**FIRE RATED DUCTWORK SPECIFICATION**

1. Fire rated ductwork constructed for ventilation/smoke/stair pressurization and kitchen extract systems to be tested to BS476 Part 24 and ISO6944 for two hours Stability, Integrity and Insulation for both fire outside (Type A test) and fire inside (Type B test).
2. All fire rated ductwork has to be coated with minimum 0.7mm ablative coating of Flamebar BW11 material according to Firespray International specification and construction standards.

To ensure the integrity of the coated ductworks, it is required that the duct work manufacturing including coating application to be performed in same location.

1. Fire resisting smoke outlet/extraction ductwork has to maintain a minimum of 75% cross-sectional area along its whole length when tested for two hours in order to maintain adequate extraction.
2. The fire duct should be manufactured to *Method 3 of BS9999:2017 Part 32.5.2.*
3. The fire duct must be proved to be tested in both orientations, horizontal and vertical.
4. The fire duct support system should be located at a maximum of 1500mm centers, the size of the hangers and bearers has to be upgraded according to construction drawings approved by Firespray International. This, to account for the reduction in tensile strength of steel, due to a two hour fire from 430 Newton/mm2 to 10 Newton/mm2.
5. All gaskets and sealants have to be non-combustible and installed as fire tested and according to Firespray International standards.
6. Dampers should not be used for ductwork passes through or serves an escape route, for extract ductwork serving kitchens and extraction ductwork serving car parks.
7. For the field of direct application, penetration seals to be installed as tested according to the BS 476 Part 24 and as per Firespray International guidelines.
8. In addition to the above, all fire rated ductwork shall be subject to approval by the authority having jurisdiction.
9. It is recommended that the manufacturer is working to a Quality Assurance System based upon the ISO 9000 series.
10. Upon full installation of the fire rated ductwork system the local licensee will issue a Certificate of Conformance after satisfactory inspection of application.