

## SLIDING SASH (SPIRAL BALANCE) - KINWARD™

### L10. WINDOWS / ROOFLIGHTS / SCREENS / LOUVRES

#### 110 EVIDENCE OF PERFORMANCE

Certification: Provide independently certified evidence that all incorporated components comply with specified performance requirements.

**Third party certification to:**

- BS EN ISO 9001: 2015
- BS EN ISO 14001: 2015
- Enhanced Security Certification PAS24:2016 - *(Where Requested) – Delete as appropriate*
- Secured by Design Licence Holder- *(Where Requested) – Delete as appropriate*
- The window manufacturer is to be a member of the Wood Window Alliance (WWA) & British Woodworking Federation (BWF) – Certificates to be provided on request.

#### 115 TIMBER PROCUREMENT

**Timber (including timber for wood based products):**

- Obtained from well managed forests and/ or plantations in accordance with the laws governing forest management in the producer country or countries. International agreements such as the Convention on International Trade in Endangered Species of wild fauna and flora (CITES)

**Documentation:**

- All timber supplied must be sustainably & ethically sourced with full audit trail endorsed by the FSC or PEFC. The window manufacturer must hold and be able to evidence FSC or PEFC chain of custody certification

#### 210 WOOD WINDOWS

**MANUFACTURER: ARDEN WINDOWS LTD**

- Arden House, Sparkbrook Street, Coventry, CV1 5ST.
- Tel: 02476 632423
- Email [sales@ardenwindows.net](mailto:sales@ardenwindows.net)
- Web: <http://www.ardenwindows.net>

**PRODUCT REFERENCE: KINWARD SEMI CONCEALED SLIDING SASH**

- Frame depth 164mm, Sash depth 60 mm Each Sash (Front to Back)
- Frame Width 63mm External / 44mm Frame + 19mm Bead Internal
- Sash Width 37mm Internal & External (Visible Timber)
- Standard Meeting Rail 44mm - (56mm meeting rails for PAS24:2016)

**Refer to drawings:**

- SEMI-CONCEALED KINWARD HORIZONTAL CROSS SECTION DETAIL
- SEMI-CONCEALED KINWARD VERTICAL CROSS SECTION DETAIL
- Sliding Sash with or Without Sash Horns
- Shaped and Curved Frames

**GUARENTEE**

- 10 Years on Windows / Hardware and Double Glazed Units
- 35 Years warranty against Fungal Rot and Insect Attack

**GENERAL PERFORMANCE:**

- Air Permeability - 600pa (Class 3) - BS EN 1026:2000
- Watertightness - 300pa (Class 7A) - BS EN 1027:2000
- Wind resistance - 2400pa (Class E2400) - BS EN 12211:2000

## 210A WOOD WINDOWS

- Generally manufactured to BS644
- BS EN ISO9001:2015
- BS EN 14001:2015
- BS 6375-1 / BS6375-2
- PAS24:2016 - *(Optional) – Delete as appropriate*
- 100% of all Timber to be FSC Certified with full chain of custody
- Timber Generally to BS EN 942
- Moisture content of 12% +/- 3 %
  
- **Frames and Sashes:** to be manufactured using engineered softwood or Hardwood with a minimum of three laminations and finger jointed. *Delete as appropriate*
- **Cills** to be manufactured using Engineered Softwood or Eucalyptus Hardwood – *Delete as appropriate*. Various cill sizes are available. The cill projection to be determined by construction method and set back position of each window and detailed in the architect's section / detail drawings.
- **Beading:** Generally internally beaded using high quality composite Q-Wood beads, glued and pinned with hidden fixing pins. Glazing to be sealed against water ingress using low modulus silicone sealant to the internal and external perimeter of all glazed units.
- **Glazing Bars:** If required and as detailed in the Window Schedule or Window Elevation Drawings glazing bars will be incorporated internally and externally and manufactured as:

53mm solid European softwood glazing bar with individual glass units - *Delete as appropriate*

20mm Composite Q-Wood plant on bars with bonded bar to glazing air space - *Delete as appropriate*

- Standard Beading & Glazing Bar Profiles to be Lambs Tongue Internally / Putty Line Externally
- Appearance Class: J10 for, drip mouldings and the like. J40 or better for all other members.

### FINISH

- Windows are to be supplied Fully Factory Finished. Suitably prepared, sealed and finished using a three coat wood coating system, incorporating preservative, mid-coat and top-coat. Arden Windows Ltd offer a comprehensive range of Standard RAL Colours & Stains including Dual Colour Options.

### GLAZING

- Windows generally supplied *Factory Glazed* with 28mm Double Glazed Units comprising:

#### *Standard Glazing 4mm / 20mm Warm Edge Argon Filled Cavity / 4mm Low E*

Centre Pane U-Value	= 1.10 W/m <sup>2</sup> K
G Value	= 0.70 (70%)
Lt Value	= 0.55 (55%)
Acoustic Attenuation	= 32dB (RW) / 28dB (RW+CTR)

- Safety Glazing to be included to all glazing falling below 800mm from the FFL or within 300mm of a door set as required under part N of the Building Regulations and in accordance with BS 6262. Safety glazing will have a visible identifying kite-mark etched into the unit.
- Privacy windows i.e. Bathroom & WC to incorporate obscure glazing, pattern to be selected from Standard Range. Typically Flemish / Minster / Autumn / Stippolyte / Cotswold
- **Further Glazing Options are available on request:**  
Triple Glazing / Acoustic Glazing / Self-Cleaning / Solar Control / Laminated / Toughened / Obscure / Acid Etched / Sandblasted / Switchable Glass / Enamelled

**THERMAL PERFORMANCE**

- Standard window assemblies incorporating standard 28mm DG Units (*4mm Float / 20mm Warm Edge Argon Filled Cavity / 4mm Low E*) comply as a whole with part L2 of the Current Building Regulations with a minimum whole frame u-value of less than 1.5 w/m2k.
- Lower U-Values are possible using different glazing configurations.

**BACKGROUND VENTILLATION**

- Trickle ventilators to be Trimvent® Select Xtra R16 4600EA.
- Where required to be fitted the Trickle Vent must vent into the free zone between the sash and frame with no external canopy. The Trickle Vent is to be recessed into the internal face at the head of the window frame.

**R16 Specification:**

- Equivalent Area – 4600mm2 Per Vent
- Water Resistance (Pa) Vent & Grille 300pa
- Acoustic Dn,e,w (+/-) – vent open 31 (0; 1) vent closed 40 (-1;-1)
- BS EN 13141-1:200 (airflow, air leakage and weather tightness)
- Acoustic performance tested in accordance with BS EN ISO20140-10:1992, BS EN ISO140-10:1991 and single figures to BS EN ISO717-1:1991

**IRONMONGREY**

**Manufacturer's standard**

- “Ultralift” Spiral Balances for sashes weighing up to 27kg
- “Torso” Spiral Balances for sashes weighing 27kg – 50kg.  
*“Both Spiral Balance options are double sprung to provide extra mechanical assistance”*
- 1 Acorn Cam Lock fastener to Sashes up to 600mm wide / 2 to Sashes >600mm wide
- 2 Number Sash Lifts per opening sash
- Hardware is available in various colours / finishes – Please speak to Arden Window Ltd
- 1 ring pull to top sash top rail per window

**ACCESSORIES**

- Two number sash stops per opening light to limit opening height to 100mm
- Alternative Flitch Catches / Sash Lifts / Pull Handles are available on request but may not meet PAS24 / Secured by Design requirements.

**MAXIMUM & MINIMUM SIZES**

Spiral Balance	Width (mm)		Height (mm)		Sash Weight (KG)
	Min	Max**	Min	Max**	
Direct Glazed	500	1500	400	3000	50

**\*\* Maximum Overall Height and Weight per sash based upon a double opening sash window. Note the maximum width can increase if the height is reduced, assuming the weight remains constant.**

## **EXECUTION**

### **710 PROTECTION OF COMPONENTS**

- General: Do not deliver to site components that cannot be installed immediately or placed in clean, dry floored and covered storage.
- Stored components: Stack vertical or near vertical on level bearers, separated with spacers to prevent damage by and to projecting ironmongery, beads etc.

### **730 PRIMING /SEALING**

- Windows are to be suitably prepared, sealed, and fully factory finished using Remmers three coat wood coating system, incorporating Preservative, Mid coat and Top coat. The finishing process must be completed on the same site as the manufacture of the windows. Visible knots and knotting compound “bleed” through paint finishes will not be acceptable
- The system is a high build moisture vapour permeable coating with a minimum dry film loading of 120 µm.
  - i) Preservative Impregnation Primer - Induline GW-306 (tinted to RAL 7035) for protection against soft rot and blue stain.
  - ii) Spray Applied Mid Coat - Induline GW - ZW /425
  - iii) Spray Applied Top Coat - Induline DW-691/35
- The System includes Induline SW-910 end grain sealer and Induline AF-920 V Joint sealer applied where applicable after the primer layer.

### **750 BUILDING IN**

- General: Not permitted unless indicated on drawings.
- Brace and protect components to prevent distortion and damage during construction of adjacent structure.

### **765 WINDOW INSTALLATION GENERALLY**

- Installation: Into prepared openings.  
Gap between frame and edge of surrounding construction:  
Minimum – 10mm  
Maximum – 14mm
- Distortion: Install windows without twist or diagonal racking.
- Ensure correct setback position from front face of window to external of façade is achieved

### **780 FIXING OF WOOD FRAMES**

- Fasteners: manufactures galvanized mild steel cramps or as otherwise recommended by Arden Windows.
- Spacing: When not predrilled or specified otherwise, position fasteners not more than 150mm from ends of jamb, adjacent, to each hanging point of opening lights, and maximum 600mm centres.
- It is recommended that the installation is carried out by the window manufacturer, or an approved specialist installer of Timber Windows and Doors.