

STRUCTURA UK RAICO THERM+



Following a strategic partnership with RAICO Bautechnik GmbH, Structura is now able to offer Kalwall® together with the RAICO THERM+ curtain walling system.

The industry-leading THERM+ framing system offers a wealth of possibilities such as the facility to conceal fixings and screws making for a seamless finish and the flexibility to use a frame in aluminium, timber or steel. It also presents the opportunity for semi-unitising the panels which can incorporate windows, Kalwall or a combination of both. This allows for monolithic, single action installations which save time on site and give excellent cost benefits together with a high performance long life cycle.

In addition, the THERM+ glazing system offers a wide range of variations. By selecting one or more of the base profile systems, identical construction of mullion-transom curtain wall and glass roofs are possible. Options include an aluminium system offering a large range of support profiles, a set-on-top steel base profile for any commercially available steel support profiles, or a base profile designed to fit on to a range of timber products. With regard to the curtain wall system, the thermal insulation can be set to individual requirement by selecting the appropriate accessories without the need to change the base profiles.

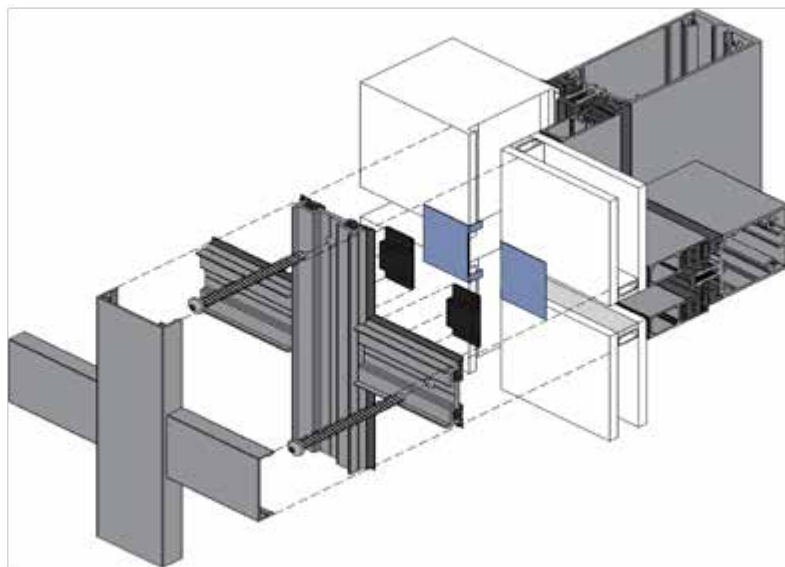
It has passed a series of assessments designed to replicate various CWCT (Centre for Window and Cladding Technology) criteria and EN 13830 'Curtain walling - Product standard'. Testing was completed using the RAICO THERM+ 56 A-I system with a standard Kalwall 70mm panel.

WHAT IS THERM+ CAPABLE OF?

This curtain wall system with integrated screw channel is compatible with all other THERM systems. Architects can employ it freely with a massive range of dimensions and wall thicknesses, and use its sharp-edged look to create elegant, seamlessly-merged glass and curtain wall profiles.

Installers no longer need to worry about welding or riveting, as the FS-1 system lets them screw the pressure profile and structural system directly to each other. The system also includes two different T-connectors for single-bar and ladder installation.

THERM+ Framing Types:



THERM+ IS AVAILABLE IN ALUMINIUM, TIMBER AND TWO STEEL OPTIONS.

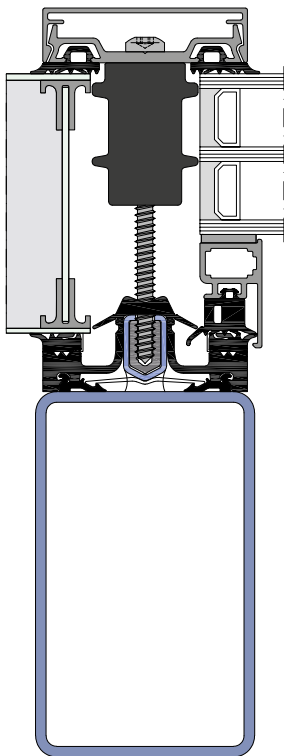
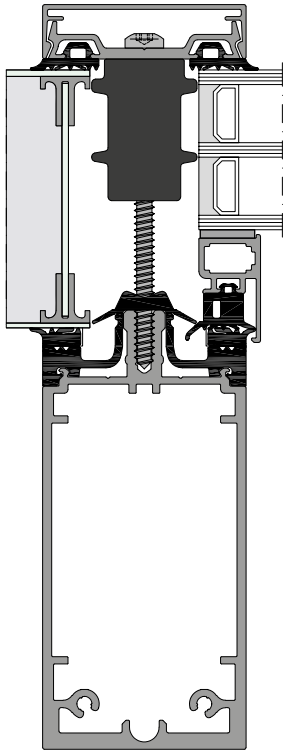
Key features:

- Framing is available in aluminium, timber and steel, or a combination of any of these.
- There is a choice of 50mm, 56mm and 76mm sight-line widths, but due to the design of the gasket you could mix and match these. For example 76mm mullions with 50mm transoms to give a strong vertical emphasis with a light horizontal line. (NB: Aluminium only available in 50mm and 56mm. All other frames are available in all three sight-lines).
- Framing can be fitted with Isobloc to improve Uf values down to Passive House Standard.
- The system can be used in a sloped glazing arrangement down to 2° from horizontal.
- Passive house certified in all system widths and on all system types.
- Integrated drainage system.
- Extensive system accessories, e.g. sun protection fixtures.
- Direct mounting of the pressure profile into steel substructure (Therm S-I Steel).
- Integrated screw channel in tube reduces planning, manufacturing and installation costs (Therm S-I Steel).
- No welding for curtain wall construction (Therm S-I Steel).
- Sendzimir galvanised profiles ensure corrosion protection. Special technology for invisible screwed transom connection.
- Design variants: burglar-resistance up to RC3, Structural Glazing SG2, fire protection up to EI 30.

PRODUCTS IN PRACTICE



A WINNING COMBINATION



THERM+ A-1

Aluminium Curtain Wall

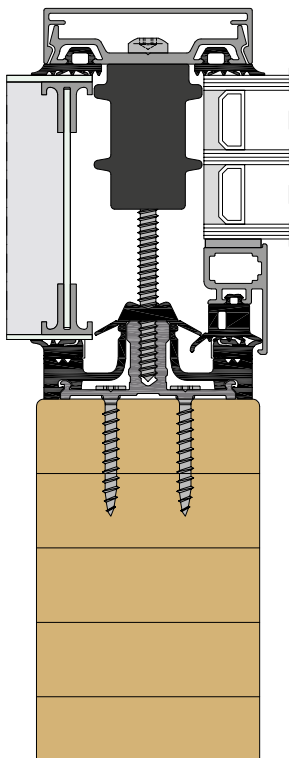
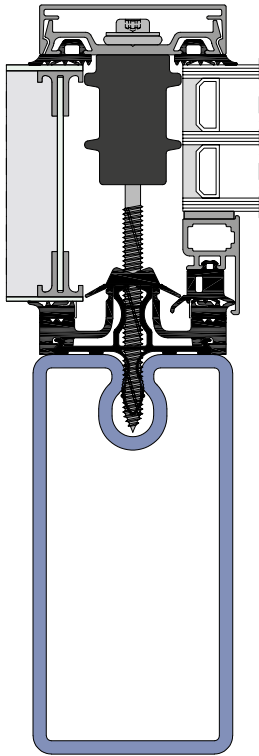
- Passive house certified in all system widths (A-V)
- Maximum thermal insulation with insulating block variant down to $U=0.85 \text{ W/(m}^2\text{K)}$ including screw influence
- Excellent aesthetics to the flush faced transoms be sharp edge cross sections
- Profiles are all suited for mullion and transom
- Numerous options for the T-connection technology
- A large selection of rectangular and T-shaped structural profiles is available
- Wide range of system accessories available (e.g. sun protection fixation)
- Integrated drainage system in the continuous hat sealing in three levels
- Stepless thermal insulation by means of RAICO Insulating Block Technology
- Maximum inertia values by means of optimised profile design

THERM+ S-1

Steel curtain wall

- Passive house certified in system widths 50 and 56
- Maximum thermal insulation with insulating block variant down to $U=0.78 \text{ W/(m}^2\text{K)}$ including screw influence
- Stepless thermal insulation by means of RAICO Insulating Block Technology
- Set-on-top construction for any steel support profile with a width from 50mm
- Integrated drainage system in the continuous hat sealing in three levels
- Steel profiles in T-shape with a face width of 60mm and a depth of 60, 90, 120mm; these profiles are ideally suited for sophisticated glass facades
- Total load chain with approved connection, from the welding with the supporting structure and the glass load transmission to the screwing of the pressure profile
- Safe and easy glass load transmission for heavy panes up to 1,500 kg

A WINNING COMBINATION



THERM+ FS-1

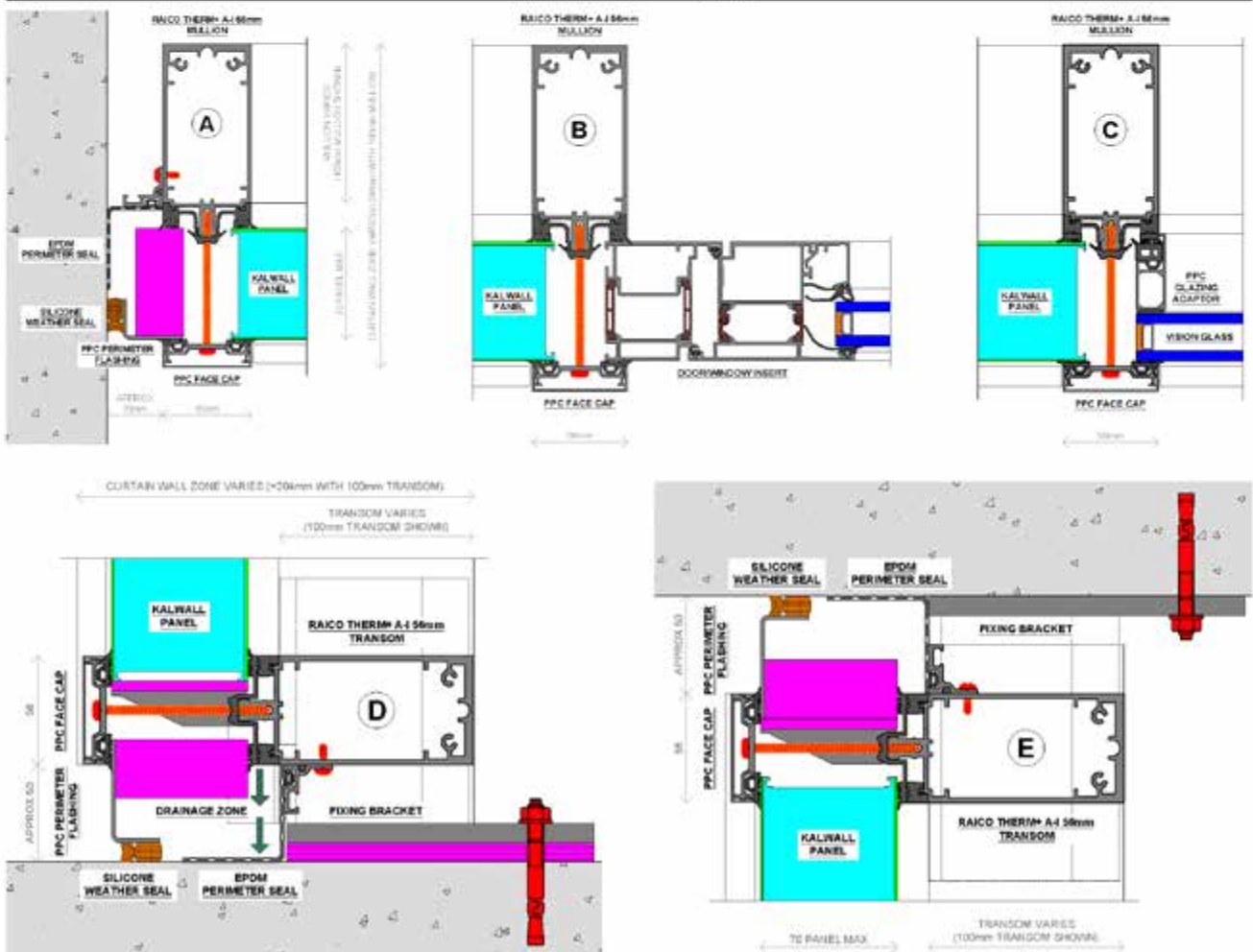
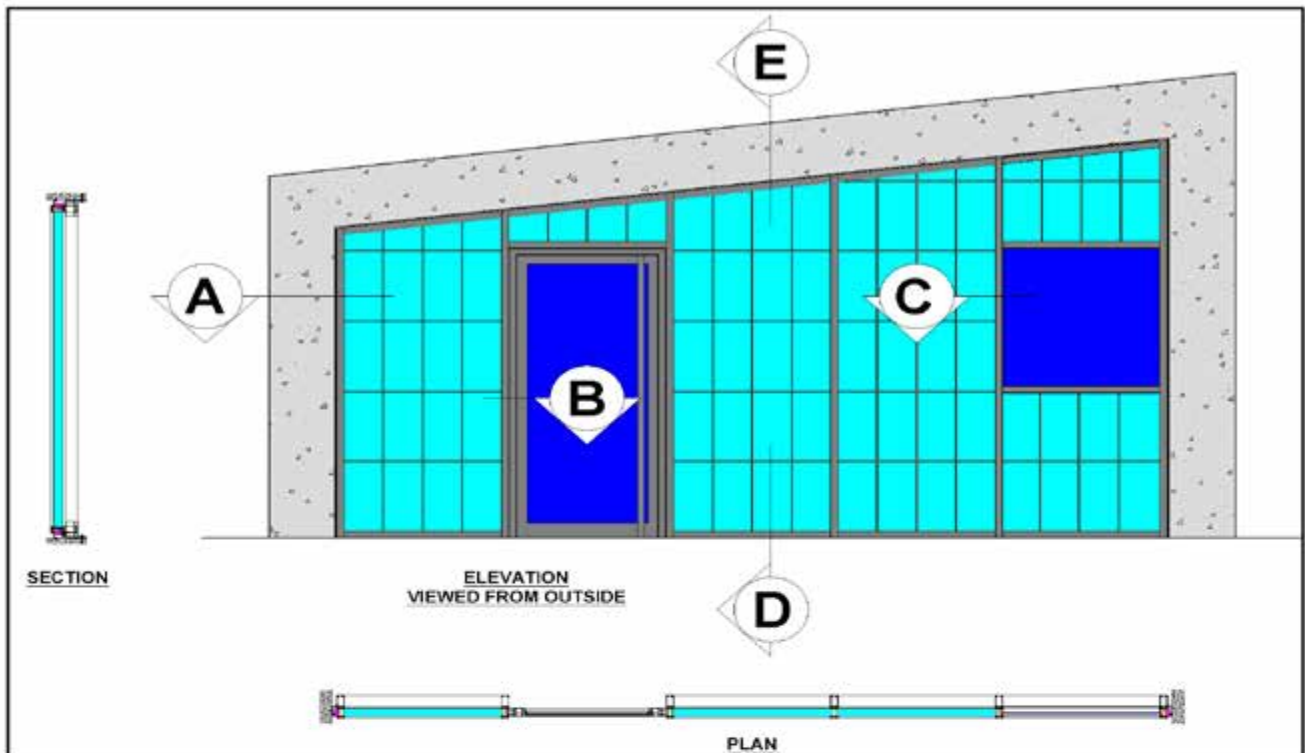
Steel curtain wall

- Passive house certified in all system widths
- Maximum thermal insulation with insulating block variant down to $U=0.75 \text{ W/(m}^2\text{K)}$ including screw influence
- Sharp edged profiles due to small radii
- Strip galvanizing of the profiles ex works
- Profiles are all suited for mullion and transom
- Integrated screw channel in tube reduces planning, manufacturing and installation costs
- Separation of screw penetration and water-bearing level by hat gaskets
- Wide range of THERM+ system accessories available e.g sun protection fixation
- No welding needed for the curtain wall construction

THERM+ H-1

Timber curtain wall

- Passive house certified in system widths 50, 56 and 76
- Maximum thermal insulation with insulating block variant down to $U=0.76 \text{ W/(m}^2\text{K)}$ including screw influence
- Two types of screw fixed aluminium base profiles with or without profile locator
- Screw fixings officially endorsed by European Technical Approval for timber product derivatives having widths of 50mm
- Quick and easy fitting of the base profiles; also suitable for assembly with magazine fed electric screwdrivers
- No external components penetrate through to the timber frame
- Integrated drainage system in the continuous hat sealing in three levels
- Stepless thermal insulation by means of RAICO Insulating Block Technology



WHAT IS KALWALL?

Kalwall, developed and manufactured in the USA for over 60 years, is a highly insulating, diffuse light transmitting building panel system for walls and roofs and can be used for daylighting spaces from small units to large areas of up to 30 metres. The primary component is a translucent structural composite sandwich panel formed by permanently bonding specially formulated fibreglass sheets to a grid core constructed of interlocking thermally broken extruded aluminium 'I-beams'.

Panels are factory prefabricated to the exact size and configuration for each project. Panels can be flat or curved while opening or fixed glazed window units can be incorporated using the integral Clamp-tite™ installation system.

Kalwall's unique composition combines to reduce solar gain while at the same time maximising thermal insulation. Kalwall diffuses light so efficiently that even direct sunlight is converted into even illumination with reduced glare.

Kalwall is able to transmit large amounts of usable daylight into a space with relatively low levels of light transmission. Panels can be selected to transmit various percentages of light according to individual project requirements. Kalwall has been tested according to the procedures of EN13830:2003 – Curtain Walling Product Standard for CE Marking.

STRUCTURA & KALWALL

Structura UK is the leading supplier, fabricator and installer of glass curtain walling, rainscreens, glass atria, windows and other architectural glass building products.

The company is also the exclusive distributor for Kalwall translucent daylight building systems in England, Wales and Northern Ireland.



WHO ARE STRUCTURA?

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For over 35 years we've specialised in the delivery of commercial glazing renovation projects throughout the UK and Ireland. In partnership with leading European curtain wall system manufacturers and glass producers, we undertake bespoke, ambitious and out-of-the-ordinary projects, drawing on our collective experience to solve problems before they arise.

Our Founding Directors remain influential in our day-to-day business, representing an important constant from our initial start-up days to the present. Today, we are a team of over 100 members from more than 15 nationalities, working from multiple locations (and remotely, in light of our new, progressive hybrid working practices).

Through our own exacting standards of excellence and accreditation, we've been trusted with the refurbishment of some of the highest profile landmarks in the UK including Grade II listed properties such as The Post Office and Devonshire Square in London, Eastbourne's Congress Theatre and more recently, Sir Nicholas Grimshaw's Herman Miller Factory in Bath.

Our family values remain at the heart of what makes us tick – ensuring we act with integrity and sincerity in every project we put our names to. In short, we're every bit as invested in the success of our work as you.

CONTACT:

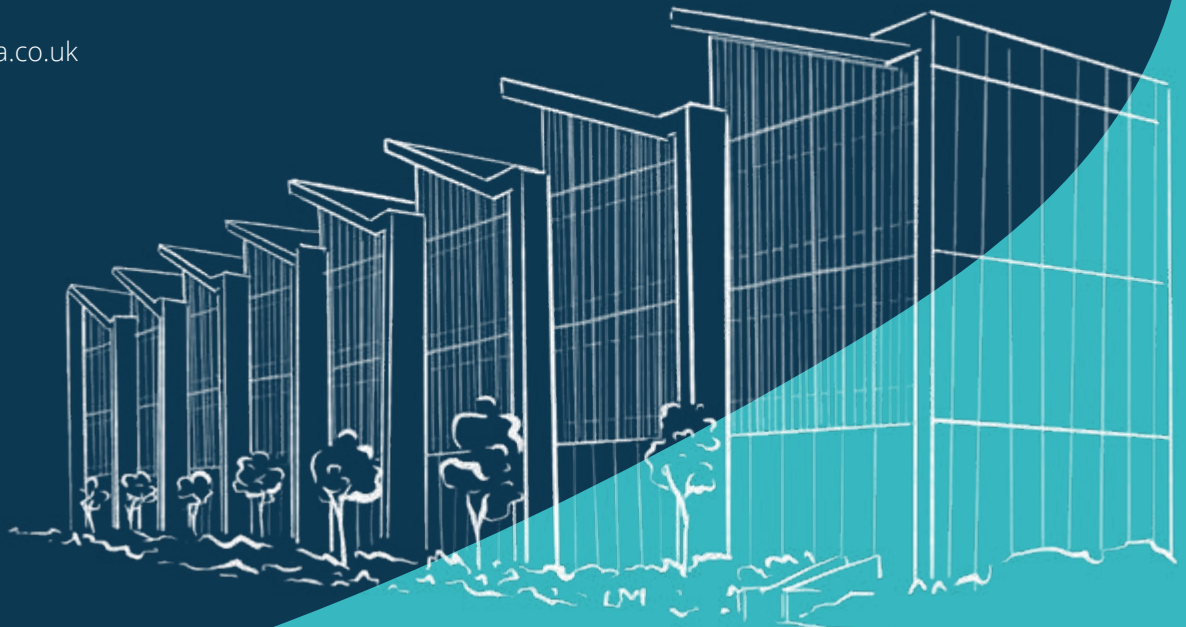
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