

Technical information

# Hybrid series 3 composite curtain wall system



Hepworth Framework in Partnership with

SENIOR **HYBRID** SYSTEMS™

## Scope

Hybrid Series 3 curtain wall has been designed to meet current and future building regulations, with impressive thermal performance. Hybrid is a high insulation timber/aluminium composite system manufactured in the UK, complete with a selection of window, curtain walling and door options. It combines the long life and low maintenance of aluminium externally with the high insulation, environmentally focused benefits of responsibly sourced engineered timber internally. Hybrid Series 3 curtain wall framing is a traditional stick, compartmentally drained system and is capable of accepting glazing up to 28mm thick depending on weight.

## Materials

- All aluminium sections are extruded using Aluminium Alloy 6060 or 6063 T6 to BS EN 755 part 9 2008.
- Polyamide thermal barriers are manufactured in accordance with PA66 GF25.
- Gaskets are manufactured in accordance with BS3734.
- Timber profiles are certified by MPA Stuttgart with quality class BS11, laminated according to DIN1502 using weather proof and heat proof melamine glue; humidity 12% +/-2%; only lamellas without fault are laminated. Finger joints in outer layer min 500mm centres. PEFC /04-32-0042 certified. Timber profiles are matt lacquered 150-300 microns wet film thickness. Timber types include Oak and Spruce.

## Finishes

Hybrid Series 3 curtain wall sections are available typically in 4 finishes.

- Polyester Powder Coating to BS EN 12206: 2004 Part 1 - painted in house. Surface finish at 40 microns standard, or enhanced to 60 microns for marine environments, in accordance with ISO9001, ISO14001 and ISO18001.
- Anodised and Anolok finishes are to BS3897: 1991 to a minimum of 25 microns (AA25), supplied in either satin or polished finish in a limited range of colours.

## Construction

Hybrid series 3 framing is constructed using mechanical methods at butt joints. A proprietary sealant is used on all metal to metal joints and gasket to gasket joints during assembly in line with good practice.

Vertical sections are designed to run through which enables individual panels to be made separately and assembled on site for large or multi-panel frames.

## Weather Rating CWCT Sequence B

Air Permeability	600 Pa
Water Tightness	600 Pa
Wind Resistance	2400 Pa

## EN13830:2003

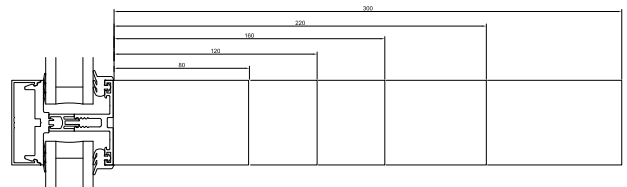
Air Permeability	600 Pa
Water Tightness	600 Pa
Wind Resistance	2400 Pa

## Glazing

Thickness	6mm	to	28mm
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## Average U Values

Due to the variety of profiles, mullion spacings, glass and panel specifications on each project; a specific U-value calculation will be required. Please contact our Technical Department or Architectural Advisors.



## Environmental

Senior Architectural Systems is fully compliant with BS EN ISO19001, BS EN ISO 14001 and OHSAS 18001 Standards.

Hybrid when used on projects involved in a BREEAM assessment, or within the Code for a Sustainable Built Environment and the Code for Sustainable Homes (which therefore involves the Green Guide to specification) can offer significant benefits. For project specific assistance, please contact our specification team.