# Specification Text Single Glass

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# **55. INTERIOR GLASS**

# 55.00. Interior glass - general

#### 55.00.10. Description

All supplies and works necessary to realize a finished, non-load bearing interior glass wall.

## 55.00.20. Reference documents

The provisions of the following documents apply:

• WTCB's TV 275: "Special constructions made of glass. Part 3: non-structural applications (interior glass walls)" (January 2021)

#### 55.00.30. Preliminary information and measures

The construction of the glass walls won't begin until the architect gives approval, and all necessary conditions are met:

- after the completion of structural work.
- The contractor shall verify that the subgrade is sufficiently level, squared, dry, neat, stable, and coherent and shall make it suitable where necessary. If visible defects may give rise to deficient performance quality, the designer shall be notified.

The performer should inquire about:

- the correct height of the finished ceiling
- the presence of other wall finishes (wall tiles, paneling, etc.)
- The guidelines around fall-through and impact safety.

The contractor should coordinate his intervention with the other finishing and technical contractors. When the glass wall is installed, the technical installations and utility lines should already be in place and finished with a flat, stable side against which the glass wall can be installed.

Glass sheets should be stored on their sides, supported by soft materials, and protected from damage. Deliveries are made on a glass trestle. Associated profiles and accessories are delivered as a separate package.

#### Measurement Method:

All preparatory information and measures are considered a charge of the contract and should be included in the various unit prices.

#### 55.00.40. Preparatory works and (detail) performances.

#### Implementation

- The installation of the glass wall must be carried out by a contractor or subcontractor specialized in it.
- The requirements of the manufacturer of the glass, aluminum profiles and fasteners are taken into account.
- The installation of the whole is done according to the contractor's proposal. At the request of the architect, the contractor will submit the necessary working drawings in 2D or 3D.
- The wall must withstand the various loads that will act on it. Impact and differential pressures are taken into account.

# 55.01. Single-pane glass - materials general

The construction of the glass wall consists of aluminum glass profiles, equipped with sealing rubbers and the glass sheets. The glass profiles are attached to the perimeter of the envisioned wall. The glass sheets form the filling for the wall. Depending on acoustic requirements and breakthrough regulations, the appropriate type of glass can be chosen.

## 55.01.10. Glass panels

#### Implementation

The glass panels are laminated in the following versions: 66.2, 66.2A, 88.2 or 88.2A. The glass panels have a standard width of 900 mm. At the end of the wall, a fitting of up to 1100 mm is placed. The height is custom passed on to the project and is maximum 3500 m high. The ratio between the maximum height and the necessary thickness of the glass are checked by the installer with the TV275. The glass panels are supported in the glass profile and adjusted with the help of expansion blocks. The glass panels are connected with a self-adhesive polycarbonate strip.

Sound insulation: 35 - 38 dB<sup>1</sup>.

#### 55.01.11. Glass profiles

#### Implementation

The glass panels are held in place with aluminum profiles. This profile consists of 4 parts:

- a basic profile;
- a click profile;
- sealing rubbers, and;
- a swelling rubber.

The sealing rubbers are already mounted in the glass profile and connect to the glass. The swell rubber is already pre-adhered centrally along the length on the bottom of the base profile. The framing of an entire glass wall is identical along the perimeter.

The profiles are finished in a textured powder coating (RAL colors) or anodized. The base profile serves as the base that is anchored to the surroundings and in which the glass is positioned. This profile is open along the front so that the glass can be tilted into the profile. The click profile serves to anchor the glass in the base profile and to finish the open side aesthetically.

The sealing rubbers and swell rubber ensure an airtight seal. The sealing rubbers in the base and click profile can be used for glass thicknesses from 12 mm to 17 mm. The environment can vary 20 mm (-10 mm / +10 mm) in height and width without leaving too little overlap between the glass sheets and the glass profile.

#### 55.01.12 Glass door

#### Design profiles

A specific aluminum profile is provided for hanging a door leaf. The door profile is suitable for a glass or a wooden door leaf (max. 40 mm thick). It is pre-cut to the project size and provided with a recess for the latch, possibly the deadbolt and hinges. On site, the door profile pieces can be assembled into a door frame using angle brackets and set screws.

The door profiles are equipped with a sealing rubber that fits against the door leaf. Once the base profile is attached to the ceiling, the door frame can slide over it. The base profiles at the bottom connect to the feet of the door frame. A glass profile (base and click) is inserted into the sides of the

<sup>&</sup>lt;sup>1</sup> measured according to NBN EN ISO 10140-2:2010.

door frame so that the glass can be clamped in place. The glass is inserted and slid into the door frame, the click profiles then provide anchoring for the glass. The profiles are finished in a textured powder coating (RAL colors) or anodized.

#### Door leaf design

The door leaf can be made of glass or wood. Glass door leaves consist of tempered glass and have a thickness of 8-10mm. The door leaf is pre-fitted with recesses depending on the type/number of hinges and lock box.

# Design of lock case and handle

The design of the lock case and handle may be suggested by the supplier or chosen by the end customer. Lock case and handle are finished in the same structural powder coating (RAL colors) or anodized. At the customer's request, a cylinder lock with key can be provided.

## Hinge design

The design of the hinges may be suggested by the supplier or chosen by the end customer. They have the same finish as the lock case and handle, i.e. structure powder coated (RAL colors) or anodized. If the hinges serve a glass door leaf, they are anchored to the aluminum door profile using self-drilling screws or bolts. If the hinges support a wooden door, recesses are provided in the door profile in which these hinges can be anchored. The hinges each have a minimum load-bearing capacity of 50 kg.