

1. BI-FireControl FIRE-RESISTANT SAFETY GLASS

1.1 Description

BI-FireControl fire-resistant glass is authorized for glazing of fire resistance class F 30. It consists of two panels of BI-Tensit single-pane safety glass or BI-Hestral semi-tempered glass, which are connected by a spacer. The intermediate gap is filled with a clear layer of gel. Since it is manufactured using the float glass principle it has exceptional optical properties. BI-FireControl is not only a glass for fire protection purposes. According to its construction it can also fulfill additional functional requirements such as solar, thermal and sound protection.

1.2 Function

BI-FireControl not only protects against fire and smoke but also prevents the spread of radiated heat. During the course of a fire according to DIN 4102 Part 2, the side of this glass which faces the fire would not heat up by more than 140 °C on average. Combustible materials on the side away from the fire would therefore not be ignited and escape routes would remain passable.

The installation details and materials to be used are described in detail in the building authority approval. For **BI-FireControl** the approval document no.

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is available.

1.3 BI-FireControlColor

BI-FireControlColor is manufactured on the same basis as **BI-FireControl** and possess an additional ceramic colour coating. The approval for BI-FireControl was extended

to provide the option of this colour printing process.

Because of the special manufacturing process the ceramic colours are resistant to abrasion and acids (except hydrofluoric acid), they are largely caustic and solvent-resistant, UV resistant and resistant to thermal shocks. Almost all the colours in the RAL system and also individual colour mixtures are feasible.

With **BI-FireControlColor** individual configuration options for fire-resistant glass are available. Apart from full-surface printing BGT offers over 50 standard patterns. Free patterns can also be implemented - including multicolour patterns, logos etc.

1.4 Application

In slim, cost-effective designs, BI-FireControl protects escape routes for 30 minutes against flames, smoke and heat.

The following applicational areas thus arise:

- Partition wall glazing in walls which border escape routes.
- Door glazing for T30 doors
- Façade glazing

2. ADDITIONAL PRODUCT FEATURES

2.1 Safety glass

Apart from the high safety reserves from the fire protection point of view, due to its special manufacturing process **BI-FireControl** also displays the additional properties of safety glass.

BI-FireControl fulfills the requirements of the following tests::

- DIN 18032 - Ball impact protection
- DIN 52337 - Pendulum impact test
- DIN 52338 - Falling ball test
- DIN 52349 - Fracture structure / crumb structure (only for single-pane glass)

2.2 Glass dimensions

The maximum permitted pane size for BI-FireControl is 1000 mm x 2000 mm. Sizes of up to 1400 x 2200 mm can however be produced.

2.3 Insulating glass

BI-FireControl insulating glass can be made as single or multifunctional glass.

Sun, heat and sound protection requirements can all be fulfilled individually or also in combinations.

3. TECHNICAL SUMMARY

Glass type	BI-Fire Control 16 mm	BI-Fire Control 18 mm
Permitted maximum size (mm)	1000 x 2000	1000 x 2000
Maximum production size (mm) ¹⁾	1400 x 2200	1400 x 2200
Minimum size (mm)	200 x 300	200 x 300
Weight (kg/m ²)	32	34

- 1) These maximum dimensions can be manufactured technically. For dimensions, which exceed the permitted maximum sizes it is necessary to obtain individual approval certificates from the responsible authorities through the client.

4. IMPORTANT INFORMATION

4.1 Identification

Every pane is permanently marked with a stamp from which you can identify the manufacturer, product name and pane thickness.



Sample (e.g. **BI-FireControl 16 mm**)

4.2 General

4.2.1 External monitoring

External monitoring of **BI-FireControl** is done by a Federal Material Testing Authority.

In addition all our fire-resistant glass is subject to strict internal monitoring and quality controls.

4.2.2 Installation

Installation must only be carried out by trained specialist companies.

The approval is linked to the described glazing system. Dimensions, materials and installation specifications must be followed according to the details of the approval document.

4.2.3 Manufacturer's certificate

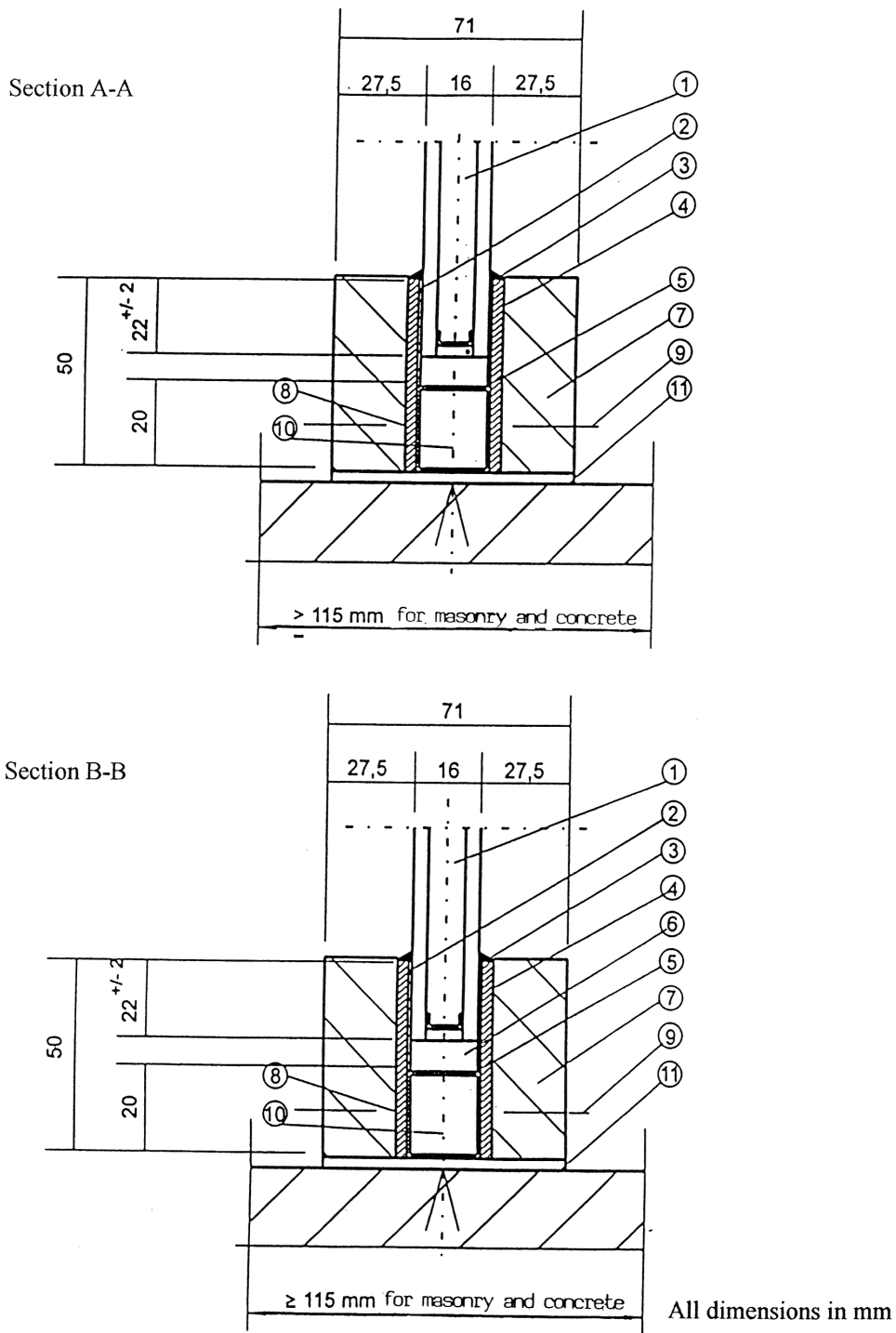
The necessary manufacturer's certificate for the responsible authorities can be made available as desired from BGT Bischoff Glastechnik as a blank form.

4.2.4 Steel signs

The steel signs, required for the identification of the glass, can be obtained from BGT by filling in and returning a copy of the manufacturer's certificate.

"BGT, Type 10-F30"

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Parts list	
1	Insulated laminated glazing panes, approx. 16 mm or approx. 18 mm thick
2	Kerafix expanded paper; 30 mm x 4 mm or 30 mm x 3 mm acc. to approval no. Z-19.14-619
3	Sealing mass made from silicon rubber
4	Glazing beads, steel (St37K), 50 mm x 3 mm or 80 mm x 3 mm, DIN 1652
5	Steel profile (ST37K) 20 mm x 25 mm x 2 mm, DIN 2395
6	Packing; 2 x on lower edge made from 8 mm thick pads of type: „FLAMMI 12“ from Gluske GmbH, Kerpen or „VERMIPAN“ or „Promatect-H“ or „Promatect-H (NEW)“
7	„Promatect-H“ plate strips, 53 mm x 20 mm or 86 mm x 20 mm
8	Countersunk screws, 3 mm x 30 mm, spacing about 400 mm
9	Countersunk screws, M4 x 12 mm, spacing < 300 mm
10	Dowels with general building approval, spacing approx. 700 mm
11	Mineral wool, non-combustible (class DIN 4102-A), melting point > 1000° C