

ConverLight® Dynamic Glass; delivery, storage, handling and assembly.

This is a document to inform you of how and what requirements are made for delivery, storage, handling and mounting of ConverLight® Dynamic Glass.

OVERVIEW CONVERLIGHT DYNAMIC GLASS

ConverLight Dynamic Glass is a facade glass with dynamic light- and solar-control properties, which improves indoor comfort and contributes to better energy efficiency in buildings, while always having access to daylight and clear views. Its low climate and energy footprint facilitate fulfillment of climate goals, energy goals and building certifications. In addition, ConverLight Dynamic Glass design freedom make it easy to adapt shape and function to the conditions and requirements for the building or project.

DEFINITION CONVERLIGHT DYNAMIC GLASS

ConverLight Dynamic Glass consists of either a glass laminate or insulating glass where a cable comes out from the top or sides, never downwards due to risk of damaging cable, see figure 1 below.

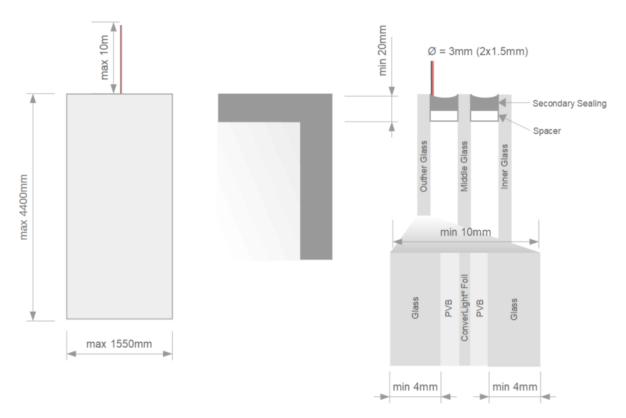


Figure 1. Left; Schematic figure of ConverLight Glass and cable outlet. Middle; Schematic figure of indentation/black-off Right; Schematic figure of ConverLight Glass and its configuration.



DELIVERY

ConverLight Dynamic Glass are received and controlled according to industry standard.

ConverLight Dynamic Glass delivered either on steel or wooden stands, where the glass is fully or partially protected with plastic and cable are protected completely or partly with adhesive tape, see example in Figure 3 below.



Figure 3. Example with ConverLight Dynamic Glass on metal stand that is protected with plastic and Tretex.

Since the glass edges are sensitive to point load over time, the glass come on either wooden racks or steel racks with OSB / Plywood at the bottom, see figure 4 below. Sometimes materials such as Tretex are used at the bottom edge to protect against, for example, nail heads, see figure 4 below. For the same reason, relief protection against straps is used, see figure 4 below.



Figure 4. Example ConverLight Dynamic Glass with point load protection; Left: Place OSB board underneath; Middle: Protection with Tretex material; Right: Protection against straps.



ConverLight Dynamic Glass can be delivered with different types of cable outlets, see example in Figure 5 below.



Figure 5. Example cable outlet ConverLight Dynamic; Left: Insulating glass short free-hanging cable outlet, where ID number is on yellow cable marking; Middle: Insulating glass longer coiled cable outlet, where ID number is on yellow cable marking; Right: Glass laminate with longer coiled cable outlet, where ID number is on yellow cable marking in a separate bag.

Whatever the supplied type of cable outlet, handle cable carefully because cable may be damaged or break.

STORAGE

Storage of ConverLight Dynamic Glass is done according to industry standard. In summary, consider the following:

- Moisture: Risk of annealing, some fire glasses are affected.
- **Sun Light:** Risk of heat cracking (when several glasses are on pallet). The side seals of the insulating glass are affected by UV light, as well as some fire glasses.
- Edge damage: Risk of cracking during and after assembly.
- Cement dust: Risk for annealing.
- Welding fleas: Pitfalls in the glass (also the emery splash)
- Cold: Some fire glasses are sensitive to low temperatures. Insulation panes can implode.
- Relief: The glass edges are sensitive to point load over time, therefore the glasses should always be placed on wooden racks or steel racks with OSB / Plywood board and relief protection against straps, see figure 3-4 for examples. If you use materials such as Tretex, it should cover at least 50% of the lower edge of the glass. Never store on rubber material, e.g. directly on steel racks.



HANDLING

Handling ConverLight Dynamic Glass is made according to industry standard. In summary, consider the following:

- Never slide glass laterally or roll over the corners when moving. The edges are the weakest point of the glass. Use suction cup when lifting and moving.
- The glass edges must never come into contact with metal tools or other hard objects. If the
 glass has a flap on the edge, it must usually be discarded due to the risk of cracking after
 assembly.
- Glass should always be placed on wooden racks or steel racks with OSB / Plywood to reduce point load.
- Handling of cables from glass should be done carefully, cable may be damaged or break.
 Glass may need to be discarded of in case of cable breakage.
- Never connect cable to any other voltage / power device other than "SMART test device" or "ConverLight Control Unit (CCU).

MOUNTING

When mounting ConverLight Dynamic Glass consider the following:

- When mounting, place a glass of a cable facing up or side, never downwards due to risk of damage to cable.
- <u>Cables that come from the glass are sensitive</u> and should be handled carefully to minimize risk of damage or clamping before, during or after mounting.
- For mounting, use a <u>tightening torque of max. 4.0 Nm per attachment point</u>, e.g. max 4.0 Nm per screw in profile system, ConverLight Dynamic Glass may be damaged during assembly or over time.
- Always note the location of glass on facade, i.e. the glass serial number (LXXXX on yellow marker) on the facade drawing.
- Yellow cable marker is moved to cable end if cable is extended at or after mounting.
- Only use cleaning methods, chemicals or products listed in "ConverLight Glass; Cleaning and Compatibility".

Any questions, contact ChromoGenics