EHPWH Ducting Kit

INSTALLATION INSTRUCTIONS

Rinnai

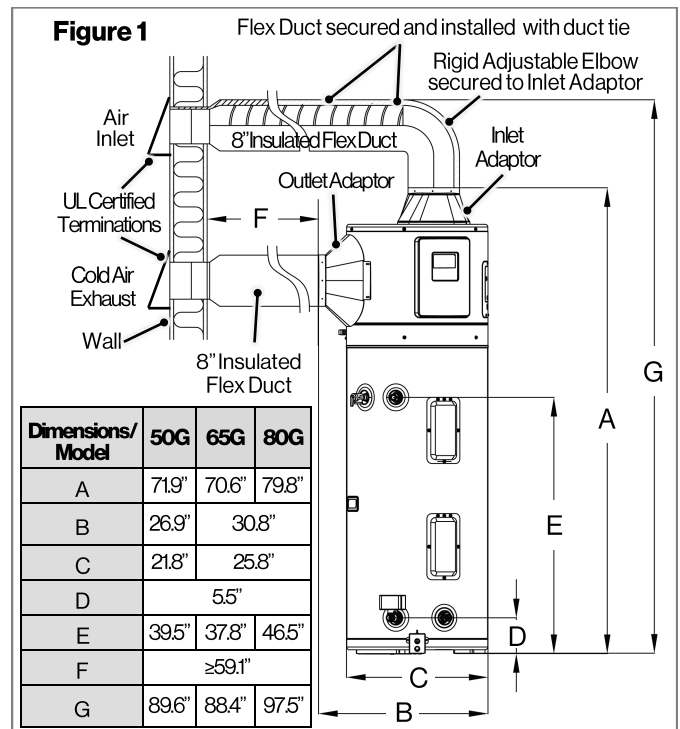| Kit Name	Electric Heat Pump Water Heater (EHPWH) Ducting Kit
Kit Part Number	103000120
Compatible Rinnai Products	Rinnai Heat Pump Water Heaters: All REHP Models

⚠ **WARNING** Failure to correctly assemble the components according to these instructions may result in electric shock, injury, or death.

⚠ **CAUTION**   Ducting Requirements:

- The ducting is required for unvented installation space smaller than 450 ft^3 / 12.7 m^3.
- All ducting accessories and installation must follow local codes.
- Water heater must be ducted separately from other appliances.
- Ducting needs to be kept clean and should not be blocked in any conditions. Add support to the duct work as necessary with duct ties or ducting tube hooks to prevent large droops which could allow moisture to pool.
- When ducting is installed, there may be some reduction in the heating capacity and efficiency of the system. To improve performance of the appliance with ducting, the parameter on the engineering channel 40 must be changed as shown in step 5.
- Figure 1 shows the typical installation of ducting. As shown, minimum duct length after outlet adaptor (dimension "F") and defined headroom for inlet adaptor (dimension "G") is required for installation.
- The inlet and outlet adaptors accept 8" diameter ducting. However, the duct diameter can be reduced down to 5". Follow Table 2 to determine the maximum allowable total length of ducting and Table 3 for equivalent feet for duct accessories (total length ducting is length of inlet plus outlet duct).

Figure 1

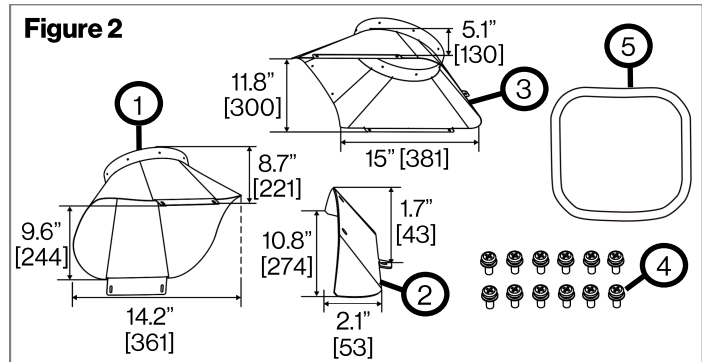| Dimensions/ Model	50G	65G	80G
A	71.9"	70.6"	79.8"
B	26.9"	30.8"	
C	21.8"	25.8"	
D	5.5"		
E	39.5"	37.8"	46.5"
F	≥59.1"		
G	89.6"	88.4"	97.5"

Items Inside Product Box

Before installation, please make sure all parts are located inside the product box.

Table 1

Item #	Item	Qty
1	Inlet Adaptor	1
2	Inlet Adaptor Sleeve	1
3	Outlet Adapter	1
4	Screws	12
5	Insulation Foam	N/A

TOOLS/MATERIALS REQUIRED

☐ Phillips Head Screw Driver   ☐ Additional Tools Required to Install Duct

Figure 2

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Installation Considerations for Improved Performance

- Use direct route and reduce elbows/bends as much as possible for best airflow.
- Use largest allowable duct size and terminations for install.
- To minimize transmission of vibration or noise, rigid ducting should be isolated from floor joists or other structural members. Use a short section (12" or larger) of flexible duct between the water heater and rigid ducting as an isolation method.
- Cold air should exhaust sufficiently away from structures to prevent condensation on surfaces.
- Lowering resistance to airflow and regular air filter maintenance can maximize the performance.

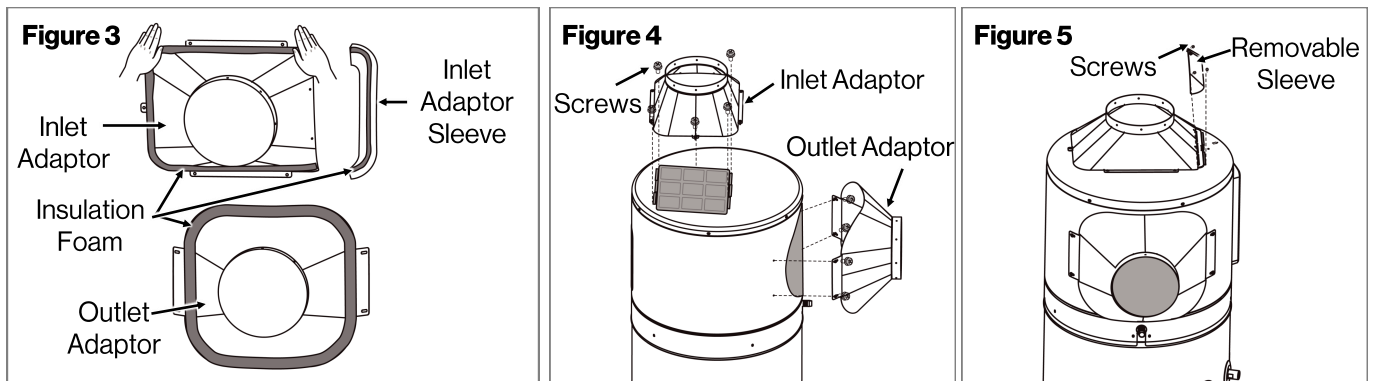Table 2: Maximum Total Duct Length

Duct Type / Diameter	8"	7"	6"	5"
Flexible	131'	68'	26'	-
Rigid	357'	168'	68'	18'

Table 3: Equivalent Feet for Duct Accessories

Description	8"	7"	6"	5"
Elbows/Flexible Bends (Each)	5'	5'	5'	5'
8" UL Certified Termination for Ducting Outside (Each)	5'	5'	5'	5'
Reduced Diameter UL Certified Termination for Ducting Outside (Each)	N/A	10'	15'	20'
8" Register for Ducting Inside (Each)	5'	5'	5'	5'
Reduced Diameter Register For Ducting Inside (Each)	N/A	10'	15'	20'
Rodent Screen (must be greater than 83% open area) (Each)	1'	1'	1'	1'
Approved 8" Diameter Duct Damper	25'	20'	10'	5'

Adaptor Installation Instructions

1. Stick the insulation foam on the edges of inlet adaptor, removable sleeve and outlet adaptor (Figure 3).

2. Secure the inlet adaptor and outlet adaptor on the appliance using provided screws (Figure 4). Ensure that the cutout on the inlet adaptor provides access to the air filter for maintenance.

3. Secure the removable sleeve on the inlet adaptor and the appliance using provided screws (Figure 5).

4. Once the adaptors are installed, follow the instructions provided by the ducting manufacture to install the ducting. Adaptors have the mounting holes to secure 8" duct using screws.

Figure 3 — Inlet Adaptor Sleeve, Inlet Adaptor, Insulation Foam, Outlet Adaptor

Figure 4 — Screws, Inlet Adaptor, Outlet Adaptor

Figure 5 — Screws, Removable Sleeve

5. Press and hold the " ⊛ " button for 3 seconds on the main interface. Select engineering channel 40 by pressing " ⌃ " or " ⌄ " buttons. Once reached to engineering channel 40, press " ⊘ " to enter. Change the parameter to " 1 " using " ⌃ " and " ⌄ " buttons (Figure 6).

Figure 6

Engineering Channel 40	Duct Setting	0 : Off (default) 1 : On (When Duct installed)

3 seconds

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