

# QRS Fire Sleeve & QRS Slim Fire Sleeve INSTALLATION INSTRUCTIONS

This installation guide is intended for general information only and all details should be checked against relevant supporting test evidence and certification.



Quelfire QRS Fire Sleeves are lifesaving products designed to prevent the spread of fire where plastic vent ducts penetrate fire compartment walls. It is therefore essential that they are fitted in a responsible and workmanlike manner.

QRS Fire Sleeves are suitable for use in various wall constructions including solid concrete masonry/block walls and flexible fire rated plasterboard partitions with and without the QuelStop Fire Batt system. Fire ratings vary depending on the substrate and services so refer to the technical data and installation details for full details.

Apertures for the QRS should be cut or drilled as tight as practically possible to suit the external dimensions of the QRS Fire Sleeve. Suggested aperture sizes are provided in the table below and we would always recommend carrying out a trial on site:

Product Code	Duct Size (mm)	Approx. space needed around duct to fit QRS Fire Sleeve (mm)	Recommended approx. aperture (mm)
QRS110/54	110 x 54	13	135 x 78
QRS205/60	205 x 60	13	230 x 85
QRS220/90	220 x 90	22	262 x 132
QRS75	75 Ø semi-rigid	8	90 Ø
QRS90*	90 Ø semi-rigid	13	116 Ø
QRS110*	100 Ø	18	135 Ø
QRS130*	125 Ø	23	170 Ø
QRS110/54SS	110 x 54	8	126 x 70
QRS204/60SS	204 x 60	8	219 x 75
QRS220/90SS	220 x 90	12	244 x 114

\*QRS90, QRS130 and QRS110 are not currently CE Marked

Gaps around the installed QRS Fire Sleeve should not exceed 5mm and can therefore be sealed with QuelStop Intumescent Acrylic Sealant.

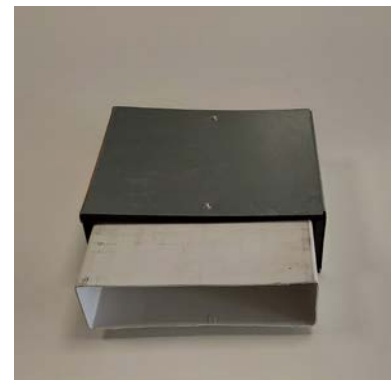
The QRS can be retrofitted but is dependent on being able to cut the right size aperture within the wall substrate which may be easier to achieve without the duct in position.

The normal and easier installation is to build the wall around the QRS Fire Sleeve and duct.

## Installation principles of the Quelfire QRS Fire Sleeve

- 1.** Once the correct diameter hole or aperture has been achieved within the wall and the correct QRS Fire Sleeve has been identified, check the duct and penetration are clean of debris and there are no obstructions that would prevent the QRS being slid into position.
- 2.** Hinge open the QRS Fire Sleeve and wrap tight around the plastic vent duct.
- 3.** Secure the lid of the QRS shut with the self-adhesive tape fitted to the rectangular versions (or the self tapping screw supplied with circular versions).
- 4.** The QRS Fire Sleeve can then be slid along the duct into the substrate.
- 5.** Ensure that the QRS Fire Sleeve is centrally positioned within the wall and that the face of the QRS is either flush or protruding from the substrate in accordance with the specific installation detail – check both sides.
- 6.** Seal around the perimeter of the QRS where it meets the substrate with QuelStop Intumescent Acrylic Sealant.
- 7.** Where the duct is required to be insulated, this can now be butted up to the QRS Fire Sleeve and sealed in accordance with manufacturer's recommendations.

Product Installation Training, otherwise known as Toolbox Talk Training, is available for the QRS range and standard.



## Example Installation 1 - Direct to flexible or rigid walls

Drill or cut the hole in accordance with the details provided in the table above then install as described above ensuring the minimum required protrusion is achieved on both sides of the wall and finally seal both sides of the wall with QuelStop Intumescent Acrylic Sealant.



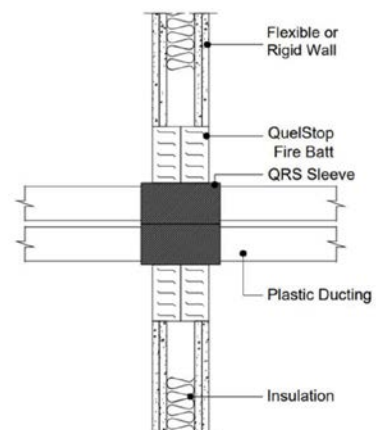
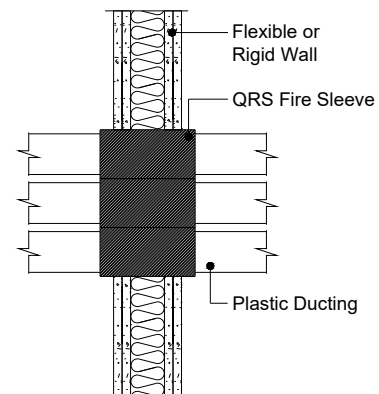
## Example Installation 2 - Multiple (stacked/side-by-side/cluster) ducts

In some instances, multiple rectangular ducts/QRS can be installed as a cluster vertically or horizontally.

The principles for installation are as per Example 1 above however, where the QRS are touching each other (0mm between seals) the sealant would be applied to the perimeter only.

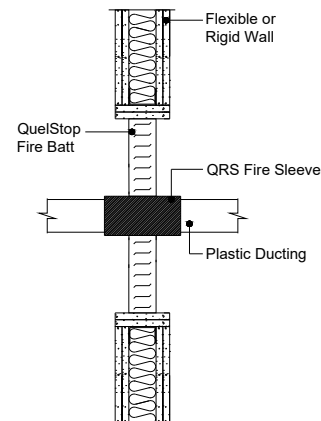
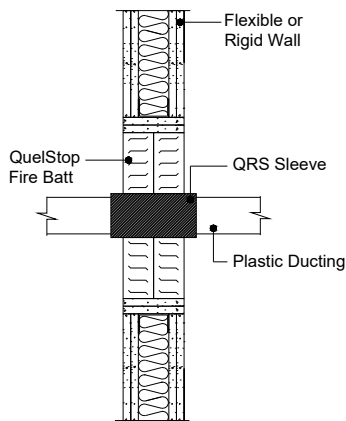
BS EN1366-3:2021 Section 13.7 states that the distance between each seal should be as tested or minimum 100mm so it is important to refer to each detail to determine what space between seals is permitted.

In any case it must be practical to install the system in accordance with the tested scope of application.



## Example Installation 3 – In conjunction with QuelStop Fire Batt

In the case of oversized holes or formed letterboxes, depending on the services, it may be possible to use the QRS Fire Sleeve in conjunction with a single or double layer of QuelStop Fire Batt. In these cases, the QRS should be installed first as described above and then during final positioning and before sealing in place, the QuelStop Fire Batt should be installed in accordance with separate supporting documentation.



## Packaging & Storage:

Quelfire QRS Fire Sleeves are supplied individually to suit specific vent duct sizes and may be packaged in cardboard boxes for shipping purposes and should be stored in a cool, dry location.

## Health & Safety:

QRS CE Marked Fire Sleeves consist of a pressed stainless steel shell containing graphite in a synthetic compound with the addition of filters and process oils.

The steel shells can have sharp edges, always wear gloves when handling.

For further information, please refer to the Material Safety Data Sheets, available on request or via the website.

### Technical Support & Guidance:

Should you require any further information regarding this product, please do not hesitate to contact the technical department at Quelfire Ltd.

Tel: 0161 928 7308. Email: [technical@quelfire.co.uk](mailto:technical@quelfire.co.uk)

Please be aware that this document is intended for general information only and all details should be checked against all relevant supporting test evidence, certification and installation guidelines.

Use of alternative components or deviations from the instructions in any way is likely to mean that the installation will not comply with the assessed rating.

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