

104.9.1

Research Reports and Tests

CHANGE TYPE. Addition

CHANGE SUMMARY. Research reports and results of tests used as a basis for approval are required to be provided to the fire code official.

2009 CODE: 104.9.1 Research Reports. Supporting data, when necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall consist of valid research reports from approved sources.

104.9.2 Tests. Whenever there is insufficient evidence of compliance with the provisions of this code, or evidence that a material or method does not conform to the requirements of this code, or in order to substantiate claims for alternative materials or methods, the fire code official shall have the authority to require tests as evidence of compliance to be made at no expense to the jurisdiction. Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized and accepted test methods, the fire code official shall approve the testing procedures. Tests shall be performed by an approved agency. Reports of such tests shall be retained by the fire code official for the period required for retention of public records.

CHANGE SIGNIFICANCE. This code change adds new provisions providing for the submittal of research reports and results of tests to the fire code official. When research reports are used as a basis for an Alternative Materials or Methods, Section 104.9.1 requires that the fire code official approve the use of valid reports as the basis for the



LEGACY REPORT

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Legacy report on the 2000 *International Building Code*[®], the 2000 *International Residential Code*[®] and the 2002 *Accumulative Supplement to the International Codes*[™], the BOCA[®] *National Building Code/1999*, the 1999 *Standard Building Code*[®], the 1997 *Uniform Building Code*[™] and the 1998 *International One- and Two-Family Dwelling Code*[®]

DIVISION 13—SPECIAL CONSTRUCTION
Section 13930—Wet-Pipe Fire Suppression Sprinklers

EVALUATION SUBJECT:

TYCO Fire Products (TFP)/Central Sprinkler Company (Csc) Window Sprinkler[™] Model WS[™], ½-inch Orifice Quick Response Vertical and Horizontal Sidewall Sprinklers SIN TY3388, TY3488, C3388 and C3488

REPORT HOLDER:

TYCO FIRE PRODUCTS RESEARCH AND DEVELOPMENT
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1.0 SUBJECT


Automatic sprinkler system for glazing assemblies located in interior non-load-bearing fire barrier assemblies or exterior walls which are installed to establish a fire-resistance rating.

3.2 TFP/CSC Model WS[™] Sprinkler Head

The TFP/CSC Model WS[™] Sprinkler Head is manufactured for two different orientations. The first type, illustrated in Figure 1 is a horizontal sidewall that is designed to face the window assembly horizontally. The second type, illustrated in Figure 2 is a pendent vertical sidewall that is designed to face the window assembly vertically. The Model WS is a quick response sprinkler head that releases once the ambient temperature reaches either 155 or 200° F (68 or 93° C), depending on which rated sprinkler head is installed. The sprinkler heads have an orifice and thread size of ½ inch (12.7 mm)

3.3 Glass Fire Barrier Assembly

The glass used within the assembly shall be single or double glazed, nominal ¼-inch (6.4 mm) thick or greater, heat strengthened glass or tempered glass manufactured in accordance with ASTM C 1048 or Federal Specification DD-G-1403B. The glass component of the wall assembly shall have a maximum height of 13 feet (3965 mm) with an unlimited horizontal span. The glass assembly shall be retained by a noncombustible frame with a standard molded EPDM rubber



design. Sources for reports can vary widely based on the analysis of the hazards and the proposed engineering or administrative controls. Therefore, any scientific or published reports used as the basis for a Technical Report and Opinion should be provided to the fire code official for review. In some cases reports may contain information that is beyond the understanding of the fire code official. In these instances the Technical Report and Opinion should substantiate how the data are applicable and relevant to the analysis being presented. The report should clearly indicate what the issue is and how the data substantiate that code compliance is achieved. Section 104.9.1 authorizes the jurisdiction to require that any Technical Reports and Opinions be sealed by a licensed architect or registered professional engineer. The fire code official will determine the validity of the reports and also will approve the acceptability of the source or author of the report.

Section 104.9.2 establishes the requirements for the testing of equipment, processes, and hazards that are regulated by the IFC. Section 104.9.2 requires the use of recognized testing procedures such as those found in the American Society for Testing and Materials (ASTM) standards or, when dictated by the IFC, the reference standard or test method. If a test method is not available, this section allows the fire code official to approve the test methodology. Tests required by the jurisdiction must be performed at the expense of the permit applicant.

In instances where a new product or process is being proposed for use, an alternative materials or methods fire code official can require that the product or process be evaluated by the International Code Council Evaluation Service (ICC-ES). The evaluation process culminates with the issuance of technical reports that, because they directly address the issue of code compliance, are extremely useful to both regulatory agencies and building-product manufacturers. Jurisdictions use evaluation reports to help determine code compliance and enforce building regulations; manufacturers use reports as evidence that their products meet code requirements and warrant regulatory approval—which is especially important if the products are new and innovative. ICC-ES evaluation reports are public documents, available free of charge on the World Wide Web, not only to building regulators and manufacturers, but also to contractors, specifiers, architects, engineers, and anyone else with an interest in the building industry.

Although not a part of these new requirements, fire code officials should realize that in some cases, test reports may contain proprietary information or trade secrets that a manufacturer does not want released. This is especially important when a test report documents the sequence of manufacturing or in cases in which specific materials are used to manufacture a particular chemical compound or formulation. Generally, referenced reports or test reports become a public record under a jurisdiction's or state's open record laws. Because this information may be required to be released as part of the Freedom of Information Act (FOIA), manufacturers are rightfully reluctant to release detailed process information or certain hazardous materials that are integral to proprietary processes. In these cases the fire code official should consult with his or her legal counsel to ensure that proprietary business information is not released as part of a FOIA request.