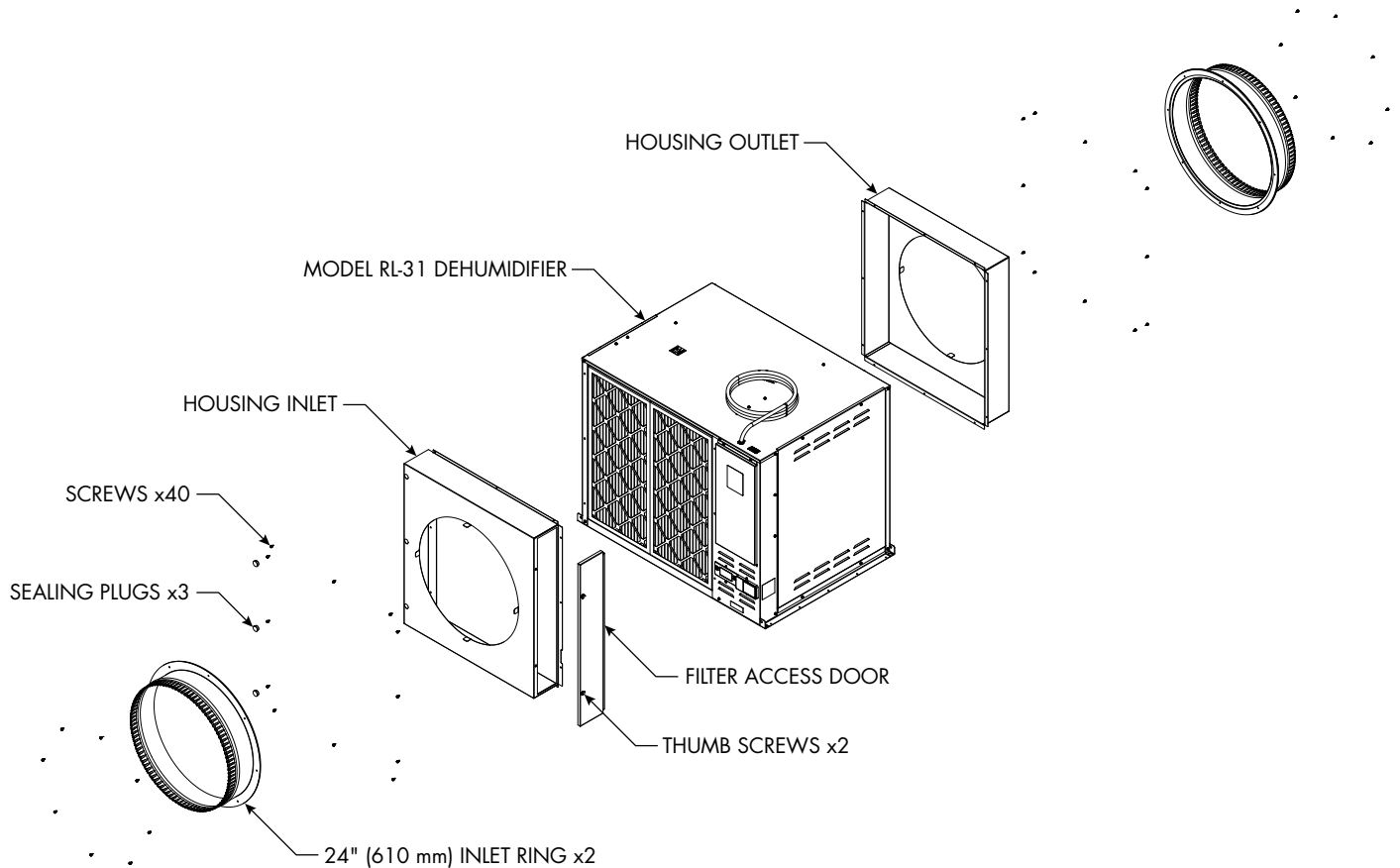




Round duct kit for Model RL-31 Dehumidifier

Part #: 601177



90-2578

CAUTION

Sharp edges may cause serious injury from cuts. Use care when cutting plenum openings and handling duct work.

NOTICE

- Failure to follow ducting guidelines may negatively impact unit performance.
- Minimize equivalent duct length to maximize unit capacity and efficiency.

AIRFLOW DELIVERY SPECIFICATIONS

- Nominal airflow through dehumidifier is 1760 cfm (2991 m³/h).
- Airflow decreases as duct length and bends increase, therefore if the equivalent duct length is too long the dehumidifier will cease to function properly.

DUCT SIZING AND ROUTING

- Inlet and outlet collars fit 24" (610 mm) round duct.
- Unit performance decreases as airflow decreases, the shortest possible duct lengths with minimal bends should be used.
- Do not exceed 1,000 feet (305 m) of metal duct or 750 feet (229 m) of flex duct.

Table 2-1:

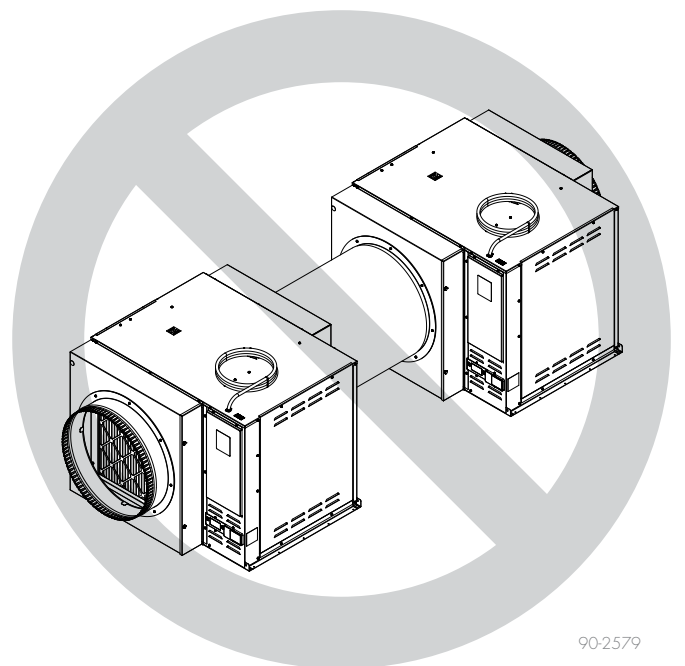
Equivalent length of bends

45° bend	5 feet (1.5 m)
90° bend	10 feet (3.0 m)
180° bend	30 feet (9.1 m)

- Max static pressure is 0.6" w.c. (149 Pa).
- Install the dehumidifier in location where filter door, service access panel, compressor side panel, and user interface are accessible, see the Dehumidifier Installation and Operating Instructions for more details.
- Do not install a bend in the ductwork within 2 feet (0.6 m) of the dehumidifier inlet or outlet.
- When selecting duct material, it is preferred to use metal ducting to maintain airflow. If flex duct is to be used, ensure it is extended out as much as possible to limit disruptions to the airflow. Note: Use only insulated ducting when the inlet side of the duct work is located outside of the conditioned space. In some instances when the dehumidifier is placed outside of the conditioned space, the cabinet of the dehumidifier may also need to be insulated to prevent condensation formation on the exterior of the unit.
- Do not duct more than one dehumidifier together. See Figure 2-1.

- If using registers and diffusers, the total open area must be at least 453 in² (0.3m³), which is the equivalent area to a 24 inch (610 mm) round.
- When locating registers and diffusers be aware of the following;
 - Relative to other dehumidifier inlets/outlets – must be a minimum 10 feet (3 m) apart and do not direct toward one another.
 - Relative to HVAC diffusers – ensure minimum 10 foot (3 m) distance from other HVAC diffusers.
 - For agriculture applications – do not directly vent onto plants.
- Ensure that the ductwork is supported within 2 feet (0.6 m) of inlet and outlet of the dehumidifier. Consult building codes and standards for duct support requirements beyond 2 feet (0.6 m) of the dehumidifier.

FIGURE 2-1: DO NOT DUCT MORE THAN ONE DEHUMIDIFIER TOGETHER



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DUCT KIT INSTALLATION

1. On each housing, bend the four alignment tabs so they are protruding out of the front as shown below. These are to be used as alignment features for the 24" (610 mm) collar. See Figure 3-1.
2. Attach the assembled duct housing to the dehumidifier using screws provided. Additional holes will need to be made in the cabinet where holes did not previously exist. To properly seal the unit, use a 5/32" (4 mm) bit to pre-drill holes and use the screws provided. If you choose to use self drilling screws, make sure they are no longer than 1" (25 mm). To secure the 3 screws on the left side of the duct kit (opposite the filter access door), a bit extension of at least 6" (152 mm) is required. After securing all screws, insert the sealing plugs provided into the access holes on the left hand side. See Figure 3-2.
3. Install the filter access door and secure with the two thumb screws. See Figure 3-3.

FIGURE 3-1: ALIGN TABS

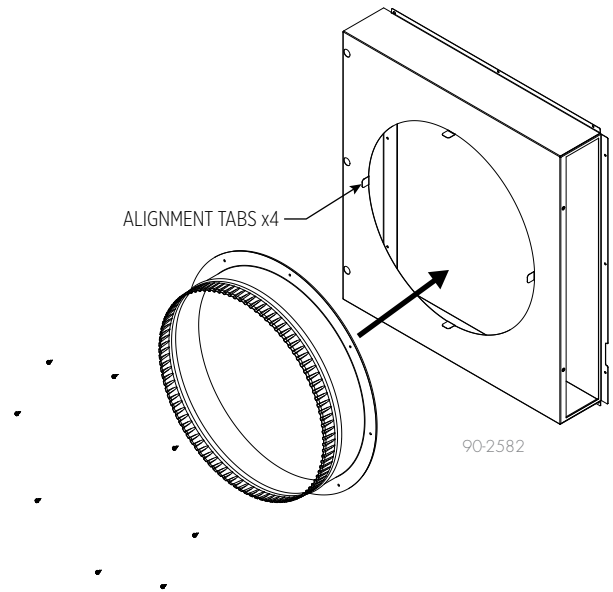


FIGURE 3-2: ATTACH ASSEMBLED DUCT HOUSING

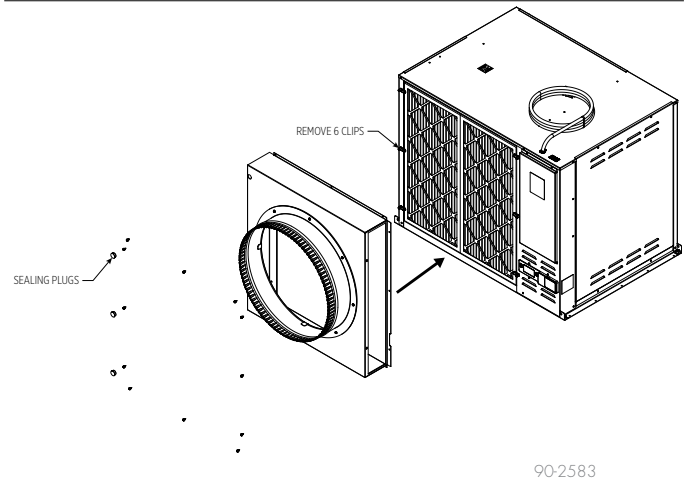
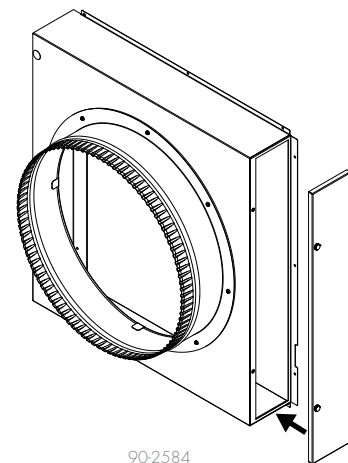


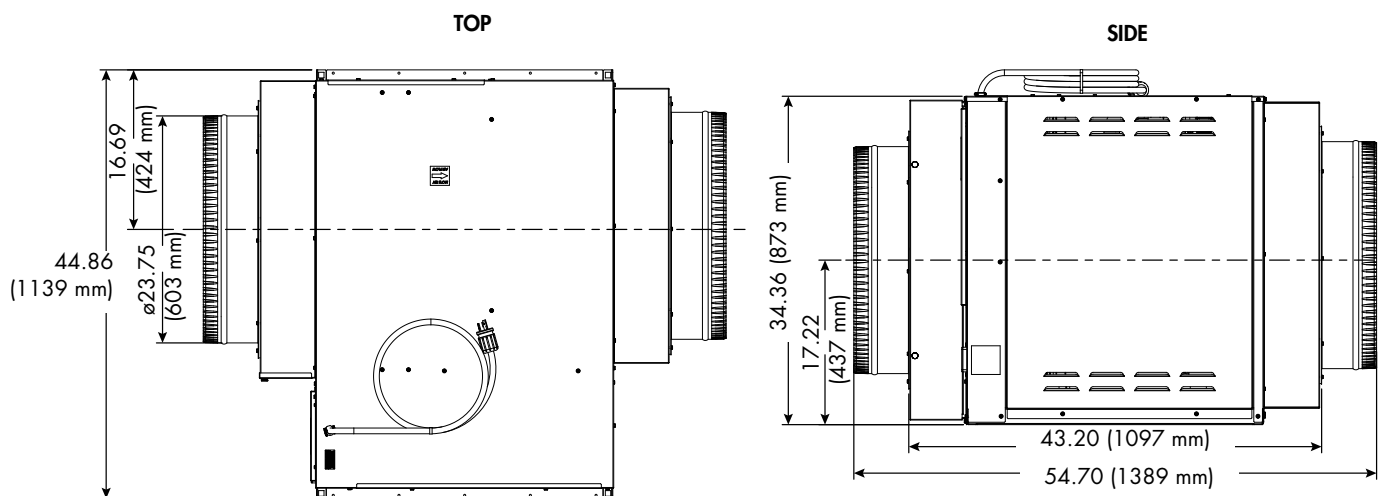
FIGURE 3-3: INSTALL



REPLACING THE FILTER

1. Loosen the two thumb screws and remove the filter access door.
2. Pull the filter away from the unit, then out through the access opening.
3. Install the new filter in the same direction.
4. Reinstall the filter access door and tighten the thumb screws.

FIGURE 4-1: OVERALL DIMENSIONS WITH DUCT KIT (INCHES)



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