

Certificate

1474/87

The product described below and production control has been found to comply with Building Regulations of the National Board of Housing Building and Planning (BBR) with reference to and under conditions described in this certificate.

Pilkington Pyrodur Fire Protection Glass

Holder

Pilkington Deutschland AG, Haydnstrasse 19, DE-458 84 Gelsenkirchen
 VAT nummer: DE 811 141 642
 Tel: +49 209 16 80, Fax: +49 209 168 20 75
 Internet: www.pilkington.com

Information supplied by

Pilkington Floatglas AB, Box 530, 301 80 Halmstad, Tel: 035-15 30 00, Fax: 035-15 30 30
 Internet: www.pilkington.se

Product

Pilkington Pyrodur, fire resistant glass as monolithic glass or insulating glass unit. Fire resistance classes EI 15, EI 20, EI 30, A 30, EW 30, E 30, EI 45, EW 60 and E 60.

Intended use

Glass panes for installation in vertical fire-cell separating structures made of steel, aluminum or timber that are approved for use in the fire resistance classes as listed below.

Approval

The products have been found to meet the requirements in the following sections of Boverket Building Regulations (BBR), issued by the National Board of Housing, Building and Planning:

Fire resistance classes 5:231

<i>Glass pane</i>	<i>Max. size (mm)</i>	<i>Fire resistance class</i>
Pyrodur 30-10	1000 x 2000	E 30, EW 30 ³⁾
Pyrodur Plus 30-104	1000 x 2000, 900 x 2200, 700 x 2400	E 30, EW 30 ³⁾ , EI 15
Pyrodur 30-105	1000 x 2930	E 30, EW 30 ³⁾ , EI 15
Pyrodur 30-174	600 x 1800, 700 x 1500	E 30, EW 30 ³⁾ , EI 15
Pyrodur Plus 30-184	600 x 1800, 700 x 1500	E 30, EW 30 ³⁾ , EI 15
Pyrodur 30-103	1200 x 2600	E 30, EW 30 ³⁾
Pyrodur 30-200	1500 x 3000	E 30, EW 30 ³⁾ , EI 15, A 30 ¹⁾
Pyrodur 30-200 +P2-P5A	1500 x 3000	E 30, EW 30 ³⁾ , EI 15, A 30 ¹⁾
Pyrodur 30-201	1200 x 2600	E 30, EW 30 ³⁾ , EI 15
Pyrodur 30-251	1200 x 2600	E 30, EW 30 ³⁾ , EI 15
Pyrodur 30-251 Triple	1200 x 2600	E 30, EW 30 ³⁾ , EI 15
Pyrodur 30-261	1200 x 2600	E 30, EW 30 ³⁾ , EI 15
Pyrodur 30-261 Triple	1200 x 2600	E 30, EW 30 ³⁾ , EI 15
Pyrodur 30-271	1200 x 2600	E 30, EW 30 ³⁾ , EI 15

<i>Glass pane</i>	<i>Max. size (mm)</i>	<i>Fire resistance class</i>
Pyrodur 30-271 Triple	1200 x 2600	E 30, EW 30 ³), EI 15
Pyrodur 30-281	1200 x 2600	E 30, EW 30 ³), EI 15
Pyrodur 30-281 Triple	1200 x 2600	E 30, EW 30 ³), EI 15
Pyrodur 30-351	1200 x 2600	E 30, EW 30 ³), EI 15
Pyrodur 30-351 Triple	1200 x 2600	E 30, EW 30 ³), EI 15, EI 30 ²)
Pyrodur 30-361	1200 x 2600	E 30, EW 30 ³), EI 15
Pyrodur 30-361 Triple	1200 x 2600	E 30, EW 30 ³), EI 15, EI 30 ²)
Pyrodur 30-371	1200 x 2600	E 30, EW 30 ³), EI 15
Pyrodur 30-371 Triple	1200 x 2600	E 30, EW 30 ³), EI 15, EI 30 ²)
Pyrodur 30-381	1200 x 2600	E 30, EW 30 ³), EI 15
Pyrodur 30-381 Triple	1200 x 2600	E 30, EW 30 ³), EI 15, EI 30 ²)
Pyrodur 30-25	1500 x 3000	EI 30 ²), E 30, EW 30 ³), EI 20 ³), A 30 ¹)
Pyrodur 30-26	1500 x 3000	EI 30 ²), E 30, EW 30 ³), EI 20 ³), A 30 ¹)
Pyrodur 30-27	1500 x 3000	EI 30 ²), E 30, EW 30 ³), EI 20 ³), A 30 ¹)
Pyrodur 30-28	1500 x 3000	EI 30 ²), E 30, EW 30 ³), EI 20 ³), A 30 ¹)
Pyrodur 30-35	1500 x 3000	EI 30 ²), E 30, EW 30 ³), EI 20 ³), A 30 ¹)
Pyrodur 30-36	1500 x 3000	EI 30 ²), E 30, EW 30 ³), EI 20 ³), A 30 ¹)
Pyrodur 30-37	1500 x 3000	EI 30 ²), E 30, EW 30 ³), EI 20 ³), A 30 ¹)
Pyrodur 30-38	1500 x 3000	EI 30 ²), E 30, EW 30 ³), EI 20 ³), A 30 ¹)
Pyrodur 30-203	1632 x 3000, A=4,78 m ²	E 30, EW 30 ³), EI 20 ³)
Pyrodur 30-253	1632 x 3000, A=4,78 m ²	E 30, EW 30 ³), EI 20 ³)
Pyrodur 30-253 Triple	1680 x 3000	E 30, EW 30 ³), EI 20 ³)
Pyrodur 30-263	1632 x 3000, A=4,78 m ²	E 30, EW 30 ³), EI 20 ³)
Pyrodur 30-263 Triple	1680 x 3000	E 30, EW 30 ³), EI 20 ³)
Pyrodur 30-273	1632 x 3000, A=4,78 m ²	E 30, EW 30 ³), EI 20 ³)
Pyrodur 30-273 Triple	1680 x 3000	E 30, EW 30 ³), EI 20 ³), EI 30 ²)
Pyrodur 30-283	1632 x 3000, A=4,78 m ²	E 30, EW 30 ³), EI 20 ³)
Pyrodur 30-283 Triple	1680 x 3000	E 30, EW 30 ³), EI 20 ³)
Pyrodur 30-353	1632 x 3000, A=4,78 m ²	E 30, EW 30 ³), EI 20 ³)
Pyrodur 30-353 Triple	1680 x 3000	E 30, EW 30 ³), EI 20 ³), EI 30 ²)
Pyrodur 30-363	1632 x 3000, A=4,78 m ²	E 30, EW 30 ³), EI 20 ³)
Pyrodur 30-363 Triple	1680 x 3000	E 30, EW 30 ³), EI 20 ³), EI 30 ²)
Pyrodur 30-373	1632 x 3000, A=4,78 m ²	E 30, EW 30 ³), EI 20 ³)
Pyrodur 30-373 Triple	1680 x 3000	E 30, EW 30 ³), EI 20 ³)
Pyrodur 30-383	1632 x 3000, A=4,78 m ²	E 30, EW 30 ³), EI 20 ³)
Pyrodur 30-383 Triple	1680 x 3000	E 30, EW 30 ³), EI 20 ³)
Pyrodur 60-202	1500 x 3000	E 60, EW 60 ³), EI 45 ³)

<i>Glass pane</i>	<i>Max. size (mm)</i>	<i>Fire resistance class</i>
Pyrodur 60-252	1500 x 3000	E 60, EW 60 ³), EI 45 ³)
Pyrodur 60-262	1500 x 3000	E 60, EW 60 ³), EI 45 ³)
Pyrodur 60-272	1500 x 3000	E 60, EW 60 ³), EI 45 ³)
Pyrodur 60-282	1500 x 3000	E 60, EW 60 ³), EI 45 ³)
Pyrodur 60-352	1500 x 3000	E 60, EW 60 ³), EI 45 ³)
Pyrodur 60-362	1500 x 3000	E 60, EW 60 ³), EI 45 ³)
Pyrodur 60-372	1500 x 3000	E 60, EW 60 ³), EI 45 ³)
Pyrodur 60-382	1500 x 3000	E 60, EW 60 ³), EI 45 ³)

- 1) Applies in the case of installation in class A fire rating doors. Class A doors may be used as an alternative to class EI doors for applications according to BBR 5:534.
- 2) Only in the case of fire against fire-resistant glass.
- 3) Under conditions stated in classification report.

Associated documents

Installation instruction "Pilkington Pyrostop/Pyrodur", edition 4200403/03-11 (6 pages).

Control

The factory production control (FPC) is monitored by an independent inspection body. Control agreement: Ref no. 310-95-0161, Inspection body: SP Technical Research Institute of Sweden.

When the building proprietor performs inspection at the building site, he shall check the markings to ensure that the correct products have been supplied and that they are used in accordance with the requirements stated in the approval and the associated documents.

Manufacturer

Production control includes the following site:

Pilkington Deutschland AG, Gelsenkirchen, Germany (marking code GE)

Stock size glass panes are supplied from manufacturer, Pilkington Deutschland AG, to following processors for processing and labeling:

-Pilkington Sverige AB	kod = VETLANDA
-Pilkington Sverige AB	kod = PITEÅ
-Glasfabriken Lindberg & Gemax AB	kod = KALMAR
-GFAB Glasteam AB	kod = MALMÖ
-GFAB Glasteam AB	kod = ALSTERMO
-Pilkington IGP Sp.z o.o.	kod = SKIERNIEWICE
-Drag Industrier AS	kod = BODØ
-Friva AS	kod = SPYDEBERG
-Modum Glassindustri AS	kod = GEITHUS
-Glaseksperten ApS	kod = HJØRRING

Marking

The products are to be marked at the factory by manufacturer or by processor. The marking consists of a label on every package supplied and a stamp on each delivered glass pane and includes (* = stamp on glass pane):

Approval holder and manufacturing site	Pilkington Deutschland AG, eg Plant 1
P-mark	☞*
Certification body	SP Certifering
Product type designation: single glass	eg 30-10*¹⁾
insulating glass unit	30 DGU*
Certificate number	1474/87*
Fire resistance class	eg E 30
Consecutive manufacture No. or date of production	month/year*
Inspection body	SP

1) Can be marked with 30-10 or 30-1..

Insulating glass unit shall be supplied with stamp on the spacer bar which includes information about glass composition, glass type, spacer bar, filling, date and place of manufacturing.

Basis for approval

Reports and assessments No. 86K40124A, 96R12844A, 96R12860A, 96R12844B, 96R12844C, 98R13142, P005242A, P005242B, P103183A, P103183B, P907041 and 6P05175 from SP Technical Research Institute of Sweden, reports No. 210003980-03-KB, 210003980-06, 210003980-06-KB, 210003980-07 and 210004836-1 from MPA NRW, reports No. 22N003.13 from Sintef, reports No. 2006-CVB-R0248 and 2006-CVB-R0249 from TNO, reports No. 05-V-044 and 08-V-156 from cticm, reports No. 145650, 145651, 152884, 172082, 192819, 195344, 305484/A, 312370 and 342979 from Exova Warrington Fire, reports No. DMT-DO-61-033 from DMT GmbH & Co. KG, reports No. 2015-Efectis-R001426 and 2015-Efectis-R001542 from Efectis, assessment No. 265 33000 from ift Rosenheim and reports no. LBO-151-10E and LBO-253-11E from Grytfitlab.

PYRODUR GLASRUTA – TEKNISKA DATA, dated 2017-02-27 (58 pages).

Comments

Decoration of Pilkington Pyrodur in the form of sandblasting or etching can be performed. The sandblasting applies on the outside of the fire glass. The treatment shall be performed in such a way that glass edge protection is not affected. The decoration should not be placed too close to the glass edge to be covered of glazing beads by installation.

Installation instructions shall be supplied with each delivery of glass.

This certificate supersedes the previous certificate with the same number dated 27 February 2017.



Period of validity

This certificate is valid until 27 February 2022.

**SP Technical Research Institute of Sweden
Certification**

Johan Åkesson

Annika Hermodsson