

Applications

The SO-1 blast doors are designed to stop the advance of blast waves through the passageways into the protected area of blast hardened Civil Defense and military shelters. The SO-1 blast doors are possible to open and close manually from both sides. The latching device tightens the door plate against the frame so that the maximum clearance between the load bearing surfaces of the door plate and the frame is 2.0 mm.

Specification

Manufacturer of SO-1 Blast Door is Temet, Finland, the brand of Väistö Group.

The SO-1 blast doors are fabricated from structural steel with a door plate of solid homogenous steel plate. Minimum thickness of a door plate is 20 mm. The door frame is of flush design for easy installation in the reinforced concrete wall, and the door plate / frame assembly has an optimized pattern for transfer of the blast forces into the surrounding wall.

Design Criteria

The SO-1 blast door is made in accordance with specific provisions issued by the Finnish Ministry of Interior. The SO-1 blast doors are approved for use on the basis of structural calculations approved by Eurofins Expert Services, an Independent Testing Authority mandated to perform type inspection for shelter equipment and systems by the Finnish Ministry of Interior.

SO-1 Door Protection Capability

The SO-1 doors are designed 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 door frame design enables uniform distribution of the positive blast load into the surrounding wall. Rebound load is received by latching system and hinges. SO-1 Blast door is also available with a 3.0 bar peak reflected overpressure version. This is mentioned in the product name e.g. SO-1 900x2000 3 bar.

The SO-1 doors also resist 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 doors are designed to function within the operating temperature range of -30 ... +80 °C.

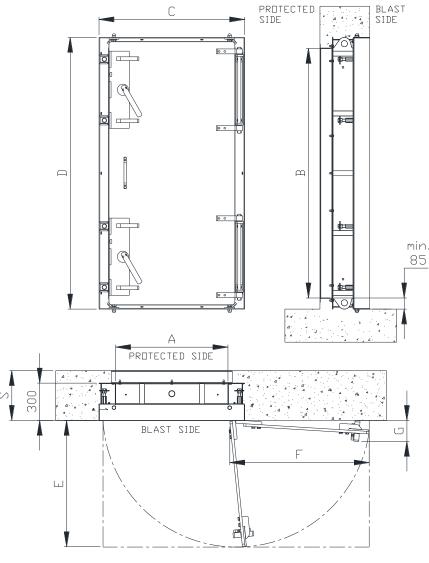


Temet SO-1 Single Leaf Blast Door





Standard SO-1 Blast Resistant Door



Door hinges

Hinges are provided with maintenance free slide bearings.

SO-1 Blast Door gas tightness

Temet SO-1 blast doors are provided with a gasket for tightness against entry of gases in such a way that the allowable leakage through the door is not more than 0.2 dm³/s (0,72 m³/h) for each square meter of the opening when the external overpressure is 150 Pa.

Surface treatment

Temet SO-1 doors are painted with durable shop primer resisting corrosion during transportation and storage. Top coating is added by min. customer after concrete casting.

Installation

Standard wall thickness is 300 mm. For wall thicknesses of 350, 400, 450, 500 mm the door will be delivered with a factory assembled extension frame that has to be bolted to the door on site. For wall thickness over 500 mm an L-profile extension frame that must be welded on the door on site is used. See IOM for installation instructions for both types.

Door opens outwards from the protected side (see drawing on the left). Door handedness can be changed before (recommended) or after concrete casting.

Other documents related to SO-1 blast door:

Installation, Operation & Maintenance Instructions

Standard SO-1 Door sizes available

Single wing door sizes with main dimensions:

А	В	С	D	Е	F	G	Min. S	Weight (kg), S=300			
900	2000	1170	2180	1020	1120	180	300	520			
1200	2000	1470	2180	1320	1420	180	300	750			
1500	2000	1770	2180	1620	1720	180	300	1020			

Contact the manufacturer for the availability of special door 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.

Applications

The SO-1 double leaf blast doors are designed to stop the advance of blast waves through the passageways into the protected area of blast hardened Civil Defense and military shelters. The SO-1 blast doors are possible to open and close manually from both sides. The latching device tightens the door plate against the frame so that the maximum clearance between the load bearing surfaces of the door plate and the frame is 2.0 mm. Design of the door enables opening by disassembly even if the door plate has undergone permanent deformations. The door plate can be dismounted from either side without any special emergency opening devices.

Specification

Manufacturer of SO-1 double leaf blast doors is Temet, the brand of Väistö Group.

The SO-1 double leaf blast doors are fabricated from structural steel with a door plate of solid homogenous steel plate stiffened by a structural steel center beam. Minimum thickness of a door plate is 20mm. The door frame is designed for easy installation into the reinforced concrete wall, and the door plate / frame assembly has an optimized pattern for transfer of the blast forces into the surrounding wall.

Design Criteria

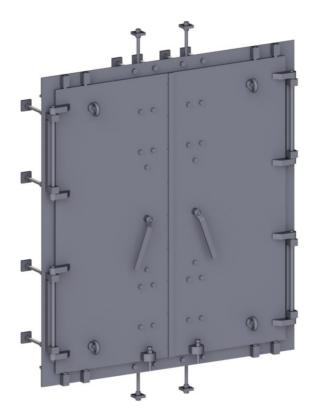
The SO-1 blast door is made in accordance with specific provisions issued by the Finnish Ministry of Interior. The SO-1 blast doors are approved for use on the basis of structural calculations approved by the Technical Research Centre of Finland / VTT Building Technology, an Independent Testing Authority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

SO-1 Door Protection Capability

The SO-1 doors are 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 door frame design enables uniform distribution of the positive blast load into the surrounding wall. Rebound load is received by latching system and hinges. SO-1 Blast door is also available with a 3.0 bar peak reflected overpressure version. This is mentioned in the product name e.g. SO-1 DL 2000x2200 3 bar.

The SO-1 doors also resist 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 doors are designed to function within the operating temperature range of -30 ... +70 °C.

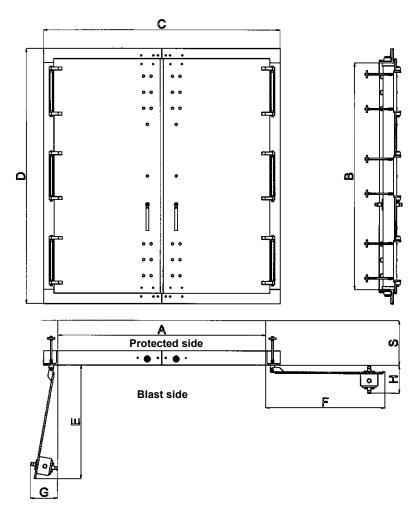


Temet SO-1 Double Leaf Blast Door





Standard SO-1 Double Leaf Blast Resistant Door



Door hinges

Hinges are provided with maintenance free slide bearings.

SO-1 Blast Door gas tightness

Temet SO-1 blast doors are provided with a gasket for tightness against entry of gases in such a way that the allowable leakage through the door is not more than 0.2 dm³/s (0,72 m³/h) for each square meter of the opening when the external overpressure is 150Pa.

Surface treatment

Temet SO-1 doors are surface treated with durable shop primer resisting corrosion during transportation and storage.

Installation

The door is delivered in two parts that must be bolted together on site.

Also, the L-profile extension frame must be welded on the door on site. See IOM for installation instructions for both types.

Door opens outwards from the protected side.

Other documents related to

SO-1 double leaf blast door:

- · Installation Instructions
- Operation & Maintenance Instructions

Examples of SO-1 DL Door sizes

Double leaf door sizes with main dimensions in mm:

А	В	С	D	E	F	G	Н	Min. S	Weight (kg)
1800	2000	2100	2300	1100	1200	400	400	400	1770
2400	2800	2700	3100	1400	1500	400	400	400	2670
2800	2400	3100	2700	1600	1700	400	400	400	2800
3000	2200	3300	2500	1700	1800	450	450	500	2750
3300	2400	3600	2700	1850	1950	450	450	500	3500

Contact the manufacturer for the availability of different door sizes. Sizes shown in a table are just examples of our wide selection.

All the information contained in this brochure agrees with the information available at the time of its printing and only serves as advance information. Final dimensions can differ from the table above.

Applications

The SO-3 blast doors are designed to stop the advance of blast waves through the passage ways into the protected area of blast hardened Civil Defence and military shelters. The SO-3 blast doors are possible to open and close manually from both sides. The latching device tightens the door plate against the frame so that the maximum clearance between the load bearing surfaces of the door plate and the frame is 2.0 mm. Design of the doors enables opening by disassembly even if the door plate has undergone permanent deformations. The door plate can be dismounted from either side without any special emergency opening devices.

Specification

Manufacturer of SO-3 blast doors is Temet, Helsinki Finland.

The SO-3 doors are fabricated from structural steel with a door plate of solid homogenous steel plate. The door frame is of flush design for easy installations in the reinforced concrete wall, and the door plate / frame assembly has an optimized pattern for transfer of the blast forces into surrounding wall.

Design Criteria

The SO-3 blast doors are made in accordance with specific provisions issued by the Finnish Ministry of Interior. The SO-3 blast doors are 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.

SO-3 Door Protection Capability

The SO-3 doors are designed to withstand multiple long duration blast loads having peak reflected overpressure of 8.0 bar (800 kPa) within the elastic range of the materials used. The door frame design enables uniform distribution of the positive blast load into the surrounding wall. Rebound load is received by the latching system.

The SO-3 doors also resist 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 SO-3 doors are designed to function within the operating temperature range of -30 ... +80 °C.

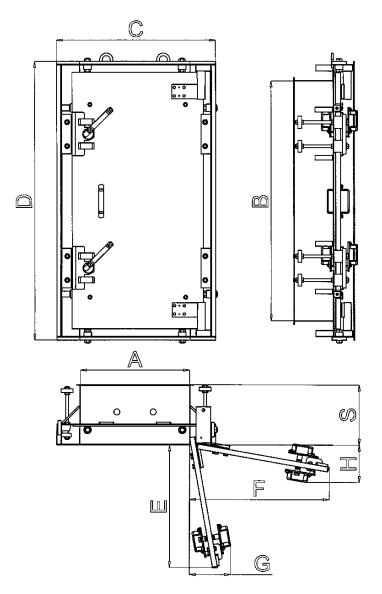


Temet SO-3 Blast Door



V00014-B www.temet.com

Standard SO-3 Blast Resistant Door



Door hinges

Hinges are provided with maintenance free slide bearings or optionally with roller bearings.

SO-3 Blast Door gas tightness

Temet SO-3 blast doors are provided with a gasket for tightness against entry of gases in such a way that the allowable leakage through the door 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 SO-3 doors are surface treated with durable shop primer resisting corrosion during transportation and storage.

Other documents related to SO-3 blast door:

- Installation Instructions
- Operation & Maintenance Instructions

Examples of SO-3 Door sizes available

Single wing door sizes with main dimensions in mm:

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А	В	С	D	Е	F	G	Н	Min. S	Weight (kg)					
900	2000	1315	2330	1100	1200	300	400	450	1200					
1200	2000	1615	2330	1400	1500	300	400	450	1400					
1500	2000	1915	2330	1700	1800	300	400	450	1950					
2000	2200	2415	2530	2200	2300	300	400	450	2600					
2200	2700	2600	3100	2400	2500	300	400	450	4700					

Contact the manufacturer for the availability of different door sizes. Sizes shown in a table are just examples of our wide selection.

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Applications

The SO-3 double leaf blast doors are designed to stop the advance of blast waves through the passage ways into the protected area of blast hardened Civil Defence and military shelters. The SO-3 blast doors are possible to open and close manually from both sides. The latching device tightens the door plate against the frame so that the maximum clearance between the load bearing surfaces of the door plate and the frame is 2.0 mm. Design of the doors enables opening by disassembly even if the door plate has undergone permanent deformations. The door plate can be dismounted from either side without any special emergency opening devices.

Specification

Manufacturer of SO-3 blast doors is Temet, Helsinki Finland.

The SO-3 double leaf blast doors are fabricated from structural steel with a door plate of solid homogenous steel plate stiffened by a structural steel center beam. Minimum thickness of a door plate is 20mm. The door frame is designed for easy installations in the reinforced concrete wall, and the door plate / frame assembly has an optimized pattern for transfer of the blast forces into surrounding wall.

Design Criteria

The SO-3 blast doors are made in accordance with specific provisions issued by the Finnish Ministry of Interior. The SO-3 blast doors are 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.

SO-3 Door Protection Capability

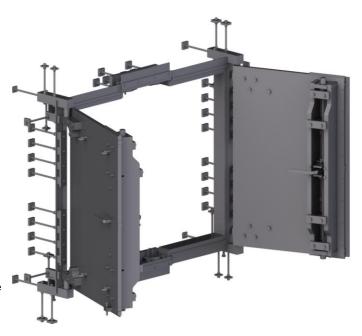
The SO-3 doors are designed to withstand multiple long duration blast loads having peak reflected overpressure of 8.0 bar within the elastic range of the materials used. The door frame design enables uniform distribution of the positive blast load into the surrounding wall. Rebound load is received by the latching system.

The SO-3 doors also resist 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.

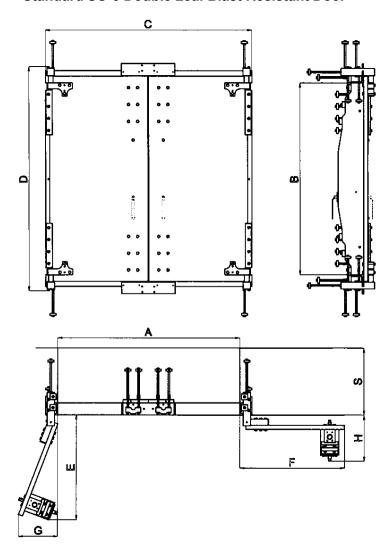
The SO-3 doors are designed to function within the operating temperature range of -30 ... +80 °C.



Temet SO-3 Double Leaf Blast Door



Standard SO-3 Double Leaf Blast Resistant Door



Door hinges

Hinges are provided with maintenance free slide bearings or optionally with roller bearings.

SO-3 Blast Door gas tightness

Temet SO-3 blast doors are provided with a gasket for tightness against entry of gases in such a way that the allowable leakage through the door 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 SO-3 doors are surface treated with durable shop primer resisting corrosion during transportation and storage. The door can be also surface treated according to the customer's specification.

Other documents related to SO-3 double leaf blast door:

- · Installation Instructions
- · Operation & Maintenance Instructions

Examples of SO-3 Door sizes available

Double leaf door sizes with main dimensions in mm:

А	В	С	D	E	F	G	Н	Min. S	Weight (kg)
2400	3000	2900	3500	1500	1600	750	750	500	8 800
2600	3000	3100	3500	1600	1700	750	750	500	9 600
2800	3000	3300	3500	1700	1800	750	750	500	10 300
3000	3000	3500	3500	1800	1900	750	750	500	11 000
3200	3000	3700	3500	1900	2000	850	850	500	12 000

Contact the manufacturer for the availability of different door sizes. Sizes shown in a table are just examples of our wide selection.

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TEMET

TEMET BLAST DOOR SO-6

Applications

The SO-6 blast doors are designed to stop the advance of blast waves through the passage ways into the protected area of blast hardened Civil Defence and military shelters. The SO-6 blast doors are possible to open and close manually from both sides. The latching device tightens the door plate against the frame so that the maximum clearance between the load bearing surfaces of the door plate and the frame is 2.0 mm. Design of the doors enables opening by disassembly even if the door plate has undergone permanent deformations. The door plate can be dismounted from either side without any special emergency opening devices.

Specification

Manufacturer of SO-6 blast doors is Temet, Helsinki Finland.

The SO-6 doors are fabricated from structural steel with a door plate of solid homogenous steel plate. The door frame is of flush design for easy installations in the reinforced concrete wall, and the door plate / frame assembly has an optimized pattern for transfer of the blast forces into surrounding wall.

Design Criteria

The SO-6 blast doors are made in accordance with specific provisions issued by the Finnish Ministry of Interior. The SO-6 blast doors are 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.

SO-6 Door Protection Capability

The SO-6 doors provide the highest level of protection against blast effects. Their resistance against multiple long duration blast load ranges from 9.0 bar (900 kPa) up to 18 bar (1800 kPa) peak reflected overpressure. The SO-6 doors are designed to function within the elastic range of the materials used. The door frame design enables uniform distribution of the positive blast load into the surrounding wall. Rebound load is received by the latching system.

The SO-6 doors also resist 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.

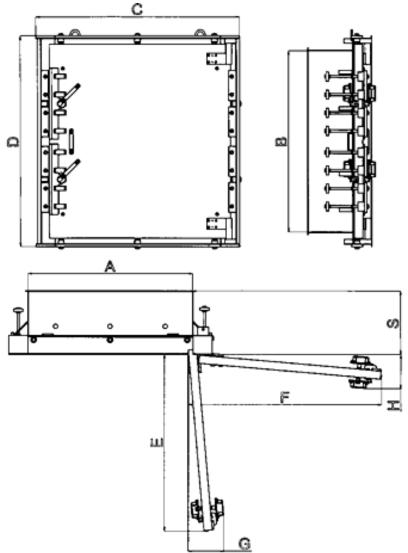
The SO-6 doors are designed to function within the operating temperature range of -30 ... +80 °C.



Temet SO-6 Blast Door



Standard SO-6 Blast Resistant Door



Door hinges

Hinges are provided with maintenance free slide bearings or optionally with roller bearings.

Surface treatment

Temet SO-6 doors are surface treated with durable shop primer resisting corrosion during transportation and storage.

Optional accessories for SO-6 Doors

Accessories such as position indicator switches are available.

Other documents related to SO-6 blast door:

- · Installation Instructions
- Operation & Maintenance Instructions

Examples of SO-6 Door sizes available

Single wing door sizes with main dimensions in mm:

Α	В	С	D	Е	F	G	Н	Min. S	Weight (kg)
900	2000	1315	2330	1100	1200	300	400	500	1200
1200	2000	1615	2330	1400	1500	300	400	500	1630
1500	2000	1915	2330	1700	1800	300	400	500	2290
1900	2200	2316	2530	2100	2200	300	400	500	2950
2200	2700	2600	3100	2400	2500	300	400	500	5820

Contact the manufacturer for the availability of different door sizes. Sizes shown in a table are just examples of our wide selection.

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Applications

The SO-6 double leaf blast doors are designed to stop the advance of blast waves through the passage ways into the protected area of blast hardened Civil Defence and military shelters. The SO-6 blast doors are possible to open and close manually from both sides. The latching device tightens the door plate against the frame so that the maximum clearance between the load bearing surfaces of the door plate and the frame is 2.0 mm. Design of the doors enables opening by disassembly even if the door plate has undergone permanent deformations. The door plate can be dismounted from either side without any special emergency opening devices.

Specification

Manufacturer of SO-6 blast doors is Temet, Helsinki Finland.

The SO-6 double leaf blast doors are fabricated from structural steel with a door plate of solid homogenous steel plate stiffened by I-beams spanning between the door sill and head. The door frame is designed for easy installation in the reinforced concrete wall, and the door plate / frame assembly has an optimized pattern for transfer of the blast forces into surrounding wall.

Design Criteria

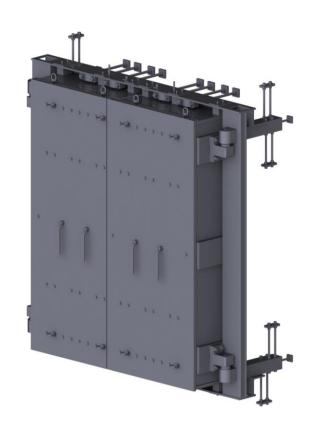
The SO-6 blast doors are made in accordance with specific provisions issued by the Finnish Ministry of Interior. The SO-6 blast doors are approved for use on the basis of structural calculations approved by the Technical Research Centre of Finland / VTT Building Technology, an Independent Testing Authority mandated to perform type inspection for shelter equipment and systems by the Finnish Ministry of Interior.

SO-6 Door Protection Capability

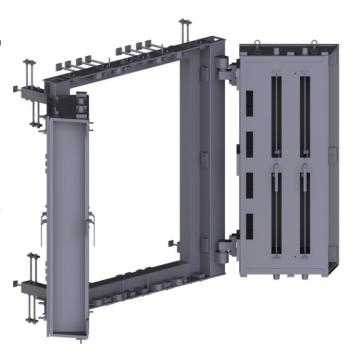
The SO-6 doors provide the highest level of protection against blast effects. Their resistance against multiple long duration blast load ranges from 9.0 bar (900 kPa) up to 18 bar (1800 kPa) peak reflected overpressure. The SO-6 doors are designed to function within the elastic range of the materials used. The door frame design enables uniform distribution of the positive blast load into the surrounding wall. Rebound load is received by the latching system.

The SO-6 doors also resist 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.

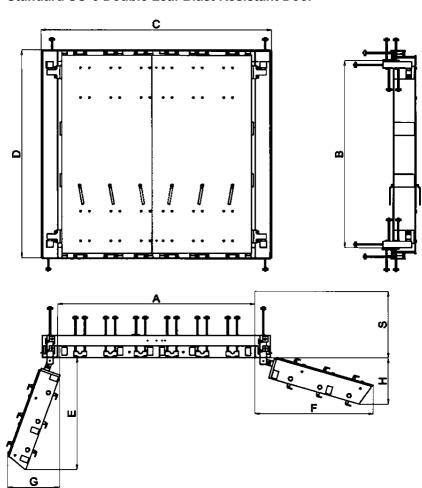
The SO-6 doors are designed to function within the operating temperature range of -30 ... +80 °C.



Temet SO-6 Double Leaf Blast Door



Standard SO-6 Double Leaf Blast Resistant Door



Door hinges

Hinges are provided with maintenance free slide bearings or optionally with roller bearings.

Surface treatment

Temet SO-6 doors are surface treated with durable shop primer resisting corrosion during transportation and storage.

Optional accessories for SO-6 Doors

Accessories such as position indicator switches are available.

Other documents related to SO-6 double leaf blast door:

- Installation Instructions
- Operation & Maintenance Instructions

Examples of SO-6 Door sizes available

Double leaf door sizes with main dimensions in mm:

А	В	С	D	E	F	G	Н	Min. S	Weight (kg)
2400	3000	3400	3500	2000	2350	800	1300	600	9 500
2600	3000	3600	3500	2100	2350	800	1350	600	10 000
2800	3000	3800	3500	2200	2350	800	1400	600	11 000
3000	3000	4000	3500	2300	2350	800	1500	600	12 000
3200	3000	4200	3500	2400	2350	1000	1550	600	12 500
3000	3500	4000	4000	2300	2600	1000	1500	600	14 000
3400	3500	4400	4000	2500	2750	1000	1600	600	16 000
3600	3500	4600	4000	2600	2850	1000	1600	600	18 000
3900	3500	4900	4000	2750	3000	1000	1650	600	20 000

Contact the manufacturer for the availability of different door sizes. Sizes shown in a table are just examples of our wide selection.

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TEMET BLAST HATCH SL-1

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 passageways. The SL-1 hatch is possible to open and close manually from both sides. The latching devices tighten 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.

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 based on 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

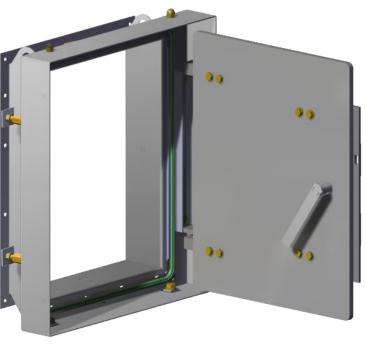
The SL-1 hatch is designed and tested to withstand multiple long duration blast loads having peak reflected overpressure of 2.0 bar (200 kPa) in the elastic range of the materials used. The hatch frame design enables uniform distribution of the positive blast load into the surrounding wall. Rebound load is received by latch and hinge systems. SL-1 can also be designed to withstand higher pressure loads, which will be mentioned in the product name.

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 °



Temet SL-1 Blast Hatch





TEMET BLAST HATCH SL-1

Hatch hinges

Hinges are provided with maintenance free slide bearings.

Hatch gas tightness

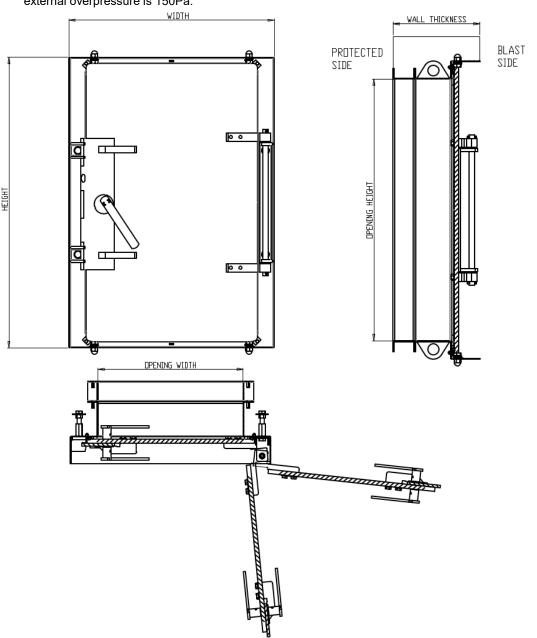
Temet SL-1 blast hatch can be provided with a gasket for tightness against entry of gases in such a way that the allowable leakage through the hatch is not more than 0.2 dm³/s (0,72 m³/h) for each square meter of the opening when the external overpressure is 150Pa.

Surface treatment

Temet SL-1 blast 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.

TEMET

TEMET BLAST HATCH SL-6

Applications

The SL-6 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-6 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. Design of the hatch enables opening by disassembly even if the hatch plate has undergone permanent deformations. The hatch plate can be dismounted from either side without any special emergency opening devices.

Specification

Manufacturer of SL-6 hatch is Temet, Helsinki Finland.

The SL-6 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

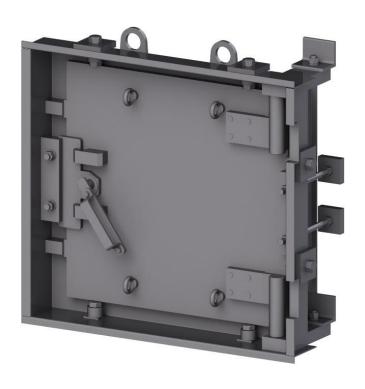
The SL-6 hatch is made in accordance with specific provisions issued by the Finnish Ministry of Interior. The SL-6 hatch is approved for use on the basis of structural calculations approved by the Technical Research Centre of Finland / VTT Building Technology, an Independent Testing Authority mandated to perform type inspection for shelter equipment and systems by the Finnish Ministry of Interior.

SL-6 Hatch Protection Capability

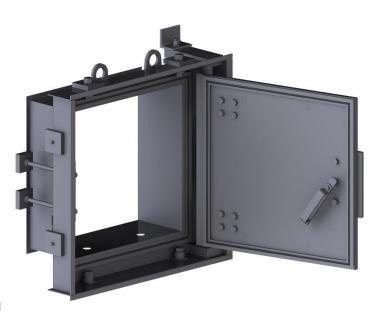
The SL-6 hatch is designed and tested to withstand multiple long duration blast loads having peak reflected overpressure up to 18 bar (1800 kPa) in the elastic range of the materials used. The hatch frame design enables uniform distribution of the positive blast load into the surrounding wall. Rebound load is received by latch and hinge systems.

The SL-6 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 °C.



Temet SL-6 Blast Hatch



TEMET BLAST HATCH SL-6

Hatch hinges

Hinges are provided with maintenance free slide bearings.

Hatch gas tightness

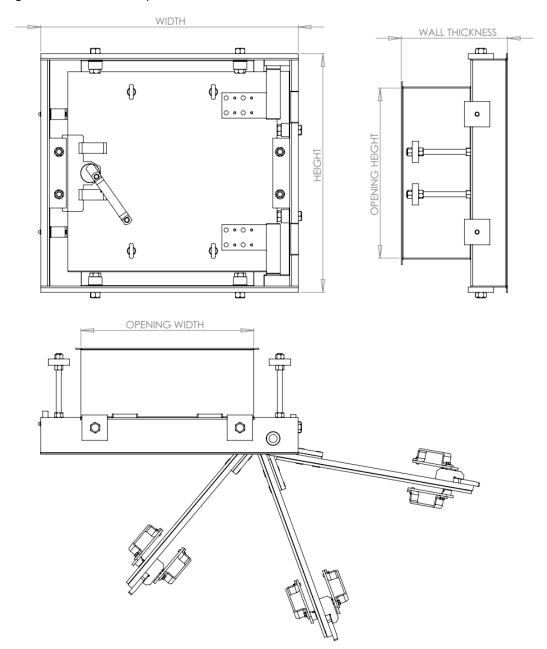
Temet SL-6 hatch can be provided with a gasket for tightness against entry of gases in such a way that the allowable leakage through the hatch is not more than 0.2 dm³/s (0,72 m³/h) for each square metre of the opening when the external overpressure is 150Pa.

Surface treatment

Temet SL-6 hatch is normally surface treated with durable shop primer resisting corrosion during transportation and storage.

Other documents related to SL-6 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.



TEMET PRE-ENGINEERED AND CUSTOM DESIGNED PROTECTIVE DOORS

Temet protective doors

Temet provides a variety of pre-engineered and custom designed special protective doors for industrial, military and Civil Defence applications. Temet protective doors are primarily designed to stop the advance of air blast and fragments, but can also be made air tight to prevent the entry of toxic substances. All doors are designed for simplicity and reliability in operation and are maintenance free. If required, the doors can be provided with automatic operation and various safety and security devices.

Standard pre-engineered Temet blast resistant doors are based on the technical specific provisions issued by the Finnish Ministry of Interior. These doors are available in wide size range single and double doors with level of protection ranging from 1.0 bar (100 kPa) to 18 bar (1800 kPa) peak reflected overpressure. The standard Temet blast resistant doors are featured in details in Temet leaflets.

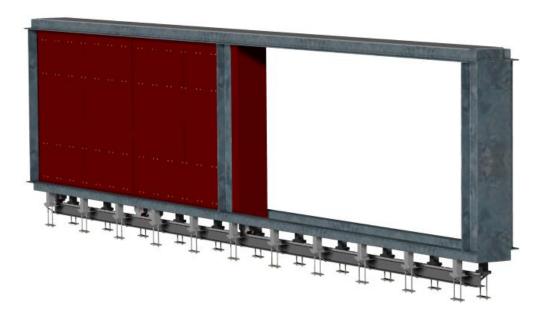
Custom designed protective doors

Temet custom designs protective doors in strict accordance with the client's specification. Typical structural custom requirements are design for short duration impulsive blast load, high resistance for primary fragments and air-tightness at high pressure difference across the doors. Typical functional custom requirements are power operation of the door and latching mechanism as well as electrical door locking and connection to the door system interlocking.

Structural configuration of Temet custom doors may be steel door with homogenous steel plate or I-beam stiffened steel plate structure. Sliding blast resistant and gas tight doors can be provided for applications where space constraints prevent the use of swing doors

Temet has over 20 years experience in supplying custom doors with extremely demanding requirements. Projects successfully completed incorporate doors with triangular or bilinear impulse load up to 50 bar (5000 kPa) with 100 percent rebound resistance, combined blast resistant and air-tight doors providing zero leakage up to 2000 Pa pressure difference across the door as well as very large hinged concrete arch doors all having numerous additional functional requirements.

Successful undertaking of a special door project implies that the door manufacturer is capable of working together with the architect and structural designer of the facility from the very beginning. This is imperative in order to reserve sufficient space for the door and its embedded components and to design the wall reinforcement properly to receive the substantial reaction forces transmitted from the door. An important part of Temet's services is the capability to consult with the structural engineers on the issue of door interface with the surrounding concrete structure.



Temet can provide protective doors in any structural configuration. The picture features a large sliding blast resistant door with I-beam stiffened doors plate structure.

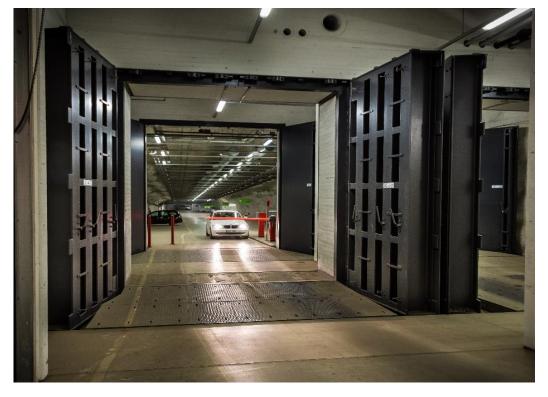
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TEMET PRE-ENGINEERED AND CUSTOM DESIGNED PROTECTIVE DOORS

Examples of custom designed Temet doors



At the factory. Large $(3m \times 2,8m)$ single-leaf blast resistant steel door designed for 59 Bar (5900 kPa) / 11ms pressure-time load



Heavy 4,4m x 4,5m Double Leaf Doors installed at the entrance of an underground car park.