



# AIR SERIES (AS-5) INSTALLATION GUIDE & OWNER'S MANUAL

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# IMPORTANT SAFETY INSTRUCTIONS: PLEASE READ AND SAVE THESE INSTRUCTIONS

READ AND UNDERSTAND ALL INSTRUCTIONS BEFORE BEGINNING INSTALLATION

# **General Safety Requirements**

**!** WARNING: Installation work and electrical connections must be performed by qualified personnel in accordance with all applicable electrical codes and local regulations. Improper installation may result in fire, electric shock, serious injury, or death.

⚠ WARNING: When cutting or drilling into walls or ceilings, exercise extreme caution to avoid damaging electrical wiring, plumbing, or other concealed utilities. Always verify the location of utilities before beginning work.

# Recommended Safety Gear

**WARNING:** All personnel entering the work zone must wear appropriate personal protective equipment (PPE) including:

- Hard hat
- Safety glasses
- Work gloves
- Steel-toed safety shoes

### **Code Compliance**

**CAUTION:** Installation of the *Air Series* fan system must comply with:

- All requirements specified in this installation manual
- National Electrical Code (NEC), ANSI/NFPA 70 (current edition)
- All applicable local building and electrical codes
- OSHA safety regulations

Code compliance is the responsibility of the installer and end user.

### **Electrical Safety**

▲ DANGER - HIGH VOLTAGE: Fan controllers contain high-voltage capacitors that remain energized after power disconnection. Before servicing any electrical components:

- 1. Disconnect main power supply at the breaker
- 2. Isolate all line inputs at the fan controller board (L1, L2/N)
- 3. Wait a minimum of three (3) minutes for capacitors to discharge to safe levels
- 4. Verify zero energy state with appropriate testing equipment

Failure to follow this procedure may result in severe injury or death.

#### **CAUTION:**

- Connect fan only to properly grounded electrical systems in good condition
- Do not attempt installation with damaged or hazardous power sources
- Only qualified electrical technicians should diagnose or repair electrical malfunctions
- Contact Airdistributor technical support for electrical installation questions

### Structural and Mechanical Safety

**CAUTION:** Guy cables must be installed exactly as specified in this manual. Improper guy cable installation may result in structural failure, equipment damage, personal injury, and will void the product warranty.

# **!** WARNING:

- Do not bend, twist, or damage fan blades during installation or maintenance
- Never insert objects between rotating fan blades
- Ensure adequate clearance around fan blades as specified in installation requirements

# **Power Tool Safety**

⚠ WARNING: Installation requires the use of power tools including drills, lifts, and rigging equipment. Follow all manufacturer safety procedures and operating instructions for each tool used during installation.

# **Service and Maintenance Safety**

**MARNING:** Risk of fire, electric shock, or injury during cleaning and maintenance operations. Always disconnect the fan system from all power sources before performing any service work.

#### **Environmental Limitations**

**CAUTION:** This fan system is designed for **indoor or covered outdoor use only**. Do not:

- Expose fan to direct water contact or moisture
- Install in corrosive environments
- Operate outside specified temperature ranges

# **Warranty Considerations**

NOTICE: Product warranty does not cover equipment damage or failure caused by:

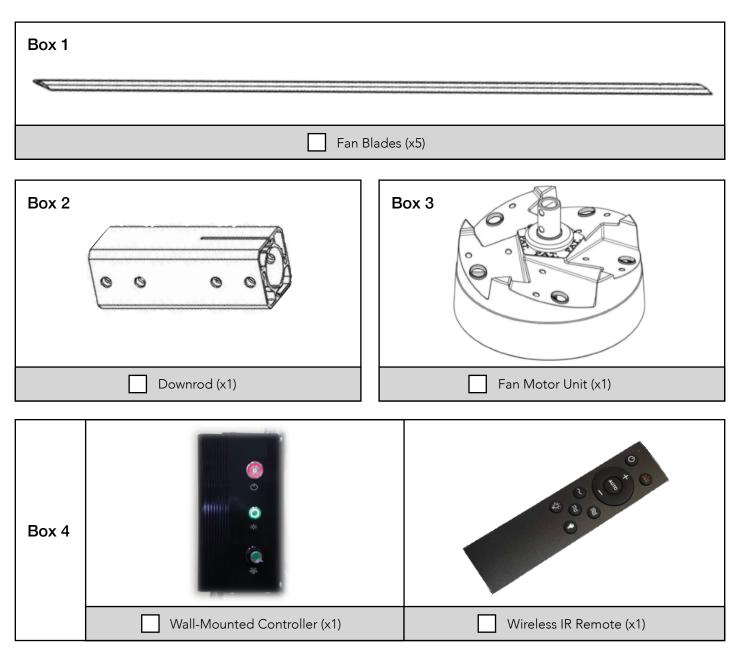
- Improper handling or installation
- Failure to follow installation manual specifications
- Non-compliance with applicable codes and standards
- Unauthorized modifications or repairs

# PRE-INSTALLATION

# Package Contents and Component Identification

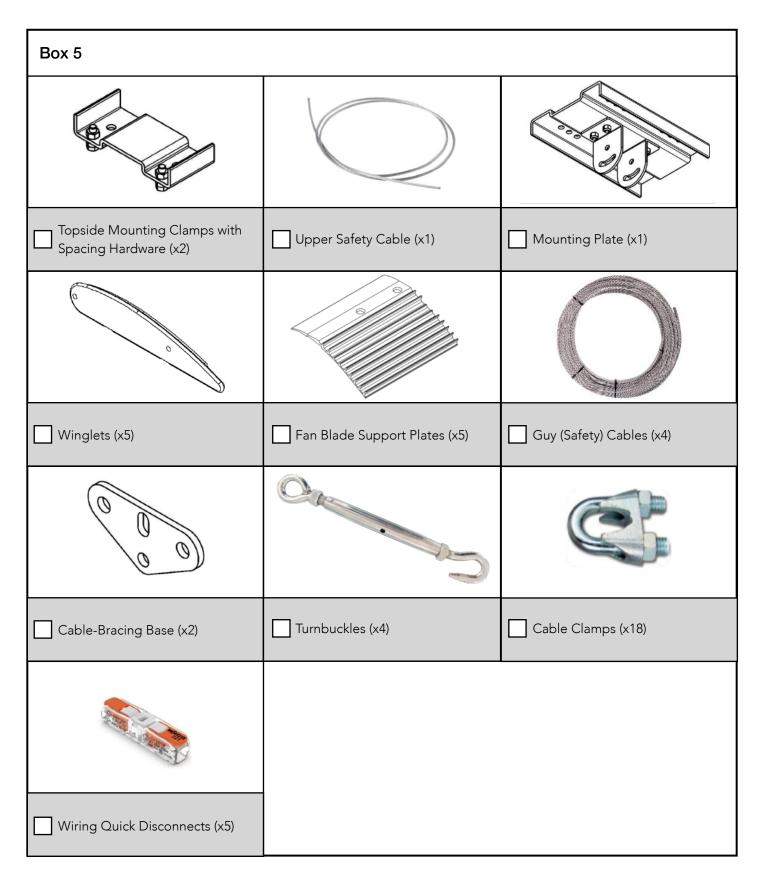
**CAUTION:** For multiple fan orders, ensure all components for each individual fan remain grouped together. Fan components are **not interchangeable** between units. Mixing components will result in improper fit and potential system failure.

The standard *Air Series* HVLS ceiling fan is shipped in five (5) separate packaging cases as illustrated below:



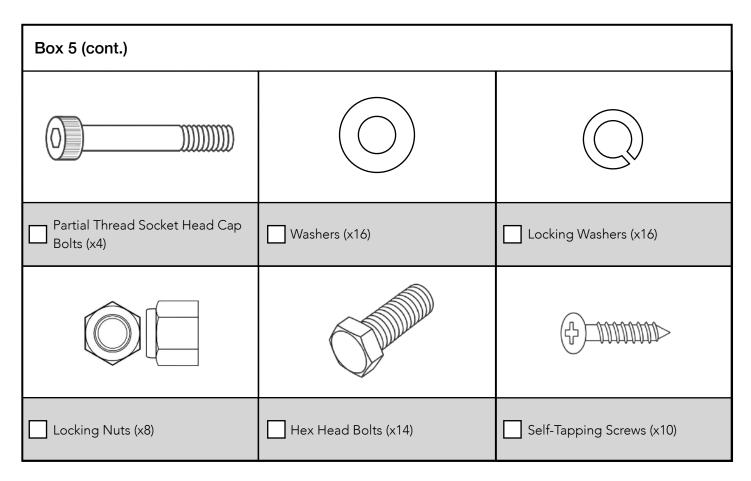
**NOTE:** Diagrams and pictures shown are not to scale.

# Package Contents and Component Identification (cont.)



**NOTE:** Diagrams and pictures shown are not to scale.

# Package Contents and Component Identification (cont.)



**NOTE:** Diagrams and pictures shown are not to scale.

# **Packing List and Component Verification**

Before beginning installation, verify that all components listed below are present and undamaged. Check each item against the included packing slip.

Box #	Description	Total Qty
1	Fan Blades	5
2	Downrod	1
3	Permanent Magnet Synchronous Motor	1
4	Wall-Mounted Controller	1
	Wireless IR Remote	1
	Mounting Plate	1
	Topside Mounting Clamps with Spacing Hardware as follows:	2
	M12-1.75 x 30mm Bolts (19mm or 3/4" socket)	4
	M12-1.75 Nuts (19mm or 3/4"socket)	4
	M12-1.75 Locking Nuts (19mm or 3/4" socket)	4
	Fan Blade Support Plates	5
	Winglets	5
	Cable-Bracing Base	2
	Guy (Safety) Cables	4
5	Upper Safety Cable	1
	Turnbuckles (16mm or 5/8" nuts)	4
	Cable Clamps (10mm nuts)	18
	M12-1.75 x 110mm Partial Thread Socket Head Cap Bolts	4
	M12 Washers	16
	M12 Locking Washers	16
	M12-1.75 Locking Nuts (19mm or 3/4" socket)	8
	M12-1.75 x 60mm Bolts (19mm or 3/4" socket)	14
	Self-Tapping Phillips Head Screws	10
	Wiring Quick-Disconnects	5

**Missing or Damaged Components:** If any components are missing, damaged, or do not match the packing list, contact Airdistributor immediately before proceeding with installation. Reference your order number and controller serial number when contacting support.

#### **Required Equipment and Tools**

**Equipment: Scissor lift or equivalent aerial work platform** with the following minimum specifications:

- Platform capacity: Minimum 350 lbs (159 kg) plus two (2) persons
- Platform type: Stable, level work surface
- Height capability: Adequate reach for installation height plus working clearance
- Mobility: Ability to position precisely under installation point
- **MARNING:** Lifting equipment operation must comply with:
  - All manufacturer safety instructions and operating procedures
  - OSHA aerial lift safety standards (29 CFR 1926.453)
  - Local and national safety codes applicable to the installation location
  - Site-specific safety requirements

**!** WARNING - WORK ZONE SAFETY: Establish a clearly marked work zone beneath the installation area using:

- Safety cones or barriers
- Caution tape or rope
- Warning signage
- Designated safety observer when possible

All personnel entering the work zone must wear required PPE as specified in the Safety Instructions section (page 2).



# Required Equipment and Tools (cont.)

**Tools and Hardware:** Gather the following tools before beginning installation. This list represents the minimum recommended tools; additional tools may be required based on specific installation conditions.

Mechanical Installation
Torque wrench (44 lb-ft / 60 N·m) or ratchet
Standard socket set
Standard wrench set
10mm Hex key bit or Allen wrench
Standard phillips head screwdriver set
Level gauge (x2)
3/16" steel cable wire cutter
Anaerobic thread-locking compound (not incl.)

**NOTE:** Tool requirements may vary based on ceiling construction type, electrical configuration, and site-specific conditions. Verify tool availability and condition before beginning work.

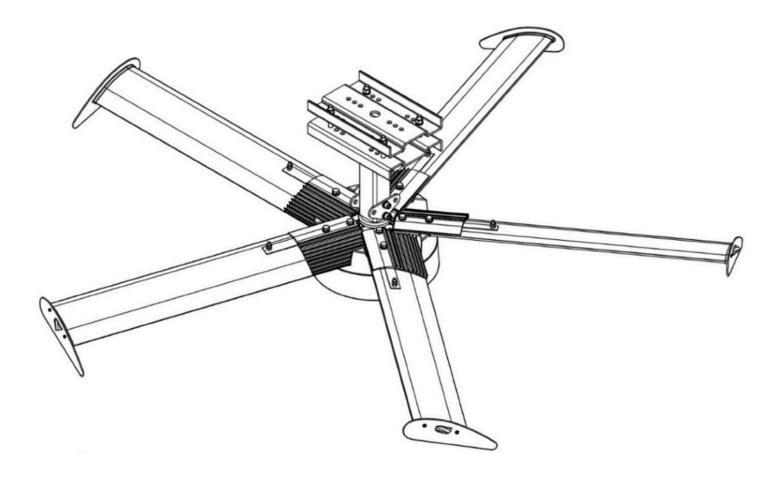
### **Pre-Installation Checklist**

Before proceeding to installation, verify:

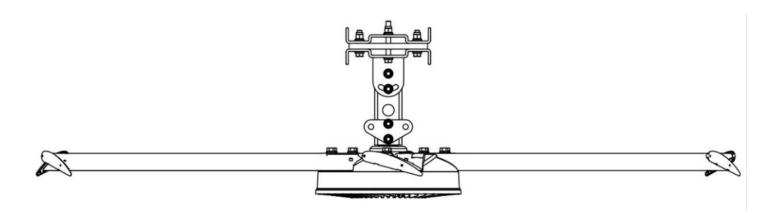
All components present and undamaged
Required equipment and tools available
Work area properly secured and marked
Electrical power disconnected and locked out
Installation team properly trained and equipped with PPE
Structural adequacy confirmed (see Structural Requirements section)
Local permits obtained (if required)

# **FAN DIAGRAM**

# **Top View**



# **Side View**



# MOUNTING INSTALLATION PROCEDURES

**A WARNING:** When performing elevated operations, all personnel must wear:

- ANSI-approved safety helmet
- High-visibility safety vest
- Full-body safety harness with lanyard
- Additional fall protection equipment as required by OSHA standards

**CAUTION:** After assembly, secure the fan unit with appropriate structural supports and fixtures. Installation must comply with all applicable local safety regulations and building codes.

**IMPORTANT:** Verify structural adequacy of mounting location before beginning installation. Consult a structural engineer if load-bearing capacity is uncertain.

If mounting to a structure other than an I-beam such as square beams, round tubes, or cement beams where *Airdistributor* has supplied additional hardware, please refer to appendix pages included with documentation for special instructions on mounting to these structures. Return to Step 2 below after mounting.

#### 1. Mounting to I-Beams/H-Beams

#### **Required Components:**

Topside mounting clamps with spacing hardware (x2)

Mounting plate (x1)

Downrod (x1)

60mm hex head bolts - 19mm or 3/4" socket (x4)

110mm partial thread socket head cap bolts - 10mm Allen (x2)

Locking nuts - 19mm or 3/4" socket (x6)

Flat washers (x8)

Locking washers (x8)

Anaerobic thread-locking compound (not included)

Note: Hardware quantities may vary based on site specifications and structural requirements

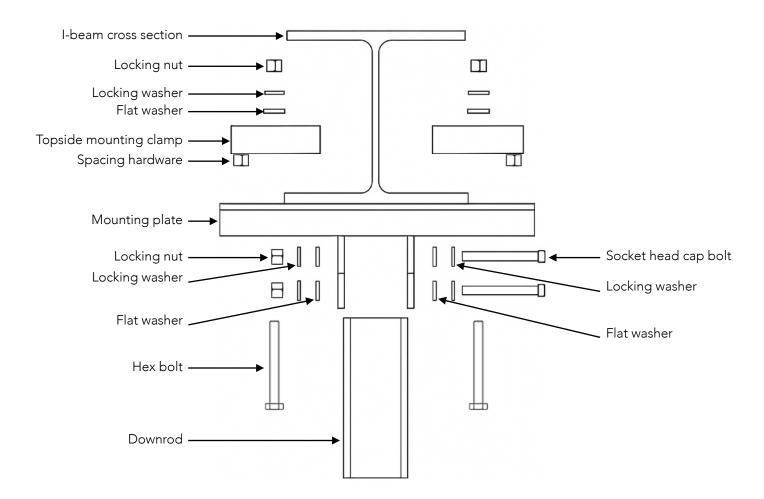
#### Procedure (diagrams 1, 2 & 3):

- Insert downrod into mounting plate and secure temporarily using two (2) partial thread socket head cap bolts along with locking washers, flat washers, and locking nuts. Do not fully tighten.
- 2. Confirm final installation location and mark mounting points on I-beam.
- 3. Position mounting plate and downrod (see step 1) underneath I-beam at marked location.
- 4. Place one (1) topside mounting clamp above lower flange of I-beam.
- 5. Insert two (2) hex bolts upward through the mounting plate and topside mounting clamp and secure with washer, locking washer, and locking nut (x1 each) for each bolt.

Note: For thicker I-beam flanges, utilize spacing hardware preassembled to topside mounting clamps as needed to provide leveling and support to topside clamps.

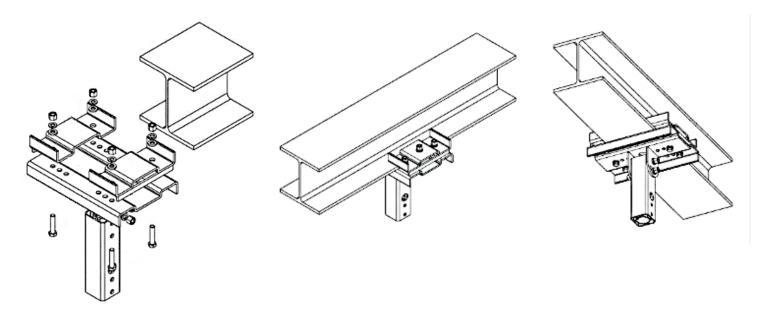
- 6. Repeat procedure on opposite side of I-beam.
- 7. Apply anaerobic thread-locking compound to all bolts as needed.
- 8. Torque all hardware to 44 lb-ft (60 N·m) using torque wrench.

#### Diagram 1:



#### Diagram 2:

#### Diagram 3 (completed I-beam mounting installation):



# 2. Securing Upper Safety Cable

#### **Required Components:**

Upper safety cable (x1)

Cable Clamps (x2)

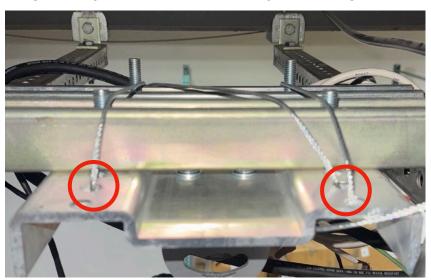
#### Procedure (diagrams 4 & 5):

- 1. Upper safety cable is designed to be looped through mounting plate and wrapped around the mounting structure to provide redundancy in the event of mount failure.
- 2. Ensure cable clamps are tightened and safety cable is not loose around structure.

Diagram 4:



Diagram 5 (pictured mounted to square tubing):



# 3. Post-Installation Mounting Verification

After completing mounting installation:

- 1. Verify all fasteners are torqued to specification
- 2. Check mounting assembly for level and plumb alignment
- 3. Inspect all connections for proper fit and engagement
- 4. Confirm structural mounting can support full fan weight and operational loads
- 5. Document installation method and hardware used for future reference

**!** WARNING: Do not proceed with fan installation until mounting assembly has been thoroughly inspected and verified as secure.

# FAN MOTOR & BLADE INSTALLATION PROCEDURES

**IMPORTANT:** Two (2) people are required for fan motor mounting procedure. Ensure that the motor unit and all components are intact and free from abnormalities prior to proceeding.

# 1. Securing Fan Motor

#### **Required Components:**

Fan motor unit (x1)

Cable-Bracing Bases (x2)

110mm partial thread socket head cap bolts - 10mm Allen (x2 pieces)

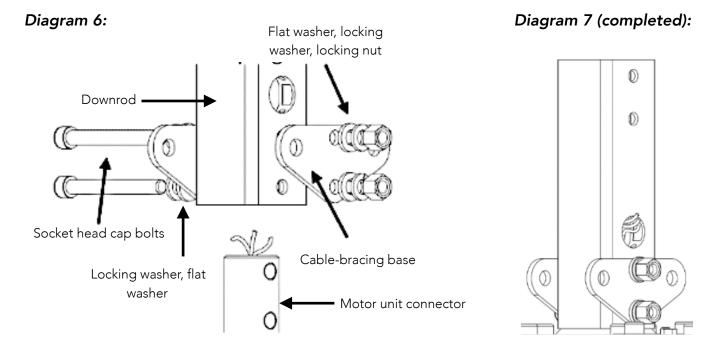
Locking nuts - 19mm or 3/4" socket (x2)

Flat washers (x4)

Locking washers (x4)

#### Procedure (diagrams 6 & 7):

- 1. Insert motor unit connector upwards into downrod and align connector holes. Hold in place.
- 2. Have second person align triangular cable-bracing base (x2, flat side up) with the connector holes on either side.
- 3. Insert socket head cap bolts through connector holes with locking washers and flat washers on both sides. Secure and tighten with locking nut to 31 lb-ft (42 N·m) using torque wrench.



# 2. Assembling & Mounting Fan Blades

#### **Required Components:**

Fan blades (x5)

Winglets (x5)

Self-tapping screws (phillips) (x10)

Fan blade support plates (x5)

60mm hex head bolts - 19mm or 3/4" socket (x10)

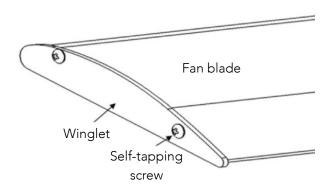
Flat washers (x10)

Locking washers (x10)

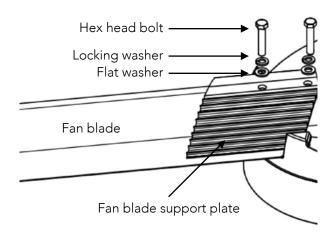
#### Procedure (diagrams 8 & 9):

- 1. Secure winglets to tip of fan blades with self tapping screws (x2 each).
- 2. Having a second person hold the fan blade in place, use 2x each hex bolts, locking washers, and flat washers to attach fan blades with fan blade support plates to top side of fan motor.

#### Diagram 8 (securing winglets):



#### Diagram 9 (attaching blades to motor):



# **GUY WIRE MOUNTING PROCEDURES**

**MARNING:** Guy cables are intended to provide stability to the fan system during operation. Guy cables must be installed as per the instructions provided in this manual; failure to do so will void the product warranty and may result in damage or injury.

#### 1. Installing Guy Wires

#### Required Components:

Guy wires (x4)

Turnbuckles - 16mm or 5/8" nuts (x4)

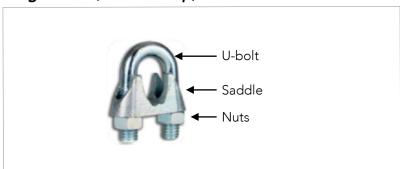
Structure-side mounting hooks (not included)

Cable clamps - 10mm nuts (x16)

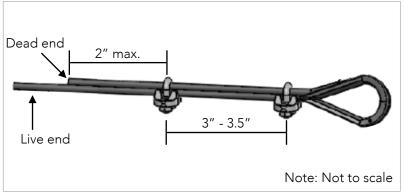
#### Procedure (diagrams 10-14):

- 1. Loosen the turnbuckle to allow room for hand-tightening after installation.
- 2. Prepare the fan-side of the guy cables with one turnbuckle and two (2) cable clamps. Loop one end of the guy cable through the closed end of the turnbuckle and tighten cable clamps. **Saddle of cable clamps must be on the live end of the wire.**

#### Diagram 10 (Cable clamp):



#### Diagram 11 (Cable clamp positioning on guy wire):

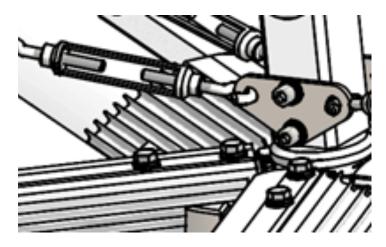


#### Diagram 12 (Cable clamp alignment):



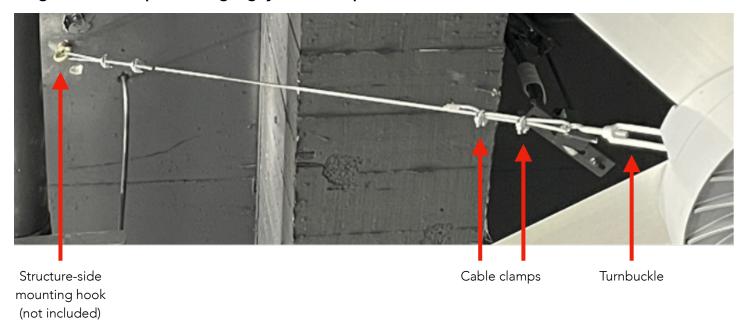
3. Hook assembled turnbuckle with one end of guy wire into the cable-bracing base on downrod.

#### Diagram 13 (Turnbuckle attaching to cable-bracing base):



- 4. Using procured structure-side mounting hardware, repeat the process on the other end of the guy wire, ensuring that any slack in the guy wire can be eliminated by tightening turnbuckle.
- 5. Repeat the above steps with the three (3) other guy wires.

#### Diagram 14 (Completed single guy wire set up):



6. Using two (2) bubble levels for the downrod, tighten each of the four (4) turnbuckles at the base of the downrod so that each guy wire becomes taught. Ensure downrod stays vertical during tightening. Tighten retaining nuts on either end of turnbuckle to prevent unscrewing.

Diagram 15 (Completed guy wire installation):



Note: Turnbuckles not shown above.

# **ELECTRIC & CONTROLLER INSTALL PROCEDURES**

⚠ WARNING! All electrical wiring must be performed by a qualified, licensed electrician. Improper installation may result in electric shock, equipment damage, or death. Do not attempt electrical work unless you are properly qualified and licensed.

⚠ WARNING! Installation of the fan system must comply with all requirements specified in this installation manual, the National Electrical Code (NEC) ANSI/NFPA 70 (current edition), and all applicable local electrical codes. Code compliance is the ultimate responsibility of the property owner and installer.

⚠ WARNING! Fan controllers contain high-voltage capacitors that remain energized after power disconnection. Before servicing electrical components: (1) disconnect main power and apply lockout procedures, (2) isolate all line inputs at the fan controller board (L1, L2/N), (3) wait a minimum of three minutes for capacitors to discharge, and (4) verify zero energy state with appropriate test equipment. Failure to follow this procedure may result in severe injury or death.

**CAUTION:** The product warranty does not cover equipment damage or failure caused by improper electrical installation or failure to follow installation manual specifications.

⚠ WARNING! Never connect the fan to damaged or hazardous power sources. Do not attempt to diagnose or repair electrical malfunctions unless you are a qualified electrical technician. Contact Airdistributor Technical Support for electrical installation questions and ensure your fan system is properly registered for warranty coverage.

# 1. Installing Wiring

**CAUTION:** Do not cut copper wire when stripping.

**IMPORTANT:** Use electrical tape to protect wiring connections and conceal connections inside fan unit/downrod to prevent short circuit and reduce fire hazard.

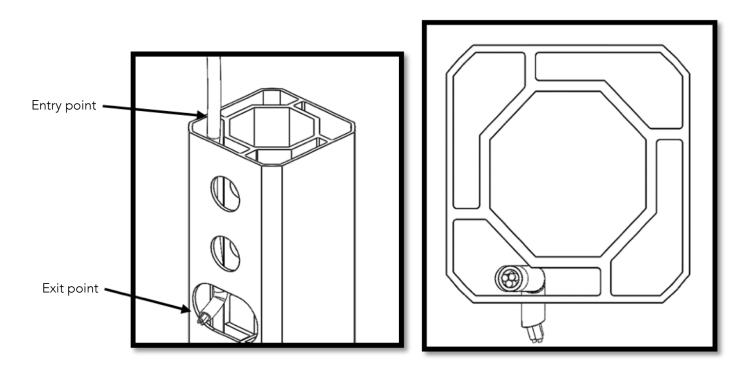
#### Procedure (diagram 12):

1. Match wire colors on fan motor unit and connect. One wire clip is required every 1.5 meters. Organize wiring neatly.

Note: Wire connections must match up to the SAME COLOR (e.g. yellow to yellow, red to red, etc)

2. Refer to below diagrams for details on passing wiring through downrod. Ensure electrical circuit avoids contact with any screws.

#### Diagram 12:



# 2. Wiring the Wall-Mounted Controller to Fan

#### **Required Components:**

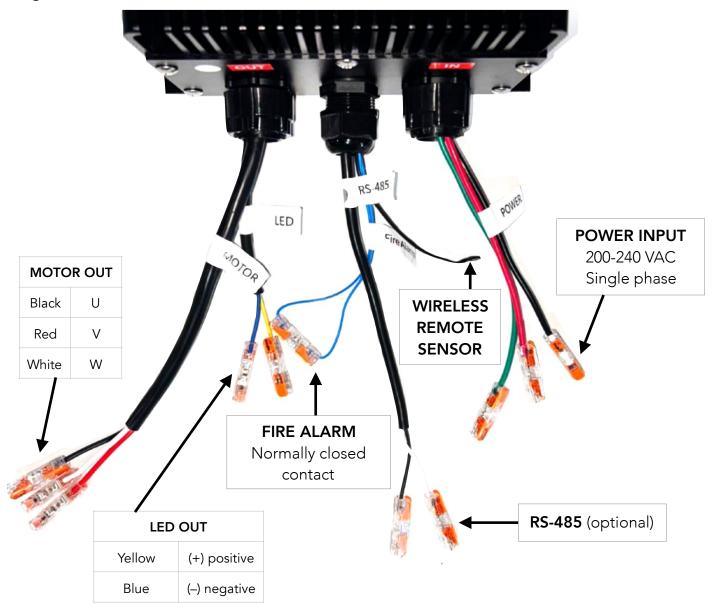
Wall-mounted controller (x1)

Hardware for mounting controller to wall (not included)

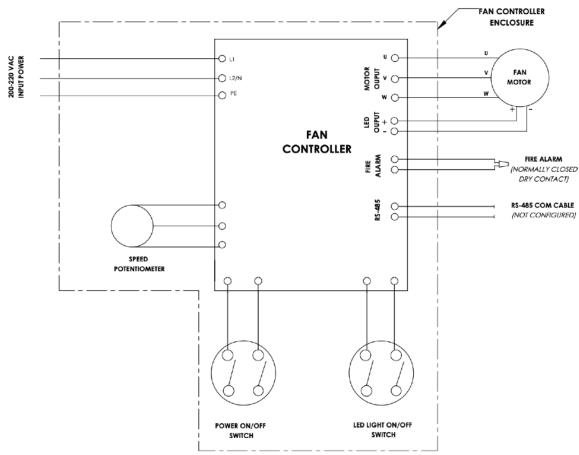
#### Procedure (diagrams 14, 15 & 16):

- 1. Mount and secure controller to wall. Use a level to mark and drill holes as necessary.
- 2. Strip electrical wiring and connect to controller wires. Make sure to color match all connections.
- 3. Refer to the following diagrams for details on properly wiring fan to controller and controller to facility power source.

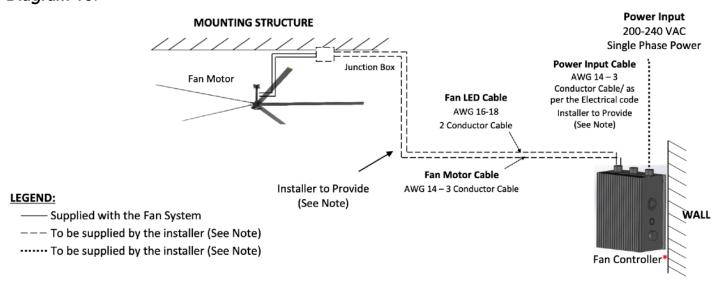
#### Diagram 14:



#### Diagram 15:



#### Diagram 16:



**Note:** Plugs and cables provided by installer are required to meet the applicable National Electrical Code and/or local codes. Fan installation should comply with the general electrical wiring requirements outlined in these codes, ensuring proper grounding, circuit sizing, and disconnects, Consider specific mounting and structural requirements to safely support the fan's weight.

# TESTING THE FAN SYSTEM BEFORE USE

**Note:** Do not operate or test fan without reading and understanding all operating instructions in the next section titled "FAN OPERATING INSTRUCTIONS".

#### Test Running Fan and Using Multimeter

⚠ WARNING: Before operation, ensure there is a minimum of 30cm of clearance above and below fan blades.

**MARNING:** Before operation, ensure there is a minimum of 1m of clearance between tip of fan blade and nearest obstacle.

**CAUTION:** User should only adjust fan speed after TWO (2) minutes of operation.

#### **Procedure:**

- 1. Switch circuit breaker ON and turn ON fan unit. The rotation of the fan when viewed from the ground should be counter-clockwise.
- 2. Allow the unit to operate for at least 15 minutes.
- 3. While running, observe and listen for any anomalous sounds. Use multimeter to ensure current is within safe and standard ranges.

# FAN OPERATING INSTRUCTIONS

**!** WARNING: Before operation, ensure there is a minimum of 30cm of clearance above and below fan blades.

**MARNING:** Before operation, ensure there is a minimum of 1m of clearance between tip of fan blade and nearest obstacle.

**CAUTION:** User should only adjust fan speed after TWO (2) minutes of operation. Do not disconnect power supply while unit is operating. Only turn the unit ON or OFF by pressing the ON/OFF button. Do not turn the unit ON until the fan blades have completely stopped.

# **Using the Wired Wall-Mounted Controller**



# **Using the Wireless Remote Control**

**Note:** In order to use wireless remote, wall-mounted controller must be ON.



To start the fan, either press any of the three speed setting button (Low Speed, Medium Speed, High Speed) or press the Power ON/OFF button.

<sup>\*</sup> Power ON/OFF will only start the fan in the normal counterclockwise direction, suitable for operation in warmer environments where cooling is desired. To reverse the fan's direction for destratification in cold environments, first make sure the fan is turned OFF using the Power ON/OFF button on the wireless remote, and then press the Reverse button to start in reverse. The fan will not reverse while in motion.

### Pairing the Wireless IR Remote with your Fan

#### Procedure:

- 1. Turn OFF power to wall-mounted controller by pressing the ON/OFF Button. Allow unit to remain OFF for (two) 2 minutes before proceeding to next step.
- 2. Press and hold the Power ON/OFF button on the wireless remote.
- 3. While holding the Power ON/OFF button on the wireless remote, turn ON power to the wall-mounted controller by pressing the ON/OFF Button.
- 4. Continue to hold the Power ON/OFF button on the wireless remote for ten (10) seconds and then release.
- 5. To check if pairing was successful, press either the Low Speed, Medium Speed, or High Speed buttons. If the fan operates as expected, the pairing process is complete.
- 6. If fan is not responding to wireless remote, repeat the above process.

**Note:** The receiver for the wireless remote's signal is on the underside of the wall-mounted controller, NOT the fan itself.

# **MAINTENANCE**

#### **Maintenance Checks**

- ✔ Regular checks on the sturdiness of the unit, components and fasteners (e.g., screws, bolts, hinges, etc.).
  - ✔ Regularly confirm guy cables remain taught and have not become loose or sagging.
- ✓ Use a soft damp cloth to clean dust off the unit. Do not use cleaning agents to avoid damage to treated surfaces.