Halspan 90 minute Smoke & Acoustic Drop Seal

Automatic Threshold Seals

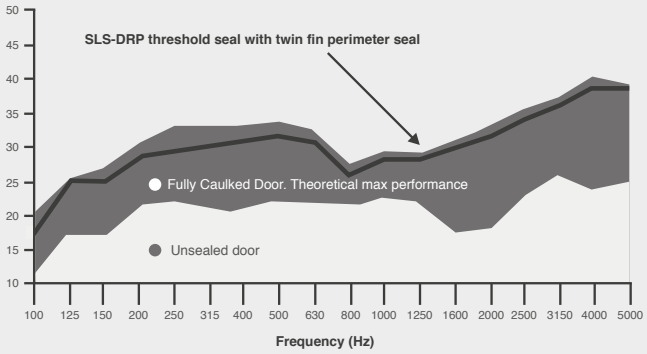
Halspan Automatic Threshold Seals are an ideal solution for sealing the gap between the bottom of the door and the threshold. The benefits provided by the BOM-DRP series seals are acoustic performance, fire and smoke sealing, gas/air prevention, light nuisance prevention and providing a dirt and insect barrier. The BOM-DRP series is fully mortised into the bottom of the door and the mechanism activates when the door is closed, lowering and self-levelling the seal to the floor. When the door is opened, the seal lifts clear of the floor and retreats into its housing. No threshold plate is required for use with this seal.

Fire

Fire Testing	Achieved 90 minutes fire resistance when tested to British Standard BS476:1987. Tested using 64mm Halspan 90.

Acoustics

Acoustic Performance



Min / max threshold gap size 3mm - 15mm.

Operational & Durability

Testing	Has been successfully tested for 500,000 cycles in accordance with BS EN1191:2000.

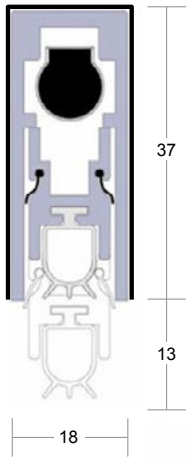
Halspan 90 minute Smoke & Acoustic Drop Seal

Automatic Threshold Seals

Product Codes & Specification*

Available Lengths	Product Code
335 mm	BOM-DRP-3718-335
435 mm	BOM-DRP-3718-435
535 mm	BOM-DRP-3718-535
635 mm	BOM-DRP-3718-635
735 mm	BOM-DRP-3718-735
835 mm	BOM-DRP-3718-835
935 mm	BOM-DRP-3718-935
1035 mm	BOM-DRP-3718-1035
1135 mm	BOM-DRP-3718-1135
1235 mm	BOM-DRP-3718-1235
1335 mm	BOM-DRP-3718-1335
Other bespoke wlengths are available on request.	
Materials	Anodized aluminium housing with a silicone seal. All fixing materials are supplied. 2mm thick intumescent kit.
Application	Single swing doors; use with any compliant perimeter seal.

Design Guide



Smoke

A Note on Smoke Control

(from BS 8214: 2016)

The test standards for determining smoke leakage are BS 476-31.1 and BS EN 1634-3. Smoke leakage is essentially the transfer of airborne particles of the products of combustion, and sealing systems are used to restrict this air flow. Seals are used to fill the gaps between the door leaf and the frame. As such, they can have an adverse effect on the operating forces required to use the door if not carefully fitted. Removal of seals to accommodate door hardware increases the leakage rate. Seals that fit in the centre thickness of the door are generally subjected to friction effects detrimental to the durability of the seal and the easy use of the door. Seals applied to the face of the doorstop are unlikely to have a noticeably adverse effect on the forces required to open the door. Doorstop-mounted seals might prevent the door from latching or closing if incorrectly fitted, or when incorporated within a door rebate that has not been designed to accommodate such seals.

Fire doors that are required by the appropriate building regulations to restrict the flow of ambient temperature smoke, identified by the suffix S, e.g. FD30S,FD 30S (BS 476-31) or the suffix Sa, e.g. E 30Sa (BS EN 1634-3), should be fitted with smoke seals. When installed, the threshold gap should, where practicable, be sealed by a (flexible edge) or automatic drop seal, either with a leakage rate not exceeding 3 m3/h per metre at 25 Pa when tested to BS 476-31.1 or BS 1634-3, or just contacting the floor,
giving an even contact with the floor but not exhibiting significant increased frictional forces that could interfere with the closing action of the door. Where this is impracticable, the threshold gap should not exceed 3 mm at any point.

Halspan strongly recommend the use of our SLS-DRP range of automatic drop seals and SLS-TRI triple fin seals to ensure compliance on smoke rated doorsets.

Halspan 90 minute Smoke & Acoustic Drop Seal

Automatic Threshold Seals

General Notes

Further Considerations

Note that there is other guidance available, including BS 9999-2017 - Code of practice for fire safety in the design, management and use of buildings, which may impose different or additional requirements, such as consideration of the gap between door leaf and threshold.

Halspan intumescent seals and smoke seals have undertaken extensive testing over many years and have been proven to perform against the toughest test standards in the most onerous of doorset designs. Care must be taken to ensure that these seals are used in the correct manner, in accordance with certification data such as Field of Application Reports and primary test evidence.
Further industry guidance can also be found in the following publications:

- BS 8214:2016: Timber-based fire door assemblies - Code of practice
- BS 9999:2017: Fire safety in the design, management and use of buildings – Code of practice
- ASDMA - Guidance and Recommendations for the Coordination of Bespoke Doorsets
- ASDMA - Best Practice Guide to Timber Fire Doors

Supporting Test Data

Please contact Halspan to request supporting test data for this product.