

1.0 PRODUCT NAME

R-WALL® (PATENT PENDING)
Continuous Insulation System

2.0 MANUFACTURER



Insulation Solutions Inc.
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3.0 PRODUCT DESCRIPTION

Insulation Solutions, Inc.
R-Wall brand insulating system panels are manufactured from molded-polystyrene board insulation with 25 gauge steel furring strips (G-60) embedded at either 16" or 24" on center.

Basic Use:

R-Wall Insulating System panels are designed to be attached to the interior side of exterior walls providing a superior alternative to rigid insulation board in a multi-step Z-furring system.

Composition & Materials:

Molded-Polystyrene Board Insulation with embedded 25 gauge steel furring strips (G-60). For above grade applications that require a vapor retarder, install Nu-Age Film over attached R-Wall panel.

Size & Types:

- 1" x 48" x 96"
- 1 1/2" x 48" x 96"
- 2" x 48" x 96"
- 2 1/2" x 48" x 96"
- 3" x 48" x 96"

Advantages:

- Enhanced thermal performance
- No thermal bridging
- Considerably faster installation
- Easy to work with

4.0 TECHNICAL DATA

Applicable Standards:

- American Society for Testing & Materials (ASTM)
- **ASTM C 645-99** Standard Specification for Nonstructural Steel Framing Members
- **ASTM C 754-99** Standard Specification for Installation of Steel Framing Members to Receive Screw-Attached Gypsum Panel Products
- **ASTM A 653** Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process
- **ASTM C 177** Standard Test Methods for Steady-State Heat Flux Measurements and Thermal Transmission Properties
- **ASTM E 84** Standard Test Methods for Surface Burning Characteristics of Building Products
- **ASTM E 96** Standard Test Methods for Water Vapor Transmission of Materials

PHYSICAL PROPERTIES	Thermal Resistance @40°F		Thermal Resistance @75°F		Nu-Age Vapor Transmission	Water Absorption	Flame Spread	Smoke Developed
	1 lb Density R-Value	3 lb Density R-Value	2 lb Density R-Value	4 lb Density R-Value				
Unit(s) of Measure	1 lb Density R-Value		2 lb Density R-Value		Perms	% by Volume		
ASTM Test Method	C 177		C 177		E 96	C 272	E 84	E 84
1" R-Wall	4.17	3.85	4.76	4.35	0.19	< 2.5	0	80 - 300
1 1/2" R-Wall	6.26	5.78	7.14	6.53	0.19	< 2.5	0	80 - 300
2" R-Wall	8.34	7.70	9.52	8.70	0.19	< 2.5	0	80 - 300
2 1/2" R-Wall	10.43	9.63	11.90	10.88	0.19	< 2.5	0	80 - 300
3" R-Wall	12.51	11.55	14.28	13.05	0.19	< 2.5	0	80 - 300

PATENT PENDING

5.0 INSTALLATION

RECOMMENDATIONS:

Installation of R-Wall insulation should be consistent with methods described in the noted standards and references and as indicated below.

Wall and Floor Preparation:

1. Examine wall surface for compliance with requirements for installation tolerances and other conditions affecting performance of insulating panels.
2. Examine floor for levelness. If floor is not level make necessary adjustments to insure panels are installed level across the wall surface.

R-Wall® Placement:

Begin installation of R-Wall insulating panels at a corner. Level/Plumb panel prior to attaching. Install panel with placement of steel furring near enough to corner for drywall attachment or other means which are acceptable by local code authorities.



For horizontal installation of R-Wall insure secure attachment of drywall is available at floor, ceiling and/or roof.

Install fasteners approximately four (4") inches from the end of each steel furring strip and at 16" or 24" inch spacing between. Shoot pin directly through solid area of furring strip. If threaded fastener is required install through hole provided.

Recommended Fastening Systems:

Typically a powder actuated tool with appropriate load and pin length to provide embedment consistent with manufacturer's recommendations for secure attachment. Pin head should be tight against furring strip without disfiguring the furring strip.



Butt adjacent R-Wall panel tightly along eight foot (8') edge and fasten. **Note: 48" panels may be +/- 1/8". Make proper adjustments for correct placement.**

Periodically check R-Wall panels for proper vertical and horizontal alignment.

Cut R-Wall panel to fit around door/window openings. Panels can be cut with razor knife and tin snips, reciprocating saw, hacksaw and circular saw using appropriate carbide tipped or carborundum blade. Install placement of steel stud near enough to edge for drywall attachment or other means which are acceptable by the local code authorities.

Electrical boxes and conduit:

1. Press R-Wall panel against box or conduit.
2. Using the impression left on the backside of the panel, cut, router out, or other suitable means, create a chase.

Drywall Attachment:

For above grade applications install Nu-Age vapor retarder over attached R-Wall system before installing drywall. (Consult local building code prior to installing vapor retarder.)

Attach gypsum board directly to metal furring strips in the insulated R-Wall panels using #6 Hilo drywall screws.

Use appropriate length screws to securely attach gypsum board spacing each fastener twelve (12") inches on-center.

6.0 AVAILABILITY & COST

R-Wall is sold through construction supply houses across the United States and Canada.

R-Wall current cost information can be obtained by calling our Corporate Office at 866-698-6562.

7.0 WARRANTY

INSULATION SOLUTIONS INC.® MAKES NO WARRANTIES AS TO THE FITNESS FOR A SPECIFIC USE OR MERCHANTABILITY OF PRODUCTS REFERRED TO, NO GUARANTEE OF SATISFACTORY RESULTS FROM RELIANCE UPON CONTAINED INFORMATION OR RECOMMENDATIONS AND DISCLAIMS ALL LIABILITY FOR RESULTING LOSS OR DAMAGE.

8.0 MAINTENANCE

R-Wall requires no maintenance once installed.

9.0 TECHNICAL SERVICES

Technical information and detailed test results can be obtained by calling our Corporate Office at 866-698-6562.

10.0 FILING SYSTEMS

Additional information can be obtained by calling our Corporate Office at 866-698-6562 or online at www.r-wall.com



Note: To the best of our knowledge, the specification chart on page one lists typical property values and are intended as guides only, not as specification limits. Insulation Solutions Inc.® makes no warranties as to the fitness for a specific use or merchantability of products referred to, no guarantee of satisfactory results from reliance upon contained information or recommendations and disclaims all liability for resulting loss or damage.

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