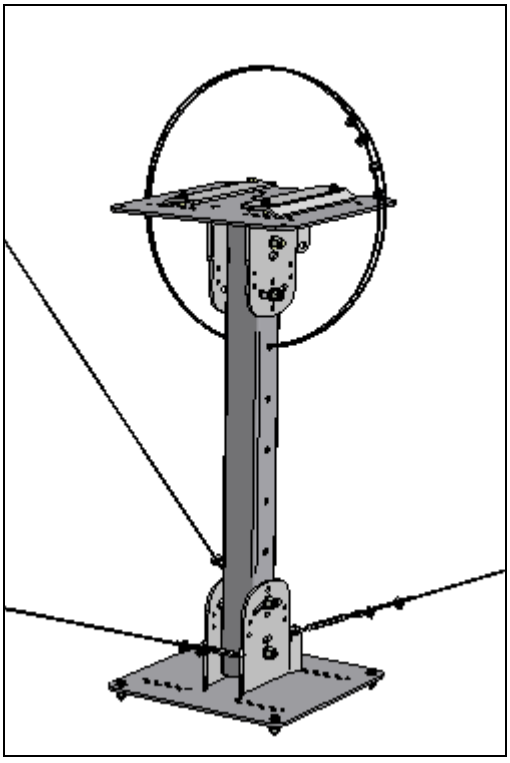
Humongous Fan Mounting Extension Installation Guide



Do not discard these instructions.

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Table of Contents

1. Safety Precautions 3

2. Parts List 5

3. Dimension Sheet 6

4. Installation 7

Safety Precautions

READ, FOLLOW AND SAVE THESE INSTRUCTIONS!

1. Only use this fan in a manner intended by the manufacturer namely as a vertical, ceiling mounted, air moving device. Any attempt to use this fan for any other purpose without expressed, written permission from The Humongous Fan Company will invalidate the warranty.

2. Before servicing or cleaning the fan, all sources of electrical power must be disconnected. The user should take means to ensure that the device is not accidentally energized while being serviced, such as attaching a lockout tag (not included) to the power supply.

3. If a safety device is removed prior to servicing the fan, it must be properly reinstalled before re-energizing the fan.

4. Do not replace any parts to this fan with anything other than authentic Humongous Fan parts. This includes both mechanical and electrical components.

5. All electrical wiring must conform to the National Electric Code and all local codes. Code compliance is ultimately the responsibility of the installer.

6. The fan must be installed in a manner such that there is no chance for the fan blades to strike a person or object while in operation.

7. The fan and any supplemental devices must be installed by qualified personnel. The Humongous Fan Company will not be responsible for personal injuries or damage to property or equipment caused by improper installation.

8. The supplemental mounting kit must be installed in a manner as laid out in this manual. All safety devices and bracing cables must be used.

9. Integrity of the structure to which the fan is mounted is the sole responsibility of the installer. Consult a structural engineer if there is any question relating to the integrity of the structure.

Parts List

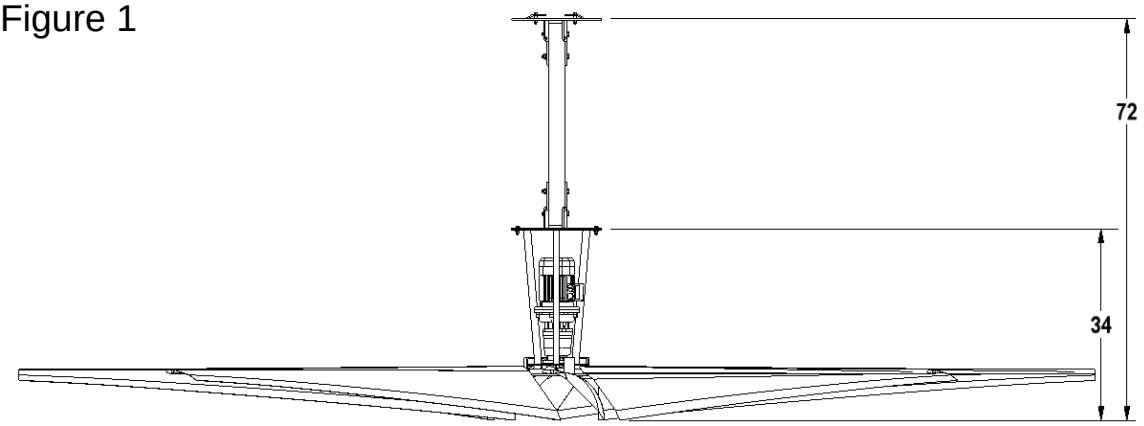
BEFORE ATTEMPTING TO INSTALL YOUR HUMONGOUS FAN, PLEASE VERIFY THAT YOU HAVE THE FOLLOWING:

1. 2 ea., Extension Mount Base
2. 1 ea., Extension Mount Tube
3. 2 ea., Beam Clamp
4. Safety Cable Kit, containing:
    a. 10 ft. (3.1m) of 1/8" Galvanized Safety Cable
    b. 4 ea., 1/8" Cable Clamps
5. Guy Wire Kit, containing:
    a. 3 ea., 10 ft. (3.1m) 1/8" Galvanized Safety Cable
    b. 12 ea., 1/8" Cable Clamps
    c. 6 ea., Wire Rope Thimbles
    d. 3 ea., Turnbuckles
6. Installation Hardware Kit, containing:
    a. 4 ea., 3/8-16 x 1-3/4" Grade 8 HHCS
    b. 4 ea., 3/8-16 x 1-1/4" Grade 8 HHCS
    c. 16 ea., 3/8" Flat Washers
    d. 8 ea., 3/8-16 Grade 8 Nylon Lock Nut
    e. 4 ea., 1/2-13 X 4-1/2" Grade 8 HHCS
    f. 8 ea., 1/2" Flat Washers
    g. 4 ea., 1/2-13 Nylon Lock Washers

If any of the above items are missing, please call us at 216-663-8830.

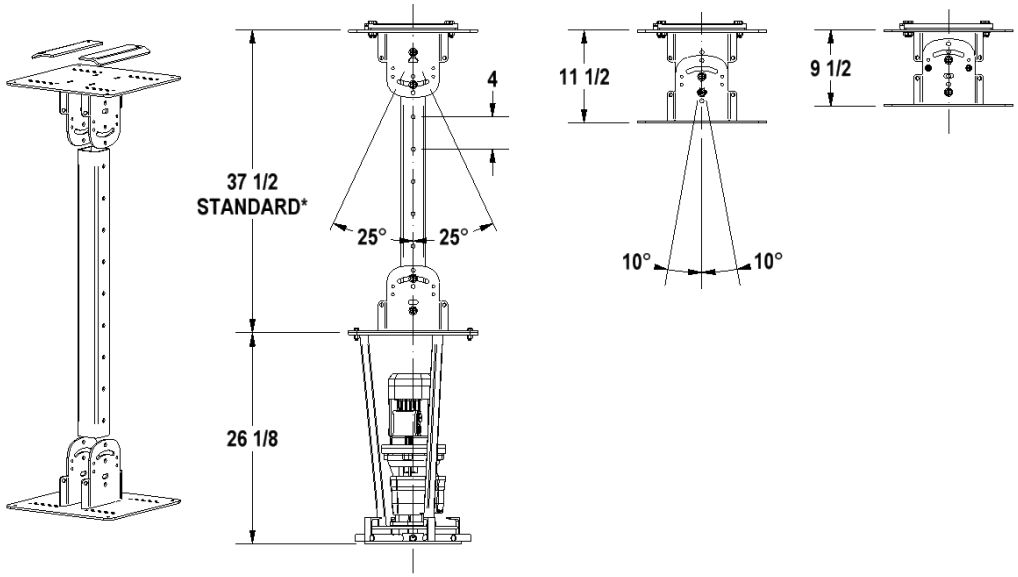
Standard Mounting Extension

Figure 1



Mounting Extension Configurations

Figure 2



Features:

- 1/4” Steel plate construction.
- 3” Square X 3/16” wall steel extension tube.
- Accommodates mounting to beams up to 12” wide.
- *Standard extension tube may be shortened in 4” increments.
- Multiple configurations from a single mount will adapt to many structures.
- Standard configuration mounting hardware and stabilizing wires are included in the extension kit.

Part Number: MTG-EXT-37.5

Installation Tools

1 ea. 9/16” Wrench
1 ea. 9/16” Socket
1 ea. 3/4” Wrench
1 ea. 3/4” Socket
1 ea. 3/8” Wrench
1 ea. Torque Wrench
1 ea. Level (<24”)
1 ea. Cable Cutter

Installation Procedure

The Humongous Fan is designed to be mounted either from a series of braces spanning multiple joists or, with the use of a mounting kit, directly from an I-beam. The mounting braces must be sufficient to remain straight while supporting the 250 lb. (113 Kg) weight of the fan and mounting extension, as well as absorb up to 250 ft-lbs (340 Nm) of torque, with an appropriate safety factor. If there is any question as to whether the structure is sufficient, consult a structural engineer.

All supplied bolts must be torqued per the following values:

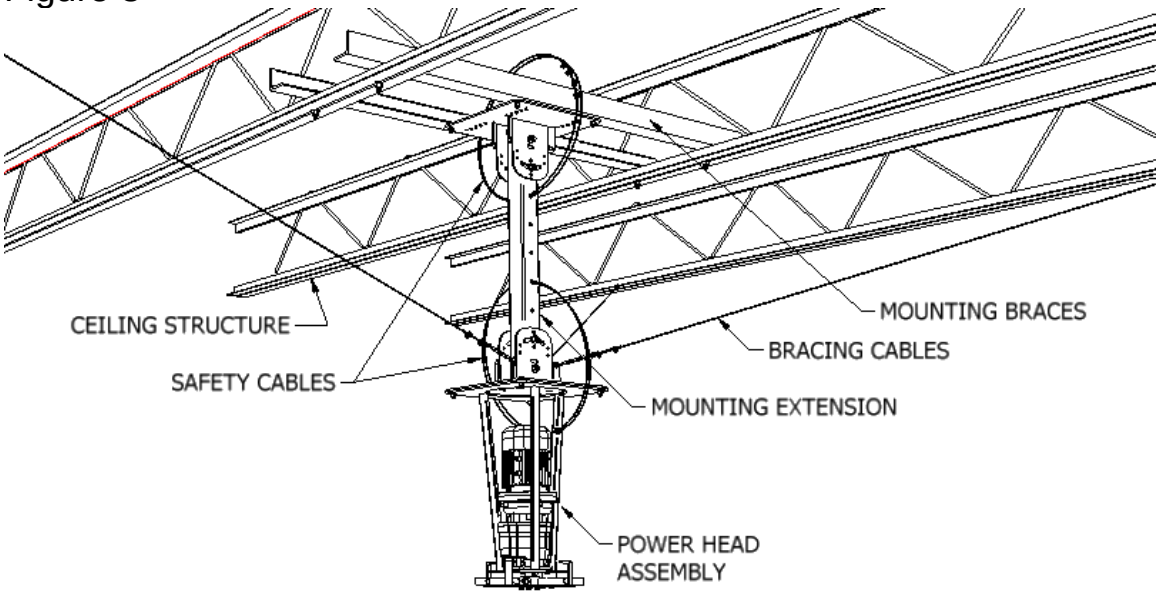
Table 1

Product	Torque [Ft·Lb]	Torque [N·m]
1/8” Wire Rope Clamps	4.5	6
1/4-20 UNC Grade 5 Bolts	8.5	12
3/8-16 UNC Grade 8 Bolts	44	60
1/2-13 UNC Grade 8 Bolts	106	143
The above values are based upon using clean, zinc plated, and non-lubricated fasteners.		

In general, mounting a Humongous Fan between joists is easier than clamping to a beam, especially if the joists are close together. Additionally, this type of mounting offers additional flexibility for fitting the fan between lights and avoiding the flickering caused by fan blades passing below a lighting fixture.

Below is a typical installation mounted across joists.

Figure 3



As the span between joists is increased, heavier support material must be used. The chart below indicates the minimum material cross sections for various spans. Please note the acceptable materials listed require the use of two sections spaced on 14" centers to create the mounting braces. A single angle, or section, should never be used as a beam.

Table 2
Joist Spans and Appropriate Support Materials

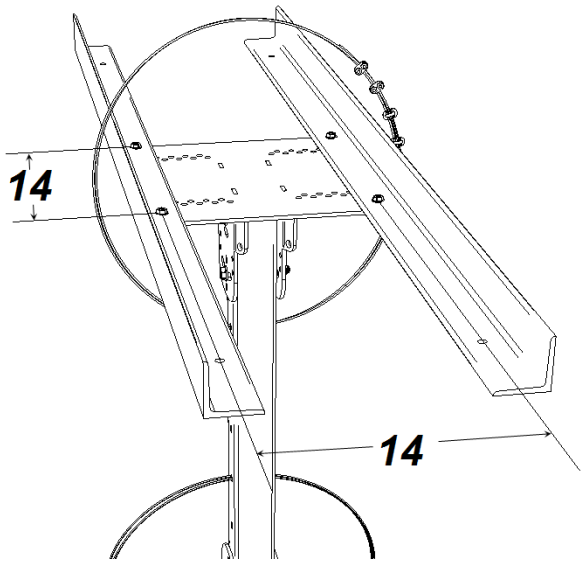
Span	Acceptable Materials
Span < 6 Ft.	2-1/2" x 2-1/2" x 1/4" Angle Iron
	Power Strut PS 100 or Equivalent
6 Ft. < Span < 8 Ft.	3" x 3" x 1/4" Angle Iron
	Power Strut PS 200-2T3 or Equivalent
8 Ft. < Span < 10 Ft.	3-1/2" x 3-1/2 x 1/4" Angle Iron
	Power Strut PS 150-2T3 or Equivalent
10 Ft. < Span < 12 Ft.	2.5" x 2.5"x 1/8" Square Tube
	4" x 4" x 1/4" Angle Iron
Above 12 Ft.	Consult Structural Engineer

Support materials, including hardware to mount to support materials, are not normally provided with the fan. Use only grade 8 fasteners for mounting the fan and support materials. Use of Power Strut (or equivalent) products is generally encouraged as it can speed

installation time and limit the weight of steel to be installed overhead.

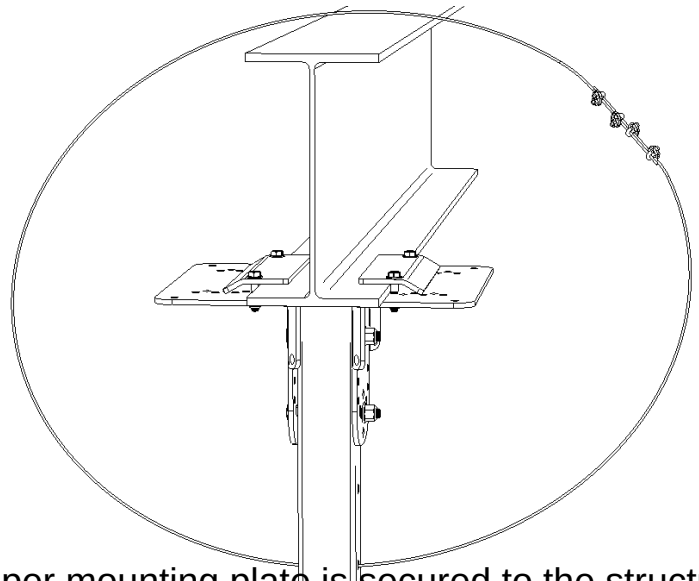
If using structural iron or strut to support the fan, the structural iron should be drilled and bolted directly to the mounting base plate. The beam clamps are intended to be used only when mounting directly to a wide flanged beam (I-beam).

FIGURE 4



When mounting directly to an I-beam, the bolts must be placed as close to the flanges of the beam as possible.

FIGURE 5



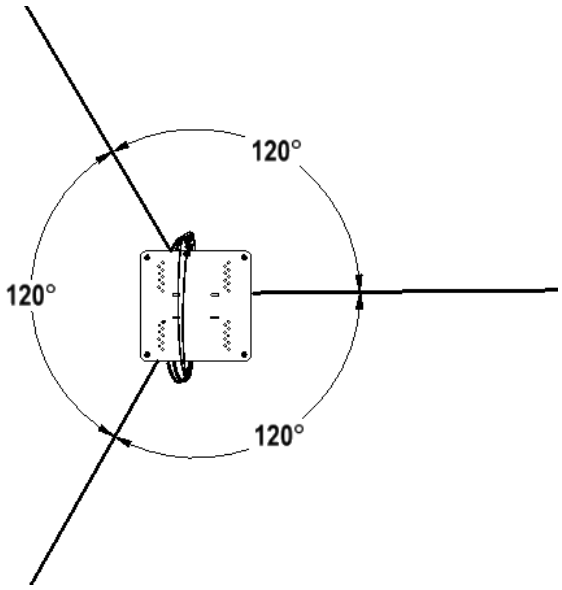
Once the upper mounting plate is secured to the structure, the extension tube should be checked for plumb using a level and tightened. The lower mounting plate can now be set level and tightened.

Once the mounting extension is secured, the power head assembly can be secured to the lower mounting plate using the 1-1/4” long bolts, nuts and washers provided.

The safety cables must be routed over the mounting structure and through the vertical extension tube or the power head frame. The safety cables should be routed to leave as little slack as possible. If the safety cable is routed through the extension tube and over the structure, a second cable must be routed through the power head frame and the extension tube. The safety cables must be secured with the four cable clamps provided. Make sure the cable clamps are installed per the instructions on their packaging.

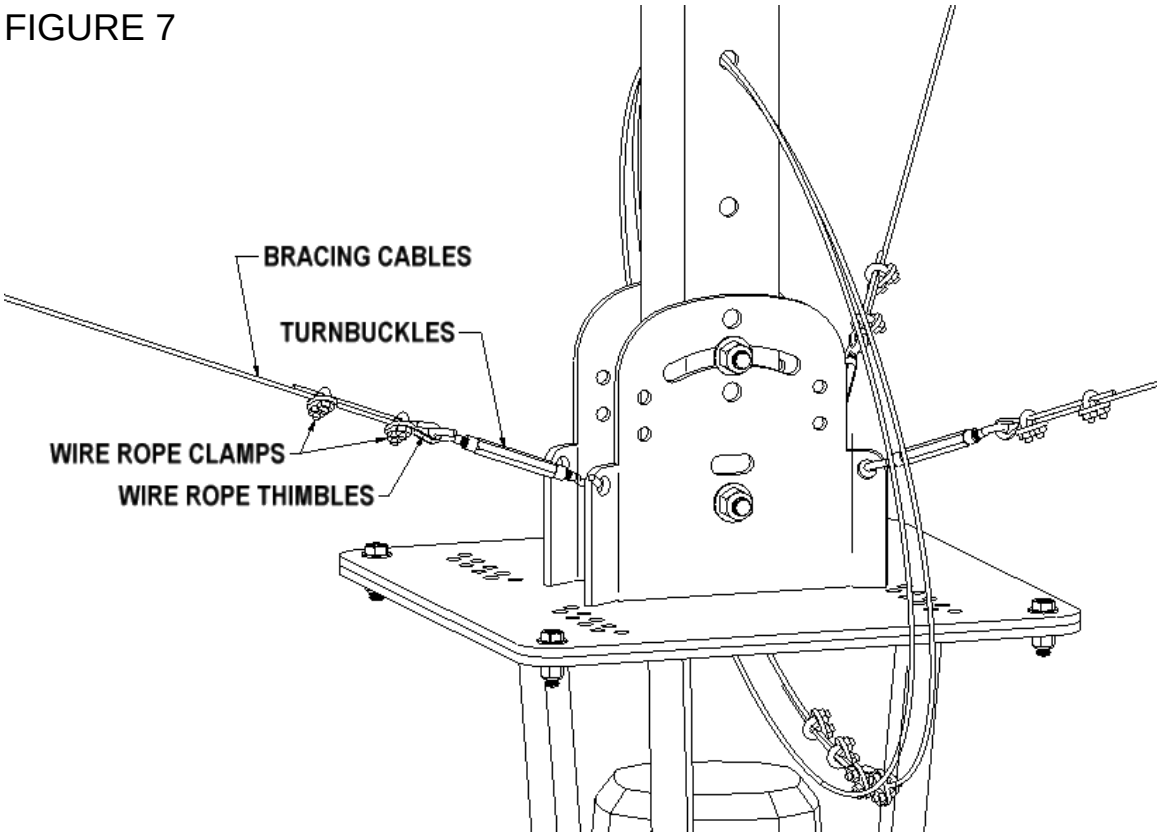
The three guy wire bracing cables must be installed to provide stability to the extension mounted fan. The bracing cables should be equally spaced around the mounting extension.

FIGURE 6



The cables should be connected to the lower mounting extension plate with the turnbuckles provided. Attach the cables to the support structure at the farthest available point from the mounting extension.

FIGURE 7



Once all bracing cables are secure at both ends and snug, recheck level on the base of the power head assembly. Adjust the turnbuckles one full turn beyond hand tight to provide proper tension in the cables. Cut off any excess lengths of cable that may remain.

Installation of the breather element and electrical connection can begin once the mounting extension, power head assembly and all safety and bracing cables are securely installed. Please refer to the fan installation manual 51512 for further instruction.