M72-18

IMC 607.4 (IBC 717.4)

Proposed Change as Submitted

Proponent: Joseph Sandman, representing self (josephs@fioptics.com)

THIS CODE CHANGE PROPOSAL HAS BEEN PLACED ON THE IBC-FS AGENDA. PLEASE SEE THE IBC-FS HEARING ORDER.

2018 International Mechanical Code

Revise as follows

~~[BF]~~ 607.4 Access and identification. Fire and smoke dampers shall be provided with an *approved* means of access, ~~large enough~~ to permit inspection and maintenance of the damper and its operating parts. Dampers equipped with fusible links, internal operators, or both shall be provided with an access door that is not less than 12 inches (305mm) square or provided with a removable duct section. The access shall not affect the integrity of fire-resistance-rated assemblies. The access openings shall not reduce the fire-resistance rating of the assembly. Access points shall be permanently identified on the exterior by a label having letters not less than 0.5 inch (12.7 mm) in height reading: FIRE/SMOKE DAMPER, SMOKE DAMPER or FIRE DAMPER. Access doors in ducts shall be tight fitting and suitable for the required duct construction.

Reason: Fire and smoke dampers are an important part of a HVAC ductwork system, in the event of a fire they are designed to close and prevent the spread of fire and smoke throughout the building duct work system, giving the building occupants enough time to evacuate and also providing the fire department sufficient time to enter the building and extinguish the fire safely.

The NFPA requires all fire and smoke dampers be periodically inspected, maintained and tested per their guidelines to assure these dampers function properly in the event of a fire.

The NFPA requires that fire and smoke dampers are inspected and maintained through an access door that provides full unobstructed access to these dampers. These access doors are mounted on the ductwork as close as possible to the damper. Access doors work well for large fire and smoke dampers because the ductwork size is large enough to except an adequate sized access door, the problem is with the smaller fire and smoke dampers, the ductwork is too small to mount an adequate size access door. NFPA 80 addresses this problem by mandating the minimum size access door shall be no smaller than 12 inch square or you must supply a removable ductwork section, this removable section provides the technician performing the inspection with the unobstructed access needed to properly inspect and maintain the smaller fire and smoke dampers.

Our concerns are with the smaller fire and smoke dampers, because in many cases the removable ductwork sections for these dampers are not being provided as mandated by the NFPA 80, rather inadequate small access doors are being installed in the ductwork system next to the fire and smoke damper. Small access doors don't provide the access needed to properly inspect and maintain the fire and smoke dampers. The inadequacies of these access doors is nothing new in the HVAC industry, in many cases when it becomes time for the periodic damper inspections the maintenance technician will ignore and pass over the small fire and smoke dampers knowing that it's virtually impossible to perform the inspection through the access doors. We are asking for your help in addressing this problem, these fire and smoke dampers are much to important to be ignored, they save lives and countless dollars in property damage, the solutions are known they are just not being implemented.

My recommendation would be to adopt the National Fire Protection Association (NFPA) standards as set forth in NFPA 80 - **19.2.3 Access.** Dampers equipped with fusible links, internal operators, or both shall be provided with an access door that is not less than 12 in. (305mm) square or provided with a removable duct section.

Cost Impact: The code change proposal will not increase or decrease the cost of construction
The proposed change will reduce the time for inspecting and servicing fire dampers by 50%.

Public Hearing Results

Committee Action: **As Submitted**

Committee Reason: The proposal increases ability to inspect and service dampers. Approval is consistent with recommendation for FS66-18. The proposed text is more enforceable because it states dimensions instead of "large enough." (Vote 14-0)

Assembly Action: **None**

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Individual Consideration Agenda

Public Comment 1:

Proponent: William Koffel, representing Air Movement and Control Association (wkoffel@koffel.com)requests As Modified by This Public Comment.

Modify as follows:

2018 International Mechanical Code

607.4 **Access and identification.** ~~Fire~~ Access and identification of fire and smoke dampers shall ~~be provided with an *approved* means of access, to permit inspection and maintenance of the damper and its operating parts. Dampers equipped with fusible links, internal operators, or both shall be provided with an access door that is not less than 12 inches (305mm) square or provided with a removable duct section. The access shall not affect the integrity of fire-resistance-rated assemblies. The access openings shall not reduce the fire-resistance rating of the assembly. Access points shall be permanently identified on the exterior by a label having letters not less than 0.5 inch (12.7 mm) in height reading: FIRE/SMOKE DAMPER, SMOKE DAMPER or FIRE DAMPER. Access doors in ducts shall be tight fitting and suitable for the required duct construction.~~
comply with Sections 717.4.1 through 717.4.2.

607.4.1 Access Fire and smoke dampers shall be provided with an approved means of access that is large enough to permit inspection and maintenance of the damper and its operating parts. Dampers equipped with fusible links, internal operators, or both shall be provided with an access door that is not less than 12 inches (305 mm) square or provided with a removable duct section.

607.4.1.1 The access shall not affect the integrity of fire-resistance-rated assemblies. The access openings shall not reduce the fire-resistance-rating of the assembly. Access doors in ducts shall be tight fitting and suitable for the required duct construction.

607.4.1.2 Restricted Access Where space constraints or physical barriers restrict access to a damper for periodic inspection and testing, the damper shall be a single- or multi-blade damper and shall comply with the remote inspection requirements of NFPA 80 or NFPA 105.

607.4.2 Identification Access points shall be permanently identified on the exterior of a label having letters not less than 1/2 inch (12.7 mm) in height reading: FIRE/SMOKE DAMPER, SMOKE DAMPER or FIRE DAMPER.

Commenter's Reason: The Public Comment merely revises the IMC to be consistent with the Committee Recommendation for Approval as Modified for FS66-18. The Committee Reason Statement for M72-18 indicated the desire of the Committee to be consistent with the action on FS66-18. The proposed language in the Public Comment was not submitted as a modification during the Committee Action Hearings since I felt that it was substantive. However, I promised the Committee that a Public Comment would be submitted to make the IMC consistent with the IBC language resulting from the action on FS66-18.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction
The language is consistent with requirements proposed for the 2021 Edition of the IBC.

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