

TIMBER SYSTEMS

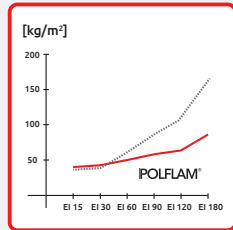
FIRE-RESISTANT GLASS

POLFLAM EI | POLFLAM BR EI | POLFLAM EW

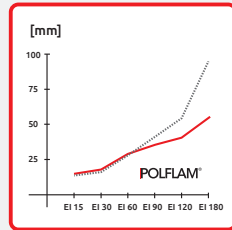


POLFLAM[®]
FIRE RESISTANT GLASS

POLFLAM competitive advantages



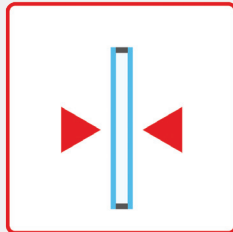
Lower weight than other fire-resistant glass



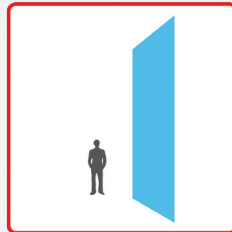
Reduced thickness than other fire-resistant glass

POLFLAM® 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.

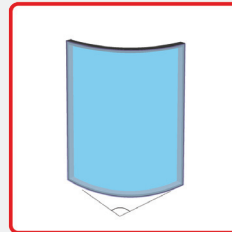
On the European market, **POLFLAM**® brand is today an unquestionable synonym of high product quality.



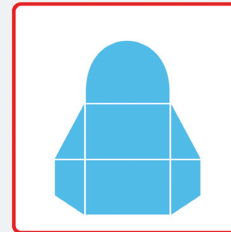
Symmetrical design



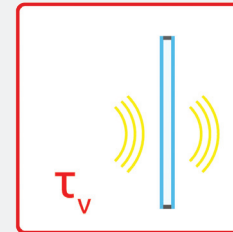
Extra large glass sheets available up to 2200 mm x 4200 mm



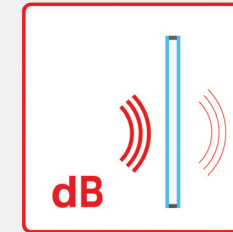
Curved fire-resistant glass



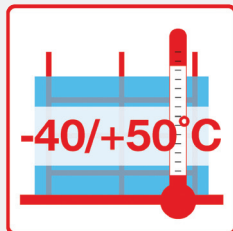
Irregular glass shapes available



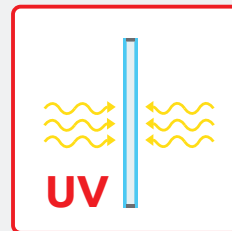
High light transmittance – τ_v up to 87 %



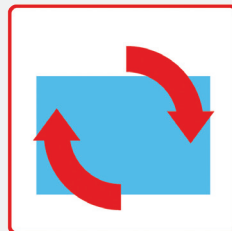
High sound reduction index – R_w up to 52 dB (TGU)



Extreme ambient temperature range from -40 °C to +50 °C



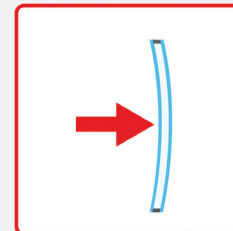
UV radiation resistance - no need of PVB inter-layers



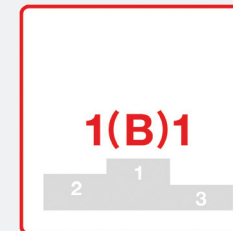
No need of repositioning



High water resistance - no need to protect glass edges



High mechanical resistance (thermal toughened glass)



Highest pendulum body impact resistance 1(B)1 (acc. to EN 12600)

POLFLAM fire-resistant glass in timber systems

POLFLAM® has successfully completed a series of fire tests on timber partitions for classifications EW 30, EW 60 and EI 15 up to EI 120. During the certification process, monolithic and insulating glass configurations were tested, allowing for the use of single, double and triple insulating glass units, with the use of laminated glass (up to P5A), toughened glass or float glass, as well as with coatings or without.

The insulating glass units can employ different types of spacer bar materials and take into account fire resistance on both sides. Other important system options include glazing beads on one or both sides, irregular frame shapes, fixing with pins or screws and pre-fabricated frames with on-site assembly.

Product range of monolithic fire-resistant glass

(Product range of butt-jointed glass solutions on page 24)

POLFLAM	EW 30	EW 60	EI 15	EI 30	EI 60	EI 90	EI 120
Nominal thickness [mm]	16	20	16	20	28	35	40
Weight [kg/m ²]	33	38	33	38	49	57	64
Light transmittance τ_v [%]	88	87	88	87	87	87	86
Sound reduction index R_w [dB]	41	42	41	42	45	47	48
Pendulum body impact resistance	1(B)1 (acc. to EN 12600)						
Reaction to fire	B-s1, d0						
Max. temperature range	-40 °C / +50 °C						
Curved glass	Yes						

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

This brochure gives a brief overview of the possibilities for POLFLAM fire-resistant glass in timber systems. For the correct installation details and instructions the classification or test report from the tested construction needs to be observed.

Please contact your local Sales Manager for more information.

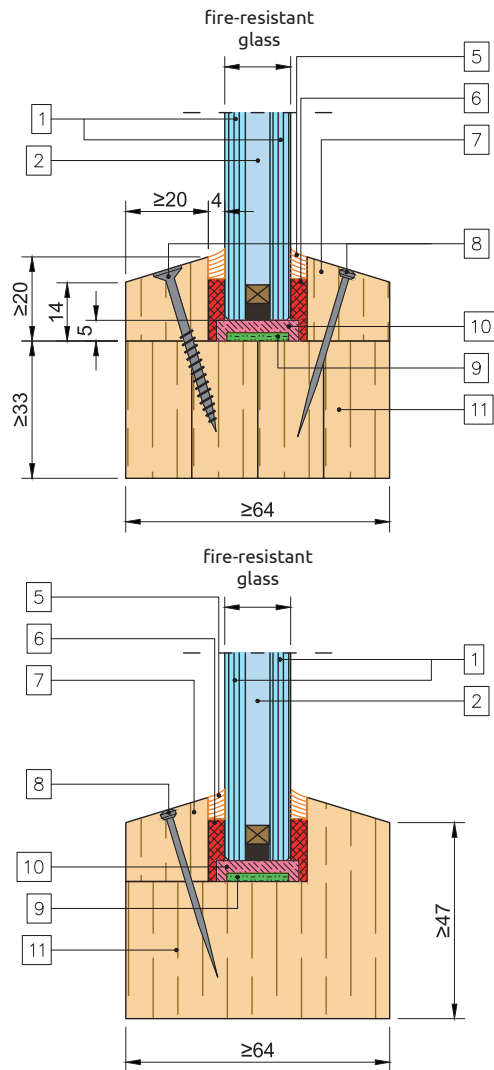
LIST OF PRODUCTS

POLFLAM fire-resistant glass in timber systems

	Product	Fire resistance class	Min. glass thickness [mm]	Max. glass dimensions portrait format [mm x mm] (max. surface area)	Max. glass dimensions landscape format [mm x mm] (max. surface area)	Area of application	Page
STANDARD	POLFLAM EW 30	EW 30	16/18	1800 x 3600 ($A_{max} = 5.45 \text{ m}^2$)	2541 x 1650 ($A_{max} = 3.81 \text{ m}^2$)	Partition wall	5
	POLFLAM EW 30 DGU		16	1500 x 3000 ($A_{max} = 4.5 \text{ m}^2$)	2310 x 1500 ($A_{max} = 3.47 \text{ m}^2$)	Partition wall	6
	POLFLAM EW 30 TGU		16	1500 x 3000 ($A_{max} = 4.5 \text{ m}^2$)	2310 x 1500 ($A_{max} = 3.47 \text{ m}^2$)	Partition wall	7
	POLFLAM EW 60	EW 60	20	1500 x 3000 ($A_{max} = 4.5 \text{ m}^2$)	2310 x 1500 ($A_{max} = 3.47 \text{ m}^2$)	Partition wall	8
	POLFLAM EI 15	EI 15	16	1500 x 3000 ($A_{max} = 4.5 \text{ m}^2$)	2310 x 1500 ($A_{max} = 3.47 \text{ m}^2$)	Partition wall	9
	POLFLAM EI 15 DGU		16/18	1800 x 3600 ($A_{max} = 5.45 \text{ m}^2$)	2772 x 1800 ($A_{max} = 4.20 \text{ m}^2$)	Partition wall	10
	POLFLAM EI 15 TGU		16/18	1800 x 3600 ($A_{max} = 5.45 \text{ m}^2$)	2772 x 1800 ($A_{max} = 4.20 \text{ m}^2$)	Partition wall	11
	POLFLAM EI 30	EI 30	20/22	1800 x 4200 ($A_{max} = 6.35 \text{ m}^2$)	3600 x 1800 ($A_{max} = 5.45 \text{ m}^2$)	Partition wall	12
	POLFLAM EI 30 DGU		20/22	1800 x 4200 ($A_{max} = 6.35 \text{ m}^2$)	3600 x 1800 ($A_{max} = 5.45 \text{ m}^2$)	Partition wall	13
	POLFLAM EI 30 TGU		20/22	1800 x 4200 ($A_{max} = 6.35 \text{ m}^2$)	3600 x 1800 ($A_{max} = 5.45 \text{ m}^2$)	Partition wall	14
	POLFLAM EI 60	EI 60	28/30	1800 x 4200 ($A_{max} = 6.35 \text{ m}^2$)	3600 x 1800 ($A_{max} = 5.45 \text{ m}^2$)	Partition wall	15
	POLFLAM EI 60 DGU		28/30	1800 x 4200 ($A_{max} = 6.35 \text{ m}^2$)	3600 x 1800 ($A_{max} = 5.45 \text{ m}^2$)	Partition wall	16
	POLFLAM EI 60 TGU		28/30	1800 x 4200 ($A_{max} = 6.35 \text{ m}^2$)	3600 x 1800 ($A_{max} = 5.45 \text{ m}^2$)	Partition wall	17
	POLFLAM EI 90	EI 90	35/37	2400 x 4200 ($A_{max} = 8.47 \text{ m}^2$)	3600 x 1800 ($A_{max} = 5.45 \text{ m}^2$)	Partition wall	18
	POLFLAM EI 90 DGU		35/37	1800 x 4200 ($A_{max} = 6.35 \text{ m}^2$)	3600 x 1800 ($A_{max} = 5.45 \text{ m}^2$)	Partition wall	19
	POLFLAM EI 90 TGU		35/37	1800 x 4200 ($A_{max} = 6.35 \text{ m}^2$)	3600 x 1800 ($A_{max} = 5.45 \text{ m}^2$)	Partition wall	20
	POLFLAM EI 120	EI 120	40/42	1500 x 3500 ($A_{max} = 5.25 \text{ m}^2$)	3000 x 1500 ($A_{max} = 4.50 \text{ m}^2$)	Partition wall	21
	POLFLAM EI 120 DGU		40/42	1500 x 3500 ($A_{max} = 5.25 \text{ m}^2$)	3000 x 1500 ($A_{max} = 4.50 \text{ m}^2$)	Partition wall	22
POLFLAM EI 120 TGU	40/42		1500 x 3500 ($A_{max} = 5.25 \text{ m}^2$)	3000 x 1500 ($A_{max} = 4.50 \text{ m}^2$)	Partition wall	23	
BR	POLFLAM BR EI 30	EI 30	30	2400 x 4200 ($A_{max} = 8.47 \text{ m}^2$)	–	Partition wall	25
	POLFLAM BR EI 60	EI 60	38	2400 x 4200 ($A_{max} = 8.47 \text{ m}^2$)	–	Partition wall	26
	POLFLAM BR EI 90	EI 90	45	2400 x 4200 ($A_{max} = 8.47 \text{ m}^2$)	–	Partition wall	27
	POLFLAM BR EI 120	EI 120	50	2200 x 3850 ($A_{max} = 7.70 \text{ m}^2$)	–	Partition wall	28

POLFLAM EW 30

[mm]



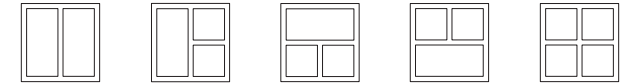
POLFLAM fire-resistant glass in timber systems

POLFLAM EW 30 (16/18* mm)

Partition wall

max. glass dimensions	1800 mm x 3600 mm ($A_{max} = 5.45 \text{ m}^2$) - portrait format
	2541 mm x 1650 mm ($A_{max} = 3.81 \text{ m}^2$) - landscape format

Reference document: Classification report 1766-1/C/2022/K/1



1*	Thermally toughened glass ≥ 5 mm thickness Thermally toughened patterned glass ≥ 6 mm thickness (individual panes can be tinted, coated, surface treated)
2	Hydrogel interlayer ≥ 6 mm thickness
5	Silicone DOWSIL™ 791 / HYBRISEAL® 2PS / Easyseal-XPS®
6	Ceramic tape KERAFIX® 2000 15 x 4 mm
7	Glazing bead ≥ 20 mm x 20/14 mm, timber $\geq 560 \text{ kg/m}^3$
8	Nail min. 16GA x 40 mm or screw $\varnothing 3.5$ x 40 mm (20-40 mm from the corner and every 200 mm)
9	Intumescent tape KERAFIX® FXL 200 20 x 2 mm
10	Setting block 5 mm
11	Laminated or solid timber $\geq 560 \text{ kg/m}^3$

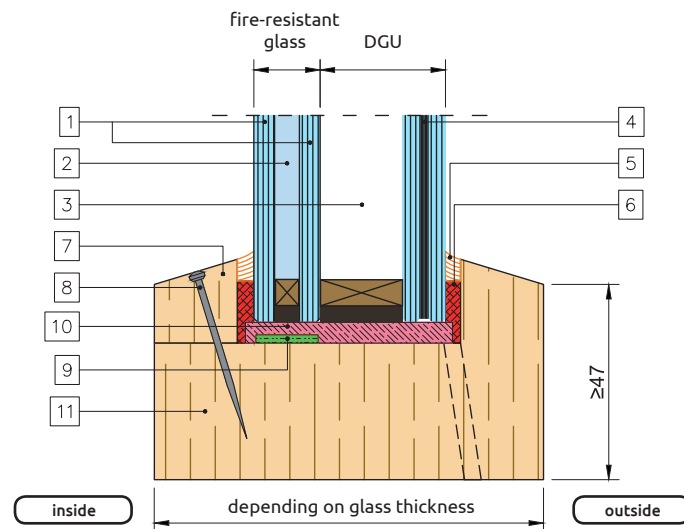
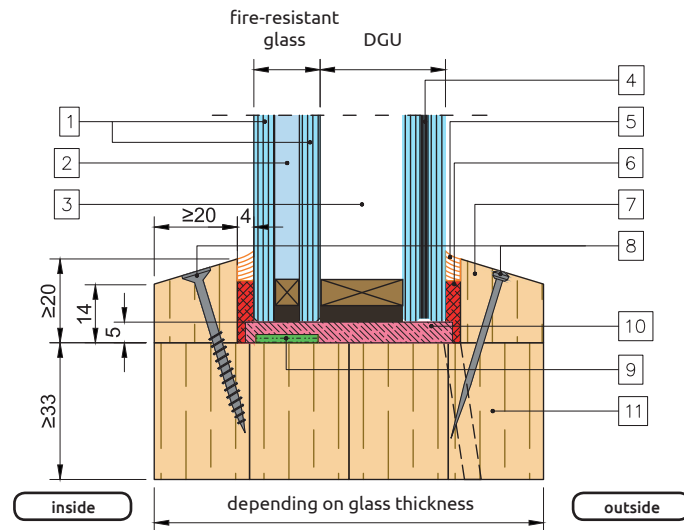
Allowed supported construction

Rigid supporting construction min. 600 kg/m^3 ; min. 115 mm thickness

* For all glass dimensions $>1500 \text{ mm} \times 3000 \text{ mm}$. Thickness of individual pane (1) will be increased to minimum 6 mm (nominal thickness 18 mm)

POLFLAM EW 30 DGU

[mm]



POLFLAM fire-resistant glass in timber systems

POLFLAM EW 30 (16 mm) DGU

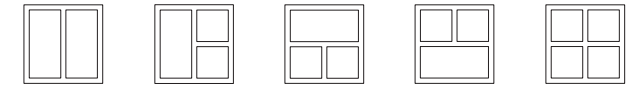
Partition wall

max. glass dimensions

1500 mm x 3000 mm ($A_{max} = 4.5 \text{ m}^2$) - portrait format

2310 mm x 1500 mm ($A_{max} = 3.47 \text{ m}^2$) - landscape format

Reference document: Classification report 1766-1/C/2022/K/1



1	Thermally toughened glass ≥ 5 mm thickness Thermally toughened patterned glass ≥ 6 mm thickness (individual panes can be tinted, coated, surface treated)
2	Hydrogel interlayer ≥ 6 mm thickness
3	Spacer 8–20 mm thickness
4	Glass ≥ 4 mm thickness: - float glass; - thermally toughened safety glass; - laminated safety glass; (individual panes can be tinted, coated or surface treated)
5	Silicone DOWSIL™ 791 / HYBRISEAL® 2PS / Easyseal-XPS®
6	Ceramic tape KERAFIX® 2000 15 x 4 mm
7	Glazing bead ≥ 20 mm x 20/14 mm, timber $\geq 560 \text{ kg/m}^3$
8	Nail min. 16GA x 40 mm or screw $\varnothing 3.5$ x 40 mm (20-40 mm from the corner and every 200 mm)
9	Intumescent tape KERAFIX® FXL 200 20 x 2 mm
10	Setting block 5 mm
11	Laminated or solid timber $\geq 560 \text{ kg/m}^3$

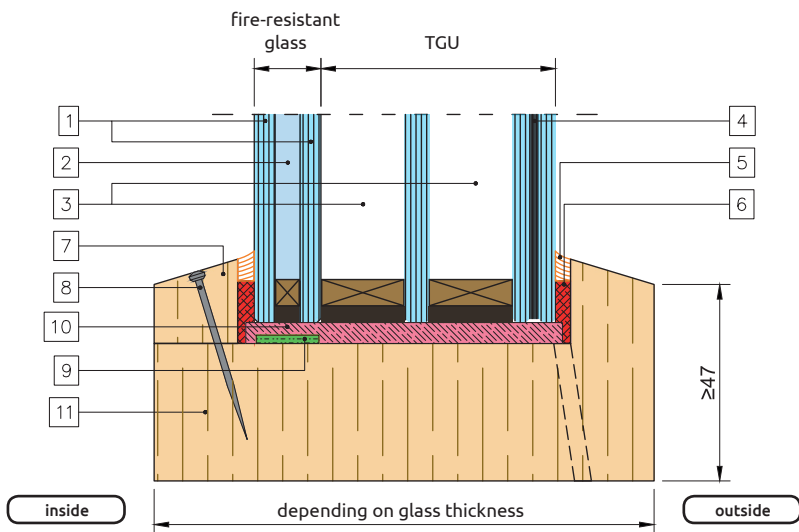
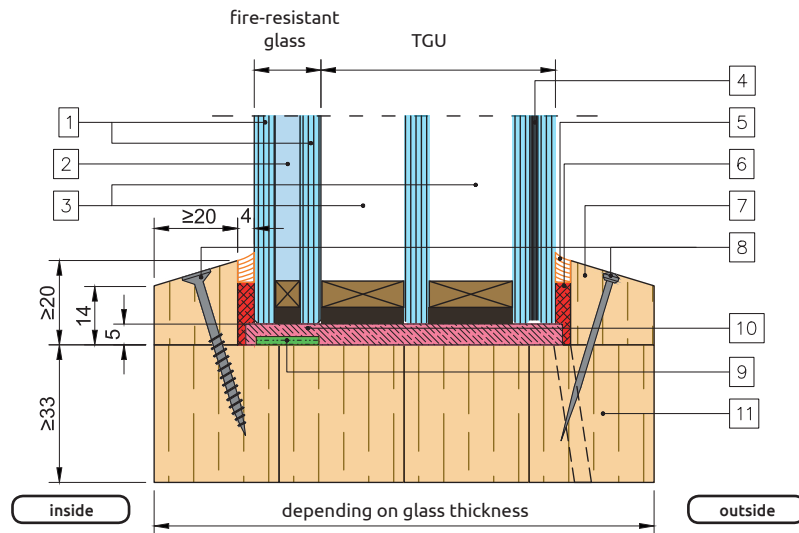
Allowed supported construction

Rigid supporting construction min. 600 kg/m^3 ; min. 115 mm thickness

POLFLAM EW 30 TGU

POLFLAM fire-resistant glass in timber systems

[mm]



POLFLAM EW 30 (16 mm) TGU

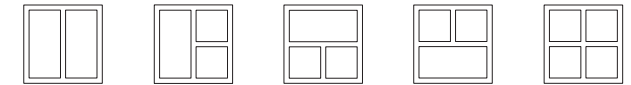
Partition wall

max. glass dimensions

1500 mm x 3000 mm ($A_{max} = 4.5 \text{ m}^2$) - portrait format

2310 mm x 1500 mm ($A_{max} = 3.47 \text{ m}^2$) - landscape format

Reference document: Classification report 1766-1/C/2022/K/1



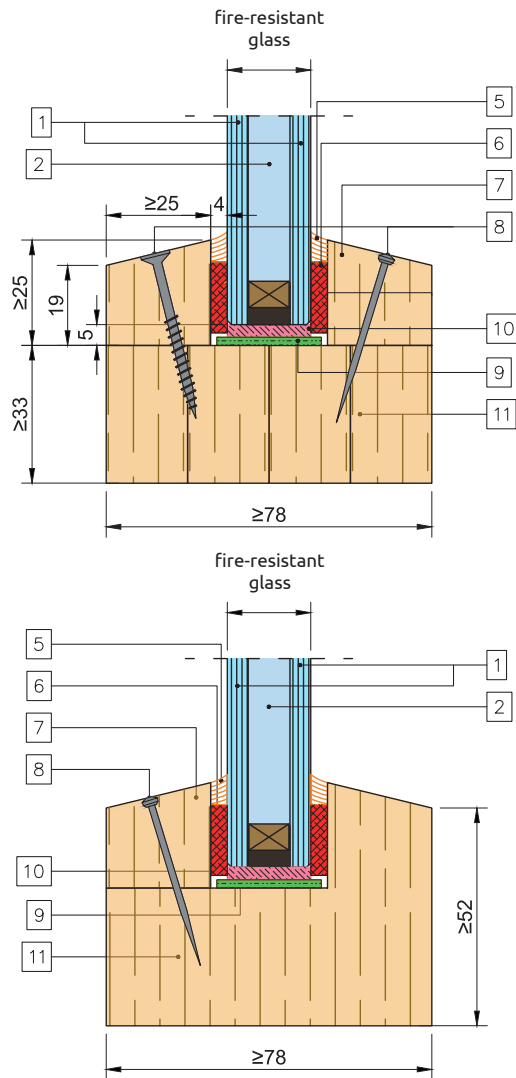
1	Thermally toughened glass ≥ 5 mm thickness Thermally toughened patterned glass ≥ 6 mm thickness (individual panes can be tinted, coated, surface treated)
2	Hydrogel interlayer ≥ 6 mm thickness
3	Spacer 8–20 mm thickness
4	Glass ≥ 4 mm thickness: - float glass; - thermally toughened safety glass; - laminated safety glass; (individual panes can be tinted, coated or surface treated)
5	Silicone DOWSIL™ 791 / HYBRISSEAL® 2PS / Easyseal-XPS®
6	Ceramic tape KERAFIX® 2000 15 x 4 mm
7	Glazing bead ≥ 20 mm x 20/14 mm, timber $\geq 560 \text{ kg/m}^3$
8	Nail min. 16GA x 40 mm or screw $\text{Ø}3.5$ x 40 mm (20-40 mm from the corner and every 200 mm)
9	Intumescent tape KERAFIX® FXL 200 20 x 2 mm
10	Setting block 5 mm
11	Laminated or solid timber $\geq 560 \text{ kg/m}^3$

Allowed supported construction

Rigid supporting construction min. 600 kg/m^3 ; min. 115 mm thickness

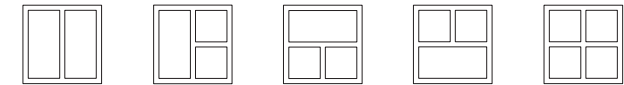
POLFLAM EW 60

[mm]



POLFLAM fire-resistant glass in timber systems

POLFLAM EW 60 (20 mm)	
Partition wall	
max. glass dimensions	1500 mm x 3000 mm ($A_{max} = 4.5 \text{ m}^2$) - portrait format
	2310 mm x 1500 mm ($A_{max} = 3.47 \text{ m}^2$) - landscape format
Reference document: Test Report LBO-191-N/21	



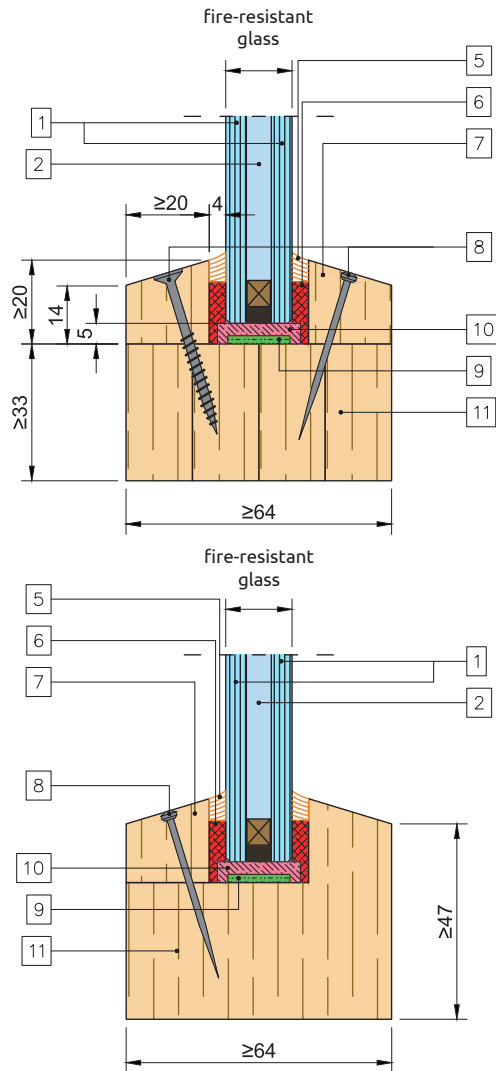
1	Thermally toughened glass $\geq 5 \text{ mm}$ thickness Thermally toughened patterned glass $\geq 6 \text{ mm}$ thickness (individual panes can be tinted, coated, surface treated)
2	Hydrogel interlayer $\geq 10 \text{ mm}$ thickness
5	Silicone DOWSIL™ 791
6	Ceramic tape KERAFIX® 2000 17 x 4 mm
7	Glazing bead $\geq 25 \text{ mm} \times 25/19 \text{ mm}$, timber $\geq 650 \text{ kg/m}^3$
8	Nail min. 16GA x 40 mm or screw $\varnothing 3.5 \times 40 \text{ mm}$ (20-40 mm from the corner and every 200 mm)
9	Intumescent tape KERAFIX® FXL 200 25 x 2 mm
10	Setting block 5 mm
11	Laminated or solid timber profile $\geq 650 \text{ kg/m}^3$

Allowed supported construction

Rigid supporting construction min. 600 kg/m^3 ; min. 150 mm thickness

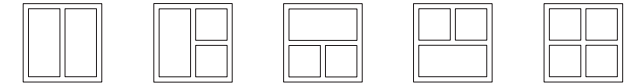
POLFLAM EI 15

[mm]



POLFLAM fire-resistant glass in timber systems

POLFLAM EI 15 (16 mm)	
Partition wall	
max. glass dimensions	1500 mm x 3000 mm ($A_{max} = 4.5 \text{ m}^2$) - portrait format
	2310 mm x 1500 mm ($A_{max} = 3.47 \text{ m}^2$) - landscape format
Reference document: Classification report 1766-1/C/2022/K/1	

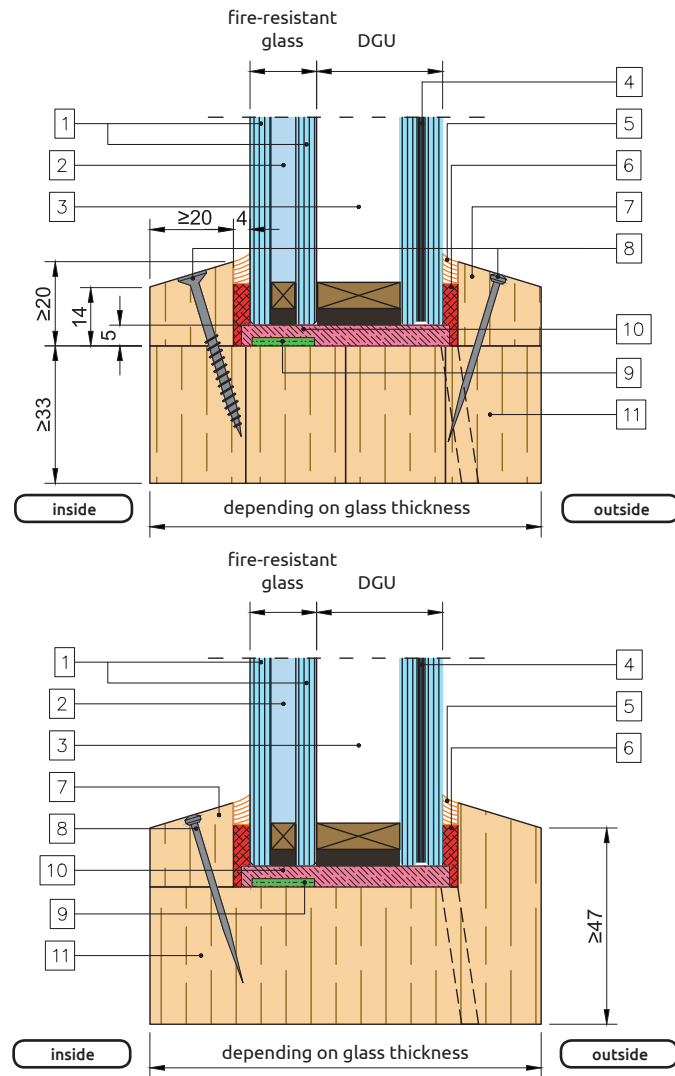


1	Thermally toughened glass $\geq 5 \text{ mm}$ thickness Thermally toughened patterned glass $\geq 6 \text{ mm}$ thickness (individual panes can be tinted, coated, surface treated)
2	Hydrogel interlayer $\geq 6 \text{ mm}$ thickness
5	Silicone DOWSIL™ 791
6	Ceramic tape KERAFIX® 2000 15 x 4 mm
7	Glazing bead $\geq 20 \text{ mm} \times 20/14 \text{ mm}$, timber $\geq 560 \text{ kg/m}^3$
8	Nail min. 16GA x 40 mm or screw $\text{Ø}3.5 \times 40 \text{ mm}$ (20-40 mm from the corner and every 200 mm)
9	Intumescent tape KERAFIX® FXL 200 20 x 2 mm
10	Setting block 5 mm
11	Laminated or solid timber $\geq 560 \text{ kg/m}^3$

Allowed supported construction	
Rigid supporting construction min. 600 kg/m^3 ; min. 115 mm thickness	

POLFLAM EI 15 DGU

[mm]



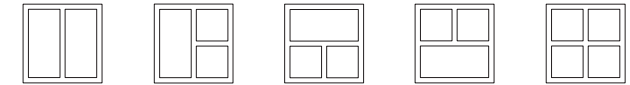
POLFLAM fire-resistant glass in timber systems

POLFLAM EI 15 (16/18* mm) DGU

Partition wall

max. glass dimensions	1800 mm x 3600 mm ($A_{\max} = 5.45 \text{ m}^2$) - portrait format
	2772 mm x 1800 mm ($A_{\max} = 4.20 \text{ m}^2$) - landscape format

Reference document: Classification report 1766-1/C/2022/K/1



1*	Thermally toughened glass ≥ 5 mm thickness Thermally toughened patterned glass ≥ 6 mm thickness (individual panes can be tinted, coated, surface treated)
2	Hydrogel interlayer ≥ 6 mm thickness
3	Spacer 8–20 mm thickness
4	Glass ≥ 4 mm thickness: - float glass; - thermally toughened safety glass; - laminated safety glass; (individual panes can be tinted, coated or surface treated)
5	Silicone DOWSIL™ 791
6	Ceramic tape KERAFIX® 2000 15 x 4 mm
7	Glazing bead ≥ 20 mm x 20/14 mm, timber $\geq 560 \text{ kg/m}^3$
8	Nail min. 16GA x 40 mm or screw $\varnothing 3.5$ x 40 mm (20-40 mm from the corner and every 200 mm)
9	Intumescent tape KERAFIX® FXL 200 20 x 2 mm
10	Setting block 5 mm
11	Laminated or solid timber $\geq 560 \text{ kg/m}^3$

Allowed supported construction

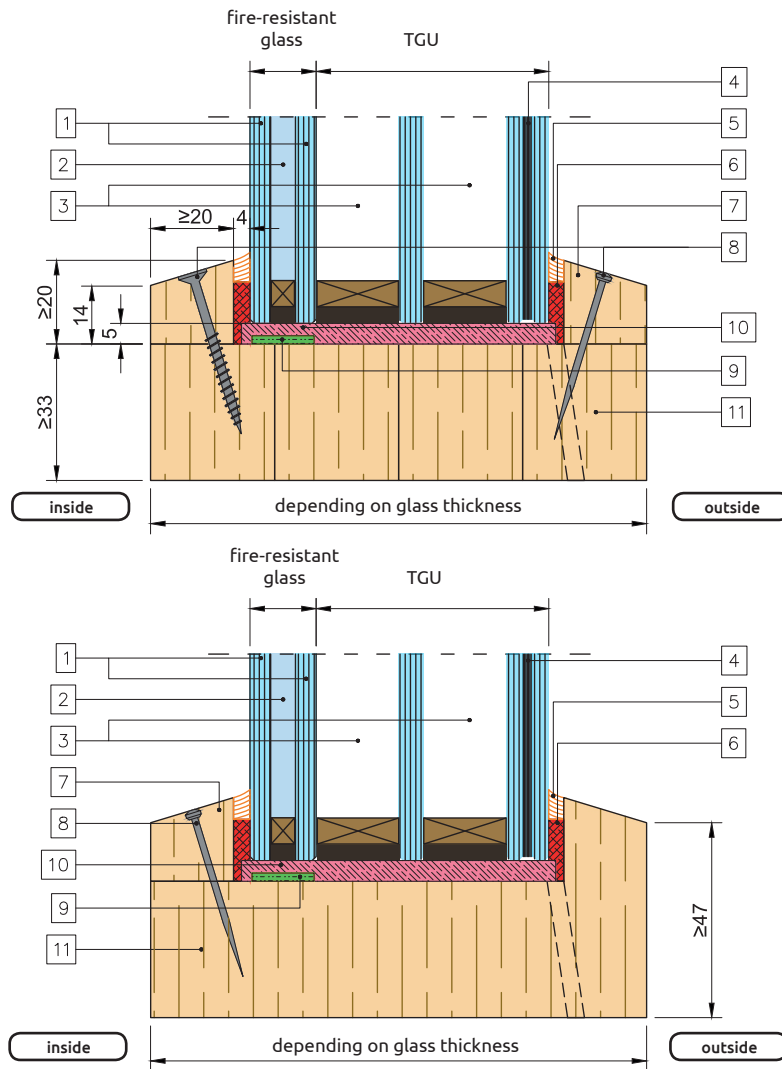
Rigid supporting construction min. 600 kg/m^3 ; min. 115 mm thickness

* For all glass dimensions $>1500 \text{ mm} \times 3000 \text{ mm}$. Thickness of individual pane (1) will be increased to minimum 6 mm (nominal thickness 18 mm)

POLFLAM EI 15 TGU

POLFLAM fire-resistant glass in timber systems

[mm]



POLFLAM EI 15 (16/18* mm) TGU

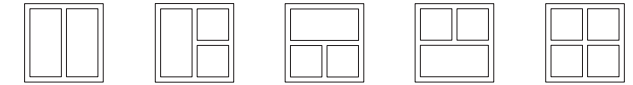
Partition wall

max. glass dimensions

1800 mm x 3600 mm ($A_{\max} = 5.45 \text{ m}^2$) - portrait format

2772 mm x 1800 mm ($A_{\max} = 4.20 \text{ m}^2$) - landscape format

Reference document: Classification report 1766-1/C/2022/K/1



1*	Thermally toughened glass ≥ 5 mm thickness Thermally toughened patterned glass ≥ 6 mm thickness (individual panes can be tinted, coated, surface treated)
2	Hydrogel interlayer ≥ 6 mm thickness
3	Spacer 8–20 mm thickness
4	Glass ≥ 4 mm thickness: - float glass; - thermally toughened safety glass; - laminated safety glass; (individual panes can be tinted, coated or surface treated)
5	Silicone DOWSIL™ 791
6	Ceramic tape KERAFIX® 2000 15 x 4 mm
7	Glazing bead ≥ 20 mm x 20/14 mm, timber $\geq 560 \text{ kg/m}^3$
8	Nail min. 16GA x 40 mm or screw $\varnothing 3.5$ x 40 mm (20-40 mm from the corner and every 200 mm)
9	Intumescent tape KERAFIX® FXL 200 20 x 2 mm
10	Setting block 5 mm
11	Laminated or solid timber $\geq 560 \text{ kg/m}^3$

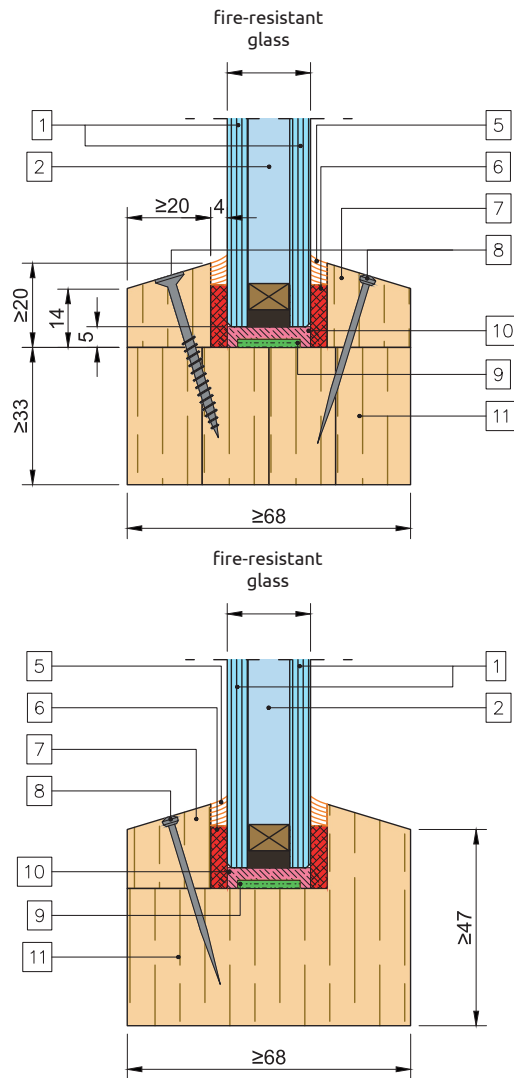
Allowed supported construction

Rigid supporting construction min. 600 kg/m^3 ; min. 115 mm thickness

* For all glass dimensions $>1500 \text{ mm} \times 3000 \text{ mm}$. Thickness of individual pane (1) will be increased to minimum 6 mm (nominal thickness 18 mm)

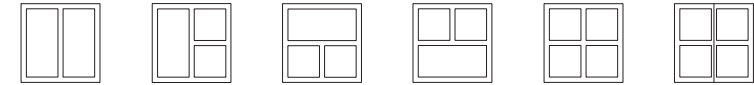
POLFLAM EI 30

[mm]



POLFLAM fire-resistant glass in timber systems

POLFLAM EI 30 (20/22* mm)	
Partition wall	
max. glass dimensions	1800 mm x 4200 mm ($A_{\max} = 6.35 \text{ m}^2$) - portrait format
	3600 mm x 1800 mm ($A_{\max} = 5.45 \text{ m}^2$) - landscape format
Reference document: Classification report K-6031-DMT-DO	



1*	Thermally toughened glass $\geq 5 \text{ mm}$ thickness Thermally toughened patterned glass $\geq 6 \text{ mm}$ thickness (individual panes can be tinted, coated, surface treated)
2	Hydrogel interlayer $\geq 10 \text{ mm}$ thickness
5	Silicone DOWSIL™ 791
6	Ceramic tape KERAFIX® 2000 15 x 4 mm
7	Glazing bead $\geq 20 \text{ mm} \times 20/14 \text{ mm}$, timber $\geq 560 \text{ kg/m}^3$
8	Nail min. 16GA x 40 mm or screw $\varnothing 3.5 \times 40 \text{ mm}$ (20-40 mm from the corner and every 200 mm)
9	Intumescent tape KERAFIX® FXL 200 20 x 2 mm
10	Setting block 5 mm
11	Laminated or solid timber $\geq 560 \text{ kg/m}^3$

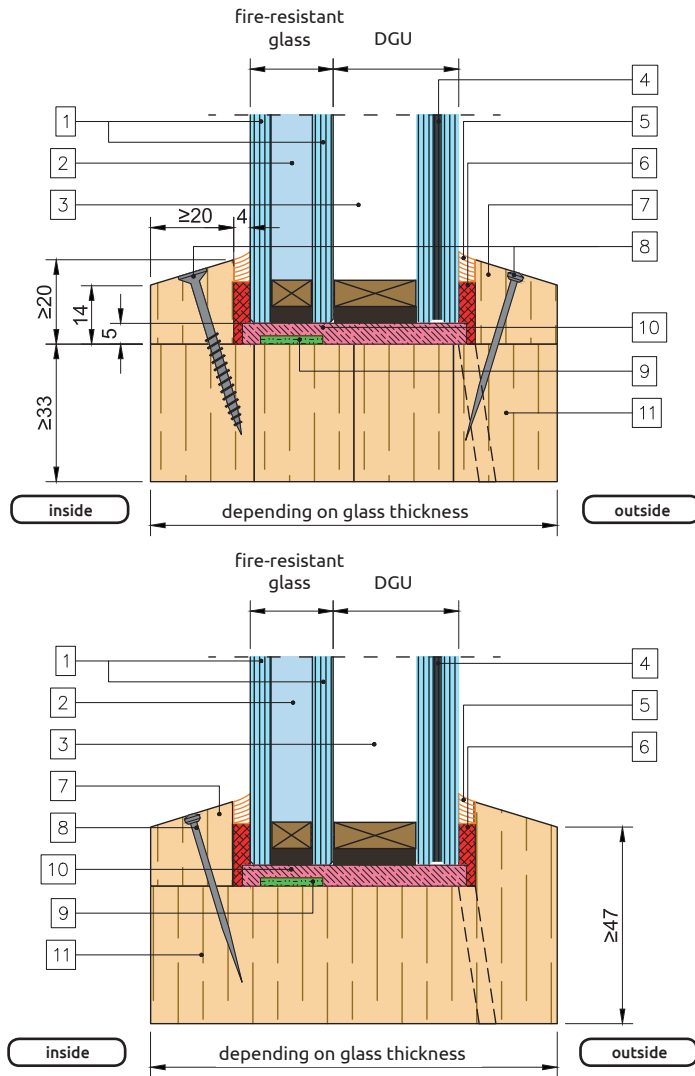
Allowed supported construction

Rigid supporting construction min. 650 kg/m^3 ; min. 150 mm thickness
flexible supporting construction EI 30; min. 100 mm thickness

* For all glass dimensions $> 1500 \text{ mm} \times 3000 \text{ mm}$. Thickness of individual pane (1) will be increased to minimum 6 mm (nominal thickness 22 mm)

POLFLAM EI 30 DGU

[mm]



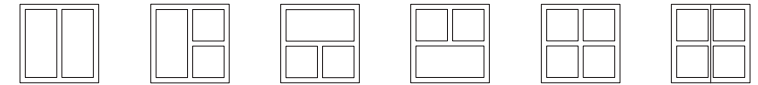
POLFLAM fire-resistant glass in timber systems

POLFLAM EI 30 (20/22* mm) DGU

Partition wall

max. glass dimensions	1800 mm x 4200 mm ($A_{\max} = 6.35 \text{ m}^2$) - portrait format
	3600 mm x 1800 mm ($A_{\max} = 5.45 \text{ m}^2$) - landscape format

Reference document: Classification report K-6031-DMT-DO



1*	Thermally toughened glass ≥ 5 mm thickness Thermally toughened patterned glass ≥ 6 mm thickness (individual panes can be tinted, coated, surface treated)
2	Hydrogel interlayer ≥ 10 mm thickness
3	Spacer 8–20 mm thickness
4	Glass ≥ 4 mm thickness: - float glass; - thermally toughened safety glass; - laminated safety glass; (individual panes can be tinted, coated or surface treated)
5	Silicone DOWSIL™ 791
6	Ceramic tape KERAFIX® 2000 15 x 4 mm
7	Glazing bead ≥ 20 mm x 20/14 mm, timber $\geq 560 \text{ kg/m}^3$
8	Nail min. 16GA x 40 mm or screw $\varnothing 3.5$ x 40 mm (20-40 mm from the corner and every 200 mm)
9	Intumescent tape KERAFIX® FXL 200 20 x 2 mm
10	Setting block 5 mm
11	Laminated or solid timber $\geq 560 \text{ kg/m}^3$

Allowed supported construction

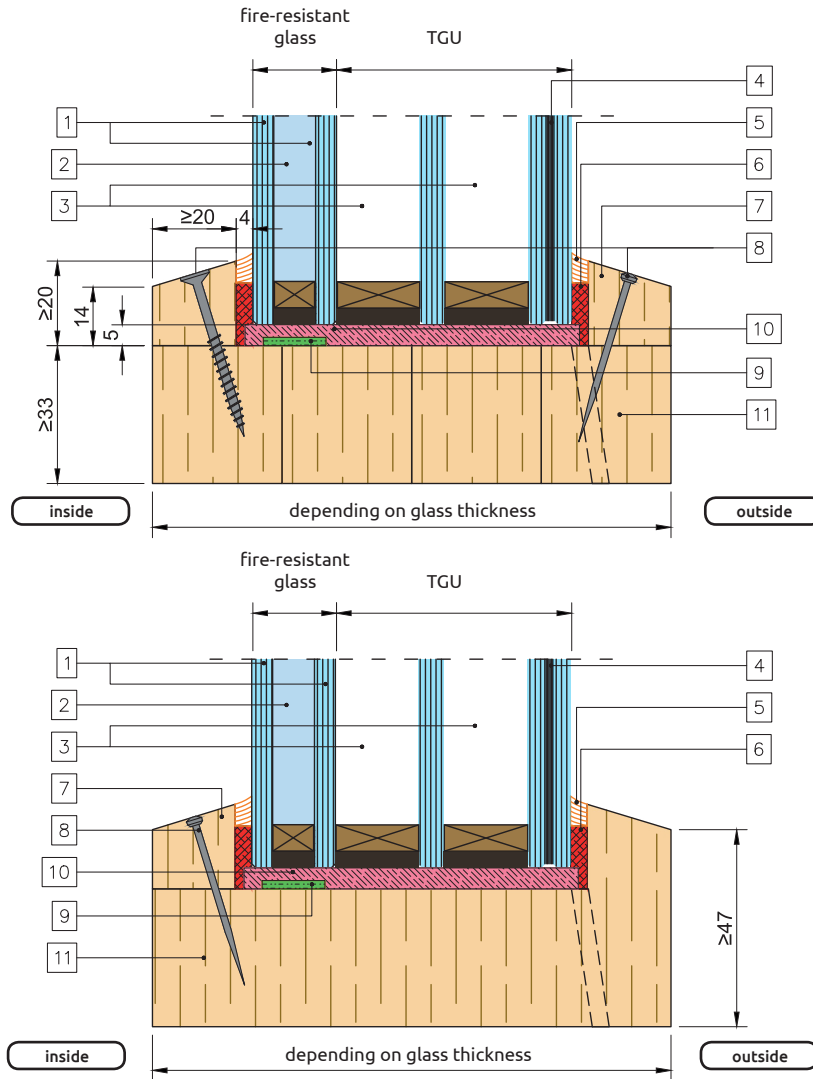
Rigid supporting construction min. 650 kg/m^3 ; min. 150 mm thickness
Flexible supporting construction EI 30; min. 100 mm thickness

* For all glass dimensions $>1500 \text{ mm} \times 3000 \text{ mm}$. Thickness of individual pane (1) will be increased to minimum 6 mm (nominal thickness 22 mm)

POLFLAM EI 30 TGU

POLFLAM fire-resistant glass in timber systems

[mm]



POLFLAM EI 30 (20/22* mm) TGU

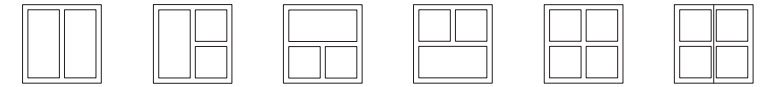
Partition wall

max. glass dimensions

1800 mm x 4200 mm ($A_{max} = 6.35 \text{ m}^2$) - portrait format

3600 mm x 1800 mm ($A_{max} = 5.45 \text{ m}^2$) - landscape format

Reference document: Classification report K-6031-DMT-DO



1*	Thermally toughened glass ≥ 5 mm thickness Thermally toughened patterned glass ≥ 6 mm thickness (individual panes can be tinted, coated, surface treated)
2	Hydrogel interlayer ≥ 10 mm thickness
3	Spacer 8–20 mm thickness
4	Glass ≥ 4 mm thickness: - float glass; - thermally toughened safety glass; - laminated safety glass; (individual panes can be tinted, coated or surface treated)
5	Silicone DOWSIL™ 791
6	Ceramic tape KERAFIX® 2000 15 x 4 mm
7	Glazing bead ≥ 20 mm x 20/14 mm, timber $\geq 560 \text{ kg/m}^3$
8	Nail min. 16GA x 40 mm or screw $\varnothing 3.5$ x 40 mm (20-40 mm from the corner and every 200 mm)
9	Intumescent tape KERAFIX® FXL 200 20 x 2 mm
10	Setting block 5 mm
11	Laminated or solid timber $\geq 560 \text{ kg/m}^3$

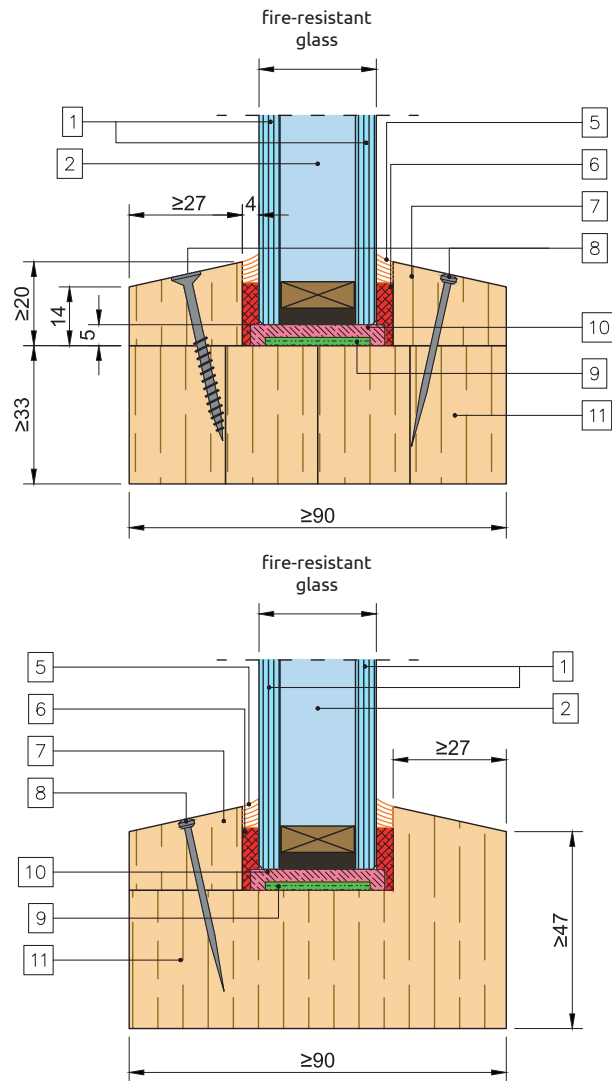
Allowed supported construction

Rigid supporting construction min. 650 kg/m^3 ; min. 150 mm thickness
Flexible supporting construction EI 30; min. 100 mm thickness

* For all glass dimensions $>1500 \text{ mm} \times 3000 \text{ mm}$. Thickness of individual pane (1) will be increased to minimum 6 mm (nominal thickness 22 mm)

POLFLAM EI 60

[mm]



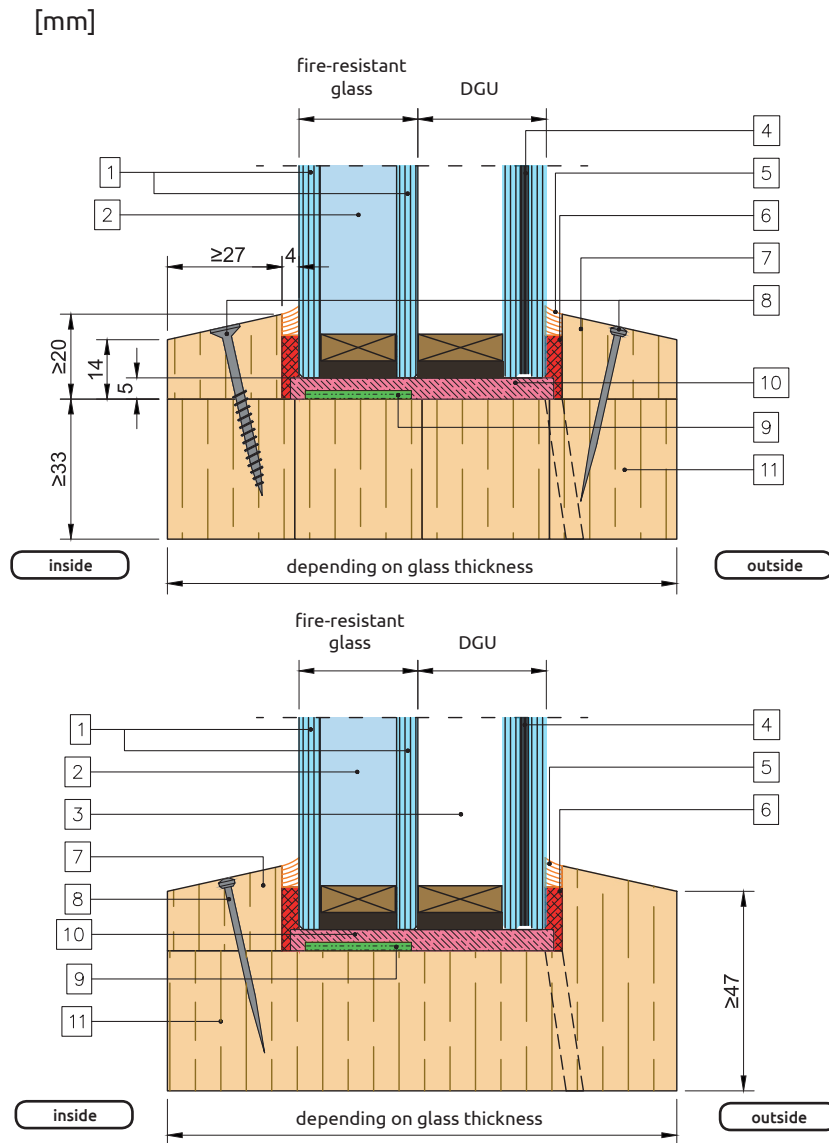
POLFLAM fire-resistant glass in timber systems

POLFLAM EI 60 (28/30* mm)	
Partition wall	
max. glass dimensions	1800 mm x 4200 mm ($A_{\max} = 6.35 \text{ m}^2$) - portrait format
	3600 mm x 1800 mm ($A_{\max} = 5.45 \text{ m}^2$) - landscape format
Reference document: Classification report K-6033-DMT-DO	
1*	Thermally toughened glass $\geq 5 \text{ mm}$ thickness Thermally toughened patterned glass $\geq 6 \text{ mm}$ thickness (individual panes can be tinted, coated, surface treated)
2	Hydrogel interlayer $\geq 18 \text{ mm}$ thickness
5	Silicone DOWSIL™ 791
6	Ceramic tape KERAFIX® 2000 15 x 4 mm
7	Glazing bead $\geq 27 \text{ mm} \times 20/14 \text{ mm}$, timber 650 kg/m^3
8	Nail min. 16GA x 40 mm or screw $\text{Ø}3.5 \times 40 \text{ mm}$ (20-40 mm from the corner and every 200 mm)
9	Intumescent tape KERAFIX® FXL 200 30 x 2 mm
10	Setting block 5 mm
11	Laminated or solid timber $\geq 650 \text{ kg/m}^3$
Allowed supported construction	
Rigid supporting construction min. 550 kg/m^3 ; min. 150 mm thickness Flexible supporting construction EI 60; min. 125 mm thickness	

* For all glass dimensions $>1500 \text{ mm} \times 3000 \text{ mm}$. Thickness of individual pane (1) will be increased to minimum 6 mm (nominal thickness 30 mm)

POLFLAM EI 60 DGU

POLFLAM fire-resistant glass in timber systems



POLFLAM EI 60 (28/30* mm) DGU

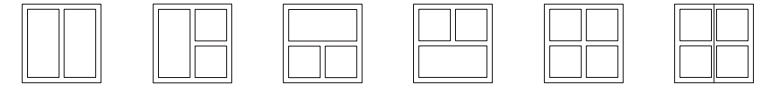
Partition wall

max. glass dimensions

1800 mm x 4200 mm ($A_{max} = 6.35 \text{ m}^2$) - portrait format

3600 mm x 1800 mm ($A_{max} = 5.45 \text{ m}^2$) - landscape format

Reference document: Classification report K-6033-DMT-DO



1*	Thermally toughened glass ≥ 5 mm thickness Thermally toughened patterned glass ≥ 6 mm thickness (individual panes can be tinted, coated, surface treated)
2	Hydrogel interlayer ≥ 18 mm thickness
3	Spacer 8–20 mm thickness
4	Glass ≥ 4 mm thickness: - float glass; - thermally toughened safety glass; - laminated safety glass; (individual panes can be tinted, coated or surface treated)
5	Silicone DOWSIL™ 791
6	Ceramic tape KERAFIX® 2000 15 x 4 mm
7	Glazing bead ≥ 27 mm x 20/14 mm, timber $\geq 650 \text{ kg/m}^3$
8	Nail min. 16GA x 40 mm or screw $\varnothing 3.5$ x 40 mm (20-40 mm from the corner and every 200 mm)
9	Intumescent tape KERAFIX® FXL 200 30 x 2 mm
10	Setting block 5 mm
11	Laminated or solid timber $\geq 650 \text{ kg/m}^3$

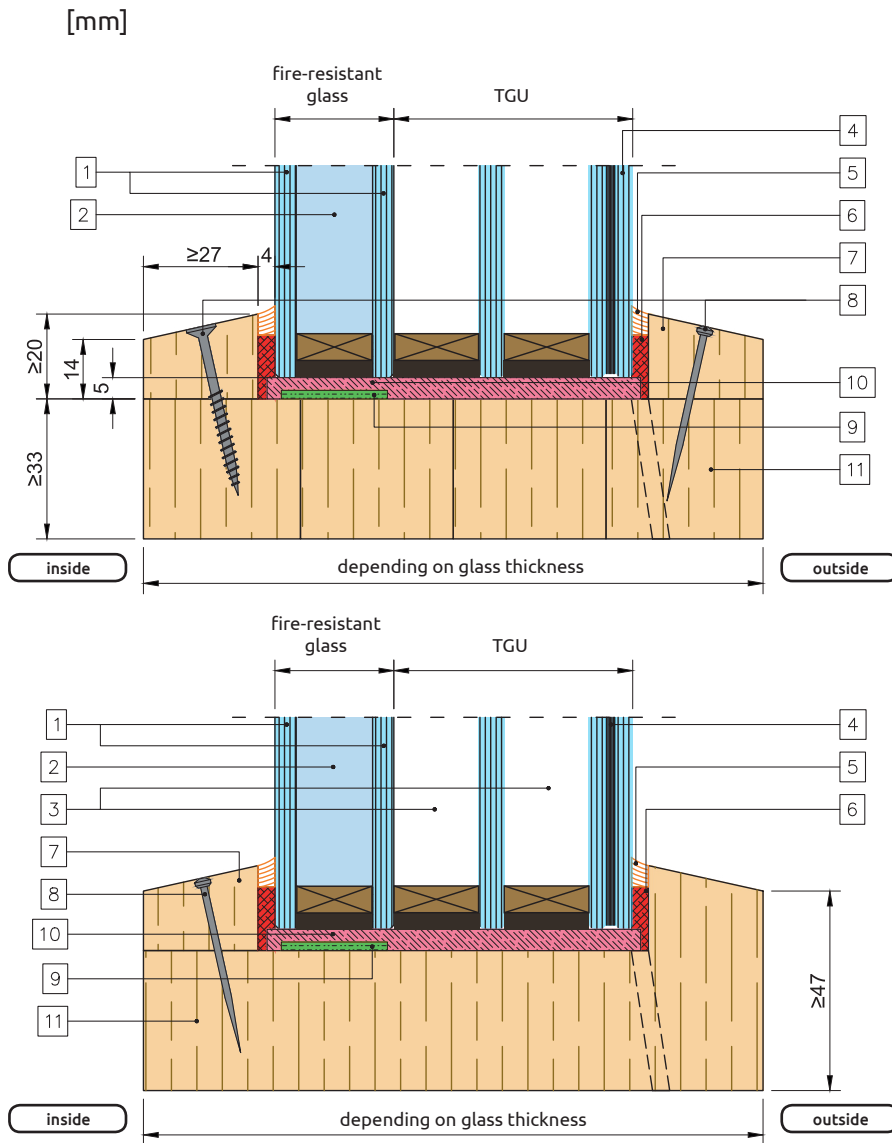
Allowed supported construction

Rigid supporting construction min. 550 kg/m^3 ; min. 150 mm thickness
Flexible supporting construction EI 60; min. 125 mm thickness

* For all glass dimensions $>1500 \text{ mm} \times 3000 \text{ mm}$. Thickness of individual pane (1) will be increased to minimum 6 mm (nominal thickness 30 mm)

POLFLAM EI 60 TGU

POLFLAM fire-resistant glass in timber systems

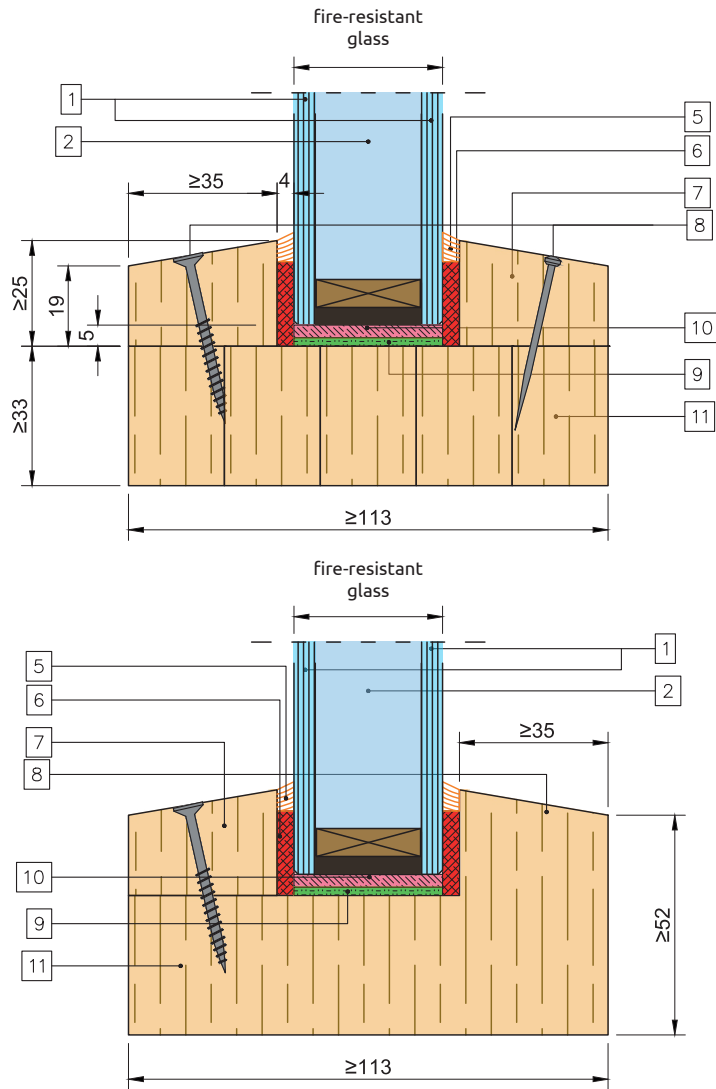


POLFLAM EI 60 (28/30* mm) TGU	
Partition wall	
max. glass dimensions	1800 mm x 4200 mm ($A_{max} = 6.35 \text{ m}^2$) - portrait format
	3600 mm x 1800 mm ($A_{max} = 5.45 \text{ m}^2$) - landscape format
Reference document: Classification report K-6033-DMT-DO	
1*	Thermally toughened glass ≥ 5 mm thickness Thermally toughened patterned glass ≥ 6 mm thickness (individual panes can be tinted, coated, surface treated)
2	Hydrogel interlayer ≥ 18 mm thickness
3	Spacer 8–20 mm thickness
4	Glass ≥ 4 mm thickness: - float glass; - thermally toughened safety glass; - laminated safety glass; (individual panes can be tinted, coated or surface treated)
5	Silicone DOWSIL™ 791
6	Ceramic tape KERAFIX® 2000 15 x 4 mm
7	Glazing bead ≥ 27 mm x 20/14 mm, timber $\geq 650 \text{ kg/m}^3$
8	Nail min. 16GA x 40 mm or screw $\varnothing 3.5$ x 40 mm (20-40 mm from the corner and every 200 mm)
9	Intumescent tape KERAFIX® FXL 200 30 x 2 mm
10	Setting block 5 mm
11	Laminated or solid timber $\geq 650 \text{ kg/m}^3$
Allowed supported construction	
Rigid supporting construction min. 550 kg/m^3 ; min. 150 mm thickness Flexible supporting construction EI 60; min. 125 mm thickness	

* For all glass dimensions $>1500 \text{ mm} \times 3000 \text{ mm}$. Thickness of individual pane (1) will be increased to minimum 6 mm (nominal thickness 30 mm)

POLFLAM EI 90

[mm]



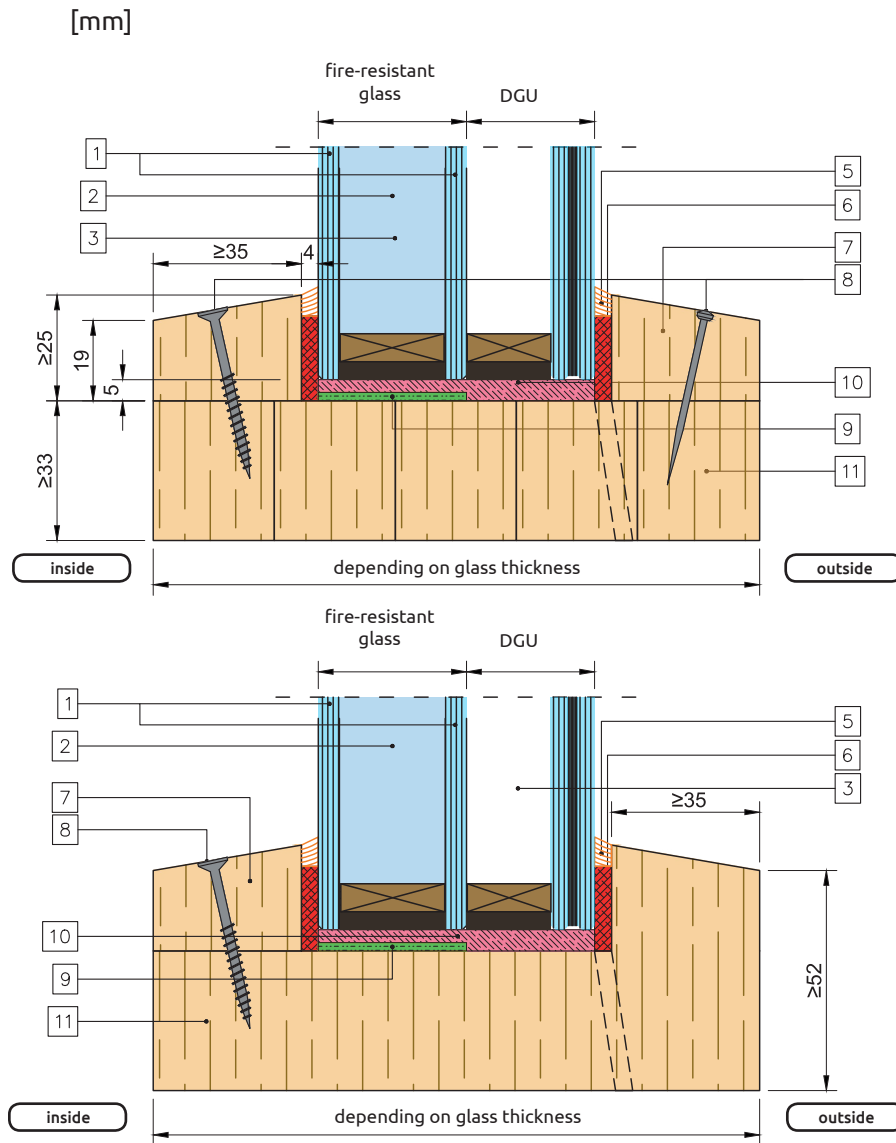
POLFLAM fire-resistant glass in timber systems

POLFLAM EI 90 (35/37* mm)	
Partition wall	
max. glass dimensions	2400 mm x 4200 mm ($A_{max} = 8.47 \text{ m}^2$) - portrait format
	3600 mm x 1800 mm ($A_{max} = 5.45 \text{ m}^2$) - landscape format
Reference document: Classification report K-6035-DMT-DO	
1*	Thermally toughened glass $\geq 5 \text{ mm}$ thickness Thermally toughened patterned glass $\geq 6 \text{ mm}$ thickness (individual panes can be tinted, coated, surface treated)
2	Hydrogel interlayer $\geq 25 \text{ mm}$ thickness
5	Silicone DOWSIL™ 791
6	Ceramic tape KERAFIX® 2000 20 x 4 mm
7	Glazing bead $\geq 35 \text{ mm} \times 25/19 \text{ mm}$, timber $\geq 650 \text{ kg/m}^3$
8	Nail min. 16GA x 50 mm or screw $\varnothing 3.5 \times 50 \text{ mm}$ (20-40 mm from the corner and every 150 mm)
9	Intumescent tape KERAFIX® FXL 200 35 x 2 mm
10	Setting block 5 mm
11	Laminated or solid timber $\geq 650 \text{ kg/m}^3$
Allowed supported construction	
Rigid supporting construction min. 650 kg/m^3 ; min. 180 mm thickness Flexible supporting construction EI 90; min. 125 mm thickness	

* For all glass dimensions $> 1500 \text{ mm} \times 3000 \text{ mm}$. Thickness of individual pane (1) will be increased to minimum 6 mm (nominal thickness 37 mm)

POLFLAM EI 90 DGU

POLFLAM fire-resistant glass in timber systems



POLFLAM EI 90 (35/37* mm) DGU

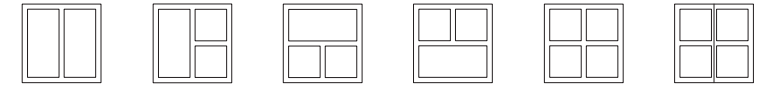
Partition wall

max. glass dimensions

1800 mm x 4200 mm ($A_{max} = 6.35 \text{ m}^2$) - portrait format

3600 mm x 1800 mm ($A_{max} = 5.45 \text{ m}^2$) - landscape format

Reference document: Classification report K-6035-DMT-DO



1*	Thermally toughened glass ≥ 5 mm thickness Thermally toughened patterned glass ≥ 6 mm thickness (individual panes can be tinted, coated, surface treated)
2	Hydrogel interlayer ≥ 25 mm thickness
3	Spacer 8–20 mm thickness
4	Glass ≥ 4 mm thickness: - float glass; - thermally toughened safety glass; - laminated safety glass; (individual panes can be tinted, coated or surface treated)
5	Silicone DOWSIL™ 791
6	Ceramic tape KERAFIX® 2000 20 x 4 mm
7	Glazing bead ≥ 35 mm x 25/19 mm, timber $\geq 650 \text{ kg/m}^3$
8	Nail min. 16GA x 50 mm or screw $\varnothing 3.5$ x 50 mm (20-40 mm from the corner and every 150 mm)
9	Intumescent tape KERAFIX® FXL 200 35 x 2 mm
10	Setting block 5 mm
11	Laminated or solid timber $\geq 650 \text{ kg/m}^3$

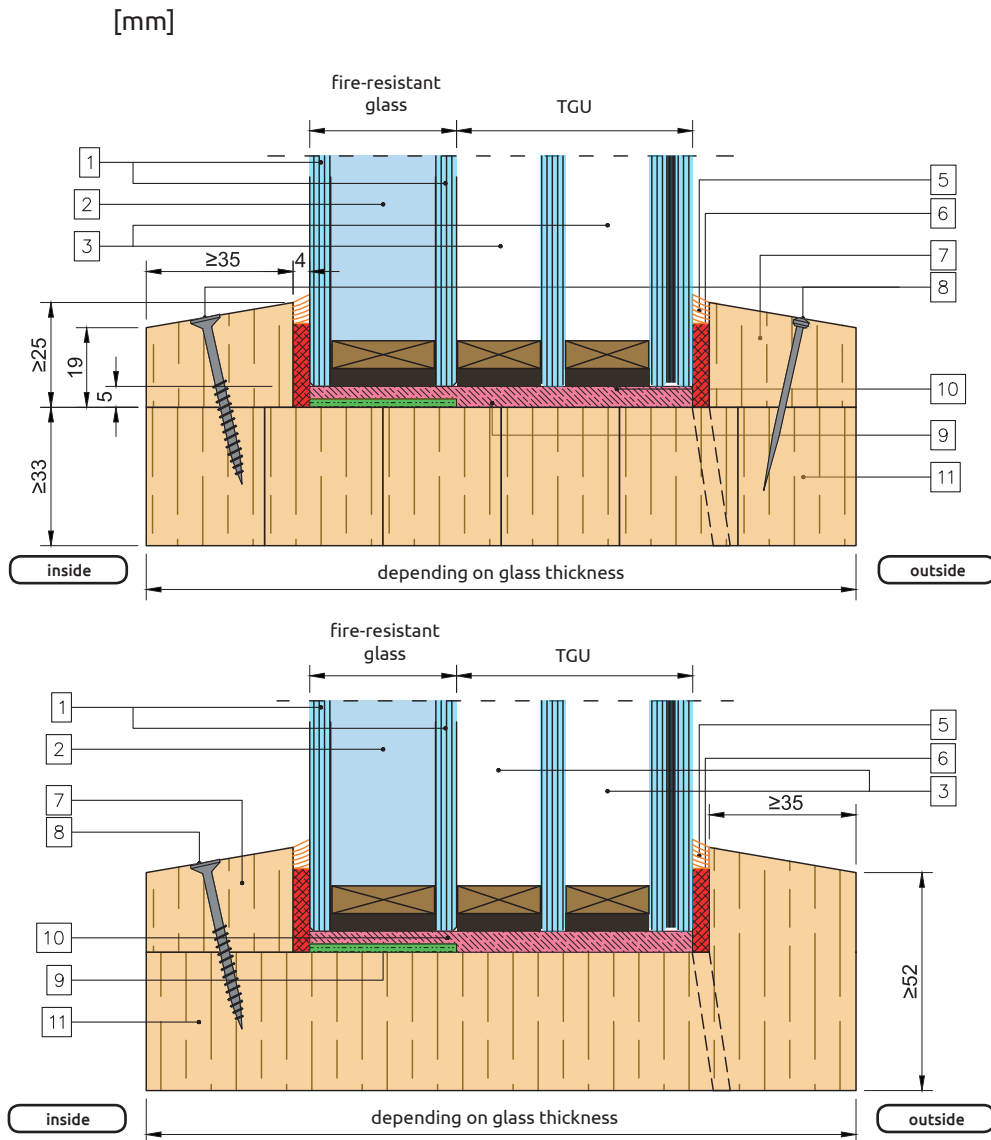
Allowed supported construction

Rigid supporting construction min. 650 kg/m^3 ; min. 180 mm thickness
Flexible supporting construction EI 90; min. 125 mm thickness

* For all glass dimensions $>1500 \text{ mm} \times 3000 \text{ mm}$. Thickness of individual pane (1) will be increased to minimum 6 mm (nominal thickness 37 mm)

POLFLAM EI 90 TGU

POLFLAM fire-resistant glass in timber systems



POLFLAM EI 90 (35/37* mm) TGU

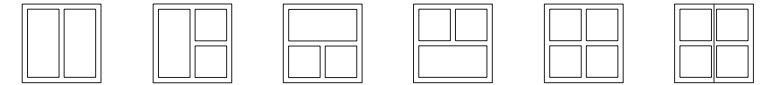
Partition wall

max. glass dimensions

1800 mm x 4200 mm ($A_{max} = 6.35 \text{ m}^2$) - portrait format

3600 mm x 1800 mm ($A_{max} = 5.45 \text{ m}^2$) - landscape format

Reference document: Classification report K-6035-DMT-DO



1*	Thermally toughened glass ≥ 5 mm thickness Thermally toughened patterned glass ≥ 6 mm thickness (individual panes can be tinted, coated, surface treated)
2	Hydrogel interlayer ≥ 25 mm thickness
3	Spacer 8–20 mm thickness
4	Glass ≥ 4 mm thickness: - float glass; - thermally toughened safety glass; - laminated safety glass; (individual panes can be tinted, coated or surface treated)
5	Silicone DOWSIL™ 791
6	Ceramic tape KERAFIX® 2000 20 x 4 mm
7	Glazing bead ≥ 35 mm x 25/19 mm, timber $\geq 650 \text{ kg/m}^3$
8	Nail min. 16GA x 50 mm or screw $\varnothing 3.5$ x 50 mm (20-40 mm from the corner and every 150 mm)
9	Intumescent tape KERAFIX® FXL 200 35 x 2 mm
10	Setting block 5 mm
11	Laminated or solid timber $\geq 650 \text{ kg/m}^3$

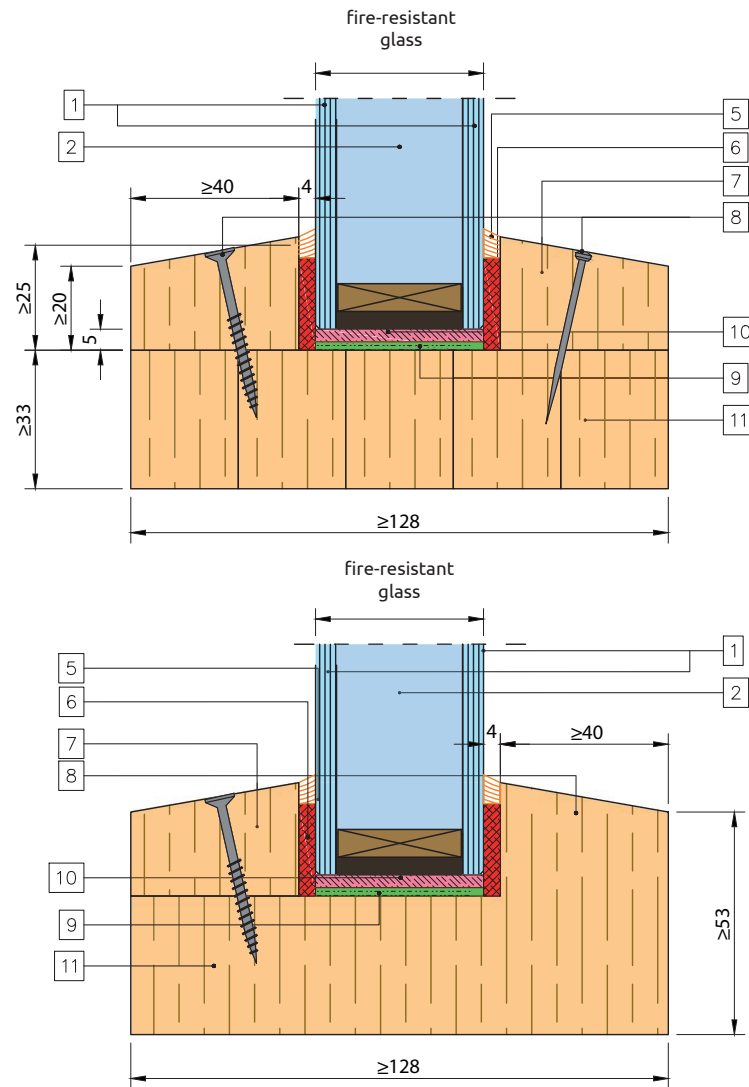
Allowed supported construction

Rigid supporting construction min. 650 kg/m^3 ; min. 180 mm thickness
Flexible supporting construction EI 90; min. 125 mm thickness

* For all glass dimensions $>1500 \text{ mm} \times 3000 \text{ mm}$. Thickness of individual pane (1) will be increased to minimum 6 mm (nominal thickness 37 mm)

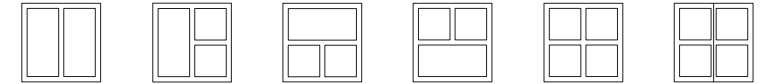
POLFLAM EI 120

[mm]



POLFLAM fire-resistant glass in timber systems

POLFLAM EI 120 (40/42* mm)	
Partition wall	
max. glass dimensions	1500 mm x 3500 mm ($A_{\max} = 5.25 \text{ m}^2$) - portrait format
	3000 mm x 1500 mm ($A_{\max} = 4.50 \text{ m}^2$) - landscape format
Reference document: Classification report K-6040-DMT-DO	



1*	Thermally toughened glass $\geq 5 \text{ mm}$ thickness Thermally toughened patterned glass $\geq 6 \text{ mm}$ thickness (individual panes can be tinted, coated, surface treated)
2	Hydrogel interlayer $\geq 30 \text{ mm}$ thickness
5	Silicone DOWSIL™ 791
6	Ceramic tape KERAFIX 2000 20 x 4mm
7	Glazing bead $\geq 40 \text{ mm} \times 27/20 \text{ mm}$, timber $\geq 650 \text{ kg/m}^3$
8	Nail min. 16GA x 50 mm or screw $\text{Ø}3.5 \times 50 \text{ mm}$ (20-40 mm from the corner and every 150 mm)
9	Intumescent tape KERAFIX® FXL 200 40 x 2 mm
10	Setting block 5 mm
11	Laminated or solid timber $\geq 650 \text{ kg/m}^3$

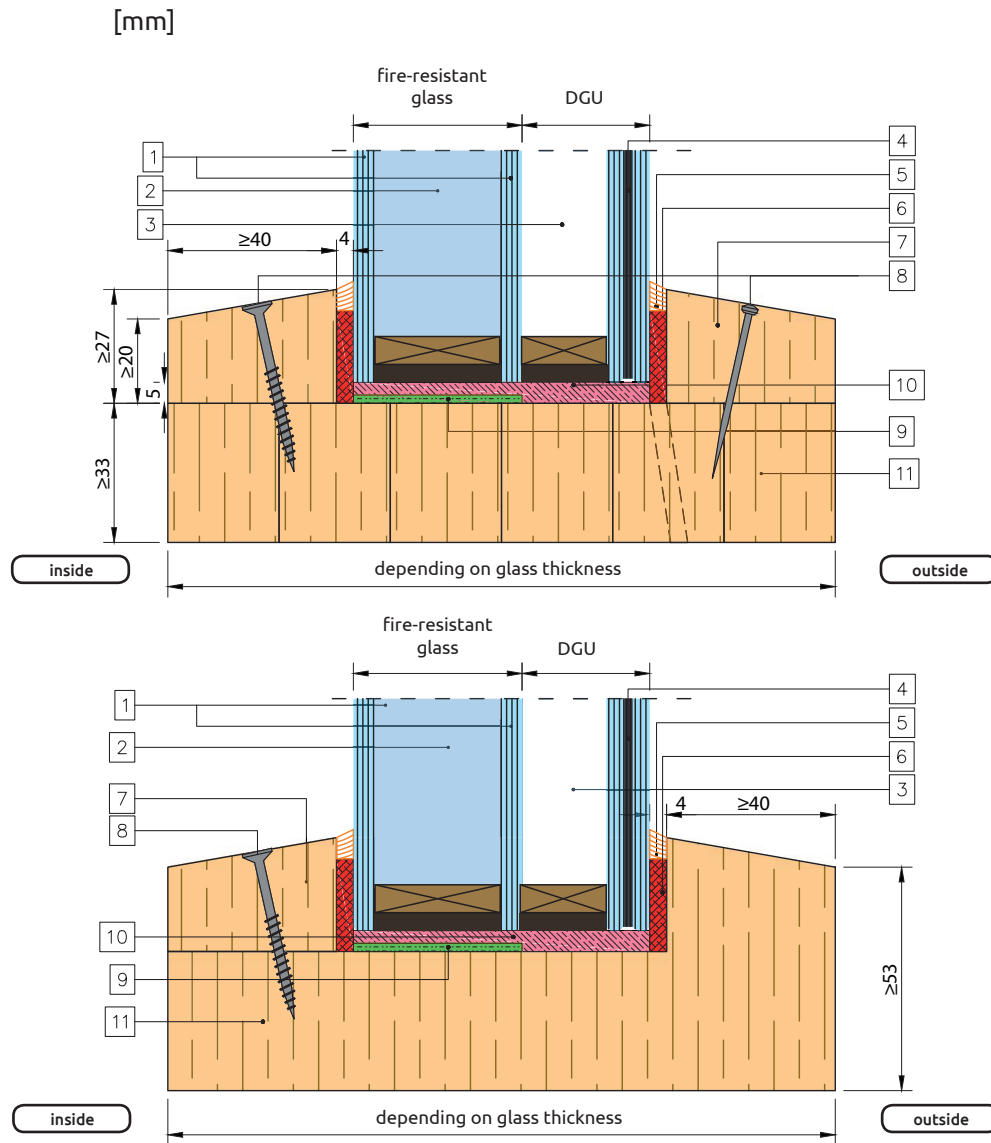
Allowed supported construction

Rigid supporting construction min. 650 kg/m^3 ; min. 240 mm thickness
Flexible supporting construction EI 120; min. 150 mm thickness

* For all glass dimensions $>1500 \text{ mm} \times 3000 \text{ mm}$. Thickness of individual pane (1) will be increased to minimum 6 mm (nominal thickness 42 mm)

POLFLAM EI 120 DGU

POLFLAM fire-resistant glass in timber systems



POLFLAM EI 120 (40/42* mm) DGU

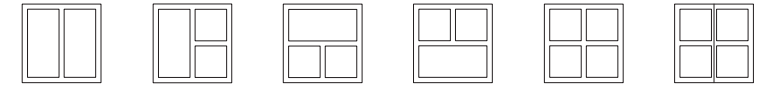
Partition wall

max. glass dimensions

1500 mm x 3500 mm ($A_{max} = 5.25 \text{ m}^2$) - portrait format

3000 mm x 1500 mm ($A_{max} = 4.50 \text{ m}^2$) - landscape format

Reference document: Classification report K-6040-DMT-DO



1*	Thermally toughened glass ≥ 5 mm thickness Thermally toughened patterned glass ≥ 6 mm thickness (individual panes can be tinted, coated, surface treated)
2	Hydrogel interlayer ≥ 30 mm thickness
3	Spacer 8–20 mm thickness
4	Glass ≥ 4 mm thickness: - float glass; - thermally toughened safety glass; - laminated safety glass; (individual panes can be tinted, coated or surface treated)
5	Silicone DOWSIL™ 791
6	Ceramic tape KERAFIX® 2000 20 x 4 mm
7	Glazing bead ≥ 40 mm x 27/20 mm, timber $\geq 650 \text{ kg/m}^3$
8	Nail min. 16GA x 50 mm or screw $\varnothing 3.5$ x 50 mm (20-40 mm from the corner and every 150 mm)
9	Intumescent tape KERAFIX® FXL 200 40 x 2 mm
10	Setting block 5 mm
11	Laminated or solid timber $\geq 650 \text{ kg/m}^3$

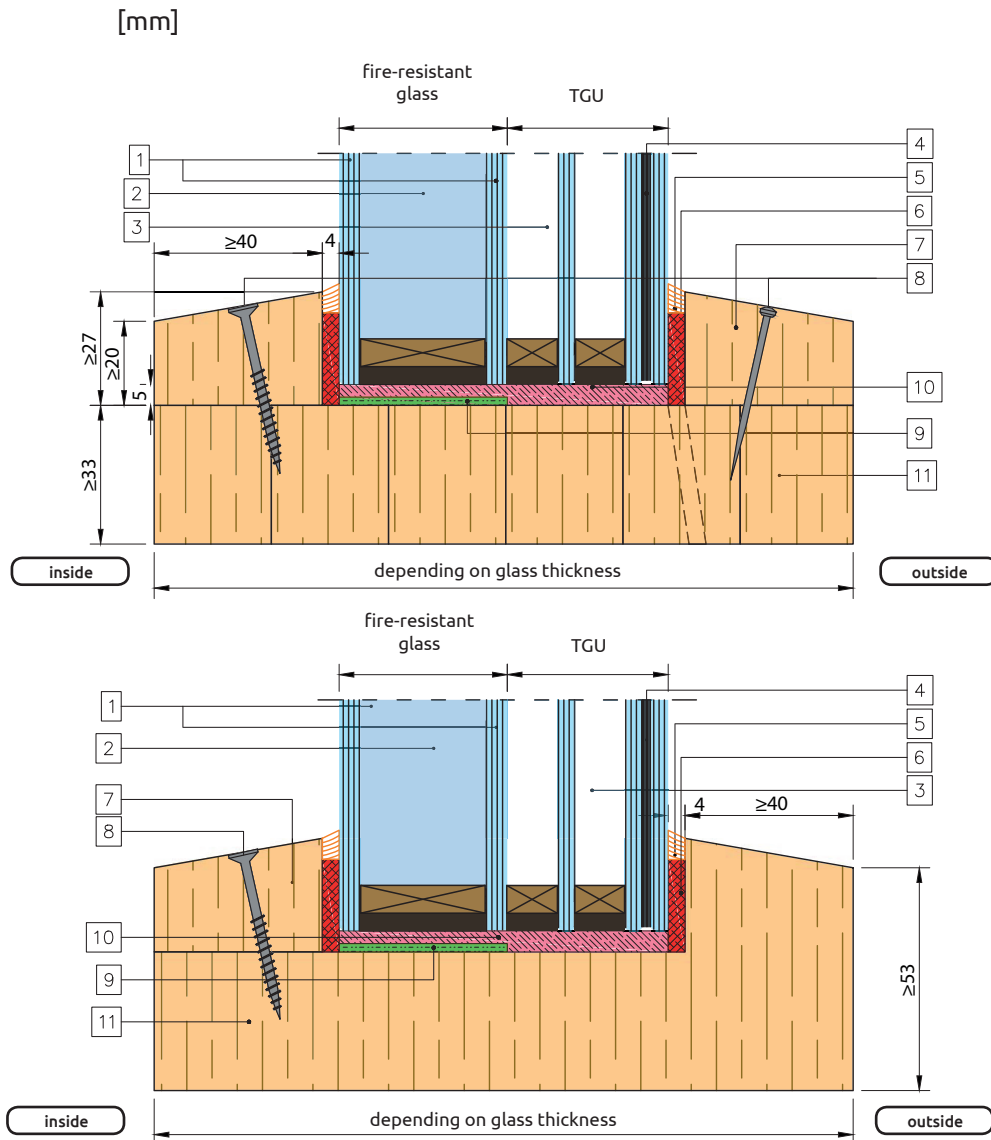
Allowed supported construction

Rigid supporting construction min. 650 kg/m^3 ; min. 240 mm thickness
Flexible supporting construction EI 120; min. 150 mm thickness

* For all glass dimensions $>1500 \text{ mm} \times 3000 \text{ mm}$. Thickness of individual pane (1) will be increased to minimum 6 mm (nominal thickness 42 mm)

POLFLAM EI 120 TGU

POLFLAM fire-resistant glass in timber systems



POLFLAM EI 120 (40/42* mm) TGU

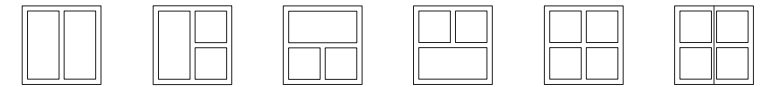
Partition wall

max. glass dimensions

1500 mm x 3500 mm ($A_{max} = 5.25 \text{ m}^2$) - portrait format

3000 mm x 1500 mm ($A_{max} = 4.50 \text{ m}^2$) - landscape format

Reference document: Classification report K-6040-DMT-DO



1*	Thermally toughened glass ≥ 5 mm thickness Thermally toughened patterned glass ≥ 6 mm thickness (individual panes can be tinted, coated, surface treated)
2	Hydrogel interlayer ≥ 30 mm thickness
3	Spacer 8–20 mm thickness
4	Glass ≥ 4 mm thickness: - float glass; - thermally toughened safety glass; - laminated safety glass; (individual panes can be tinted, coated or surface treated)
5	Silicone DOWSIL™ 791
6	Ceramic tape KERAFIX® 2000 20 x 4 mm
7	Glazing bead ≥ 40 mm x 27/20 mm, timber $\geq 650 \text{ kg/m}^3$
8	Nail min. 16GA x 50 mm or screw $\varnothing 3.5$ x 50 mm (20-40 mm from the corner and every 150 mm)
9	Intumescent tape KERAFIX® FXL 200 40 x 2 mm
10	Setting block 5 mm
11	Laminated or solid timber $\geq 650 \text{ kg/m}^3$

Allowed supported construction

Rigid supporting construction min. 650 kg/m^3 ; min. 240 mm thickness
Flexible supporting construction EI 120; min. 150 mm thickness

* For all glass dimensions $>1500 \text{ mm} \times 3000 \text{ mm}$. Thickness of individual pane (1) will be increased to minimum 6 mm (nominal thickness 42 mm)



POLFLAM BR fire-resistant glass for frameless applications

POLFLAM BR glass allows you to create a transparent partition without vertical frames (butt-joint glazing) with a height of up to 4200 mm and unlimited length.

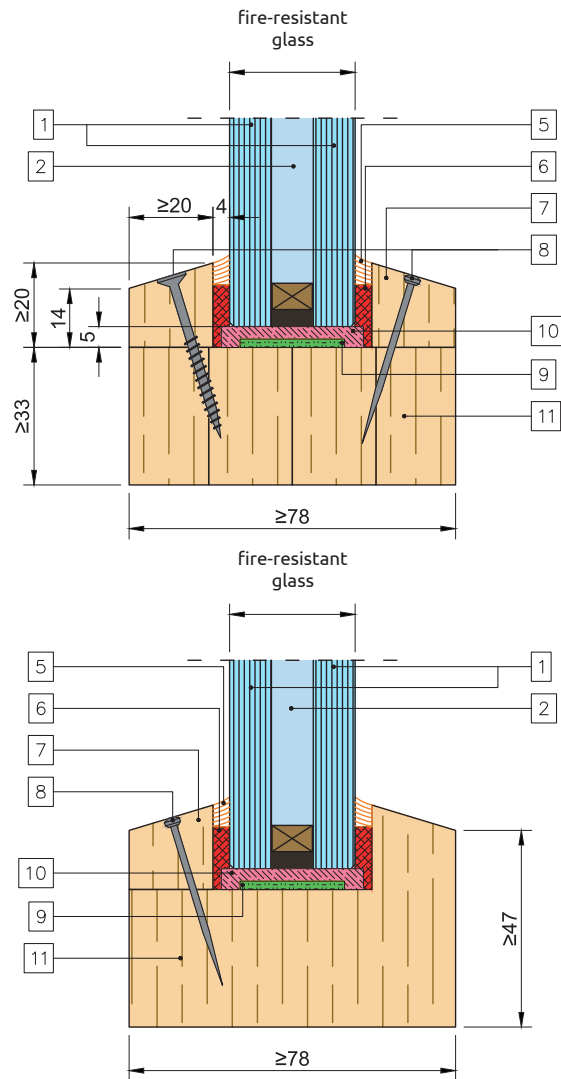
The glazed partition without vertical frames between the glass panes can be also combined with glazed fire-resistant doors.

All vertical edges of POLFLAM BR fire-resistant glass are specially grinded and painted with a high-quality black paint faced to the inside of the glass (width of edge paint 14 mm).

POLFLAM BR	EI 30	EI 60	EI 60	EI 90	EI 120
Nominal thickness [mm]	30	35	38	45	50
Weight [kg/m ²]	65	69	75	82	90
Light transmittance τ_v [%]	84	84	84	84	84
Sound reduction index R_w [dB]	43	44	44	47	46
Pendulum body impact resistance	1(B)1 (according to EN 12600)				
Reaction to fire	B-s1, d0				
Max. temperature range	-40 °C / +50 °C				
Curved glass	Yes				

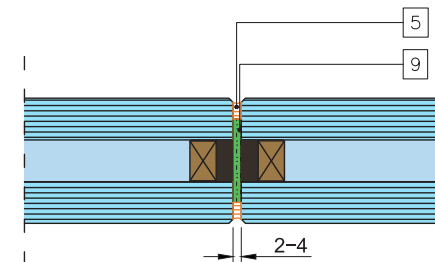
POLFLAM BR EI 30

[mm]



POLFLAM BR fire-resistant glass in timber systems

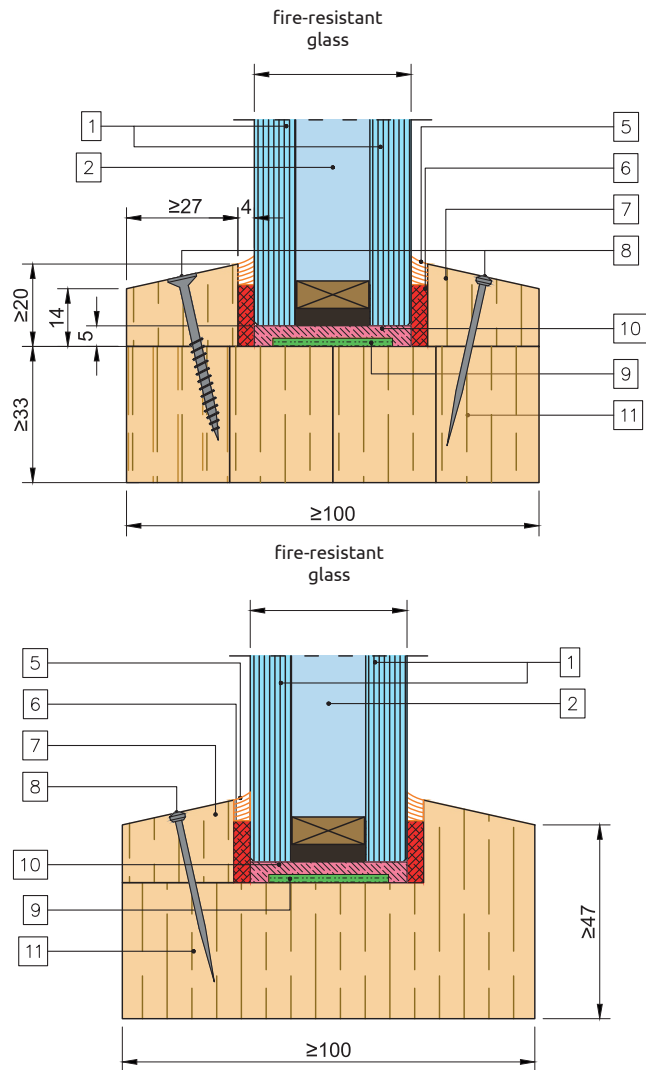
POLFLAM BR EI 30 (30 mm)	
Partition wall	
max. glass dimensions	2400 mm x 4200 mm ($A_{max} = 8.47 \text{ m}^2$) - portrait format
Reference document: Classification report K-6031-DMT-DO	
1	Thermally toughened glass $\geq 10 \text{ mm}$ thickness (individual panes can be tinted, coated or surface treated)
2	Hydrogel interlayer $\geq 10 \text{ mm}$ thickness
5	Silicone DOWSIL™ 791
6	Ceramic tape KERAFIX® 2000 15 x 4 mm
7	Glazing bead $\geq 20 \text{ mm} \times 20/14 \text{ mm}$, timber $\geq 560 \text{ kg/m}^3$
8	Nail min. 16GA x 40 mm or screw $\varnothing 3.5 \times 40 \text{ mm}$ (20-40 mm from the corner and every 200 mm)
9	Intumescent tape KERAFIX® FXL 200 20 x 2 mm
10	Setting block 5 mm
11	Laminated or solid timber $\geq 560 \text{ kg/m}^3$
Allowed supported construction	
Rigid supporting construction min. 650 kg/m^3 ; min. 150 mm thickness Flexible supporting construction EI 30; min. 125 mm thickness	



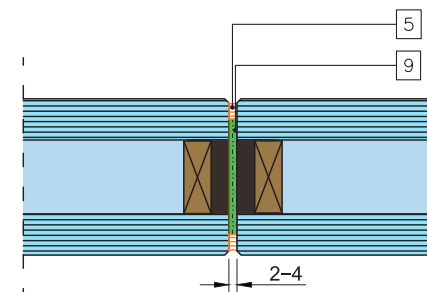
POLFLAM BR EI 60

POLFLAM BR fire-resistant glass in timber systems

[mm]



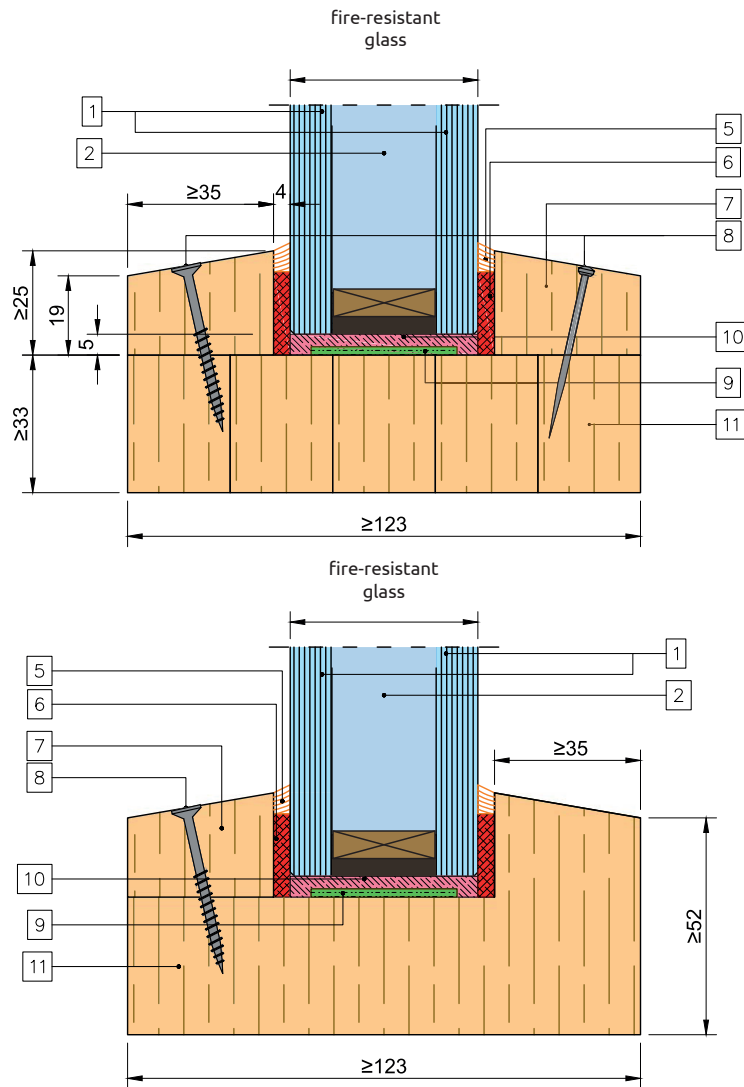
POLFLAM BR EI 60 (38 mm)	
Partition wall	
max. glass dimensions	2400 mm x 4200 mm ($A_{max} = 8.47 \text{ m}^2$) - portrait format
	-
Reference document: Classification report K-6033-DMT-DO	
1	Thermally toughened glass $\geq 10 \text{ mm}$ thickness (individual panes can be tinted, coated or surface treated)
2	Hydrogel interlayer $\geq 18 \text{ mm}$ thickness
5	Silicone DOWSIL™ 791
6	Ceramic tape KERAFIX® 2000 15 x 4 mm
7	Glazing bead $\geq 27 \text{ mm} \times 20/14 \text{ mm}$, timber $\geq 650 \text{ kg/m}^3$
8	Nail min. 16GA x 40 mm or screw $\text{Ø}3.5 \times 40 \text{ mm}$ (20-40 mm from the corner and every 200 mm)
9	Intumescent tape KERAFIX® FXL 200 30 x 2 mm
10	Setting block 5 mm
11	Laminated or solid timber profile $\geq 650 \text{ kg/m}^3$
Allowed supported construction	
Rigid supporting construction min. 550 kg/m^3 ; min. 150 mm thickness Flexible supporting construction EI 60; min. 125 mm thickness	



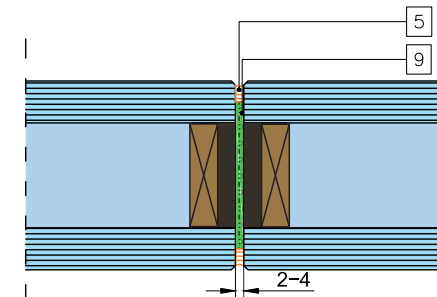
POLFLAM BR EI 90

POLFLAM BR fire-resistant glass in timber systems

[mm]



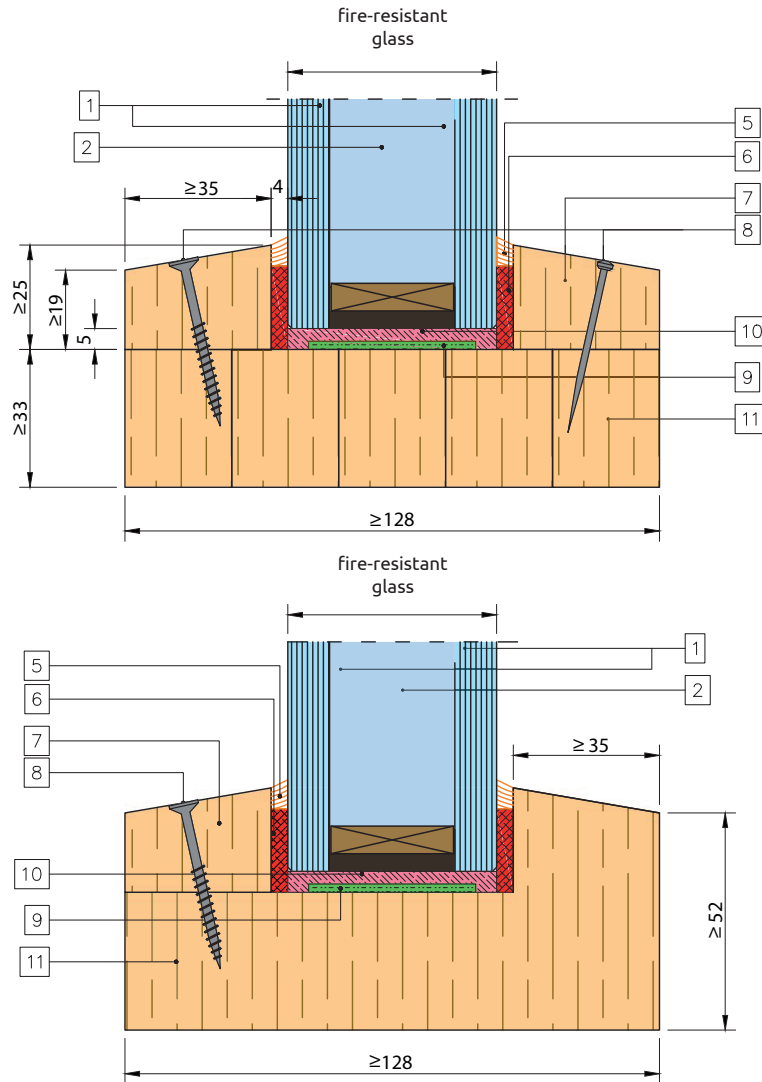
POLFLAM BR EI 90 (45 mm)	
Partition wall	
max. glass dimensions	2400 mm x 4200 mm ($A_{max} = 8.47 \text{ m}^2$) - portrait format
	-
Reference document: Classification report K-6035-DMT-DO	
1	Thermally toughened glass $\geq 10 \text{ mm}$ thickness (individual panes can be tinted, coated or surface treated)
2	Hydrogel interlayer $\geq 25 \text{ mm}$ thickness
5	Silicone DOWSIL™ 791
6	Ceramic tape KERAFIX® 2000 20 x 4 mm
7	Glazing bead $\geq 35 \text{ mm} \times 25/19 \text{ mm}$, timber $\geq 650 \text{ kg/m}^3$
8	Nail min. 16GA x 50 mm or screw $\varnothing 3.5 \times 50 \text{ mm}$ (20-40 mm from the corner and every 150 mm)
9	Intumescent tape KERAFIX® FXL 200 35 x 2 mm
10	Setting block 5 mm
11	Laminated or solid timber profile $\geq 650 \text{ kg/m}^3$
Allowed supported construction	
Rigid supporting construction min. 650 kg/m^3 ; min. 180 mm thickness Flexible supporting construction EI 90; min. 125 mm thickness	



POLFLAM BR EI 120

POLFLAM BR fire-resistant glass in timber systems

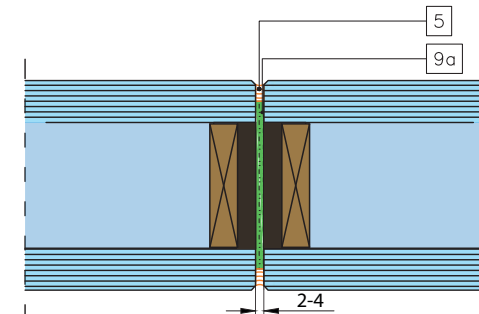
[mm]



POLFLAM BR EI 120 (50 mm)	
Partition wall	
max. glass dimensions	2200 mm x 3850 mm ($A_{\max} = 7.70 \text{ m}^2$) - portrait format
	-
Reference document: Classification report K-6040-DMT-DO	

1	Thermally toughened glass $\geq 10 \text{ mm}$ thickness (individual panes can be tinted, coated or surface treated)
2	Hydrogel interlayer $\geq 30 \text{ mm}$ thickness
5	Silicone DOWSIL™ 791
6	Ceramic tape KERAFIX® 2000 20 x 4 mm
7	Glazing bead $\geq 35 \text{ mm} \times 25/19 \text{ mm}$, timber $\geq 650 \text{ kg/m}^3$
8	Nail min. 16GA x 50 mm or screw $\varnothing 3.5 \times 50 \text{ mm}$ (20-40 mm from the corner and every 150 mm)
9/9a	Intumescent tape KERAFIX® FXL 200 40 x 2 mm / 35 x 2 mm
10	Setting block 5 mm
11	Laminated or solid timber profile $\geq 650 \text{ kg/m}^3$

Allowed supported construction
Rigid supporting construction min. 650 kg/m^3 ; min. 240 mm thickness Flexible supporting construction EI 120; min. 150 mm thickness





PARTITIONS



WINDOWS
AND DOORS



FACADES
AND ROOFS



FLOORS



SMOKE
BARRIERS



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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