

SECTION 09 29 00

GYPSUM BOARD

THIS SECTION IS WRITTEN IN CSI 3-PART FORMAT AND IN CSI PAGE FORMAT; THE PROJECT NAME/NUMBER/DATE AND SECTION TITLE IN THE FOOTER ARE OPTIONAL. NOTES TO THE SPECIFIER, SUCH AS THIS, MUST BE DELETED FROM THE FINAL SPECIFICATION.

IT IS ASSUMED THAT THE GENERAL CONDITIONS BEING USED ARE AIA A201-1997.

PART 1 GENERAL

1.01 SUMMARY

- A. Section Includes: Fiberglass-mat faced, abuse and impact resistant, moisture and mold resistant gypsum boards.

EDIT LIST BELOW TO CONFORM TO PROJECT REQUIREMENTS. VERIFY SECTION NUMBERS AND TITLES.

- B. Related Sections:

1. Section 06 10 00 Rough Carpentry.
2. Section 09 21 16 Gypsum Board Assemblies.
3. Section 09 22 00 Supports for Plaster and Gypsum Board.

IF THE PROJECT INCLUDES ALLOWANCES OR ALTERNATES OR UNIT PRICES, RETAIN PARAGRAPHS BELOW AND COORDINATE WITH DIVISION 01.

- C. Allowances:

- D. Unit Prices:

- E. Alternates:

1.02 REFERENCES

- A. ASTM International (ASTM):

1. ASTM C473 Standard Test Methods for Physical Testing of Gypsum

Panel Products.

- 2. ASTM C518 Standard Test Method for Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus.
- 3. ASTM C630 Standard Specification for Water-Resistant Gypsum Backing Board.
- 4. ASTM C840 Standard Specification for Application and Finishing of Gypsum Board.
- 5. ASTM C1396 Standard Specification for Gypsum Board.
- 6. ASTM C1629 Standard Classification for Abuse-Resistant Nondecorated Interior Gypsum Panel Products and Fiber-Reinforced Cement Panels.
- 7. ASTM C1658 Standard Specification for Glass Mat Gypsum Panels.
- 8. ASTM D3273 Standard Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber.
- 9. ASTM D6329 Standard Guide for Developing Methodology for Evaluating the Ability of Indoor Materials to Support Microbial Growth Using Static Environmental Chambers.
- 10. ASTM E84 Standard Test Method for Surface Burning Characteristics of Building Materials.

B. Gypsum Association (GA): GA-216 Application and Finishing of Gypsum Panel Products.

1.03 SUBMITTALS

A. Product Data: Manufacturer's specifications and installation instructions for each product specified.

1.04 QUALITY ASSURANCE

RETAIN BELOW IF REQUIRED, REVISE LIMITS IF REQUIRED.

- A. Regulatory Requirements: Provide products that comply with the following limits for surface burning characteristics when tested per ASTM E84:
 1. Flame spread: 0.
 2. Smoke developed: 0.
- B. Provide products that are GREENGUARD Indoor Air Quality Certified and GREENGUARD Children & Schools Certified for low emissions of volatile organic compounds (VOCs) by GREENGUARD Environmental Institute.

1.05 WARRANTY

- A. Provide products that offer twelve months of coverage against in-place exposure damage (delamination, deterioration and decay).
- B. Manufacturer's Warranty: Three years against manufacturing defects.

THIS GUIDE SPEC WAS WRITTEN TO PROVIDE THREE EDITING OPTIONS: 1) PROPRIETARY, 2) GENERIC, OR 3) A COMBINATION OF THE TWO.

PART 2 PRODUCTS

IF PROPRIETARY PRODUCT NAMES ARE INCLUDED IN THE "MATERIALS" ARTICLE BELOW, DELETE THIS ARTICLE ALTOGETHER. IF A PROPRIETARY SPECIFICATION IS REQUIRED, RETAIN THIS ARTICLE AND DELETE THE "MATERIALS" ARTICLE.

2.01 MANUFACTURERS

EDIT LISTS BELOW TO CONFORM TO PROJECT REQUIREMENTS. IF OTHER MANUFACTURERS ARE BEING ADDED TO THIS SECTION, ADD LISTINGS OF THEIR PROPRIETARY PRODUCT NAMES.

- A. Georgia-Pacific Gypsum LLC:
 - 1. Abuse Resistant Fiberglass-Mat Faced Gypsum Board: DensArmor Plus Abuse-Resistant Interior Panel.
 - 2. Impact Resistant Fiberglass-Mat Faced Gypsum Board: DensArmor Plus Impact-Resistant Interior Panel.

B.

C.

THIS ARTICLE INCLUDES GENERIC DESCRIPTIONS OF GYPSUM BOARD PANELS; THE NAMES OF THE CORRESPONDING GEORGIA-PACIFIC GYPSUM PRODUCTS ARE INCLUDED AS ACCEPTABLE PRODUCTS. IF THIS SECTION IS BEING EDITED TO BE GENERIC, THESE PRODUCT NAMES SHOULD BE DELETED.

IF OTHER MANUFACTURERS ARE BEING ADDED TO THIS SECTION, 1) ADD THE PROPRIETARY PRODUCT NAMES OF THOSE MANUFACTURERS, OR 2) IF PROPRIETARY NAMES ARE LISTED IN THE "MANUFACTURERS" ARTICLE ABOVE, DELETE THEM FROM THIS ARTICLE ALTOGETHER.

2.02 MATERIALS

- A. Abuse Resistant Fiberglass-Mat Faced Gypsum Board:
 - 1. Thickness: 5/8 inch.
 - 2. Width: 4 feet.
 - 3. Length: 8 feet - 12 feet.
 - 4. Weight: 2.8 lb/sq. ft.
 - 5. Edges: Tapered.
 - 6. Surfacing: Abuse resistant coated fiberglass mat on face, back, and long edges.
 - 7. Flexural Strength, Parallel (ASTM C473, ASTM C1658): Not less than 100 lbf.
 - 8. Flexural Strength, Perpendicular (ASTM C473, ASTM C1658): Not less than 140 lbf.
 - 9. R-Value (ASTM C518): 0.67.
 - 10. Nail Pull Resistance (ASTM C473, ASTM C1658): Not less than 90 lbf.
 - 11. Humidified Deflection (ASTM C473, ASTM C1658): Not more than 1/8 inch.
 - 12. Hardness, Core, Edges, and Ends (ASTM C473, ASTM C1396, ASTM C1658): Not less than 15.
 - 13. Water Absorption (ASTM C630, ASTM C1396, ASTM C1658): Less than 5 percent of weight.
 - 14. Mold Resistance (ASTM D3273): 10, in a test as manufactured.
 - 15. Microbial Resistance (ASTM D6329): Will not support microbial growth.
 - 16. Abuse Resistance (ASTM C1629):
 - a. Surface Abrasion: Level 3.
 - b. Surface Indentation: Level 1.
 - c. Soft-Body Impact: Level 1.
 - 17. Acceptable Products:
 - a. DensArmor Plus Abuse-Resistant Interior Panel, Georgia-Pacific Gypsum.
 - b.
 - c.
- B. Impact Resistant Fiberglass-Mat Faced Gypsum Board:
 - 1. Thickness: 5/8 inch.

2. Width: 4 feet.
3. Length: [8 feet] [10 feet] [12 feet].
4. Weight: 2.8 lb/sq. ft.
5. Edges: Tapered.
6. Surfacing: Coated fiberglass mat on face, back and long edges.
7. Flexural Strength, Parallel (ASTM C473, ASTM C1658): Not less than 100 lbf.
8. Flexural Strength, Perpendicular (ASTM C473, ASTM C1658): Not less than 140 lbf.
9. R-Value (ASTM C518): 0.67.
10. Nail Pull Resistance (ASTM C473, ASTM C1658): Not less than 90 lbf.
11. Humidified Deflection (ASTM C473, ASTM C1658): Not more than 1/8 inch.
12. Hardness, Core, Edges, and Ends (ASTM C473, ASTM C1396, ASTM C1658): Not less than 15.
13. Water Absorption (ASTM C630, ASTM C1396, ASTM C1658): Less than 5 percent of weight.
14. Mold Resistance (ASTM D3273): 10, in a test as manufactured.
15. Microbial Resistance (ASTM D6329): Will not support microbial growth.
16. Abuse Resistance (ASTM C1629):
 - a. Surface Abrasion: Level 3.
 - b. Surface Indentation: Level 1.
 - c. Soft-Body Impact: Level 3.
 - d. Hard-Body Impact: Level 2.
17. Acceptable Products:
 - a. DensArmor Plus Impact-Resistant Interior Panel, Georgia-Pacific Gypsum.
 - b.
 - c.

PART 3 EXECUTION

3.01 INSTALLATION

- A. General: In accordance with ASTM C840, GA-216 and the manufacturer's recommendations.

IF OTHER MANUFACTURERS WERE ADDED IN PART 2, REFERENCE THEIR INSTALLATION RECOMMENDATIONS BELOW BY TITLE.

1. Manufacturer's Recommendations:
 - a. Current "Product Catalog", Georgia-Pacific Gypsum.

- b.
- c.

3.02 PROTECTION

REVISE BELOW IF OTHER THAN AIA GENERAL CONDITIONS ARE USED.

- A. Protect gypsum board installations from damage and deterioration until the date of Substantial Completion.

END OF SECTION 09 29 00