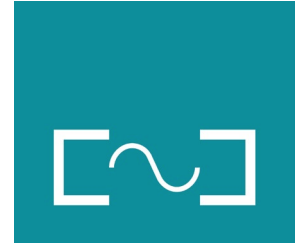


LINAC SWING DOOR





SECTION 08346

LINEAR ACCELERATOR SWING DOOR SYSTEM

PART 1 - GENERAL

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Furnish all labor, materials, tools, equipment and services for all linear accelerator doors as indicated, in accordance with provisions of contract documents.

1.1 ACCEPTABLE MANUFACTURERS

Swinging doors shall be manufactured by, and all accessories and parts supplied by Albatross Projects or approved equal manufacturer with at least (10) year's experience in the production and installation of radiation shielding door systems.

1.2 SUBMITTALS

- A. In accordance with conditions of the contract and Division I, submit six (6) copies of shop drawings for each type of swinging door unit, including typical unit elevations, sections and details of typical composite members.
- B. Submit six (6) copies of door operating instructions and manufacturers warranty. Operators shall be warranted against defects for a period of not less than one (1) year and door systems shall be warranted against defects for a period of not less than one (1) year.

1.3 DESIGN

Door and frame to withstand all loads without deflection that might inhibit operation or impair radiation protection. Design radiation shielding to provide equivalent thickness in any straight line with no gaps and minimum overlap of 1". Exceptions: maximum of ½" gap under bottom of door. Detail frames and sub-frames for welded concrete anchorage.

PART 2 - PRODUCTS

2.1 MATERIAL

- A. Steel sheet and strip: commercial quality carbon steel, ASTM A568,
- B. Steel bars and plates: ASTM A36.
- C. Roll-formed steel members: ASTM A36.
- D. Inserts, bolts and fasteners: Manufacturers standard units.
- E. Primer: rust-inhibiting paint suitable as base for specified finish paints.
- F. Lead sheet: fed spec. QQL-201-f, grade C free from imperfections affecting performance, thickness as indicated.
- G. Polyethylene: 5% boron content, manufactured specifically for neutron shielding.

2.2 DOOR AND FRAME

- A. Doors: Steel bar or plate perimeter frame with ¼" minimum thickness steel faces. Optional wood or plastic laminate veneer type as specified by architect. Doors shall have required lead and borated polyethylene thickness, as specified by physicist of record
- B. Heavy Duty Door Frames; Minimum ¼" thick steel sheet, Type A36 weld in concrete anchors and hinge reinforcing

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- C. Hinges: Heavy-duty series weld or bolt-on type, adjustable ball bearing hinges, one pair per door.
- D. Pulls: One each side. Finish is to be determined.

2.3 DOOR CLOSER/OPERATOR

- A. Swinging Door Operator as manufactured by Brookfield Industries, Inc., designed and tested in accordance with UL 325 and ANSI 156.10 for linear accelerator swing doors. Operator to include Entrapment Protection and shall be accomplished by means of current limiting the motor control in the forward and reverse directions to control the operating torque. The criteria for these settings shall be ANSI156.10.
Work not included: Electrical supply and conduits.

2.4 SAFETY FEATURES

- A. All operators shall be free egress in the event of power failure.

2.5 OPTIONAL SAFETY FEATURES

- A. Presence Sensor: This device detects any object passing through the presence area and sends a signal to stop the door.

2.6 FABRICATION

Fabricate rigid, neat in appearance and free from defects. Fit and assemble in shop wherever practical. Assure proper assembly at site. Weld joints continuously, dress exposed joints smooth and flush. Prepare for finish hardware that is not shop installed. Clean off all mill scale and foreign materials and shop prime.

PART 3 - EXECUTION

3.1 PREPARATION

Examine structure, substrates, and conditions under which work is to be installed for conditions detrimental to correct and timely completion. Installation constitutes acceptance of responsibility for performance.

3.2 INSTALLATION:

Door and frame manufactured and furnished by Albatross Projects, installed by general contractor or Albatross Projects set door frames prior to construction of walls. Special care must be taken during installation of frames. Frames must be installed plumb within 1/8" over vertical height and square to insure proper door balance and operation. Immediately after installation, sand smooth rusted or damaged areas of prime coat.

- A. Touch up prime coat with compatible primer
- B. Leave smooth for finish painting

3.3 OPERATOR

Electric door operator to be installed and maintained by trained Albatross Projects personnel or a qualified local door operator contractor.

3.4 INTERLOCK

Frame mounted equipment interlock switches supplied and installed by Albatross Projects electrical connections by others.

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PART 4 - OPERATING INSTRUCTIONS

All personnel should read these instructions completely and be trained in the safe operation of this door. All adjustments and calibrations to the operator must be made by a certified technician. Albatross Projects will not be liable for injuries due to non-certified tampering or settings made to the door or operator.

4.1 OPERATION

- A. The door is automatically opened or closed by pushing one or two switches located on the interior and exterior walls. No attempt should ever be made to disengage frame mounted interlock switches or any safety feature, as this could present a serious health risk.
- B. Before operating, the door operating area should be visually inspected to be sure no person or other object is in the vicinity.
- C. In case of an emergency operator failure, the door is Free Egress and can be manually opened, which disengages the operator. Room use should be discontinued until proper operation is restored.

PART 5 – CAUTION

- 5.1 No attempts should be made to adjust door operating speed except by authorized operator technicians. All set speeds will meet ANSI standards. (Ref. ANSI/ BHMA A156 10-1985)
- 5.2 Any attempt to operate at a faster speed will cause premature wear and damage to the operator and void any warranty. Also, liability may occur to anyone operating the door faster than recommended as injuries may occur as a result.
- 5.3 No attempt should ever be made to disengage frame-mounted interlock switches or any safety feature, as this could present a serious health risk.
- 5.4 Objects should be kept clear of door operation area. No objects should ever be placed to keep door in the Closed or Open position, restricting free movement.

PART 6 – SPECIFICATIONS

- 6.1 Since all door systems are custom-designed per customer specifications, please refer to shop drawings for information.

PART 7 – SERVICE

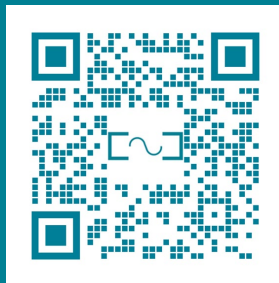
- 7.1 Preventative Maintenance Plan offered. For technical information, product information and service, please call Albatross Projects at (973) 574-9077.

PART 8 – WARRANTY

- 8.1 Albatross Projects subject to ordinary operation, warranties this door and its hardware against defects in workmanship and materials. We will also repair this product or replace parts free of charge for one (1) year from the date of invoice. We do not guarantee against defects due to the failure to exercise normal preventative maintenance, nor do we guarantee against the consequence of use for which our products were not designed.

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start with trust.



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