

**SECTION 10650 or
MasterFormat™ 2004 SECTION 10 22 26.13**

**TRANZFORM® SOUND
ACCORDION FOLDING PARTITIONS, WALLS OR DOORS**

GENERAL NOTES TO SPECIFIER:

THIS SPECIFICATION SECTION HAS BEEN PREPARED TO ASSIST DESIGN PROFESSIONALS IN THE PREPARATION OF PROJECT OR OFFICE MASTER SPECIFICATIONS. IT FOLLOWS GUIDELINES ESTABLISHED BY THE CONSTRUCTION SPECIFICATIONS INSTITUTE, AND THEREFORE MAY BE USED WITH MOST MASTER SPECIFICATION SYSTEMS WITH MINOR EDITING.

EDIT CAREFULLY TO SUIT PROJECT REQUIREMENTS. MODIFY AS NECESSARY AND DELETE ITEMS THAT ARE NOT APPLICABLE. VERIFY THAT REFERENCED SECTION NUMBERS AND TITLES ARE CORRECT. (NUMBERS AND TITLES REFERENCED ARE BASED ON MASTERFORMAT™, 2004 EDITION).

THIS SECTION ASSUMES THE PROJECT MANUAL WILL CONTAIN COMPLETE DIVISION 01 DOCUMENTS INCLUDING SECTIONS 01 33 00 SUBMITTAL PROCEDURES, 01 62 00 PRODUCT OPTIONS, 01 25 13 PRODUCT SUBSTITUTION PROCEDURES, 01 66 00 PRODUCT STORAGE AND HANDLING REQUIREMENTS, 01 77 00 CLOSEOUT PROCEDURES AND 01 78 00 CLOSEOUT SUBMITTALS. IF THE PROJECT MANUAL DOES NOT CONTAIN THESE SECTIONS, ADDITIONAL INFORMATION SHOULD BE INCLUDED UNDER THE APPROPRIATE ARTICLES.

THIS IS AN OPEN PROPRIETARY SPECIFICATION ALLOWING USERS THE OPTION OF APPROVING OTHER MANUFACTURERS WHICH COMPLY WITH THE CRITERIA SPECIFIED HEREIN.

NOTES TO THE SPECIFIER ARE CONTAINED IN BOXES AND SHOULD BE DELETED FROM FINAL COPY.

OPTIONAL ITEMS REQUIRING SELECTION BY THE SPECIFIER ARE ENCLOSED WITHIN BRACKETS, E.G.: [35] [40] [45]. IN CASES WHERE ONE OF THE OPTIONAL ITEMS IS A STANDARD FEATURE OF THE ACCORDION FOLDING PRODUCT MODEL, IT IS LISTED IN THE FIRST POSITION. MAKE APPROPRIATE SELECTION AND DELETE OTHERS.

ITEMS REQUIRING ADDITIONAL INFORMATION ARE UNDERLINED, E.G.: _____.

OPTIONAL PARAGRAPHS ARE SEPARATED BY A REDLINED "OR" E.G.:

OR

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes: manually operated, side folding accordion-type products for partition, wall or door applications.
- B. Related Sections:
 - 1. 06 10 00 Rough Carpentry: All headers, support structures, surrounding insulation, jambs, field painting, blocking, wood trim and pocket doors when not provided by Cornell shall be furnished and installed by others.
 - 2. 08 70 00 Hardware: Masterkeyed cylinders by others.

1.2 SYSTEM DESCRIPTION

- A. Operation: All units shall be top supported without the use of any floor tracks or single point lock sockets. Smooth glide manual push/pull operation is accomplished with ease and minimal force.
- B. Design: Accordion folding product assembly shall be repairable at installation site without removal requirement for repair at factory.

- C. Acoustic Performance: Provide accordion-type folding products that have been tested by a qualified independent agency for the following acoustic properties as per the following test method:
 - 1. Sound Transmission Requirements: Accordion-type side folding products tested for laboratory sound transmission loss performance according to ASTM E90, determined by ASTM E413 and rated for an STC as follows:
 - a. Sound Transmission Class (STC): 45
- D. Fire Resistance: The accordion folding door material and finish shall achieve a Flame Spread Index of not more than 20 and a Smoke Developed Index of not more than 60 when tested in accordance with ASTM E84.

1.3 SUBMITTALS

- A. Reference Section 01 33 00 Submittal Procedures; submit the following items:
 - 1. Product Data.
 - 2. Shop Drawings: Show interface with adjacent work. Indicate required stacking depth, pocket width (if applicable), and height from finished floor to bottom side of header. Show installation details and layout.
 - 3. Closeout Submittals:
 - a. Operation and Maintenance Manual.
 - b. Certificate stating that installed materials comply with this specification.

1.4 QUALITY ASSURANCE

- A. Installation shall be performed by manufacturer trained or authorized personnel according to manufacturer's installation instructions.
- B. Surface Burning Characteristics: Provide operable wall with the following surface burning characteristics as determined by testing identical products per ASTM E84 by an authorized independent testing agency that is acceptable to the authority having jurisdiction:
 - 1. Flame Spread: 20
 - 2. Smoke Developed: 60

1.5 DELIVERY STORAGE AND HANDLING

- A. Reference Section 01 66 00 Product Storage and Handling Requirements.
- B. Deliver to the job site in manufacturer's original, unopened package(s).

1.6 COORDINATION BY GENERAL CONTRACTOR

- A. Coordinate the efforts of the various trades affected by the work of this section. Assure accurate installation of header, jamb and trim. Provide field dimensions for fabrication
- B. Supervise unloading and handling. Store boxes flat, and no more than four high, in a dry area and protect from elements that may damage materials. Replace damaged materials at no additional cost to the owner.

1.7 WARRANTY

- A. Standard Warranty: Two years from date of shipment against defects in material and workmanship.

- B. Maintenance: Submit for owner's consideration and acceptance of a maintenance service agreement for installed products.

PART 2 PRODUCTS

2.1 MANUFACTURER

- A. Manufacturer: Cornell Iron Works, Inc., 100 Elmwood Avenue, Crestwood Industrial Park, Mountaintop, PA 18707. Telephone: (800) 233-8366, Fax: (800) 526-0841.
- B. Model: ESP20
- C. Substitutions: Reference Section 01 25 13 Product Substitution Procedures.

2.2 MATERIALS

- A. Accordion Folding Wall Construction
 1. Construction shall consist of a two parallel accordion-type side folding walls of panels independently suspended from an interconnected double rail overhead track with no pantographs or internal connections except at the upright posts.
 2. Wall Panels: Each assembly to consist of continuous length, 4 1/2" wide panels formed of vinyl clad 24 gauge steel, corrugated and reinforced with double rolled end beads for strength and resilience. Vinyl shall be permanently bonded to the outside face of the steel panels using a heat and pressure process prior to the panels being roll formed.
 3. Sound Blocker Lining: Interior surfaces of both panel walls shall be completely covered with continuous blankets of sound absorbing material attached with tear resistant fasteners that ensure lasting, effective retention of the sound liner.
 4. Hinges: Continuous length, formed extruded vinyl members that interconnect full height with the panel sections and upright posts to form the desired width wall panels. Hinges allow wall panels to expand and collapse to create an operable product.
 5. Upright Lead & Striker Posts: Heavy duty, formed extruded aluminum members located at leading and end sections of the wall panels. Lead post shall be equipped with grip-type operating handles and a slide latch mechanism to secure the unit when closed. [Single slide units to utilize a striker post to seal fit with the lead post and secure the hook bolt latch.] [Bi-parting units to utilize a combination lead/striker post that mates to, and secures, the lead post.] Latch design, operation and location shall be ADA compliant. [For units greater than 14' tall, manufacturer to supply a concealed, internally mounted diagonal Plumb Bar Support brace that is track supported and connected to the lead post for reinforced vertical alignment during latching and operation (requires a 14" wide header).]
 6. Fully assembled and extended panel wall hang weight shall be approximately 4.5 pounds per square foot.
- B. Suspension System
 1. Track: Interconnected double rail heavy duty extruded aluminum track section designed to attach to overhead structural support system. Shape is designed for smooth running support of the roller assemblies while prohibiting any opportunity for the rollers to derail.
 2. Rollers: Every panel shall be supported and suspended by a nylon wheel ball bearing roller. Each lead post shall be connected to, and suspended by, a heavy duty trolley system that is fitted with three sets of double nylon wheel ball bearing rollers per rail.
- C. Perimeter Seals: Continuous extruded vinyl sweep strips shall be attached to the top and bottom of both wall panels to close off gaps at the header and floor. Leading edges of the lead and striker

posts shall be provided with interlocking extruded vinyl seals that also cushion the contact point during closing operation.

D. Finishes

1. Wall Panels: Customer selected, tear resistant decorative vinyl. Color and pattern [as selected from manufacturer's stock finishes, minimum of 12 finish choices.] [to match custom finish as provided by the customer.] All surface treatments as applied to the metal panel substrates shall meet the Surface Burning Characteristics per ASTM E84 as described in Section 1.4 B.
2. Hinges: Manufacturer selected color to compliment the customer selected wall panel finish.
3. Upright Posts: Supplied with a baked-on powder coat finish in a manufacturer selected color to compliment the customer selected wall panel finish.
4. Track: Supplied with a white baked-on powder coat finish as standard. Mill finish aluminum and brown powder coat are readily available options. Consult factory for optional colors.
5. Perimeter Seals: Flat black.

2.3 Accessories

THE ACCESSORIES LISTED BELOW ARE AVAILABLE OPTIONS. FACTORY SUPPLIED POCKET DOORS ARE AN AVAILABLE OPTION TO A MAXIMUM OF 12' HIGH. POCKET DOORS STOP AT UNDERSIDE OF TRACK AND LOOK BETTER AESTHETICALLY WHEN THE TRACK IS RECESSED IN A CEILING OR SOFFIT. DELETE ITEMS THAT ARE NOT DESIRED.

- A. Cylinder Locks: Cylinder locking at lead posts operable from public side with key, secured side with [key] [thumbturn]. 1" mortise cylinder, non-removable core.
- B. Pocket Door(s):
 1. Door and Frame
 - a. Material: A36 HR steel
 - b. Thickness: USS 12-gauge
 - c. Finish: Phosphate treatment followed by a baked-on powder coat finish in [standard white] [color as selected from manufacturer's standard color range] [custom color as selected by Architect].
 2. Hinges: 3" non-mortise type
 3. Lock: 1" security mortise cylinder
- C. Header Trim: For use with exposed track. Provide rigid extruded vinyl aesthetic trim members in a white finish on [one] [both] sides of the track assembly.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Examine header substrates upon which accordion folding product will be installed and verify conditions are in accordance with approved shop drawings. Openings shall be prepared to the dimensions specified and be plumb and level. Header shall be leveled with the finished floor to within +/- 1/4" tolerance over the entire length of the opening.
- B. Upon inspection of prepared opening, coordinate immediately with responsible entity to perform corrective work on unsatisfactory substrates and header, floor or sill levels.
- C. Commencement of work by installer is considered acceptance of substrate.

3.2 INSTALLATION

- A. Install accordion folding products in accordance with manufacturer's printed instructions.
- B. Upon completion of the installation, the General Contractor shall protect the accordion folding units from damage and replace or repair subsequent damage so that the units are acceptable to the architect, at no additional cost to the owner.

3.3 ADJUSTING

- A. Following completion of installation, including related work by others, test and adjust accordion folding products for ease of operation.

3.4 CLEANING

- A. Clean surfaces soiled by work as recommended by manufacturer.
- B. Remove surplus materials and debris from the site.

3.5 DEMONSTRATION

- A. Demonstrate proper operation to Owner's Representative.
- B. Instruct Owner's Representative in maintenance procedures.

END OF SECTION