

GENERAL INSTRUCTIONS FOR CLEANING GLASS SURFACES

1. Cleaning glass surfaces

1.1. General principles

- Cleaning of the glass, as well as removal of sticker and spacer, should be carried out by the work contractor using mild cleaning products.
- Glass stains that cannot be removed by the usual cleaning method using a lot of water, a sponge, rubber puller, soft leather or commercially available sprays cleaners and rags, can be removed with fine industrial steel wool or household cleaners.
- Sharp tools, such as razor blades or scrapers, can cause minor scratches to the surfaces and for this reason should be avoided.
- In particular, it is necessary to immediately remove lumps of cement or other residues of construction materials, otherwise it is possible and may lead to the staining of windows.
- If any sealant residue remains on the glass during the sealing work, it must be removed immediately.
- Simple dirt should be removed as described above, while abrasive materials such as scouring agents or steel wool can not be used.
- Difficult to remove dirt, e.g., paint or tar stains or glue residues, should be removed using suitable solvents, i.e., spirit, acetone or gasoline, and then the glass should be washed with water.
- It is important to prevent any solvent from coming into contact with the glass package edge seals, gaskets or other organic materials (silicone joints), as this may damage them.

1.2. Not recommended cleaning products

- Do not use strong solutions of alkalis or acids, especially liquid acids and cleaning products containing fluoride. Such solutions may cause irreversible damage to coatings and/or glass surfaces.
- Cleaning of the facade and glass should be performed in accordance with recognized industrial standards.

1.3. Glass coated with a metal oxide coating

Glass covered with a metal oxide coating requires special products.

- Simple dirt should be removed as described above, but abrasive agents such as scouring agents or steel wool can not be used.
- Difficult-to-remove dirt, such as paint or tar stains or glue residues should be removed with suitable solvents, i.e. spirit, acetone or gasoline, and then the glass should be washed with water.

- It is important to prevent any solvent from coming into contact with the sealing edges of the glass package, gaskets or other organic materials (silicone joints), as this may damage them.

1.4. Cleaning of satin glass

- Satin-finished glass has a slightly rougher surface on one side. It is possible therefore, this surface will get dirty more easily than a smooth surface. It will therefore be necessary to pay more attention to the maintenance of this type of glass.
- Silicone and acid-free cleaning products must be used. You can not use strong alkaline solutions, as well as acids and cleaners containing fluoride.
- Cleaning of the glass, as well as removal of residues from stickers and spacers must be done with mild cleaning products.
- Glass dirt should be removed by the usual "wet" method, using plenty of water, a sponge, rubber roller, leather or commercially available spray cleaners and rags.
- Difficult-to-remove dirt that cannot be removed with ordinary cleaners should be preliminarily removed with special cleaners (Pril, Ajax, etc.)
- It is recommended to use the usual "wet" cleaning method afterwards. Use of steam cleaners with suction ensures satisfactory cleaning of heavily soiled areas.
- Heavy dirt should be removed with suitable cleaning solutions but do not use fine steel wool or sharply pointed edges, such as razor blades or scrapers.
- Cleaning solutions containing abrasive particles are not recommended.
- To remove difficult stains from, for example, paint or tar, or adhesive residues suitable solvents should be used, such as spirit, acetone or gasoline, and then the soiled surfaces should be washed with water.
- It is important to prevent contact any solvent with package edge seals, gaskets or other organic materials (silicone joints), as this can damage them.
- It is normal for glass staining to occur during plastering. Lime contained in materials used for plastering will damage the glass surface unless it is immediately removed with a sponge and plenty of water.
- Due to the many possibilities of glass soiling, it is not possible to provide recommendations for each case. In areas that are particularly heavily soiled, we suggest performing tests on parts of the surface that will not be visible.
- The information contained in this manual instructions are based on years of experience, but are not exhaustive. Please follow the instructions given for each cleaning agent.

1.5. Cleaning of self-cleaning glass

- Do not use sharp tools, which may scratch the coating or glass (razor blade, spatula, abrasives).
- The first cleaning of the glass should take place no earlier than one week after the installation of the window. The exterior pane should be washed with plenty of water.

- Self-cleaning function: within a week after installation and first washing, under the influence of UV rays, the self-cleaning property of self-cleaning glass gradually activates.

1.6. Ongoing maintenance

- A feature of self-cleaning glass is that it soils less than ordinary glass. The frequency washing depends on the degree of exposure of the glazing to sun and rain, and the level of atmospheric pollution
- Cleaning tools: a rubber window squeegee in good condition, clean and silicone-free; cloth clean and soft, sponge clean and non-abrasive.
- Cleaning agents: clean water and ordinary inert glass cleaners. As with any glass, the water should be of low calcium content. If necessary, use softened or demineralized water.
- Do not use: cleaners or glass treatment products containing silicones or abrasive particles; maintenance products for materials other than glass (aluminum, wood,...); chemicals: soda, javel water, lye; abrasive tools: sponges and rags abrasive, steel wool, razor blades, scissors.

2. Surface damage

2.1. Damage to the surface of the glass can be caused by various reasons. It is necessary take protective measures appropriate to local conditions.

2.2. Welding and grinding.

- Welding and grinding operations performed near windows require the use of adequate protection of the glass surface to avoid pitting from splashes from welding or sparks from grinding.

2.3. Etching and leaching.

- Etching of the glass surface can occur when glass comes into contact with the chemicals, typically used in building materials and cleaning products.
- Chemicals, such as solutions of alkalis and acids, when acted upon over a long period of time, lead to permanent etching of the surface. This applies to fresh concrete, ordinary and two-layer plaster, etc., coming into contact with the glass surface.

2.4. Water damage.

- It is also possible to damage the surface due to prolonged exposure to water, especially if the glass was exposed to dirt for a long time before the building was cleaned.
- During construction, glass should be cleaned regularly when necessary

Additional Information

Additional information can be found in the Quality Criteria for Insulated Glass Panes