

CASE STUDY: Fire Stopping for Berkshire Schools

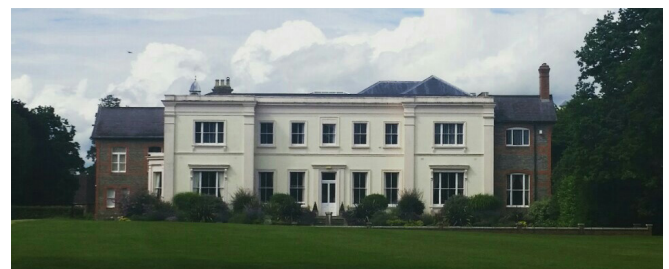
Customer requirements

Our Berkshire School customers range from co-educational independent schools with 500 pupils to larger comprehensive secondary schools with in excess of 1700 pupils.

Our customers require a variety of fire stopping measures in order to meet their specific fire risk assessment obligations. These fire stopping measures are put into place to ensure that building gaps and voids are sealed and are fire resistant.

Basement services

We recently helped an independently funded senior school for boys and girls who needed passive fire stopping measures for a dumb waiter shaft that was being used to run data cables and other services.



The redundant shaft was inspected by our Passive Fire Protection Manager who proposed a number of solutions to cover all the issues raised.

The original dumb waiter doors were replaced with FD30 fire doors which included grade 13, fire rated hinges and all round intumescent fire and smoke seals. The lower area below the doors was boarded over with fire rated plasterboard and sealed using intumescent sealant, providing up to 30 minutes of fire protection.

Within the shaft all holes and unsealed service exits were sealed using fire rated foam and intumescent sealant. One area within the shaft, a regular route for a number of data cables passing through was sealed using a fire stop cable collar, this also allows for additional cables to be easily added at a later date.



In the basement/server room to the bottom of the dumb waiter shaft there was a large opening with a number of pipes and cables passing through which needed to be sealed.

Due to the shape and the number of items passing through this area it was decided that "50mm coated Fire Batt" would be the best solution, offering very good fire protection, up to 4hrs. The Fire Batt was then sealed with intumescent sealant to all edges and around the pipes and cables.

Safe evacuation route

For another local school, we needed to make good a void above a suspended ceiling which was at the bottom of a lobby stairwell.

Being part of an evacuation route we needed to create a compartment using fire and smoke resistant materials.

Our fire stopping installation used studded partitioning with fire resistant plasterboard (30 minute resistance) with an intumescent sealant and coated fire batt where possible.



Boiler room services

For a local Independent boarding and day school for girls we needed to install fire stopping measures within a boiler room and cellar space.

Holes and gaps around services were filled using suitable fire resistant materials such as ablative fire batt, intumescent sealant, intumescent collars and intuwraps.

A partition / fire break was also installed using stud work and boarding to one side with fire resistant plasterboard, in between the support pillars from floor to ceiling.

Result

RES are able to work closely with their customers, offering a number of suitable and affordable passive fire protection solutions to meet each specific customer requirement.



RES are FIRAS certified for Penetration Sealing.

FIRAS is the mark of endorsement of competency in the installation of products and systems, vital for achieving the protection required.