

Processing guide for FRAMING GLASS



2006

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Table of Contents

1. Packaging.....	3
2. Unloading.....	3
3. Storage	5
4. Handling glass panes	5
5. Cutting	7
6. Washing	8
7. Curving	9

1. Packaging

Framing glazings are available in standard sizes: DLF (bulk: A or L frames, reversible collapsible frames, wooden case or frame) or cut sizes (from Barevka).

The sheets of glass are separated by a powder interlayer.

The exact contents of each package are indicated on the label affixed to the edge of the pack or packaging.

2. Unloading

Packaged in cases:

- The rack must be positioned on perfectly level ground;
- Release the straps and blocks;
- Use the appropriate clamp;
- The slings must be positioned under the pack, at the ends;
- The angle between the slings must be no more than 90°;
- Handle one pack at a time;

Bulk packaging:

- The trailer must be positioned on perfectly level ground;
- Release the straps and blocks;
- Use the appropriate clamp or sling;
- Handle one pack at a time;
- The clamp must be perfectly centred;
- The slings must be positioned under the pack, at the ends;
- The angle between the slings must be no more than 90°;
- Prevent any damage to the glass by using protective materials in those areas where there is contact with the glass.

Packaging on L frames:

- The trailer must be positioned on perfectly level ground;
- Release the straps and blocks;
- The posts must NOT be opened at this stage;
- Use an appropriate lifting beam, with a double hook at each end (see diagram on frame);
- Handle one frame at a time;
- Check that the glass is correctly centred on the frame before lifting.

Packaging on returnable sectional frame:

- The trailer must be positioned on perfectly level ground;
- Release the straps and blocks;
- The posts must NOT be opened at this stage;
- Use an appropriate lifting beam, with a double hook at each end (see diagram on frame);
- Handle one frame at a time;
- Check that the glass is correctly centred on the frame before lifting.
- Empty frames must be demounted;
- The elements must be set into the special racks;
- The special rack must be reloaded up the truck according to the driver's direction;

Packaged in wooden cases:

- The trailer must be positioned on perfectly level ground;
- Release the straps and blocks;
- The strapping on the cases themselves must NOT be cut at this stage;
- Use a fork lifter, centre the fork under the load;
- Unload the load with an appropriate clamp;
- Handle one wooden case at a time.

General notes:

- Clamps, slings, lifting beams and other hoisting equipment must comply with prevailing regulations and be approved by the relevant authorities;
- Ensure the safety of personnel at all times. Keep all unnecessary personnel out of the handling area. Wear appropriate personal protective gear;
- Personnel must have received the required training.

3. Storage

Correct storage helps prevent deterioration caused by the following hazards:

- chemicals: surface defacement caused by water, moisture or condensation;
- mechanical hazards: surface accidents, breakage, etc.

Ideal storage areas are well ventilated and out of sunlight to prevent the risk of thermal stress. AGC recommends maintaining a temperature of between 15 and 25 °C and a relative humidity of less than 80%.

Glazings showing signs of moisture due to temperature fluctuations during transport must be dried or installed as soon as possible.

Factory racks are used for transport packaging; they are not meant for storage. Consequently, glazings must be stored on racks with interlayers for each pack. The same sizes should be stored together.

As a general rule, AGC recommends ensuring proper rotation of stored glazings.

4. Handling glass panes

Packaged in cases:

- Set the case on a support inclined at a slight angle (5°);
- Remove the upper cover and then the 2 side covers;
- Remove the plastic protecting the glass;
- Glass panes must be lifted with a suction pad lifting beam, manually or with a clamp;
- The lifting beam must be properly centred;
- The glass pane must first be lifted slightly, and then moved away from the others;

- Care must be taken to prevent scratches by ensuring that the edge of one glass pane does not rub against the surface of another glass pane.

Bulk packaging:

- Glass panes must be lifted with a suction pad lifting beam or with an automatic unstacking machine;
- Labels and/or tapes on the edge of the pack must be removed before handling glass panes;
- The lifting beam must be properly centred;
- The glass pane must first be lifted slightly, and then moved away from the others;
- Care must be taken to prevent scratches by ensuring that the edge of one glass pane does not rub against the surface of another pane.

Packaged in L frames:

- Ensure that the pack rests on the uprights, not on the posts;
- Open the posts;
- Remove the posts;
- Glass panes must be lifted with a suction pad lifting beam or with an automatic unstacking machine;
- Labels and/or tapes on the edge of the pack must be removed before handling glass panes;
- The lifting beam must be properly centred;
- The glass pane must first be lifted slightly, and then moved away from the others;
- Care must be taken to prevent scratches by ensuring that the edge of one glass pane does not rub against the surface of another glass pane.

Packaged in returnable sectional frame:

- Ensure that the pack rests on the uprights, not on the posts;
- Open the posts;
- Remove the posts;
- Glass panes must be lifted with a suction pad lifting beam or with an automatic unstacking machine;
- Labels and/or tapes on the edge of the pack must be removed before handling glass panes;

- The lifting beam must be properly centred;
- The glass pane must first be lifted slightly, and then moved away from the others;
- Care must be taken to prevent scratches by ensuring that the edge of one glass pane does not rub against the surface of another glass pane.

Packaged in wooden cases:

- Cut the vertical strapping;
- Glass panes must be lifted with a suction pad lifting beam or manually;
- The lifting beam must be properly centred;
- The glass pane must first be lifted slightly, and then moved away from the others;
- Care must be taken to prevent scratches by ensuring that the edge of one glass pane does not rub against the surface of another glass pane.

General notes:

- Suction pads must be perfectly clean;
- Any direct contact with hard materials must be avoided;
- Suction pad lifting beams and other hoisting equipment must comply with prevailing regulations and be approved by the relevant authorities;
- Personnel must check that the suction pads are adhering correctly before any further manipulation;
- Ensure the safety of personnel at all times. Keep all unnecessary personnel out of the handling area. Wear appropriate personal protective gear;
- Personnel must have received the required training.

5. Cutting

Below are several recommendations that should be complied with when cutting framing glazings:

- Cutting should be carried out on the smooth side;
- The cut must be lubricated using a volatile oil that is easy to wash off;
- Cut sheets must be separated by a spacer.

However, cutting Glamatt glasses is a more intricate process and it is important that the following rules be observed:

- Place the sheet of glass with the patterned side facing upwards;
- Cut the underside (float) only;
- Next cut the upper side (patterned glass) using plenty of oil;
- Move the sheet to break it off manually;
- Break off the underside (float) by lifting the sheet;
- Then break off the uppermost side (patterned glass) by pressing down on the sheet;
- Cut the PVB interlayer with the cutter or place the sheet over the table's heating element.

Working conditions:

- Cutting personnel must wear clean gloves;
- All tools, conveyors etc. that might come into contact with the glass must be kept clean;
- When using templates, special care must be taken to ensure that the templates are clean.

6. Washing

Framing glazings must be washed with clean water. A small quantity of a mild detergent solution which does not contain any abrasives or acids (specifically chlorine, fluorine or alkalis) may be mixed into the water.

Before washing the glazings, make sure to remove all residue and particles that could scratch the surface of the glass (grains of sand, glass splinters, iron oxides, etc.).

If the glazings are washed in an automatic machine it is important to check regularly the wash water as well as the cleanliness and hardness of the brushes in the washing machine so as to prevent the build-up of abrasives. Doing so will help prevent any damage to the surface of the glass.

Glass must be dried immediately after washing and must be dried thoroughly. AGC recommends regularly checking the filtration quality of the air used to dry the glazings.

7. Curving

Framing glazings can be curved. Below are several recommendations to comply with during the curving process:

- Check that the settings of the bending oven are correct for this type of glass;
- The glazings must first be shaped along all edges;
- The glazings must first be thoroughly washed and dried so that both sides of the glass are free of any residue (oil, fingerprints, etc.) and particles (grains of sand, pieces of glass, iron oxides, etc.);
- Any markings (such as a quality label), silkscreen printing or enamelling must be applied to the glass prior to bending. They must be applied to the side of the glass that is not in contact with the templates used for bending the glass. The ink used must be chemically compatible with this type of glass;
- The patterned side of the glazing must not come into contact with the bending templates.

Working conditions:

- Glass-bending personnel must have received the required training and must wear clean gloves;
- All tools, rollers, etc. that might come into contact with the glass must be kept clean.