TDS TECHNICAL DATA SHEET







Product Name: R-Wall® Continuous Insulation



ISI BUILDING PRODUCTS

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3 PRODUCT DESCRIPTION

3.1 BASIC USE

R-Wall continuous insulation (CI) panels are designed to be attached to the interior side of exterior concrete walls or CMU providing a superior alternative to rigid insulation board in a multi-step z-furring system.

3.2 COMPOSITION & MATERIALS

Molded-Polystyrene Board Insulation with embedded 25 gauge steel furring strips (G-60) embedded at either 16" or 24" on center.

3.3 SIZE

Standard Thicknesses: 1", 1½", 2", 2½", 3" Standard Size: 4' x 8'

3.4 WEIGHT

R-Wall weighs approximately 8 $\frac{1}{2}$ lbs per sheet, depending on thickness and density.



TECHNICAL DATA

4.1 APPLICABLE STANDARDS

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

5 INSTALLATION

5.1 RECOMMENDATIONS

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

5.2 WALL AND FLOOR PREPARATION

Examine wall surface for compliance with requirements for installation tolerances and other conditions affecting performance of insulating panels.

Examine floor for levelness. If floor is not level, make necessary adjustments to insure panels are installed level across the wall surface.

5.3 PLACEMENT

Begin installation of R-Wall 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 4" from the end of each steel furring strip and at 16" or 24" spacing between. Shoot pin directly through solid area of furring strip. If threaded fastener is required, install through hole provided.

5.4 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 tightly along 8' edge and fasten. Note: 48" panels may be +/-1/8". Make proper adjustments for correct placement.

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

5.5 ELECTRICAL BOXES AND CONDUIT

Press R-Wall CI panel against box or conduit.

Using the impression left on the backside of the panel, cut, router out, or other suitable means, create a chase.

5.6 DRYWALL ATTACHMENT

Attach gypsum board directly to metal furring strips in the insulated R-Wall panels using #6 Hi-Lo drywall screws. Use appropriate length screws to securely attach gypsum board spacing each fastener 12" on-center.

These are very general installation instructions. Instructions on architectural or structural drawings should be reviewed and followed. Detailed installation instructions can be obtained by calling our corporate office at 866.698.6562 or online at www.isibp.com.



AVAILABILITY AND COST

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

R-Wall current cost information can be obtained by calling our corporate sales office at 866.698.6562.



WARRANTY

Warranty information can be obtained by calling our corporate office at 866.698.6562 or online at www.isibp.com.



MAINTENANCE

Requires no maintenance once installed.



TECHNICAL SERVICES

Technical information and detailed test results can be obtained by calling ISI Building Products corporate office at 866.698.6562.



FILING SYSTEMS

Additional information can be obtained by calling our corporate office at 866.698.6562 or online at www.isibp.com.

PHYSICAL PROPERTIES	THERMAL @40°F	RESISTANCE @75°F	THERMAL @40°F	RESISTANCE @75°F	VAPOR TRANSMISSION	WATER ABSORPTION	FLAME SPREAD	SMOKE DEVELOPED
UNIT(S) OF MEASURE	1 LB DENSITY R-VALUE		2 LB DENSITY R-VALUE		PERMS	% BY VOLUME		
ASTM TEST METHOD	ASTM C 177		ASTM C 177		ASTM E 96	ASTM C 272	ASTM E 84	ASTM E 84
1" R-WALL	4.17	3.85	4.76	4.35	0.19	<2.5	0	80 - 300
1.5" 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
2.5" 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

NOTE:

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