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**Architectural Specification Sheet**

**CertainTeed AirRenew® Gypsum Boards for Improved Indoor Air Quality and abuse and impact resistance**

09250 / 09 29 00 or 09253 / 09 21 16

**PART 1 — GENERAL**

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and

Supplementary Conditions and Division 1. Specification Sections, apply to this

Section.

1.2 SUMMARY

A. This Section includes the following:

1. Moisture and mold resistant gypsum board which reduces volatile organic compounds (VOC).
2. Moisture and mold resistant joint treatment.
3. Abuse and impact resistant gypsum boards which reduce volatile organic compounds (VOC), specifically formaldehyde and other aldehydes.
   1. REFERENCES
      1. ASTM C 473: Standard Test Methods for Physical Testing of Gypsum Panel Products
      2. ASTM C 475: Standard Specification for Joint Compound and Joint Tape for Finishing Gypsum Board
      3. ASTM C 514: Standard Specification for Nails for the Application of Gypsum Board
      4. ASTM C 840: Standard Specification for the Application and Finishing of Gypsum Board
      5. ASTM C 954: Standard Specification for Steel Drill Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Steel Studs from 0.033 in (0.84 mm) to .112 in (2.84 mm) in Thickness
      6. ASTM C 1002: Standard Specification for Steel Self-Piercing Tapping Screws for the Application of Gypsum Panel Products or Metal Plaster Bases to Wood Studs or Steel Studs
      7. ASTM C 1396: Standard Specification for Gypsum Board
      8. ASTM D 1629: Standard Classification for Abuse-Resistant Nondecorated Interior Gypsum Panel Products and Fiber-Reinforced Cement Panels
      9. ASTM D 3273: Standard Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber
      10. ASTM E 84 – Test Method for Surface Burning Characteristics of Building Materials
      11. ASTM E 119 – Standard Test Methods for Fire Tests of Building Construction and Materials
      12. ASTM G 21 – Standard Practice for Determining Resistance of Synthetic Polymeric Materials to Fungi
      13. California Department of Public Health CDPH/EHLB/Standard Method Version 1.1, 2010
      14. CAN/ULC-S101 – Fire Endurance Tests of Building Construction and Materials
      15. CAN/ULC-S102 – Surface Burning Characteristics of Building Materials and Assemblies
      16. CAN/ULC-A82-20 Series – Methods of Testing Gypsum and Gypsum Products
      17. CAN/ULC-A82.27 – Gypsum Board
      18. CAN/ULC-A82-31 – Gypsum Board Application
      19. GA-214 - Recommended Levels of Gypsum Board Finish
      20. GA-216 - Application and Finishing of Gypsum Board
      21. GA-231 - Assessing Water damage to Gypsum Board
      22. GA-238 - Guidelines for the Prevention of Mold Growth on Gypsum Board
      23. Health Product Declaration Standard v2.0 – hpdcollaborative.org
      24. ISO 14024 – Environmental Labels and Declarations – Type I Environmental Labeling – Principles and Procedures
      25. ISO 14025 – Environmental Labels and Declarations – Type III Environmental Declarations – Principles and Procedures
      26. ISO 16000-23 – Performance Test for Evaluating Reduction of Formaldehyde Concentrations by Sorptive Building Materials

1.4 SUBMITTALS

A. Submit in accordance with Section 01 33 00.

B. Product Data: For each type of product indicated.

C. Informational Submittals: Submit manufacturer’s instructions, special procedures,

and perimeter conditions requiring special attention.

1.5 QUALITY ASSURANCE

A. Fire-Test-Response Characteristics: For assemblies with fire-resistance ratings,

provide materials and construction identical to those of assemblies tested for fire

resistance per ASTM E 119 (UL 263, CAN/ULC-S101) by a testing and

inspecting agency acceptable to authorities having jurisdiction.

1. Fire-Resistance Ratings: Indicated by design designations from ULI and

ULC “Fire Resistance Directory” and Products Certified for Canada.

2. Fire-Resistance Ratings: Indicated by design designations from Intertek

Testing Services (formerly Warnock Hersey International) *Directory of*

*Listed Products*.

1. Abuse and Impact Resistant Characteristics: For abuse and impact resistance levels, provide materials tested to achieve the level of abuse or impact resistance required per ASTM C 1629.
2. Single Source Responsibility: Except where specified otherwise, obtain gypsum

board products, joint treatment, and accessories from single manufacturer or

from manufacturers recommended by prime manufacturer of gypsum board products.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Store materials protected against damage from weather, direct sunlight, surface

contamination, construction traffic, or other causes.

1. Store CertainTeed AirRenew® Gypsum Board panels in flat stacks to prevent sagging.
2. Protect CertainTeed Joint Compounds from freezing.

3. Protect materials to keep them dry.

4. Protect CertainTeed AirRenew® Gypsum Board panels to prevent damage to edges, ends, and surfaces.

**PART 2 — PRODUCTS**

2.1 VOC REDUCING MOISTURE AND MOLD RESISTANT GYPSUM BOARD

A. Acceptable Manufacturers

1. CertainTeed Gypsum, Inc.

a. Basis of Design: CertainTeed AirRenew® Gypsum Board

2. Type and Thickness: Type X, 5/8 inch (15.9 mm) thick where indicated and

as otherwise required to meet fire rating for specific element

[1/2 inch (12.7 mm) elsewhere].

3. Size: 48 by not less than 96 inches (1220 by not less than 2440 mm) [longest length possible to minimize joints].

4. Surface Paper: 100% recycled moisture and mold resistant paper on face,

back and long edges.

5. Mold Resistance Rating:

a. Score of 10 (best possible) tested in accordance with

ASTM D 3273

b. Rating of 0 (best possible) tested in accordance with ASTM G 21

6. GREENGUARD Children & SchoolsSMCertification.

2.2 VOC REDUCING MOISTURE AND MOLD RESISTANT GYPSUM BOARD, ABUSE RESISTANT

A. Acceptable Manufacturers

1. CertainTeed Gypsum, Inc.

a. Basis of Design: CertainTeed AirRenew® Extreme Abuse Board

2. Type and Thickness: Type X, 5/8 inch (15.9 mm) thick where indicated and as otherwise required to meet fire rating for specific element

3. Size: 48 by not less than 96 inches (1220 by not less than 2440 mm) [longest length possible to minimize joints].

4. Surface Paper: 100% recycled moisture and mold resistant paper on face,

back and long edges.

5. Mold Resistance Rating:

a. Score of 10 (best possible) tested in accordance with

ASTM D 3273

b. Rating of 0 (best possible) tested in accordance with ASTM G 21

6. GREENGUARD Children & SchoolsSMCertification.

7. ASTM 1629 Classification Levels

a. Surface Abrasion: Level 3

b. Surface Indention: Level 1

c. Soft Body Impact: Level 2

d. Hard Body Impact: Level 1

2.3 VOC REDUCING MOISTURE AND MOLD RESISTANT GYPSUM BOARD, IMPACT RESISTANT

A. Acceptable Manufacturers

1. CertainTeed Gypsum, Inc.

a. Basis of Design: CertainTeed AirRenew® Extreme Impact Board

2. Type and Thickness: Type X, 5/8 inch (15.9 mm) thick where indicated and as otherwise required to meet fire rating for specific element

3. Size: 48 by not less than 96 inches (1220 by not less than 2440 mm) [longest length possible to minimize joints].

4. Surface Paper: 100% recycled moisture and mold resistant paper on face,

back and long edges.

5. Mold Resistance Rating:

a. Score of 10 (best possible) tested in accordance with

ASTM D 3273

b. Rating of 0 (best possible) tested in accordance with ASTM G 21

6. GREENGUARD Children & SchoolsSMCertification.

7. ASTM 1629 Classification Levels

a. Surface Abrasion: Level 3

b. Surface Indention: Level 1

c. Soft Body Impact: Level 3

d. Hard Body Impact: Level 3

* 1. Independent Environmental Certifications

VOC Content

Third-party certification of compliance

Per California Department of Public Health CDPH/EHLB/Standard Method Version 1.1, 2010

Recycled Content

1. Third-party verified Type I Environmental Label

Per ISO 14024 Environmental Labels and Declarations – Type I Environmental Labeling – Principles and Procedures

Environmental Product Declaration

1. Third-party verified Type III Environmental Product Declaration

Per ISO 14025 – Environmental Labels and Declarations – Type III Environmental Declarations – Principles and Procedures

Health Product Declaration

1. Per Health Product Declaration Standard v2.0

Hpdcollaborative.org

2.5 MOISTURE AND MOLD RESISTANT SETTING-TYPE JOINT COMPOUND

1. Acceptable Manufacturers
2. CertainTeed Gypsum, Inc.
   1. Basis of Design: “CertainTeed Moisture and Mold Resistant Setting Compound with M2Tech®
3. Packaging: [18 lbs. (8.1 kg)] [24.25 lbs. (11 kg)]
4. Mold Resistance Rating:
   1. Score of 10 (highest possible) tested in accordance with

ASTM D 3273

1. GREENGUARD Children & SchoolsSM-Certification.
2. Substitutions: Submit in accordance with Section 01 60 00.

2.6 MOLD RESISTANT GLASS FIBER DRYWALL TAPE

1. Acceptable Manufacturers
2. Saint-Gobain Adfors
   1. Basis of Design: “FibaTape Mold-X10TM”
3. Dimensions: 1-7/8 inches (48 mm) wide by 300 feet (91440 mm) long
4. Mold Resistance Rating:
   1. Score of 10 (highest possible) tested in accordance with

ASTM D 3273

1. Substitutions: Submit in accordance with Section 01 60 00.

2.7 TRIMS AND ACCESSORIES

A. General: Except as otherwise specifically indicated, provide trim and accessories by manufacturer of gypsum board materials, made of galvanized steel or zinc alloy and configured for concealment in joint compound.

1. Include corner beads, edge trim, and other units necessary for project

conditions. Provide accessories as required in order to achieve details

indicated, whether or not specific accessories are shown on the drawings.

2.8 MISCELLANEOUS

A. Fasteners:

1. Screws for attaching gypsum board to light gauge steel (minimum 20 gauge with abuse and impact versions) and wood framing members:

a. Type [S] [W] Drywall Screws per ASTM C 1002.

i. Length: minimum 1-1/4” (32 mm)

2. Nails for attaching gypsum board to wood framing and furring:

a. Nails per ASTM C 514.

i. Length: minimum 1-3/8” (35 mm)

**PART 3 — EXECUTION**

3.1 MOISTURE AND MOLD RESISTANT GYPSUM BOARD INSTALLATION

A. Comply with GA-216, ASTM C 840 and manufacturer’s written instructions.

B. Install CertainTeed AirRenew® Gypsum Board with light violet paper side facing the interior.

C. Cut boards at penetrations, edges, and other obstructions of work; fit tightly

against abutting construction, unless otherwise indicated.

1. Install boards with a ¼ inch (6 mm) setback at wall-to-floor intersections.
2. Allow no joints greater than 1/8 inch (3 mm).

D. Apply fasteners so screw/nail heads bear tightly against light violet colored face paper; countersink slightly and avoid damaging face paper.

E. Space wall framing members a maximum of [16 inches (400 mm) o.c. for ½” gypsum board] [24 inches (600 mm) o.c. for 5/8” gypsum board]

G. Horizontal Installation: Install gypsum board with long edges in contact with

edges of adjacent boards without forcing. Abut ends of boards over centers of

stud flanges, and stagger end joints of adjacent boards not less than one stud

spacing. Screw/nail-attach boards at perimeter and within field of board to each stud.

1. Space fasteners approximately 8 inches (200 mm) o.c. (or tighter spacing if

recommended by manufacturer for specific application) and set back a

minimum of 3/8 inch (10 mm) from edges and ends of boards.

3.2 MOISTURE AND MOLD RESISTANT JOINT TREATMENT

1. Apply mold resistant glass fiber joint tape to all joints and interior angles.
   1. Embed taped joints and interior angles with minimum one coat of moisture and mold resistant setting compound. Coat fastener heads with one coat of moisture and mold resistant setting compound.
      1. [Specify the appropriate Level of Finish per area or wall type]
2. Level of Finish per GA-216:
   1. Level I: All joints and interior angles set in joint compound.
   2. Level II: One coat on all joints and interior angles; fastener heads covered with one coat of joint compound.
   3. Level III: One coat on all joints and interior angles; fastener heads and accessories covered with two coats of joint compound.
   4. Level IV: All joints and interior angles have tape embedded in joint compound. Two additional coats on all joints and interior angles. Fastener heads and accessories covered with two separate coats of joint compound.
   5. Level V: Final skim coating of all surfaces; recommended where gloss paints and/or critical lighting will be experienced.

SAFETY:

For more information, consult the Material Safety Data Sheet by contacting CertainTeed at 1-800-233-8990 or email: building.solutions@certainteed.com. For an electronic copy of this specification, please visit: [www.certainteed.com/gypsum](http://www.certainteed.com/gypsum)

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CertainTeed Corporation

P.O. Box 860

Valley Forge, PA 19482

www.certainteed.com/gypsum

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