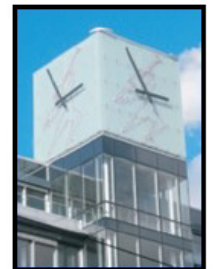




FIRE-RESISTANT GLASS FOR THE CONSTRUCTION INDUSTRY



ANTIFIRE is one of very few similar products on the market of the fire-rated safety glass and unique in its

- tested safety largely surpassing standard requirements
- range and properties
- universal applicability
- above-the-average price / value ratio



ANTIFIRE is manufactured by a registered proprietary process which forms a clear, salt-based hydrogel layer between the outer panes of fully tempered safety glass. Depending on the gel layer thickness, fire resistance full integrity and insulation periods can be provided from 15 minutes to over 120 minutes.

ANTIFIRE uniquely utilizes 2-pane technology for all fire-rating classes - from 15 minutes to over 120 minutes fire-resistance in respect of integrity, radiation and full insulation. Thus, the weight per square meter parameters surpass the common standards and enables to lower the construction structural statics requirements and enhance architectural variety.



62nd minute of test. Falling down of fire resistant jelly from the glass, termination of the test.



ANTIFIRE can be easily applied into a wide range of finished construction elements, satisfying most of the market requirements, including but not limited to

- indoor fixed screens with or without transoms, door assemblies, partitions, viewing areas, etc.
- shop windows, shop fronts, shop decoration elements, etc.
- outdoor facade systems, cantilever glazing, etc.

ANTIFIRE has been approved and certified for applications using steel, aluminium, as well as wooden frames. It has been installed and tested in various elements, such as glazed walls, screens, single and double-leaf doors, sliding doors, UV-proof facade glazing, glazed walking panels, flooring, etc.

ANTIFIRE is factory-made to specific sizes, but should be used within the size parameters of the certified tests - please check **ANTIFIRE** Certification pages.



*In the event of fire the fire-exposed glass pane cracks and collapses allowing the gel interlayer within the **ANTIFIRE** makeup to intumesce to form an opaque fire and heat resistant and insulating barrier. Dependent on the gel interlayer thickness, resistance times from 15 minutes upwards can be achieved.*



	thickness (mm)	integrity (E)	radiation / partial insulation (EW)	full (fire and heat) insulation (EI)
ANTIFIRE EI 15	16	30 min	30 min	15 min
ANTIFIRE EI 30	22	30 min	30 min	30 min
ANTIFIRE EI 30 LITE	18	30 min	30 min	30 min
ANTIFIRE EI 45	25	45 min	45 min	45 min
ANTIFIRE EI 60	28 / 32	60 min	60 min	60 min
ANTIFIRE EI 90	38 / 40	90 min	90 min	90 min

E = Integrity

The ability of the fire-rated glass of a separating element to contain the fire to specified criteria for collapse, freedom from holes, cracks and fissures, smoke leakage and sustained flaming on the unexposed face.

EW = Integrity and Radiant Heat Transmission

The ability of the element of construction, involving the fire-rated glass, to reduce the probability of transmission of fire as a result of significant radiated heat, either through the element or from its unexposed surface to adjacent materials on the non-fire side.

EI = Integrity and Insulation

The ability of glazed screens or doors or other elements of construction to limit the temperature rise on the non-fire side to an average of no more than 140°C (245°F) and in any one position by no more than 180°C (356 °F).

The most frequent case of the damage or impairment to the fire-resistant glass often leading to its losing the safety properties, is the impact of water or humidity. The **ANTI****FIRE** fire-rated safety glass is totally immune to any action of both water and atmospheric or any other humidity.

ANTI**FIRE** fire-rated laminated safety glass is UV stable for both indoor or outdoor use, can be applied for vertical as well as horizontal glazing, the temperature range of use spans from -20°C (-4°F) to +50°C (122°F), decibel absorption 42 - 46dB, and light transmission 85% min. We can supply precisely made-to-measure glass as per your requirements with the largest tested dimension for all fire-resistance glasses being 1500x2000mm.



Standards Applied

Fire- testing: EN 1364-1

Fire resistance tests for non-loadbearing elements

EN 1634-1

Fire resistance test for doors

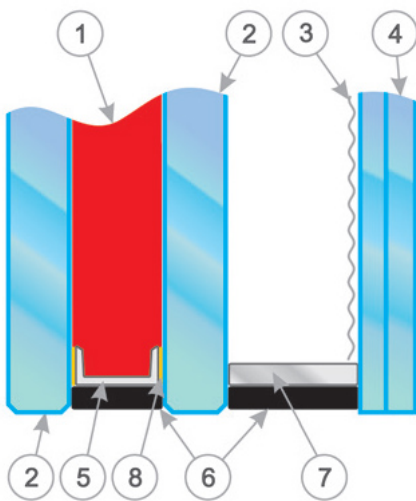
EN 12150

Thermally toughened soda lime silicate safety glass



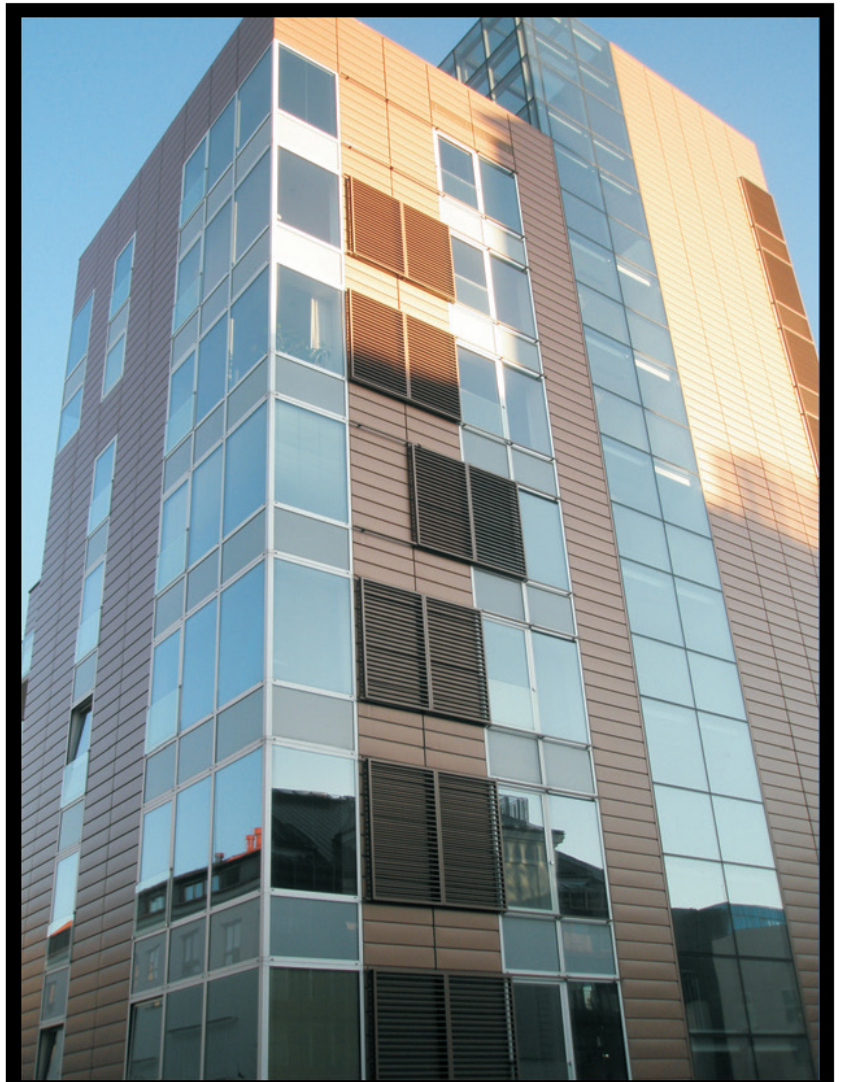
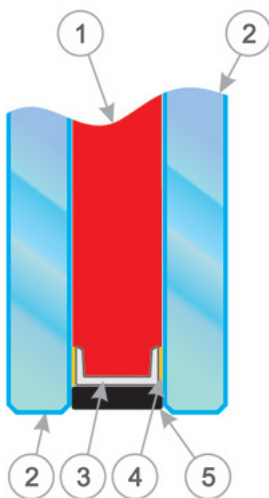
OUTDOOR USE

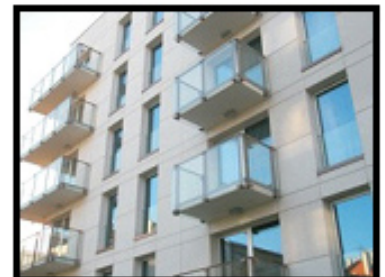
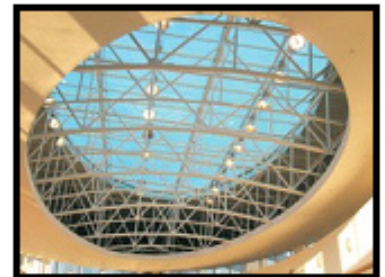
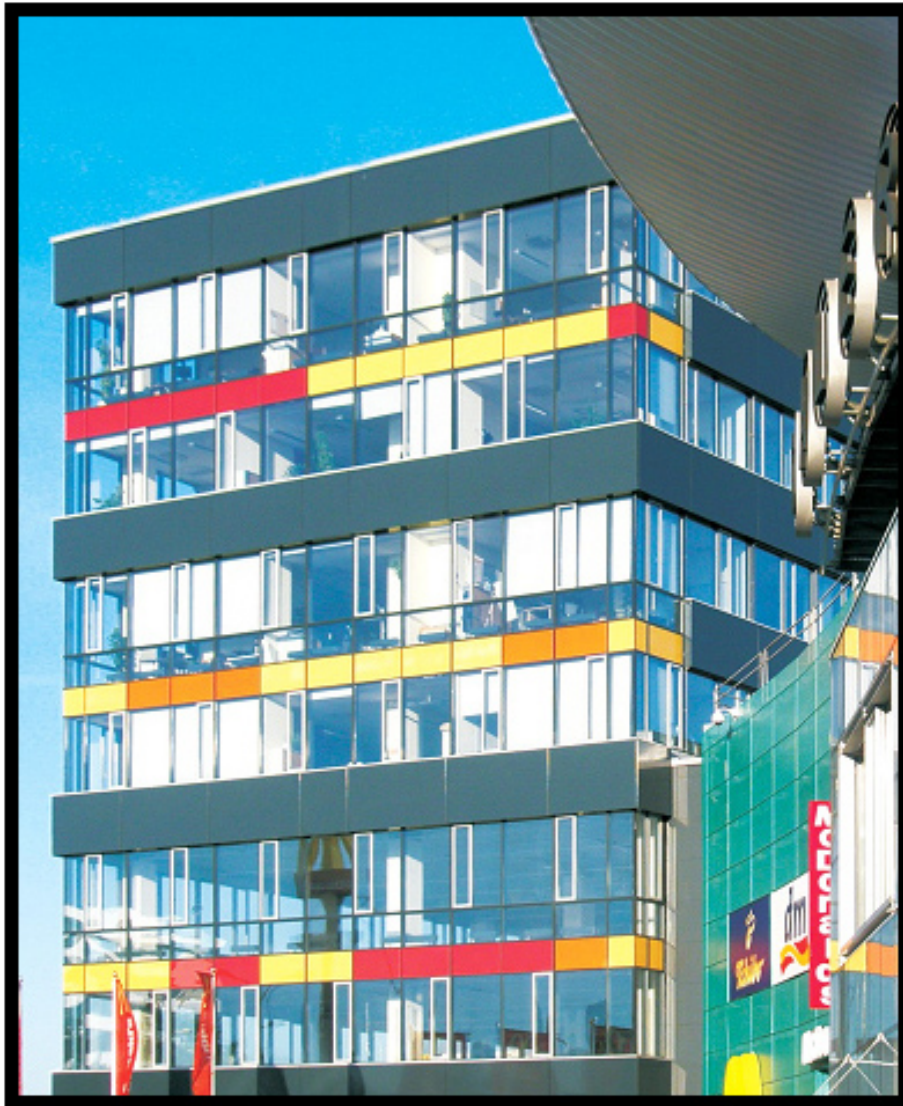
1. Fire-resistant gel (6 - 28mm)
2. Tempered safety glass (5 - 6 mm)
3. Metal coating
4. Laminated safety glass
5. Spacer
6. Polyurethane
7. Aluminium, stainless steel or plastic spacer
8. Sealant



INDOOR USE

1. Fire-resistant gel (6 - 22 mm)
2. Tempered safety glass (5 - 6 mm)
3. Spacer
4. Sealant
5. Polyurethane





The company LG Glass & Glazing Ltd is a licensed distributor of **ANTIFIRE** proprietary patented fire-rated construction safety glass. The company commenced business in late 2011 and provides a distribution network throughout Ireland, the UK, & Continental Europe. In addition to the **ANTIFIRE** range, LG Glass & Glazing Ltd is a leading processor and distributor of quality glass products to a variety of industry sectors. They provide glass products to trade customers, architects, engineers and interior designers. Their customers have the choice of either standard or customised glass products. They are a family owned business committed to providing the highest standard of glass products to customers with outstanding customer service.

The ITEX Services LLC company is the authorized contractual worldwide licensor of the **ANTIFIRE** unique patented technological process and know-how. It has been catering for our production partners' supply requirements of raw materials, chemicals and components. Based in the U.S.A. and operating its liaison office in Europe, it has been active on various world markets. Extensive expertise, full testing and information background and profound understanding of our partners' needs account for added value you seek.

**PRODUCTION AND DISTRIBUTION OF
PROPRIETARY PATENTED FIRE-RATED
CONSTRUCTION SAFETY GLASS**



LG Glass & Glazing Ltd

Cloonkeen
Castlebar Co.
Mayo
Ireland
tel: +353 (94) 9022000
fax: +353 (94) 9022055
email: lgglass@eircom.net
antifireireland@eircom.net
www.lg-glass.ie

RETRE s.r.o.

Pražská 1193
37901 Třeboň
Czech Republic
tel.: +420 384 724 248,
+420 384 724 438
fax: +420 384 724 248
email: retre@retre.cz
www.retre.cz

ITEX Services LLC

7901 4th St N, STE300
St. Petersburg
FL 33702
USA
tel: +1 484 346 8595
email: antifire@itex-services.com
www.antifire-glass.com

European liaison office:

Za Mototechnou 1114/4
15500 Praha 13
Czech Republic
tel.: +420 603 583 099
fax: +420 251 617 397,
+420 312 587 383
email: apindustries_jh@yahoo.com



ITEXServices