

PART I GENERAL

1.01 SUMMARY

- A. Description: This section includes Swinging Steel Sound Control Door, Frame and Window Assemblies and Wood Doors where shown on the drawings and as specified here in, including Sound Seal Gasket System, Door Bottom Seal, Cam-Action Hinges at assemblies above STC 48, Glass and Glazing.
- B. Related work not included in this section:
 - 1. Steel doors and frames.
 - 2. Wood doors.
 - 3. Finish hardware including lock cylinders and thresholds.
 - 4. Installation of sound control glass and glazing in sound control window frames.
 - 5. Caulking between frames and masonry.
 - 6. Structural members.
 - 7. Finish painting.

1.02 QUALITY ASSURANCE

- A. Applicable standards of the following as referenced herein:
 - 1. AAMA, American Architectural Manufacturers Association.
 - 2. ASTM, American Society for Testing and Materials.
 - 3. ADA, Americans with Disabilities Act.
 - 4. NAAMM/HMMA, National Association of Architectural Metals Manufacturers
 - 5. WDMA, Wood Door Manufacturer's Association
- B. Manufacturer shall have been regularly engaged in manufacturing sound control door, frames and window assemblies for a period of at least ten years. Doors and frames shall be fabricated by a single manufacturer. The manufacturer must have an effective quality control system in place.
- C. Sound Assemblies shall be tested by a certified independent laboratory in accordance with ASTM E90, ASTM E413 and ASTM E1408.
- D. Exterior sound assemblies shall be tested for Air and Water infiltration in accordance with ASTM E283, E330 and E331
- E. Allowable Tolerances as stated in NAAMM/HMMA Technical Manual.

1.03 SUBMITTALS

- A. Shop drawings: Indicate in elevation with sections and details to scale. Include STC rating with independent test report, glass and metal thicknesses, joining details, field connections, anchorage, concealed and exposed fastening methods, door and framing reinforcement, and metal finishes. Indicate compliance with specified design criteria.
- B. Maintenance data: Give instructions for general maintenance and repair of surfaces and finishes.
- C. Maintenance data: Give instructions for general maintenance and repair of surfaces and finishes.

1.04 WARRANTY: Sound Control Door and Frame assemblies shall be warranted from defects in workmanship and quality for a period of one (3) years from date of shipment when stored, installed and painted in accordance with manufacturers instruction and NAAMM / HMMA Technical Manual. Adjustments made necessary by shifting or settling of building structure shall not be covered by warranty.

PART II PRODUCTS

2.01 DOOR ASSEMBLIES

- A. The Sound Control Door products are based on Stiles Custom Metal, Inc. Audia™ Model _____, STC Rating _____. www.stilesdoor.com
 - 1. Provide sound control assemblies complete with door, frame, anchors, sound seals and door bottom seal of type and sizes required by manufacturer to achieve specified STC rating. Cam-action hinges shall also be included at ratings above STC 48. All other door hardware is specified and furnished in "Door Hardware" section.

Audia™ SOUND CONTROL DOOR & WINDOW ASSEMBLIES (continued)

2. Materials: Door face sheets shall be 0.053 in. (1.3mm) min. thickness. Exterior openings shall be A60 Galvanized steel.
 3. Construction: All doors shall be of the types and sizes shown on approved shop drawings, with no visible seams or joints on faces. Minimum door thickness 1-3/4 in. (44mm). The use of lead or asbestos in door construction shall not be permitted.
 4. Glazed Lite Kits (if applicable) shall be furnished complete with a removable glass stop system and glazing gasket seals designed and tested to meet required STC rating.
 5. Finish: After fabrication, all tool marks and surface imperfections shall be removed, and faces of all welded joints shall be dressed smooth. Doors and frames shall be treated to insure maximum paint adhesion and shall be painted on all accessible surfaces with one coat of a rust inhibitive, modified Alkyd, Zinc compound, gray primer that meets or exceeds all ANSI A250.10-98 performance criteria. Primer coat shall be fully cured prior to shipment. Red or brown colored primers shall not be permitted.
- B. Wood Doors are based on Stiles Custom Metal, Inc. Audia™ Model _____, STC Rating _____. www.stilesdoor.com
1. Provide sound control assemblies complete with wood door, steel frame, anchors, sound seals and door bottom seal of type and sizes required by manufacturer to achieve specified STC rating. Cam-action hinges shall also be included at ratings above STC 48. All other door hardware is specified and furnished in "Door Hardware" section.
 2. Construction: All doors shall be of the types and sizes shown on approved shop drawings.
 - a. Visible seams or joints on door faces are NOT permitted.
 - b. Veneer thickness, internal sound retardant core and perimeter door edge construction to be manufacturers standard for the specified model.
 3. The use of lead, formaldehyde or asbestos in door construction shall not be permitted.
 4. Face veneer species, cut and color shall match that specified in "Wood Door" section.
 5. Glazed Lite Kits (if applicable) shall be furnished complete with removable glass stops and glazing gasket seals designed and tested to meet required STC rating.
 6. Factory finishing of doors shall comply with AWI standards and the Wood Door Section.

2.02 DOOR FRAMES

- A. Provide door frames, complete with perimeter sound seals and wall anchors.
- B. Construction: Frames shall be constructed of 0.067 in. (14 Ga.)(1.7mm) minimum thickness. Exterior frames shall also have an A60 zinc coating. Frames shall be continuously welded assemblies. Knocked-down frames shall not be accepted.
- C. Sound Seal assemblies shall consist of a continuous adjustable retainer channel and compression or magnetic sound seal gasket system designed and tested to meet required STC rating. Bump type thresholds, adhesive-attached seals, including thin bronze strip seals shall not be accepted.

2.03 FIXED WINDOW SYSTEMS

- A. The Sound Control Fixed Window Systems are based on Stiles Custom Metal, Inc. Audia™ Model _____, STC Rating _____. www.stilesdoor.com
- B. Provide fixed sound control windows and door frames with, transom lights, and sidelights.
- C. Materials: Window Frames shall be constructed of 0.067 in. (14 Ga.)(1.7mm) minimum thickness. Exterior frames shall also have an A60 zinc coating.
- D. Construction: Window frames shall be welded units of the sizes and types shown on approved shop drawings. Knocked-down frames shall not be accepted.
- E. Assemblies shall be furnished complete with welded steel frame, fixed stops and glazing gasket seals designed and tested to meet required STC rating. Loose glass stop shall be attached with concealed fasteners. Exposed fasteners shall not be accepted.

Audia™ SOUND CONTROL DOOR & WINDOW ASSEMBLIES (continued)

2.04 SOUND CONTROL GLASS

- A. Sound Control Glass for Door Lites and Windows: (choose)

[Glass shall be furnished and installed by the sound door / window manufacturer in type and thickness required to meet the STC rating.]

[Glass shall be furnished by the sound door / window manufacturer in type and thickness required to meet the STC rating. Glass installation shall take place in the field by glazing contractor in accordance with the manufacturers instructions.]

[Glass shall be furnished and installed in the field by glazing contractor. Glass type, thickness and installation method in accordance with the sound door / window manufacturers instructions.]

2.05 FINISH HARDWARE

- A. Doors and frames shall be mortised, reinforced, drilled and tapped at the factory for completely Templated mortised hardware only, in accordance with the final approved hardware schedule and templates provided by the hardware supplier. Where surface mounted, anchor hinges, or non-template mortise hardware is to be applied, doors shall be reinforced, with all drilling and tapping done by others in the field. Reinforcement steel shall comply with NAAMM/HMMA 830 and 861.
- B. Doors shall be constructed to function with standard builders hardware, custom modifications of hardware shall not be permitted.
- C. Hardware supplier shall coordinate hardware compatibility with the sound control door manufacturer.

PART III EXECUTION

3.01 CLEARANCES AND TOLERANCES shall be in compliance with NAAMM / HMMA standards.

3.02 SITE STORAGE AND PROTECTION OF MATERIALS

- A. Deliver and store materials to prevent damaging and marring finishes.
- B. Protection: Protect metal surfaces from contact with lime, mortar, cement, acids, and other harmful surfaces and from careless handling, storage or machining.

3.03 INSTALLATION: It shall be the responsibility of the installation contractor to perform the following:

- A. Tolerances shall meet the requirements of HMMA 840.
- B. Solidly pack throat of frames which are installed in metal-stud and gypsum-wallboard partitions with 12 lb./cubic ft. (2.72kg to 5.44kg) density mineral wool insulation.
- C. Solidly grout-fill frames installed in masonry or poured in place to eliminating all voids.
- D. The floor area under a sound control door shall be flat, level and smooth.

3.04 CLEANING: Clean doors and frames in accordance with manufacturer's special instructions.

3.05 MAINTENANCE: Instruct the Owner's Maintenance Personnel regarding the operation and maintenance of these doors.

End of Section