

PATENT PENDING FIRE RESISTANT DUCTWORK SYSTEMS

Fire resistant ductwork plays a crucial role in protecting both the structure and its occupants during a fire. Our IFS-DS fire-resistant ductwork system has been extensively tested to the current European BS EN 1366 test standards. Designed to meet the highest level of safety and performance, providing critical containment and prevent the spread of smoke and flames where required, our system can also aid with controlling smoke movement, allowing for safe evacuation and firefighting efforts.



TESTED & CLASSIFIED TO:



BS EN 1366-1:2014+A1:2020 BS EN 1366-8:2024 BS EN 1366-9:2008 BS EN 13501-3:2005+A1:2009 BS EN 13501-4:2016



Fire Inside – TYPE A Fire Outside – TYPE B Smoke Extract – TYPE C



Horizontal and Vertical







Formal test and Performance Criteria

PRODUCT FEATURE

Ventilation ducts tested in accordance with BS EN 1366–1:2014+A1:2020 for ducts up to 2500mm x 1250mm (DIAP & EXAP)

Smoke Extract ducts tested in accordance with BS EN 1366–8:2014+A1:2020 for ducts up to 1250mm x 1000mm (DIAP)

Smoke Extract ducts tested in accordance with BS EN 1366–9:2008 for ducts up to 1250mm x 1000mm (DIAP)

Smoke Extract ducts tested up to 2000mm x 2000mm

Tested with Components

Horizontal & Vertical Applications

Classified to BS EN 13501-3:2012

Classified to BS EN 13501-4:2016

Certificate of Constancy of Performance (CCoP)

Decoration of Performance (DoP)

COMMENTARY

- Test Standard for Ventilation Ducts Type A (Fire Outside)
 Type B (Fire Inside)
- Test Standard for Multi-compartment Smoke Extract Ducts Type C (Fire Inside - test duct must maintain 90% cross-sectional area during exposure to fire)
- Test Standard for Single Compartment Smoke Extract Ducts Type C (Fire Inside - test duct must maintain 90% cross-sectional area during exposure to fire up to 600°c)
- ✓ In the absence of a formal EXAP (Extended Field of Application) test standard for smoke extract ducts, we have proactively conducted a large-scale test to demonstrate performance beyond conventional limits. A duct measuring 2000mm x 2000mm was tested as far as practicable with the requirements of BS EN 1366-8:2024 fire test standard. The duct maintained 90% free area throughout 120min fire exposure, meeting the stringent performance criteria typically required for multi-compartment smoke extraction systems, offering enhanced confidence in the duct's ability for complex, large-scale smoke control applications.
- Components tested include Attenuators, VCD's, Grilles, Turning Vanes and Access Doors (all components have been tested for 120mins)
- Ducts have been stringently tested in both horizontal and vertical orientations allowing classification.
- Classification document detailing the level of fire resistance performance of Ventilation Ducts
- Classification document detailing the level of fire resistance performance of Smoke Extract Ducts
- Issued by the notified body to certify that all provisions concerning the amassment and verification of performance are in line with BS EN 12101-7
- Drawn up and issued by the manufacturer to place the product on the market under the scope of a harmonised standard. As there is no harmonised standard in place for ventilation ducts, a European Assessment Document (EAD) allows manufactures to obtain an European Technical Assessment (ETA). These documents allow a manufacture to produce a DoP for a product not covered by a harmonised standard, without this a DoP should not be produced.

Third Party Certification

A strong statement of credibility holding both LPCB LPS 1531 Installer Approval for fire resistant ductwork and dampers as well as the Warrington fire FIRAS Certification for ductwork, places Imperial in the top tier of fire protection contractors.



Ready to work together...

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