WARNING
THE MODEL 800243/800326 ROOM PRESSURE SENSORS MUST BE WIRED TO 24 VAC ONLY. WIRING THE UNIT TO 110 VAC WILL CAUSE SERIOUS DAMAGE TO THE UNIT AND VOID THE WARRANTY.

The pressure sensor must be mounted through-the-wall between the controlled space and referenced space.

These installation instructions guide the installer through the installation of the TSI Model 800243/800326 Through-the-Wall Room Pressure Sensor. Unless specified otherwise, figures and instructions apply to all versions. Please read these instructions thoroughly before beginning installation.

This product is classified by UL as to fire resistive properties only. See UL File R15545.

Component List

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Qty</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>800243 or 800326</td>
<td>1</td>
<td>Pressure sensor with cable</td>
</tr>
</tbody>
</table>

Figure 1: Typical Installation

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Pressure Sensor Installation

**WARNING**
800243/800326 pressure sensor must be mounted through-the-wall between the controlled space (isolation room) and referenced space (hallway), exactly as shown in Figure 3 and Figure 4.

- Determine pressure sensor location (Figure 1, Figure 3, and Figure 4). Pressure sensor typically mounts in the reference space, and the dummy housing mounts in the isolation room.

**NOTE**
Pressure sensor is not symmetrical. If sensor is to be centered over hallway door, measure one inch to the left of center for 2¾” hole. Dummy sensor will be 2” off center on other side of wall.

- The pressure sensor must be orientated on the wall as shown in Figure 2. Looking at the mounted sensor, sensor hole is on the left (2¾”) and wire hole is on the right.
- Drill a 2¾” hole through each side of the wall to accept the sensor tube.
- Drill a 7/8” hole on the side of the wall that the pressure sensor will be mounted. This hole is for the six-conductor sensor cable. Refer to Figure 2 for a hole-mounting pattern.
- Slide sensor cover to right and remove screw that holds the sensor base to the pressure sensor (Figure 2). Remove pressure sensor and store in a safe place.
- From the side of the wall the sensor will be mounted, slide the sensor tube through-the-wall. Mark the tube where it is flush with wall. Remove sensor tube and cut tube ¾ inch shorter than flush marking.

**NOTE**
If 12” sensor tube needs to be extended, use same size or larger diameter tube. Drill out ½” sensor hole in dummy case to match ID of tube extension.

- From the side of the wall the sensor will be mounted, slide the sensor tube through-the-wall. Slide the dummy base over the end of the tube. Screw the pressure sensor base and dummy base to the wall (Figure 3 and Figure 4).
- Wire the pressure sensor per Figure 5. Run sensor cable to the room pressure monitor 6” x 4” electrical rough-in box.
- Insert fire protection sealant (provided) into ¾” wire hole to seal.
- Install and screw the pressure sensor and dummy cover onto the bases. Slide covers to the left to hide the sensor. Finished installation should look as shown in Figure 4.

**WARNING**
DO NOT touch the sensor element in the pressure sensor. DO NOT run wires through the air passage. Doing so will damage the sensing element.
Figure 3: Cutaway View of Mounted Pressure Sensor

Figure 4: Pressure Sensor Mounting

**WARNING**

**DO NOT** connect more than 24 VAC to any terminal.
Wiring Recommendations

- TSI recommends stranded wire.
- Comply with local and national electrical codes.
- Follow good wiring practices:
  - **DO NOT** run control wiring in the same conduit or wireway as power wiring.
  - Control cables should cross power cables at a 90-degree angle.
  - Use a consistent color code to maintain polarity.
  - Control signals require “home run” wiring / star configuration. **DO NOT** daisy-chain control wires or use a series configuration.

Refer to the wiring diagram, Figure 5 for proper wiring installation.

Power Requirements

Through the Wall Sensor Each
24 VAC, 50/60 Hz, 3VA

24VAC POWER IN

H 3
N 4

+ 5
-

0-10VDC SIGNAL OUT

A 7
B 8

SENSOR COMMUNICATION

TSI TTW SENSOR

WARNING

Sensor must be wired exactly as wire diagram shows. Making modifications to the wiring may severely damage the unit. See monitor or controller installation instructions for complete wiring diagrams.

Figure 5: Through-The-Wall Sensor Wiring