

SpecRite

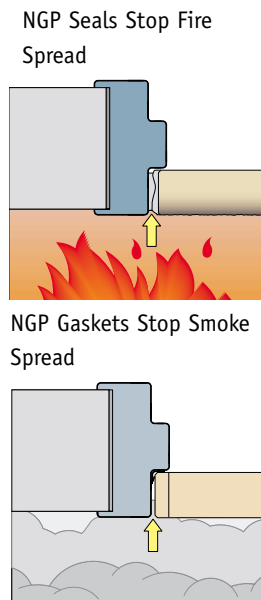
September, 2002

from National Guard Products, Inc.

Edge Sealing Systems, Smoke and Draft Control Gasketing for Positive Pressure Fire Door Assemblies.

History: Those responsible for drafting the Uniform Building Code included in the 1997 revision a requirement for Fire Door Assemblies to be tested with the Neutral Pressure Plane regulated at 40" above the sill. The revised code also required many fire-rated doors (mostly doors at corridors) to be Smoke and Draft Control Assemblies. The UBC test standard 7-2 "Fire Tests of Door Assemblies" was revised to include the new criteria. Many western states quickly adopted the 1997 version of the Uniform Building Code, which for the first time in the United States required fire doors to meet a fire test under positive pressure conditions.

Manufacturers had to test all doors, frames and hardware to the new test standard. In so doing the wood door manufacturers found it necessary to use an edge sealing system to seal the gap between the door and the frame and protect the edge of the door from deteriorating during the more intense positive pressure fire test. The materials they used initially were intumescent type seals that expand approximately 10 times their original size when they reach a temperature of around 375 degrees. These originally tested edge seals were required to be furnished in order for the door to bear the positive pressure fire label and meet UBC 7-2 (1997).



UL test standard UL10C is Underwriter's Laboratories standard for testing of fire door assemblies to positive pressure with the neutral plane at 40" above the sill. This test standard is required to be met for all fire doors installed in jurisdictions that have adopted the International Building Code (IBC) 2000. The requirement for Smoke and Draft Control assemblies is also stated in IBC 2000.

Today: A variety of seals have now been tested including intumescent and some silicone seals. These seals have been separately categorized to indicate their unique ratings by the testing labs, UL and Warnock Hersey.



Edge Sealing Systems are listed in Category G and are rated for use on Category B listed wood doors.



Smoke and Draft Control Gasketing is listed in Category H and are rated for use on "S" labeled doors.

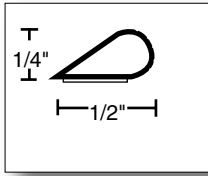
Wood doors that have a factory installed edge sealing system under the veneer are listed by both UL and Warnock Hersey as Category A doors.

Wood doors that require a supplemental Edge Sealing System installed in the field on either the edge of the door or on the frame opposite the edge of the door are listed by both UL and Warnock Hersey as Category B doors.

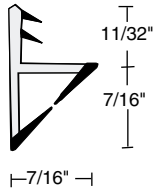
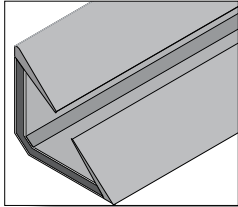
Today, both testing labs confirm that NGP Edge Sealing Systems (Category G listed) can be used on ANY listed Category B fire-rated wood door. With the extent of testing that has now been done, UL and Warnock Hersey have extended our category G listings to all category B listed wood doors up to the maximum rating of either the door or the gasket.



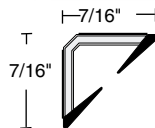
5050



Recommended Choices: 5050 Silicone Bulb is a Category G Edge Seal for up to 20 min., and is a Category H Smoke and Draft Control Gasket.

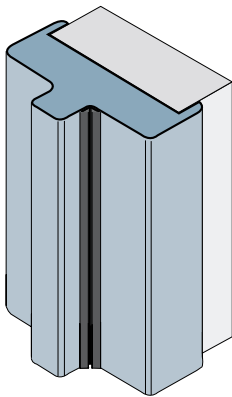


9441
Kerf Application

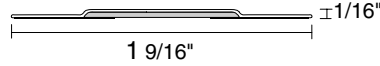
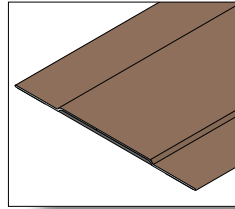


9440

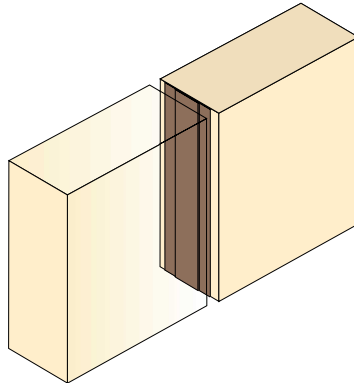
9440 Intumescent Batwing is a Category G Edge Seal for up to 90 min. doors, and is Category H Smoke and Draft Control Gasket.



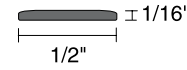
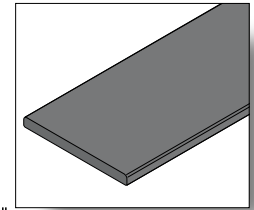
9500



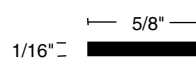
9500 The Edge (patented) is a Category G Edge Seal for up to 90 min. doors, and is our recommendation for use on the meeting edge of



pairs of doors.



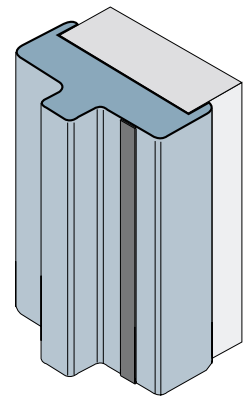
9800



9890

9800

Intumescent Strip with protective skin is a Category G Edge Seal up to 60 min., with 9890 available up to 90 min.



For Samples of these products, please contact your local NGP representative or NGP at 800-NGP-RUSH or fax your request to 800-ALL-RUSH.

Spec Rite is designed as a vehicle to provide information to Architects and Specification Writers to make them better informed and to make their job easier.

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