# Rmax Thermasheath®-XP

## Installation Instructions for Exposed Basement Walls

Rmax Thermasheath®-XP is an optimal energy-efficient choice for insulating your basement. This lightweight, easy-to-install insulation product achieves thermal control, while providing protection against moisture and reducing air leakage - with properly treated joints.

Thermasheath®-XP is a polyiso insulation board with durable, embossed aluminum facers on both sides. One side has a white modified acrylic coating, and the other side has a reflective surface with a clear coating. Designed for use without a 15 minute thermal barrier, this energy-efficient insulation provides an attractive surface where either side can be left exposed.

### **MATERIALS CHECKLIST**

- · Small handsaw or utility knife
- · Straight edge
- Measuring tape
- · Pencil or marker
- Safety glasses
- · Puncture resistant gloves
- As needed based on desired install technique
  - · Quality grade construction adhesive
  - Fasteners/plates appropriate for wall type
  - Hammer, pneumatic fastener or screwdriver
  - Flex-Tite Insulation Clips
  - R-SEAL 3000 or R-SEAL 3000W tape
  - · Feathering tool or roller
  - Quality grade construction sealant
  - Spray polyurethane foam filler

#### **BEFORE YOU BEGIN:**

- Insulation products must be kept dry. Installation of wet insulation, tape or any other components within an assembly shall cause Rmax warranties to become void.
- Examine the wall and ensure there are no leaks or structural cracks that need to be remedied prior to installing the insulation.
- Ensure wall/framing surface is clean and free of irregularities that will affect the placement or performance of the insulation.
- Before applying any tape or sealant, use a dry cloth to remove contaminants and/or foam dust from the application area.
- CAUTION: Rmax recommends eye protection throughout the project construction. Use care when handling insulation. Product may have sharp edges and could result in injury. Rmax recommends the use of protective puncture-resistant gloves and/or sleeves when handling. Proper ventilation should be provided especially when using construction adhesives during install.



#### **INSTALLATION**

**Mechanical Fasteners** – Thermasheath®-XP may be mechanically fastened to wood or concrete/block substrates.

- 1. Install insulation with fasteners at a maximum of 24" on center.\*
  - A. Wood framing/furring: Use roofing nails, bugle head screws or minimum 3/4" cap nails long enough to penetrate at least 1" into the wood. Insulation boards shall be installed with all edges tightly butted and backed by framing.
  - B. Concrete: Use plastic masonry fasteners with washers.
- Refer to the AIR AND MOISTURE Section for extra steps in achieving optimal control.



**Adhesives** – Thermasheath®-XP may be adhered directly to the concrete block wall.

- Apply quality grade construction adhesive to the concrete wall, and firmly press the Thermasheath®-XP into place. Hold until adhesive is set. Refer to adhesive manufacturer for application recommendations and proper installation techniques.
- Refer to the AIR AND MOISTURE Section for extra steps in achieving optimal control.



Insulation Clips – For a more complete solution and finished look, use the Flex-Tite Insulation Clip attachment system when installing Thermasheath®-XP directly to the concrete block wall. The Flex-Tite Insulation Clips are a two part PVC solution (female base and male top "T") used at the insulation joints.

- Measure and mark a vertical install line for the location of the female clip using the combined width of the insulation and clip. Final insulation install should result in a tight fit.
- 2. Attach female clip to wall through pre-punched holes at 12" o.c.
- Apply quality grade construction adhesive to the wall between female clips. Firmly press Thermasheath®-XP into place between female clips and hold until adhesive is set. Refer to adhesive manufacturer for application recommendations and proper installation techniques.
- 4. Repeat steps 1 through 3.
- For optimal air and moisture control, tape horizontal joints and apply a construction grade sealant along the surface of the insulation at each side of the vertical joint prior to installing the male clips. Refer to the AIR AND MOISTURE Section for application techniques.
- 6. Install male clips ensuring that they snap completely into the interlocking female base for a tight fit with the insulation.



Note: Panels should be tightly butted at corners. Use J-Channels for a more finished look. Where desired, use tape to seal tightly butted joints, or apply a quality grade construction sealant along the length of the J-Channel at the interface of both panels.

\*This is a general rule of thumb and the number of fasteners per board may need to be increased depending on the capability of the fastener and/or any additional loading on the installed panels. For example, heavy wind drafts/gusts, accelerated wear and tear, etc.

#### **CUTTING**

Polyiso will not break cleanly or evenly. Rmax recommends using a sharp, fine toothed saw for cutting Thermasheath®-XP. Use of a utility knife to cut the insulation is acceptable, ensuring to cut all the way through the facing on both sides. Care should be taken to get as clean a cut as possible to avoid excessively sharp and jagged edges.



**UTILITIES** 

The Thermasheath®-XP insulation boards can be installed to fit around boxes, conduit, fixtures and other electrical or plumbing utilities. Simply measure and cut an opening in the back side of the insulation. CAUTION: Be sure to check the insulation contact rating of the utility.



#### **AIR AND MOISTURE**

The best line of defense against air and moisture intrusion is to tape or seal all joints, gaps, cracks, etc. For optimal air and moisture control, use a combination of the techniques described below.

**Taping** – Center tape over dry clean joint and apply. Use R-SEAL 3000 for silver side and R-SEAL 3000W for white side. Wipe tape firmly from center out with feathering tool or hand roller to smooth out wrinkles. Applying more pressure yields more surface contact, and

therefore, creates a greater bond. Do not tear tape, cut with scissors or knife.



**Sealing** – Seal all gaps and cracks within the plane of the insulation, including insulation joints, using a quality grade construction sealant or polyurethane expansion spray foam for larger areas. Protect the finished surface of the insulation boards from overspray using a protective film. Once fully cured, trim the excess sealant protruding beyond the surface with a knife to create a flush plane for taping.



Note: It is also important to seal the ceiling to wall, floor to wall and wall to wall transitions.

#### **PAINTING**

If preferred, the surface of the insulation board can be painted. Rmax recommends a quality grade acrylic latex paint. While primer is not generally required, consult the paint manufacturer and/or industrial paint supply for recommendations and best practices.