SECTION 09 29 00 – GYPSUM BOARD, 5/8 in. (15.9 mm) USG Sheetrock® Brand EcoSmart Panels Firecode® X (UL Type ULIX™)

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| **Sustainability Notes:** (Architecture 2030 Challenge for Products – LEED® v4 EPD/LCA improvements) |
| * USG Sheetrock® Brand EcoSmart Panels Firecode® X (UL Type ULIX™) are formulated and manufactured using the most sustainable method to date
	+ Up to 21% less global warming potential (GWP)1
	+ Up to 22% less weight reduces transportation fuel energy by up to 20%
	+ Living Building Challenge™ Red List Free
	+ Contain 100% USDA certified biobased content
	+ Up to 94.6% recycled content (regionally available)
	+ Achieved GREENGUARD Gold Certification and qualify as a low VOC emitting material (meets CA 01350)
	+ USGBC® LEED® v4 **–** may assist in achieving additional credits
* Developed to meet the Architecture 2030 Challenge for Products, USG Sheetrock® Brand EcoSmart Panels Firecode® X (UL Type ULIX™) have lower carbon dioxide emissions than standard Type X gypsum board. These values are defined by the Gypsum Association’s Type III EPD per ISO 14040 for North American Type X gypsum board.

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| **Gypsum Panel** | **CO2 eq. (kg CO2/1000 sq. ft.)** |
| **USG Sheetrock® Brand EcoSmart Panels Firecode® X** **(per EPD 216)** | **219** |
| GA Industry Average **–** Standard 5/8 in. (15.9 mm) Type X  | 277 |

1. Compared to standard 5/8 in. (15.9 mm) Type X gypsum panels as presented in the Gypsum Association’s *5/8 in. (15.9 mm) Type X Conventional Gypsum Board Environmental Product Declaration* (EPD 10270). |

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| **Product Summary:**  |
| * Sustainable and ultralightweight 5/8 in. (15.9 mm) enhanced proprietary Type X panels for interior wall and ceiling applications
* Formulated to achieve all of the same strength and performance characteristics as standard 5/8 in. (15.9 mm) USG Sheetrock® Brand Firecode® X Panels at a lower environmental impact and reduced weight
* Feature an innovative noncombustible gypsum core that is encased in 100% recycled face and back papers that form a high strength-to-weight ratio composite design
* Comply with ASTM C1396, *Standard Specification for Gypsum Board*, for 5/8 in. (15.9 mm) and Type X gypsum wallboard
* Underwriters Laboratories Inc. (UL) Classification as to fire resistance, surface-burning characteristics and noncombustibility
* Offer comparable sound, strength and sag resistance to standard 5/8 in. (15.9 mm) Type X
* Can be used in any UL Design in which UltraLight Innovation Type X (ULIX™) panels are listed
* For more information, refer to product submittal sheet WB2859 or usg.com
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| **Note to Specification Writers:**  |
| * This document is not intended to function as a standalone specification. It is intended to assist the specifier in inserting the proper language into the following recommended specification sections: 09 29 00 – GYPSUM BOARD.
* This product is manufactured at USG gypsum panel plants, reducing distances and carbon footprint for transport.
* Panels shall be installed in accordance with GA-216, *Specifications for the Application and Finishing of Gypsum Panel Products* and ASTM C840, *Standard Specification for Application and Finishing of Gypsum Board*.
* Contact USG at800.874.4968 for technical questions.
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PART 2 – GYPSUM PANEL PRODUCTS

* + - 1. SUSTAINABLE TYPE X GYPSUM PANEL
				1. ASTM C1396, *Standard Specification for Gypsum Board*, for 5/8 in. (15.9 mm) and Type X gypsum wallboard

Basis of Design: Subject to compliance with project requirements, the design is based on the following: United States Gypsum Company, USG Sheetrock® Brand EcoSmart Panels Firecode® X

Note to specification writer:

For Compliance with LEED v4 Materials and Resources Credit; Building Product Disclosure and Optimization – Environmental Product Declarations, Option 1; Please select relevant project geographical area with appropriate LCA & ISO 14040 criteria below:

ISO 14040 Environmental Management, Life Cycle Assessment, Principles and Framework:

Carbon emissions per Gypsum Association; Industry Standard Type III EPD
for North American Type X wallboard have a Global Warming Potential value
of 277 kg CO2 eq./1000 sq. ft.: **219 kg CO2 eq./1000 sq. ft.**

Primary energy from non-renewable resources per Gypsum Association; Industry Standard Type III EPD for North American Type X wallboard have a value of 4,100 MJ/1000 sq. ft.: **3,840 MJ/1000 sq. ft.**

UL Type Designation: “ULIX™”

ASTM E136 Noncombustibility: Meets

ASTM E84 Surface-Burning Characteristics

Flame Spread: 5

Smoke Developed: 5

Class A (Flame spread not greater than 25 and smoke developed not greater than 450): Meets

ASTM C473, *Standard Test Methods for Physical Testing of Gypsum Panel Products*

Core Hardness

Field [Not less than 11 lbf (49 N)]: Meets

End [Not less than 11 lbf (49 N)]: Meets

Edge [Not less than 11 lbf (49 N)]: Meets

Flexural Strength

Parallel [Not less than 46 lbf (205 N)]: Meets

Perpendicular [Not less than 147 lbf (654 N)]: Meets

Nail Pull Resistance [Not less than 87 lbf (387 N)]: Meets

Humidified Deflection [Not greater than 5/8 in. (15.9 mm)]: Meets

Thickness: 5/8 in. (15.9 mm)

Length: 8-16 ft. (2438-4877 mm)

Width: 4 ft. (1219 mm), 54 in. (1372 mm)

Weight: 1.8 lb./sq. ft. (8.8 kg/sq. m.)

Edge: Tapered

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