

GLAZING GUIDELINES

The SiLATEC glazing guidelines are purposefully short so as to cover only the most important matters.

The generally recognized rules of engineering and glazing and legal prescriptions and safety rules are also to be observed and complied with.

Compliance with our glazing directives does not in any way relieve the operator of compliance with official prescriptions, laws or directives and the attainment of the necessary permissions and approval.

The installation may only be performed by trained specialists.

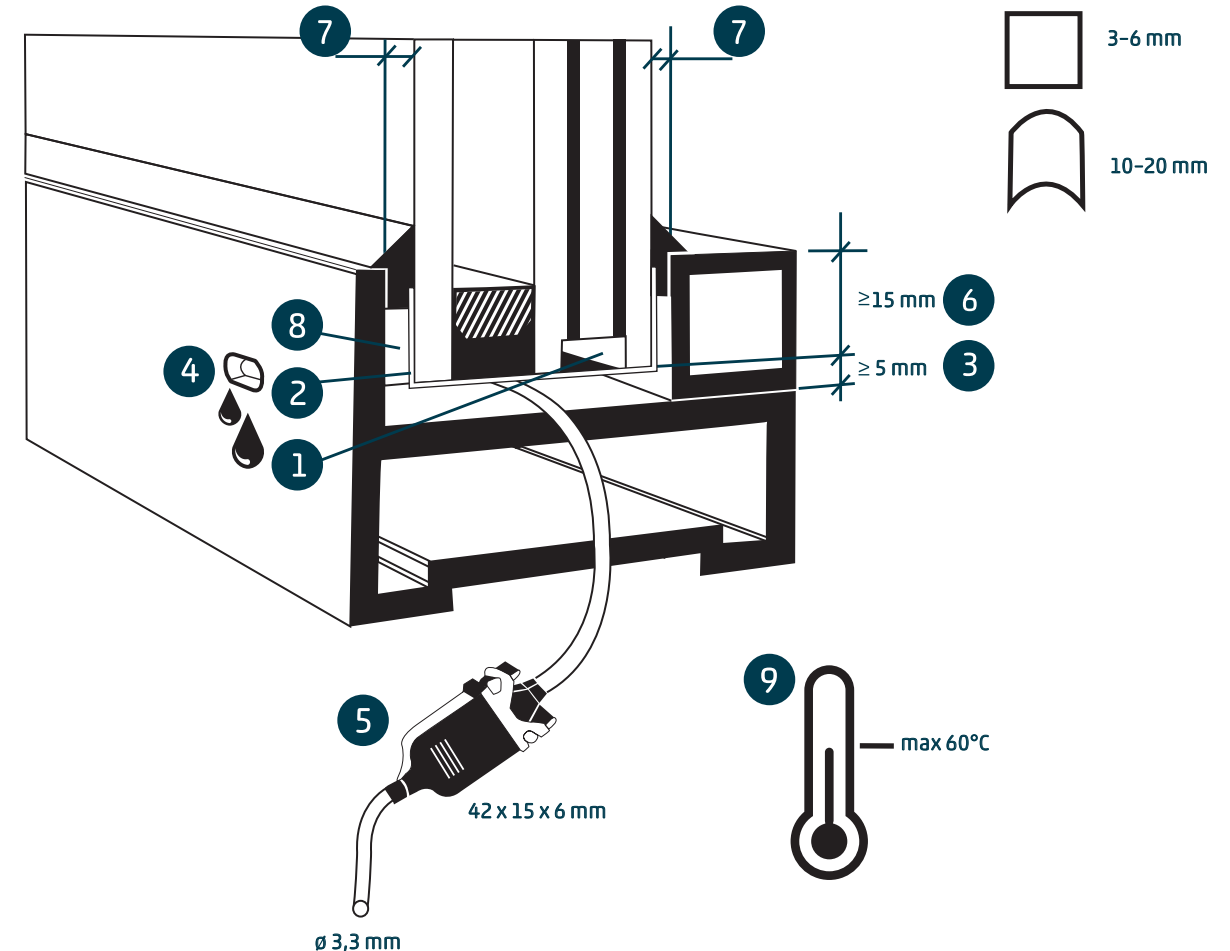
Our warranty requires compliance with our glazing guidelines and all generally-valid technical rules. No alterations may be made to the panes and the panes may not be damaged in any location.

If in doubt, please contact us.

The contents of these glazing guidelines were compiled in accordance with the best of our knowledge. No legal claims can be derived from them. This edition supersedes all previous editions.
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- 1 EXPANSION JOINT:** SILATEC security glass has a circumferential "expansion joint", so that the various materials can expand without hindrance upon heating. This "expansion joint" must not be permitted to become blocked.
- 2 EDGE COATING:** The full extent of the surrounding edge coating (c. 8-12 mm) must be covered.
- 3 GLAZING REBATE ROOM:** The glazing rebate room must be kept permanently clean and free of oil / grease residue as well as any adhesives / sealants. It must be open around its full extent and amount to 5 mm in each location.
- 4 VENTILATED GLAZING REBATES:** The frame system must be able to remove the condensate developing in the glazing rebate room immediately. The ventilated glazing rebate faces the side with the colder and drier climate and prevents the penetration of rain water.
- 5 ALARM CABLE INSTALLATION:** Provide sufficient space for the installation and strain-relief of the alarm cable. A minimum of 7 mm in the glazing rebate room must be kept open for the alarm socket. The cable and socket must not be subject to damage, jamming or kinking.
- 6 DEPTH OF GLASS IN REBATE:** The depth of the glass in the rebate must be dimensioned so that the glazing remains securely in the frame under all forces (e.g. wind force). We recommend a minimum of 15 mm. Depths of up to 30 mm in the rebate has proven to be successful given special safety requirements. The pane is to be stored in linear fashion, supported on all sides.
- 7 JOINT:** With flat panes, c. 3-6 mm on both sides. With cylindrically curved panes, c. 10-20 mm on both sides to compensate for tolerances. Ensure material compatibility with the glazing and the frame.
- 8 DISTANCE TAPE** The distance tape prevents contact between the glass and the frame.
- 9 MAXIMUM TEMPERATURE:** < 60°C laminated glass
< 50°C laminated glass with fire protection function
- CYLINDRICALLY CURVED PANES:** No forces may be allowed to impinge on cylindrically curved panes. It must be subject to zero stress on all sides, without pressure points in the glazing rebate room. This explains why dry and pressure glazing is not permissible. Wet sealing (silicone) compensates tolerances and avoids pressure points.
- PRESSURE GLAZING:** Pressure glazing must guarantee a linear, elastic storage along the glass edge under the occurring loads. The contact pressure should be equal and may not exceed 15N/cm. Point loading is not permissible.
- WARPAGE RESTRICTION:** The warpage restriction of the framework profile may amount to a maximum of l/200 and may not exceed 15 mm.



1 VISUAL CHECK:

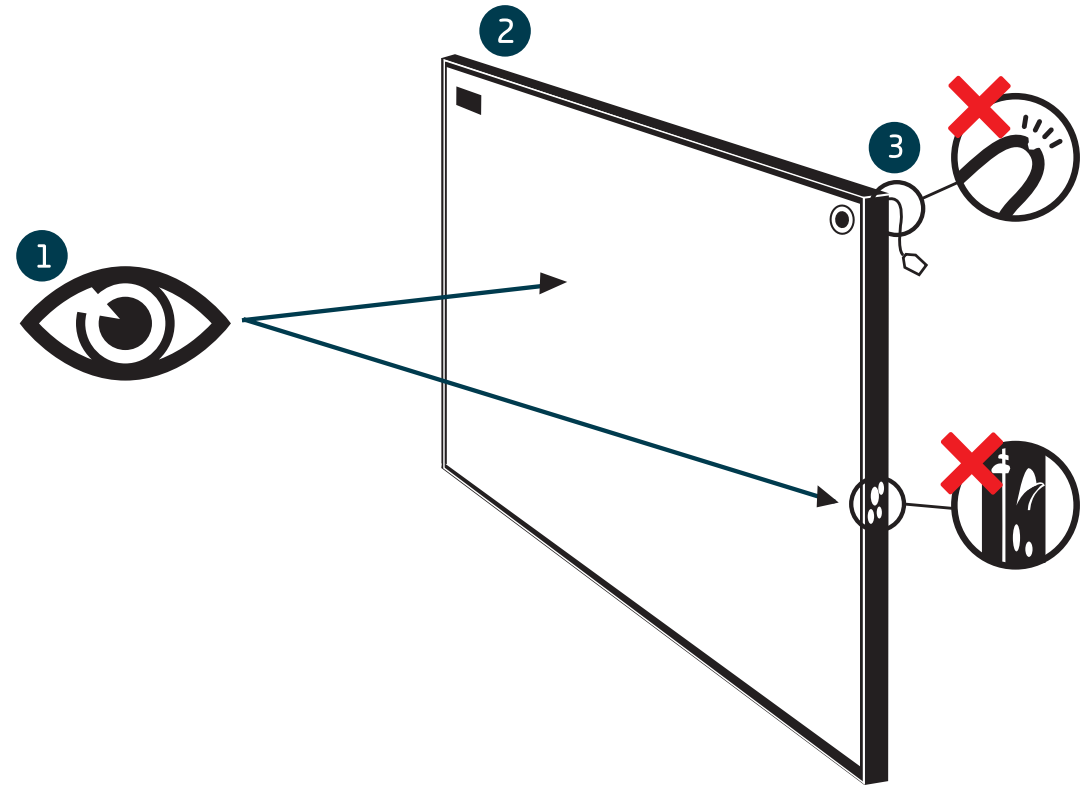
The glass pane is to be checked for any damage and malfunctions. SILATEC panes have a circumferential cladding tape which may not suffer damage. Faulty panes may not be installed.

2 DIRECTION OF INSTALLATION:

All SILATEC panes have a direction of installation marked with a label. The direction of installation **MUST** be adhered to. Incorrect installation of the panes can result in the loss / reduction of the function and protective effect.

3 CHECK ALARM:

Every alarm glass is to be checked for its function (electrical resistance test) and for any damage before and after installation. Faulty alarm panes may not be installed.



1 SETTING BLOCK

Deflects any forces into the frame and metal fitting. It must be non-ageing, long-term pressure resistant and material compatible (e.g. impregnated hard wood or a suitable plastic with 60°-80° Shore A) and must not damage the glass edge. It must lie flat in the rebate bottom. The glass pane must lie flat along its entire thickness. With a flat rebate bottom, a circumferential ventilated glazing rebate must be guaranteed (bridge setting block).

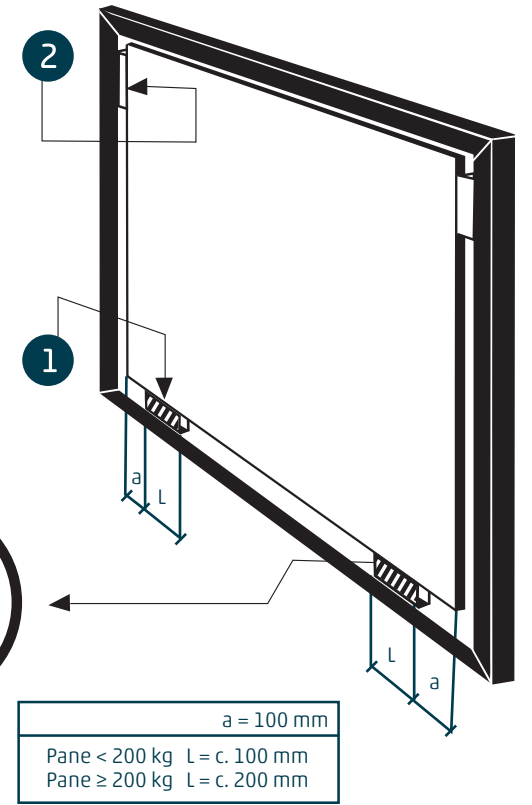
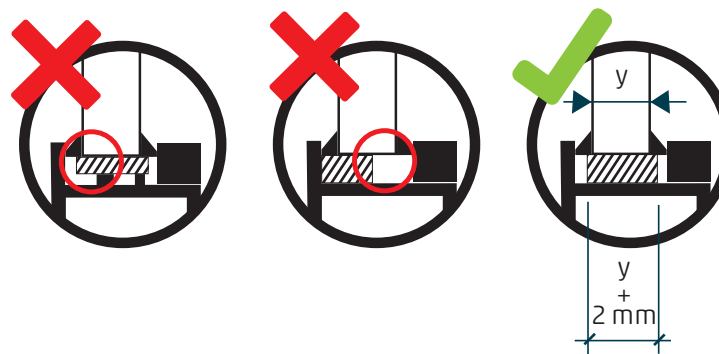
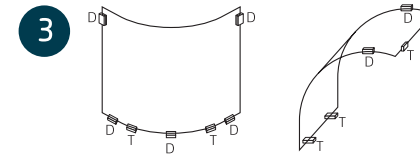
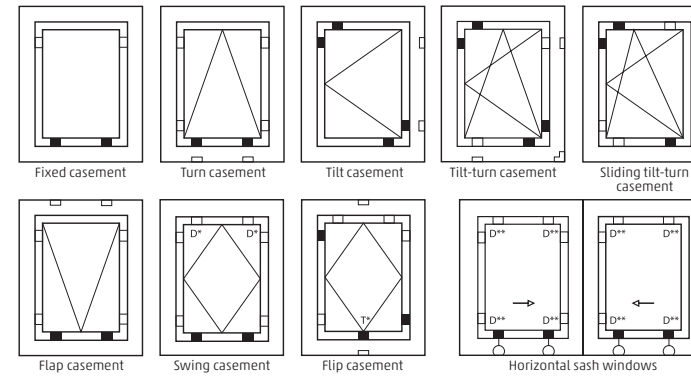
2 DISTANCE BLOCK

Guarantees the distance between the glass edge and the rebate bottom and ensures zero-stress installation. It has the same properties as the setting block.

3 CYLINDRICALLY CURVED PANES:

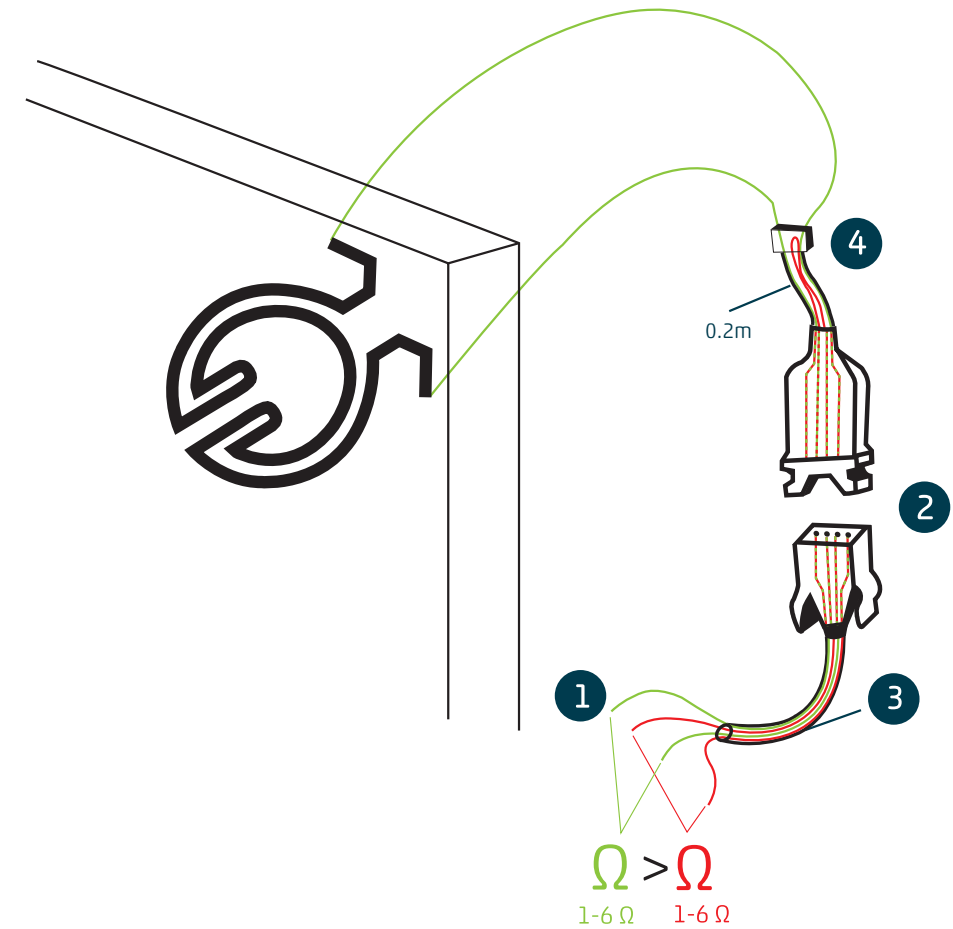
No forces may be allowed to impinge on cylindrically curved panes. They must be subject to zero stress on all sides, without pressure points in the glazing rebate room. The entire pane must be raised during installation in order to adjust otherwise the glass could break.

- T SETTING BLOCK
- T* A pane over 1.000 mm in width requires two setting blocks of min. 60 mm in length to be laid over the swivel bearings.
- D DISTANCE BLOCK
- D* Opening the window wings converts them into setting blocks
- D** Distance block shock-absorbing plastic



Comply with all country-specific guidelines, rules etc. for notification of break-ins. The guidelines for the installation of electrical systems and the VdS directives for burglar alarm systems apply.

- 1 FUNCTIONAL TEST: Every alarm glass is to be checked for its function (electrical resistance test) before fitting.
The **alarm line** has the greatest electrical resistance.
The **sabotage line** has the lowest electrical resistance.
Faulty alarm panes may not be installed.
- 2 PLUG CONNECTION: The plug connection and the extension cable are approval. Other connections (e.g. solders) are impermissible. The plug connection is preferably to be installed in the low-humidity upright glazing rebate room with the opening downwards. The cable and plug connection must not become damaged, jammed or kinked and must be installed in a non-tension fashion.
- 3 EXTENSION CABLE: Available lengths: 3 m, 6 m, 10 m
- 4 MAX. CURRENT LOAD: < 0.1 A through current strength



1 TRANSPORT ROUTES:

Pressure equalisation could be required on transport routes with extreme height differences and resulting differences in air pressure. If a height of 700m above sea level is exceeded, consultation is required with SILATEC.

2 STORAGE:

When storing multiple panes upon each other, the respective glass surfaces must not be in direct contact with each other. Use suitable spacers. The glass panes must not be stored outside and must be protected against rain, sunlight and soiling.

3 PROTECTIVE MEASURES:

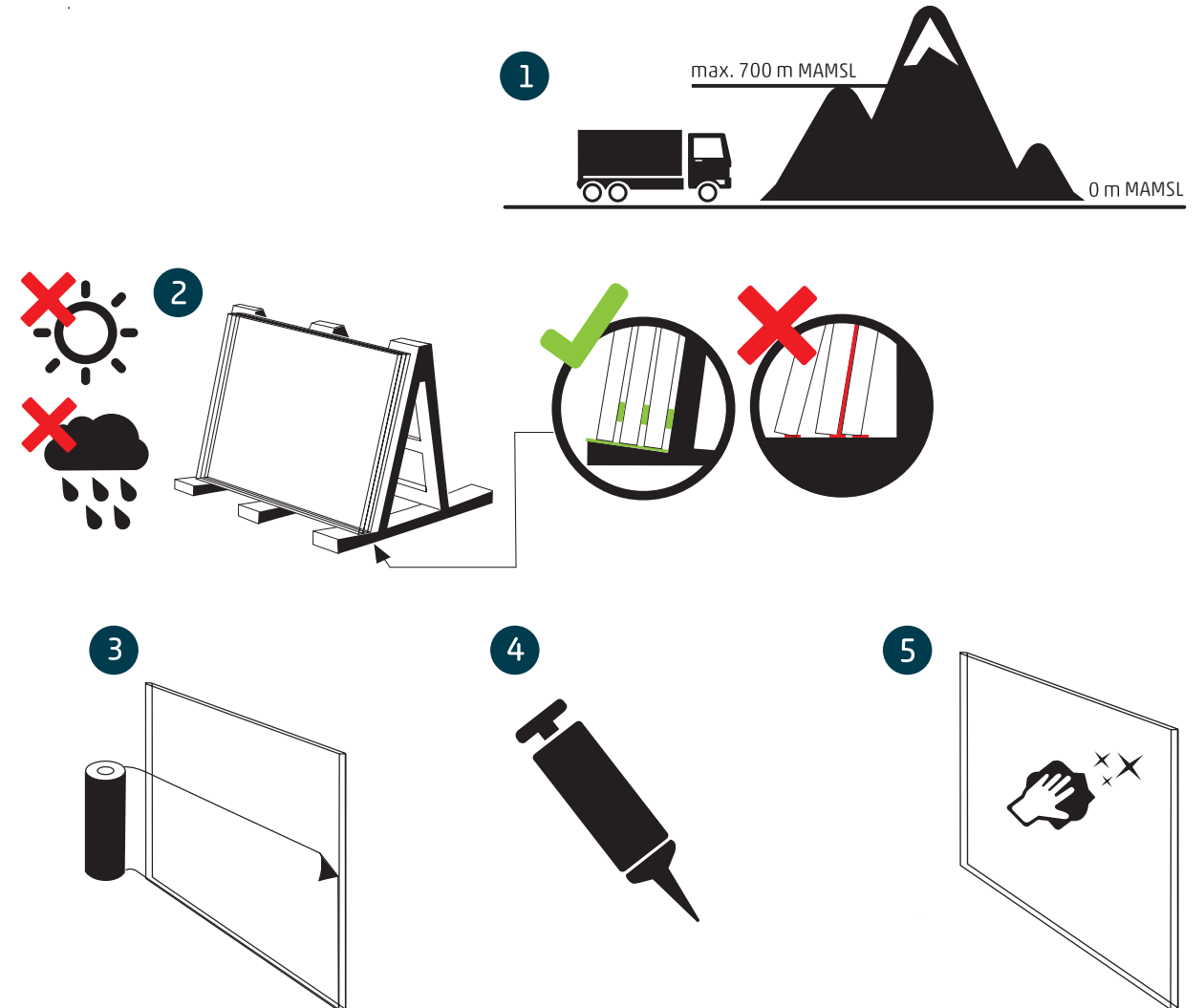
We recommend protection of the panes after installation. The protective measures must not be permitted to damage the surface of the glass or contribute to the heating of the glass panes and must be removable without leaving a residue.

4 SEALANT:

We recommend neutrally linking silicone. Ensure material compatibility with the glazing and the frame.

5 GLASS CLEANING:

Use clean water or glass cleaner and a clean cloth. Sharp and hard objects such as blades or abrasive cleaners are not suitable for cleaning glass.



TAKE CARE (Tc)

The protection side (usually the room side) is made of plastic with a scratch-proof plastic surface coating and is to be handled with especial care.

The attack side is made of glass

Distortion can occur with angled viewing. Spectral colours can be visible at night and when using artificial light. This is not a ground for complaints.

Storage: Store in a dry, clean room. Do not store outside, in the rain or in direct sunlight.

Installation: Suction must not be applied to the glass pane on the protective film, as this does not have sufficient lifting capacity.

Joint: Only the following sealant brands may be used for the joining of the plastic side: Momentive, Multisil.

A dry glazing with rubber seal or other seals are not permissible (material compatibility).

Cleaning: We recommend that you use a soft cotton cloth, lukewarm water and mild soap to remove coarse soiling. Do not use any alkali cleaning agents. Then rinse the pane with plenty of clean water and dry with a soft cotton cloth. Do not use any sharp-edged objects or abrasive cleaners, as these could irreparably scratch or damage the surface.

Protection: We recommend to protect the polycarbonate surface with a special foil during the entire construction time

ANTI REFLECTIVE

SILATEC Anti Reflective is a non-reflective glass which is to be handled with especial care, as the glass surface is coated and sensitive.

Planning: As these panes are "hardly visible", design precautions must be taken to ensure that people do not run into the panes. Do not affix any labels or decorative film, as the coating could suffer damage when these are removed.

Storage

Installation: SILATEC Anti Reflective must be stored in a dry, clean room. Do not store outside or in a position exposed to rain or sun. Ensure that the coated glass surface is not damaged or soiled. Scratches are especially visible and cannot be polished out. Soiling on the site (e.g. from limescale, concrete or cement spray) must be prevented at all costs, as this could result in corrosion and irremovable stains. Should splashes reach the glass surface, clean these away immediately with plenty of clean water. Wear clean, suitable gloves and use a clean vacuum cleaner of a design which will not damage the surface.

Cleaning: SILATEC Anti Reflective should be cleaned regularly with plenty of clean water and a clean sponge or a soft cotton cloth. The cleaning water can be mixed with a neutral, non alkali, non-scouring wetting agent (e.g. Ajax, Sidolin, Pril).

Never use:

- Microfibre cloths (overly-aggressive cleaning method)
- Blades, steel wool, scrubbing sponges, paper cloths, hard cloths
- Alkali liquors (e.g. curd soap)
- Acids (e.g. hydrochloric acids, vinegar, lemon juice)
- Decalcifier (e.g. lemon juice)
- Degreasing agent (e.g. acetone, benzene)
- Substances containing ammonia or chlorine (e.g. Domestos)
- Solvents (e.g. alcohol, acetone)

CONVERSION TABLE					
Length					
... mm	x	0.03937	=	... inches	
				... inches	x 25.4 = ... mm
... cm	x	0.3937	=	... inches	
				... feet	x 30.48 = ... cm
... m	x	1.0936	=	... yards	
				... yards	x 0.9144 = ... m
Fläche					
... m ²	x	1.196	=	... yards ²	
				... yards ²	x 0.8361 = ... m ²
... m ²	x	11.111	=	... feet ²	
				... feet ²	x 0.09 = ... m ²
Weight					
... kg	x	2.2046	=	... pounds	
				... pounds	x 0.4536 = ... kg
... kg/m ²	x	0.1984	=	... pounds/feet ²	
				... pounds/feet ²	x 5.0403 = ... kg/m ²
... kg/m ²	x	1.8433	=	... pounds/yards ²	
				... pounds/yards ²	x 0.5425 = ... kg/m ²
Temprature					
... °C	x	1.8 + 32	=	... °Fahrenheit	
				... (°Fahrenheit - 32)	x 0.5555 = ... °C

