Alitherm HeritageWindows- Bespoke Glazing to 46MM

Alitherm Heritage designed for use as fixed-light or Tilt before Turn internally beaded, for domestic and commercial applications. All opening vents are hung on concealed tilt-before turn multi-point locking hardware.

Internal beads and gaskets up to 46mm units.

Thermal breaks are formed with polyamide strips PA 6.6 25 reinforced with glass fibre, fitted between aluminium extrusions. All profiles are extruded from aluminium alloy 6060/6063 T5/T6 and comply with the recommendations of BS EN 12020-2; 2001/BS 755-9: 2001. Profiles can be Electrostatic powder coat finished in a range of RAL colours to APA Qualicoat guidelines with the option of Bi-colour, different internal and external colours. Other finishes include anodised in satin with EWAA/EURAS-Qualanod quality label.

Windows are manufactured according to customer requirements from a range of standard profiles and are designed to incorporate a range of vent openings and various options, therefore it is advisable to contact Smart Systems technical design department early in the design process.

**Manufacturer:** Smart Systems Ltd. Arnolds Way, Yatton, North Somerset BS49 4QN.  
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**Product reference**: Alitherm Heritage Windows

**Materials**: All profiles are extruded from aluminium alloy 6060/6063 T5/T6 and comply with the recommendations of BS EN 12020-2; 2001/BS 755-9: 2001. Thermal breaks are formed with polyamide strips PA 6.6 25 reinforced with glass fibre sections capable of withstanding temperatures up to 200°C for over painting.

**Performance**: Product tested to BS6375: Part 1.  
Air Permeability Class 4 600Pa.  
Watertightness Class 7A 300Pa  
Wind resistance Class AE 2400Pa

**Parameters**: Windows are manufactured to the required design to within the following maximum limitations (subject to location).  
TT opening – Max width 1200mm. (900 at 1600h) Refer to statics in manual.TT Opening – Max height 1600mm.  
+Weight limit dependent upon hinge selection. 90kgs Chrono Invision

**Exposure**: Design Wind Pressure **Proposed 1103Pa**

**Thermal**: All windows, in conjunction with a suitable glazing specification, to achieve an average project U-value to meet the current requirements of the approved Building Regulation Document L1/L2 for England and Wales. Target window U-value **1.6W/m2K**

**Construction**: All windows shall be manufactured, installed and glazed in strict accordance with Smart Systems instructions and guidelines as set down in the appropriate technical literature, details and specifications. Depth of outer frame sections shall be 47mm stepped internally to 52mm incorporating two 22mm polyamide thermal break sections within the window profiles. All outer frame and vent members to be 45° mitred corner construction, reinforced by means of extruded aluminium cleats and stainless steel corner braces. All corner joints to be secured by gluing & crimping. All mullions and transoms are to be cut/shaped and secured using either stainless steel screws driven into integral screw ports within the sections or special T cleats. All joints are to be sealed during construction using suitable ‘small gap’ sealant. The windows to incorporate an internal pressure equalized drainage system with concealed down drainage through a sub sill or frontal drainage with snap on cover caps.

**Finish as Delivered:** Internal Colour: **TBA** External Colour: **TBA**

**Glazing details**: Glazing shall be site glazed as section L40. Windows shall be double glazed and internally beaded. Unit thickness - Overall thickness of 24, 28 & 36mm. All windows to be dry glazed using shuffle extruded aluminium beads and EPDM extruded gaskets. With proprietary glazing tape or EPDM gaskets.

**Target window u value based on a double glazed unit having a centre pane u value of 1.0W/m2K and including a suitable warm edge spacer such as Swisspacer Ultimate or better.**

**Target acoustic performance of RwdB45 fixed-lights and RwdB43 Sash, glazing would need to provide RwdB50 allowing for size correction factors. Based on tabulation/extrapolation as per BS EN 14351-1:2006. Annex B (normative).**

**This** **level of performance** **would be provided by addition of new heavy duty profiles**  **to the system to accommodate 46mm glazing thickness.**

**Ironmongery / Accessories: (Additional) TBC**

**Fixing**: All fixings to be in strict accordance with the relevant British Standards, including BS 6262 and BS8213 Part 4: 2007. Ensure the window is retained securely within the opening without incurring any damage or distortion to the window frame. Generally, fixings to be positioned 150mm from each corner and 100mm from each mullion/transom and at centres not exceeding 600mm. Fixing lugs/straps only to be used where they can be suitably concealed to approval. All fixing of windows to the supporting structure to be achieved using a suitable lug and/or frame anchor fixing method capable of accommodating all applicable loads, deflection, tolerances and expansion expected on site.  
Details of the proposed fixing method shall be submitted to the project engineer for approval prior to installation.