



Warranty Certificate

Isolide® Insulating glass - Trisolide® Insulating glass

january 2017

General warranty clause Isolide® / Trisolide®

- 1** Subject to the Provisions below, Scheuten Glas Netherlands BV. guarantees for a period of 5 years, calculated from the date of production of the Isolide® or Trisolide® (triple) insulating glass unit (or in the case that this is no more than 30 days later, as from the date of invoice) that no reduction of transparency, nor an inefaceable grey hue will occur through condensation, deposits on or damage of the glass on the cavity side due to a defect of the Isolide® / Trisolide® insulating glass unit.
- 2** The warranty mentioned under 1 is given on the proviso that the fitting of the Isolide® / Trisolide® insulating glass in the Netherlands satisfies:
 - a** The requirements set out in the Dutch standard NEN 3576 and the guidelines from NPR 3577 or substitute versions thereof;
 - b** Other fitting instructions than those specified under 2a provided these are accepted by Scheuten Glas Netherlands BV in writing and are equivalent to or better than the fitting instructions specified under a in terms of content and purport. The buyer is deemed to be au fait with all fitting and maintenance instructions as well as with the content of these, and to have informed his buyer(s), if any, of that content.
- 3** The warranty does not cover any damage to the unit arising from:
 - a** Failure to fit the panes tension-free, as well as structural causes, such as the building subsiding and thereby introducing tension into the glass;
 - b** Distortion and/or change to the surrounding structure for whatever causative reason (to include taking out and replacing the glass unit);
 - c** Mechanical causes such as external force, including crushing, grinding or touching up the unit included;
 - d** Applying changes in the structure of the insulating glass unit (including covering with foil on one of either sides of the unit, or the application of paint on the glass on one of either sides of the unit);
 - e** Insufficient maintenance to the surrounding structure, and/or to the rebate seal; maintenance must comply with the requirements in NPR 3577, and any substitute versions thereof, as well as to the requirements laid down in OAD 2011 (Service Announcements Double Glazing Systems) and any substitute versions thereof;
 - f** Exposure to chemical influences and/or aggressive cleaning agents that could affect the rim sealing of the unit;
 - g** Thermal causes, i.e. breakage or damage due to tension that is the product of local, partial heating of the unit giving rise to significant temperature differentials;
 - h** Use of materials for construction, preservation, finishing or sealing of the windows, doors or window frames (specifically sealants), which reduce the suitability of the insulating glass in the relevant application;
 - i** Direct contact between materials and the insulating glass sealant except for the necessary contacts of glazing blocks and setting blocks, provided that the choice of material for the blocks is in accordance with NPR 3577.
- 4** No warranty is given for:
 - units with one or more sheets of patterned or wire glass;
 - units with cross bars or Georgian bars;
 - units with one or more solid enameled sheets;
 - units intended for non-vertical fitting;
 - units with stained glass (either in lead or in copper) in the cavity;
 - units intended for industrial use and for swimming pools;
 - imperfections/anomalies in the Isolide® / Trisolide® glass unit, or in the constituent parts thereof, which fall inside of the tolerance limits, specified in the Dutch standards;
 - distortion, both in transparency and in reflection, as a result of properties inherent to glass types and/or combinations, including distortions caused by tolerances, differences in barometric pressure, temperature differences and geographic elevation differences;
 - the apparentness of colour bands and/or colour patterns due to interference;
 - Trisolide® triple glazing in which one or more sides is shorter than 650 mm.
- 5** In contrast to the provisions specified under 1, no warranty is given for units intended for rolling stock;
- 6** In contrast to the provisions specified under 1, the warranty for units with fire resistant glass is limited to five years.
- 7** In contrast to the provisions specified under 1, the warranty for units with one or more polycarbonate sheets / components is limited to two years.
- 8** The guarantee implies that if within the warranty period a reduction of transparency occurs without any of the above restrictive or exclusive conditions being applicable, a provision shall be made as soon as possible to replace the defective insulating glass unit with a unit as identical as possible and to compensate installation costs to a maximum of € 15,- per m² redelivered insulating glass; the replacement unit will be covered by the warranty for the remainder of the warranty period that applied to the unit originally supplied. Consequential loss, i.e. any loss not pertaining directly to the glass supplied, is not eligible for compensation.
- 9** No warranty will be provided if and for such time as invoices issued by Scheuten Glas Nederland BV and/or other Scheuten entities have not been settled in full.
- 10** In all cases, warranty claims are to be submitted through your glass supplier, the party from whom you purchased the glass and whose name and address should be mentioned on the warranty certificate. Notification must be made within 30 days after discovery of the defects during which you are obliged to limit any possible damages as much as possible.

Scheuten Glas Nederland BV would like to draw your attention to the obligation to issue this warranty to your customers when reselling the product and to inform your customers that they are to issue the warranty to the end user. Only then will warranty claims be valid in accordance with the terms and conditions above.

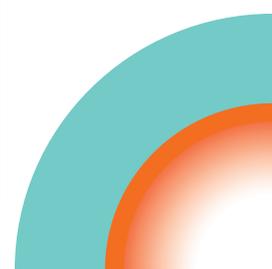
Party fitting the glass: _____

Project name: _____

Street: _____

Postcode / City: _____

Stamp supplier



Maintenance Guidelines Insulating glass

You have received this guide for proper use and maintenance of your windows, because you had insulating glass installed in your property.

Insulating glass consists of two or three panes of glass with a one or two spaces (cavities) in between. The cavity between the panes is filled with air or inert gas, usually argon gas.

The properties of the insulating glass which must be maintained are:

- Light transmission
- Transparency
- Thermal insulation
- Sound insulation
- Safety
- Rain protection
- Air tightness
- Aesthetics

With proper maintenance and proper use you also retain the right to warranty. This manual therefore also pursues the conditions that apply to the right of warranty.

Retention of properties

To get the most out of your glass the properties of the glass pane must be held in its original state for as long as possible. Especially for the light transmission, the transparency and the thermal insulation, it is important that the rim sealing of the cavity is and remains in a good condition. A leaking rim sealing could cause moisture to enter into the cavity, affecting the glass and possibly causing condensation in the cavity. As a result, less light is transmitted and transparency is reduced.

In addition, inert gas (which also allows for the insulation) could leak from the cavity. Coated glass may be showing stains.

The rim sealing may be directly or indirectly affected by moisture or ultraviolet light due to a poor condition of paint and sealant and as a result of wood decay. In addition, extreme thermal or chemical influences as well as malfunctioning rotary parts may cause decrease of the rim sealing quality.

Maintenance paint and sealant

The paint and the sealant must be kept in good condition. The painting prevents intrusion of moisture and rot of the wooden window frame. The state of the interior painting is at least

as important as that of the exterior painting. In winter a house produces a lot of water vapour, and this vapour wants to go outside. Poorly painted wooden frames facilitate this perfectly. Along the way the vapour condenses in the open connections of wood studs and sills which causes the wood to rot and may cause the build-up of moisture on the rim sealing of the glazing. The moisture content in the wood frame should not exceed 16%. It is necessary to check the painting and the sealant at least once a year (especially the sills) and touch it up or replace it. It is often possible to enter into a subscription contract with your painter. Maintenance should be undertaken with neutral, non-aggressive products.

The criterion for determining whether the sealing joints require repair is the functioning of the sealant or the dry glazing profile. If detachment occurs or openings are formed in the sealing joints, moisture can get into the rebate. During inspection it must be determined whether a good adhesion of the sealant or adequate pressure of the dry glazing profile is still ensured. If this is not the case, it should be restored.

Restoration of the sealing joint can be done by means of the application of an additional triangular joint on top of the existing seal. For this purpose, the defective sealant is cut out with a depth of at least 3 mm.

Next, the bonding surfaces are dried, cleaned and degreased. The new sealant must be applied in such a way that the bonding surface on the glass is at least 5 mm wide.

If repair work is only required to the bottom sill, the repair joint should also be applied to a height of 150 mm in the posts. If the adhesion of the sealant is totally inadequate than the existing glazing bead is to be removed and after cleaning to be remounted or to be replaced and again be provided with a proper sealant.

Upon repair of glazing, which was originally placed with a dry glazing profile, this should

be executed with a similar system. If the seal no longer functions, the profile must be replaced by profile identical in shape. If the corners do not connect properly, the dry glazing profiles must also be replaced, otherwise ingress of moisture into the rebate remains a possibility.

Maintenance of rotating parts

Malfunctioning rotating parts are often the cause of leakage in the rim seal of the insulating glass. Windows and doors should not jam, should be running smoothly and should be easy to close. By pulling (or pushing against) clamping window casements and doors, the connections between the posts and sills will break and cause moisture penetration. In order to keep the rotating parts in a proper condition, it is necessary to check hinges, levers, door handles and locks regularly and clean, oil and adjust them whenever necessary.

Retain ventilation

In order to drain off excess moisture in the vicinity of the glazing, ventilation slots are provided on the exterior side of the window or door frame, near the glazing beads.

It is necessary to keep these openings clean from dirt, debris and vermin.

Cleaning

Clean windows and frames at least twice a year. Not only to ensure a clean impression, but in particular for the maintenance of the construction. In case of insufficient cleaning of joints and edges of aluminium windows, the sealant and painting of wooden windows and the surface of plastic windows will be affected by pollution.

It is recommended that in addition to the glass, the door frame, the rotating parts, the glazing beads, vents and hardware are cleaned as well. This will extend the life span of the window frame and the paint work considerably and allow a continuous proper functioning of the rotating parts.

When cleaning the glass, bear in mind that sand has an abrasive effect and may cause scratches on the glass. Before cleaning the glass with a sponge, it is therefore recommended that any sand is rinsed or sprayed off with a lot of water. Furthermore, it is important not to clean the glass with abrasive or aggressive agents. The abrasive agents can scratch glass, aluminium and plastic. The aggressive agents can affect the sealant, the coating of wooden windows or the top layer of aluminium or plastic windows. Also, the life span of the rim seal of the insulating glass can be affected.

Suitable for cleaning all types of windows and doors are neutral detergents for hand wash (and not dishwasher products). Always rinse with clean water.