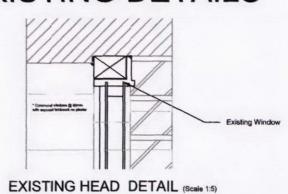
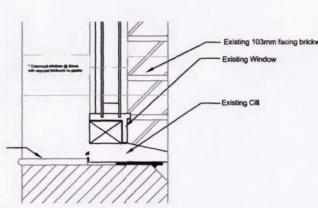
## **EXISTING DETAILS**





EXISTING CILL DETAIL (Scale 1:5)

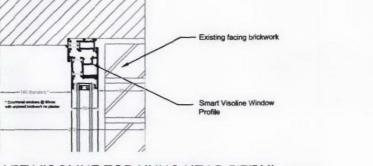


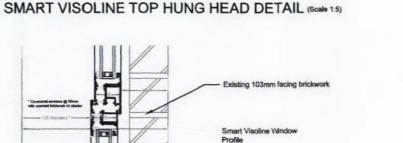
Photograph illustrating relationship of existing window cill to existing chamfered brickwork



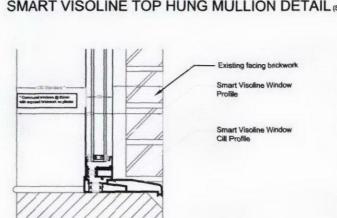
Photograph illustrating the mixture of existing window frame finishes

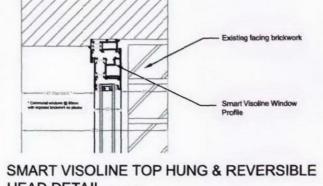
## PROPOSED DETAILS

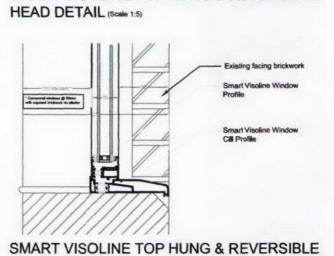




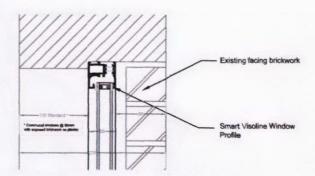












SMART VISOLINE FIXED WINDOW HEAD DETAIL (Scale 1:5)

SMART VISOLINE FIXED WINDOW

ALL CORNER JOINTS TO BE SECURED BY GLUING & CRIMPING OR GLUING AND MECHANICAL CORNER CLEATS.

ALL JOINTS TO BE SEALED DURING CONSTRUCTION USING SUITABLE 'SMALL GAP' SEALANT.

INNER PANE 4MM PLANITHERM TOTAL CLEAR FLOAT WITH SOFT LOW E COAT

WINDOWS SHALL BE GLAZED AND INTERNALLY WITH SQUARE BEAD.
UNIT THICKNESS. OVERALL THICKNESS OF 28MM WITH CENTRE PANE U-VALUE OF 1.2

OR FRONTAL DRAINAGE WITH SNAP ON COVER CAPS.

OUTER PANE 4MM PLANILUX CLEAR FLOAT 20MM BLACK SWISS V WARM EDGE SPACER

FINISH AS DELIVERED: INTERNAL COLOUR: BROWN OR BLACK. EXTERNAL COLOUR: BROWN OR BLACK. GLAZING DETAILS: 28MM SEALED UNITS

90% ARGON FILL

REVERSIBLE:

FIXED LIGHTS:

VLIO OUTER FRAME

ETCI57 I50MM CILL TOP HUNG CASEMENT:

IN010 OUTER FRAME

IN022 VENT FRAME

ETCI57 ISOMM CILL

RV010 OUTER FRAME RV021 VENT FRAME RV030 TRANSOM ETCI57 ISOMM CILL

TOUGHENED WHERE REQUIRED.

CENTRE PANE U VALUE OF 1.2 W/M2K

ALL MULLIONS AND TRANSOMS TO BE CUT/SHAPED AND SECURED USING EITHER STAINLESS STEEL SCREWS DRIVEN INTO INTEGRAL SCREW PORTS WITHIN THE SECTIONS OR CRUCIFORM CLEATS.

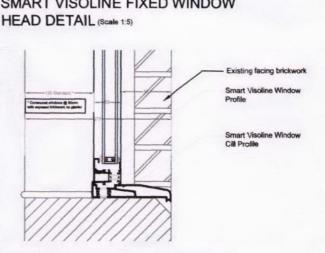
THE WINDOWS TO INCORPORATE AN INTERNAL PRESSURE EQUALIZED DRAINAGE SYSTEM WITH CONCEALED DOWN DRAINAGE THROUGH A SUB SILL

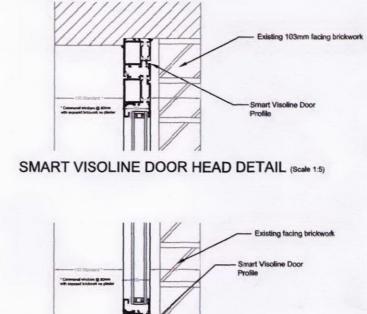
ALL INTERNAL GLAZED WINDOWS TO BE DRY GLAZED USING SNAP IN' EXTRUDED ALUMINIUM BEADS AND EPDM EXTRUDED GASKETS.

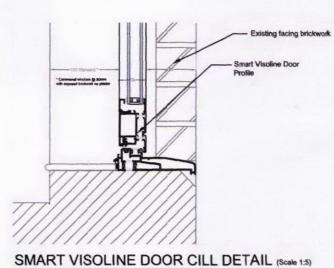
E FULLY REVERSIBLE HINGE GEARING ALLOWING THE SASH TO BE REVERSED FOR EASY CLEANING ONCE A RESTRICTOR IS RELEASED.

IRONMONGERY / ACCESSORIES: OPEN OUT CASEMENT WINDOWS TO HAVE LOCKING SHOOTBOLTS AND FRICTION STAY HINGES. REVERSIBLES WINDOWS TO HAV

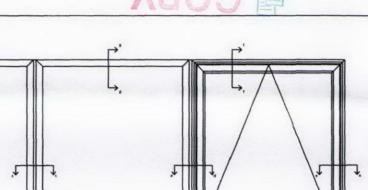
CILL DETAIL (Scale 1:5)

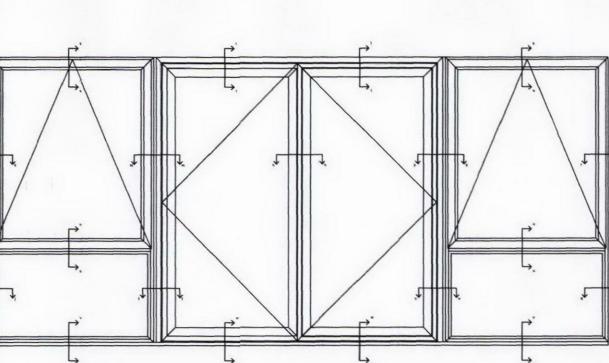


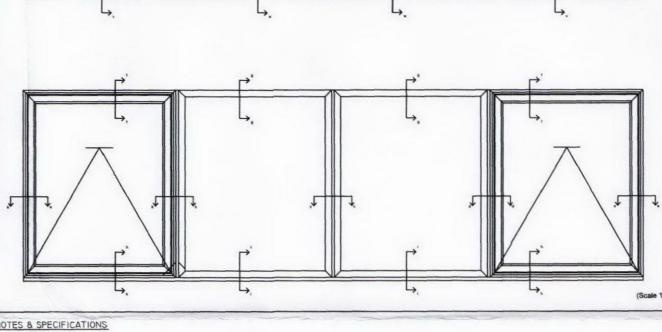




SMART VISOLINE TOP HUNG CILL DETAIL (Scale 1:5)







NOTES & SPECIFICATIONS

DESIGNED FOR USE AS FIXED LIGHTS, SIDE OR TOP HUNG OPEN OUT CASEMENTS OR FULLY REVERSIBLE. INTERNALLY BEADED, FOR DOMESTIC AND LIGHT / MEDIUM / HEAVY COMMERCIAL APPLICATIONS.

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 ALLDY 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, POWDER-COATED WOODSTRUCTURE FINISHES ARE AVAILABLE ON REQUEST. ALL OPENING VENTS ARE HUNG ON NON-CORROSIVE HARDWARE AND FITTED WITH SHOOT BOLT/MULTI-POINT LOCKING MECHANISMS. GLAZING CONFORMS TO THE REQUIREMENTS OF BS 6262 AND PART NO OF THE BUILDING REGULATIONS FOR BOTH THICKNESS AND TYPE. INTERNAL BEADS AND GASKETS TO ACCOMMODATE 28MM DOUBLE GLAZED UNITS WITH CENTRE PANE U-VALUE OF 1.2. PRODUCT TESTED TO BS 6375: PART I. WEATHER TIGHTNESS CLASSIFICATION: AIR PERMEABILITY CLASS CD . WATER TIGHTNESS 600PA.

PRODUCT REFERENCE: VISOLINE 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.

THERMAL: TO MEET REQUIREMENTS AS LAID DOWN IN PART L BUILDING REGUALTIONS

STRUCTURE: ALL STRUCTURAL PROFILES TO BE DESIGNED SO AS THE MAXIMUM DEFLECTION OF ANY GLASS EDGE INTO A FRAMING MEMBER UNDER WINDLOAD SHALL NOT EXCEED L/175 OF ITS SPAN WITH NO EVIDENCE OF ANY PERMANENT DEFORMATION ONCE THE LOAD HAS BEEN REMOVED. ALL HORIZONTAL FRAMING MEMBERS TO RESTRICT DEAD LOAD DEFLECTION TO L/400, UP TO A MAXIMUM OF 3MM. 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 51 MM INCORPORATING TWO 18.6MM POLYAMIDE THERMAL BREAK SECTIONS WITHIN THE WINDOW PROFILES.

ALL OUTER FRAME AND VENT MEMBERS TO BE 45° MITTED CORNER CONSTRUCTION, REINFORCED BY MEANS OF EXTRUDED ALUMINIUM CLEATS AND

DIFFERENT INTERNAL AND EXTERNAL COLOURS. OTHER FINISHES INCLUDE ANODISED IN SATIN OR BRONZE COLOURS WITH EWAA/EURAS-QUALANOD QUALITY LABEL. WIND RESISTANCE 2400PA WINDOWS ARE MANUFACTURED TO THE REQUIRED DESIGN TO LIMITATIONS AS STATED WITHIN TECHNICAL MANUALS (SUBJECT TO LOCATION). SUBJECT TO AGREEMENT IT IS POSSIBLE TO EXCEED THESE LIMITATIONS DEPENDING ON DESIGN CRITERIA, CONTACT SMART SYSTEMS TECHNICAL DEPARTMENT FOR DETAILS. CONSULT SMART SYSTEMS LTD TECHNICAL LITERATURE FOR DETAILS. SMART SYSTEMS LTD CAN ALSO PROVIDE DESIGN AND SPECIFICATION GUIDANCE AND IT IS RECOMMENDED THAT THEY ARE CONSULTED EARLY IN THE DESIGN PROCESS. MANUFACTURER: SMART SYSTEMS LTD. ARNOLDS WAY, YATTON, NORTH SOMERSET BS49 4QN TEL: 01934 876100. FAX: 01934 83516.

EMAIL: SALES@SMARTSYSTEMS.CO.UK WEB: WWW.SMARTSYSTEMS.CO.UK

ALL FIXINGS TO BE IN STRICT ACCORDANCE WITH THE RELEVANT BRITISH STANDARDS, INCLUDING BS 6262, AND SHALL 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 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. DESIGNED FOR USE AS OPEN OUT OR OPEN IN, SINGLE, DOUBLE, INTERNALLY BEADED, WITH SIDELIGHT OPTIONS, FOR DOMESTIC AND LIGHT / MEDIUM COMMERCIAL APPLICATIONS.

DOOR AND DOOR FRAMES 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 OR BRONZE COLOURS WITH EWAA/EURAS-QUALANOD QUALITY LABEL. POWDER-COATED WOODSTRUCTURE FINISHES ARE AVAILABLE ON REQUEST.

ALL DOORS ARE HUNG ON FACE FIX FLAG TYPE HINGES AND FITTED WITH MULTIPOINT LOCKING MECHANISM.

GLAZING CONFORMS TO THE REQUIREMENTS OF BS 6262 AND PART NO OF THE BUILDING REGULATIONS FOR BOTH THICKNESS AND TYPE. WEATHERSEALS ARE EPDM SET IN UNDERCUT CHANNELS. INTERNAL BEADS AND GASKETS TO ACCOMMODATE 28MM DOUBLE GLAZED UNITS WITH CENTRE PANE U-VALUE OF 1.2.

DOORS ARE MANUFACTURED ACCORDING TO CUSTOMER REQUIREMENTS FROM A RANGE OF STANDARD PROFILES AND ARE DESIGNED TO INCORPORATE A RANGE OF OPTIONS, HEREFORE IT IS ADVISABLE TO CONTACT SMART SYSTEMS TECHNICAL DESIGN DEPARTMENT EARLY IN THE DESIGN PROCESS. CONSULT SMART SYSTEMS LTD TECHNICAL LITERATURE FOR DETAILS. SMART SYSTEMS LTD CAN ALSO PROVIDE DESIGN AND SPECIFICATION GUIDANCE AND IT IS RECOMMENDED THAT THEY ARE CONSULTED EARLY IN THE DESIGN PROCESS.

MANUFACTURER: SMART SYSTEMS LTD. ARNOLDS WAY, YATTON, NORTH SOMERSET BS49 4QN. Tel: 01934 876100. FAX: 01934 835169. EMAIL: SALES@SMARTSYSTEMS.CO.UK WEB: WWW.SMARTSYSTEMS.CO.UK

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 THERMAL BREADS ARE PORNED WITH POLITARIDE STRIPS PA 0.0 25 REINFORCED WITH GLASS PIBRE SECTIONS CAPABLE OF WITHSTANDING TEMPERATURES UP TO 200°C FOR OVER PAINTING.

THERMAL: ALL DOORS, 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 LI/L2 FOR ENGLAND AND WALES. STRUCTURE: ALL STRUCTURAL PROFILES TO BE DESIGNED SO AS THE MAXIMUM DEFLECTION OF ANY GLASS EDGE INTO A FRAMING MEMBER UNDER WINDLOAD SHALL NOT EXCEED L/175 OF ITS SPAN WITH NO EVIDENCE OF ANY PERMANENT DEFORMATION ONCE THE LOAD HAS BEEN REMOVED. ALL HORIZONTAL FRAMING MEMBERS TO RESTRICT DEAD LOAD DEFLECTION TO L/400, UP TO A MAXIMUM OF 3MM.

CONSTRUCTION: ALL DOORSETS 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 51 MM INCORPORATING TWO 14.8MM OR 18.6MM POLYAMIDE THERMAL BREAK SECTIONS WITHIN THE PROFILES.

ALL OUTER FRAME AND DOOR MEMBERS TO BE 45° MITRED CORNER CONSTRUCTION, REINFORCED BY MEANS OF EXTRUDED ALUMINUM CLEATS AND STAINLESS STEEL CORNER BRACES.

ALL CORNER JOINTS TO BE SECURED BY GLUING AND CRIMPING OR GLUING AND MECHANICAL CORNER CLEATS.

ALL MULLIONS AND TRANSOMS TO BE CUT/SHAPED AND SECURED USING STAINLESS STEEL SCREWS DRIVEN INTO INTEGRAL SCREW PORTS WITHIN THE SECTIONS OR CRUCIFORM CLEATS.

ALL JOINTS TO BE SEALED DURING CONSTRUCTION USING SUITABLE 'SMALL GAP' SEALANT.

IT IS RECOMMENDED THAT THE DOOR SYSTEM BE DRAINED AND VENTILATED IN ACCORDANCE WITH SMART SYSTEMS TECHNICAL MANUAL. DRIP BAR SHALL BE USED TO ALL DOORS.

FINISH AS DELIVERED: INTERNAL COLOUR: BROWN OR BLACK. EXTERNAL COLOUR: BROWN OR BLACK.

GLAZING DETAILS: 28MM SEALED UNITS OUTER PANE 4MM PLANILUX CLEAR FLOAT

20MM BLACK SWISS V WARM EDGE SPACER

INNER PANE 4MM PLANITHERM TOTAL CLEAR FLOAT WITH SOFT LOW E COAT 90% ARGON FILL

TOUGHENED WHERE REQUIRED. CENTRE PANE U VALUE OF 1.2 W/M2K WINDOWS SHALL BE GLAZED INTERNALLY WITH SQUARE BEAD.

INTERNAL BEADS AND GASKETS TO ACCOMMODATE 28MM DOUBLE GLAZED UNITS WITH CENTRE PANE U-VALUE OF 1.2. IRONMONGERY / ACCESSORIES:

FACE MOUNTED FLAG STYLE HINGES. THREE PER DOOR LEAF. MULTIPOINT LOCK ON MASTER DOOR WITH LEVER/LEVER HANDLES. FINGER BOLTS TO SLAVE DOOR. OPENING OUT WITH LOW THRESHOLD.

VLI4 OUTER FRAME VL90 Low THRESHOLD VL25 SASH

ALL FIXINGS TO BE IN STRICT ACCORDANCE WITH THE RELEVANT BRITISH STANDARDS, INCLUDING BS 6262, AND SHALL ENSURE THE DOOR FRAME IS RETAINED SECURELY WITHIN THE OPENING WITHOUT INCURRING ANY DAMAGE OR DISTORTION TO THE FRAME.

GENERALLY, FIXINGS TO BE POSITIONED 150MM FROM EACH CORNER AND 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 DOOR FRAMES 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.



Apollo/Camden 15 Belsize Avenue Existing & Proposed Window Details + Existing Photographs Scale: 1:20 & 1:5 @ A0 Date: 29/09/2011

B15 AS 20