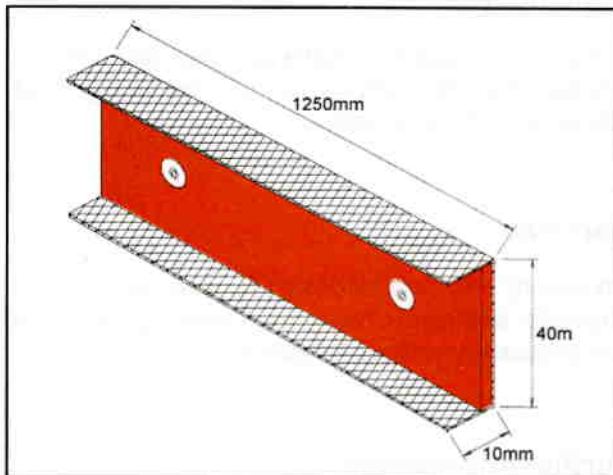


Sealmaster

CAVITY FIRE SEAL



Intumescent Cavity Fire Seal (CFS)

The last few years have seen a massive increase in the number of timber framed buildings being constructed, especially those over a single storey in height. These timber framed constructions require an uninterrupted, fully ventilated cavity between inner and outer walls to ensure that rot and fungus are avoided and the timbers remain undamaged. However, in multi-storey buildings, this cavity poses a significant fire hazard and can act as a chimney, spreading fire and smoke throughout the structure very quickly.

The Problem

Sealmaster was approached by one of the UK's leading construction companies, who were at the time involved in a large timber framed development, and tasked with the development of a cavity fire seal; this seal had to allow full ventilation and drainage, be impervious to moisture and other atmospheric contaminants and, if called upon, provide fire integrity for periods in excess of 30 minutes. Needless to say, it also had to be rugged and easy to install.

The Solution

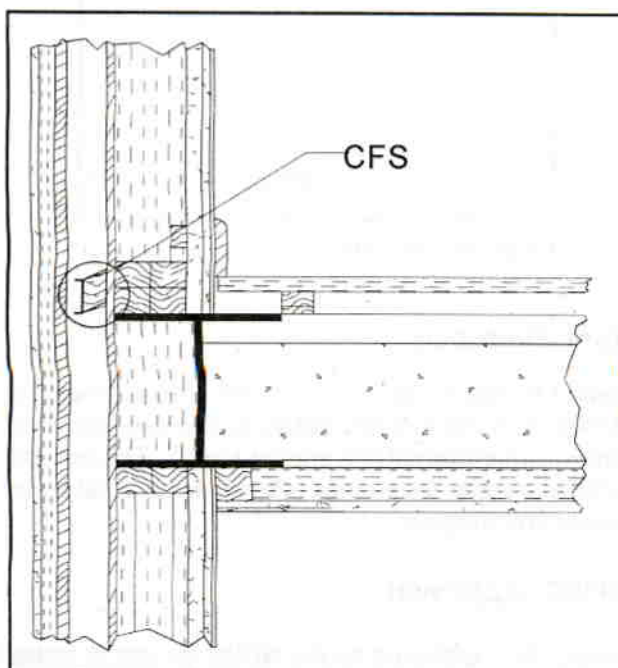
The Sealmaster cavity fire seal (CFS) fulfills all of these criteria with ease and provides a permanent, maintenance free solution to what would be a very dangerous problem. It actually exceeds the design brief by providing over 60 minutes fire integrity.

The seal comprises of a length of our unique flexible graphite based intumescent material, set into a stainless steel carrier system. This results in both the materials and their fixings being fully resistant to water, damp, humidity, heat and cold and even frost.

Application and Installation

The CFS is suitable for use in cavities from 20-50mm wide, in all timber framed constructions. It may be used in a horizontal or vertical plane, i.e. at floor level or around window apertures. It is mounted directly to the inner cavity wall or on a splayed, treated softwood batten, if necessary, to provide a clear gap of 10mm between the seal and cavity outer wall. This batten may be continuous or interrupted by vertical battens, as needed.

The batten should be fixed through to the structure with 75mm galvanised nails at 250mm centres, staggered top to bottom, the seal is then fixed directly to the batten with 30mm galvanised nails, staggered at 150mm centres. Care should be taken to ensure that joints in the batten and cavity fire seal and/or fixings do not coincide. The cavity fire seal does not require any intumescent mastic to joint or to bed against, nor does it require any paint or other protective coatings.



Typical installation detail

Technical Information

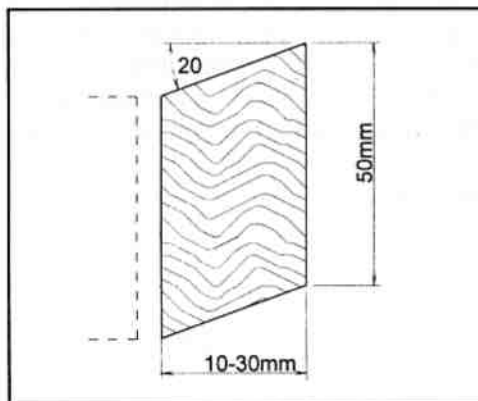
Product Code:	CFS
Size:	40 x 10mm. Supplied in 1250mm lengths.
Colour:	Black/natural
Cavity Size:	20 - 50mm
Batten: (not supplied)	50mm high, 20° splay, 10-30mm wide, preservative treated softwood.
Fixings: (not supplied)	Galvanised steel clout head nails Batten to structure - 75mm Seal to batten - 30mm

Components: Stainless steel mesh, stainless steel rivets, graphite based intumescent material.

Moisture resistance: The CFS is unaffected by atmospheric carbon dioxide or moisture. Even after undergoing total submersion in water, and then being subjected to freezing conditions, CFS activates reliably at the designated temperature.

Fire resistance: In excess of 60 minutes when installed in accordance with manufacturer's instructions.

Safety: Care should be taken when handling/installing the CFS as there may be sharp edges to the stainless steel carrier. The intumescent material is odourless, non-toxic and is asbestos free. No further Health & Safety issues apply.



Batten cross section

Test Evidence

Tested to BSEN1363 Part 1: 1999 (replacement for BS476 Part 22) and witnessed by representatives of Chiltern International Fire and the NHBC. The test was terminated after 69 minutes without failure. Test report available on request.

NHBC Approval

The CFS is approved by the NHBC for use in timber framed constructions, as detailed in this datasheet.

How to specify

Please specify CFS as follows:

"Install Sealmaster Cavity Fire Seal, in accordance with Manufacturer's instructions, to inside face of cavity in line with floor level. Obtain materials from Sealmaster, Pampisford, Cambridge. CB2 4HG. Telephone: 01223 832851".

Availability

The CFS is available ex-stock for immediate delivery. Express overnight delivery can also be arranged, at additional cost, on request.

Services

Sealmaster provide initial design services with technical support at all stages of work, from planning through to site installation, without obligation.

Further information

Our sales and technical teams will be only too pleased to provide further advice or technical information on Sealmaster's fire penetration systems or any form of passive fire protection.

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