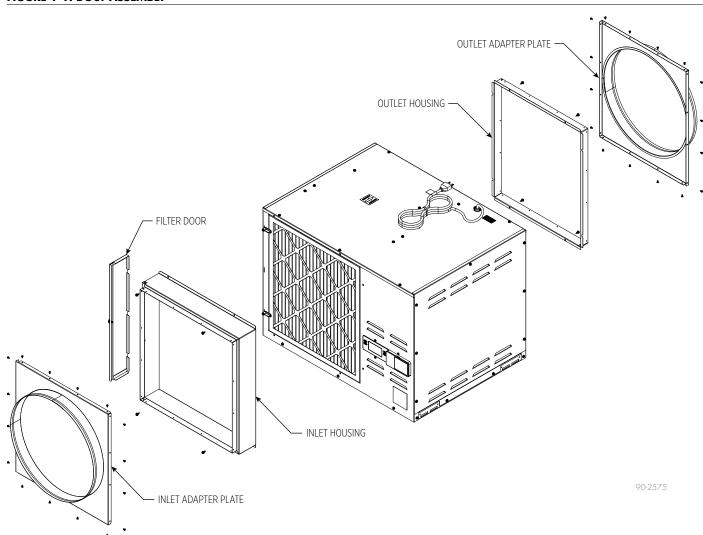


# Round duct kit for Model RL-14 Dehumidifier Part #: 601198

FIGURE 1-1: DUCT ASSEMBLY



### **A** 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
- Minimize equivalent duct length to maximize unit capacity and efficiency.

#### **AIRFLOW DELIVERY SPECIFICATIONS**

- Nominal airflow through dehumidifier is 830 cfm  $(1410 \text{ m}^3/\text{h}).$
- 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**

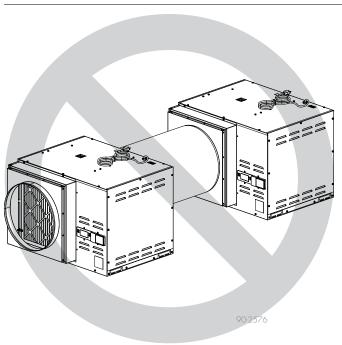
- Inlet and outlet collars fit 18" (457 mm) round duct.
- Unit performance decreases as airflow decreases, the shortest possible duct lengths with minimal bends should be used.
- Do not exceed 1,000 feet (305 m) of metal duct or 750 feet (229 m) of flex duct.

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.
- 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 255 in<sup>2</sup> (1645 cm<sup>2</sup>), which is the equivalent area to a 18 inch (457 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.

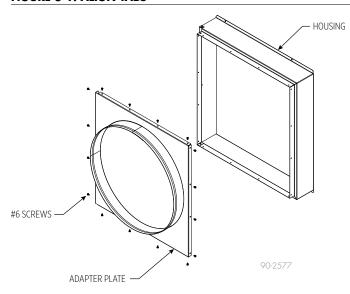
## FIGURE 2-1: DO NOT DUCT MORE THAN ONE DEHUMIDIFIER IN SERIES



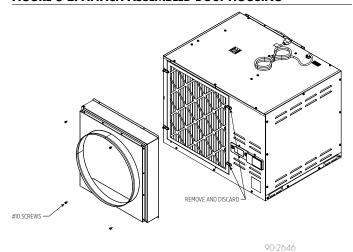
#### **DUCT KIT INSTALLATION**

- 1. Install the round adapter plates onto the inlet and outlet using the #6 (smaller) screws provided. See Figure 3-1.
- 2. Attach the assembled components to the dehumidifier using the #10 (larger) screws provided. The filter clips must be removed from the inlet side of the dehumidifier, the duct kit will attach using those holes. See Figure 3-2.
- 3. Install the filter access door and secure with the two thumb screws. See Figure 3-3.

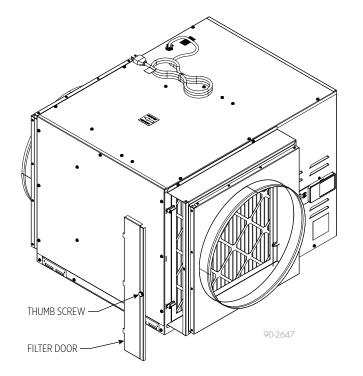
#### FIGURE 3-1: ALIGN TABS



#### FIGURE 3-2: ATTACH ASSEMBLED DUCT HOUSING



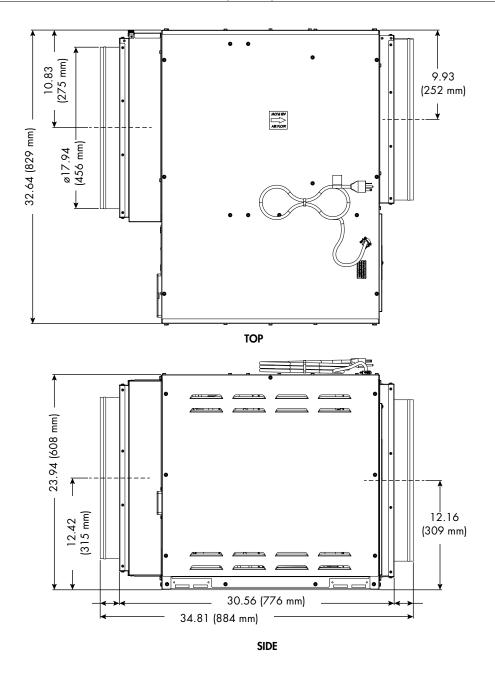
### FIGURE 3-3: INSTALL



#### **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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