

TWO AND FOUR HOURS FIRE RATED PROMATECT®H CLADDING SYSTEM TO SMOKE, VENTILATION AND KITCHEN EXHAUST DUCTS

- 1.0 Preliminaries
 - 1.1 Shop drawings submission and approval.
 - 1.2 Determine the HVAC steel ducts that require fire protection
 - 1.3 Measure and determine the dimensions of these ducts
 - 1.4 Check hanger rod size and interval is within the permissible tensile stress for unprotected hangers correspond to the fire rating

- 2.0 Install steel channel collars
 - 2.1 Select suitable size of steel channel collar correspond to the require fire rating
 - 2.2 Determine the interval between steel channel collars framing transversely and longitudinally is within 1.5sqm of unsupported boards area
 - 2.3 Cut the steel channel framing to desire length to fit the steel duct.
 - 2.4 Place the steel channel into position, fold it all round the duct body to form a complete loop and fasten it together with screws.
 - 2.5 Repeat similarly for subsequent steel channel collars at appropriate interval along the steel duct

- 3.0 Install steel corner angles
 - 3.1 From one end/corner, place the light gauge steel angle perpendicular to the channel collars
 - 3.2 Adjust and connect the corner angles to the preconstructed steel channel collar with screw
 - 3.3 Repeat similarly for other corners of the steel duct.

- 4.0 Install mineral rockwool infill within enclosure
 - 4.1 Place the mineral rock wool slab of appropriate thickness and density correspond to the fire rating along the body of the steel duct.
 - 4.2 Trim away any excess rock wool insulation
 - 4.3 When more than one layer of rock wool slabs, ensure the insulation slabs are placed in stagger manner such that their joints never coincide
 - 4.4 Ensure the cavity within the steel channel collar is filled with rock wool

- 5.0 Install PROMATECT® facing boards
 - 5.1 Cut the boards to the required measurements.
 - 5.2 Place boards over the steel framing and rock wool insulation

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- 5.3 Adjust the boards until satisfactory and fix the board to the steel framing with M4 self-tapping/drilling counter sunk screws at 200mm centres.
- 5.4 Repeat similarly for subsequent boards until the whole steel duct is enclosed with boards

- 6.0 Install PROMATECT® H cover strips/PROMASEAL®AN sealant at butt-joints
 - 6.1 Cut the boards to the required measurements
 - 6.2 Place PROMATECT® H 100mm x 9mm thick cover strip over the facing boards butt-joints
 - 6.3 Fix the cover strip into place with M4 self-drilling/tapping counter sunk screw at 300mm intervals
 - 6.4 Alternatively, simply apply PROMASEAL® acrylic sealant to fill the gap between the facing boards
 - 6.5 Repeat similarly for all subsequent facing boards' joints until completion

- 7.0 Penetration Through the Fire Resistance Duct Enclosure
 - 7.1 When unavoidable, building services penetrating the fire rated enclosure shall be duly sealed with appropriate PROMASEAL®/PROMASTOP® fire seal system 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 sealant or other suitable PROMASEAL®/PROMASTOP® fire seal systems
 - 7.3 Penetration by combustible plastic pipe shall be duly coupled with PROMASTOP® Unicollars

- 8.0 Application of architectural finishes
 - 8.1 Apply necessary finishes over the joints accordingly