

CLASSIFICATION: 06 16 43.00 WOOD, PLASTICS, AND COMPOSITES (FRAMING): GYPSUM SHEATHING

created via: HPDC Online Builder

PRODUCT DESCRIPTION: Gold Bond® BRAND eXP® Sheathing consists of a moisture- and mold-resistant gypsum core encased in a coated, specially designed PURPLE® fiberglass mat on the face, back and sides. It is available in either a Regular or Type X core. The glass mat is folded around the long edges to reinforce and protect the core, and it provides superior weather resistance. Use it for attachment to the outside of wall and soffit framing as a substrate for exterior cladding. For speed of installation, GridMarX® guide marks are printed on the glass mat surface. This HPD covers 1/2" Gold Bond® BRAND eXP® Sheathing Gypsum Panel and 5/8" Gold Bond® BRAND eXP® Sheathing Fire-Shield® Type X Gypsum Panel products.

Section 1: Summary **Nested Method / Material Threshold**

CONTENT INVENTORY

<p>Inventory Reporting Format</p> <p><input checked="" type="radio"/> Nested Materials Method</p> <p><input type="radio"/> Basic Method</p> <p>Threshold Disclosed Per</p> <p><input checked="" type="radio"/> Material</p> <p><input type="radio"/> Product</p>	<p>Threshold level</p> <p><input type="radio"/> 100 ppm</p> <p><input checked="" type="radio"/> 1,000 ppm</p> <p><input type="radio"/> Per GHS SDS</p> <p><input type="radio"/> Per OSHA MSDS</p> <p><input type="radio"/> Other</p>	<p>Residuals/Impurities</p> <p>Residuals/Impurities Considered in 2 of 2 Materials</p> <p>Explanation(s) provided for Residuals/Impurities?</p> <p><input checked="" type="radio"/> Yes <input type="radio"/> No</p>	<p><i>Are All Substances Above the Threshold Indicated:</i></p> <p>Characterized Percent Weight and Role Provided? <input checked="" type="radio"/> Yes <input type="radio"/> No</p> <p>Screened Using Priority Hazard Lists with Results Disclosed? <input checked="" type="radio"/> Yes <input type="radio"/> No</p> <p>Identified Name and Identifier Provided? <input type="radio"/> Yes <input checked="" type="radio"/> No</p>
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CONTENT IN DESCENDING ORDER OF QUANTITY

Summary of product contents and results from screening individual chemical substances against HPD Priority Hazard Lists and the GreenScreen for Safer Chemicals®. The HPD does not assess whether using or handling this product will expose individuals to its chemical substances or any health risk. Refer to Section 2 for further details.

MATERIAL | SUBSTANCE | RESIDUAL OR IMPURITY
GREENSCREEN SCORE | HAZARD TYPE

EXP GYPSUM CORE [GYPSUM **LT-UNK** GLASS / MINERAL FIBER **LT-UNK** | CAN STARCH **LT-UNK** SILOXANES AND SILICONES, DI-ME, POLYMERS WITH 3-MERCAPTOPROPYL SILSESQUOXANES **LT-UNK** SODIUM POLYNAPHTHALENESULFONATE **LT-P1** | PBT] COATED FIBERGLASS MAT (EXTERIOR) [LIMESTONE; CALCIUM CARBONATE **LT-UNK** GLASS / MINERAL FIBER **LT-UNK** | CAN KAOLIN CLAY **LT-UNK** | CAN UNDISCLOSED **LT-P1** | RES UNDISCLOSED **LT-UNK** POTASSIUM METHYLSILANETRIOLATE **NoGS** POLYACRYLIC ACID, SODIUM SALT **LT-UNK** UNDISCLOSED **LT-UNK** MICA **LT-UNK** QUARTZ **LT-1** | CAN SILICA, AMORPHOUS **LT-P1**]

Number of Greenscreen BM-4/BM3 contents..... 0
Contents highest concern GreenScreen
Benchmark or List translator Score..... LT-1
Nanomaterial..... No

INVENTORY AND SCREENING NOTES:

This Health Product Declaration (HPD) was completed in accordance with the HPD Standard version 2.1, and discloses hazards associated with all substances present at or above 1000 parts per million (ppm) in the finished product, along with the role and percent weight for each substance. Therefore, this HPD is consistent with the LEED v4 MR credit Building Product Disclosure and Optimization: Material Ingredient Reporting (Option 1).

VOLATILE ORGANIC COMPOUND (VOC) CONTENT

VOC Content data is not applicable for this product category.

CERTIFICATIONS AND COMPLIANCE *See Section 3 for additional listings.*

Other: ICC-ES Evaluation Report (ESR-2743)
Multi-attribute: Type III Environmental Product Declaration

CONSISTENCY WITH OTHER PROGRAMS

Pre-checked for LEED v4 Material Ingredients, Option 1

Third Party Verified? Yes No

PREPARER: Self-Prepared
VERIFIER:
VERIFICATION #:

SCREENING DATE: 2017-05-01
PUBLISHED DATE: 2017-09-06
EXPIRY DATE: 2020-05-01

Section 2: Content in Descending Order of Quantity

This section lists contents in a product based on specific threshold(s) and reports detailed health information including hazards. This HPD uses the inventory method indicated above, which is one of three possible methods:

- Basic Inventory method with Product-level threshold.
- Nested Material Inventory method with Product-level threshold
- Nested Material Inventory method with individual Material-level thresholds

Definitions and requirements for the three inventory methods and requirements for each data field can be found in the HPD Open Standard version 2.1, available on the HPDC website at: www.hpd-collaborative.org/hpd-2-1-standard

EXP GYPSUM CORE

%: 94.5000 - 97.0000

HPD URL:

MATERIAL THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: No residuals or impurities are known or expected to be present at or above the Content Inventory Threshold indicated that have a GS score of BM-1, LT-1 or LT-P1 based on batch testing, supplier SDS, and as predicted by process chemistry (Pharos CML).

OTHER MATERIAL NOTES: Gold Bond® eXP® Sheathing is manufactured with an enhanced moisture and mold resistant core.

GYPSUM

ID: 13397-24-5

%: 98.8000 - 99.2000

GS: LT-UNK

RC: PreC

NANO: No

ROLE: Substrate

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: May also include CASRN 10101-41-4 (LT-UNK; No warnings found on HPD Priority lists). Five National Gypsum plants produce gypsum board exclusively with Pre-Consumer (Post-Industrial) byproduct gypsum [Shippingport, PA; Apollo Beach, FL; Mt. Holly, NC; Westwego, LA; Shoals, IN]. Ten National Gypsum plants produce gypsum board exclusively with natural rock gypsum [Burlington, NJ; Fort Dodge, IA; Long Beach, CA; Medicine Lodge, KS; National City, MI; Phoenix, AZ; Portsmouth, NH; Richmond, CA; Rotan, TX; Savannah, GA]. Two National Gypsum plants produce gypsum board with a blend of Pre-Consumer (Post-Industrial) byproduct gypsum and natural rock gypsum [Baltimore, MD; Waukegan, IL].

GLASS / MINERAL FIBER

ID: 65997-17-3

%: 0.3000 - 0.4000

GS: LT-UNK

RC: None

NANO: No

ROLE: Core Strength, Fire Resistance

HAZARDS:

AGENCY(IES) WITH WARNINGS:

CANCER

EU - R-phrases

R40 - Limited Evidence of Carcinogenic Effects

CANCER

EU - GHS (H-Statements)

H351 - Suspected of causing cancer

SUBSTANCE NOTES: Identified on the US EPA Safer Chemical Ingredient List.

STARCH

ID: 9005-25-8

%: 0.3000 - 0.4000

GS: LT-UNK

RC: None

NANO: No

ROLE: Improves Binding, Core Strength

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: Identified on the US EPA Safer Chemical Ingredient List.

SILOXANES AND SILICONES, DI-ME, POLYMERS WITH 3-MERCAPTOPROPYL SILSESQUIOXANES

ID: 108775-26-4

#: 0.1000 - 0.2000 GS: LT-UNK RC: None NANO: No ROLE: Moisture Resistance

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: Silicone

SODIUM POLYNAPHTHALENESULFONATE

ID: 9084-06-4

#: 0.0300 - 0.0400 GS: LT-P1 RC: None NANO: No ROLE: Dispersant; Reduces process water demand and energy consumption

HAZARDS:

AGENCY(IES) WITH WARNINGS:

PBT

EC - CEPA DSL

Persistent, Bioaccumulative and inherently Toxic (PBiTH) to humans

SUBSTANCE NOTES: This substance falls below the Content Inventory Threshold indicated; however, we have included this substance in an effort to provide full transparency for this product. Efforts are being made to find a suitable replacement for this dispersant that has fewer hazards.

COATED FIBERGLASS MAT (EXTERIOR)

#: 3.0000 - 5.5000

HPD URL:

MATERIAL THRESHOLD: 1000 ppm

RESIDUALS AND IMPURITIES CONSIDERED: Yes

RESIDUALS AND IMPURITIES NOTES: Residuals or impurities with the potential to be present at or above the Content Inventory Threshold indicated that return a GS score of BM-1, LT-1 or LT-P1 have been disclosed, based on information provided in supplier disclosure letters, supplier SDS, and as predicted by process chemistry (Pharos CML).

OTHER MATERIAL NOTES: Gold Bond® eXP® Sheathing is manufactured with enhanced moisture and mold resistant facers, which provide superior weather resistance capabilities. Percent by weight of substances reported as a range in order to further protect the proprietary nature of this formulation.

LIMESTONE; CALCIUM CARBONATE

ID: 1317-65-3

#: 45.0000 - 50.0000 GS: LT-UNK RC: None NANO: No ROLE: Filler

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: Identified on the US EPA Safer Chemical Ingredient List.

#: 20.0000 - 25.0000	GS: LT-UNK	RC: None	NANO: No	ROLE: Substrate
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HAZARDS:

AGENCY(IES) WITH WARNINGS:

CANCER

EU - R-phrases

R40 - Limited Evidence of Carcinogenic Effects

CANCER

EU - GHS (H-Statements)

H351 - Suspected of causing cancer

SUBSTANCE NOTES: Identified on the US EPA Safer Chemical Ingredient List.

KAOLIN CLAY

ID: 1332-58-7

#: 20.0000 - 25.0000	GS: LT-UNK	RC: None	NANO: No	ROLE: Filler
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HAZARDS:

AGENCY(IES) WITH WARNINGS:

CANCER

MAK

Carcinogen Group 3B - Evidence of carcinogenic effects but not sufficient for classification

SUBSTANCE NOTES: Identified on the US EPA Safer Chemical Ingredient List.

UNDISCLOSED

#: 2.0000 - 7.0000	GS: LT-P1	RC: None	NANO: No	ROLE: Binder
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HAZARDS:

AGENCY(IES) WITH WARNINGS:

RESPIRATORY

AOEC - Asthmagens

Asthmagens (Rs) - sensitizer-induced

SUBSTANCE NOTES: Supplier has disclosed substance name and CASRN under a Non-Disclosure Agreement; substance to remain proprietary to supplier. Substance has been screened against the HPD Priority lists with results disclosed. Supplier has confirmed the upper limit for residuals of concern related to this binder component, which fall below the Content Inventory Threshold indicated for this material.

UNDISCLOSED

#: 1.0000 - 5.0000	GS: LT-UNK	RC: None	NANO: No	ROLE: Binder
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HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: Supplier has disclosed substance name and CASRN under a Non-Disclosure Agreement; substance to remain proprietary to supplier. Substance has been screened against the HPD Priority lists with results disclosed.

POTASSIUM METHYLSILANETRIOLATE

ID: 31795-24-1

#: 0.1000 - 1.0000	GS: NoGS	RC: None	NANO: No	ROLE: Water Repellent
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HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: Synonyms: Methylsilanetriol, potassium salt; Silanetriol, 1-methyl-, potassium salt (1:?); Silanetriol, methyl-, potassium salt

POLYACRYLIC ACID, SODIUM SALT

ID: 9003-04-7

#: 0.1000 - 1.0000

GS: LT-UNK

RC: None

NANO: No

ROLE: Dispersant

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: Identified on the US EPA Safer Chemical Ingredient List.

UNDISCLOSED

#: 0.1000 - 1.0000

GS: LT-UNK

RC: None

NANO: No

ROLE: Binder

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: Supplier has disclosed substance name and CASRN under a Non-Disclosure Agreement; substance to remain proprietary to supplier. Substance has been screened against the HPD Priority lists with results disclosed.

MICA

ID: 12001-26-2

#: 0.1000 - 1.0000

GS: LT-UNK

RC: None

NANO: No

ROLE: Filler

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: Synonyms: Muscovite; Phlogopite; Silicate, mica

QUARTZ

ID: 14808-60-7

#: Impurity/Residual

GS: LT-1

RC: None

NANO: No

ROLE: Impurity/Residual

HAZARDS:

AGENCY(IES) WITH WARNINGS:

CANCER

US CDC - Occupational Carcinogens

Occupational Carcinogen

CANCER

IARC

Group 1: Agent is carcinogenic to humans - inhaled from occupational sources

CANCER

US NIH - Report on Carcinogens

Known to be Human Carcinogen (respirable size - occupational setting)

CANCER

MAK

Carcinogen Group 1 - Substances that cause cancer in man

CANCER

CA EPA - Prop 65

Carcinogen - specific to chemical form or exposure route

SUBSTANCE NOTES: Quartz is one of several compounds with warnings restricted to respirable forms (Pharos CML). Exposures to respirable crystalline silica are not expected during the recommended use of this product. Awaiting full GreenScreen Assessment for form specific hazards for this compound (<http://ow.ly/Z5ken>).

SILICA, AMORPHOUS

ID: 7631-86-9

#: **Impurity/Residual** GS: **LT-P1** RC: **None** NANO: **No** ROLE: **Impurity/Residual**

HAZARDS:

AGENCY(IES) WITH WARNINGS:

None Found

No warnings found on HPD Priority lists

SUBSTANCE NOTES: Potential Residual/Impurity of Glass/Mineral Fiber (Pharos CML).

Section 3: Certifications and Compliance

This section lists applicable certification and standards compliance information for VOC emissions and VOC content. Other types of health or environmental performance testing or certifications completed for the product may be provided.

OTHER

ICC-ES Evaluation Report (ESR-2743)

CERTIFYING PARTY: Third Party ISSUE DATE: 2016-06-01 EXPIRY DATE: 2018-06-01 CERTIFIER OR LAB: ICC Evaluation Services

APPLICABLE FACILITIES: All

CERTIFICATE URL:
http://designcenter.nationalgypsum.com/storage/components/pdf/ESR-2743_2016.pdf

CERTIFICATION AND COMPLIANCE NOTES: ESR-2743. EVALUATION SUBJECT: GOLD BOND BRAND® e2XP® 1/2-INCH AND 5/8-INCH TYPE X, EXTENDED EXPOSURE GYPSUM SHEATHING. EVALUATION SCOPE - Compliance with the following codes: 2009 and 2006 International Building Code® (IBC); 2009 and 2006 International Residential Code® (IRC); 2013 Abu Dhabi International Building Code (ADIBC). Properties evaluated: Structural; Noncombustibility; Surface-burning characteristics; Fire-resistance-rated construction; Physical properties.

MULTI-ATTRIBUTE

Type III Environmental Product Declaration

CERTIFYING PARTY: Third Party ISSUE DATE: 2016-09-13 EXPIRY DATE: 2021-09-13 CERTIFIER OR LAB: ASTM International

APPLICABLE FACILITIES: All

CERTIFICATE URL:
designcenter.nationalgypsum.com/storage/components/pdf/GMGP_EPD-Final_091516-.pdf

CERTIFICATION AND COMPLIANCE NOTES: Industry average cradle-to-gate EPD for Glass Mat Gypsum Panels produced by Gypsum Association member companies for the USA and Canadian Markets. Declaration Number: EPD- 038. ASTM International, Product Category Rules for Preparing an Environmental Product Declaration for Glass Mat Gypsum Panels, August 2016. Declared unit: 1,000 square feet (1MSF) of Glass Mat Gypsum Panel with a nominal finished thickness of 1/2" and 5/8".

Section 4: Accessories

This section lists related products or materials that the manufacturer requires or recommends for installation (such as adhesives or fasteners), maintenance, cleaning, or operations. For information relating to the contents of these related products, refer to their applicable Health Product Declarations, if available.

STEEL FRAMING

HPD URL: **No HPD available**

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:

Component of Steel Stud Curtain Wall, as referenced in ICC Evaluation Report (ESR-2743).

FASTENERS

HPD URL: **No HPD available**

CONDITION WHEN RECOMMENDED OR REQUIRED AND/OR OTHER NOTES:

As referenced in ICC Evaluation Report (ESR-2743).

Section 5: General Notes

Residuals and Impurities have been considered as stated in the Material Notes for each disclosed material.

Section 6: References

MANUFACTURER INFORMATION

MANUFACTURER: **National Gypsum Company**

ADDRESS: **2001 Rexford Road**

Charlotte NC 28211, USA

WEBSITE: **www.nationalgypsum.com**

CONTACT NAME: **Warren Barber**

TITLE: **Manager - Technical Marketing**

PHONE: **704-365-7494**

EMAIL: **WarrenB@nationalgypsum.com**

KEY

OSHA MSDS

Occupational Safety and Health Administration Material Safety Data Sheet

GHS SDS

Globally Harmonized System of Classification and Labeling of Chemicals Safety Data Sheet

Hazard Types

AQU Aquatic toxicity

CAN Cancer

DEV Developmental toxicity

END Endocrine activity

EYE Eye irritation/corrosivity

GEN Gene mutation

GLO Global warming

MAM Mammalian/systemic/organ toxicity

MUL Multiple hazards

NEU Neurotoxicity

OZO Ozone depletion

PBT Persistent Bioaccumulative Toxic

PHY Physical Hazard (reactive)

REP Reproductive toxicity

RES Respiratory sensitization

SKI Skin sensitization/irritation/corrosivity

LAN Land Toxicity

NF Not found on Priority Hazard Lists

GreenScreen (GS)

BM-4 Benchmark 4 (prefer-safer chemical)
BM-3 Benchmark 3 (use but still opportunity for improvement)
BM-2 Benchmark 2 (use but search for safer substitutes)
BM-1 Benchmark 1 (avoid - chemical of high concern)
BM-U Benchmark Unspecified (insufficient data to benchmark)

LT-P1 List Translator Possible Benchmark 1
LT-1 List Translator Likely Benchmark 1
LT-UNK List Translator Benchmark Unknown (insufficient information from List Translator lists to benchmark)
NoGS Unknown (no data on List Translator Lists)

Recycled Types

PreC Preconsumer (Post-Industrial)
PostC Postconsumer
Both Both Preconsumer and Postconsumer
Unk Inclusion of recycled content is unknown
None Does not include recycled content

Other Terms

Inventory Methods:

Nested Method / Material Threshold Substances listed within each material per threshold indicated per material
Nested Method / Product Threshold Substances listed within each material per threshold indicated per product
Basic Method / Product Threshold Substances listed individually per threshold indicated per product

Nano Composed of nano scale particles or nanotechnology
Third Party Verified Verification by independent certifier approved by HPDC
Preparer Third party preparer, if not self-prepared by manufacturer
Applicable facilities Manufacturing sites to which testing applies

The Health Product Declaration (HPD) Open Standard provides for the disclosure of product contents and potential associated human and environmental health hazards. Hazard associations are based on the HPD Priority Hazard Lists, the GreenScreen List Translator™, and when available, full GreenScreen® assessments. The HPD Open Standard v2.1 is not:

- a method for the assessment of exposure or risk associated with product handling or use,*
- a method for assessing potential health impacts of: (i) substances used or created during the manufacturing process or (ii) substances created after the product is delivered for end use.*

Information about life cycle, exposure and/or risk assessments performed on the product may be reported by the manufacturer in appropriate Notes sections, and/or, where applicable, in the Certifications section.

The HPD Open Standard was created and is supported by the Health Product Declaration Collaborative (the HPD Collaborative), a customer-led organization composed of stakeholders throughout the building industry that is committed to the continuous improvement of building products through transparency, openness, and innovation throughout the product supply chain.

The product manufacturer and any applicable independent verifier are solely responsible for the accuracy of statements and claims made in this HPD and for compliance with the HPD standard noted.