

INTRODUCTION

The Promat SUPALUX® Shaft Wall System is applicable for use in areas where fire integrity and insulation performance is required, but where access for construction is only possible from one side, e.g. in lift shafts and service risers.

The system is designed for wall heights up to 6.4m to provide up to 120 minutes fire separation.

In shafts where insulated flues are incorporated, elevated shaft temperatures may occur.

Promat SUPALUX® may be used for temperatures up to 80°C. In some instances temperatures in excess of this may be encountered, and in these circumstances Promat MONOLUX® facings may be used on the shaft side face of the shaft.

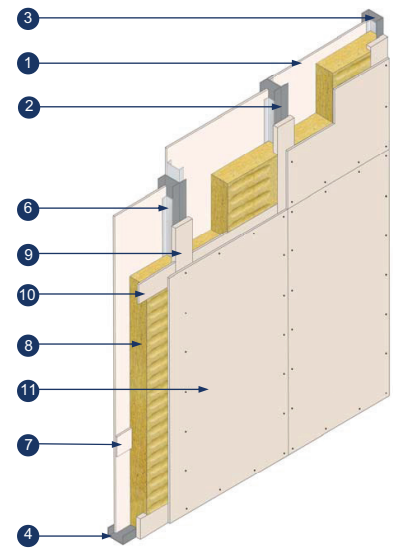
The attached detail provides a construction that is capable of withstanding higher continuous exposed face temperatures up to 120°C - whilst still providing 120min fire separation.

For instances where continuous temperatures of over 95°C are anticipated on the shaft side face of the construction, if it is required to fit plasterboard around the enclosure, then boards should be spaced off on standard framing to ensure that any transferred heat does not have deleterious effect on plasterboard facing.

NOTE: The temperature of the exposed metal (inside the shaft) may exceed the requirements of BS 476: Part 22: 1987 within the fire test period when exposed to fire from the outside, and therefore relaxation should be sought from the authority on the basis that no combustible materials should exist adjacent to the structure within the shaft.

CONSTRUCTION

1. Promat MONOLUX® boards, 16mm thick. Boards tightly fitted between studs and held in place with steel securing channels. Horizontal board joints backed by Promat MONOLUX® cover strip, 16mm thick.
2. Steel channels, 85mm x 40mm x 1.2mm fixed back to back at maximum 300mm centres with M5 self-tapping screws to form "I" section and located at maximum 610mm centres.
3. Steel channels, 85mm x 40mm x 1.2mm fixed at edge of shaft wall partition at maximum 600mm centres with M6 steel anchor bolt.
4. Steel channels, 88mm x 40mm x 1.2mm bottom track fixed at maximum 600mm centres with M6 steel anchor bolt. All perimeter channels to be bedded with Promat PROMASEAL® Intumescent Sealant, or bedded on rock wool.
5. Steel channels, 88mm x 70mm x 1.2mm head track fixed at maximum 600mm centres with M6 steel anchor bolt. All perimeter channels to be bedded with Promat PROMASEAL® Intumescent Sealant or bedded on rock wool (omitted from drawing).
6. Securing channel to be continuous steel channel 65mm x 25mm x 0.7mm fixed to steel web with M5 steel self-tapping screws at 300mm centres.
7. Promat MONOLUX® cover strip, 16mm thick x 100mm wide at all horizontal board joints, fastened using M4 x 30mm self-tapping screws at nominal 200mm centres on both sides of joint.
8. Rock wool, minimum 75mm thick x 100kg/m³
9. Promat SUPALUX® fillet, 25mm thick x 100mm wide fixed to steel channels with self-tapping or self-drilling screws.



10. Promat SUPALUX® cover strip, 9mm thick x 100mm wide at all horizontal board joints, fastened using M4 x 25mm self-tapping screws at nominal 200mm centres on both sides of joint
11. Promat SUPALUX® 9mm thick board fixed to stud and perimeter channels through the fillets using M4 x 45mm self-tapping screws at 200mm nominal centres.

SUPPORTING STEEL - COMPARTMENTATION

Where partitions are erected against a steel structure, it is a requirement that the steel is fire protected and that the fire protection boarding product also maintains compartmentation. Where this is required, Promat VERMICULUX® should be used.

NOTE: The thickness of Promat VERMICULUX® will differ from standard A/V limiting temperature tables. Please contact Etex Building Performance technical team for further information.

ACOUSTICS

The Promat MONOLUX® Shaft Wall system will achieve Rw 44-45 dB.

SYSTEM WEIGHT

The installed system weight is nominal 40kg/m²

AUTHORITY: EXOVA WARRINGTON FIRE ASSESSMENT REPORT: WF 197544

