

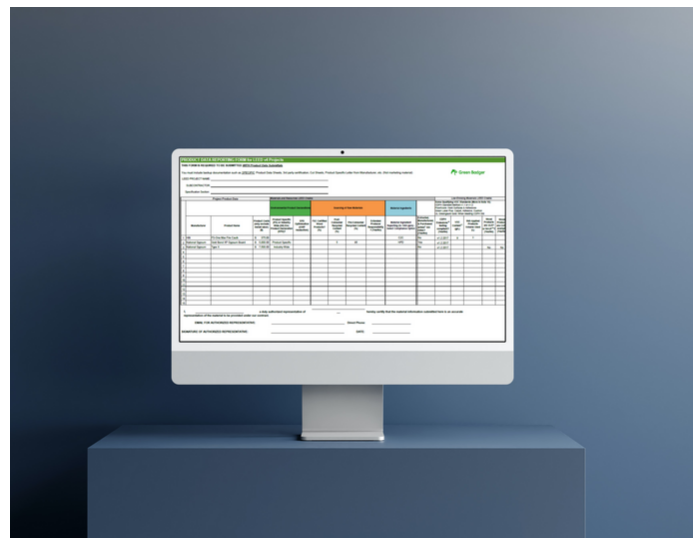


General Contractor Submittal Example

Before you start building, one big job for contractors is handling construction submittals. They're a big deal for making sure your project's on point, runs on schedule, and doesn't blow your budget. To make your construction business shine, you gotta know what these submittals are, why they matter, the basics of a good template, what goes into them, and how to make the whole process easier.

Please Note:

This is a sample submittal only showing document pages that need to be reviewed and recorded. Every page of documentation should be submitted at the end of your process.



PRODUCT DATA REPORTING FORM for LEED v4 Projects

THIS FORM IS REQUIRED TO BE SUBMITTED *WITH Product Data Submittals*



You must include backup documentation such as SPECIFIC Product Data Sheets, 3rd party certification, Cut Sheets, Product Specific Letter from Manufacturer, etc. (Not marketing material)

LEED PROJECT NAME: _____

SUBCONTRACTOR: _____

Specification Section: _____

Project Product Data			Materials and Resources LEED Credits							Low-Emitting Materials LEED Credits					
			Environmental Product Declarations		Sourcing of Raw Materials				Material Ingredients	Some Qualifying VOC Standards (More in Note 10): CDPH Standard Method v1.1 or v1.2 FloorScore: Hard Surfaces & Adhesives Green Label Plus: Carpet, Adhesive, Cushion UL Greengaurd Gold: When Meeting CDPH Std					
Manufacturer	Product Name	Product Costs (only exclude install labor) (\$)	Product Specific (PS) or Industry Wide (IW) Env. Product Declaration (EPD)?	EPD Optimization (GWP reuduction)	FSC Certified Wood Products? (%)	Post-Consumer Recycled Content (%)	Pre-Consumer Recycled Content (%)	Extended Producer Responsibility ? (Yes/No)	Material Ingredient Reporting (to 1000 ppm) - Select Compliance Option	Extracted, Manufactured, & Purchased within ² 100 miles? (Yes/No)	CDPH Emissions ¹⁰ testing compliant? (Yes/No)	VOC Content ¹¹ (g/L)	Wet-Applied Products Volume Used (L)	Wood Products are ULEF or NAUF ¹² ? (Yes/No)	Wood Products are CARB exempt? (Yes/No)
1	Hilti	FS-One Max Fire Caulk	\$ 375.00						C2C	No	v1.2 2017	9	3		
2	National Gypsum	Gold Bond XP Gypsum Board	\$ 5,000.00	Product Specific		5	95		HPD	Yes	v1.2 2017				
3	National Gypsum	Type X	\$ 7,500.00	Industry Wide						No	v1.2 2017			No	No
4															
5															
6															
7															
8															
9															
10															
11															
12															
13															
14															
15															

I, _____ a duly authorized representative of _____ hereby certify that the material information submitted here is an accurate representation of the material to be provided under our contract.

EMAIL FOR AUTHORIZED REPRESENTATIVE: _____ Direct Phone: _____

SIGNATURE OF AUTHORIZED REPRESENTATIVE: _____ DATE: _____



Material Health must be Bronze or higher.

Material Health



BRONZE

FS-ONE MAX Firestop Sealant / CFS-FIL Firestop Filler Mastic

ISSUED TO Hilti Corporation

STANDARD 3.1

EXPIRES 1 November 2024

LEAD ASSESSMENT BODY

MBDC

PHASES AND P

Final manufacturing
 uncontrolled burn

PRODUCTS COVERED

FS-ONE MAX Firestop Sealant / CFS-FIL Firestop Filler Mastic with product codes: 21

THE CHEMICAL TOXICITY ASSESSMENT

nd of use:

g, incineration,



HILTI



Expiration date is 11/1/2024.

2052899, 2245696.

PRODUCT OPTIMIZATION SUMMARY

- Cradle to Cradle Certified® Banned List compliant
- Material Health optimization strategy developed
- No carcinogens, or reproductive toxicants
- No mutagens
- Products do not contain any GREY or x-assessed chemicals
- Products do not contain any chemicals that have been identified and none are GREY or x-assessed



Percentage must be 90% or higher.

PERCENTAGE OF CHEMICAL SUBSTANCES ASSESSED BY WEIGHT

100%

Inventory threshold for chemicals in each material = 100 ppm

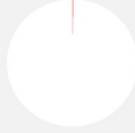
ASSESSMENT RATINGS BY WEIGHT



a or b: 1.1-11%



c: 88.9-98.8%



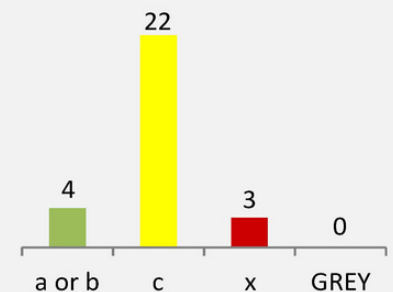
x: 0.1-0.3%



GREY: 0%

% CHEMICAL SUBSTANCES

PRODUCT OPTIMIZATION



29 CHEMICAL SUBSTANCES



December 19, 2021

To Whom It May Concern:

Re: Hilti FS-ONE Max Firestop – LEED Info.

The Hilti FS-ONE MAX Firestop is manufactured in Germany.

There is no post-consumer or post-industrial content in FS-ONE MAX and it cannot be recycled.

The VOC content for FS-ONE MAX is 9 grams/liter.

FS-ONE MAX is not regulated as a hazardous waste by the Federal EPA Standards. The regulations for the disposal of hazardous waste can vary from state to state and even city to city. For this reason, please contact your local regulatory agencies for direction on disposal.

Please feel free to contact us for more information.

Must show VOC content in grams/liter.

Sincerely,

Jerry Mitchell
Senior Environmental
Hilti, Inc.
(918) 436-1000
jerry.mitchell@hilti.com

Hilti, Inc.
5400 South 122nd East Avenue
Tulsa, OK 74146

1-800-879-8000
www.hilti.com



COMPLIANCE TESTED by berkeley analytical

VOC Emission Test Certificate



Date must be within three years.

Product Sample Information		Certificate Information	
Company:	Hilti Inc.	Certificate No:	200715-02
Company Website:	www.hilti.com	Authorized By:	
Product Type:	Sealants - Firestop		Raja S. Tannous, Laboratory Director
Date Produced:	5/5/2020	Date:	July 15, 2020

Reference Standard: California Department of Public Health CDPH/EHLB/Standard Method Version 1.2, 2017 (Emission testing method for CA Specification 01350)

Acceptance Criteria and Results Demonstrating Compliance of Product Sample to Referenced Standard:

Exposure Scenario ¹	Individual VOCs of Concern ²		TVOC ³
	Criterion	Compliance	
School Classroom	≤½ Chronic REL	YES	≤0.5 mg/m ³
Private Office	≤½ Chronic REL	YES	≤0.5 mg/m ³

Must be CDPH V.1.2-2017.

Product Coverage⁵: 14,260 g/m²

1. Exposure scenarios & product quantities for classroom & office are defined in Tables 4-2 – 4-5 (CDPH Std. Mtd. V1.2-2017)
2. Maximum allowable concentrations of individual target VOCs are specified in Table 4-1 (*ibid.*)
3. Maximum allowable formaldehyde concentration is ≤9 µg/m³, effective Jan 1, 2012; previous limit was ≤16.5 µg/m³ (*ibid.*)
4. Informative only; predicted TVOC Range in three categories, i.e., ≤0.5 mg/m³, >0.5 – 4.9 mg/m³, and ≥5.0 mg/m³
5. Informative and applicable only to tests of wet-applied products; grams of sample applied per square meter of substrate

Standards & Codes Recognizing CDPH Standard Method V1.2 (partial list)

- USGBC LEED Version 4. BD&C. ID&C
- The WFII Building Standard
- ANSI/GBI 01. Green Building Assessment Protocol

Narrative: Hilti Inc. selected a sample representative of its FS-ONE MAX - 2101531 firestop sealant product and submitted it on 6/10/2020 for testing. Berkeley Analytical measured and evaluated the emissions of VOCs from this sample following CDPH/EHLB/Standard Method V1.2-2017. The results of the test are presented in Berkeley Analytical report, 1031-007-03A-Jul1520.

Berkeley Analytical is an independent, third-party laboratory specializing in the analysis of organic chemicals emitted by and contained in building products, finishes, furniture, and consumer products. We are an ISO/IEC 17025 accredited laboratory (IAS, [TL-383](#)); all standards used in performing this test are in Berkeley Analytical's scope of accreditation.

DISCLAIMER: THIS CERTIFICATE OF COMPLIANCE AFFIRMS THAT: 1) A SAMPLE OF THE LISTED PRODUCT WAS TESTED ACCORDING TO THE REFERENCED STANDARD; 2) THE MEASURED VOC EMISSIONS FROM THE SAMPLE WERE EVALUATED FOR THE DEFINED EXPOSURE SCENARIO(S); AND 3) THE RESULTS MEET THE ACCEPTANCE CRITERIA OF THE REFERENCED STANDARD(S). BERKELEY ANALYTICAL IS NOT RESPONSIBLE FOR ANY CLAIMS REGARDING A PRODUCT OR PRODUCTS ENTERED INTO COMMERCE THAT MAY BE BASED ON THIS TEST. BERKELEY ANALYTICAL PROVIDES THIS CERTIFICATE OF COMPLIANCE "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PURPOSE.

ENVIRONMENTAL PRODUCT DECLARATION

GOLD BOND® XP® GYPSUM BOARD AND GOLD BOND® XP® FIRE-SHIELD® GYPSUM BOARD



Product Specific EPD



NSF: Program Operator








National 
Gypsum®

Gold Bond™
Building Products



NSF: Program Operator

Program Operator	NSF Certification LLC 789 N. Dixboro, Ann Arbor, MI 48105 www.nsf.org	 
Manufacturer Name and Address	Gold Bond Building Products, LLC 2001 Rexford Road Charlotte, NC 28211	
Declaration Number	EPD10792	
Declared Product and Declared Unit	92.9 m2 (1,000 square feet) of Gold Bond® XP® Gypsum Board 1/2 inch and Gold Bond® XP® Fire-Shield® Gypsum Board 5/8 inch	
Reference PCR and Version Number	NSF PCR for Gypsum Panel Products (Version 1.1, 2020)	
Product's Intended Application and Use	Products are designed to provide extra protection against mold and mildew. Applications include wood- and steel-framed construction for interior wall and ceiling applications.	
Product RSL	75 years	
Markets of Applicability	North America	
Date of Issue	10/21/2022	
Period of Validity	5 years from date of issue	
EPD Type	Product Specific	
Range of Dataset Variability	N/A	
EPD Scope	Cradle-to-Gate	
Year of reported manufacturer primary data	2020	
LCA Software and Version Number	GaBi 10.0.0.71	
LCI Database and Version Number	GaBi Database 2021.2	
LCIA Methodology and Version Number	TRACI 2.1 and IPCC AR5	
The sub-category PCR	<ul style="list-style-type: none"> • Thomas P. Gloria, Industrial Ecology Consultants • Bill Stough, Sustainable Research Group • Jack Geibig, EcoForm 	 Valid to 10/21/2027
This declaration was independently verified in accordance with ISO 14025: 2006. The reference PCR for Gypsum Panel Products (Version 1.1) serves as the core PCR.	Tony Favilla afavilla@nsf.org 	
<input type="checkbox"/> Internal <input checked="" type="checkbox"/> External		
This life cycle assessment was conducted in accordance with ISO 14044 and the reference PCR by:	Lindsay Bonney, WAP Sustainability Consulting, LLC	
This life cycle assessment was independently verified in accordance with ISO 14044 and the reference PCR by:	Jack Geibig - EcoForm jgeibig@ecoform.com 	
Limitations: Environmental declarations from different programs (ISO 14025) may not be comparable. Only EPDs prepared from cradle-to-grave life-cycle results and based on the same function, reference service life, and quantified by the same functional unit, and meeting all the conditions in ISO 14025, Section 6.7.2, can be used to assist purchasers and users in making informed comparisons between products. Full conformance with the PCR for Products allows EPD comparability only when all stages of a life cycle have been considered. However, variations and deviations are possible. Example of variations: Different LCA software and background LCI datasets may lead to differences results for upstream or downstream of the life cycle stages declared. Additional information on the life cycle assessment can be found by contacting National Gypsum directly.		



External Review

DESCRIPTION OF COMPANY

National Gypsum Company, headquartered in Charlotte, NC, 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®.



Products covered by EPD

PRODUCT DESCRIPTION

Gold Bond® XP® Gypsum Board and Gold Bond® XP® Fire-Shield Gypsum were designed to provide extra protection against mold and mildew compared to standard gypsum board products. These products are available with a regular (1/2-inch board) and a specially treated, fire-resistant, Type X gypsum core (5/8-inch board). The face paper is folded around the long edges to reinforce and protect the core, and the ends are square-cut and finished smooth. Long edges of the panels are tapered. With purple paper on the face side, mold, mildew, and moisture resistance, and 100% recycled gray paper on the back side, you can count on XP Gypsum Board to help protect your projects from mold.

This EPD includes representative products manufactured by National Gypsum's affiliate, Gold Bond Building Products, produced at the facilities shown in the table below. The facilities shown below produce XP boards in both thicknesses covered under this study: 1/2 inch and 5/8 inch. A weighted average of each manufacturing input (energy, water, waste, etc.) was utilized based on the volume of product made at multiple facilities.



If your facility is listed here, you can use it.

Table 1: Manufacturing Facilities

Manufacturing/Wallboard Plants	
Apollo Beach, FL	Portsmouth, NH
Baltimore, MD	Richmond, CA
Burlington, NJ	Rotan, TX
Fort Dodge, IA	Savannah, GA
Long Beach, CA	Shippingport, PA
Medicine Lodge, KS	Shoals, IN
Mount Holly, NC	Waukegan, IL
National City, MI	Westwego, LA
Phoenix, AZ	Wilmington, NC


Paper and gypsum used in the products are sourced from the plants below. These materials tend to be sourced from the paper plant and quarry nearest to the wallboard/manufacturing plant but that is not always the case.

Table 2: Paper Plants and Quarries

Paper Plants	Quarries
Anniston, AL	Halifax, Nova Scotia
Milton, PA	Fort Dodge, IA



Prepared By
 Trang Schwartz
 National Gypsum Company
 (704) 365-7300 Ext. 7625
 Trangs@nationalgypsum.com

 Recycled content shown as pre-consumer and/or post consumer.

National Gypsum Sustainable Materials Data Sheet

Recycled Content

Product Name	Manufacturing Location	Post Consumer	Pre Consumer	Materials Cost
Gold Bond® XP® Fire-Shield® Gypsum Board	Shippingport, PA	5%	95%	
Gold Bond® Fire-Shield® Gypsum Board	Shippingport, PA	5%	95%	
Gold Bond® eXP® Shaftliner	Baltimore, MD	0%	0%	
Gold Bond® eXP® Fire-Shield® Tile Backer	Savannah, GA	0%	0%	
ProForm® All Purpose Joint Compound	Belcamp, MD	0%	0%	
ProForm® Multi-Use Joint Compound	Belcamp, MD	0%	0%	
ProForm® Quick Set Lite™ Setting Compound	Rensselaer, IN	0%	0%	

Gold Bond® Gypsum Board

Gypsum board face and back paper is made of 100% post-consumer recycled content.
 Gypsum board recycled content varies by manufacturing location.
 The Post and Pre Consumer recycled content for gypsum and paper facings meet the definition of recycled content per ISO 14021.

ProForm® Finishing Products do not have recycled content; however, they may contribute in other categories covered in this report.

Report results are based on current distribution plan and manufacturing location capabilities. Gold Bond® Building Products, LLC, PermaBASE® Building Products, LLC and ProForm® Finishing Products, LLC reserve the right to determine the plant from which products will be shipped.

Gold Bond® Gypsum Board products with higher recycled content may be available for projects in Northeastern and Mid-Atlantic states. Please contact your local National Gypsum Sales Representative or call 1-800-NATIONAL for assistance.

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

Corporate Headquarters
 National Gypsum Company
 2001 Rexford Road
 Charlotte, NC 28211
 Phone: (704) 365-7300
 Web: NationalGypsum.com

Technical Information
 Phone: (800) NATIONAL
 (800) 628-4662



CERTIFICATE OF COMPLIANCE



Gold Bond Building Products, LLC provided by National Gypsum Company

Gold Bond® XP® Fire-Shield® Gypsum Board

86378-420

Certificate Number

03 Mar 2017 - 28 Dec

2023 Certificate Period

Certified

Status

UL 2818 - 2013 Gold Standard for Chemical Emissions for Building Materials, Finishes and Furnishings

Wall finishes are determined compliant in accordance with California Department of Public Health (CDPH) Standard Method V1.2-2017 using a Classroom Environment with an air change of 0.82 hr^{-1} and a loading of 94.60 m^2 ; and Wall finishes are determined compliant in accordance with California Department of Public Health (CDPH) Standard Method V1.2-2017 using an Office Environment with an air change of 0.68 hr^{-1} and a loading of 33.40 m^2 .



UL investigated representative samples of the product in accordance with the terms of the "Agreement". The Certificate Holder is authorized to use the UL logo on the product and its packaging only on the dates unless there is non-compliance with the terms of the Agreement.



Must be CDPH
V.1.2-2017.

This certificate is valid only in accordance with the agreements and any applicable program service terms in place between UL and the Certificate Holder (collectively the "Agreement") for the specific location site(s) covered by the UL Test Report, in accordance with the terms of the Agreement. This Certificate is valid for the identified



GREENGUARD Gold Certification Criteria for Building Products and Interior Finishes

Criteria	CAS Number	Maximum Allowable Predicted Concentration	Units
TVOC (A)	-	0.22	mg/m
Formaldehyde	50-00-0	9 (7.3 ppb)	³
Total Aldehydes (B) 4-	-	0.043	µg/m ³
Phenylcyclohexene	4994-16-5	6.5	ppm
Particle Matter less than 10 µm	-	20	µg/m ³
(C) 1-Methyl-2-pyrrolidinone (D)	872-50-4	160	µg/m ³
Individual VOCs (E)	-	1/2 CREL or 1/100th TLV	-

- (A) Defined to be the total response of measured VOCs falling within the C6 – C16 range, with responses calibrated to a toluene surrogate. Maximum allowable predicted TVOC concentrations for GREENGUARD Gold (0.22 mg/m³) fall in the range of 0.5 mg/m³ or less, as specified in CDPH Standard Method v1.2.
- (B) The sum of all measured normal aldehydes from formaldehyde through nonanal, plus benzaldehyde, individually calibrated to a compound specific standard. Heptanal through nonanal are measured via TD/GC/MS analysis and the remaining aldehydes are measured using HPLC/UV analysis.
- (C) Particle emission requirement only applicable to HVAC Duct Products with exposed surface area in air streams (a forced air test with specific test method) and for wood finishing (sanding) systems.
- (D) Based on the CA Prop 65 Maximum Allowable Dose Level for inhalation of 3,200 µg/day and an inhalation rate of 20 m³/day
- (E) Allowable levels for chemicals not listed are derived from the lower of 1/2 the California Office of Environmental Health Hazard Assessment (OEHHA) Chronic Reference Exposure Level (CREL) as required per the CDPH/EHLB/Standard Method v1.2 and BIFMA level credit 7.6.2 and 1/100th of the Threshold Limit Value (TLV) industrial work place standard (Reference: American Conference of Government Industrial Hygienists, 6500 Glenway, Building D-7, and Cincinnati, OH 45211-4438).



TVOC Range must also be shown on the certificate.



UL investigated representative samples of the identified Product(s) to the identified Standard(s) or other requirements in accordance with the agreements and any applicable program service terms in place between UL and the Certificate Holder (collectively "Agreement"). The Certificate Holder is authorized to use the UL Mark for the identified Product(s) manufactured at the production site(s) covered by the UL Test Report, in accordance with the terms of the Agreement. This Certificate is valid for the identified dates unless there is non-compliance with the Agreement.



Industry-wide EPD:
Gypsum Association



**National
Gypsum**



**Certified
Environmental
Product Declaration**
www.nsf.org

An Environmental Product Declaration

According to ISO 14025:2006 and ISO 21930:2017

An industry average cradle-to-gate EPD for 5/8" Type X Conventional Gypsum Board produced by Gypsum Association member companies for the USA and Canadian Markets.



NSF Certification, LLC
Ann Arbor, MI
www.nsf.org

Date of issue: 28/04/2020
Period of validity: 5 years
Declaration No.: EPD 10270



National Gypsum is a part of this EPD.



Industry Average EPD for 5/8" Type X Conventional Gypsum Board

General Summary



National Gypsum Company
2001 Rexford Road
Charlotte, North Carolina 28211, USA
Member Link (URL):
<http://nationalgypsum.com/>



PABCO® Gypsum
10600 White Rock Road, Suite 100
Rancho Cordova, CA 95670, USA
Member Link (URL):
<http://www.pabco gypsum.com/>



United States Gypsum Company
550 West Adams Street
Chicago, IL 60661-3676, USA
Member Link (URL):
<https://www.usg.com/content/usgcom/en.html>



Canadian Gypsum Company (CGC) Inc.
350 Bumhamthorpe Road West
5th Floor Mississauga, ON, L5B 3J1, Canada
Member Link (URL):
https://www.usg.com/content/usgcom/en_CA_east.html

Product Group and Name

Gypsum board

Product Description

Gypsum board is the generic name for a family of sheet products consisting of a non-combustible core primarily of gypsum with a paper facing [5], [8] (UN CPC Code 3699, NAICS Code 327420).

Product Category Rules (PCR)

NSF International, Product Category Rule for Environmental Product Declarations, PCR for Gypsum Panel Products, April 2020 [5].

Certification Period

28.04.2020 - 27.04.2025

Declared Unit

92.9 m² (1,000 square feet) of 5/8" (15.9 mm) Type X conventional

NSF Declaration Number

EPD 10270



Valid to
4/28/2025

NSF Certification, LLC
Ann Arbor, MI
www.nsf.org

Date of issue: 28/04/2020
Period of validity: 5 years
Declaration No.: EPD 10270

EPD and Project Report Information			
Program Operator		NSF Certification, LLC	
Declaration Holder		Gypsum Association (GA)	
Product group	Date of Issue	Period of Validity	Declaration Number
Gypsum board	28.04.2020	5 years	EPD 10270

Declaration Type
 A "cradle-to-gate" EPD for 5/8" Type X conventional gypsum board manufactured by GA members. Activity stages or information modules covered include production with the product ready for shipment at the manufacturing plant (modules A1 to A3). The declaration is intended for use in Business-to-Business (B-to-B) communication.


Applicable Countries
 United States and Canada

Product Applicability
 Gypsum board products are used extensively in building construction and renovation as an enclosing surface for interior walls and ceilings providing a finishing surface as well as mold and fire resistance.

Content of the Declaration
 This declaration follows *Section 9; Content of an EPD*, NSF International, Product Category Rule for Environmental Product Declarations: PCR for Gypsum Panel Products, April 2020 [5].


This EPD was independently verified by NSF in accordance with ISO 14025 and the reference PCR:

Internal External
X


 Jenny Oorbeck, joorbeck@nsf.org

The Project Report

An Industry Average Cradle-to-Gate Life Cycle Assessment of 1/2" Lightweight and 5/8" Type X conventional Gypsum Board for the USA and Canadian Markets, April 2020.

 External

Lindita Bushi, Ph.D. and Mr. Jamie Meil
 Athena Sustainable Materials Institute
info@athenasmi.org
www.athenasmi.org



CERTIFICATE OF COMPLIANCE



Gold Bond Building Products, LLC provided by National Gypsum Company

Gold Bond® Fire-Shield® Gypsum
Board

7196-420
Certificate Number

31 Dec 2008 - 28 Dec 2023
Certificate Period

Certified
Status

UL 2818 - 2013 Gold Standard for Chemical Emissions for Building Materials, Finishes and Furnishings

Building products and interior finishes are determined compliant in accordance with [California Department of Public Health \(CDPH\) Standard Method V.1.2-2017](#) using an Office and Classroom Environment. Product tested in accordance with UL 2821 test method to show compliance to emission limits on UL 2818, Section 7.1 and 7.2.



UL investigated representative samples of the identified Product(s) to the "Agreement". The Certificate Holder is authorized to use the UL Mark for dates unless there is non-compliance with the Agreement.



Must be CDPH
V.1.2-2017.



any applicable program service terms in place between UL and the Certificate Holder (collectively Report, in accordance with the terms of the Agreement. This Certificate is valid for the identified

GREENGUARD Gold Certification Criteria for Building Products and Interior Finishes

Criteria	CAS Number	Maximum Allowable Predicted Concentration	Units
TVOC ^(A)	-	0.22	mg/m ³
Formaldehyde	50-00-0	9 (7.3 ppb)	µg/m ³
Total Aldehydes ^(B)	-	0.043	ppm
4-Phenylcyclohexene	4994-16-5	6.5	µg/m ³
Particle Matter less than 10 µm ^(C)	-	20	µg/m ³
1-Methyl-2-pyrrolidinone ^(D)	872-50-4	160	µg/m ³
Individual VOCs ^(E)	-	1/2 CREL or 1/100th TLV	-

^(A) Defined to be the total response of measured VOCs falling within the C₆ – C₁₆ range, with responses calibrated to a toluene surrogate. Maximum allowable predicted TVOC concentrations for GREENGUARD Gold (0.22 mg/m³) fall in the range of 0.5 mg/m³ or less, as specified in CDPH Standard Method v1.2.

^(B) The sum of all measured normal aldehydes from formaldehyde through nonanal, plus benzaldehyde, individually calibrated to a compound specific standard. Heptanal through nonanal are measured via TD/GC/MS analysis and the remaining aldehydes are measured using HPLC/UV analysis.

^(C) Particle emission requirement only applicable to HVAC Duct Products with exposed surface area in air streams (a forced air test with specific test method) and for wood finishing (sanding) systems.

^(D) Based on the CA Prop 65 Maximum Allowable Dose Level for inhalation of 3,200 µg/day and an inhalation rate of 20 m³/day

^(E) Allowable levels for chemicals not listed are derived from the lower of 1/2 the California Office of Environmental Health Hazard Assessment (OEHHA) Chronic Reference Exposure Level (CREL) as required per the CDPH/EHLB/Standard Method v1.2 and BIFMA level credit 7.6.2 and 1/100th of the Threshold Limit Value (TLV) industrial work place standard (Reference: American Conference of Government Industrial Hygienists, 6500 Glenway, Building D-7, and Cincinnati, OH 45211-4438).



TVOC Range must also be shown on the certificate.

