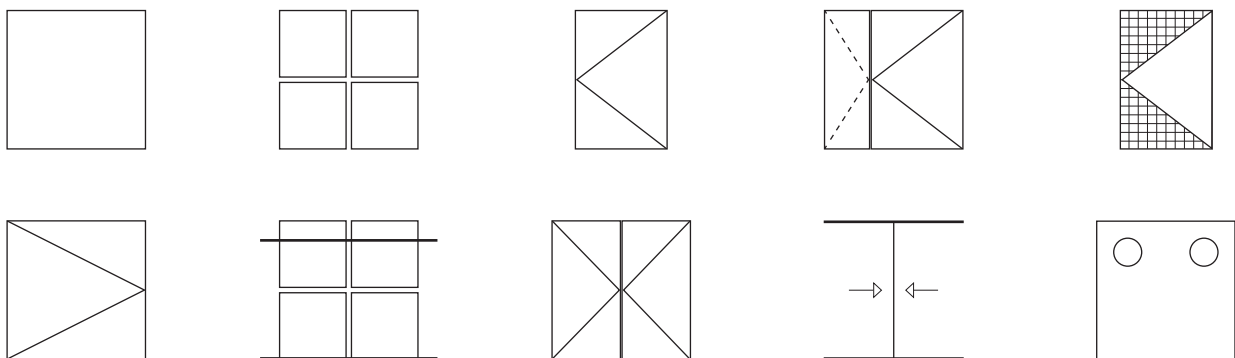




FLEXIBLE
INDPENDENT
RESPONSIVE
SPECIFIC
TECHNICAL
FIRST IN FIRE GLASS

Fire glass solutions combining safety and beautiful design



Technical Document

2017 EDITION

Product Information and Certification for Fire Resistant Glass

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ABOUT PYROGUARD

Pyroguard manufactures fire resistant glass to enable architects, specifiers and installers to achieve their vision of safe and beautiful living and working spaces.

With over **25 years of experience** in manufacturing fire resistant glass solutions, we have two distinct routes to market. Our cuttable, stockable products are supplied worldwide through our network of over **100 licensed partners**. Our bespoke-manufactured toughened products have been installed by fabricators and contractors in **thousands of successful projects**.

Pyroguard exports globally and operates an extensive **product development and certification programme** to meet customer needs worldwide.

Offering solutions from E30/EW30 to EI180, plus additional options to include impact, solar, thermal and acoustic performance, we provide **the widest fire resistant glazing range available from an independent manufacturer**. Our independence gives us full flexibility to meet customer needs with bespoke, high performance glazing solutions, unrestricted to specific configurations.

Unlike other generalist glass manufacturers, Pyroguard is **100% focused on fire resistant glazing**, providing a comprehensive and trusted service including dedicated project management and technical support.

CERTIFICATION PROVIDERS AND ASSOCIATIONS



WHY PYROGUARD?

CUTTING FACILITIES

For customers not operating their own cutting facilities, but still wishing to work with Pyroguard Rapide and Pyroguard Rapide Plus, Pyroguard offers a bespoke cutting service.

In-house cutting facilities with table cutting and saws are available, which operate on very short lead times.

Pyroguard's skilled and experienced cutting team offers custom shapes, waterjet cutting, polished edges, arrised edges.

TECHNICAL SUPPORT

From front-facing technical support to our highly qualified R&D scientists, our teams are industry-leading. Our products are certified to the most stringent technical standards and supported by extensive technical publications.

Our dedicated specification teams are always available to provide you with the advice, technical and regulatory information they require, and are happy to consult with you at any stage of your project, even if it's just an initial enquiry.

IGU CAPABILITIES

Insulated Glazing Units (IGUs), otherwise known as double or triple glazing, can be supplied featuring Pyroguard's fire resistant glass to meet project-specific requirements.

A vast array of non-fire rated counterpane glass can be used, including float, coated, tempered and laminated glass, in order to achieve desired attack, blast, thermal, acoustic, solar and impact classifications.

ENVIRONMENTAL POLICY

Pyroguard operates an Environmental Policy to co-ordinate, monitor and improve the company's environmental performance. This includes minimising the release of any pollutants, reducing waste, especially hazardous waste, recycling materials wherever possible, investing in improved energy efficient products and conserving use of resources.

IN-HOUSE TESTING FACILITIES

One of the major benefits to Pyroguard's research and development efforts is the fire test furnace located on the French site.

The furnace is used by Pyroguard's dedicated Research & Development team for our in-house product development programme and to maintain high standards of quality control.

QUALITY STANDARDS

All Pyroguard products are CE or UL marked, which means they comply with the requirements for local health, safety and environmental protection legislation.

In addition, the performance of Pyroguard products is independently tested and certified by Certfire, BM Trada, BRE, Efectis France, Efectis Nederland and TUV Rheinland.

Other certifications include CEKAL certification for IGU manufacturing and ISO 9001 Quality Management certified by BSI.

PARTNER NETWORK

Pyroguard is proud to operate a partner network of over 100 glass processors, ensuring that Pyroguard glazing solutions are readily available when you need them.




Processors of Pyroguard conform to the Construction Product Regulation (CPR) for CE marking, quality control and auditing process, which is supported by Pyroguard's Technical Licensing Programme. As part of this, Pyroguard partners receive full product training.

LOCAL & PERSONAL SERVICE

With manufacturing facilities in France and the UK, a knowledge centre in the Netherlands and a dedicated export function including regional agents, Pyroguard is in close proximity to customers globally.

With dedicated technical support, project management and local sales teams, Pyroguard is a trusted partner for customers around the world.

PRODUCT OVERVIEW

		Duration of fire / smoke protection				
		30	60	90	120	180
E - Integrity  Offers effective and economical protection from flames and smoke, but does not prevent the transmission of heat in the event of a fire.	E	▶	▶	▶		
		▶				
EW - Integrity & Radiation  Reduces the amount of radiant heat transfer to below 15 kW/m ² on the unexposed side.	EW	▶	▶	▶	▶	
		▶	▶			
EI - Integrity & Insulation  The highest level of protection from flames, smoke and heat.	EI	▶	▶			
		▶	▶	▶	▶	▶
		▶	▶			
		▶	▶			
DH - Smoke Control Maintains a smoke and fume-free escape route for up to half an hour.	DH	▶				
Manual Attack Protection Protection against manual attack to the EN 356 standard.						

Product Range	Product Overview	Product Code	Page
Pyrostem	Entry level cuttable, wired fire rated glass which provides integrity only protection against the passage of flames, smoke and toxic gases for 30 & 60 minutes (E classification). Used in like-for-like refurbishment projects demanding an economical glass with the appearance and performance of Georgian polished wired.	Pyrostem	32
Pyroguard Integrity	A range of toughened fire rated glass which provides integrity only protection against the passage of flames, smoke and toxic gases for 30 minutes (E classification). As a lightweight monolithic solution it provides exceptional visual quality and light transmission combined with short lead times and UV stability.	T-E30/6 • T-E30/8 T-E30/10 • T-E30/12	33-38
Pyroguard Integrity Plus	A range of toughened fire rated glass which provides integrity and radiant heat reduction for 30 to 120 minutes (EW classification). A lightweight and UV stable solution with exceptional light transmission.	T-EW30/6 T-EW30/13-1 • T-EW60/13-1 T-EW90/13-1 • T-EW120/13-1	39-62
Pyroguard Rapide	A range of cuttable fire rated glass which provides integrity and radiant heat reduction for 30 & 60 minutes (EW classification). A market leader for ease of processing and installation, the range can be cut by hand with no additional preparation required. A trusted solution in the market for over 20 years, this range offers short lead times and exceptional visual quality.	EW30 Impact EW30 Maxi • EW30 Maxi Impact EW60 • FD60	63-71
Pyroguard Rapide Plus	A range of cuttable fire rated glass which provides integrity and heat insulation for 30 & 60 minutes (EI classification). This stockable product provides application flexibility into timber, steel and aluminium framing systems and 1B1 impact performance at short lead times.	EI30 INT • EI30 EXT EI60 INT • EI60 EXT	72-79
Pyroguard Protect	A range of toughened fire rated glass which provides integrity and heat insulation for 30 to 180 minutes (EI classification). The solution provides 1B1 impact classification, high performing acoustic properties and UV stability.	T-EI30/18-2 • T-EI60/25-3 • T-EI60/26-2 T-EI90/32-2 • T-EI120/47-3 • T-EI180/82-5	80-92
Pyroguard Ultra	A premium range of toughened fire rated glass which provides integrity and heat insulation for 30 & 60 minutes (EI classification). Industry-leading acoustic performance, light transmission and low weight. Certified for timber, steel and aluminium profiles.	T-EI30/18-1 • T-EI60/21-1	93-98
Pyroguard Infinity	A range of fire rated glass certified for butt joint applications, providing integrity and heat insulation for 30 & 60 minutes (EI classification). No vertical frame profiles required, providing visually appealing seamless partitions between rooms and corridors.	EI30 INT • EI30 EXT • EI60 INT • EI60 EXT EI30/24-2 SWS • EI30/32-2 SWS EI60/36-2 SWS • EI60/40-2 SWS	99-105
Smokeguard	A glass smoke control solution which can direct smoke and keep toxic fumes at bay long enough to allow members of the public to exit the building safely, minimising the risk of smoke inhalation, injury and death. Smokeyguard provides significant cost reductions versus mechanical smoke curtains through lower initial investment costs, zero ongoing maintenance and no maximum lifespan.	DH30/8	106
Attackguard	A range of security glass which provides protection against manual attack. Attackguard is used either as an IGU counterpane or as a laminated Pyroguard fire resistant glass. A range of configurations are available which provide manual attack protection to the EN 356 standard from P1A to P6B.	N/A	107

GUIDE TO USING THE APPLICATIONS TABLES

Below is a case study to help you use the application tables that can be found on pages 12 – 26.

Example

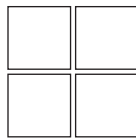
Internal partition between the entrance and the factory of the printing company Rapid Print in St Helens. This partition must meet the fire rating of 60 minutes integrity and insulation in a concrete wall that is 6 m long and 2.3 m high. The framing is in steel.

The responses to our questionnaire:

1 ▶ **Frame:**
steel

4 ▶ **Fire rating:**
EI60

2 ▶ **Application:**
partition wall



5 ▶ **Maximum glass sizes:**
1200 x 2300 mm

3 ▶ **Dimensions of the opening :**
6000 x 2300 mm

You can find the product characteristics and installation details in the datasheets and test reports.

The application tables are used to guide you to the appropriate datasheets for your requirement. In this example:

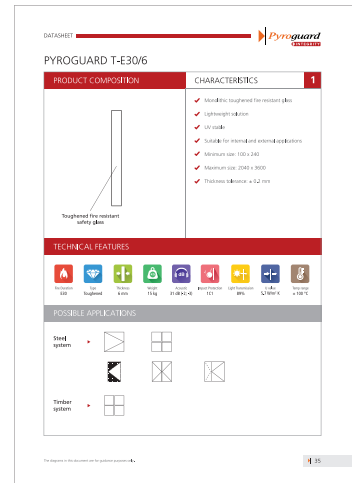
▶ Datasheets 44, 45, 46

▶ Test reports 13-A-429, 13-A-425, 09-A-498, CF 5204 p 39-40, CF 437 p 28-30-31

Product datasheets are numbered and can be found in the summary table on pages 6 & 7.

The datasheets include:

- ▶ The product reference code
- ▶ A cross-section diagram to indicate product composition
- ▶ Its additional features
- ▶ Its technical characteristics
- ▶ Its physical characteristics
- ▶ The possible applications relating to the corresponding test report



Key - Applications tables colour scheme:

- E – Integrity
- EW – Radiation control
- EI – Insulation
- DH - Smoke Control

Key - Datasheet diagram colour scheme

- Intumescent interlayer (EW)
- Intumescent interlayer (EI)
- PVB film
- Fire resistant coating

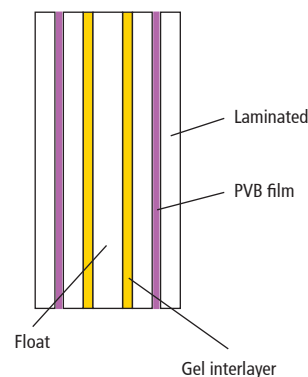
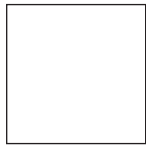
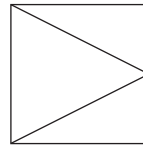


Diagram for illustration purposes.

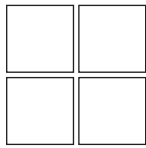
APPLICATIONS TABLES



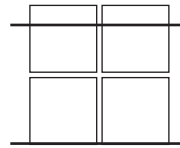
Single frame



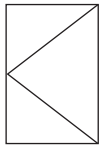
Opening window



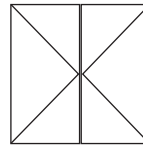
Partition wall



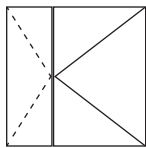
Curtain wall



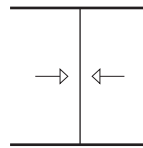
Single door



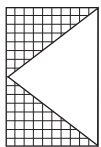
Double door



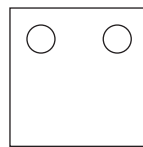
Unequal double door



Structural wall / butt joint



GDC door



Smoke containment

Key

- DC – Dependant on the construction
- VI – Double glazed insulating units
- TVI – Triple glazed insulating units
- VF – Laminated glasses
- SWS – Structural Wall
- EDC – Smokescreen
- RV – 2-sided fire resistance


STEEL SYSTEMS


Applications (system)	Classification	Max Area (m²)	Dim. maxi glass (mm)	Profile	Pyroguard Glass	Certification	Annex			
<p>Single frame</p>	E30	5.5	1600 x 2850	Forster Presto	T-E30/8	13-A-433	4			
			1920 x 3420		T-E30/10 • T-E30/12		5, 6			
		5.7	2000 x 3563	Certifire approved or previously tested steel system	T-EW30/6	CF5319	7			
		5.02	1760 x 3135		T-E30/10	CF5319	5			
	2.62	1250 x 2100 1000 x 2625	Pyrostem		CF581	0				
	E60	2.62	1250 x 2100 1000 x 2625		Pyrostem	CF581	0			
					E90	2.39	1400 x 2100 1000 x 2394	Pyrostem	CF581	0
								E30 / EW30	5.5	1920 x 3420
	EW30	2	660 x 3000		RP ISO Hermetic	EW30 Maxi • EW30 Maxi Impact	Chiltern 09202	33, 35		
		3.5	1440 x 2400		RP Série 50	EW30 Maxi • EW30 Maxi Impact	EFR-15-002717	33, 35		
		3	1500 x 2500		Certifire approved or previously tested steel system	EW30 Maxi • EW30 Maxi Impact	CF257	33, 35		
		1.65	660 x 3045			T-EW30/6	CF5319	7		
		5.7	2000 x 3563	T-E30/10		CF5319	5			
		5.02	1760 x 3135	EW60		EW60	CF257	37		
	1.21	600 x 2400								
	1.72	960 x 2160								
	EW60	1.44	1200 x 1200	Forster Fuego Light	EW60	EFR-15-002716	37			
		1	500 x 2000	Forster Fuego Light	EW60 VI	EFR-15-002715	38			
		1.3	650 x 2000	Forster Fuego Light	EW60 VI	EFR-15-002715	38			
	EI180	3.1	1003 x 2703	Steel Frame	T-EI180/82-5	13-A-446	60			
<p>Opening window</p>	E30	2.0	1134 x 1807	Forster Unico	T-EW30/6 • T-EW30/6 VF T-EW30/6 VI	13-A-443	7, 8, 12			
	E30	1.3	1096 x 1185 995 x 1303	Forster Presto	T-E30/6 • T-E30/8 T-E30/10 • T-E30/12 T-EW30/6 • T-EW30/6 VF T-EW30/6 VI	13-A-176	1, 4-8, 12			
	E60	1.3	1096 x 1185 995 x 1303	Forster Presto	T-EW60/13-1	13-A-178	23			
					T-EW60/13-1 VF T-EW60/13-1 VI (with a security option)	13-A-178 ext. 09/1	24, 25			
					T-EW60/6 VF • T-EW60/6 VI	13-A-178 ext. 11/3	17, 21			
	E90	1.2	1060 x 1150	Forster Presto	T-EW60/13-1 VI	13-A-374	24			
	EW30	1.8	1034 x 1707	Forster Unico	T-EW30/6 VI	13-A-443	8			
		1.3	1096 x 1185 995 x 1303	Forster Presto	T-EW30/6 • T-EW30/6 VF T-EW30/6 VI	13-A-176	7, 8, 12			
	EW60	1.3	1096 x 1185 995 x 1303	Forster Presto	T-EW60/13-1	13-A-178	23			
					T-EW60/13-1 VF T-EW60/13-1 VI (with a security option)	13-A-178 ext. 09/1	24, 25			
					T-EW60/6 VF T-EW60/6 VI	13-A-178 ext. 11/3	17, 21			
		1.22	1060 x 1150	T-EW60/13-1 VI	13-A-374	24				
1720 x 720			T-EW60/13-1	13-A-374	23					

Applications (system)	Classification	Max Area (m ²)	Dim. maxi glass (mm)	Profile	Pyroguard Glass	Certification	Annex	
<p>Partition wall</p>	E30	2.53	1110 x 2280	Forster Presto	T-E30/6	13-A-175	1	
		4.73	3110 x 1520 1505 x 3000 1360 x 3310		T-E30/8 • T-E30/10 • T-E30/12		4-6	
		5.58	1770 x 3150		T-E30/10 • T-E30/12		5, 6	
		4.82	1535 x 3135 3135 x 1535		T-EW30/6 T-EW30/6 VF • T-EW30/6 VI		7, 8, 12	
		4.5	1360 x 3310		T-EW30/6 VI		8	
		2	1120 x 1805	Jansen VISS-TV	T-EW30/6 VI	13-A-438	8	
		2.45	1344 x 2166		T-E30/6 VI	EFR-15-002714	2	
		2.83	1560 x 2160	Steel frame	T-E30/6	13-A-436	1	
		2.6	1754 x 1759		T-E30/6 VF		3	
		3.32	2584 x 1284 1284 x 2584	Forster Unico	T-EW30/6	13-A-442	7	
		3.98	1284 x 3100		T-EW30/6 VI • T-EW30/6 VF		8, 12	
		3.98	3100 x 1540					
		3.02	1517 x 2393	Certifire approved or previously tested steel system	T-E30/6 VI	CF5319	2	
		2.09	1157 x 1805					
		1.58	873 x 1865					
		0.85	873 x 1002					
		1.88	1040 x 2226					
		1.34	1381 x 1196					
		2.49	1381 x 2226		T-E30/6	CF5319	1	
		2.81	2160 x 1560					
		0.48	326 x 1757		CF5319	CF5319	5	
		1.69	1157 x 1757					
		1.69	1157 x 1560					
		2.57	1754 x 1759		CF5319	CF5319	6	
		4.61	3316 x 1625					
		3.85	1619 x 2783		T-E30/12	CF5319		
		E60	4.86	1222 x 3210	Forster Presto	T-EW60/13-1	13-A-177	23
				3210 x 1222				
	1555 x 3130							
	3130 x 1555							
	4.19		1480 x 2830 2830 x 1480	T-EW60/13-1 VF T-EW60/13-1 VI	13-A-177 + ext EFR-14-002238	21		
	3.92		2835 x 1385 1385 x 2835	T-EW60/6 VF	PV 13-A-177 + Ext EFR-14-002239	21		
4.22	1542 x 2742		T-EW60/6 VI	17				
5.95	1285 x 2285 2585 x 1600		Forster Unico	T-EW60/6 VI • T-EW60/6 TVI	13-V-582	17, 19		
	1668 x 1122 1000 x 1710	Jansen	T-EW30/6 VI	EFR-15-002708	8			
1.87	1300 x 2000	Jansen Economy 50	T-EW30/6	EFR-15-002708 + ext	7			


Applications (system)	Classification	Max Area (m²)	Dim. maxi glass (mm)	Profile	Pyroguard Glass	Certification	Annex			
<p>Partition wall</p>	E60	4.34	2714 x 1680	Certifire approved or previously tested steel system	T-EW60/6 TVI	CF5319	19			
		1.55	1323 x 1229		T-EW60/6 VI	CF5319	17			
		4.91	1731 x 3544		T-EW60/6 VF	CF5319	21			
		4.91	3544 x 1731		T-EW60/6	CF5319				
	E90	1.23	1720 x 720	Forster Presto	T-EW60/13-1	13-A-374	23			
		1.22	1060 x 1150		T-EW60/13-1 VI					
		4.5	2850 x 1579 1579 x 2850	Forster Presto	T-EW90/13-1 T-EW90/13-1 VF	13-A-417 ext. EFR-14-001441	24			
				Steel frame			26, 28			
	E120	8.9	2845 x 3120	Forster Presto	T-EW60/13-1 • T-EW60/13-1 VI T-EW60/13-1 VF	13-A-180 ext. EFR-14-002251	23-25			
		6.77	2400 x 3360	RP Hermetic	T-EW120/13-1	EFR-16-V-002496	29			
	EW30	2.1	820 x 2500	Forster Presto	EW30 Impact	Chiltern 10188	31			
		1.5	840 x 1800	Forster Presto	EW30 Impact	EFR-15-002713				
			1028 x 900							
		1.52	840 x 1800 1028 x 900	Jansen Economy	EW30 Impact	EFR-15-002713 + ext				
		3.2	1390 x 1835	Jansen Economy	EW30 Maxi • EW30 Maxi Impact	12-V-068	33, 35			
			2290 x 1395							
		3.98	3100 x 1540	Forster Unico	T-EW30/6 VI • T-EW30/6 VF	13-A-442	8, 12			
			1284 x 3100							
		3.02	1517 x 2393							
		3.31	1284 x 2584							
			2584 x 1284							
		5.95	3102 X 1920					T-EW30/6 VI • T-EW30/6 TVI	13-V-582 ext.14/2	8, 10
			1600 X 2585							
		2	1120 x 1805					Jansen VISS-TV	T-EW30/6 VI	13-A-438
		1.87	1668 x 1122 1000 x 1710	Jansen Economy 50	T-EW30/6 VI	EFR-15-002708 + ext	8			
		4.8	1535 x 3135	Forster Presto	T-EW30/6 T-EW30/6 VF • T-EW30/6 VI	13-A-175	7, 8, 12			
			3135 x 1535							
		3.92	1400 x 2800	RP ISO Fine 45	T-EW30/13-1 VI	13-A-444	15			
			1479 x 1391	RP ISO Hermetic 45N						
		6.77	2400 x 3360	RP Hermetic	T-EW30/13-1	EFR-16-V-002496	14			
		1.4	1195 x 1170	Certifire approved or previously tested steel system	EW30 Impact	CF257	31			
		2.26	900 x 2750							
3		1500 x 2500								
1.04		1668 x 780								
1.65		660 x 3045								
3.15		1500 x 2500	EW30 Maxi • EW30 Maxi Impact				CF257	CF257	33, 35	
		1500 x 2750								
3.3		1500 x 2750								
2.1	1963 x 1335	T-EW90/13-1	CF5227				26			
5.43	1875 x 3623	T-EW30/13-1 VI	CF5227				CF5227	15		
4.9	1750 x 3500									
2.57	1849 x 1739									
5.49	1875 x 3660									
2.09	1157 x 1805	T-EW120/13-1 VI	CF5227				CF5227	30		
1.58	873 x 1865									
0.85	873 x 1002									
1.88	1040 x 2226									
1.34	1381 x 1196									
2.49	1381 x 2226			T-E30/6 • T-E30/6 VI	CF5319	CF5319			1, 2	
										CF5319


Applications (system)	Classification	Max Area (m ²)	Dim. maxi glass (mm)	Profile	Pyroguard Glass	Certification	Annex			
<p>Partition wall</p>	EW30	2.81	2160 x 1560	Certifire approved or previously tested steel system	T-E30/6	CF5319	1			
		0.48	326 x 1757			CF5319				
		1.69	1157 x 1757			CF5319				
		1.69	1157 x 1560					CF5319	5	
		2.57	1754 x 1759					T-E30/10	CF5319	3
		4.61	3316 x 1625					T-E30/6 VF	CF5319	33, 35
		3.85	1619 x 2783					EW30 Maxi • EW30 Maxi Impact	CF257	34
	EW30 horizontal	0.87	1020 x 1020		EW30 Maxi VI					
		1.76	774 x 2804							
	EW60	3.92	1400 x 2800	1479 x 1391	RP ISO Fine 45RP ISO Hermetic 45N	T-EW60/13-1 VI	13-A-444	24		
			3.9	2835 x 1385	1385 x 2835	Forster Presto	T-EW60/6 VF	13-A-173	21	
		8.87	2845 x 3120		T-EW60/13-1 • T-EW60/13-1 VI T-EW60/13-1 VF		13-A-180 + ext EFR-14-002251	23-25		
		4.5	2850 x 1579	1579 x 2850	Forster Presto	T-EW60/13-1	13-A-177	23		
		4.19	2830 x 1480	1480 x 2830		T-EW60/13-1 VF • T-EW60/13-1 VI (with a security option)	13-A-177 ext. EFR-14-002238	24, 25		
		1.24	1720 x 720		Forster Presto	T-EW60/13-1	13-A-374	23		
		1.22	1060 x 1150			T-EW60/13-1 VI		24		
		4.1	1285 x 2285	2585 x 1600	Forster Unico	T-EW60/6 VI • T-EW60/6 TVI	13-V-582 ext 14/1	17, 19		
		6.77	2400 x 3360		RP Hermetic	T-EW60/13-1	EFR-16-V-002496	23		
		4.18	1494 x 2988		Certifire approved or previously tested steel system	T-EW60/13-1 VI	CF5204	24		
		2.19	1578 x 1484			T-EW30/13-1 VI	CF5204	15		
		5.49	1875 x 3660			T-EI30/18-2 • T-EI30/18-1	CF5204	61		
		3.44	2680 x 1284			T-EI30/18-2 • T-EI30/18-2 VI T-EI30/18-1 • T-EI30/18-1 VI	CF5204	48, 49		
		1.96	1311 x 1543				CF5204	61, 62		
		3.83	2983 x 1477			EW30 Impact VI	CF257	32		
		2.17	1454 x 1718				EW60	CF257	37	
		3.01	1316 x 2323			T-EW90/13-1	CF5227	26		
		1.66	1509 x 1116				T-EW60/13-1	CF5227	23	
3		1500 x 2500		EW60 VI		CF257	38			
0.92		1467 x 686								
1.21		600 x 2400								
1.72		960 x 2160								
1.44		1200 x 1200								
3.3		1570 x 2750								
2.1		1963 x 1335								
2.33		1081 x 2698								
2.24		3538 x 791								
1.25	625 x 2500									
1.95	1088 x 1788									

Applications (system)	Classification	Max Area (m²)	Dim. maxi glass (mm)	Profile	Pyroguard Glass	Certification	Annex
 Partition wall	EW60	5.43	1875 x 3623	Certifire approved or previously tested steel system	T-EW30/13-1 VI	CF5227	15
		4.9	1750 x 3500	RP ISO Hermetic 45N		CF5227	
		2.57	1849 x 1739		Forster Thermix Vario	T-EW120/13-1 VI	CF5227
		5.49	1875 x 3660	T-EW60/6 TVI		CF5319	19
		4.34	2714 x 1680	Certifire approved or previously tested steel system	T-EW60/6 VI	CF5319	17
		1.55	1323 x 1229		T-EW60/6 VF	CF5319	21
		4.91	1731 x 3544		T-EW60/6	CF5319	
		4.91	3544 x 1731				
	EW90	4.5	1579 x 2850	Forster Presto	T-EW90/13-1	13-A-417 + ext	26, 28
			2850 x 1579		T-EW90/13-1 VF		
		6.77	2400 x 3360	RP Hermetic	T-EW90/13-1	EFR-16-V-002496	26
		7.33	2585 x 2835	Forster Presto	T-EW90/13-1	13-A-180 ext EFR-14-002242	
		4.39	1500 x 2928	Certifire approved or previously tested steel system	T-EW30/13-1 VI	CF5204	15
					T-EW30/13-1 VI	CF5227	
					T-EW90/13-1	CF5227	
					T-EW90/13-1	CF5227	
					T-EW120/13-1	CF5227	
					T-EW120/13-1 VI	CF5227	
	5.27	1800 x 3514	Certifire approved or previously tested steel system	T-EW90/13-1	CF5227	26	
				T-EW120/13-1	CF5227	29	
				T-EW120/13-1 VI	CF5227	30	
				T-EW120/13-1 VI	CF5227	30	
	EW120	5.6	2000 x 2800	RP Hermetic	T-EW120/13-1	EFR-16-V-002496	29
		4	2840 x 1409	Certifire approved or previously tested steel system	T-EW90/13-1	CF5227	26
		8.79	3102 x 3402		T-EW120/13-1	CF5227	29
		5.27	1800 x 3514		T-EW120/13-1 VI	CF5227	30
	EI30	3.92	1400 x 2800 1479 x 1391	RP ISO Fine 45RP ISO Hermetic 45N	T-EW60/13-1 VI	13-A-444	24
		4.0	1541 x 3113 3113 x 1541	Forster Fuego Light	T-EI30/18-2 • T-EI30/18-2 VF T-EI30/18-2 VI	13-A-439	48, 50
					T-EI30/18-1 • T-EI30/18-1 VF T-EI30/18-1 VI	13-A-439 + ext 16/1	61-63
		3.93	2623 x 1650	Certifire approved or previously tested steel system	T-EW30/13-1 VI	CF5204	15
		3.37	1350 x 2970			CF5204	
		5.49	1500 x 2385 1875 x 3660			CF5204	
4.18		1494 x 2988	CF5204				
2.19		1578 x 1484	T-EI30/18-2 • T-EI30/18-2 VI T-EI30/18-1 • T-EI30/18-1 VI		CF5204	48-49 61-62	
5.49		1875 x 3660			CF5204		
4.39		1500 x 2928			CF5204		
2.36		1580 x 1868			CF5204		
4.16		3243 x 1605		CF5204			
3.44		2680 x 1326		CF5204			
1.96		1311 x 1543	CF5204				
3.83	2983 x 1477	CF5204					
2.17	1454 x 1718	CF5204					

Applications (system)	Classification	Max Area (m²)	Dim. maxi glass (mm)	Profile	Pyroguard Glass	Certification	Annex		
 <p>Partition wall</p>	EI30	3.7	1618 x 2855	Certifire approved or previously tested steel system	T-EI30/18-2 • T-EI30/18-2 VI T-EI30/18-1 • T-EI30/18-1 VI	CF5204	48-49 61-62		
		2.04	1855 x 1372			CF5204			
		3.01	1316 x 2323				EI30 INT • EI30 EXT	CF5204	
		1.66	1509 x 1116		CF437	40, 42			
		5.68	2840 x 2840		CF437	40, 42			
		2.73	1105 x 3098						
		1.46	2517 x 584		EI30 INT VI • EI30 EXT VI	CF437		41, 43	
		3.66	1555 x 2948		EI30 EXT VI	CF437		43	
		4.5	1630 x 3450		EI30 INT • EI30 EXT	CF437		40, 42	
		5.96	2840 x 2840		EI30 INT VI • EI30 EXT VI	CF437		41, 43	
		4.68	3120 x 3120		Janisol 2	EI30 INT • EI30 EXT		12-A-315	40, 42
		5.68	2000 x 2840 2500 x 1500			EI30 INT VI			41
		3	1200 x 2500			EI30 EXT VI	43		
	5.6	2000 x 2840	EI60	1.59	1250 x 1250	Certifire approved or previously tested steel system	EI60 INT VI • EI60 EXT VI	CF437	45, 47
	EI60	2.0		1780 x 1346 1540 x 2740	Forster Fuego Light	T-EI60/25-3 • T-EI60/25-3 VF T-EI60/25-3 VI	13-A-429	51 - 53	
		3.33		2594 x 1284				T-EI60/25-3	51
		3.99		1415 x 2820	RP ISO Hermetic 60N	T-EI60/25-3 VI	13-A-425	52	
		3.55		1540 x 2740	Forster Fuego Light	T-EI60/25-3	EFR-15-002712	51	
		2.0		1780 x 1346					
		4.99		1769 x 3525	Certifire approved or previously tested steel system	T-EI60/25-3 • T-EI60/25-3 VI	CF5204	51, 52	
		5.3		3530 x 1875		T-EI90/32-2 • T-EI90/32-2 VI	CF5204	56, 57	
		2.03		1879 x 1349			CF5204		
		4		2667 x 2600		EI60 INT • EI60 EXT	CF437	44, 46	
		2.7		2700 x 1000		EI60 INT VI • EI60 EXT VI		45, 47	
		4.37		1750 x 3125		Janisol 2	EI60 INT VI • EI60 EXT VI	CF437	44-47
		3		2000 x 1500			EI60 INT • EI60 EXT EI60 INT VI • EI 60 EXT VI	12-A-340	
	4.31	2875 x 1725	Certifire approved or previously tested steel system	EI60 INT VI • EI60 EXT VI			CF437	45, 47	
	6.51	3100 x 3100		EI60 INT • EI60 EXT EI60 INT VI • EI 60 EXT VI		12-A-340	44-47		
	3.75	2500 x 1500 1500 x 2500	EI60 horizontal	1.0		1000 x 1000	Certifire approved or previously tested steel system	EI60 INT VI • EI60 EXT VI	CF437
	EI90	4.3		2824 x 1500 1500 x 2824	RP ISO Hermetic 45N	T-EI90/32-2	13-A-432	56	
		4.2		2824 x 1500	Certifire approved or previously tested steel system	T-EI90/32-2 • T-EI90/32-2 VI	CF5204	56, 57	
		1.95		1804 x 1295			CF5204		
		5.1		1800 x 3401		T-EI90/32-2	CF5204	56	
	EI120	3.7		1300 x 2825 1457 x 1378	RP ISO Feu	T-EI120/47-3	13-A-422	58	
		3.67		1300 x 2825	Certifire approved or previously tested steel system	T-EI120/47-3	CF5204		
3.55		1542 x 2742		Forster Fuego Light	T-EI120/47-3 VI	EFR-16-V-004086	59		
		1782 x 2742							
2.77	1285 x 2285	Certifire approved or previously tested steel system		T-EI120/47-3 T-EI120/47-3 VF	EFR-16-V-004086 + ext 17/1				

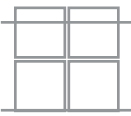
Applications (system)	Classification	Max Area (m ²)	Dim. maxi glass (mm)	Profile	Pyroguard Glass	Certification	Annex
 Single door	E30	2.8	1090 x 2260 1460 x 1950	Forster Presto	T-E30/6	13-A-176	1
		3.86	1329 x 2904 1196 x 3202		T-E30/8 • T-E30/10 • T-E30/12		4-6
	inward / outward opening	3	1240 x 2427	Forster Presto	T-E30/6 • T-E30/8 T-E30/10 • T-E30/12 T-EW30/6 VF • T-EW30/6 VI acid etched/satin possible screen print possible for 50%	EFR-14-001850	1, 4-6, 8, 12
inward / outward opening	E60	3.53	984 X 2411 886 X 2648 1214 X 2933 1095 X 3223	Forster Presto	T-EW60/13-1 T-EW60/13-1 VF • T-EW60/13-1 VI (with a security option)	13-A-178	23-25
		3.93	1385 x 2835 2835 x 1385		T-EW60/6 VF		21
		3.55	1542 x 2742		T-EW60/6 VI		17
	3	1240 X 2427	Forster Presto	T-EW60/13-1	EFR-14-001852	23	
	E90 / E120	3	1033 X 2677	Forster Presto	T-EW90/13-1 VI • T-EW120/13-1 VI	13-A-419	24
4.32	1263 X 3252	T-EW90/13-1 • T-EW120/13-1	13-A-419		27, 30		
EW30	1.5	780 x 1931	Forster Presto	EW30 Impact	Chiltern 10188	31	
	2.1	920 x 2320	Jansen Economy	EW30 Maxi VI	12-V-034B	34	
	3.32	1284 x 2584	Forster Unico	T-EW30/6	13-A-443	7	
	3.98	1284 x 3100		T-EW30/6 VI • T-EW30/6 VF		8, 12	
	3.02	1517 x 2393					
	3.15	1140 X 2765	Forster Presto	T-EW30/6 • T-EW30/6 VF • T-EW30/6 VI	13-A-176	7, 8, 12	
	2.22	1060 X 2093		EFR-14-001850			
	1.61	835 x 2066	Certifire approved or previously tested steel doorset	EW30 Impact	CF257	31	
	0.82	858 x 1096					
	3.7	1325 x 3488		T-EW60/13-1	CF5227	23	
2.46	1075 x 2863	T-EW60/13-1 VI		CF5227	24		

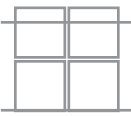
Applications (system)	Classification	Max Area (m ²)	Dim. maxi glass (mm)	Profile	Pyroguard Glass	Certification	Annex	
 Single door ----- inward / outward opening -----	EW60	3.16	1140 X 2269 1140 X 2769	Forster Presto	T-EW60/13-1 T-EW60/13-1 VF • T-EW60/13-1 VI	13-A-178	23-25	
		2.5	880 x 2310	Forster Presto	T-EW60/13-1 VI	13-A-419	24	
		3.6	1080 X 2810		T-EW60/13-1		23	
		2.2	1060 X 2093	Forster Presto	T-EW60/13-1	EFR-14-001852	23	
		2.8	1029 x 2684	Certifire approved or previously tested steel doorset	T-EI30/18-2 • T-EI30/18-2 VI T-EI30/18-1 • T-EI30/18-1 VI	CF5204	48, 49	
		2.62	1263 x 2598		T-EW60/13-1	CF5227	23	
		2.46	1075 x 2863		T-EW60/13-1 VI	CF5227	24	
		3.7	1325 x 3488		T-EW60/13-1	CF5227	23	
		EW90	2.36		1032 x 2748	T-EW60/13-1 VI	CF5227	24
			3.55		1272 x 3348	T-EW60/13-1	CF5227	23
	EW120	1.97	860 x 2290		T-EW60/13-1 VI	CF5227	24	
		2.96	1060 x 2790		T-EW60/13-1	CF5227	23	
	EI30	3.32	1083 x 2741 1227 x 2707	Forster Fuego	T-EI30/18-2 T-EI30/18-2 VF • T-EI30/18-2 VI	13-A-441	48-50	
		3.37	1350 x 2970	Forster Fuego	T-EI30/18-1 T-EI30/18-1 VF • T-EI30/18-1 VI	13-A-441 + ext 16/1	61-63	
		3.45	1286 x 3355	Certifire approved or previously tested steel doorset	T-EI30/18-2 • T-EI30/18-2 VI T-EI30/18-1 • T-EI30/18-1 VI	CF5204	48, 49 61, 62	
		2.76	1029 x 2684		EI30 EXT VI	CF5204		
		4.5	1630 x 3450		EI30 INT VI	CF437	43	
		3.03	1270 x 2694		EI60 INT • EI60 EXT	CF437	44, 46	
		4.42	1380 x 3205		EI30 INT • EI30 EXT	CF437	40, 42	
		3.66	1555 x 2948	EI30 INT VI • EI30 EXT VI	CF437	41, 43		
		3.75	1306 x 2870	Janisol 2	EI30 INT • EI30 EXT EI30 INT VI • EI30 EXT VI	12-A-316	40-43	
		EI60	2.06	880 x 2337	Forster Fuego	T-EI60/25-3 • T-EI60/25-3 VF T-EI60/25-3 VI	13-A-430	51-53
	2.6		1100 x 2360	Janisol C4	EI60 INT • EI60 EXT EI60 INT VI • EI60 EXT VI	12-A-339	44-47	
	2.74		1200 x 2409	Certifire approved or previously tested steel doorset	EI60 INT • EI60 EXT	CF437	44, 46	
	0.82		1400 x 589		EI60 INT • EI60 EXT	CF437	44, 46	
	2.31		976 x 2433		EI60 EXT VI	CF437	47	
	4.13		1598 x 3178		EI60 INT VI • EI60 EXT VI	CF437	45, 47	
	2.94		1241 x 2767		EI60 INT • EI60 EXT	CF437	44, 46	
3.69	1429 x 2842		CF437					
3.03	1270 x 2694							
2.13	913 x 2795		T-EI60/25-3		CF5204	51		

Applications (system)	Classification	Max Area (m²)	Dim. maxi glass (mm)	Profile	Pyroguard Glass	Certification	Annex	
 Double door	E30	3.32	1284 x 2584	Forster Unico	T-EW30/6	13-A-443	7	
		3.98	1284 x 3100		T-EW30/6 VI • T-EW30/6 VF		8, 12	
		3.02	1517 x 2393					
		2.85	1090 x 2260 1460 x 1950	Forster Unico	T-E30/6	13-A-176	1	
		3.86	1329 X 2904 1196 X 3202		T-E30/8 • T-E30/10 • T-E30/12		4-6	
		2.58	1069 X 2410	Forster Presto	T-E30/8 • T-E30/10 • T-E30/12 T-EW30/6 • T-EW30/6 VF • T-EW30/6 VI"	EFR-14-001850	4-8, 12	
	2.36	1131 x 2570	Certifire approved or previously tested steel doorset	T-E30/8	CF5319	4		
	inward / outward opening	E60	5.7	2330 X 2254 2019 X 2808 1749 X 3224	Forster Presto	T-EW60/13-1 • T-EW60/13-1 VI (with a security option)	13-A-178 + EFR-14-002239	23, 34
			3.93	1385 x 2835 2835 x 1385		T-EW60/6 VF	13-A-178	21
			4.23	1542 x 2742		T-EW60/6 VI		17
2.58		1069 X 2410	Forster Presto	T-EW60/13-1	EFR-14-001852	23		
opens both ways and in unison	E120	2.98	1102 X 2706	Forster	T-EW120/13-1	13-A-174	29	
	EW30	3.02	1517 x 2393	Forster Unico	T-EW30/6 VI • T-EW30/6 VF	13-A-443	8, 12	
		2.11	915 x 2305	Forster Presto	T-EW30/6 • T-EW30/6 VF T-EW30/6 VI	13-A-176	7, 8, 12	
		2.36	1131 x 2570	Certifire approved or previously tested steel doorset	T-E30/8	CF5319	4	
	EW60	2.55	870 x 2784	Forster Presto	T-EW60/13-1 • T-EW60/13-1 VI (with a security option)	13-A-178	23, 24	
		1.9	912 x 2078	Forster Presto	T-EW60/13-1	EFR-14-001852	23	
		2.76	1029 x 2684	Certifire approved or previously tested steel doorset	T-EI30/18-2 • T-EI30/18-2 VI T-EI30/18-1 • T-EI30/18-1 VI	CF5204	48, 49 61, 62	
	EI30	2.92	1228 x 2376	Forster Fuego	T-EI30/18-2 • T-EI30/18-2 VF T-EI30/18-2 VI	13-A-441	48-50	
		2.44	1029 x 2684	Forster Fuego	T-EI30/18-2 VI	13-A-440	49	
		3.45	1286 x 3355	Certifire approved or previously tested steel doorset	T-EI30/18-2 • T-EI30/18-2 VI T-EI30/18-1 • T-EI30/18-1 VI	CF5204	48, 49 61, 62	
		2.76	1029 x 2684			CF5204		
		3.29	1145 X 2870	Janisol 2	EI30 INT • EI30 EXT EI30 INT VI • EI30 EXT VI	12-A-316	40-43	
	EI60	2.39	752 x 2337 882 x 2708	Forster Fuego	T-EI60/25-3 • T-EI60/25-3 VF T-EI60/25-3 VI	13-A-430	51-53	
		2.44	1033 x 2360	Janisol C4	EI60 INT • EI60 EXT EI60 INT VI • EI60 EXT VI	12-A-339	44-47	



Applications (system)	Classification	Max Area (m ²)	Dim. maxi glass (mm)	Profile	Pyroguard Glass	Certification	Annex
 <p>Unequal double door</p>	E30	3.86	1329 x 2904 1196 x 3202	Forster Presto	T-E30/6 • T-E30/8 T-E30/10 • T-E30/12	13-A-176	1, 4-6
		2.85	1182 x 2410	Forster Presto	T-E30/8 • T-E30/10 • T-E30/12 T-EW30/6 T-EW30/6 VF • T-EW30/6 VI	EFR-14-001850	4-8, 12
		3.32	1284 x 2584	Forster Unico	T-EW30/6	13-A-443	7
		3.02	1284 x 3100 1517 x 2393		T-EW30/6 VI • T-EW30/6 VF		8, 12
		3.8	1608 x 2916	Certifire approved or previously tested steel doorset	T-E30/8	CF5319	4
	E60	5.67	2260 x 2334 1958 x 2686 2019 x 2808 1749 x 3224	Forster Presto	T-EW60/13-1 • T-EW60/13-1 VI (with a security option) T-EW60/6 VF • T-EW60/6 VI	13-A-178	17, 21, 23, 24
		3.13	964 x 3241	Forster Presto	T-EW60/13-1	13-A-418	23
		4.79	1987 x 2410	Forster Presto	T-EW60/13-1	EFR-14-001852	
	E120	2.98	1102 x 2706	Forster Presto	T-EW120/13-1	13-A-174	29
		3.13	964 x 3241	Forster Presto		13-A-418	
		2.29	1049 x 2182	RP Technik Hermetic 50 CS		13-A-416	
	EW30	2.11	915 x 2305	Forster Presto	T-EW30/6 T-EW30/6 VF • T-EW30/6 VI	13-A-176	7, 8, 12
		3.02	1284 x 3100 1517 x 2393	Forster Unico	T-EW30/6 VI	13-A-443	8
		2.1	1010 x 2078	Forster	T-EW30/6 • T-EW30/6 VF T-EW30/6 VI	EFR-14-001850	7, 8, 12
		3.67	1600 x 2869	Certifire approved or previously tested steel doorset	T-EW60/13-1	CF5227	23
		3.8	1608 x 2916		T-E30/8	CF5319	4


Applications (system)	Classification	Max Area (m²)	Dim. maxi glass (mm)	Profile	Pyroguard Glass	Certification	Annex
<p>Unequal double door</p>	EW60	4.85	1950 x 2309 1740 x 2784	Forster Presto	T-EW60/13-1	13-A-178	23
						T-EW60/13-1 VF • T-EW60/13-1 VI (with a security option)	13-A-178 ext. EFR-14-002238
		3.93	1385 x 2835		T-EW60/6 VF	13-A-178 ext. EFR-14-002239	21
		4.23	1542 x 2742		T-EW60/6 VI		17
		3.55	1710 x 2078	Forster Presto	T-EW60/13-1	EFR-14-001852	23
		2.76	1029 x 2684	Certifire approved or previously tested steel doorset	T-EI30/18-2 • T-EI30/18-2 VI T-EI30/18-1 • T-EI30/18-1 VI	CF5204	48, 49 61, 62
	3.81	1364 x 3069	T-EW60/13-1		CF5227	23	
	3.67	1600 x 2869	CF5227		23		
	3.53	1536 x 2754	T-EW90/13-1		CF5227	26	
	EW90	2.29	820 X 2790	Forster Presto		13-A-418	26
		EW120	3.53	1536 x 2754	Certifire approved or previously tested steel doorset	T-EW60/13-1	CF5227
	4		2840 x 1409	T-EW90/13-1		CF5227	26
	8.79		3102 x 3402	T-EW120/13-1		CF5227	29
	5.27		1800 x 3514	T-EW120/13-1 VI		CF5227	30
	EI30	3.29	1145 x 2870	Janisol 2	EI30 INT • EI30 EXT EI30 INT VI • EI30 EXT VI	12-A-316	40-43
		2.75	886 x 3097	Forster Fuego Light	T-EI30/18-2 • T-EI30/18-2 VF T-EI30/18-2 VI	13-A-441	48-50
		3.45	1286 x 3355	Certifire approved or previously tested steel doorset	T-EI30/18-2 • T-EI30/18-2 VI T-EI30/18-1 • T-EI30/18-1 VI	CF5204	48, 49 61, 62
		2.76	1029 x 2684		CF5204		
	EI60	2.44	1033 x 2360	Janisol C4	EI30 INT • EI30 EXT EI30 INT VI • EI30 EXT VI	12-A-339	44 - 47
		1.76	752 x 2337	Forster Fuego Light	T-EI60/25-3 • T-EI60/25-3 VF T-EI60/25-3 VI	13-A-430	51-53
<p>Smoke containment</p>	DH30	3.0	2500 x 1200	Steel	Smokeyguard DH30/8 EDC	EFR-14-002471	74
<p>Structural wall / butt joint</p>	EI30	4.20	1470 x 2860	Steel	EI30 INT	RF11097	40
		4.25	1300 x 3265	Forster Fuego Light	T-EI30/24-2 SWS	13-A-445	67
		4.3	1485 x 2895	Jansen Janisol 2	EI30 EXT	IFT 27134141	42
		5.39	1845 x 3592	Certifire approved or previously tested steel system	EI30 INT • EI30 EXT	CF437	40, 42
	EI60	4.69	1605 x 3124		EI60 INT • EI60 EXT	CF437	44, 46
		5.84	2013 x 3190	Forster Fuego Light 60	T-EI60/40-2 SWS	13-A-421 ext. 16/1	72
		4.34	1500 x 2895	EI60 EXT +	12-A-461	-	

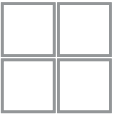
Applications (system)	Classification	Max Area (m²)	Dim. maxi glass (mm)	Profile	Pyroguard Glass	Certification	Annex			
 Curtain wall	EW30	4.4	1500 x 2928	Forster Thermfix Vario	T-EW30/6 • T-EW30/6 VF T-EW30/6 VI	13-A-427 ext. EFR-14-001712	7, 8, 12			
	EW60	4.4	1500 x 2928	Forster Thermfix Vario	T-EW60/13-1 • T-EW60/13-1 VF T-EW60/13-1 VI	13-A-184	23-25			
		3.93	1500 x 1385 1385 x 2835					T-EW60/6 VF	13-A-184 ext. EFR-14-002239	21
		2.94	1285 x 2285							
		4.18	1494 x 2988					Certifire approved or previously tested steel system	T-EW30/13-1 VI	CF5204
		2.19	1578 x 1484	CF5204						
		5.49	1875 x 3660		CF5204					
		3.44	2680 x 1284	T-EI30/18-2 • T-EI30/18-2 VI T-EI30/18-1 • T-EI30/18-1 VI		CF5204	48, 49 61, 62			
		1.96	1311 x 1543							
		3.83	2983 x 1477							
		2.17	1454 x 1718							
		3.01	1316 x 2323							
		1.66	1509 x 1116							
	EW90	4.39	1500 x 2928		T-EW30/13-1 VI	CF5204	15			
	EI30	4.4	1500 x 2928	Forster Thermfix Vario	T-EW30/13-1 VI	13-A-427	15			
		5.49	1875 x 3660	Certifire approved or previously tested steel system	T-EW30/13-1 VI	CF5204	15			
		4.18	1494 x 2988			CF5204				
		2.19	1578 x 1484			CF5204				
		5.49	1875 x 3660			CF5204				
		4.39	1500 x 2928			CF5204				
		4.16	3243 x 1605			T-EI30/18-2 • T-EI30/18-2 VI T-EI30/18-1 • T-EI30/18-1 VI	CF5204	48, 49 61, 62		
		2.36	1580 x 1868				CF5204			
		3.44	2680 x 1284				CF5204			
1.96		1311 x 1543	CF5204							
3.83		2983 x 1477	CF5204							
2.17	1454 x 1718			CF5204						

Applications (system)	Classification	Max Area (m ²)	Dim. maxi glass (mm)	Profile	Pyroguard Glass	Certification	Annex
 Curtain wall	EI60	5.84	2013 X 3190	Forster	T-EI60/40-2 SWS	13-A-421 + ext	72
		4.99	1769 x 3525	Certifire approved or previously tested steel system	T-EI60/25-3 • T-EI60/25-3 VI	CF5204	51, 52
		5.3	3530 x 1875		T-EI90/32-2 • T-EI90/32-2 VI	CF5204	56, 57
		2.03	1879 x 1349			CF5204	
	EI90	4.24	2824 x 1500		T-EI90/32-2 • T-EI90/32-2 VI	CF5204	56, 57
		1.95	1804 x 1295	T-EI90/32-2 • T-EI90/32-2 VI	CF5204		
	EI120	3.67	1300 x 2825	T-EI120/47-3	CF5204	58	




TIMBER SYSTEMS

Applications (system)	Classification	Max Area (m²)	Dim. maxi glass (mm)	Profile	Pyroguard Glass	Certification	Annex			
 Single frame	E30	2.81	1353 x 2080 1230 x 2288	hard wood	Pyrostem	CF581	0			
	EW60	1.3	650 x 2000	wood	EW60 VI	EFR-15-002710	38			
 Partition wall	E30	3.24	1296 x 2496 1486 x 1216	oak	T-E30/8	13-A-447	4			
		3.56	1425 x 2745			13-A-447 ext 15/1				
		1.98	1635 x 1338			13-A-435		7, 8, 12		
	E30	4.8	3420 x 1674 1535 x 3135	hard wood	T-EW30/6 • T-EW30/6 VF T-EW30/6 VI	13-A-435	7, 8, 12			
		3.65	1465 x 2821	hard wood	T-E30/8	CF5319	4			
		2.04	1679 x 1374							
		4.32	3100 x 1744							
		4.97	3563 x 1744					T-E30/6 • T-E30/6 VI	CF5319	7, 8
		EW30	2.02	800 x 2500	Timber density: 450 kg/m³	EW30 Impact	EFR-16-004198 + Ext 17/3	31		
				2500 x 806						
	1000 x 2000									
	4.05		1500 x 2700	EW30 Maxi • EW30 Maxi Impact					33, 35	
	2		800 x 2500	EW30 Impact VI					32	
	2.8		1400 x 2000	EW30 Maxi VI • EW30 Maxi Impact VI					34	
	3.98		2850 x 1395 1395 x 2850	T-EW30/6 • T-EW30/6 VF T-EW30/6 VI					EFR-16-004198 + Ext 17/1	7, 8, 12
3.7	1676 x 2190		Hard wood density: 650 kg/m³	T-EW30/6 VI					13-A-437	8
4.98	3153 x 1579		Timber density: 450 kg/m³	T-EW30/13-1					EFR-16-004198 + Ext 17/1	14
		8.87			2845 x 3120	T-EW30/13-1 VI • T-EW30/13-1 VF (with or without an integral blind)	15, 16			



Applications (system)	Classification	Max Area (m ²)	Dim. maxi glass (mm)	Profile	Pyroguard Glass	Certification	Annex	
 <p>Partition wall</p>	EW30	2.2	1100 x 2200	hard wood	EW30 Impact	CF257	31	
		2.4	1200 x 2000					
		1.43	880 x 1780			wood		CF257
		2.68	1070 x 2675	CF257 CF257				
		1.4	1549 x 2000					
		2.52	3125 x 1008	hard wood		EW30 Maxi EW30 Maxi Impact		CF257
		3.93	1575 x 2625					
		0.97	696 x 1624					
		3.3	1575 x 2100	CF257				
		4.58	1695 x 3051	CF257				
		2.48	3075 x 991	hard wood	EW30 Maxi VI • EW30 Maxi Impact VI		CF257	34
		3.28	1638 x 2340		T-EW90/13-1	CF257	26	
		2.06	1963 x 1335	CF5227		27		
		3.92	1500 x 2750			EW30 Impact	CF257	31
		3.99	2514 x 1744	CF5227				
		1.3	2400 x 2600	soft wood	EW30 Impact	CF257	32	
		2.2	880 x 2750			EW30 Impact VI		CF257
		2.26	904 x 2825		CF257			
		2.47	1236 x 2060		CF257			
		2.5	1000 x 2500	hard wood	T-E30/8	CF5319	4	
		3.65	1465 x 2821			T-EW30/6 • T-EW30/6 VI T-EW30/6 VF	CF5319	7, 8, 12
		2.04	1679 x 1374		Hard wood density: 650 kg/m ³		T-EW60/13-1 T-EW60/13-1 VF • T-EW60/13-1 VI	13-A-181 ext. EFR-14-001509
		4.32	3100 x 1744			T-EW60/13-1 VF • T-EW60/13-1 VI (with a security option)		13-A-181 ext. EFR-14-001509
		4.97	3563 x 1744	hard wood	T-EI30/18-2 • T-EI30/18-2 VI T-EI30/18-1 • T-EI30/18-1 VI		CF5204	48, 49 61, 62
		EW60	8.9			2845 x 3120	Hard wood density: 650 kg/m ³	T-EW60/13-1 VF • T-EW60/13-1 VI
			3.99	2628 x 1510	hard wood	T-EW90/13-1		
			3.92	1500 x 2750			hard wood	EW60 • EW60 VI
			2.06	1963 x 1335	Certifire approved timber frames	CF257		
	0.97		696 x 1624	Hard wood density: 650 kg/m ³		T-EW90/13-1	13-A-181	26
	1.63		812 x 2500		hard wood		CF5227	
	2.6	1200 x 2200 1570 x 1068	hard wood	T-EW90/13-1		CF5227		
	3.17	1884 x 1282			hard wood	T-EW90/13-1	CF5227	
3.17	1440 x 2640	hard wood	T-EW90/13-1	CF5227				




Applications (system)	Classification	Max Area (m ²)	Dim. maxi glass (mm)	Profile	Pyroguard Glass	Certification	Annex
 Partition wall	EI30	4.64	3102 x 1782 1782 x 3102	Timber density: 450 kg/m ³	T-EI30/18-2 T-EI30/18-2 VF • T-EI30/18-2 VI (with or without integral blinds)	EFR-16-004198 + ext	48-50
		4.87	1866 x 3108		T-EI30/18-1 (with or without integral blinds) T-EI30/18-1 VF (with or without integral blinds)		61
		2.73	2712 x 1200		T-EI30/18-1 VI		63
		2.73	2712 x 1200 1200 x 2712				62
		3.1	1300 x 2385 2385 x 1300				
		4.66	1869 x 3119	hard wood	T-EI30/18-2 • T-EI30/18-2 VI T-EI30/18-1 • T-EI30/18-1 VI	CF5204	48, 49 61, 62
		4.8	3231 x 1856			CF5204	
		3.99	2628 x 1510			CF5204	
		6.99	3179 x 3179		EI30 INT • EI30 EXT	CF437	40, 42
		1.9	1378 x 200			CF437	
		2.16	2049 x 2188			CF437	
		3	1500 x 2500		EI30 INT VI • EI30 EXT VI	CF437	41, 43
		4.68	3100 x 3120				
		1.9	1378 x 200				
		1.3	2400 x 2600		soft wood	EI30 INT • EI30 EXT	CF437
		3.9	1463 x 3100	CF437			
		1.3	2400 x 2600	CF437			
		2.4	2000 x 1200	hard wood	EI30 INT • EI30 EXT	CF437	40, 42
	5.78	2890 x 2000 2000 x 2890	Timber density: 450 kg/m ³	EI30 INT • EI30 EXT (with or without integral blinds)	EFR-16-004198 + ext 17/2		
	3	1200 x 2500		EI30 INT VI			
	5.68	2000 x 2840		EI30 EXT VI			
	EI60	3.93	1385 x 2835 1835 x 1985	Timber density: 650 kg/m ³	T-EI60/26-2	13-A-423	54
					T-EI60/26-2 • T-EI60/26-2 VI (with a security option)	13-A-423 + ext 15/1	54, 55
		3.5	1871 x 2500	hard wood	EI60 INT • EI60 EXT	CF437	44, 46
		3	2000 x 1500				
		1.8	1342 x 2000		EI60 INT VI • EI60 EXT VI	CF437	45, 47
		4.13	1652 x 2950				
		4.37	1750 x 3125		EI60 INT • EI60 EXT	CF437	44, 46
3	2000 x 1500						
4.53	1540 x 295	Timber density: 640 kg/m ³	EI60 INT	EFR-16-003517			

Applications (system)	Classification	Max Area (m²)	Dim. maxi glass (mm)	Profile	Pyroguard Glass	Certification	Annex
 Single door	E30	1.4	818 x 1707 706 x 1980	44 mm FD30 blank	Pyrostem	CF581	0
		0.85	778 x 1102 708 x 1212			CF581	0
		0.72	628 x 1145 503 x 1431			CF581	0
		0.75	561 x 1330 525 x 1423			CF581	0
	E60	0.35	594 x 594	54 mm FD60 blank		CF581	0
		0.81	626 x 1300			CF581	0
		0.42	300 x 1400			CF581	0
		0.35	250 x 1400			CF581	0
		0.58	503 x 1145			CF581	0
	EW30	2	800 x 2500	Timber density: 450 kg/m³		EW30 Impact • EW30 Impact VI	EFR-16-004199 + ext 17/3
		2.07	1032 x 2000		EW30 Maxi VI • Ew30 Maxi Impact VI	34	
		2.72	1032 x 2636		EW30 Maxi VI • EW30 Maxi Impact VI	33, 35	
		2.72	1032 x 2636		T-EW30/6 • T-EW30/6 VF T-EW30/6 VI • T-EW30/13-1 T-EW30/13-1 VF • T-EW30/13-1 VI	EFR-16-004199 + ext 17/1	7, 8, 12, 14
		0.69	781 x 979	soft wood	EW30 Impact EW30 Impact VI	CF257	31, 32
		1.31	760 x 1846		CF257		
		0.68	759 x 952	wood	EW30 Impact	CF257	31
		0.25	313 x 1000	wood	EW30 Impact	CF257	33, 35
		0.95	870 x 1353	wood	EW30 Maxi • EW30 Maxi Impact	CF257	31
		1.5	864 x 2085		EW30 Impact	CF257	
		1.31	760 x 1846	44 mm FD30	EW30 Impact	CF257	31
0.62	700 x 890	stile and rail	CF257				
EW60	0.28	200 x 1400	54 mm FD60	EW60	CF257	37	
	0.58	508 x 1200					
	0.58	460 x 1437					
EI30	2.35	1051 x 2794	44 mm FD30	EI30 INT • EI30 EXT	CF437	40, 42	
	0.65	540 x 1440			CF437		
	1.88	1051 x 2793	hard wood	T-EI30/18-1 • T-EI30/18-2	CF5204	48, 61	
	2.72	1031 x 2635	Timber density: 450 kg/m³	T-EI30/18-2 • T-EI30/18-2 VF • T-EI30/18-2 VI • (with or without an integral blind) T-EI30/18-1 • T-EI30/18-1 VF (with or without an integral blind) • T-EI30/18-1 VI	EFR-16-004199	48-50 61-63	
	2.15	1031 x 2635		EI30 INT • EI30 EXT (with or without integral blinds) EI30 EXT VI	EFR-16-004199 + ext 17/2	40, 42, 43	
	2.58	1031 x 2500		EI30 INT VI	41		
EI60	2.15	950 x 2261	Hard wood density: 640 kg/m³	EI60 INT • EI60 EXT EI60 INT VI • EI60 EXT VI	12-A-372	44-47	
	0.59	495 x 1320	54 mm FD60	EI60 INT • EI60 EXT	CF437	44, 46	
	2.14	950 x 2250		EI60 INT	CF437	44	
 GDC door	FD60	0.38	250 x 1500	54 mm FD60	FD60	CF257	39
		0.54	375 x 1552				











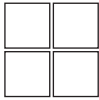



Applications (system)	Classification	Max Area (m ²)	Dim. maxi glass (mm)	Profile	Pyroguard Glass	Certification	Annex	
 Double door  Unequal double door	EW30	2.72	1124 x 2414	Timber density: 450 kg/m ³	T-EW30/6 • T-EW30/6 VF T-EW30/6 VI • T-EW30/13-1 T-EW30/13-1 VF • T-EW30/13-1 VI	EFR-16-004199 + ext 17/1	7, 8, 12, 14 - 16	
		1.94	800 x 2414		EW30 Impact • EW30 Impact VI (with or without an integral blind)	EFR-16-004199 + ext 17/3	31, 32	
		2.49	1032 x 2414		EW30 Maxi • EW30 Maxi Impact		33, 35	
		2.07	1032 x 2000		EW30 Maxi VI • EW30 Maxi Impact VI		34, 36	
	EI30	2.72	1124 x 2414		T-EI30/18-2 • T-EI30/18-2 VF T-EI30/18-2 VI (with or without an integral blind) T-EI30/18-1 T-EI30/18-1 VF (with or without an integral blind) T-EI30/18-1 VI	EFR-16-004199	48 - 50, 61 - 63	
					EI30 INT • EI30 EXT (with or without an integral blind) EI30 INT VI • EI30 EXT VI	EFR-16-004199 + ext 17/2	40-43	
	EI60	1.76	750 x 2340		Hardwood density: 640 kg/m ³	EI60 INT • EI60 EXT EI60 INT VI • EI60 EXT VI	12-A-372	44-47
	 Structural wall / butt joint	E30 / EW30	5.31		1830 x 2900	Hardwood density: 680 kg/m ³	T-EI30/32-2 SWS VI (with or without an integral blind)	13-A-426 ext.15/1
EI30 / EI45		1830 x 2900		T-EI30/32-2 SWS	13-A-426		68	
EI30		6.63	2288 x 3625	T-EI30/32-2 SWS	CF5204		68	
		4.35	1500 x 3625	EI60 INT	CF437		44	
		5.3	1830 x 2900	T-EI60/36-2 SWS T-EI60/40-2 SWS	CF5204		70, 72	
		3.48	1200 x 2900	wood	Pyroguard EI60 INT		WF310097	44
EI60		5.84	2013 x 3190	Hardwood density: 650 kg/m ³	T-EI60/40-2 SWS	13-A-421 + ext	72	
		5.31	1830 x 2900		T-EI60/36-2 SWS		70	

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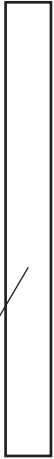









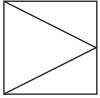


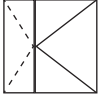
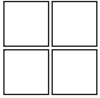
Applications (system)	Classification	Max Area (m²)	Dim. maxi glass (mm)	Profile	Pyroguard Glass	Certification	Annex		
 Single frame	EW30	2.91	1200 x 2428	Schüco AWS/ADS 65	EW30 Maxi VI EW30 Maxi Impact VI	RF10165	34, 36		
 Partition wall	EI30	4.98	2862 x 1800 1764 x 3360 2385 x 2800	Aluprof MB78 EI30	T-EI30/18-1 • T-EI30/18-1 VF	EFR-15-003983	61 - 63		
		3.75	2862 x 1560 1550 x 2640 2385 x 2200		T-EI30/18-1 VI				
		5.14	1470 x 3500 1837 x 2800		T-EI30/18-2 • T-EI30/18-1 T-EI30/18-2 • T-EI30/18-1	CF5204			
		3.58	2981 x 1500 2385 x 1875		T-EI30/18-2 • T-EI30/18-1 T-EI30/18-2 • T-EI30/18-1				
		2.84	1292 x 2200		T-EI30/18-2 VI • T-EI30/18-2 VF	EFR-15-003983			
		4.12	1470 x 2800		T-EI30/18-2				
		1.35	3582 x 377 2866 x 471		T-EI30/18-2 VF • T-EI30/18-1 VF	CF5204			
		3.55	1615 x 2200 1292 x 2750		T-EI30/18-2 VI • T-EI30/18-1 VI	CF5204			
		3.58	2981 x 1300 2385 x 1625		EI30 INT • EI30 EXT EI30 INT VI • EI30 EXT VI	ITB-AT-15-6006/2012			
		5.68	2000 x 2840 2840 x 2000						
		EI60	4.11		1470 x 2800	T-EI60/25-3 • T-EI60/25-3 VF		EFR-16-001317	51, 53
			2.89		1312 x 2200	T-EI60/25-3 VI			52
	4.4		1573 x 2800 1470 x 2996	T-EI60/25-3	CF5204	51			
	3.09		1404 x 2200 1312 x 2354	T-EI60/25-3 VI		52			
	3.75		1500 x 2500	EI60 INT • EI60 EXT EI60 INT VI • EI60 EXT VI	ITB-AT-15-6006/2012	40-43			
			2500 x 1500						

Applications (system)	Classification	Max Area (m ²)	Dim. maxi glass (mm)	Profile	Pyroguard Glass	Certification	Annex
 Single door	EI30	3.5	1295 x 2703	Aluprof MB78 EI30	T-EI30/18-1 • T-EI30/18-1 VF T-EI30/18-1 VI • T-EI30/18-2	EFR-15-003984	48, 61-63
		2.85	1292 x 2200		T-EI30/18-2 VF • T-EI30/18-2 VI		49, 50
		2.9	1221 x 2235		T-EI30/18-2 • T-EI30/18-1	CF5204	48, 61
			1118 x 2594				
		3.4	1342 x 2358		T-EI30/18-2 VI • T-EI30/18-1 VI	CF5204	49, 62
	1118 x 3046						
	5.68	2000 x 2840	EI30 INT • EI30 EXT EI30 INT VI • EI30 EXT VI	ITB-AT-15-6006/2012	40-43		
		2840 x 2000					
	EI60	2.43	1055 x 2298	Aluprof MB78 EI60	T-EI60/21-1	EFR-16-001318	64
		2.58	1106 x 2334		T-EI60/25-3 • T-EI60/25-3 VF T-EI60/25-3 VI		51-53
3.75		1500 x 2500	EI60 INT • EI60 EXT EI60 INT VI • EI60 EXT VI		ITB-AT-15-6006/2012	40-43	
		2500 x 1500					
2.64	1118 x 2358	T-EI60/25-3 • T-EI60/25-3 VI	CF5204	51, 52			
 Double door  Unequal double door	EI30	3.37	1241 x 2709	Aluprof MB78 EI30	T-EI30/18-1 • T-EI30/18-1 VF T-EI30/18-1 VI • T-EI30/18-2	EFR-16-003984	48, 61-63
		2.85	1292 x 2200		T-EI30/18-2 VF T-EI30/18-2 VI		49, 50
		5.68	2000 x 2840		EI30 INT • EI30 EXT EI30 INT VI • EI30 EXT VI	ITB-AT-15-6006/2012	40-43
			2840 x 2000				
		2.9	1221 x 2235		T-EI30/18-2 • T-EI30/18-1	CF5204	48, 61
	1118 x 2594						
	3.4	1342 x 2358	T-EI30/18-2 VI • T-EI30/18-1 VI	CF5204	49, 62		
		1118 x 3046					
	EI60	2.43	1055 x 2298	Aluprof MB78 EI60	T-EI60/21-1	EFR-16-001318	64
		2.44	1043 x 2334		T-EI60/25-3 • T-EI60/25-3 VF T-EI60/25-3 VI		51-53
3.75		1500 x 2500	EI60 INT • EI60 EXT EI60 INT VI • EI60 EXT VI		ITB-AT-15-6006/2012	40-43	
		2500 x 1500					
2.64	1118 x 2358	T-EI60/25-3 • T-EI60/25-3 VI	CF5204	51, 52			

PYROSTEM

PRODUCT COMPOSITION	CHARACTERISTICS							
 <p>Embedded wire</p>	<div style="text-align: right; font-weight: bold; font-size: 24px; color: #c00000;">0</div> <ul style="list-style-type: none"> ✓ Entry level wired glass ✓ Stockable and cuttable with standard equipment ✓ UV stable for internal and external applications ✓ Minimum size: 100 x 300 mm ✓ Maximum size: 2440 x 1830 mm ✓ Thickness tolerance: ± 0.2 mm 							
TECHNICAL FEATURES								
 <p>Fire Duration E90</p>	 <p>Type Cuttable</p>	 <p>Thickness 7.2 mm</p>	 <p>Weight 18 kg</p>	 <p>Acoustic 32 dB (-2; -3)</p>	 <p>Impact Protection 3B3</p>	 <p>Light Transmission 87%</p>	 <p>U value 5.7 W/m² K</p>	 <p>Temp range ± 100 °C</p>
POSSIBLE APPLICATIONS								
<p>Steel system</p>	▶							
<p>Timber system</p>	▶							

PYROGUARD T-E30/6

PRODUCT COMPOSITION	CHARACTERISTICS	1						
 <p>Toughened fire resistant safety glass</p>	<ul style="list-style-type: none"> ✓ Monolithic toughened fire resistant glass ✓ Lightweight solution ✓ UV stable ✓ Suitable for internal and external applications ✓ Minimum size: 100 x 240 mm ✓ Maximum size: 2040 x 3600 mm ✓ Thickness tolerance: ± 0.2 mm 							
TECHNICAL FEATURES								
 Fire Duration E30	 Type Toughened	 Thickness 6 mm	 Weight 15 kg	 Acoustic 31 dB (-2; -3)	 Impact Protection 1C1	 Light Transmission 89%	 U value 5.7 W/m ² K	 Temp range ± 100 °C
POSSIBLE APPLICATIONS								
Steel system	▶							
Timber system	▶							


















PYROGUARD T-E30/6 VI

PRODUCT COMPOSITION	CHARACTERISTICS							
<p>Pyroguard T-E30/6</p> <p>Spacer bar</p> <p>Different options for counterpane</p>	<div style="background-color: #c00000; color: white; padding: 5px; text-align: center; font-weight: bold; font-size: 24px;">2</div> <ul style="list-style-type: none"> ✓ Double glazed configuration of T-E30/6 ✓ Wide range of counterpanes available, including security, solar control, thermal insulation, acoustic and decorative options ✓ Minimum size: 100 x 400 mm ✓ Maximum size: 2000 x 3600 mm ✓ Thickness tolerance: DC ✓ Larger sizes available on special request 							
TECHNICAL FEATURES								
<p>Fire Duration E30</p>	<p>Type Toughened</p>	<p>Thickness DC</p>	<p>Weight DC</p>	<p>Acoustic DC</p>	<p>Impact Protection DC</p>	<p>Light Transmission DC</p>	<p>U value DC</p>	<p>Temp range DC</p>
POSSIBLE APPLICATIONS								
<p>Steel system</p>	▶							
<p>Timber system</p>	▶							



















PYROGUARD T-E30/6 VF

PRODUCT COMPOSITION	CHARACTERISTICS	3							
<p style="text-align: center;">Pyroguard T-E30/6</p> <p style="text-align: center;">PVB film</p> <p style="text-align: center;">Different options for counterpane</p>	<ul style="list-style-type: none"> ✓ Laminated configuration of T-E30/6 ✓ Wide range of counterpanes available, including security, solar control, thermal insulation, acoustic and decorative options ✓ P1A EN356 anti attack classification ✓ Minimum size: 100 x 400 mm ✓ Maximum size: 1605 x 3350 mm ✓ Larger sizes available on special request ✓ Thickness tolerance: DC 								
TECHNICAL FEATURES									
<p>Fire Duration E30</p>	<p>Type Toughened</p>	<p>Thickness DC</p>	<p>Weight DC</p>	<p>Acoustic DC</p>	<p>Impact Protection 1B1</p>	<p>Light Transmission DC</p>	<p>U value DC</p>	<p>Temp range ± 100 °C</p>	
POSSIBLE APPLICATIONS									
<p>Steel system</p>									











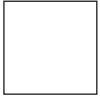
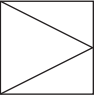
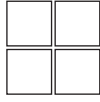
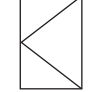

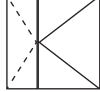

PYROGUARD T-E30/8

PRODUCT COMPOSITION	CHARACTERISTICS	4							
 <p style="text-align: center;">Toughened fire resistant safety glass</p>	<ul style="list-style-type: none"> ✓ Monolithic toughened fire resistant glass ✓ Lightweight solution ✓ UV stable for internal and external applications ✓ Minimum size: 100 x 240 mm ✓ Maximum size: 2040 x 3600 mm ✓ Thickness tolerance: ± 0.3 mm 								
TECHNICAL FEATURES									
 Fire Duration E30	 Type Toughened	 Thickness 8 mm	 Weight 20 kg	 Acoustic 32 dB (-2; -3)	 Impact Protection 1C1	 Light Transmission 88%	 U value 5.7 W/m ² K	 Temp range ± 100 °C	
POSSIBLE APPLICATIONS									
Steel system	▶								
Timber system	▶								See PV 13-A-447 in appendix

PYROGUARD T-E30/10

PRODUCT COMPOSITION	CHARACTERISTICS	5						
 <p style="margin-left: 100px;">Toughened fire resistant safety glass</p>	<ul style="list-style-type: none"> ✓ Monolithic toughened fire resistant glass ✓ Lightweight solution ✓ UV stable for internal and external applications ✓ Minimum size: 100 x 240 mm ✓ Maximum size: 2040 x 3600 mm ✓ Thickness tolerance: ± 0.3 mm 							
TECHNICAL FEATURES								
 Fire Duration E30	 Type Toughened	 Thickness 10 mm	 Weight 25 kg	 Acoustic 33 dB (-2; -3)	 Impact Protection 1C1	 Light Transmission 87%	 U value 5.6 W/m² K	 Temp range ± 100 °C
POSSIBLE APPLICATIONS								
Steel system	▶							
Timber system	▶							

PYROGUARD T-E30/12

PRODUCT COMPOSITION	CHARACTERISTICS	6						
 <p style="margin-left: 100px;">Toughened fire resistant safety glass</p>	<ul style="list-style-type: none"> ✓ Monolithic toughened fire resistant glass ✓ Lightweight solution ✓ UV stable for internal and external applications ✓ Minimum size: 100 x 240 mm ✓ Maximum size: 2040 x 3600 mm ✓ Thickness tolerance: ± 0.3 mm 							
TECHNICAL FEATURES								
 Fire Duration E30	 Type Toughened	 Thickness 12 mm	 Weight 30 kg	 Acoustic 34 dB (0; -2)	 Impact Protection 1C1	 Light Transmission 86%	 U value 5.5 W/m ² K	 Temp range ± 100 °C
POSSIBLE APPLICATIONS								
Steel system	▶							
Timber system	▶							

PYROGUARD T-EW30/6

PRODUCT COMPOSITION	CHARACTERISTICS							
	<div style="text-align: right; background-color: #f4a460; color: white; padding: 5px; font-weight: bold; font-size: 24px;">7</div> <ul style="list-style-type: none"> ✓ Monolithic toughened fire resistant glass ✓ Pyrolitic coating to reduce heat radiation ✓ Fire protection from one direction ✓ Low emissivity ✓ Minimum size: 100 x 240 mm ✓ Maximum size: 2040 x 3600 mm ✓ Thickness tolerance: ± 0.2 mm 							
TECHNICAL FEATURES								
<p>Fire Duration EW30</p>	<p>Type Toughened</p>	<p>Thickness 6 mm</p>	<p>Weight 15 kg</p>	<p>Acoustic 31 dB (-2; -3)</p>	<p>Impact Protection 1C1</p>	<p>Light Transmission 81%</p>	<p>U value 3.6 W/m² K</p>	<p>Temp range ± 100 °C</p>
POSSIBLE APPLICATIONS								
<p>Steel system</p>	▶							
<p>Timber system</p>	▶							
		See EFR-16-004198 in appendix						

PYROGUARD T-EW30/6 VI

PRODUCT COMPOSITION	CHARACTERISTICS	8						
<p>Pyroguard T-EW30/6</p> <p>Fire resistant coating</p> <p>Different options for counterpane</p> <p>Spacer bar</p>	<ul style="list-style-type: none"> ✓ Double glazed configuration of T-EW30/6 ✓ Fire protection from one direction ✓ Wide range of counterpanes available, including security, solar control, thermal insulation, acoustic and decorative options ✓ Minimum size: 100 x 400 mm ✓ Maximum size: 2000 x 3600 mm ✓ Thickness tolerance: DC ✓ Larger sizes available on special request 							
TECHNICAL FEATURES								
<p>Fire Duration EW30</p>	<p>Type Toughened</p>	<p>Thickness DC</p>	<p>Weight DC</p>	<p>Acoustic DC</p>	<p>Impact Protection DC</p>	<p>Light Transmission DC</p>	<p>U value DC</p>	<p>Temp range DC</p>
POSSIBLE APPLICATIONS								
<p>Steel system</p>			additional classification: E60					
<p>Timber system</p>								
See EFR-16-004198 & PV 13-A-437 in appendix								

PYROGUARD T-EW30/6 VI RV

PRODUCT COMPOSITION	CHARACTERISTICS	9						
<p>Pyroguard T-EW30/6</p> <p>Pyroguard T-EW30/6</p> <p>Spacer bar</p>	<ul style="list-style-type: none"> ✓ Double glazed configuration of T-EW30/6 ✓ Fire protection from both directions ✓ Minimum size: 100 x 400 mm ✓ Maximum size: 2000 x 3600 mm ✓ Thickness tolerance: DC ✓ Larger sizes available on special request 							
TECHNICAL FEATURES								
<p>Fire Duration EW30</p>	<p>Type Toughened</p>	<p>Thickness 6 mm</p>	<p>Weight 15 kg</p>	<p>Acoustic 31 dB</p>	<p>Impact Protection 1C1</p>	<p>Light Transmission 81%</p>	<p>U value 3.6 W/m² K</p>	<p>Temp range ± 100 °C</p>
POSSIBLE APPLICATIONS								
<p>Steel system</p>	▶							
<p>Timber system</p>	▶							
		See EFR-16-004198 in appendix						

PYROGUARD T-EW30/6 TVI

PRODUCT COMPOSITION	CHARACTERISTICS	10						
	<ul style="list-style-type: none"> ✓ Triple glazed configuration of T-EW30/6 ✓ Wide range of counterpanes available, including security, solar control, thermal insulation, acoustic and decorative options ✓ Minimum size: 100 x 400 mm ✓ Maximum size: 2000 x 3600 mm ✓ Thickness tolerance: DC ✓ Larger sizes available on special request 							
TECHNICAL FEATURES								
<p>Fire Duration EW30</p>	<p>Type Toughened</p>	<p>Thickness DC</p>	<p>Weight DC</p>	<p>Acoustic DC</p>	<p>Impact Protection DC</p>	<p>Light Transmission DC</p>	<p>U value DC</p>	<p>Temp range DC</p>
POSSIBLE APPLICATIONS								
<p>Steel system</p>			<p>additional classification: E60</p>					

PYROGUARD T-EW30/6 TVI RV

PRODUCT COMPOSITION	CHARACTERISTICS	11						
	<ul style="list-style-type: none"> ✓ Triple glazed configuration of T-EW30/6 ✓ Fire protection from both directions ✓ Minimum size: 100 x 400 mm ✓ Maximum size: 2000 x 3600 mm ✓ Thickness tolerance: DC ✓ Larger sizes available on special request 							
TECHNICAL FEATURES								
<p>Fire Duration EW30</p>	<p>Type Toughened</p>	<p>Thickness DC</p>	<p>Weight DC</p>	<p>Acoustic DC</p>	<p>Impact Protection 1C1</p>	<p>Light Transmission DC</p>	<p>U value DC</p>	<p>Temp range DC</p>
POSSIBLE APPLICATIONS								
<p>Steel system</p>			<p>additional classification: E60</p>					

PYROGUARD T-EW30/6 VF

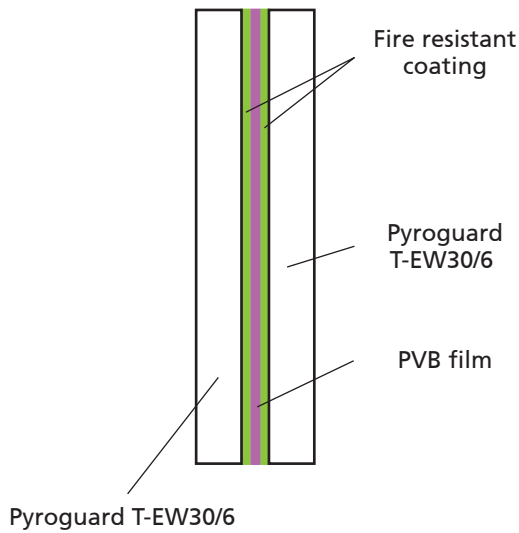
PRODUCT COMPOSITION	CHARACTERISTICS	12						
<p>Pyroguard T-EW30/6</p>	<ul style="list-style-type: none"> ✓ Laminated configuration of T-EW30/6 ✓ Fire protection from one direction ✓ Wide range of counterpanes available, including security, solar control, thermal insulation, acoustic and decorative options ✓ P1A EN356 anti attack classification ✓ Minimum size: 100 x 400 mm ✓ Maximum size: 1605 x 3350 mm ✓ Larger sizes available on special request ✓ Thickness tolerance: DC 							
TECHNICAL FEATURES								
<p>Fire Duration EW30</p>	<p>Type Toughened</p>	<p>Thickness DC</p>	<p>Weight DC</p>	<p>Acoustic DC</p>	<p>Impact Protection 1B1</p>	<p>Light Transmission DC</p>	<p>U value DC</p>	<p>Temp range ± 100 °C</p>
POSSIBLE APPLICATIONS								
<p>Steel system</p>			additional classification: E60					
<p>Timber system</p>								
	<p>See EFR-16-004198 & PV 13-A-437 in appendix</p>							

PYROGUARD T-EW30/6 VF RV

PRODUCT COMPOSITION

CHARACTERISTICS

13

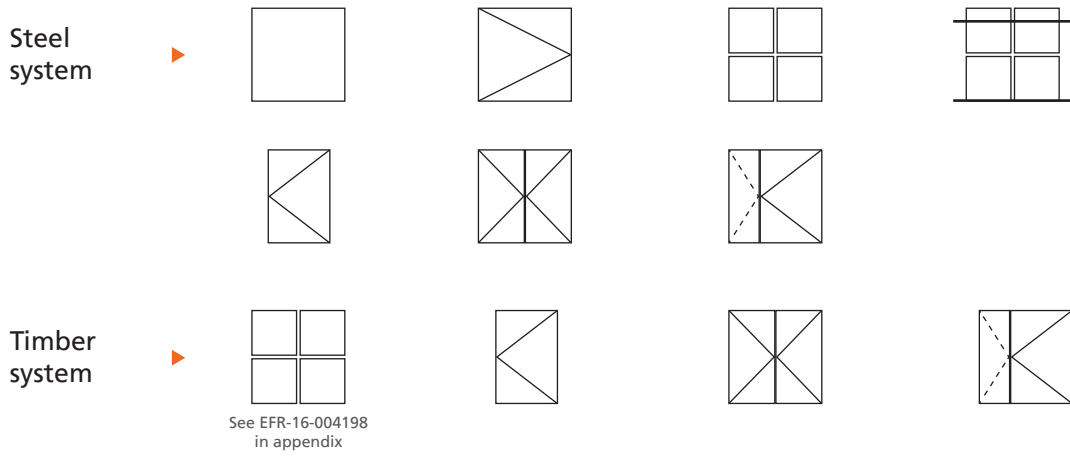


- ✓ Laminated configuration of T-EW30/6
- ✓ Fire protection from both directions
- ✓ P4A EN356 anti attack classification
- ✓ Minimum size: 100 x 400 mm
- ✓ Maximum size: 1605 x 3350 mm
- ✓ Larger sizes available on special request
- ✓ Thickness tolerance: - 0.5 / + 1 mm

TECHNICAL FEATURES

🔥	💎	↔	KG	dB	💣	☀️	➔	🌡️
Fire Duration EW30	Type Toughened	Thickness 12.76 mm	Weight 30 kg	Acoustic 36 dB (-1; -2)	Impact Protection 1B1	Light Transmission 67%	U value 4.2 W/m² K	Temp range ± 100 °C

POSSIBLE APPLICATIONS



PYROGUARD T-EW30/13-1

PRODUCT COMPOSITION	CHARACTERISTICS	14						
	<ul style="list-style-type: none"> ✓ Toughened fire resistant glass with an intumescent interlayer ✓ Excellent impact rating ✓ UV stable ✓ Minimum size: 300 x 400 mm ✓ Maximum size: 2040 x 3600 mm ✓ Larger sizes available on special request ✓ Sizes greater than 2040 x 3600 mm must be converted to 15-1 ✓ Thickness tolerance: ± 1 mm 							
TECHNICAL FEATURES								
<p>Fire Duration EW30 EI15</p>	<p>Type Toughened</p>	<p>Thickness 13 mm</p>	<p>Weight 29.5 kg</p>	<p>Acoustic 37 dB (-1; -2)</p>	<p>Impact Protection 1B1</p>	<p>Light Transmission 85%</p>	<p>U value 5.1 W/m² K</p>	<p>Temp range -10 / +45 °C</p>
POSSIBLE APPLICATIONS								
<p>Steel system</p>	<p>additional classification: E60</p>							
<p>Timber system</p>	<p>See EFR-16-004198 in appendix</p>	<p>See EFR-16-004199 + EXT in appendix</p>	<p>See EFR-16-004199 + EXT in appendix</p>	<p>See EFR-16-004199 + EXT in appendix</p>				

PYROGUARD T-EW30/13-1 VI

PRODUCT COMPOSITION	CHARACTERISTICS	15						
<p style="text-align: center;">Pyroguard T-EW30/13-1</p>	<ul style="list-style-type: none"> ✓ Double glazed configuration of T-EW30/13-1 ✓ Wide range of counterpanes available, including security, solar control, thermal insulation, acoustic and decorative options ✓ Minimum size: 300 x 400 mm ✓ Maximum size: 2000 x 3600 mm ✓ Larger sizes available on special request ✓ Thickness tolerance: DC 							
TECHNICAL FEATURES								
<p>Fire Duration EW30 EI15</p>	<p>Type Toughened</p>	<p>Thickness DC</p>	<p>Weight DC</p>	<p>Acoustic DC</p>	<p>Impact Protection DC</p>	<p>Light Transmission DC</p>	<p>U value DC</p>	<p>Temp range DC</p>
POSSIBLE APPLICATIONS								
<p>Steel system</p>	<p>additional classification: E30, E60, EI30</p>	<p>additional classification: E60, EI30</p>						
<p>Timber system</p>	<p>See EFR-16-004198 in appendix</p>							

PYROGUARD T-EW30/13-1 VF

PRODUCT COMPOSITION	CHARACTERISTICS	16						
<p style="text-align: center;">Pyroguard T-EW30/13-1</p> <p style="text-align: right;"> Different options for counterpane Interlayer PVB film </p>	<ul style="list-style-type: none"> ✓ Laminated configuration of T-EW30/13-1 ✓ Wide range of counterpanes available, including security, solar control, thermal insulation, acoustic and decorative options ✓ P1A EN356 anti attack classification ✓ Minimum size: 300 x 400 mm ✓ Maximum size: 1605 x 3350 mm ✓ Larger sizes available on special request ✓ Thickness tolerance: DC 							
TECHNICAL FEATURES								
<p>Fire Duration EW30 EI15</p>	<p>Type Toughened</p>	<p>Thickness DC</p>	<p>Weight DC</p>	<p>Acoustic DC</p>	<p>Impact Protection 1B1</p>	<p>Light Transmission DC</p>	<p>U value DC</p>	<p>Temp range -10 / +45 °C</p>
POSSIBLE APPLICATIONS								
<p>Steel system</p>	<p>E60</p>	<p>E60 & E60 only</p>						
<p>Timber system</p>								

PYROGUARD T-EW60/6 VI

PRODUCT COMPOSITION	CHARACTERISTICS							
<p>Pyroguard T-EW60/6</p> <p>Fire resistant coating</p> <p>Different options for counterpane</p> <p>Spacer bar</p>	<div style="float: right; background-color: #f4a460; color: white; padding: 5px; font-weight: bold;">17</div> <ul style="list-style-type: none"> ✓ Double glazed toughened fire resistant glass ✓ Pyrolitic coating to reduce heat radiation ✓ Low emissivity ✓ Wide range of counterpanes available, including security, solar control, thermal insulation, acoustic and decorative options ✓ Minimum size: 100 x 400 mm ✓ Maximum size: 2000 x 3600 mm ✓ Thickness tolerance: DC ✓ Larger sizes available on special request 							
TECHNICAL FEATURES								
<p>Fire Duration EW60</p>	<p>Type Toughened</p>	<p>Thickness DC</p>	<p>Weight DC</p>	<p>Acoustic DC</p>	<p>Impact Protection DC</p>	<p>Light Transmission DC</p>	<p>U value DC</p>	<p>Temp range DC</p>
POSSIBLE APPLICATIONS								
<p>Steel system</p>								

PYROGUARD T-EW60/6 VI RV

PRODUCT COMPOSITION	CHARACTERISTICS	18						
<p>Pyroguard T-EW60/6</p> <p>Pyroguard T-EW60/6</p> <p>Spacer bar</p>	<ul style="list-style-type: none"> ✓ Two sided configuration of T-EW60/6 VI ✓ Fire protection from both directions ✓ Minimum size: 100 x 400 mm ✓ Maximum size: 2000 x 3600 mm ✓ Thickness tolerance: ± 1.5 mm ✓ Larger sizes available on special request 							
TECHNICAL FEATURES								
<p>Fire Duration EW60</p>	<p>Type Toughened</p>	<p>Thickness 24 mm</p>	<p>Weight 30 kg</p>	<p>Acoustic 31 dB (-1; -4)</p>	<p>Impact Protection 1C1</p>	<p>Light Transmission 67 %</p>	<p>U value 1.4 W/m² K</p>	<p>Temp range ± 100 °C</p>
POSSIBLE APPLICATIONS								
<p>Steel system</p>								

PYROGUARD T-EW60/6 TVI

PRODUCT COMPOSITION	CHARACTERISTICS	19						
<p>Pyroguard T-EW60/6</p> <p>Fire resistant coating</p> <p>Different options for counterpane</p> <p>Spacer bar</p>	<ul style="list-style-type: none"> ✓ Triple glazed configuration of T-EW60/6 VI ✓ Low emissivity ✓ Wide range of counterpanes available, including security, solar control, thermal insulation, acoustic and decorative options ✓ Minimum size: 100 x 400 mm ✓ Maximum size: 2000 x 3600 mm ✓ Thickness tolerance: DC ✓ Larger sizes available on special request 							
TECHNICAL FEATURES								
<p>Fire Duration EW60</p>	<p>Type Toughened</p>	<p>Thickness DC</p>	<p>Weight DC</p>	<p>Acoustic DC</p>	<p>Impact Protection DC</p>	<p>Light Transmission DC</p>	<p>U value DC</p>	<p>Temp range DC</p>
POSSIBLE APPLICATIONS								
<p>Steel system</p>								

PYROGUARD T-EW60/6 TVI RV

PRODUCT COMPOSITION	CHARACTERISTICS	20						
<p style="text-align: center;">Pyroguard T-EW60/6 Pyroguard T-EW60/6 Spacer bar</p>	<ul style="list-style-type: none"> ✓ Triple glazed configuration of T-EW60/6 VI ✓ Fire protection from both directions ✓ Minimum size: 100 x 400 mm ✓ Maximum size: 2000 x 3600 mm ✓ Thickness tolerance: DC ✓ Larger sizes available on special request 							
TECHNICAL FEATURES								
<p>Fire Duration EW60</p>	<p>Type Toughened</p>	<p>Thickness DC</p>	<p>Weight DC</p>	<p>Acoustic DC</p>	<p>Impact Protection 1C1</p>	<p>Light Transmission DC</p>	<p>U value DC</p>	<p>Temp range DC</p>
POSSIBLE APPLICATIONS								
<p>Steel system</p>								

PYROGUARD T-EW60/6 VF

PRODUCT COMPOSITION	CHARACTERISTICS	21						
<p>Pyroguard T-EW60/6</p>	<ul style="list-style-type: none"> ✓ Laminated toughened fire resistant glass ✓ Low emissivity ✓ Wide range of counterpanes available, including security, solar control, thermal insulation, acoustic and decorative options ✓ P1A EN356 anti attack classification ✓ Minimum size: 100 x 400 mm ✓ Maximum size: 1605 x 3350 mm ✓ Larger sizes available on special request ✓ Thickness tolerance: DC 							
TECHNICAL FEATURES								
<p>Fire Duration EW60</p>	<p>Type Toughened</p>	<p>Thickness DC</p>	<p>Weight DC</p>	<p>Acoustic DC</p>	<p>Impact Protection 1B1</p>	<p>Light Transmission DC</p>	<p>U value DC</p>	<p>Temp range ± 100 °C</p>
POSSIBLE APPLICATIONS								
<p>Steel system</p>				<p>additional classification: E60</p>				

PYROGUARD T-EW60/6 VF RV

PRODUCT COMPOSITION	CHARACTERISTICS	22						
<p>Fire resistant coating</p> <p>Pyroguard T-EW60/6</p> <p>PVB film</p> <p>Pyroguard T-EW60/6</p>	<ul style="list-style-type: none"> ✓ Laminated toughened fire resistant glass ✓ Low emissivity ✓ Fire protection from both directions ✓ P4A EN356 anti attack classification ✓ Minimum size: 100 x 400 mm ✓ Maximum size: 1605 x 3350 mm ✓ Larger sizes available on special request ✓ Thickness tolerance: DC 							
TECHNICAL FEATURES								
<p>Fire Duration EW60</p>	<p>Type Toughened</p>	<p>Thickness 12.76 mm</p>	<p>Weight 30 kg</p>	<p>Acoustic 36 dB (-1; -2)</p>	<p>Impact Protection 1B1</p>	<p>Light Transmission 69%</p>	<p>U value 4.6 W/m² K</p>	<p>Temp range ± 100 °C</p>
POSSIBLE APPLICATIONS								
<p>Steel system</p>								

PYROGUARD T-EW60/13-1

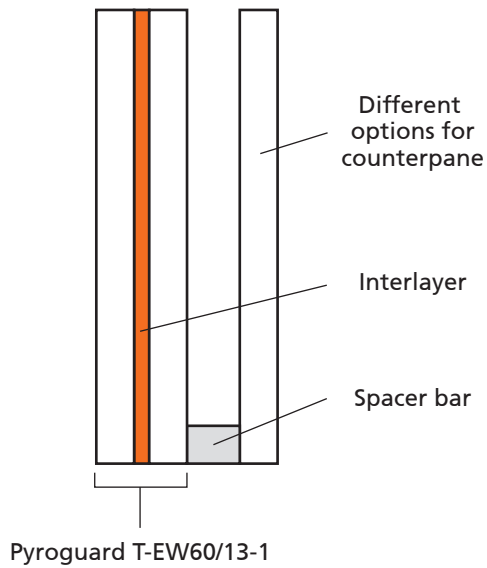
PRODUCT COMPOSITION	CHARACTERISTICS	23						
<p>Toughened safety glass</p> <p>Interlayer</p>	<ul style="list-style-type: none"> ✓ Toughened fire resistant glass with an intumescent interlayer ✓ Excellent impact rating ✓ UV stable ✓ Minimum size: 300 x 400 mm ✓ Maximum size: 2040 x 3600 mm ✓ Larger sizes available on special request ✓ Sizes greater than 2040 x 3600 mm must be converted to 15-1 ✓ Thickness tolerance: ± 1 mm 							
TECHNICAL FEATURES								
<p>Fire Duration EW60 EI15</p>	<p>Type Toughened</p>	<p>Thickness 13 mm</p>	<p>Weight 29.5 kg</p>	<p>Acoustic 37 dB (-1; -2)</p>	<p>Impact Protection 1B1</p>	<p>Light Transmission 85%</p>	<p>U value 5.1 W/m² K</p>	<p>Temp range -10 / +45 °C</p>
POSSIBLE APPLICATIONS								
<p>Steel system</p>		<p>additional classification: E90, E120</p>			<p>additional classification: E120</p>			
<p>Timber system</p>	<p>See PV 13-A-181 in appendix</p>							

PYROGUARD T-EW60/13-1 VI

PRODUCT COMPOSITION

CHARACTERISTICS

24



- ✓ Double glazed configuration of T-EW60/13-1
- ✓ Wide range of counterpanes available, including security, solar control, thermal insulation, acoustic and decorative options
- ✓ Minimum size: 300 x 400 mm
- ✓ Maximum size: 2000 x 3600 mm
- ✓ Larger sizes available on special request
- ✓ Thickness tolerance: DC

TECHNICAL FEATURES

Fire Duration EW60 EI15	Type Toughened	Thickness DC	Weight DC	Acoustic DC	Impact Protection DC	Light Transmission DC	U value DC	Temp range DC

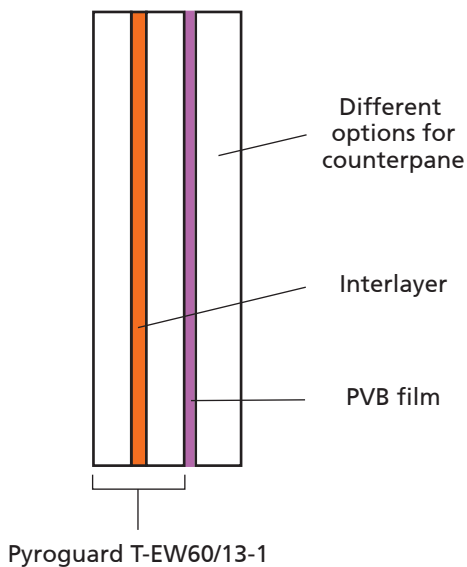
POSSIBLE APPLICATIONS

<p>Steel system</p>	<p>▶ </p> <p>additional classification: E90</p>	<p>▶ </p> <p>additional classification: E90 & EI30</p>	<p>▶ </p> <p>additional classification: EI30</p>
	<p>▶ </p> <p>additional classification: EI20</p>	<p>▶ </p>	<p>▶ </p>
<p>Timber system</p>	<p>▶ </p> <p>See PV 13-A-181 in appendix</p>		

PYROGUARD T-EW60/13-1 VF

PRODUCT COMPOSITION	CHARACTERISTICS
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25

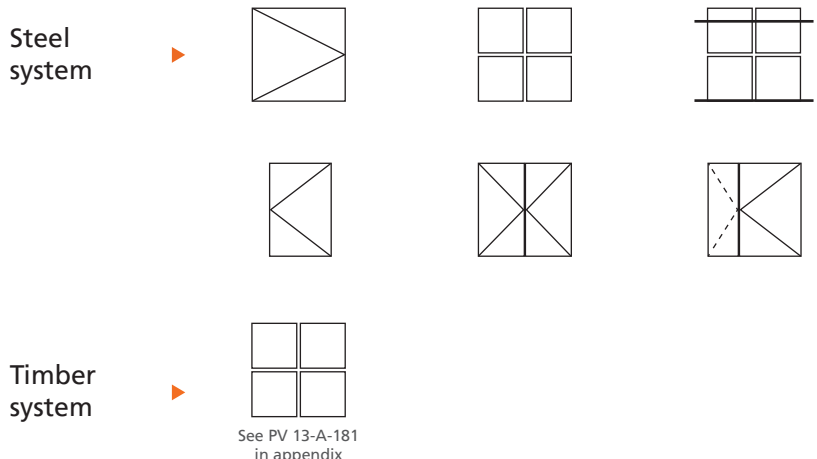


- ✓ Laminated configuration of T-EW60/13-1
- ✓ Wide range of counterpanes available, including security, solar control, thermal insulation, acoustic and decorative options
- ✓ P1A EN356 anti attack classification
- ✓ Minimum size: 300 x 400 mm
- ✓ Maximum size: 1605 x 3350 mm
- ✓ Larger sizes available on special request
- ✓ Thickness tolerance: DC

TECHNICAL FEATURES

Fire Duration EW60 EI15	Type Toughened	Thickness DC	Weight DC	Acoustic DC	Impact Protection 1B1	Light Transmission DC	U value DC	Temp range -10 / +45 °C

POSSIBLE APPLICATIONS



PYROGUARD T-EW90/13-1

PRODUCT COMPOSITION	CHARACTERISTICS	26						
<p>Toughened safety glass</p> <p>Interlayer</p>	<ul style="list-style-type: none"> ✓ Toughened fire resistant glass with an intumescent interlayer ✓ Excellent impact rating ✓ UV stable ✓ Minimum size: 300 x 400 mm ✓ Maximum size: 2040 x 3600 mm ✓ Larger sizes available on special request ✓ Sizes greater than 2040 x 3600 mm must be converted to 15-1 ✓ Thickness tolerance: ± 1 mm 							
TECHNICAL FEATURES								
<p>Fire Duration EW90 EI15</p>	<p>Type Toughened</p>	<p>Thickness 13 mm</p>	<p>Weight 29.5 kg</p>	<p>Acoustic 37 dB (-1; -2)</p>	<p>Impact Protection 1B1</p>	<p>Light Transmission 85%</p>	<p>U value 5.1 W/m² K</p>	<p>Temp range -10 / +45 °C</p>
POSSIBLE APPLICATIONS								
<p>Steel system</p>	▶							
<p>Timber system</p>	▶	<p>See PV 13-A-181 in appendix</p>						

PYROGUARD T-EW90/13-1 VI

PRODUCT COMPOSITION	CHARACTERISTICS	27						
	<ul style="list-style-type: none"> ✓ Double glazed configuration of T-EW90/13-1 ✓ Wide range of counterpanes available, including security, solar control, thermal insulation, acoustic and decorative options ✓ Minimum size: 300 x 400 mm ✓ Maximum size: 2000 x 3600 mm ✓ Larger sizes available on special request ✓ Thickness tolerance: ± 1 mm 							
TECHNICAL FEATURES								
<p>Fire Duration EW90 EI15</p>	<p>Type Toughened</p>	<p>Thickness DC</p>	<p>Weight DC</p>	<p>Acoustic DC</p>	<p>Impact Protection DC</p>	<p>Light Transmission DC</p>	<p>U value DC</p>	<p>Temp range DC</p>
POSSIBLE APPLICATIONS								
<p>Steel system</p>	▶							
<p>Timber system</p>	▶							

PYROGUARD T-EW90/13-1 VF

PRODUCT COMPOSITION	CHARACTERISTICS	28						
<p style="text-align: center;">Pyroguard T-EW90/13-1</p> <p style="text-align: right;"> Different options for counterpane Interlayer PVB film </p>	<ul style="list-style-type: none"> ✓ Laminated configuration of T-EW90/13-1 ✓ Wide range of counterpanes available, including security, solar control, thermal insulation, acoustic and decorative options ✓ P1A EN356 anti attack classification ✓ Minimum size: 300 x 400 mm ✓ Maximum size: 1605 x 3350 mm ✓ Larger sizes available on special request ✓ Thickness tolerance: DC 							
TECHNICAL FEATURES								
<p>Fire Duration EW90 EI15</p>	<p>Type Toughened</p>	<p>Thickness DC</p>	<p>Weight DC</p>	<p>Acoustic DC</p>	<p>Impact Protection 1B1</p>	<p>Light Transmission DC</p>	<p>U value DC</p>	<p>Temp range -10 / +45 °C</p>
POSSIBLE APPLICATIONS								
<p>Steel system</p> <p>▶</p>								
<p>Timber system</p> <p>▶</p>								

PYROGUARD T-EW120/13-1

PRODUCT COMPOSITION	CHARACTERISTICS	29						
<p>Toughened safety glass</p> <p>Interlayer</p>	<ul style="list-style-type: none"> ✓ Toughened fire resistant glass with an intumescent interlayer ✓ Excellent impact rating ✓ UV stable ✓ Minimum size: 300 x 400 mm ✓ Maximum size: 2040 x 3600 mm ✓ Larger sizes available on special request ✓ Sizes greater than 2040 x 3600 mm must be converted to 15-1 ✓ Thickness tolerance: ± 1 mm 							
TECHNICAL FEATURES								
<p>Fire Duration EW120 E180, EI15</p>	<p>Type Toughened</p>	<p>Thickness 13 mm</p>	<p>Weight 29.5 kg</p>	<p>Acoustic 37 dB</p>	<p>Impact Protection 1B1</p>	<p>Light Transmission 85%</p>	<p>U value 5.1 W/m² K</p>	<p>Temp range -10 / +45 °C</p>
POSSIBLE APPLICATIONS								
<p>Steel system</p>								

PYROGUARD T-EW120/13-1 VI

PRODUCT COMPOSITION	CHARACTERISTICS	30						
<p style="text-align: center;">Pyroguard T-EW120/13-1</p>	<ul style="list-style-type: none"> ✓ Double glazed configuration of T-EW120/13-1 ✓ Wide range of counterpanes available, including security, solar control, thermal insulation, acoustic and decorative options ✓ Minimum size: 300 x 400 mm ✓ Maximum size: 2000 x 3600 mm ✓ Larger sizes available on special request ✓ Thickness tolerance: ± 1 mm 							
TECHNICAL FEATURES								
<p>Fire Duration EW120 E180, E115</p>	<p>Type Toughened</p>	<p>Thickness DC</p>	<p>Weight DC</p>	<p>Acoustic DC</p>	<p>Impact Protection DC</p>	<p>Light Transmission DC</p>	<p>U value DC</p>	<p>Temp range DC</p>
POSSIBLE APPLICATIONS								
<p>Steel system</p>								

PYROGUARD EW30 IMPACT

PRODUCT COMPOSITION	CHARACTERISTICS	31						
<p style="text-align: center;">Float</p> <p style="text-align: center;">Interlayer</p>	<ul style="list-style-type: none"> ✓ Float glass with an intumescent interlayer ✓ UV stable for internal and external applications ✓ No edge taping required ✓ Minimum size: 100 x 100 mm ✓ Available in 1580 x 2780 mm stock sheets ✓ Thickness tolerance: - 0.6 / + 0.8 mm 							
TECHNICAL FEATURES								
<p>Fire Duration EW30</p>	<p>Type Cuttable</p>	<p>Thickness 7 mm</p>	<p>Weight 17 kg</p>	<p>Acoustic 33 dB (-2; -3)</p>	<p>Impact Protection 2B2</p>	<p>Light Transmission 87%</p>	<p>U value 5.1 W/m² K</p>	<p>Temp range -20 / +140 °C</p>
POSSIBLE APPLICATIONS								
<p>Steel system</p>	▶							
<p>Timber system</p>	▶	<p>See EFR-16-004198 in appendix</p>	<p>See EFR-16-004199 in appendix</p>					

PYROGUARD EW30 IMPACT VI

PRODUCT COMPOSITION	CHARACTERISTICS	32						
<p>Diagram labels: Float, Interlayer, Spacer bar, Different options for counterpane.</p>	<ul style="list-style-type: none"> ✓ Double glazed configuration of EW30 Impact ✓ Wide range of counterpanes available, including security, solar control, thermal insulation, acoustic and decorative options ✓ Minimum size: 100 x 400 mm ✓ Maximum size: 1580 x 2780 mm ✓ Thickness tolerance: DC 							
TECHNICAL FEATURES								
<p>Fire Duration EW30</p>	<p>Type Cuttable</p>	<p>Thickness DC</p>	<p>Weight DC</p>	<p>Acoustic DC</p>	<p>Impact Protection DC</p>	<p>Light Transmission DC</p>	<p>U value DC</p>	<p>Temp range DC</p>
POSSIBLE APPLICATIONS								
<p>Steel system</p>								
<p>Timber system</p>	<p>See EFR-16-004198 in appendix</p>	<p>See EFR-16-004199 + EXT in appendix</p>	<p>See EFR-16-004199 + EXT in appendix</p>					

PYROGUARD EW30 MAXI

PRODUCT COMPOSITION	CHARACTERISTICS	33						
	<ul style="list-style-type: none"> ✓ Float glass with an intumescent interlayer ✓ UV stable for internal and external applications ✓ No edge taping required ✓ Minimum size: 100 x 100 mm ✓ Available in 1580 x 2780 mm stock sheets ✓ Thickness tolerance: - 1 / + 1.4 mm 							
TECHNICAL FEATURES								
<p>Fire Duration EW30</p>	<p>Type Cuttable</p>	<p>Thickness 11 mm</p>	<p>Weight 26.7 kg</p>	<p>Acoustic 35 dB (-2; -2)</p>	<p>Impact Protection 2B2</p>	<p>Light Transmission 85%</p>	<p>U value 5.1 W/m² K</p>	<p>Temp range -20 / +140 °C</p>
POSSIBLE APPLICATIONS								
<p>Steel system</p>								
<p>Timber system</p>	<p>See EFR-16-004198 in appendix</p>	<p>See EFR-16-004199 + EXT in appendix</p>		<p>See EFR-16-004199 + EXT in appendix</p>				

PYROGUARD EW30 MAXI VI

PRODUCT COMPOSITION	CHARACTERISTICS	34						
	<ul style="list-style-type: none"> ✓ Double glazed configuration of EW30 Maxi ✓ Wide range of counterpanes available, including security, solar control, thermal insulation, acoustic and decorative options ✓ Minimum size: 100 x 400 mm ✓ Maximum size: 1580 x 2780 mm ✓ Thickness tolerance: DC 							
TECHNICAL FEATURES								
<p>Fire Duration EW30</p>	<p>Type Cuttable</p>	<p>Thickness DC</p>	<p>Weight DC</p>	<p>Acoustic DC</p>	<p>Impact Protection DC</p>	<p>Light Transmission DC</p>	<p>U value DC</p>	<p>Temp range DC</p>
POSSIBLE APPLICATIONS								
<p>Steel system</p>								
<p>Timber system</p>	<p>See EFR-16-004198 in appendix</p>	<p>See EFR-16-004199 + EXT in appendix</p>	<p>See EFR-16-004199 + EXT in appendix</p>					
<p>Aluminium system</p>								

PYROGUARD EW30 MAXI IMPACT

PRODUCT COMPOSITION	CHARACTERISTICS	35						
	<ul style="list-style-type: none"> ✓ Float glass with an intumescent interlayer ✓ UV stable for internal and external applications ✓ No edge taping required ✓ Excellent impact rating ✓ Minimum size: 100 x 400 mm ✓ Available in 1580 x 2780 mm stock sheets ✓ Thickness tolerance: - 1 / + 1.4 mm 							
TECHNICAL FEATURES								
<p>Fire Duration EW30</p>	<p>Type Cuttable</p>	<p>Thickness 11 mm</p>	<p>Weight 26.7 kg</p>	<p>Acoustic 35 dB (-2; -2)</p>	<p>Impact Protection 1B1</p>	<p>Light Transmission 85%</p>	<p>U value 5.1 W/m² K</p>	<p>Temp range -20 / +140 °C</p>
POSSIBLE APPLICATIONS								
<p>Steel system</p>	▶							
<p>Timber system</p>	▶	 <small>See EFR-16-004198 in appendix</small>	 <small>See EFR-16-004199 + EXT in appendix</small>			<small>See EFR-16-004199 + EXT in appendix</small>		

PYROGUARD EW30 MAXI IMPACT VI

PRODUCT COMPOSITION	CHARACTERISTICS	36						
	<ul style="list-style-type: none"> ✓ Double glazed configuration of EW30 Maxi Impact ✓ Wide range of counterpanes available, including security, solar control, thermal insulation, acoustic and decorative options ✓ Minimum size: 100 x 400 mm ✓ Maximum size: 1580 x 2780 mm ✓ Thickness tolerance: DC 							
TECHNICAL FEATURES								
<p>Fire Duration EW30</p>	<p>Type Cuttable</p>	<p>Thickness DC</p>	<p>Weight DC</p>	<p>Acoustic DC</p>	<p>Impact Protection DC</p>	<p>Light Transmission DC</p>	<p>U value DC</p>	<p>Temp range DC</p>
POSSIBLE APPLICATIONS								
<p>Steel system</p>	▶							
<p>Timber system</p>	▶	 <small>See EFR-16-004198 in appendix</small>	 <small>See EFR-16-004199 + EXT in appendix</small>	 <small>See EFR-16-004199 + EXT in appendix</small>				
<p>Aluminium system</p>	▶							

PYROGUARD EW60

PRODUCT COMPOSITION	CHARACTERISTICS								
	<div style="text-align: right; background-color: #f4a460; color: white; padding: 5px; font-weight: bold; font-size: 1.2em;">37</div> <ul style="list-style-type: none"> ✓ Float glass with an intumescent interlayer ✓ UV stable for internal and external applications ✓ No edge taping required ✓ Minimum size: 100 x 400 mm ✓ Available in 1580 x 2780 mm stock sheets ✓ Thickness tolerance: - 1 / + 1.4 mm 								
TECHNICAL FEATURES									
<p>Fire Duration EW60</p>	<p>Type Cuttable</p>	<p>Thickness 11 mm</p>	<p>Weight 26.7 kg</p>	<p>Acoustic 35 dB (-2; -2)</p>	<p>Impact Protection 2B2</p>	<p>Light Transmission 85%</p>	<p>U value 5.6 W/m² K</p>	<p>Temp range -20 / +140 °C</p>	
POSSIBLE APPLICATIONS									
<p>Steel system</p>	▶								
<p>Timber system</p>	▶	<p style="font-size: 0.8em;">See EFR-15-002710 in appendix</p>							

PYROGUARD EW60 VI

PRODUCT COMPOSITION	CHARACTERISTICS							
	<div style="text-align: right; background-color: #f4a460; color: white; padding: 5px; font-weight: bold; font-size: 1.2em;">38</div> <ul style="list-style-type: none"> ✓ Double glazed configuration of EW60 ✓ Wide range of counterpanes available, including security, solar control, thermal insulation, acoustic and decorative options ✓ Minimum size: 100 x 400 mm ✓ Maximum size: 1580 x 2780 mm ✓ Thickness tolerance: DC 							
TECHNICAL FEATURES								
<p>Fire Duration EW60</p>	<p>Type Cuttable</p>	<p>Thickness DC</p>	<p>Weight DC</p>	<p>Acoustic DC</p>	<p>Impact Protection DC</p>	<p>Light Transmission DC</p>	<p>U value DC</p>	<p>Temp range DC</p>
POSSIBLE APPLICATIONS								
<p>Steel system</p> <p>▶ </p>								
<p>Timber system</p> <p>▶ </p> <p style="font-size: 0.8em;">See EFR-15-002710 in appendix</p>								

PYROGUARD FD60

PRODUCT COMPOSITION	CHARACTERISTICS	39						
<p style="text-align: center;">Float</p> <p style="text-align: center;">Interlayer</p>	<ul style="list-style-type: none"> ✓ Float glass with an intumescent interlayer ✓ UV stable for internal and external applications ✓ No edge taping required ✓ Minimum size: 100 x 100 mm ✓ Available in 1580 x 2780 mm stock sheets ✓ Thickness tolerance: - 0.6 / + 0.8 mm 							
TECHNICAL FEATURES								
<p>Fire Duration E60</p>	<p>Type Cuttable</p>	<p>Thickness 7 mm</p>	<p>Weight 17 kg</p>	<p>Acoustic 33 dB(-2; -3)</p>	<p>Impact Protection 3B3</p>	<p>Light Transmission 87%</p>	<p>U value 5.7 W/m² K</p>	<p>Temp range -20 / +140 °C</p>
POSSIBLE APPLICATIONS								
<p>Timber system</p>								

PYROGUARD EI30 INT

PRODUCT COMPOSITION	CHARACTERISTICS	40						
<p>Float</p> <p>Interlayer</p>	<ul style="list-style-type: none"> ✓ Float glass with three intumescent interlayers ✓ Stockable and cuttable with specialist equipment ✓ Excellent impact rating ✓ Internal installation only ✓ Minimum size: 100 x 100 mm ✓ Available in 2125 x 3100 mm stock sheets ✓ Thickness tolerance: +/- 3mm 							
TECHNICAL FEATURES								
<p>Fire Duration EI30</p>	<p>Type Cuttable</p>	<p>Thickness 15 mm</p>	<p>Weight 37.6 kg</p>	<p>Acoustic 38 dB (-1; -3)</p>	<p>Impact Protection 1B1</p>	<p>Light Transmission 85%</p>	<p>U value 5.4 W/m² K</p>	<p>Temp range -40 / +50°C</p>
POSSIBLE APPLICATIONS								
<p>Steel system</p>	▶							
<p>Timber system</p>	▶							
<p>Aluminium system</p>	▶							

PYROGUARD EI30 INT VI

PRODUCT COMPOSITION	CHARACTERISTICS	41						
	<ul style="list-style-type: none"> ✓ Double glazed configuration of EI30 INT ✓ Internal installation only ✓ Can be installed externally with a PVB counterpane ✓ Wide range of counterpanes available, including security, solar control, thermal insulation, acoustic and decorative options ✓ Minimum size: 100 x 100 mm ✓ Maximum size: 2125 x 3100 mm ✓ Thickness tolerance: +/- 3 mm 							
TECHNICAL FEATURES								
<p>Fire Duration EI30</p>	<p>Type Cuttable</p>	<p>Thickness DC</p>	<p>Weight DC</p>	<p>Acoustic DC</p>	<p>Impact Protection DC</p>	<p>Light Transmission DC</p>	<p>U value DC</p>	<p>Temp range DC</p>
POSSIBLE APPLICATIONS								
<p>Steel system</p>	▶							
<p>Timber system</p>	▶							
<p>Aluminium system</p>	▶							

PYROGUARD EI30 EXT

PRODUCT COMPOSITION	CHARACTERISTICS	42						
<p>Diagram illustrating the product composition layers: Float, Interlayer, and PVB layer.</p>	<ul style="list-style-type: none"> ✓ Laminated configuration of EI30 INT ✓ Stockable and cuttable with specialist equipment ✓ Internal and external installation ✓ Minimum size: 100 x 100 mm ✓ Available in 2125 x 3100 mm stock sheets ✓ Thickness tolerance: +/- 3mm 							
TECHNICAL FEATURES								
<p>Fire Duration EI30</p>	<p>Type Cuttable</p>	<p>Thickness 19 mm</p>	<p>Weight 41.8 kg</p>	<p>Acoustic 39 dB (-1; -3)</p>	<p>Impact Protection 1B1</p>	<p>Light Transmission 84%</p>	<p>U value 5.3 W/m² K</p>	<p>Temp range -40 / +50°C</p>
POSSIBLE APPLICATIONS								
<p>Steel system</p>	▶							
<p>Timber system</p>	▶							
<p>Aluminium system</p>	▶							

PYROGUARD EI30 EXT VI

PRODUCT COMPOSITION	CHARACTERISTICS	43						
<p style="text-align: center;">Pyroguard EI30 EXT</p>	<ul style="list-style-type: none"> ✓ Double glazed configuration of EI30 EXT ✓ Wide range of counterpanes available, including security, solar control, thermal insulation, acoustic and decorative options ✓ Minimum size: 100 x 400 mm ✓ Maximum size: 2000 x 3100 mm ✓ Thickness tolerance: +/- 3 mm 							
TECHNICAL FEATURES								
<p>Fire Duration EI30</p>	<p>Type Cuttable</p>	<p>Thickness DC</p>	<p>Weight DC</p>	<p>Acoustic DC</p>	<p>Impact Protection DC</p>	<p>Light Transmission DC</p>	<p>U value DC</p>	<p>Temp range DC</p>
POSSIBLE APPLICATIONS								
<p>Steel system</p>	▶							
<p>Timber system</p>	▶							
<p>Aluminium system</p>	▶							

PYROGUARD EI60 INT

PRODUCT COMPOSITION	CHARACTERISTICS	44						
	<ul style="list-style-type: none"> ✓ Float glass with five intumescent interlayers ✓ Stockable and cuttable with specialist equipment ✓ Excellent impact rating ✓ Internal installation only ✓ Minimum size: 100 x 100 mm ✓ Available in 2125 x 3100 mm stock sheets ✓ Thickness tolerance: +/- 3 mm 							
TECHNICAL FEATURES								
<p>Fire Duration EI60</p>	<p>Type Cuttable</p>	<p>Thickness 23 mm</p>	<p>Weight 57.6 kg</p>	<p>Acoustic 43 dB (-1; -3)</p>	<p>Impact Protection 1B1</p>	<p>Light Transmission 82%</p>	<p>U value 5.2 W/m² K</p>	<p>Temp range -40 / +50°C</p>
POSSIBLE APPLICATIONS								
<p>Steel system</p>	▶							
<p>Timber system</p>	▶							
<p>Aluminium system</p>	▶							

PYROGUARD EI60 INT VI

PRODUCT COMPOSITION	CHARACTERISTICS	45						
	<ul style="list-style-type: none"> ✓ Double glazed configuration of EI60 INT ✓ Internal installation only ✓ Can be installed externally with a PVB counterpane ✓ Wide range of counterpanes available, including security, solar control, thermal insulation, acoustic and decorative options ✓ Minimum size: 100 x 100 mm ✓ Maximum size: 2125 x 3100 mm ✓ Thickness tolerance: +/- 3 mm 							
TECHNICAL FEATURES								
<p>Fire Duration EI60</p>	<p>Type Cuttable</p>	<p>Thickness DC</p>	<p>Weight DC</p>	<p>Acoustic DC</p>	<p>Impact Protection DC</p>	<p>Light Transmission DC</p>	<p>U value DC</p>	<p>Temp range DC</p>
POSSIBLE APPLICATIONS								
<p>Steel system</p>	▶							
<p>Timber system</p>	▶							
<p>Aluminium system</p>	▶							

PYROGUARD EI60 EXT

PRODUCT COMPOSITION	CHARACTERISTICS	46						
<p>Diagram labels: Float, Interlayer, PVB</p>	<ul style="list-style-type: none"> ✓ Laminated configuration of EI60 INT ✓ Stockable and cuttable with specialist equipment ✓ Internal and external installation ✓ Minimum size: 100 x 100 mm ✓ Available in 2125 x 3100 mm stock sheets ✓ Thickness tolerance: +/- 3mm 							
TECHNICAL FEATURES								
<p>Fire Duration EI60</p>	<p>Type Cuttable</p>	<p>Thickness 27 mm</p>	<p>Weight 61.8 kg</p>	<p>Acoustic 44 dB (-1; -3)</p>	<p>Impact Protection 1B1</p>	<p>Light Transmission 81%</p>	<p>U value 5.1 W/m² K</p>	<p>Temp range -40 / +50°C</p>
POSSIBLE APPLICATIONS								
<p>Steel system</p>	▶							
<p>Timber system</p>	▶							
<p>Aluminium system</p>	▶							

PYROGUARD EI60 EXT VI

PRODUCT COMPOSITION	CHARACTERISTICS	47						
<p style="text-align: center;">Pyroguard EI60 EXT</p>	<ul style="list-style-type: none"> ✓ Double glazed configuration of EI60 EXT ✓ Wide range of counterpanes available, including security, solar control, thermal insulation, acoustic and decorative options ✓ Minimum size: 100 x 400 mm ✓ Maximum size: 3100 x 2000 mm ✓ Thickness tolerance: +/- 3 mm 							
TECHNICAL FEATURES								
<p>Fire Duration EI60</p>	<p>Type Cuttable</p>	<p>Thickness DC</p>	<p>Weight DC</p>	<p>Acoustic DC</p>	<p>Impact Protection DC</p>	<p>Light Transmission DC</p>	<p>U value DC</p>	<p>Temp range DC</p>
POSSIBLE APPLICATIONS								
<p>Steel system</p>	▶							
<p>Timber system</p>	▶							
<p>Aluminium system</p>	▶							

PYROGUARD T-EI30/18-2

PRODUCT COMPOSITION	CHARACTERISTICS	48						
<p>Toughened safety glass</p> <p>Interlayer</p>	<ul style="list-style-type: none"> ✓ Toughened fire resistant glass with two intumescent interlayers ✓ Excellent impact rating ✓ UV stable ✓ Minimum size: 300 x 400 mm ✓ Maximum size: 2040 x 3600 mm ✓ Thickness tolerance: - 1 / + 2 mm 							
TECHNICAL FEATURES								
<p>Fire Duration EI30</p>	<p>Type Toughened</p>	<p>Thickness 18 mm</p>	<p>Weight 39 kg</p>	<p>Acoustic 39 dB (-1; -2)</p>	<p>Impact Protection 1B1</p>	<p>Light Transmission 81%</p>	<p>U value 4.8 W/m² K</p>	<p>Temp range -10 / +45 °C</p>
POSSIBLE APPLICATIONS								
<p>Steel system</p> <p>▶</p>	<p>Additional classification: EW60</p>							
<p>Timber system</p> <p>▶</p>	<p>see EFR-16-004198 in appendix</p>	<p>See EFR-16-004199 + EXT in appendix</p>	<p>See EFR-16-004199 + EXT in appendix</p>	<p>See EFR-16-004199 + EXT in appendix</p>				
<p>Aluminium system</p> <p>▶</p>								

PYROGUARD T-EI30/18-2 VI

PRODUCT COMPOSITION	CHARACTERISTICS	49						
<p style="text-align: center;">Pyroguard T-EI30/18-2</p> <p style="text-align: right;"> Different options for counterpane Interlayer Spacer bar </p>	<ul style="list-style-type: none"> ✓ Double glazed configuration of T-EI30/18-2 ✓ Wide range of counterpanes available, including security, solar control, thermal insulation, acoustic and decorative options ✓ Minimum size: 300 x 400 mm ✓ Maximum size: 2000 x 3600 mm ✓ Thickness tolerance: ± 3 mm ✓ Larger sizes available on special request 							
TECHNICAL FEATURES								
<p>Fire Duration EI30</p>	<p>Type Toughened</p>	<p>Thickness DC</p>	<p>Weight DC</p>	<p>Acoustic DC</p>	<p>Impact Protection DC</p>	<p>Light Transmission DC</p>	<p>U value DC</p>	<p>Temp range DC</p>
POSSIBLE APPLICATIONS								
<p>Steel system</p> <p>▶</p>	<p>Additional classification: EW60</p>							
<p>Timber system</p> <p>▶</p>	<p>See EFR-16-004198 in appendix</p>	<p>See EFR-16-004199 + EXT in appendix</p>	<p>See EFR-16-004199 + EXT in appendix</p>	<p>See EFR-16-004199 + EXT in appendix</p>				
<p>Aluminium system</p> <p>▶</p>								

PYROGUARD T-EI30/18-2 VF

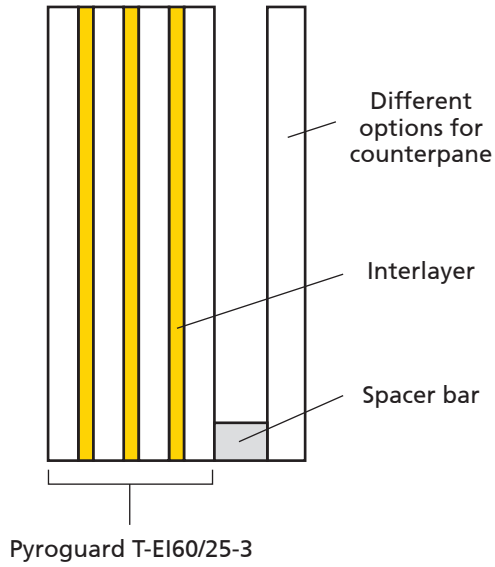
PRODUCT COMPOSITION		CHARACTERISTICS	50
<p>Different options for counterpane</p> <p>Interlayer</p> <p>PVB film</p> <p>Pyroguard T-EI30/18-2</p>		<ul style="list-style-type: none"> ✓ Laminated configuration of T-EI30/18-2 ✓ Wide range of counterpanes available, including security, solar control, thermal insulation, acoustic and decorative options ✓ P1A EN356 anti attack classification ✓ Minimum size: 300 x 400 mm ✓ Maximum size: 1605 x 3350 mm ✓ Larger sizes available on special request ✓ Thickness tolerance: DC 	
TECHNICAL FEATURES			
Fire Duration EI30	Type Toughened	Thickness DC	Weight DC
Acoustic DC	Impact Protection 1B1	Light Transmission DC	U value DC
			Temp range -10 / +45 °C
POSSIBLE APPLICATIONS			
Steel system			
Timber system	 See EFR-16-004198 in appendix	 See EFR-16-004199 + EXT in appendix	 See EFR-16-004199 + EXT in appendix
Aluminium system			

PYROGUARD T-EI60/25-3

PRODUCT COMPOSITION	CHARACTERISTICS	51						
<p style="text-align: center;">Toughened safety glass Interlayer</p>	<ul style="list-style-type: none"> ✓ Toughened fire resistant glass with three intumescent interlayers ✓ Excellent impact rating ✓ UV stable ✓ P1A EN356 anti attack classification ✓ Minimum size: 300 x 400 mm ✓ Maximum size: 2040 x 3600 mm ✓ Thickness tolerance: - 1 / + 2 mm 							
TECHNICAL FEATURES								
<p>Fire Duration EI60</p>	<p>Type Toughened</p>	<p>Thickness 25 mm</p>	<p>Weight 53.5 kg</p>	<p>Acoustic 42 dB (-2; -3)</p>	<p>Impact Protection 1B1</p>	<p>Light Transmission 73%</p>	<p>U value 4.3 W/m² K</p>	<p>Temp range -10 / +45 °C</p>
POSSIBLE APPLICATIONS								
<p>Steel system</p>	<p>▶</p>							
<p>Timber system</p>	<p>▶</p>							
<p>Aluminium system</p>	<p>▶</p>							

PYROGUARD T-EI60/25-3 VI

PRODUCT COMPOSITION	CHARACTERISTICS	52
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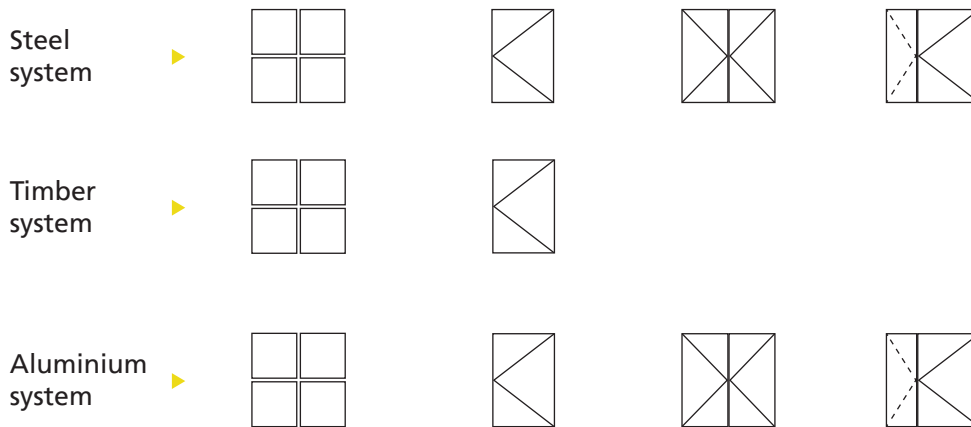


- ✓ Double glazed configuration of T-EI60/25-3
- ✓ Wide range of counterpanes available, including security, solar control, thermal insulation, acoustic and decorative options
- ✓ P1A EN356 anti attack classification
- ✓ Minimum size: 300 x 400 mm
- ✓ Maximum size: 2000 x 3600 mm
- ✓ Thickness tolerance: ± 3 mm
- ✓ Larger sizes available on special request

TECHNICAL FEATURES

Fire Duration EI60	Type Toughened	Thickness DC	Weight DC	Acoustic DC	Impact Protection DC	Light Transmission DC	U value DC	Temp range DC

POSSIBLE APPLICATIONS



PYROGUARD T-EI60/25-3 VF

PRODUCT COMPOSITION	CHARACTERISTICS	53						
<p style="text-align: center;">Pyroguard T-EI60/25-3</p>	<ul style="list-style-type: none"> ✓ Laminated configuration of T-EI60/25-3 ✓ Wide range of counterpanes available, including security, solar control, thermal insulation, acoustic and decorative options ✓ P1A EN356 anti attack classification ✓ Minimum size: 300 x 400 mm ✓ Maximum size: 1605 x 3350 mm ✓ Larger sizes available on special request ✓ Thickness tolerance: DC 							
TECHNICAL FEATURES								
<p>Fire Duration EI60</p>	<p>Type Toughened</p>	<p>Thickness DC</p>	<p>Weight DC</p>	<p>Acoustic DC</p>	<p>Impact Protection 1B1</p>	<p>Light Transmission DC</p>	<p>U value DC</p>	<p>Temp range -10 / +45 °C</p>
POSSIBLE APPLICATIONS								
<p>Steel system</p>	▶							
<p>Timber system</p>	▶							
<p>Aluminium system</p>	▶							

PYROGUARD T-EI60/26-2

PRODUCT COMPOSITION	CHARACTERISTICS	54						
<p style="margin-left: 20px;">Toughened safety glass</p> <p style="margin-left: 150px;">Interlayer</p>	<ul style="list-style-type: none"> ✓ Toughened fire resistant glass with two intumescent interlayers ✓ Excellent impact rating ✓ UV stable ✓ Minimum size: 300 x 400 mm ✓ Maximum size: 2040 x 3600 mm ✓ Thickness tolerance: - 1 / + 2 mm 							
TECHNICAL FEATURES								
<p>Fire Duration EI60</p>	<p>Type Toughened</p>	<p>Thickness 26 mm</p>	<p>Weight 55 kg</p>	<p>Acoustic 41 dB (-2; -3)</p>	<p>Impact Protection 1B1</p>	<p>Light Transmission 74%</p>	<p>U value 4.3 W/m² K</p>	<p>Temp range -10 / +45 °C</p>
POSSIBLE APPLICATIONS								
<p>Timber system</p>	<p>See PV 13-A-423 in appendix</p>							

PYROGUARD T-EI60/26-2 VI

PRODUCT COMPOSITION	CHARACTERISTICS	55						
<p style="text-align: center;">Pyroguard T-EI60/26-2</p> <p style="text-align: right;"> Different options for counterpane Interlayer Spacer bar </p>	<ul style="list-style-type: none"> ✓ Double glazed configuration of T-EI60/26-2 ✓ Wide range of counterpanes available, including security, solar control, thermal insulation, acoustic and decorative options ✓ Minimum size: 300 x 400 mm ✓ Maximum size: 2000 x 3600 mm ✓ Thickness tolerance: DC ✓ Larger sizes available on special request 							
TECHNICAL FEATURES								
<p>Fire Duration EI60</p>	<p>Type Toughened</p>	<p>Thickness DC</p>	<p>Weight DC</p>	<p>Acoustic DC</p>	<p>Impact Protection DC</p>	<p>Light Transmission DC</p>	<p>U value DC</p>	<p>Temp range DC</p>
POSSIBLE APPLICATIONS								
<p>Timber system</p>	<p>See 13-A-423 + EXT in appendix</p>							

PYROGUARD T-EI90/32-2

PRODUCT COMPOSITION	CHARACTERISTICS	56						
<p>Toughened safety glass</p> <p>Interlayer</p>	<ul style="list-style-type: none"> ✓ Toughened fire resistant glass with two intumescent interlayers ✓ Excellent impact rating ✓ UV stable ✓ P1A EN356 anti-attack classification ✓ Minimum size: 300 x 400 mm ✓ Maximum size: 2040 x 3600 mm ✓ Thickness tolerance: - 1 / + 3 mm 							
TECHNICAL FEATURES								
<p>Fire Duration EI90</p>	<p>Type Toughened</p>	<p>Thickness 32 mm</p>	<p>Weight 66 kg</p>	<p>Acoustic 43 dB (-2; -2)</p>	<p>Impact Protection 1B1</p>	<p>Light Transmission 71%</p>	<p>U value 3.6 W/m² K</p>	<p>Temp range -10 / +45 °C</p>
POSSIBLE APPLICATIONS								
<p>Steel system</p>								

PYROGUARD T-EI90/32-2 VI

PRODUCT COMPOSITION	CHARACTERISTICS	57						
<p style="text-align: center;">Pyroguard T-EI90/32-2</p>	<ul style="list-style-type: none"> ✓ Double glazed configuration of T-EI90/32-2 ✓ Wide range of counterpanes available, including security, solar control, thermal insulation, acoustic and decorative options ✓ Minimum size: 300 x 400 mm ✓ Maximum size: 2000 x 3600 mm ✓ Thickness tolerance: DC ✓ Larger sizes available on special request 							
TECHNICAL FEATURES								
<p>Fire Duration EI90</p>	<p>Type Toughened</p>	<p>Thickness DC</p>	<p>Weight DC</p>	<p>Acoustic DC</p>	<p>Impact Protection DC</p>	<p>Light Transmission DC</p>	<p>U value DC</p>	<p>Temp range DC</p>
POSSIBLE APPLICATIONS								
<p>Steel system</p>								

PYROGUARD T-EI120/47-3

PRODUCT COMPOSITION	CHARACTERISTICS	58						
<p style="text-align: center;">Toughened safety glass</p> <p style="text-align: center;">Interlayer</p>	<ul style="list-style-type: none"> ✓ Toughened fire resistant glass with three intumescent interlayers ✓ Excellent impact rating ✓ UV stable ✓ P1A EN356 anti-attack classification ✓ Minimum size: 300 x 400 mm ✓ Maximum size: 2040 x 3600 mm ✓ Thickness tolerance: - 1 / + 3 mm 							
TECHNICAL FEATURES								
<p>Fire Duration EI120</p>	<p>Type Toughened</p>	<p>Thickness 47 mm</p>	<p>Weight 96 kg</p>	<p>Acoustic 47 dB (-1; -2)</p>	<p>Impact Protection 1B1</p>	<p>Light Transmission 64%</p>	<p>U value 3.4 W/m² K</p>	<p>Temp range -10 / +45 °C</p>
POSSIBLE APPLICATIONS								
<p>Steel system</p>								

PYROGUARD T-EI120/47-3 VI

PRODUCT COMPOSITION	CHARACTERISTICS	59						
<p style="text-align: center;">Pyroguard T-EI120/47-3</p> <p style="text-align: right;"> Different options for counterpane Interlayer Spacer bar </p>	<ul style="list-style-type: none"> ✓ Double glazed configuration of T-EI120/47-3 ✓ Wide range of counterpanes available, including security, solar control, thermal insulation, acoustic and decorative options ✓ Minimum size: 300 x 400 ✓ Maximum size: 2000 x 3600 ✓ Thickness tolerance: DC ✓ Larger sizes available on special request 							
TECHNICAL FEATURES								
<p>Fire Duration EI120</p>	<p>Type Toughened</p>	<p>Thickness DC</p>	<p>Weight DC</p>	<p>Acoustic DC</p>	<p>Impact Protection DC</p>	<p>Light Transmission DC</p>	<p>U value DC</p>	<p>Temp range DC</p>
POSSIBLE APPLICATIONS								
<p>Steel system</p>								

PYROGUARD T-EI180/82-5

PRODUCT COMPOSITION	CHARACTERISTICS	60						
<p style="text-align: center;">Toughened safety glass Interlayer</p>	<ul style="list-style-type: none"> ✓ Toughened fire resistant glass with five intumescent interlayers ✓ Excellent impact rating ✓ UV stable ✓ Minimum size: 300 x 400 mm ✓ Maximum size: 2040 x 3600 mm ✓ Thickness tolerance: - 1 / + 3 mm 							
TECHNICAL FEATURES								
<p>Fire Duration EI180</p>	<p>Type Toughened</p>	<p>Thickness 82 mm</p>	<p>Weight 180 kg</p>	<p>Acoustic ND</p>	<p>Impact Protection 1B1</p>	<p>Light Transmission ND</p>	<p>U value ND</p>	<p>Temp range -10 / +45 °C</p>
POSSIBLE APPLICATIONS								
<p>Steel system</p>								

PYROGUARD T-EI30/18-1

PRODUCT COMPOSITION	CHARACTERISTICS	61						
<p>Toughened safety glass</p> <p>Gel</p>	<ul style="list-style-type: none"> ✓ Toughened fire resistant glass with an intumescent interlayer ✓ Excellent impact rating ✓ Lightweight solution ✓ Minimum size: 300 x 400 mm ✓ Maximum size: 2040 x 3600 mm ✓ Thickness tolerance: -1 / +2 mm 							
TECHNICAL FEATURES								
<p>Fire Duration EI30</p>	<p>Type Toughened</p>	<p>Thickness 18 mm</p>	<p>Weight 35.5 kg</p>	<p>Acoustic 41 dB (-1; -2)</p>	<p>Impact Protection 1B1</p>	<p>Light Transmission 85%</p>	<p>U value 5.5 W/m² K</p>	<p>Temp range -10 / +45 °C</p>
POSSIBLE APPLICATIONS								
<p>Steel system</p>	▶							
<p>Timber system</p>	▶	 <small>See EFR-16-004198 in appendix</small>	 <small>See EFR-16-004199 + EXT in appendix</small>	 <small>See EFR-16-004199 + EXT in appendix</small>	 <small>See EFR-16-004199 + EXT in appendix</small>			
<p>Aluminium system</p>	▶							

PYROGUARD T-EI30/18-1 VI

PRODUCT COMPOSITION	CHARACTERISTICS	62						
<p style="text-align: center;">Pyroguard T-EI30/18-1</p> <p style="text-align: right;"> Different options for counterpane Interlayer Spacer bar </p>	<ul style="list-style-type: none"> ✓ Double glazed configuration of T-EI30/18-1 ✓ Wide range of counterpanes available, including security, solar control, thermal insulation, acoustic and decorative options ✓ Minimum size: 300 x 400 mm ✓ Maximum size: 2000 x 3600 mm ✓ Thickness tolerance: DC ✓ Larger sizes available on special request 							
TECHNICAL FEATURES								
<p>Fire Duration EI30</p>	<p>Type Toughened</p>	<p>Thickness DC</p>	<p>Weight DC</p>	<p>Acoustic DC</p>	<p>Impact Protection DC</p>	<p>Light Transmission DC</p>	<p>U value DC</p>	<p>Temp range DC</p>
POSSIBLE APPLICATIONS								
<p>Steel system</p>	▶							
<p>Timber system</p>	▶	 <small>See EFR-16-004198 in appendix</small>	 <small>See EFR-16-004199 + EXT in appendix</small>	 <small>See EFR-16-004199 + EXT in appendix</small>	 <small>See EFR-16-004199 + EXT in appendix</small>			
<p>Aluminium system</p>	▶							

PYROGUARD T-EI30/18-1 VF

PRODUCT COMPOSITION	CHARACTERISTICS	63						
<p style="text-align: center;">Pyroguard T-EI30/18-1</p> <p style="text-align: right;"> Different options for counterpane Interlayer Spacer bar </p>	<ul style="list-style-type: none"> ✓ Laminated configuration of T-EI30/18-1 ✓ Wide range of counterpanes available, including security, solar control, thermal insulation, acoustic and decorative options ✓ P1A EN356 anti attack classification ✓ Minimum size: 300 x 400 mm ✓ Maximum size: 1605 x 3350 mm ✓ Thickness tolerance: DC ✓ Larger sizes available on special request 							
TECHNICAL FEATURES								
<p>Fire Duration EI30</p>	<p>Type Toughened</p>	<p>Thickness DC</p>	<p>Weight DC</p>	<p>Acoustic DC</p>	<p>Impact Protection 1B1</p>	<p>Light Transmission DC</p>	<p>U value DC</p>	<p>Temp range DC</p>
POSSIBLE APPLICATIONS								
<p>Steel system</p>								
<p>Timber system</p>	<p>See EFR-16-004198 in appendix</p>	<p>See EFR-16-004199 + EXT in appendix</p>	<p>See EFR-16-004199 + EXT in appendix</p>	<p>See EFR-16-004199 + EXT in appendix</p>				
<p>Aluminium system</p>								

PYROGUARD T-EI60/2 1-1

PRODUCT COMPOSITION	CHARACTERISTICS	64						
	<ul style="list-style-type: none"> ✓ Toughened fire resistant glass with an intumescent interlayer ✓ Excellent impact rating ✓ Lightweight solution ✓ Minimum size: 300 x 400 mm ✓ Maximum size: 2040 x 3600 mm ✓ Thickness tolerance: -1 / +2 mm 							
TECHNICAL FEATURES								
<p>Fire Duration EI60</p>	<p>Type Toughened</p>	<p>Thickness 21 mm</p>	<p>Weight 38.6 kg/m²</p>	<p>Acoustic 42 dB(- 1; - 2)</p>	<p>Impact Protection 1B1</p>	<p>Light Transmission ND</p>	<p>U value ND</p>	<p>Temp range -10 /+45°C</p>
POSSIBLE APPLICATIONS								
<p>Timber system</p>								
<p>Aluminium system</p>								

PYROGUARD T-EI60/21-1 VI

PRODUCT COMPOSITION	CHARACTERISTICS	65						
<p style="margin-left: 100px;">Pyroguard T-EI60/21-1</p> <p style="margin-left: 200px;">Different options for counterpane</p> <p style="margin-left: 200px;">Interlayer</p> <p style="margin-left: 200px;">Spacer bar</p>	<ul style="list-style-type: none"> ✓ Double glazed configuration of T-EI60/21-1 ✓ Wide range of counterpanes available, including security, solar control, thermal insulation, acoustic and decorative options ✓ Minimum size: 300 x 400 mm ✓ Maximum size: 2000 x 3600 mm ✓ Thickness tolerance: DC ✓ Larger sizes available on special request 							
TECHNICAL FEATURES								
<p>Fire Duration EI60</p>	<p>Type Toughened</p>	<p>Thickness DC</p>	<p>Weight DC</p>	<p>Acoustic DC</p>	<p>Impact Protection DC</p>	<p>Light Transmission DC</p>	<p>U value DC</p>	<p>Temp range DC</p>
POSSIBLE APPLICATIONS								

PYROGUARD T-EI60/21-1 VF

PRODUCT COMPOSITION	CHARACTERISTICS	66						
<p>Pyroguard T-EI60/21-1</p> <p>Different options for counterpane</p> <p>Interlayer</p> <p>PVB</p>	<ul style="list-style-type: none"> ✓ Laminated configuration of T-EI60/21-1 ✓ Wide range of counterpanes available, including security, solar control, thermal insulation, acoustic and decorative options ✓ P1A EN356 anti attack classification ✓ Minimum size: 300 x 400 mm ✓ Maximum size: 1605 x 3350 mm ✓ Thickness tolerance: DC ✓ Larger sizes available on special request 							
TECHNICAL FEATURES								
<p>Fire Duration EI60</p>	<p>Type Toughened</p>	<p>Thickness DC</p>	<p>Weight DC</p>	<p>Acoustic DC</p>	<p>Impact Protection 1B1</p>	<p>Light Transmission DC</p>	<p>U value DC</p>	<p>Temp range DC</p>
POSSIBLE APPLICATIONS								

PYROGUARD T-EI30/24-2 SWS

PRODUCT COMPOSITION	CHARACTERISTICS	67						
<p style="text-align: center;">Toughened safety glass Interlayer</p>	<ul style="list-style-type: none"> ✓ Toughened fire resistant glass with two intumescent interlayers ✓ Specifically for use in butt joint applications. Assembled with a 6 mm black silicone joint between panes ✓ Excellent impact rating ✓ UV stable ✓ Minimum size: 300 x 400 mm ✓ Maximum size: 2040 x 3600 mm ✓ Thickness tolerance: - 1 / + 2 mm ✓ Larger sizes available on special request 							
TECHNICAL FEATURES								
<p>Fire Duration EI30</p>	<p>Type Butt joint</p>	<p>Thickness 24 mm</p>	<p>Weight 52 kg</p>	<p>Acoustic 42 dB (-2; -3)</p>	<p>Impact Protection 1B1</p>	<p>Light Transmission 76%</p>	<p>U value 4.7 W/m² K</p>	<p>Temp range -10 / +45 °C</p>
POSSIBLE APPLICATIONS								
<p>Steel system</p>								

PYROGUARD T-EI30/32-2 SWS

PRODUCT COMPOSITION	CHARACTERISTICS	68						
<p style="text-align: center;">Laminated PVB film Interlayer Float</p>	<ul style="list-style-type: none"> ✓ Float glass with two intumescent interlayers and two PVB interlayers ✓ Specifically for use in butt joint applications. Assembled with a 6 mm black silicone joint between panes ✓ Excellent impact rating ✓ UV stable ✓ P1A EN356 anti attack classification ✓ Minimum size: 300 x 400 mm ✓ Maximum size: 1605 x 3350 mm ✓ Thickness tolerance: - 1 / + 2 mm ✓ Larger sizes available on special request 							
TECHNICAL FEATURES								
<p>Fire Duration EI30</p>	<p>Type Butt joint</p>	<p>Thickness 32 mm</p>	<p>Weight 67 kg</p>	<p>Acoustic 43 dB (-2; -3)</p>	<p>Impact Protection 1B1</p>	<p>Light Transmission 76%</p>	<p>U value 4.3 W/m² K</p>	<p>Temp range -10 / +45 °C</p>
POSSIBLE APPLICATIONS								
<p>Timber system</p>	<p>See PV 13-A-426 in appendix</p>							

PYROGUARD T-EI30/32-2 SWS VI

PRODUCT COMPOSITION	CHARACTERISTICS	69						
<p style="text-align: center;">Pyroguard T-EI30/32-2 SWS</p>	<ul style="list-style-type: none"> ✓ Double glazed configuration of T-EI30/32-2 SWS ✓ Wide range of counterpanes available, including security, solar control, thermal insulation, acoustic and decorative options ✓ P1A EN356 anti attack classification ✓ Minimum size: 300 x 400 mm ✓ Maximum size: 1605 x 3350 mm ✓ Thickness tolerance: DC ✓ Larger sizes available on special request 							
TECHNICAL FEATURES								
<p>Fire Duration EI30</p>	<p>Type Butt joint</p>	<p>Thickness DC</p>	<p>Weight DC</p>	<p>Acoustic DC</p>	<p>Impact Protection DC</p>	<p>Light Transmission DC</p>	<p>U value DC</p>	<p>Temp range DC</p>
POSSIBLE APPLICATIONS								
<p>Timber system</p>		<p>See PV 13-A-426 in appendix</p>						

PYROGUARD T-EI60/36-2 SWS

PRODUCT COMPOSITION	CHARACTERISTICS	70						
<p style="text-align: right;">Laminated PVB film Interlayer Float</p>	<ul style="list-style-type: none"> ✓ Float glass with two intumescent interlayers and two PVB interlayers ✓ Specifically for use in butt joint applications. Assembled with a 6 mm black silicone joint between panes ✓ Excellent impact rating ✓ UV stable ✓ P1A EN356 anti attack classification ✓ Minimum size: 300 x 400 mm ✓ Maximum size: 1605 x 3350 mm ✓ Thickness tolerance: - 1 / + 2 mm ✓ Larger sizes available on special request 							
TECHNICAL FEATURES								
<p>Fire Duration EI60</p>	<p>Type Butt joint</p>	<p>Thickness 36 mm</p>	<p>Weight 73 kg</p>	<p>Acoustic 43 dB (-2; -3)</p>	<p>Impact Protection 1B1</p>	<p>Light Transmission 74%</p>	<p>U value 4.2 W/m² K</p>	<p>Temp range -10 / +45 °C</p>
POSSIBLE APPLICATIONS								
<p>Timber system</p>	<p>See PV 13-A-421 in appendix</p>							

PYROGUARD T-EI60/36-2 SWS VI

PRODUCT COMPOSITION	CHARACTERISTICS	71						
<p style="text-align: center;">Pyroguard T-EI30/36-2 SWS</p>	<ul style="list-style-type: none"> ✓ Double glazed configuration of T-EI60/36-2 SWS ✓ Wide range of counterpanes available, including security, solar control, thermal insulation, acoustic and decorative options ✓ P1A EN356 anti attack classification ✓ Minimum size: 300 x 400 mm ✓ Maximum size: 1605 x 3350 mm ✓ Thickness tolerance: DC ✓ Larger sizes available on special request 							
TECHNICAL FEATURES								
<p>Fire Duration EI60</p>	<p>Type Butt joint</p>	<p>Thickness DC</p>	<p>Weight DC</p>	<p>Acoustic DC</p>	<p>Impact Protection DC</p>	<p>Light Transmission DC</p>	<p>U value DC</p>	<p>Temp range DC</p>
POSSIBLE APPLICATIONS								
<p>Timber system</p>		<p>See PV 13-A-421 in appendix</p>						

PYROGUARD T-EI60/40-2 SWS

PRODUCT COMPOSITION	CHARACTERISTICS	72						
	<ul style="list-style-type: none"> ✓ Float glass with two intumescent interlayers and two PVB interlayers ✓ Specifically for use in butt joint applications. Assembled with a 6 mm black silicone joint between panes ✓ Excellent impact rating ✓ UV stable ✓ P1A EN356 anti attack classification ✓ Minimum size: 300 x 400 mm ✓ Maximum size: 1605 x 3350 mm ✓ Thickness tolerance: - 1 / + 2 mm ✓ Larger sizes available on special request 							
TECHNICAL FEATURES								
<p>Fire Duration EI60</p>	<p>Type Butt joint</p>	<p>Thickness 40 mm</p>	<p>Weight 83 kg</p>	<p>Acoustic 44 dB (-2; -3)</p>	<p>Impact Protection 1B1</p>	<p>Light Transmission 71%</p>	<p>U value 4.1 W/m² K</p>	<p>Temp range -10 / +45 °C</p>
POSSIBLE APPLICATIONS								
<p>Steel system</p>								
<p>Timber system</p>								
<p>See PV 13-A-421 in appendix</p>								

PYROGUARD T-EI60/40-2 SWS VI

PRODUCT COMPOSITION	CHARACTERISTICS	73						
<p style="text-align: center;">Pyroguard T-EI30/40-2 SWS</p>	<ul style="list-style-type: none"> ✓ Double glazed configuration of T-EI60/40-2 SWS ✓ Wide range of counterpanes available, including security, solar control, thermal insulation, acoustic and decorative options ✓ P1A EN356 anti attack classification ✓ Minimum size: 300 x 400 mm ✓ Maximum size: 1605 x 3350 mm ✓ Thickness tolerance: DC ✓ Larger sizes available on special request 							
TECHNICAL FEATURES								
<p>Fire Duration EI60</p>	<p>Type Butt joint</p>	<p>Thickness DC</p>	<p>Weight DC</p>	<p>Acoustic DC</p>	<p>Impact Protection DC</p>	<p>Light Transmission DC</p>	<p>U value DC</p>	<p>Temp range DC</p>
POSSIBLE APPLICATIONS								
<p>Timber system</p>								

SMOKEGUARD DH30/8

PRODUCT COMPOSITION	CHARACTERISTICS	74				
<p>Bracket</p> <p>Toughened safety glass</p>	<ul style="list-style-type: none"> ✓ A glass smoke control solution which can direct smoke and keep toxic fumes at bay long enough to allow members of the public to exit the building safely ✓ Supplied with patented brackets and fixings for installation ✓ A specific Smokeguard brochure is available separately DH30 and D⁶⁰⁰ 30 Classification ✓ Minimum size: 465 x 109 mm ✓ Maximum size: 2040 x 3600 mm ✓ Thickness tolerance: ± 0.3 mm 					
TECHNICAL FEATURES						
<p>Fire Duration DH30</p>	<p>Type Toughened</p>	<p>Thickness 8 mm</p>	<p>Weight 20 kg</p>	<p>Impact Protection 1C1</p>	<p>Light Transmission 87%</p>	<p>Temp range ± 100 °C</p>
POSSIBLE APPLICATIONS						
<p>Steel system</p>						

ATTACKGUARD

CHARACTERISTICS

75

A range of security glass which provides protection against manual attack. Numerous configurations are available which provide manual attack protection to the EN 356 standard from P1A to P8B.

Attackguard is used either as an IGU counterpane or as a laminated Pyroguard fire resistant glass.



Fire Duration
Manual Attack Protection



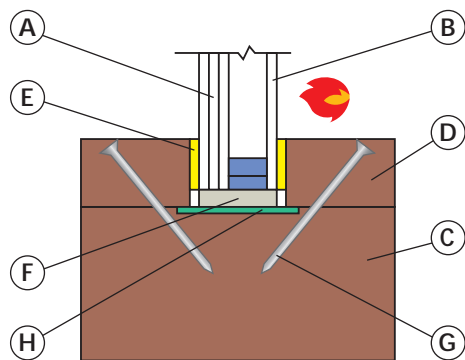
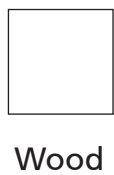
Impact Protection
1B1

ATTACKGUARD CONFIGURATIONS

Class (EN 356)	Product Code	Drop Height hard body (4.11 kg)	Thickness (mm)	Weight (kg/m ²)	Test report
P1A	Attackguard P1A/442	1,5 m (3x)	8.5	20	89207163-03
P1A	Pyroguard T-EI60/25-3	1,5 m (3x)	25	53.5	89210211-06
P1A	Pyroguard T-EI90/32-2	1.5 m (3x)	32	66	89211941-01
P1A	Pyroguard T-EI120/47-3	1.5 m (3x)	47	96	89211941-02
P2A	Attackguard P2A/332	3.0 m (3x)	6.5	15	89207503-01
P2A	Attackguard P2A/442	3.0 m (3x)	8.5	20	89210211-05
P2A	Attackguard P2A/443	3.0 m (3x)	9	20	89207563-02
P3A	Attackguard P3A/445	6.0 m (3x)	10	20	89207503-04
P4A	Attackguard P4A-448	9.0 m (3x)	11	20	89207503-05
P4A	Pyroguard T-EW30/6 VF RV Pyroguard T-EW60/6 VF RV	9.0 m (3x)	12.5	30	89207163-01
P4A	Attackguard P4A/444	9.0 m (3x)	9.5	20	89207503-06
P5A	Attackguard P5A/448	9.0 m (3x)	11	20	89210211-03

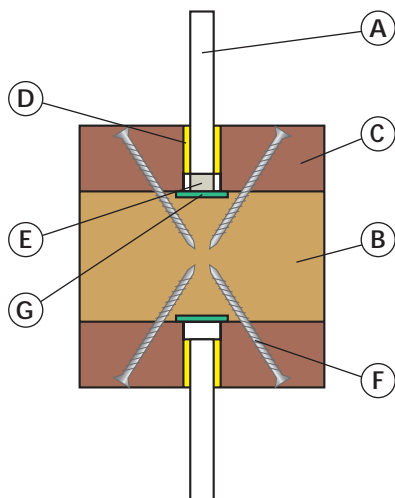
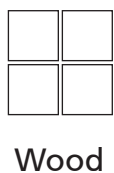
Class (EN 356)	Product Code	Hits hammer / axe	Thickness (mm)	Weight (kg/m ²)	Test report
P6B	Attackguard P6B/15-1	> 30	16	37.5	MV 14 01 17
P6B	Attackguard P6B/16-2	> 30	17	40	MV 14 01 18
P7B	Attackguard P8B/20-3	> 50	24	59	89211039-01
P8B	Attackguard P8B/20-3	> 70	24	59	89211039-01

EFR-15-002710



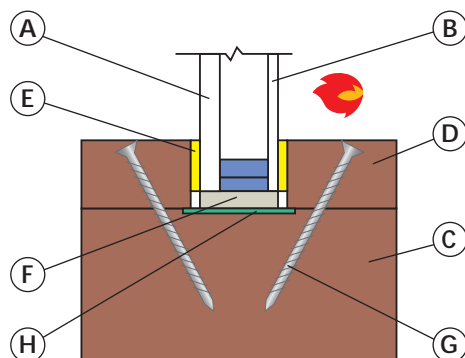
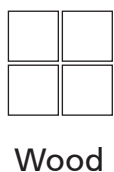
- (A) Pyroguard EW60 (11 mm)
- (B) Float 4, 6, 8 or 10 mm
- (C) Timber framing section 92 x 45 mm min. 610 kg/m³ density
- (D) Timber glazing beads 25 x 28.5 mm min. 610 kg/m³ density
- (E) K Tape glazing strip 15 x 6 mm
- (F) Hardwood setting blocks 26 x 8 x 40 mm, 650 kg/m³ minimum density
- (G) Fixings: screws 4 x 50 mm at a 45 degree angle spacings 200 mm and 70 mm from corners
- (H) Intumescent tape

PV 13-A-447



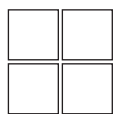
- (A) Pyroguard T-E30/8
- (B) Oak hardwood screen 86 x 40 mm, 710 kg/m³ minimum density
- (C) Hardwood beading 20 x 35 mm, 710 kg/m³ minimum density
- (D) K tape glazing strip 20 x 5 mm
- (E) Setting blocks 80 x 8 x 10 mm
- (F) Fixings: screws 4 x 40 mm at a 15 degree angle spacings 170 mm and 70 mm from corners
- (G) Intumescent tape

PV 13-A-437

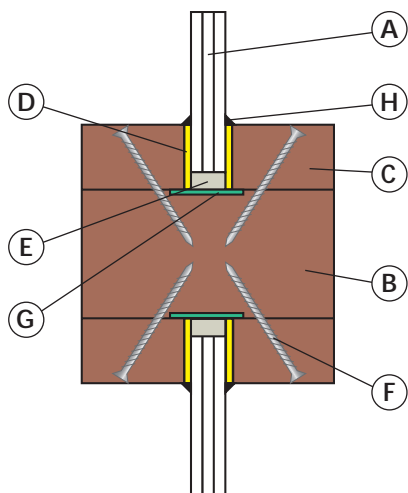


- (A) Pyroguard T-EW30/6 VI
- (B) Consult PV for counterpane options
- (C) Timber framing section 100 x 48 mm min. 650 kg/m³ density
- (D) Timber glazing beads 20 x 35 mm min. 650 kg/m³ density
- (E) Kerafix glazing tape 15 x 4 mm
- (F) Hardwood or Vermiculite setting block 80 x 10 mm
- (G) Glazing bead fixing screws 4 x 50 mm
- (H) Flexilodice intumescent tape 10 x 2.5 mm

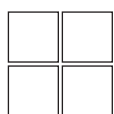
PV 13-A-423



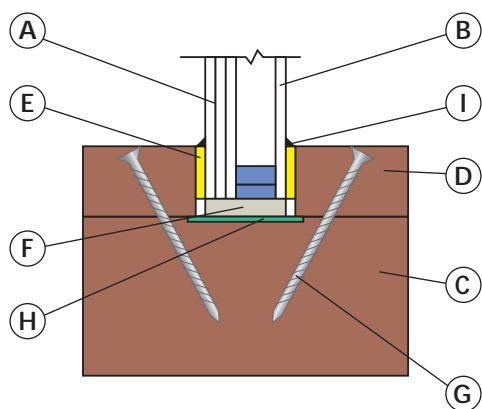
Wood



- (A) Pyroguard T-EI60/26-2
- (B) Hardwood screen 112 x 50 mm, 650 kg/m³ minimum density
- (C) Hardwood beading 40 x 20 mm, 650 kg/m³ minimum density
- (D) K Tape glazing strip 20 x 4 mm
- (E) Setting blocks 80 x 26 x 3 mm
- (F) Fixings: screws 4 x 40 mm spacings 200 mm and 50 mm from corners
- (G) Intumescent tape
- (H) Fire resistant silicone

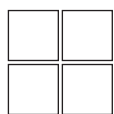


Wood

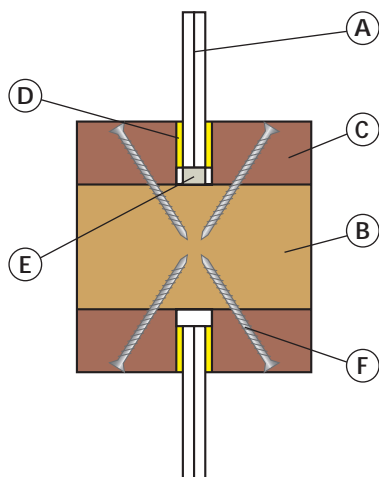


- (A) Pyroguard T-EI60/26-2 VI
- (B) Different options for counter pane (recommendations in the test report)
- (C) Hardwood screen 112 x 50 mm, 650 kg/m³ minimum density
- (D) Hardwood beading 40 x 20 mm, 650 kg/m³ minimum density
- (E) Glazing material: ceramic tape
- (F) Hardwood or Vermiculite setting block 80 x 3 mm
- (G) Fixings: screws 4 x 40 mm spacings 200 mm and 50 mm from corners
- (H) Intumescent tape
- (I) Fire resistant silicone

EFR-16-003517

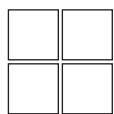


Wood

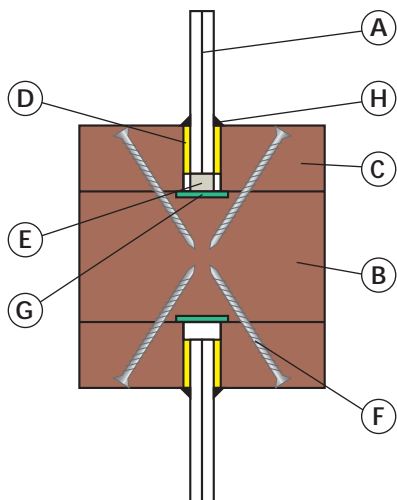


- (A) Pyroguard EI 60 INT
- (B) Timber framing section 45 x 92 mm min. 640 kg/m³ density
- (C) Timber glazing beads 20 x 30.5 mm min. 640 kg/m³ density
- (D) Interdens intumescent glazing tape 20 x 2 mm
- (E) Hardwood or Vermiculite setting blocks 80 x 7 x 23 mm
- (F) Glazing bead fixing screws 5 x 50 mm

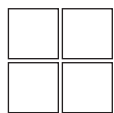
PV 13-A-181 + EXT



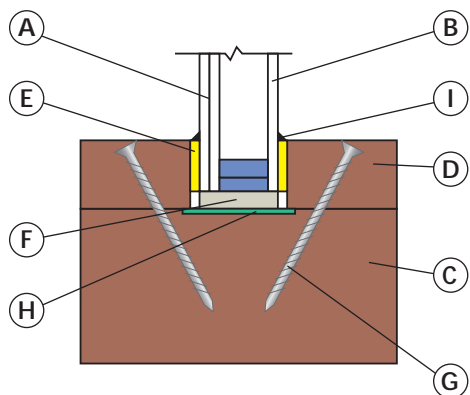
Wood



- (A) Pyroguard T-EW60/13-1 or Pyroguard T-EW60/13-1 VF
- (B) Hardwood screen 98 x 50 mm, 650 kg/m³ minimum density
- (C) Hardwood beading 40 x 20 mm, 650 kg/m³ minimum density
- (D) K Tape glazing strip 15 x 3 mm
- (E) Hardwood or Vermiculite setting blocks 80 x 7 mm
- (F) Fixings: screws 4 x 40 mm spacings 160 mm and 70 mm from corners
- (G) Intumescent tape
- (H) Fire resistant silicone

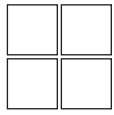


Wood

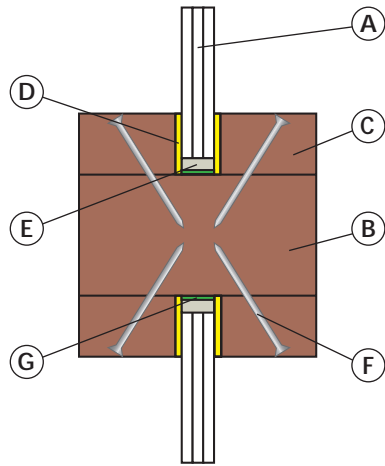


- (A) Pyroguard T-EW60/13-1 VI
- (B) Different options for counter pane (recommendations in the test report)
- (C) Hardwood screen 98 x 50 mm, 650 kg/m³ minimum density
- (D) Hardwood beading 40 x 20 mm, 650 kg/m³ minimum density
- (E) K Tape glazing strip 15 x 3 mm
- (F) Setting blocks 80 x 13 x 7/8 mm
- (G) Fixings: screws 4 x 40 mm spacings 160 mm and 70 mm from corners
- (H) Intumescent tape
- (I) Fire resistant silicone

PV EFR-16-004198



Wood



(A) Pyroguard glass - options below:

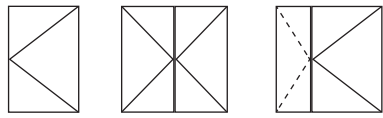
EI Classification	T-EI30/18-2 • T-EI30/18-2 VF • T-EI30/18-2 VI
	T-EI30/18-1 • T-EI30/18-1 VF • T-EI30/18-1 VI
	EI30 INT • EI30 EXT • EI30 INT VI • EI30 EXT VI

EW Classification	T-EW30/6 • T-EW30/6 VF • T-EW30/6 VI
	T-EW30/13-1 • T-EW30/13-1 VF • T-EW30/13-1 VI
	EW30 Impact • EW30 Impact VI • EW30 Maxi • EW30 Maxi VI

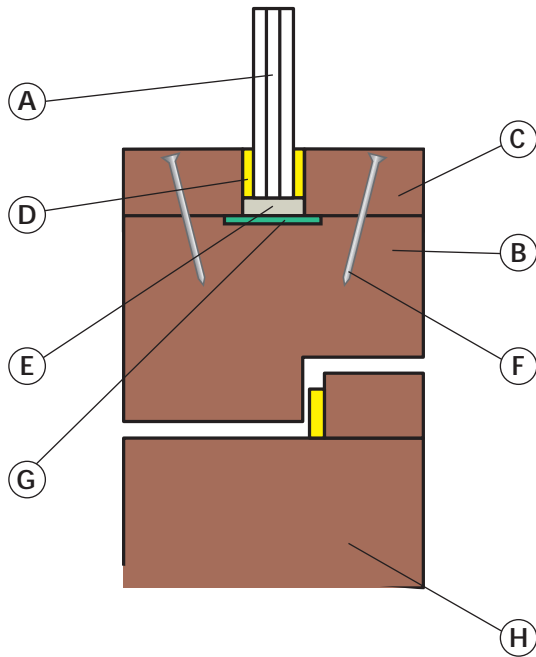
- (B)** Timber framing section 70 x 33 mm min. 450 kg/m³ density
- (C)** Timber glazing beads 20 x 18 mm min. 450 kg/m³ density
- (D)** Kerafix glazing tape 18 x 3 mm
- (E)** Hardwood or vermiculite setting block 80 x 7 mm
- (F)** Glazing bead fixing screws 4 x 50 mm or 1 x 50 mm pins
- (G)** Flexilodice intumescent liner 20 x 2 mm

Option to use integral blinds

EFR-16-004199 + EXT



Wood



(A) Pyroguard glass - options below:

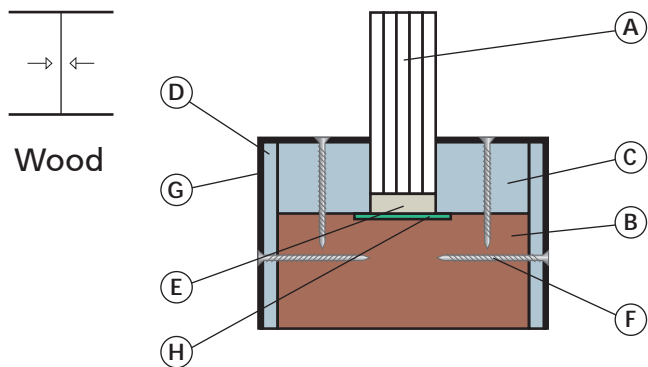
EI Classification	T-EI30/18-2 • T-EI30/18-2 VF • T-EI30/18-2 VI
	T-EI30/18-1 • T-EI30/18-1 VF • T-EI30/18-1 VI
	EI30 INT • EI30 EXT • EI30 INT VI • EI30 EXT VI

EW Classification	T-EW30/6 • T-EW30/6 VF • T-EW30/6 VI
	T-EW30/13-1 • T-EW30/13-1 VF • T-EW30/13-1 VI
	EW30 Impact • EW30 Impact VI • EW30 Maxi • EW30 Maxi VI

- (B) Timber door leaf 80 x 58 mm min. 450 kg/m³ density
- (C) Timber glazing beads 20 x 18 mm min. 450 kg/m³ density
- (D) K Tape glazing strip 18 x 3 mm
- (E) Hardwood or Vermiculite setting block 80 x 7 mm
- (F) Glazing bead fixing screws 4 x 50 mm or 1 x 50 mm pins
- (G) Flexilodice glazing tape 20 x 2 mm
- (H) Fixed timber frame 58 x 66 mm min. 450 kg/m³ density

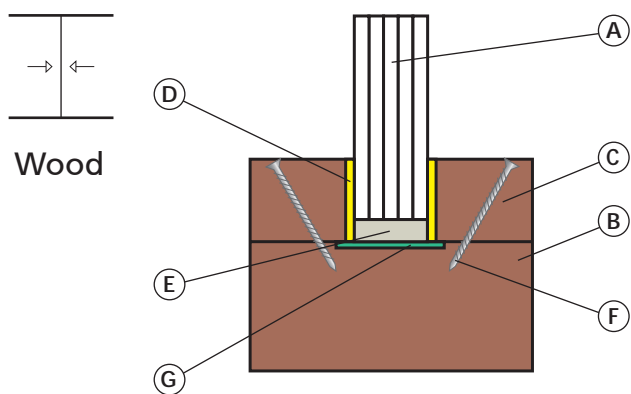
Option to use integral blinds

13-A-421 + EXT

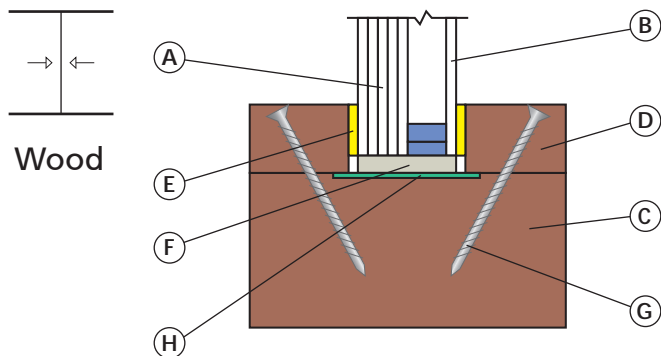


- (A) Pyroguard T-EI60/36-2 SWS or T-EI60/40-2 SWS
- (B) Hardwood screen 107 x 38 mm, 680 kg/m³ minimum density
- (C) Promatec H beading 35 x 20 mm
- (D) Promatec H 58 x 6 mm
- (E) Setting blocks 8 x 80 x glass thickness (mm)
- (F) Fixings: screws 4 x 50 mm
- (G) Covering in steel or aluminium 58 x 41 mm
- (H) Intumescent tape

PV 13-A-426



- (A) Pyroguard T-EI30/32-2 SWS
- (B) Hardwood screen 107 x 38 mm, 680 kg/m³ minimum density
- (C) Hardwood beading 35 x 20 mm, 680 kg/m³ minimum density
- (D) Glazing material: ceramic tape
- (E) Setting blocks 80 x 8 x 30 mm
- (F) Fixings: screws 4 x 50 mm
- (G) Gluske Flexpress 30 x 2 mm



- (A) Pyroguard T-EI30/32-2 SWS VI
- (B) Different options for counter pane (recommendations in the test report)
- (C) Hardwood screen 107 x 38 mm, 680 kg/m³ minimum density
- (D) Hardwood beading 35 x 20 mm, 680 kg/m³ minimum density
- (E) Glazing material: ceramic tape
- (F) Setting blocks 80 x 8 x 30 mm
- (G) Fixings: screws 4 x 50 mm
- (H) Gluske Flexpress 30 x 2 mm

PROJECT QUESTIONNAIRE

In order to better assess your requirements, we invite you to complete this questionnaire.
We can then offer you the most appropriate technical solutions.

dd	mm	yy

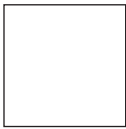
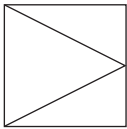
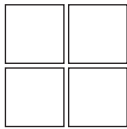
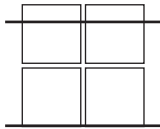
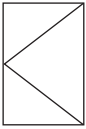
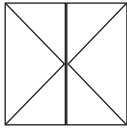
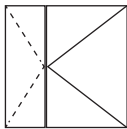
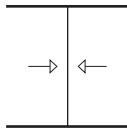
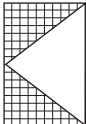
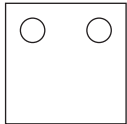
<p>Company:</p> <p>Contact:</p> <p>Tel:</p> <p>Email :</p>	<p>Project name:</p> <p>Customer name:</p> <p>Town:</p> <p>Postal code:</p>
------------------------------------------------------------	-----------------------------------------------------------------------------

1. Framing

- Timber
 Steel
 Aluminium
 Other

2. Utilisation

Specification types

- | | | | |
|------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| <input type="checkbox"/> Single frame
 | <input type="checkbox"/> Opening window
 | <input type="checkbox"/> Glazed screen
 | <input type="checkbox"/> Curtain wall
 |
| <input type="checkbox"/> Single door
 | <input type="checkbox"/> Double door
 | <input type="checkbox"/> Unequal double door
 | <input type="checkbox"/> Structural wall / butt joint
 |
| <input type="checkbox"/> GDC door
 | <input type="checkbox"/> Smoke Containment
 | | |

3. Fire classification

You're looking for a glass that attains a classification of:

	30 minutes	60 minutes	90 minutes	120 minutes	180 minutes
E	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
EW	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
EI	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

4. The maximum glass dimensions

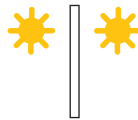
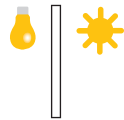
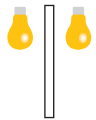
Portrait - _____ W _____ x H _____ (mm)

Landscape - _____ W _____ x H _____ (mm)

5. Installation

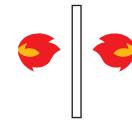
How do you wish to install the glass?

- Interior
 Interior and exterior
 Exterior



Which is the fire side?

- 1 fire side
 2 fire side



6. Other characteristics

Acoustic performance _____ dB minimum
 Thermal performance _____ W/m² K maximum
 Solar factor: _____ %
 Impact rating: 1C1 1B1 2B2 Other _____
 Barrier loading: yes no
 Applicable line load: _____
 Security requirement: yes no
 Security performance _____
 Light transmission _____ % minimum
 Specific counterpane _____

7. Comments or special requests

NOTES



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