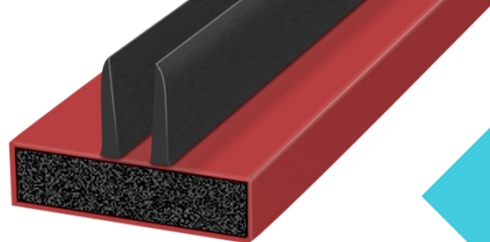




# HALSPAN®



## Halspan Twin Fin Fire, Smoke & Acoustic Seals



Halspan have developed a range of fire and smoke seals to complement our range of fire rated door blanks. Halspan 30 and 60 minute Fire and Smoke Seals have been fully tested to BS476: Part 22 and BS EN 1634-1 for performance to 30 and 60 minutes fire resistance. Tested in leading fire resistance laboratories around the world, Halspan Fire Seals provide excellent performance even in the most onerous doorset designs. Halspan Twin Fin seals also provide additional resistance to airbourne sound transmission and can offer improvements to the acoustic ratings of timber doorsets.

### For 30 & 60 Minute Fire Rated Door Timber Assemblies

#### Tested in Accordance with:

BS 476: Part 22: 1987 and BS EN 1634-1\*

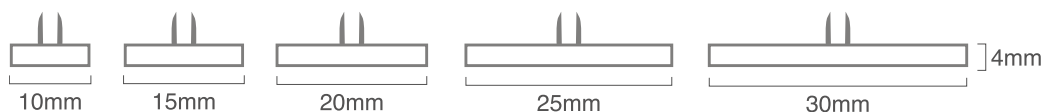
\*See notes section overleaf on smoke control and further considerations for other relevant test standards.

### Product Codes & Specifications

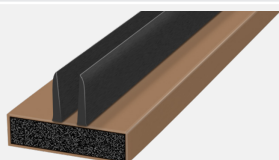
#### Master Product Code: SLS-TWF

Halspan fire seals are available in the sizes and colours shown below (+/-0.3mm) depending on your performance requirements. The standard length supplied is 2100mm, 2500mm & 3000mm. Special lengths and colours can also be made to order. All seals are supplied complete with a self-adhesive backing strip for ease of installation. Max gap size 3mm-4mm.

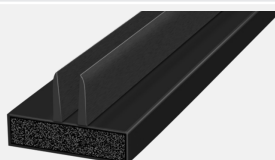
#### Section



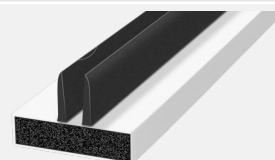
#### Brown (BR)



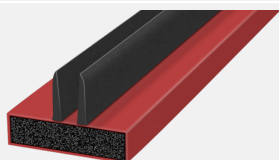
#### Black (BK)



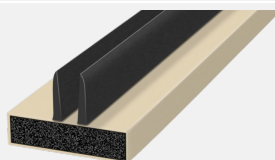
#### White (WH)



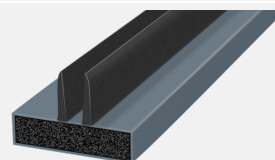
#### Red (RD)



#### Cream (CR)



#### Slate Grey (SG)



Halspan fire seals are PVC encapsulated in a range of colours shown above. Any RAL colour can be supplied subject to special order. Halspan Seals are graphite based.

### Halspan Fire, Smoke & Acoustic Twin Fin Seal

| Colour                                                                                       | Product Codes (10mm x 4mm) |                  |                  |
|----------------------------------------------------------------------------------------------|----------------------------|------------------|------------------|
|                                                                                              | 2100mm length              | 2500mm length    | 3000mm length    |
|  Brown      | SLS-TWF-104-21BR           | SLS-TWF-104-25BR | SLS-TWF-104-30BR |
|  Black      | SLS-TWF-104-21BK           | SLS-TWF-104-25BK | SLS-TWF-104-30BK |
|  White      | SLS-TWF-104-21WH           | SLS-TWF-104-25WH | SLS-TWF-104-30WH |
|  Red        | SLS-TWF-104-21RD           | SLS-TWF-104-25RD | SLS-TWF-104-30RD |
|  Cream      | SLS-TWF-104-21CR           | SLS-TWF-104-25CR | SLS-TWF-104-30CR |
|  Slate Grey | SLS-TWF-104-21SG           | SLS-TWF-104-25SG | SLS-TWF-104-30SG |

| Colour                                                                                        | Product Codes (15mm x 4mm) |                  |                  |
|-----------------------------------------------------------------------------------------------|----------------------------|------------------|------------------|
|                                                                                               | 2100mm length              | 2500mm length    | 3000mm length    |
|  Brown       | SLS-TWF-154-21BR           | SLS-TWF-154-25BR | SLS-TWF-154-30BR |
|  Black       | SLS-TWF-154-21BK           | SLS-TWF-154-25BK | SLS-TWF-154-30BK |
|  White       | SLS-TWF-154-21WH           | SLS-TWF-154-25WH | SLS-TWF-154-30WH |
|  Red         | SLS-TWF-154-21RD           | SLS-TWF-154-25RD | SLS-TWF-154-30RD |
|  Cream       | SLS-TWF-154-21CR           | SLS-TWF-154-25CR | SLS-TWF-154-30CR |
|  Slate Grey | SLS-TWF-154-21SG           | SLS-TWF-154-25SG | SLS-TWF-154-30SG |

| Colour                                                                                         | Product Codes (20mm x 4mm) |                  |                  |
|------------------------------------------------------------------------------------------------|----------------------------|------------------|------------------|
|                                                                                                | 2100mm length              | 2500mm length    | 3000mm length    |
|  Brown      | SLS-TWF-204-21BR           | SLS-TWF-204-25BR | SLS-TWF-204-30BR |
|  Black      | SLS-TWF-204-21BK           | SLS-TWF-204-25BK | SLS-TWF-204-30BK |
|  White      | SLS-TWF-204-21WH           | SLS-TWF-204-25WH | SLS-TWF-204-30WH |
|  Red        | SLS-TWF-204-21RD           | SLS-TWF-204-25RD | SLS-TWF-204-30RD |
|  Cream      | SLS-TWF-204-21CR           | SLS-TWF-204-25CR | SLS-TWF-204-30CR |
|  Slate Grey | SLS-TWF-204-21SG           | SLS-TWF-204-25SG | SLS-TWF-204-30SG |

| Colour                                                                                         | Product Codes (25mm x 4mm) |                  |                  |
|------------------------------------------------------------------------------------------------|----------------------------|------------------|------------------|
|                                                                                                | 2100mm length              | 2500mm length    | 3000mm length    |
|  Brown      | SLS-TWF-254-21BR           | SLS-TWF-254-25BR | SLS-TWF-254-30BR |
|  Black      | SLS-TWF-254-21BK           | SLS-TWF-254-25BK | SLS-TWF-254-30BK |
|  White      | SLS-TWF-254-21WH           | SLS-TWF-254-25WH | SLS-TWF-254-30WH |
|  Red        | SLS-TWF-254-21RD           | SLS-TWF-254-25RD | SLS-TWF-254-30RD |
|  Cream      | SLS-TWF-254-21CR           | SLS-TWF-254-25CR | SLS-TWF-254-30CR |
|  Slate Grey | SLS-TWF-254-21SG           | SLS-TWF-254-25SG | SLS-TWF-254-30SG |

| Colour                                                                                         | Product Codes (30mm x 4mm) |                  |                  |
|------------------------------------------------------------------------------------------------|----------------------------|------------------|------------------|
|                                                                                                | 2100mm length              | 2500mm length    | 3000mm length    |
|  Brown      | SLS-TWF-304-21BR           | SLS-TWF-304-25BR | SLS-TWF-304-30BR |
|  Black      | SLS-TWF-304-21BK           | SLS-TWF-304-25BK | SLS-TWF-304-30BK |
|  White      | SLS-TWF-304-21WH           | SLS-TWF-304-25WH | SLS-TWF-304-30WH |
|  Red        | SLS-TWF-304-21RD           | SLS-TWF-304-25RD | SLS-TWF-304-30RD |
|  Cream      | SLS-TWF-304-21CR           | SLS-TWF-304-25CR | SLS-TWF-304-30CR |
|  Slate Grey | SLS-TWF-304-21SG           | SLS-TWF-304-25SG | SLS-TWF-304-30SG |



## 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 doorstep 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 m<sup>3</sup>/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.

**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.**



## 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 Certification & Test Data

#### Certification - Fire

- Warringtonfire Halspan Optima 30 Field of Application Report Chilt/A01204
- Warringtonfire Halspan Optima 60 Field of Application Report Chilt/A01205
- Warringtonfire Halspan Prima 30 Field of Application Report FEA/F97174
- Warringtonfire Halspan Prima 60 Field of Application Report FEA/F96103
- IFC Halspan Optima 30 Field of Application Report PAR/10341/01
- IFC Halspan Optima 60 Field of Application Report PAR/10341/02
- IFC Halspan Prima 30 Field of Application Report IFCA/06166
- IFC Halspan Prima 60 Field of Application Report IFCA/06167

#### Smoke Test Data

- WARRES 120683/A
- WYC406080 - 01, 02, 03, 04 & 05

The information in this datasheet is correct at time of going to press. However our designs, specifications and certifications may change in the interest of product development following publication. If you would like to make a query about any of the details in this document, please contact Halspan via our website, or call our office in the UK on +44 (0)3300 563836.

