Ventilation, kitchen extract (with internal steel liner) and smoke exhaust ducting systems have been tested in accordance with BS 476: Part 24 and AS 1530: Part 4.

PROMATECT®-S single layer ducts, without mineral wool, have been tested to provide up to 360 minutes stability and integrity.

For insulation up to 240 minutes, mineral wool is applied within the construction. Both single and double layer systems have been tested and approved for the construction of high pressure duct systems in accordance with DW 144 Class C.

Single-skin PROMATECT®-S ducts of 9.5mm thickness have also been shown to be unaffected by the synthetic high voltage discharge explosion test developed by Building Research Establishment (UK).

**Installation Method 1**

Stability and integrity only.

**Detail**

Corner angles can be fixed externally or internally.

**TECHNICAL DATA**

Up to 4 hours fire rating, stability, integrity and 3 hours insulation in accordance with the criteria of BS 476: Part 24 and AS 1530: Part 4.

1. PROMATECT®-S boards, thickness in accordance with table on the webpage

2. Steel flanges, fabricated by cutting and welding 50mm x 50mm x 3mm thick angles, the flanges are bolted together with M10 nuts and bolts at nominal 200mm centres to form continuous sections

3. Corner steel angle reinforcement, 50mm x 50mm x 3mm thick, these corner angles do not require any mechanical fixing to the flanges

4. Support channels, sized according to duct weight and size

5. Steel hanger rods, sized according to duct weight and size
Ventilation, kitchen extract (with internal steel liner) and smoke exhaust ducting systems have been tested in accordance with BS 476: Part 24 and AS 1530: Part 4.

PROMATECT®-S single layer ducts, without mineral wool, have been tested to provide up to 360 minutes stability and integrity.

For insulation up to 240 minutes, mineral wool is applied within the construction. Both single and double layer systems have been tested and approved for the construction of high pressure duct systems in accordance with DW 144 Class C.

Single-skin PROMATECT®-S ducts of 9.5mm thickness have also been shown to be unaffected by the synthetic high voltage discharge explosion test developed by Building Research Establishment (UK).

**TECHNICAL DATA**

Up to 4 hours fire rating, stability, integrity and 3 hours insulation in accordance with the criteria of BS 476: Part 24 and AS 1530: Part 4.

1. PROMATECT®-S boards, thickness in accordance with table on the webpage
2. Steel flanges, fabricated by cutting and welding 50mm x 50mm x 3mm thick angles, the flanges are bolted together with M10 nuts and bolts at nominal 200mm centres to form continuous sections
3. Corner steel angle reinforcement, 50mm x 50mm x 3mm thick, these corner angles do not require any mechanical fixing to the flanges
4. Support channels, sized according to duct weight and size
5. Steel hanger rods, sized according to duct weight and size
6. Mineral wool, requirement in accordance with table on the webpage
Insulated self supporting ducts can be constructed from PROMATECT®-S boards, in order to provide stability, integrity and insulation in terms of the criteria of BS 476: Part 24 and AS 1530: Part 4. Although the details below depict constructions constructed using double-skin systems with a mineral wool infill which offer up to 240 minutes insulation, Promat also have systems offering up to 180 minutes insulation where it is possible to construct the ducts from a single layer of PROMATECT®-S board and lag the exterior face with appropriate mineral wool, thus saving time and reducing costs.

The same simple, cost effective joint details utilised in the construction of the self-supporting duct systems can also be applied to the over cladding of standard galvanised steel ducts to provide up to 240 minutes stability and integrity and up to 240 minutes stability, integrity and insulation.

The PROMATECT®-S systems offer an extremely robust and durable duct combined with exceptional strength.

**Technical Data**

- Up to 4 hours fire rating, stability, integrity and 3 hours insulation in accordance with the criteria of BS 476: Part 24 and AS 1530: Part 4.

1. PROMATECT®-S boards, thickness in accordance with table on the webpage
2. Steel flanges, fabricated by cutting and welding 50mm x 50mm x 3mm thick angles, the flanges are bolted together with M10 nuts and bolts at nominal 200mm centres to form continuous sections
   
   Alternatively, systems have been tested which utilise standard steel duct flange systems, for further information pertaining to the construction of such systems, please consult Promat Technical Department
3. Corner steel angle reinforcement, 50mm x 50mm x 3mm thick, these corner angles do not require any mechanical fixing to the flanges
4. Steel channel support for board joints
5. Mild steel flat bar 100mm x 3mm thick
6. Support channels, sized according to duct weight and size
7. Steel hanger rods, sized according to duct weight and size