

General terms of processing and  
installation fire resisting glazing with  
**FIRESWISS FOAM 30-xx**

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## **Introduction**

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References to standards cited without any information on their effective date are considered to refer, as a general principle, to standards being valid at the date of the coming effective of this document.

## **Modifications**

This document is taking effect in November 2004 for the first time. All future modifications will be indicated in this item in chronological order.

Previous editions

October 2005

## I. General

The general terms in connection with the classification report 271 29283 and any correspondent document according to EN 13501-2 describes the applicability of frame systems glazed with FIRESWISS FOAM with fire resisting performance classified according to EN 13501-2.

The non-load bearing fire resisting glazing for compartmentation and with fire-separation performance must include glass panes, frame, glazing beads, sealants, fixings and any other part which can take affect in the performance. It has to be considered that using building materials which are not described in the approval or any relevant documentation need prior permission of any responsible person who owns the premises subject to fire safety regulation.

## II. Specific information

### 1. Object

#### 1.1. Designation

According to the classification report the building component is defined as FIRESWISS 01 F30. The types of glass which are allowed to be used in this building component are designated with the names FIRESWISS FOAM 30-15, FIRESWISS FOAM 30-16 O, FIREWISS 30-19 and FIRESWISS 30-20 O.

#### 1.2. Application

The fire resistant glazing may be used as a building component for compartmentation and fire-separation. It prevents penetration of flames, conflagration gas and heat radiation for a period of at least 30 minutes.

The building component may be used in indoor partitions, escape and access corridor walls, stairways, lobbies or elevator shafts.

## 2. Production

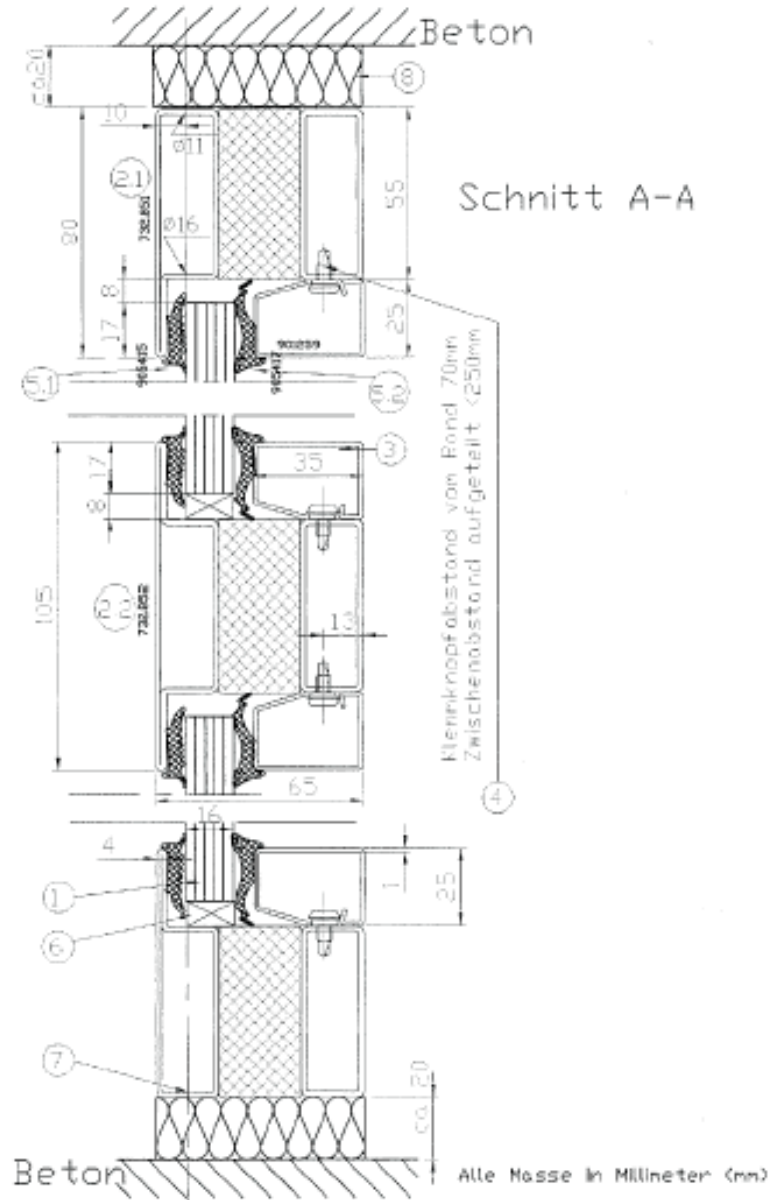
The function of the fire resistant glazing may only be granted if the following prescriptions are observed referring to processing and installation.

### 2.1. Glazing with steel frames

For the fire resisting frame construction with FIRESWISS FOAM may be used thermally broken profile systems. The profiles must be made of steel-type S235JR or of stainless steel profiles with the minimum quality X5CrNi18 10 with a minimum thickness of material of 1.50 mm.

For the glazing beads special profiles have to be used made of steel sheet, steel tubes or angled steel of S235JR type of steel with a thickness of at least 1.25 mm or, alternatively, stainless steel profiles having a minimum quality of X5CrNi18 10.

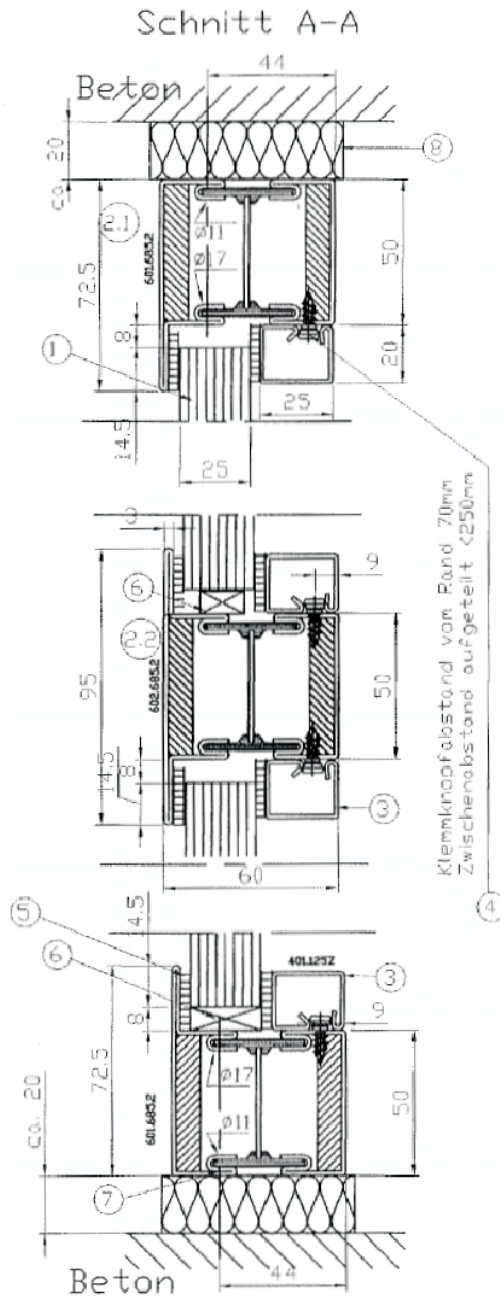
# FIRESWISS 01 F30 with Forster Fuego light



The whole variance of technical applications is shown in the Hermann Forster AG processing guideline.

No.	Product	description
1	FIRESWISS FOAM 30-15, FIRESWISS FOAM 30-160 FIRESWISS FOAM 30-19, FIRESWISS FOAM 30-200	The maximum dimension of FIRESWISS FOAM is 2000 mm x 2840 mm or 2840 mm x 2000 mm
2.1 / 2.2	Steel profile of Forster Fuego or Forster Fuego light series	The profiles must be made of steel-type S235JR or of stainless steel profiles with the minimum quality X5CrNi18 10 with a minimum thickness of material of 1.50 mm.*
3	Glazing bead from the Forster Fuego or Forster Fuego light series	The profiles must be made of steel-type S235JR or of stainless steel profiles with the minimum quality X5CrNi18 10 with a minimum thickness of material of 1.25 mm.*
4	Screw from the Forster Fuego or Forster Fuego light series for glazing bead fixing	
5.1 / 5.2	Rubber sealing from the Forster Fuego or Forster Fuego light series	
6	Setting block "Flammi 22" 8 x 14 x 80 or from the Forster Fuego or Forster Fuego light series	
7	Screw 8 x 160 mm and wall anchor 8 x 100 mm	
8	Mineral wool fire proof	

## FIRESWISS 01 F30 with Jansen Janisol 2



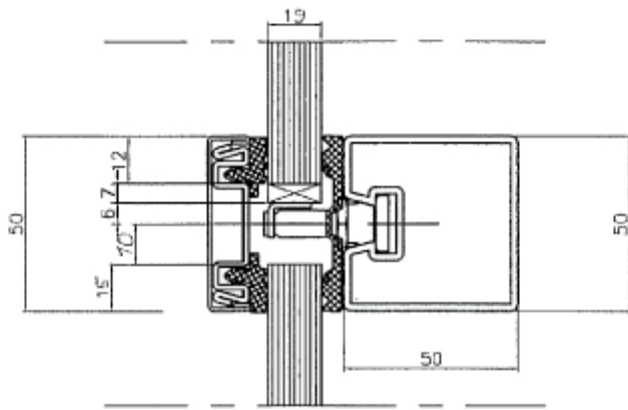
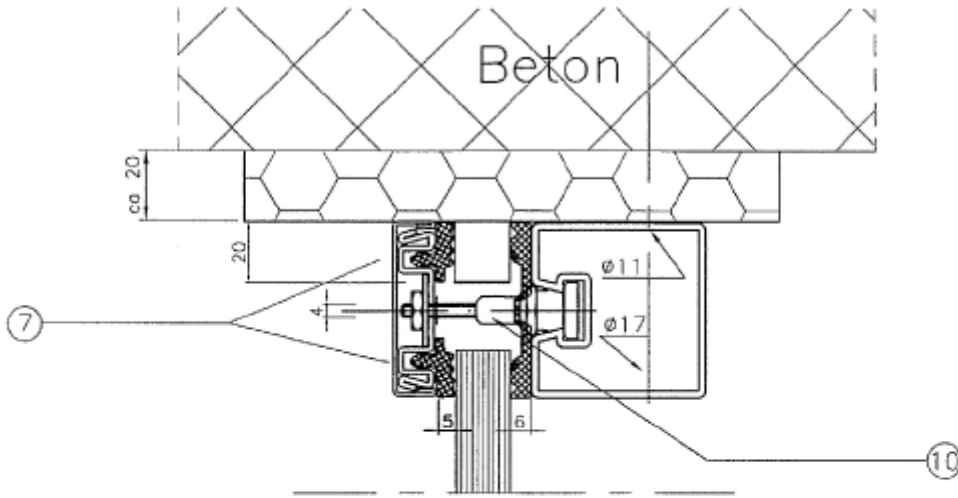
The whole variance of technical applications is shown in the Jansen AG processing guideline.

No.	Product	description
1	FIRESWISS FOAM 30-15, FIRESWISS FOAM 30-160 FIRESWISS FOAM 30-19, FIRESWISS FOAM 30-200	The maximum dimension of FIRESWISS FOAM is 2000 mm x 2840 mm or 2840 mm x 2000 mm
2.1 / 2.2	Steel profile of Jansen Janisol series	The profiles must be made of steel-type S235JR or of stainless steel profiles with the minimum quality X5CrNi18 10 with a minimum thickness of material of 1.50 mm.*
3	Glazing bead from the Jansen Janisol series	The profiles must be made of steel-type S235JR or of stainless steel profiles with the minimum quality X5CrNi18 10 with a minimum thickness of material of 1.25 mm.*
4	Screw from the Jansen Janisol series for glazing bead fixing	
5.1 / 5.2	Glazing seal fire proof	
6	Setting block "Flammi 22" 8 x 18 x 80 or from the Jansen Janisol series	
7	Screw 8 x 160 mm and wall anchor 10 x 90 mm	
8	Mineral wool fire proof	

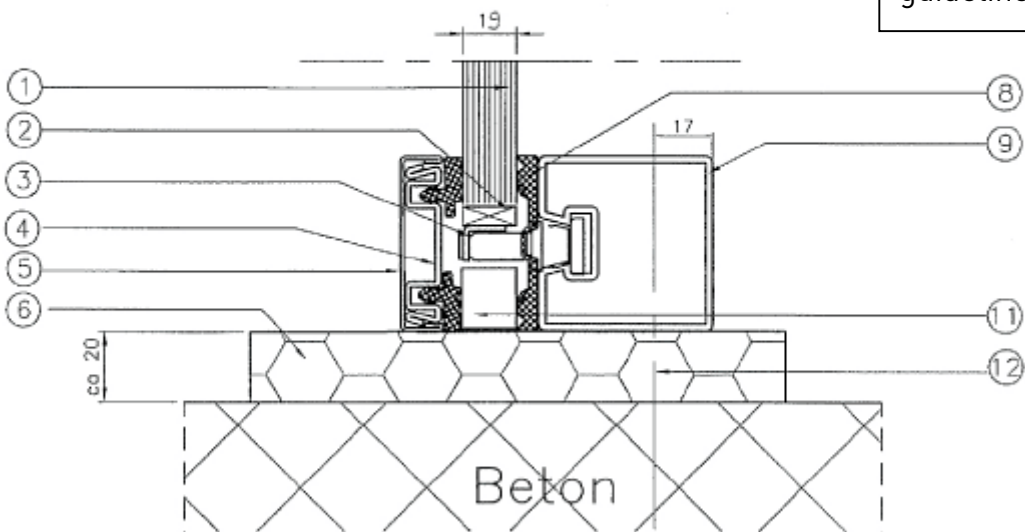
\* The profiles which may be used must be compatible under fire conditions, and the performance must be referenced to appropriate and relevant test evidence. FIRESWISS FOAM has a large number of applicable evidence of performance.



### FIRESWISS 01 F30 with Jansen Viss



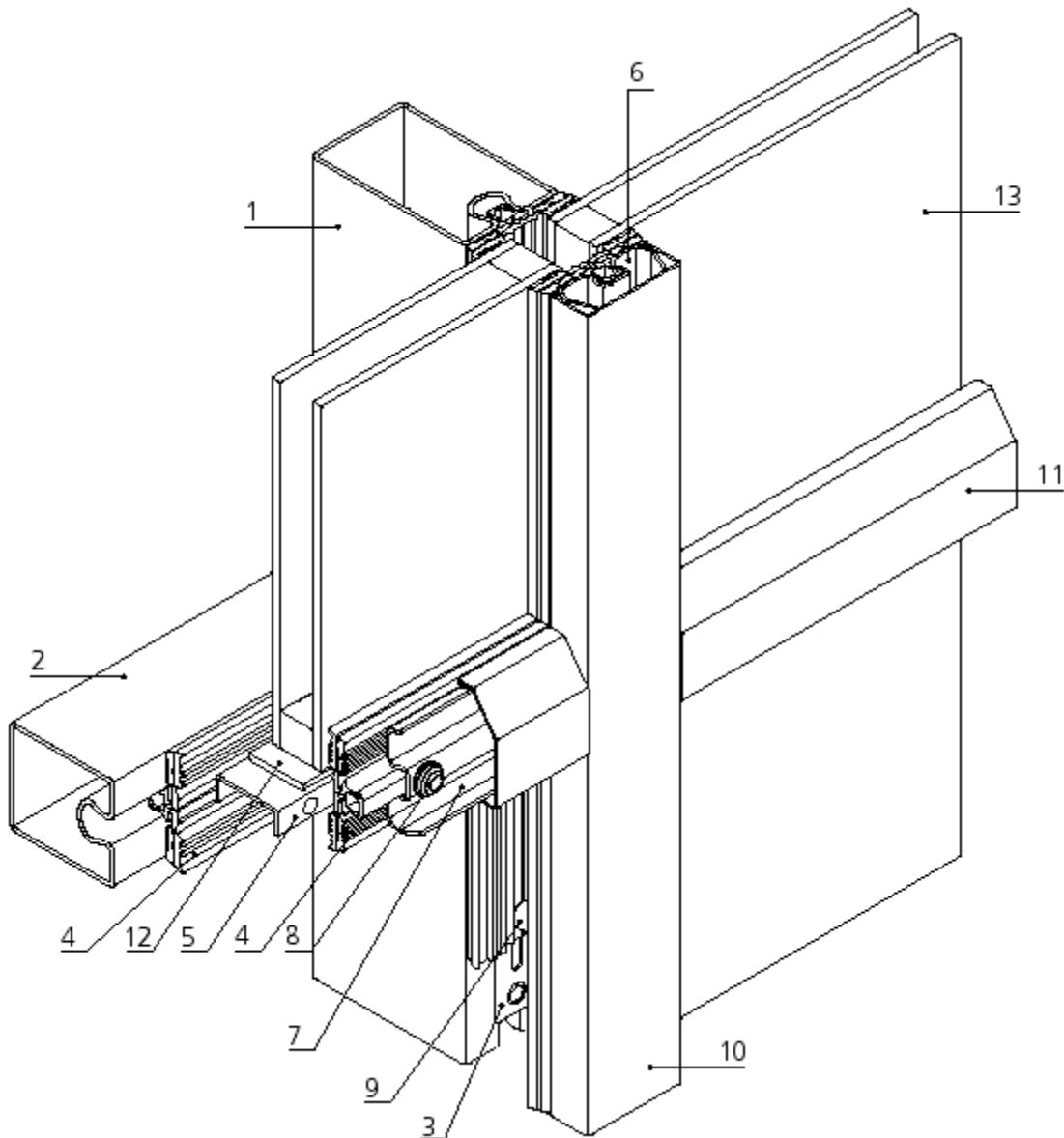
The whole variance of technical applications is shown in the Jansen AG processing guideline.



Alle Masse in Millimeter (mm)

No.	Product	description
1	FIRESWISS FOAM 30-15, FIRESWISS FOAM 30-160 FIRESWISS FOAM 30-19, FIRESWISS FOAM 30-200	The maximum dimension of FIRESWISS FOAM is 2000 mm x 2840 mm or 2840 mm x 2000 mm
2	Setting block "Flammi 22" 7 x 19 x 80 or from the Jansen Viss series	
3	Glas carrier Jansen Inox 452.483 from the Jansen Viss series	
4	Steel clamping strip Inox 400.867 from the Jansen Viss series	
5	Cover channel Inox 400.860 from the Jansen Viss series	
6	Mineral wool fire proof	
7 / 8	Rubber seal from the Jansen Viss series	
9	Steel frame section of Jansen Viss series	
10	Fixing 452.482 of Jansen Viss series	
11	Setting profile fire-proof	
12	Screw 8 x 160 mm and wall anchor 10 x 90 mm	

## FIRESWISS 01 F30 with Forster Thermfix Vario



The whole variance of technical applications is shown in the Hermann Forster AG processing guideline.

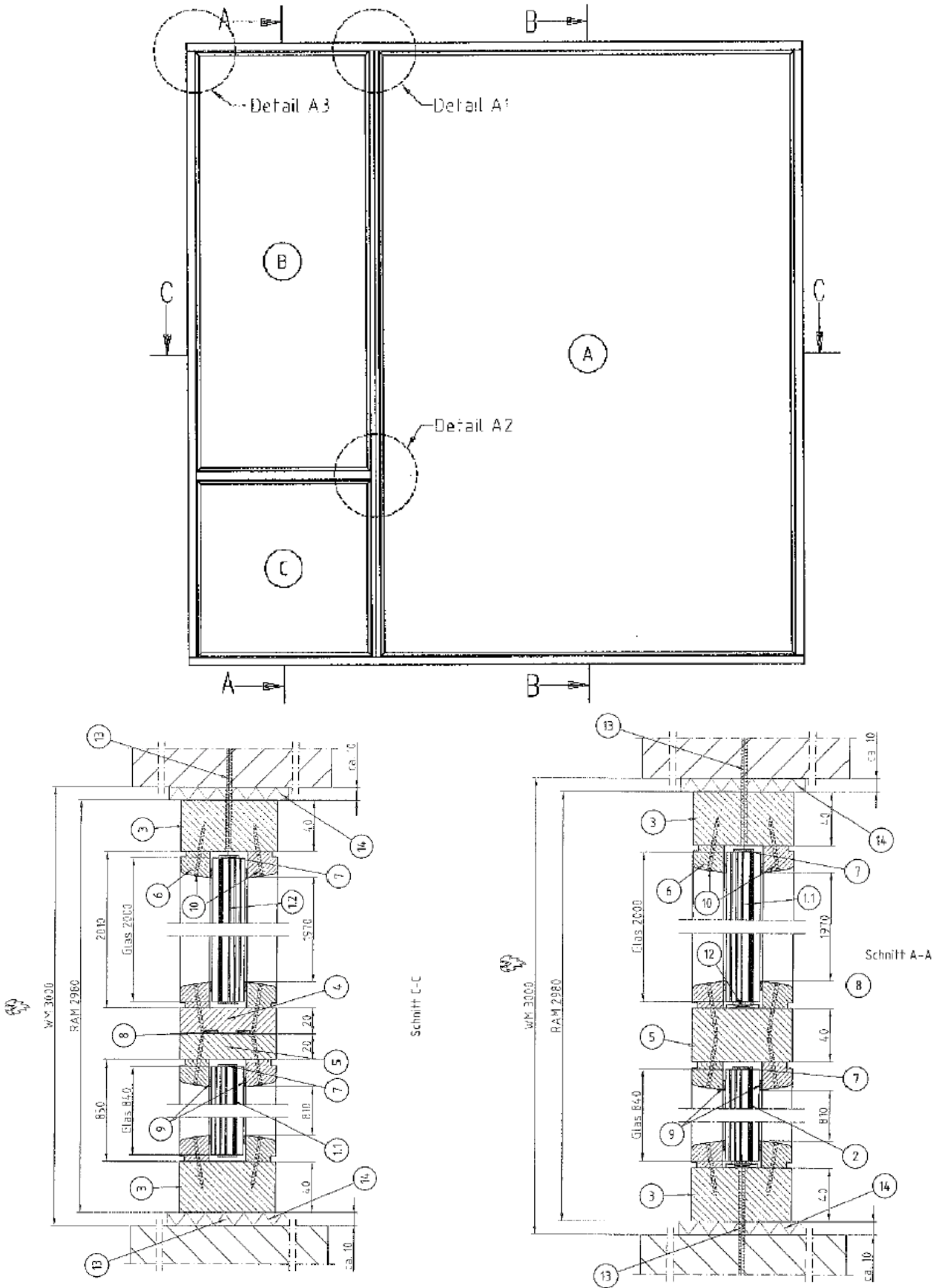
No.	Product	description
1 / 2	Mullion or Transom profile from Forster Thermfix Vario series	
3	Weather stripping int. / ext. from Forster Thermfix Vario series	
5	Glass carrier from Forster Thermfix Vario series	
6 / 7	Clamping strip from Forster Vario series	
8	Locking screw for clamping strip from Forster Thermfix Vario series	
9	Spacer from Forster Thermfix Vario series	
10 / 11	Cover channel from Forster Thermfix Vario series	
12	Setting block fire proof or from Forster Thermfix Vario series	
12	Screw 8 x 160 mm and wall anchor 10 x 90 mm	
13	FIRESWISS FOAM 30-15, FIRESWISS FOAM 30-160 FIRESWISS FOAM 30-19, FIRESWISS FOAM 30-200	The maximum dimension of FIRESWISS FOAM is 2000 mm x 2840 mm or 2840 mm x 2000 mm

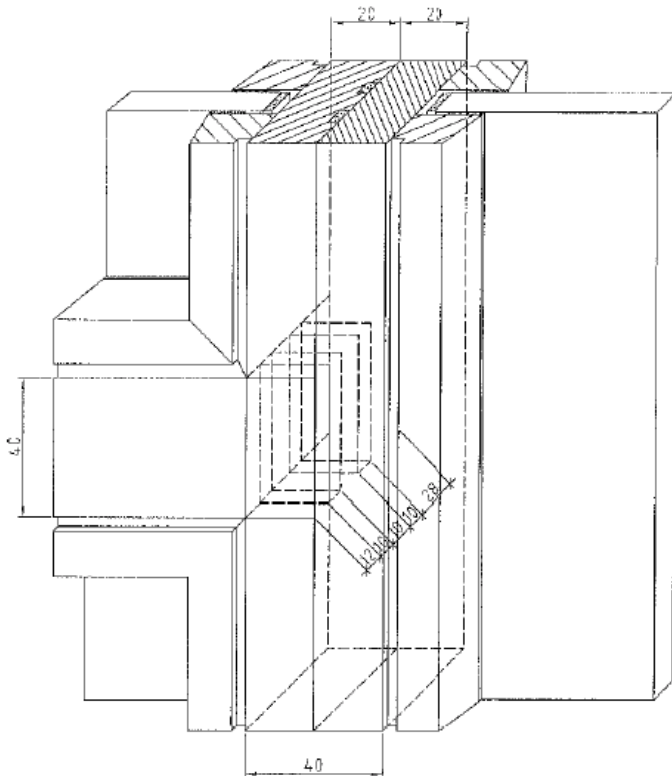
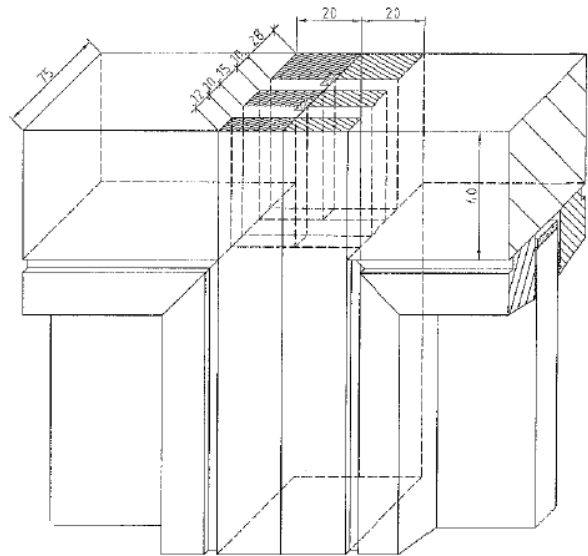
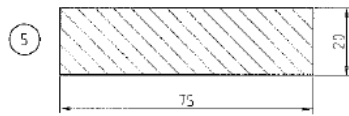
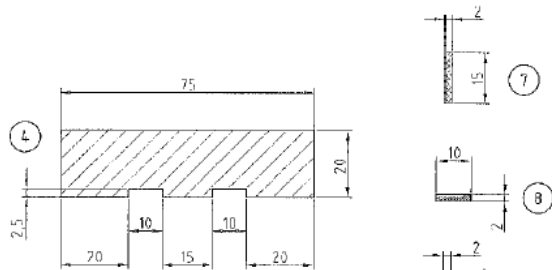
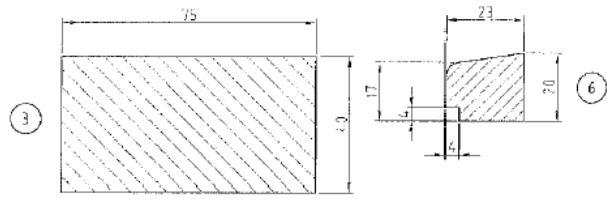
- \* The profiles which may be used must be compatible under fire conditions, and the performance must be referenced to appropriate and relevant test evidence. FIRESWISS FOAM has a large number of applicable evidence of performance.

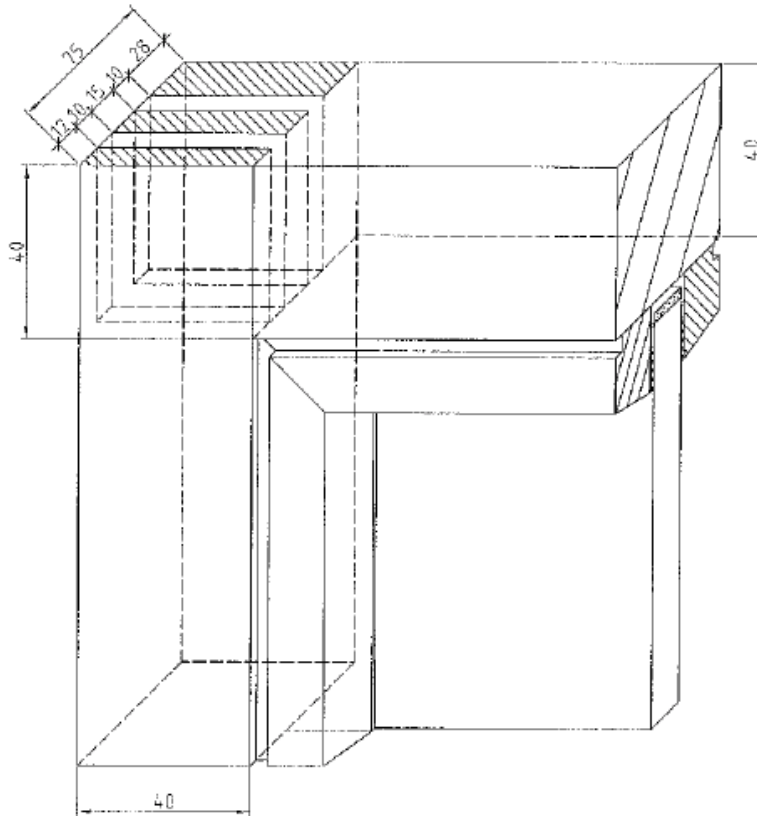
## 2.2. Glazing with timber frames

For the fire resisting construction with timber frames and FIRESWISS FOAM may be used only profiles with the here shown shapes and cross sections. The minimum dimensions of the mullion, top rail, stile or transom must be 75 mm x 40 mm for the frame construction parts and at 23 mm x 20 mm for the glazing beads. If using other types of construction, the respective prescriptions of the manufacturer may be strictly adhered to. Only timber frame systems may be used which have proved their applicability by acknowledged procedures. In principle, timber with a minimum raw density of  $>520 \text{ kg/m}^3$  may be used instead of oak tree. The following technical drawings show construction details of the fire resisting glazing with timber frames according to the Classification report 271 29283.

# FIRESWISS 01 F30 with timber frame







No.	Product	description
1/2	FIRESWISS FOAM 30-15, FIRESWISS FOAM 30-160 FIRESWISS FOAM 30-19, FIRESWISS FOAM 30-200	The maximum dimension of FIRESWISS FOAM is 2000 mm x 2840 mm or 2840 mm x 2000 mm
3	Rail or Stile from timber with a minimum raw density of $>520 \text{ kg/m}^3$	With a profile-dimension of 75 mm x 40 mm and a rectangular shape
4	Profile from timber with a minimum raw density of $>520 \text{ kg/m}^3$	With a profile-dimension of 75 mm x 20 mm and a rectangular shape and two notches
5	Profile from timber with a minimum raw density of $>520 \text{ kg/m}^3$	With a profile-dimension of 75 mm x 20 mm and a rectangular shape
6	Glazing bead from timber with a minimum raw density of $>520 \text{ kg/m}^3$	With a minimum dimension of 23 mm x 20 mm or with the shown shape
7	Kerafix Flex Pan 200 (20 mm)	
8	INTUMEX - L 10 mm	
9	EGOPREN Glazing seal 7 x 2 mm	
10	Wood-screw 4 x 40	
11	ABC Spax S screw 4 x 40	
12	Setting block of hardwood 3 x 24 x 80 mm	
13	ASSY flake board screws 6 x 100 and Master wall anchor 8 x 40	
14	Mineral wool fire-proof	



### 3. Construction

#### 3.1. Assembly

The described series with profiled steel sections and timber sections even the corresponding accessories have been developed for a wide range of applications in the manufacture of metal and timber structures. The series are designed for processing by specialist firms in the metal- and timber-working industry who are familiar with the appropriate technical standards.

#### 3.2. Installation

The elements joined together may be forming a continuous glazing. Fire resistant glazing should only be installed by companies which provide the necessary experience and trained employees. The fixing of the fire resistant glazing to the supporting construction may be carried out according to the guideline of the system supplier. This is also valid for the sealing of the joints.

Fire resistant glazing produced and installed in that way fulfils the fire resistance class EI30 independently from the direction of the fire load.

### 4. Service life

#### 4.1. Repair / Recondition

Should the inspection of the condition of the fire resisting glazing show any impair of the fire performance then may be the construction should be repaired or replaced. A replacement must be done on a like-to-like basis. The replacement of the frame or in the frame may be accord to the original evidence of fire performance provided for the particular glazed system as installed.

#### 4.2. Safety in use

If binding information is required, especially with regard to the installation of the elements and the building physics involved in problems such as static, fastenings, thermal insulation, waterproofing, fire, smoke and sound protection etc., professional consultants and experts must be consulted. Possible costs thereby incurred must be borne by the party placing the order.

The above-mentioned services are not object of our tender. In any other case that must be confirmed by us in writing.

#### 4.3. Guarantee

Unless a written agreement to the contrary has been concluded, the warranty granted by Glas Trösch AG applies only solely to the extent of the "General Terms Of Business" with which the customer is already familiar.

All information contained in the total catalogue or any guideline of Glas Trösch or any company we refer to in any document about purpose, use, misuse, product performance, duty to inform and instruct or anything else in that meaning must be taken into consideration. Non observance frees the manufacturer of all liability.

Glas Trösch AG, Buochs  
October 2005

Dateiname: Guideline for manufacturing FIRESWISS 01 F30.doc  
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Titel: Richtlinien Brandschutzglas EI  
Thema: Richtlinie über die Herstellung und Montage von Brandschutz-  
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