Product Name: Gyptone® BIG Boards Manufacturer: CertainTeed Architectural

SECTION 09 84 13 - FIXED SOUND-ABSORPTIVE PANELS

PART 1 - GENERAL

1.1 SUMMARY

- A. Description of Work: Work of this section includes, but is not limited to, the following:
 - Gypsum board and accessories
 - Metal studs and furring
 - 3. Metal suspension systems
 - 4. Sound-rated construction and accessories
 - 5. Gypsum board finishing
 - Trim and accessories

1.2 RELATED WORK SPECIFIED ELSEWHERE

- A. See Section 09 22 16 NON-STRUCTURAL METAL FRAMING for gypsum boards.
- See Section 09 22 26 SUSPENSION SYSTEMS for suspended gypsum ceilings.
- C. See Section 09 91 23 INTERIOR PAINTING for gypsum board prime and finish coats.

1.3 SUBMITTALS

- A. Product Data: Submit manufacturer's specifications and installation instructions with project conditions and materials clearly identified or detailed for each required system.
- B. Shop Drawings
 - 1. Submit ceiling and/or wall plans drawn to scale prescribed by Architect
 - a. Include coordinated penetrations
 - b. Include any necessary details or drawings from the manufacturer regarding recommended installation
- C. Samples
 - 1. Submit 12" x 12" manufacturer's sample of each panel indicated
- D. Certifications
 - Provide manufacturer's written certification that products submitted meet or exceed all specified requirements
 - a. Independent Environmental Certifications
 - b. VOC content
 - i. Third-party certification of compliance
 - Per California Dept. of Public Health CDPH/EHLB/Standard Method v1.2, 2017
 - c. Environmental Product Declaration
 - i. Third-party verified Type III Environmental Product Declaration

- Per ISO 14025 Environmental Labels and Declarations

 Type III Environmental Declarations -- Principles and Procedures
- d. Health Product Declaration
 - Per Health Product Declaration Standard v2.0
 - hpdcollaborative.org

1.4 SYSTEM REQUIREMENTS

- A. Performance Requirements: Fabricate and install systems as indicated but not less than that required to comply with ASTM C754, including but not limited to the following:
 - Interior suspended ceilings and soffits: Maximum deflection of L/240 of distance between supports.
 - 2. Nonstructural components that are permanently attached to structures and their support attachments, shall be designed and constructed to resist the effects of earthquake motions in accordance to local jurisdiction.
- B. Acoustical Ratings: Where sound ratings are indicated, provide materials and application procedures identical to those tested by manufacturer to achieve Noise Reduction Coefficient (NRC) scheduled or indicated in accordance with ASTM C423.
- C. VOC Certification of Compliance
 - Per California Dept. of Public Health CDPH/EHLB/Standard Method v1.2, 2017
 - a. Berkeley Analytical certification of compliance
 - 1) Standard classroom model
 - 2) Standard office model

1.5 QUALITY ASSURANCE

- A. Reference Standards:
 - 1. Follow manufacturer's printed installation instructions (available online at www.certainteed.com/ceilings)
 - 2. Applicable requirements of ASTM C754 for installation of steel framing.
 - Install gypsum board in accordance with applicable requirements and recommendations of Gypsum Association GA 216, "Application and Finishing of Gypsum Panel Products" except for more stringent requirements of manufacturer.
- B. Installer Qualifications
 - Must be experienced in the installation of systems similar to those specified herein

1.6 DELIVERY, STORAGE AND HANDLING

- A. Delivery:
 - Deliver material to site promptly without undue exposure to weather.
 - 2. Deliver in manufacturer's unopened containers or bundles, fully identified with name, brand, type and grade.
- B. Storage:
 - Store above ground in dry, ventilated space.

- 2. Protect materials from soiling, rusting and damage.
- 3. Store and handle gypsum products in accordance with application requirements and recommendations of Gypsum Association GA-801, "Handling and Storage of Gypsum Panel Products: A Guide For Distributors, Retailers, and Contractors"

1.7 PROJECT CONDITIONS

- A. Environmental Requirements:
 - Do not install gypsum board until ambient conditions do not exceed 104°F and 70% relative humidity.

PART 2 - PRODUCTS

2.1 PRODUCTS AND MANUFACTURERS

- A. Perforated Gypsum Board and Accessories: Gyptone BIG Boards by CertainTeed Architectural
 - 1. Address: 20 Moores Road, Malvern, PA 19355
 - 2. Telephone: 800-233-8990
 - Web: www.certainteed.com/architectural
- B. Steel Framing and Furring (walls):
 - Gyptone wall framing by CertainTeed Architectural
 - 2. Manufacturer acceptable to installer
- C. Grid Suspension Assemblies (ceilings):
 - SURFACE DIMENSION MUST BÉ [min] 1.5-INCHES IN WIDTH
 - a. 1-1/2" Drywall Grid System (metric components) by Certainteed Architectural
 - b. Manufacturer acceptable to installer

2.2 PERFORATED GYPSUM BOARD MATERIALS

- A. Perforated Gypsum Board: Gyptone BIG
 - Edges: Tapered on all 4 sides
 - Thickness: 12.5 mm [approx. 1/2-inch]
 - Sizes:
 - a. 1200mm x 2400mm (≈ 47.2" x 94.5")
 - b. 900mm x 2700mm (≈ 35.5" x 106.3")
 - Patterns:
 - a. BIG Line 6 (only in 1200mm x 2400mm)
 - 1) NRC / ceiling: 0.60 (w/ 2.5" insulation onlay)
 - 2) NRC / wall: 0.65 (w/ 2.5" insulation in cavity)
 - b. BIG Quattro 41 (only in 1200mm x 2400mm)
 - 1) NRC / ceiling: 0.70 (w/ 2.5" insulation onlay)
 - 2) NRC / wall: 0.80 (w) 2.5" insulation in cavity)
 - c. BIG Quattro 46 (only in 1200mm x 2400mm)
 - 1) NRC / ceiling: 0.60 (w/ 2.5" insulation onlay)
 - 2) NRC / wall: 0.80 (w/ 2.5" insulation in cavity)
 - d. BIG Sixto 63 (only in 1200mm x 2400mm)
 - 1) NRC / ceiling: 0.65 (w/ 2.5" insulation onlay)
 - 2) NRC / wall: 0.70 (w/ 2.5" insulation in cavity)
 - e. BIG Sixto 65 (only in 900mm x 2700mm)
 - 1) NRC / ceiling: 0.75 (w/ 2.5" insulation onlay)

- 2) NRC / wall: 0.85 (w/ 2.5" insulation in cavity)
- 5. Proprietary formaldehyde scavenging formula
 - ActivAir scavenging technology

2.3 METAL FRAMING AND FURRING MATERIALS

- A. Metal Furring Channels (in accordance with manufacturer's recommendation):
 - Gyptone "Z-channel"
 - a. Z shaped: per ASTM C645
 - b. Metal Thickness: 0.020 inches
 - G30 galvanized coating
 - d. Dimesion: 1.50" x 1.50" x 1.50"
 - 2. Gyptone "C-channel"
 - a. C-shaped: per ASTM C645
 - b. Metal Thickness: 0.020 inches
 - c. G30 galvanized coating
 - d. Dimension: 1.50" x 1.80" x 2.00"
 - 3. Accessories
 - a. Gyptone panel attachment: QSTR 25 screw (2-directional thread design)
 - 1) for screw attachment within perforated area

2.4 CEILING SUSPENSION SYSTEM

- A. Framing System:
 - 1. Name
 - a. CertainTeed Drywall Grid System
 - 2. Components
 - a. Main Runner
 - a. Length: 3600mm
 - i. DWS3600MM-13-20 G40
 - b. Cross Tees
 - a. Length: 1500mm
 - DWS1500MM-13-20 G40
 - b. Length: 1200mm
 - i. DWS1200MM-13-20 G40
 - c. Length: 750mm
 - i. DWS750MM-13-20 G40
 - d. Length: 600mm
 - i. DWS600MM-13-20 G40
 - e. Length: 900mm
 - i. DWS900MM-13-20 G40
 - c. Angle Molding
 - a. Length: 12-ft (3657.6 mm)
 - i. DWA1.5-1.5
 - ii. DWA2-2
 - Accessories
 - a. Splice Clip (DWSC)
 - For radius applications

3.1 EXAMINATION

A. Examine substrates and adjoining construction and conditions under which work is to be installed. Do not proceed with work until unsatisfactory conditions are corrected.

3.2 GENERAL INSTALLATION REQUIREMENTS

- A. Install in accordance with reference standards and manufacturer's recommended instructions [and as required to comply with seismic requirements].
- B. Install framing to comply with ASTM C754 and with ASTM C840 requirements that apply to framing, installation and finishing.

C. Insulation:

- Install CertainTeed Insulation fiberglass (or equivalent) sound blankets in partitions and ceilings where indicated.
 - a. Thickness: 2.5-inches [unfaced]
- 2. Completely fill space between studs and framing to full height of partition wall or full area of ceiling.
- 3. Fit carefully behind electrical outlets and other work penetrating sound-rated construction.

D. Finishing

- 1. Joint compound
 - e. APPLY TAPE BY HAND ONLY (no taping guns or other mechanical devices)
 - f. Use CertainTeed All-Purpose Joint Compound (or equivalent).
 - g. Mix joint compound according to manufacturer's directions.
 - h. Fill joints between boards flush to top of eased or beveled edge.
 - e. Keep joint compound from gyptone perforations.
- Taping
 - a. APPLY TAPE BY HAND ONLY (no taping guns or other mechanical devices)
 - b. Use Marco Spark-Perf Paper Tape by CertainTeed (or equivalent)
 - c. Butter taping compound into inside corners and joints.
 - d. Center tape over joints and press down into fresh compound.
 - e. Remove excess compound.
- 3. Finish surface to be Level 4 in accordance with applicable requirements and recommendations of Gypsum Association GA 214, "Recommended Levels of Gypsum Board Finish"
- 4. Sanding
 - a. After each of three (3) finishing applications
- Prime painting
 - a. APPLY BY ROLLER ONLY (1/4" nap)
 - b. One prime coat
- Finish painting
 - a. APPLY BY ROLLER ONLY (1/4" nap)
 - b. Two finish coats

- A. Correct damage and defects which may telegraph through finish work.
- B. Leave work smooth and uniform.

END OF SECTION

CertainTeed Architectural shall be held harmless for any damages resulting from the use of this specification guide