

## Single Sliding Door (SSD)



ETS-Lindgren's Single Sliding Doors (SSD), answer the growing need for bi-parting special access door requirements in medical applications. The SSD door incorporates proven RF sealing technology with an internal pneumatic actuator to drive the guided mechanism plates and expansion strip outward, making for a perfect alignment. This pneumatically sealed door system represents a breakthrough in shielding, with a flat threshold for smooth patient transport. Shielding includes RF protection for MRI, and can be supplemented with acoustic enhancements, lead or passive shielding requirements.

Optional: interlock function and/or HMI controls.

### Key Features

- Allows Easy Transport Between Adjacent Medical Suites:
  - MRI
  - X-ray
  - Angiography
  - OR
  - CT
- Fully Automatic Door System with Flat Threshold
- Maintains Sterile Environment Due to Fingerless Sealing Design
- Features RF Shielding for Medical Applications
- Satisfies RF Performance of all MRI Equipment Suppliers
- Reliable Pneumatic and Logic System Utilizing an Exclusive Fail-safe Operating Mechanism

### Product Features

#### Standard Features

- Single or double leaf sliding
- Interlocking system
- Reverse on-contact sensors
- Expansion seal for acoustic and hygienic management
- ADA-compliant flat-door threshold
- Emergency overrides

#### Operation

The SSD offers quiet, fully automatic operation with push button switches. These switches can be located at the MRI console for remote door activation. The linear belt drive operator provides for a smooth, fail-safe, mechanical closing. The servomotor, encoders, and logic hardware are concealed within an architecturally pleasing brushed aluminum transom header. Door leaves are pressure-sensitive and reverse on contract, should the opposing pressure exceed 12.7 kg (28 lb) of force. The cycle speed and braking of the door system can be adjusted for the intended application.

The sliding door system can also be equipped with pressure sensitive mats and unidirectional motion sensors that are activated by the approaching pedestrian traffic. The door system can be supplied with a hold-open safety switch, activated remotely at an operator console location.

During pneumatic operation, the thermal-bonded, tin-coated surfaces expand to create a tight seal that eliminates outside ambient RF noise and helps maintain a sterile environment within the shielded area.

Options include indicator switches that alert technicians of the position of the door. These switches may also be used for MRI scan interconnection to insure shield integrity during scanning procedures.

### Construction

The factory engineered doors are 5.72 cm (2.25 in) thick. The doors incorporate RF shielding for MRI protection, and can be supplemented with lead shielding for radiation protection.

A heavy-duty through bolted frame construction provides the strength and durability required for automation.

While rugged, the SSD system is architecturally styled for hospital environments. It features attractive hardware, durable mortised hinges for sag-free mounting, and can be finished with an aesthetically pleasing laminate finish.

The systems fingerless sealing design is virtually maintenance-free and helps assure a sterile environment. This unique seal replaces gaskets, contact fingers, and the service problems associated with their frequent maintenance and replacement. Such problems include broken contact fingers and flattened gaskets. The highly durable fingerless seal consists of a continuous expansion strip concealed within the doors edge, which achieves a positive RF seal when the doors are closed.

### Performance

The SSD system provides outstanding attenuation levels that meet or exceed MRI vendor specifications. The sealing mechanism has been cycle tested up to 2 million operations with no failures.

### Specifications

#### Physical Specifications

Door Size (W x H)	Open/Close Wall Stations	Safety Light Curtains	Collision Sensors	E-stop Buttons	HMI Touch Screen	Keyed Lock Out	Manual Operation	Finishes
1.54 m x 2.13 m (5 ft x 7 ft)	Yes, 1 Station; Optional Add	Yes	Yes	Yes	Optional	Optional	Yes	#4 Stainless Steel
2.54 m x 2.13 m (8.33 ft x 7 ft)	Yes, 1 Station; Optional Add	Yes	Yes	Yes	Optional	Optional	Yes	#4 Stainless Steel
2.64 m x 3.02 m (8.67 ft x 9.92 ft)	Yes, 1 Station; Optional Add	Yes	Yes	Yes	Optional	Optional	Yes	#4 Stainless Steel

#### Electrical Specifications

AC Service, 50/60 Hz: 1 ph; 100 to 240 VAC/<3a

House Air Supply: 100 psi @10 cfm, Dry, Filtered

Primary Drive Power: House Air

Signal/Control Power: 24 vdc