

SPECIFICATION

SUMMARY

Client:	Davis Langdon
PROJECT:	Window Schemes, Manchester Schools Projects
PREPARED BY:	Alistair Craig
DATE:	!3th October 2009
VEKA REFERENCE:	Specification

Information is supplied by VEKA plc on behalf of Davis Langdon in an advisory basis only. Please check to ensure compliance with all applicable Building Regulations and Standards before issue. 13/10/2009

All PVC-U fenestration profiles shall be supplied by a current member of the B P F (British plastics Federation)

VEKA Plc (or similar approved)
Farrington Road
Rossendale Road Industrial Estate
Burnley
Lancashire
BB1 5DA

Tel: 01282 716611
Fax:01282 718490

Contact: Alistair Craig

Quality & Environmental Management

Quality	Profiles manufactured under guidelines: BS EN ISO 9001 with systems company holding the relevant accreditation.
Environmental	Profiles manufactured under guidelines: BS EN ISO 14001 with systems company holding the relevant accreditation.

Materials

PVCu	Manufactured from VEKA (or similar approved) extruded hollow PVC-U to BS EN 12608 reinforced with steel or aluminium profiles to the recommendations in British Plastics Federation publication 323/1.Nominated profiles to include recycled content in strict accordance with this standard.
Environmental	Profile supplier to comply with Vinyl 2010. Recycled content of the profiles nominated by client in accordance with BS EN 12608 shall contain a minimum recycled content of 51% for the assembled frame with cross section drawings provided by the systems company for illustration purposes. The BRE confirm that the life expectancy of a PVC-U window can be expected to exceed 35 years. PVC-U can be recycled many times without any significant change to the physical properties of the material. We can expect therefore that the PVC-U already installed in buildings today can still be in buildings for centuries to come.

Authority & Performance

BS 7412:2007	Performance: Plastic windows and doors made from PVC-U extruded hollow profiles
BS 6375: Part 1,2 & 3	Performance: Windows and doorsets, classification for weathertightness, specification for operation and strength characteristics and general performance criteria.
BS 7950:1997	Security: Specification for enhanced security performance of casement and tilt turn windows for domestic applications
PAS 024	Enhanced Security for PVCu doors
BS 6399: Part 2: 1997	Design: Loadings for buildings
BS EN ISO 10077 Part 1:2000	Thermal performance of windows, doors and shutters. Calculation of thermal transmittance. Simplified method. Window energy rating to BFRC 'A' rating.
BS 8213: Part 1:2004	Safety: Windows doors and roof lights. Design for safety in use and during cleaning of windows, including door-height windows and roof windows.

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Guarantees periods	PVCu profiles:	25 Years
	Composite door slabs:	10 Years
	Hardware components:	10 years
	Double glazed units.	10 years
Terms & Conditions	Must be supplied by supplier for approval by client.	

Glass

Glazing

All glazing to be carried out in accordance with the requirements of the Building Regulations Part N & L. Glass to comply with BS 952:Part 1:1978.

Safety glass to comply with BS 6206:1981 with regard to impact performance and the marking of glass to indicate type and classification, and with BS 6262:1982 with regard to minimum thickness' for certain pane sizes.

• BS EN 1279 - This standard covers double glazed units.

Installation

PVC-U

Installation of fenestration systems shall be performed by a Fensa registered and approved VEKA fabricator/installer in accordance with issued drawings. Installation, Fixing & glazing shall be in accordance with BS 8213-4:2007 or BPF COP 362/.

Protection & Cleaning

The sub-contractor shall be responsible for any damage to the materials under this section of the specification incurred by him during installation and shall leave the work in a clean condition. The general contractor shall be responsible for the protection of these materials from damage by other trades and shall be responsible for the final cleaning of the work.

FOOTNOTES:

- Information regarding products not manufactured or supplied by VEKA plc is given on an advisory basis only, and Specifiers are recommended to contact specialist suppliers to ensure that such products are suitable.
- A risk assessment in accordance with BS 8213 Part 1:2004 has not been included as final details including the position, access and occupancy are not available at the time of writing. We recommend that a risk assessment be carried out, taking into account of the relative priority needs established in each situation.
- Specifiers are advised to contact Pilkington Glass on 01744 692000 or similar approved and check that the glass is not at risk of thermal over stressing. In the avoidance of doubt, specifically with high performance glass, it is advisable to perform a thermal safety calculation by completing the from available from:

  http://www.pilkington.com/resources/thermal+safety+check.pdf
- Any wind load calculations relating to framing and profile specifications have been carried out on a preliminary basis only, using information available at the time, and a basic form of calculation to BS6399 Pt2 1997. The fabricator/installation contractor should provide detailed wind load calculations based on full and final information at the point of order, based on BS6399 Part 2 1997. Sections selected can be significantly affected if the input data is not exact and correct.

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- Specifiers are advised to check as to whether solar control glass is required to comply with Approved Document L2 (April 2002) of the Building Regulations in respect of solar overheating, or if other methods of solar shading are necessary.

Performance Specification for the provision of PVC-U Davis Langdon.

1. INTRODUCTION

This Performance Specification is for the supply and installation of PVC-U windows and doors and is to include for all the fittings required to complete the installation, and to ensure the full, effective and safe operation of the windows and doors. The systems company must have the full product range available as outlined in section 5.

2. EXTENT/LOCATION OF WORK

The units supplied will include all items and materials for their installation, making good, and use, including:

Fixed and opening lights;
Ventilators;
Glazing and gasketry;
Ironmongery and furniture;
Weather sealing;
All necessary trims, internal and external mastics, foam fillers, and other ancillary items required for an effective and neat finish to the works.

3. SURVEY, DIMENSIONS and DESIGN

The units supplied are to be manufactured to suit existing/prepared openings in accordance with BS 8213 or BPF COP 362.

The Window and Door Surveyor/installer (Specialist Contractor) is expected to make a pre tender visit to site / inspection of all relevant drawings and documents in order to ascertain all relevant conditions, structural details and site layout. No additional claim will be entertained for items that would be apparent during the pre tender site visit. The Contractor must allow in his tender for the replacement of all items specified and/or required.

The Specialist Contractor shall allow in his price for a survey visit to site in order to take the dimensions and adjacent structural details of every window and door that is to be replaced.

The Specialist Contractor is responsible for ensuring that all new windows are square and central in the opening, and that a perimeter gap shall be provide to allow adequate thermal expansion and contraction of the framing, consistent with the site location and limitations of the perimeter sealant used.

The Specialist Contractor shall provide drawings to the Main Contractor depicting all profiles, glazing, weather seals, gaskets fixings and sealants to be used and the relationship of the above to the adjacent structural detail for each window/door type.

Allow for any anomalies and variations in the size of the openings, and for out-of-square openings. This is to include for the manufacture of 'specials' as necessary.

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The Specialist Contractor is to provide drawings showing the relationship of framing to structure, including all profiles, sealants, fixings, trims and weatherseals.

Notwithstanding any information within this Specification, all framing and infills shall be capable of withstanding the design wind loadings calculated in accordance with BS6399 Pt2: 1997, and imposed loads as defined in BS6399 Pt1: 1996, and the systems company shall provide the Specialist Contractor calculations to demonstrate this upon receipt of project detail.

Opening lights shall be no closer to FFL than **1100mm.**

NOTE: BS8213 Pt1 2004 (Code of Practice) says opening lights up to 1100 from FFL **could** require guarding. Part K2 of Building Regs says guarding and infill containment should be provided at 800mm above FFL. You should discuss with the Specifier which Standard/Regulation you are both going to work to
See also Footnotes regarding Risk Assessment.

4. STANDARDS

The frames are to comply with all relevant British Standard Specification, Code of Practice, and Statutory Requirements (including all revisions and amendments), as well as the guides and recommendations laid down by the relevant trade organisation relating to their performance, constituent materials, methods of assembly and use. Any exceptions to the above are to be confirmed in writing by the Specifier.

PVC-U window profiles to be designed and manufactured by an approved systems company to BS EN ISO.9001 Management System.

PVC-U window profiles to be manufactured by an approved systems company under Environmental Systems BS EN ISO 14001:

Manufactured from VEKA extruded hollow PVC-U to BS EN 12608 reinforced with steel or aluminium profiles to the recommendations in British Plastics Federation publication 323/1.Nominated profiles to include recycled content in strict accordance with this standard.

Recycled content of the profiles nominated by client in accordance with BS EN 12608 shall contain a minimum recycled content of 51% for the assembled frame with cross section drawings provided by the systems company for illustration purposes.

The fabricated product is to conform to BS 7412:2007 and BS 6375 Parts 1,2 & 3.

The window extrusion systems manufacturer must hold British Standard Kitemark licences for “Plastics windows made from unplasticized polyvinyl chloride (PVC-U) extruded hollow profiles. Specification” and BS7950 “Enhanced Security of Casement and Tilt and Turn Windows for Domestic Applications”. Prior to commencement of work on site, the Specialist Contractor shall forward copies of the Kitemark Certificates to the Contract Administrator.

The door extrusion system manufacturer shall hold test certificates to the following standards. BS 7412 “General Performance Requirements for Door Assemblies” and PAS024-1:1999 “Doors of Enhanced Security”. Testing shall be carried out by a UKAS accredited test house such as BSI. Prior to commencement of work on site, the Specialist Contractor shall forward copies of the test certificates to the Contract Administrator.

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The window fabricator must hold British Standard Kitemark licences for BS7412 "Plastics windows made from unplasticized polyvinyl chloride (PVC-U) extruded hollow profiles. Specification" and BS7950 "Enhanced Security of Casement and Tilt and Turn Windows for Domestic Applications". Prior to commencement of work on site, the Specialist Contractor shall forward copies of the Kitemark Certificates to the Contract Administrator.

The door fabricator shall hold test certificates to the following standards. BS 7412"General Performance Requirements for Door Assemblies" and PAS024-1:1999 "Doors of Enhanced Security". Testing shall be carried out by a UKAS accredited test house such as BSI. Prior to commencement of work on site, the Specialist Contractor shall forward copies of the test certificates to the Contract Administrator.

5. WINDOW PRODUCT RANGE & CONSTRUCTION

- Outward Opening Casements
- Tilt & Turn
- Single & Double Doors
- Tilt & Slide Patio Doors
- In Line sliding Patio Doors
- Composite doors
- Fully Reversible Horizontal & Vertical windows
- Vertical Sliding Sash

Windows

Shall be manufactured from profiles supplied by VEKA plc systems Matrix 58 & 70 depending on installation detail.

All joints are to be fully welded and finished with a shadow groove joint.

Windows shall be fabricated strictly in accordance with the requirements of the relevant VEKA Technical Manual and all specialist contractors must be trained and approved by the systems company.

6. REINFORCEMENT

All white windows shall be locally reinforced, in steel, in accordance with the relevant technical manual but must meet the correct weather ratings (pascal) for the area.
All laminated coloured profiles shall be fully reinforced, in steel, in accordance with the relevant technical manual.
Please refer to VEKA plc Technical Department for exact requirements.

For Guidance (windload less than 1200 pa)

- No reinforcement to outer frames where direct fixing is achieved
- Mullions < 600mm no reinforcement
- Mullions 600 – 1200mm 65mm mullion with 1.5mm steel
- Mullions 1200 – 1400mm 75mm mullion with 2mm steel
- Top hung casements <1000mm no reinforcement
- Side hung casements <1000mm high no reinforcement
- Side hung casements <700mm wide no reinforcement
- Screw fixings into local reinforcement
- Coloured laminated profile to be reinforced

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7. APPEARANCE & DESIGN

All window designs and finishes must take into account any restrictions or requirements of local planning departments.
Where planning applications are required, the specialist contractor will provide full working drawings and process the planning application to conclusion.

8. FINISHING

Standard finish for all profiles to be White to 40% Gloss (RAL 9003 equivalent)

Note: Foiled finishes: Ivory, Black, Grey, Green, Cherrywood Wood Grain, Rosewood Wood Grain, Only when required for planning and by client design team instruction.

9. GASKETS

All gaskets should be supplied and fitted by the systems company in bar length prior to frame manufacture thus ensuring gasket is welded in each corner.
The gasket sightlines shall not exceed the profile sightline to keep overall sightlines to a minimum.

WEATHER PERFORMANCE

The system company will provide CAD drawings and proposed design for any application which exceeds maximum recommended sizes as indicated in the technical manual.

Performance shall be as specified below to BS 6375, Part 1, 1989, and will achieve a Class A for mechanical testing to BS6375, Part 2.

Water Tightness	300 Pascals
Air Permeability	600 Pascals
Wind Resistance	2400 Pascals

Where location and design permits:

Performance shall be as specified below to BS 6375, Part 1, 1989, and will achieve a Class A for mechanical testing to BS6375, Part 2.

Water Tightness	300 Pascals
Air Permeability	600 Pascals
Wind Resistance	1200 Pascals

All framing including mullions, transoms and couplers shall be capable of withstanding the design wind loadings calculated in accordance with BS6399 Pt2: 1995

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10. DRAINAGE

All horizontal lower rails of frames, transoms and sashes within a window or door shall be drained to allow water to escape. Drain slots (30mm x 5mm) to be in accordance with the product manual.

The frames are to incorporate an adequate means of concealed self-drainage. This is to be achieved using a sub-cill or drainage tray, according to site requirements, allowing drainage through frame of window and exiting via hidden drainage holes in the nose of the sub-cill or drainage tray.

Glazing packers should not obstruct the drainage and profile specific bridging packers must be used.

Cill ends to be closed with plastic end caps and sealed.

Cill profiles to be selected according to the position of each frame within the structural opening.

Low thresholds to doors to be fully drained

11. INSTALLATION

All surveys, frame removal and installation shall be in strict accordance with BS8213 Part 4 2007 or BPF COP 362

Window and door framing to be securely fixed direct to the building structure, between 150mm and 200mm from each corner and at centres not exceeding 600mm, as laid down in procedures issued by the systems company.

The removal of existing windows and doors must be programmed to ensure that units are only removed if they are to be replaced within the same working day. Immediately on removal, the existing windows and doors, together with any debris associated with the removal of existing units, are to be cleared away to an approved tip or storage location. At the end of each working day, the Specialist Contractor shall be responsible for the removal of any debris from the existing units and new materials from site, and shall thoroughly clean the working area in accordance with the requirements of the Schedule of Works.

On removal of the existing windows, doors and associated frames, sub frames, cills etc. the reveal surfaces of the opening are to be cleaned to remove all existing frame sealant, mastic, beading mortar etc. ready for the installation of the new units.

The Specialist Contractor is to ensure that all PVCu or other framing materials and all glass taken out is recycled once removed from site using systems company recycling facilities.

DPC materials are to be repaired and/or renewed as necessary and tucked into the new framing.

The Specialist Contractor is to make all due allowance to ensure that no damage is caused to the property internally or externally. The Specialist Contractor's attention is drawn specifically to the need to protect soft landscaping and external and internal fabric and finishes. Any damage caused as a result of the replacement of windows and doors will be the Specialist Contractor's liability.

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The Specialist Contractor shall allow for all necessary making good of all work disturbed.

Frames are to be positioned to cover the cavity within the reveals, and level with the existing external window line wherever possible, ensuring that they are plumb, level and without bow.

Any gap between the internal frame face and the existing plaster line is to be filled with expanding foam void filler, knifed off flush with the plaster. The foam and a minimum of 15mm of plaster is to be covered with PVCu trims from a product range which carries BBA certification or Kite marking to BS 7619: 1993. Internal trims to be fixed with acrylic caulking.

Existing sliding sash boxes and all associated trims are to be removed. In the case of rebated reveals the Specialist Contractor is to make up the rebate dimension internally with treated softwood, such that the reveal is made flush. Internal PVCu linings are to be applied to the satisfaction of the C.A. (See above re PVCu materials). No timber shall be exposed to moisture and the Specialist Contractor shall provide a detail drawing showing his solution for the CA's approval prior to manufacture

Integral timber cills and sub frames with any existing windows and doors are to be removed completely with glazing and ventilation intact. Should any glazing be broken on removal, all glass must be immediately cleaned up, both internally and externally.

The Specialist Contractor is to allow for necessary measures to protect the occupants, fittings and finishes within the rooms for the duration of the works.

Seal all external joints between framing and structure with low modulus neutral cure silicone sealant to BS5889 (1989). Sealants shall be tested and classified in accordance with BS EN ISO 11600 and of low modulus and high elasticity, with movement capability of at least 20%, class 20LM or 25LM

Allow for all making good work to window/door openings, both internally and externally, including masonry, plaster, cladding, and decorative finishes to reveals. No additional allowance will be made for costs associated with making good which would be visible on a site inspection.

Allow unclipping all existing telephone cables, aerial cables and the like from existing windows and door frames, and re-clip to surround in a suitable location using new cable clips of appropriate size and colour. Any cables passing through a frame/structure joint shall be routed through a plastic sleeve, the inner end of which is to be higher than the outer to prevent water penetration along or through the sleeve

Remove and re-fit existing net curtains and other soft furnishings as applicable. Curtain rods to be screw fixed to window frame head. Main Contractor to replace curtain rods where necessary. Inform Contract Administrator of any soft furnishings not suitable for re-instatement.

Upon completion of the installation of each window or door, all glazing, window frames, handles and all other surfaces are to be cleaned with a mild detergent and polished to a perfect finish. All components are to be checked for security of fixings, adequacy of clearances, adjustment of hinges, locks etc. as may be necessary to leave the window/door units in a perfect working order.

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12. GLAZING

All glazing to windows and doors to be secured by means of internal or external glazing beads in the locations described in the contract documents.

Glazing to be hermetically sealed double-glazed 28mm thick overall units, comprising inner pane of 6.4mm "soft coat" low emissivity laminated safety glass and an outer pane of 6.4mm laminated safety glass, with an argon filled cavity and thermally broken "warm edge" spacer bar, unless noted otherwise in the contract documents. The sealed units are to have a centre pane U value no greater than 1.2W/m^2k with the window tested and achieving an 'A' rating under the BRFC scheme which can be achieved:

All glazing in WCs and bathrooms shall have obscured glass to the inner pane. Other requirements for obscured glazing to the inner pane are as shown in the contract documents.

All glass and glazing shall conform to:

BS.6206: 1994:	Specification for Impact Performance;
BS.6262: Parts 1-6:2005	Code of Practice for Glazing Buildings;
BS.952: 1978:	Glass for Glazing;
BS.5713: 1979:	Specification for Hermetically Sealed Flat Double Glazed Units. Valid Kitemark certification will be required.

Recommendations of the Glass and Glazing Federation shall be adhered to for safety.

Glazing packers in accordance with BPF COP362 and should not obstruct the drainage with profile specific bridging packers used.

Solid infill panels where required are to be 28mm insulated sandwich panels with facings of polyester powder coated aluminium and comply with PAS 024 when required.

Louvres to be manufactured from extruded aluminium Grade AA 6063 to (BS EN 755-9:). Blades to be secured to an outer frame, to be retained within the window / door system by the glazing beads and gaskets.

Louvre blades to be individually screwed in place or retained within extruded aluminium holders. The use of plastic retention clips will not be permitted.

Louvres to be finished to match window / door framing.

Free area minimum 50%.

100% High Density Polyethylene (HDPE) insect / bird mesh to rear of louvres. Nominal 4mm x 4mm mesh size. Colour black.

NOTE: Some users do not like insect mesh as it clogs too easily.

Levolux A.T. Ltd tel. 01452 500007 950/50 Series Contour Ventilation Louvre or equal approved.

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13. HARDWARE

NOTE: Please check with manufacturer's & system company's information (e.g. Teleflex Code of Practice) / VEKA manuals / Product Support that products are suitable for application. Also bear in mind that using certain hardware may negate performance test figures given in systems company manual where not tested and approved.

Matrix 70 Casement

Hardware	
Top Hung	
Friction Stays:	Securistyle Defender Top Hung Stays with ASD1 Excluder; Opening Restrictor set to 100mm
Locking:	Maco MKII Shoot bolt Espagnolette Securistyle Virage Non Locking Push Button Handle; finish Satin Silver. Cavity Closing Wedge Run-Up Blocks
Glass Retention:	Internally Glazed. Externally Glazed to Suit Application.
Side Hung	
Friction Stays:	Securistyle Defender Side Hung Stays with ASD1 Excluder: opening Restrictor set to 100mm
Locking:	Maco MKII Shoot bolt Espagnolette Non Locking Push Button Handle. Securistyle Virage. Cavity Closing Wedge Run-Up Blocks
Glass Retention:	Internally Glazed. Externally Glazed to Suit Application.

Size Limitations						
Window Type	Length (mm)	Height (mm)	Perimeter	Friction Stays	Transom /Mullion Including Frame	Exposure Category
Projecting Top Hung	≤ 1260	≤ 1260		24 inch		2400 Special
Projecting Side hung	≤ 760	≤ 1360		16 inch		2400 Special
Fixed	≤ 1400	≤ 1400	≤ 5600			2400 Special
* Multi-light Casement	≤ 2400	≤ 2400	≤ 7200		≤ 1700	2400 Special

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Hardware Fixings		
Manufacturer:	**SFS Fixings**	**UK Fasteners**
Friction Stays to Sash (PVC):	SPT/17 - S-PD8/SR1 - 4.8 x 25mm	3575 - 4.8 x 25mm
Friction Stays to Sash (Steel):	SPS2/21 - PD8/SR1 - M4 x 29mm or SNS2/14 - PD9/SR1 - 4.8 x 27mm	3000 - 4.8 x 32mm
Friction Stays to Frame:	SPS2/8 - PD8/SR1 - M4 x 16mm or SNS2/8 - PD9/SR1 - 4.8 x 16mm	3000 - 4.8 x 16mm
Espag. Shoot bolt to Sash (PVC):	SPT/19 – SR1 - 4.3 x 25mm	3501 - 4.2 x 25mm
Espag. Shoot bolt to Sash (Steel):	SP3/19 - SR1 - 3.9 x 25mm	3525 - 3.9 x 25mm
Espag. Gearbox (Steel):	SP3/26 - SR1 - 3.9 x 32mm	3525 - 3.9 x 32mm
Keeps to PVC:	SPT/19 - SR1 - 4.3 x 25mm	3501 - 4.2 x 25mm
Keeps to Steel:	SP3/19 - SR1 - 3.9 x 25mm	3525 - 3.9 x 25mm
Run-Up Blocks (PVC):	SPT/19 - SR1 - 4.3 x 25mm	3501 - 4.2 x 25mm
Run-Up Blocks (Steel):	SP3/19 - SR1 - 3.9 x 25mm	3525 - 3.9 x 25mm
Cavity Wedge to Sash (PVC):	SPT/19 - SR1 - 4.3 x 25mm	3501 - 4.2 x 25mm
Cavity Wedge to Sash (Steel):	SP3/19 - SR1 - 3.9 X 25mm	3525 - 3.9 X 25mm
Cavity Wedge to Frame (PVC):	SPT/10 - SR1 - 4.3 x 16mm	3501 - 4.2 x 16mm
Cavity Wedge to Frame (Steel):	SP3/10 - SR1 - 3.9 x 16mm	3525 - 3.9 x 16mm
X-TRA Bolt:	SPT/10 - SR1 - 4.3 x 16mm	3501 - 4.2 x 16mm
X-TRA Bolt:	SP3/10 - SR1 - 3.9 x 16mm	3525 - 3.9 x 16mm
X-TRA Bolt:	SPT/19 - SR1 - 4.3 x 25mm	3501 - 4.2 x 25mm
X-TRA Bolt:	SP3/19 - SR1 - 3.9 x 25mm	3525 - 3.9 x 25mm

Matrix 70 Tilt Turn

Hardware	
Tilt Turn, Bottom Hung, Inward Opening	
Locking:	Maco Multi Trend Tilt First IS High Security Gear set to Tilt Only. Tilt Restrictor set to 100mm opening. Hoppe Non Locking Handle T/T Style: colour Satin Silver Run-Up Blocks
Glass Retention:	Internally Glazed. Externally Glazed to Suit Application.

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Size Limitations						
Window Type	Length (mm)	Height (mm)	Perimeter	Distance between locking points (mm)	Transom /Mullion Including Frame (mm)	Exposure Category
Projecting tilt & turn	≤ 1400	≤ 1400		900		2400 Special
Fixed	≤ 1400	≤ 1400	≤ 5600			2400 Special
* Multi-light Casement	≤ 2400	≤ 2400	≤ 7200	900	≤ 1700	2400 Special

Hardware Fixings		
Manufacturer:	**SFS Fixings**	**UK Fasteners**
Bottom tilt hinge (PVC)	SPT/29 – SR1 – 4.2 x 35mm	
Bottom tilt hinge (Steel)	SP3/26 – SR1 – 3.9 x 32mm	
Top scissor hinge (PVC)	SPT/29 – SR1 – 4.2 x 35mm	
Top scissor hinge (Steel)	SP3/26 – SR1 – 3.9 x 32mm	
Espagnolette (PVC)	SPT/19 – SR1 - 4.3 x 25mm	
Keeps to PVC:	SPT/19 - SR1 - 4.3 x 25mm	
Keeps to Steel:	SP3/19 - SR1 - 3.9 x 25mm	
Run-Up Blocks (PVC):	SPT/19 - SR1 - 4.3 x 25mm	
Run-Up Blocks (Steel):	SP3/19 - SR1 - 3.9 x 25mm	

14. VENTILATION

Each window unit is to be fitted with PVC-U slot ventilators, to meet current Building Regulations (Part F1). Ventilator to be secure and adjustable, complete with insect screen. Ventilator to be fitted above the head of the outer frame or through the sash profile and the slot should be sleeved to isolate the reinforcing chamber.

Trickle ventilation shall also comply with Approved Document J and BS5540 Part 2 with respect to ventilation of gas burning appliances. This requirement shall take precedence over the requirements of Approved Document F1.

Where necessary, a frame extension profile, or extended leg framing, are used to ensure that trickle ventilators are clear of internal finishes. Frame extension sections to be of an identical material and finish to framing, and designed to locate in grooves within the frame extrusion.

Where the window is of insufficient width to accommodate the level of ventilation required by Approved Document F1 the Specialist Contractor shall bring this to the attention of the Contract Administrator.

Approved suppliers: Titon
RW Simon
Greenwood
Brookvent

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VEKA Nominated fabricators

All fabricators shall be fully trained in accordance with the systems company technical manual and listed as an approved fabricator.

All surveyors & installers must be fully trained in accordance with the systems company technical manual and listed as an approved surveyor and/or installer.

All specialist contractors will be registered with Construction line and CHAS. Certificated
ISO 14001 Environmental Accreditation

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Additional Information

Accreditation

Management Systems
BS EN ISO 9001 - Certificate of Registration FM 01414
BS EN ISO 140001 - Certificate of Registration EMS 59308
Investors in People - Certificate of Registration 87564

BSI Kitemark Certification
PVC-U Window profile BS 7413 - Kitemark Licence KM 12875
PVC-U Plastic Windows BS 7412
Enhanced Window Security BS 7950 - Kitemark Licence KM 33520
Residential Door Performance PAS 23-1/7413 - Kitemark Licence KM 60983
Enhanced Door Security PAS 24-1/7413 - Kitemark Licence KM 60985

BBA Agrement Certificates
1200 Woodgrain foiled PVC-U Profiles for Window & Door
1341 Matrix Casement - Thermal Performance
1342 Matrix Tilt Turn - Thermal Performance
1404 Matrix Casement & Tilt Turn Windows

Thermal Performance to BS EN ISO 12567-1
PP31/E01030191/4 - Matrix Fully Reversible Window, Matrix 58 Casement Window
PP31/E01080181 – Matrix 58 Tilt Turn Window, Matrix 70 Casement Window, Matrix 70 Tilt Turn Window, Matrix Vertical Sliding Window

In addition to the above VEKA are members of the British plastics Federation (BPF) who provide a range of Codes of Practice that give guidelines and recommendations on good practices required for the survey, manufacture and installation of windows and doors.

Recycling

VEKA is the World leader in the closed loop recycling of "post consumer" or "end of life" PVC-U windows and doors.

Since 1993 in Germany and from this year in the UK, VEKA is intent on collecting as many as possible of the available end of life frames. In VEKA's own recycling plants, frames are broken up with metals and glass being sent to other specialist recycling companies. VEKA grinds, separates and cleans the PVC-U content of the frame and produces powder ready for extruding new window profiles with the same high quality as virgin material. VEKA's closed loop recycling process ensures the embodied energy used to manufacture virgin PVC-U profiles maintains its nobility within the window industry and is not down-cycled into products where low grade PVC-U can be used.

The BRE confirm that the life expectancy of a PVC-U window can be expected to exceed 35 years. PVC-U can be recycled many times without any significant change to the physical properties of the material. We can expect therefore that the PVC-U already installed in buildings today can still be in buildings for centuries to come.

Information is supplied by VEKA plc on behalf of Davis Langdon in an advisory basis only. Please check to ensure compliance with all applicable Building Regulations and Standards before issue. 13/10/2009