

Document in support
of Minor Amendment
Application for
Garages to rear of
no.15 Elsworthy Terrace

August 2013

Planning Application Ref: 2011/1828P
REV A

COVEBURGESS

Contents:

1.0 Plans_Proposed Roof Layout

2.0 Fixed Roof Light

2.1 Materials

2.2 Details

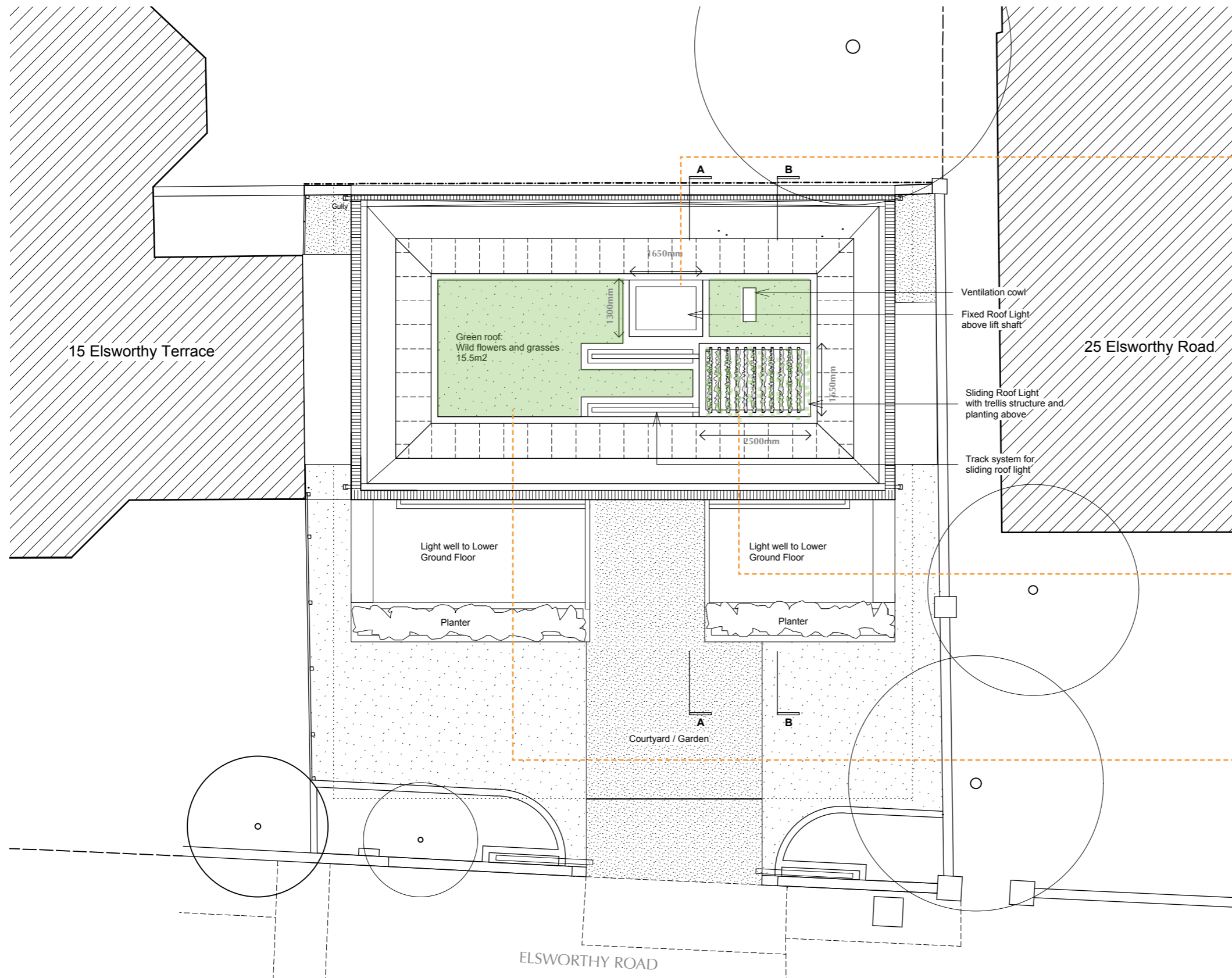
3.0 Sliding Roof Light

3.1 Materials

3.2 Details

4.0 Manufacturer's details_Motor

1.0 Plans_Proposed Roof Layout



Fixed roof light: GV Flushglaze by Glazing Vision



Sliding roof light: GV Sliding over Roof by Glazing Vision



Green Roof with a mix of wild flowers and grasses

Proposed Roof Layout 1:100 @ A3

2.0 Fixed Roof light_Materials

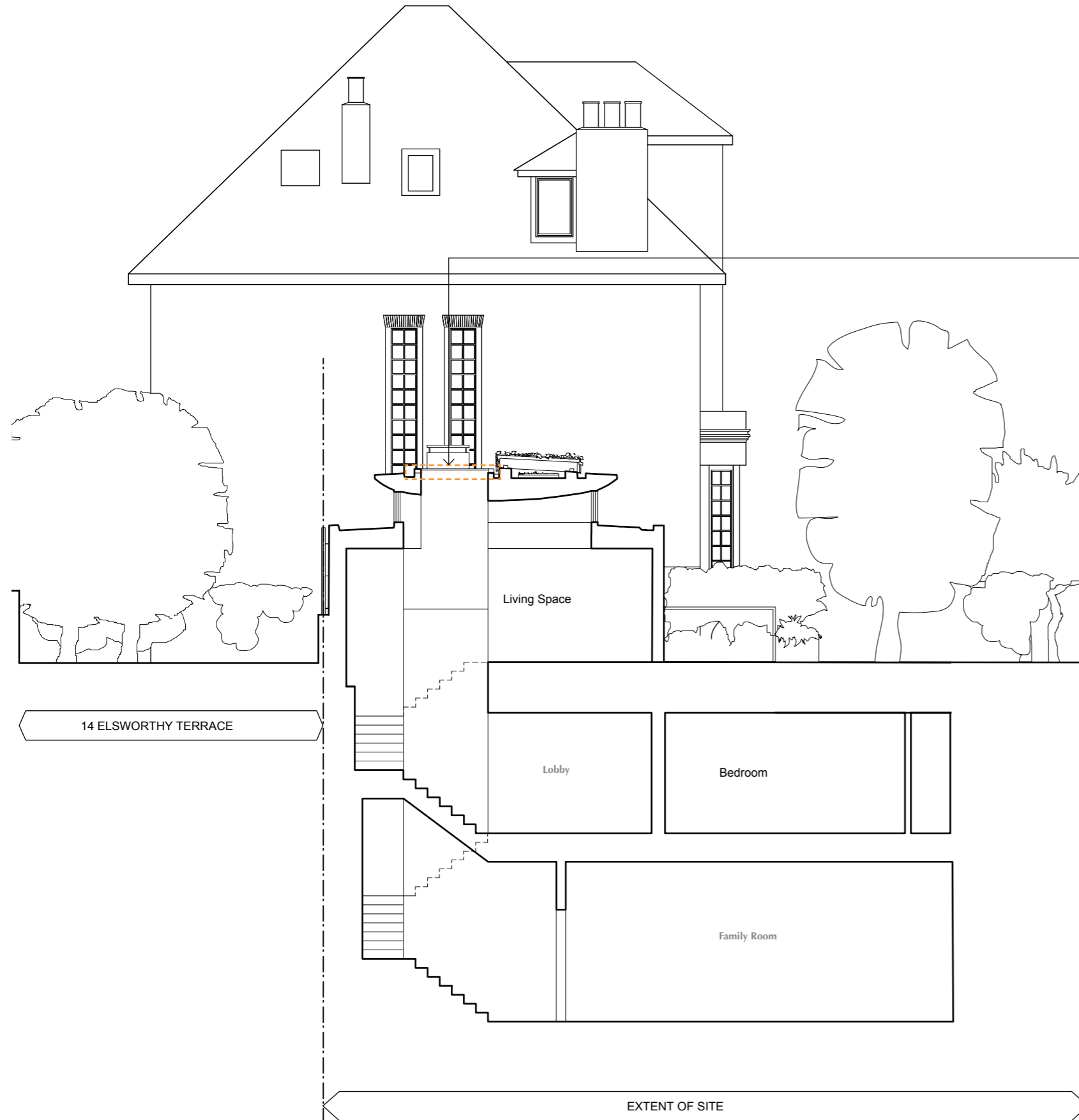


Image of proposed fixed roof light: GV Flushglaze by Glazing Vision

Fixed Roof light

The proposed roof light is a fixed glazing system comprising painted aluminium extrusion and double glazed unit.

The roof light is located above the lift shaft which will bring natural light down the stair well to the lower floors.

Materials

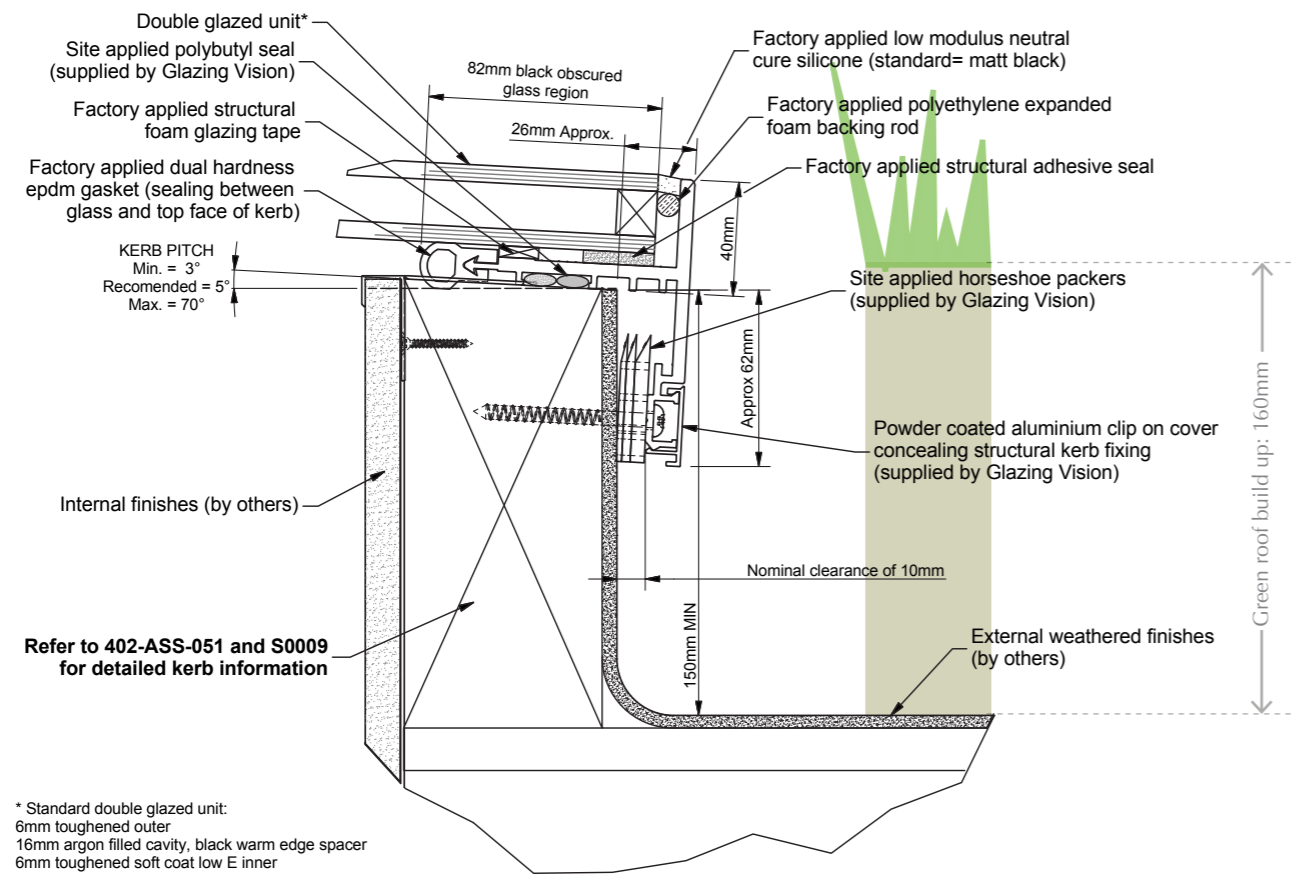
Frame: Powder Coated Aluminium RAL 7015
Glass: 6mm Toughened (Outer), 6mm Clear soft Low Emission Toughened (Inner)



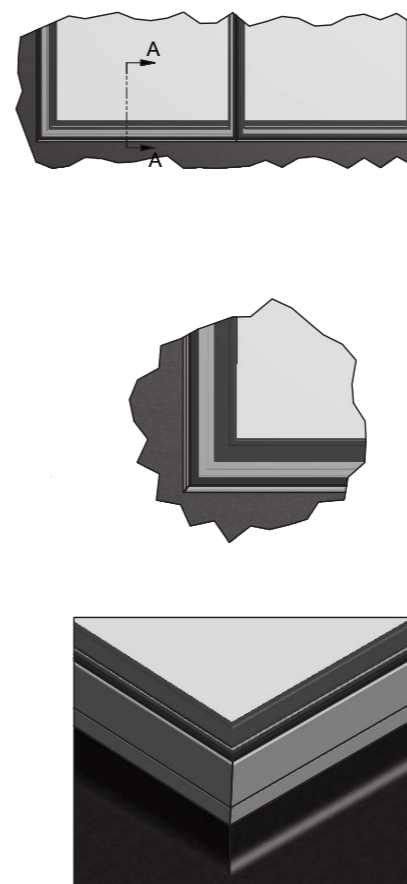
RAL 7015

Section showing fixed roof light above lift shaft

2.1 Fixed Roof Light_Details



Manufacturer's details for fixed roof light: Glazing Vision Flushglaze (NTS)



Fixed Roof light

The proposed fixed roof light has a minimal upstand and frame which minimises any visual impact of the installation.

A fixed glazing system comprising painted aluminium extrusion and double glazed unit.

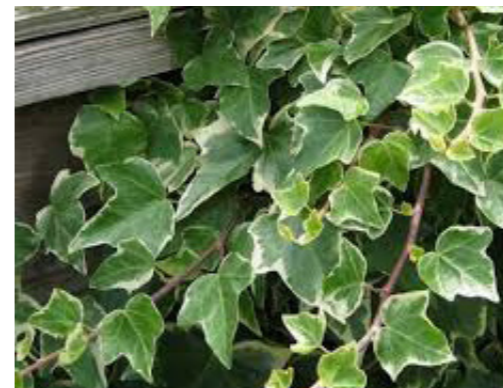
Frame: Powder Coated Aluminium RAL 7015
Glass: 6mm Toughened (Outer), 6mm Clear soft Low Emission Toughened (Inner)

3.0 Sliding Roof Light_Materials

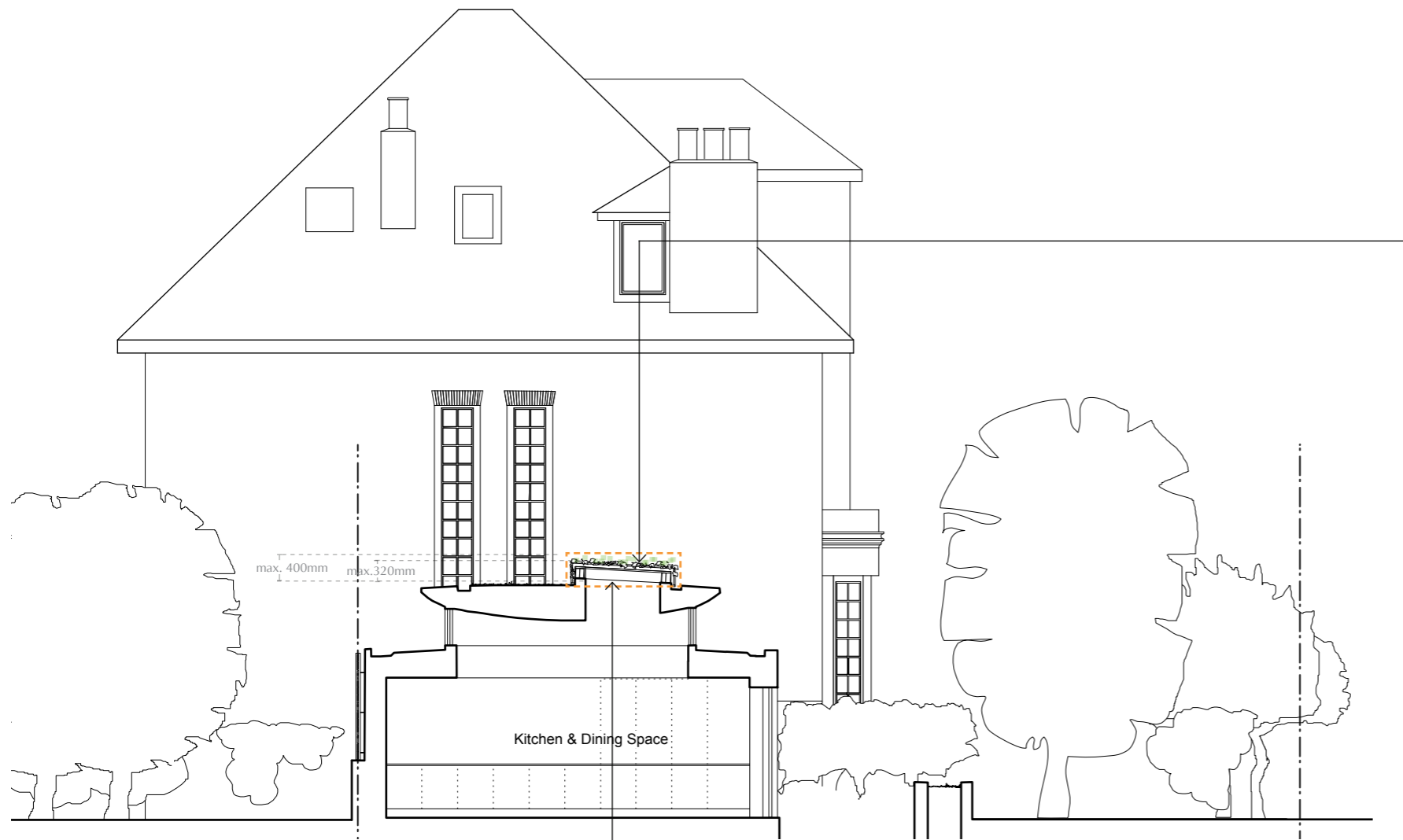
Sliding Roof light

The proposed installation is a sliding rooflight with one section sliding on rails over a roof, creating a 100% clear opening. All the glass is flush to allow water runoff and easy cleaning.

To maximise the appearance of greenery on the roof as well as minimising light emission we propose to install a trellis structure above the roof light with climbing ivy. This bespoke detail will give the impression of dining below an open air green structure from the inside of the house.



Trellis structure with growing ivy above sliding roof light to provide continuation of green roof and reduce light emission.



Proposed sliding roof light above dining area



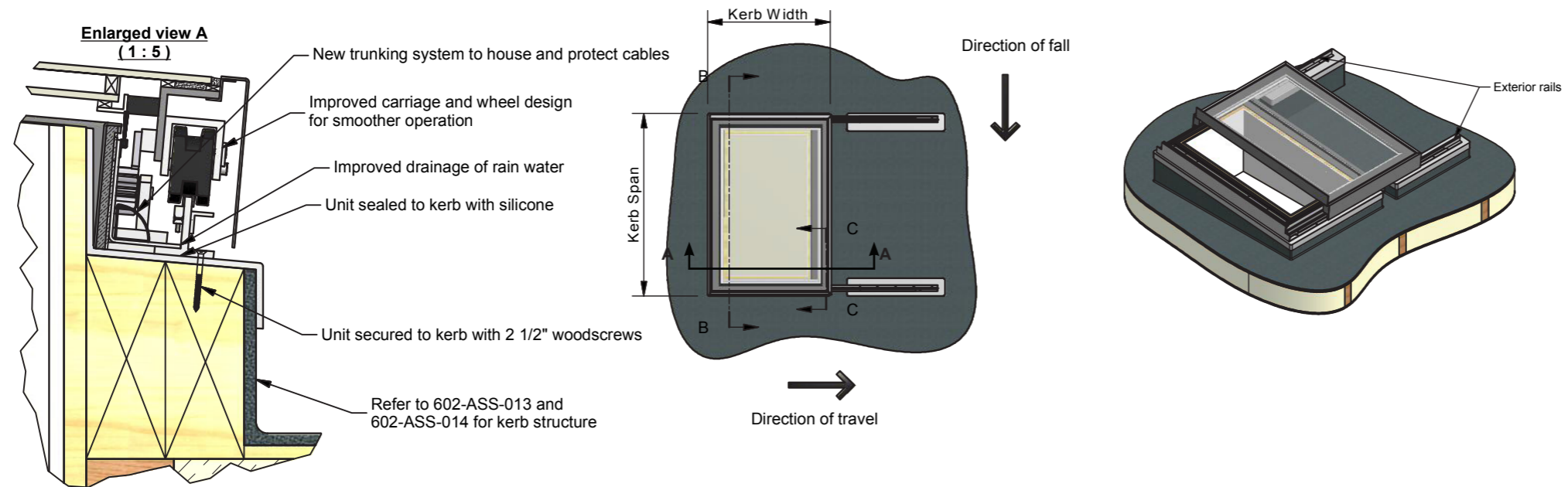
RAL 7015

Materials

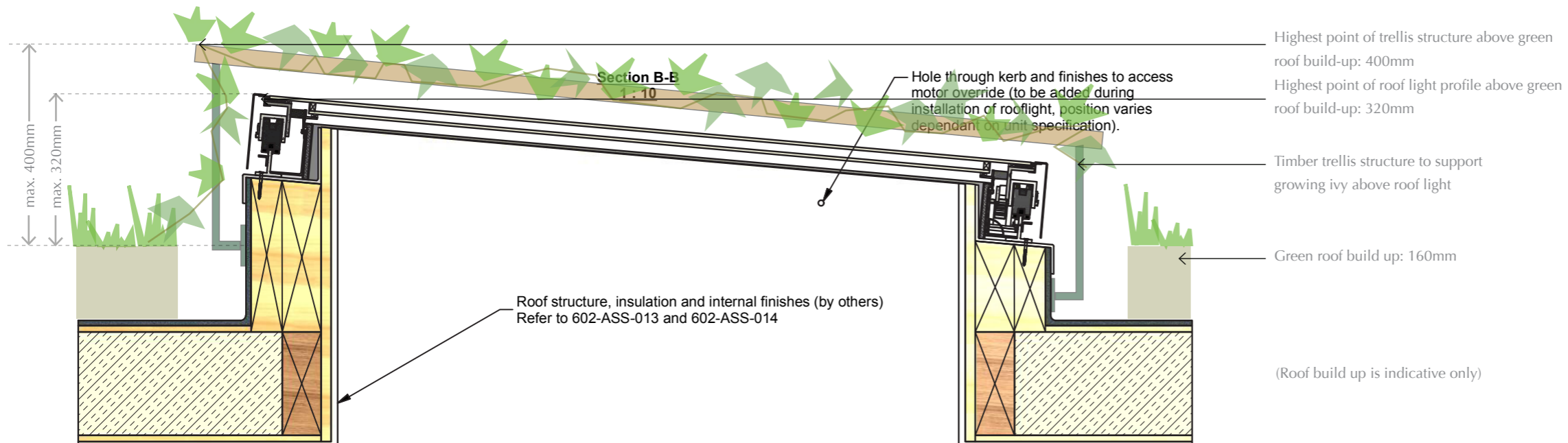
Frame: Powder Coated Aluminium RAL 7015
Glass: 6mm Toughened (Outer), 6mm Clear soft Low Emission Toughened (Inner)

Images of proposed sliding roof light: GV Sliding over roof by Glazing Vision

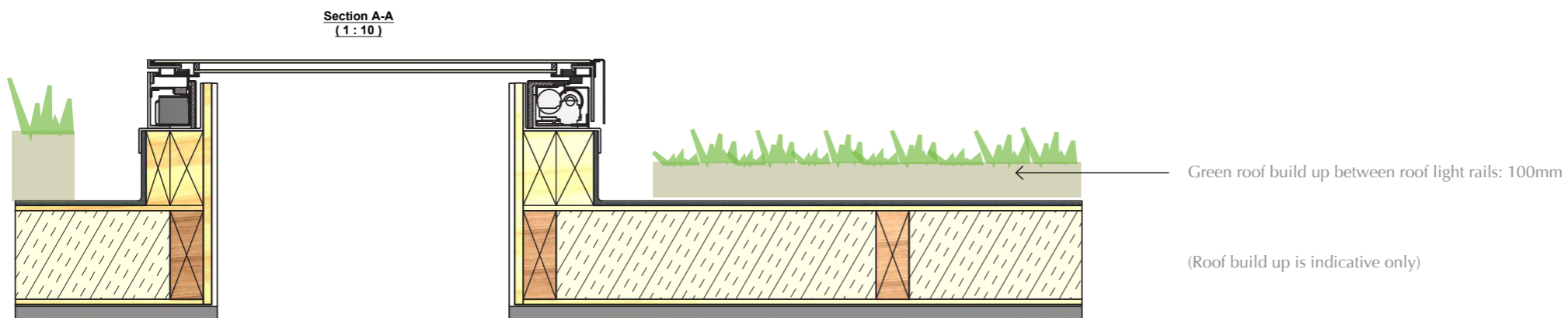
3.2 Sliding Roof Light_Details



Manufacturer's details of GV Sliding over roof. These images show typical details of the proposed roof light, the layout in the diagrams is indicative only.



Cross section of sliding roof light showing trellis structure and growing ivy above



Section showing lower level sedum planting between rails

Sliding Roof light

The proposed sliding roof light is an installation which includes roof tracks to allow the glazed section to fully open and create a clear opening internally. The hardwood thermal break detail on the fixed frame and insulated flashings on the sliding frame almost eliminates direct contact between the warm internal frame and the exterior cold air, reducing heat loss and condensation.

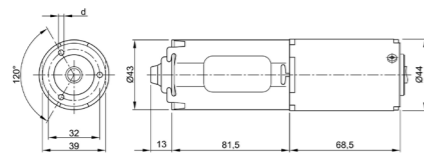
The proposed roof light is low-noise in operation and have built in electronic solid-state controls with battery back-up, manual override, speed control and creep-speed sealing at end of travel as standard.



Series GMPI Motor type 404 722

Design Data	
Commutation	Brushed
Direction of rotation	Bi-directional
Bearing type	sleeve bearing

0231 B



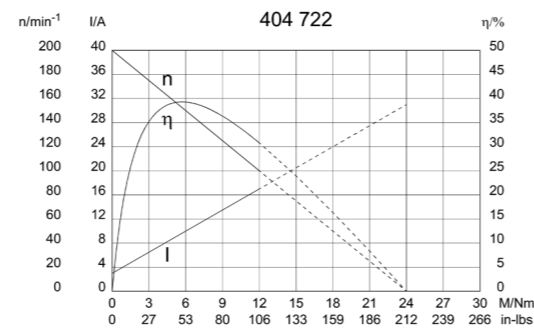
Performance data		
Rated voltage [V]	U_N	24
Nominal torque [Nm]	M_N	4.00
No-load speed [min^{-1}]	n_0	200.0
Nominal power [W]	P_N	69.8
Nominal current [A]	I_N	8.0
Nominal force [kN]	F_N	0.00
Duty cycle		s2

Sensor data	
Pulses	39
Output channels	2

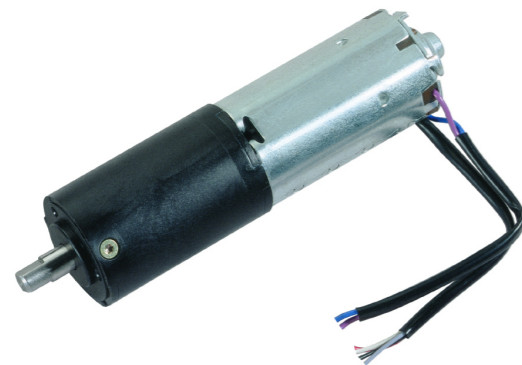
Other data	
Gear ratio	39.7/1
Gear wheel material	plastic
Suppression components	4,0 μ H, 1nF
Enclosure class	IP 30
Weight [kg]	0.650

Remarks: d = 3,3mm, for self-cutting screw 4mm

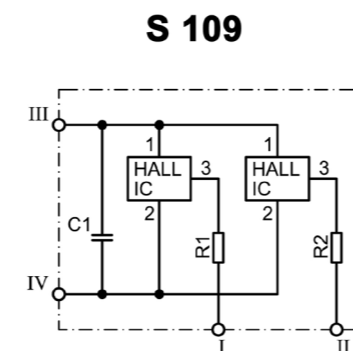
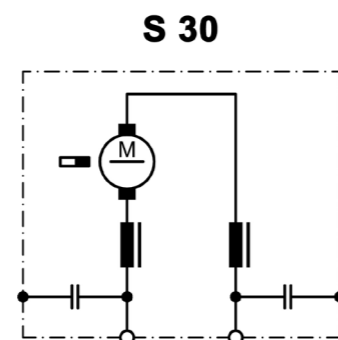
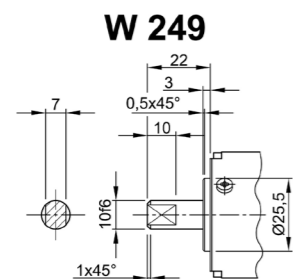
Characteristic curves



Motor picture



Output shaft drawing (W), Wiring diagrams (S) and Connector layout (K)



- I Terminal 1, OUT A1, grey
- II Terminal 2, OUT A2, black
- III Terminal 3, +, white
- IV Terminal 4, -, red

Motor for sliding roof light

The proposed roof light is low-noise in operation and have built in electronic solid-state controls with battery back-up, manual override, speed control and creep-speed sealing at end of travel as standard.

The motor used in the installation is the Motor Type 404 722 from Nidec and the following test results regarding noise levels (at 1 m distance from the roof light) have been provided by the manufacturer:

“ When in motion the rooflight was registering an average of 37dB. This is a different model of rooflight with stripped down framework mounted on a hollow timber structure and therefore creating an absolute worst case environment. We are happy to confirm the rooflight’s noise level when in motion will not exceed 40dB.

There is however a very short duration noise spike level when the sliding rooflight closes and locks, very much the same as closing any latched or bolted door. The noise comes from the locking bolt itself as it engages and the sliding section hitting the seals. We cannot guarantee this locking action will be under 40dB depending on the distance from the rooflight. However we presume this would be acceptable as it is not running noise and no different to someone closing their front door. We are happy to carry out a further test at a certain distance from the rooflight if required.”

Manufacturer's details of motor used for sliding roof light