# Quick Start Guide

#### **RSQ HOOD ASSEMBLY**







#### Parts List

- (1) Base Fan (Supply or Exhaust)
- (1) Fastener Kit (Size 7-15 Only)
- (2) Fastener Kit (Size 16-33 Only)
- Hood Kit
  - (2) Hood End Angle
  - (1) Male Hood End Panel
  - (1) Female Hood End Panel
  - (0-6) Inner Hood Panel
  - (2) Hood Support Rail
  - (4) Hood Support Angle (Size 18-33 Only)
  - (2) Hood Z-Channel
  - (4) L-Bracket
  - (4) U-Bolt
- Birdscreen Kit
  - (2) Long Birdscreen Section
  - (2) Short Birdscreen Section
- Filtered Kit (Supply Only)
  - (2) Filter End Angle
  - (2) Long Filter C-Channel
  - (2) Short Filter C-Channel (Size 7-27 Only)
  - (4) Short Filter C-Channel (Size 30-33 Only)

#### **Tools List**

Impact Driver
5/16 in. Nut Driver
1/2 in. Nut Driver
(2) 1/2 in. Wrench
(2) 9/16 in. Wrench

# Fastener Specifications#12 Self-Tapping Screw (TEK)Image: Colspan="3">Image: Colspan="3">Image: Colspan="3">Image: Colspan="3">Image: Colspan="3"#12 Sheet Metal Screw (SMS)Image: Colspan="3">Image: Colspan="3">Image: Colspan="3">Image: Colspan="3">Image: Colspan="3"#12 Sheet Metal Screw (SMS)Image: Colspan="3">Image: Colspan="3"5/16 in. Thread Rolling Screw (TRS)Image: Colspan="3">Image: Colspan="3"5/16 in. Whiz-Lock Nut and BoltImage: Colspan="3">Image: Colspan="3"3/8 in. Whiz-Lock Nut and BoltImage: Colspan="3">Image: Colspan="3"

- Hood kit components are shipped knocked down and are to be assembled and installed on the base fan in the field.
- This Quick Start Guide (QSG) does not replace the Installation Operation Manual (IOM), refer to the IOM for more information.

**NOTE:** Hood assembly process for supply and exhaust fans are the same.

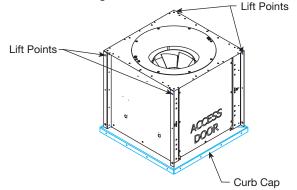
# Step 1 – Rotate The Base Fan

• Unpackage and inspect fan per IOM. Locate the knockdown hood crate, shipped separately.

**IMPORTANT:** Handle birdscreens or filters carefully to avoid damaging throughout the assembly process.

**IMPORTANT:** Ensure rotating the unit will not cause damage to the base fan, surroundings, or roof. Use proper equipment, lifting techniques, and safety measures to avoid injury or damage to the base fan or surroundings. The manufacturer is not liable for any damages that may occur during this process.

• Ensure the base fan is in the upright position with the curb cap sitting flush on the roof curb. Use the holes located in the (4) corners of the base fan inlet (for supply) or outlet (for exhaust) as lifting points to assist in rotating the unit.

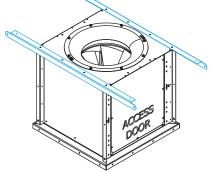


**NOTE:** Image shown is for supply configurations, with the inlet of the fan up. Exhaust configurations would have the outlet of the fan up.

# Step 2 – Install Hood Support Rails

• Place the hood support rails on the top edge of the base fan perpendicular to the access doors.

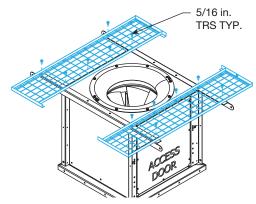
**IMPORTANT:** Do not fasten hood support rails to base fan in this step.



#### Steps 3-4 For Fan With Birdscreen Step 3 – Install Long Birdscreen Sections

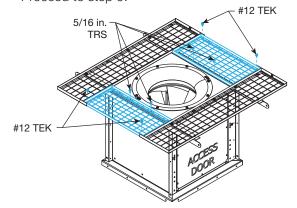
**NOTE:** For Filtered Supply Fan, birdscreen sections are not included, skip to Step 5.

• Place the long birdscreen sections across the hood support rails. Align the holes in the rails and the long birdscreen sections with the pilot holes on the top of the base fan. Secure the long birdscreen sections to the base fan and hood support rails using TRS.



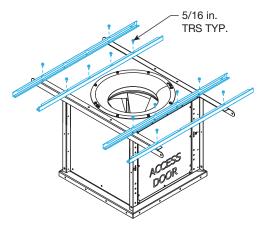
# Step 4 – Install Short Birdscreen Sections

- Place the short birdscreen section over hood support rails and long birdscreen tab, align holes, then fasten TRS to hood support rails. Use TEK to secure to long birdscreen tabs.
- Proceed to step 9.



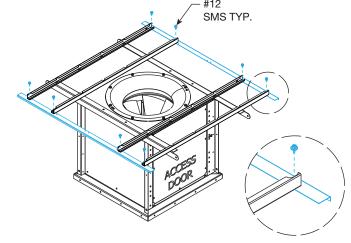
# Steps 5-8 For Filtered Supply Fan Only Step 5 – Install Long Filter C-Channels

• Place long filter C-channels parallel to the access doors across the hood support rails and fasten with TRS.



# Step 6 – Install Filter End Angles

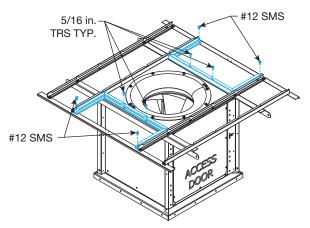
 Place filter end angle across the bottom of the long filter C-channel. Short flange should be positioned down and away from fan. Fasten with SMS. Optional C-clamp may be used to hold components in place while fastening.



#### Step 7 – Install Short Filter C-Channels

**NOTE:** For fan sizes 30 and 33, short filter C-channels may have two hand formed channels per side.

• Bend the short filter C-channel 90 degrees at the notches creating an inward channel. Place the bent short filter C-channel on top of hood support rail and fasten using TRS to base fan. Fasten the outer legs of C-channel to filter end angles using SMS.





# Step 8 – Install Filters

**IMPORTANT:** Handle filters carefully to avoid damaging throughout the assembly process.

**NOTE:** An airflow direction arrow is located on the side of each filter.

 Carefully slide filters into the filter C-channel assemblies ensuring all airflow direction arrows on filters point upward. Reference the table below for filter quantity and sizing.

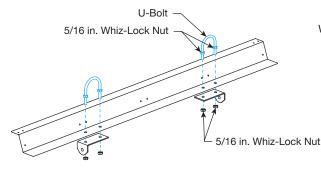
Fan Size	Short Filter		Long Filter	
	L x W	Qty.	L×W	Qty.
7	5-1/2 x 11-3/8	2	23-1/4 x 5-3/4	2
9	9-5/8 x 15	2	35-1/4 x 6-1/4	2
12	8-1/8 x 18-1/4	2	35-1/4 x 7-1/4	2
15	12-1/4 x 22	2	23-5/8 x 6-3/4	4
16	11-1/4 x 24	2	23-5/8 x 9-3/4	4
18	15-7/8 x 26-1/2	2	29-5/8 x 8-1/8	4
20	14-5/8 x 29-1/8	2	29-5/8 x 12-3/8	4
22	19-1/8 x 32	2	35-5/8 x 11	4
24	17-1/2 x 35-1/2	2	35-5/8 x 15-3/4	4
27	21-3/4 x 38-7/8	2	27-3/4 x 14-7/8	6
30	19-3/4 x 21-1/4	4	27-3/4 x 19-1/2	6
33	23-1/2 x 23-3/8	4	31-3/4 x 19-5/8	6

All dimensions in inches.

#### Step 9 – Create and Install Hinge Assembly

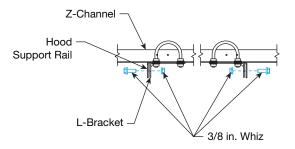
**IMPORTANT:** The arrangement of components in this step is critical.

- Create the hinge assembly:
  - 1. Thread (2) 5/16-in. Whiz-Lock nuts onto each U-bolt, such that the nut flange is towards the end of the U-bolt.
  - 2. Insert U-bolt through the Z-channel and L-bracket from the top down.
  - 3. Secure using 5/16-in. Whiz-Lock nuts on each leg of the U-bolt.
  - 4. Repeat this process for remaining hinge assemblies.



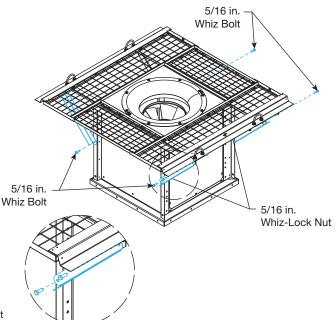
- Install the hinge assembly:
  - 1. Sizes 7-16:

Attach hinge assemblies to the hood support rails using 3/8-in. Whiz-Lock nuts and bolts.

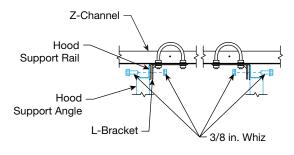


2. Sizes 18-33:

Install hood support angle to the base fan using 5/16-in. Whiz-Lock nut and bolt through the hole located halfway down the corner of the base fan.



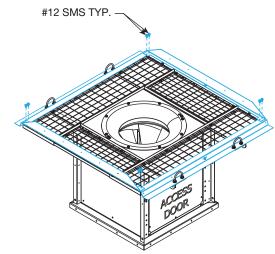
Align the hole in the L-bracket of the hinge assembly with the hole at the end of the hood support rail and the hood support angle. Secure using 3/8-in. Whiz-Lock nut and bolt.





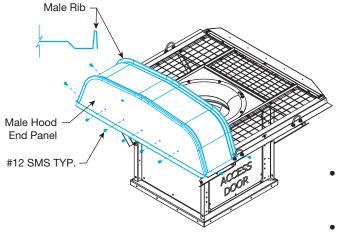
#### Step 10 – Install Hood End Angles

• Place hood end angles on top of Z-channels. Fasten in each corner from above using SMS.



#### Step 11 - Install Male Hood End Panel

 Start with the male hood end panel and place it over either hood end angle, across the Z-channels. Attach the male hood end panel to the hood end angle and Z-channels using SMS.

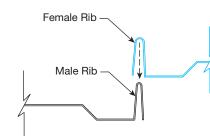


# Step 12 – Install Remaining Hood Panels

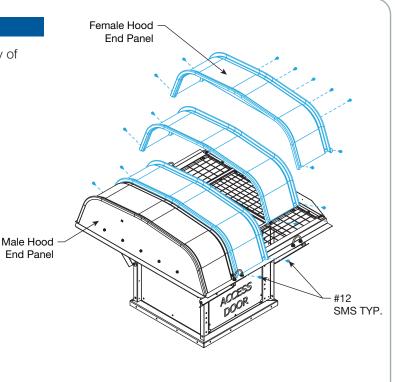
• Refer to the table for the required quantity of hoods panels.

Fan	Number Of		
Size	Hood End Panels	Inner Hood Panels	
7	2	0	
9	2	1	
12	2	1	
15	2	2	
16	2	2	
18	2	3	
20	2	3	
22	2	4	
24	2	4	
27	2	5	
30	2	5	
33	2	6	

• Align inner hood panels by overlapping the female rib of the panel on top of the male rib of the previously installed panel. Be careful not to damage the panels. Use a rubber mallet to help interlock the hood panels together.



- Once all inner hood panels are aligned, install the female hood end panel. Fasten the female hood end panel to the hood end angle with SMS.
- Secure all inner hood panels to Z- channels using SMS.



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