



# **DEXcell<sup>®</sup>**

*Roof Board*

**ONE NAME COVERS IT ALL**

# We've Got You Covered

## Four great products. Many great benefits.

When a building houses expensive equipment or people, DEXcell® Roof Boards will cover more than your roof. With four great products to choose from, there is one that works for every commercial roofing application. Our entire line also helps reduce sound transmission through a broad range of roof assemblies.

Our **DEXcell® Glass Mat Roof Board** is recommended for mechanically attached systems, metal roof systems and wood shake underlayment. It's also an excellent thermal and fire barrier.

Our **DEXcell FA™ Glass Mat Roof Board** has a heavy-duty coated fiberglass facer and is ideal for fully adhered roof systems — from a vapor barrier substrate to the parapet wall. Both DEXcell Glass Mat and FA Glass Mat Roof Boards are easier to use, handle and install because they are coated with our unique glass mat technology. DEXcell FA now available for FM VSH single ply assemblies. **DEXcell FA VSH™ Glass Mat Roof Board** delivers enhanced, hail, puncture and wind resistance.

**DEXcell® Cement Roof Board** provides unprecedented versatility. This board's superior moisture resistance makes it suitable for nearly every roof system.

Along with a great line of roof boards, our customers deserve exceptional service. For detailed information about applications or installation requirements, call 1-800-NATIONAL. Our technical experts are here to help.

## Roof Boards

**DEXcell**  
Roof Board



DEXcell

### Glass Mat Roof Board | A board you'll get attached to.

DEXcell® Glass Mat Roof Board is recommended for mechanically attached single-ply membranes and metal and fire/thermal barrier applications. It's manufactured with coated fiberglass facers and an enhanced moisture-resistant gypsum core. And it's coated on the front, back and sides for easy handling.

#### KEY FEATURES

- High-density coverboard/thermal barrier.
- Scores and snaps easily.
- Manufactured to meet ASTM C1177.
- Use as a part of a Class A, B or C roof covering.
- Tested in accordance with UL 1256, ULC CAN-S126 or FM 4450.
- Available in 1/4", 1/2" and 5/8" thicknesses and 4'x8'.



DEXcell

### FA Glass Mat Roof Board | A board you'll want to adhere to.

DEXcell FA™ Glass Mat Roof Board is recommended for fully adhered single-ply membranes, modified bitumen (cold applied), fluid applied, metal and spray foam. It's also used on the roof side of parapet walls.

#### KEY FEATURES

- High-density coverboard/thermal barrier.
- Heavy-duty coated fiberglass facers for improved handling, strength and adhesion.
- Scores and snaps easily.
- Manufactured to meet ASTM C1177.
- Available in 1/4", 1/2" and 5/8" thicknesses, and 4'x4' and 4'x8'.



DEXcell

### FA VSH Glass Mat Roof Board | A board to handle the extremes.

DEXcell FA VSH™ Glass Mat Roof Board is an excellent choice for applications requiring maximum hail and puncture resistance. Enhanced wind uplift, fire and moisture resistance and dimensional stability help to protect the assembly and the building owner's investment.

#### KEY FEATURES

- Achieves FM VSH approval for single ply membrane assemblies.
- For mechanically attached and adhered assemblies.
- Easier to handle and install.
- Available in 5/8" 4x4 and 4x8 sizes.
- Manufactured to meet ASTM C1177.



DEXcell

### Cement Roof Board | A board to get, wherever it's wet.

Whenever a building will be exposed to moisture or high humidity, DEXcell® Cement Roof Board is the smart choice. It is manufactured with Portland cement, lightweight aggregate and glass mesh that provides an exceptionally hard, durable surface.

#### KEY FEATURES

- Suitable for all roof systems, including, but not limited to, fully adhered single-ply membrane, mechanically attached roof systems, modified bitumen, built-up roof systems, fluid applied, metal and spray foam. It's also used on the roof side of parapet walls.
- Excellent bond/pull-through uplift values.
- Ideal for hot-mopped and torched applications.
- Superior moisture resistance.
- Manufactured to meet ASTM C1325.

# The Right Boards in the Right Place Mean Everything

DEXcell® Roof Boards form one component among many components in a properly designed roof assembly. Gold Bond Building Products, LLC, for gypsum DEXcell products, and PermaBASE Building Products, LLC, for cement DEXcell products, do not warrant the design, quality or workmanship of any other components in any roof assembly in which DEXcell® products may be used or of the roof assembly as a whole. Specifically, the manufacturers offer no recommendations regarding the following aspects of a roof assembly:

- The type of roof assembly to be used (single-ply, modified bitumen, built-up roof, etc.).
- The specifications of the other components in the roof assembly.
- Whether to use a separator sheet or vapor barrier between DEXcell Roof Boards and any other component of the roof assembly.
- Priming requirements.

However, different DEXcell products are designed for different applications. Refer to the chart to the right for recommendations of which DEXcell products are best suited for various applications.

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## Choose the Best DEXcell® Roof Board Product for Your Project

Application	DEXcell® Glass Mat Roof Board	DEXcell FA™ Glass Mat Roof Board	DEXcell FA VSH™ Glass Mat Roof Board	DEXcell® Cement Roof Board
Single-Ply – Fully Adhered	—	✓	✓	✓
Single-Ply – Mechanically Attached	✓	✓	✓	✓
Single-Ply – Self Adhered	—	✓	✓	✓
Modified Bitumen – Hot Mop	—	✓	✓	✓
Modified Bitumen – Cold Adhesive	—	✓	✓	✓
Modified Bitumen – Torch	—	✓	✓	✓
Modified Bitumen – Self Adhered	—	✓	✓	✓
Built-Up Roof (BUR) – Hot Mop	—	—	—	✓
Built-Up Roof (BUR) – Cold	—	✓	✓	✓
Spray Polyurethane Foam	—	✓	✓	✓
Fluid Applied	—	✓	✓	✓
Thermal Barrier	✓	✓	✓	✓
Fire Barrier	✓	✓	✓	✓
Substrate for Vapor Barrier	✓	✓	✓	✓
Substrate for Parapet Wall	—	✓	✓	✓
Very Severe Hail - Modified Bitumen	—	✓	✓	—
Very Severe Hail - Single-Ply	—	—	✓	—
Vegetative "Green" Roof System	—	✓	✓	✓
Photovoltaic Roof System	—	✓	✓	✓
Standing-Seam Metal Roof System	✓	✓	✓	✓
Wood Shake Underlayment	✓	✓	✓	✓

Recommended   
  Acceptable   
  Not Recommended\*

\*Indicates product applications that may be used successfully, but may not be optimal in terms of cost or performance as compared to the recommended product.

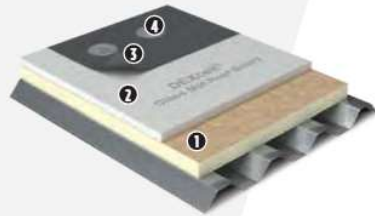
**Note:** In situations where prolonged excessive membrane surface temperatures may be experienced, such as dark-colored membranes in Southern climates, roof surfaces that experience reflected sunlight or photovoltaic installations, DEXcell® Cement Roof Board is the preferred DEXcell® product.

Fire barrier meets FM Class 1 and UL Class A Fire ratings for roofing systems up to unlimited slope per UL 790.

# Typical Roof System Applications

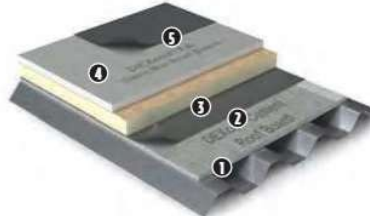
The following are examples of typical roof system applications using DEXcell® Roof Boards and should be considered to be for illustration purposes only. Consult with the roof system manufacturer or roof design professional for recommendations on use and installation. The manufacturers of DEXcell Roof Board products do NOT provide roof design services and make no warranties or representation with respect to any particular roof system or any components or materials, other than DEXcell Roof Boards. It is the responsibility of the roof system manufacturer or roof design professional to determine the suitability of DEXcell Roof Boards, or the use of any other materials with DEXcell Roof Boards, for any particular application.

## COVERBOARD



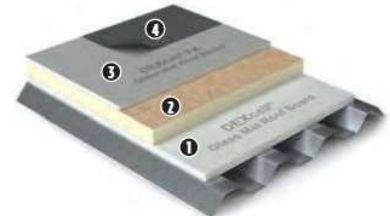
1. Insulation
2. DEXcell® Glass Mat Roof Board
3. Membrane
4. Fastener

## THERMAL BARRIER / VAPOR BARRIER



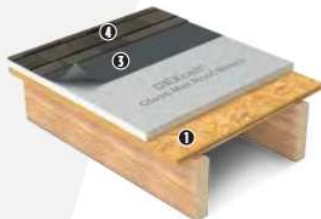
1. DEXcell® Cement Roof Board
2. Vapor Barrier
3. Insulation
4. DEXcell FA™ Glass Mat Roof Board
5. Membrane

## THERMAL BARRIER / COVERBOARD



1. DEXcell® Glass Mat Roof Board
2. Insulation
3. DEXcell FA™ Glass Mat Roof Board
4. Membrane

## WOOD DECK



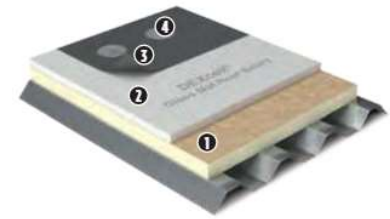
1. Wood Decking
2. DEXcell® Glass Mat Roof Board
3. Membrane
4. Shingles

## VEGETATIVE



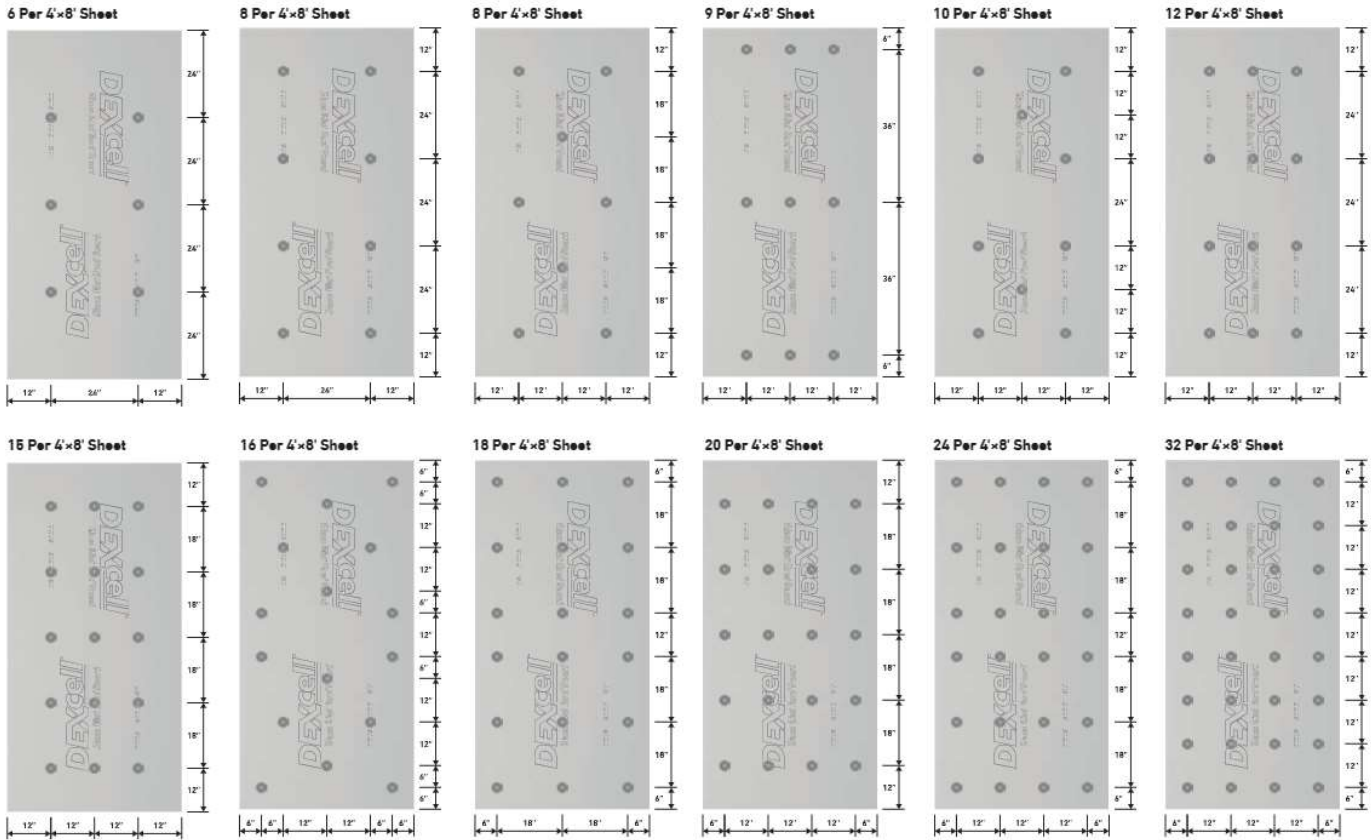
1. Insulation
2. DEXcell® Cement Roof Board
3. Membrane
4. Vegetative Roof System

## VERY SEVERE HAIL



1. Insulation
2. 1/2" DEXcell FA™ with modbit or DEXcell FA VSH™ single-ply
3. Membrane
4. Fastener

# Fastener Applications



## Best Choice for All Applications

Product	Cover Board Attachment				Membrane Attachment							
	Loose Lay	Hot Asphalt	Adhesive	Mech. Fastener	Solvent Based	Water Based	Torch	Hot Asphalt	Cold Adhesive	Low-Rise Foam	Mech. Fastener	
DEXcell® Glass Mat	✓ <sup>1</sup>	—	—	✓ <sup>2</sup>	—	—	—	—	—	—	✓	
DEXcell FA™ Glass Mat	✓ <sup>1</sup>	✓	✓	✓	✓	✓	✓	Fleece <sup>3</sup>	✓	✓	✓	
DEXcell FA VSH™ Glass Mat	✓ <sup>1</sup>	✓	✓	✓	✓	✓	✓	Fleece <sup>3</sup>	✓	✓	✓	
DEXcell® Cement Board	✓ <sup>1</sup>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	

✓ Yes — No

- Loose lay when layers above are attached to the deck. Common in thermal barrier applications.
- With MA roof covers. 4 to 5 fasteners per 4x8 are commonly used.
- Application of fleece back membrane in hot asphalt is permitted.

# Hear Less of What's Above

Architects, roof consultants and contractors have come under increasing pressure to reduce sound transmission through the roof assembly in commercial, residential, institutional and industrial roof assemblies. Sound Transmission Class, or STC, measures how well a building material or assembly blocks airborne sound. STC is a single number rating system. An Outdoor Indoor Transmission Class (OITC) rating is a single number rating for comparing the performance of exterior roofs exposed to typical transportation noise sources.

## DEXcell Sound Testing

Interior Ceiling	Above Deck				Below Deck					
	Under-Layment	Insulation	Coverboard	Membrane	Insulation	Hat Channel	R/C Channel	Suspended Ceiling	Ceiling Board	Tested STC
None	5/8" DEX	3" ISO	1/2" DEX	EPDM	-	-	-	-	1/2" C	36
1/2" C, Hat Channel	5/8" DEX	3" ISO	1/2" DEX	EPDM	R13	Yes	-	-	1/2" C	56
1/2" C, Hat Channel	5/8" DEX	3" ISO	1/2" DEX	Mod Bit	R13	Yes	-	-	1/2" C	57
1/2" C, Res. Channel	5/8" DEX	3" ISO	1/2" DEX	EPDM	R13	Yes	Yes	-	1/2" C	57
1/2" C, Res. Channel	5/8" DEX	3" ISO	1/2" DEX	Mod Bit	R13	Yes	Yes	-	1/2" C	58
1/2" C, Res. Channel	5/8" DEX	3" ISO	2 x 1/4" DEX	EPDM	R13	Yes	Yes	-	1/2" C	57
Suspended Ceiling	5/8" DEX	3" ISO	1/2" DEX	EPDM	R13	-	-	C & Hat C.	1/2" C	57
Suspended Ceiling	5/8" DEX	3" ISO	1/2" DEX	EPDM	R13	-	-	C & Hat C.	1/2" C (x2)	59
Suspended Ceiling	5/8" DEX	3" ISO	1/2" DEX	EPDM	5.5" Mineral Wool	-	-	C & Hat C.	5/8" X (x2)	61

### HAT RC 1 - STC 57 / OITC 46



- 1. Membrane
- 2. 1/2" DEXcell FA (Coverboard)
- 3. Rigid Foam Insulation, 3" Min.
- 4. 5/8" DEXcell® Roof Board (Thermal Barrier Underlayment)
- 5. Steel Deck
- 6. Steel Truss
- 7. Hat Channel
- 8. RC Channel
- 9. Type C Gypsum Board, 1/2" Min.

### SUSPENDED CEILING HC 2 - STC 61 / OITC 50



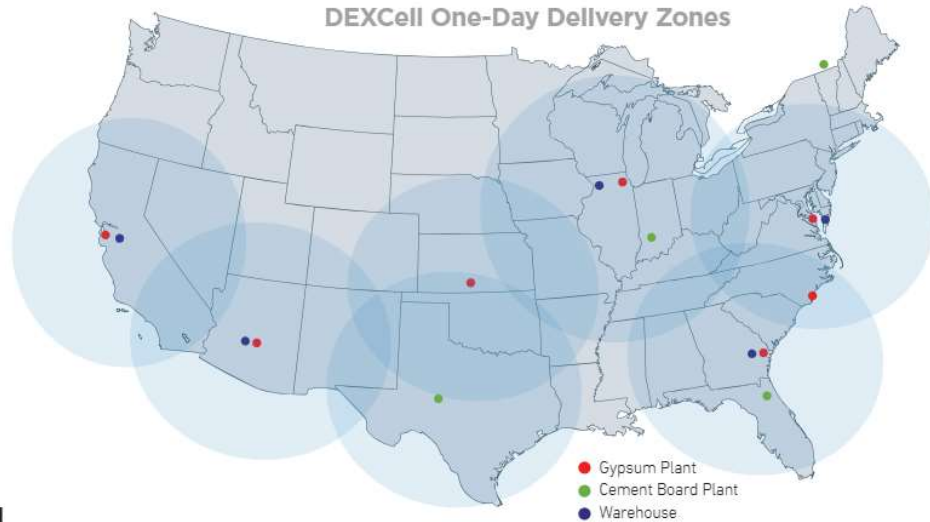
- 1. Membrane
- 2. 1/2" DEXcell FA (Coverboard)
- 3. Rigid Foam Insulation, 3" Min.
- 4. 5/8" DEXcell® Roof Board (Thermal Barrier Underlayment)
- 5. Steel Deck
- 6. Steel Truss
- 7. Batt Insulation, 5-1/2" Mineral Wool
- 8. Hat Channel
- 9. Two Layers of 5/8" Type X Gypsum Board



# Delivering Customer Service You Deserve

National Gypsum is a solutions-focused company. Our goal is to help you make the best product choices by providing unmatched technical expertise. You can also expect world-class customer service and a solid commitment to on-time, and in most cases, one-day delivery. Put simply, we want to be your trusted partner.

To the right, you can find the plant locations where DEXcell Roof Board products are produced along with warehouse locations and one-day delivery zones.



## DEXcell Packaging

4" x 4" DEXcell® FA Glass Mat	1/4"	1/2"	5/8"
Pieces per pallet	60	48	44
Sq. ft. per pallet	960	768	704
Weight per pallet (lbs.)	1,200	1,612	1,964
Sq. ft. per truck	38,400	23,040	16,900
Weight per truck (lbs.)	48,000	48,384	47,139

4" x 8" DEXcell® Glass Mat & FA Glass Mat	1/4"	1/2"	5/8"
Pieces per pallet	44	30	30
Sq. ft. per pallet	1,408	960	960
Weight per pallet (lbs.)	1,760	2,016	2,678
Sq. ft. per truck	38,020	23,040	17,280
Weight per truck (lbs.)	47,520	48,384	48,211

4" x 8" DEXcell® FA VSH Glass Mat	1/4"	1/2"	5/8"
Pieces per pallet	44	30	30
Sq. ft. per pallet	1,408	960	960
Weight per pallet (lbs.)	1,760	2,016	2,678
Sq. ft. per truck	38,020	23,040	17,280
Weight per truck (lbs.)	47,520	48,384	48,211

4" x 4" DEXcell® Cement Roof Board	7/16"	5/8"
Pieces per pallet	30	24
Sq. ft. per pallet	480	384
Weight per pallet (lbs.)	1,067	1,080
Sq. ft. per truck	21,600	16,128
Weight per truck (lbs.)	48,016	48,600

4" x 8" DEXcell® Cement Roof Board	7/16"	5/8"
Pieces per pallet	30	24
Sq. ft. per pallet	960	768
Weight per pallet (lbs.)	2,110	2,130
Sq. ft. per truck	22,080	16,128
Weight per truck (lbs.)	48,531	48,990

**Note:** Any protective plastic factory packaging that is used to wrap DEXcell Glass Mat Roof Boards and DEXcell Cement Roof Boards for shipment is intended to provide temporary protection from exposure to moisture only and is not intended to provide protection during storage after delivery.

## LIMITED WARRANTY

# DEXcell® Roof Board

(United States, U.S. Territories, and Canada Only)

### LIMITED WARRANTY

The Seller warrants to each purchaser of its DEXcell® Roofing Products ("DEXcell"), and to the owner at the time of installation of any building upon which DEXcell is installed, that subject to the conditions and limitations set forth below: (1) DEXcell® Roof Boards shall be free from defects in material and workmanship at the time of shipment ("Defects Warranty"); and (2) with respect to only DEXcell FA™ Glass Mat Roof Board (1/2" and 5/8" thicknesses only), DEXcell FA VSH™ Glass Mat Roof Board (5/8" thickness) and DEXcell® Cement Roof Board, such products will not deteriorate as a result of exposure to normal weather conditions when properly installed on parapet walls ("Exposure Warranty"). "Seller" means for gypsum DEXcell products, Gold Bond Building Products, LLC, and for cement DEXcell products, PermaBASE Building Products, LLC. Claims under the Defects Warranty may be made for up to two (2) years after the date of the product's manufacture, as printed on each DEXcell Roof Board. Claims under the Exposure Warranty may be made for up to ninety (90) days after the date of installation of the product.

This Limited Warranty is the only warranty applicable to DEXcell and IS IN LIEU OF, EXCLUDES, AND SELLER DISCLAIMS, ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. SELLER WILL NOT BE RESPONSIBLE OR LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL, CONSEQUENTIAL, EXEMPLARY OR PUNITIVE DAMAGES, REGARDLESS OF THE NATURE OR THEORY OF THE CLAIM, OR FOR LOSS OF INCOME OR PROFITS, DAMAGE TO ANY STRUCTURE, CONTENTS OR OTHER PROPERTY, OR LOSS OF USE. Some states or provinces prohibit the exclusion or limitation of warranties or may not allow the exclusion or limitation of incidental or consequential damages. In this case, the above disclaimers may not apply to you. This warranty gives you specific legal rights and you may also have other rights which will vary depending upon the state or province.

### WARRANTY CONDITIONS

This Limited Warranty applies only if the following conditions are met:

- DEXcell Roofing Products shall be dry prior to, during, and after roofing application processes.
- Installation methods are in strict accordance with roofing industry and roof system standards, proper roof design; applicable building codes, and any applicable written recommendations and specifications published by Seller.
- The DEXcell product has been properly handled and stored at all times in accordance with industry, trade, and standard building practices, and has not been abused or used for an improper application.
- Only as much DEXcell as can be covered by complete and final roofing system during the same day has been installed, without leaving the DEXcell product exposed and uncovered.
- The problem with the DEXcell product is not due to structural movement of the building; movement in, failure of or defects in materials to which the product is attached or which are attached to it; causes other than normal weather conditions, such as near gale or higher force winds, tornadoes, hail storms, hurricanes, floods, earthquakes or falling objects; immersion in water, or sustained pooling or cascading of water; or fire, vandalism, misuse or abuse.
- The building on which the product is installed is maintained with reasonable care.
- The problem or claim is not the result of mold, mildew, algae, fungus, or other conditions involving organic growth or bacteria or insect issues.

### MAKING CLAIMS

All claims under this warranty must be submitted to National Gypsum Company, authorized sales agent and service provider to Seller, within thirty (30) days from the time you discover a problem with DEXcell products. Include a brief description of the problem with photographs and copies of sales receipts, invoices or other documents which may show the dates of purchase and installation. Mail this information to:

National Gypsum Company  
5901 Carnegie Boulevard  
Charlotte, NC 28209

Attn: Director, Quality Services R&D

Seller shall within a reasonable time be permitted to inspect the DEXcell products, site, installation and system conditions. The building owner must grant reasonable access for such inspection and shall not make or allow to be made any alteration or repair to DEXcell before Seller's inspection. If Seller's inspection confirms that the DEXcell product does not conform with the warranty set forth herein, then if all conditions are met Seller will, at its sole option, either replace the non-conforming DEXcell or refund the original uninstalled purchase price for the non-conforming DEXcell or, where the product has already been installed, provide reimbursement for the reasonable cost of repair or replacement of the non-conforming DEXcell Roof Board product up to a maximum amount equal to two (2) times the original uninstalled purchase price of the non-conforming DEXcell product. These remedies are Seller's sole and exclusive obligation and liability for any breach of warranty relating to DEXcell.

Issued January 2021



# National Gypsum Company

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National Gypsum Company is the exclusive service provider of reliable, high-performance building products manufactured by its affiliate companies and marketed under the Gold Bond®, ProForm®, and PermaBASE® brands. The strategic network of Gold Bond, ProForm, and PermaBASE manufacturing facilities located throughout major metropolitan hubs in North America allows us to provide the best in customer service so we can keep your fast-paced projects moving forward.

## **SUSTAINABILITY**

Our brands create products that contribute to sustainable design by providing healthy indoor air quality; moisture, mold and mildew management; durability; optimal acoustics; life safety and increased space functionality. No matter how you define sustainability, we offer the most comprehensive set of value-added solutions in the industry.

## **TRUSTED PARTNER**

The National Gypsum name has been synonymous with high-quality, innovative products and exceptional customer service since 1925. Our technical experts at 1-800-NATIONAL® are always a phone call away to answer any type of product or specification question.

We are Building Products for a Better Future® — one project at a time.

## Industry Associations



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## Technical Information

Visit [dexcellroofboard.com](http://dexcellroofboard.com) or call National Gypsum Company Construction Services: 1-800-NATIONAL (628-4662).



National Gypsum Company is the exclusive service provider for products manufactured by Gold Bond Building Products, LLC and PermaBASE Building Products, LLC.

DEXcell® gypsum roof board products are manufactured by Gold Bond Building Products, LLC.

DEXcell® cement roof board products are manufactured by PermaBASE Building Products, LLC.



Exclusive service provider of DEXcell®

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