



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

Sustainability Notes: (Architecture 2030 Challenge for Products – LEED® v4 EPD/LCA improvements)

- USG Sheetrock® Brand EcoSmart Panels Mold Tough® Firecode® X (UL Type ULIX™) are formulated and manufactured using the most sustainable method to date
 - Up to 11% less global warming potential (GWP)¹
 - Up to 15% less water used in the manufacturing process¹
 - Living Building Challenge™ Red List Free
 - Contains 100% USDA certified biobased content
 - Achieved GREENGUARD Gold Certification and qualify as a low VOC emitting material (meets CA 01350)
- Developed to meet the Architecture 2030 Challenge for Products, USG Sheetrock® Brand EcoSmart Panels Mold Tough® Firecode® X (UL Type ULIX™) have lower carbon dioxide emissions than standard 5/8 in. (15.9 mm) USG Sheetrock® Brand Mold Tough® Panels Firecode® X.

Gypsum Panel	CO ₂ eq. (kg CO ₂ /1000 sq. ft.)
USG Sheetrock® Brand EcoSmart Panels Mold Tough® Firecode® X – Eastern USA (per EPD 4787352797.106.1)	252
USG Sheetrock® Brand Mold Tough® Panels Firecode® X – Eastern USA	278
USG Sheetrock® Brand EcoSmart Panels Mold Tough® Firecode® X – Western USA (per EPD 4787352797.106.1)	268
USG Sheetrock® Brand Mold Tough® Panels Firecode® X – Western USA	301

1. Compared to third-party verified Life Cycle Analysis (LCA) for standard 5/8 in. (15.9 mm) USG Sheetrock® Brand Mold Tough® Panels Firecode® X.

Product Summary:

- Sustainable and ultralightweight 5/8 in. (15.9 mm) enhanced proprietary Type X panels with moisture and mold resistance for wall and ceiling applications
- Feature a noncombustible, moisture-resistant gypsum core encased in moisture- and mold-resistant, 100% recycled green face and brown back papers
- Formulated to achieve all of the same strength and performance characteristics as standard 5/8 in. (15.9 mm) USG Sheetrock® Brand Mold Tough® Firecode® X Panels at a lower environmental impact and reduced weight
- Comply with ASTM C1396, *Standard Specification for Gypsum Board*, for 5/8 in. (15.9 mm), Type X, water-resistant gypsum wallboard and exterior gypsum soffit board
- When tested in accordance with ASTM D3273, *Standard Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber*, the panels meet or exceed ASTM C1396 specifications
- 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 WB2981 or usg.com

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 at 800.874.4968 for technical questions.

PART 2 – GYPSUM PANEL PRODUCTS

2.1 SUSTAINABLE MOISTURE- AND MOLD-RESISTANT TYPE X GYPSUM PANEL

- A. ASTM C1396, *Standard Specification for Gypsum Board*, for 5/8 in. (15.9 mm), Type X, water-resistant gypsum wallboard and exterior gypsum soffit board
1. 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 Mold Tough® Firecode® X
 2. ISO 14040 Environmental Management, Life Cycle Assessment, Principles and Framework:
 - a. Carbon emissions per Product Category Rules for North American Gypsum Boards; FPInnovations – Gypsum PCR-2013: v1; Global Warming Potential of **[Eastern USA: 252 kg CO₂ eq./1000 sq. ft.] [Western USA: 268 kg CO₂ eq./1000 sq. ft.]**
 3. UL Type Designation: “ULIX™”
 4. ASTM E136 Noncombustibility: Meets
 5. ASTM E84 Surface-Burning Characteristics
 - a. Flame Spread: 5
 - b. Smoke Developed: 5
 - c. Class A (Flame spread not greater than 25 and smoke developed not greater than 450): Meets
 6. ASTM C473, *Standard Test Methods for Physical Testing of Gypsum Panel Products*
 - a. Core Hardness
 - 1) Field [Not less than 11 lbf (49 N)]: Meets
 - 2) End [Not less than 11 lbf (49 N)]: Meets
 - 3) Edge [Not less than 11 lbf (49 N)]: Meets
 - b. Flexural Strength
 - 1) Parallel [Not less than 46 lbf (205 N)]: Meets
 - 2) Perpendicular [Not less than 147 lbf (654 N)]: Meets
 - c. Nail Pull Resistance [Not less than 87 lbf (387 N)]: Meets
 - d. Humidified Deflection [Not greater than 5/8 in. (15.9 mm)]: Meets
 - e. Average Water Absorption (Not greater than 5% by weight after two-hour immersion): Meets
 7. ASTM D3273, *Standard Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber*: Meets ASTM C1396 specifications
 8. Thickness: 5/8 in. (15.9 mm)
 9. Length: 8-12 ft. (2438-3658 mm)
 10. Width: 4 ft. (1219 mm)
 11. Weight: 1.85 lb./sq. ft. (9.03 kg/sq. m.)
 12. Edge: Tapered

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