SGG EGLAS® Electrically Heated Insulated Glass Units

GENERAL FIXING INSTRUCTIONS FOR WOODEN, PLASTIC AND ALUMINIUM GLAZING SYSTEMS

This document is for demonstration purposes only and will be superceded with job specific documentation for actual installations.

SGG EGLAS®

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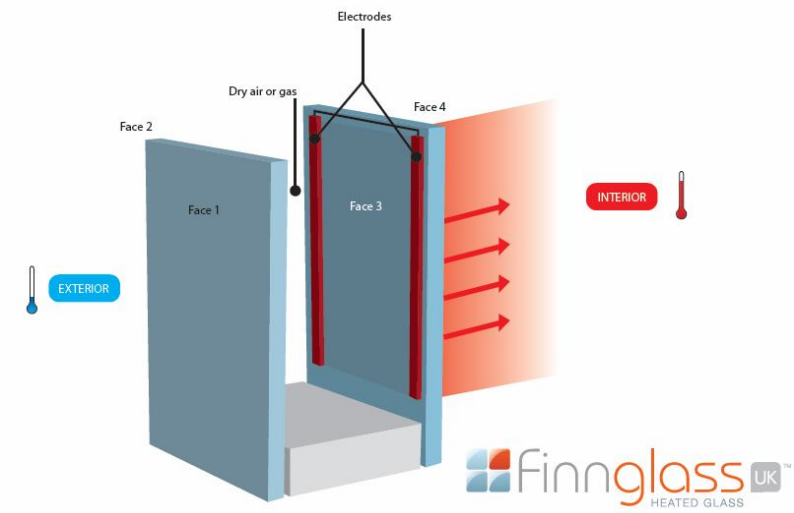


transparently smart heating

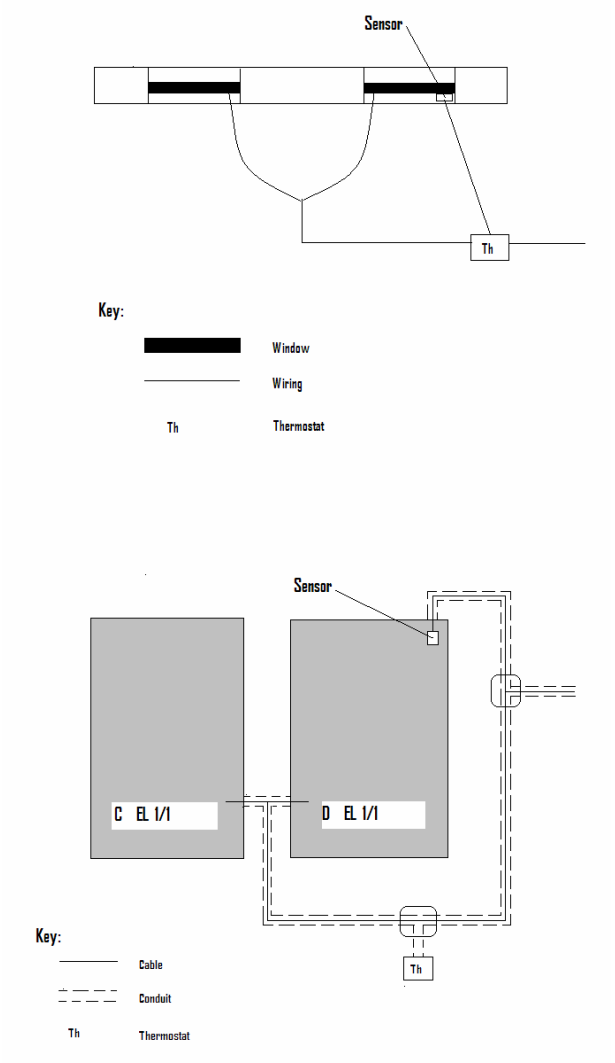
GENERAL

- Always fit the EGLAS in such a way that the sticker showing the EGLAS dimensions is outwards. The heatable side of the EGLAS is marked by a red sticker (most commonly on the inside). The EGLAS emits heat in only this direction.

- Always fit the EGLAS in such a way that the markings found in the spacer bar of the EGLAS are at the bottom left (seen from the inside).

- Check the outlet points of the EGLAS wires for drilling points on the frame. N.B. In opening windows always drill access through the hinge side.

- If applicable check the mounting point of glass surface temperature sensors.



FIXING EGLAS INTO A FIXED GLAZING AREA

It is extremely important to handle and install the EGLAS with care especially avoiding any damage EGLAS unit and to wiring.

1. Drill the framing as close to the position of the EGLAS Cable as possible ensuring the EGLAS conduit will run through the hole. The conduit is either fixed whilst Glazing the EGLAS at the point of manufacture or on site when fitting the EGLAS onsite. The external diameter of the conduit is either 11, 13 or 16mm. **See appendix on page 6.**

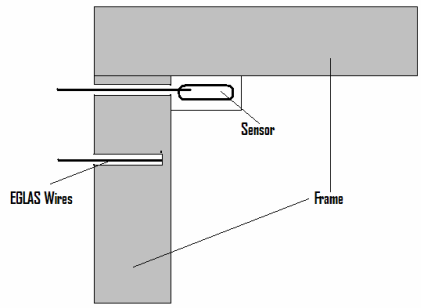
2. In multi-EGLAS windows it is advisable to provide a separate wiring point for each eglas unit.

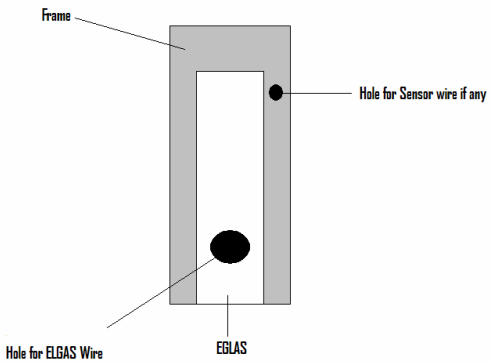
3. Again, if applicable check the mounting point of any glass surface temperature sensors as the cabling for this may well need to be run separately.

4. If a glass surface sensor is required it will need to be fixed to the glass surface (generally at the top corner of the glass). Depending on the glazing system, its colour and the application a variety of covering strips and adhesives may be used to fix and cover the sensor if desired.

5. Pass the wires through the drilled holes, and fix the EGLAS in the same way as a normal IGU (Insulated Glass Unit).

6. Roll up the wires, secure and check that they will not be damaged during packaging or transportation.





FIXING EGLAS INTO AN OPENING WINDOW

The fixing of an electric glass EGLAS into an opening aperture differs from a fixed glazing area with respect to the conduit carrying the wires between the sash and the frame.

The following are products available from Finnglass uk for protection of the wires

1. Lead covers EA 280 and 281 used for the installation of ABLOY electromechanical locks. The one selected depends on whether the aperture opens 90 degrees or 180.

N.B. The metal structure of the lead cover requires double insulation of electric wires. The EGLAS wires in this instance must therefore be specified to require heat shrinkable sleeving. Please inform us of the desired length of heat-shrinkable sleeving when placing the order.

2. Fiskars 2160 Feed-through Hinge
Follow the machining and mounting instructions of the manufacturer, Fiskars Oy. One hinge per electric glass EGLAS.

3. Other electrical contactors (e.g. surface mounting). Requires type-specific testing or certification please contact Finnglass uk for further information

The wire of the thermostat sensor is transferred either through the same conduit as the EGLAS wires or by means of a separate structure/ lead cover. This depends on the exact application and what works best.

FIXING SGG EGLAS® ON SITE

Every job involving the installation of SGG EGLAS is quoted, designed and specified on a case by case basis by our in-house engineering team. Once a quotation moves to the ordering stage we produce a set of detailed electrical connection plans in accordance with the exact job details. The main calculations required for this process are based on room volume, location of EGLAS units, surface area of EGLAS and actual unit sizes. From this our engineers design to run as many units as possible in series to avoid any unnecessary transformer use. Installers should always refer to this documentation as **anything in this document will be superceded by installation specific documentation**.

1. The installer must fix the EGLAS units according to their numbers, into the places shown by the connection plan or the window plan. The connection plan must be followed accurately. The number of the EGLAS unit is marked on the name plate found in the spacer bar of the unit.

2. If the conduit which protects the EGLAS wires is not fixed until at the site, it must be placed into its position before fixing the EGLAS unit.

3. Fix the unit in the normal way paying particular attention not to damage the cables.

NB. The fitting process tends to go more smoothly if both the electrician and the window fitter are available on site for the installation.

TASKS OF THE ELECTRICIAN ON SITE

Lead the wires coming from the EGLAS through the conduits to the connection box. Connect the wires in accordance with the connection plans. Please ensure you pass the mounting tube / lead cover of the EGLAS wires inside the conduit this way any polyurethane foam used as insulation cannot thus block the route of the wires, and the EGLAS – if necessary could be replaced in the future.

2. Verify the correctness of the connections. Faulty connection may result in the damaging of the EGLAS.

Before putting the EGLASs and EGLAS groups into use, measure their resistances and compare the results with the values given in the plans and records (tolerances ±10%).

When putting the EGLASs and EGLAS groups into use, measure their currents and voltages and compare the results with the values given in the plans and records. Also check that the thermostat has been connected correctly and that the temperature setting is correct to the specification of the particular job.

3. If the windows have metal frames, measure the insulation resistances between the EGLAS and the frame. In the case of metal-frame windows, earthing of-the frame is always recommended.

4. Provide the main distribution boards supplying current to electrically heatable EGLAS with markings indicating the exact EGLAS unit / group it is heating (stickers are provided together with the electric glass EGLAS).

5. The use of fault current protection is recommended.

Appendix:
EGLAS wiring types: