

METHOD STATEMENT

PROMINA®60 TWO HOURS FIRE RATED CLADDING DUCT SYSTEMS TO SMOKE, VENTILATION AND KITCHEN EXHAUST DUCTS


- 1.0 Preliminaries
 - 1.1 Shop drawings submission and approval
 - 1.2 Determine the location of steel ducts to be cladded
 - 1.3 Measure and determine the dimensions of these ducts
 - 1.4 Check hanger rod size and interval is within the permissible tensile stress of unprotected hangers correspond to the related fire rating

- 2.0 Install steel channel collars
 - 2.1 Ensure the spacing between steel channel collars framing transversely and longitudinally is within 1.5sqm of unsupported boards area
 - 2.2 Cut the steel channel framing to desire length to fit the body of the steel duct
 - 2.3 The cavity within the steel channel collar shall be filled with rock wool insulation
 - 2.4 Place the steel channel in position and fold it all round the duct body to form a complete loop.
 - 2.5 Fasten the section of the steel channel together with self-tapping screws.
 - 2.6 Repeat similarly for subsequent steel channel collars at suitable interval along the body of the steel duct

- 3.0 Install steel corner angles
 - 3.1 From one side of the steel duct, place the light gauge steel angle perpendicular to the preconstructed steel channel collars
 - 3.2 Adjust and connect the corner angle to the preconstructed steel channel collar with self-tapping screws
 - 3.3 Repeat steps 3.1 to 3.2 to connect the rest of the corner angles to steel channel collars.

- 4.0 Install mineral rockwool infill within enclosure
 - 4.1 From one side of the steel duct, begin by placing the rock wool slab of suitable thickness and density within the space between the preconstructed steel channel collars and corner angles along the body of the steel duct.
 - 4.2 Where necessary add additional steel angle bracket to hold the rock wool slab in place. Trim away any excess rock wool insulation
 - 4.3 Repeat steps 4.1 to 4.3 for the other sides of the steel duct.

- 5.0 Install PROMINA®60 boards
 - 5.1 Measure and cut the boards to the required dimensions
 - 5.2 From bottom of the duct, place the boards to conceal the preinstalled rock wool slabs and position it between the preinstall steel channel collars and corner angles.
 - 5.3 Ensure that the edge of the board is at the centre of the steel channel collars

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- 5.4 Adjust the position boards until satisfactory and fix the board onto the steel framing with M4 self-tapping/drilling counter sunk screws at 200mm centres.
 - 5.5 Repeat steps 5.1 to 5.3 for subsequent boards until the entire steel duct is cladded with boards

6.0 Treatment at Boards Butt-joints

- 6.1 The boards' butt-joints can be simply treated with either PROMASEAL® acrylic fire sealant or PROMINA®60 cover strip
- 6.2 For PROMASEAL® acrylic sealant, simply apply the sealant bead to fill the gap between the board butt-joints
- 6.3 Alternatively, simply place PROMINA®60 100mm x 9mm thick cover strip over the boards butt-joints and fix the cover strip into place with M4 self-drilling/tapping counter sunk screw at 300mm intervals
- 6.4 Repeat similarly for all subsequent boards' joints until completion

7.0 Penetration Through the Fire Resistant Duct Enclosure

- 7.1 When unavoidable, building services penetrating the fire rated enclosure shall be duly sealed with appropriate PROMASEAL®/PROMASTOP® fire stopping material to ensure the fire integrity of the enclosure is not compromise
- 7.2 Penetration by non-combustible services with gap up 10mm shall be sealed with PROMASEAL® acrylic fire sealant
- 7.3 Penetration by combustible plastic pipe shall be duly coupled with PROMASTOP® Unicollars