

THE NATURAL CHOICE FOR ENERGY SAVINGS!

INSTALLATION GUIDE

SPECIALTY SERIES FANS

MODELS: AFG Models, GA Models, GX Models, RM Models



AFG SMT-3.0



GA ES-1500



RM ES-1100 SLP

SEE // HEAR // FEEL
THE QUIETCOOL DIFFERENCE

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 installing 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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QC Manufacturing, Inc.
43352 Business Park Drive
Temecula, CA 92590

PH 951.325.6340
FX 951.325.6351

QuietCoolSystems.com

1. SYSTEM OVERVIEW

1.1 INTRODUCTION

Congratulations on the purchase of your new QuietCool Specialty Series 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!

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

QuietCool Garage Fans: The QuietCool Garage Fans offer great ventilation options for your garage, man cave, or workshop. We offer the GA ES-1500 to ventilate both your garage and attic, and the GX ES-1100 to ventilate your garage only, with a wall mount design.

QuietCool Roof Mount Fans: The QuietCool Roof Mount Fans offer great versatility for any system you are looking to put in. QuietCool Roof Mount Fans can be used as an attic fan, as a whole house fan with a duct, or as a whole house fan that pulls air through air intake grilles in multiple rooms.

1.2 Series Features

- High Efficiency Design
- Designed and Built in California
- 15 Year Warranty
- Attic Gable Fans
- Garage Fans
- Roof Mount Fans



1.3 Benefits



SAVES



COOLS



VENTILATES



EXHAUSTS

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

Vent Type	Model Type	Average Size	Venting Sq. Ft.
Gable vent		12" x 19.5"	1.20
Dormer Vent		14" x 8"	0.70
Eave Vent		Various	Various
Ridge Vent		Various	Various
Soffit Vent		Various	Various

2. INSTALLATION

2.1 Installing AFG model fans

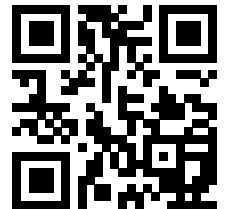


NOTE: The AFG model fans are designed to mount behind existing louvers. If no louver exists, one must be installed. Louver should be installed in the upper center section of the gable. For maximum efficiency, the area of the louver should be greater than the size of the ventilator. Any louver area not covered by the ventilator should be sealed off to prevent any possible air leakage.

Installing the **QuietCool AFG** is very easy. The mounting tabs on the AFG should be attached to the Attic Gable Fan. There should also be mounting hardware in the box to fasten the gable fan to the boards that frame the gable vents. To install the AFG, simply mount the gable fan to your gable vents as shown in the following steps:

Installation Video:

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



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 mount the AFG. We recommend using the Flush Mount option if possible for all applications.

Figure 2.1A

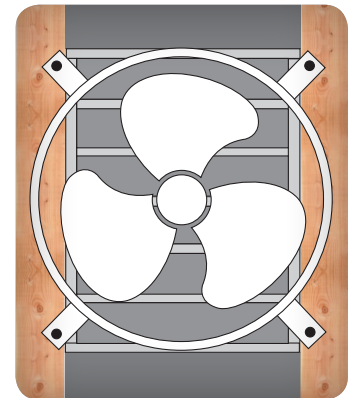
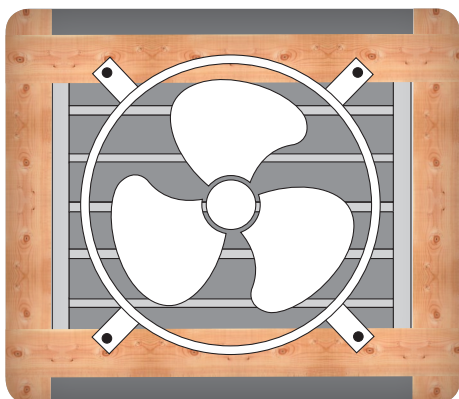


Figure 2.1B



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.

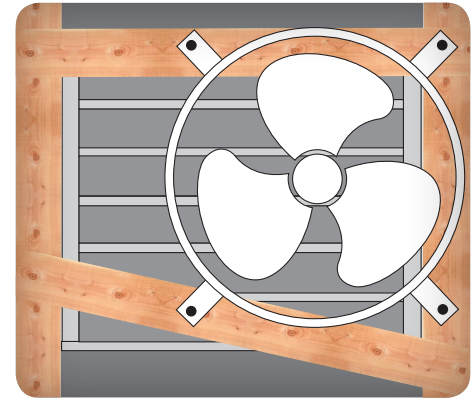
As stated in the note above, any area of the louver that is not covered by the AFG must be sealed off in order to prevent air leakage, which may hinder performance.

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 GA model fans



VERY IMPORTANT: MINIMUM OF 26" CLEARANCE REQUIRED ABOVE CEILING FOR INSTALLATION OF GA MODEL FANS. ALWAYS FOLLOW LOCAL BUILDING CODES.

1. Determine in which area you would like to install your QuietCool Garage Attic Fan. Now it's time to find the exact location using a stud finder. Locate the ceiling studs and mark the location for the fan to be installed. (see Figure 2.2A) One side of the cut out should be directly next to a wood member for proper fan mounting and support.
2. When you find the location, mark a 14 1/4" square using a framing square or template. Make sure you have 2" of clearance all the way around it. The grille that will be installed later is a 16" square. (see Figure 2.2B)
3. Starting at one corner of the square using a drywall saw, cut out the opening. Remove the drywall cutout and clear away insulation (if applicable). (see Figure 2.2C)
4. Take the GA fan model into the attic and place it over the ceiling cut out. Attach the fan using screws into the ceiling joists. (see Figure 2.2D). Install the ceiling grille. (see Figure 2.3H)



VERY IMPORTANT: CHECK TO MAKE SURE FAN BLADE SPINS FREELY AND THE FIRE DAMPER CLOSES EASILY. MAKE SURE TO SECURE THE LATCH IN THE OPEN POSITION



AVOID BACKDRAFTS: MAKE SURE THE GARAGE FAN WILL NOT BACKDRAFT COMBUSTION APPLIANCES IN THE GARAGE. QUIETCOOL GARAGE FANS MOVE LARGE QUANTITIES OF AIR.

Figure 2.2A



Figure 2.2B



Figure 2.2C



Figure 2.2D



2.3 Installing GX model fans

1. Determine in which area you would like to install your QuietCool Garage Exterior Mount Fan. Now it's time to find the exact location using a stud finder. Locate the wall studs and mark the location for the fan to be installed **(see Figure 2.2A)**. One side of the cut out should be directly next to a wood member for proper fan mounting and support.
2. When you find the location, mark a 14 1/4" square using a framing square or template. Make sure you have 2" of clearance all the way around it. The grille that will be installed later is a 16" square **(see Figure 2.2B)**.
3. Starting at one corner of the square using a drywall saw, cut out the opening. Remove the drywall cutout and clear away insulation (if applicable) **(see Figure 2.2C)**.
4. From the interior, drill a hole through the exterior at the four corners of the cut out **(see Figure 2.3A)**.
5. Go to the exterior and place the square wall mounting bracket aligned to the 4 drilled holes. Using a level, mark the inside of the bracket with a pencil **(see Figure 2.3B)**.
6. Using a saw or angle grinder, cut out the marked area of stucco or siding **(see Figure 2.3C)**.
7. Remove cut out of exterior stucco or siding. Then cut out any applicable sheathing.
8. Now install the exterior cover frame. Make sure the frame is level and then attach the four corners with long enough screws to penetrate the wood studs. Note: Predrilling may be required **(see Figure 2.3D)**.

Figure 2.3A

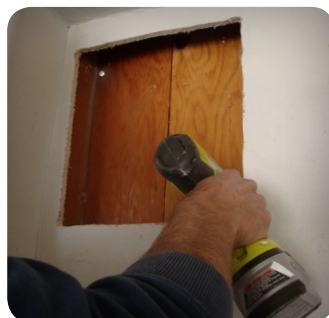


Figure 2.3B

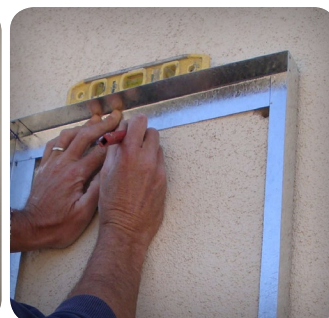


Figure 2.3C

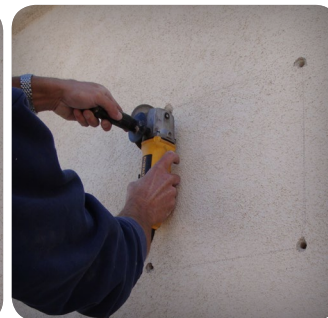


Figure 2.3D



9. Place fan into the cut out area. Fasten the fan in each 4 corners to the vertical wood studs **(see Figure 2.3E)**.
10. Caulk exterior around frame **(see Figure 2.3F)**.
11. Attach the exterior cover to mounting frame using 4 sheet metal screws **(see Figure 2.3G)**.
12. Mount inside wall grille **(see Figure 2.3H)**.

Figure 2.3E



Figure 2.3F



Figure 2.3G

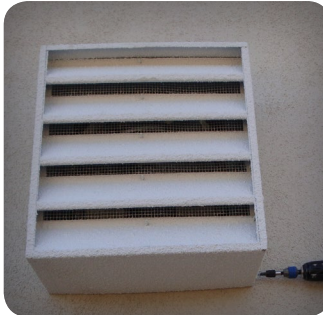


Figure 2.3H



2.4 Installing RM model fans

1. Determine in which area you would like to install your QuietCool Roof Mount Fan. **(see Figure 2.4D)**



IMPORTANT: If you are installing the RM fan as a ducted fan, it's time to find the exact location for your ceiling box and grille using a stud finder. Locate the wall studs and mark the location for the box to be installed. Minimum of 20" clearance required. Make sure the duct will fit between the fan location and the ceiling box location. Using a drywall saw, cut out the drywall.

2. Drill 4 reference holes to mark where you will be cutting the roof. If you are installing the RM ES-1100, mark a 14 1/4" x 14 1/4" square. If you are installing the RM ES-2200, mark a 16 1/4" x 16 1/4" square. **(see Figure 2.4A)**
3. Move to the roof and, using a circular saw, cut out the square. **(see Figure 2.4B)**
4. With the square cut out, place the roof mount fan over the cutout. **(see Figure 2.4C)**
5. Fasten the fan to the roof using appropriate connectors for your roof material.
6. Flash in fan curb using appropriate weatherproofing method and materials based on roof material.



IMPORTANT: If you are installing the RM fan in a flat or cathedral ceiling application, find the location for your ceiling box and grille using a stud finder. Locate the wall studs and mark the location for the box to be installed. Using a drywall saw, cut out the drywall. The move on to step 7. If installing as an attic fan, you are done!

7. Place the ceiling box (if applicable) over the ceiling cut out. Attach the ceiling box using screws into the ceiling joists. **(see Figure 2.2D)** Install the ceiling grille. **(see Figure 2.3H)**

Figure 2.4A



Figure 2.4B



Figure 2.4C

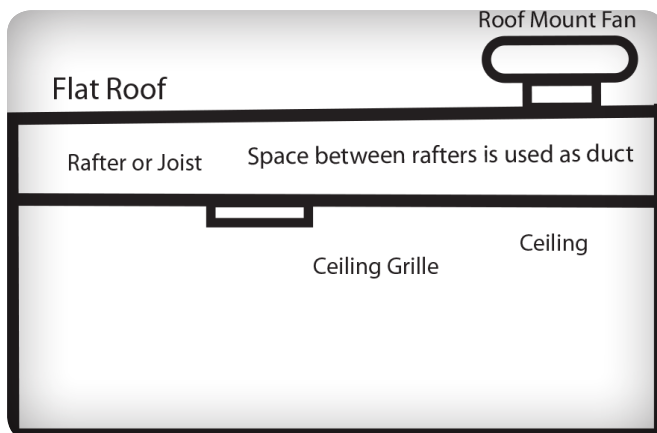


Figure 2.4D: Roof Mount Application Diagrams

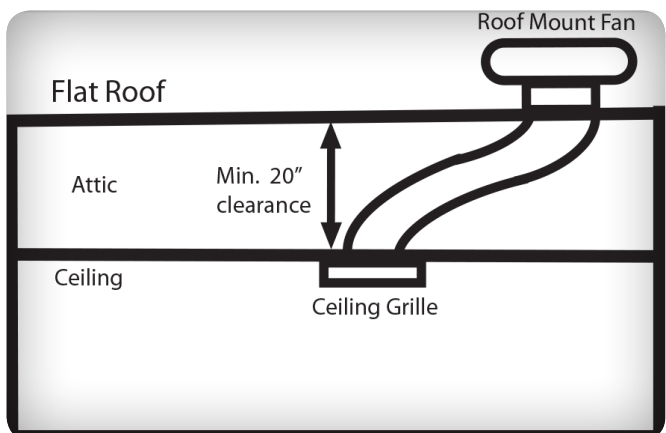


EXTREMELY IMPORTANT: It is very important that you install the RM fans correctly, as shown in the following diagram, as it will dramatically affect the sound level of the fan. **NEVER** install the ceiling grille directly underneath the fan. Always offset at least two feet.

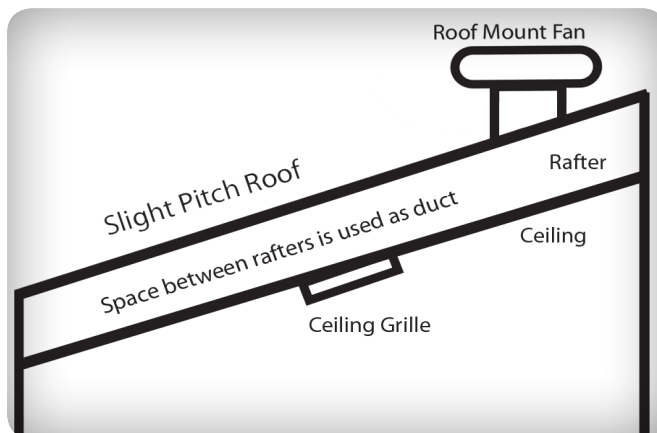
Flat Roof - No Duct: Works with CRB and FLT Models



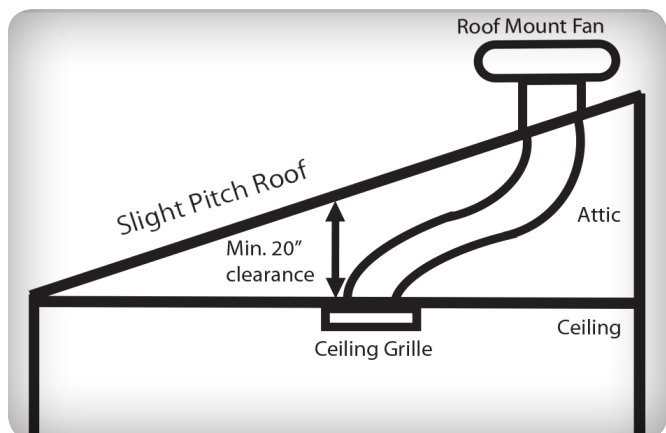
Flat Roof - With Duct: Works with CRB and FLT Models



Sloped Roof - No Duct: Works with SLP Models



Sloped Roof - With Duct: Works with SLP Models



3. WIRING



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



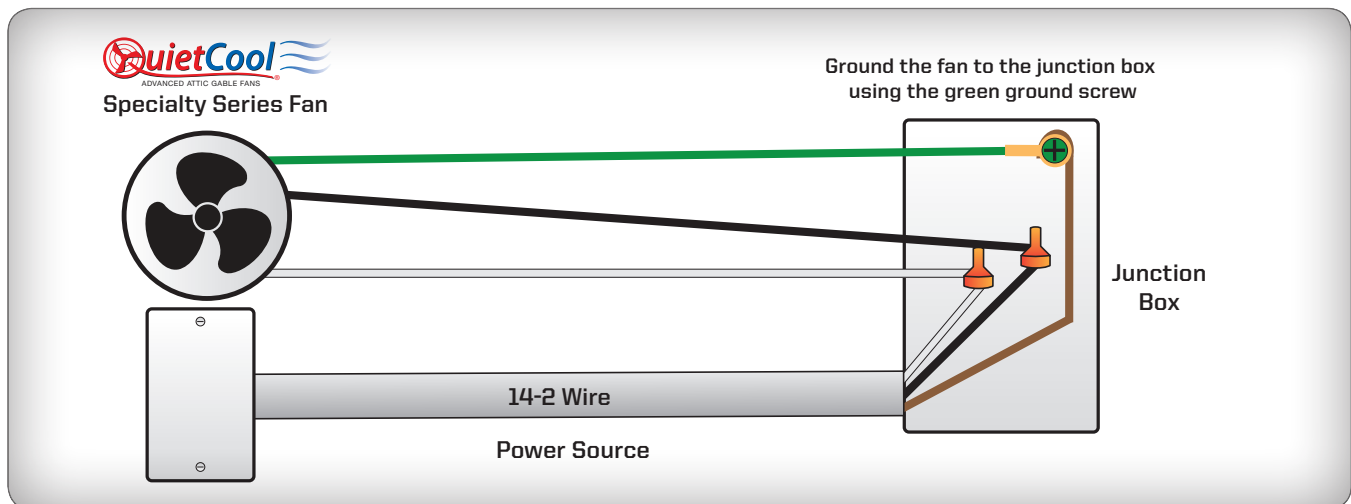
NOTE: Your fan may have come with the thermostat pre-wired to a power cord. If this is the case, simply mount the thermostat or junction box, find a power source in your attic, and plug the fan in. If you would like to hard-wire the fan, or it is required by your local building codes, please follow the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

3.1. Specialty Fan Wiring - Smart

The Smart Attic Fan has the thermostat and humidistat built into the motor. This makes the installation extremely simple.

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.

Figure 3.1A: Smart Attic Fan at the Junction Box



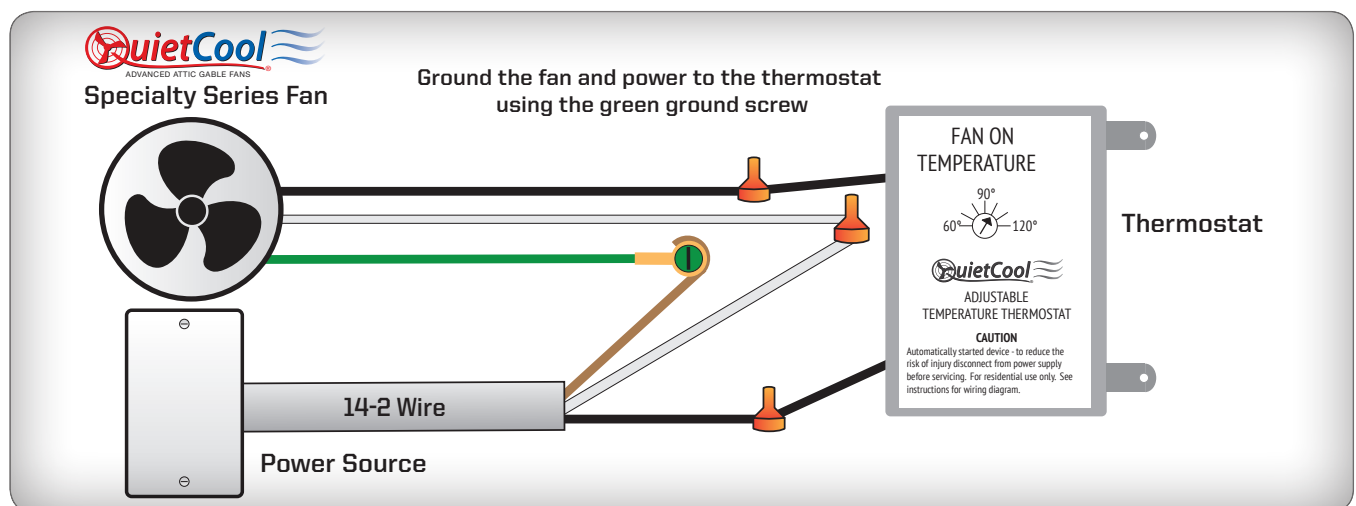
NOTE: When the Smart Attic Fan is connected to power for the first time, it will start in test mode. It will run for 60 seconds to ensure it runs properly. After 60 seconds, if the temperature is in operating range (as shown on page 11), the fan will continue to run. If the temperature is not in operating 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

For wiring of a Specialty Series Fan with a thermostat. This wiring method works with all of our Specialty Series fans, but we do not recommend using it with a Roof Mount fan that is being used as a whole house fan.

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. Tie the black wire from the fan to one of the black wires from the thermostat. Either black wire from the thermostat will work.
5. Tie the black wire from the power source to the remaining black wire from the thermostat.

Figure 3.2A: Thermostat Wiring



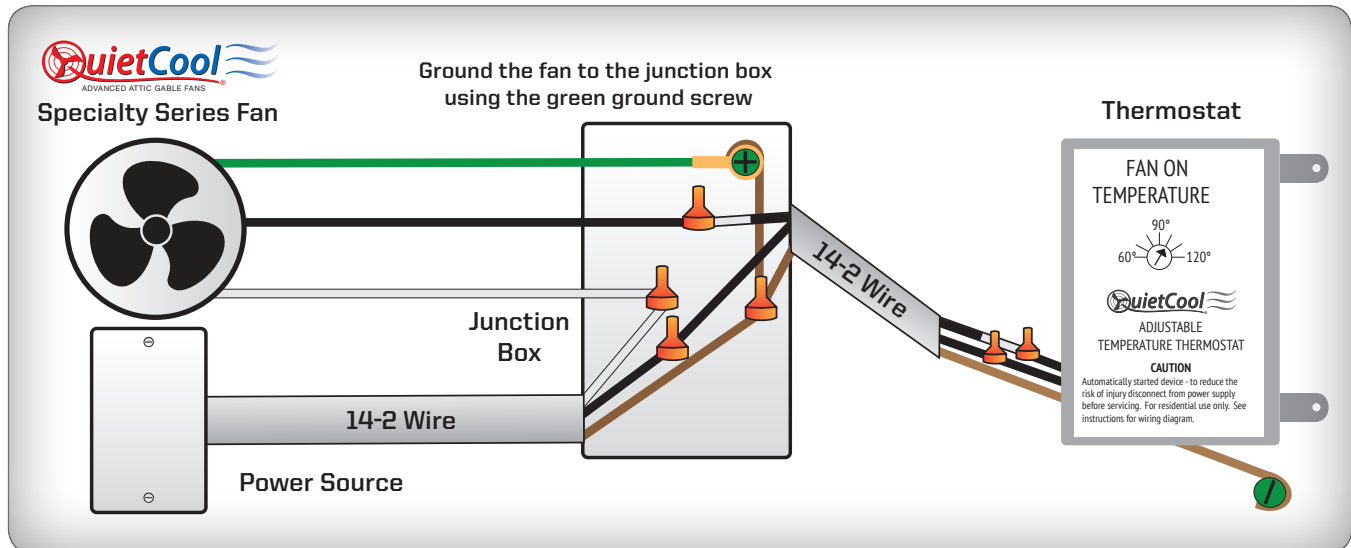
6. Using the ground screw in the thermostat, ground your power source and the green wire from the fan.
7. Mount the thermostat to one of the joists near the attic fan.

WIRING THE THERMOSTAT REMOTELY:

1. For this installation, you will need a 2 wire Romex, junction box, and a thermostat.
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.
3. 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.

4. 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.
5. 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. Tie the black wire from the fan to the taped white wire from the thermostat. Tie the black wire from the power source to the black wire from the thermostat. Replace the cover on the junction box.

Figure 3.2B: Thermostat Wiring in a Remote Location



6. In the thermostat, 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.

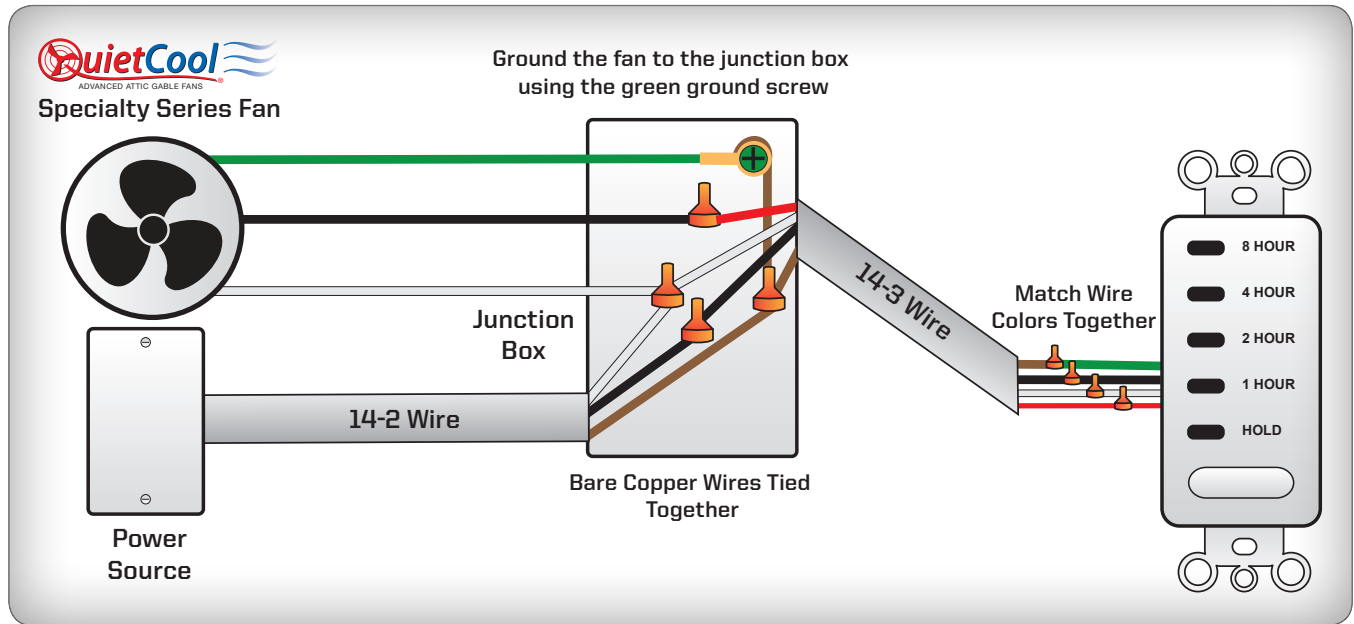
3.3 Specialty Fan Wiring - Timer

For wiring of a Specialty Series Fan with a timer. This wiring method works with all of our Specialty Series fans.

1. For this installation, you will need a 2 & 3 wire Romex, and an 8 Hour Timer.
2. Begin wiring the timer. From your 3 wire Romex, using a wire nut, tie the two red wires together, the two white wires together, the two black wires together, and the two ground wires together.
3. Open up the junction box that is connected to the fan. Bring your 2 wire and 3 wire into the junction box.
3. Tie the white common wires from the fan, the power source, and the timer together. Then, using the green ground screw, ground the green wire from the fan to the handy box.
4. With a wire nut, tie the black wire from the fan to the red wire from the timer.

5. Then, tie the black wire from the power source to the black wire from the timer.
6. Lastly, tie the copper ground wire from the power source to the copper ground wire from the timer.

Figure 3.3A



4. SYSTEM OPERATING INSTRUCTIONS

4.1 QuietCool Smart Attic Fan

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 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.

Temp.	80°	85°	90°	95°	100°	105°	110°	115°	120°	125°+
Humidity	60%+	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Speed	1	2	3	4	5	6	7	8	9	10
CFM	963	1343	1513	1641	1841	2014	2119	2356	2500	2830
Watts	15	18	25	34	49	60	79	99	117	145

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

With the QuietCool Smart Attic Fan, the attic will help your attic stay cooler than 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 QuietCool Pro Attic Gable Fan

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 exhausts 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!

4.3 QuietCool Garage Fans

QuietCool Garage Fans work great to cool your garage, man cave, or workshop. Our two models work for different application. Our GA ES-1500 works to cool and ventilate your garage and the attic above your garage. This greatly reduced the heat transfer between the attic and garage on really hot days. Our GX ES-1100 works well to cool and ventilate your garage. Run both of these fans when it is cooler outside than it is in your garage.

Don't let your garage get hot and worry about damage to your vehicles, motorcycles, boat, etc.; just install a QuietCool Garage Fan!

4.4 QuietCool Roof Mount Fans

The QuietCool (RM) Roof Mount Fans are the most versatile fans that we offer. They can be used as an attic fan, a whole house fan with a duct, or a whole house fan with multiple inlet vents. QuietCool Roof Mount Fans also work where a conventional QuietCool Whole House Fan will not. Roof Mount fans work with homes that have a sealed attic, manufactured homes with no attic, homes with cathedral ceilings, and even industrial buildings such as warehouses.

If you installed your Roof Mount as a whole house fan, run the fan when it is cooler outside than it is inside your home. Be sure to crack open a few select windows in your home and let the Roof Mount fan do the rest.

If you installed your Roof Mount as an attic fan, set your thermostat and let it run! When installed as an attic fan, it is effective almost everywhere, almost anytime.

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

QuietCool is Proudly Designed and Built in California

15 YEAR LIMITED WARRANTY
 QUIETCOOL SPECIALTY SERIES FANS



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, AFG ES-1500, GA ES-1500, GX ES-1100, RM ES-1100, 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 grills, 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. Incidental 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, 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 of 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.



PRODUCT INFORMATION

QC Serial #

QC Serial #

QC Serial #

QC Serial #

QuietCool is Proudly Designed and Built in California

