



<b>Fire resistance:</b>	240 minutes integrity - 120 minutes insulation. (Fire attack from either face) (formally referred to as the STI 240/120 System)
<b>Channel (minimum):</b>	80mm x 60mm x 3mm (for heights up to 6m)
<b>Overall width:</b>	118mm
<b>Weight (kg/m<sup>2</sup>, nominal):</b>	62 kg/m <sup>2</sup>
<b>Estimated sound reduction:</b>	47 dB

Perimeter channels fastened to surrounding construction with M10 or M12 all-steel expanding anchors (or equivalent for alternative types of supporting construction) at 500mm maximum centres.

The vertical channels are set at a maximum 1200mm centres. Horizontal and vertical channel members either welded together or joined with steel angle cleats, minimum 60mm x 60mm x 3mm thick x 60mm long, fastened to each channel member with two M10 steel bolts and nuts.

9.5mm Durasteel® fillet strips fixed on both sides of channel, number of fillet strips according to requirements in Table below. Fillet strips to overlap channel by minimum of 20mm on both sides.

9.5mm Durasteel® sheets fixed through the fillet on both sides of channel, with M5.5 steel self drill and tap Tek screws at 250mm nominal centres. Fixings a minimum of 12mm and maximum 20mm from board edge and a minimum 50mm and maximum 100mm from corners (ie 2 fixings per corner) in accordance with Promat UK Durasteel corner fixing statement.

The length of fixing to be sufficient to ensure appropriate penetration of screw thread, in accordance with manufacturer's recommendations.

Vertical board joints coincide with studs, horizontal board joints are backed by steel channel the same size as the vertical studs.

Rock wool infill, according to the table below, is fitted into the channels. The layers are staggered by a minimum of 150mm.

If the rock wool does not fill the cavity, it must be fastened into position with 2.5mm-diameter steel stud-welded pins and 38mm-diameter spring steel washers. The pins are positioned in a grid 400mm x 400mm maximum.

Expansion allowance will be required for barriers above 4 metres high. Please contact Promat UK Customer Relations Team for further information.

### Steel channel sizes for barrier heights up to 15 metres

Height of Barrier (m)	Channel Size (mm x mm x mm)	Durasteel fillets per face	Rock wool infill	Estimated Sound insulation Rw (dB)
0-6	80 x 60 x 3	1	2 x 40mm x 140 kg/m <sup>3</sup>	47
6-9	150 x 60 x 3	None	3 x 50mm x 80 kg/m <sup>3</sup>	51
9-12	Two 150 x 60 x 3 back to back	None	3 x 50mm x 80 kg/m <sup>3</sup>	51
12-15	Two 200 x 60 x 3 back to back	None	4 x 50mm x 60 kg/m <sup>3</sup>	53

Back to back channels fastened together with M10 steel bolts and nuts at 500mm maximum centres. The vertical joints in the Durasteel® should be offset by 30mm from the centreline of the back-to-back studs, to avoid a straight through path for hot gases.

Horizontal channels are single channels.

**AUTHORITY:** Certifire Certificate of Approval No CF429, Rolton Fire 02-0605, AIRO L3082/L2

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