# **TGP 60-90 Minute Designer Series Doors Product Alert**

For States in the 2006 and 2009 IBC

Includes IL (except Chicago), KS, NH and TX as of April 2019



Before specifying TGP's Designer Series 60-90 minute doors, please read below as it may be in violation of the IBC - putting the project and building occupants at risk, as well as exposing the architect, owner and installer to liabilities.

## **♦** What does the 2006 and 2009 IBC require?

Section 715.4.4 highlights requirements for temperature rise doors in exit stairways and exit passageways, which are typically rated 60 and 90 minutes:

**715.4.4 Doors in exit enclosures and exit passageways.** Fire door assemblies in exit stairways and exit passageways shall have a maximum transmitted temperature rise of not more than 450° F (250° C) above ambient at the end of 30 minutes of standard fire test exposure.

**Exception:** The maximum transmitted temperature rise is not required in buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.

**715.4.4.1. Glazing in doors.** Fire-protection-rated glazing in excess of 100 sq. in.  $(0.065 \text{ m}^2)$  is not permitted. Fire-resistance-rated glazing in excess of 100 sq. in.  $(0.065 \text{ m}^2)$  shall be permitted in fire door assemblies when tested as components of the door assemblies, and not as glass lights, and shall have a maximum transmitted temperature rise of  $450^{\circ}$  F  $(250^{\circ}$  C) in accordance with Section 716.5.5.

**Exception:** The maximum transmitted temperature rise is not required in buildings equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.

**♦** Can TGP's 60-90 minute Designer Series Doors glazed with FireLite NT/FireLite Plus exceeding 100 sq. inches in the vision area comply with this code?

**Not always.** In order to meet code, the automatic sprinkler system installed throughout the building (and not just the area where the doors are located) must meet the specific installation instructions in 903.3.1.1 or 903.3.1.2 **BEFORE** the temperature rise requirements for the door and the glazing in the door can be waived. Simply having a building that is 'fully sprinklered' is not enough to evoke these exceptions.

However, in the 2012 and 2015 versions of the IBC, the exception is eliminated for glazing in doors. Ceramics, wired glass and other fire protective glazing are limited to 100 sq. inches regardless if the building is sprinklered. The sprinklers may prevent the door from warping, but it does not prevent ceramics or wired glass from cracking and allowing smoke and flames to pass through – nor does it effectively minimize the passage of radiant heat. This puts building occupants in grave danger because they no longer have a path for safe egress through these exit enclosures or exit passageways.

Can TGP's 60-90 minute Designer Series Doors glazed with FireLite NT/FireLite Plus exceeding 100 sq. inches in the door vision area comply with this code? continued

Today, 80% of the states are on the 2012 and 2015 IBC. It is only a matter of time before the states that are in the 2006 and 2009 IBC follow suit. In the meantime, architects and glaziers can start protecting building occupants NOW by specifying and purchasing 60-90 minute doors that ALWAYS meet the temperature rise requirements for these critical areas.

#### ♦ What if Sections 903.3.1.1 or 903.3.1.2 are not met, or cannot be confirmed?

To meet temperature rise requirements, the Designer Series Door must be glazed with Pyrostop 60 or Pyrostop 90, as stated in its UL listing:

Designer Series products are capable of bearing a 250 Degree F Temperature Rise Rating at thirty minutes when supplied with Pilkington Pyrostop 60-XXX or Pyrostop 90-XXX.

If the Designer Series Door is glazed with FireLite NT or FireLite Plus that exceeds 100 sq. inches in the door vision area, it does not meet temperature rise requirements.



## Who will be liable if non-compliant products are used?

It could be the architect, the building owner or the glazier – but it definitely won't be TGP. This much is clearly stated in the Designer Series specification manual:

#### 2. BUILDING CODES

Due to the diversity in local, state / provincial, or federal laws and the codes that govern design and application of architectural products, it is the responsibility of the individual architect / owner and installer to ensure that products selected for use on projects comply with all the applicable building codes and laws. Technical Glass Products exercises no control over the use or application of its products, glazing materials, and operating hardware and assumes no responsibility thereof. Compliance of TGP project drawings with applicable codes for a given project shall be the responsibility of the Buyer.





#### Question for architects, glaziers and owners:

So why take the risk of specifying or purchasing a 60-90 minute door that doesn't always meet code?

#### Is the Designer Series Door available in aluminum?

**No.** This door is made of hollow metal steel frames, and only available in limited finishes. It cannot be anodized or clad with aluminum, and will not match the profiles or look of aluminum storefront.

The Designer Series Door is often packaged with TGP's Aluminum Series Framing. Architects who are expecting an aluminum door when selecting the Aluminum Series Framing System (which currently does not include doors) should double-check which door is being supplied with it.



How can I ensure that I am specifying or purchasing a 60-90 minute door product that will always meet code requirements?



To ensure that you are specifying or purchasing a 60-90 minute door product that ALWAYS meets code (regardless if the building in sprinklered), SAFTI *FIRST* has two code-compliant options that you can choose from:

<u>GPX Builders Series Temperature Rise Doors</u> with SuperLite II-XL 60 or 90 glazing – insulated steel door that meets the 450 degree F temperature rise criteria. Available in standard and custom finishes including high performance fluoropolymer finishes by PPG, stainless steel, and more. Offered with standard and custom hardware packages.

<u>GPX Architectural Series Fire Resistive Doors</u> with SuperLite II-XL 60 or 90 glazing – fire resistive aluminum door that meets the 250 degree F temperature rise criteria. Available in standard and custom finishes including clear anodized, bronze anodized, black anodized, high performance fluoropolymer finishes by PPG, ornamental metal, wood veneer, and more. Offered with standard and custom hardware packages.

View our <u>online project gallery</u> to see photos of our products installed in various code-approved applications throughout the country.

If you have any questions or would like assistance on any current or future projects, please don't hesitate to contact your <u>local SAFTI FIRST</u> architectural representative or call us toll-free at 888.653.3333.









