

Rmax Thermasheath-3: Superior Insulation Value

Concrete blocks have great structural strength, resistant to termite destruction, moisture, mold and ease of assembly. These are some of the reasons why concrete block is an ideal choice for residential walls.

On the other hand, concrete blocks are a permeable material and offers negligible insulation value. Therefore, the assembly should be enhanced to provide more energy savings - creating lower energy bills.

Installing Thermasheath-3 to the interior face of a block wall offers energy performance, an unsurpassed combination of moisture management and ease of assembly.

Why Thermasheath-3 is Best for Blocks

Thermasheath-3 is superior in many ways - starting with its insulation value. It is an energy-efficient thermal insulation board composed of a closed-cell Polyiso foam core, bonded to reinforced aluminum foil facers on each side. Polyiso offers the highest R-value per inch, and the reflective foil facing increases the R-value of the overall assembly when installed against the dead air space - created by the furring strips.

Superior Thermal Values		
Nominal Board Thickness	0.75"	1.0"
Thermasheath-3 R-Value: 75°F Mean Temperature	5.0	6.0
Assembly R-Value	7.77	8.77

Assembly R-values are determined by using ASTM C518 test method at 75°F mean temperature on material conditioned according to PIMA Technical Bulletin No. 101. Includes the ASHRAE assigned 2.77 R-value of a 3/4" dead-air space against a reflective foil in a typical wall assembly.

Blocking Heat is No Sweat

Heat is transferred three different ways: radiation, conduction and convection. Thermasheath-3 blocks all three. While foil facers block radiation, the closed-cells block conduction and convection.

Other products such as Fi-Foil, foil bubble, open cell spray foam, fiberglass and cellulose are far inferior to Thermasheath-3. Most of these products cannot address all three methods of heat transfer as efficiently as Thermasheath-3, if at all.

Moisture is one of the leading causes of damage to buildings. Thermasheath-3 can manage the situation with proper installation, coupled with standard tapes, flashing and sealants. This provides protection against mold and mildew by resisting water intrusion and moisture migration.

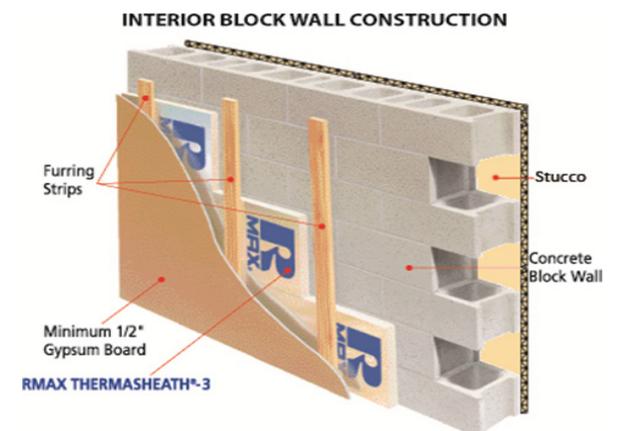


Ease of Assembly

Thermasheath-3 insulation is lightweight, making it faster and easier to install - which positively affects labor time and costs. The boards are secured to the inside face of the block wall, over or under the furring strips and covered with 1/2" gypsum wallboard interior finish, as required by building codes.

Adhesives, screws or nails may be used to hold the Thermasheath-3 in place against the wall temporarily, until the furring strips or gypsum wallboard is installed. The furring strips and/or gypsum wallboard must be secured with suitable screws or nails.

As an added benefit, a reflective airspace is created as the furring strips are placed between Thermasheath-3 and the gypsum board - therefore increasing the wall systems R-value.



Stay Cool with Rmax Thermasheath-3

Thermasheath-3 delivers the most effective and efficient means to insulating a home or building.

This energy-efficient thermal insulation also adds great value to any project through moisture management, saving time in labor, while helping to manage your bottom line.



Optimum Insulation for Block Wall Construction

Rmax Thermasheath-3 Thermal Insulation: Creating Energy-Efficiency

Features	Benefits
3-Way Heat Transfer Barrier	Unlike other common insulation materials, Thermasheath-3 blocks three types of heat transfer: radiation, conduction and convection.
Radiant Barrier	The low emissivity of the aluminum facer reflects radiant heat, providing ultimate cost savings.
Air Barrier	Thermasheath-3 was tested per ASTM E2178 to be an air barrier material. Proper installation coupled with standard tapes, flashings and sealants - virtually eliminate air infiltration. Keeps occupants comfortable while making the HVAC system run more efficiently.
Moisture/Water Barrier	Thermasheath-3 was tested per ASTM E96 to have a water vapor permeability of less than 0.3perms. Proper installation - coupled with standard tapes, flashing and sealants is key to managing moisture. Provides a defense against the growth of mold and mildew by resisting water intrusion and moisture migration.
Continuous Insulation	Provides a layer of continuous insulation (ci) over the entire surface. Eliminates thermal bridging which improves thermal efficiency, comfort and reduces energy. There should be no doubt that ci is superior to cavity insulation.
Highest R-Value	Thermasheath-3 is composed of Polyiso which has the highest R/inch of any rigid foam plastic, allowing energy codes to be met or exceeded. Provides more insulation value for your dollar - lowering energy consumption.
Quality You Can Count On	Backed by a 15 year Thermal Warranty, Thermasheath-3 has been third party tested and verified for thermal, physical and fire performance. It undergoes routine third party inspections throughout the year - ensuring confidence customer satisfaction.
Code Listings	Meets building code requirements for the state of Florida. Thermasheath-3 is has many third party listings, including an ICC-ES report and a Miami-Dade NOA.

Builder Solutions

Thermasheath-3		
Component	R-Value Through Cavity/ Airspace Area	R-Value Through 3/4" Furring Area
Inside Air Film	0.68	0.68
1/2" Drywall	0.45	0.45
3/4" Furring	-----	0.94
3/4" Airspace	2.77	-----
3/4" Insulating Sheathing	5.0	5.0
8" CMU	1.11	1.11
Stucco Exterior	0.15	0.15
Outside Air Film	0.25	0.25
Total R-Value	10.41	8.58
U-Value	0.096	0.116
% Air/Furring	90%	10%
	0.086	0.012
Total U-Value		0.098
Total Effective R-Value		10.16

Foil Bubble Pak		
Component	R-Value Through Cavity/ Airspace Area	R-Value Through 3/4" Furring Area
Inside Air Film	0.68	0.68
1/2" Drywall	0.45	0.45
3/4" Furring	-----	0.94
3/4" Airspace		-----
Foil Bubble Pak	4.2	-----
8" CMU	1.11	1.11
Stucco Exterior	0.15	0.15
Outside Air Film	0.25	0.25
Total R-Value	6.84	2.64
U-Value	0.146	0.379
% Air/Furring	90%	10%
	0.131	0.0379
Total U-Value		0.169
Total Effective R-Value		5.92

Overall thermal resistance of wall assembly based on ASHRAE calculations.

Corporate & Technical Location

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