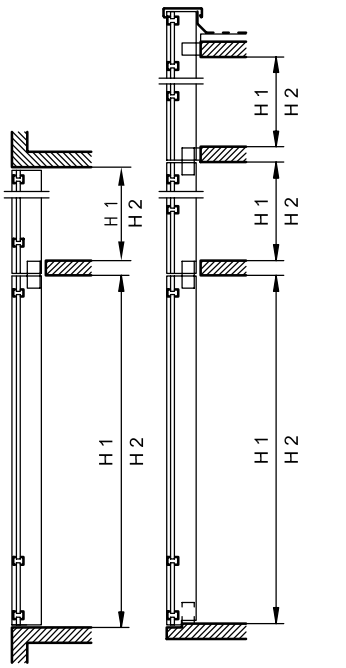
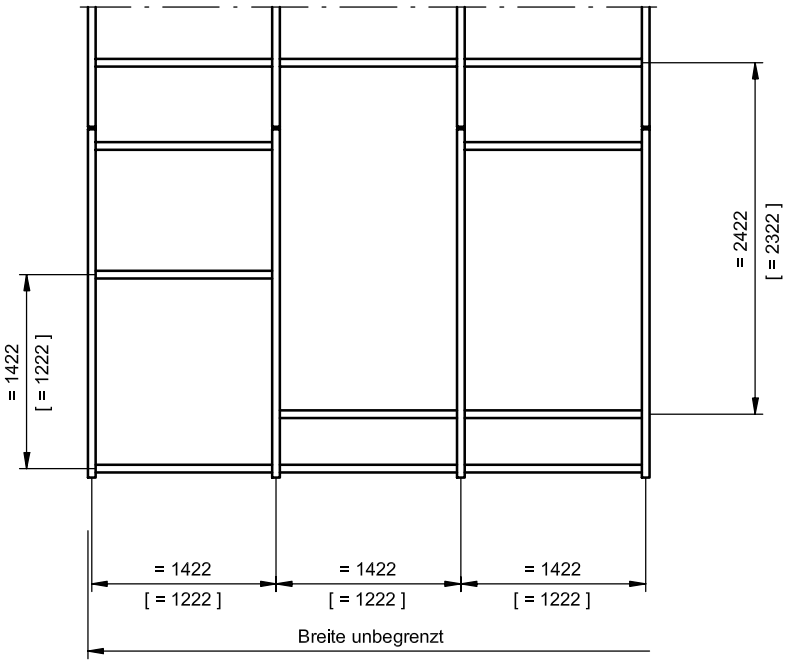


H 1 = max. 4250 (Riegel- Riegel)
H 2 = max. 4000 (Pfosten- Riegel)



[ ] Maße für G30-Verglasung

Fire-resistant façade:
Hueck BS C-VF 50 façade satisfying requirements for fire protection F30/G30 in mullion-transom as well as transom-transom constructions.
Hueck BS C-VF 60 façade satisfying requirements for fire protection F30/G30 in mullion-transom constructions.

Designation:
Aluminium façade construction for the erection of non-load-bearing outside walls satisfying additional requirements in fire protection, fire-resistance class F30 or, as the case may be, G30 to DIN 4102-13 with the general building supervisory authority approvals numbers Z-70.4-110 [Hueck BS C-VF 50] and Z-70.4-111 [Hueck BS C-VF 60].

Design characteristics:
Thermally-insulated aluminium façade construction in mullion-transom construction for vertical (installation alignments at up to 10° to vertical), flat, polygonal (internal angle ≤ 6° per side) as well as corner constructions (internal angle between 90° and 270°).
The transoms between the mullions are only possible at right angles.

Mullion, transom and cover profiles from the Hueck/Hartmann modular system façade [series: 1.0 VF50 / 1.0 VF50 RR / 1.0 VF 60], with inserted supplementary profile, inserted non-inflammable insulating strips as well as damp course strips in rebate region. Insulating zone by means of glass-fibre-reinforced polypropylene as spacer profile. Approved, high-strength T-connection (connection between mullion and transom) as well as approved system of fixing façade with screws [approval: Z-14.4-463].
Elevation width of 50 or, as the case may be, 60 mm, in accordance with the Hueck/Hartmann modular system façade [series: 1.0 VF50 / 1.0 VF50 RR / 1.0 VF60], in various profile sections.
Profile depth in accordance with static requirements. Rounded edges on mullion and transom profiles.

Air permeability: class A4 [series 1.0 VF50RR] and AE [series 1.0 VF50 / VF60] to DIN EN 12152
Water tightness: static class RE 750 [series 1.0 VF50RR] and RE 1200 [series 1.0 VF50 / VF60] to DIN EN 12154, dynamic class 250 / 750 Pa to DIN ENV 13050
Resistance to wind load: test load 2000 Pa / safety 3000 Pa to DIN EN 13116
Thermal insulation: U_f between 1.7 and 3.2 W/m²K depending on profile depth
Soundproofing: $R_{W,R}$ as a function of glass structure

Area of application:
The **permissible height** between the storeys (see figure) is:
4250 mm with mullion profiles of [series: 1.0 VF50 RR]
4000 mm with mullion profiles of [series: 1.0 VF50 / 1.0 VF 60]
There is no limit on the **width** of the façade construction.
The maximum distance between mullions is 1422 mm with F30 constructions
and 1222 mm with G30 constructions.

The façade construction may be installed in:
Brickwork ≥ 11.5 cm thick, to DIN 1053-1, at least block compression resistance class 12, at least mortar group II
Concrete ≥ 10.0 cm thick, to DIN 1045-1, at least strength class C8/10 or, as the case may be, C12/15, or B10/B15
Gas concrete blocks / plan bricks ≥ 17.5 cm thick to DIN 4165, at least strength class 4,
at least mortar group II or, as the case may be, thin-bed mortars of mortar group III.

Cladded steel pillars or girders to DIN 4102-4, at least to fire resistance class F30 or the corresponding general construction supervision test certificates in accordance with the approvals.
The constructional components (walls) adjoining the façade construction on all sides must be to at least fire resistance class F30 to DIN 4102-2.

The **wall connections** to the building structure must be executed with "PROMATECT - H" fire-resistant slabs, at least 24 mm thick, in accordance with the approval. The cavities are to be filled in a peripheral and complete manner with non-inflammable building materials, e.g. mineral or rock wool to building material class DIN 4102-A. Mullion and transom profiles may be secured to adjoining construction components via aluminium/steel brackets only with dowels with steel screws with general building supervisory authority approvals. The statical proof is to be produced.

Glazing:
F30 glazing as single or insulating glass: Pyrostop type: 30-1..., 30-17, 30-18, 30-20, 30-2.., 30-27, 30-3..., or Promaglas 30 type: 1, 2, 3, 5, 6, 10
Maximum permissible glass pane size F30: 1400 x 2400 mm,
optionally mounted in upright or horizontal format

G30 glazing as single or insulating glass: Pyrodur type: 30-201, 30-27, 30-28, 30-2.., 30-3..
Maximum permissible glass pane size G30: 1200 x 2300 mm,
optionally mounted in upright or horizontal format

Glazing is carried out from outside with hollow-chamber-forming EPDM sealing profiles (as dry glazing without silicone, in accordance with the approval or with the processing instructions) and aluminium pressure plate profiles, optionally single-part or two-part external sealing profiles without additional sealing tape

- Internal EPDM glazing gaskets with chamber-forming rebate webs
- Room-side and external side peripheral uniform sealing thickness
- Drainage grooves arranged on both sides in the mullions
- Vapour pressure equalization holes lying covered produced by punching out of the external sealing profiles

Panels:
The panels are to be manufactured of at least 24 mm thick (2 x 12 mm) "PROMATECT - H" fire-resistant slabs, which are to be cladded optionally with either 2 mm aluminium or 1 mm steel sheet metal. Alternatively a 6 mm thick ESG glass pane may be arranged on one side instead of the metal cladding. As an option the metal cladding may be extended flush with the mullion. The cavity is to be filled completely with non-inflammable mineral wool (building material class 4102-A), the melting point of which is above 1000 °C.
Maximum permissible panel size F30: 1400 x 2400 mm, optionally mounted in upright or horizontal format
Maximum permissible panel size G30: 1200 x 2300 mm, optionally mounted in upright or horizontal format

Interlocking element, fire-resistant door:
The façade construction to fire-resistance class F30 may be executed in combination with the fire-resistant closure T-30-1 door "HUECK BS C-1" in accordance with general building supervisory authority approval No. Z-6.18-1605.

Connection / transition of the fire-resistant façade to a "normal façade" with additional fire-resistant security area:
Connection to glass façades which do not have a fire-resistance classification ("normal façades") is permissible provided that the building supervisory regulations permit this or provided that the local building supervisory authority agrees to this. Amongst other things this concerns the width of the fire-resistant façade and of the security area (see approvals).

Sun shade:
Should the façade construction be executed in combination with a sun shade, then the latter must be of at least normally inflammable building materials (building material class DIN 4102-B2).
A statical proof for the securing of the sun shade is necessary.

Crash security:
Crash security in accordance with "TRAV" is to be proven separately.

Declarations of conformity / marking:
The façade construction satisfying requirements in respect of fire protection may only be executed by a manufacturer (processor) who has been trained in the product and who can prove that he carries out his own production checks. Conformity with the general building supervisory authority approvals numbers Z-70.4-110 or, as the case may be, Z-70.4-111 is to be proven by a works certificate in accordance with DIN EN 10204 [see approval].
The declaration of conformity (works certificate) is to be completed by the manufacturer (processor) and handed over to the client, who if necessary will pass it on to the responsible building supervisory authority. Each façade construction is to be marked in a durable manner (steel plate) with a declaration of conformity mark. Additional properties of the façade are to be declared with a CE mark.

Further constructional characteristics are to be taken from series 1.0 VF50, 1.0 VF50 RR and 1.0 VF 60 and the general building supervisory authority approvals, numbers Z-70.4-110 or, as the case may be, Z-70.4-111.