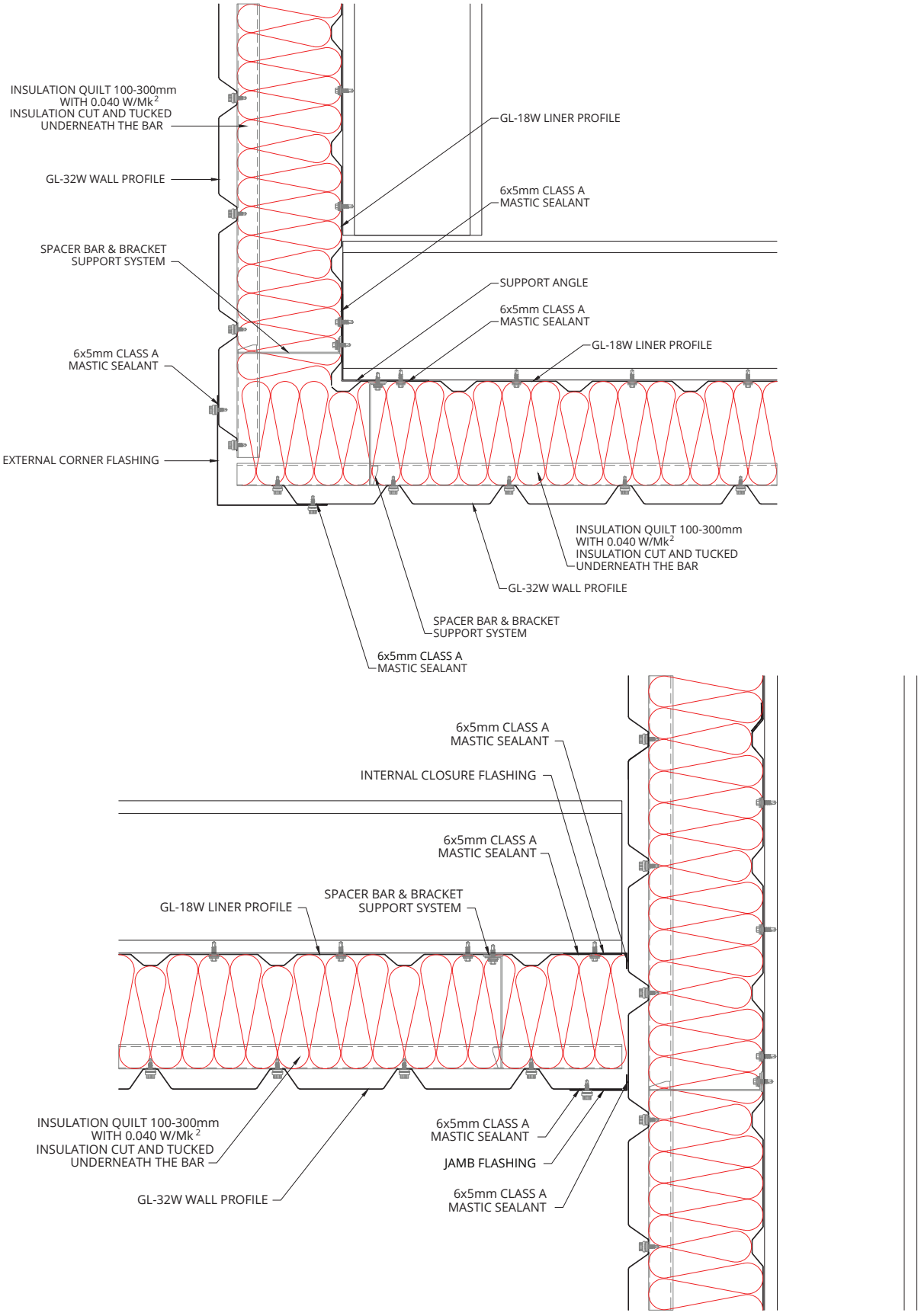
Key Features:

- Designed to reduce vertical load deflection
- Includes anti-sag measures for longer brackets
- Supports safe working loads up to 1.0 kN/m² (depending on bracket centres)
- Thermal break at bracket base minimises cold bridging

Side and End Lap Detail



Corner and Abutment Detail



Acoustic sound Insulation Performance, Rw dB.

Top sheet	Nett insulation thickness mm	Liner sheet	Rw dB
Roof, 0.7mm steel, 32 profile depth	180	0.7mm steel, 32mm liner profile depth	36
Roof, 0.7mm steel, 32mm profile depth	290	0.7mm steel, 32mm liner profile depth	38
Wall, 0.5mm steel, 32mm profile depth	180	0.4mm steel, 18mm liner profile depth	34
Wall, 0.7mm steel, 32mm profile depth	290	0.7mm steel, 32mm liner profile depth	38

Acoustic Notes:

Insulation is 0.040W/mK glass quilt.

Rw values are indicative for the range of profile depths.

Rw values by MCRMA/Salford University SRIPT software modelling. Solid (non-perforated) Liner, 1500mm spans.

Fire Regulations

After the Grenfell Tower fire in July 2017, Judith Hackitt led a review of the Building Regulations 2010. Her report called for stricter safety rules. In response, the UK introduced the Building (Amendment) Regulations 2018, banning flammable materials on external walls and updating Approved Documents—guidance for compliance.

Approved Document B (ADB), focused on fire safety, was updated on 30 August 2019. It removed the old BS 476-3:2004 National Classification as the main fire performance standard for roofs, replacing it with the European system (BS EN 13501-5). Scotland still uses both systems. This test evaluates a roof's resistance to external fire but not internal fire exposure.

The European system rates roofs from best to worst: BROOF(t4), CROOF(t4), DROOF(t4), EROOF(t4), and FROOF(t4). Under Paragraph 14.3 of ADBv2, some materials don't require testing if listed under EU Decision 2000/553/EC and used per national rules. These are considered compliant via "Classification Without Further Testing" (CWFT).

CWFT applies to common, pre-approved products that meet strict EU/UK fire standards without additional testing. They must show consistent performance, follow allowed manufacturing tolerances, and be unaffected by environmental changes.

Two relevant EU decisions are:

1. **2005/403/EC** – Covers certain steel roof sheets rated BROOF(t1–t3), but not valid in England (which requires t4).
2. **2000/553/EC** – Lists roof coverings that meet fire rules without testing if national standards, meet the following requirements
   - The material type is approved,
   - It's at least 0.4mm thick,
   - It has an inorganic coating or one with low calorific value or mass.

Under 2000/553/EC, the GL Profiles roof systems meet these requirements.

GL Profiles engaged with the JOULE Group, to produce a detailed report on the two methods that demonstrate the performance classification:
1. By undertaking fire testing and classification per BS EN 13501-5, or
2. Roof covering products falling under the scope of Classification Without Further Testing

Please contact GL Profiles technical department to discuss or to receive a copy of the report.

INSTALLATION GUIDANCE

Safe, Efficient Assembly of the GL-TS Roof and Wall Systems

All GL-TS Systems are site-assembled, offering flexibility and ease of handling during installation. The system is designed to allow safe working practices, reliable structural performance, and consistent thermal and acoustic continuity.

The TS systems require support from steel purlins. The primary structural steelwork must comply with tolerance specifications outlined in the National Structural Steelwork Specification for Building Construction (NSSS) and BS EN 1090-2:2008 +A1:2011. Secondary structural elements should meet the tolerance requirements specified in SCI publication P346 "Best Practice for the Specification and Installation of Metal Cladding and Secondary Steelwork". Additional valuable guidance can be found in MCRMA documents GD 20 "Guidance document on serviceability states and deflection criteria", GD 24 "Installation of purlins and side rails", and GD27 "Installed tolerances: best practice design guide" as well as GD 07 Installation and quality of workmanship.

All installations must follow the guidance below and relevant project-specific drawings provided by GL Profiles.

General Considerations

All GL-TS Systems are site-assembled, offering flexibili

- Prior to sheet installation, verify that the steelwork is square and accurately positioned. When possible, install sheets laying into the prevailing wind direction to ensure lap joints face away from wind exposure. Examine delivery packages thoroughly and document any damage or missing items on the delivery documentation.
- Ensure all materials are **stored flat and dry**, off the ground
- Components must be **handled carefully** to avoid damage to coatings or protective films
- Do not install in high winds or wet conditions where sealing and alignment may be compromised
- Always use correct PPE and follow site safety protocols

On-Site Cutting Requirements

When profiles require cutting on-site:

- Utilize a powered nibbler, reciprocating saw, or circular saw only—abrasive wheels are prohibited
- Provide adequate support along the cutting line
- Shield the pre-coated profile finishes during cutting operations
- Remove all metal shavings and debris from the pre-coated surface immediately after cutting
- Do not use impact drivers

Roof System Installation – GL-TS-R / GL-TS-RWL

1. **Fix the internal liner sheet** (e.g. GL-LP1000) to the steel purlins using self-drilling fasteners. Ensure liner laps are sealed for air and vapour control.
2. **Install the GL-Tech Brackets:**
   - Twist-lock the brackets into the GL-Tech Bar at 1.0 m centres, or as specified
   - A bracket must be located within 100 mm of the end of each bar
   - Sway Brackets to be installed on systems 260mm or deeper as specified
3. **Fix the bar and bracket assembly** through the liner sheet into the purlin with **two self-drilling screws per bracket**
4. **Lay insulation quilt** between and over the brackets. Dress tightly around brackets to maintain continuity
5. **Install the external profiled sheet** (e.g. GL-R32) over the bar and fix with appropriate fasteners at specified centres

Wall System Installation – GL-TS-5 / GL-TS-6

1. **Install the liner sheet** to the steel rails using self-drilling screws, ensuring all laps are sealed
2. **Fix the GL-Tophat Tech Brackets** to rails or cleats:
   - For vertical systems: brackets twist-locked into horizontal bars
   - For horizontal systems: vertical bars fixed to rails with cleats or top-hats
3. **Secure the GL-Tech Bars** using appropriate fixings, ensuring alignment and level
4. **Install insulation quilt**, dressing it between brackets and behind bars to minimise compression
5. **Stick Pins** to be attached to liner sheet
6. **Fix external cladding sheets** through the outer profile into the bar or sheeting rail, depending on system orientation

Notes for Fire-Resistant Systems - GL-TS-BROOF(t4)

Report from Joule Group is based on the Full built up system specified within this document. Any alterations to the build-up will not truly reflect the report by Joule croup.

Wall System Installation – GL-TS-7 / GL-TS-8

1. **Install the liner** sheet to the steel rails using self-drilling screws, ensuring all laps are sealed
2. **Fix the GL-Tophat Tech Brackets** to rails or cleats:
   - For vertical systems: brackets twist-locked into horizontal bars
   - For horizontal systems: vertical bars fixed to rails with cleats or top-hats
3. **Secure the GL-Tech Bars** using appropriate fixings, ensuring alignment and level
4. **Install insulation quilt**, dressing it between brackets and behind bars to minimise compression
5. **Stick Pins** to be attached to liner sheet
6. **Fix external cladding sheets** through the outer profile into the bar or sheeting rail, depending on system orientation

Ongoing Maintenance Requirements

The property owner/client is responsible for maintaining the roof and wall systems according to BS5427, BS7543, and other applicable British Standards and codes of practice to ensure optimal performance and longevity. Maintenance inspections must be conducted by qualified, experienced personnel following completion of appropriate risk assessments and method statements. Annual inspections are mandatory, with additional inspections required following severe weather events. Where feasible, roof inspections should be performed from eaves or gable positions to eliminate the need for roof access.

Scan this code to download the Tata Steel Inspection and Maintenance Manual

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FIXING DETAILS

WALL FASTENER SELECTION			
Application	**Woodalls**	**Fixfast**	**SFS**
Primary fixing for external profile to spacer bar	BML25S16-MH + Colour	MF3-SS-A15-5.5x35 + Colour	SX3-S19-6X29 + Colour
Primary fixing for internal liner profile to cold rolled purlins	BML25S16-MH	DF3-SS-A15-5.5x25	SX5-S16-5,5X31
Primary fixings for internal liner profile to hot rolled purlins	BMH40S16-MH	MF6-SS-A15-5.5x30	SX14-S16-5,5X40
Primary fixings for spacer bracket to cold rolled purlins	BML25S16-MH	DF3-SS-A15-5.5x25	SX5-S16-5,5X31
Primary fixings for spacer bracket to hot rolled purlins	BMH40S16-MH	MF6-SS-A15-5.5x30	SX14-S16-5,5X40
External stitching screw for side-lap and/or metal flashing to external weathering profile	BMS27S19-MH	MF2-SS-A15-6.3 x 25	CXLW-AV14-4 8X28 + Colour
External rivet for side-lap and/or metal flashing to external weathering profile	AL4815	R-SS-LAC-4.8x10 + Colour	PG-C-ALST-4,8X10,0 +Colour

ROOF FASTENER SELECTION			
Application	**Woodalls**	**Fixfast**	**SFS**
Primary fixing for external profile to spacer bar	BML25519 + Colour	MF3-SS-A19-5.5x35 + Colour	SX3-S16-6X29 + Colour
Primary fixing for internal liner profile to cold rolled purlins	BML25516	DF3-SS-A15-5.5x25	SX5-S16-5,5X31
Primary fixings for internal liner profile to hot rolled purlins	BMLH40516	MF6-SS-A15-5.5x30	SX14-S16-5,5X40
Primary fixings for spacer bracket to cold rolled purlins	BML25NW	DF3-SS-A15-5.5x25	SX5-S16-5,5X31
Primary fixings for spacer bracket to hot rolled purlins	BMH40NW	MF6-SS-A15-5.5x30	SX14-S16-5,5X40
External stitching screw for side-lap and/or metal flashing to external weathering profile	BMS27519-MH	MF2-SS-A15-6.3 x 25	CXLW-AV14-4,8X28 + Colour
External rivet for side-lap and/or metal flashing to external weathering profile	AL4815 + Colour	R-SS-LAC-4.8x10 + colour	PG-C-ALST-4,8X10,0 + Colour
	No fixing are required on internal liner sheet side laps but 50x1mm Butyl Sealant 25 year guarantee must be installed		

TYPICAL FASTENER LAYOUT Note: All sealants need to be minimum 25 years guarantee			
GL-32R	Main fixings (Sheet ends)	Main fixings	Laps
GL-32R-S	Every Trough	(Intermediate)	
GL-32W	5no fixings	Even other trough	Stitches @ 450
GL-32W-S		3no fixings	
GL-18R	As above	As above	Laps
GL-18R-S GL-18W GL-18W-S			50x1mm Butyl tape

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CONTACT & TECHNICAL SUPPORT

Here to Help at Every Stage of Your Project

GL Profiles is committed to providing clear, responsive technical support throughout the design, specification, and installation of your GL-TS System. Whether you're preparing a tender, modelling U-values, or working through installation on-site — we're here to help.

Contact Us

GL Profiles Ltd
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Dock Road, Chatteris PE16 6TY

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Technical Support Services

- **System Detailing**
  Standard and custom build-up guidance
- **U-Value Calculations**
  Project-specific insulation modelling
- **Wind Load & Structural Checks**
  Span/load analysis
- **Fire Strategy Support**
  Certified roof system data
- **Fixing Patterns & Setting Out**
  Installer-ready layouts
- **Drawing Packs**
  PDF and DWG available on request
- **Site Surveys**
  Site surveys are available on request.

Document Notes

- All specifications are subject to project-specific structural and environmental requirements.
- Final installation should always be approved by the principal designer or structural engineer.
- This guide is not a substitute for appropriate professional advice and should be used in conjunction with GL Profiles' certified drawings and test data.

For latest drawings and support tools, please contact **sales@glprofiles.co.uk**