

SECTION 08300 BI-FOLDING DOORS

PART 1 GENERAL

1.01 SUMMARY:

- A. Work described in this section includes manufacture, delivery and installation of bi-folding doors, control devices and actuator systems.
- B. Related work is described in other sections:
 - 1. Field painting
 - 2. Electrical connections

1.02 REFERENCES:

- A. Applicable standards; standards of the following, as referenced herein:
 - 1. American Society for Testing and Materials (ASTM)
 - 2. National Electrical Manufacturer's Association (NEMA)
 - 3. Underwriters Laboratories, Inc. (UL)

1.03 SUBMITTALS:

- A. Product Data: Submit manufacturer's product data, roughing-in diagrams and installation instructions for each type and size of bi-folding door. Provide operating instructions, maintenance information and complete information describing the operating system including rough-in instructions.
- B. Shop Drawings: Submit shop drawings for special components and installations that are not fully dimensioned or detailed on the manufacturer's data sheets, including equipment interconnection diagrams.

1.04 QUALITY ASSURANCE:

- A. Furnish each bi-folding door as a complete unit produced by one manufacturer, including hardware, accessories, mounting and installation components. Furnish bi-folding doors by one manufacturer for the entire project.
- B. Inserts and Anchorage: Furnish fasteners and spacers as required to facilitate installation. If special requirements are necessary, coordinate those requirements with the general contractor.
- C. Pressure Differential: Bi-folding door to withstand a windload condition of 6.7-lb./sq. ft. (40 mph) at standard pressure & temperature.

1.05 WARRANTY:

- A. Manufacturer shall warrant door panel for a period of two (2) years.
- B. Manufacturer shall warrant mechanical and electrical components against defects in material and workmanship for one (1) year.

- C. Manufacturer shall warrant the self-lubricating trolleys against defects in material for the lifetime of the door.

PART 2 PRODUCTS

2.01 MANUFACTURER:

- A. Acceptable product, subject to compliance with specified requirements:
As provided by PMH Material Handling 888-557-1515 Chuck Phillips

2.02 MATERIAL AND COMPONENTS:

- A. Door Panels:
1. Panel: Clear, 7mm thick Vistaseal®, PVC panels, precut at factory for mounting. Bonded fixing strip on Vistaseal® panel allows easy installation to slip-on track. Anti-warp design creates tighter seal.
- B. Panel Seals and Connection:
1. Panel-to-panel and panel-to-jamb sealed against air filtration along entire height using a 22-oz. vinyl fabric.
 2. Velcro connections capable of "breaking away" at frame to minimize damage upon impact with closed or moving panels.
 3. Adjustable bottom sweep to create seal against finished floor.
- C. Arm & Trolley System:
1. Arms close in-line from opposite directions to maximize sealing area of Vistaseal® panels.
 2. Cabling system - Continuous drive cable system. Pulleys have sealed bearings. Pre-stretched fiber-core cable. System minimizes moving parts.
 3. Trolleys - Moly-disulfide impregnated Nylatron® based polymer trolleys. Self-Lubricating. Lifetime warranty on trolleys.
- D. Mounting Frame:
1. 2" x 6", 14 gauge steel tube uprights. Extruded anodized aluminum header profile. Track for folding arms included in aluminum profile.
- E. Drive Unit:
1. 0.5 H.P., 3 Phase, 60 HZ motor with brake. In-line gearbox driving pretensioned cable to move folding arms. Door opens up to 10.0 ft./sec.
 2. Adjustable limit switches shall control travel of door.
 3. Motor shall be removable without disturbing limit switches.
 4. Provide high starting torque, reversible intermittent duty, enclosed non-ventilated electric motor, sized to move door in either direction, from any position, at no less than the specified operating speed.
 5. Low-temperature gearbox fluid.
- F. Electrical Operation:
1. The motor and gearbox shall be designed for high cycle operation. Basic operation features shall include the All-Star™ system for soft starting and stopping, automatic closing timer, emergency stop, one

actuating pushbutton and a manual disengagement lever to place the door in manual operation.

2. Power supply:
 - a. Primary voltage: Coordinate wiring requirements and current characteristics of complete electrical system with building electrical system. Supply shall be rated at ****220**460**575****volt, single phase 60 Hz, 10 amps.
 3. Control Panel:
 - a. Panel enclosure shall be NEMA 4.
 - b. Wiring shall be completed by manufacturer and shall be UL listed (File E103891).
 - c. An Albany International programmable logic controller shall control drive.
 - d. Control functions determined by Manufacturer's preparation of programmable logic controller.
 - e. Optional custom designed control system and/or components.
 - f. Control panel shall include an adjustable, automatic closing timer, emergency stop, one actuating push button and a cycle counter.
 4. Optional actuation systems available shall be NEMA 4 rated or equivalent; push buttons, pull switches, radio control system including receiver, antenna and remote transmitter. System shall operate at 310 MHz, with 265 separate programmable security codes; photocell featuring an infrared beam which maintains "open" signal when interrupted, metallic activated floor loop receiver reset system for vehicle detection, motion detector utilizing Doppler radar to detect motion.
- G. Protection features:
1. Provide fuses to protect from power line overcurrent and from secondary control voltage overcurrent.
 2. Provide thermal overload protection to protect motor from over current.
 3. Provide running timer to protect drive unit from motor run on.
 4. Provide emergency stop feature to instantly stop door in any position.
 5. Provide start-up protection to ensure there is no movement of door when system detects a failure (power on/off/on, E stop...).

2.03

OPTIONS:

- A. Air Circulation System (ACS): Pre-wired, pre-installed, only requires one supply for the complete door system. Two air circulation units per door, with a maximum air output of 10,500 CFM. Optional maximum 30K watt heated ACS systems available. (220 Vac or 480 Vac)
- B. Vision Panels (*for Insulated Panels*)
- C. Vestibule Insulation: FM approved, USDA white approved, powder coated 26 gauge galvanized skins, insulation factor of R8.34
- D. Consult factory for custom applications.

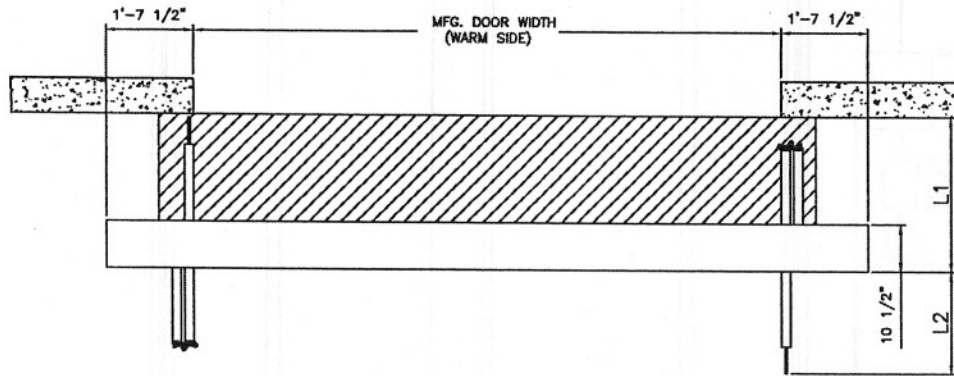
PART 3 EXECUTION

3.01 INSTALLATION

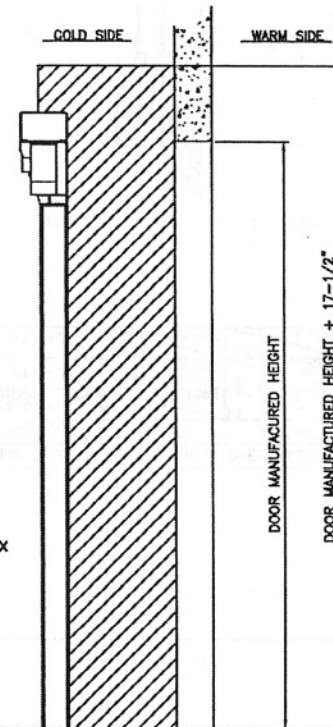
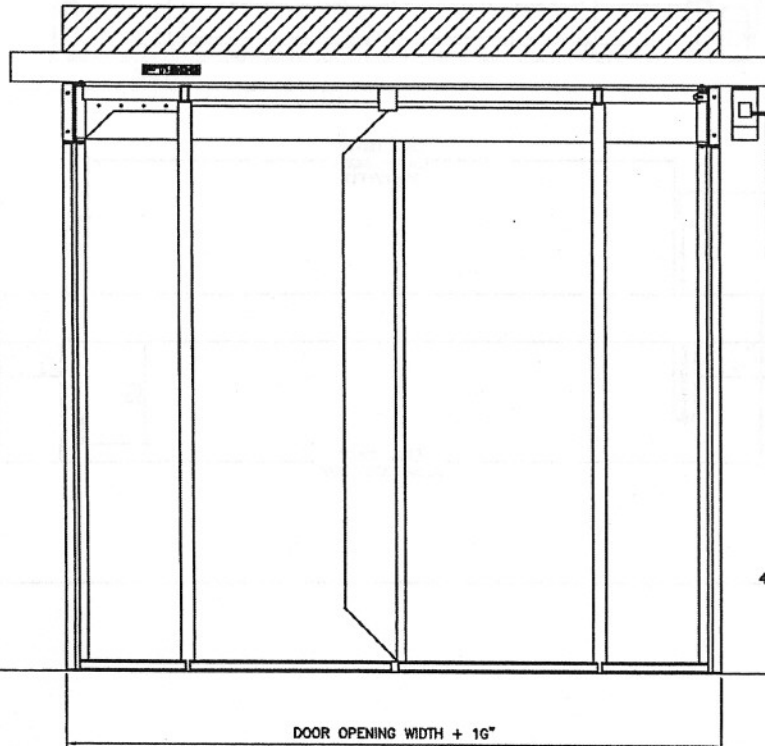
- A. Install door and operating equipment complete with necessary hardware, jamb and head mold strips, anchors, inserts, hangers and equipment supports in accordance with final shop drawings, manufacturer's product data and as specified herein.
 - 1. Secure guides to walls, plumb, level and true to line. Anchor guides at spacing indicated on approved shop drawings.
 - 2. Provide additional support as necessary for attachment of guides, brackets and door and operator mechanisms to interfacing surfaces.
- B. Connect and adjust electrical components and operating hardware.
- C. Touch-up paint on frame and other painted surfaces in accord with painting section.
- D. Upon completion of installation, including work by other trades, lubricate, test and adjust doors to operate in accordance with manufacturer's product data. Manufacturer's authorized representative shall make final adjustments.
- E. Protect finished installations until Date of Substantial Completion. Repair damage to door panel, hardware and operators.

End of Section

ALBANY DOOR MODEL
 PT-800 (VEST MOUNT)
 SPECIFICATIONS & OPTIONS



ARM CLEARANCES W/DOOR IN OPEN POSITION				
MFG. DOOR WIDTH	≤11'-0"		>11'-0"	
	L1 max.	L2 max.	L1 max.	L2 max.
≤11'-0"	35.00"	24.00"	59.00"	30.00"
>11'-0"	59.00"	38.00"	59.00"	44.00"



OPENING SIZE	W=	H=
MFG. DOOR SIZE	W=	H=
OPERATOR LOCATION	RIGHT-HAND DRIVE	(STD.)
OPERATOR SIZE AND SPEED	STANDARD 1/2 HP	
OPERATOR CONFIGURATION	VERTICAL	(STD.)
PRIMARY VOLTAGE (3 PHASE)	208 V	
	220 - 240 V	
	440 - 480 V	
	575 V	
DOOR ACTUATOR (Quantity)	PUSH BUTTON(s)	
	* PULL SWITCH(s)	
	FLOOR LOOP RECEIVER	
	* PHOTOCELL	
	MOTION DETECTOR(s)	
DOOR PANEL	CLEAR PVC - BONDED STYLE	
	INSULATED PANEL	
	INSULATED PANEL W/ VISION	
SIDE FRAME	STEEL (PAINTED BLACK)	
Comments:		

- NOTE:
1. MANUFACTURED DOOR WIDTH (MDW) = DOOR OPENING
 2. MANUFACTURED DOOR HEIGHT (MDH) = DOOR HEIGHT
 3. MEASUREMENTS ARE IN INCHES UNLESS OTHERWISE NOTED.
 3. THE DIMENSIONS FOR THE DOOR WILL NOT CHANGE WHEN AN AIR CIRCULATION SYSTEM (ACS) IS INCLUDED WITH THE VESTIBULE.

APPROVED BY:

APPROVED WITH CHANGES AS NOTED BY:

CUSTOMER	DRAWN BY	JCR
LOCATION	DATE	8/98
DEALER/SALESMAN	REVISION	H
DOOR #	DATE	SCALE
		NONE

ALBANY
 INTERNATIONAL
 Nomafa Division
 NAME
 JO DOOR (VEST)
 DRAWING NUMBER
 PTR800-2