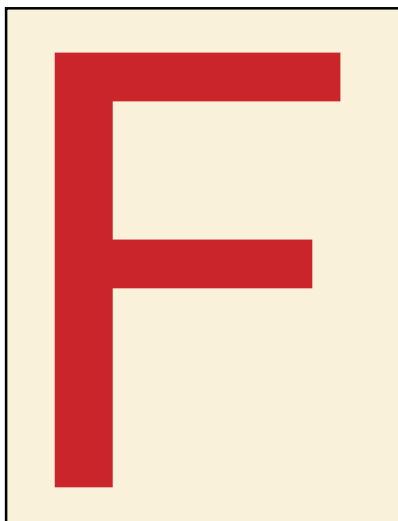


Inspection of **FIRE-RATED** Door Assemblies

by Keith Pardoe, DAHC/CDC, CDT



For many months you have read and heard information regarding the affect the National Fire Protection Association's (NFPA) publication number 80, *Standard for Fire Doors and Other Opening Protectives*, 2007 edition will have on new and existing buildings and facilities. Most notably, its requirements for the annual inspection of all types of fire-rated door assemblies will have a direct impact on the architectural openings industry.

As is often the case, rumors and myths abound as to when these inspections will go into effect, how these inspections will take place, who is responsible for performing the inspections, and if these inspections are necessary. It is also rumored that these inspections are virtually unenforceable due to the wide range of products these openings are comprised of. Some may interpret the new inspection requirements to mean that these inspectors can coerce building owners into compliance by threatening to "shut down" their building until corrections are made. Others worry that unscrupulous individuals will force owners to unnecessarily replace doors and hardware in order to increase their own profits. Still others are concerned about the potential liability the inspectors will bear for performing these safety inspections.

This article will attempt to explain the new inspection requirements and allay these concerns.

Fire Doors Assembly Inspection Class (FDAIC)

(24 hours, 72 CEP Points)

NFPA 80, Standard for Fire Doors and Other Opening Protectives—2007 edition, requires documented inspections of fire-rated door assemblies on an annual basis. NFPA 80 requires these inspections to be performed by persons who are knowledgeable of the types of door assemblies being inspected. Swinging doors with builders hardware are the most common type of fire door assembly, and are among the most complex due to the myriad of materials and products that are used to create them. These assemblies often provide accessibility, security and life-safety functions in addition to their fire-safety protection, also increasing their complexity. Inspectors must thoroughly understand the dynamics of these assemblies in order to correctly evaluate them in the field.

Understanding the role and responsibilities of the inspectors is equally as important as understanding what is being inspected. Interacting with the building owner and the Authority Having Jurisdiction (AHJ) is paramount to ensuring the respective parties clearly understand the inspection documentation and follow through with necessary corrections in order to improve safety in their buildings and facilities.

This class will teach you how to perform and record these inspections as well as provide tips for interacting with the owners and AHJs. In addition, upon passing this class, you will be invited to enroll in the Intertek.

Note: *In preparation for the Intertek/Warnock Hersey Certified Fire Door Inspector program, ALL students are required to bring photo identification (e.g., valid driver's license) and be prepared to have their photograph taken for their inspector credentials. Notification of successfully passing the FDAIC will be sent to each student and Intertek/Warnock within 30 days of completion of the class.*



NFPA 80

Learning Outcome Statements:

Upon successful completion of this class, students will:

- Understand inspection requirements of the 2007 edition of NFPA 80
- Understand the inspector's role and responsibilities
- Be able to conduct safety inspections of swinging fire door assemblies with builders hardware
- Be able to create inspection records and summary inspection reports
- Be eligible to enroll in the Intertek/Warnock Hersey Certified Fire Door Inspection program

Student Materials:

Each student will receive an Inspection Guidelines Kit that includes:

- NFPA 80, Standard for Fire Doors and Other Opening Protective—2007 edition
- 2007 Guidelines for Inspections of Fire-Rated Door Assemblies (published by the Foundation for the Advancement of Life Safety and Security)
- Sample Inspection forms
- Sample Contract templates for inspection and service agreements
- Application for Errors and Omissions insurance for inspectors

Prerequisites:

Individuals certified as Architectural Hardware Consultants (AHCs), Certified Door Consultants (CDCs), Electrified Hardware Consultants (EHCs) and/or Architectural Openings Consultants (AOCs) are eligible to enroll in the FDAIC. All other individuals must have successfully completed each of the following DHI classes prior to enrolling in the FDAIC:

- Self-Study Course: Fundamentals of Architectural Doors and Hardware
- COR110 Basic Hardware
- COR115 Hardware Applications
- COR140 Using Codes and Standards

Previous editions of NFPA 80 contained requirements for the ongoing maintenance and care of fire-rated door assemblies, but the language used was ambiguously

phrased, which made it virtually unenforceable. More importantly, the majority of property owners and management companies were not aware of these responsibilities

or how to go about making the necessary repairs to fire-rated door assemblies. Chapter 5, titled *Care and Maintenance*, of the 2007 edition of NFPA 80 contains



Fire Door Inspection Initiative

On November 28, 2006, Jerry S. Heppes, Sr. CAE, and Jeff Turcotte representing Intertek SEMKO, signed an agreement to create training and certification to support the inspections required by NFPA 80. Intertek is a global leader in testing, inspection and certification of door and hardware products, under the Warnock Hersey mark.

specific requirements for the ongoing maintenance and repair of fire-rated door assemblies. Section 5.2, titled *Inspections*, outlines the inspection process, its documentation, and the repairing of fire-rated door assemblies.

It is important to remember that NFPA 80 is a product standard, it is not a code per se. As such, NFPA 80 establishes the minimal level of quality for the products used to create fire-rated door assemblies and their installation. Consequently, NFPA 80 requires individuals performing the inspections of fire-rated door assemblies to be knowledgeable of the types of assemblies being inspected.

However, it does not attempt to define what constitutes an acceptable level of knowledge (e.g., experience, training, certification, etc.) for these individuals. Instead, NFPA 80 relies on the Authority Having Jurisdiction (AHJ) to determine if the individuals performing inspections in their region have the requisite level of knowledge to perform these safety inspections.

The AHJ community at large recognizes they, themselves, are not adequately trained to perform these inspections (with few exceptions), nor do they have the time to dedicate to performing these inspections given their responsibilities for the entire structure. As is the case

with inspections for fire alarm and sprinkler systems, as well as elevators and fire extinguishers, AHJs rely on the expertise of industry personnel to perform and document the inspections. Building owners and facility management companies are required to retain written proof of the inspections, which will be presented to the AHJ for its approval at a later date. Inspections of fire-rated door assemblies will follow the same process and the AHJs will be looking toward personnel in our industry to lead the way.

A portion of the role our industry is playing in this process is the development of a new training program, which will be open to

all interested parties. Large facilities and institutions (e.g., hospitals, universities, etc.) already have trained personnel who are responsible for the care and maintenance of their buildings. In some cases, they have established door maintenance programs and it would be a natural extension of their programs to train their personnel to perform these inspections.

Ultimately, the building owner is the party who is responsible for making sure the inspections take place and that the fire-rated door assemblies within the structure are properly maintained. AHJs will confirm the inspections have occurred by reviewing the documentation and verifying that necessary corrective actions were taken to repair assemblies that were found to have deficiencies. The role of the inspector is to simply record and report the condition of the door assemblies to the owner. The owner will have to decide if, when, and what corrective actions will be taken; otherwise, they will run the risk of being cited for violations by the AHJ. Understand, inspectors are not passing or failing door assemblies, nor are they approving them. Only the AHJ has the authority to approve, in this case, the door assemblies and building elements within their jurisdiction. Accordingly, inspectors will not be permitted to threaten to shut down a building as leverage to force compliance. Similarly, inspectors will not be authorized to issue citations or monetary fines when openings with deficiencies are discovered.

Liability for the maintenance and care of fire-rated door assemblies rests solidly on the shoulders of the building owners and/or their representatives. However, in today's society no one is immune from being sued and an inspector is a possible candidate, especially if problems arise subsequent to an inspection. Proper documentation of the inspections will help to protect the inspectors should legal proceedings be initiated. Likewise, being able to document a certain level of training specific to the types of fire-rated door assemblies will alleviate some of the potential liability. DHI is developing an errors and omissions insurance program specifically designed to insulate the inspectors from financial loss resulting from performing these inspections.

The majority of fire-rated door assemblies are classified as swinging doors with builders hardware (see chapter 6 of NFPA 80), which can also be the most complex type of fire-rated door assemblies due to their locations within buildings and facilities.

In addition to their fire-protection properties, these door assemblies often provide accessibility, life-safety and security functions, which can increase their complexity dramatically. Inspectors have to be extremely knowledgeable of a broad range of products that can, and cannot, be used on these types of openings; this depth of knowledge can only be gained through experience.

Another frequently raised issue regarding the inspection of swinging doors with builders hardware concerns the number of existing openings and the high number of possible product combinations used to create them. The sheer number of possibilities makes inspections both overwhelming and virtually unen-

forceable. It is certainly true that the number of installed fire-rated swinging doors with builders hardware is extremely large and growing every year. Modern day assemblies have different capabilities and limitations than yesterday's assemblies. However, when you look at the criteria for inspecting them (see section 5.2.4 of NFPA 80), you will see the base elements are the lowest common denominator that all of these assemblies must meet.

Fortunately, it will take some time for these inspections to be universally required across the country. As with other significant changes (e.g., positive pressure fire testing, accessibility requirements, etc.) that have affected our industry, inspections will begin

slowly as AHJs and their respective jurisdictions adopt the 2007 edition of NFPA 80 and its inspection requirements. Remember, NFPA 80 does not require the inspections to be performed by third-party inspectors, nor does it require professional certification for the inspectors; only that the inspectors are knowledgeable about the types of openings being inspected. While certification is not a requirement of NFPA 80, the AHJ community looks to the industry experts, in our case DHI, for training and information to facilitate the inspections.

About the Author: Keith Pardoe, DAHC, CDC/CDT

In mid-October, at DHI's 32nd annual convention and tradeshow, DHI will be launching the first training class for fire door inspectors. The Fire Door Assembly Inspection Class (FDAIC)—see course description—is designed to train inspectors in performing and documenting the inspections. Additionally, upon passing this class, the students will be eligible to participate in Intertek's Certified Inspectors of Swinging Doors with Builders Hardware to NFPA 80 program.

Architectural Hardware Consultants (AHCs), Certified Door Consultants (CDCs), Electrified Hardware Consultants (EHCs) and Architectural Openings Consultants (AOCs) are immediately eligible to enroll in this class. Others, whether from our industry or related industries (e.g., locksmiths, access control installers, AHJs, etc.), need to learn basic product and technical information (see course prerequisites) before being eligible to enroll in this class.

Note: *Class size is limited and registrations will be entered in the order they are received. Watch the DHI website and Doors & Hardware magazine for the enrollment application.*

For more information on this new training program, contact the DHI Education and Technical Services department at 703-222-2010 or education@dhi.org.

