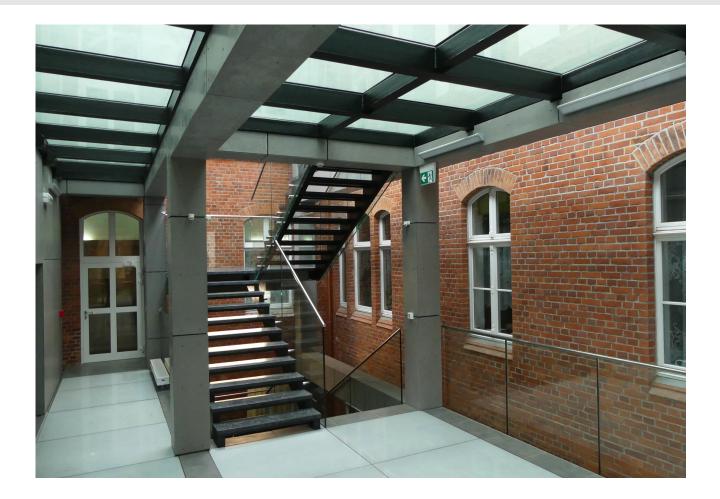
# FR FLOOR SYSTEM FIRE-RESISTANT GLASS POLFLAM F







### POLFLAM F fire-resistant glass installed in FR FLOOR SYSTEM

POLFLAM F fire-resistant glass was tested in certified research institutes across Europe.





**IPOLFLAM**<sup>\*</sup> is an independent manufacturer of fire-resistant glass, from research to technology and to production. POLFLAM fire protection glass is manufactured on the basis of modern hydrogel technology which makes it possible to obtain a glass of exceptional functionality.

On the European market, **POLFLAM**<sup>°</sup> brand is today an unquestionable synonym of high product quality.

POLFLAM F fire-resistant glass is used for floor applications.

It is available for internal applications in the fire resistance classes REI 30, 60, 90 and 120.

Fire-resistant glazed floors provide for more daylight saturation while giving the building occupants maximum protection in the event of fire.

**POLFLAM**<sup>\*</sup> offers fire-resistant glass for glazed floors with a load-bearing capacity up to  $qk = 5 \text{ kN/m}^2$ .

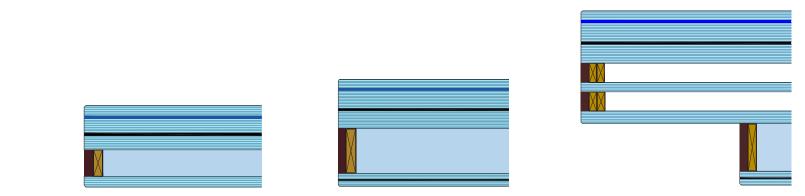
POLFLAM F fire-resistant glass can be provided with anti-slip screen printing and is also available as irregular glass shapes.

For each application, the load-bearing structural design as well as all statically exposed elements and connections must be verified by a static calculation.

This brochure gives a brief overview of the possibilities for POLFLAM F fire-resistant glass. For the correct installation details and instructions the classification or test report from the tested construction needs to be observed. Please contact your local POLFLAM sales representative for more information.



# POLFLAM F fire-resistant glass

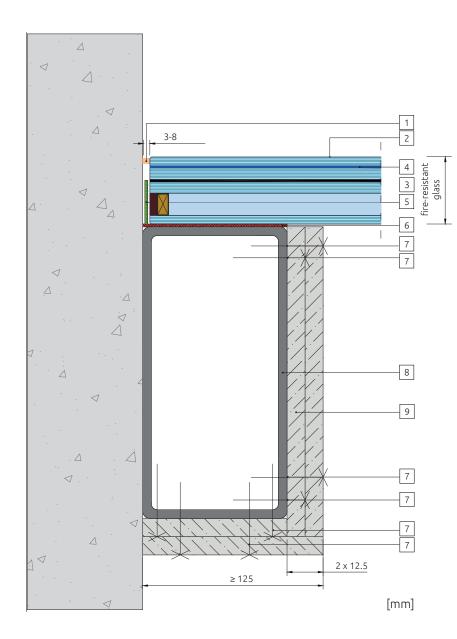


	POLFLAM F62	POLFLAM F72	POLFLAM F110
Resistance to fire	REI 30, REI 60	REI 30	REI 30, REI 60, REI 90, REI 120
Total thickness [mm]	62 ±3	72 ±3	110 ±3
Weight [kg/m²]	136	136	158
Max. temperature range [°C]	-40/+50		
Pendulum body impact resistance	1(B)1		1(B)1/1(B)1
Light transmittance $ au_v$ [%]	75*	69*	55*
U <sub>g</sub> -value [W/m²K]	4.0*	2.8*	0.8**
Sound reduction index $R_{_{w}}$ (C; $C_{_{tr}}$ ) [dB]	53 (-3; -7)*	53 (-3; -7)*	54 (-3; -7)*
Maximum glass dimensions [mm]         2200x1650 REI 30 1900x1650 REI 60		2200x1650	2200x1650

\* estimated parameters \*\* estimated parameters; 2 x Low-E 1.1

Other glass compositions on request

## Installation of POLFLAM F on steel supporting structure



POLFLAM F62

REI 30, REI 60



1	Silicone - DOWSIL™ 791
2	Anti-slip screen printing – optional
3	Fire-resistant glass POLFLAM F62
4	Edge screen printing
5	Intumescent tape KERAFIX® FXL 200 35 x 2 mm
6	Ceramic fibre paper
7	Self-drilling screw made of galvanized carbon steel (6.3 × 50 mm)
8	Substructure: steel beam or reinforced concrete beam according to static calculation (see detail on page 7)
9	Plasterboard type DF 2 x 12.5 mm

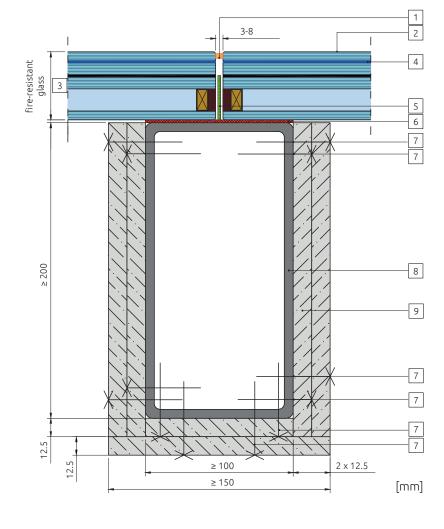
# Installation of POLFLAM F on steel supporting structure

POLFLAM F62

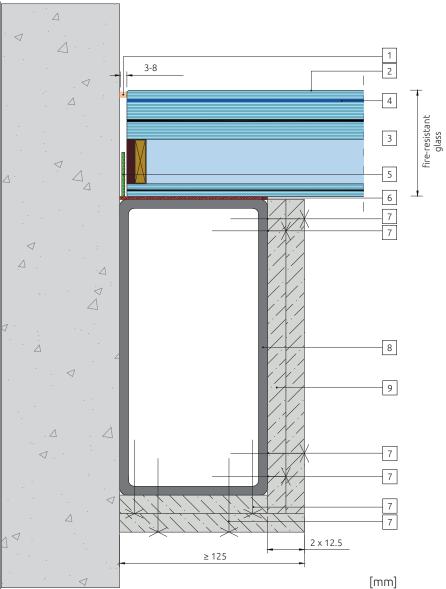
REI 30, REI 60



1	Silicone - DOWSIL™ 791	
2	Anti-slip screen printing – optional	
3	Fire-resistant glass POLFLAM F62	
4	Edge screen printing	
5	Intumescent tape KERAFIX® FXL 200 35 x 2 mm	
6	Ceramic fibre paper	
7	Self-drilling screw made of galvanized carbon steel (6.3 × 50 mm)	
8	Substructure: steel beam or reinforced concrete beam according to static calculation (see detail on page 8)	
9	Plasterboard type DF 2 x 12.5 mm	



## Installation of POLFLAM F on steel supporting structure

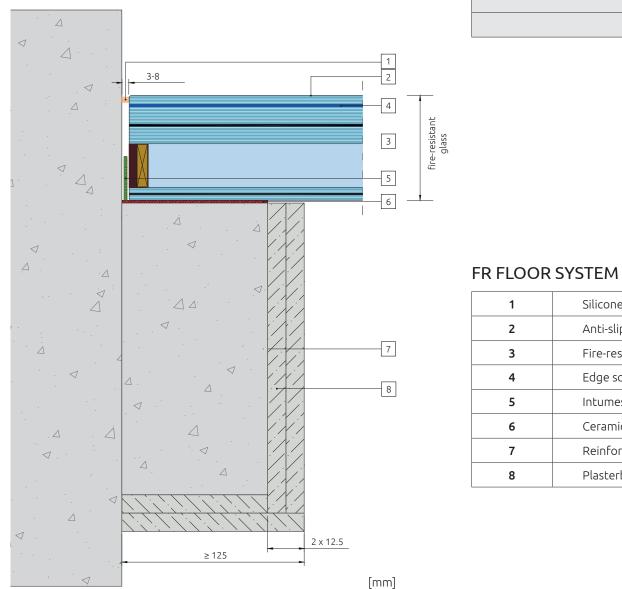


### POLFLAM F72 **REI 30**



1	Silicone - DOWSIL™ 791
2	Anti-slip screen printing – optional
3	Fire-resistant glass POLFLAM F72
4	Edge screen printing
5	Intumescent tape KERAFIX® FXL 200 35 x 2 mm
6	Ceramic fibre paper
7	Self-drilling screw made of galvanized carbon steel (6.3 × 50 mm)
8	Substructure: steel beam or reinforced concrete beam according to static calculation (see detail on page 7)
9	Plasterboard type DF 2 x 12.5 mm

# Installation of POLFLAM F on reinforced concrete supporting structure



POLFLAM F72 **REI 30** 



1	Silicone - DOWSIL™ 791	
2	Anti-slip screen printing – optional	
3	Fire-resistant glass POLFLAM F72	
4	Edge screen printing	
5	Intumescent tape KERAFIX® FXL 200 35 x 2 mm	
6	Ceramic fibre paper	
7	Reinforced concrete beam according to static calculation	
8	Plasterboard type DF 2 x 12.5 mm – optional	

7

# Installation of POLFLAM F on reinforced concrete supporting structure

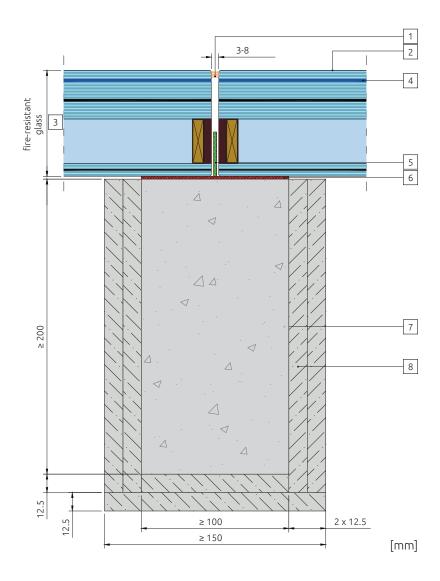
POLFLAM F72

**REI 30** 



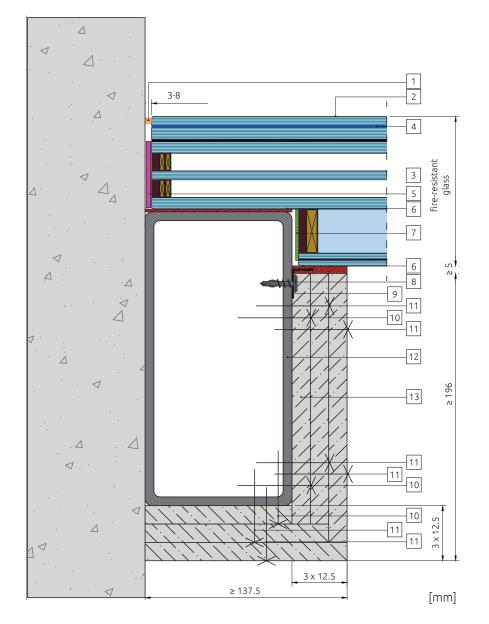
#### FR FLOOR SYSTEM

1	Silicone - DOWSIL™ 791	
2	Anti-slip screen printing – optional	
3	Fire-resistant glass POLFLAM F72	
4	Edge screen printing	
5	Intumescent tape KERAFIX® FXL 200 35 x 2 mm	
6	Ceramic fibre paper	
7	Reinforced concrete beam or steel beam covered with gypsum according to static calculation (see detail on page 5)	
8	Plasterboard type DF 2 x 12.5 mm – optional	



8

## Installation of POLFLAM F on steel supporting structure



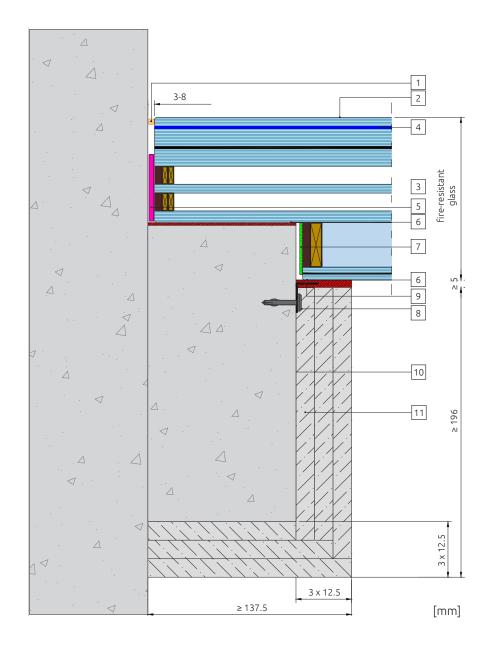
#### POLFLAM F110

REI 30, REI 60, REI 90, REI 120



1	Silicone - DOWSIL™ 791		
2	Anti-slip screen printing – optional		
3	Fire-resistant glass POLFLAM F110		
4	Edge screen printing		
5	Filing with polipropylene (45 x 3 mm) – optional		
6	Ceramic fibre paper		
7	Intumescent tape KERAFIX® FXL 200 35 x 2 mm		
8	Self-drilling screw made of galvanized carbon steel (4.2 × 25 mm)		
9	Stainless steel L bracket 40/20/0.8 every 400 mm		
10	Self-drilling screw made of galvanized carbon steel (6.3 × 50 mm)		
11	Self-drilling screw made of galvanized carbon steel (6.3 × 70 mm)		
12	Substructure: steel beam or reinforced concrete beam according to static calculation (see detail on page 10)		
13	Plasterboard type DF 3 x 12.5 mm		

## Installation of POLFLAM F on reinforced concrete supporting structure



### POLFLAM F110

REI 30, REI 60, REI 90, REI 120



1	Silicone - DOWSIL™ 791	
2	Anti-slip screen printing – optional	
3	Fire-resistant glass POLFLAM F110	
4	Edge screen printing	
5	Filing with polipropylene (45 x 3 mm) – optional	
6	Ceramic fibre paper	
7	Intumescent tape KERAFIX® FXL 200 35 x 2 mm	
8	Screw (4.2 x 25 mm)	
9	Stainless steel L bracket 40/20/0.8 every 400 mm	
10	Reinforced concrete beam according to static calculation	
11	Plasterboard type DF 3 x 12.5 mm	

## Installation of POLFLAM F on steel supporting structure

- 1 3-8 Т 4 fire-resistant glass w 5 - 7 6 8 9 11 12 ≥ 158 13 10 10 -11 12.5 11 12.5 12.5 3 x 12.5 ≥ 100 ≥ 175 [mm]

#### POLFLAM F110 REI 30, REI 60, REI 90, REI 120



1	Silicone - DOWSIL™ 791	
2	Anti-slip screen printing – optional	
3	Fire-resistant glass POLFLAM F110	
4	Edge screen printing	
5	Filing with polipropylene (45 x 3 mm) – optional	
6	Ceramic fibre paper	
7	Intumescent tape KERAFIX® FXL 200 35 x 2 mm	
8	Self-drilling screw made of galvanized carbon steel (4.2 × 25 mm)	
9	Stainless steel L bracket 40/20/0.8 mm every 400 mm	
10	Self-drilling screw made of galvanized carbon steel (6.3 × 50 mm)	
11	Self-drilling screw made of galvanized carbon steel (6.3 × 70 mm)	
12	Substructure: steel beam or reinforced concrete beam according to static calculation	
13	Plasterboard type DF 3 x 12.5 mm	

## Installation of POLFLAM F on reinforced concrete supporting structure

1 3-8 4 fire-resistant glass  $\omega$ 5 7 \_\_\_\_6 \_\_\_9 \_\_\_8 10 ≥ 158 11 12.5 12.5 12.5 ≥ 100 3 x 12.5 [mm] ≥175

POLFLAM F110

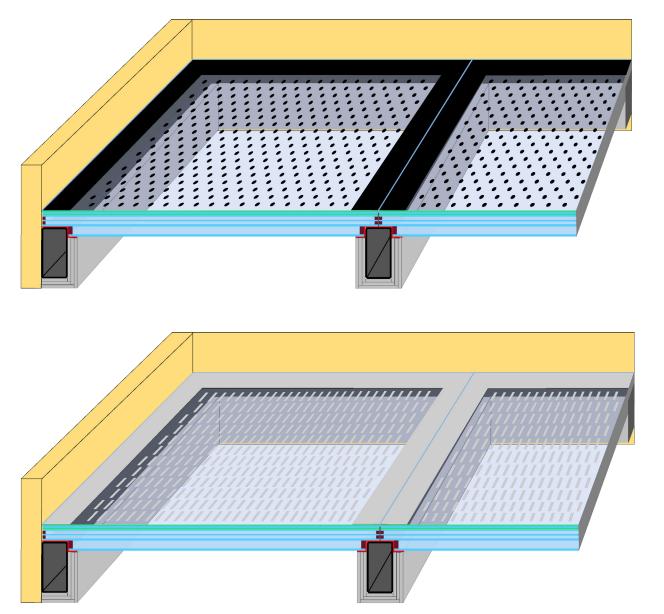
REI 30, REI 60, REI 90, REI 120

#### FR FLOOR SYSTEM

1	Silicone - DOWSIL™ 791	
2	Anti-slip screen printing – optional	
3	Fire-resistant glass POLFLAM F110	
4	Edge screen printing	
5	Filing with polipropylene (45 x 3 mm) – optional	
6	Ceramic fibre paper	
7	Intumescent tape KERAFIX® FXL 200 35 x 2 mm	
8	Screw (4.2 x 25 mm)	
9	Stainless steel L bracket 40/20/0.8 mm every 400 mm	
10	Reinforced concrete beam according to static calculation	
11	Plasterboard type DF 3 x 12.5 mm	

12

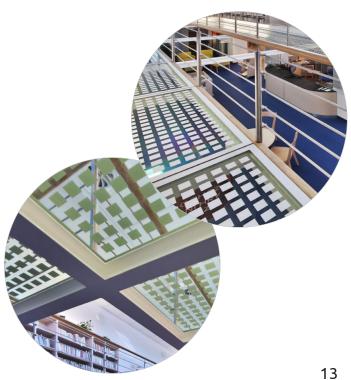
## Screen printing variants for POLFLAM F



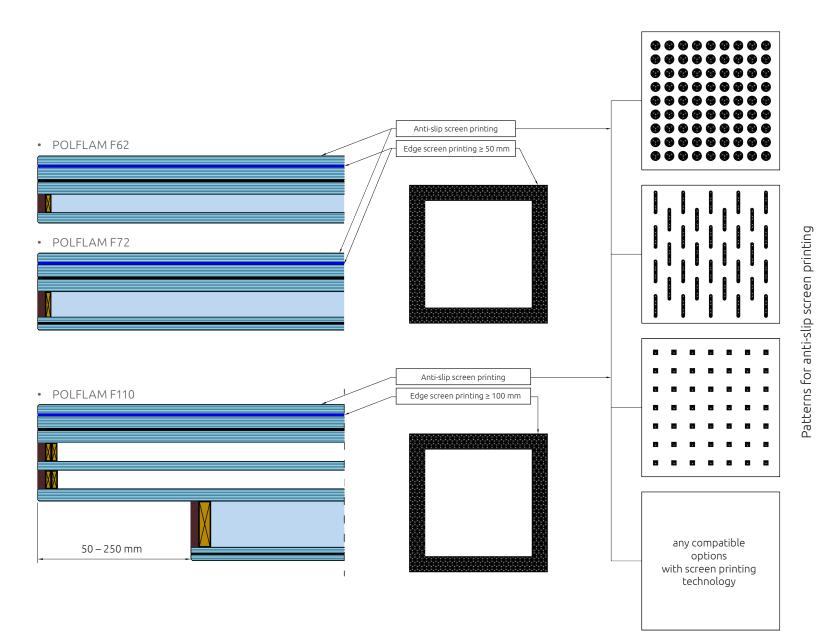
POLFLAM F glass is provided with an opaque edge screen printing  $\geq$  50 mm to conceal the supporting structure of the floor system.

Optional screen printed geometric pattern provides anti-slip properties to the glass surface and also improves appearance.

Both the edge screen printing and the surface patterns can be made in different RAL colours on request.



## Screen printing variants for POLFLAM F



### Patterns for anti-slip screen printing

Name	Pattern	Technical Specifications
DOTS 3/3		<ul> <li>Dot diameter: 3 mm</li> <li>Dot spacing: 3 mm</li> <li>Surface coverage: 24.2%</li> <li>ITB certified in accordance with DIN 51130: Anti-slip rating "R9"</li> <li>Standard colours: satin, white</li> <li>Non-standard colours: RAL – on request</li> </ul>
DOTS 2/1		<ul> <li>Dot diameter: 2 mm</li> <li>Dot spacing: 1 mm</li> <li>Surface coverage: 37.3%</li> <li>Standard colours: satin, white</li> <li>Non-standard colours: RAL – on request</li> </ul>
SQUARES 2.5/12		<ul> <li>Side length: 2.5 mm</li> <li>Square spacing: 12 mm</li> <li>Surface coverage: 5.7%</li> <li>Standard colours: satin, white</li> <li>Non-standard colours: RAL – on request</li> </ul>
SQUARES 4/4		<ul> <li>Side length: 4 mm</li> <li>Square spacing: 4 mm</li> <li>Surface coverage: 30.9%</li> <li>Standard colours: satin, white</li> <li>Non-standard colours: RAL – on request</li> </ul>
STRIPES 1200/1.5		<ul> <li>Stripe dimensions: 1200 × 1 mm</li> <li>Stripe spacing: 1.5 mm</li> <li>Surface coverage: 44.4%</li> <li>Standard colours: satin, white</li> <li>Non-standard colours: RAL – on request</li> </ul>



CE marking confirms that a product complies with the relevant harmonised European Norm.

Technical specification of the products are available at www.polflam.com



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