

SAPA FIRE-RATED SOLUTIONS

FIRE-RATED DOORS, SCREENS AND CURTAIN WALLING



sapa:

By  Hydro

Fire-resistance classes

Type-approved fire class	E30	EI15	EI30	EI60
Door 2050	▪			
Door 2060	▪	▪	▪	
Door 2074	▪	▪	▪	▪
Door 2086			▪	▪
Glazed element 3050	▪			
Glazed element 3074	▪	▪	▪	▪
Glazed element 3086			▪	
Glazed element 3050 CF Structure	▪			
Glazed element 3074 CF Structure			▪	▪
Glazed element 3086 CF Structure			▪	
Facade 4150	▪	▪	▪	

Facades and interior glazed partitions, EI 15, E30, EI 30

Sapa systems	Facade 4150	Door 2074
Fire resistance performance	EI15, E30, EI30	EI15, E30, EI30
Approval certificate	SITAC 144502	SITAC 144501 SITAC 144502
Max. dimensions, width x height, mm	W unlimited x H 3000 mm	Door leaf dimensions, single door: W 1306 x H 2240 Door leaf dimensions, double door: W 2100 x H 2240
Approved fire-resistant glass	Contraflam 30 Contraflam lite 30 Swissflam 30 Pyrostop 30-17 etc. Pyrobel 16 DGU etc. Pyrodur 30-25 etc. Pyroguard 11 Pyrobelite 7 DGU etc.	Contraflam 30 Pyrostop 30-17 etc. Pyrobel 16 DGU etc. Swissflam 30 Pyranova 30 S2.0 etc. Pyrodur 30-251 etc. Pyrobelite 7 DGU Contraflam lite 30
Approved infill panels	Plasterboard and rockwool covered with aluminium sheet	Plasterboard covered with aluminium or steel sheet

Exterior and interior glazed elements and doors, EI 15, E30, EI 30

Sapa systems	Door 2060	Door 2074	Fixed glazed element 3074	Door 2074	Fixed glazed element 3074
Fire resistance performance	EI15, E30, EI30			EI60	
Approval certificate	SITAC 144501 SITAC 144502			SITAC 144502 SITAC 144503	
Max. dimensions, width x height, mm	Door leaf dimensions single door: W 1285 x H 2240 double door: W 2100 x H 2240	Door leaf dimensions single door: W 1306 x H 2240 double door: W 2100 x H 2240	W unlimited x H 3000 mm	Door leaf dimensions single door: W 1220 x H 2240 double door: W 2100 x H 2240	W unlimited x H 3000 mm
Approved fire-resistant glass	Contraflam 30 Pyrostop 30-10 etc. Pyrodur 30-200 etc. Pyrobel 16 Swissflam 30	Contraflam 30 Pyrostop 30-17 etc. Pyrobel 16 DGU etc. Swissflam 30 Pyranova 30 S2.0 etc. Pyrodur 30-251 etc. Pyrobelite 7 DGU Contraflam lite 30		Pyrostop 60-101 etc. Contraflam 60 Pyrobel 25 DGU etc. Interfire EI60	
Approved infill panels	Plasterboard covered with aluminium or steel sheet			Plasterboard covered with aluminium or steel sheet	

Exterior and interior glazed elements and doors EI 30

Sapa systems	Door 2086	Fixed glazed element 3086	Door 2086
Fire resistance performance	EI 30		EI 30 with smoke leakage control S_a , S_{200}
Approval certificate	SC0836-14, 144502		SC0836-14, 144502
Max. dimensions, width x height, mm	Door leaf dimensions single door: W 1620 x H 2928 mm double door: W 2952 x H 2928 mm	W unlimited x H 4620 mm split mullion max c/c 6600 mm	Door leaf dimensions single door: W 1350 x H 2250 mm double door: W 2365 x H 2250 mm
Approved fire-resistant glass	Pyrostop 30 (SGU, DGU and TGU) Contraflam 30 (SGU, DGU and TGU)		
Approved infill panels	Interior: Plasterboard covered with aluminium sheet Rockwool board + sheathing plasterboard covered with aluminium sheet		Not approved

Interior glazed elements and doors E 30

Sapa systems	Door 2050	Fixed glazed element 3050	Door 2060	Fixed glazed element 3050
Fire resistance performance	E30			
Approval certificate	SITAC 1199/94 SITAC 144502		SITAC 1199/94 SITAC 144502	
Max. dimensions, width x height, mm	Door leaf dimensions, single door, W 1285 x H 2140 mm Door leaf dimensions, double door, W 2100 x H 2140 mm.	W 10,000 mm x H 2200 mm.	Door leaf dimensions, single door, W 1295 x H 2140 mm Door leaf dimensions, double door, W 2100 x H 2140 mm.	W 10,000 mm x H 3000 mm.
Approved fire-resistant glass	Pyrodur 30-10 etc. Pyrobelite 7 and 9 etc. Contraflam lite 30 Pyran Wire mesh glass		Pyrodur 30-10 etc. Pyrobelite 7 and 9 etc. Contraflam lite 30 Pyran Wire mesh glass	
Approved infill panels	Plasterboard covered with aluminium or steel sheet		Plasterboard covered with aluminium or steel sheet	

Interior doors and glazed partitions EI 60

Sapa Systems	Door 2086	Door 2086 with glazed partitions	Door 2086	Door 2086 with glazed partitions
Fire resistance performance	EI 60	EI 60	EI 60 with smoke control class S _a , S ₂₀₀	
Approval certificate	SC1457-16			
Max. dimensions, width x height, mm	Door leaf dimensions, single door: W 1350 x H 2930 Door leaf dimensions, double door, W 2600 x H 2930	Glazed partitions dimension, single door: W 3000 x H 3427 Glazed partitions dimension, double door: W 3427 x H 3427	Door leaf dimensions single door: W 1350 x H 2250 Door leaf dimensions, double door, W 2365 x H 2250	Glazed partitions dimension, single door: W 2694 x H 3140 Glazed partitions dimension, double door: W 3427 x H 3140
Approved fire-resistant glass	Contraflam 60-3 SGU			
Approved infill panels	1,5 mm aluminium sheet, 2x15 mm Promatect-100, 1,5 mm aluminium sheet		Not approved	

Interior glazed elements, with full glazing system

Sapa systems	Fixed glazed element 3086	Door 2086
	SGG Contraflam Structure	
Fire resistance performance	EI 30	
Approval certificate	SC0836-14, 144502	
Max. dimensions, width x height, mm	W unlimited x H 3600 mm In combination with door max. H 3000 mm NOTE! Split mullion W max c/c 6600 mm	Door leaf dimensions single door: B 1620 x H 2928 mm double door: B 2952 x H 2928 mm
Approved fire-resistant glass	Fire glazing system Contraflam Structure 30	Pyrostop 30 (SGU, DGU and TGU) Contraflam 30 (SGU, DGU and TGU)

Sapa systems	Fixed glazed element 3050	Door 2050	Door 2060
	SGG Contraflam Structure		
Fire resistance performance	E30		
Approval certificate	SITAC 1199/94 SITAC 144502	SITAC 1199/94 SITAC 144502	SITAC 1199/94 SITAC 144502
Max. dimensions, width x height, mm	W 6600 x H 3100	Door leaf dimensions, single door W 1285 x H 2140 mm Door leaf dimensions, double door W 2100 x H 2140 mm.	Door leaf dimensions, single door W 1295 x H 2140 mm Door leaf dimensions, double door W 2100 x H 2140 mm.
Approved fire-resistant glass	Fire glazing system Contraflam Structure Lite 30	Pyrodur 30-10 etc. Pyrobelite 7 and 9 etc. Contraflam lite 30 Pyran Wire mesh glass	

Sapa systems	Fixed glazed element 3074	Door 2074	Fixed glazed element 3074	Door 2074
	SGG Contraflam Structure		SGG Contraflam Structure	
Fire resistance performance	EI30		EI60	
Approval certificate	SITAC 144501 SITAC 144502	SITAC 144501 SITAC 144502	SITAC 144502 SITAC 144503	SITAC 144502 SITAC 144503
Max. dimensions, width x height, mm	W unlimited x H 3600 mm In combination with door max. H 3000 mm NOTE! Split mullion W max c/c 6600 mm	Door leaf dimensions, single door: W 1306 x H 2240 Door leaf dimensions, double door: W 2100 x H 2240	W unlimited x H 3340 mm In combination with door max. H 3000 mm NOTE! Split mullion W max c/c 6600 mm	Door leaf dimensions, single door: W 1220 x H 2240 Door leaf dimensions, double door: W 2100 x H 2240
Approved fire-resistant glass	Fire glazing system Contraflam Structure 30	Contraflam 30 Pyrostop 30-10 etc. Pyrobel 16 etc. Swissflam 30 Pyranova 30 S2.0 etc.	Fire glazing system Contraflam Structure 60	Pyrostop 60-101 etc. Contraflam 60 Pyrobel 25 etc. Interfire EI60

Transparency and safety



Växjö University Sweden. 2074 fire class EI 30



VGS School in Halden, Norway



Oulun Kaupunginsairaala, Finland. 2074 fire class EI 60



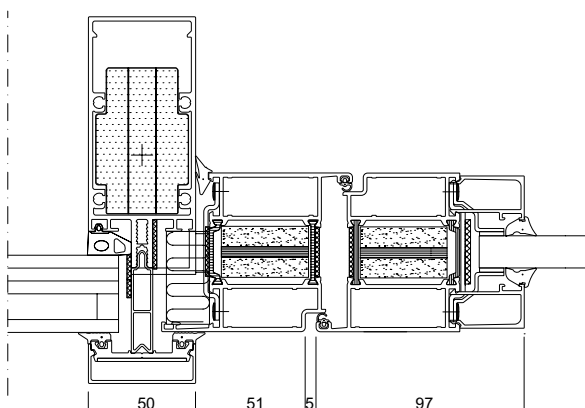
VGS School in Halden, Norway

Facades and interior glazed elements

Sapa Facade 4150 E30, EI15, EI30

Facade system for exterior and interior solutions. Interior aluminium transoms/mullions with profile width of 50 mm. Profile depth is chosen to suit span and wind loads.

Fire-resistant structures must be fitted with approved fire-resistant glass or infill panels stated in Sapa Building Systems AB's approvals. The design of the structure varies depending if fire exposed side is on inside, outside or both sides. If fire exposed side is on the inside or both sides, the facade is constructed as an infill wall between floor slabs, and if fire exposed side is on the outside, the facade may also be constructed as a curtain wall.



Fire protection	Class E 30, EI 15 or EI 30.
Profile width	50 mm
Transoms/ mullions fire from inside, fire from any side.	80–140 mm
Transoms/ mullions fire from outside	80–180 mm, also I- and T-profiles 100–140 mm. Split mullions 80–180 mm.
Facade, dimensions	Facades can be produced without limitation in width and maximum height of 3000 mm. For exterior walls the maximum spacing between attachment points is 3000 mm. For widths up to 3000 mm the maximum height is 3600 mm.
Door 2074 E30, EI15, EI30	Door leaf dimensions, single door: W 1306 x H 2240 mm double door: W 2100 x H 2240 mm
Approval certificate	144501, 144502.

Fire-resistant structures must be fitted with approved fire-resistant glass or infill panels stated in Sapa Building Systems AB's approvals.

Facade 4150, example with fire protection on both sides

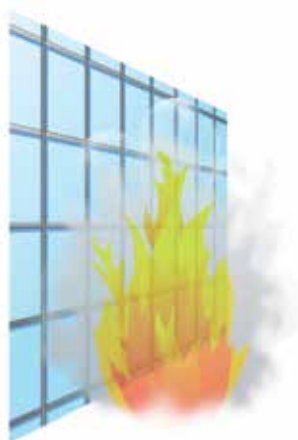




Ranheim School in Norway uses Sapa Facade 4150, meeting fire protection class EI30, for interior elements.



*Fire from inside.
Infill wall, max. height
3000 mm.*



*Fire from outside.
Infill wall / curtain wall with max. storey height of
3000 mm.*



*Fire from any side.
Infill wall, max. height
3000 mm.*

Transparency and safety



Skobes Bil in Nyköping, Sweden



Pool Media, Örebro, Sweden



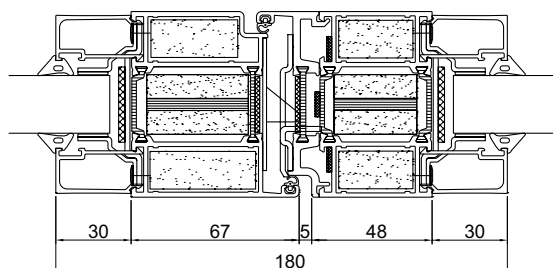
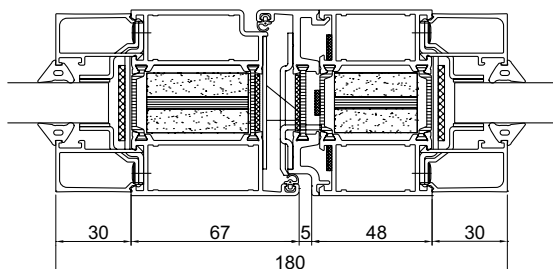
Angered Arena in Gothenburg, Sweden



Resurscentrum in Båstad, Sweden

Exterior and interior glazed elements and doors

Sapa 2074/2060/3074 E30, EI15, EI30, EI60



Fire protection	Class E30, EI15, EI30 and EI 60
Profile depth	74 - 106 mm. 2060= 60 mm
Mullions	105–240 mm. For making vertical joints, mullions are also available in the form of split mullions
Single door 2074, door leaf dimensions	E30, EI15, EI30: 1306 x 2240. EI60: 1220 x 2240
Double door 2074, door leaf dimensions	E30, EI15, EI30: 2100 x 2240. EI 60: 2100 x 2240 mm
Single door 2060, door leaf dimensions	E30, EI15, EI30: 1285 x 2240.
Double door 2060, door leaf dimensions	E30, EI15, EI30: 2100 x 2240.
Door sill	Available in several alternatives. Doors can be installed without a door sill, with a 10-15 mm gap below the bottom edge.
Glazed partitions	No restrictions for width, maximum height 3000 mm.
Smoke control 2074	2074 E30, EI15, EI30: Doors can be classified for smoke control class S _a .
Approval certificate	144501, 144502, 144503

Fire-resistant structures must be fitted with approved fire-resistant glass or infill panels stated in Sapa Building Systems AB's approvals

Fire-resistant elements 2074, 3074



Sapa 2074/3074 single-glazed E30, EI15, EI30



Sapa 2074/3074 DGU E30, EI15, EI30

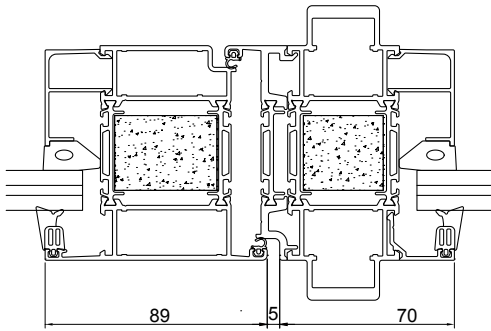


Sapa 2074/3074 single-glazed EI60

Exterior and interior glazed elements and doors

Sapa 2086/3086

EI30



*Sapa Door 2086, Glazed Elements 3086
Single Glazed, EI 30*

Fire protection	Class EI 30
Profile depth	86 to 118 mm
Mullions	Split mullions are also available for vertical joints.
Single door 2086, door leaf dimensions	EI 30: 1620 x 2928 mm*. EI 30 S _a , S ₂₀₀ : 1350 x 2250 mm
Double door, 2086, door leaf dimensions	EI 30: 2952 x 2928 mm. EI 30 S _a , S ₂₀₀ : 2365 x 2250 mm.
Door sill	Available in several alternatives. Doors can be installed with or without door sill, with a 10-15 mm gap below the bottom edge of door leaf.
Glazed partitions	No width limitation with use of split mullions and height max 4620 mm.
Child safety	Possible to add cover for back edge of door leaf with anti-finger trap solution.
Smoke control 2086	EI 30: Doors can be classified for smoke control to class S _a , S ₂₀₀
Approval certificate	SC0836-14, 144502

*Fire-resistant structures must be fitted with approved fire-resistant glass or infill panels stated in Sapa Building Systems AB's approvals.
* max recommended door leaf width 1350 mm*

Fire-resistant elements 2086, 3086



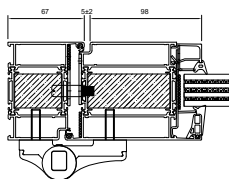
Sapa 2086 single-glazed EI 30



Sapa 3086 TGU EI 30

Interior doors and glazed partitions

Sapa 2086 EI 60



Sapa Dörr 2086, Single Glazed, EI 60

Fire protection	Class EI 60
Smoke control	2086 Doors can be classified for smoke control to class S _a , S ₂₀₀
Profile depth	86 mm
Single door 2086, door leaf dimensions	EI 60: 1350 x 2930 mm EI 60 S _a , S ₂₀₀ : 1350 x 2250 mm
Double door 2086, door leaf dimensions	EI 60: 2600 x 2930 mm EI 60 S _a , S ₂₀₀ : 2326 x 2250 mm
Door sill	Available in several alternatives. Doors can be installed with door sill or with strip seal at bottom edge of door leaf.
Glazed partitions dimensions EI 60	EI 60: 3000 x 3427 mm, single door EI 60: 3427 x 3427 mm, double door EI 60 S _a , S ₂₀₀ : 2694 x 3140 mm, single door EI 60 S _a , S ₂₀₀ : 3427 x 3140 mm, double door
Approval certificate	EI 60: SC1457-16

Fire-resistant structures must be fitted with approved fire-resistant glass or infill panels stated in Sapa Building Systems AB's approvals.

Branddörr och dörrpartier 2086

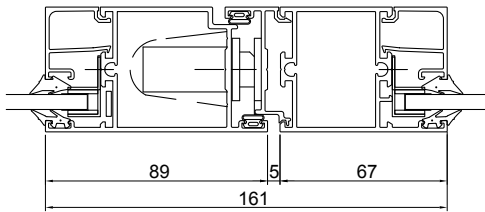


Sapa 2086 single-glazed EI 60



Interior glazed elements and doors

Sapa 2050/3050 E30



*Sapa Door 2050, Glazed Element 3050
single-glazed, E30*

Fire protection	Class E30
Profile depth	Glazed element and door 50 mm
Mullions	74–250 mm. Split mullions are also available for vertical joints.
Single door, door leaf dimensions	Max. W 1285 x H 2140 mm.
Double door, door leaf dimensions	Max outward door leaf W 2100 x H 2140 mm.
Door sill	Available in several variants, but doors can be installed without door sill, with a 10 mm gap below the bottom edge.
Glazed partitions	Maximum width 10,000 mm and maximum height 2200 mm. or maximum width 2000 mm and maximum height 3000 mm.
Approval certificate	1199 / 94, 144502

Fire-resistant structures must be fitted with approved fire-resistant glass or infill panels stated in Sapa Building Systems AB's approvals.

Fire-resistant elements 2050, 3050

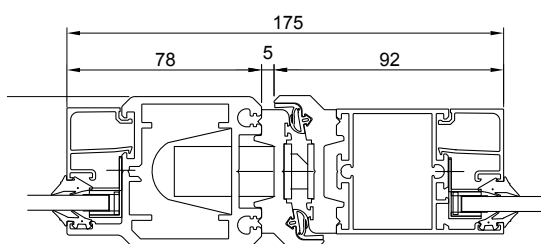


Sapa 2050 single-glazed E30

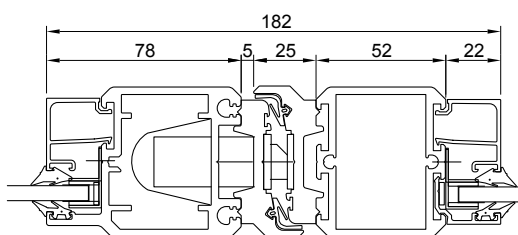


Interior glazed elements and doors

Sapa 2060/3050/3060 E30



Sapa Door 2060, Glazed Element 3050. Single-glazed, E30



Sapa Door 2060, Glazed Element 3060. Single-glazed, E30

Fire protection	Class E30
Profile depth	Glazed element 50/60 mm, door 60 mm
Mullions	74–250 mm. Mullion with total width of 96 mm. Split mullions are also available for vertical joints. Horizontal glazing bar profiles with profile depth of 50 mm.
Single door, door leaf dimensions	Max. W 1295 x H 2140 mm.
Double door, door leaf dimensions	Max outward door leaf W 2100 x H 2140 mm.
Door sill	Available in several variants, but doors can be installed without a door sill, with a 10 mm gap below the bottom edge.
Glazed partitions	Maximum width 10,000 mm and maximum height 3000 mm.
Child safety	Rebate seal on hinge side is also available in anti-finger trap version.
Approval certificate	1199 / 94, 144502

Fire-resistant structures must be fitted with approved fire-resistant glass or infill panels stated in Sapa Building Systems AB's approvals.

Fire-resistant elements 2060, 3050, 3060

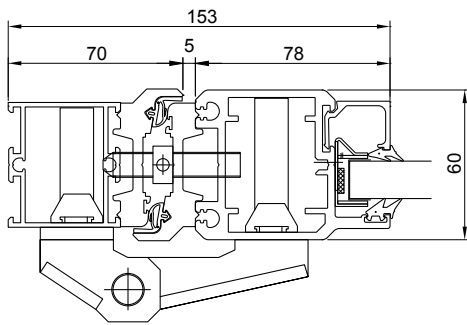


Sapa 2060, single-glazed, E30

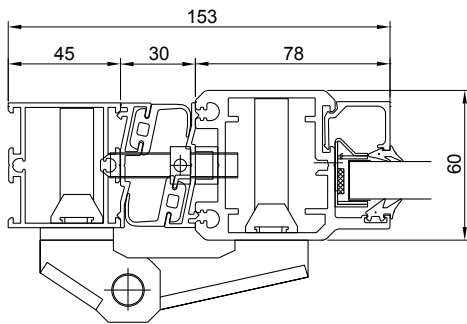


Interior doors

Sapa Door 2060 E30, EI15, A30, EI30



Sapa Door 2060, single-glazed, E30



Anti-finger trap solution

Fire protection	Class E30, EI15, A30, EI30
Profile depth	Frame 50 mm, door leaf 60 mm
Single door, door leaf dimensions	Max. W 1295 x H 2240 mm.
Double door, door leaf dimensions	Max outward door leaf W 2100 x H 2240 mm.
Door sill	Available in several variants, but doors can be installed without door sill, with a 10 mm gap below the bottom edge.
Narrow-profile variant	For variant without horizontal rails and in frame 3074, this door meets fire resistance class EI30. For variant with horizontal rails, the door meets fire resistance classes E30, EI15 and A30. When combined with a safe distance of 1.0 m, doors with glazing bars can also meet EI30.
Child safety	Rebate seal on hinge side is also available in anti-finger trap version.
Approval certificate	1199 / 94, 144502

Fire-resistant structures must be fitted with approved fire-resistant glass or infill panels stated in Sapa Building Systems AB's approvals.

Fire door 2060



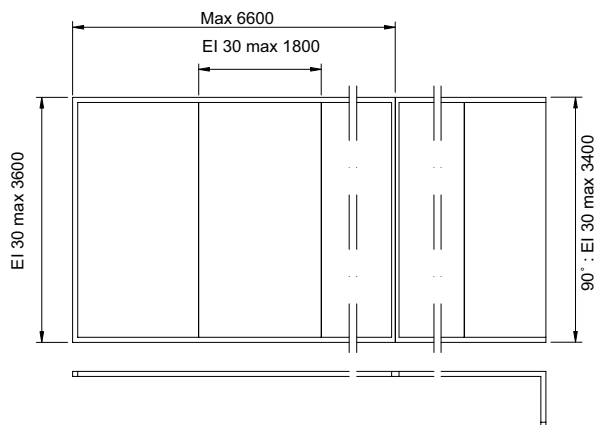
Sapa 2060, single-glazed, E30



Interior glazed elements, with full glazing system

Sapa Glazed Element 3086
with SGG Contraflam Structure.
A fully glazed system with sealed
vertical joints.

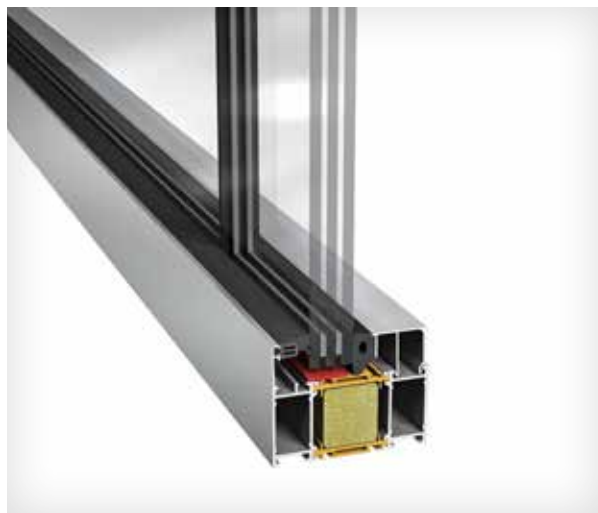
EI 30



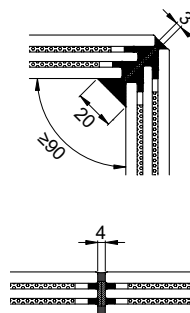
Fire protection	Class EI30
Profile depth	86 - 118 mm
Mullions	67 mm. Split mullions are also available for vertical joints, 93 mm.
Glazed element EI30	This construction is only intended for interior elements with a maximum height of 3600 mm. Maximum element width without split mullions is 6600 mm. 90 degree corner, max H 3400 mm. In combination with door max. H 3000 mm
Door EI30	Door leaf dimensions, single door: B 1620 x H 2928 double door: B 2952 x H 2928
Corner solution	Corner solution is available without vertical profile.
Approval certificate	SC0836-14, 144502

Sapa Glazed Element 3086 with SGG Contraflam Structure is approved for installation to flexible and light/heavy construction framing.

Fire-resistant elements 3086 with SGG Contraflam Structure



Sapa 3086 with SGG Contraflam Structure 30



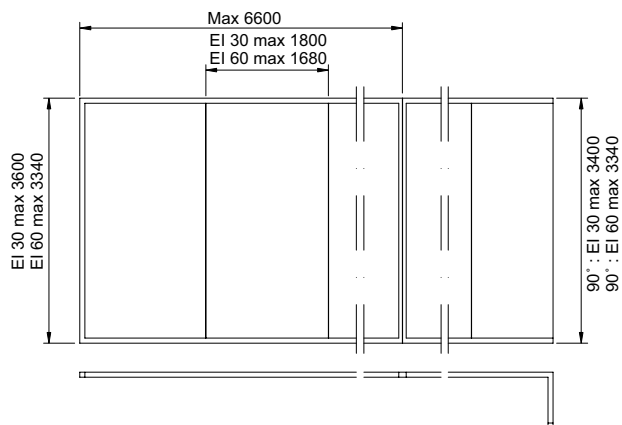
Corner solution and vertical joints with
SGG Contraflam Structure

Interior glazed elements, with full glazing system

Sapa Glazed Element 3074 with SGG Contraflam Structure.

A fully glazed system with sealed vertical joints.

EI30 and EI60



Fire protection	Class EI30 and EI60
Profile depth	74 mm
Mullions	75 mm. Split mullions are also available for vertical joints, 109 mm.
Glazed element EI30	This construction is only intended for interior elements with a maximum height of 3340 mm. Maximum element width without split mullions is 6600 mm. 90 degree corner, max. H 3340 mm. In combination with door max. H 3000 mm
Glazed element EI60	This construction is only intended for interior elements with a maximum height of 3340 mm. Maximum element width without split mullions is 6600 mm. 90 degree corner, max. H 3340 mm. In combination with door max. H 3000 mm
Door EI30	Door leaf dimensions, single door: W 1306 x H 2240 Door leaf dimensions, double door: W 2100 x H 2240.
Door EI60	Door leaf dimensions, single door: W 1220 x H 2240 Door leaf dimensions, double door: W 2100 x H 2240
Corner solution	Corner solution is available without vertical profile.
Approval certificate	144501, 144502, 144503.

Sapa Glazed Element 3074 with SGG Contraflam Structure is only approved for installation in heavy construction framing. Heavy framing refers to framing material with a thickness of at least 150 mm and density of 625 kg/m³

A fully glazed system for fire-resistant elements. The vertical joints between glazing do not require vertical profiles and are made with silicone sealant in accordance with the glass supplier's recommendations.

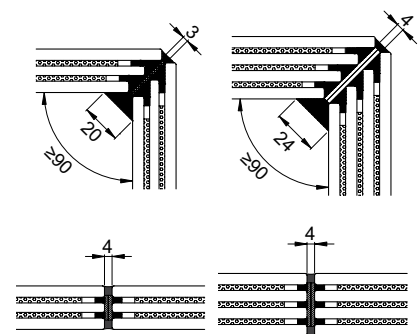
Fire-resistant elements 3074 with SGG Contraflam Structure



Sapa 3074 with SGG Contraflam Structure 30



Sapa 3074 with SGG Contraflam Structure 60



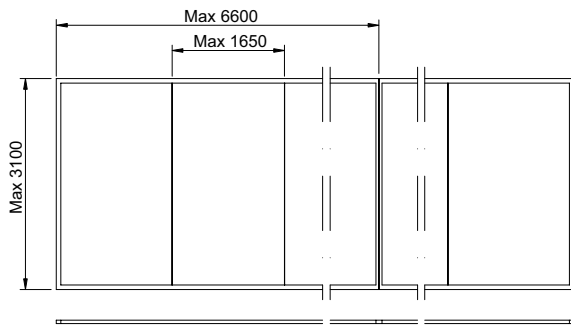
Corner solution and vertical joints with SGG Contraflam Structure

Interior glazed elements, with full glazing system

Sapa Glazed Element 3050 with SGG Contraflam Structure.

A fully glazed system with sealed vertical joints.

E30

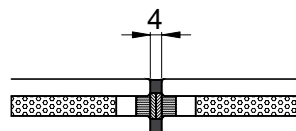


Fire protection	Class E30
Profile depth	50 mm
Mullions	67 mm. Split mullions are also available for vertical joints, 89 mm.
Glazed element E30	This construction is only intended for interior elements with a maximum height of 3100 mm. Maximum element width without split mullions is 6600 mm.
Combination with Door 2050	Element height, max. 2200 mm. Door leaf dimensions, single door W 1285 x H 2140 mm Door leaf dimensions, double door W 2100 x H 2140.
Combination with Door 2060	Element height, max. 3000 mm. Door leaf dimensions, single door W 1295 x H 2140 mm Door leaf dimensions, double door W 2100 x H 2140 mm.
Approval certificate	1199/94, 144502

Sapa Glazed Element 3050 with SGG Contraflam Structure is only approved for installation in heavy construction framing. Heavy framing refers to framing material with a thickness of at least 150 mm and density of 625 kg/m³

A fully glazed system for fire-resistant elements. The vertical joints between glazing do not require vertical profiles and are made with silicone sealant in accordance with the glass supplier's recommendations.

Fire-resistant elements 3050 with SGG Contraflam Structure

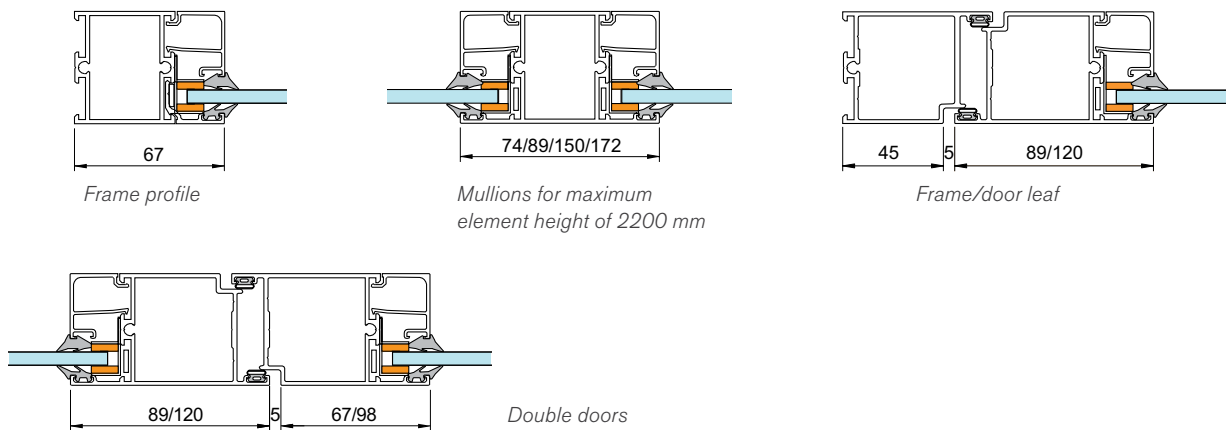


Sapa 3050 with SGG Contraflam Structure E30

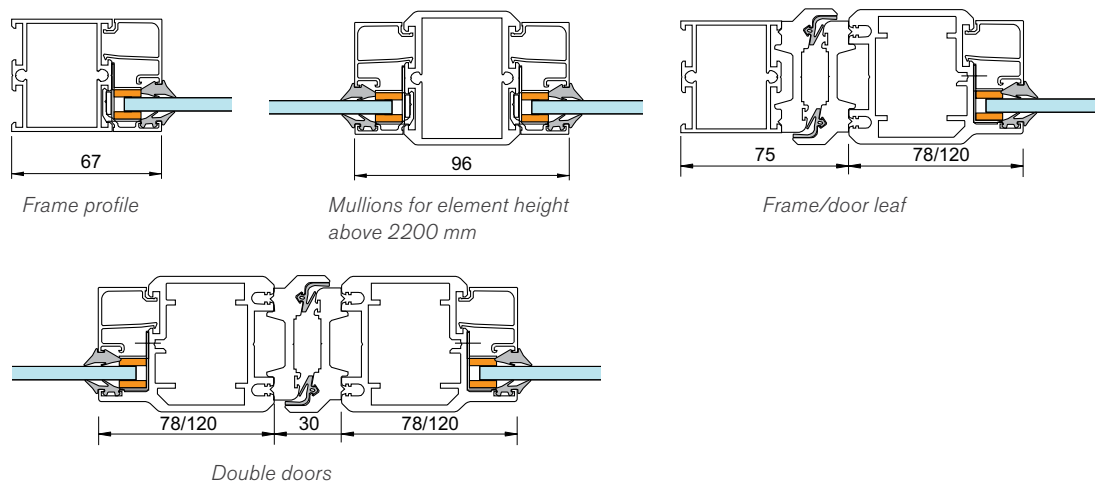
Design details

For more information about profile combinations for fire partitions, see our website. Drawings are available in DWG and DXF formats.

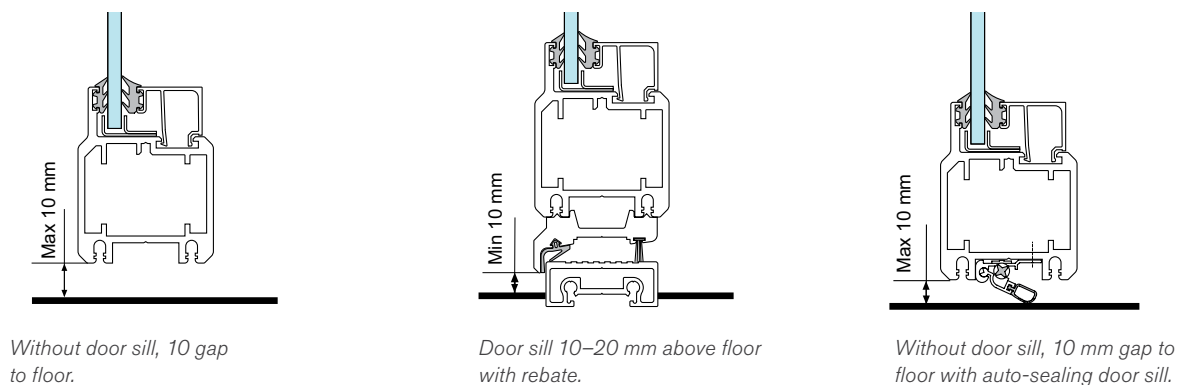
Design details for fire-resistant elements E30. 2050, 3050

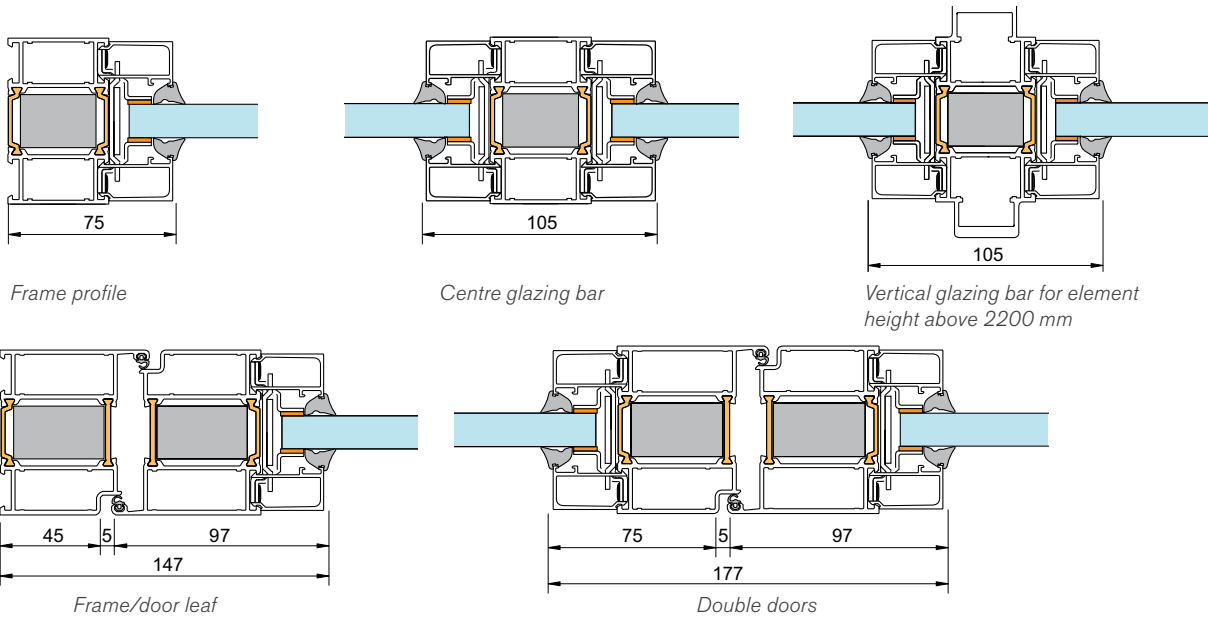


Design details for fire-resistant elements E30. 2060, 3050/3060

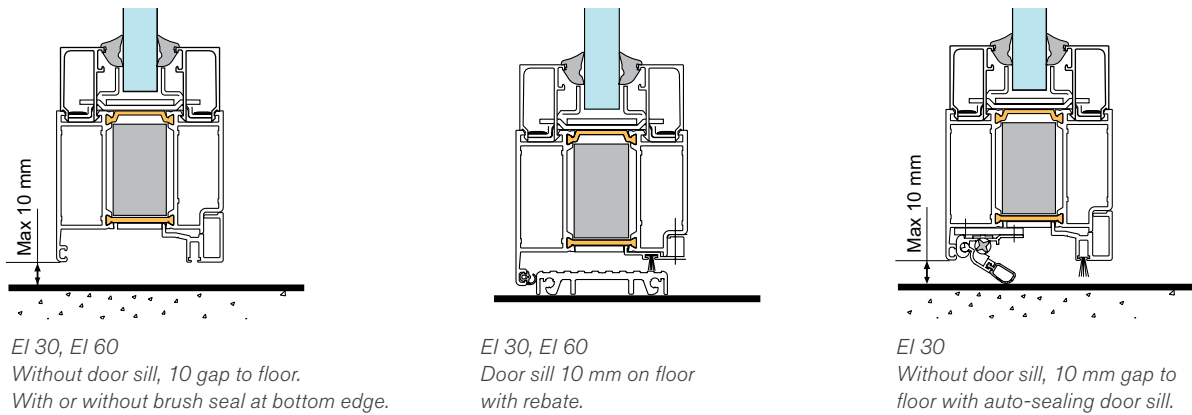


Examples of door sills for Door 2060/2050, interior wall

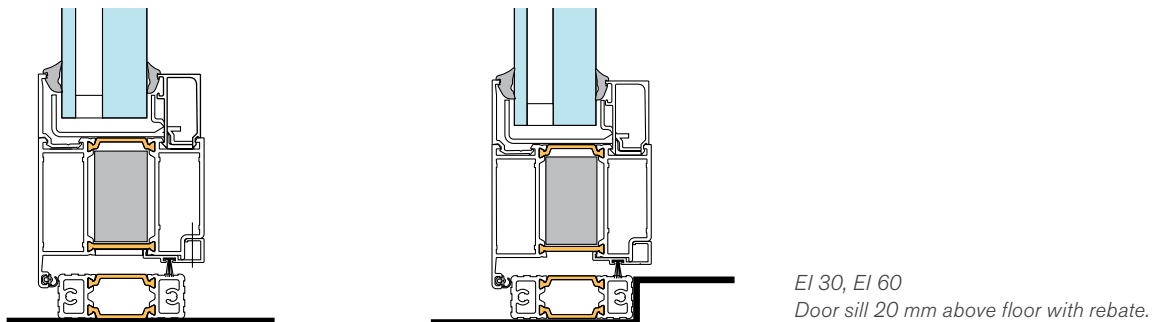




Example of door sill for Door 2074, interior wall



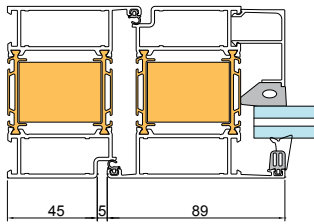
Example of door sill for Door 2074 in exterior wall



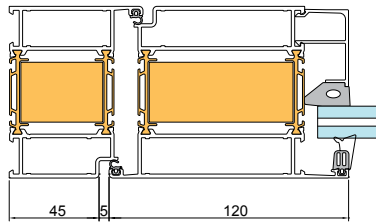
Design details

For more information about profile combinations for fire partitions, see our website. Drawings are available in DWG and DXF formats.

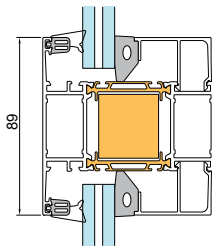
Design details for fire-resistant elements. EI 30. 2086, 3086



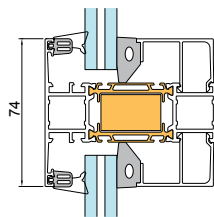
Frame/door leaf narrow section



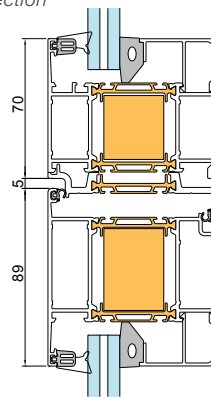
Frame/door leaf modular section



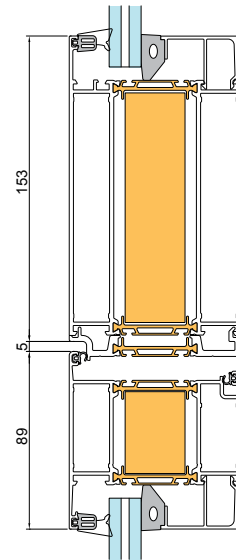
Glazing bar



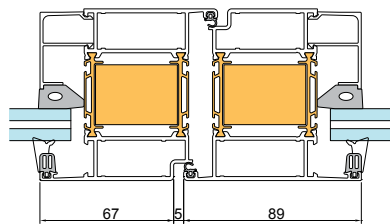
Glazing bar



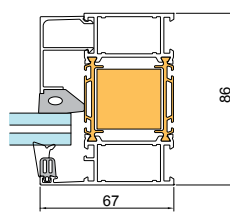
Top edge of door with top light



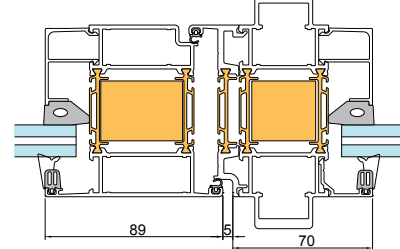
Top edge of door with top light and profile for automatic door operator



Double doors, narrow section

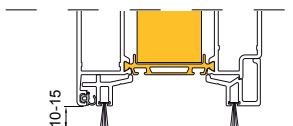


Frame profile

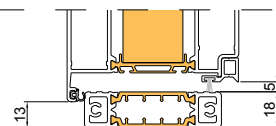


Door with glazing bar for element height above 2500 mm.

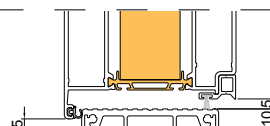
Example of door sill for Door 2086, EI 30 and S_a/S_{200}



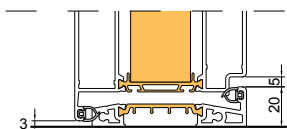
Door with brush seal



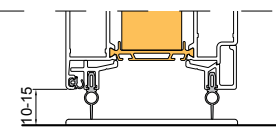
Door with rebate seal against door sill



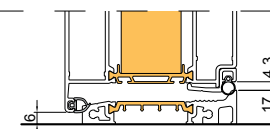
Door with rebate seal against door sill



Door with rebate seal against door sill. Approved for smoke control doors S_a and S_{200}



Door with strip seal. Approved for smoke control doors S_a and S_{200}

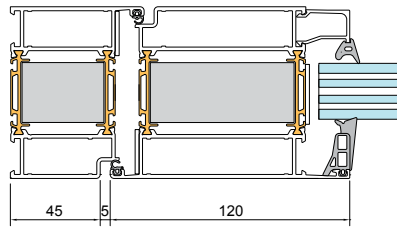


Door 2086 Plus. Door with rebate seal against door sill

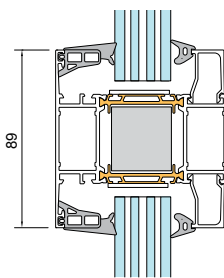
Design details

For more information about profile combinations for fire partitions, see our website. Drawings are available in DWG and DXF formats.

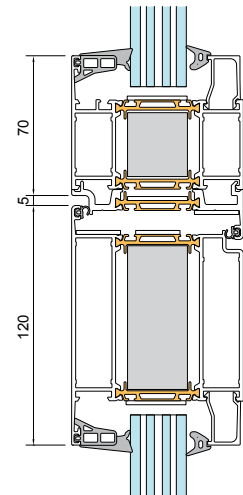
Design details for doors and glazed partitions. EI 60. 2086



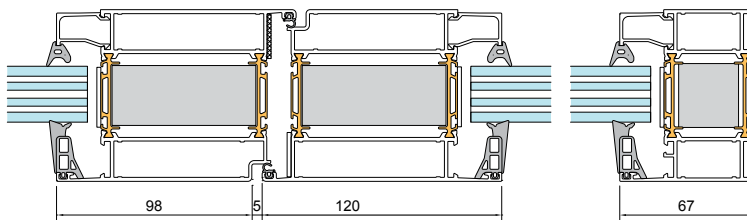
Frame/door leaf modular section



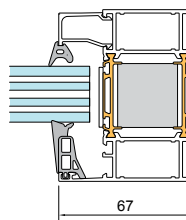
Glazing bar



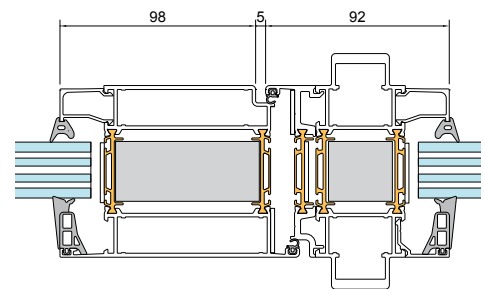
Top edge of door with top light



Double doors modular section

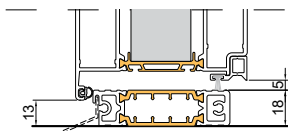


Frame profile

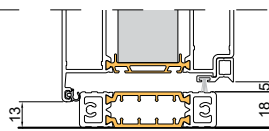


Door with glazing bar for top light

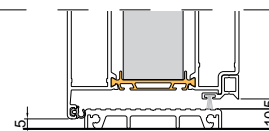
Example of door sill for Door 2086, EI 60



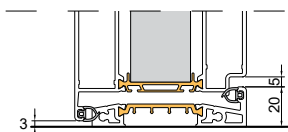
Door with rebate seal against door sill



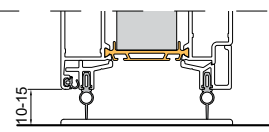
Door with rebate seal against door sill



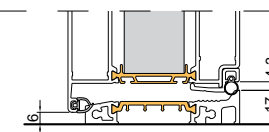
Door with rebate seal against door sill



Door with rebate seal against door sill.
Approved for smoke control doors S_a and S_{200}



Door with strip seal.
Approved for smoke control doors S_a and S_{200}



Door 2086 Plus. Door with rebate seal against door sill

Attachment

Door and wall elements are attached to the frame using screws, twist anchors or welded plates.

Installation is carried out so that there is an adjustment gap of 20 (± 10 mm) between the element and the frame.

The gap is filled with rockwool and sealed with elastic fire

sealant rated for E30 structures. Standard silicone sealant can be used for EI30 and EI60 structures. Alternatively the gap between the element and frame can be covered with a sheet metal angle.



Rommen school, Norway.



Minerva school, Umeå, Sweden.

sapa:

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