



# Gap Solutions and Explanations

Door Rating	Perimeter Solution *Up to 5/16" Gap	Door Bottom Solution *Up to 1-1/2" Gap
up to 90 Minute	Gap90™ Gap90DKB™	9590

## Gap90™

9945 (GPZ Steel stop extender)  
9400 (Gray Intumescent PVC cover)  
5075CL (Clear Self-Adhesive TPE seal)

## Gap90DKB™

9945 (GPZ Steel stop extender)  
9400DKB (Brown Intumescent PVC Cover)  
5075B (Brown Self-Adhesive Seal)

## Common Questions

### Gaps - Perimeter vs. Door Bottom?

Perimeter gaps in doors are the distance between the edge of the door and door frame as measured on the pull side of the opening. Door bottom gaps are the distance between the bottom of the door and the finish floor.

### Gaps - Why are they important?

Proper gap tolerances ensure that the door will perform as it is intended. Gaps that are outside of tolerance can lead to compromised fire door integrity in a fire situation as well as not allowing the fire door latching mechanism to engage fully as it is required to do by code.

### Gaps - What does the code say?

NFPA 80 (the code standard for fire doors) states that fire doors must be inspected on an annual basis. Maximum allowable perimeter gap is 1/8" for wood doors, 1/8" +/- 1/16" for metal doors. Maximum allowable door bottom gap is 3/4". Gaps that exceed these maximum allowable tolerances result in a non-compliant fire door that needs to be repaired.





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### Common Questions – Continued

#### *Repairs - What does the code require?*

Separate from the FDAI Inspection Log; a Maintenance Log is required to be kept with record of repairs to each door. It should include specific product information and certification for products applied that solve issues like excessive gaps.

#### *UL Mark – Are the products marked?*

GAP90™ – Yes, the steel stop extender (9945) is embossed with the UL Certified Mark and required category ID.

9590 – Yes, the stainless steel sweep with Neoprene and the stainless steel shoe with intumescent are each embossed with the UL Certified Mark and required category ID.

#### *UL Mark – What does it include?*

The 'official' UL mark is the UL shield & category ID – POSITIVE PRESSURE TESTED MISCELLANEOUS FIRE DOOR ACCESSORY. It fails to inform the special nature of GAP90™ application and does not indicate that the certification requires 3 separate components.

#### *UL Mark – Where is the official mark & comprehensive info?*

UL requires the smallest unit packaging include the official mark and installation instructions. GAP90™ installation instructions included in each set contain the 'official' UL mark, category ID, and comprehensive information regarding application and installation of all components. Installation Instructions are also available on [www.ngp.com](http://www.ngp.com) in 8-1/2" x 11" pdf format.

#### *GAP90™ – How does it close the gap?*

With GAP90™ installed – excessive gap will still be visible. GAP90™ is tested and certified for use on doors WITH excessive gap as it allows them to successfully pass up to a 90 minute UL10C positive pressure fire endurance test and required hose stream test.

#### *What Solution is recommended for the Meeting Edge of Pairs?*

Use steel hinge shims behind the hinges to shift the door(s) toward the center and close the gap between the meeting edges.

If this causes an excessive gap at the hinge jamb edge(s), use GAP90™ at the hinge jamb(s).

