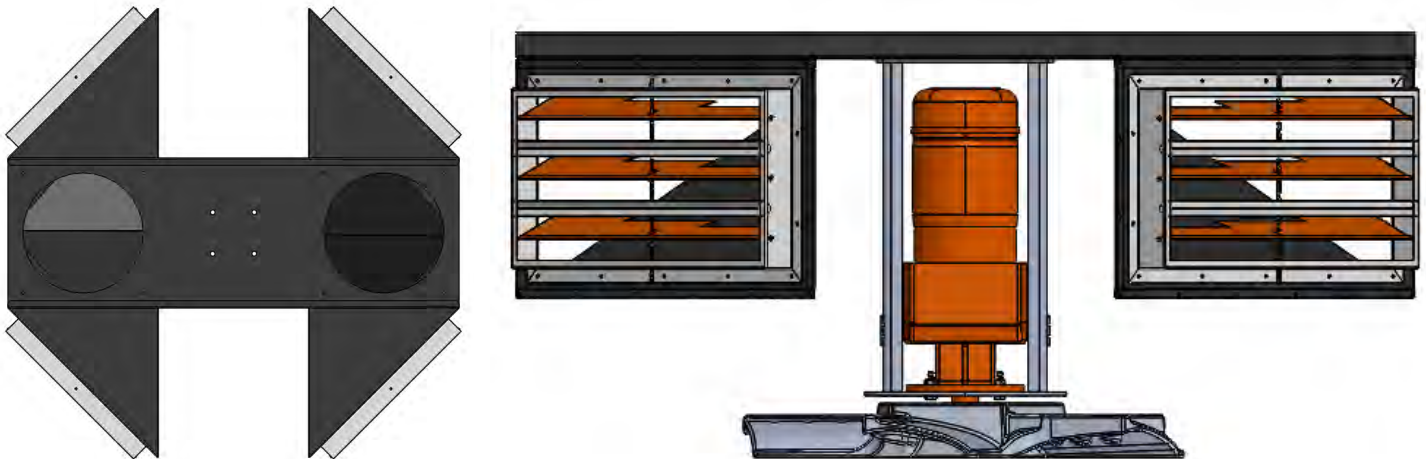
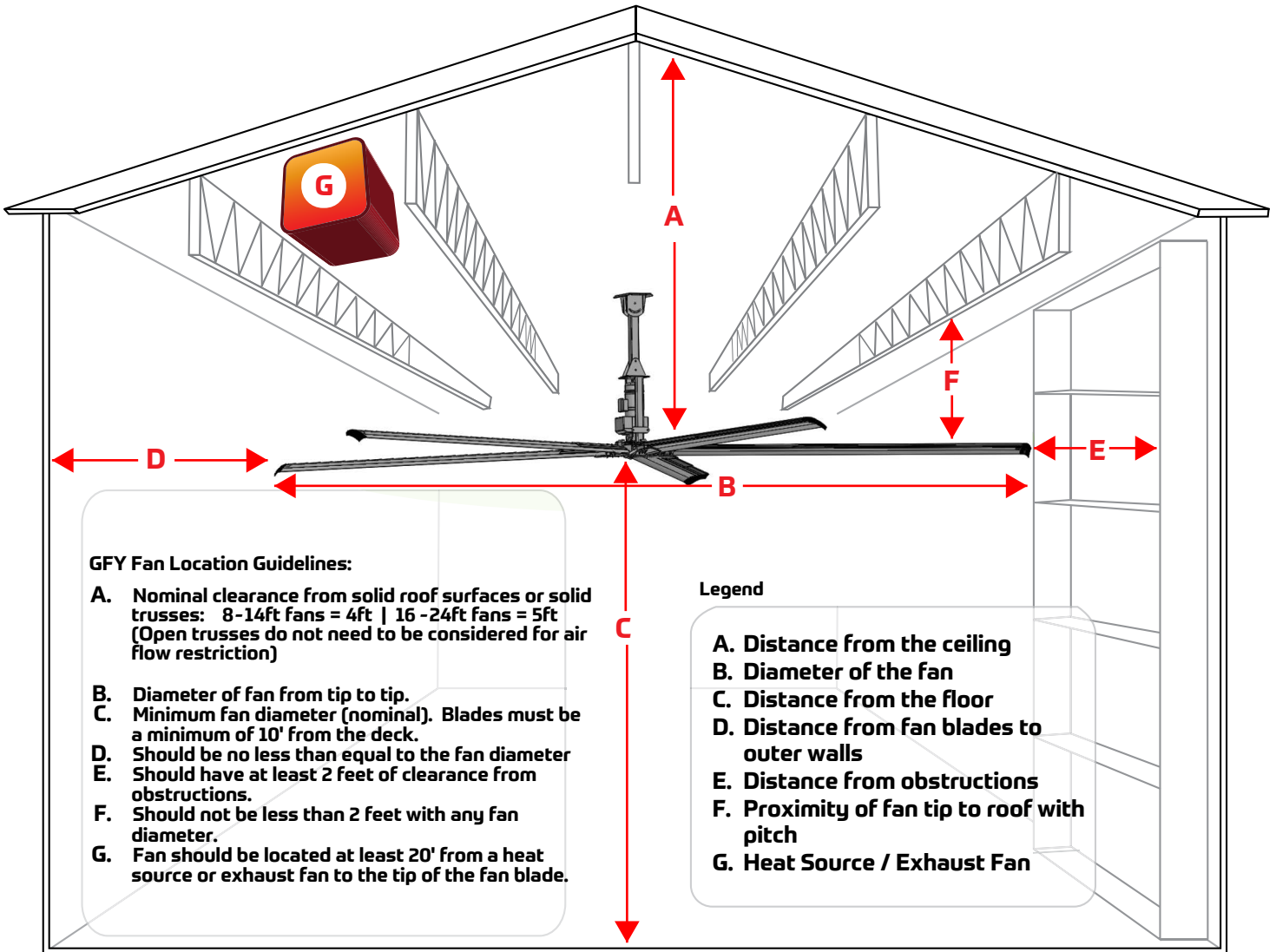


Follow the Factory Mutual Insurance Company (FM Global) standards, Heating equipment manufacturer's guideline and safety standards such as those published by the National Fire Protection Association (NFPA), and the American Society for Heating, Refrigeration and Air Conditioning Engineers (ASHRAE), and local code authorities.

Z-CHILL™

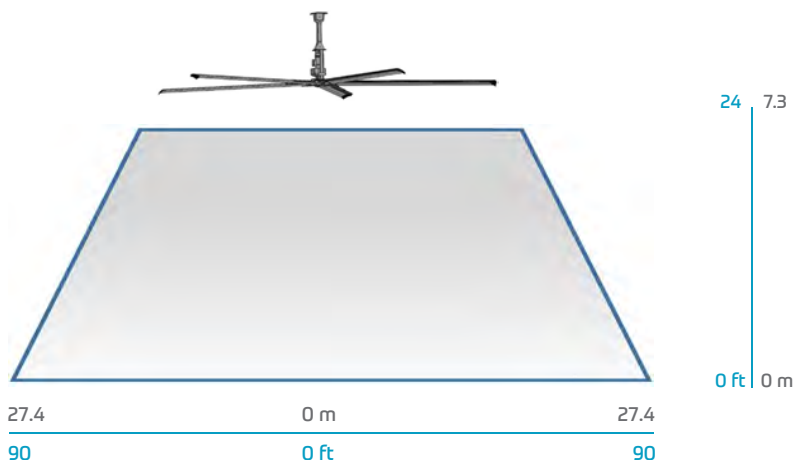
GFY's patented revolutionary tempered air delivery system. Z-Chill™ is a highly engineered vent/louver system that delivers tempered air to GFY's Z-Tech™ fan. Cool air, hot air, or both can be introduced into the top of your Z-Tech™ fan and optimally spread across the Z-Chill™ coverage area. Z-Chill™ is the most innovative product to hit the HVLS fan market since 1996 when the first HVLS fan was made. Easily installs with any GFY Z-Tech™ fan. A 2 FT down tube is required and will ship automatically with every Z-Chill™. Available with new Z-Tech™ fans or retrofit existing Z-Tech™ fans.





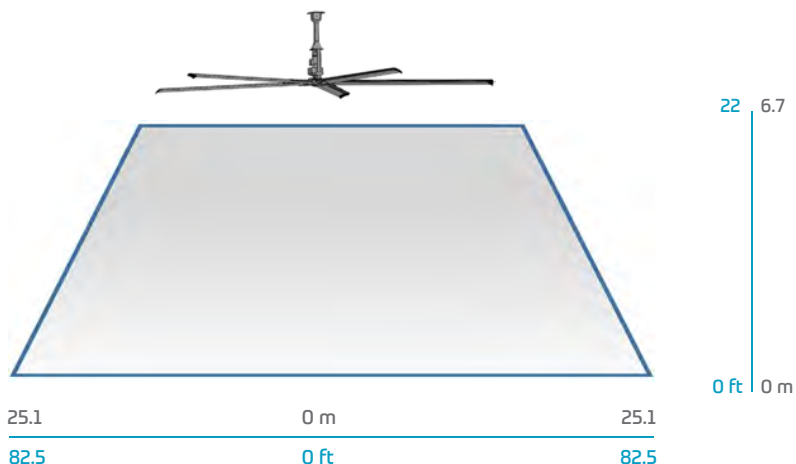
24' Diameter Fan (nominal)

- 1) Number of Blades: 5 Patented Z-Tech™ Blades
- 2) Blade Pitch: 20°+
- 3) Minimum Blade Height: 24 FT (Blade from Floor)
- 4) Maximum Cooling Diameter: 180 FT
- 5) Maximum Destratification Coverage: 240 FT
- 6) Nominal Rotations Per Minute: 56 RPM
- 7) Nominal Motor: 2.0 HP (2.2kW)
- 8) Nominal Amps: 3.5A@480V
- 9) System Weight: 395 lbs
- 10) Maximum Mounting Distance Between Fans: 165 FT
- 11) Nominal Clearance From Solid Roof Surfaces: 5 FT



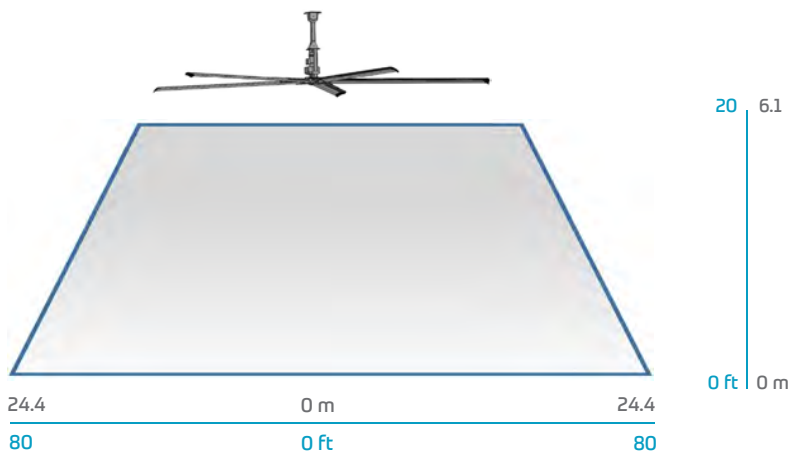
22' Diameter Fan (nominal)

- 1) Number of Blades: 5 Patented Z-Tech™ Blades
- 2) Blade Pitch: 20°+
- 3) Minimum Blade Height: 22 FT (Blade from Floor)
- 4) Maximum Cooling Diameter: 165 FT
- 5) Maximum Destratification Coverage: 220 FT
- 6) Nominal Rotations Per Minute: 56 RPM
- 7) Nominal Motor: 2.0 HP (2.2kW)
- 8) Nominal Amps: 3.5A@480V
- 9) System Weight: 385 lbs
- 10) Maximum Mounting Distance Between Fans: 150 FT
- 11) Nominal Clearance From Solid Roof Surfaces: 5 FT



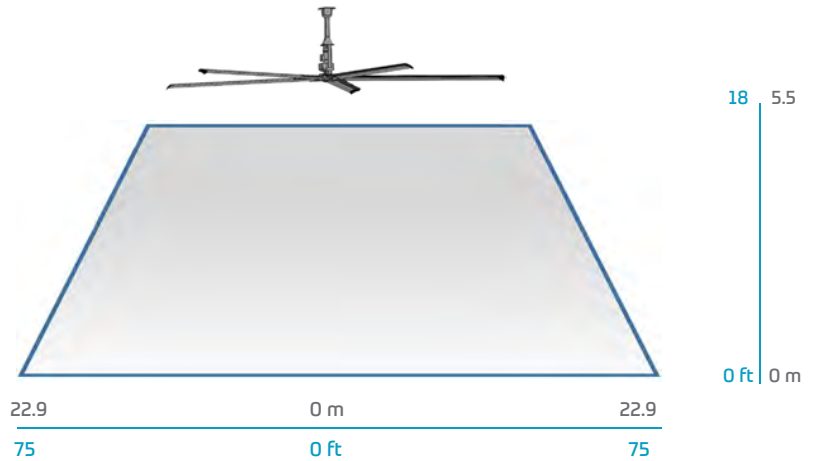
20' Diameter Fan (nominal)

- 1) Number of Blades: 5 Patented Z-Tech™ Blades
- 2) Blade Pitch: 20°+
- 3) Minimum Blade Height: 20 FT (Blade from Floor)
- 4) Maximum Cooling Diameter: 160 FT
- 5) Maximum Destratification Coverage: 200 FT
- 6) Nominal Rotations Per Minute: 70 RPM
- 7) Nominal Motor: 2.0 HP (2.2kW)
- 8) Nominal Amps: 3.5A@480V
- 9) System Weight: 375 lbs
- 10) Maximum Mounting Distance Between Fans: 145 FT
- 11) Nominal Clearance From Solid Roof Surfaces: 5 FT



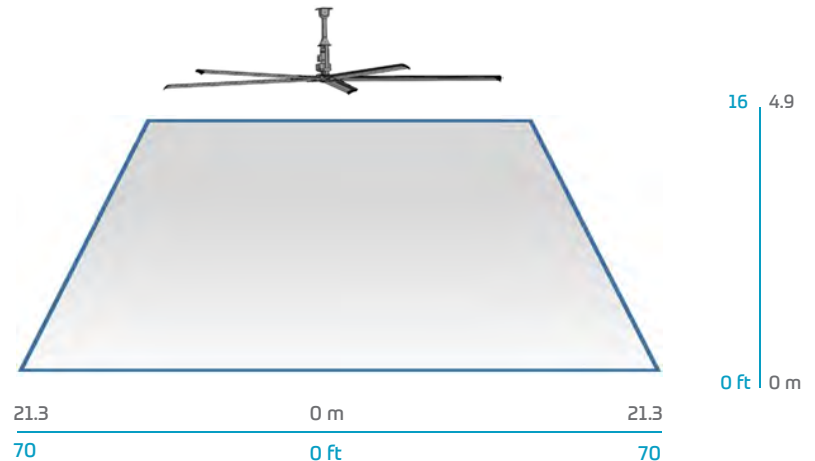
18' Diameter Fan (nominal)

- 1) Number of Blades: 5 Patented Z-Tech™ Blades
- 2) Blade Pitch: 20°+
- 3) Minimum Blade Height: 18 FT (Blade from Floor)
- 4) Maximum Cooling Diameter: 150 FT
- 5) Maximum Destratification Coverage: 180 FT
- 6) Nominal Rotations Per Minute: 76 RPM
- 7) Nominal Motor: 2.0 HP (2.2kW)
- 8) Nominal Amps: 3.5A@480V
- 9) System Weight: 365 lbs
- 10) Maximum Mounting Distance Between Fans: 135 FT
- 11) Nominal Clearance From Solid Roof Surfaces: 5 FT



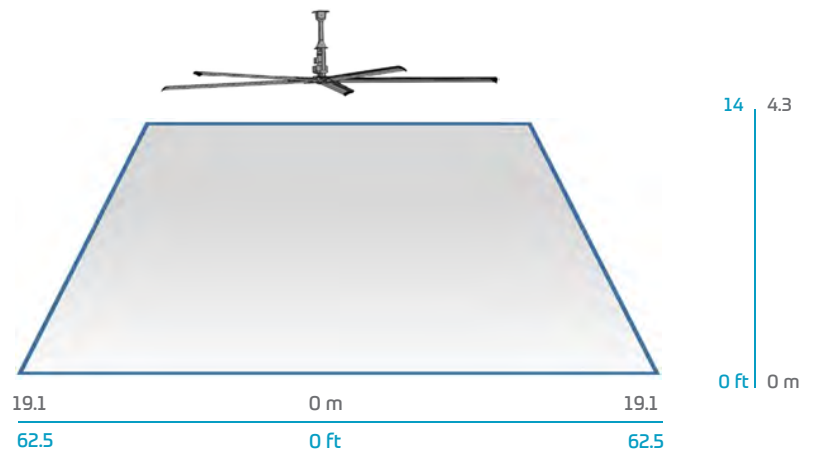
16' Diameter Fan (nominal)

- 1) Number of Blades: 5 Patented Z-Tech™ Blades
- 2) Blade Pitch: 20°+
- 3) Minimum Blade Height: 16 FT (Blade from Floor)
- 4) Maximum Cooling Diameter: 140 FT
- 5) Maximum Destratification Coverage: 160 FT
- 6) Nominal Rotations Per Minute: 76 RPM
- 7) Nominal Motor: 1.5 HP (1.5kW)
- 8) Nominal Amps: 2.65A@480V
- 9) System Weight: 325 lbs
- 10) Maximum Mounting Distance Between Fans: 125 FT
- 11) Clearance From Solid Roof Surfaces: 5 FT



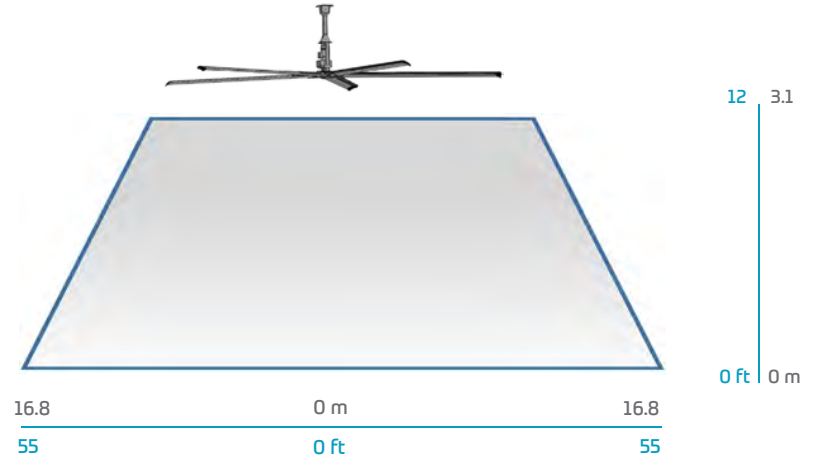
14' Diameter Fan (nominal)

- 1) Number of Blades: 5 Patented Z-Tech™ Blades
- 2) Blade Pitch: 20°+
- 3) Minimum Blade Height: 14 FT (Blade from Floor)
- 4) Maximum Cooling Diameter: 125 FT
- 5) Maximum Destratification Coverage: 140 FT
- 6) Nominal Rotations Per Minute: 76 RPM
- 7) Nominal Motor: 2.0 HP (1.5 kW)
- 8) Nominal Amps: 2.65A@480V
- 9) System Weight: 315 lbs
- 10) Maximum Mounting Distance Between Fans: 105 FT
- 11) Nominal Clearance From Solid Roof Surfaces: 4 FT



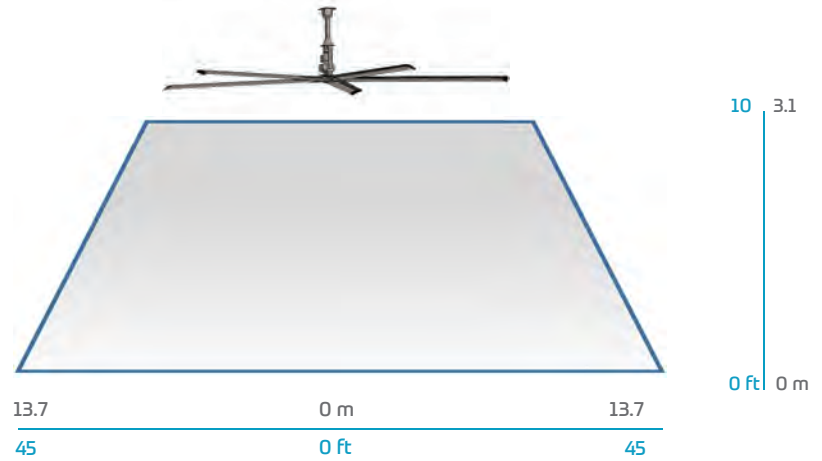
12' Diameter Fan (nominal)

- 1) Number of Blades: 5 Patented Z-Tech™ Blades
- 2) Blade Pitch: 20°+
- 3) Minimum Blade Height: 12 FT (Blade from Floor)
- 4) Maximum Cooling Diameter: 110 FT
- 5) Maximum Destratification Coverage: 120 FT
- 6) Nominal Rotations Per Minute: 120 RPM
- 7) Nominal Motor: 2.0 HP (1.5kW)
- 8) Nominal Amps: 2.65A@480V
- 9) System Weight: 305 lbs
- 10) Maximum Mounting Distance Between Fans: 95 FT
- 11) Nominal Clearance From Solid Roof Surfaces: 4 FT



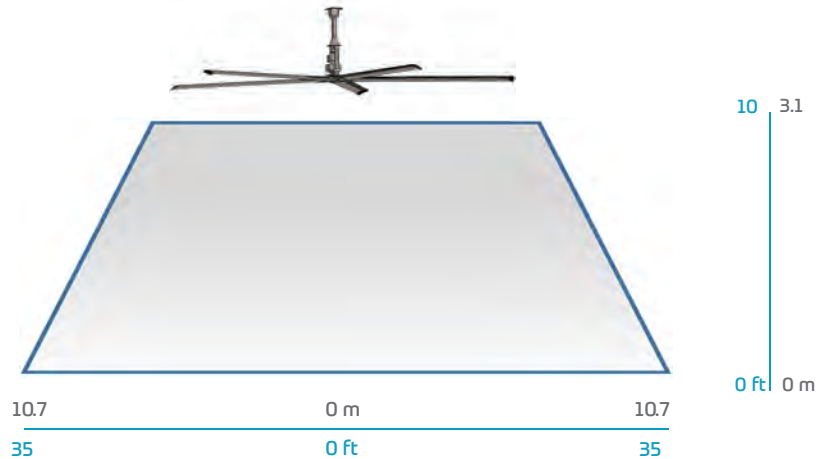
10' Diameter Fan (nominal)

- 1) Number of Blades: 5 Patented Z-Tech™ Blades
- 2) Blade Pitch: 20°+
- 3) Minimum Blade Height: 10 FT (Blade from Floor)
- 4) Maximum Cooling Diameter: 90 FT
- 5) Maximum Destratification Coverage: 100 FT
- 6) Nominal Rotations Per Minute: 120 RPM
- 7) Nominal Motor: 2 HP (1.5 kW)
- 8) Nominal Amps: 2.65A@480V
- 9) System Weight: 295 lb
- 10) Maximum Mounting Distance Between Fans: 75 FT
- 11) Nominal Clearance From Solid Roof Surfaces: 4 FT



8' Diameter Fan (nominal)

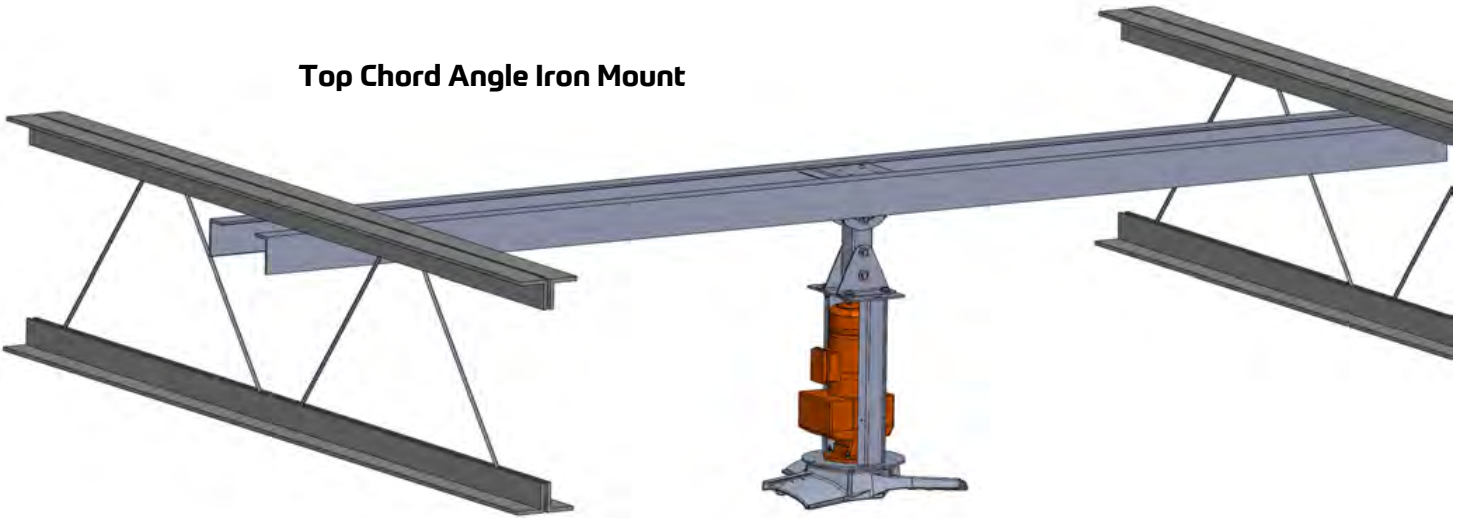
- 1) Number of Blades: 5 Patented Z-Tech™ Blades
- 2) Blade Pitch: 20°+
- 3) Minimum Blade Height: 10 FT (Blade from Floor)
- 4) Maximum Cooling Diameter: 70 FT
- 5) Maximum Destratification Coverage: 80 FT
- 6) Nominal Rotations Per Minute: 120 RPM
- 7) Nominal Motor: 2 HP (1.5 kW)
- 8) Nominal Amps: 2.65A@480V
- 9) System Weight: 285 lb
- 10) Maximum Mounting Distance Between Fans: 55 FT
- 11) Nominal Clearance From Solid Roof Surfaces: 4 FT



ADDITIONAL SPECIFICATION NOTES: See GFY FAN LOCATION GUIDELINES in this spec sheet for additional details.

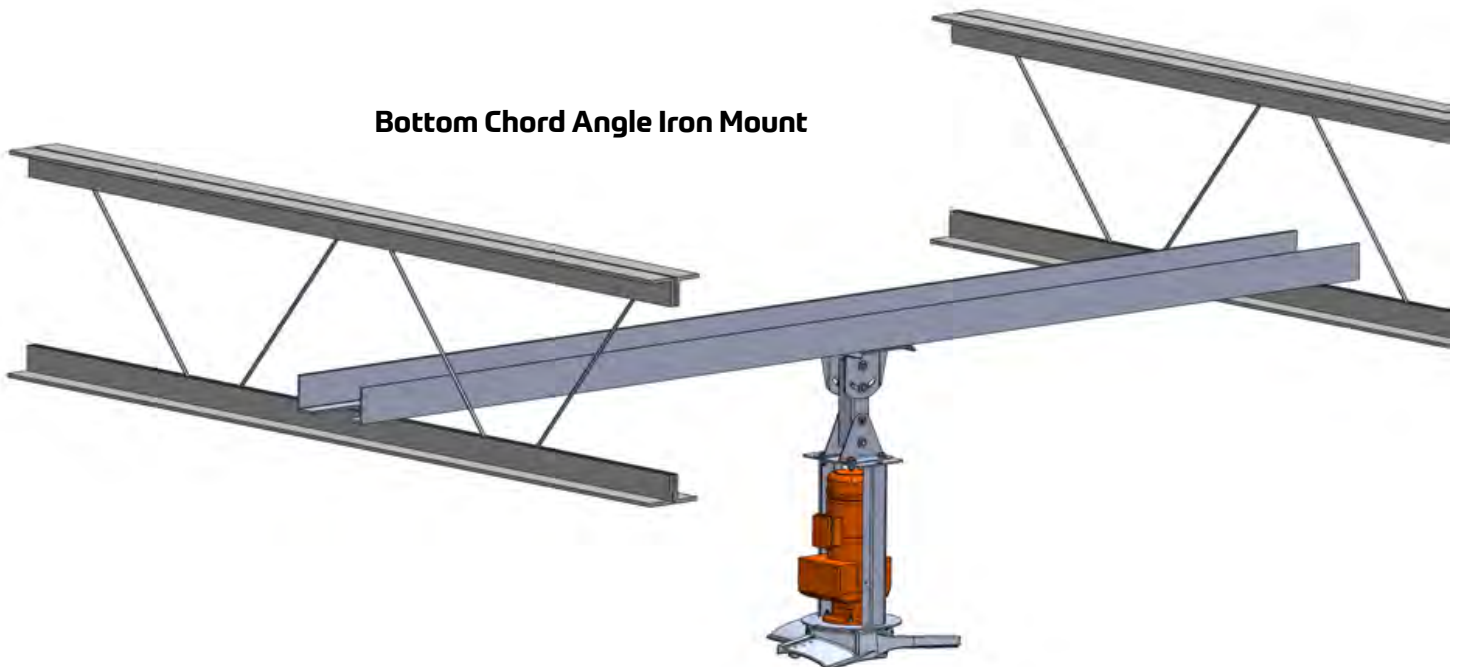
1. Minimum 2 FT of clearance from obstructions.
2. Minimum 2 FT below truss with any fan diameter.
3. Should be at least one fan diameter away from a heat source.
4. Should be at least one fan diameter away from any exhaust fan(s).
5. Should be at least one fan diameter away from any wall.
6. Fan should be no closer than 3ft to sprinkler heads (observe local codes).
7. Lights may need to be spaced 2 FT or greater away from the tip of the fan blade to prevent shadowing.

Top Chord Angle Iron Mount



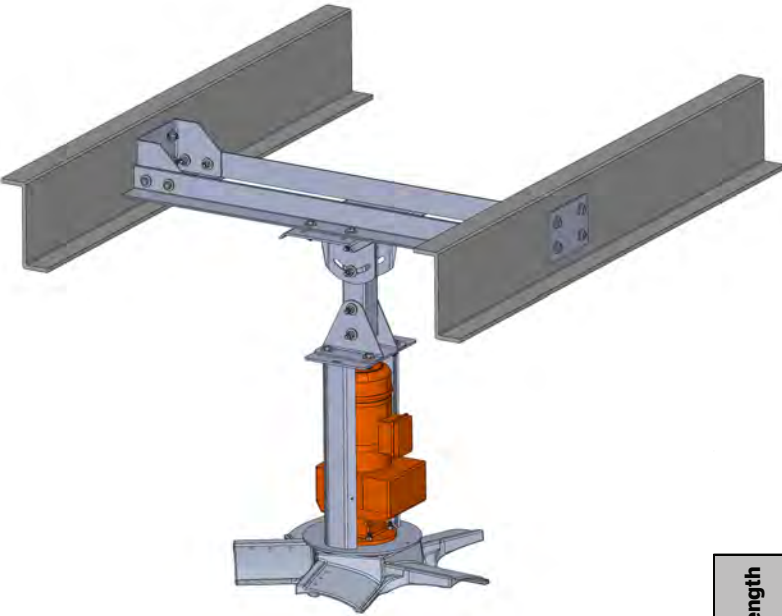
- The 3"x3"x1/4" steel angles must be supplied by the installing contractor. Hardware used to secure the angles to the mounting structure is not included.
- If the truss span is wider than 8 FT (4) steel angles and the XL Mount are required. Reference the Installation & Technical Operations Guide or contact GFY for additional instructions.

Bottom Chord Angle Iron Mount



- The 3"x3"x1/4" steel angles must be supplied by the installing contractor. Hardware used to secure the angles to the mounting structure is not included.
- If the truss span is wider than 8 FT (4) steel angles and the XL Mount are required. Reference the Installation & Technical Operations Guide or contact GFY for additional instructions.

“Z-Purlin” Mount



Z-PURLIN REQUIREMENTS

- The 3"x3"x1/4" steel angles must be supplied by the installing contractor.
- Maximum unsupported length (see chart below).
- Spacing between Z-Purlins should 5 FT or less.
- Z-Purlins must be a minimum of 14 gauge steel.
- This mounting system may also be required to span concrete beams.
- Consult a local structural engineer for any concrete beam applications.

		Purlin Height		
		8" (20.3 cm)	9" (22.9 cm)	10" (25.4 cm)
Purlin Length	<20' (6.1 m)	Intended use	Intended Use	Intended Use
	<25' (7.6 m)	DO NOT USE	Intended Use	Intended Use
	<30' (9.1 m)	DO NOT USE	DO NOT USE	Intended Use

Wood Beam Mount

Installing contractor must supply L-bracket anchor hardware as described below:

- (2) 1/2"-13 x "1 1/2" longer than the support structure" Grade 8 Hex Cap Screw
- (4) 1/2" ASTM F436 Type 1 Grade 8 Mechanical Galvanized Steel Structural Flat Washer
- (2) 1/2"-13 Grade 8 Steel Nylock Nut

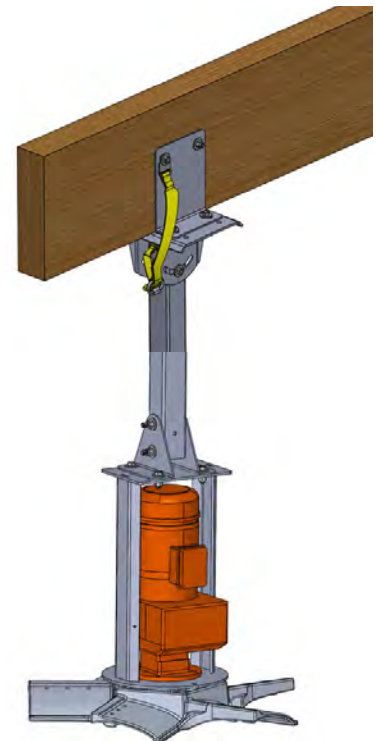


ABB ASC355 VFD Controller

200-240VAC 3 Phase
380-480VAC 3 Phase

ABB ASC255 VFD Controller

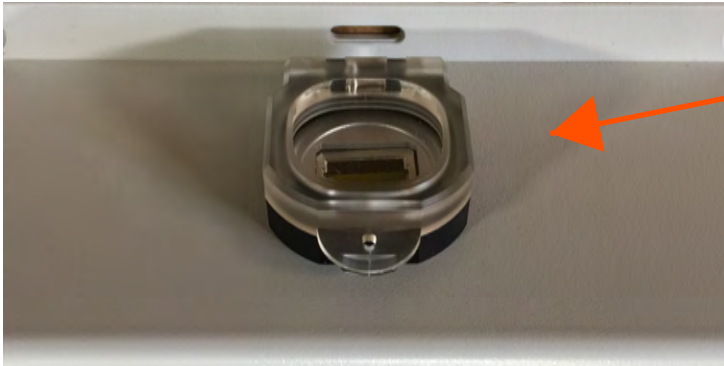
100-120VAC 1 Phase
200-240VAC 1 Phase



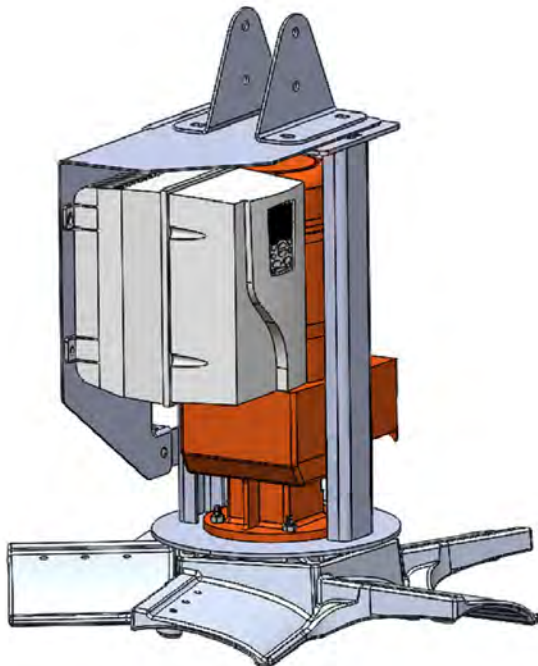
Fan Control **ROHS**
COMPLIANT

- ABB Variable Frequency Drive Enclosure - Nema 4X (IP66).
- Special Wiring (Thermostats, Fire Alarm Interface, Networking, Etc.) (Optional) Consult Factory.
- 50 / 60 Hz Operation.
- All GFY Z-Tech™ Controls ship standard with an Early Suppression Fast Response Relay ready to connect to existing fire suppression systems.
- GFY Z-Tech™ Fan Controls ship standard with an integral Lock Out Tag Out Disconnect.
- ASC355 can interlink and run up to 25 fans from a single keypad (Additional wiring and programming required).

**WALL MOUNT KEYPAD
 ON BOARD CONTROLS**



- Optional Wall Mount Keypad provides far greater flexibility for your GFY fan installation.
- Mount the VFD Controller in the ceiling or high on the column for safety and security and drop the keypad down to a user friendly mounting height.
- Wall Mount Keypad option ships from GFY with a 10 FT and a 100 FT CAT6 data cable allowing the keypad to be mounted approximately 24 FT below the VFD Controller.
- Max CAT6 data cable length is 300 FT. Longer cable is supplied by the installing contractor.
- Box size is 9" x 6" x 2 3/4"



- Fan Mounted Control option locates the VFD Controller on a bracket mounting directly to the fan frame.
 - GFY - Access to the VFD is available without fan disassembly.
 - 8-10 airfoil fans - One airfoil must be removed to access the VFD for service work.
- The Wall Mount Keypad option is included in the cost of this option.
- GFY provides a 10 FT and a 100 FT data cable to connect the Wall Mount Keypad option. Longer cable is installing contractor provided.