

certificate of inspection is furnished by an *approved* testing agency, the certificate shall state that the door conforms to the requirements of design, materials and construction, but has not been subjected to the fire test.

**716.2.9.3 Smoke and draft control door labeling requirements.** Smoke and draft control doors complying with UL 1784 shall be labeled in accordance with Section 716.2.9.1 and shall show the letter “S” on the fire-rating *label* of the door. This marking shall indicate that the door and frame assembly are in compliance where *listed* or labeled gasketing is installed.

**716.2.9.4 Fire door frame labeling requirements.** *Fire door* frames shall be labeled showing the names of the manufacturer and the third-party inspection agency.

**716.2.9.5 Labeling.** *Fire-rated glazing* shall bear a *label* or other identification showing the name of the manufacturer, the test standard and information required in Table 716.1(1) that shall be issued by an *approved agency* and shall be permanently identified on the glazing.

**716.2.9.6 Fire door operator labeling requirements.** *Fire door* operators for horizontal sliding doors shall be labeled and listed for use with the assembly.

**716.2.10 Installation of door assemblies in corridors and smoke barriers.** Installation of smoke doors shall be in accordance with NFPA 105.

**716.3 Fire window assemblies.** Fire window assemblies required by other sections of this code shall comply with the provisions of this section.

**716.3.1 Testing requirements.** Fire window assemblies shall be constructed of any material or assembly of component materials that conforms to the test requirements of Sections 716.3.1.1 and 716.3.1.2 and the *fire protection rating* indicated in Table 716.1(3).

**716.3.1.1 Testing under positive pressure.** NFPA 257 or UL 9 shall evaluate fire-protection-rated glazing under positive pressure. Within the first 10 minutes of a test, the pressure in the furnace shall be adjusted so not less than two-thirds of the test specimen is above the neutral pressure plane, and the neutral pressure plane shall be maintained at that height for the balance of the test.

**716.3.1.2 Nonsymmetrical glazing systems.** Nonsymmetrical fire-protection-rated glazing systems in *fire partitions*, *fire barriers* or in *exterior walls* with a *fire separation distance* of 10 feet (3048 mm) or less pursuant to Section 705 shall be tested with both faces exposed to the furnace, and the assigned *fire protection rating* shall be the shortest duration obtained from the two tests conducted in compliance with NFPA 257 or UL 9.

**716.3.2 Performance requirements.** Fire window assemblies shall be installed in the assemblies and comply with the *fire protection rating* specified in Table 716.1(3).

**716.3.2.1 Interior fire window assemblies.** Fire-protection-rated glazing used in *fire window assemblies* located in *fire partitions* and *fire barriers* shall be limited to use in assemblies with a maximum *fire-resistance rating* of 1 hour in accordance with this section.

**716.3.2.1.1 Where  $\frac{3}{4}$ -hour-fire-protection window assemblies permitted.** Fire-protection-rated glazing requiring 45-minute opening protection in accordance with Table 716.1(3) shall be limited to *fire partitions* designed in accordance with Section 708 and *fire barriers* utilized in the applications set forth in Sections 707.3.6, 707.3.7 and 707.3.9 where the *fire-resistance rating* does not exceed 1 hour. Fire-resistance-rated glazing assemblies tested in accordance with ASTM E119 or UL 263 shall not be subject to the limitations of this section.

**716.3.2.1.2 Area limitations.** The total area of the glazing in fire-protection-rated window assemblies shall not exceed 25 percent of the area of a common wall with any room.

**716.3.2.1.3 Where  $\frac{1}{3}$ -hour-fire-protection window assemblies permitted.** Fire-protection-rated glazing shall be permitted in window assemblies tested to NFPA 257 or UL 9 in *fire partitions* requiring  $\frac{1}{3}$ -hour opening protection in accordance with Table 716.1(3).

**716.3.3 Fire window frames.** Fire window frames installed with a *fire window assembly* shall meet the fire-protection rating indicated in Table 716.1(3).

**716.3.3.1 Window mullions.** Metal mullions that exceed a nominal height of 12 feet (3658 mm) shall be protected with materials to afford the same *fire-resistance rating* as required for the wall construction in which the protective is located.

**716.3.4 Fire-protection-rated glazing.** Glazing in *fire window assemblies* shall be fire protection rated in accordance with this section and Table 716.1(3). Fire-protection-rated glazing in fire window assemblies shall be tested in accordance with and shall meet the acceptance criteria of NFPA 257 or UL 9. Openings in nonfire-resistance-rated *exterior wall* assemblies that require protection in accordance with Section 705.3, 705.8, 705.8.5 or 705.8.6 shall have a *fire protection rating* of not less than  $\frac{3}{4}$  hour. Fire-protection-rated glazing in  $\frac{1}{2}$ -hour fire-resistance-rated partitions is permitted to have a 20-minute *fire protection rating*.

**716.3.4.1 Glass and glazing.** Glazing 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.

**716.3.5 Labeled protective assemblies.** Glazing in fire window assemblies shall be labeled by an approved agency. The labels shall comply with NFPA 80 and Section 716.3.5.2.