Applications
The SL-1 hatch is designed to stop the advance of blast waves into protected area of Civil Defence and military shelters through the emergency exit passage ways. The SL-1 hatch is possible to open and close manually from both sides. The latching devices tightens the hatch plate against the frame so that the maximum clearance between the load bearing surfaces of the hatch plate and the frame is 2.0 mm.

In designing phase, burglar resistance has been taken in special consideration.

Specification
Manufacturer of SL-1 hatch is Temet, Helsinki Finland.

The SL-1 hatch is fabricated from structural steel with a solid homogenous door plate. The hatch frame is designed for easy installations in the reinforced concrete wall, and the hatch plate / frame assembly has an optimized pattern for transfer of the blast forces into surrounding wall.

Design Criteria
The SL-1 hatch is made in accordance with specific provisions issued by the Finnish Ministry of Interior. The SL-1 hatch is approved for use on the basis of structural calculations approved by the Technical Research Centre of Finland / VTT Building Technology, an Independent Testing Authority mandated to perform type inspection for shelter equipment and systems by the Finnish Ministry of Interior.

SL-1 Hatch Protection Capability
The SL-1 hatch is designed and tested to withstand multiple long duration blast loads having peak reflected overpressure of 2.0 bar (200 kPa) in the elastic range of the materials used. The hatch frame design enables uniform distribution of the positive blast load into the surrounding wall. Rebound load is received by latch and hinge systems.

The SL-1 hatch also resists a mechanical shock transmitting through the installation wall with a rapid change in velocity of 1.5 m/s corresponding to acceleration force of 30 g.

The hatch is designed to function within the operating temperature range of -30 … +80 ºC.
TEMET BLAST HATCH SL-1

Hatch hinges
Hinges are provided with maintenance free slide bearings.

Hatch gas tightness
Temet SL-1 hatch can be provided with a gasket for tightness against entry of gases in such a way that the allowable leakage through the hatch is not more than 0.2 dm³/s (0.72 m³/h) for each square metre of the opening when the external overpressure is 150Pa.

Surface treatment
Temet SL-1 hatch is normally surface treated with durable shop primer resisting corrosion during transportation and storage.

Other documents related to SL-1 blast hatch:
• Installation Instructions
• Operation & Maintenance Instructions

Contact the manufacturer for availability of different hatch sizes. All the information contained in this brochure agrees with the information available at the time of its printing and only serves as advance information.