# 10-year guarantee

The guarantee declaration applies to windows supplied and installed in Denmark, Ireland & UK (excluding the Faroe Islands & Greenland) from 1st September 2013.

On the premise that the elements in your order are installed in accordance with the installation instructions and that they are maintained according to instructions, we provide a 10-year guarantee as follows:

On our DVV marked products we offer a 10year guarantee, composed of 5 years DVV guarantee in accordance with window industry regulations and in addition our extended 5-year guarantee

The window industry DVV guarantee is available at: www.vinduesindustrien.dk

Please note that the above guarantee does not encompass:

- Damage and functional problems arising from lack of, or inadequate lubrication and maintenance and the removal of the units' exterior powder coated surface
- Products that are affected by external influences, such as: other building components, including various foam types, also extreme heat, moisture, chemical and climatic influences etc.
- Ring seals inside fittings (hinges, locks, closure fittings) and sealing strips that have to be replaced due to general wear and tear and use.

- Visual faults in panes will be assessed in accordance with the window industry Appendix 20: Visual quality deviations in thermal panes as found on www.vinduesindustrien.dk The guarantee deadline for visual faults in panes is maximum 1 year after delivery
- Sealing for doors, supplied with 1-point locks
- Water ingress at the door edge of inward opening doors
- Functional stability in units that are larger than the units in our price list
- Units supplied with colourless/glazed surface coatings. For these, a 5-year DVV guarantee applies
- For panel and leaf doors a 5-year DVV guarantee applies as standard
- For electrical components, in general a 1-year guarantee applies.

Due to the high level of insulation in lowenergy products, in certain situations condensation may form on the exterior side of thermal panes.

If bottom glazing beads or window bars are of timber, also doors with timber bottom sections, the durability of surface coatings on these cannot be expected to correspond to other surfaces, and so these will require more frequent maintenance. Please refer to the section in the user manual concerning "Anticipated outcome of industrially surface treated timber units" on page 25.

# Brief information about thermal glass panes

# Replacement

If it should be necessary to replace panes, this should be carried out by professional tradespeople. For panes that are held in place with glazing beads, these must be removed with care before the pane can be removed. If panes are fitted with aluminium covers, these must be removed using specialist tools placed between the timber and aluminium, before the pane can be removed.

#### Panes

Panes are manufactured according to the window industry's standards and guarantees including Standard EN 1279 for thermal panes.

The section below is an excerpt from the window industry's guidelines and guarantees.

#### Maintenance

Panes should be cleaned at regular intervals, depending on the nature of external influences.

Installation materials must be maintained or replaced when there are any signs of deterioration. This requires a level of professional competence.

# Pane guarantee

A guarantee is given that the pane will remain free of condensation inside the pane for 10 years.

The guarantee covers replacement panes and replacement according to the window industry's compensation table.

# Visual faults

Panes that deviate from the window industry's guidelines for thermal pane visual quality Appendix 20, will be replaced by supply of a new pane up to 1 year after delivery.

Glass is an industrial product composed of among other elements calcium, quartz and soda.

Despite the fact that the raw material undergoes a thorough purification process, in certain cases minor imperfections and fissures can occur inside the glass in thermal panes.

Guarantee claims concerning imperfections in the glass will be assessed based on the method outlined below, where an evaluation will be made of whether these are insignificant and part of the natural structure of the material and as such do not fall within the guarantee – or whether they are sufficiently significant such that the user is entitled to a replacement pane.

#### Assessment criteria for visual faults

Panes shall be inspected at a distance of a minimum of 2 m from the inside, this must take place in diffused lighting (e.g. overcast sky) without direct sunlight or artificial lighting. Imperfections that cannot be observed at a distance of 2 m are not considered to be faults. When controlling reflection the distance shall be a minimum of 5 m.

The circumstances below do not invoke the guarantee:

**Interference effect** - Optical interference is due to superposition of two or more light waves at a single point. The effect is seen as variation in intensity of the colored zones, which changes when pressure is applied to the glass.

**Specific effect due to barometric conditions** – IGU includes a volume of argon, hermetically sealed by the edge seal. If the insulating glass is installed at another altitude, or when the temperature or barometric pressure changes, the panes will deflect inwards or outwards.

**Anisotrop**y – IGU that contain a heat-treated glass component may show visible phenomena known as anisotropy. When heat-treated glass is viewed in polarized light, the areas of stress show up as colored zones, sometimes known as a "leopard spots". The amount of polarized light depends on the weather and the angle of the sun. Anisotropy is not a defect but a visible effect.

**Condensation on exterior and interior pane surfaces** – the effect of condensation on the outer surfaces of the insulating glass pane is a phenomenon conditioned by physical properties of the glass and existing atmospheric conditions (low temperature and high humidity). This is not a defect, but rather confirms the high quality of insulating glass units.

**Mark information on glass surfaces** – Multiple reflections can occur in varying intensity at the surfaces of glass units. Can be seen particularly well if background viewed through the glazing is dark. Second mark can be a wetting of glass surfaces e.g. effect of rollers, fingerprints, labels, vacuum suction holders, sealant residues, silicone compounds etc.

**Toughened glass without Heat Soaked Test** – HST is a test for nickel sulphide (NiS) inclusion within the glass pane. Glass without HST has the potential to spontaneously implode. Fixed, tempered glass containing NiS inclusions which become heated e.g. under the influence of solar radiation, increase in volume slowly, which results in additional increase of internal stress.

**Thermal cracking** – glass is a homogeneous, amorphous, solid, brittle and hard construction. It has negligible internal stress, so it can be cut and processed, but also it can break due to thermal or mechanical external factors.

# Guarantee claims

Any guarantee claim must be submitted to the tradesperson or distributor from whom you have purchased the product(s).

If the guarantee claim is brought about through incorrect installation, the guarantee claim must be submitted to the tradesperson who installed the unit(s). If the fault is due to incorrect use or lack of maintenance, the guarantee will not apply.

Further information concerning the DVV guarantee is available at: www.vinduesindustrien.dk