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SECTION 09260

SHAFTWALL SYSTEMS

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

IT IS ASSUMED THAT THE GENERAL CONDITIONS BEING USED ARE AIA A201-87.

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes: A fire resistance rated and air pressure resistance rated metal stud and gypsum board wall system for the enclosure of shafts, chases, stair wells, and horizontal duct assemblies.

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

B. Related Sections:

1. Section 09215, Veneer Plaster.
2. Section 09250, Gypsum Board.

1.02 REFERENCES

DELETE REFERENCES NOT USED IN PART 2 OR PART 3.

A. American Society for Testing and Materials (ASTM):

1. C 36, Specification for Gypsum Wallboard.
2. C 79, Test Method for Gypsum Sheathing Board.
3. C 442, Specification for Gypsum Backing Board and Coreboard.
4. C 588, Specification Gypsum Base for Veneer Plasters.
5. C 630, Specification for Water-Resistant Gypsum Backing Board.
6. C 645, Specification for Non-Load (Axial) Bearing Steel Studs, Runners (Track), and Rigid Furring Channels for Screw Application of Gypsum Board.
7. C 754, Specification for Installation of Steel Framing Members to Receive Screw-Attached Gypsum Board.
8. C 840, Specification for Application and Finishing of Gypsum Board.
9. C 931, Specification for Exterior Gypsum Soffit Board.

10. C 954, Specification for Steel Drill Screws for the Application of Gypsum Board or Metal Plaster Bases to Steel Studs from 0.33 in. (0.84 mm) to 0.112 in. (2.84 mm) in Thickness.
11. C 1002, Specification for Steel Drill Screws for the Application of Gypsum Board or Metal Plaster Bases.
12. C 1047, Specification for Accessories for Gypsum Wallboard and Gypsum Veneer Base.

1.03 SUBMITTALS

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

RETAIN SINGLE-SOURCE PARAGRAPH BELOW IF MORE THAN ONE MANUFACTURER IS LISTED IN PART 2 OR IF SECTION IS EDITED TO BE GENERIC.

1.04 QUALITY ASSURANCE

- A. Single-Source Responsibility: Obtain shaftwall system products from a single manufacturer.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Packaging and Shipping: Have materials shipped in manufacturer's original packages showing manufacturer's name and product brand name.
- B. Storage and Protection: Store materials inside and protected from damage by the elements. Protect ends, edges, and faces of gypsum boards from damage. Protect steel studs and accessories from bending.

1.06 PROJECT CONDITIONS

- A. Environmental Requirements: Establish and maintain application and finishing environment in accordance with ASTM C 840.

PART 2 PRODUCTS

2.01 MANUFACTURERS

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

PROPRIETARY PRODUCT NAMES MAY BE LISTED IN THIS ARTICLE OR IN THE "MATERIALS" ARTICLE BELOW. LISTING THEM IN BOTH ARTICLES IS OVERKILL AND INVITES COORDINATION ERRORS.

- A. National Gypsum Co.
 1. Metal Framing:
 - a. Studs: Gold Bond I-Stud.
 - b. Track: Gold Bond J Track, 2-1/4 in. leg.
 - b. Track: Gold Bond J Track, 3 in. leg.
 2. Gypsum Board:
 - a. Shaftwall Coreboard: Gold Bond Fire-Shield Shaftliner.

- b. Fire-Rated Board: Gold Bond Fire-Shield G Wallboard.
 - c. Fire-Rated Board: Gold Bond Fire-Shield Wallboard.
 - d. Fire-Rated Board: Gold Bond 5/8" Fire-Shield Hi-Impact Wallboard.
 - e. Regular Board: Gold Bond Regular Gypsum Wallboard.
 - f. Water-Resistant Backing Board: Gold Bond MR Board.
 - g. Plaster Base: Gold Bond Kal-Kore Regular, plain.
3. Joint Treatment:
- a. Tape: Gold Bond Joint Tape.
 - b. Compound: Gold Bond ProForm All Purpose Ready-Mix Joint Compound.
 - c. Compound: Gold Bond ProForm Multi-Use Ready-Mix Joint Compound.
 - d. Compound: Gold Bond ProForm Lite Ready-Mix Joint Compound.
 - e. Compound: Gold Bond Proform Ready-Mix Topping Compound
 - f. Compound: Gold Bond Easy Finish Ready-Mix Joint Compound.
 - g. Compound: Gold Bond Easy Finish Light Weight Ready-Mix Joint Compound.
 - h. Compound: Gold Bond Easy Finish Ready-Mix Topping Compound.
 - i. Compound: Gold Bond Triple-T Compound.
 - j. Compound: Gold Bond Sta-Smooth Joint Compound.
 - k. Compound: Gold Bond Sta-Smooth Lite Joint Compound.
4. Accessories:
- a. Corner Bead: Gold Bond Wallboard Cornerbead, 1-1/8 in. by 1-1/8 in.
 - b. Corner Bead: Gold Bond Wallboard Cornerbead, 1-1/4 in. by 1-1/4 in.
 - c. Expansion Joint: Gold Bond E-Z Strip Control Joint.
 - d. Expansion Joint: Gold Bond .093 Zinc Control Joint.

2.02 MATERIALS

THIS ARTICLE INCLUDES GENERIC DESCRIPTIONS OF GYPSUM BOARD CONSTRUCTION PRODUCTS, THE NAMES OF THE CORRESPONDING GOLD BOND PRODUCTS FOLLOW IN PARENTHESES. IF THIS SECTION IS BEING EDITED TO BE GENERIC, THEN THESE PRODUCT NAMES SHOULD BE DELETED.

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

A. Metal Framing:

BELOW IS 25 GA.

- 1. Studs: 2-1/2 in. and 4 in. I shaped studs, weighing 490 lbs. and 615 lbs. per 1000 lin. ft. with min. base steel of 0.020 in., galvanized, and complying with ASTM C 645 (Gold Bond I-Stud).

BELOW IS 20 GA.

- 1. Studs: 2-1/2 in., 4 in. and 6 in. I shaped studs, weighing 835 lbs., 1050 lbs. and 1353 lbs. per 1000 lin. ft. with min. base steel of 0.0329 in., galvanized, and complying with ASTM C 645 (Gold Bond I-Stud).

BELOW IS 25 GA. WITH 2-1/4 IN. LEG.

2. Track: 2-1/2 in. and 4 in. J shaped track with 2-1/4 in. leg, weighing 390 lbs. and 490 lbs. per 1000 lin. ft., 25 ga., galvanized and complying with ASTM C 645 (Gold Bond J Track, 2-1/4 in. leg).

BELOW IS 20 GA. WITH 2-1/4 IN. LEG.

2. Track: 2-1/2 in., 4 in. and 6 in. J shaped track with 2-1/4 in. leg, weighing 675 lbs., 830 lbs. and 1038 lbs. per 1000 lin. ft., 20 ga., galvanized and complying with ASTM C 645 (Gold Bond J Track, 2-1/4 in. leg).

BELOW IS 20 GA. WITH 3 IN. LEG.

2. Track: 2-1/2 in., 4 in., and 6 in. J shaped track with 3 in. leg, weighing 787 lbs., 968 lbs. and 1210 lbs. per 1000 lin. ft., 20 ga., galvanized and complying with ASTM C 645 (Gold Bond J Track, 3 in. leg).

B. Gypsum Board:

1. Shaftwall Coreboard: A gypsum core shaftwall panel with additives to enhance fire resistance of the core and surfaced with water-repellant paper on front, back, and long edges and complying with ASTM C 442, type X.
 - a. Thickness: 1 in. (Gold Bond Fire-Shield Shaftliner).
 - b. Width: 2 ft.
 - c. Length: 7 ft. through 14 ft.
 - d. Edges: Double-Beveled.
2. Fire-Rated Gypsum Board: A gypsum core wall panel with additives to enhance fire resistance of the core and surfaced with paper on front, back, and long edges and complying with ASTM C 36, type X.
 - a. Thickness: 1/2 in. (Gold Bond Fire-Shield G), 5/8 in. (Gold Bond Fire-Shield), or 5/8 in. (Gold Bond Fire-Shield G).
 - b. Width: 4 ft.
 - c. Length: 6 ft. through 16 ft.
 - d. Edges: Square, Tapered, or Beveled Taper (Gold Bond Sta-Smooth Edge).
3. Regular Gypsum Board: A gypsum core wall panel surfaced with paper on front, back, and long edges and complying with ASTM C 36 (Gold Bond Regular Gypsum Wallboard).
 - a. Thickness: 1/4 in., 3/8 in. or 1/2 in.
 - b. Width: 4 ft.
 - c. Length: 6 ft. through 16 ft.
 - d. Edges: Square, Tapered, or Beveled Taper (Gold Bond Sta-Smooth Edge).
4. Water-Resistant Gypsum Backing Board: A gypsum core wall panel with additives to enhance the water resistance of the core; surfaced with water-repellant paper on front, back, and long edges; and complying with ASTM C 630 (Gold Bond MR Board).
 - a. Thickness: 1/2 in.
 - b. Width: 4 ft.
 - c. Length: 6 ft. through 16 ft.
 - d. Edges: Tapered.
5. Plaster Base: A gypsum core wall panel surfaced with absorptive paper on front, back, and long edges and complying with ASTM C 588 (Gold Bond Kal-Kore).
 - a. Thickness: 3/8 in. or 1/2 in.
 - b. Width: 4 ft.
 - c. Length: 8 ft. and 12 ft.

- d. Edges: Tapered.
- 6. Fire-Rated Impact-Resistant Gypsum Board: A gypsum core wall panel with additives to enhance fire resistance of the core and surfaced with paper on front, back and long edges with a GE Lexan film bonded to the back side to enhance impact/penetration resistance and complying with ASTM C36, type X.
 - a. Thickness: 5/8 in. with 0.010" Lexan film (Gold Bond Fire-Shield Type X Hi-Impact 1000), 5/8 in. with 0.020" Lexan film (Gold Bond Fire-Shield Type X Hi-Impact 2000), 5/8 in. with 0.030" Lexan film (Gold Bond Fire-Shield Type X Hi-Impact 3000), 5/8 in. with 0.081" Lexan film (Gold Bond Fire-Shield Type X Hi-Impact 8000).
 - b. Width: 4 ft.
 - c. Length: 8 ft. through 12 ft.
 - d. Edges: Square, Tapered or Beveled Taper (Gold Bond Sta-Smooth Edge)

C. Joint Treatment:

- 1. Tape: 2-1/16 in. wide paper reinforcing tape (Gold Bond Joint Tape).
- 2. Compound: Drying type pre-mixed vinyl base compound (Gold Bond ProForm All Purpose Ready-Mix Joint Compound, regular grade and machine grade and Gold Bond ProForm Lite Ready-Mix Joint Compound, Gold Bond ProForm Multi-Use Ready-Mix Joint Compound, Gold Bond Easy Finish Ready-Mix Joint Compound, Gold Bond Easy Finish Light Weight Joint Compound).
- 3. Compound: Drying type job mixed vinyl base compound (Gold Bond Triple-T Compound).
- 4. Compound: Drying type vinyl base topping compound, pre-mixed (Gold Bond ProForm Ready-Mix Topping Compound and Easy Finish Ready-Mix Topping Compound).
- 5. Compound: Setting type job mixed chemical-hardening compound (Gold Bond Sta-Smooth Joint Compound, Sta-Smooth Lite Compound, and Sta-Smooth HS).

2.03 ACCESSORIES

- A. Angle: Rolled steel angle, 2 in. by 2 in. by 20 ga.
- B. Corner Bead: Formed galvanized steel angle, min. base steel 0.014 in. thick, and complying with ASTM C 1047 (Gold Bond Wallboard Cornerbead, 1-1/8 in. by 1-1/8 in. and 1-1/4 in. by 1-1/4 in.).
- C. Control Joint: Extruded vinyl formed with V shaped slot covered with removable flexible vinyl strip and complying with ASTM C 1047 (Gold Bond E-Z Strip Expansion Joint).
- D. Screws: ASTM C 954 or ASTM C 1002 or both with heads, threads, points, and finish as recommended by the manufacturer.
- E. Acoustical Sealant: Nondrying, nonhardening, nonskinning, nonstaining, nonbleeding, gunnable type as recommended by the manufacturer.

PART 3 EXECUTION

3.01 INSTALLATION

- A. In accordance with the following ASTM Standards and manufacturer's recommendations:
 - 1. ASTM Standards:
 - a. Metal Framing: C 754.
 - b. Gypsum Board and Joint Treatment: C 840.

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

2. Manufacturer's Recommendations:
 - a. National Gypsum Co. Gypsum Construction Guide.

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.