



**WASHINGTON STATE PATROL – FIRE PROTECTION BUREAU
INSPECTION SECTION**

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Fire Door Maintenance

In 2010, in the state of Washington, the most cited violation in nursing homes was corridor doors. During the same time period, the second most documented violation in hospitals was rated doors. The most common violations were: doors that did not close and/or latch properly, doors purposely blocked from closing with wedges and/or doorstops, and penetrations in the door compromising the smoke resistance of the door.

A Fire Door Assembly is defined as any combination of a fire door, frame, hardware and other accessories that together provide a degree of fire protection to the opening. Fire doors are designed to stop or slow down the spread of fire, smoke and toxic fumes from one section of a building to another. This gives the building's occupants a chance to exit safely from one smoke compartment to another and time for emergency responders to arrive on site.

Per NFPA 80, 2007 Edition Standard for Fire Doors and Other Opening Protectives, Section 5.2.1, fire door assemblies shall be inspected and tested not less than annually. A written record of the inspection shall be signed and kept for inspection by the Authority Having Jurisdiction.

Following are the minimum standards that must be met during an inspection of fire doors:

1. Visible inspection of both sides of the door:
2. Listing label in place and visible
3. No open holes or breaks in the door surface
4. Glazing intact and securely fastened in place
5. Door, frame, hinges, hardware and threshold are secured, aligned and in working order
6. No parts missing or broken
7. Door clearances--bottom of door maximum $\frac{3}{4}$ " , $\frac{1}{8}$ " top and vertical edges of doors
8. Self-closing device operational
9. Hold-open devices operational
10. Coordinator - inactive leaf closes before active leaf
11. Latching hardware operates and secures door
12. Auxiliary hardware items that interfere or prohibit operation are not installed, e.g., door feet, chocks or wedges
13. No field modifications have been made to the door
14. Gaskets and edge seals, where required, are present and in good condition

Imagine the following scenario; a fire has broken out in a resident room in one wing of a facility. The smoke detectors identify particles of combustion and signal the fire alarm system. The alarm is initiated, which includes visual and audible alarms throughout the facility. In addition, a signal is being sent to the local fire department and power cut to any fire door being held open with magnetic hold open devices. All fire doors begin to shut. The sprinkler system is also activating.

Employees, having verified the location of the fire, are now assisting residents. Because all fire doors have closed, the fire is contained to one resident room. All residents, employees and visitors are able to safely exit the fire area while the fire is completely extinguished by the fire department.

This scenario could have been drastically different if the fire doors were maintained improperly or held open with wedges. Live fire incidents have proven that properly maintained fire doors can be the difference between life and death.