Relocating an Existing Rolling Steel Fire Door

Rolling steel fire door manufacturers have occasionally been asked if an existing rolling steel fire door can be removed from where it was originally installed and then reinstalled on a different opening. This Technical Data Sheet gives responses to some questions that manufacturers, dealers, code officials, design professionals, and building owners and managers may consider before such an existing door is relocated.

1. **Is the original fire door label from the approval agency still attached to the bottom bar, intact and legible, or original oversize door certificate still available?**
   - If not, it may be difficult or impossible to get the door approved by the AHJ in its new location. Purchasing a new door may be a better option.

2. **Is the other opening the same size?**
   - A fire door is manufactured for a specific opening width and height. It cannot be field modified to fit either a larger or smaller opening.
   - A door might be able to be installed on a smaller opening without being modified if it can be properly mounted and attached.

3. **Is the wall construction the same?**
   - A fire door may have been manufactured for a specific wall construction and mounting condition.
   - The wall construction where the new opening is located must be in accordance with the listing of the door. Some doors – especially older ones – were approved only for installation on masonry wall construction.
   - The wall bolts used to reinstall the door must also be in accordance with the listing of the door.

4. **Is the wall rating the same?**
   - A fire door is manufactured with a specific hourly rating. It is not uncommon for a fire door rating to be less than the rating of the wall on which it is installed, but it must be as required by local codes and the Authority Having Jurisdiction. For example, a 1½ hour rated fire door is commonly allowed on 2 hour rated non-masonry wall construction if it is listed for such an installation.
   - A fire door with a rating higher than that of the wall is normally acceptable.
5. *Is the fire door still “code compliant”?*

- The Authority Having Jurisdiction (AHJ) may require the fusible link system to be set up so there are fusible links on both sides of the wall. If the existing system is not, additional fusible links and chain or cable will need to be purchased to set up the new release layout.
- If the original door is equipped with only fusible links to trigger the automatic closing, it must be evaluated for acceptability at the new location. Relocation of the door may require the door’s automatic closing to be triggered by the building’s alarm system with the fusible links being used only as a back up to this system. If this is the case, an approved electro-mechanical releasing device will need to be purchased in order to reinstall the door and connect it to the building’s alarm system. Additional fusible links and sash chain / cable may also need to be purchased to set up the release layout.
- If a fire door is being moved to an opening on a corridor or certain other locations, current building codes may require that the door also be leakage rated as an air leakage rated “smoke door” assembly.
- In most cases, an existing fire door cannot be field-labeled to comply. Even if the existing door can be field-labeled, purchasing a new door may be a better option.

6. *What is the condition of the door?*

- Depending on the age of a fire door, how well it operates, whether there is damage to be repaired, and other potential issues such as corrosion of guides and slats, it may not be worth moving.
- After the door is reinstalled, it must also be drop-tested successfully two times in accordance with the requirements of NFPA 80.
- The door must be re-installed at the new location per the original installation instructions and as originally required by its listing. Copies of the original installation drawings/instructions should be available to refer to for reinstallation of the doors. If not, the door manufacturer should be contacted for availability of such drawings. [NOTE: In most cases, the manufacturer will require the original job number in order to provide these documents. This may be on a nameplate somewhere on the door, most likely on the bottom bar, or it may be marked in an inconspicuous location such as inside the sheet metal hood, on the counterbalance shaft or inside one of the end plate brackets of the door. Check to see if this number is available before contacting the manufacturer for drawings.] The following items are among those that must be verified:
  - Expansion clearance beneath the guides or above the top of the coil
  - Size and type of wall mounting bolts
  - Bolt locations in the guide and wall angle slots
  - Type of washers used on the mounting and assembly bolts

7. *What is happening with the existing opening from which the door is being removed?*

- If the existing opening is part of a building undergoing demolition, no further consideration is needed.
• If the existing opening is part of a building undergoing abandonment, consultation with a fire protection engineer and the Authority Having Jurisdiction may be needed as to whether the opening can be left open.
• If the existing opening is being replaced by another door with different specifications, the Authority Having Jurisdiction should be consulted.

If the existing opening is being left open and the areas on both sides of the door are still under the same use, a fire protection engineer and the Authority Having Jurisdiction should be involved.

8. Is the relocation approvable from a building code standpoint?
• The Authority Having Jurisdiction has the final authority regarding approval.
• The manufacturer and/or the door listing agency will likely need to supply supporting information relating to the relocation.

In conclusion, it is very important to inspect, operate, and drop-test a fire door before committing to move it. It may also be necessary to consult with the door manufacturer to obtain any information that cannot be determined by a site inspection. As with any fire door installation, doors that are relocated must be installed per the provisions of NFPA 80. The original door installation instructions should also be obtained and made available, to refer to regarding type of mounting hardware and method of installing such hardware.