

# **GENERAL CLEANING INSTRUCTIONS**

## LOW-E / Coated Glass

#### Metal-oxide coated glass has special cleaning instructions, General:

Normal soiling should be dealt with as described below however, abrasive agents e.g. scouring agent or steel wool, must not be used. Stubborn spots of soiling e.g. paint or tarspots or adhesive residues should be removed using suitable solvents e.g. spirit, acetone or gasoline and then cleaned with water. It is important to ensure that any solvents used do not come into contact with the edge seal of the insulating unit, gaskets or other organic materials (silicone joints) as they may become damaged (IGU only).

#### Particular cleaning instructions for EVO / ET series

Soiling of glass should be cleaned using the normal wet-method with a lot of water, sponge, squeegee and leather. A neutral solution <u>without</u> abrasive particles (e.g. Pril, Ajax) should be added to the water. Stubborn areas of soiling should be removed using suitable cleaning solutions, but fine industrial steel wool or Sharp-edged tools such as razor-blades and scrapers <u>must not</u> be used.

Decorative stickers should not be applied to the glass.

#### **Glass Cleaning**

In particular it is necessary to remove cement clumps and other remains of building materials immediately, otherwise it is likely that the glass will be etched and may lead to the units becoming "blind".

Should residues of sealants come onto the glass during sealing works, they should also be removed immediately. Normal soiling should be dealt with as described above however, abrasive agents e.g. scouring agent or steel wool, must not be used. Stubborn spots of soiling e.g. paint or tarspots or adhesive residues should be removed using suitable solvents e.g. spirit, acetone or gasoline and then cleaned with water. It is important to ensure that any solvents used do not come into contact with the edge seal of the insulating unit (IGU only), gaskets or other organic materials (silicone joints) as they may become damaged.

#### Unsuitable cleaning agents

Strong alkali solutions as well as acids, particularly liquid acids, and cleaning agents containing fluoride should never be used. These solutions may irreparably damage the coating and / or the glass surface.



### **Glass in general**

#### Value maintenance

All building materials such as window frames, coatings, sealants and profile gaskets are subject to a natural ageing process. In order to maintain the claim for warranties and to prolong the life-expectancy of glass it is necessary to carry out regular performance checks. All necessary maintenance procedures such as renewal of the window frame coating, control of the gaskets between the frame and the glass, ventilation and pressure-equalisation openings etc.. must be carried out timely on a regular basis.

#### Surface damage

Many factors may cause damage to the surface of the glass. It is necessary to take suitable protective measures against the local conditions.

#### Welding / grinding operations

Welding or grinding operations close to the windows require suitable protection of the glass surface to avoid pitting from weld-spatter or grinding sparks.

#### Etching / leaching

Surface etching of the glass sheet may result from contact with chemicals which are common in building materials and cleaning agents. Particularly over long periods, such chemicals (e.g. Alkalis, acid solutions) lead to permanent etching. This applies to fresh concrete, plaster, render etc.. when these materials come into contact with the glass surface.

#### Water damage

It is also possible that long-term water effects can cause surface damage, in particular when a prolonged period of soiling exposure has occurred to the glass prior to building clean-down. Glass must be cleaned regularly, when necessary also during the construction phase.

#### **Glass cleaning**

Cleaning of the glass, as well as removal of residue from stickers and spacing-pads is to be carried out by the builder using mild cleaning agents. Soiling of glass which cannot be removed with normal wet-method with a lot of water, sponge, squeegee, leather; or commercially available spray cleaners and cloths, can be removed using a fi ne industrial steel wool or household cleaning agent. Sharpedged tools such as razor-blades and scrapers may cause fi ne scratches in the surface and the use thereof should be avoided.

In particular it is necessary to remove cement clumps and other remains of building materials immediately, otherwise it is likely that the glass will be etched and may lead to the units becoming "blind". Should residues of sealants come onto the glass during sealing works, they should also be removed immediately.