

# ADDITIONAL ERRATA POSTING FOR FINAL ACTION AGENDA May 4, 2007

## FS113-06/07

Replace public comments 1 and 2 with the following:

### *Individual Consideration Agenda*

This item is on the agenda for individual consideration because public comments were submitted.

*Public Comment 1:*

**William F. O’Keeffe, SAFTI FIRST, requests Approval as Modified by this public comment.**

**715.5 Fire-protection-rated glazing.** Glazing in fire window assemblies shall be fire-protection rated in accordance with this section and Table 715.5. Glazing in fire door assemblies shall comply with Section 715.4.6. Fire-protection-rated glazing shall be tested in accordance with and shall meet the acceptance criteria of NFPA 257. Fire-protection-rated glazing shall also comply with NFPA 80. Openings in nonfire-resistance-rated exterior wall assemblies that require protection in accordance with Section 704.3, 704.8, 704.9 or 704.10 shall have a fire protection rating of not less than 3/4 hour.

**Exceptions:**

1. ~~Wired glass in accordance with Section 715.5.3~~
2. Fire-protection-rated glazing in 0.5-hour fire-resistance-rated partitions is permitted to have an 0.33-hour fire-protection rating.

**715.5.3 Wired glass.** ~~Steel window frame assemblies of 0.125-inch (3.2 mm) minimum solid section or of not less than nominal 0.048-inch thick (1.2mm) formed sheet steel members fabricated by pressing, mitering, riveting, interlocking or welding and having provision for glazing with 1/4-inch (6.4 mm) wired glass where securely installed in the building construction and glazed with 1/4 inch (6.4 mm) labeled wired glass shall be deemed to meet the requirements for a 3/4-hour fire window assembly. Wired glass panels shall conform to the size limitations set forth in Table 715.5.3.~~

**TABLE 715.5.3  
LIMITING SIZES OF WIRED GLASS PANELS**

Opening Fire Protection Rating	Maximum Area (square inches)	Maximum Height (Inches)	Maximum Width (Inches)
3 hours	0	0	0
1-1/2 hour doors in exterior walls	0	0	0
1 and 1-1/2 hours	100	33	10
3/4 hour	1,296	54	54
20 minutes	Not limited	Not limited	Not limited
Fire window Assemblies	1,296	54	54

For SI: 1 inch = 25.4 mm, 1 square inch = 645.2 mm<sup>2</sup>.

**715.5.4 Nonwired glass. Size limitations.** ~~Fire-protection-rated glazing used in fire windows other than wired glass in fire window assemblies shall be fire-protection-rated glazing installed in accordance with and complying with the size limitations set forth in NFPA 80.~~

(Portions not shown remain as modified by committee)

**Commenter’s Reason:** Wired Glass is fire-protection-rated glazing and should be referenced in the code as such. This would be in sync with how NFPA 80 describes this type of product. NFPA 80 does not contain specific requirements for any specific type of glazing material. This proposal does not eliminate the use of wired glass from the code. This proposal is intended to include wired glass under the designation of fire-protection-rated glazing with all the other types of glazing materials currently available today. Wired glass is suitable for use in fire windows and sidelights/transoms of fire door assemblies located in non-hazardous locations.

This proposal originally covered the deletion of the reference to wired glass in both doors and windows. The committee agreed and approved deletion of wired glass in doors for two reasons.

1. The code should not be product specific and should address the required performance.
2. Wired glass is no longer permitted as a safety glazing in hazardous locations. Therefore Section 715.4.6.1 should not include wired glass since it may not be used in the doors which are considered as a hazardous location.

The committee reason for not approving the deletion of wired glass in fire windows and making a modification to leave wired glass in fire windows was as follows:

“The modification recognizes that the code has historically accepted wired-glass in a steel frame as equivalent to a 3/4hour assembly. The deletion of this section and table would require a listed frame which would increase the cost of construction without justification supporting such a change. The listing of wired-glass assemblies use the steel frames specified in this section during their testing. These prescriptive steel frame products have worked well historically and the option of using this should remain in the code.”

The committee reasons to accept the deletion of wired glass reference in fire doors apply to fire windows. The code should not be product specific and wired glass is no longer permitted as safety glazing in hazardous locations. In addition we offer the following position:

1. The code should not be prescriptive but should be performance based.

- The code is not in sync with NFPA 80 which requires listed and labeled frames. NFPA 80 does not reference the use of non-labeled and non-listed steel frames.
- The reference to the non-listed and non-labeled frames places additional burden on AHJ's to determine compliance with the prescriptive code requirements.
- The vast majority of fire window frames today are listed and labeled and this proposal does not increase the cost of construction.
- Continuing to include reference to wired glass without limitations on its use in doors or in all hazardous locations will lead to potential misapplication of this product specific type of glazing.

Public Comment 2:

**William F. O'Keefe, SAFTI FIRST, requests Approval as Modified by this public comment.**

**715.5 Fire-protection-rated glazing.** Glazing in fire window assemblies shall be fire-protection rated in accordance with this section and Table 715.5. Glazing in fire door assemblies shall comply with Section 715.4.6. Fire-protection-rated glazing shall be tested in accordance with and shall meet the acceptance criteria of NFPA 257. Fire-protection-rated glazing shall also comply with NFPA 80. Openings in nonfire-resistance-rated exterior wall assemblies that require protection in accordance with Section 704.3, 704.8, 704.9 or 704.10 shall have a fire protection rating of not less than 3/4 hour.

**Exceptions:**

- ~~Wired glass in accordance with Section 715.5.3~~
- Fire-protection-rated glazing in 0.5-hour fire-resistance-rated partitions is permitted to have an 0.33-hour fire-protection rating.

**715.5.3 ~~Wired glass~~ 1/4-inch fire-protection-rated glazing in non-labeled steel window frames.** Steel window frame assemblies of 0.125-inch (3.2 mm) minimum solid section or of not less than nominal 0.048-inch-thick (1.2mm) formed sheet steel members fabricated by pressing, mitering, riveting, interlocking or welding and having provision for glazing with 1/4-inch (6.4 mm) ~~wired glass fire-protection-rated glazing~~ where securely installed in the building construction and glazed with 1/4-inch (6.4 mm) labeled ~~wired glass fire-protection-rated glazing~~ shall be deemed to meet the requirements for a 3/4-hour fire window assembly. ~~Wired glass Fire-protection-rated glazing~~ panels shall conform to the size limitations set forth in Table 715.5.3 and shall be listed and labeled for use with non-labeled and non-listed steel window frames described in 715.5.3.

**TABLE 715.5.3  
LIMITING SIZES OF ~~WIRED GLASS PANELS~~ 1/4-INCH FIRE-PROTECTION-RATED GLAZING**

Opening Fire Protection Rating	Maximum Area (square inches)	Maximum Height (Inches)	Maximum Width (Inches)
3 hours	0	0	0
1-1/2 hour doors in exterior walls	0	0	0
1 and 1-1/2 hours	100	33	10
3/4 hour	1,296	54	54
20 minutes	Not limited	Not limited	Not limited
Fire window Assemblies	1,296	54	54

For SI: 1 inch = 25.4 mm, 1 square inch = 645.2 mm<sup>2</sup>.

**715.5.4 ~~Nonwired glass. Size limitations.~~** Fire-protection-rated glazing used in fire windows ~~other than wired glass in fire window assemblies~~ shall be fire-protection-rated glazing installed in accordance with and complying with the size limitations set forth in NFPA 80.

**Commenter's Reason:** Wired Glass is fire-protection-rated glazing and should be referenced in the code as such. This would be in sync with how NFPA 80 describes this type of product. NFPA 80 does not contain specific requirements for any specific type of glazing material. This proposal does not eliminate the use of wired glass from the code. This proposal is intended to include wired glass under the designation of fire-protection-rated glazing with all the other types of glazing materials currently available today.

This proposal originally covered the deletion of the reference to wired glass in both doors and windows. The committee agreed and approved deletion of wired glass in doors for two reasons.

- The code should not be product specific and should address the required performance.
- Wired glass is no longer permitted as a safety glazing in hazardous locations. Therefore Section 715.4.6.1 should not include wired glass since it may not be used in the doors which are considered as a hazardous location.

The committee reason for not approving the deletion of wired glass in fire windows and making a modification to leave wired glass in fire windows was as follows:

"The modification recognizes that the code has historically accepted wired-glass in a steel frame as equivalent to a 3/4hour assembly. The deletion of this section and table would require a listed frame which would increase the cost of construction without justification supporting such a change. The listing of wired-glass assemblies use the steel frames specified in this section during their testing. These prescriptive steel frame products have worked well historically and the option of using this should remain in the code."

The committee reasons to accept the deletion of wired glass reference in fire doors apply to fire windows. The code should not be product specific.

To address the need to maintain the non-listed and non-labeled steel frame construction, the reference to 1/4-inch wired glass has been updated to 1/4-inch fire-protection-rated glazing. This change will maintain the non-labeled and non-listed steel frame construction while deleting the product specific designation of wired glass and replacing it with terminology consistent with the code. 1/4-inch fire-protection-rated glazing will need to be listed and labeled for use in the steel window frames described in 715.5.3.