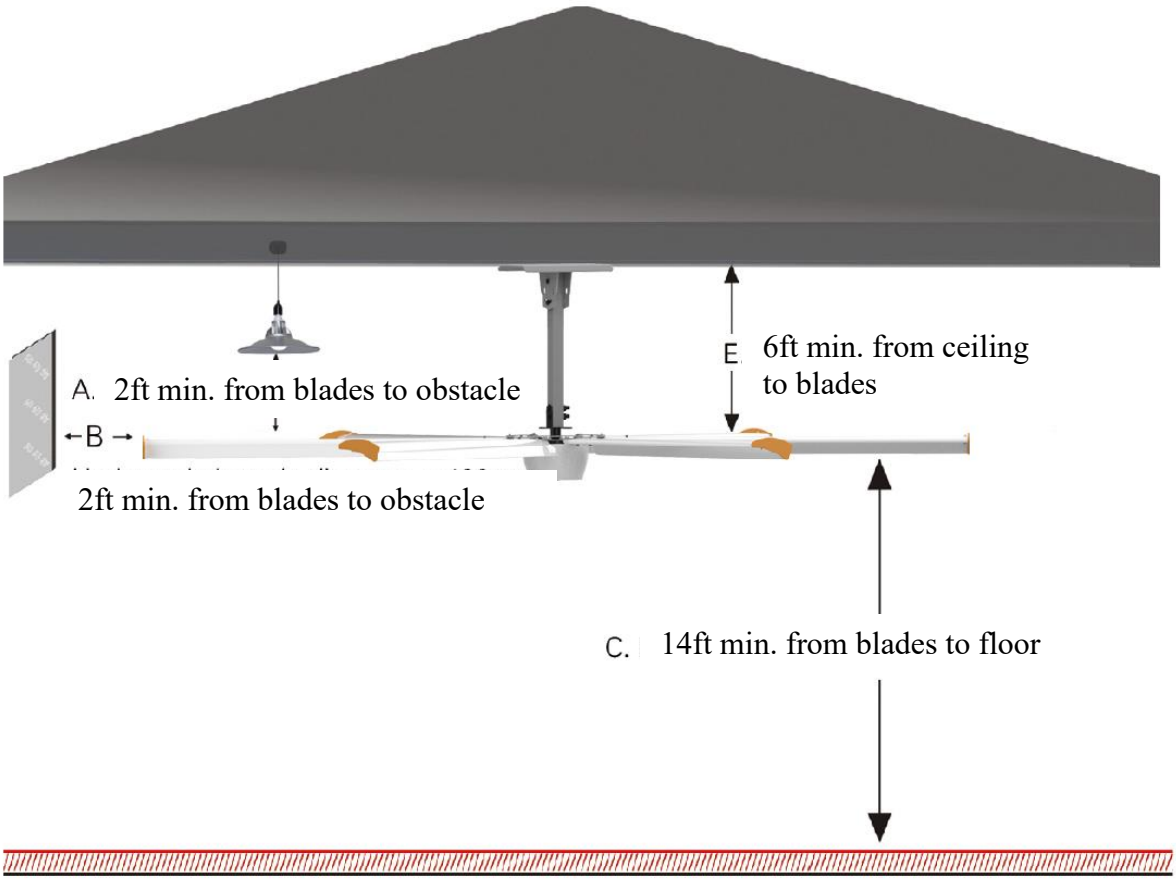
Installation Manual

For 14-24ft Duel King
Overhead HVLS Fans

Beach'n Blades

www.BeachNBlades.com
v 1.21

1. Safety Warning
   1.1. Failure to install fan in accordance with these instructions may result in property damages and/or losses and bodily injury and/or death. All electrical and installation work should be accomplished by qualified personnel.
   1.2. To avoid risks of electrocution, fire, or damage, do not connect the fan or control box to power until final installation.
   1.3. Fans must be mounted to a structure capable of handling the weight and forces applied by the fan. Consult your building manufacturer or an engineer to ensure the structure to which you intend to mount the fan is appropriate for such loads.
   1.4. Fans must be installed in accordance with all national and local codes and safety standards.
2. Location
   2.1. To avoid damage or failure, ensure the fan is installed:
      - Indoors
      - In a dry environment away from moisture or humidity
      - Away from corrosive, explosive, or flammable gases or materials
      - Away from dust, oil, or other particulates
      - Away from obstacles that may contact blades
      - In an environment that does not exceed 120°F
      - Away from winds or moving air caused by doors, HVAC units, vents, etc.
   2.2. Ideal Location
      Ideally, the fan should be mounted in the center of the room at a height of the fan's diameter over the floor (e.g. a 18ft fan would ideally be mounted 18ft over the floor).
   2.3. Installation Requirements
      Minimum height over ground – 14ft
      Minimum distance between blades and ceiling – 6ft
      Minimum distance between blades and obstacles – 2ft



2.4.

3. Installation

3.1. Install the fan mount

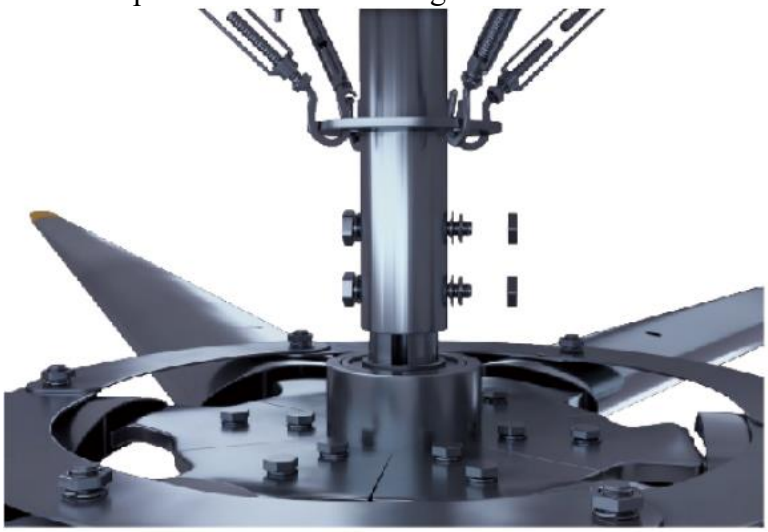
The mount included with your fan is designed for installation on structural I beams. Do not mount fan directly to a purlin, truss, or joist. Install the mount as shown in the example below. Use permanent thread locker on bolts and tighten to 42 ft-lbs.

3.2. Install extension tube

The extension tube should be mounted as shown in the example below. Apply permanent thread locker prior to installation. After using a level to confirm that the extension tube is vertical, tighten bolts to 42 ft-lbs.

3.3. Install motor

Mount the motor to the extension tube as shown in the example below. Apply permanent thread locker prior to installation. Tighten bolts to 42 ft-lbs.

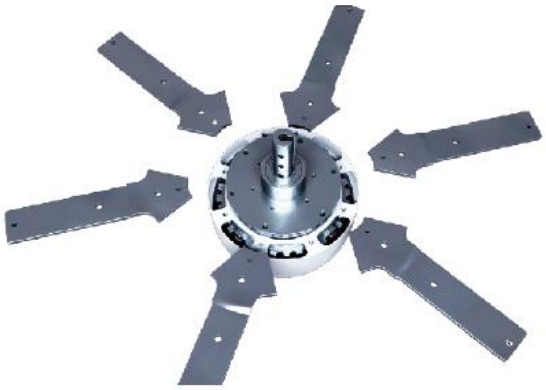


3.4. Install guy wires

Guy wires should be mounted to structural components recommended by your engineer. Guy wires should be mounted 45 degrees from the beam to which the fan is mounted when viewed from below. Guy wires should also be mounted 45 degrees up from the plane of the fan blades. Apply permanent thread locker to wire rope clips and tighten to 5 ft-lbs. Tighten turnbuckles until each guy wire is taut and fan is vertical.

3.5. Install blade mounts

Install the blade mounts to the motor as shown in the example below. Apply permanent thread locker and tighten bolts to 35 ft-lbs.

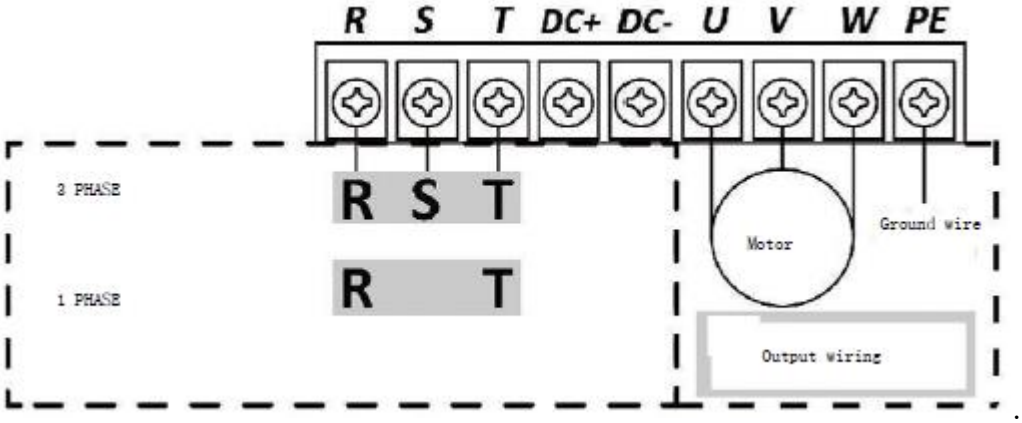


3.6. Install blade winglets
Install a blade winglet to each airfoil.

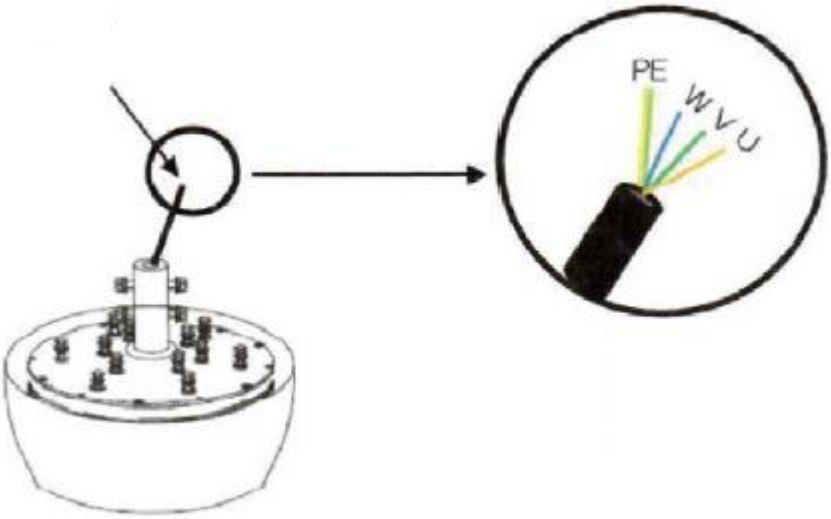
3.7. Install blades
Install the blades to the motor, alternating sides to prevent weighing down one side of the fan during installation. The blades should be installed in an orientation so that the trailing edge (narrow side) of the airfoil is below the leading edge (wider side) of the airfoil.

3.8. Install blade supports
Install the curved blade supports above the airfoils as shown in the example below. Apply permanent thread locker to each bolt, and tighten each to 30 ft-lbs.

4. Electrical Connection
   4.1. Fans require an input of 200vac-240vac. Current varies based on fan size.
   4.2. Ensure all power is disconnected prior to installing fan and control box.
   4.3. Connect the fan ground wire to the ground terminal within the control box.



   4.4. Connect the fan control wires, U, V, and W to the corresponding terminals within the control box. Note: if upon startup, the fan rotates the incorrect direction, swap any two of the fan control wires to switch direction.



4.5. Connect the main power wires to the R and T terminals within the control box.

5. Periodic Maintenance

5.1. Every three months

- Ensure that bolts and fasteners are tight. If a bolt or fastener has become loose, apply appropriate thread locker, and retighten.
- Check tension of guy wires. If cables have become loose, retighten in accordance with instructions.