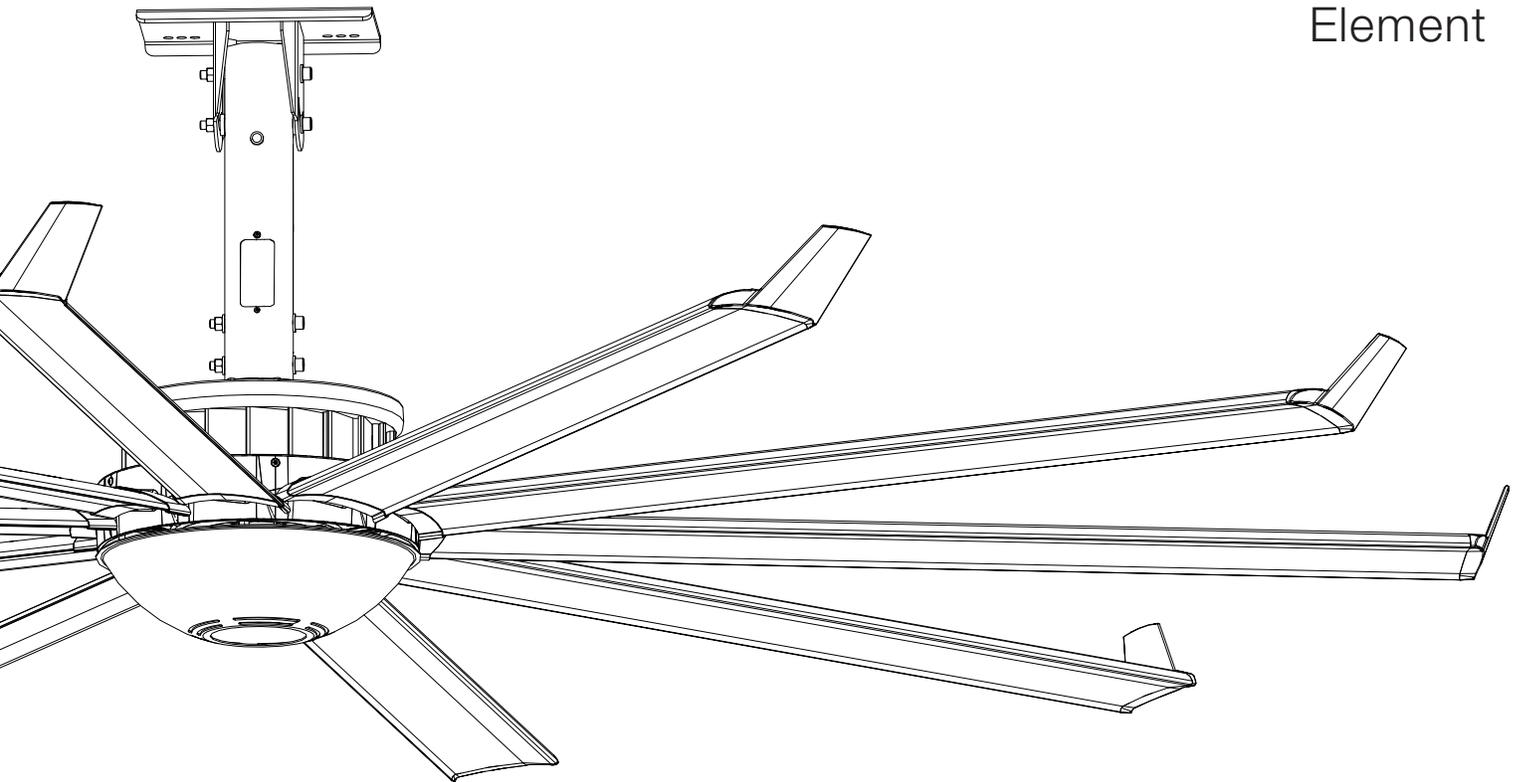




INSTALLATION GUIDE

Element



Installation Checklist

Did a structural engineer approve the mounting structure? (See p. 6 for Big Ass Fans approved mounting structures.)

Are you familiar with the function and use of the safety cables? (See pp. 14–15 for information on properly securing the safety cables.)

Will the fan be installed so that the blades are at least 10 ft (3.05 m) above the floor?

Will the fan be installed so that the blades have at least 2 ft (0.61 m) of clearance from obstructions?

Will the fan be installed so that it is not subjected to high winds, such as from an HVAC system? Install the fan so that it is $\geq 1x$ fan diameter away from a diffuser if the fan is at same level or above diffuser. If the fan is below a diffuser, install the fan so that it is $\geq 2x$ fan diameter from the diffuser.

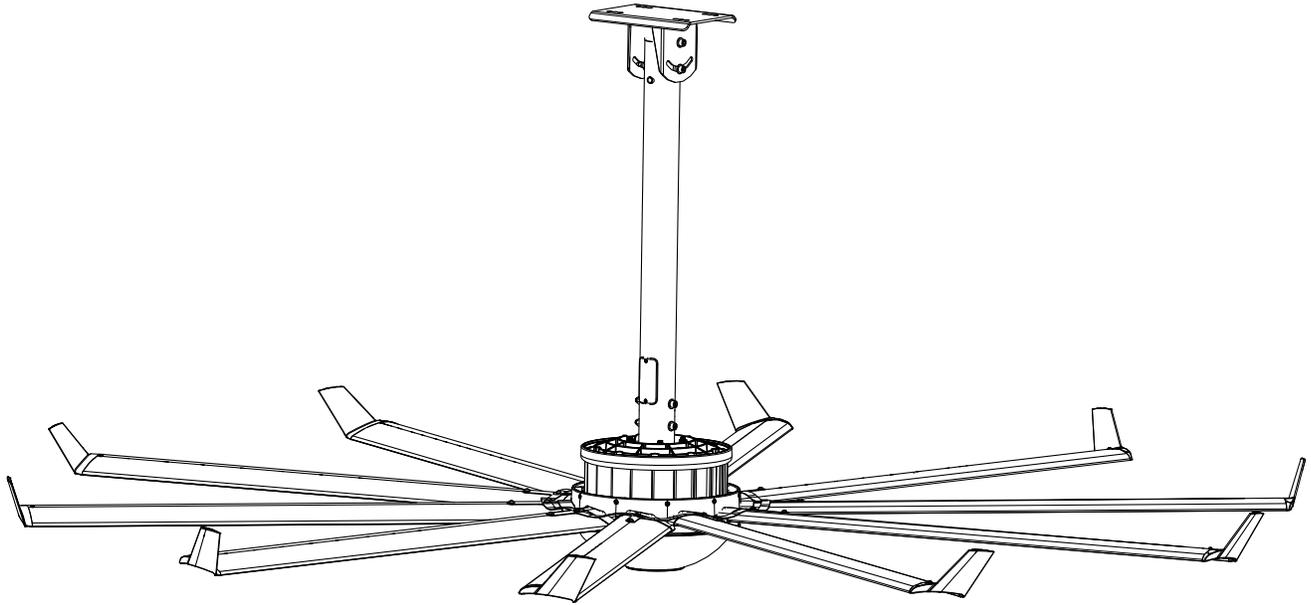
Will the distance between multiple fans be at least 2.5x the fans' diameter when measured from the centers of the fans?

If installing to an I-beam, is the upper yoke the correct size? (See p. 7 for more information on installing the fan to an I-beam.)

If you ordered multiple fans, did you keep the parts for each fan together?

Customer Service: 1-877-BIG-FANS
(International: +1 859 233 1271)

Element Installation Guide



Installation Guide:
Apr. 2015
Rev. L



This product was manufactured in a plant whose Management System is certified as being in conformity with ISO 9001:2008.



Intertek

Conforms to ANSI/UL STD 507: Electric Fans
Certified to CAN/CSA C22.2 No.113: Fans & Ventilators

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www.bigasssolutions.com/patents

ii



IMPORTANT SAFETY INSTRUCTIONS READ AND SAVE THESE INSTRUCTIONS



WARNING—TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS, OBSERVE THE FOLLOWING:

- a. Installation work and electrical wiring must be done by qualified person(s) in accordance with all applicable codes.
- b. When cutting or drilling into wall or ceiling, do not damage electrical wiring and other hidden utilities.

CAUTION: The installation of a Big Ass Fan must be in accordance with the requirements specified in this installation manual and with any additional requirements set forth by the national electric code (NEC), ANSI/NFPA 70-2011, and all local codes. Code compliance is ultimately YOUR responsibility!

WARNING: The fan controllers contain high voltage capacitors which take time to discharge after removal of mains supply. Before working on the fan controller, ensure isolation of mains supply from line inputs at the fan controller board (L1, L2/N). Wait three minutes for capacitors to discharge to safe voltage levels. Failure to do so may result in personal injury or death.

CAUTION: Exercise caution and common sense when powering the fan. Do not connect the fan to a damaged or hazardous power source. Do not attempt to resolve electrical malfunctions or failures on your own. Contact Big Ass Fans if you have any questions regarding the electrical installation of this fan.

Suitable for use with solid-state speed controls.

WARNING—To reduce the risk of fire, electric shock, and injury to persons, Big Ass Fans must be installed with Big Ass Fan supplied controllers that are marked (on their cartons) to indicate the suitability with this model. Other parts cannot be substituted.

CAUTION: When service or replacement of a component in the fan requires the removal or disconnection of a safety device, the safety device is to be reinstalled or remounted as previously installed.

WARNING: Risk of fire, electric shock, or injury to persons during cleaning and user-maintenance! Disconnect the appliance from the power supply before servicing.

WARNING—TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS, OBSERVE THE FOLLOWING:

- a. Use this unit only in the manner intended by the manufacturer. If you have questions, contact the manufacturer.
- b. Before servicing or cleaning unit, switch power off at service panel and lock the service disconnecting means to prevent power from being switched on accidentally. When the service disconnecting means cannot be locked, securely fasten a prominent warning device, such as a tag, to the service panel.

CAUTION: Do not bend the airfoils when installing or servicing the fan. Do not insert foreign objects between rotating airfoils.

WARNING: Stay alert, watch what you are doing, and use common sense when installing fans. Do not install fans if tired or under the influence of drugs, alcohol, or medication. A moment of inattention while installing fans may result in serious personal injury.

CAUTION: The installation of this fan requires the use of some power tools. Follow the safety procedures found in the owner's manual for each of these tools and do not use them for purposes other than those intended by the manufacturer.

CAUTION: The Big Ass Fans product warranty will not cover equipment damage or failure that is caused by improper installation.

CAUTION: Do NOT install the fan where it may come into direct contact with water unless the fan is labeled, "Suitable for use in wet locations."

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Introduction

1

Thank you and congratulations on your purchase of a Big Ass Fan, an efficient and cost-effective way to stay cool in the summer and warm in the winter. The revolutionary design of our fans combines the best of both form and function to bring power performance and a sleek look to any setting. More importantly, you have purchased a product that is backed by extensive research, thorough testing, and quality manufacturing. We're ready to answer any questions or comments at 1-877-BIG-FANS or visit our Web site at www.bigassfans.com.

Who we are and what we do

Big Ass Fans has been the preeminent manufacturer of large-diameter, low-speed fans since 1999. With a worldwide presence and located in beautiful Lexington, KY, we research, design, and manufacture the most effective air movement solutions on the market. Our never-ending commitment to quality and innovation keeps us at the leading edge of a burgeoning industry. With an eye to helping customers satisfy their needs, and a strong sense of corporate responsibility to the community, Big Ass Fans has redefined the way business is done.

About this fan

Technical specifications

Fan diameter	Input power	Maximum amp	Maximum RPM	Fan weight*
12 ft (3.7 m)	10 A @ 100–250 V, 1 Φ	6.4 A @ 100–125 V, 1 Φ 3.2 A @ 200–250 V, 1 Φ	82	230 lb (104 kg)
14 ft (4.3 m)	10 A @ 100–250 V, 1 Φ	6.4 A @ 100–125 V, 1 Φ 3.2 A @ 200–250 V, 1 Φ	64	244 lb (111 kg)
16 ft (4.9 m)	10 A @ 100–250 V, 1 Φ	6.4 A @ 100–125 V, 1 Φ 3.2 A @ 200–250 V, 1 Φ	52	258 lb (117 kg)
18 ft (5.5 m)	10 A @ 100–250 V, 1 Φ	6.4 A @ 100–125 V, 1 Φ 3.2 A @ 200–250 V, 1 Φ	43	272 lb (123 kg)
20 ft (6.1 m)	10 A @ 100–250 V, 1 Φ	6.4 A @ 100–125 V, 1 Φ 3.2 A @ 200–250 V, 1 Φ	33	286 lb (130 kg)

* Fan weight includes 3-ft extension tube and upper yoke.

2

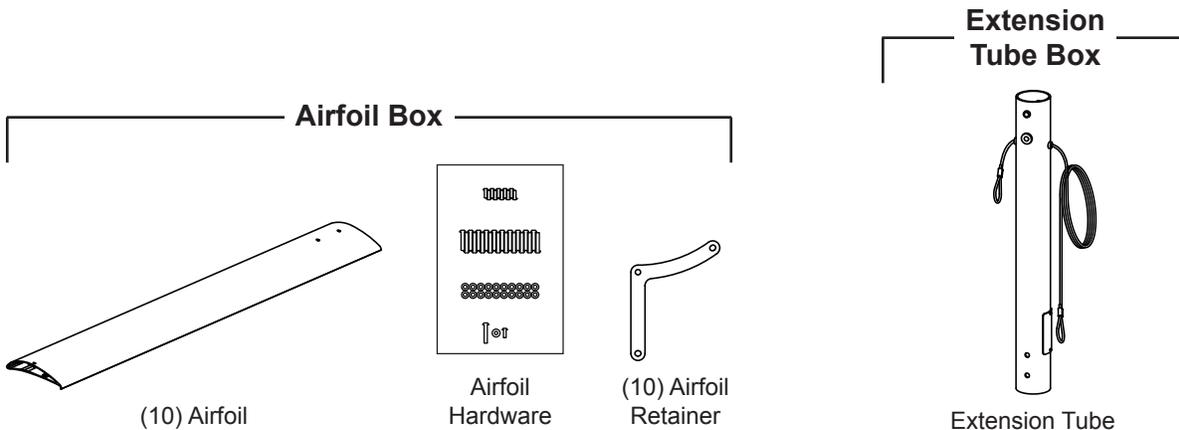
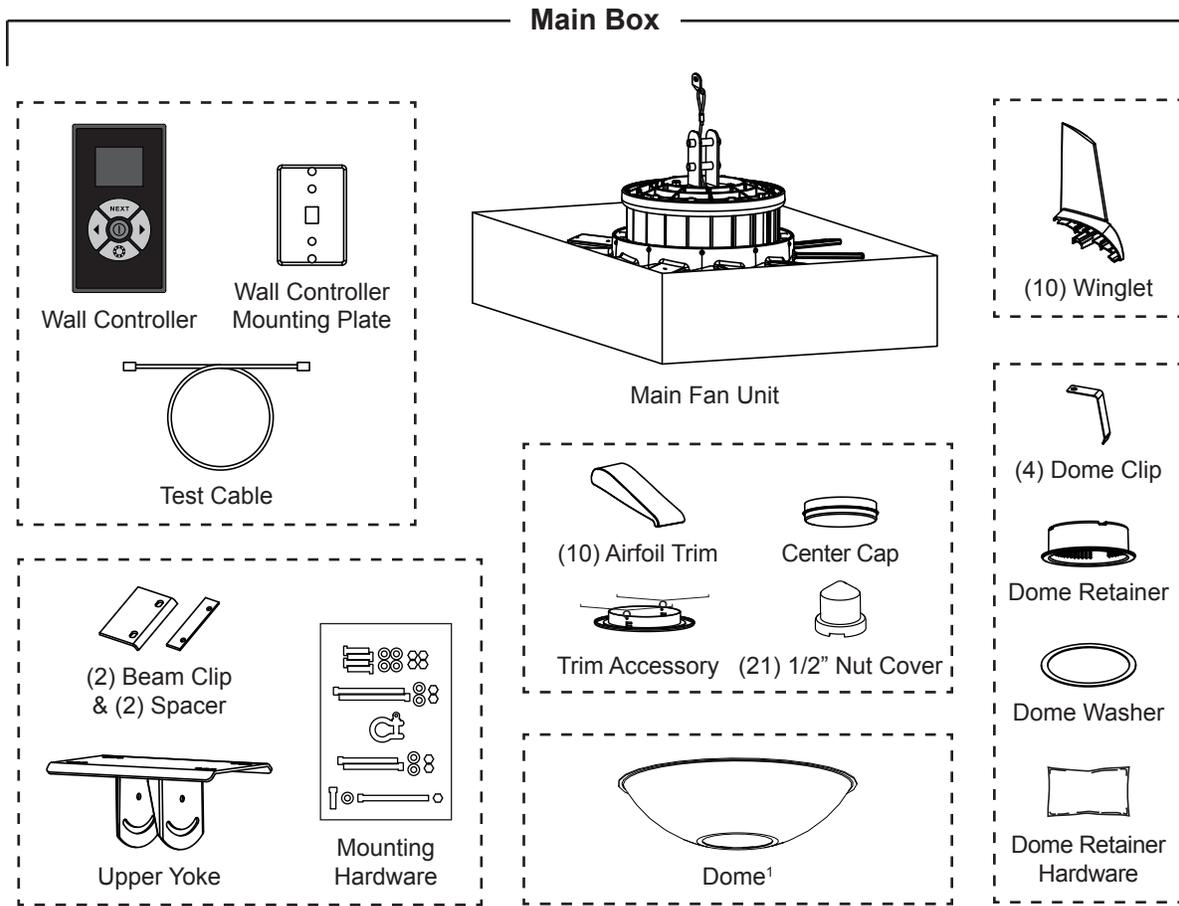
Pre-Installation

What's in the box

- ⚠ **CAUTION:** Do not remove the motor from its protective packaging prior to hanging it!
- ⚠ **CAUTION:** To prevent damage, avoid contact with the printed circuit board located on the bottom of the fan!
- ⚠ **CAUTION:** If you ordered multiple fans, be sure to keep the components of each fan together.

The fan is shipped in three boxes. The largest box contains the main fan unit assembly, upper yoke, beam clips & spacers, dome, dome clips, dome retainer, dome washer, center cap, airfoil trim, winglets, wall control, wall control mounting plate, test cable, mounting hardware, and fire relay. The fire relay and its Installation Guide (not shown below) are packaged in a small box within the main box. A smaller box contains the airfoils, airfoil retainers, and airfoil hardware. Another small box contains the extension tube with attached safety cable. If you are missing any piece required for installation, contact Big Ass Fans.

Note: Dashed lines indicate internal boxes. Drawings below are not to scale.



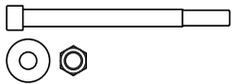
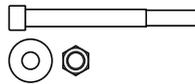
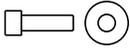
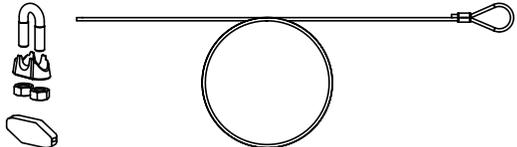
1. Round dome shown. An optional flat dome is available.

Parts included

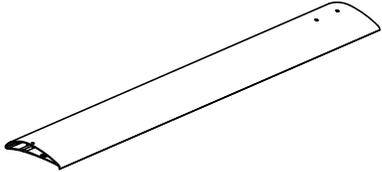
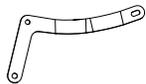
⚠ CAUTION: The components located on the bottom of the main fan unit are fragile and include sensitive electronics. Do not remove the assembly from its protective packaging prior to hanging it from the extension tube!

Note: A fire relay is also included with the fan (not shown below). Drawings below are not to scale.

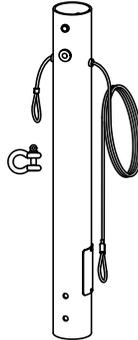
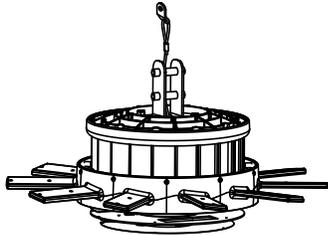
Hardware

			
Beam Clip Hardware (4) 1/2-13 x 2" Bolt (8) 1/2" Flat Washer (4) 1/2-13 Nylock Nut	Extension Tube Hardware (2) 1/2-13 x 6" Bolt (4) 1/2" Flat Washer (2) 1/2-13 Nylock Nut	Main Fan Unit Hardware (2) 1/2-13 x 5" Bolt (4) 1/2" Flat Washer (2) 1/2-13 Nylock Nut	Lower Safety Cable Hardware (1) 1/2-13 x 1 1/2" Bolt (1) 1/2" Flat Washer
			
Access Door Hardware¹ (2) 8-32 x 1/2" Screw	Winglet Hardware (10) 1/4-20 x 3/4" Screw	Airfoil Hardware (20) 5/16-18 x 1-3/4" GR 8 Bolt (40) 5/16" Washer (20) 5/16-18 Nylock Nut	Dome Retainer Hardware² (4) 8-18 x 3/8" Screw (4) 1/4-20 x 5/8" Screw
			
Guy Wire Hardware³ (8) Locking Carabiner (4) 1/4" Beam Clamp (4) 1/4-20 x 1" Eyebolt (4) 1/4-20 Hex Nut		(4) Gripple® (4) Guy Wire (8) Wire Rope Clip	

Airfoils

			
(10) Airfoil			
			
(10) Winglet	(10) Airfoil Trim	(10) Airfoil Retainer	(21) Nut Cover

Mounting

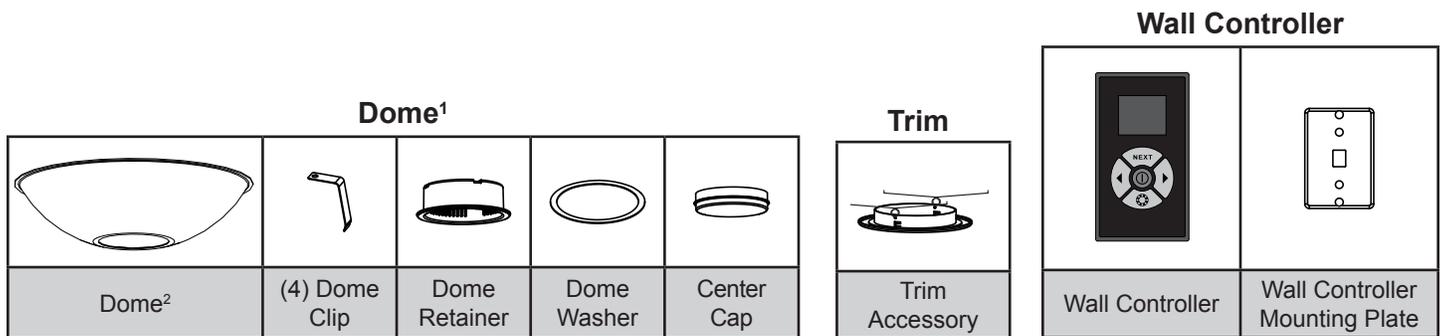
	
(2) Beam Clip & (2) Spacer	Upper Yoke
	
Extension Tube & Safety Cable ¹	Main Fan Unit ⁴

1. The Access Door Hardware is installed in the extension tube when the fan is shipped. The shackle for the safety cable is included with the Mounting Hardware.
2. The Dome Retainer Hardware is packed in the dome retainer box. Big ASS Fans does not recommend installing a light module.
3. Guy wires are designed to constrain fan's lateral movement and are only included in some fan packages. Big ASS Fans recommends using guy wires if the fan's extension tube is 4 ft or longer, if the fan is exposed to high winds or similar conditions, or if the fan is close to any building fixtures. Guy Wire Hardware is bagged separately from hardware boards.
4. The components located on the bottom of the main fan unit are fragile and include sensitive electronics. Do not remove the assembly from its protective packaging prior to hanging it from the extension tube!

4

Pre-Installation (cont.)

Parts included (cont.)



1. The Dome Retainer Hardware is packed in the dome retainer box. Big Ass Fans does not recommend installing a light module.
2. Round dome shown. An optional flat dome is available.

Tools needed

Big Ass Fans recommends gathering the following tools prior to beginning installation. *Note: This list of suggested tools is not exhaustive. Additional tools may be necessary.*

Mechanical Installation:

Standard Wrench Set
Standard Socket and Ratchet Set
Torque Wrench capable of 40 ft·lb (54.2 N·m)
Phillips and Flat Head Screwdrivers
Standard Allen Wrench Set

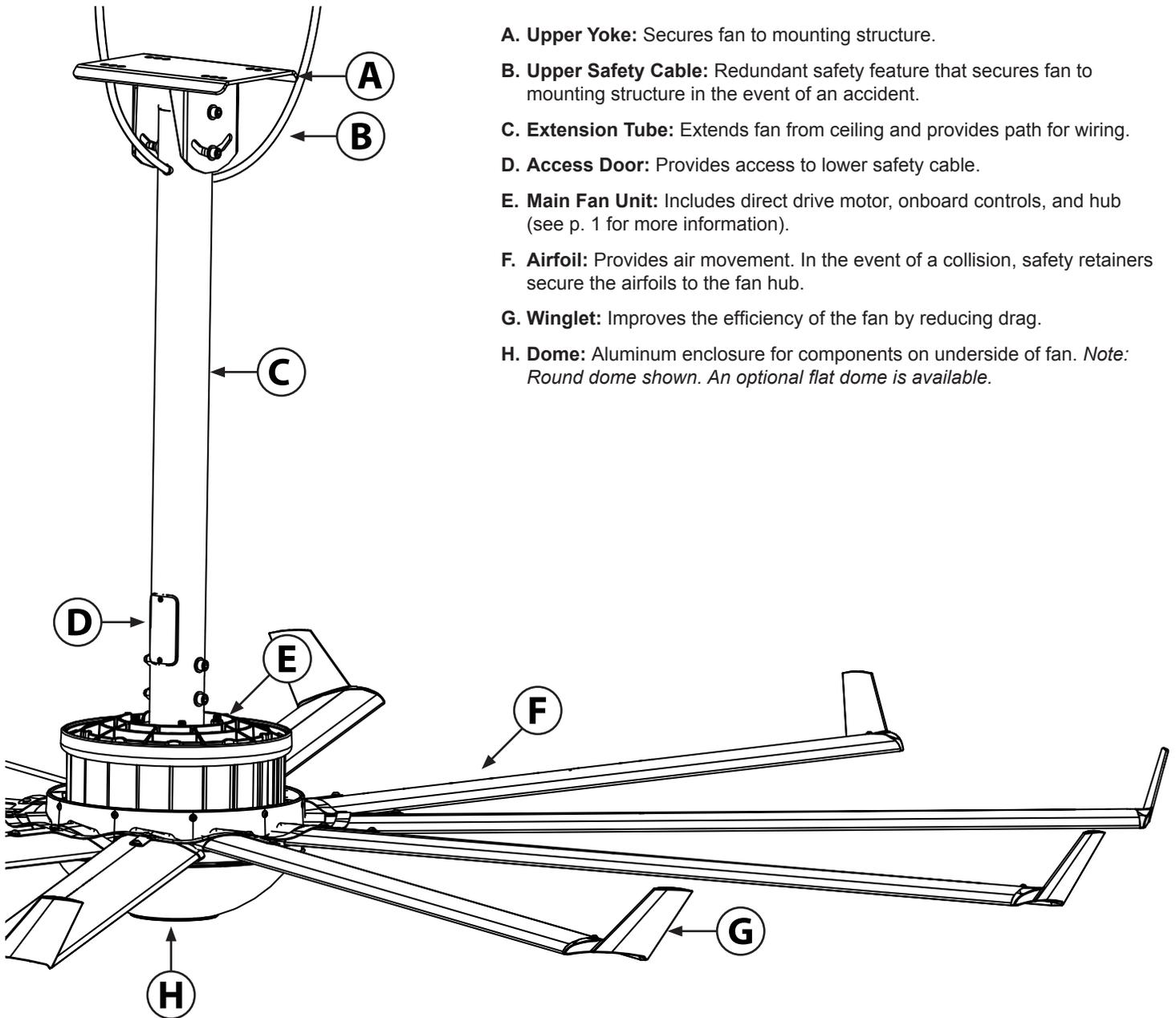
Electrical Installation:

Phillips and Flat Head Screwdrivers
Pair of #10 to #14AWG Strippers
Pair of Medium Size Channel Locks
Multimeter
CAT5/5E Crimper
CAT5/5E Cable tester

Important weights

Part	Weight
Upper Yoke	17 lbs (7.7 kg)
Extension Tube (3')	15 lbs (9.1 kg)
Motor Assembly	127 lbs (57.6 kg)
Airfoil (10)	7 lbs (3.1 kg) each
Winglet (10)	0.8 lbs (0.4 kg) each
Aluminum Dome	2.2 lbs (1.0 kg)
Wall Controller	0.4 lbs (0.2 kg)

Fan diagram



6

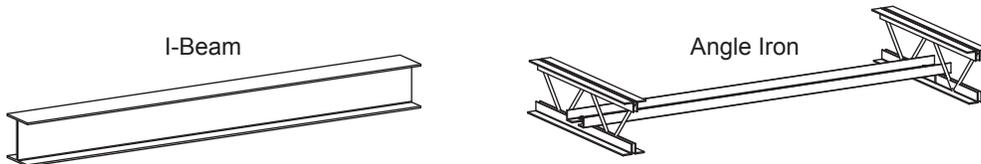
Pre-Installation (cont.)

Preparing the work site

⚠ CAUTION: Mount fan only to an angle iron or I-beam.

When surveying the work site keep the following guidelines in mind:

- Element weighs, at maximum, 286 lbs (with 3-ft extension tube). A scissor lift or other suitable means for lifting the weight of the fan and at least two installation personnel will be required.
- Big Ass Fans can only be hung from an angle iron or an I-beam. The minimum dimensions of the angle iron must be 2-1/2" × 2-1/2" × 1/4" (6.4 cm × 6.4 cm × 0.6 cm) and it cannot be longer than 6 ft (1.8 m). It must be secured to structure. Do not mount the fan to single purlins, trusses, or bar joists. Consult a structural engineer for installation methods not covered in the manual.



- Fan installation area must be free of obstructions such as lights, cables, sprinklers, or other building structure. The airfoils should have at least 2 ft (0.61 m) of clearance from any obstructions.
- Adhere to the safety requirements in the table below when selecting the fan location.

Safety requirement	Minimum distances
Clearance	≥2 ft from all fan parts. The fan installation area must be free of obstructions such as lights, cables, sprinklers, or other building structure.
Blade height	≥10 ft above the floor
HVAC equipment	≥1x fan diameter if at same level or above diffuser. ≥2x fan diameter if below diffuser.
Fan spacing	2.5x fan diameter, center-to-center
Radiant/IR heaters	See the manufacturer's requirements for the minimum clearance to combustibles.

- Fans mounted on lightweight I-beams (common in steel buildings) could cause the beam to flex and the fan to move significantly during operation. If this flexing causes a clearance problem, we suggest installing a stiffening strut on a nearby beam.
- The fan should be visible from the location of the wall controller.
- The mounting system must be able to withstand the torque forces generated by the fan. A 20-ft diameter fan generates nearly 300 ft·lb (406.7 N·m) of torque during operation.
- If the fan is to be located near infrared or radiant heaters, Big Ass Fans recommends that the fan be mounted according to the following guidelines:
 - The fan should be mounted outside of the clearances recommended by the manufacturer of the heater and at a height equal to or above the shielding on the heating element.
 - The controller must be mounted on the opposite side of the heater.
 - If mounting the fan below the heater shielding, all fan elements must be located outside of the clearances recommended by the manufacturer of the heater and the controller must be remotely mounted.
- Ensure the mounting location will not expose the fan to direct contact with water unless the fan is labeled, "Suitable for use in wet locations."

Mounting Structure: I-Beam

7

Big Ass Fans should only be hung from an I-beam or bar joists. See the following page for bar joist mounting instructions. Consult a structural engineer for installation methods not covered in this manual.

- ⚠ WARNING:** The fan should not be installed unless the structure on which the fan is to be mounted is of sound construction, undamaged, and capable of supporting the loads of the fan and the method of attachment to the structure. A structural engineer should verify that the structure is adequate prior to fan installation. Verifying the stability of the mounting structure is the sole responsibility of the customer and/or end user, and Big Ass Fans hereby expressly disclaims any liability arising therefrom, or arising from the use of any materials or hardware other than those supplied by Big Ass Fans or otherwise specified in these installation instructions.
- ⚠ CAUTION:** It is not recommended to mount a Big Ass Fan from a fabricated I-beam.
- ⚠ CAUTION:** Install the spacers **only** if the thickness of the I-beam flange exceeds 3/8" (1cm). The mounting holes on the spacer are closer to one side than the other. Make sure this side is facing the I-beam.
- ⚠ CAUTION:** Ensure the mounting location will not expose the fan to direct contact with water unless the fan is labeled, "Suitable for use in wet locations."

1. Attach upper yoke (to I-beam)

Measure the flange width of the I-beam from which the fan will be hung. Consult the tables and diagram below to determine what size upper yoke is included with your fan package. Select the upper yoke mounting holes that match the flange width of the I-beam.

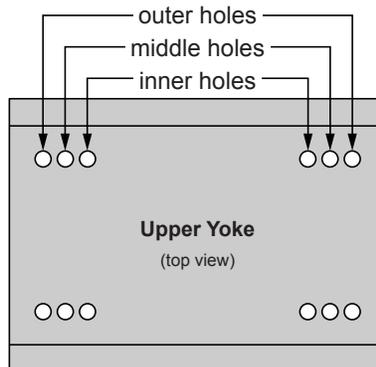
Secure the upper yoke to the I-beam with the Beam Clip Hardware as shown. Tighten the bolts to **40 ft·lb (54.2 N·m)** using a torque wrench and 3/4" socket.

Proceed to "Hanging the Fan" (p. 13).

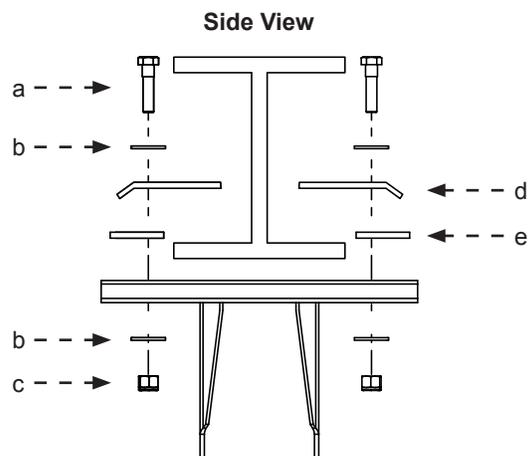
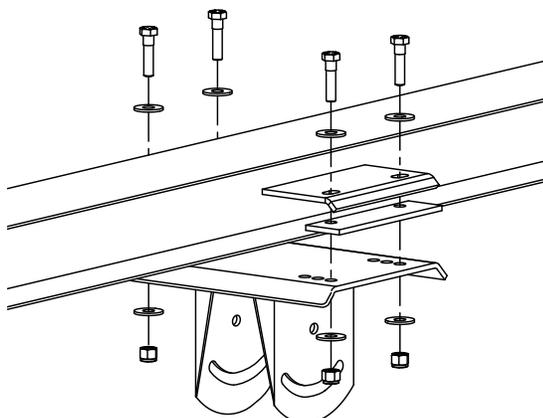
Beam Clip Hardware (BAF-Supplied):

- (4) 1/2-13 x 2" GR 8 Bolt
- (8) 1/2" Flat Washer
- (4) 1/2-13 Nylock Nut
- (2) Beam Clip
- (2) Spacer

Small Upper Yoke 13-3/4" (349 mm) x 10" (258 mm)	
I-beam flange width	Upper yoke mounting holes
5" (127 mm) to 6-5/8" (168 mm)	Inner holes
>6-5/8" (168 mm) to 8-1/4" (210 mm)	Middle holes
>8-1/4" (210 mm) to 9-7/8" (250 mm)	Outer holes



Large Upper Yoke 18-1/2" (470 mm) x 10" (258 mm)	
I-beam flange width	Upper yoke mounting holes
9-7/8" (250 mm) to 11-3/8" (289 mm)	Inner holes
>11-3/8" (289 mm) to 13" (330 mm)	Middle holes
>13" (330 mm) to 14-5/8" (371 mm)	Outer holes



8 Mounting Structure: Bar Joists

If you are installing the fan to an I-beam and have attached the upper yoke, proceed to “Hanging the Fan” (p. 13).

- ⚠ **WARNING:** The fan should not be installed unless the structure on which the fan is to be mounted is of sound construction, undamaged, and capable of supporting the loads of the fan and the method of attachment to the structure. A structural engineer should verify that the structure is adequate prior to fan installation. Verifying the stability of the mounting structure is the sole responsibility of the customer and/or end user, and Big Ass Fans hereby expressly disclaims any liability arising therefrom, or arising from the use of any materials or hardware other than those supplied by Big Ass Fans or otherwise specified in these installation instructions.
- ⚠ **WARNING:** Never use beam clamps when mounting the fan to angle irons! Beam clamps are only intended for I-beam installations.
- ⚠ **CAUTION:** Do not install the fan from a single purlin, truss, or bar joist.
- ⚠ **CAUTION:** Unsupported angle iron spans should not exceed 12 ft (3.7 m).
- ⚠ **CAUTION:** The angle irons must be fastened to the roof structure at each end.
- ⚠ **CAUTION:** Ensure the mounting location will not expose the fan to direct contact with water unless the fan is labeled, “Suitable for use in wet locations.”

1. Select proper angle irons

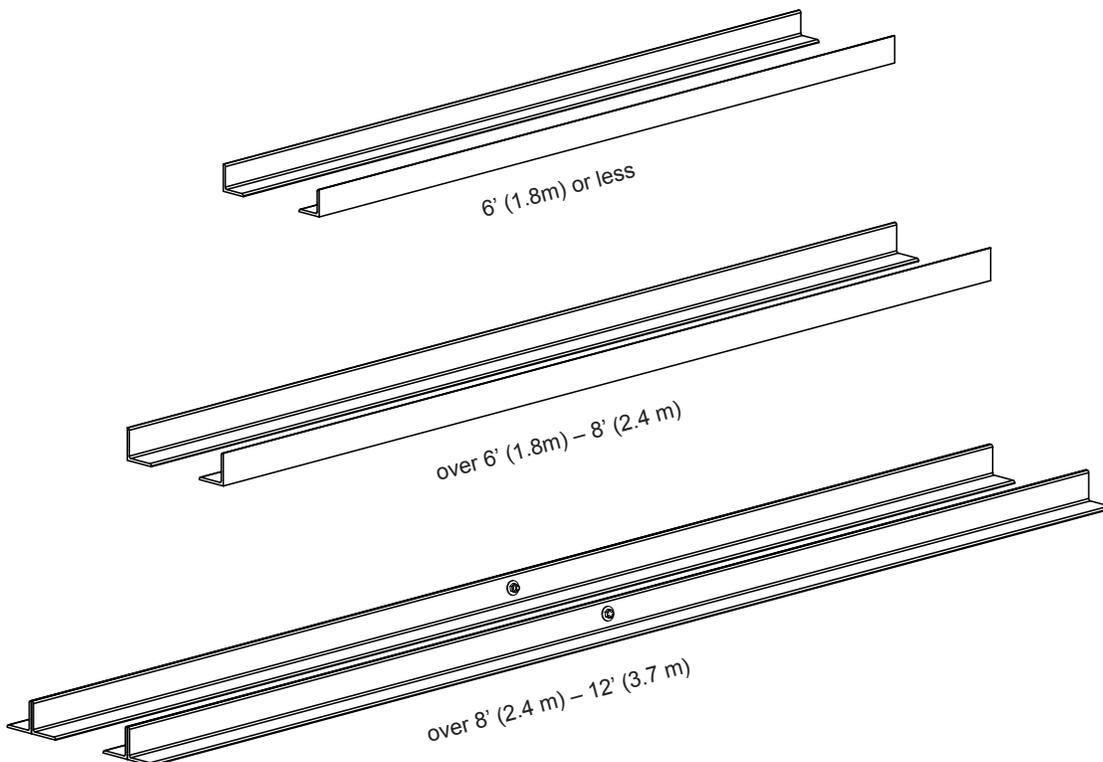
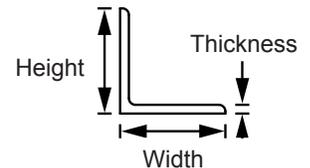
Note: Angle irons and angle iron hardware are not included with the fan.

Follow the table below when selecting angle irons for fan installation.

Angle iron span (between mounting points)	Minimum angle iron dimensions (W x H x T)	Number of angle irons needed
6' (1.8 m) or less	2.5" (6.4 cm) x 2.5" (6.4 cm) x 0.25" (0.6 cm)	2
over 6' (1.8 m) to 8' (2.4 m)	3" (7.6cm) x 3" (7.6 cm) x 0.25" (0.6 cm)	2
over 8' (2.4 m) to 12' (3.7 m)	3" (7.6 cm) x 3" (7.6 cm) x 0.25" (0.6 cm)	4 ¹

1. Two pairs of angle irons. Pairs should be placed back to back and fastened in center (see step 3).

Angle Iron Side View
(see table for dimensions)



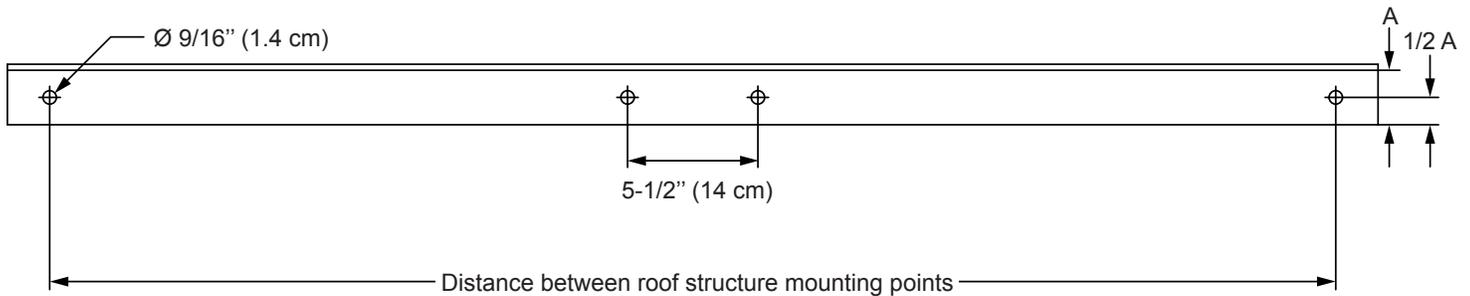
Mounting Structure: Bar Joists (cont.)

9

2. Pre-drill angle irons

Drill two $\text{Ø } 9/16''$ (1.4 cm) holes exactly $5\text{-}3/8''$ (13.7 cm) apart in the centers of two angle irons.

Measure the distance between the mounting points of the roof structure that the angle irons will span. Measure the same distance on the angle irons and drill $\text{Ø } 9/16''$ (1.4 cm) holes through each end of the angle irons. Drill holes in two angle irons if span is 8 ft (2.4 m) or less. Drill holes in four angle irons if span is greater than 8 ft (2.4 m).



3. Secure angle irons (if span is longer than 8 ft)

If the angle iron span is 8 ft (2.4 m) or less, proceed to step 4a on the following page.

If the angle iron span is longer than 8 ft (2.4 m), it is necessary to use double angle irons.

Locate the center of the angle iron length. Drill $\text{Ø } 9/16''$ (1.4 cm) hole through the center of the vertical wall of the angle iron. Drill a total of four angle irons.

Place two drilled angle irons back to back. Fasten the angle irons together with customer-supplied Grade 8 hardware.

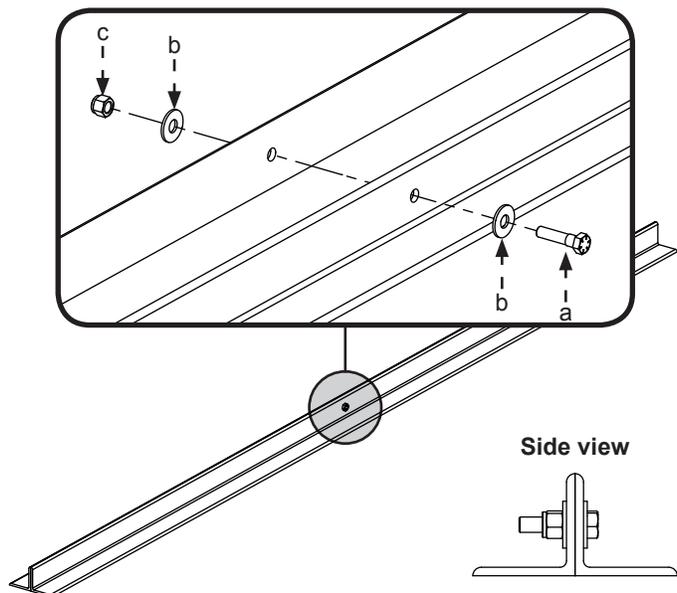
Align the angle irons to each other and tighten the bolts to **40 ft·lb (54.2 N·m)** using a torque wrench and $3/4''$ socket.

Repeat step for remaining two (2) angle irons.

Proceed to step 4b.

Grade 8 Hardware (Customer-Supplied):

- (2) $1/2\text{-}13$ Bolt
- (4) $1/2''$ Washer
- (2) $1/2\text{-}13$ Nylock Nut



4a. Fasten single angle irons to roof structure mounting points

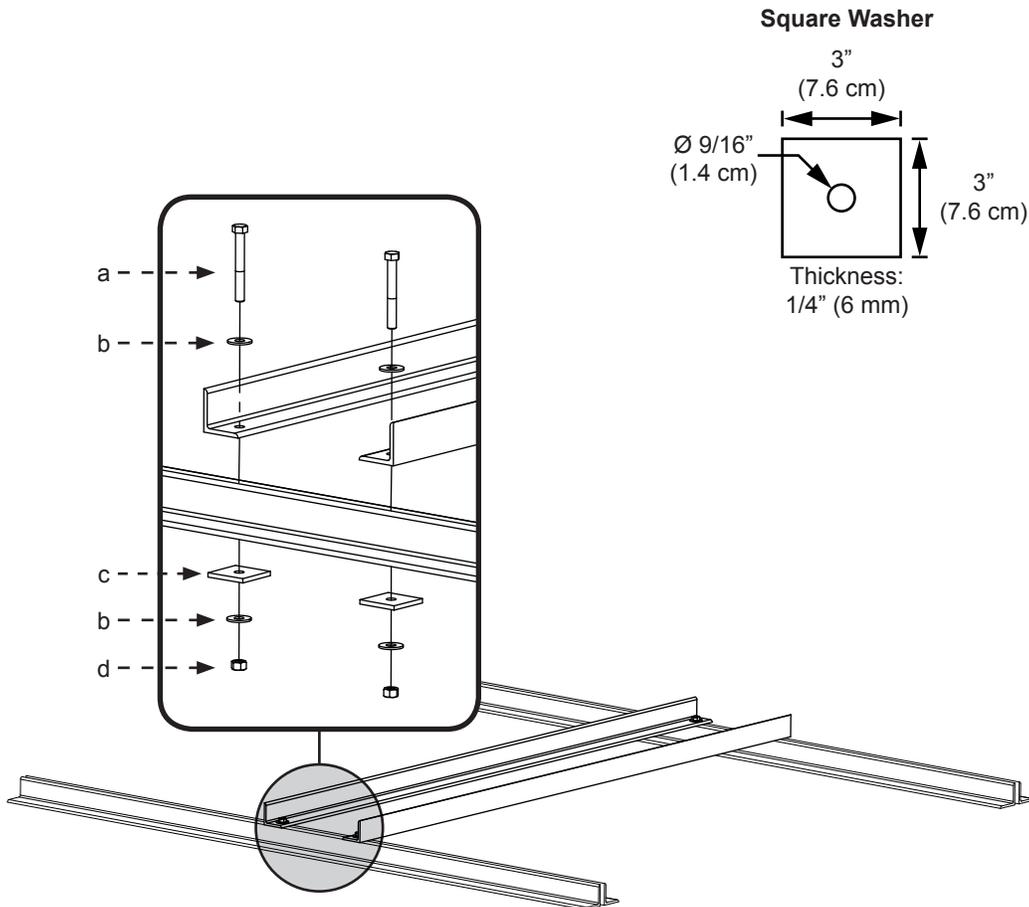
If the angle iron span is greater than 8 ft (2.4 m) and requires double angle irons, proceed to step 4b.

Fasten the angle irons to the roof structure mounting points at each end with customer-supplied Grade 8 hardware as shown. *Do not tighten the hardware until the fan has been mounted to the angle irons.*

Proceed to step 5.

Grade 8 Hardware (Customer-Supplied):

- a. (4) 1/2-13 Bolt
- b. (8) 1/2" Washer
- c. (4) 3" Square Washer (BAF-Supplied; see diagram)
- d. (4) 1/2-13 Nylock Nut

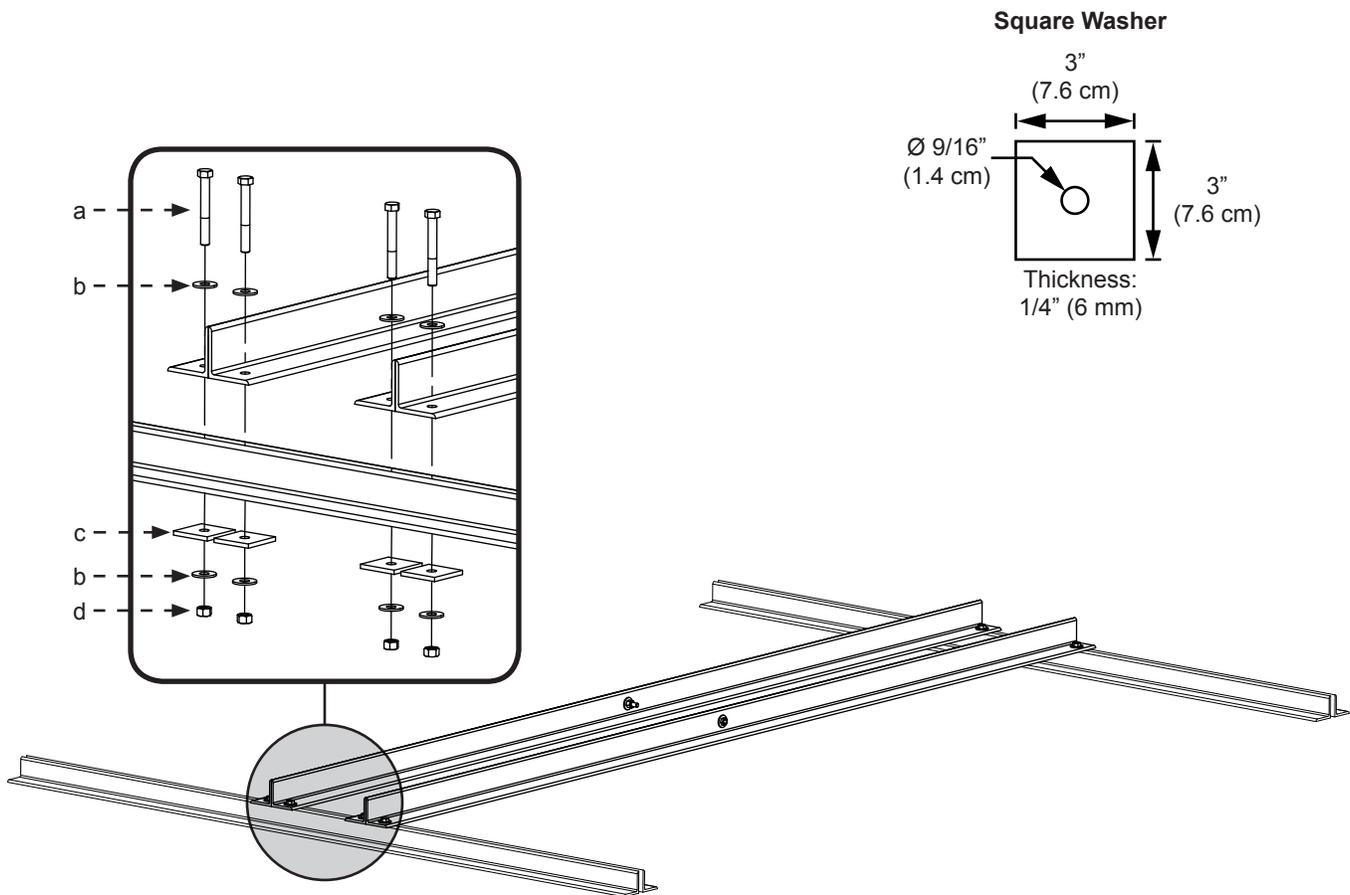


4b. Fasten double angle irons to roof structure mounting points

Fasten the angle irons to the roof structure mounting points at each end with customer-supplied Grade 8 hardware as shown. The angle irons with fan mounting holes should be positioned on the inside, facing each other. *Do not tighten the hardware until the upper yoke has been mounted to the angle irons.*

Grade 8 Hardware (Customer-Supplied):

- a. (8) 1/2-13 Bolt
- b. (16) 1/2" Washer
- c. (8) 3" Square Washer (BAF-Supplied; see diagram)
- d. (8) 1/2-13 Nylock Nut



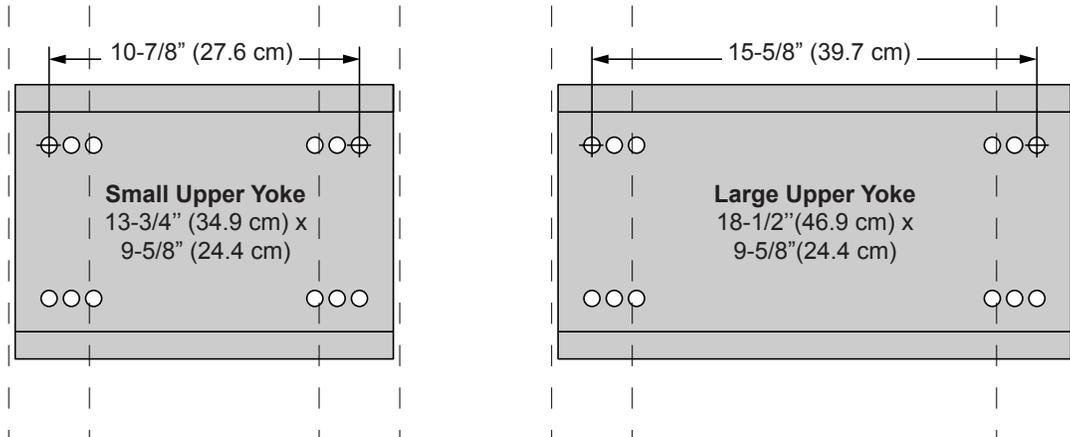
5. Attach upper yoke (to angle irons)

Secure the upper yoke directly to the angle irons with the Beam Clip Hardware as shown. The angle irons should be aligned with the outermost holes of the upper yoke. Consult the diagrams below for distances between the angle irons.

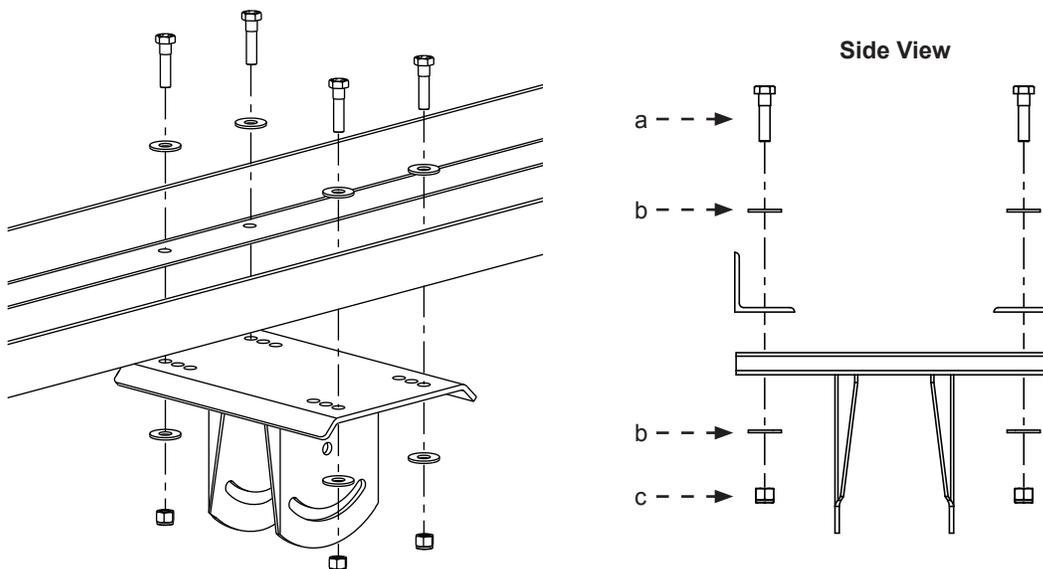
Tighten the bolts to **40 ft·lb (54.2 N·m)** using a torque wrench and 3/4" socket.

Beam Clip Hardware (BAF-Supplied):

- (4) 1/2-13 x 2" GR 8 Bolt
- (8) 1/2" Flat Washer
- (4) 1/2-13 Nylock Nut



Note: Dashed lines represent angle irons in the above illustrations.



Hanging the Fan

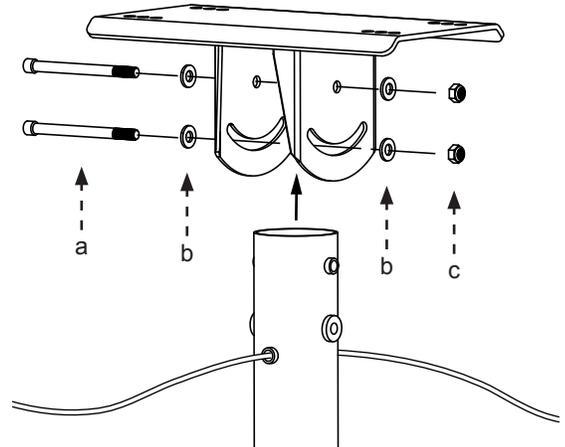
1. Attach extension tube (to upper yoke)

Fasten the extension tube to the upper yoke (already attached to I-beam or angle irons) using the Extension Tube Hardware as shown. *Before tightening the bolts, allow the extension tube to hang freely and balance itself.*

Tighten the bolts to **40 ft·lb (54.2 N·m)** using a 3/8" Allen wrench and a 3/4" socket with torque wrench

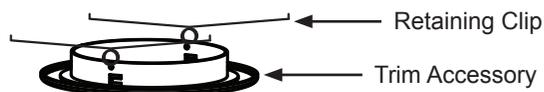
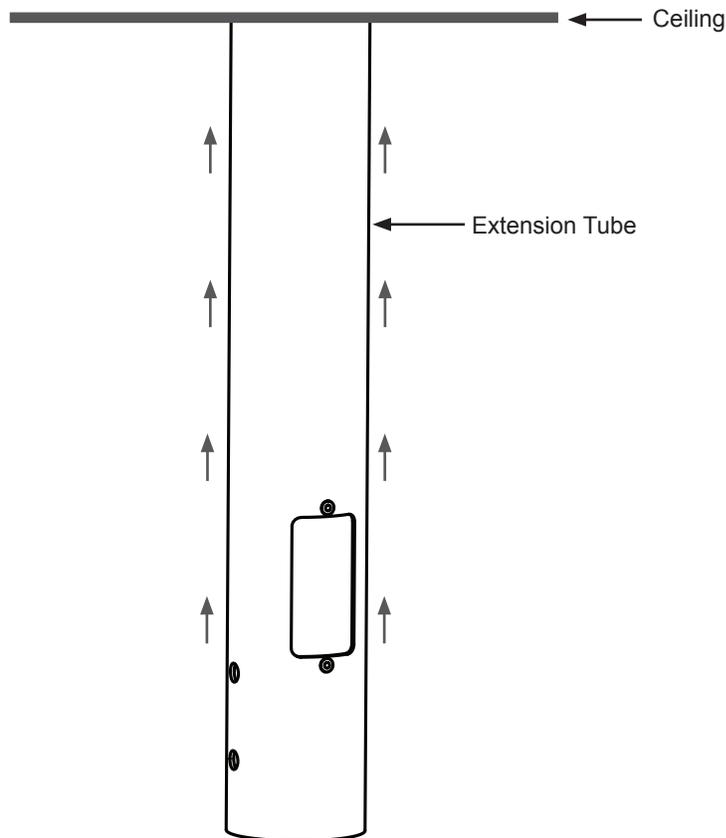
Extension Tube Hardware:

- a. (2) 1/2-13 x 6" Bolt
- b. (4) 1/2" Flat Washer
- c. (2) 1/2-13 Nylock Nut



2. Install trim accessory

Slide the trim accessory around the extension tube and raise it to the ceiling. Pinch both retaining clips, slide them through the hole in the ceiling, and release.

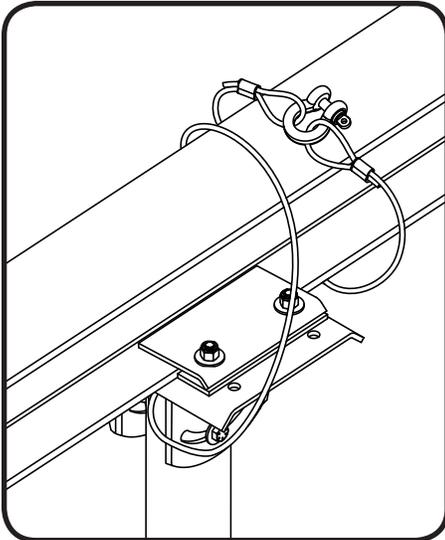


3. Secure upper safety cable

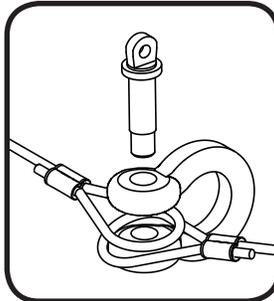
The safety cable is a crucial part of the fan and must be installed correctly. If you have questions, call Customer Service for assistance.

Secure the safety cable to the I-beam or angle iron by wrapping it around the I-beam or angle iron and securing the looped ends with the shackle as shown. The cable must be drawn tightly around the I-beam or angle iron, leaving as little slack as possible. If possible, the shackle should be on the topside of the I-beam or angle iron. Securely tighten the shackle.

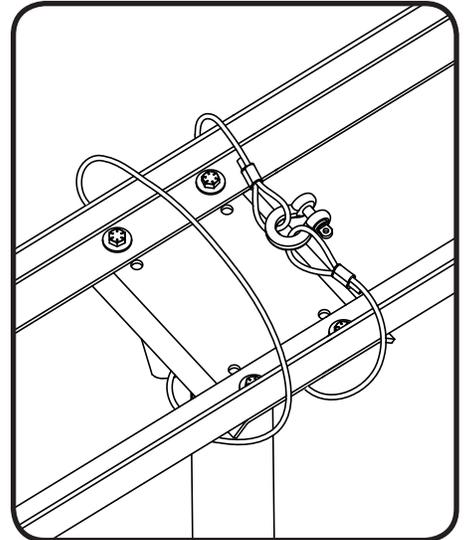
I-Beam Mount



Shackle



Angle Iron Mount



4. Attach main fan unit (to extension tube)

Do not discard the main fan unit packaging and foam. It should be used if the fan is ever moved or relocated.

- ⚠ **CAUTION:** Do not remove the motor from its protective packaging prior to hanging it!
- ⚠ **CAUTION:** To prevent damage, avoid contact with the printed circuit board located on the bottom of the fan!
- ⚠ **CAUTION:** The main fan unit is heavy. Use care when raising it.

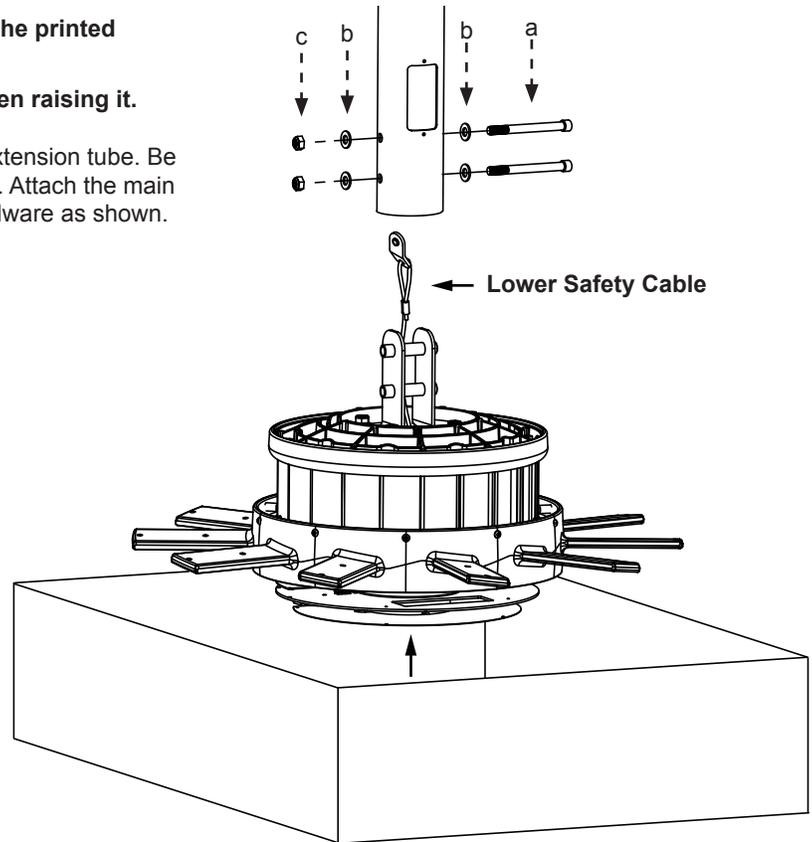
Raise the main fan unit directly from its packaging to the extension tube. Be sure to route the lower safety cable into the extension tube. Attach the main fan unit to the extension tube using the Main Fan Unit Hardware as shown.

Tighten the bolts to **20 ft·lb (27.1 N·m)** using a 3/8" Allen wrench and a torque wrench and 3/4" socket.

Note: If installing guy wires, see "Installing Guy Wires" on p. 18.

Main Fan Unit Hardware:

- a. (2) 1/2-13 x 5" Bolt
- b. (4) 1/2" Flat Washer
- c. (2) 1/2-13 Nylock Nut



5. Secure lower safety cable

Big Ass Fans recommends completing electrical installation (p. 20) and testing the connections before installing the airfoils.

- ⚠ **CAUTION:** When securing the lower safety cable, be careful not to pinch any electrical wiring that may be routed through the extension tube.

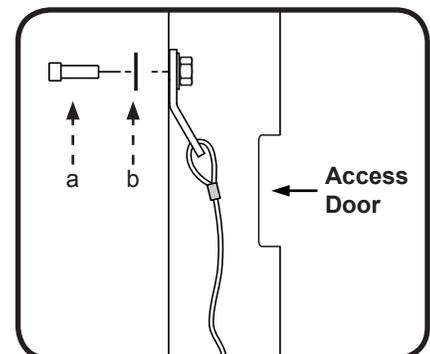
Remove the access door from the extension tube with a 3/32" Allen wrench. Save the door and screws.

The lower safety cable is equipped with a pre-assembled plate and weld nut. Fasten the end of the lower safety cable to the inside wall of the extension tube using the Lower Safety Cable Hardware as shown.

Tighten the bolt to **20 ft·lb (27.1 N·m)** using a 3/8" Allen wrench and torque wrench.

Lower Safety Cable Hardware:

- a. (1) 1/2-13 x 1 1/2" Bolt
- b. (1) 1/2" Flat Washer



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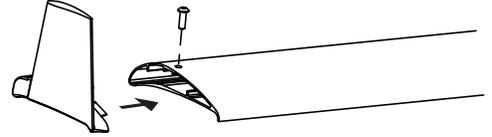
Installing Airfoils

Big Ass Fans recommends completing electrical installation (p. 20) and testing the connections before installing the airfoils.

⚠ WARNING: Disconnect power to the fan before installing the airfoils.

1. Attach winglets to airfoils

Attach the winglet to the airfoil using the Winglet Hardware as shown. Securely tighten the screws using a 1/8" Allen wrench. *Attach winglets to all ten (10) airfoils before attaching the airfoils to the fan.*

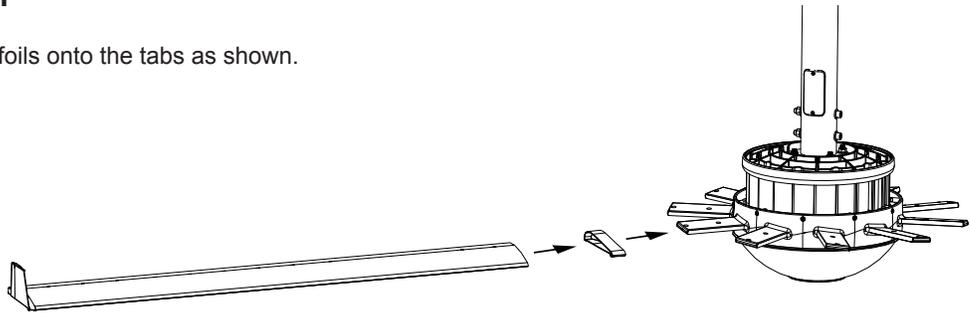


Winglet Hardware:

(10) 1/4-20 x 3/4" Screw

2. Position airfoils and trim

Slide the airfoil trim pieces and the airfoils onto the tabs as shown.



3. Attach airfoils to main fan unit

Attach the 10 airfoil retainers with the Airfoil Hardware. Moving clockwise around the fan hub, position the airfoil retainers end over end as shown. Hole A of the retainer should be positioned over top of Hole B. *Do not tighten the bolts until all the airfoil retainers have been attached!*

Tighten the bolts along the outer perimeter to **29 ft·lb (39.3 N·m)** using a torque wrench and 1/2" socket. After the outer perimeter bolts are torqued, tighten the bolts along the inner perimeter to **29 ft·lb (39.3 N·m)** using a torque wrench and 1/2" socket.

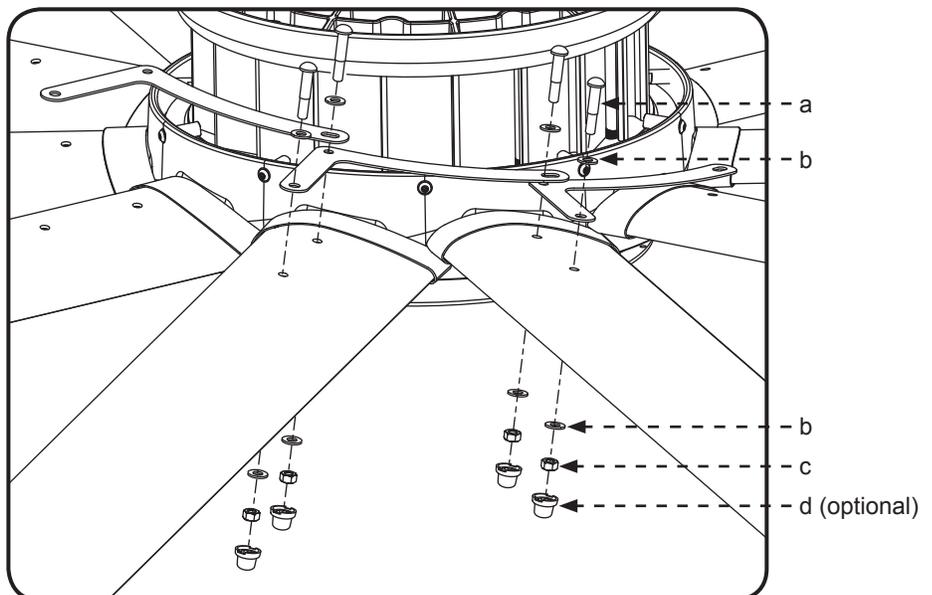
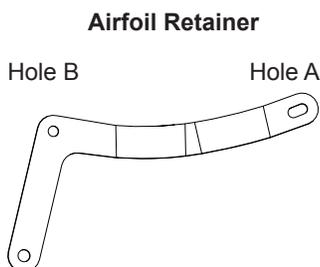
If desired, place nut covers on the nuts. *Note: Nut covers are packaged with the trim and center cap.*

Airfoil Hardware:

- a. (20) 5/16-18 x 1-3/4" GR 8 Bolt
- b. (40) 5/16" Washer
- c. (20) 5/16-18 Nylock Nut

Nut covers:

- d. (20) 1/2" Nut Cover (optional)



Installing Dome

⚠ WARNING: Disconnect power to the fan before installing the dome.

Note: A round dome is shown in the illustrations below. An optional flat dome is available.

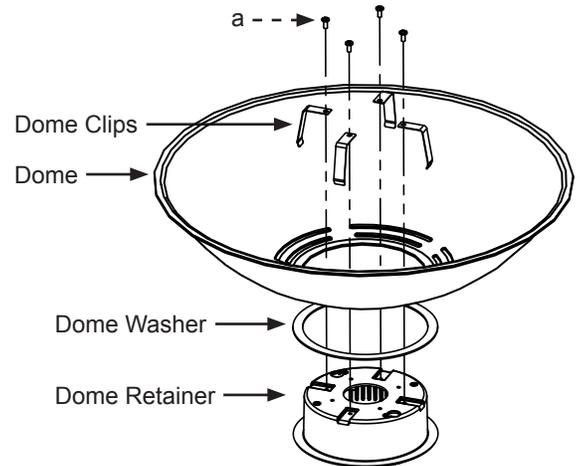
1. Assemble dome

Assemble the dome, dome clips, dome washer, and dome retainer as shown. Secure the dome clips to the dome retainer with the Dome Retainer Hardware (8-18 x 3/8" screws).

Securely tighten the screws using a flat head screwdriver.

Dome Retainer Hardware (1):

- a. (4) 8-18 x 3/8" Screw



2. Attach dome to static hub

Big Ass Fans does not recommend installing a light module on the Element.

Insert two (2) screws from the Dome Retainer Hardware (1/4-20 x 5/8" screws) into the static hub as shown. The screws should be placed diametrically opposite of one another. Do not tighten the screws.

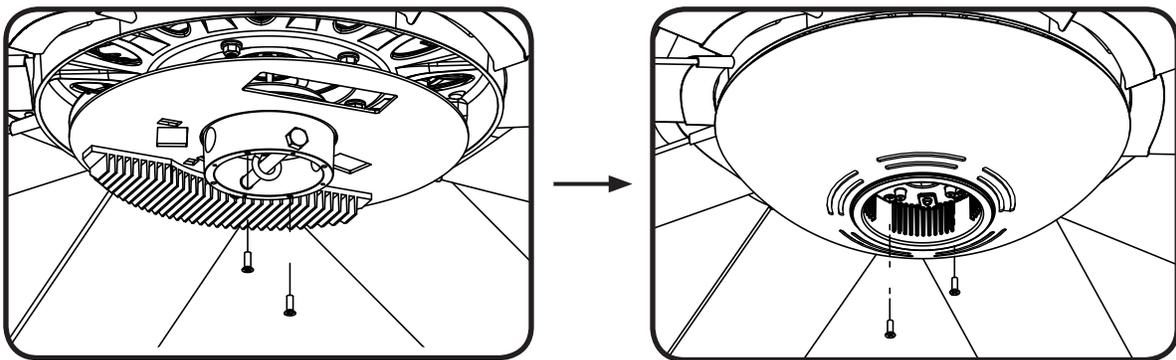
Attach the dome assembly to the static hub. Guide the dome retainer keyhole slots to the static hub screws. Turn the dome assembly clockwise.

Insert two (2) more screws from the Dome Retainer Hardware (1/4-20 x 5/8" screws) into the dome retainer to secure it to the static hub.

Securely tighten all screws using a flat head screwdriver.

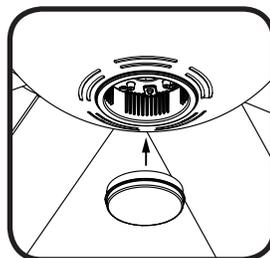
Dome Retainer Hardware (2):

- (4) 1/4-20 x 5/8" Screw



3. Attach center cap to dome

Snap the center cap into the dome retainer.



18

Installing Guy Wires

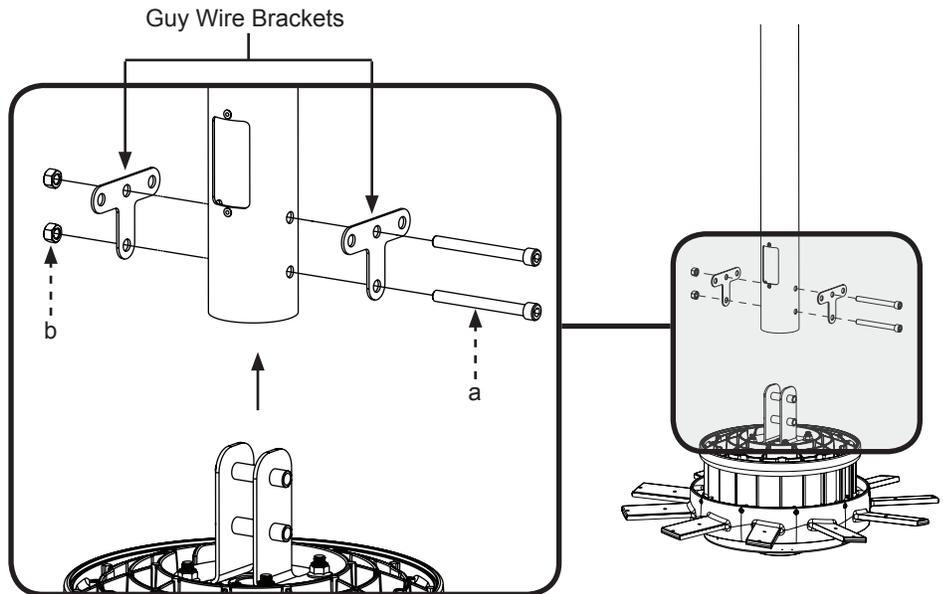
Guy wires may not be included in your fan order. They are intended to constrain the fan's lateral movement and are only included with all fans that have extension tubes 4 ft (1.2 m) or longer.

1. Attach guy wire brackets

Attach the guy wire brackets to the extension tube and main fan unit using the Mounting Hardware as shown. *Note: Do not use the supplied washers when installing guy wire brackets on Element.*

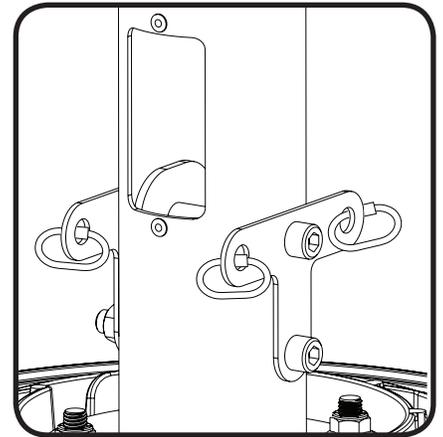
Mounting Hardware (BAF-Supplied):

- a. (2) 1/2-13 x 5" Bolt
- b. (2) 1/2-13 Nylock Nut



2. Attach locking carabiners to guy wire brackets

Secure the (4) locking carabiners to the guy wire brackets as shown. Securely tighten the carabiners.



3. Attach beam clamp

Attach the beam clamp to the mounting structure. *The guy wire should be at approximately a 45° angle from the roof to the extension tube (see the illustrations on the following page).* Place the beam clamp accordingly.

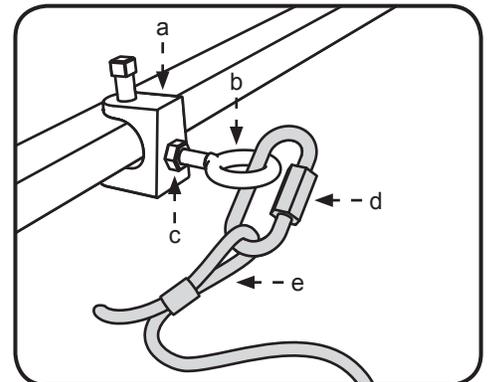
For best results, the guy wires should be installed at 45° in the X-Y, Y-Z, and X-Z planes as shown on the following page. If the angle deviates by more than 15°, contact Customer Service for assistance.

Fasten the small eyebolt and nut onto the beam clamp. The nut will be on the outside of the beam clamp.

Loop the crimped end of the guy wire into the locking carabiner and secure to the eyebolt as shown. Securely tighten the carabiner.

Guy Wire Hardware (BAF-Supplied):

- a. 1/4" Beam Clamp
- b. 1/4-20 x 1" Eyebolt
- c. 1/4-20 Hex Nut
- d. Locking Carabiner
- e. Guy Wire

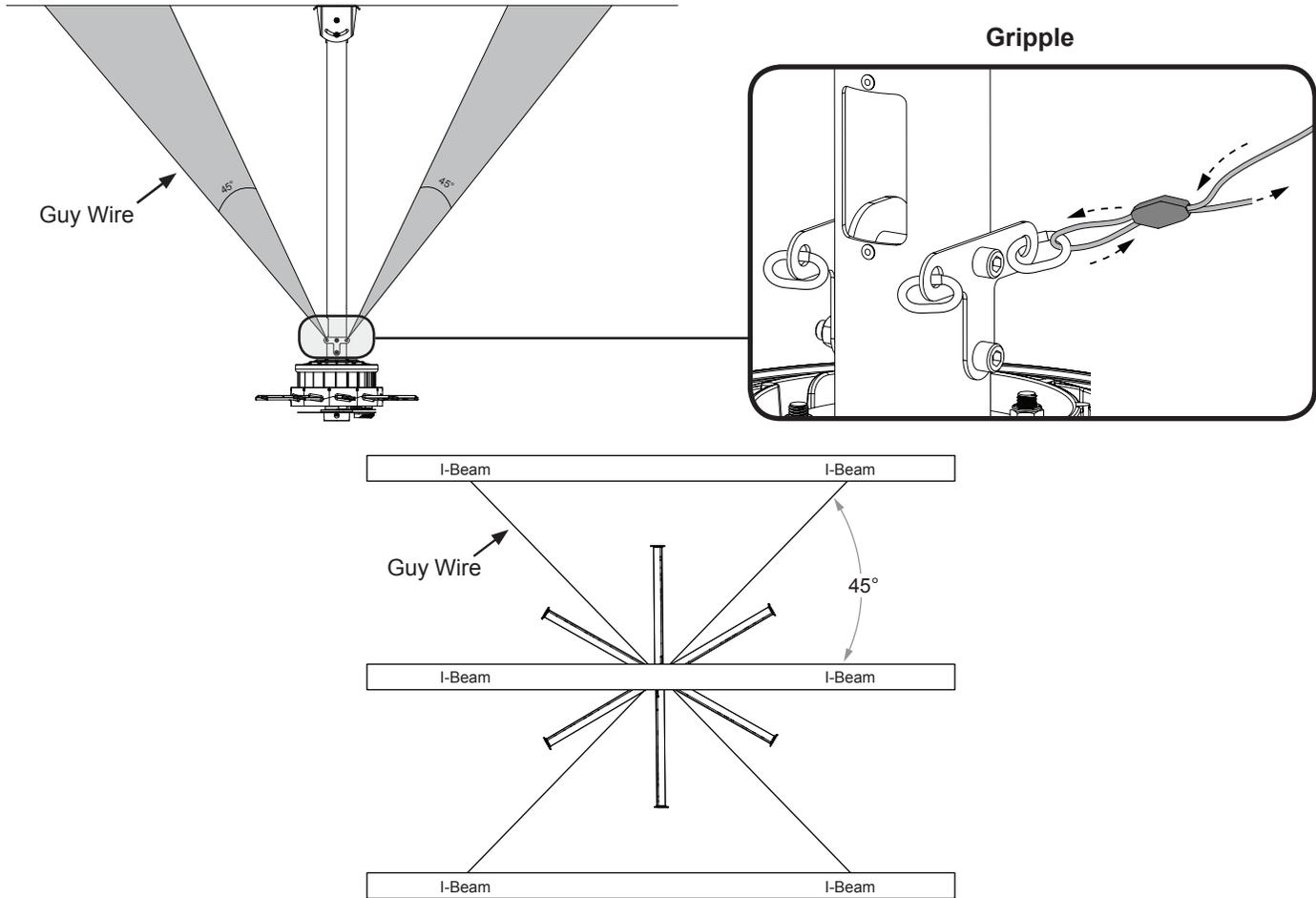


4. Route guy wire through Gripple®

Route the guy wire through the Gripple, the carabiner on the motor, and back through the Gripple as shown. Do not tighten the Gripple until the remaining guy wires have been installed.

Note: To back the guy wire out of the Gripple, insert 1/16 (1.5 mm) Allen wrench into the small hole on the Gripple.

Note: I-beams are shown in the illustration below. Your mounting structure may differ.



Note: I-beams shown above. Your mounting structure may differ.

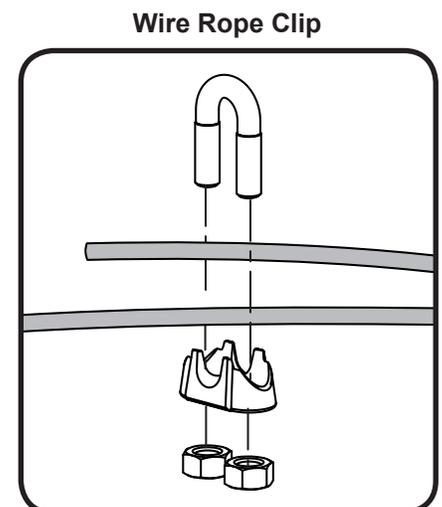
5. Install remaining guy wires

Repeat steps 3–4 to install the three remaining guy wires.

⚠ CAUTION: Over-tightening the guy wires could throw the fan off balance.

Evenly cinch all four guy wires into place using the Gripples. The guy wires should be taut, evenly spaced around the fan, and away from the path the airfoils. Maintain a distance of 6"–8" between the Gripple and the frame mounting eyebolt.

Once all of the guy wires are taut, secure their loose ends with the wire rope clips and torque to **4.5 ft·lb (6.1 N·m)**. The wire rope clip nearest the eyebolt should create a loop about 2" in length. The second wire rope clip should be located 3"–4" from the first clip. Trim the cables so there is no more than 1"–3" extending from the end of the Gripple. *Ensure all electrical cords/cable are unobstructed by the guy wire system.*



Electrical Installation



WARNING: To reduce the risk of electric shock, wiring should be performed by a qualified electrician! Incorrect assembly can cause electric shock or damage the motor and the controller! Hazard of electrical shock!

WARNING: The installation of a Big Ass Fan must be in accordance with the requirements specified in this installation manual and with any additional requirements set forth by the national electric code (NEC), ANSI/NFPA 70-2011, and all local codes. Code compliance is ultimately YOUR responsibility!

WARNING: The fan controllers contain high voltage capacitors which take time to discharge after removal of mains supply. Before working on the fan controller, ensure isolation of mains supply from line inputs at the fan controller board (L1, L2/N). Wait three minutes for capacitors to discharge to safe voltage levels. Failure to do so may result in personal injury or death.

CAUTION: The Big Ass Fans product warranty will not cover equipment damage or failure that is caused by improper installation.

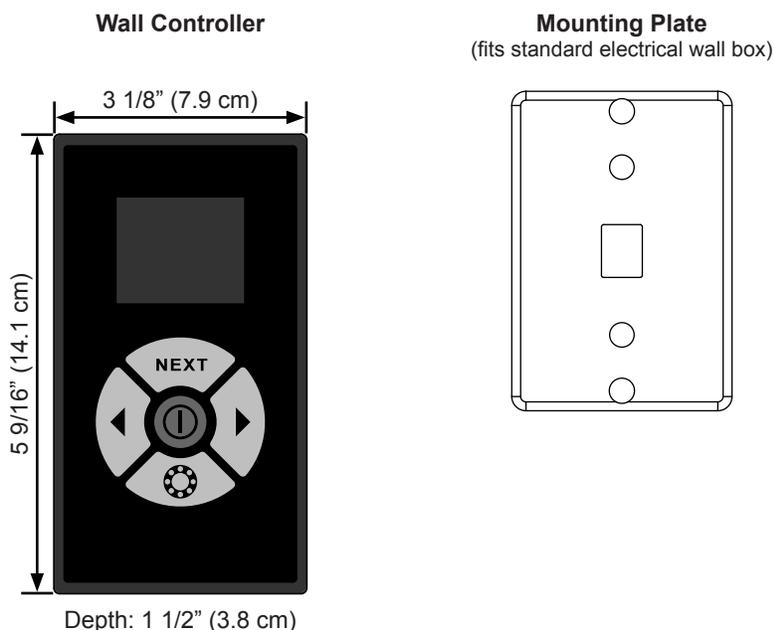
WARNING: Exercise caution and common sense when powering the fan. Do not connect the fan to a damaged or hazardous power source. Do not attempt to resolve electrical malfunctions or failures on your own. Contact Big Ass Fans if you have any questions regarding the electrical installation of this fan.

ATTENTION: If installing the fan in the United States, the fan must be installed per the following National Fire Protection Association (NFPA) guidelines:

- The fan must be centered approximately between four adjacent sprinklers.
- The vertical distance from the fan to the sprinkler deflector must be at least 3 ft (91.4 cm).
- The fan must be interlocked to shut down immediately upon receiving a waterflow signal from the alarm system.

Mounting the wall controller

To mount the wall controller, install the controller on a flat surface that is readily accessible, free from vibration, and where there is adequate distance from foreign objects or moving equipment. Attach the mounting plate to a standard electrical wall box using customer-supplied hardware. Use the key hole slots on the wall controller to attach it to the mounting plate. Mount the wall controller so that the fan(s) it controls is visible from the wall controller location.



Wiring connections

Route wiring through the top of the extension tube to the electronics mounting plate on the underside of the fan.

CAUTION: To prevent damage, avoid contact with the printed circuit board located on the bottom of the fan!

Wiring the motor

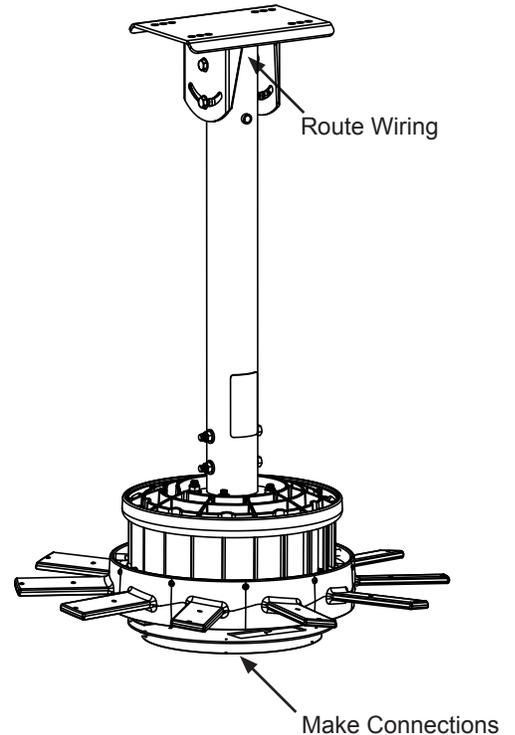
Adhere to the following when wiring the motor:

- Follow the diagrams on the following pages to connect power supply to the fan.
- Required Supply Circuit Size: 100–250 VAC Single Phase
- Max Amp: 6.4 A @ 100–125 V, 1 Φ ; 3.2 A @ 200–250 V, 1 Φ
- Wire Type: 14 AWG (not supplied)
- Input Power Terminal Torque: 15 in·lbs (1.69 N·m)

Wiring the wall controller

Adhere to the following when wiring the controller:

- Follow the diagrams on the following pages to connect the wall controller to the fan.
- The required cable type is category 5 or 5E patch cable (not supplied). The cable should be straight-through type (not crossover). For easiest installation, Big Ass Fans recommends using a pre-made cable available at most electronics retailers. *Note: A short category 5 cable is included for fan startup verification.*
- The connector type is RJ45 (not supplied).
- The maximum cable length is 3000 ft (with 120 ohm termination resistance).

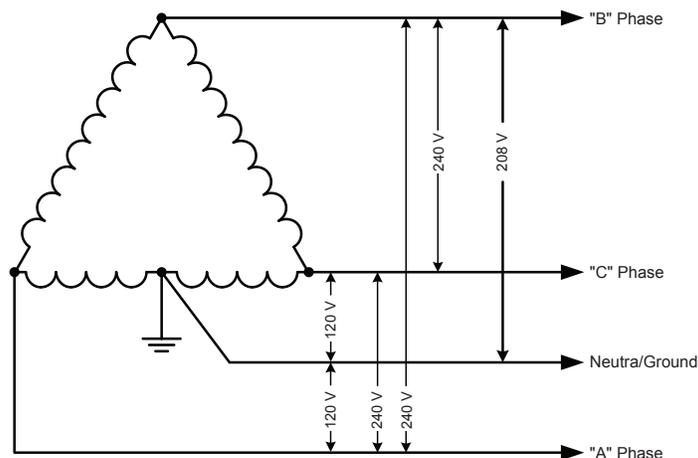


Delta secondary

CAUTION: Care must be taken when connecting the Element fan to a three phase 240/120V Secondary as shown above. The Element fan controller relies on internal references made between each incoming phase and ground. To prevent damage to the fan controller, adhere to the the following recommendations:

The following is a common arrangement available for industrial and commercial power distribution in the United States.

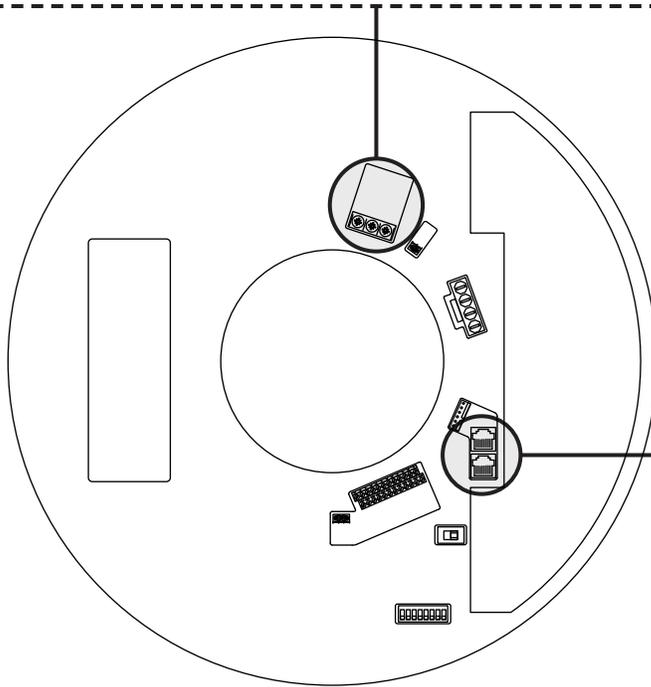
- **240V/120V Three Phase (Delta Secondary)**, which provides 240 V between phases for three phase loads, 120 V from phase "A" and "C" to Neutral / Ground, and 208 V from phase "B" to Neutral / Ground as shown below. In this transformer arrangement, phase "B" is commonly referred to as a **"Wild Leg" or "High Leg,"** and should be marked accordingly with an orange finish or other effective means per NEC 110.15.
- **200V-250V Single phase** fan controllers should be connected so that only phase "A" and phase "C" are utilized. (Each power lead should measure 120 V to Ground.)



Wiring connections diagram

J8- Main Power Connections

- Supply Voltage: 120–250 VAC Single Phase
- Required Circuit Size: 10 A @ 200–250 V, 15 A @ 100–125V
- Max Amp: 6.4 (120 V), 3.7 (208 V), 3.2 (240 V)
- Wire Type- 14 AWG (not supplied)
- Input Power Terminal Torque: 15 in·lbs (1.69 N·m)



J19, J15- Wall Controller Connections



J19 Remote Control Unit
In / Out #1

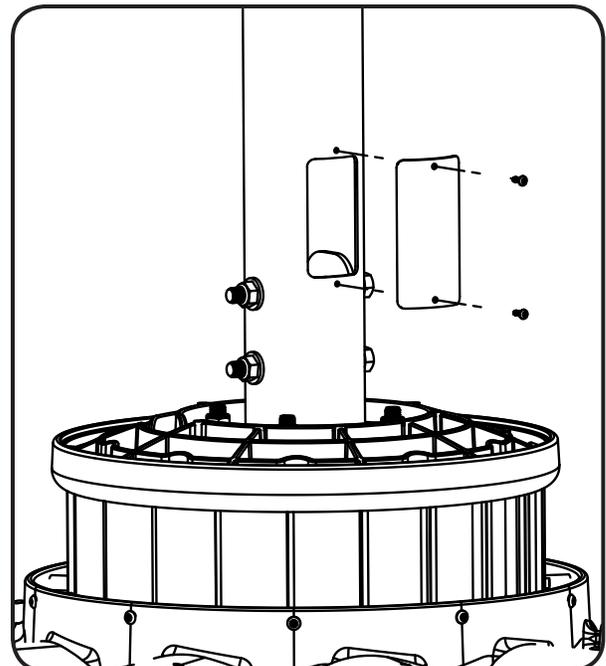


J15 Remote Control Unit
In / Out #2

- Supplied remote will work in either location
- Cable Type: Category 5 or 5E
- Connector Type: RJ45

Attach wiring access door

After all connections have been made, attach the wiring access door.
Securely tighten the screws using a 3/32" Allen wrench.



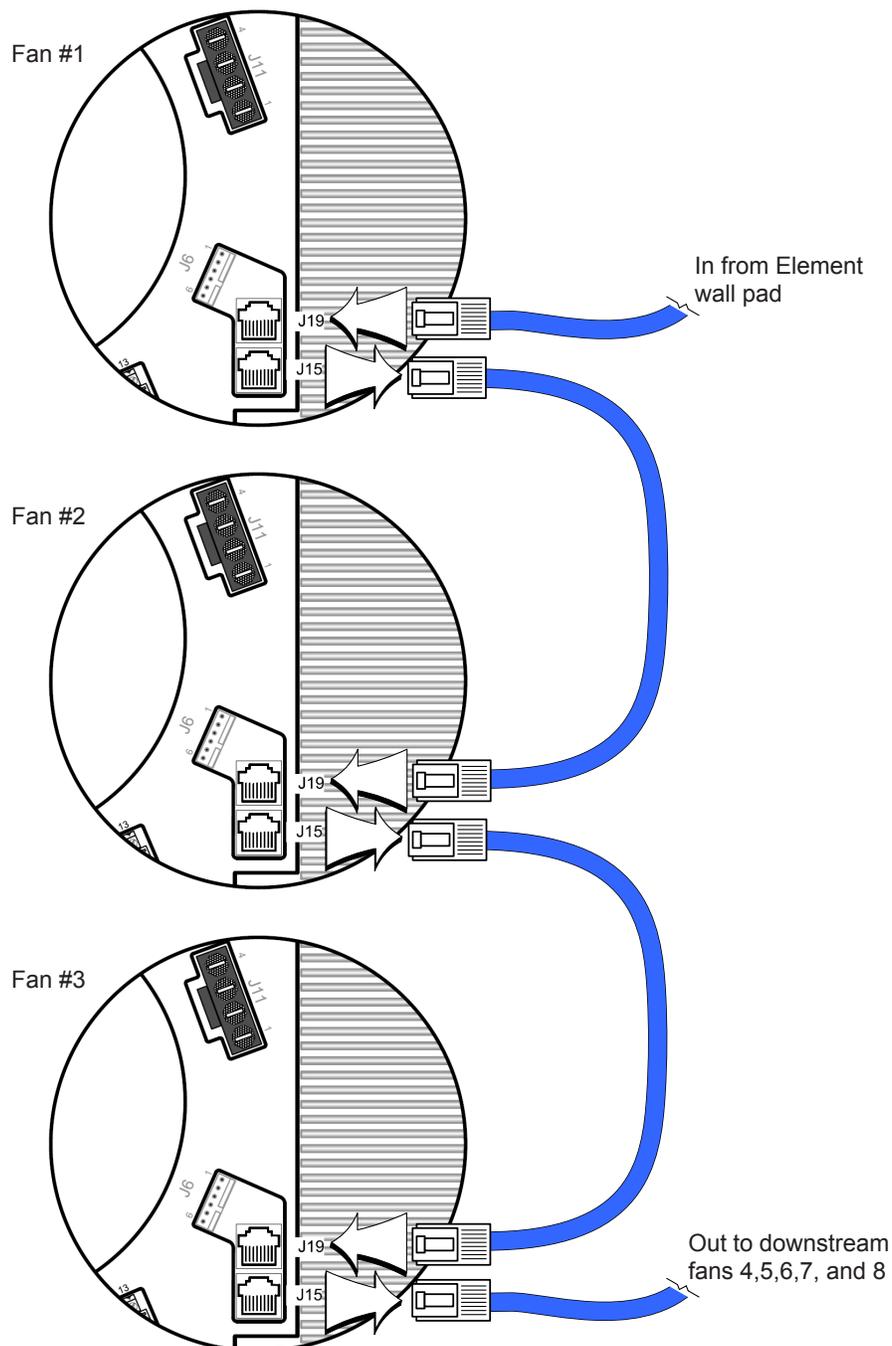
Daisy chaining

Either port on the Element is acceptable for input or output. J15 and J19 can be treated as input or output at the discretion of the user; however, the connectors must be used accordingly on each fan. Route wiring through the top of the extension tube to the electronics mounting plate on the underside of the fan.

The following illustrates a typical setup utilizing multiple Element fans and a single wallpad, allowing for the operation of multiple fans with a single wallpad installation. *Note: The Element wallpad can control a maximum of eight (8) fans independently.*

The Element fan's communications loop utilizes standard CAT5 Ethernet patch cable assemblies wired to either the 568A or 568B standard.

Connect the wallpad to connector J19 on Fan #1. On the same fan (#1), wire out of connector J15 and into the J19 connector on Fan #2. Repeat this on up to six (6) additional Element fans.



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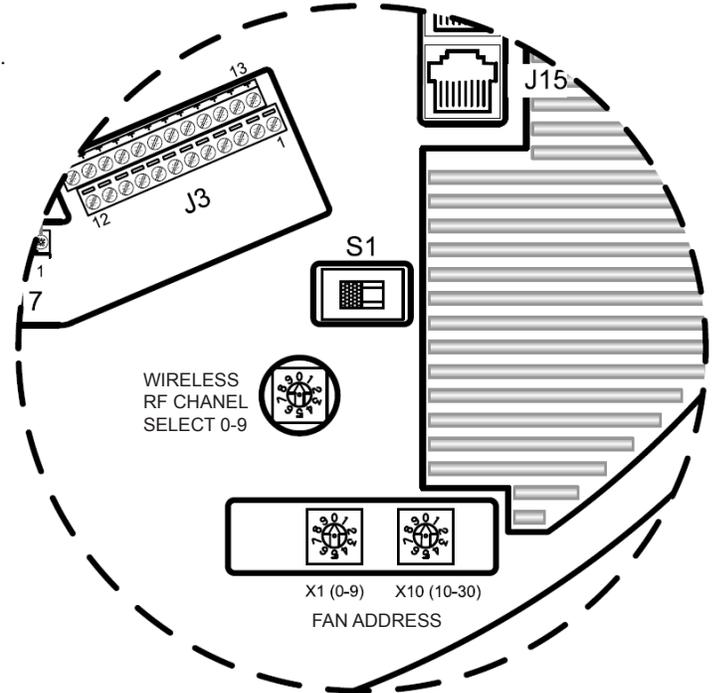
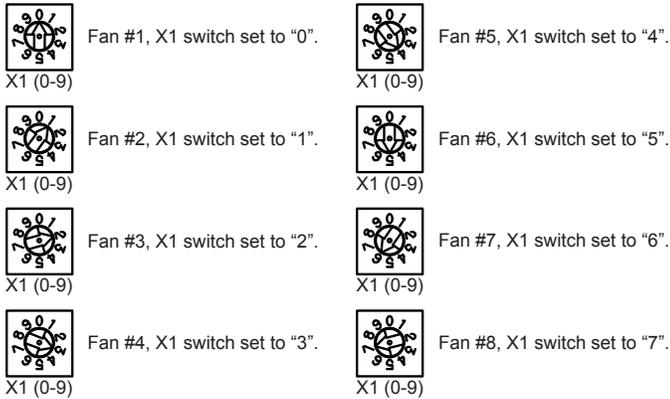
Electrical Installation (cont.)

Addressing

Depending on the version, one of two methods of addressing are implemented on Element fan motor assemblies. Earlier versions use two rotary selector switches, which adjust both the address' least significant digit and most significant digit. In later versions, a four position dip switch is utilized for address assignment. In either case, the range of addressing for the fan is 0 through 7 (Fan #1 through Fan #8) on the wallpad.

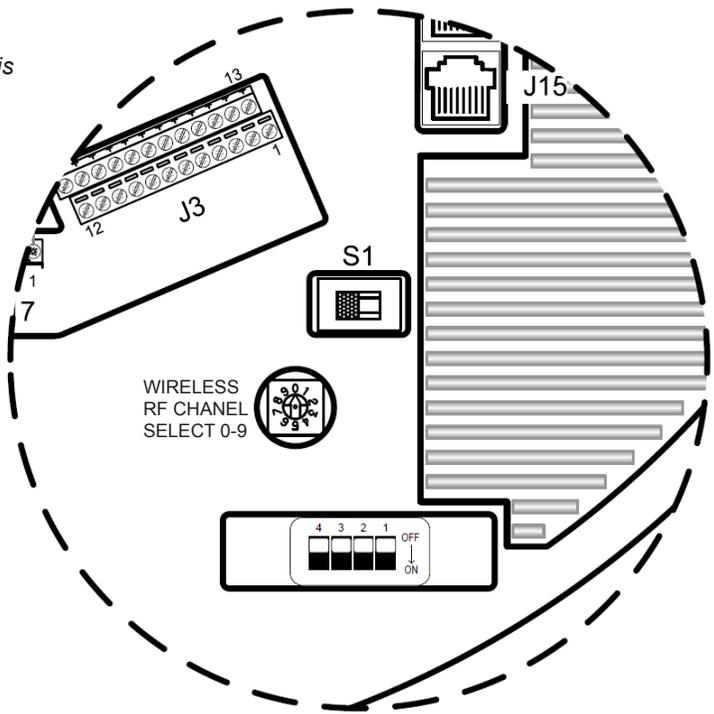
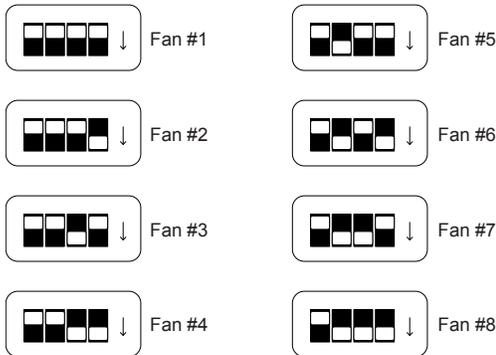
Rotary switch addressing

Adjustments are made using switch X1, the least significant digit only. X1 can be rotated in either direction for a setting of 0 through 7. *Settings 8 and 9 are inactive.* The factory default address setting is 1.



Dip switch addressing

Adjustments are made using switch positions 1, 2, and 3. *Position 4 is inactive.* The factory default address setting is 1 (all switches off).



Interfacing with Building Automation Systems 25

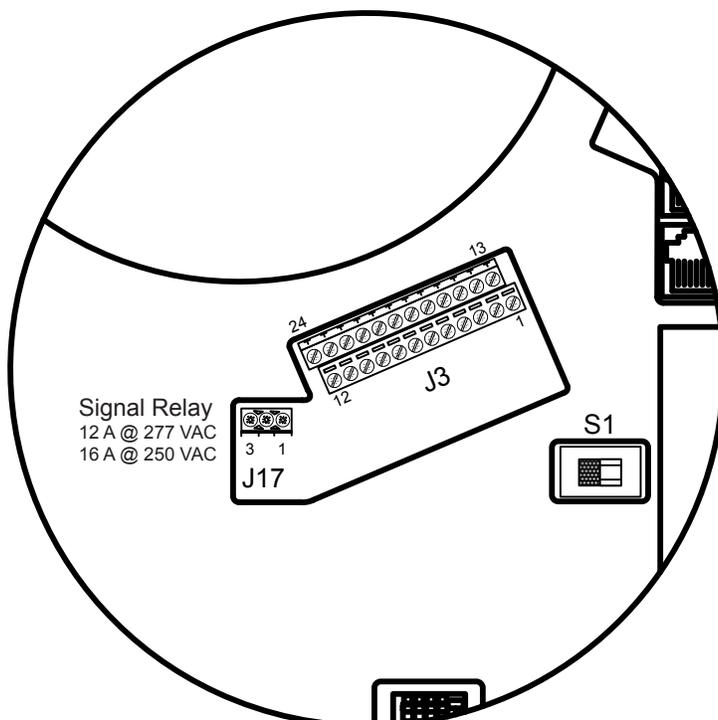
The following illustrates a typical setup utilizing the Element fan's onboard input/output terminals. The connections allow the user or installer to interface the Element fan with HVAC controls that are typical of older systems and in new construction.

In order for the onboard inputs and outputs to be utilized, the wall control must be disconnected.

Wiring

Terminal block J3 contains both discreet and analog I/O.

Terminal block J17 is a drive status relay contact, which will change upon drive fault conditions.



J3 Pin Identification	
1	GND/DCCom
2	Digital Out #2
3	Digital Out #1
4	GND/DCCom
5	Digital In #4
6	Digital In #3
7	Digital In #2
8	Digital In #1
9	Direction CW/CCW
10	GND/DCCom
11	RUN Enable
12	Ambient Thermistor (-)
13	GND/DCCom
14	RS232-RXD
15	GND/DCCom
16	RS232-TXD
17	Analog Output
18	4-20mA Loop Power
19	+20 VDC
20	4-20mA Input (Z=100Ω)
21	+10 VDC
22	0-10 VDC Input (Z=20kΩ)
23	GND/DCCom
24	Ambient Thermistor (+)

J17 Pin Identification	
1	Normally Closed
2	Common
3	Normally Open

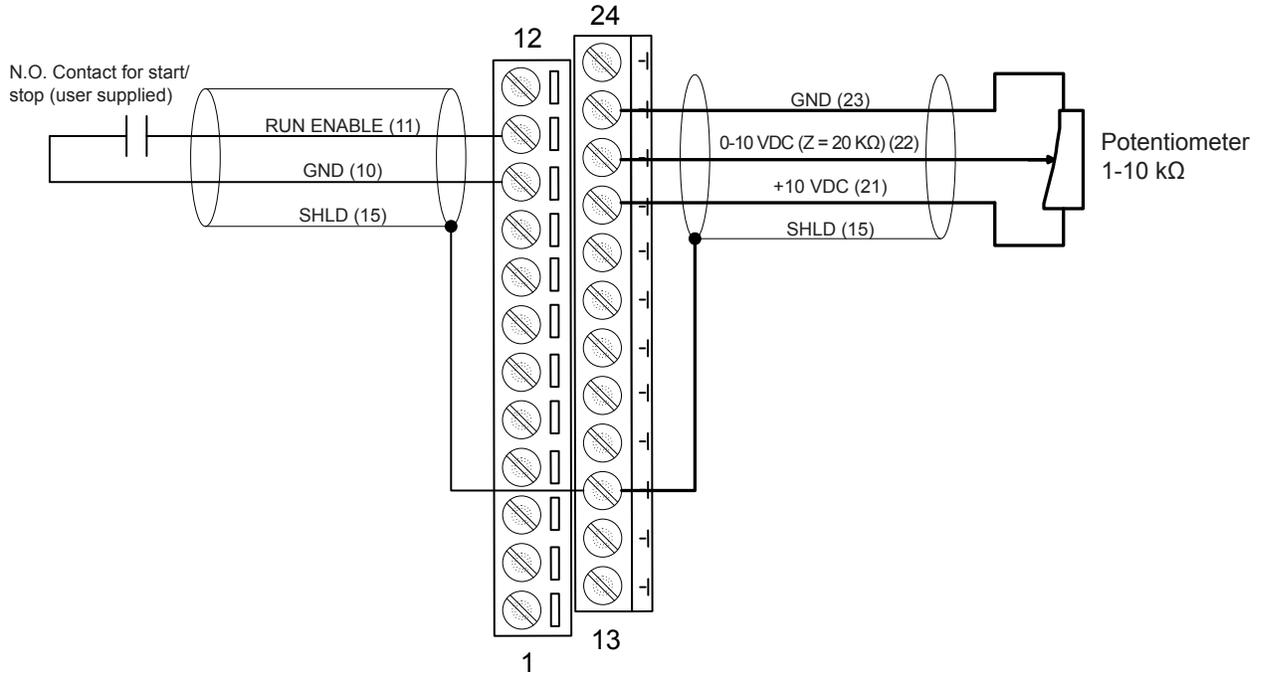
26

Interfacing with Building Automation Systems (cont.)

0–10VDC analog speed reference

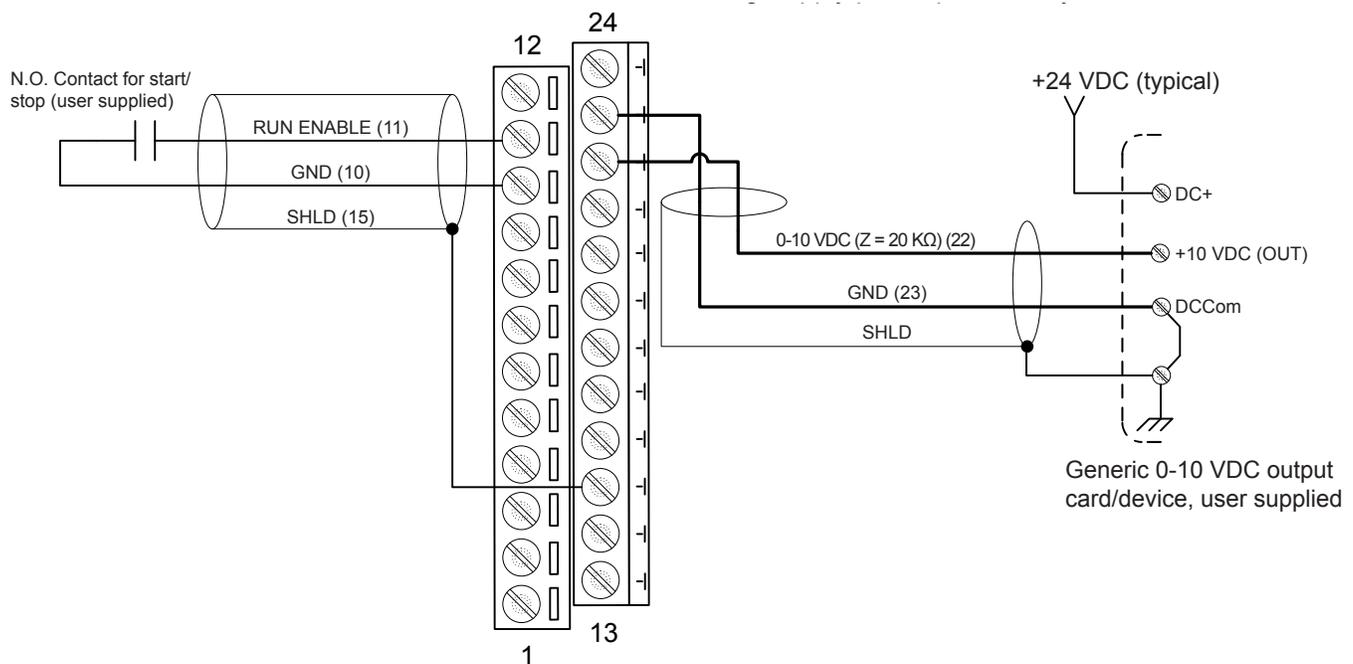
Option one

10VDC is sourced from the Element circuit board. 0-10VDC input impedance is 20k Ω . Minimum 18 AWG shielded cable is recommended. Only ground cable shield at source end.



Option two

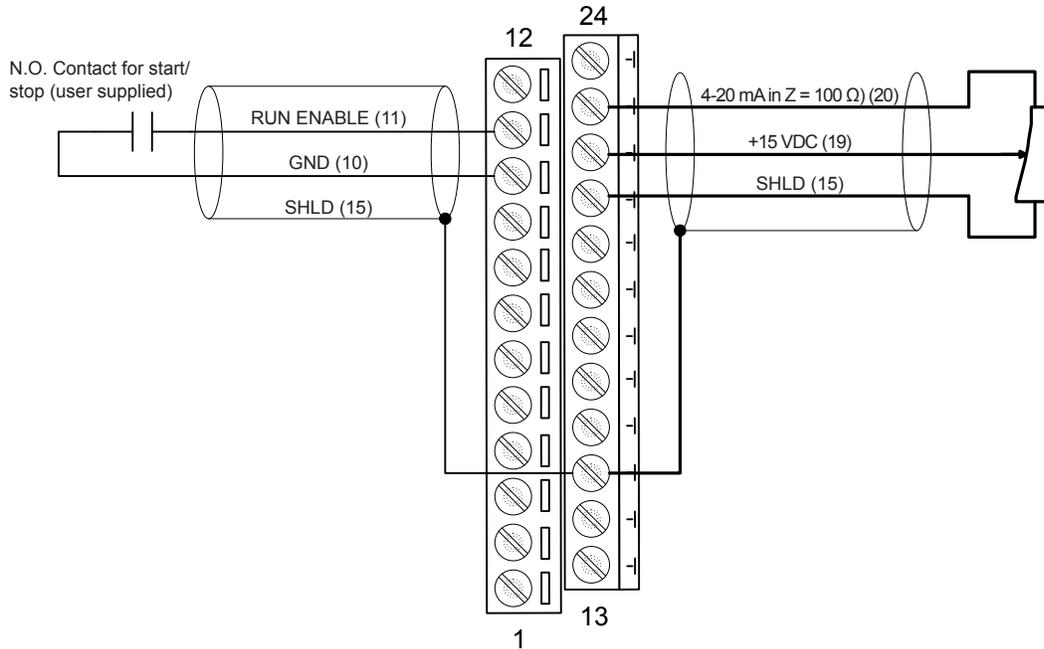
10VDC is user-supplied via PLC output card or external DC supply. Minimum 18 AWG shielded cable is recommended. Only ground cable shield at source end.



4–20mA analog speed reference

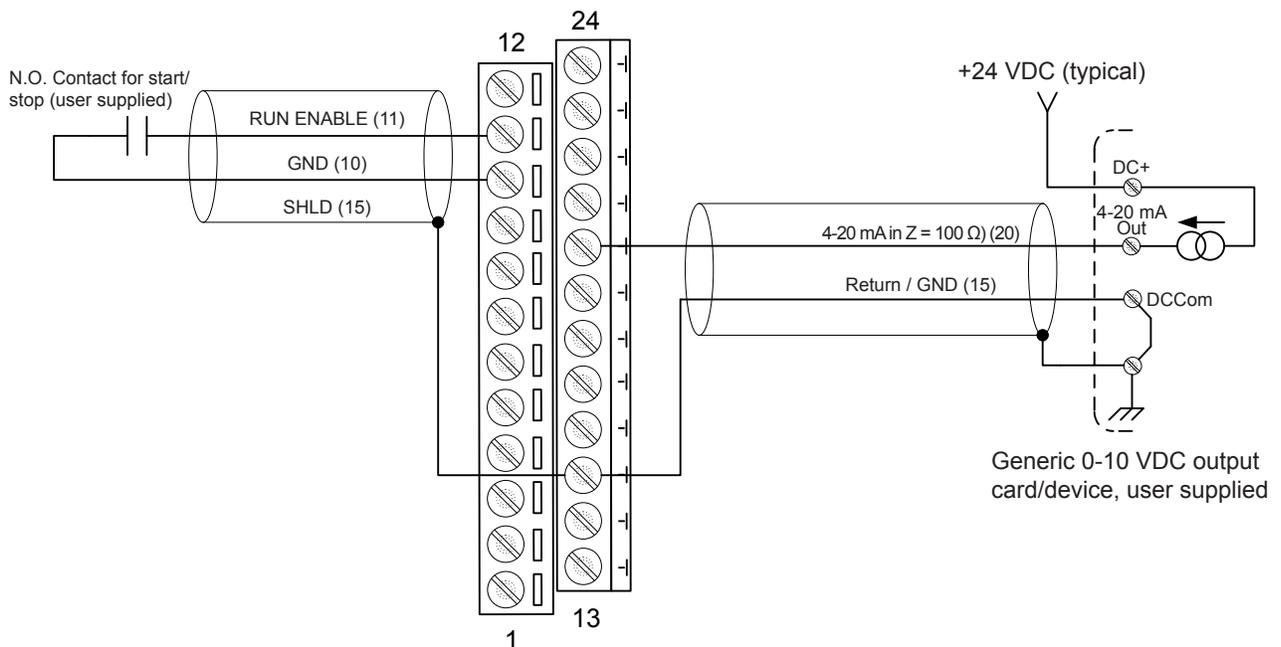
Option one

Source current for 4-20mA loop is provided by Element onboard +15VDC supply. 4-20mA input impedance is 100Ω.



Option two

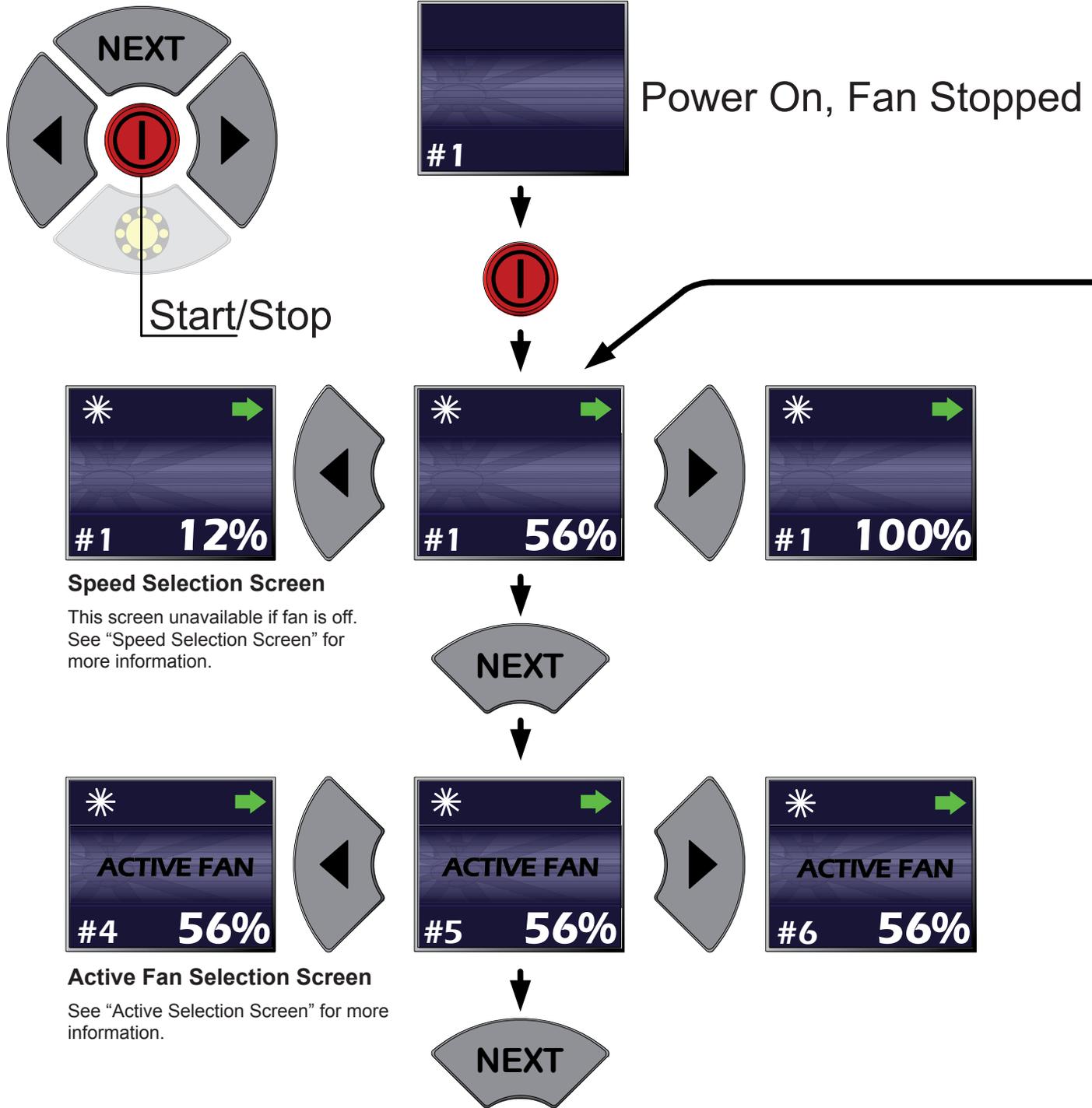
Source current for 4-20mA loop is provided by an external power supply or analog output card. 4-20mA input impedance is 100Ω.



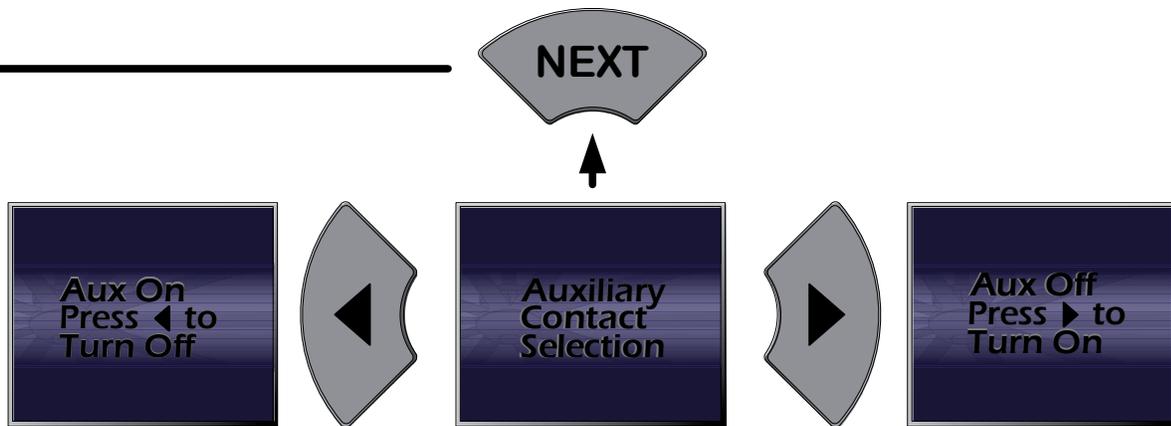
Operating the Fan

Navigating the controller menu

After electrical installation has been completed, press the power  button. *Note: When power is turned off, the controller screen will remain illuminated.*

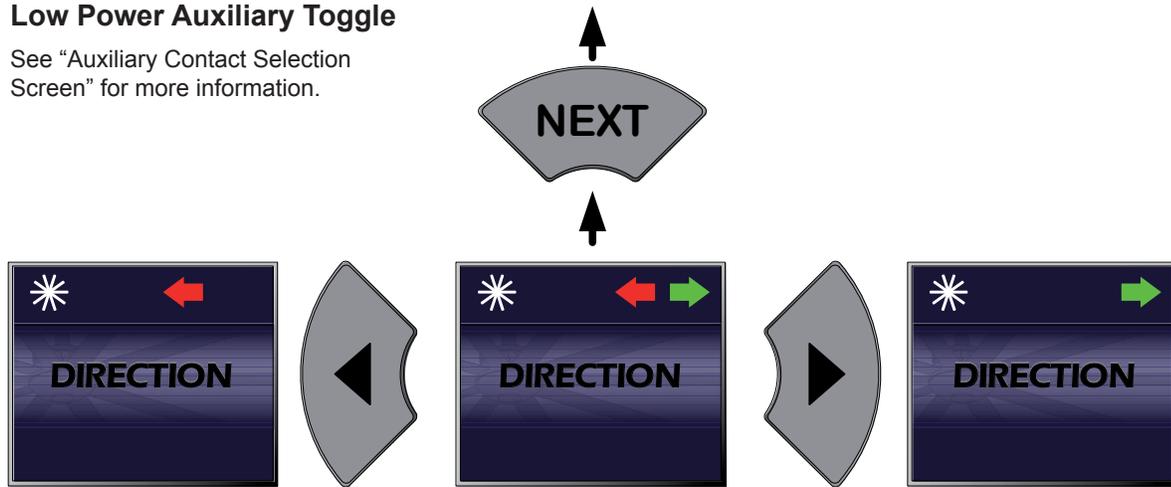


Navigating the controller menu



Low Power Auxiliary Toggle

See "Auxiliary Contact Selection Screen" for more information.



Fan Direction Toggle

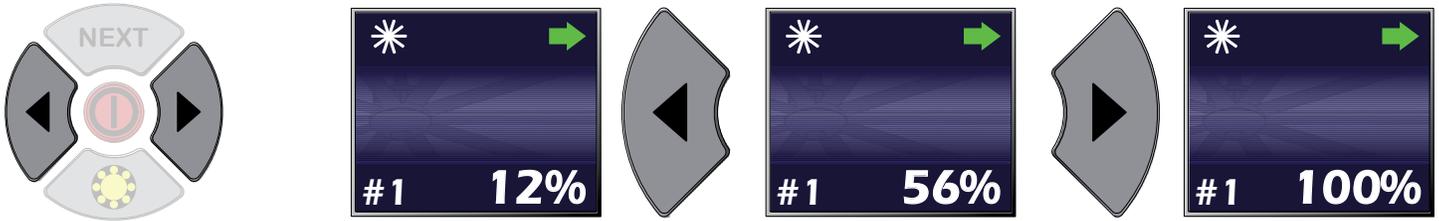
This screen unavailable if fan is off
See "Toggling Fan Direction" for more information.

30

Fan Operation (cont.)

Speed selection screen

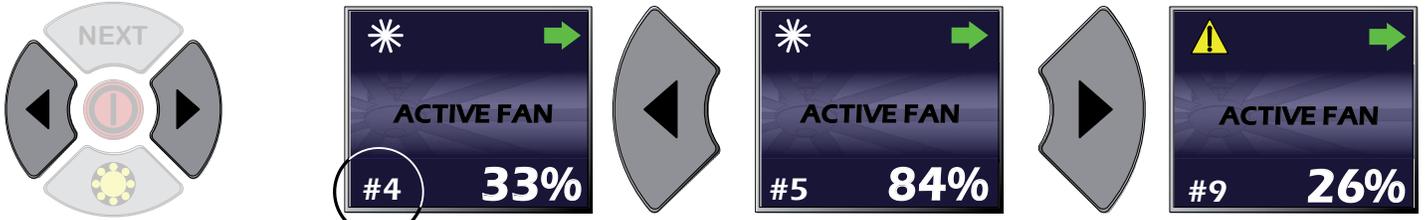
Each press of the Speed button will not necessarily equal a one percent change in the fan's speed. This is due to the scaling in the software and is normal.

**Fan Diameter and RPM Chart**

Diameter	Wall Pad 12-100%
8 ft (2,4 m)	10-82 RPM
10 ft (3,0 m)	10-82 RPM
12 ft (3,5 m)	10-82 RPM
14 ft (4,3 m)	10-64 RPM
16 ft (4,9 m)	10-52 RPM
18 ft (5,5 m)	10-42 RPM
20 ft (6,1 m)	10-33 RPM

Active fan selection screen

See “Daisy Chaining” on p. 23 and “Addressing” on p. 24 for multi-fan installation using one fan controller.

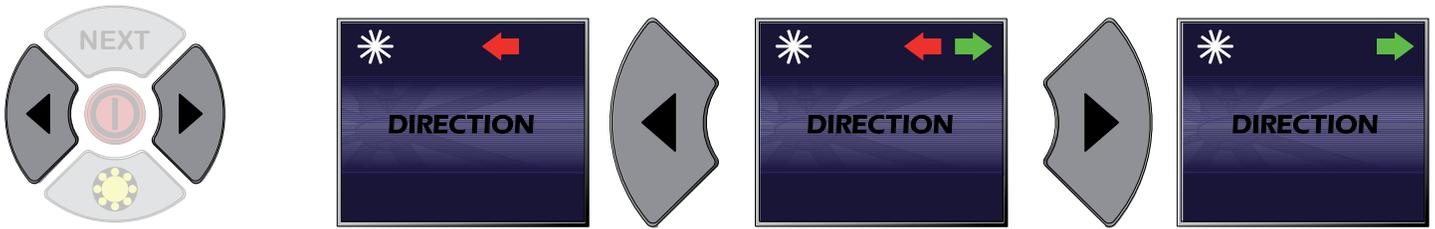


About Active Fan Selection:

The wall pad will control a maximum of 8 fans. If an invalid address is selected on the wall pad or there is a problem with the fan assigned to that particular number, a communications error will be reported on the upper left hand corner of the display.



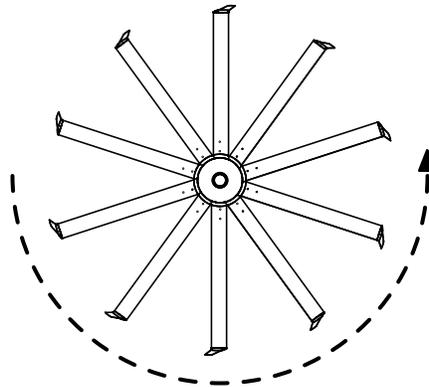
Toggling fan direction



The fan must be rotating counterclockwise (when viewed from the floor) to be effective. Direction of rotation is indicated by the **green right arrow (correct rotation)** or **red left arrow (incorrect rotation)** in the upper left-hand corner of the wall control screen. To change the direction of rotation, press the "NEXT" button to access the "Direction" screen. Press the right arrow button to select the correct rotation (green right arrow).

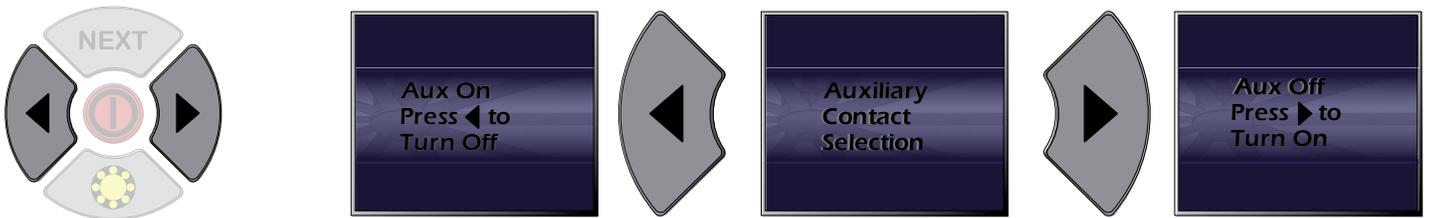
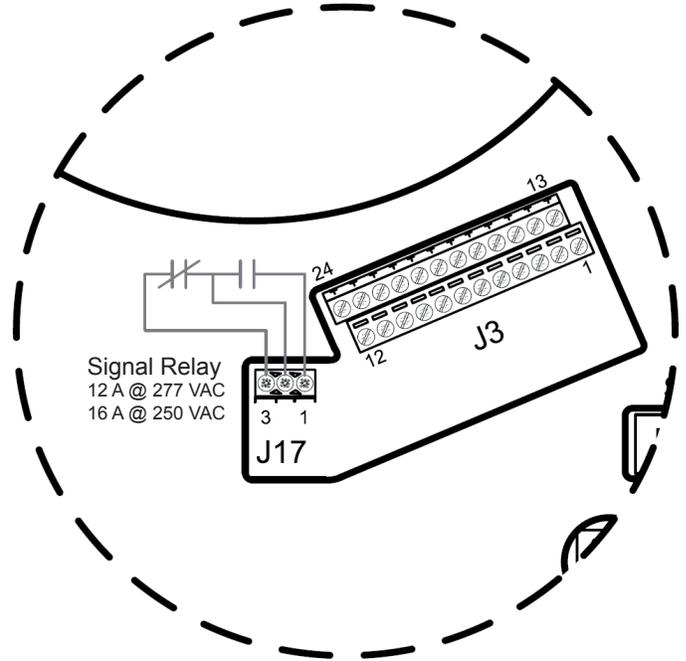
Note: The fan should rotate in the same direction (counterclockwise when viewed from the floor) during both the warmer and cooler months. During the warmer months, run the fan at higher speeds. This will circulate the air and provide a cooling breeze. During the cooler months, run the fan at lower speeds. This will push warmer air down from the ceiling to the floor without creating a cooling breeze.

View From Under Fan

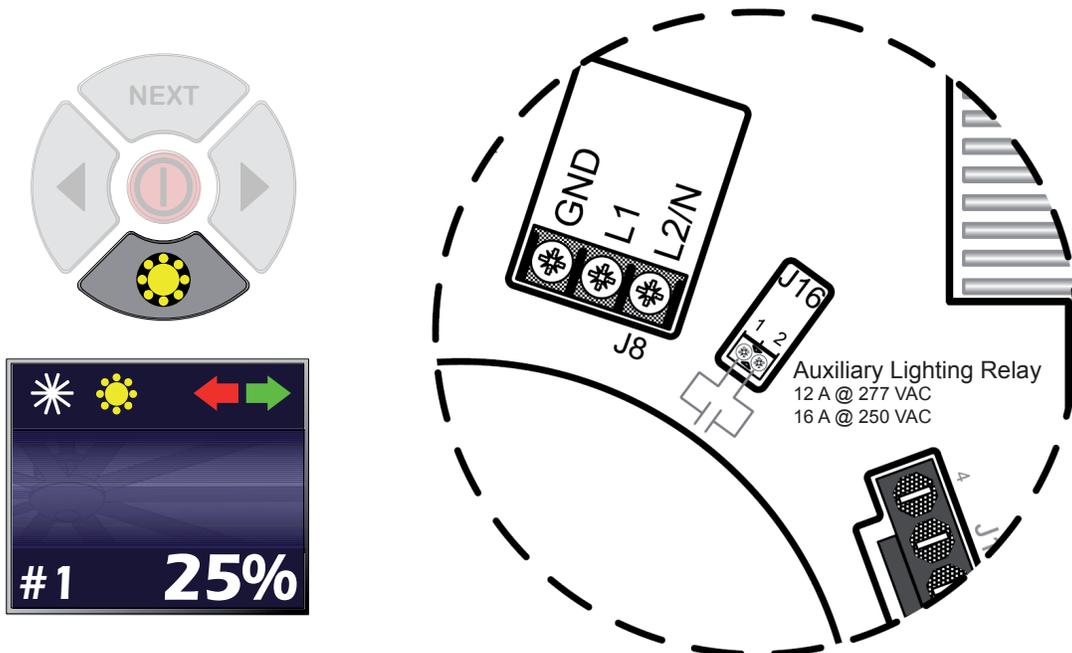


toggling the auxiliary relays

The first auxiliary relay is located next to the input/output terminal strip, making it easy to control fan input or output signals from the fan controller.



The second/lighting auxiliary relay is located next to the main power connection and is intended for use with higher power devices. It is also easier to control without menu navigation via the dedicated button.



34 Preventive Maintenance

- ⚠ **WARNING:** Risk of fire, electric shock, or injury to persons during cleaning and user-maintenance! Disconnect the appliance from the power supply before servicing.
- ⚠ **WARNING:** Before servicing or cleaning unit, switch power off at service panel and lock the service disconnecting means to prevent power from being switched on accidentally. When the service disconnecting means cannot be locked, securely fasten a prominent warning device (such as a tag) to the service panel.
- ⚠ **WARNING:** When service or replacement of a component in the fan requires the removal or disconnection of a safety device, the safety device is to be reinstalled or remounted as previously installed.

Please take a few moments each year to perform the following preventive maintenance inspection on your fan to ensure its safe and efficient operation. If you have any questions, please contact Customer Service.

Annual preventive maintenance

Note: Actual installation setup may differ from picture.

To be performed annually (see "Maintenance Checklist" in back of manual):

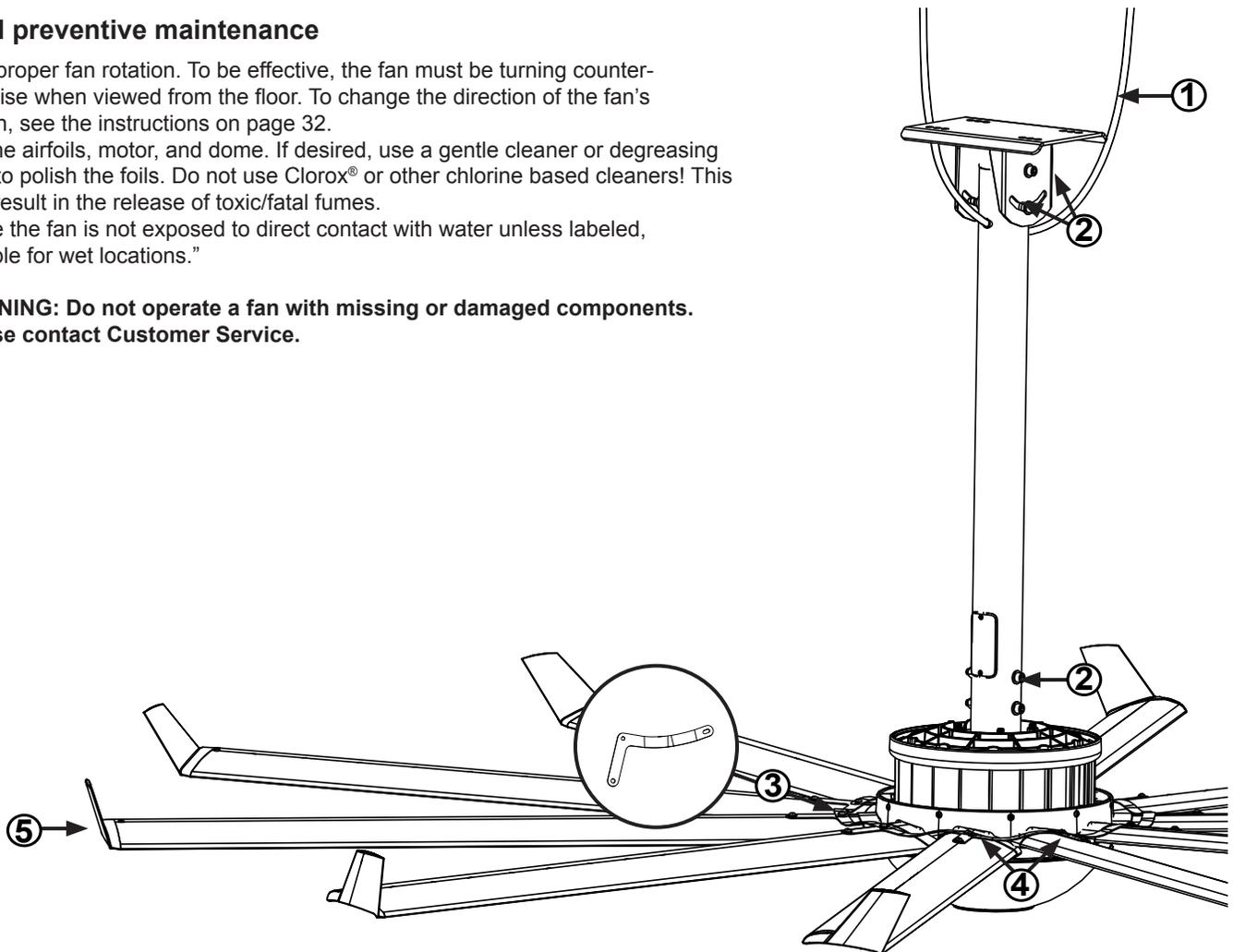
1. Ensure upper safety cable and shackle are secure. The cable should be wrapped around the mounting structure leaving as little slack as possible. The shackle should be securely tightened and located on the topside of the mounting structure.
2. Ensure all mounting bolts (8x) are present and torqued to 40 ft·lb (54.2 N·m).
3. Ensure airfoils are secured to one another by airfoil retainers.
4. Ensure all hardware (20x) securing airfoils to fan are present and tightened.
5. Ensure all hardware securing winglets to airfoils are securely tightened.
6. Check guy wires (if installed) for fraying or damage.

Ask about the Big Ass Fans preventive maintenance service package by calling Customer Service.

General preventive maintenance

- Verify proper fan rotation. To be effective, the fan must be turning counter-clockwise when viewed from the floor. To change the direction of the fan's rotation, see the instructions on page 32.
- Dust the airfoils, motor, and dome. If desired, use a gentle cleaner or degreasing agent to polish the foils. Do not use Clorox® or other chlorine based cleaners! This could result in the release of toxic/fatal fumes.
- Ensure the fan is not exposed to direct contact with water unless labeled, "Suitable for wet locations."

- ⚠ **WARNING:** Do not operate a fan with missing or damaged components. Please contact Customer Service.



Troubleshooting

- ⚠ WARNING:** When servicing or replacement of a component in the fan requires the removal or disconnection of a safety device, the safety device is to be reinstalled or remounted as previously installed.
- ⚠ WARNING:** Risk of fire, electric shock, or injury to persons during cleaning and user-maintenance. Disconnect fan from power supply before servicing.
- ⚠ WARNING:** TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS, OBSERVE THE FOLLOWING:
- Use this unit only in the manner intended by the manufacturer. If you have questions, contact the manufacturer.
 - Before servicing or cleaning unit, switch power off at service panel and lock the service disconnecting means to prevent power from being switched on accidentally. When the service disconnecting means cannot be locked, securely fasten a prominent warning device, such as a tag, to the service panel.

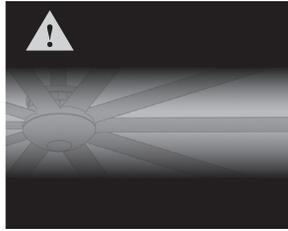
<p>Customers in the United States</p> <p>For questions about your product or customer service inquiries, please call our toll free number (877-BIG-FANS) or visit www.bigassfans.com/service.</p>	<p>Customers outside of the United States</p> <p>For questions about your product or customer service inquiries, please contact your local Big Ass Fans representative or fill out a contact form at www.bigassfans.com/service.</p>
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General troubleshooting

Symptom	Possible solution(s)
<i>The fan is turning in the wrong direction.</i>	To be effective, the fan should be rotating in the counterclockwise direction (when viewed from the floor). Direction of rotation is indicated by the green right arrow (correct rotation) or red left arrow (incorrect rotation) in the upper left-hand corner of the controller screen. To change the direction of rotation, press the "NEXT" button to access the "Direction" screen. Press the right arrow  button to select the correct rotation (green right arrow).
<i>A popping noise is coming from the fan.</i> Airfoil noise comes from airfoils that are not tightened to the specified torque.	Disconnect the fan from power, and then tighten the airfoil fasteners to 29 ft·lb (39.3 N·m). If the popping still occurs, verify that the airfoils are not contacting each other. If they are, contact Big Ass Fans Customer Service.
<i>The fan will not start.</i>	Verify the following: <ul style="list-style-type: none"> All wires are securely connected. The controller is on with no error messages. Supply power is adequate and functional. Disconnect power to the fan for two (2) minutes. Reset the power, and then reconnect power to the fan. If the fan still does not start, contact Customer Service.

Note: Some motor, gearbox, or drive noise is to be expected and is normal.

Troubleshooting fault screens



Communication Error

A flashing warning signal on the wall controller screen indicates a communication error. For single fan setups, verify that Termination Switch (S1) on the electronics mounting plate is in the ON position. For multiple fan setups, all termination switches (S1) should be in the OFF position except for the last fan in the chain.

Fan# 1
Motor Fault

PFC

Service
Required

PFC- Motor Fault

Contact Customer Service.

Fan# 1
Motor Fault

Overcurrent

Service
Required

Overcurrent- Motor Fault

Contact Customer Service.

Fan# 1
Motor Fault

Thermal

Service
Required

Thermal- Motor Fault

Contact Customer Service.

Fan# 1
Motor Fault

Stall

Service
Required

Stall- Motor Fault

Turn the fan off and back on. If the fault persists, contact Customer Service.

Fan# 1
Drive Fault

Thermal

Service
Required

Thermal- Drive Fault

Contact Customer Service.

Fan# 1
Motor Fault

Low AC Line

Service
Required

Low AC Line- Motor Fault

Incoming AC power is at low levels. Ensure supply voltage is adequate and restart the system. If the fault persists, contact Customer Service.

Fan# 1

Imbalance
Detected

Correct the
fault, then
Reset System.

Imbalance

An imbalance condition occurs when the fan is not level. Verify that there are no objects in the path of the airfoils, that nothing has come in contact with the fan, and that the airfoils are properly tightened. Turn the fan off and back on. If the fault persists, contact Customer Service.

Warranty Return Instructions

39

Congratulations on your purchase of a Big Ass Fan! We are delighted that you have chosen the Element fan to improve the quality of your indoor environment, and hope you'll have much pleasure using the fan for years to come.

Replacement of products under warranty acknowledgment & return instructions

We have received your request for replacement of a part that failed during normal use and which you believe to be covered under warranty. We are shipping this replacement part to you pursuant to your notice that you will be replacing the original part within 10 days.

This replacement part is being shipped to you prior to our receipt of the item that failed, and prior to our evaluation of this part to determine the reasons for its failure and whether it is covered under warranty.

In order to evaluate the cause of the product failure, we need you to return the original part to our offices within 10 working days of receipt of the replacement part. Should the part be covered under warranty, you will not be charged for the replacement item. However, you will be charged for the replacement part plus shipping if (1) the part is not under warranty because the source of failure is outside the scope of the warranty, or (2) the warranty period has expired. If there is no warranty coverage, we will send you a detailed letter of explanation.

We also will charge you for the replacement item plus shipping and handling if you do not return the original item within 10 days of the receipt of the replacement item.

Instructions for returning the original item

1. Please use the return label that is included in the box containing the replacement part. The return shipment address is:

Big Ass Fan Company
ATTN: RMA# _____
800 Winchester Road
Lexington, KY 40505

2. Use the packaging for the replacement part to return the original part.
3. Include the packing list we have provided which includes the RMA#.
4. If the part weighs over 50 lbs., you will be provided a prepaid Bill Of Lading. To schedule a freight pick up, please contact Customer Service. We will only charge back the freight costs if the original part is not under warranty, or if you do not return the original component within 10 days of receipt of the replacement.
5. If the part weighs 50 lbs. or less, please use the provided prepaid UPS Ground shipping label and drop off at your nearest UPS pickup location.

We apologize for the inconvenience, and appreciate your assistance and cooperation.

If you have questions, please contact us at 1-877-BIG-FANS.

Thank you,
Big Ass Fan Company

Warranty claim form instructions

1. Complete Warranty Claim Form and Responsibility Agreement and fax them to 859-967-1695, Attn: Customer Service. These pages will be faxed back to you for your records. The Warranty Claim Form will include our acknowledgment and a Return Materials Authorization (RMA) number. **Do not return any item without first being assigned an RMA# by Big Ass Fans Customer Service.**
2. No more than 10 days prior to the date you have made arrangements to replace the component part, call Customer Service at 1-877-BIG-FANS to arrange for replacement component delivery and original component pickup. At that time, we will fax you a written acknowledgment of your call that includes a reminder of the return instructions. Note: Even if you are not able to replace the component immediately following your initial notice to us, returning the Warranty Claim Form and Responsibility Agreement will effectively stop the warranty clock from running. You can then make the product exchange when you are prepared to do so. However, the warranty period will continue to run until we receive these completed pages back from you, and no warranty will be honored without receipt of these pages within the warranty period. We will not send out any replacement part until you have called to let us know that you have scheduled installation of the replacement. This ensures that the replacement part is not lost or damaged while awaiting installation, and that you are not billed for the replacement because you have waited too long to return the original component (see Responsibility Agreement).
3. When you receive the replacement part, you have 10 working days to remove and replace the existing component and return it to us at **800 Winchester Road, Lexington, KY 40505**.
 - a. Upon receiving the replacement part, verify that replacement part order is correct. If order is incorrect or damaged, notify Big Ass Fan Company within 24 hours after receiving order.
 - b. Use care unpacking the replacement component, as you will need to use *both* the packaging from the replacement part and the packing list and a return address label included inside this packaging to return the original part. If the original packaging and return documents are not used, you will be responsible for any damage incurred in transit as well as any additional costs involved. **Note: The RMA# must appear on the outside of the box being returned. Items without an RMA# will not be accepted.**
 - c. Use the delivery service or one of the truck lines specified in the acknowledgement for return of the part. We will refuse receipt of any shipment that is returned via an unauthorized carrier. If you prefer, we can make all arrangements for delivery and pickup.
 - d. Fax a copy of the bill of lading or other tracking information to 859-967-1695 when the item has been shipped so that we know to expect delivery of the original part.
4. If we do not receive the original part back within 15 working days from the date you receive delivery of the replacement, you will be invoiced for the cost of the replacement part, plus freight, on Net 15 terms (see Responsibility Agreement), and this invoice will be due and payable. If you subsequently return the replacement part to us after payment has been made, we will refund any payment made for the replacement part, unless we subsequently determine that the part is not covered under warranty.



800 Winchester Road
Lexington, KY 40505
Phone: 1-877-BIG-FANS
Fax: (859) 967-1695
www.bigassfans.com

Warranty Claim Form

Name (print): _____ Signature: _____

Company: _____

Shipping Address: _____

City/State/ZIP: _____

Phone: _____ Fax: _____

Items Returned: _____ Date of Purchase: _____

Reason(s) for Returning Item (Please provide detail, including length of time after fan had been in operation that problem was noticed, nature of problem, any attempts you made to remedy the problem, etc.):

ATTENTION: Do not return any item without first being assigned an RMA# by Big Ass Fan Company Customer Service Department. The RMA# must appear on the outside of the box being returned. Items without an RMA# will not be accepted.

Date Replacement Parts Should Be Shipped (if known): _____

(Please do not request shipment until you are prepared to install. Call us at 1-877-BIG-FANS to arrange shipment when you have scheduled installation.)

Acknowledgment of Receipt of Warranty Return Notification (to be completed by Big Ass Fan Company)

Acknowledged By: _____ Date: _____

RMA#: _____

Authorized Truck Line(s): _____



800 Winchester Road
Lexington, KY 40505
Phone: 1-877-BIG-FANS
Fax: (859) 967-1695
www.bigassfans.com

Responsibility Agreement

To: Big Ass Fan Company

The undersigned understands and acknowledges receipt of the Warranty Claim Form and Instructions and agrees that Big Ass Fan Company ("Big Ass Fan Company") has the right, upon receipt of returned merchandise, to make final determination as to whether this merchandise should be replaced at no cost under Big Ass Fan Company's stated warranty policy.

The undersigned further agrees that if Big Ass Fan Company determines that this merchandise does not qualify under its stated warranty policy, Big Ass Fan Company can invoice for the replacement merchandise, plus shipping and handling for the original part and all replacements, and such invoice will be paid within 15 days of receipt of the same.

The undersigned agrees to ship to Big Ass Fan Company's location at 800 Winchester Road, Lexington, KY 40505 all of the merchandise replaced by Big Ass Fan Company, including, but not necessarily limited to, defective or failed components, within 10 working days of the receipt of the any replacements.

The undersigned further agrees that if said replaced merchandise has not been shipped to Big Ass Fan Company within 10 working days, Big Ass Fan Company can invoice for the replacement merchandise plus shipping and handling, and the invoice will be paid within 15 days of receipt.

Signed: _____

Title: _____

For: _____
(Name of Company)

Date: _____



2348 Innovation Drive
Lexington, KY 40511
Phone: 1-859-233-1271
www.bigasssolutions.com

Check-In Procedure

(for Big Ass Fans Certified Installers Only)

ATTENTION: These items must be completed prior to any additional installation crew members entering jobsite or any installation material being unloaded.

Date: _____

Company: _____ Job Name: _____

Address: _____ Purchase Order No.: _____

City/State/ZIP: _____

Contact Name: _____ Phone: _____

E-mail: _____

****SEE THE FOLLOWING PAGE FOR NFPA 13 REGULATIONS****

<input type="checkbox"/>	Fan placement is to be in accordance with agreed upon original Scope of Work and Layout. If this is to change, please note change and consult Field Service Manager for approval.
<input type="checkbox"/>	Installation techniques have been discussed (type of conduit, L-brackets if required, mounting technique explained). If the extension tubes exceed 4 ft (1.2 m), guy wires are explained and fully understood.
<input type="checkbox"/>	Times in/out, duration, and schedule presented and accepted.
<input type="checkbox"/>	Time (please list the number of employees and total duration of jobs):
<input type="checkbox"/>	Safety rules and regulations have been brought to installer's attention (e.g., badges, safety harnesses, vests, hard hats, footwear, lock out/tag out, certification processes, work area free of trash and debris, etc.). If there are any areas that are forbidden or secure, they are brought to the supervisor's attention and instructed not to enter. If there are any special site conditions (i.e., open areas and operating machinery to be avoided), they are also brought to the supervisor's attention and instructed how to bypass the area if required. Safety Rules and Regulations listed:
<input type="checkbox"/>	The facility manager understands all electrical requirements, i.e., breaker size, voltage, brand, main panel space, and they are in accordance with original Scope of Work and Layout.
	Additional comments:

Check-In Procedure (cont.)

(for Big Ass Fans Certified Installers Only)

National Fire Protection Association Standard

In accordance with NFPA 13 Standard from the National Fire Prevention Association as referenced in sections 12.1.4 and 11.1.7: High Volume Low Speed (HVLS) Fans:

The installation of HVLS fans in buildings equipped with sprinklers, including ESFR sprinklers, shall comply with the following:

- The maximum fan diameter shall be 24 feet (7.3 m).
- The fan shall be approximately centered between four adjacent sprinklers.
- The vertical clearance from the fan to sprinkler deflector shall be a minimum of 3 feet (0.9 m).
- All fans shall be interlocked to shut down immediately upon receiving a water flow signal from the alarm system in accordance with the requirements of NFPA 72- National Fire Alarm and Signaling Code.

WARNING: The fan should not be installed unless the structure on which the fan is to be mounted is of sound construction, undamaged, and capable of supporting the loads of the fan and its method of mounting. Verifying the stability of the mounting structure is the sole responsibility of the customer and/or end user, and Big Ass Fans hereby expressly disclaims any liability arising therefrom, or arising from the use of any materials or hardware other than those supplied by Big Ass Fans or otherwise specified in the installation instructions.

If this installation will be performed outside the scope of work or not within the specifications of Big Ass Fans by customer's request, please provide specific details:

Please sign below if both parties agree that all aspects of this installation have been thoroughly explained and are of clear understanding and agreement of the installation to be completed.

Customer Signature: _____

Printed Name: _____ **Date:** _____

Contractor Signature: _____

Printed Name: _____ **Date:** _____

The supervisor is to hold all documents until the job is complete and send all forms back to Field Service Manager. This will consist of the service/work order, Check-In document, and Close-Out document. The installation crew will not receive payment until all forms are signed by the facility manager and the supervisor. These documents will then be forwarded to the Field Service Manager at Big Ass Fans.



2348 Innovation Drive
Lexington, KY 40511
Phone: 1-859-233-1271
www.bigasssolutions.com

Close-Out Procedure

(for Big Ass Fans Certified Installers Only)

Date: _____

Company: _____ Job Name: _____

Address: _____ Purchase Order No.: _____

City/State/ZIP: _____

Contact Name: _____ Phone: _____

E-mail: _____

****SEE THE FOLLOWING PAGE FOR NFPA 13 REGULATIONS****

The field crew supervisor and facility manager are to walk through the completed installation.

<input type="checkbox"/>	The installation is complete and on time in accordance with the original Check-In document. If not, explain:
<input type="checkbox"/>	Conduit runs are installed in accordance with the Check-In document, Scope of Work, and Layout. If not, explain:
<input type="checkbox"/>	The fans are correctly placed in accordance with both the Check-In document, Scope of Work, and Layout. If not, explain:
<input type="checkbox"/>	Breaker size and wire type are in accordance with the Check-In document, Scope of Work, and Layout. If not, explain:
<input type="checkbox"/>	All safety rules and regulations met in accordance with the Check-In document, Scope of Work, and Layout. If not, explain:
<input type="checkbox"/>	Fans have been running for over an hour and operate without visible defect or issue.
<input type="checkbox"/>	The fan is spinning in the correct direction (counterclockwise when viewed from floor).
<input type="checkbox"/>	Angle irons are securely fastened and are without any apparent problems in accordance with installation techniques discussed at check-in.
<input type="checkbox"/>	If extension tube is 4 ft (1.2 m) or longer, guy wires are in place and there is no evidence of a wobble.
<input type="checkbox"/>	Supervisor or contractor has supplied and explained the Installation Guide. If not, explain:
<input type="checkbox"/>	The supervisor or contractor has explained and I understand how to operate fan including starting/stopping, speed operation, and power disconnect. If not, explain:
<input type="checkbox"/>	Time in/out and duration are in accordance with Check-In document.
	Additional comments:

Close-Out Procedure (cont.)

(for Big Ass Fans Certified Installers Only)

National Fire Protection Association Standard

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WARNING: The fan should not be installed unless the structure on which the fan is to be mounted is of sound construction, undamaged, and capable of supporting the loads of the fan and its method of mounting. Verifying the stability of the mounting structure is the sole responsibility of the customer and/or end user, and Big Ass Fans hereby expressly disclaims any liability arising therefrom, or arising from the use of any materials or hardware other than those supplied by Big Ass Fans or otherwise specified in the installation instructions.

NOTE: The customer's initials are required as acknowledgement for the following instances:

- ___ Return Trip Required – Additional Charges Apply (Customer not Ready/Lift Issues)
- ___ Work Completed Outside Scope of Work (if applicable)
- ___ Installation Not Performed Per BAF Recommendations or Specifications For Any Reason
- ___ Customer Understands and Approves Additional Charges As Explained in amount of \$_____ (if applicable)
- ___ Other (Please Explain Below)

If any portion of this installation was performed outside the scope of work or not within the specifications of Big Ass Fans at any capacity or for any reason, please provide specific details below:

Signatures of both parties are required below to acknowledge that this installation has been completed to customer's satisfaction, to activate fan(s) warranty, and to issue payment to contractor (with required documentation):

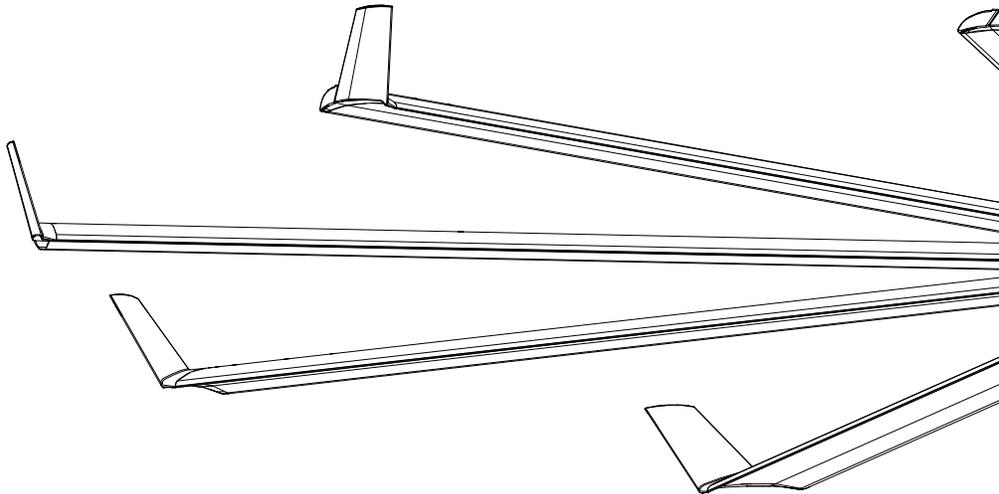
Customer Signature: _____

Printed Name: _____ **Date:** _____

Contractor Signature: _____

Printed Name: _____ **Date:** _____

The supervisor is to hold all documents until the job is complete and send all forms back to Field Service Manager. This will consist of the service/work order, Check-In document, and Close-Out document. The installation crew will not receive payment until all forms are signed by the facility manager and the supervisor. These documents will then be forwarded to the Field Service Manager at Big Ass Fans.



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