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info@allen-architects.co.uk

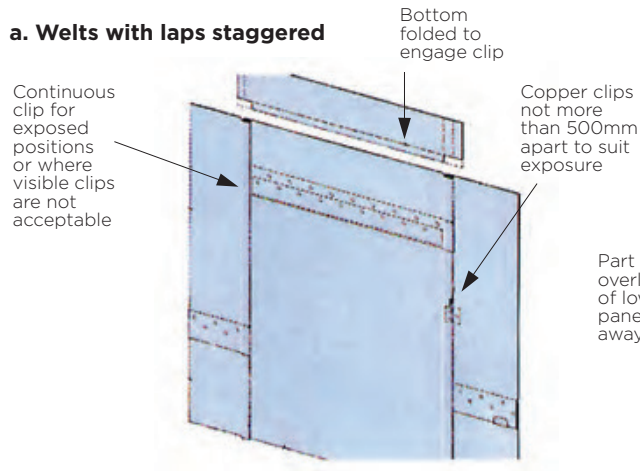
Allen

Materials
039; No.3 Belsize Park, London

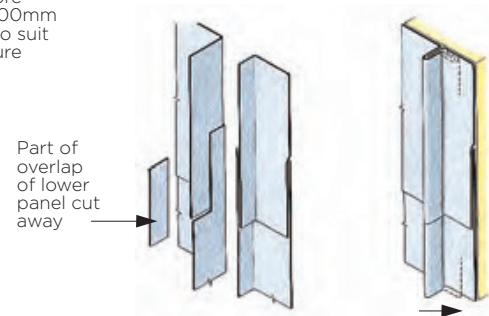
architects

VERTICAL CLADDING - JOINTS AND FIXINGS

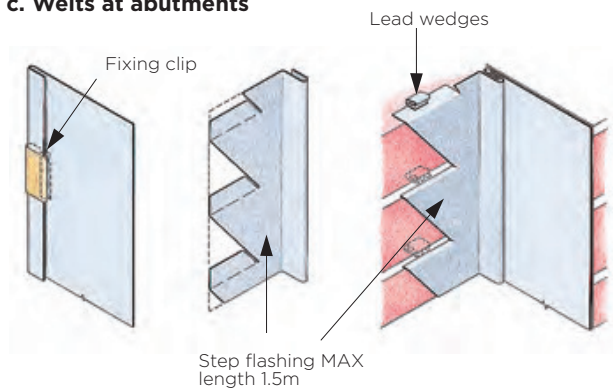
a. Welts with laps staggered



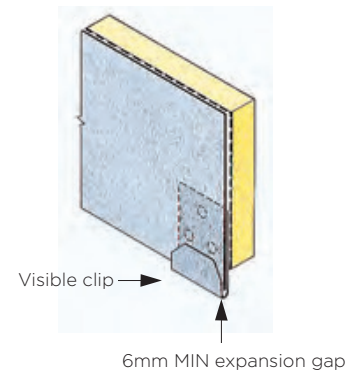
b. Welts laps in line



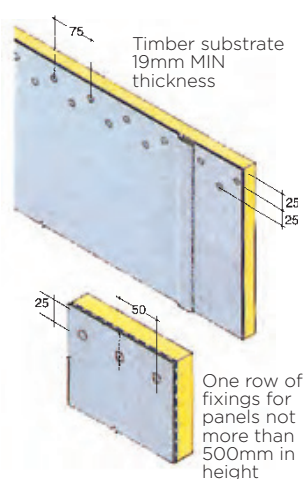
c. Welts at abutments



d. Clips on bottom edge

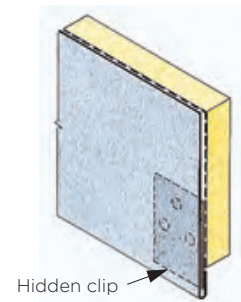
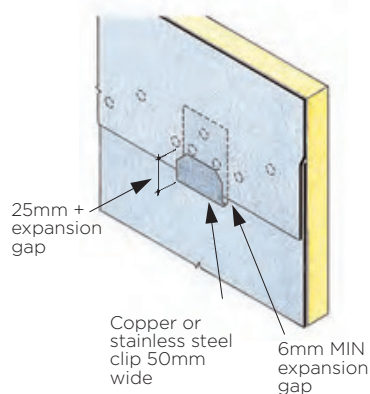


f. Head fixings

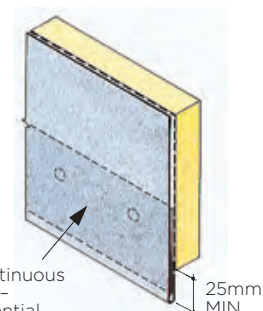


For head fixings use copper or stainless steel nails, or brass or stainless steel screws and washers, minimum length 20mm.

e. Clip for most exposures



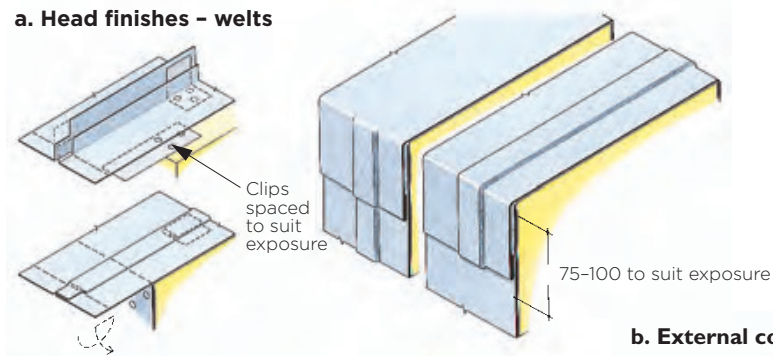
Hidden clip



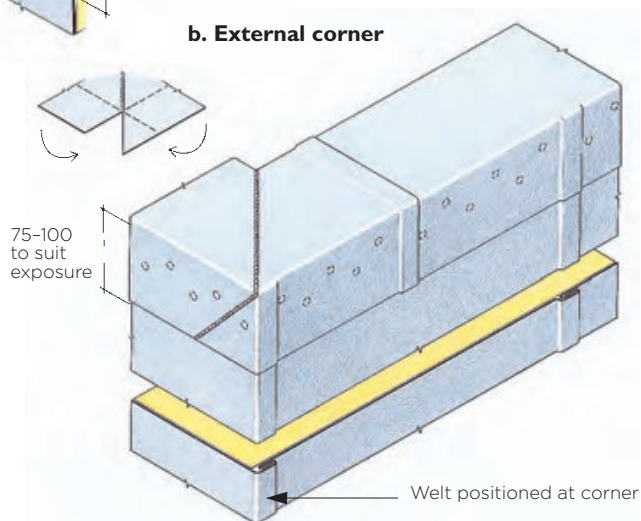
Continuous clip - essential for severe exposure
25mm MIN

VERTICAL CLADDING - HEAD FINISHES

a. Head finishes - welts

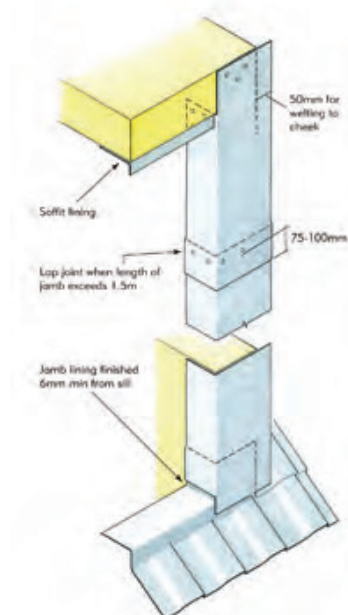


b. External corner

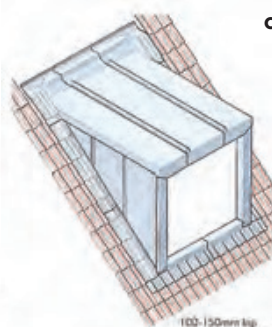


DORMER WINDOWS - JAMBS AND SILL

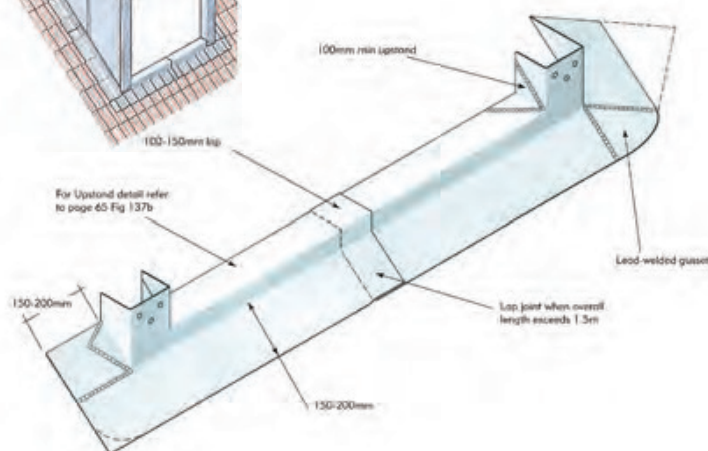
a. Weathering to jamb and soffit



c. Completed dormer

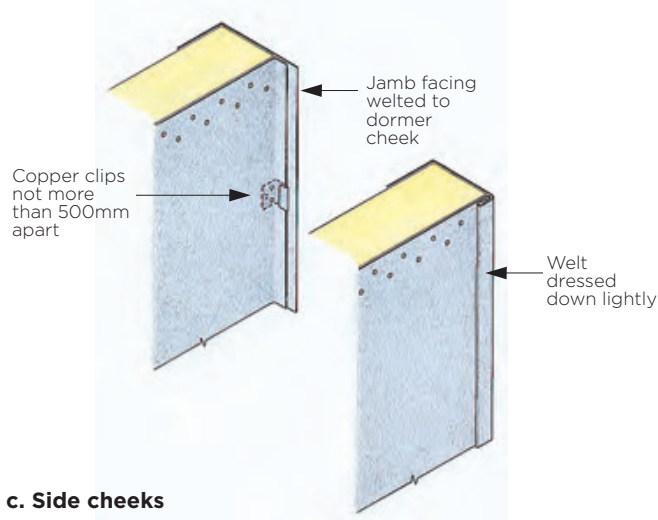


b. Sill weathering



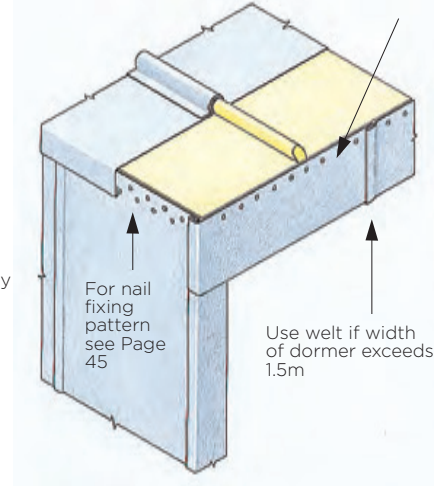
DORMER WINDOWS - TOPS, JAMBS, SOFFIT AND SIDE CHEEKS

a. Welt at cheek/jamb corner

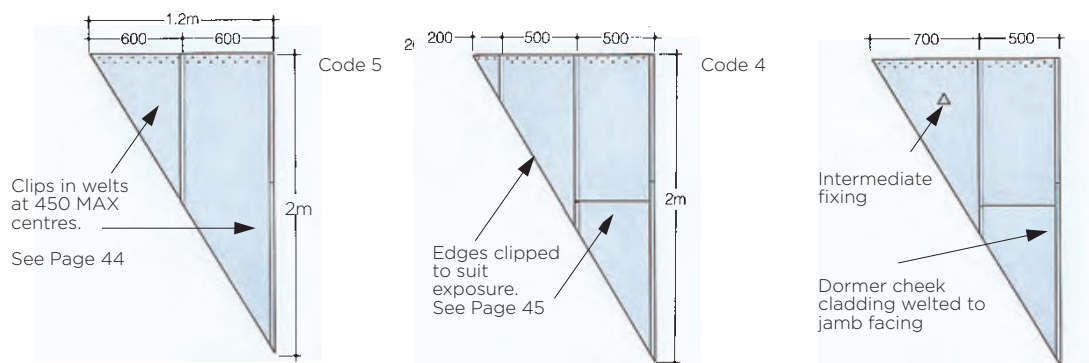


b. Deep fascia

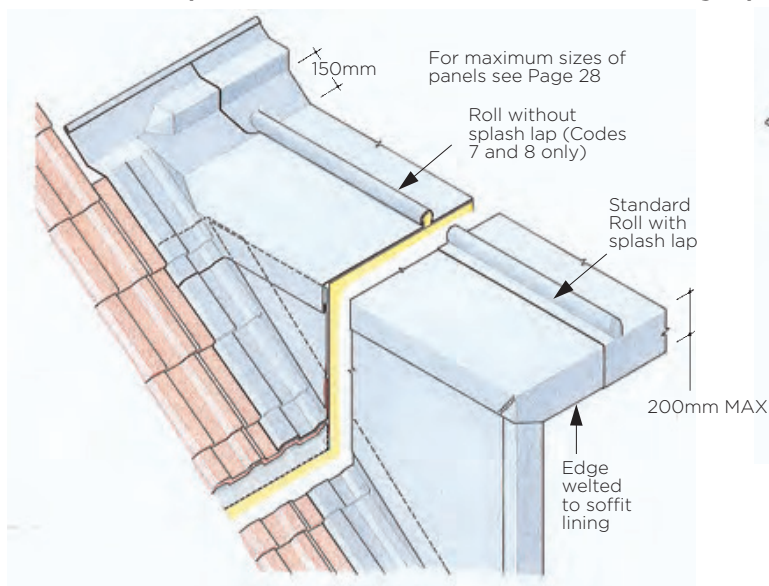
One row of nails at 50mm centres
25mm from top edge



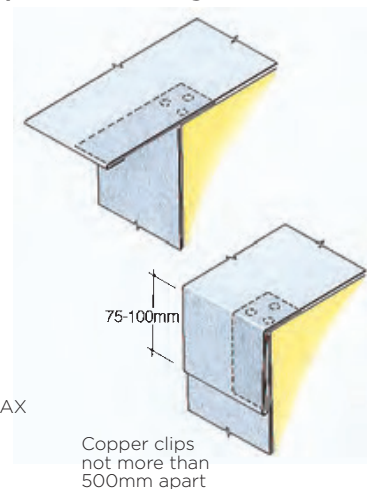
c. Side cheeks



d. Dormer top - front and back corners



e. Fixing clips to the free edge





PV Slate version 2.3

PV SLATE
by GB·Sol

Solar slates for
beautiful solar roofs



GB-Sol's PV Slate is a discreet solar panel with the appearance of a natural slate tile while also generating solar electricity.

If you are already going to the expense of building or replacing your roof, why not fit a solar roof that will make your house more energy efficient and reduce your energy bills? There is no cheaper time to fit solar than when you already have the scaffolding up and a roofer at work.

- **Compatible** with traditional slates
- **Traditional** appearance for conservation areas & listed buildings
- **Robust** for all the UK weather can throw at it
- **British manufactured** in our spacious factory north of Cardiff
- **Lightweight** up to 50% less weight than traditional slates
- **Stronger** than traditional slates
- **Warranty** 25 years

GB·SOL
ARCHITECTURAL SOLAR POWER



PV Slate technical details:



Seamless solar for sensitive aesthetics

The PV Slate is a small solar panel that looks like a row of 3 or 4 natural slates. PV Slates can be installed by an experienced roofer once trained. Each unit has a robust metal frame which interlocks with the surrounding slates for waterproofing and is fitted to traditional roof battens with stainless steel screws.

Electrically, the PV Slates are connected together using industry standard MC4 connectors and then wired back to the inverter for conversion to mains power, like any other solar installation. PV Slates can provide a peak solar output of 1kW from a roof area of around 6.5 square metres.

Compatible with natural slates

PV Slates are compatible with traditional slates, so they can be fitted into a traditional roof construction without any extra roofing accessories. This is cost-effective and enables you to choose how much of your roof you would like to invest in solar, with remainder as traditional slate.

PV Slates are suitable for conservation areas and have also been successfully used in AONBs and on listed buildings. No additional planning permission is necessary over that required for a traditional slate roof. For the best colour matching, we recommend light grey or blue grey 6mm natural slates. Please see our website for an up to date list of compatible slates.



Also available edge-to-edge

Slate looks even more amazing when taken edge-to-edge by using the same materials to make the surrounding "infill" slates. You would never know it wasn't a natural slate roof. Please contact us for more details.

Each PV Slate comes with a comprehensive **25 year warranty on product, performance and weatherproofing.**

MCS accredited

PV Slates are accredited under the Microgeneration Certification Scheme, so they can help reduce the official EPC rating of your property and be a cost-effective way to comply with Part L of the Building Regulations. MCS accreditation also means that any surplus power from your PV Slates qualifies for extra income under the Smart Export Guarantee scheme.

Battery storage systems

Like any other solar panels, PV Slates are compatible with battery storage systems from a wide range of manufacturers, whether it is to increase the use of the solar energy you generate or to provide protection from power cuts.



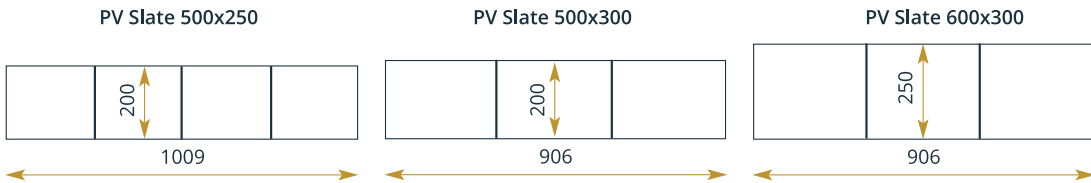
PV SLATE

by GB·Sol



Roofing & Mechanical Data:

	PV Slate 500x250	PV Slate 500x300	PV Slate 600x300
Natural Slate Compatibility	500mm x 250mm x 6mm	500mm x 300mm x 6mm	600mm x 300mm x 6mm
Natural Slates Replaced	4	3	3
Nominal Output	28.0 Wp	25.0Wp	30.0 Wp
Wp per m2 Roof Area*	138 Wp	138 Wp	132 Wp
Dimensions (Length x Width) - Visible on Roof	1009mm x 200mm	906mm x 200mm	906mm x 250mm
Weight	3.2Kg	3.0Kg	3.8Kg
Minimum Natural Slates on Roof	Two natural slates are required around all edges of the roof and features such as roof windows.		
Natural Slate Colour Compatibility	Use light grey or blue-grey slates for the best colour match. Please see our website for an up to date list of suggested makes & models.		
Batten Gauge	200mm	200mm	250mm
Roof Pitch (Typical)	22.5°-90° - Dependent on location - contact us for more details		



Dimensions show the visible area of a single PV Slate unit on the roof.



Electrical Data:

	PV Slate 500x250	PV Slate 500x300	PV Slate 600x300
Nominal Output	28.0 Wp (+/-5%)	25.0 Wp (+/-5%)	30.0 Wp (+/-5%)
Short Circuit Current	9.2 A	4.3 A	5.8 A
Open Circuit Voltage	3.7 V	7.4 V	6.8 V
MPP Current	8.8 A	4.1 A	5.6 A
MPP Voltage	3.2 V	6.2 V	5.4 V
Temperature Coefficient of Power	-0.40%/K	-0.40%/K	-0.40%/K
Temperature Coefficient of Voltage	-0.32%/K	-0.32%/K	-0.32%/K
Temperature Coefficient of Current	-0.042%/K	-0.042%/K	-0.042%/K
Maximum Permissible System Voltage	600 V	600 V	600 V

General Data:

Weatherproofing Warranty	25 Years
Product Warranty	25 Years
Power Output Warranty	90% of nominal power output for 10 years and 80% for 25 years
Product Certification & Testing	MCS 012 (BABT 8752-02) & MCS 005 (BABT 8501-15), EN 15601:2015 (Weathertightness), EN 13501-5:2005 (Fire), CEN/TS 1187:2012 (Fire), BS 476-3:2004 (Fire - EXT.S.AA Rating), BS EN 14437:2004 (Wind Uplift)



GB·SOL
ARCHITECTURAL SOLAR POWER

Tel 01443 841 811
Email info@pvslate.co.uk
#pvslate



Please note that visits to our premises are by appointment only.

Head office and factory
Renewable Energy Works, Treforest Industrial Estate, Cardiff CF37 5YB



CINERO

Brazilian Graphite-Grey

High quality graphite-grey slate, with a flat surface and pleasing grey shade variations. Can be relied upon to create an attractive and long lasting roof or floor. Has virtually no unstable minerals such as pyrites, carbon and un-oxidised irons and will withstand the most severe weather conditions. Unaffected by sunlight, ultraviolet light and even acid rain.

Slatescape recommend the use of hook fixing for our Brazilian ranges.

SS02F	FIRST	5-7mm	100 YEARS
Sizes (cm):	40 x 20	40 x 25	
	50 x 25	50 x 30	
	60 x 30		

SS02H	HEAVY	7-9mm	75 YEARS
Sizes (cm):	40 x 20	40 x 25	
	50 x 25	50 x 30	
	60 x 30		

Technical Specification

European Standard: EN 12326-1

Test Results

SO2 Exposure Test:	Complies S1
Thermal Cycle Test:	Complies T1
Water Absorption:	Complies W1
Contents of Carbonate:	Complies <2%

Call us on 01254 685 175

Email: sales@slatescape.co.uk

Website: www.slatescape.co.uk

#seriousaboutslate #designthenation



Slatescape.

TRADITIONAL BOX
SASH WINDOW

TITLE

ELEVATION DRAWING

DRAWING No.

BOX-160/01

DATE

2018/06/06

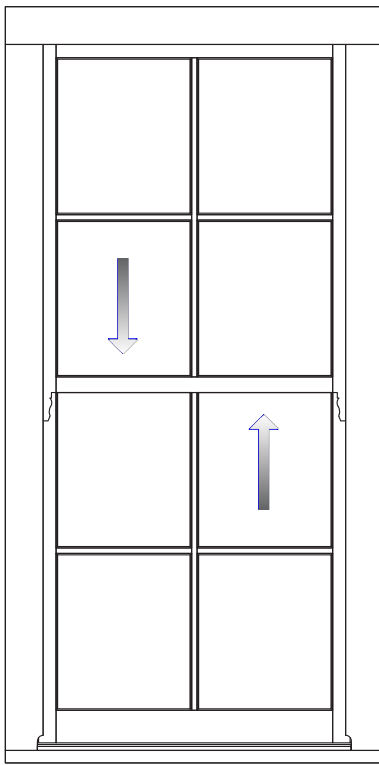
SCALE

1:10 @ A3

CONSTRUCTION DETAILS

TRC CONTRACTS Ltd
Knoll House, Union Wharf,
Market Harborough,
Leicestershire LE16 7UW
Tel: +44 (0)1858 469 225
Fax: +44 (0)1858 469 249
www.trcwindows.co.uk

TRC
WINDOWS



Material	Manufactured in selected engineered laminated pine or hardwood, sourced from sustainable and managed forestry (FSC or PFEC certified)
Mechanism	Sashes are hung on cords or chains, operating over pulleys and counter balanced with lead weights
Weatherseal	The window is fully weather sealed to BS EN 6375-1 2009
Glazing	Windows are internally beaded with the external rebate up stand to give the appearance of putty glazing
Glass	The window is factory glazed with 24 mm thickness dual sealed units
Thermal Performance	Thermal performance is calculated by the standards of EN ISO 10077-1:2006 and typically this window achieves a U-value of 1.6 W/m²K or better
Glazing Bars	Applied bars are used to achieve the slim section of traditional glazing bars. These are applied with double sided glazing tape to both faces of the sealed unit and capped with clear silicone
Cills	Manufactured in Hardwood with options of cill projections
Horns	Solid feature horns to top sashes are included as standard (See Drawing No H-001)
Fittings	A lockable Fitch fastener and two finger pulls to the bottom sash with options in colour and finish
Ventilation	A controllable trickle ventilator can be fitted to the window dependant on width of frame (See Drawing No BOX-160/09)
Restrictors	Restrictors which allows the opening of the sash to be restricted to 100mm is an option
Factory Finishing	To ensure the smooth operation and optimum performance of the window, we apply 3 coats of sprayed applied microporous water based paint system

TRC ARE AN ISO 9001 REGISTERED COMPANY



PRODUCT TYPE

TRADITIONAL BOX
SASH WINDOW

TITLE

VERTICAL SECTION

DRAWING No.

BOX-160/02.1

DATE

2018/06/06

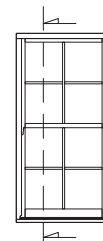
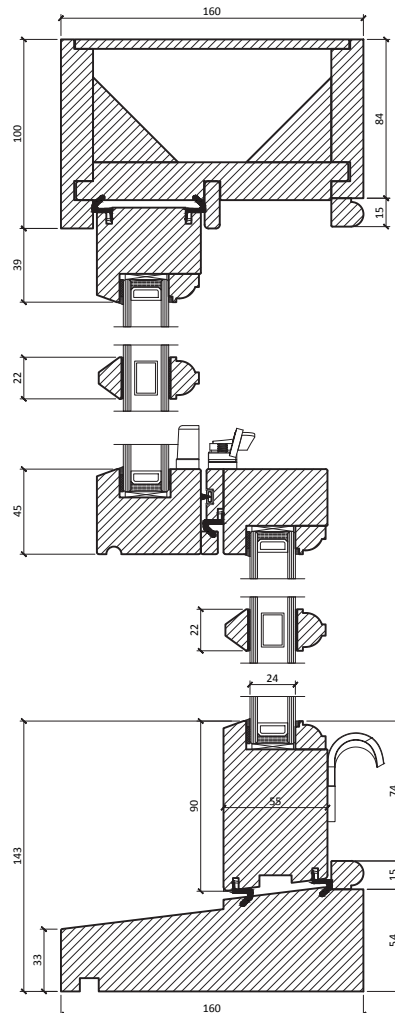
SCALE

1:2 @ A3

CONSTRUCTION DETAILS

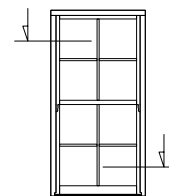
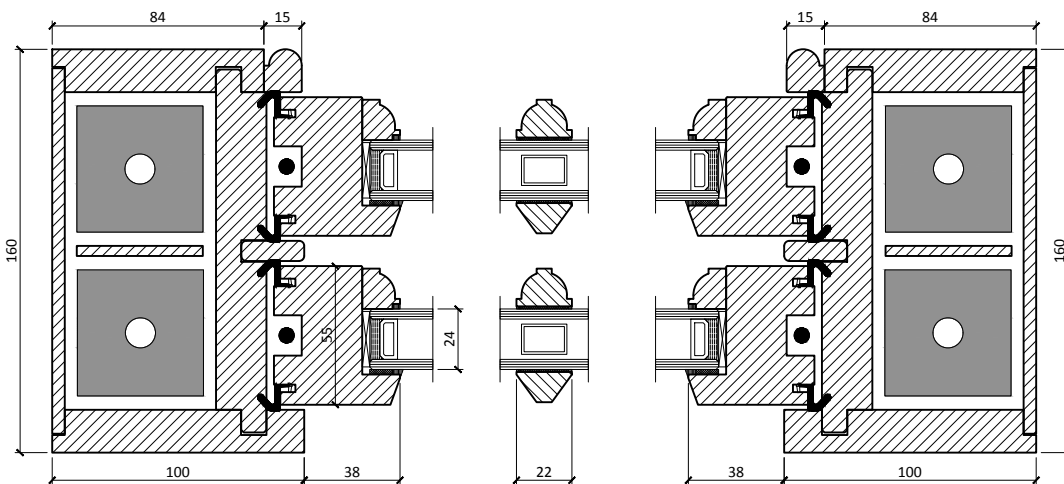
TRC CONTRACTS Ltd
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WINDOWS



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TRADITIONAL BOX SASH WINDOW

TITLE

HORIZONTAL SECTION

DRAWING No.

BOX-160/03.1

DATE

2018/06/06

SCALE

1:1.5 @ A3

CONSTRUCTION DETAILS

TRC CONTRACTS Ltd
Knoll House, Union Wharf,
Market Harborough,
Leicestershire LE16 7UW
Tel: +44 (0)1858 469 225
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TRC
WINDOWS

PRODUCT TYPE

TRADITIONAL BOX SASH WINDOW

TITLE

GLAZING BAR AND BEAD OPTIONS

DRAWING No.

BOX-160/04.1

DATE

2018/06/06

SCALE

1:1 @ A3

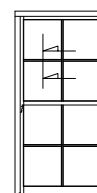
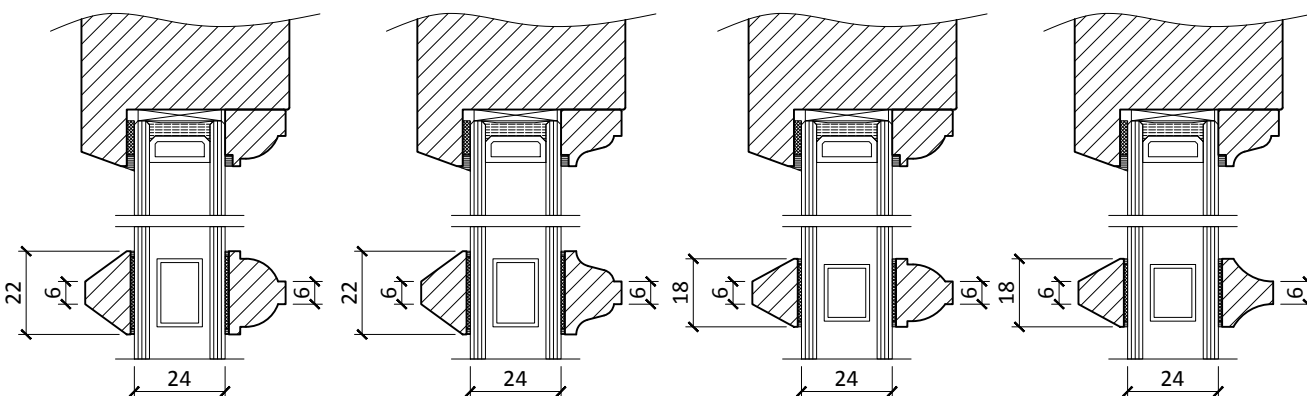
CONSTRUCTION DETAILS

Ovolo Profile 1

Lambs Tongue Profile 1

Ovolo Profile 2

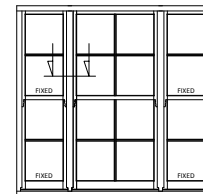
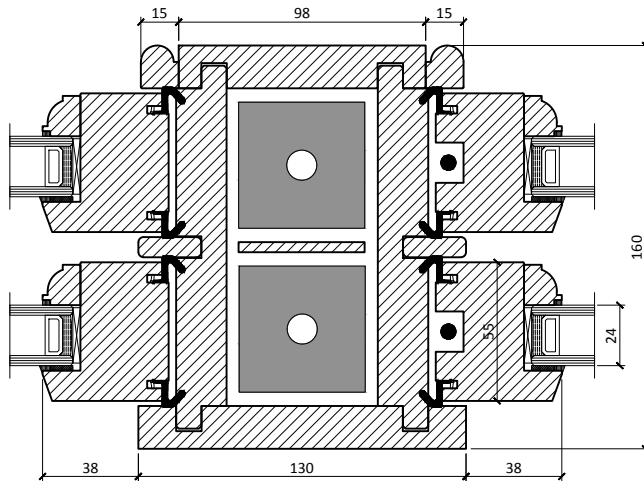
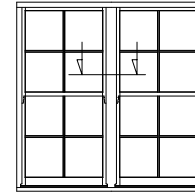
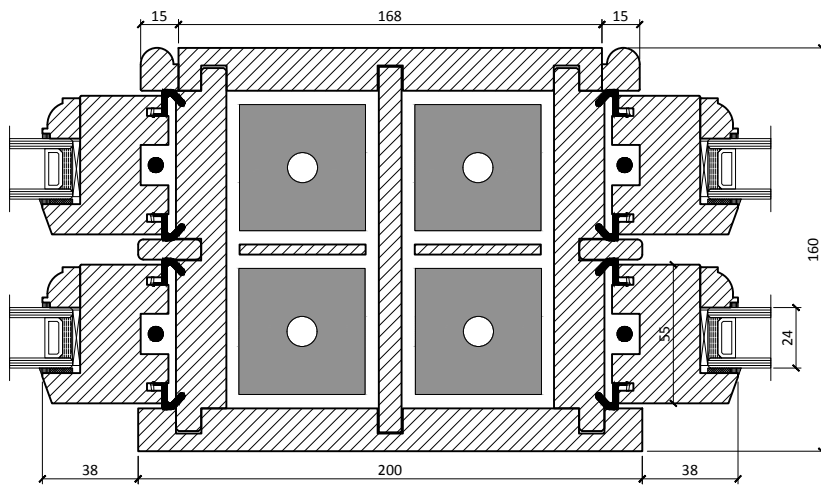
Lambs Tongue Profile 2



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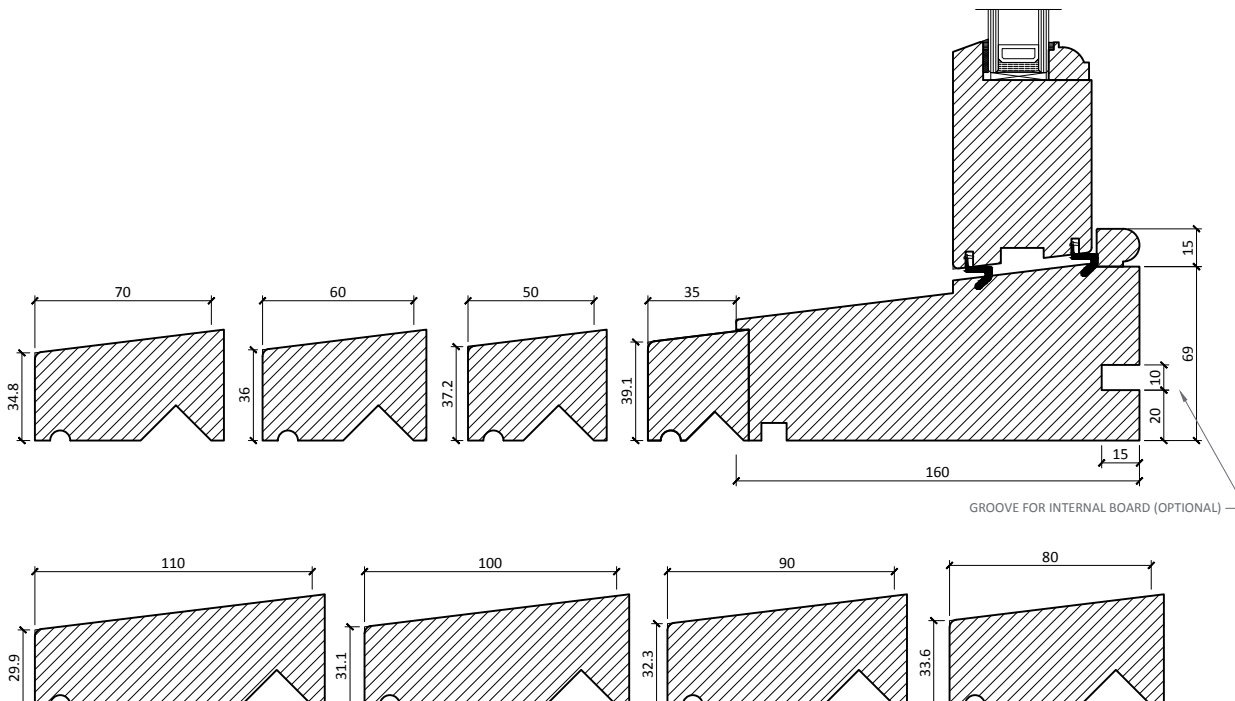
TRC
WINDOWS



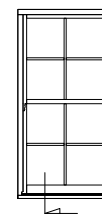
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PRODUCT TYPE	
TRADITIONAL BOX SASH WINDOW	
TITLE	
MULLION DETAIL	
DRAWING No.	
BOX-160/05.1	
DATE	SCALE
2018/06/06	1:1.5 @ A3
CONSTRUCTION DETAILS	
<p>TRC CONTRACTS Ltd Knoll House, Union Wharf, Market Harborough, Leicestershire LE16 7UW Tel: +44 (0)1858 469 225 Fax: +44 (0)1858 469 249 www.trcwindows.co.uk</p>	



GROOVE FOR INTERNAL BOARD (OPTIONAL)

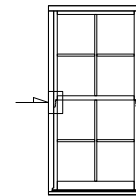
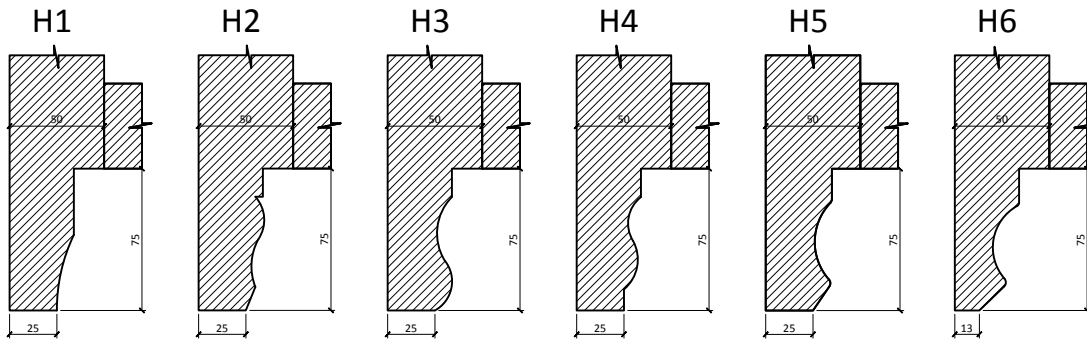


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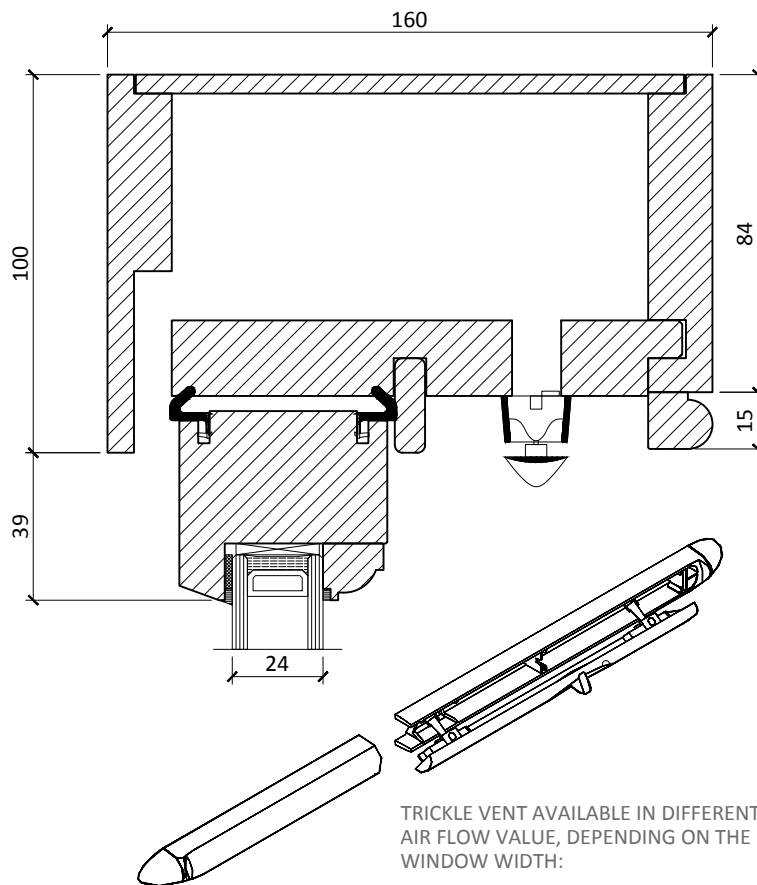


PRODUCT TYPE	
TRADITIONAL BOX SASH WINDOW	
TITLE	
CILL EXTENSION OPTIONS	
DRAWING No.	
BOX-160/06	
DATE	SCALE
2018/06/06	1:1.5 @ A3
CONSTRUCTION DETAILS	
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PRODUCT TYPE	
TRADITIONAL BOX SASH WINDOW	
TITLE	
SASH HORN OPTIONS	
DRAWING No.	
H-001	
DATE	SCALE
2018/06/06	1:2 @ A3
CONSTRUCTION DETAILS	
<p>TRC CONTRACTS Ltd Knoll House, Union Wharf, Market Harborough, Leicestershire LE16 7UW Tel: +44 (0)1858 469 225 Fax: +44 (0)1858 469 249 www.trcwindows.co.uk</p>	
	



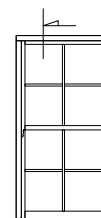
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TRICKLE VENT AVAILABLE IN DIFFERENT AIR FLOW VALUE, DEPENDING ON THE WINDOW WIDTH:

- * - 1700 mm² EA
- * - 4400 mm² EA
- * - 5000 mm² EA

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PRODUCT TYPE	
TRADITIONAL BOX SASH WINDOW	
TITLE	
CONCEALED TRICKLE VENT	
DRAWING No.	
BOX-160/07	
DATE	SCALE
2018/06/06	1:1 @ A3
CONSTRUCTION DETAILS	
<p>TRC CONTRACTS Ltd Knoll House, Union Wharf, Market Harborough, Leicestershire LE16 7UW Tel: +44 (0)1858 469 225 Fax: +44 (0)1858 469 249 www.trcwindows.co.uk</p>	
	