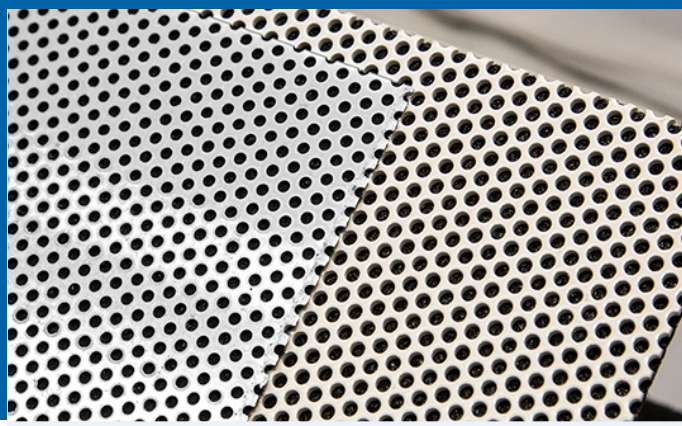
SORBERSCREEN®

This Installation Guide provides recommendations to maximise the service life in various applications. Sorberscreen® is a perforated metal sheet sound absorber offering high-performance sound absorption.



WORKING HEALTH AND SAFETY

- Gloves, protective goggles and any other appropriate safety equipment based on local health & safety requirements and safe work practice must be worn by applicator.

DESCRIPTION

Sorberscreen® perforated metal screen with a non combustible flow resistant backing textile (Sorbertextile™ STA), offers high performance sound absorption. The product has a hard durable finish with aesthetic appeal. It's the perfect finish for sound absorption in engine rooms, soundproof enclosures, architectural building walls and ceiling absorptive panel applications.

INSTALLATION

To obtain the maximum acoustic performance from Sorberscreen, we recommend that it be placed minimum of 25 mm from the substrate. The larger the air gap, the better the low frequency absorption. An air cavity can be created using battens or L - brackets depending on the substrate you are fixing it to.

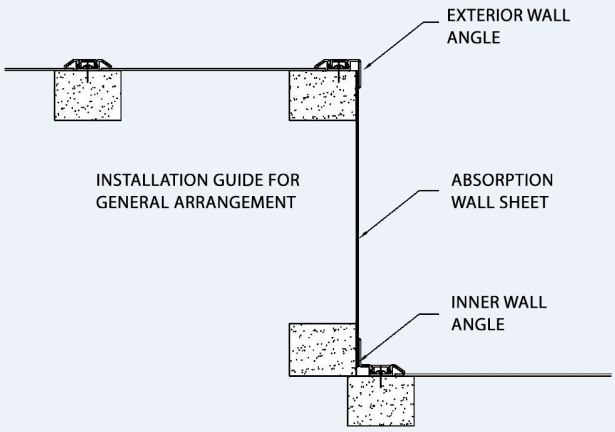
NON-STRUCTURAL FIRE PROTECTION

Sorberscreen can simply be installed using either timber battens or basic wall mounts extending from the main structure. Simply build a wall frame off the main structure and allow a minimum of 25 mm air gap between the substrate/installation and the Sorberscreen. The greater the air gap distance, the better the low frequency absorption you will achieve.
Build your frame (wall mounts/battens) as per the drawing below. Allow approximately 450 mm centres between the vertical supports and place the horizontal supports every 600 mm centres in a stag-gered pattern.

The sheets are supplied either plain or backed with Sorbertextile™ STA, a black, high air flow resistant glass based acoustic textile, that offers high performance sound absorption.

applications

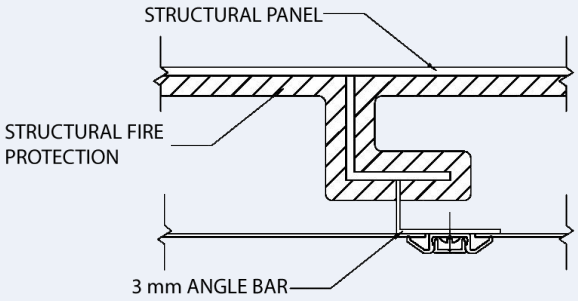
- Decorative and durable protective engine room cover in marine, power generation and engine bays of large mobile equipment
- Wall and ceiling insulation in marine engine rooms
- Lining of acoustic enclosures
- Acoustic baffles
- Interior decorative wall absorbers



AREAS REQUIRING STRUCTURAL FIRE PROTECTION

For marine applications, the internal stringers of the hull are ideal to create a cavity. It is important that the Sorberscreen panels are well supported to prevent mechanical damage. A support matrix at 600 mm x 450 mm centres behind the panels is required.

When installing Sorberscreen where structural fire protection is required, you must keep in mind not to disturb the fire protection insulation. When installing the product on aluminium or steel structures, we recommend that extra T or L bars be welded onto the stringers to support Sorberscreen. Once the supports are welded in place, simply make up a grid pattern frame 600 mm x 450 mm.



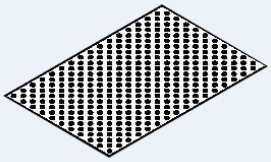
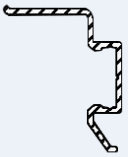
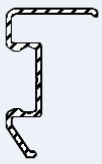
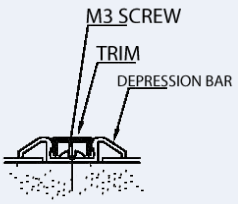
INSTALLATION GUIDE FOR STRUCTURAL FIRE PROTECTION

INSTALLATION OF JOINERY PIECES/FIXTURES & FITTINGS

Depending on the layout of the area being treated, the corner depression bars are installed first using M3 screws spaced every 600 mm, with the bars being left loose until the Sorberscreen is slipped in behind the clamping flange of the depression bar.

A joining depression bar is used at the end of the Sorberscreen sheet to continue the installation - if required. Use the same technique of leaving the screws loose until the sheet of Sorberscreen is slipped under the clamping flange. Once Sorberscreen is in place, the screws holding the depression bars can be tightened, this will clamp it in place.

Check that Sorberscreen is held tightly in place to prevent any rattling. In the case of an engine bay fit out, vibration from rotating equipment can cause Sorberscreen to vibrate, thereby producing unwanted noise from loose panels. Finally, the concealment trim is then applied over the screws.

SORBERSCREEN	SORBERSCREEN DB DEPRESSION BAR
Alu 1.0 mm Powder Coated	Alu 1.0 mm
	
W1250 x 2500	W25 x 5.8 x L3000
SORBERSCREEN TM TRIM	**SORBERSCREEN IWA INNER WALL ANGLE**
Alu 1.0 mm	Alu 1.0 mm
	
W9.6 x H4 x L3000	W25 x 20 x L3000
SORBERSCREEN EWA EXTERIOR WALL ANGLE	**SORBERSCREEN TM / SFS**
Alu 1.0 mm	Fastening System
	
W24 x 15 x L3000	

SUSPENDED CEILING TILES—CLIP-IN INSTRUCTIONS

Sorberscreen Clip-in systems are powder coated galvanised steel ceiling panels available in standard 600 x 600 or 600 x 1200 tiles. They are designed to install on a suspension system. All full panels can be removed and reinstalled without movement up into the plenum area.

Sorberscreen Clip-in panels are powder coated in standard white (WH), silver grey (SG) and gun metal grey (MY) finishes. The panels are lined with Sorbertextile STA which is a fire resistant textile, that reduces flow resistance through the perforations, and increases the acoustic absorption.

The installation of Sorberscreen Clip-in panels require no more space in the plenum, around 75 mm from the face of the panel to the top of the carrying channel or main beam. Additional space maybe required for the attachment devices and suspension wired.

SUSPENSION SYSTEMS

- The MPT 4500 main beams are installed every 600 mm and are attached to the carrying channel on 1200 mm centers, using wire clips. Alternately, they may be screw attached perpendicular to prelude main beams with two self drill screws at each intersection.
- Location of the first main beam shall be as detailed on the reflected ceiling plan so as to provide borders that are equal in size and greater than ½ of the full panel width.
- Hangers and bracing are to comply with local code requirements.
- Perimeters are trimmed with channel molding attached with appropriate fasteners.
- Cut edges are held down against the channel moldings.
- Panels are multidirectional. Two opposite sides feature a pair of "pips" that engage the main beam and retain the panel.
- Align the edges with the opening on the bottom of the main beam and press up into the place with the palm if the hand.
- The use of a string line is recommended to maintain panel alignment perpendicular to the main beams.

CUT PANELS

- Cut panels should never occur within the field of the ceiling. All ceiling mounted services must either replace a full panel, install into a hole cut in a panel or be mounted through the face of a panel.

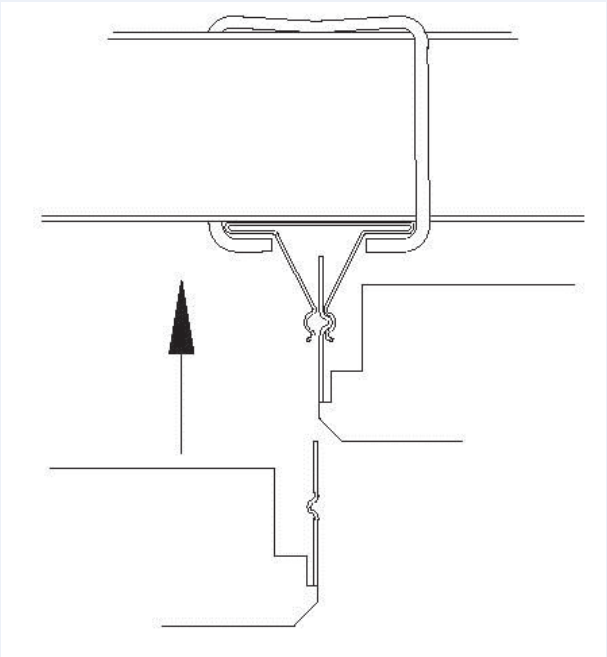
PANEL REMOVAL

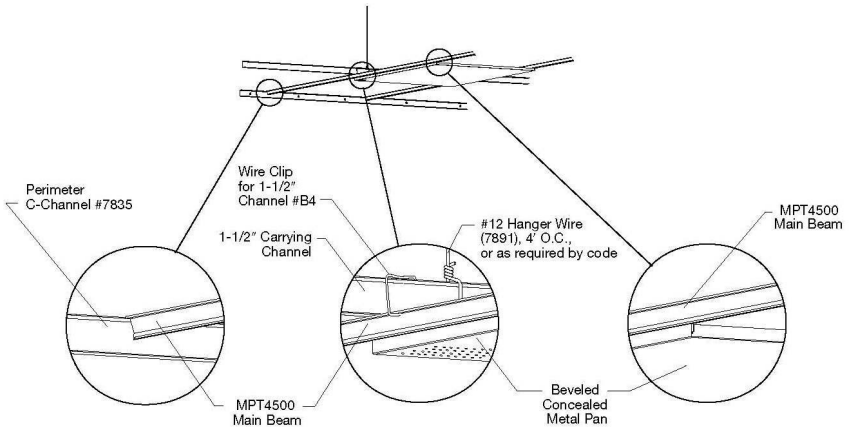
- All panels are removable without moving up into the plenum. A panel removal tool is inserted into the joint between two panels. When inserted far enough, the tool will engage the top edge of the panel. Pull down gently to release the panel from the MPT4500 main beam.

ACCESSORIES

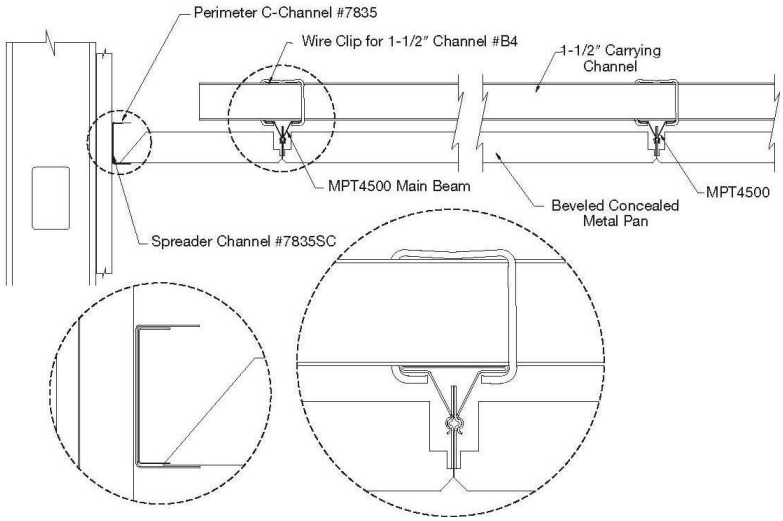
MPT 4500 SPRING TEE SYSTEM

	MPT 4500 SPRING TEE
	B4 WIRE CLIP 1-1/2 CHANNEL
	7835 PERIMETER CHANNEL
	7835SC SPREADER CHANNEL
	S45 SPLICE FOR METAL PAN MAIN BEAM

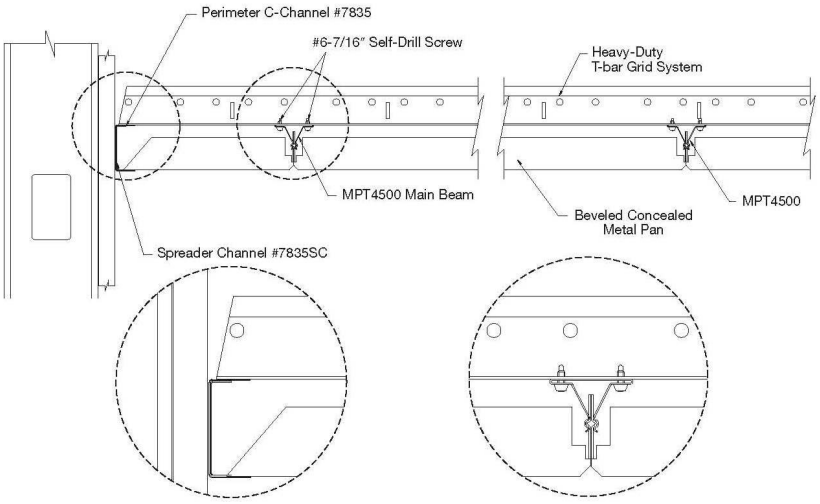




Perspective view of Sorberscreen Slip-in ceiling installed on 1½ carrying channel.



Section detail of Sorberscreen Slip-in ceiling installed on 1½ carrying channel.



Section detail of Sorberscreen Clip-in ceiling installed on 15/16"Tbar grid