Neutron Shielding Swing Door Specifications

General

Furnish all labor and material in accordance with provisions of the contract drawings for all linear accelerator vault swing doors.

Acceptable Manufacturer

Door and all accessories to be supplied by Pitts Little Corporation 800-680-1967 or approved equal. The vault door manufacture must have at least ten (10) years of documented experience specifically related to vault swing doors.

Submittals

Submit six (6) copies of submittal information and shop drawings for each vault door type. The submittal package must include information on the door operator.

Material

All steel to be grade ASTM A-36
All lead to be QQL-201 or ASTM B29
5% borated polyethylene formulated for neutron shielding

Design

Rails and stiles to be fabricated from three-quarter (0.75) inch thick A-36 steel.
The fixed faced is three-eighth (0.375) inch thick A-36 steel.
The removable face is one-quarter (0.25) inch thick A-36 steel.
The door must be of adequate thickness to accommodate the required shielding material.
All shielding must comply with the physicist of record.
The two hinges must be rated to twice the weight of the door.
The electronic operator must be capable of controlling the weight of the door.
The frame must contain a junction box for two kill switches Door and frame will be prime painted.
Installation

Frame: The vault door frame will be delivered to the job site on a semi truck. The contractor is to unload and install the vault door frame. The frame must be installed plumb vertically, level and square. Extend interlock conduit clear of form work.

Pitts Little Corporation will furnish and install the door, hardware and automatic operator. The project electrician is to furnish and install all conduit and wiring for the operator and interlock switches. Note the low voltage and wires for the push plates must be run in dedicated conduit to minimize line noise.

Testing

Testing to be performed by qualified personnel at the owner’s expense.

Warranty

Warrant door against defect for one year from installation date.