



Installation Instructions

Section 1: General Information

1.1 Storage and handling

Store the SONOpan II panels and RefleXor membranes in a dry place, sheltered from the elements. The manufacturer performs thorough quality tests to ensure their products exceed established criteria and standards. Before installing the SONOpan II panels and RefleXor membranes, always ensure the work site conditions meet the conditions described in this guide. The manufacturer cannot be held responsible for improper installation of the products.

1.2 Related work

- Thermal insulation
- Drywall
- Acoustic sealant
- · Resilient channels
- Wood studs
- Steel studs
- · Flooring / ceiling assemblies

1.3 Warranty

MSL guarantees that the products it manufactures are free from manufacturing defects that would render a product unsuitable for its intended use. The duration of this warranty is limited to ten (10) years from the date of the product's manufacture. MSL commits to refunding or replacing any product with a manufacturing defect subject to the following conditions and restrictions. This warranty does not cover any labour costs or materials related to the replacement of MSL's products. Buyer must return any defective product to the point of purchase for replacement or reimbursement. The SONOpan II panels and RefleXor membranes must be kept indoors at a moderate temperature. This warranty does not cover any damages caused by negligence or improper maintenance of walls and floors. This warranty is valid only for the original buyer and is not transferable.

1.4 Conditions for installation of SONOpan II panels and of RefleXor membrane

All conditions for installation must be in accordance with the recommendations of MSL, the acoustician, the architect and the suppliers of related materials. Before installing the SONOpan II panels, all building openings must be closed (i.e. doors, windows, garage doors, etc.). The SONOpan II panels must be stored indoors on the work site, with an ambient humidity of 25% to 55%. Panels must always be laid flat to allow for optimal conditioning for approximately 48 hours. Protect SONOpan II panels against any risk of fire and use a temporary protective screen against sparks from any welding in adjacent areas.

Section 2: Product Information

- 2.1 SONOpan II is a soundproofing panel made from 100% recycled wood fibres and is 100% recyclable. Each panel measures 1.22 m x 2.44 m (48" x 96") and has a thickness of 19.05 mm (3/4").
- 2.2 RefleXor is a thermo-acoustic membrane made from 100% recycled polyester fibres laminated to a metallic film. The RefleXor membrane has a thickness of 1.70 mm (0.039") and roll sizes are 1.22 m x 15.24 m (48" x 50'). RefleXor offers a continuous and effective sound barrier that facilitates the soundproofing process.
- 2.3 These innovative wall and ceiling systems, which combine SONOpan II and RefleXor, minimize the complexities of soundproofing while offering superior results.





Installation of a double wall (metal or wood) with SONOpanII an RefleXor

Section 3: Installation of SONOpan II wall / ceiling

- 3.1 Install metal or wood framing to the floor taking care to leave a 1 3/4" space between the plates at the floor and at the ceiling.
- 3.2 Install metal or wooden studs in the first wall according to the architect's plan.
- 3.3 Install the SONOpan II on the interior section of the first wall using screws equipped with washers 16" on centre vertically.
- 3.4 Install metal or wooden studs of the second wall according to the architect's plan.
- 3.5 Fill the cavity with fibreglass, mineral or cellulose insulation.
- 3.6 Install the first layer of 5/8" type X drywall, on each side of the partition wall according to the recommendations of the drywall manufacturer. For best results, ensure that joints between the panels are as tight as possible and/or apply a joint compound.

Section 4: Installation of the RefleXor wall / ceiling membrane

- 4.1 Apply the RefleXor membrane on each side of the partition wall on the first layer of the drywall panel using T50 (or similar) staples leaving a 4" overlap at the floor, the ceiling and at any other seam. The gold side must be facing the inside of the room.
- 4.2 Overlap the seams by 2" to create a perfect seal. The RefleXor membrane may be installed vertically or horizontally.
- 4.3 Install the second layer of 5/8" type X drywall according to the manufacturer's instructions. Stagger the joints between the first and second layer of drywall.
- 4.4 Apply joint compound and finishing (painting, moulding, etc.)

Note: Always ensure that the SONOpan II is protected from the elements during installation and until completion of the work.

Note: If you do not use the RefleXor membrane, apply acoustic sealant to the perimeter of each SONOpan II panel as well as to the perimeter of walls and ceilings, and to all other seams, joints and openings.





Installation of a single frame wall (condo/corridor) with SONOpan II and RefleXor

Section 3: Installation of SONOpan II wall / ceiling

- 3.1 Construct the wall(s) separating the condo and the corridor according to the architect's plans and specifications.
- 3.2 Fill the cavities with fibreglass, mineral or cellulose insulation.
- 3.3 Install the resilient channels on the walls on 24" centres on the condo side.
 - a. First channel must be 2" from the floor.
 - b. Second channel must be 24" from the floor.
 - c. Last channel must be 6" from the ceiling.
- 3.4 Install the SONOpan II panels vertically on the resilient channels on 24" centres vertically and 12" centres horizontally, using screws equipped with washers. Screw the SONOpan II to the resilient channels only.
- 3.5 Install the first layer of 5/8" type X drywall on the SONOpan II on 24" centres vertically and 12" centres horizontally.
- 3.6 Apply joint compound and finishing (painting, moulding, etc.) on the condo side.
- 3.7 On the corridor side, install a layer of 5/8" type X drywall, according to the manufacturer's instructions.

Section 4: Installation of RefleXor wall / ceiling

- 4.1 Apply the RefleXor membrane on each side of the partition wall on the first layer of the drywall panel using T50 (or similar) staples leaving a 4" overlap at the floor, the ceiling and at any other seam.. The gold side must be facing the inside of the room.
- 4.2 Overlap the seams by 2" to create a perfect seal. The RefleXor membrane may be installed vertically or horizontally.
- 4.3 Install the second layer of 5/8" type X drywall according to the manufacturer's instructions. , Stagger the joints between the first and second layer of drywall.
- 4.4 Apply joint compound and finishing (painting, moulding, etc.)

Note: Always ensure that the SONOpan II is protected from the elements during installation and until completion of the work.

Note: If you do not use the RefleXor membrane, apply acoustic sealant to the perimeter of each SONOpan II panel as well as to the perimeter of walls and ceilings, and to all other seams, joints and openings.





Renovation Installation

Section 3: Installation of SONOpan II wall / ceiling

- 3.1 Fill all existing walls and ceiling with fibreglass, mineral or cellulose insulation.
- 3.2 Install the SONOpan II to the ceiling on 16" centres with $1\frac{1}{4}$ " roofing nails or with $1\frac{1}{2}$ " drywall screws equipped with washers.
- 3.3 Install SONOpan II on the walls on 16" centres using 1½" drywall screws equipped with washers. The joints between the panels must be as tight as possible.
- 3.4 Install resilient channels to the ceiling on 12" centres perpendicular to the joists using $1\frac{1}{2}$ " screws. Then install a resilient channel at 6" on each parallel wall .
- 3.5 Install the first layer of 5/8" type X drywall to the ceiling, screwed into the resilient channels only.
- 3.6 Install the resilient channels on the walls on 24" centres
 - a. First channel must be 2" from the floor.
 - b. Second channel must be 24" from the floor.
 - c. Last channel must be 6" from the ceiling.
- 3.7 Install the first layer of 5/8" type X drywall to the walls. For best results, ensure that joints between the panels are as tight as possible and/or apply a joint compound.

Section 4: Installation of RefleXor wall / ceiling

- 4.1 Apply the RefleXor membrane on each side of the partition wall on the first layer of the drywall panel using T50 (or similar) staples leaving a 4" overlap at the floor, the ceiling and at any other seam. The gold side must be facing the inside of the room.
- 4.2 Overlap the seams by 2" to create a perfect seal. The RefleXor membrane may be installed vertically or horizontally.
- 4.3 Install the second layer of 5/8" type X drywall beginning at the ceiling, taking care to secure into resilient channels, using 2½" screws. Stagger the joints between the first and second layer of drywall.
- 4.4 Install the second layer of 5/8" type X drywall on the wall(s), taking care to secure into resilient channels, using 2½" screws. Stagger the joints between the first and second layer of drywall.
- 4.5 Apply joint compound and finishing (painting, moulding, etc.)

Note: Always ensure that the SONOpan II is protected from the elements during installation and until completion of the work.

Note: If you do not use the RefleXor membrane, apply acoustic sealant to the perimeter of each SONOpan II panel as well as to the perimeter of walls and ceilings, and to all other seams, joints and openings.