

LCD Glass Installation

1. Specifications of LCD Glass

LCD Glass Type & Dimensions

Product Name	Thickness	Max Size	Dimension of edge protector	
			T	W
DVG07	7.5mm	980 x 1500mm	9.5mm	11.5mm
DVG11	11.5mm	980 x 2600mm	13.5mm	
DVG13	13.5mm		15.5mm	

When ordering, the size of LCD Glass should include the dimension of edge protector(s). The standard colour of LCD Glass is clear glass. DVG11 is also available in bronze, green, blue and grey by special order

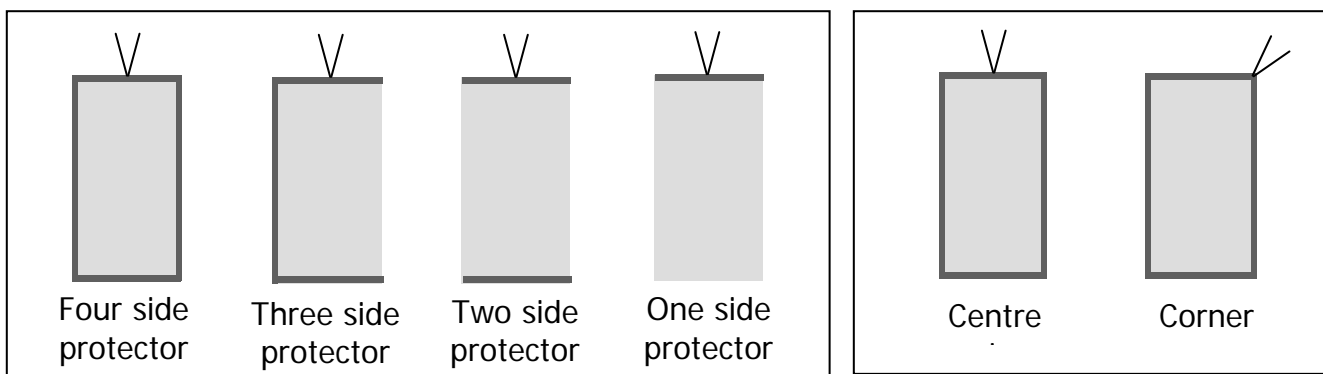


Plastic edge protector

Plastic edge protector should be located on the bus bar edge. This edge protector should not be damaged or removed. Edge protectors for the other three edges are optional. When ordering, you are kindly requested to indicate the type of edge protector.

Electrical Wire

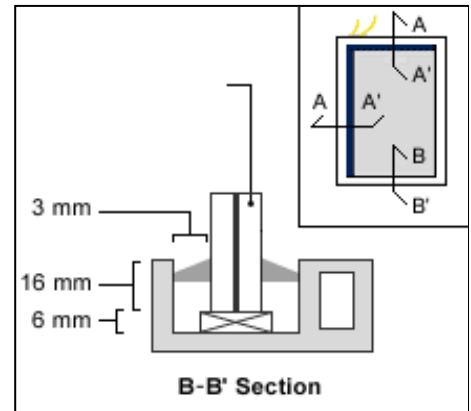
Electrical wire comes out from either the corner or the centre of one edge. When ordering, please indicate the position of wire. The standard length of electrical wire is one metre.



2. Glazing in a frame

The drawing on the right shows the minimum rebate requirements. Frames used for traditional curtain walls can be used. For metal frames, the frame should be grounded and no moisture should come into the frame area.

To fix LCD Glass panels, the fitter must check that the limits of the mentioned dimensions are being respected. Any pressure increased on the glazing is to be strictly avoided. The electrical wires from LCD Glass should be placed at the upper edges of the glass.

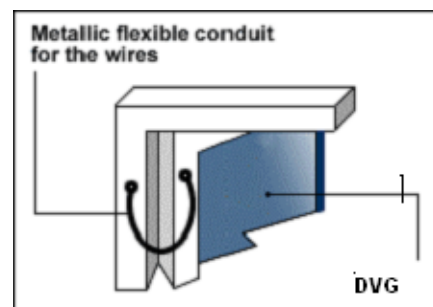
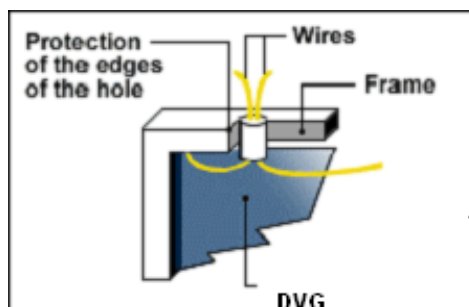


Note:

1. Remove all spurs around the electrical wire and ensure that the protective covering on the electrical wires is not damaged.
2. Do not place the electrical wires in the sash and take care of the edge protectors to avoid damage.
3. When drilling a hole in the sash for the electrical wires to pass through, be sure to insert a rubber bush into the hole to avoid any damage.
4. When the LCD Glass is installed in a metal sash frame, be sure to ground the sash frame first.

3. Door glazing

In doors and windows that can be opened, we recommend that the LCD Glass is framed on all four edges. The frame should be sturdy enough to take all the pressure exerted on the movable units during the opening operation. As per the electrical connection, an electrical wire will be placed from the opening frame to the door casing or the standing window frame. A metallic flexible conduit similar to those generally used in alarm systems or electrical catches will protect the wires.

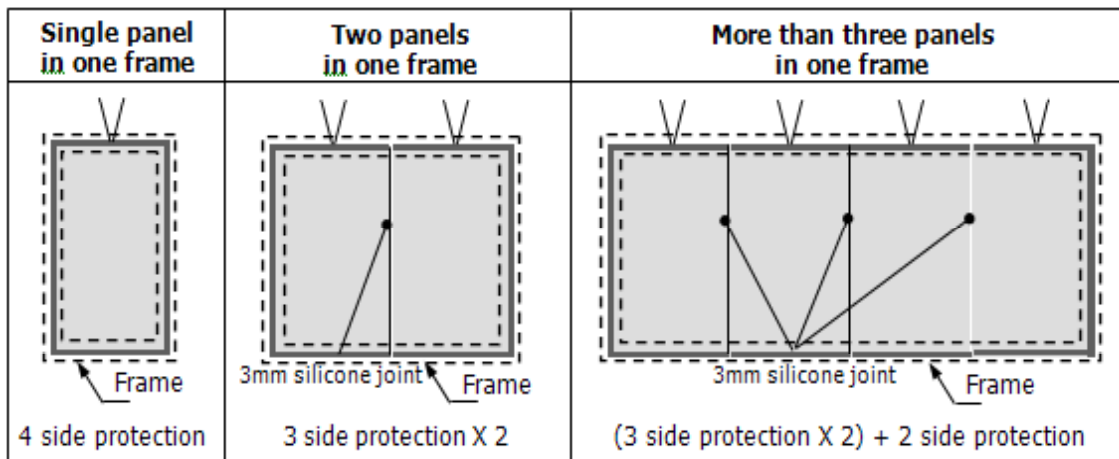


4. Sliding glazing

In the case of sliding doors, the connection has to be made by means of a permanently connected cable. The cable should be as short as possible and an appropriate device must prevent the cable from being cut or jammed while opening or closing the sliding part. System with sliding contacts or any other system that interrupt the current between the glass and the power supply are prohibited.

5. Placing multiple LCD Glass panels side by side

DVG can be placed side by side with transparent silicone seal in between.



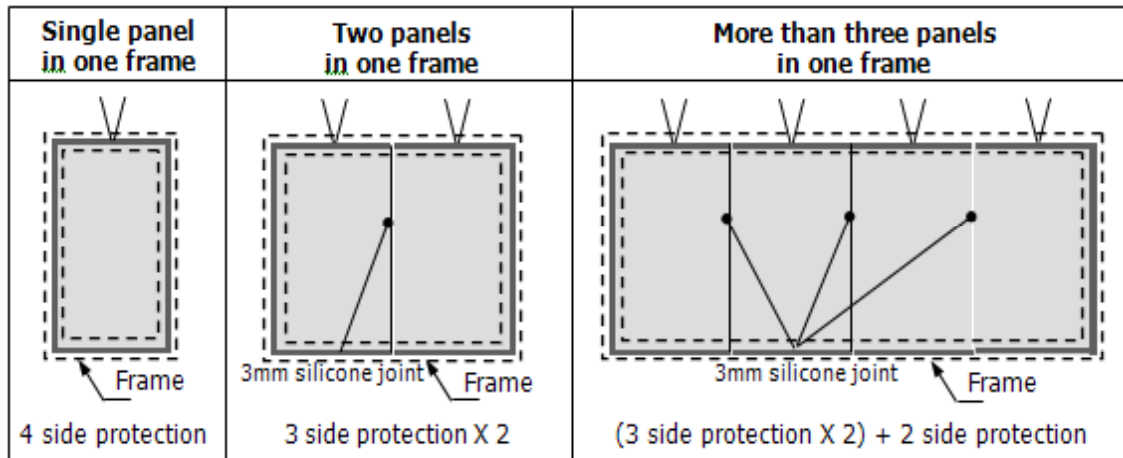
Note:

For silicone sealant, use only a neutral, non-acetic acid-type silicone sealant (Dow Corning).

6. Electrical wiring

The electrical voltage to DVG should be **110VAC**. If the voltage of your electrical power source is higher than 110VAC, you have to adjust it with a transformer (see our range of step-down transformers).

Please refer to the following electrical circuit diagram.



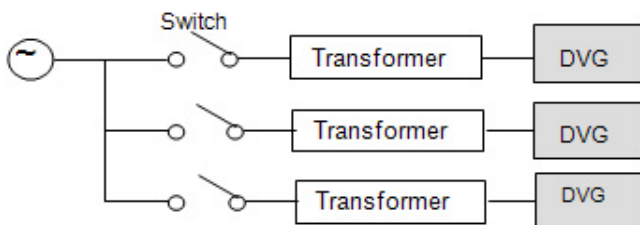
The voltage at the secondary side of transformer should be 110VAC. Calculate the capacity of transformer to secure VA per a square metre of DVG.

$$\text{Capacity of transformer} = \text{Total area of DVG (sqm)} \times 20\text{VA}$$

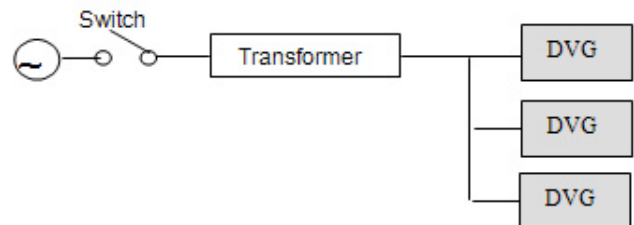
Place the switch on the primary side of transformer. If placed on the secondary side, it may cause deterioration of DVG.

It is recommended to install Earth Leakage Circuit Breaker (ELB) between power source and switch, when the exposure to water or moisture is anticipated such as exterior glazing or interior use in a bathroom or kitchen.

Beside the manual operation of switch, automatic switching can be done by relay control such as a timer or a sensor.



Independent switching of multiple LCD Glass



Switching of multiple LCD Glass in one unit control

7. Maintenance

Special care must be taken during initial cleaning, cleaning during the construction period, or when glass surfaces are severely soiled in order to prevent any damage caused by abrasive contaminants. The glass surfaces must first be flushed with clean water to remove as many contaminants as possible. With the glass surfaces still heavily wetted, carefully work a squeegee from top to bottom removing excess water. Caution must be taken to ensure that any remaining abrasive materials do not become trapped between the glass surface and the rubber squeegee; otherwise the glass surfaces may become scratched. The glass should then be cleaned with a clean, soft, grit free cloth and a mild, non-abrasive, non-alkaline cleaning solution and rinsed immediately with clean water. Excess water should be removed from glass surfaces with a squeegee. For routine cleaning, use a conventional liquid glass cleaner or mild soap and water. Uniformly spray the cleaning solution or apply it with a clean, soft, grit free applicator and rinse thoroughly. The glass surface should then be either wiped dry with a clean, grit free cloth or squeezed dry. Do not allow any metal or hard parts of the cleaning equipment to contact the glass surfaces.

8. Trouble shooting

LCD Glass does not turn clear when switched ON:

- Check the fuses in the switch box
- Check the electricity source in the primary position
- Check the switch unit if the transformer is not powered
- Check the voltage in the secondary position
- Check the cable connections to the LCD Glass
- Check the input voltage to LCD Glass connections. If voltage is over 110VAC and the LCD Glass does not turn clear, measure electrical resistance of the LCD Glass and discuss it with us.

LCD Glass does not completely clear up in ON-state of the switch:

- Check whether the glass panels are connected in parallel
- Check the connection of the electric cables on the LCD Glass
- Check whether the output voltage of the transformer remains at 110VAC. If the input voltage is normal and the output voltage is less than 110VAC, replace the transformer. If the input voltage is normal and the output voltage is over 110VAC, return the LCD Glass panels.