

THE NATURAL CHOICE FOR ENERGY SAVINGS!

OWNER'S GUIDE

ATTIC FAN GABLE

MODELS:

AFG Models



AFG SMT-3.0



AFG PRO-3.0



DO NOT THROW AWAY! SERIAL NUMBER FOR FAN IS LOCATED ON BACK COVER OF OWNER'S GUIDE. RETAIN IN A SAFE PLACE.

GENERAL SAFETY INSTRUCTIONS

- 1. **Read Instructions** All safety and operation instructions must be read. Failure to read and follow instructions as stated in this guide may void applicable warranty.
- **2. Retain Instructions** The safety and operating instructions should be kept for future reference.
- **3. Heed Warnings** All warnings should be followed.
- **4. Follow Instructions** All installation and operating instructions should be followed.
- **5. Heat** The QuietCool system should be situated away from heat sources.
- **6. Damage Requiring Service** Only qualified service personnel should service the QuietCool system. The user should not attempt to service the product.
- 7. Building Codes Always follow Local Building Codes when installing appliances

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1. SYSTEM OVERVIEW

1.1 INTRODUCTION

Congratulations on the purchase of your new QuietCool Attic Gable Fan!

The **QuietCool** Specialty Series was designed for every application imaginable. QuietCool Specialty Series fans dominate the market in energy efficiency. Our Specialty Series works great in practically all climate zones and most homes, mobile homes, and even warehouse buildings!

The QuietCool Attic Fans are the best in the business. New for 2017, we offer a smart line of attic fans including the AFG SMT-3.0 attic gable fan, the first smart attic fan on the maket, and the most energy efficient too! We also have the AFG PRO-3.0, the most powerful residential attic gable fan on the market.

1.2 Series Features

- High Efficiency Design
- Designed and Built in California
- 15 Year Warranty
- Attic Fans (AFG SMT-3.0 shown right)



1.4 System Venting Requirements



VERY IMPORTANT! - 1 SQUARE FOOT OF NET FREE VENT AREA PER 750 CFM RECOMMENDED! - 2 TO 4 SQUARE FEET OF INLET VENTS PER FAN

Venting plays a very significant role in the performace of QuietCool fans. QuietCool recommends a minimum of 1 SQ. FT. of venting for every 750 CFM in the QuietCool system. If an attic has at least 1:750 attic venting, the QuietCool system will operate efficiently and effectively. If an attic has less than 1:750 attic venting, the system may not operate as efficiently, or effectively, as it could with 1:750 attic venting. But don't worry, the system will still operate if there is not enough venting.

Insufficient venting is a very simple problem to fix. Roofing contractors can add extra venting to most homes simply and easily. The most common types of venting is shown in the chart below.

Vent Type	Model Type	Average Size	Venting Sq. Ft.
Gable vent		12" × 19.5"	1.20
Dormer Vent		14" × 8"	0.70
Eave Vent		4" 5" 6"	0.03 0.04 0.07
Ridge Vent	-	4' - 12'	0.125 per ft
Soffit Vent		16" x 4" 16" x 6" 16" x 8"	0.19 0.29 0.39
O'Hagin Vent		Low/Medium Profile Tapered Low Profile Low Profile Flat High Profile	0.5 0.6 0.68 0.68
Turbine Vent		8" 12" 14"	.35 .79 1.1

^{*}Note: This table is only a guideline and is not a guarantee of venting capacity.

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2. INSTALLATION

2.1 Installing AFG (Attic Fan Gable) model fans



NOTE: The AFG model fans are designed to mount behind
existing vents. If no vent exists, one must be
installed. Vent should be installed in the upper center section of the gable.

Installation Video:

Watch the video by scanning the QR code or visit www. QuietCoolSystems.com/ support



NOTE: IF YOU ARE INSTALLING THE AFG SMT-3.0, PLEASE READ SECTION 2.3 BEFORE INSTALLING.

Installing the **QuietCool AFG** is very easy. To install the AFG, simply mount the gable fan to your gable vents as shown in the following steps:

Flush Mount: The AFG can be mounted flush to a rectangular type louver by fastening through the mounting brackets to the frame of the louver (as shown in Figure 2.1A).

As stated in the note above, any area of the louver that is not covered by the AFG must be sealed off in order to prevent air leakage, which may hinder performance.

This is the most conventional method of mounting the AFG. We recommend using the Flush Mount option if possible for all applications.

Figure 2.1A

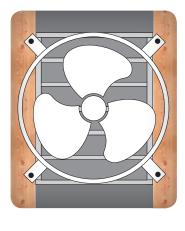


Figure 2.1B



Wide Mount: The AFG can be mounted on a wide louver, but additional mounting steps must be taken in order for the fan to work properly. As shown in Figure 2.1B, two additional boards must be fastened to the boards framing the gable vent so the AFG can be mounted securely.

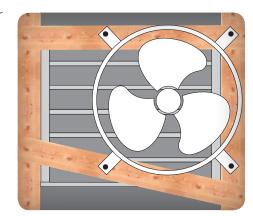
As stated in the note above, any area of the louver that is not covered by the AFG must be sealed off in order to prevent air leakage, which may hinder performance.

Odd Mount: The AFG can also be mounted off center for an odd shaped louver **(as shown in Figure 2.1C)**.

As stated in the note above, any area of the louver that is not covered by the AFG must be sealed off in order to prevent air leakage, which may hinder performance.

While this is not the most ideal way to mount the gable fan, it is possible. However, since the fan is not completely covering the vent, maximum airflow will not be achieved.

Figure 2.1C





NOTE: The AFG can be mounted on many other types of louvers, including triangle vents, round vents, half-round vents, etc. If the vent is smaller than the area of the fan, we recommend constructing a chamber that surrounds the vent, and then mount the AFG to the chamber to ensure maximum airflow and performance.

2.2 Installing AFG (Attic Fan Gable) Vent Covers

Included with your QuietCool Attic Gable Fan are four vent covers that are designed to be installed around the attic fan housing to block any air backdrafting into the attic through a gable vent that is larger than the attic fan cylinder, causing air to cycle in and out around the vent.

How-to Video:

Watch the video by scanning the QR code or visit www. QuietCoolSystems.com/ support



- **1.** Take the vent cover and match it to one of the sides around the attic fan housing.
- **2.** Using the two provided wood screws, attach each corner to the wood framing around your gable vent. (See picture for screw locations)
- **3.** Repeat step 1 and 2 for the three additional covers.





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2.3 NOTE ABOUT THE AFG SMT-3.0

The AFG SMT-3.0 features a 10-speed ECM motor that automatically changes speed based on temperature and humidity conditions within the attic.

How-to Video:

Watch the video by scanning the QR code or visit www. QuietCoolSystems.com/ support



Sometimes this automatic speed change can cause a slight, tinny vibration sound on certain gable vents when the fan is switching down to the lower speed ranges.

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To prevent this, please follow the steps below.

- **1.** Purchase general silicon caulking from any hardware store.
- **2.** Caulk over the steel mesh that touches the horizontal slats of the gable vent.
- **3.** Proceed to the installation in section 2.1.



3. WIRING



NOTE: Wiring Diagrams are for examples ONLY. Wiring should be done by an experienced electrician.



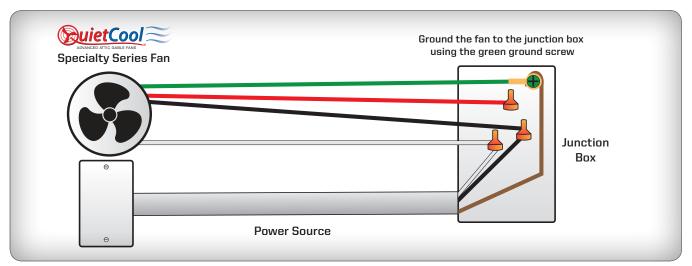
NOTE: Your fan may have come with the thermostat pre-wired to a power cord. If this is the case, simply mount the thermostat or junction box, find a power source in your attic, and plug the fan in. If you would like to hard-wire the fan, or it is required by your local building codes, please follow the wiring instructions below.

3.1. Specialty Fan Wiring - Smart (AFG SMT-3.0)

If you purchased a specialty fan with a smart motor, the fan has the thermostat and humidistat built into the motor. This makes the installation extremely simply.

- 1. For this installation, you will need a 2 wire Romex.
- **2.** Open up the junction box from the fan. Remove the power cord. Bring your 2 wire Romex from the power source into the junction box.
- **3.** With a wire nut, tie the white common wire together. Then tie the black wires together.
- **4.** Ground the green wire from the fan and the ground wire from the Romex to the junction box.
- 5. TO DISABLE THE HUMIDISTAT, TIE THE BLACK WIRES AND THE RED WIRE TOGETHER.

Figure 3.1A: Smart Attic Fan at the Junction Box





NOTE: When the Smart Attic Fan is connected to power for the first time, it will start in test mode. It will run for 60 seconds to ensure it runs properly. After 60 seconds, if the temperature is in operating range (as shown on page 14), the fan will continue to run. If the temperature is not in operating range, the fan will shut off. If the fan does not come on the first time it is connected to power, there may be a problem with the wiring. Please contact us if you have any issues.

3.2 Specialty Fan Wiring - Thermostat (AFG PRO-3.0)

- 1. For this installation, you will need a 2 wire Romex, and a thermostat.
- **2.** Open up the thermostat that is connected to the fan. Remove the power cord. Bring your 2 wire Romex from the power source into the thermostat.
- **3.** With a wire nut, tie the white common wires together.
- **4. High Speed**: Tie the black wire from the fan to one of the black wires from the thermostat. Cap the red wire. **Low Speed**: Tie the red wire from the fan to one of the black wires from the thermostat. Cap the black wire.
- 5. Tie the black wire from the power source to the remaining black wire from the thermostat.
- **6.** Using the ground screw in the thermostat, ground your power source and the green wire from the fan.
- 7. Mount the thermostat to one of the joists near the attic fan.

Figure 3.2A: Thermostat Wiring - High Speed

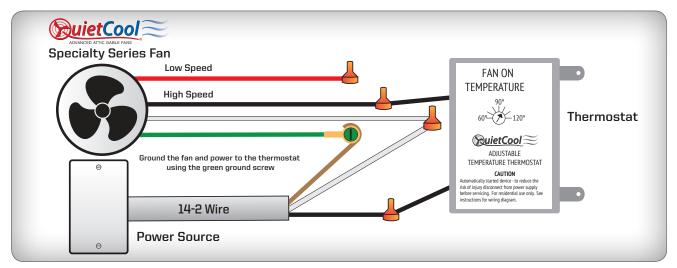
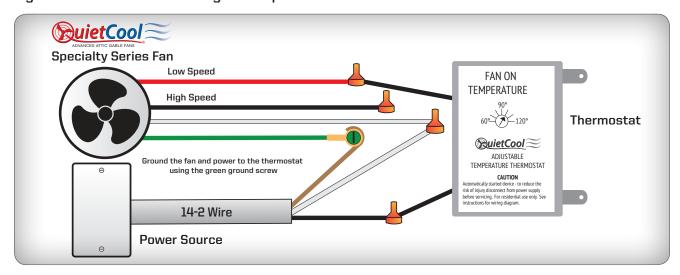


Figure 3.2B: Thermostat Wiring - Low Speed



WIRING THE THERMOSTAT REMOTELY:

1. For this installation, you will need a 2 wire Romex, junction box, and a thermostat.

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- 2. Open up the thermostat that is connected to the fan. Remove the power cord. Remove the bracket mounting the thermostat to the flex tubing and remove the thermostat. Mount the junction box to the flex tubing with the included bracket and mount the junction box. Bring your 2 wire romex from the power source into the junction box.
- **3.** Mount the thermostat in the best location for thermostat readings. Run a 2 wire Romex from the junction box to the thermostat. Tape the white wire on each side of the 2 wire Romex to indicate that it is a switch leg.
- **4.** In the junction box, with a wire nut, tie the white common wires together. Using the green ground screw, ground the green wire from the fan and the 2 wire Romex from the thermostat, to the junction box.
- **5. High Speed:** Tie the black wire from the fan to the taped white wire from the thermostat. **Low Speed:** Tie the red wire from the fan to the taped white wire from the thermostat
- **6.** Tie the black wire from the power source to the black wire from the thermostat. Replace the cover on the junction box.
- 7. In the themostat, tie the black wire to one of the black wires from the thermostat. Tie the taped wire to the other black wire from the thermostat. Using the ground screw in the thermostat, ground the ground wire from the 2 wire Romex.
- **8.** Tie the two remaining black wires together. Then, tie the remaining copper wires together.

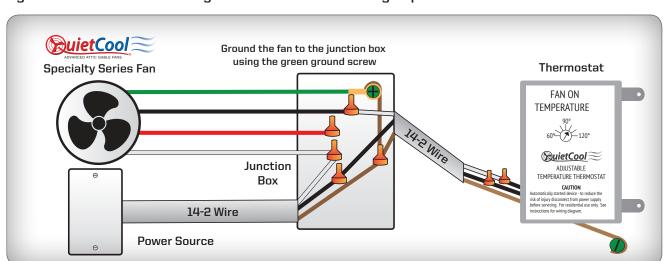
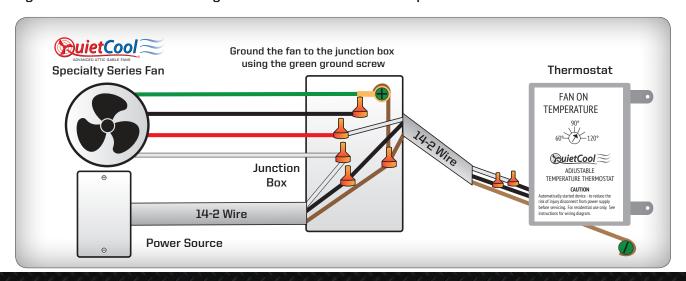


Figure 3.2C: Thermostat Wiring in a Remote Location - High Speed

Figure 3.2D: Thermostat Wiring in a Remote Location - Low Speed





4.1 QuietCool Smart Attic Fan (AFG SMT-3.0)

QuietCool Attic Fans work almost everywhere, anytime. During the summer, an attic can be 40-50 degrees hotter than the outside temperature, which in turn heats up the house much faster. With an attic fan, you can cool the attic to the same temperature as it is outside, greatly reducing the house from heating as quickly.

With the QuietCool Smart Attic Fan, gone are the days of having to adjust the thermostat for your attic fan. Featuring a built-in thermostat and humidistat, the self-adjusting, 10-speed ECM motor is always reading the temperature and humidity in the attic.

When the fan detects temperature over 80 degrees, or humidity over 60%, the Smart Attic Fan comes on at the lowest speed. As the attic starts to heat up, the Smart Attic Fan automatically adjusts it's speed.

AFG SMT-3.0 Attic Fan - Gable

Temp.	80°	85°	90°	95°	100°	105°	110°	115°	120°	125°+
Humidity	60%+	N/A								
Speed	1	2	3	4	5	6	7	8	9	10
CFM	1343	1513	1641	1841	2014	2119	2356	2500	2652	2830
Watts	22	29	37	47	58	79	99	117	133	163

^{*}All specs are approximate. For the most up-to-date specs, please visit QuietCoolSystems.com

The QuietCool Smart Attic Fan will help your attic stay cooler than with a traditional single-speed attic fan, and will help save you energy by running the fan at a lower speed (thus a lower wattage) when the attic is not as hot.

4.2 OuietCool Attic Fan Gable - Pro (AFG PRO-3.0)

QuietCool Attic Fans work almost everywhere, almost anytime. During the summer, an attic can be 40-50 degrees hotter than the outside temperature, which in turn heats up the house much faster. With an attic fan, you can cool the attic to the same temperature as it is outside, greatly reducing the house from heating up as quickly.

The AFG PRO-3.0 is the most powerful residential attic fan on the market. Moving over 3000 CFM at just 250 watts, this fan exhuasts the attic of hot, stale air very quickly and very efficiently. In fact, it is up to 3 times more efficient and up to 2 times more powerful than an average big box store attic fan.

Simply set your thermostat and forget about your QuietCool Attic Fan!

If you have any trouble installing or operating your new **QuietCool** Specialty Series Fan, please visit our website at <u>www.QuietCoolSystems.com</u> or call us at <u>951-325-6340</u> for support.

QuietCool is Proudly Designed and Built in California





SPECIALTY SERIES FANS LIMITED WARRANTY

QC Manufacturing Inc. extends this warranty to the original purchaser of the following QuietCool Specialty Series Fans - AFG SMT-3.0, AFG PRO-3.0, AFR SMT-2.0, GA ES-1500, GX ES-1100, RM ES-1100, and RM ES-2200 - installed and used in a residence under normal conditions within the United States:

- **A.** Fifteen year coverage applies to the QuietCool motor fan assembly. At our option we will repair or replace any part of the assembly should it fail to operate during the first fifteen years from the date of original purchase.
- **B.** One year coverage for all other components including grilles, housings, controls and accessories furnished by QC Manufacturing, Inc. At our option we will repair or replace any part which fails as a result of defective material or workmanship during the first year from the original date of purchase.
- **C.** This warranty does not cover any of the following:
 - 1. Accidental or consequential damage resulting from the operation of our equipment or any malfunction thereof.
 - 2. Cost of service calls to diagnose the cause of problems or the labor charge to un-install any components.
 - 3. Product failure or damage due to faulty installation, abuse, misuse, unauthorized alteration to factory specs, lack of maintenance, or transportation damage.
 - 4. Shipping or postage for warranty claims.
- **D.** To obtain service under this warranty, first contact the dealer where you purchased the equipment. If you are unable to find or reach your dealer, contact Customer Service at QC Manufacturing, Inc. at the number below.
- **E.** Registration is no longer required for QuietCool fans. If service is required under this warranty, you must retain your proof or purchase.

This warranty is the only warranty extended by QC Manufacturing, Inc. to purchasers or suppliers of our equipment. QC Manufacturing Inc. disclaims all other warranties, express or implied, that arise by operation of the law.

QC Manufacturing, Inc. Customer Service

26040 Ynez Rd. Temecula, CA 92591 www.QuietCoolSystems.com 951-325-6340

Rev. 4-22-19

Fan Serial Number Information

Retain for your records. Serial number is required for warranty purposes.

