RMAX® THERMASHEATH®-SI RESIDENTIAL SOLUTION

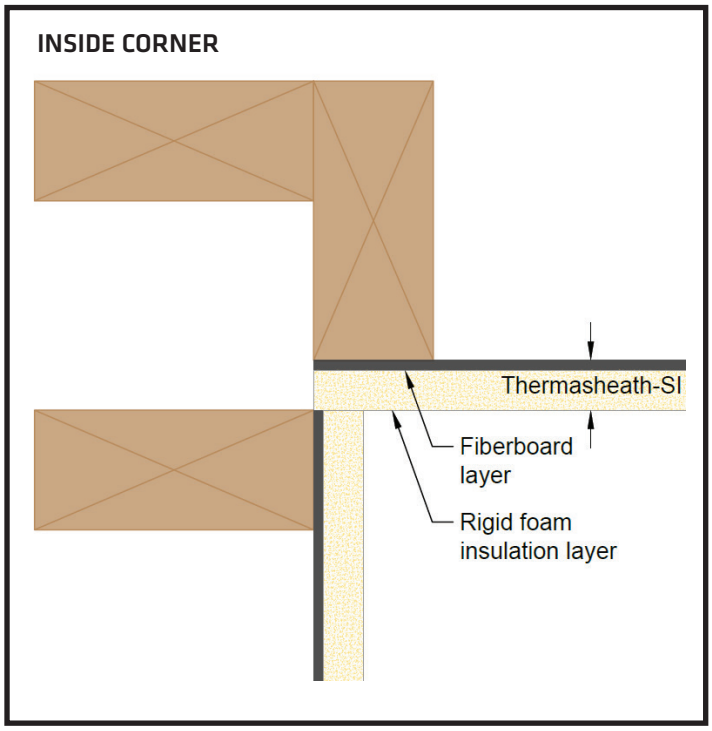
STRUCTURAL INSULATION FOR EXTERIOR WALLS

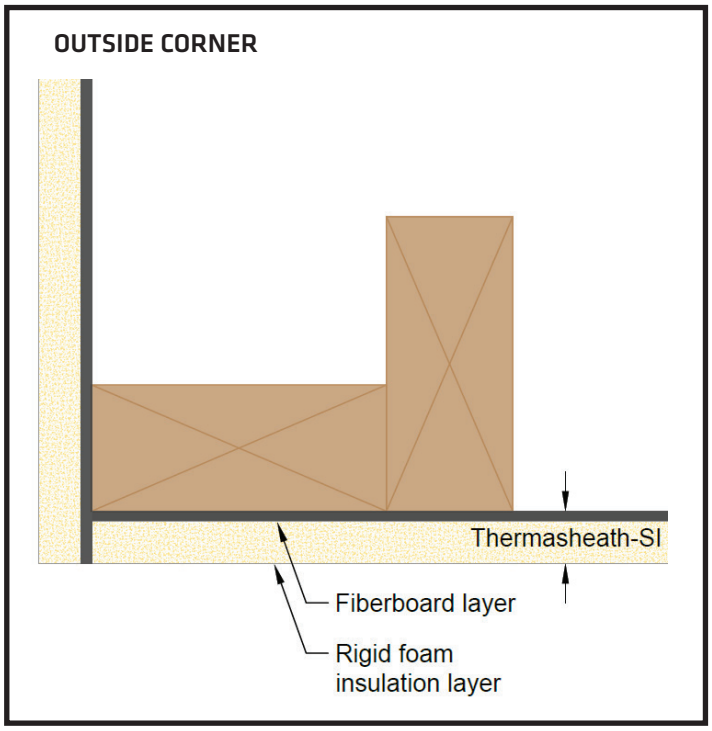
Thermasheath®-SI is used over exterior wood framed walls as intermittent braced wall panels integrated with Thermasheath® or as continuous structural insulated sheathing. With taped joints, an air and water-resistive barrier (WRB) can be achieved. Refer to DrJ Engineering TER 1207-01 for structural values and other design details.

THERMASHEATH®-SI STEP BY STEP INSTALLATION

STEP 1: INSTALLING PANELS

- Install panels with fiberboard layer directly against the studs (foam layer out.)
- Install panels with the long dimension parallel to the vertical framing.
- All perimeter edges must be backed by a framing member. Boards may need to be cut or studs added to ensure this happens.
- Cutting Panels
  - Panels shall maintain a 24” minimum height and a maximum aspect ratio of 4:1 (height:width).
  - Mark cut lines using straight edge with pencil/marker or chalk line.
  - Cut boards on a level, durable surface using a circular saw.
- Install in temperatures above -10°F
- Replace boards with major damages to foam sheathing layer or any damages to paperboard layer.
- See figures below for proper installation at inside and outside corners.





STEP 2: FASTENING

- Fasten boards using approved staples or nails every 3” along the perimeter and every 6” in the field, see details below.
- Staples shall be a minimum 16 gauge,7/16”, 1/2” or 1” crown, at least 1 ¼” leg and penetrate a minimum of 1” into the stud.
- Nails shall be a minimum 0.113” x 2 ⅜” and penetrate a minimum of 1 ¼” into the stud.
- Fasteners must be placed not less than 3/8” (9.5 mm) from sheathing edges.
- Sheathing joints must be centered and butted at framing members and a single row of fasteners must be applied to each panel edge into the stud behind. Do not tack sheathing products to framing, but fasten each panel completely once fastening begins using sequencing pattern shown in detail to the right. Countersink fasteners beneath the surface of the foam sheathing.
- Repair all areas where the fastener missed the studs by applying piece of tape to cover punctured area.
- **WARNING:** Too many missed fasteners/holes in the board could reduce the structural integrity and warrant replacement.

FASTENING SEQUENCE

STEP 3: TAPING/FLASHING (WHEN USED AS THE WRB OR AIR BARRIER)

- Tape all joints with 4” R-SEAL 3000 or 3” R-SEAL Construction Tape. Refer to corresponding tape data sheet for installation instructions.
- Center the tape over the joints to cover fastener penetrations on both sides and tool into place.
- All fasteners missing the studs, as well as, any other holes in the insulation board must be sealed by applying a piece of tape to cover the punctured area.
- Properly installed fasteners in the field of the board do not need tape.
- Flash all inside and outside corners, transitions, openings and penetrations to the foil surface of the foam sheathing.

STEP 4: FUTURE TRADES

- The barrier created by the Rmax® products shall be maintained by future trades (fastener penetrations, damages during installation, etc.) using common construction practices.
- All materials (windows, furring, cladding, metal flashing, etc.) shall be installed through the insulation directly to the wood framing per manufacturer instructions.

For additional product information refer to Rmax® Thermasheath®-SI Product Data Sheet. Refer to the third party engineering analysis from DrJ, TER No. 1207-01, for specific details on meeting code requirements.