GOLD BOND® BRAND THERMALFOIL® GYPSUM BOARD

► MANUFACTURER

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► DESCRIPTION

Gold Bond® BRAND ThermalFOIL®
Gypsum Board is a specialty
gypsum board that is laminated
with a perforated foil-backing
that was developed to provide
R-value to the interior of an
exterior wall assembly when
installed as part of a complete
exterior wall system. When
combined with closed cell spray
polyurethane foam insulation
and a defined air space, the
ThermaFOIL Gypsum Board
acts as part of a reflective
insulated air space, enabling
builders to meet 2012 and 2015
energy codes while saving
on the high cost of full cavity
spray foam of "flash and batt"
systems, which require extra
time and labor. ("Flash and
batt" is a hybrid insulation
approach which combines
fiberglass insulation and closed-
cell spray foam.)

BASIC USES

ThermalFOIL Gypsum Board
can be used for the interior of
exterior walls in non-fire rated
single layer construction where
framing members are spaced up
to 16" o.c.

ADVANTAGES

• Installs like regular gypsum
board while offering a defined
R-value system.

• Saves time and labor versus
the two step "flash & batt"
methods.

• Saves cost over completely
filling the cavity with closed
cell spray foam.

• Enables the builder or
homeowner to still run wire or
pipes through the cavity after
wall is completed.

• Excellent working properties
including score/snap, reduced
dust and improved strength-to-
weight ratio.

• Enables builders to meet the
2012 and 2015 International
Energy Code while still using
2x4 wood construction (for
most climate zones.)

• GridMarX® guide marks are
printed on the paper surface
allowing the installer to quickly
identify fastener lines for stud
framing. GridMarX also assists
with quick identification of
nail/screw patterns.

GREENGUARD CERTIFIED

ThermalFOIL Gypsum Board has
achieved GREENGUARD GOLD
certification.

GREENGUARD
PRODUCT CERTIFIED FOR
LOW CHEMICAL EMISSIONS
UL.COM/GG
UL 2818
GOLD

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.

COMPOSITION & MATERIALS

ThermalFOIL Gypsum Board is
a manufactured panel with a
gypsum core encased in paper
and contains no asbestos. It has
a laminated foil backing with
perforations in the foil.

ACCESSORIES

• Fasteners: drywall screws,
nails or adhesives

• ProForm Joint Tape

• ProForm Ready Mix or
ProForm Quick Set/Quick Set
Lite Setting Compound

• Furring channels

• E-Z Strip control joints or
.093 zinc control joints

Job Name _____

Contractor_____ Date _____

Submittal Approvals: (Stamps or Signatures)

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	1/2" Regular 1.3 – 1.4
Edges	Tapered
Surface Burning Characteristics (per ASTM E 84)	Flame Spread: 0 Smoke Developed: 10

APPLICABLE STANDARDS AND REFERENCES

ASTM C 1396

ASTM C 840

ASTM C 1224

Gypsum Association GA-216

Gypsum Association GA-214

International Code Council Acceptance Criteria 02

Federal Specification SS-L-30D Type III (Grade R)

National Gypsum Company, *Gypsum Construction Guide*

► **INSTALLATION**

RECOMMENDATIONS

Once framing and exterior sheathing is installed, 2 lb. closed cell spray polyurethane foam is sprayed to the average depth needed to meet code (minus the R-value of the ThermalFOIL + air space.) This can be determined using the ThermalFOIL and SPUF (Spray Polyurethane Foam) R-value.

Regardless of brand or type of SPUF installed, the installer should refer to the manufacturer's instructions on how to properly install the SPUF. Check to make sure all edges of the cavity are sealed by the SPUF and that a consistent air space depth is maintained across all cavities.

Once the SPUF has been installed (refer to specific SPUF manufacturer for direction), ThermalFOIL can be installed.

ThermalFOIL Gypsum Board is then installed in accordance with Gypsum Association document GA-216 or *National Gypsum Company's Gypsum Construction Guide*.

Any foil area that is significantly scuffed, scraped or gouged should be discarded or repaired using foil tape prior to the board being fastened to the wall to preserve the low emittance qualities of the foil surface.

Any openings such as outlets and switches should be sealed using pads or caulk to minimize air flow.

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

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 surfaces of the gypsum board.

DECORATION

For best painting results, all surfaces, including joint compound, should be clean, dust-free and not glossy. To improve fastener and joint concealment, a coat of a quality primer is recommended to equalize the porosities between surface paper and joint compound. Drywall primer is a product specially formulated for this purpose.

The selection of a paint to give the specified or desired finished characteristics is the responsibility of the architect or contractor.

ThermalFOIL Gypsum Board that is to have a wallcovering applied to it should be prepared and primed as described for painting.

Gypsum Association GA-214, *Recommended Specification for Levels of Gypsum Board Finish*, should be referred to in order to determine the level of finishing needed to assure a surface properly prepared to accept the desired decoration.

ThermalFOIL™
Gypsum Board by National Gypsum

National Gypsum®