

## SP PASS THRU SPECIFICATION FOR DOUBLE WALL STAINLESS STEEL CONSTRUCTION

### 1.0 PURPOSE AND SCOPE

This specification describes a factory fabricated pass thru enclosure to be used for maintaining an air sealed air lock between a Clean Room environment and outside contaminated atmosphere. It shall be designed with simplicity in mind while maintaining an aesthetic appearance.

### 2.0 CONSTRUCTION

- A. Model SPDS pass thrus shall be constructed of a double wall of 16 gage 304 stainless steel with a #4 brushed finish. All seams have a continuous weld and are ground smooth to match the #4 brushed finish.
- B. The doors for the pass thrus are made of 0.25" thick clear acrylic for the SPW121212. The doors for the SPW181818 to SPW303030 are made from 0.5" thick clear acrylic. Doors on pass thrus SPW363618 and larger are made of a 304 stainless steel frame door with a #4 brushed finish that has a 0.25" clear tempered glass vision panel.
- C. The trim angle for the SPW121212 to SPW181818 is made from 1" x 1" x 16 gage 304 stainless steel angle with a #4 brushed finish. The trim angle for the SPW242418 and larger is 1.5" x 1.5" 16 gage 304 stainless steel with a #4 brushed finish.

### 3.0 Hardware

- A. The pass thru catches are a spring loaded 3-4 stainless steel device that enables the door to be closed without turning a handle.
- B. The hinges are a lift off stainless steel hinge that enables easy cleaning and replacement.
- C. The seals for the doors are Pemko S88W vinyl bulb gasket.
- D. The mechanical interlock is made from 0.25" stainless steel all tread with polished aluminum turn buckles on each end that are turned 90 degrees from each other so that when one side has the buckle clear of the door the opposite side blocks the door.

### 4.0 Options

- A. Electric interlock system
  - 1. The pass thru door locks are a 24VDC magnetic lock
  - 2. Each door has a magnetic sensor switch that determines the status of the door.
  - 3. The pass thru shall have a flush mounted access panel in the top of the pass thru with a 24VDC power supply and terminal blocks.
- B. Fan filter module
  - 1. There shall be a cutout in the top of the pass thru with a 99.99% @ .3 micron HEPA fan filter unit bolted to the top. There shall be perforated aluminum discharge point on one side of the pass thru on the dirty side.
  - 2. The fan filter shall require a 120 VAC power connection.
- C. Shelf
  - 1. The shelf shall be constructed of 304 stainless steel with a #4 brushed finish.
  - 2. The shelf is supported by 4 304 stainless steel shelf standards with stainless steel clips.
  - 3. Each shelf will support up to 25 pounds each.
- D. Support brackets
  - 1. Support brackets are available for pass thrus when they protrude more than 18" from the wall surface or when the supporting wall is less than 4.5" thick.
  - 2. The support brackets are made from two 0.18" thick stainless steel plates (one mounts to the bottom of the pass thru and the other to the wall) that are connected by a 0.25" 304 stainless steel rod that is threaded on each end with adjustable clevis rod ends.

E. Fire rated door assembly

1. A pass thru can be supplied with a fire rated door and frame on the end that will mount into the wall. The doors are rated from 20 minutes to 3 hours.
2. The door and frame are constructed of 3-4 stainless steel with a #4 brushed finish.
3. Vision panels are based on the maximum amount of glass allowed for each rating. All vision panels shall have FireLite glass.
4. Pass thrus with a fire rated door are not available with a mechanical interlock. An electric interlock system must be ordered if interlocks are required.
5. The fire rated door frame is a welded one piece design. Installation requires the wall cutout be made 4" larger in width and height than the outside dimensions of the pass thru body. Once the fire rated door frame (with the pass thru body) is mounted securely to the wall the finish wall product is then used to fill in the left over space to the interior throat of the door frame.
6. If the pass thru protrudes more than 18" from the face of the wall a support bracket must be ordered.
7. Only one fire rated door assembly can be mounted to a pass thru. The pass thru body and opposite door are not rated. Only the fire rated door and frame that mount in the fire wall are rated.
8. The fire rated door and frame are listed by Warknock Hershey.