

Gold Bond® BRAND

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ThermalFOIL® Gypsum Board

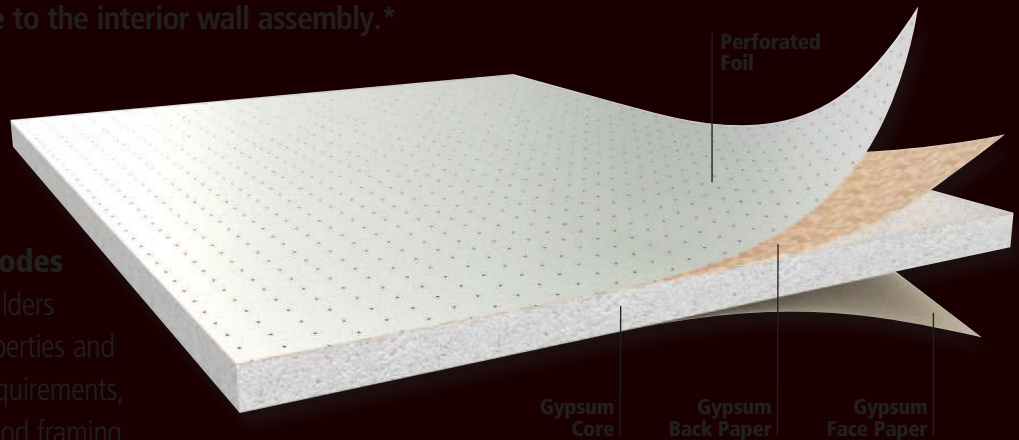


National 
Gypsum®

Introducing Gold Bond® BRAND

ThermalFOIL® Gypsum Board

For installation convenience and exceptional long term performance, the new all-in-one panel combines the technology of our signature Gold Bond® BRAND Gypsum Board plus a new reflective backing that provides an R-value to the interior wall assembly.*



Meets New Energy Codes

Built-in R-value allows builders to achieve air-sealing properties and meet new energy code requirements, while still utilizing 2x4 wood framing.



Labor Savings

All-in-one technology eliminates flash and batt insulation systems, helping save money on labor costs and improve project cycle times.

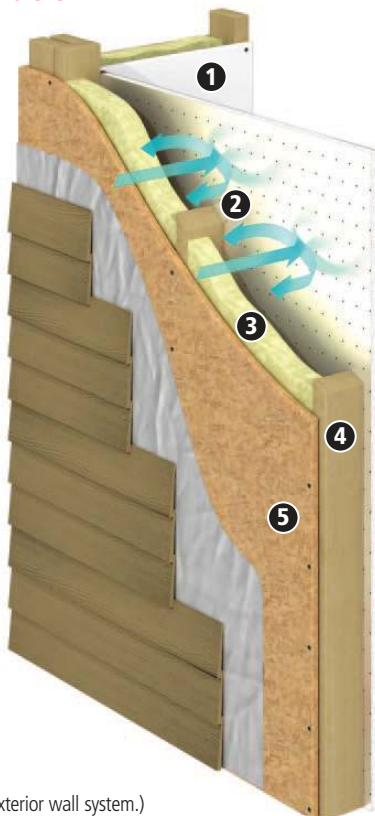


Installation Ease

Designed to allow for easy scoring and snapping, while reducing dust and improving strength-to-weight ratio.

ThermalFOIL Installation

1. 1/2" ThermalFOIL
2. Reflective Air Space
3. 2 lb. Closed Cell Spray Foam
4. 2x4" Studs, 16" o.c.
5. OSB or Plywood



Easy Installation

- Install framing members and exterior sheathing per local codes.
- Spray medium density/closed cell polyurethane foam, per manufacturer recommendation, to the average depth needed to meet code (minus the R-value of the ThermalFOIL + airspace). See chart on next page.
- Install ThermalFOIL gypsum board per GA-216 or *National Gypsum Company's Gypsum Construction Guide*, by scoring the paper face of the panel and then cutting the foil side.
- Inspect the foil backed side of the board for significant scuffs, scrapes or gouges. These pieces should be discarded, or repaired with foil tape prior to installation.
- Seal all openings such as outlets and switches with pads or caulk to minimize air flow.

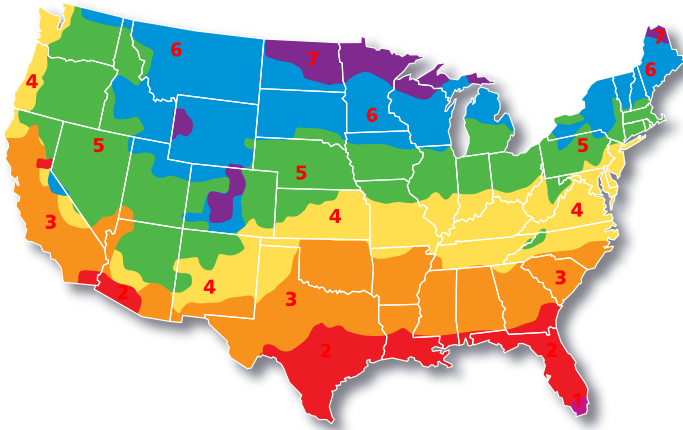
NOTE: ThermalFOIL is not intended to act as a vapor barrier. It is not for use in areas other than the interior of exterior wall assemblies.

View the installation video at nationalgypsum.com.

*(when used as part of a complete exterior wall system.)

Meet 2009, 2012 and 2015 Energy Codes While Still Using 2x4 Construction

Meet R-Value Needs With ThermalFOIL® Gypsum Board



Residential Energy Code (R-Value Minimums)

Climate Zone	2009 IRCC	2012 IECC	2015 IECC
1	R-13	R-13	R-13
2	R-13	R-13	R-13
3	R-13	R-20	R-20
4	R-13	R-20	R-20
5	R-20	R-20	R-20
6	R-20	R-20+5	R-20+5
7	R-21	R-20+5	R-20+5

THERMALFOIL GYPSUM BOARD R-VALUE TABLE*

Air Space	R-Value (ThermalFOIL + Air Space)
0.75"	3.20
1.00"	3.70
1.10"	3.90
1.25"	4.00
1.50"	3.90

* Based on 2x4 wood construction spaced 16" o.c. with 2.0 lb. closed cell spray polyurethane foam (SPUF).

THERMALFOIL SYSTEM TOTAL CAVITY R-VALUE

R-Value/ In	2" Spray Foam + Air Space Total Value			2.25" Spray Foam + Air Space Total Value			2.5" Spray Foam + Air Space Total Value			2.75" Spray Foam + Air Space Total Value		
	2.0" SPUF	ThermalFOIL and 1.5" Air Space	Total Value	2.25" SPUF	ThermalFOIL and 1.25" Air Space	Total Value	2.5" SPUF	ThermalFOIL and 1" Air Space	Total Value	2.75" SPUF	ThermalFOIL and .75" Air Space	Total Value
6.0	12.0	3.9	15.9	13.5	4.0	17.5	15.0	3.7	18.7	16.5	3.2	19.7
6.1	12.2	3.9	16.1	13.7	4.0	17.7	15.3	3.7	19.0	16.8	3.2	20.0
6.2	12.4	3.9	16.3	14.0	4.0	18.0	15.5	3.7	19.2	17.1	3.2	20.3
6.3	12.6	3.9	16.5	14.2	4.0	18.2	15.8	3.7	19.5	17.3	3.2	20.5
6.4	12.8	3.9	16.7	14.4	4.0	18.4	16.0	3.7	19.7	17.6	3.2	20.8
6.5	13.0	3.9	16.9	14.6	4.0	18.6	16.3	3.7	20.0	17.9	3.2	21.1
6.6	13.2	3.9	17.1	14.9	4.0	18.9	16.5	3.7	20.2	18.2	3.2	21.4
6.7	13.4	3.9	17.3	15.1	4.0	19.1	16.8	3.7	20.5	18.4	3.2	21.6
6.8	13.6	3.9	17.5	15.3	4.0	19.3	17.0	3.7	20.7	18.7	3.2	21.9
6.9	13.8	3.9	17.7	15.5	4.0	19.5	17.3	3.7	21.0	19.0	3.2	22.2
7.0	14.0	3.9	17.9	15.8	4.0	19.8	17.5	3.7	21.2	19.3	3.2	22.5
7.1	14.2	3.9	18.1	16.0	4.0	20.0	17.8	3.7	21.5	19.5	3.2	22.7
7.2	14.4	3.9	18.3	16.2	4.0	20.2	18.0	3.7	21.7	19.8	3.2	23.0
7.3	14.6	3.9	18.5	16.4	4.0	20.4	18.3	3.7	22.0	20.1	3.2	23.3
7.4	14.8	3.9	18.7	16.7	4.0	20.7	18.5	3.7	22.2	20.4	3.2	23.6
7.5	15.0	3.9	18.9	16.9	4.0	20.9	18.8	3.7	22.5	20.6	3.2	23.8

Green represents the combination of the spray foam and the air space that would meet the 2012 & 2015 Energy Code for R-20 Cavity Insulation (Dependent on the R-value/in for the spray foam brand).

Yellow represents the combination of the spray foam and the air space that would meet the 2009 Energy Code for R-17 Cavity Insulation (Dependent on the R-value/in for the spray foam brand).

Safety

Foil is an electrical conductor and if it comes in contact with exposed wiring can lead to shock. All electrical wiring and wired connections should always be installed by a professional electrician, and must conform to all applicable building codes including containment within appropriate electrical boxes to avoid contact with the foil surface.

All electrical trim-out that occurs after ThermalFOIL is installed should be done so as to avoid contact with the foil-backed surface of the gypsum board.

Corrugated Stainless Steel Tubing (CSST) gas lines are not recommended to be used or installed through or adjacent to ThermalFOIL

Gypsum Board. Use of CSST in or near contact with foil or other metal surfaces can cause arcing in the event of a lightning strike with the potential for gas leaks and fire hazards. Only black pipe gas line systems should be used for penetration of a wall utilizing ThermalFOIL Gypsum Board.

Limitations

- Not recommended for high moisture areas such as saunas, steam rooms or gang showers.
- Prime with latex primer and allow to dry thoroughly before decoration.
- Should not be used as a vapor barrier.
- Minimum defined air space must be an average of 3/4" in depth.

Technical Data

PHYSICAL PROPERTIES

Thickness, nominal	1/2" Regular (12.7 mm)
Width, nominal	4' (1219 mm)
Length, standard	8' (2438 mm), 12' (3657 mm)
Weight, lbs./sq. ft., nominal	1.3 – 1.4
Edges	Tapered
Emissivity	.038
Permeance	11
Surface Burning Characteristics	Flame spread: 0 Smoke developed: 10

APPLICABLE STANDARDS AND REFERENCES

ASTM C 1396
ASTM C 840
Gypsum Association GA-216
Gypsum Association GA-214
Meets Federal Specification SS-L-30D Type III (Grade R)(Form C)
ICC Acceptance Criteria 02 (AC02)
ASTM E 96
ASTM E 84
ESR-3501

LIMITED WARRANTIES AND REMEDIES

Products manufactured and sold by National Gypsum Company are warranted by National Gypsum Company to its customers to be free from defects in materials and workmanship at the time of shipment. THIS EXPRESS WARRANTY IS THE ONLY WARRANTY APPLICABLE TO SUCH PRODUCTS, AND IS IN LIEU OF AND EXCLUDES ALL OTHER EXPRESS ORAL OR WRITTEN WARRANTIES AND ALL IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

National Gypsum Company will not be liable for any incidental, indirect or consequential losses, damages or expenses. The customer's exclusive remedy for any type of claim or action for defective products will be limited to the replacement of the products (in the form originally shipped) or, at National Gypsum's option, to a payment or credit not greater than the original purchase price of the products.

National Gypsum Company will not be liable for products claimed to be defective where the defect resulted from causes not within National Gypsum's control, or which arose or occurred after shipment, including but not limited to accidents, misuse, mishandling, improper installation, contamination or adulteration by other materials or goods, or abnormal conditions of temperature, moisture, dirt or corrosive matter.

Any claim that products sold by National Gypsum Company were defective or otherwise did not conform to the contract of sale is waived unless the customer submits it in writing to National Gypsum within thirty (30) days from the date the customer discovered or should have discovered the defect or nonconformance. No legal action or proceeding complaining of goods sold by National Gypsum may be brought by the customer more than one year after the date the customer discovered or should have discovered the defect or problem of which it complains.

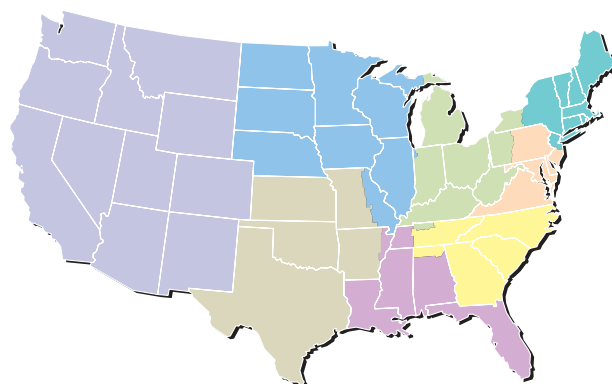
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CUSTOMER SERVICE SALES AREAS



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