



Quality Alert

Cavity fire socks Installation and compliance

When is a cavity fire sock not a fire cavity sock?

When it has not or cannot be fully installed in accordance with the manufacturers guidance and or the building structure does not allow the installation to be compliant. See installation issues below:

Issues affecting compliant installation

- | | | |
|---------------------------------------|---------------------------------|--|
| 1. Inadequate ITP & check sheet | 2. Lack of knowledge of product | 3. Cavity creep inconsistent width |
| 4. Inconsistent cut bricks to reveals | 5. Excess mortar cavity side | 6. Lack of required compression |
| 7. Voids between socks | 8. Set in the wrong orientation | 9. Not butted uptight to other build element e.g., DPCs etc. |
| 10. wrong product | 11. Workmanship | 12. Lack of compliance checks |



Gaps



No compression



Missing



Other build issues



Mortar not removed

Resolve of build issues Using traditional build method/ best practices i.e. build up wall end/corner, once set and cleared of excess mortar, cut bricks to be mechanically cut (specification requirement)Cavity fire socks can be easily installed with the correct compression/friction which means the same thing.

General design

The fire cavity barrier is designed to provide fire protection to timber, steel frames and cavity structures, and other locations that this type of barrier is best suited.

Function of a fire cavity sock

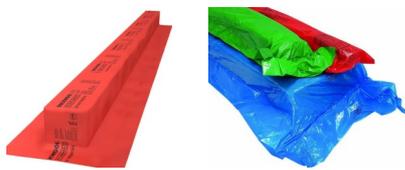
Is to prevent the passage of smoke and fire to other parts of the structure and meet the thermal and acoustic requirements. The fire socks are installed with a required compression stipulated by the manufacturer data sheet guidance.

General properties

The product comprises of a fairly soft rock mineral fibre sealed in an oversize polythene bag. Some of the polythene bags have flaps or wings that will aid retention across a joint , in a vertically or horizontally position to the inner wall structure, secured by stappling or clout nails. Cavity fire socks.

Fire barrier socks comes in a variety of sizes type and wrapped in different coloured polythene sleeves. The significance of the coloured rap, generally none, but each size will be a different colour for identification purposes.

The product has a minimum fire resistance of F30



The product material is to be inert, will not rot or degrade, will not grow fungi, mould or bacteria and will not support vermin.

Product Compliance requirements

1. Approved document B part 2
2. BS 9991 requires that cavity barriers should be provided in an external wall
3. Euroclass A1 fire rating / Tested and assessed for up to the required fire resistance (integrity and insulation) in accordance with BS 476: Part 20.
4. BS EN 13162 series is to provide manufacturers with best industry practices to demonstrate the performance of thermal insulation products, such that they are fit for their intended use.
5. The product is installed with the required compression, which depends on the manufacturers guidance for its intended use.
6. Continuity: Vertical cavity barriers should extend below the DPC up the structure and where a void exists in the substructure.

This advice should be used, where the above is applicable, and the information discussed with your team highlighting the following points:

- Understanding the safety critical requirements for Cavity fire socks
- Validation of materials
- Knowledge of the product requirements
- Ensure the ITP hold points are clearly established and adhered too
- Robust inspection process is conducted MS and contractor

Toolbox Talk Packages (put an 'x' next to the related work packages):

| | | | | | | | |
|---|-----------------------|--------------------------|--------------------|---------------------------------------|-----------------------------|--------------------------------------|-------------------------------|
| X | Brickwork / Blockwork | Doors & Windows | Roof | Drainage | Frames | Roads, Paths, Paving's & Surfacing's | Site preparation works |
| X | Substructure | FFE | Flooring | Internal walls & partitions, Ceilings | Joinery / General Carpentry | Painting | X Fire & Lightning protection |
| | Walling (Tiling) | Electrical installations | Services / Systems | Water installations | DFMA (Offsite Manufacture) | Design | Miscellaneous |



Everyone has the right to be

100% Safe