

Environmental Product Declaration

ENSEMBLE™

ACOUSTICAL DRYWALL CEILING

USG CORPORATION

WALWORTH, WI



The Ensemble™ Acoustical Drywall Ceiling represents a revolutionary approach to building design. Installed and finished like traditional wallboard, this system provides a nondirectional, monolithic appearance with a fine texture while maximizing sound absorption. The result is a surface that looks like standard finished drywall but absorbs sound like traditional ceiling panels.



ENVIRONMENTAL PRODUCT DECLARATION



USG Sheetrock® Brand Ensemble™ Acoustical Drywall Ceiling

According to ISO 14025 and ISO 21930:2017

This declaration is an environmental product declaration (EPD) in accordance with ISO 14025. EPDs rely on Life Cycle Assessment (LCA) to provide information on a number of environmental impacts of products over their life cycle. Exclusions: EPDs do not indicate that any environmental or social performance benchmarks are met, and there may be impacts that they do not encompass. LCAs do not typically address the site-specific environmental impacts of raw material extraction, nor are they meant to assess human health toxicity. EPDs can complement but cannot replace tools and certifications that are designed to address these impacts and/or set performance thresholds – e.g. Type 1 certifications, health assessments and declarations, environmental impact assessments, etc. Accuracy of Results: EPDs regularly rely on estimations of impacts, and the level of accuracy in estimation of effect differs for any particular product line and reported impact. Comparability: EPDs are not comparative assertions and are either not comparable or have limited comparability when they cover different life cycle stages, are based on different product category rules or are missing relevant environmental impacts. EPDs from different programs may not be comparable.



PROGRAM OPERATOR	UL Environment
DECLARATION HOLDER	USG
DECLARATION NUMBER	4787352797.10J.1
DECLARED PRODUCT	USG Ensemble™ Acoustical Drywall Ceiling
REFERENCE PCR	NSF International PCR for Gypsum Panel Products, v.1.1, April 23, 2020
DATE OF ISSUE	April 23, 2020
PERIOD OF VALIDITY	5 Years
CONTENTS OF THE DECLARATION	Product definition and information about building physics Information about basic material and the material's origin Description of the product's manufacture Indication of product processing Life cycle assessment results Testing results and verifications
The PCR review was conducted by:	NSF International PCR Review Panel ncss@nsf.org
This declaration was independently verified in accordance with ISO 14025 by Underwriters Laboratories <input type="checkbox"/> INTERNAL <input checked="" type="checkbox"/> EXTERNAL	 Grant R. Martin, UL Environment
This life cycle assessment was independently verified in accordance with ISO 14044 and the reference PCR by:	 Thomas P. Gloria, Industrial Ecology Consultants

This EPD conforms with ISO 21930:2017

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USG Sheetrock® Brand Ensemble™ Acoustical Drywall Ceiling

According to ISO 14025

2.0 Product Information

2.1 Product Description

The USG Sheetrock® Brand Ensemble™ panels consist of perforated 5/8" USG Sheetrock® Brand EcoSmart FC30 gypsum board laminated front and back with non-woven scrims and tapered on all 4 edges. During the installation process of the Ensemble™ system, one of the following 4 scenarios is followed.

FEATURES

- Nondirectional, monolithic appearance with fine texture
- Special perforated USG Sheetrock® Brand panels to optimize sound performance
- Installs and finishes similar to traditional wallboard
- NRC 0.80 and CAC 40
- High light-reflective finish (LR-0.85) reduces fixture and energy use
- Acoustically transparent spray-applied finish

<u>Scenario #</u>	<u>1" USG Ensemble™ High-NRC Backer Board</u>	<u>Owens Corning® 2" VersaBoard®</u>	<u>Installation Method</u>
1	1,000 sf	0 sf	Standard Install
2	0 sf	1,000 sf	Standard Install
3	1,000 sf	0 sf	Direct Mount
4	0 sf	1,000 sf	Direct Mount

Standard Installation Method

When installing an Ensemble™ panel with 4 tapered edges using the standard installation method (Scenario 1 above), the Ensemble™ panel is fastened to USG Drywall Suspension System DGLW26 main tee using standard metal screws. The joints of the installed Ensemble™ panels are then finished with USG Sheetrock® Brand Paper Joint Tape embedded in USG Sheetrock® Brand All Purpose Joint Compound. USG Sheetrock® Brand Ensemble™ Ceiling Compound is used for the finish coats over the joints. The surface is then coated with USG Ensemble™ Spray-Applied Finish. For high-NRC system performance, 1" USG Ensemble™ High-NRC Backers are laid in the DGLW26 main tees from above. The acoustical backers are 24" x 48" and lay on the backside of the main tees. Installation is similar to standard lay-in ceiling panels. An alternate installation method (Scenario 2 above) utilizes a 2" Owens Corning® VersaBoard® acoustical backer material instead of the 1" USG Ensemble™ High-NRC Backer.

Direct Applied Installation Method

When installing an Ensemble™ panel with 4 tapered edges (Scenario 3) using the direct applied installation method, the Ensemble™ panel is fastened to standard 1" Z channel fastened to the wall or ceiling 24" o.c. as shown below using standard metal screws. The joints of the installed Ensemble™ panels are then finished with USG Sheetrock® Brand Paper Joint Tape embedded in USG Sheetrock® Brand All Purpose Joint Compound. USG Sheetrock® Brand Ensemble™ Ceiling Compound is used for the finish coats over the joints. The surface is then coated with USG Ensemble™ Spray-Applied Finish. For high-NRC system performance, USG Ensemble™ High-NRC Backers are placed behind the installed Ensemble™ panels. The acoustical backers are 24" x 48" and rest in the Z channel with the white side towards the wall or ceiling. An alternate installation method (Scenario 4 above) utilizes a 2" Owens Corning® VersaBoard® acoustical backer material instead of the 1" USG Ensemble™ High-NRC Backer Board in the direct applied installation method. A 2" Z channel is used for this scenario.



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2.2 Product Data

Table #1: Summary of the general data for Ensemble™ panels

Product Data: Sizes and Types	Thickness	Panel Weight in lb/ft ² (kg/m ²)	Core Type
5/8" Ensemble™ Panels	5/8" (15.9 mm)	1.60 lb/ft ² (7.81 kg/m ²)	gypsum

2.3 Technical Data

PERFORMANCE DATA	Base Panel	Backer Panel	NRC	CAC	LR	Fire Performance
	USG Sheetrock® Brand Ensemble™ Four-Sided Taper Panels	1" USG Ensemble™ High-NRC	0.80	40	.85	Class A

SYSTEM COMPONENTS	Products	Item Number	Sizes	Packaging	Quantity	Notes
	USG Drywall Suspension Main Tees	DGLW26	12'	16-pc. carton	192 LF/ctn	Main tees 48" o.c.
	USG Drywall Suspension Cross Tees	DGLW424	4'	48-pc. carton	192 LF/ctn	Cross tees 24" o.c.
	5/8" USG Sheetrock® Brand Ensemble™ Four-Sided Taper Panels	ENSPNL96, ENSPNL120	5/8" x 4' x 8', 5/8" x 4' x 10'	26-pc. unit	8'-832 sq. ft./unit 10'-1040 sq. ft./unit	Gypsum panel highly engineered to perform like an acoustical ceiling panel
	1" USG Ensemble™ High-NRC Backer Panels	ENSHINRC	1" x 23.5" x 47.75"	4-pc. unit	31.3 sq. ft./carton	Acoustical base mat for High-NRC/High-CAC
	USG Sheetrock® Brand Paper Joint Tape	—	250' roll	20 rolls per carton	5,000 LF/ctn	Specially formulated paper tape
	USG Sheetrock® Brand All Purpose Joint Compound	USAPJC	4.5-gal. pail	Single pail 48-pail pallet	216 gal./pallet	Coverage 100 sq. ft./gal. 450 sq. ft./4.5-gal. pail
	USG Sheetrock® Brand Ensemble™ Ceiling Compound	ENSCJC	4.5-gal. pail	Single pail 48-pail pallet	216 gal./pallet	Coverage 106 sq. ft./gal. 480 sq. ft./4.5-gal. pail
	USG Ensemble™ Spray-Applied Finish, White, Custom Colors	ENSSPRAF	4.5-gal. pail	Single pail 48-pail pallet	216 gal./pallet	Coverage 80-100 sq. ft./4.5-gal. pail



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2.4 Placing on the Market/Application Rules

Standard application rules for Ensemble™ panels are available on usg.com.

2.5 Product Formulation

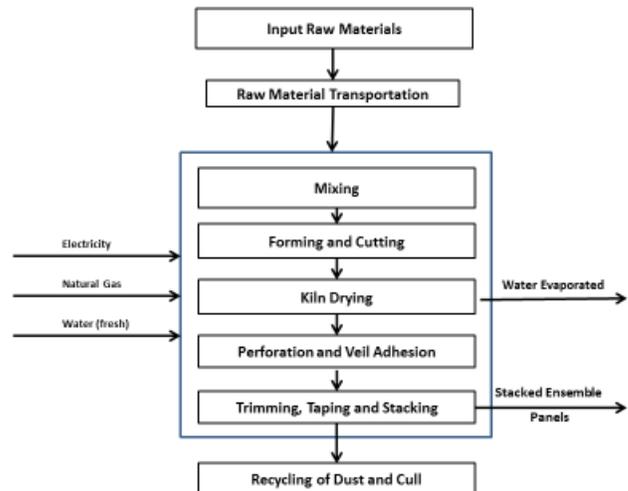
Product Specifications for Ensemble™ Panels	Measurement	Value
	Thickness	5/8 in. (15.9 mm)
	Lengths	8' and 10' (2438 and 3048 mm)
	Width	4' (1219 mm)
	Weight (nominal)	1.60 lbs./ ft2 (7.81 kg/m2)
Edges	Tapered	

Product Formulation for Ensemble™ Panels	Additive	Amount (kg/1000 sq. ft.)
	Gypsum	613
	Fiberglass (core)	1.4
	Paper	39
	Additives	18
Scrims + Adhesive	39	

Product formulation values the EcoSmart FC30 gypsum board were taken from the East Chicago, IN plant.

2.6 Manufacturing

The manufacture of Ensemble™ panels starts with the combining of the dry ingredients in a screw conveyor, feeding of this dry ingredient mixture into a pin mixer where these dry ingredients are mixed with water and wet additives. The resulting slurry is fed between two sheets of paper; facing paper (Manila) on the bottom and backing paper (Newsline) on the top. The wet gypsum board is allowed to hydrate after which the hard board is cut and transferred into a kiln for evaporation of excess water. After removal of the evaporative water, the board is cut to its final size, perforated with nominal ¼" holes and veils are adhesively applied front and back. End tapes are then applied and the resulting product is ready for shipment. Any gypsum board not meeting quality control specifications is recycled on-site.



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2.7 Environment and Health during Manufacturing

All appropriate equipment required by federal, state and local regulations are in place at all USG manufacturing facilities.

2.8 Packaging

A quantity of units is collected and placed on sleutters (i.e., spacers) for easy pick-up by forklift trucks.

2.9 Product Installation

In the standard installation system, Ensemble™ panels with 4 tapered edges are fastened to USG Drywall Suspension System DGLW26 main tee using standard metal screws. The joints of the installed Ensemble™ panels are then finished with USG Sheetrock® Brand Paper Joint Tape embedded in USG Sheetrock® Brand All Purpose Joint Compound. USG Sheetrock® Brand Ensemble™ Ceiling Compound is used for the finish coats over the joints. The surface is then coated with USG Ensemble™ Spray-Applied Finish. For high-NRC system performance, 1" USG Ensemble™ High-NRC Backers are laid in the DGLW26 main tees from above. The acoustical backers are 24" x 48" and lay on the backside of the main tees. Installation is similar to standard lay-in ceiling panels. An alternate installation method (Scenario 2 above) utilizes a 2" Owens Corning® VersaBoard® acoustical backer material instead of the 1" USG Ensemble™ High-NRC Backer. Additional information and standard rules and practices for installing and finishing the USG Ensemble™ Acoustical Drywall Ceiling are available online at usg.com.

2.10 Environment and Health during Use Stage

USG has led the building sector's effort in developing and supplying sustainable construction materials. Today, sustainability is integrated into the design and manufacture of every wall, ceiling, and flooring product. As both a producer and a buyer of raw materials, we have a responsibility to extensively review and select each material we use. Each decision we make is based on careful consideration of environmental and safety effects over time. Raw materials used in our products are carefully selected and go through a screening procedure. Incoming raw materials are tested for contaminants by an internal lab and third-party labs for consideration of use and worker, environmental, and end-user exposure. This due diligence helps to ensure our products are safe to handle in our manufacturing plants and on job sites while having minimal impact on occupant health and indoor and outdoor environments.

2.11 Reference Service Life

The reference service life for this cradle-to-grave (A1-C4) analysis is reported as 60 years as dictated by the gypsum board PCR. This is equal to the buildings' useful life if properly installed and maintained.



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2.12 End-of-Life

All Ensemble™ panels as well as ancillary materials (i.e., joint tape, joint compound, USG Ensemble™ Spray Applied Finish, USG Ensemble™ High-NRC Backer panels and USG Fiberock Brand End-joint Backer panels) are disposed of in a construction and demolition waste landfill at end-of-life.

2.13 Further Information

Additional information can be found at usg.com

3.0 LCA: Calculation Rules

3.1 Declared or Functional Unit

5/8" USG Sheetrock® Brand Ensemble™ panels	Value and Units
Functional Unit	1,000 sq. ft.
Conversion to kg	726 kg

3.2 System Boundary

The system boundaries are cradle to grave (modules A1-C4) and include the following system processes in the production of 5/8" USG Sheetrock® Brand Ensemble™ Panels: raw material extraction, raw material production, raw material transportation from suppliers to the production facility, product manufacturing and waste management, distribution, installation (including consists of installed USG Sheetrock® Brand Ensemble™ panels plus High-NRC Backer panels, USG Fiberock Brand End-joint Backer panels and USG Ensemble™ Spray Applied Finish), use and end-of-life.

3.3 Estimates and Assumptions

All paper raw material and energy data is specific to the manufacture of USG Manila and Newsline papers at the USG paper mill located in Otsego, MI. All USG Sheetrock® Brand EcoSmart FC30 gypsum board raw material and energy inputs are specific to product produced at the East Chicago, IN gypsum board plant.

3.4 Cut-off Criteria

The cut-off criteria for input flows to be considered within each system boundary were as follows:

Mass – if a flow is less than 1% of the cumulative mass of the model flows it may be excluded, providing its environmental relevance is minor.

Energy – if a flow is less than 1% of the cumulative energy of the system model it may be excluded, providing its environmental relevance is minor.

The sum of the excluded material flows must not exceed 5% of mass, energy or environmental relevance.



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3.5 Data Requirements and Data Sources

Manufacturer specific data was obtained from the United States Gypsum plants in East Chicago, IN, Otsego, MI and Walworth, WI.

3.6 Allocation

The LCI data was collected for the 2016 production year. Raw material and energy inputs were allocated to the USG Sheetrock® Brand EcoSmart Panels Firecode 30® based on the mass of those panels.

3.7 Comparability of EPDs

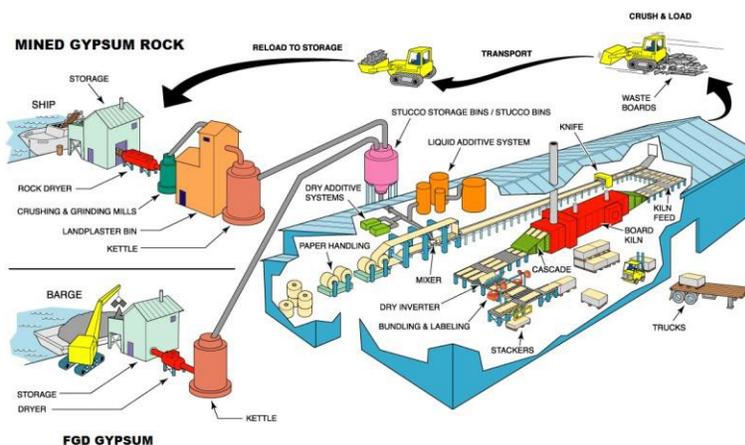
Environmental declarations from different programs may not be comparable. The comparison of the environmental performance of gypsum boards using the EPD information shall be based on the product's use in and its impacts on or within the building and shall consider the complete life cycle (all information modules).

Full conformance with the PCR for North American Gypsum Boards ensures EPD comparability when all stages of a product's life cycle have been duly considered; however, variations and deviations are possible.

4.0 LCA Scenarios and Additional Technical Information

Life Cycle Flow Diagram

The SHEETROCK® Brand Gypsum Panels Manufacturing Process



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5.0 LCA Results

PRODUCT STAGE			CONSTRUCTION PROCESS STAGE		USE STAGE							END OF LIFE STAGE			
Raw material supply	Transport	Manufacturing	Transport from gate to site	Assembly/Install	Use Stage	Maintenance	Repair	Replacement	Refurbishment ¹⁾	Operational Energy Use	Operational Water Use	Deconstruction	Transport	Waste Processing	Disposal
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

ABBREVIATION	PARAMETER	UNIT
Life Cycle Impact Assessment Indicators		
GWP	Global Warming Potential	kg CO ₂ eq.
ODP	Ozone Depletion Potential	kg CFC-11 eq.
AP	Acidification Potential	kg SO ₂ eq.
EP	Eutrophication Potential	kg N eq.
POCP	Photochemical ozone creation potential	kg O ₃ eq.
ADP	Abiotic resource depletion potential – fossil fuels	MJ, LHV
Resource Use Parameters		
PERE	Use of renewable primary energy excluding renewable primary energy resources used as raw materials	MJ, net calorific value (LHV)
PERM	Use of renewable primary energy resources used as raw materials	MJ, net calorific value
PERT	Total use of renewable primary energy resources (primary energy and primary energy resources used as raw materials)	MJ, net calorific value
PENRE	Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials	MJ, net calorific value
PENRM	Use of non-renewable primary energy resources used as raw materials	MJ, net calorific value
PENRT	Total use of non-renewable primary energy resources (primary energy and primary energy resources used as raw materials)	MJ, net calorific value
SM	Use of secondary materials	kg
RSF	Use of renewable secondary fuels	MJ, net calorific value
NRSF	Use of non-renewable secondary fuels	MJ, net calorific value
FW	Net use of fresh water	m ³
Waste Parameters		
HWD	Disposed-of-hazardous waste	kg
NHWD	Disposed-of non-hazardous waste	kg
RWD	Radioactive Waste Disposed	kg
Output Flow Parameters		
CRU	Components for reuse	kg
MFR	Materials for recycling	kg
MER	Materials for energy recovery	kg
EE	Exported energy	MJ



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Table 6: Scenario #1: Environmental LCA Results for 1 MSF of Ensemble™ Panels with 1,000 SF of 1” USG Ensemble™ High-NRC Backer Board - Standard Installation (A1-C4)

TRACI v2.1	UNITS	A1-A3	A4	A5	B1-B7	C1-C4
GWP	kg CO ₂ eq.	1.42E+03	2.78E+02	3.45E+02	0.00E+00	4.70E+01
ODP	kg CFC-11 eq.	3.81E-03	3.59E-14	2.87E-04	0.00E+00	1.57E-13
AP	kg SO ₂ eq.	2.72E+02	5.32E-01	2.13E+01	0.00E+00	2.22E-01
EP	kg N eq.	4.84E-01	7.76E-02	9.99E-02	0.00E+00	1.25E-02
POCP	kg O ₃ eq.	6.75E+01	1.17E+01	1.85E+01	0.00E+00	4.15E+00
ADP	MJ, LHV	3.63E+03	5.30E+02	8.26E+02	0.00E+00	8.99E+01

Table 7: Scenario #2: Environmental LCA Results for 1 MSF of Ensemble™ Panels with 1,000 SF of 2” Owens Corning® Thermafiber® VersaBoard® Backerboard - Standard Installation (A1-C4)

TRACI v2.1	UNITS	A1-A3	A4	A5	B1-B7	C1-C4
GWP	kg CO ₂ eq.	2.08E+03	1.95E+02	3.82E+02	0.00E+00	4.32E+01
ODP	kg CFC-11 eq.	1.70E-04	2.50E-14	1.32E-05	0.00E+00	1.37E-13
AP	kg SO ₂ eq.	1.23E+01	4.00E-01	1.77E+00	0.00E+00	1.97E-01
EP	kg N eq.	3.88E+00	5.59E-02	3.52E-01	0.00E+00	1.15E-02
POCP	kg O ₃ eq.	1.48E+02	8.87E+00	2.41E+01	0.00E+00	3.69E+00
ADP	MJ, LHV	2.65E+03	3.69E+02	7.29E+02	0.00E+00	8.36E+01

Table 8: Scenario #3: Environmental LCA Results for 1 MSF of Ensemble™ Panels with 1,000 SF of 1” USG Ensemble™ High-NRC Backer Board - Direct Mount Installation (A1-C4)

TRACI v2.1	UNITS	A1-A3	A4	A5	B1-B7	C1-C4
GWP	kg CO ₂ eq.	1.28E+03	2.66E+02	3.33E+02	0.00E+00	4.68E+01
ODP	kg CFC-11 eq.	3.80E-03	3.44E-14	2.87E-04	0.00E+00	1.57E-13
AP	kg SO ₂ eq.	2.71E+02	4.76E-01	2.12E+01	0.00E+00	2.20E-01
EP	kg N eq.	4.51E-01	7.21E-02	9.70E-02	0.00E+00	1.24E-02
POCP	kg O ₃ eq.	5.66E+01	1.04E+01	1.76E+01	0.00E+00	4.13E+00
ADP	MJ, LHV	3.59E+03	5.07E+02	8.22E+02	0.00E+00	8.95E+01



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Table 9: Scenario #4: Environmental LCA Results for 1 MSF of Ensemble™ Panels with 1,000 SF of 2" Owens Corning® Thermafiber® VersaBoard® Backerboard - Direct Mount Installation (A1-C4)

TRACI v2.1	UNITS	A1-A3	A4	A5	B1-B7	C1-C4
GWP	kg CO ₂ eq.	2.01E+03	1.89E+02	3.76E+02	0.00E+00	4.31E+01
ODP	kg CFC-11 eq.	1.69E-04	2.43E-14	1.31E-05	0.00E+00	1.37E-13
AP	kg SO ₂ eq.	1.19E+01	3.73E-01	1.74E+00	0.00E+00	1.97E-01
EP	kg N eq.	3.87E+00	5.33E-02	3.51E-01	0.00E+00	1.14E-02
POCP	kg O ₃ eq.	1.43E+02	8.25E+00	2.36E+01	0.00E+00	3.68E+00
ADP	MJ, LHV	2.63E+03	3.58E+02	7.27E+02	0.00E+00	8.34E+01

Table 10:

Scenario #1: Environmental LCA Results for 1 MSF of Ensemble™ Panels with 1,000 SF of 1" USG Ensemble™ High-NRC Backer Board - Standard Installation (A1-C4)

Scenario #2: Environmental LCA Results for 1 MSF of Ensemble™ Panels with 1,000 SF of 2" Owens Corning® Thermafiber® VersaBoard® Backerboard - Standard Installation (A1-C4)

Scenario #3: Environmental LCA Results for 1 MSF of Ensemble™ Panels with 1,000 SF of 1" USG Ensemble™ High-NRC Backer Board - Direct Mount Installation (A1-C4)

Scenario #4: Environmental LCA Results for 1 MSF of Ensemble™ Panels with 1,000 SF of 2" Owens Corning® Thermafiber® VersaBoard® Backerboard - Direct Mount Installation (A1-C4)

PARAMETER	UNITS	SCENARIO #1	SCENARIO #2	SCENARIO #3	SCENARIO #4
PERE	MJ, LHV	2.18E+03	1.12E+03	2.10E+03	1.08E+03
PERM	MJ, LHV	4.69E+01	5.49E+01	4.69E+01	5.49E+01
PERT	MJ, LHV	2.23E+03	1.17E+03	2.15E+03	1.14E+03
PENRE	MJ, LHV	2.87E+04	2.32E+04	2.81E+04	2.29E+04
PENRM	MJ, LHV	1.06E+03	1.06E+03	1.06E+03	1.06E+03
PENRT	MJ, LHV	2.98E+04	2.43E+04	2.92E+04	2.39E+04
SM	kg	1.46E+03	1.31E+03	1.46E+03	1.31E+03
RSF	MJ, LHV	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NRSF	MJ, LHV	0.00E+00	0.00E+00	0.00E+00	0.00E+00
FW	m ³	1.12E+01	8.74E+00	1.05E+01	8.43E+00



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Table 11

Scenario #1: Environmental LCI Results for 1 MSF of Ensemble™ Panels with 1,000 SF of 1" USG Ensemble™ High-NRC Backer Board - Standard Installation (A1-C4)

Scenario #2: Environmental LCI Results for 1 MSF of Ensemble™ Panels with 1,000 SF of 2" Owens Corning® Thermafiber® VersaBoard® Backerboard - Standard Installation (A1-C4)

Scenario #3: Environmental LCI Results for 1 MSF of Ensemble™ Panels with 1,000 SF of 1" USG Ensemble™ High-NRC Backer Board - Direct Mount Installation (A1-C4)

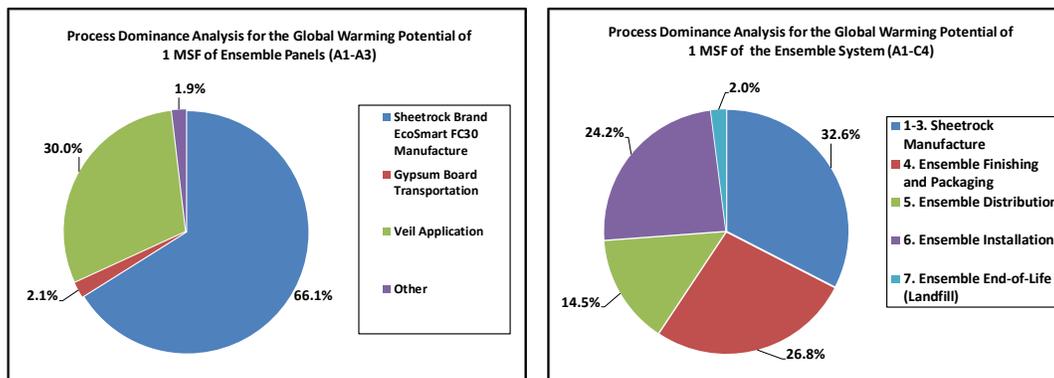
Scenario #4: Environmental LCI Results for 1 MSF of Ensemble™ Panels with 1,000 SF of 2" Owens Corning® Thermafiber® VersaBoard® Backerboard - Direct Mount Installation (A1-C4)

PARAMETER	UNITS	SCENARIO #1	SCENARIO #2	SCENARIO #3	SCENARIO #4
HWD	kg	2.09E-03	2.06E-03	2.06E-03	2.02E-03
NHWD	kg	1.81E+03	1.63E+03	1.63E+03	1.63E+03
RWD	kg	5.27E-01	3.05E-01	3.05E-01	2.86E-01
CRU	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MFR	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MER	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00
EE	MJ, LHV	0.00E+00	0.00E+00	0.00E+00	0.00E+00

6.0 LCI Interpretation

The figure below graphically depicts relative contributions for both the cradle-to-gate and cradle-to-grave production of 1000 sq. ft. of USG Ensemble™ Panels and 1000 sq. ft. of installed USG Ensemble™ Panels Acoustical Drywall Ceiling, respectively. The significant sources of greenhouse gases are generated during the manufacture of the Sheetrock® FC30 gypsum board from combustion of natural gas and indirectly the consumption of electricity at the generating plant.

Declarations based on this PCR are not comparative assertions; that is, no claim of environmental superiority can be inferred or implied.



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7.0 Additional environmental information

There is no additional environmental information for this product.

8.0 References

1. International Organization for Standardization (ISO), International Standard ISO 14025, Environmental labels and declarations – Type III environmental declaration – Principles and procedures, 2006
2. International Organization for Standardization (ISO), International Standard ISO 14040, Environmental management – Life cycle assessment – Principles and framework, 2006.
3. International Organization for Standardization (ISO), International Standard ISO 14044, Environmental management – Life cycle assessment – Requirements and guidelines, 2006.
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