

Pilkington **Pyroclear**® **Fire Test Summary**

For glazed steel partitions, door sets and façades 30 and 60 minutes integrity



Pilkington **Pyroclear**® in steel frames

Pilkington **Pyroclear®**is a clear, monolithic,
high performance
fire-resistant glass
providing integrity
with impact resistance
for screens, doors

and windows

Typical glazing details

Figures 1, 2 and 3 give examples of steel systems that have been successfully tested or approved for use with Pilkington **Pyroclear®**. For more details, please contact Pilkington or the system manufacturer.

30 minutes integrity - monolithic

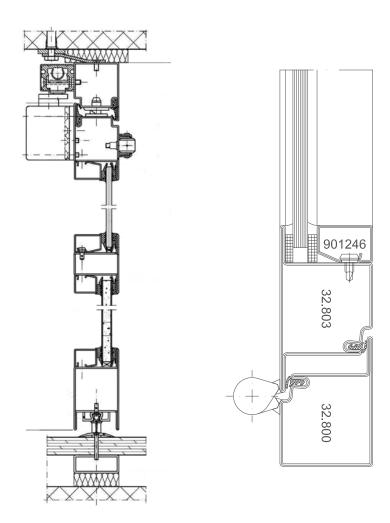


Figure 1: Jansen Economy 50 Stainless Steel System

Figure 2: Forster Presto Steel System

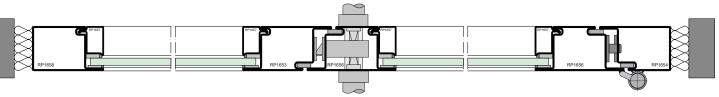


Figure 3: RP Technik Design 50 Steel System

Summary of fire test evidence in steel

The fire test evidence for Pilkington **Pyroclear®** in steel frames is summarised in Tables 1 to 5. All tests have been undertaken in accordance with BS EN 1634-1 and BS EN 1363-1, unless otherwise stated.

Table 1: Initial Type Testing for CE Marking

Reference	Pilkington Pyroclear® Product Code	Туре	Maximum Sizes (mm)	
30 minutes integrity (E30)				
C-275 384 48-1	30-001	6 mm monolithic	1400 x 3000	
C-275 381 162-1	30-003	10 mm monolithic	1800 x 3500	
2011 – Efectis – R1015	30-008 ¹	12.8 mm laminated	1215 x 2850 (P), 1575 x 1395 (L)	
C-275 375 72-1	30-361 ²	24 mm Insulating Glass Unit	1400 x 2600	
K-6001-DMT-DO	30-381³	27 mm Insulating Glass Unit	1400 x 2869 (P), 2403 x 1200 (L)	
60 minutes integrity (E60)				
K-3347/597/10-MPABS	60-002	8 mm monolithic	1200 x 2830 (P), 2540 x 1200 (L)	

Note:

Table 2: 30 minutes integrity, internal applications

Reference	System	Application	Maximum sizes (mm)		
			Portrait	Landscape	Door
Pilkington Pyrocle	Pilkington Pyroclear® 30-001 (6 mm)				
27137686	Forster Presto	Partition	1400 x 3000	3000 x 1400	
3230/983/09	Jansen Economy 50 (Stainless Steel)	Partition	1400 x 3000	2504 x 493	
CC 271415	Jansen Economy 50 (Stainless Steel)	Screens and doorsets	1400 x 3000	2448 x 831	1284 x 1480
10-001772-PR01	Jansen Economy 50 (Stainless Steel)	SLD with top & sidelights	637 x 1718	2448 x 831	896 x 1717
27142889	Jansen Economy 50 (Stainless Steel)	SLD			1298 x 2475
27142474	Jansen Economy 50 (Stainless Steel)	DLD			1113 x 2515
Pilkington Pyroclear ® 30-002 (8 mm)					
27138180	Forster Presto (Stainless Steel)	Partition and SLD	844 x 2376	1024 x 426	904 x 2266
27137691	Forster Presto	Partition and SLD	594 x 2924	1424 x 1024	1304 x 2844
27137690	Forster Presto	SLD			1304 x 2884
27137688	Forster Presto	DLD			1289 x 2884
Pilkington Pyroclear® 30-003 (10 mm)					
27137687	Forster Presto (Stainless Steel)	Partition	1400 x 3000	3000 x 1400	
27137689 R1	Forster Presto (Stainless Steel)	DLD			1289 x 2884
Pilkington Pyroclear® 30-008 (13 mm)					
2011-E-R0816	RP Design 50	Partition	1215 x 2850	1575 x 1395	

¹ Pilkington **Pyroclear**® 30-008 comprises Pilkington **Pyroclear**® 30-001 (6 mm), 0.76 PVB and Pilkington **Pyroclear**® (6 mm).

² Pilkington **Pyroclear®** 30-361 comprises 6 mm low-e (toughened) outer pane, 8 mm airspace and Pilkington **Pyroclear®** 30-001 (6 mm) inner pane.

³ Pilkington **Pyroclear®** 30-381 comprises 9 mm laminated low-e outer pane, 12 mm airspace and Pilkington **Pyroclear®** 30-001 (6 mm) inner pane.

Table 3: 30 minutes integrity, external/internal applications

Reference	System	Application	Maximum sizes (mm)		
			Portrait	Landscape	Door
Pilkington Pyroclear ® 30-361 (IGU)					
27141148¹	Forster Thermfix Vario	Facade	1400 x 2600	1483 x 718	
27143158²	RP Climatline 65	Partition with windows	794 x 1940	1204 x 426	1116 x 1852
Pilkington Pyroclear ® 30-381 (IGU)					
DMT-DO-61-001 ³	Jansen Janisol 1	Partition	1400 x 2869	2403 x 1200	

Notes:

- ¹ Pilkington Pyroclear® 30-361 comprises 6 mm Pilkington Optitherm™ S3 outer pane, 14 mm airspace and Pilkington Pyroclear® 30-001 (6 mm) inner pane
- ² Pilkington **Pyroclear**® 30-361 comprises 6 mm Pilkington **Optitherm** 33 outer pane, 16 mm airspace and Pilkington **Pyroclear** 30-001 (6 mm) inner pane

Table 4: 60 minutes integrity, internal applications

Reference	System	Application	Maximum sizes (mm)		
			Portrait	Landscape	Door
Pilkington Pyroclear ® 60-002 (8 mm)					
LBO 182/11E	RP Hermetic 50	SLD with side and top lights	1000 x 2540	2400 x 800	1186 x 2373
3169/620/10	RP Hermetic 50	Partition	1200 x 2830	2540 x 1200	
305482A	Stalprofil SP 35000	Partition	1050 x 2370		
27138181	Forster Presto (Stainless Steel)	Partition	1024 x 2374		
W00023B1	Forster Norm	Partition	1390 x 1897		

¹ Tested to BS 476: Part 22: 1987

For fire test evidence in timber glazing systems, please refer to Fire Test Summary for Pilkington **Pyroclear**® in timber frames.

³ Pilkington Pyroclear® 30-381 comprises 8.8 mm Pilkington Optilam™ outer pane, 12 mm airspace and Pilkington Pyroclear® 30-001 (6 mm) inner pane

Safety

Pilkington **Pyroclear**® is classified as a 1 (C) 1 safety glass according to BS EN 12600 and has been tested in accordance with BS EN 1363-1, BS EN 1364-1 and BS 476: Part 22: 1987 for fire resistance.

Glazing

Pilkington **Pyroclear®** should be installed fully in accordance with tested details and installation requirements, particularly with respect to edge cover and expansion tolerances. For details specific to particular approved systems and framing materials, installers must always refer to the specific test report or approval. All glazing beads, tapes, strips or channels, sealants and setting blocks should be used as specified in the appropriate test report or approval for the particular system being used.

When used in a façade, Pilkington **Pyroclear**® should be installed in a frame system specifically designed for this application. It is required that the system is a drained and ventilated framing system designed for external use.

Pilkington **Pyroclear®** monolithic glass and insulating glass units are supplied with a special edge protection tape which has been specifically tested by Pilkington for resistance against mechanical damage. This tape has been especially selected and is an integral part of the product as supplied. This tape shall not be removed or tampered with, either temporarily or permanently. It shall not be replaced by any other tape. If the edge tape is damaged then advice should be sought from Pilkington.

For technical advice on the Pilkington range of fire protection glass, please refer to **www.pilkington.com/specifire** or contact us by telephone on **01744-69-2000** or email at **pilkington@respond.uk.com**

This publication provides only a general description of the products. Further, more detailed, information may be obtained from your local supplier of Pilkington products. It is the responsibility of the user to ensure that the use of these products is appropriate for any particular application and that such use complies with all relevant legislation, standards, codes of practice and other requirements. To the fullest extent permitted by applicable laws, Nippon Sheet Glass Co. Ltd. and its subsidiary companies disclaim all liability for any error in or omission from this publication and for all consequences of relying on it. Pilkington "Pyroclear", "Optitherm" and "Optilam" are trademarks owned by Nippon Sheet Glass Co. Ltd, or a subsidiary thereof.

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

The CE marking label for each product, including declared values, can be found at www.pilkington.com/CE



Pilkington United Kingdom Ltd

Prescot Road St Helens WA10 3TT United Kingdom Telephone 01744 692000 Fax 01744 692880 pilkington@respond.uk.com

www.pilkington.co.uk