

SECTION 09 29 00

GYP SUM 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, mold- and moisture-resistant gypsum board.

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.

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 C1658 Standard Specification for Glass Mat Gypsum Panels.
7. ASTM D3273 Standard Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber.
8. ASTM D6329 Standard Guide for Developing Methodology for Evaluating the Ability of Indoor Materials to Support Microbial Growth Using Static Environmental Chambers.
9. ASTM E84 Standard Test Method for Surface Burning Characteristics of Building Materials.

B. Gypsum Association (GA):

1. GA-214 Recommended Levels of Gypsum Board Finish.
2. 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.

COORDINATE ARTICLE BELOW WITH PROJECT
REQUIREMENTS.

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. Fiberglass-Mat Faced Gypsum Board: DensArmor Plus Interior Panel.
 2. Fire-Rated Fiberglass-Mat Faced Gypsum Board: DensArmor Plus Fireguard.
- 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. Fiberglass-Mat Faced Gypsum Board:
1. Thickness: 1/2 inch.
 2. Width: 4 feet.
 3. Length: 8 feet - 12 feet.
 4. Weight: 2.02 pounds per square foot.
 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 80 lbf.
 8. Flexural Strength, Perpendicular (ASTM C473, ASTM C1658): Not less than 100 lbf.
 9. R-Value (ASTM C518): Not less than 0.56.
 10. Nail Pull Resistance (ASTM C473, ASTM C1658): Not less than 80 lbf.
 11. Humidified Deflection (ASTM C473, ASTM C1658): Not more than 1/4 inch.
 12. Hardness, Core, Edges, and Ends (ASTM C473, ASTM C1396): 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. Acceptable Products:
 - a. 1/2 inch DensArmor Plus Interior Panel, Georgia-Pacific Gypsum.
 - b. 1/2 inch DensArmor Plus Fireguard C, Georgia-Pacific Gypsum.
 - c.
- B. 1/2 Inch Fire-Rated Fiberglass-Mat Faced Gypsum Board:
1. Thickness: 1/2 inch.
 2. Width: 4 feet.
 3. Length: 8 feet - 12 feet.
 4. Weight: 2.02 pounds per square foot.
 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 80 lbf.
 8. Flexural Strength, Perpendicular (ASTM C473, ASTM C1658): Not less than 100 lbf.
 9. R-Value (ASTM C518): Not less than 0.56.
 10. Nail Pull Resistance (ASTM C473, ASTM C1658): Not less than 80

- lbf.
 - 11. Humidified Deflection (ASTM C473, ASTM C1658): Not more than 2/8 inch.
 - 12. Hardness, Core, Edges, and Ends (ASTM C473, ASTM C1396): 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. Acceptable Products:
 - a. 1/2 inch DensArmor Plus Fireguard C, Georgia-Pacific Gypsum.
 - b.
 - c.
- C. 5/8 Inch Fire-Rated Fiberglass-Mat Faced Gypsum Board:
- 1. Thickness: 5/8 inch.
 - 2. Width: 4 feet.
 - 3. Length: 8 feet.
 - 4. Weight: 2.5 pounds per square foot.
 - 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): Not less than 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): 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. Acceptable Products:
 - a. 5/8 inch DensArmor Plus Fireguard, Georgia-Pacific Gypsum.
 - b. 5/8 inch DensArmor Plus Fireguard C, Georgia-Pacific Gypsum.
 - c.

PART 3 EXECUTION

3.01 INSTALLATION

- A. General: In accordance with GA-216, ASTM C840 and 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 APPLICATION

RETAIN PARAGRAPH BELOW WHEN "LEVEL 4" FINISH IS REQUIRED PER GA-214. WHEN USING GLOSS, SEMI-GLOSS OR ENAMEL PAINT, OR WHEN WORKING IN A CRITICAL (SEVERE) LIGHTING AREA, ALWAYS FINISH TO A "LEVEL 5" PER GA-214. REFER TO GA-214 FOR DEFINITION AND EXAMPLES OF CRITICAL LIGHT AREAS. CONSULT GYPSUM BOARD MANUFACTURER FOR MORE INFORMATION.

- A. Primer and Paint Application:
1. Use high solids primer with at least 40% volume solids.
 2. Apply primer to a dry film thickness of 1.7 to 1.8 mils dry to ensure uniform coverage and appearance.

THE NUMBER OF COATS OF FINISH PAINT AND THE TOTAL DRY FILM THICKNESS OF THE FINISH COATS NEEDED FOR ACCEPTABLE RESULTS WILL DEPEND ON THE PAINT USED. CONSULT PAINT MANUFACTURER FOR MORE INFORMATION.

3. Apply finish coats of paint per the paint manufacturer's label instructions.

3.03 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.

3.04 SCHEDULE

<p>For purposes of this schedule, exposure to water is defined as follows:</p> <p>Direct Exposure: Surfaces normally soaked, saturated or, regularly and frequently exposed to water and moisture.</p> <p>Incidental Exposure: Surfaces immediately adjacent to lavatories, sinks, urinals, water closets, and other plumbing fixtures.</p> <p>No Exposure: Surfaces in locations not normally exposed to water and moisture sources.</p> <p>Abuse-resistant gypsum board shown on drawings</p>			TYPICAL PAPER FACED	ENHANCED RESISTANCE PAPER FACED OR GLASS	COATED GLASS MAT
TOILET AND BATH ROOMS	Walls with Adjacent Plumbing Fixtures - Wet Walls (Incidental Exposure):	Paint and Wall Coverings		X	
		Tile and Adhered Sheet/Panel Finishes			X
	Wall locations other than wet walls (No Exposure)	Paint and Wall Coverings		X	
		Tile and Adhered Sheet/Panel Finishes			X
	Tub and Shower Walls (Direct Exposure):	Paint and Wall Covering Finishes above Tub and Shower Finishes		X	
		Tile and Adhered Sheet/Panel Finishes			X
	Ceilings (No Exposure)	Paint only		X	
Walls above ceilings (Incidental Exposure)			X	X	X
Interior Faces of Exterior Walls (No Exposure, except for future potential of water and moisture infiltration through exterior wall)				X	
All Other Walls and Ceilings (No Exposure) – Paint only			X		

END OF SECTION 09 29 00