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** | **CO2 eq. (kg CO2/1000 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 at800.874.4968 for technical questions. |

PART 2 – GYPSUM PANEL PRODUCTS

* + - 1. SUSTAINABLE MOISTURE- AND MOLD-RESISTANT TYPE X GYPSUM PANEL
         1. 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

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

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

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.]**

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

Average Water Absorption (Not greater than 5% by weight after two-hour immersion): Meets

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

Thickness: 5/8 in. (15.9 mm)

Length: 8-12 ft. (2438-3658 mm)

Width: 4 ft. (1219 mm)

Weight: 1.85 lb./sq. ft. (9.03 kg/sq. m.)

Edge: Tapered

Disclaimer: The USG Product Specifications contained herein are intended for use as product reference material by architects, engineers, other design professionals, contractors, building code officials, or other competent construction industry trade professionals having an interest in the selection, specification and use of products manufactured by the subsidiaries of USG Corporation. The specifications are intended solely as technical support incident to the sale and use of USG products and not intended to be a substitute for the design review and approval of the licensed design professionals for the project. These materials may be printed and/or transferred electronically solely as needed by the user. Because electronic files can be modified by other parties, without notice or indication of such modifications, modification of USG Product Guide Specifications is the sole responsibility of the Design Professional.