

## Fire performance

The four C's provides a process to ensure that the products and systems being designed for the project have evidence of compliance relating to the specific detailing and interfaces.

Clear evidence of performance should be obtained for all products and systems on a project as early as possible in the design stage. Note that products are tested in isolation of the building fabric, intersections, and interfaces. Some systems which are an inherent part of a buildings fabric will have other products, systems and materials that intersect, penetrate and interface them, where this occurs the designer and person responsible for the purchasing should use the four C's process to clarify that they have the right evidence that when these interfaces occur all the products will perform as required within the parameters of the required design.

### What to consider, clarify, check and confirm

**1** **CONSIDER** the implications of where the product or system is being installed, its interface with the structure and other elements, if there are any penetrations even partial penetrations or any intersections.

**2** **CLARIFY** what the impact of another product intersecting, penetrating, or interfacing might be and what test evidence is available/ required. This should be with the system owner and other relevant third party.

**3** **CHECK** what test evidence/ third party certification is required with the design team and authority having jurisdiction.

**4** **CONFIRM** that the test evidence provided is relevant to that situation, in date and addresses the systems interfaces and parameters, and satisfies the requirements of the building regulations, standards and guides and the principal designer.

To show compliance, products and systems are independently tested in UKAS or equivalent test laboratories and facilities to relevant and referenced International (ISO) European (EN) and British Standards (BS) where an independent test report will be produced.

Products may also have third party certification which involves regular retesting factory controls and a scope of application. Where an assessment is required to satisfy the requirements as described in Approved Document B, the Passive Fire Protection Federation (PFPF) Guide to undertaking technical assessments of fire performance of construction products based on fire test evidence describes the method, and competencies of this involved should this be required.