

MANUAL – INSTALLATION

Commercial Duct Silencer

Circular Geometry

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CONTROL**

COMMERCIAL DUCT SILENCER

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COMMERCIAL DUCT SILENCER

INSTALLATION INSTRUCTIONS

Sealing the Silencer into the Duct System

- The installer must ensure that the silencer installation and duct system are airtight.
- All joints and connection areas should be sealed with a mastic sealant approved for use by the duct manufacturer.
- All sealants used during the silencer installation should be applied to a clean and dry surface, free of any contaminants.
- Be sure to follow the manufacturer's instructions carefully in regard to application and storage of the sealant.

Maintenance

Price absorptive silencers have no moving parts and therefore very little maintenance is required. Periodic cleaning of the silencers should be performed to remove dust or contaminants that may have built up in the ducts. The acoustic media used in Price absorptive silencers is protected by a perforated metal liner and will not be affected by standard duct cleaning processes.

Please note water or other liquids should not be used when cleaning absorptive silencers.

The frequency of silencer cleaning will be dependent on the specific application and site conditions and should be performed with the rest of the duct system cleaning.

COMMERCIAL DUCT SILENCER

INSTALLATION INSTRUCTIONS

Silencer Slip Connection Installation

2-inch slip connections come as standard on all circular duct silencers. This type of connection is used to overlap the existing ductwork by going inside of the adjoining duct work and creating a compression fit.

FIGURE 1: CONNECTION TO EXISTING DUCTWORK - SLIP CONNECTION ▼

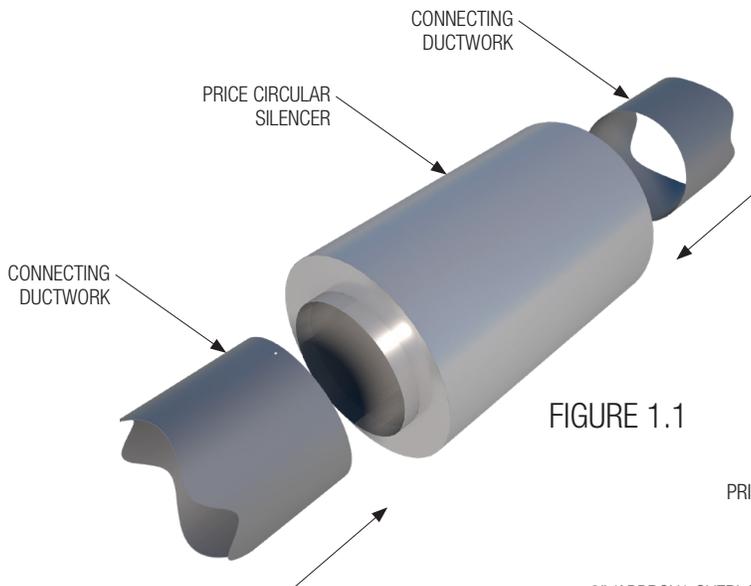


FIGURE 1.1

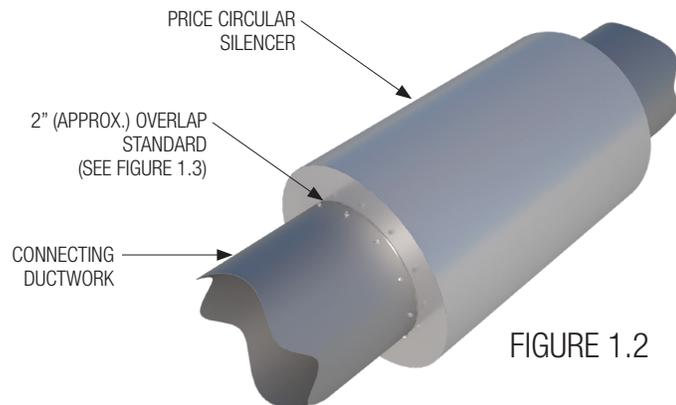


FIGURE 1.2

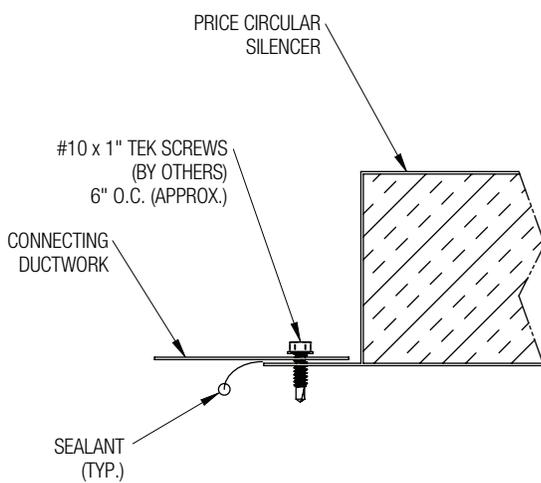


FIGURE 1.3

COMMERCIAL DUCT SILENCER

INSTALLATION INSTRUCTIONS

Duct Coupler Connection Installation

Prefabricated duct connectors can be used to connect Price silencers to existing ductwork. These utilize the existing 2" slip connection provided at the inlet and discharge of the silencer. Below is a general guideline to installing the silencer with duct couplers. Any duct couplers manufacturers installation instructions supersede these guidelines and should be followed.

NOTE: Duct couplers are not provided by Price.

FIGURE 2: CONNECTION TO EXISTING DUCTWORK - DUCT COUPLER ▼

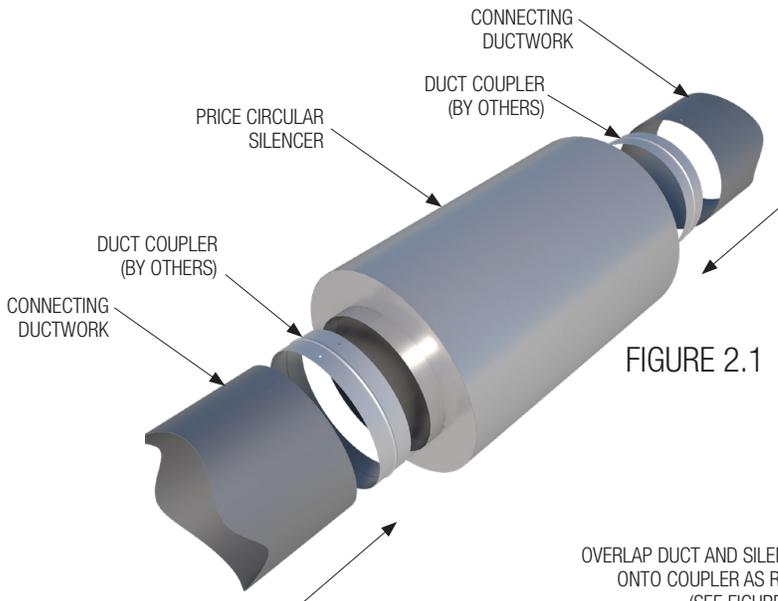


FIGURE 2.1

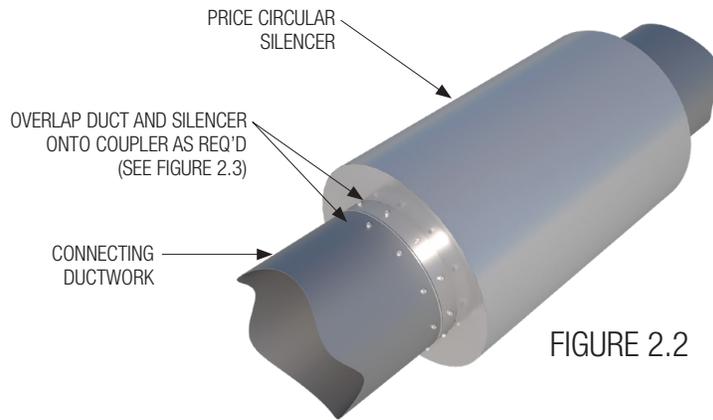


FIGURE 2.2

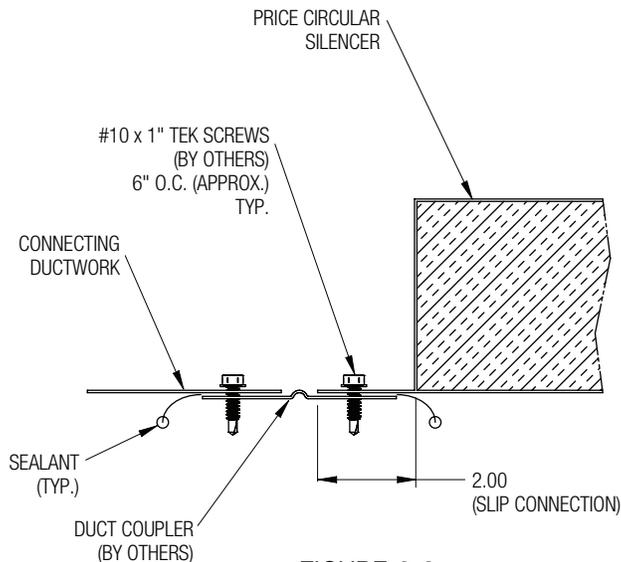


FIGURE 2.3

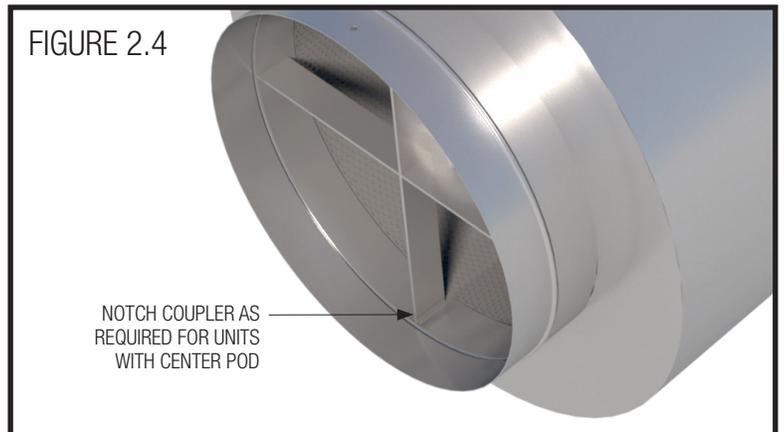


FIGURE 2.4

COMMERCIAL DUCT SILENCER

INSTALLATION INSTRUCTIONS

Rolled Flange Installation

Flange connections are supplied loose to be installed by the contractor. The following guidelines should be used to attach flanges to commercial silencers.

- Flange connections should first be aligned with the duct connection of the silencer.
- If flanges have been provided with a bolting pattern, clamp the flanges in the desired orientation to the end of the silencer.

NOTE: All welding supplies, fasteners and required sealants to be determined and supplied by others.

Welding Connection (preferred)

- Size and placement of welds can vary depending on the overall size of silencer component.
- Recommended welding instructions, based on duct connection diameter:
 - Ø6-18" Dia: 0.5"-4", staggered
 - Ø18-30" Dia: 1"-4", staggered
 - >Ø36" Dia: 2"-8", staggered

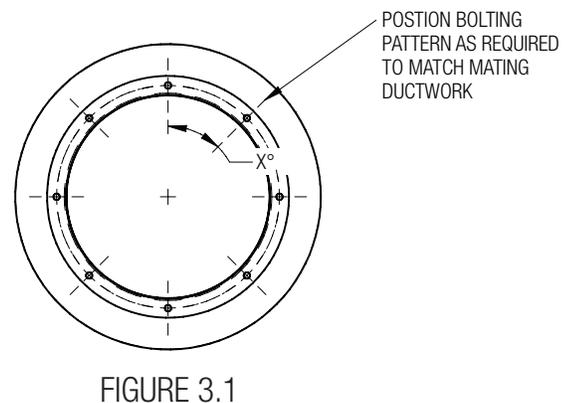
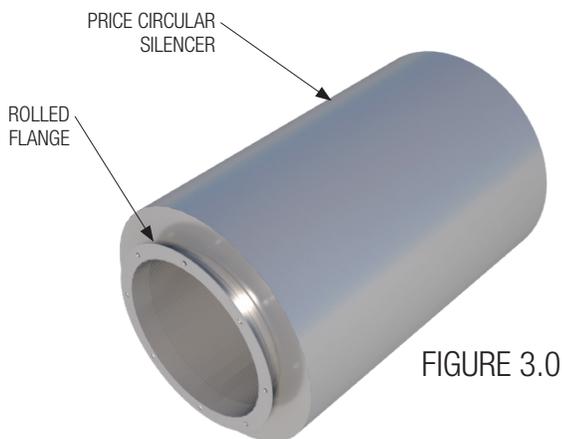
NOTE: Some building specs may require a full seam welded connection to flange.

- Figure 3.2 provides general welding information for attaching flanges.
- Welded connection should be cleaned of spatter and contaminants, then duct sealer applied to fully seal the flange connection.

Fastener Connection (optional)

- Caulking should be applied to silencer duct connection, prior to positioning the flange on the duct connection.
- Fastener size and type of fastener to be determined and supplied by others.
- Fastener spacing, regardless of type or size, is min 6" O.C. around perimeter of duct connection.
- Figure 3.3 provides general information for attaching flanges with fasteners.
- Connection should be cleaned of contaminants, then duct sealer applied to fully seal the flange connection.

FIGURE 3: ROLLED FLANGE ORIENTATION ▼



COMMERCIAL DUCT SILENCER

INSTALLATION INSTRUCTIONS

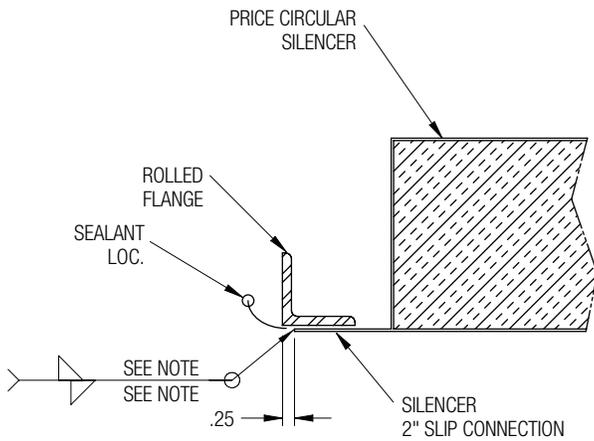
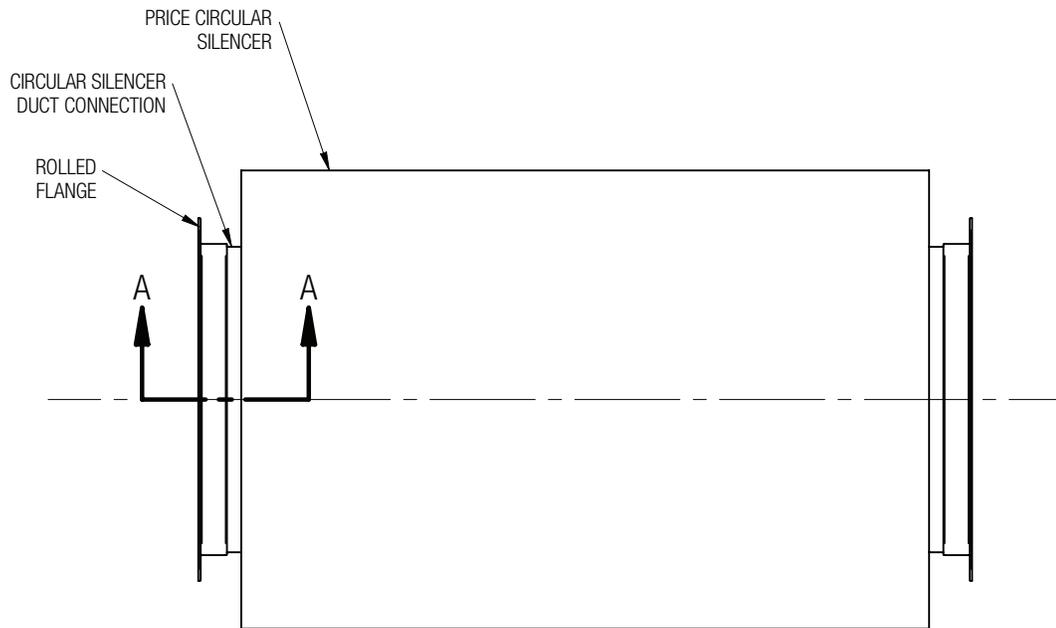


FIGURE 3.2

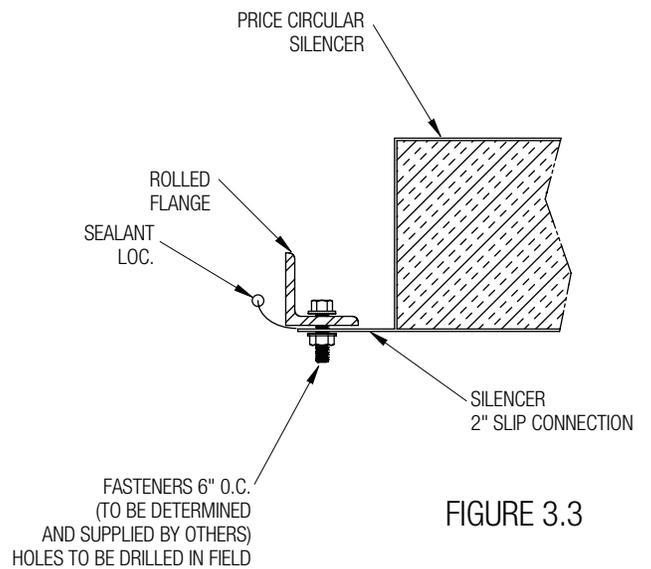


FIGURE 3.3

COMMERCIAL DUCT SILENCER

INSTALLATION INSTRUCTIONS

Silencer Supports

- Typical support of circular silencer will vary depending upon on the size and location.
- The frequency and size of hangers and supports depends on the weight and size of the silencer and may need to be determined by the structural engineer on record.
- Unless included in the project scope, Price does not make structural recommendations.
- The following is general information on how circular silencers are typically supported.

- Examples of silencer supports:
 - Duct strapping (Figure 4.1)
 - Duct strapping with buckle and threaded rod (Figure 4.2)
 - Heavy duty duct straps (Figure 4.3)
 - Support straps (Figure 4.4)

NOTE:

- All strapping, hardware and supports to be determined and supplied by others.
- Vibration isolation may be required in some applications. Refer to building owner or engineer on record to determine.

FIGURE 4.1: SILENCER SUPPORT - DUCT STRAPING ▼

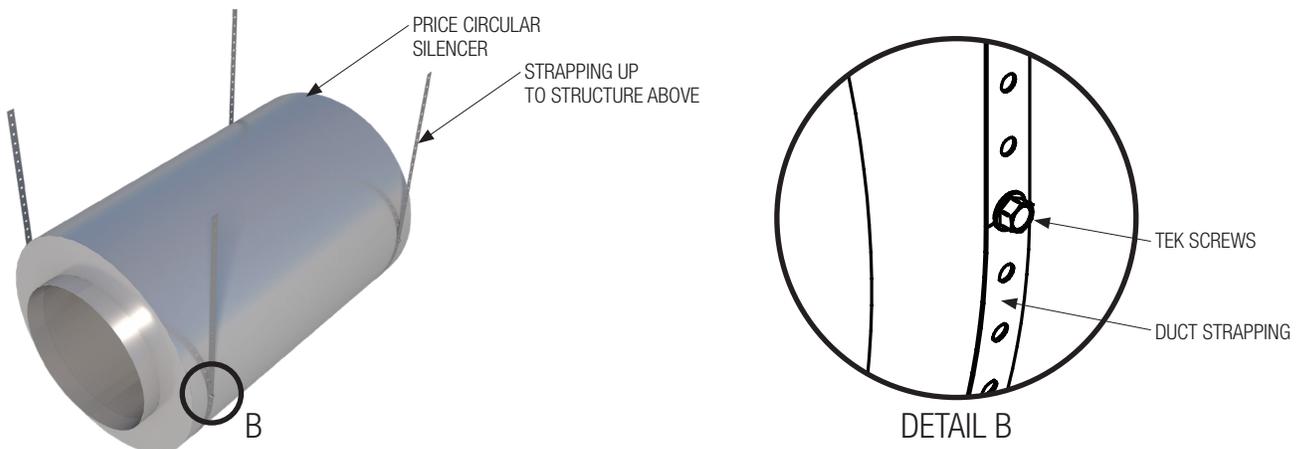
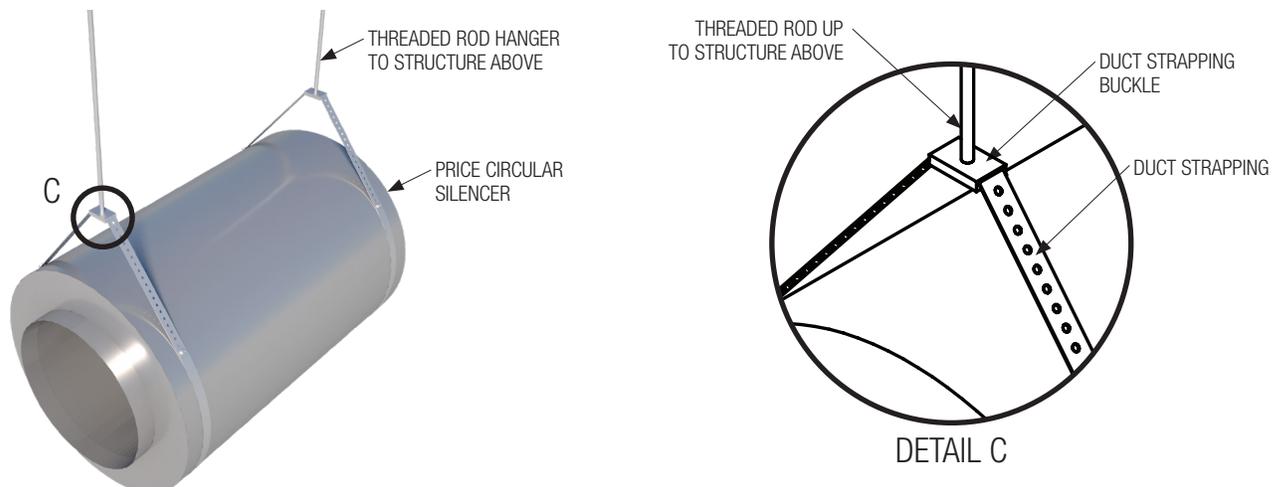


FIGURE 4.2: SILENCER SUPPORT - DUCT STRAPING W/BUCKLE & THREADED ROD ▼



COMMERCIAL DUCT SILENCER

INSTALLATION INSTRUCTIONS

FIGURE 4.3: SILENCER SUPPORT - HD DUCT STRAPS ▼

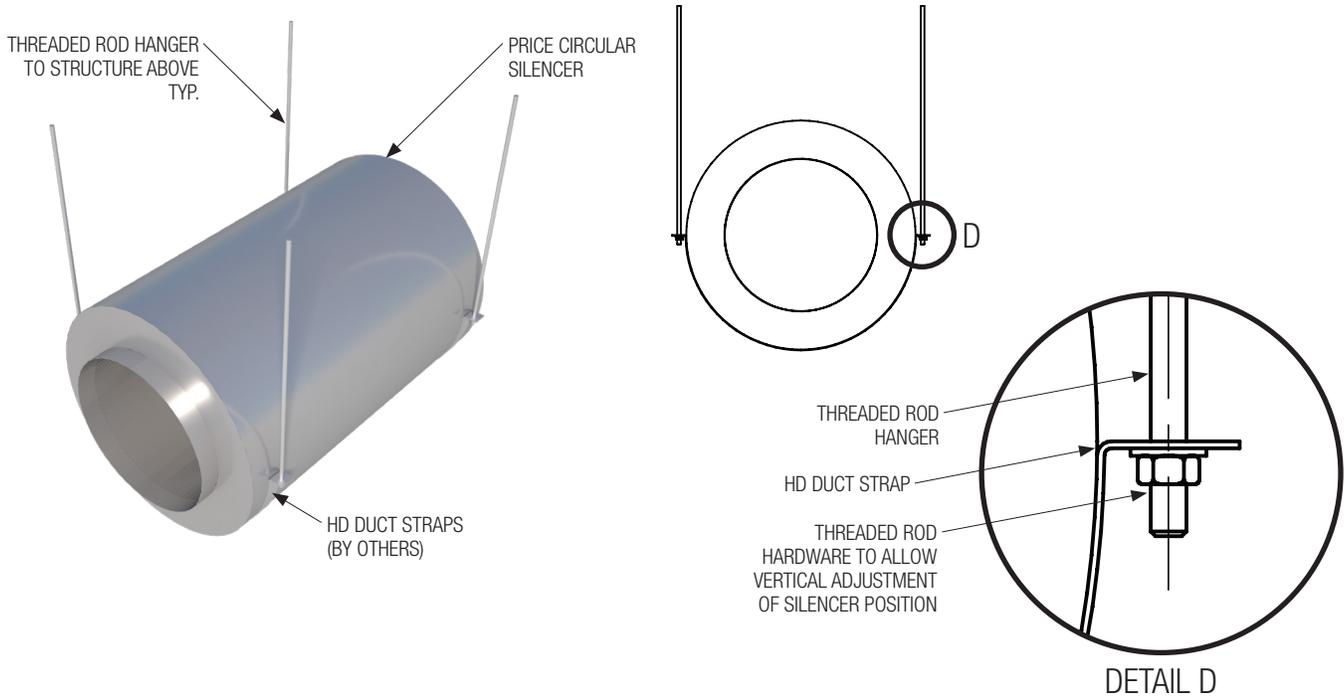
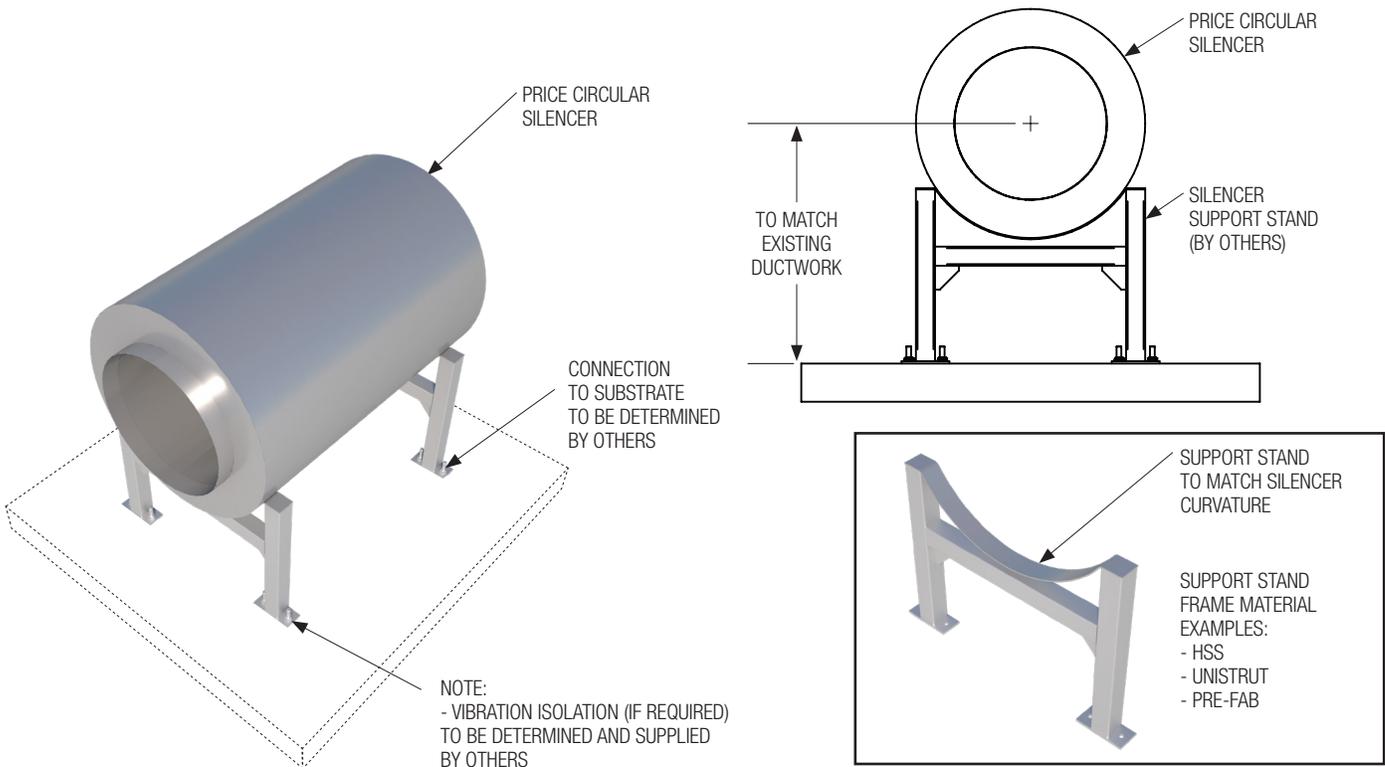


FIGURE 4.4: SILENCER SUPPORT - STANDS ▼



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