



THE NATURAL CHOICE FOR ENERGY SAVINGS!

# INSTALLATION GUIDE

## SPECIALTY SERIES FANS

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



AFG ES-1500



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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## 1. SYSTEM OVERVIEW

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### 1.1 INTRODUCTION

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#### **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. We offer two great models: the AFG ES-1500, the most energy efficient attic fan on the market, and the AFG PRO-3.0, the most powerful residential attic fan on the market. Both fans have stellar energy efficiency and astounding airflow.

**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

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



### 1.3 Benefits

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SAVES



COOLS



VENTILATES



EXHAUSTS

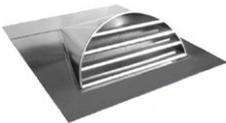
### 1.4 System Venting Requirements (for AFG, GA and GX model fans)

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**VERY IMPORTANT!** - 1 SQUARE FOOT OF NET FREE VENT AREA PER 750 CFM

**RECOMMENDED!** - FOR AFG FAN MODELS, 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:

- 1. 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 to prevent air leakage.

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

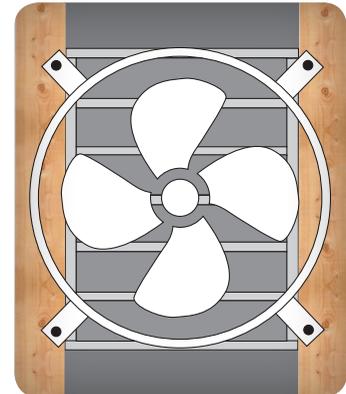
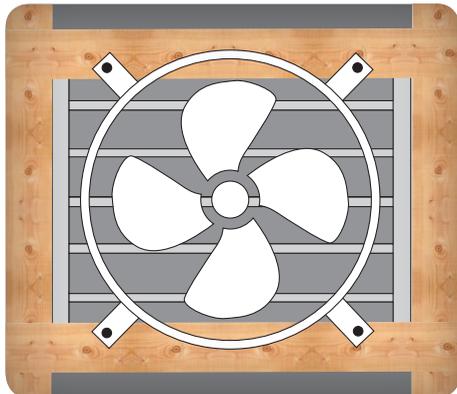


Figure 2.1B



- 2. 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.

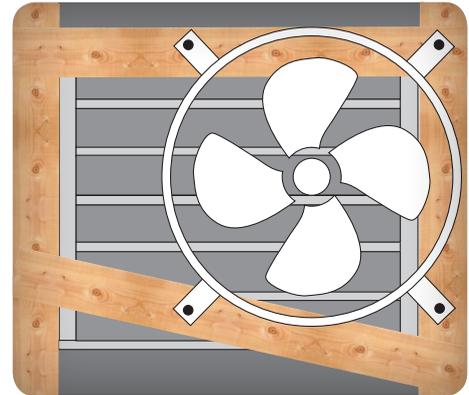
As stated in the note above, any area of the louver that is not covered by the AFG must be sealed off to prevent air leakage.

- 3. 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 to prevent air leakage.

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

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**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

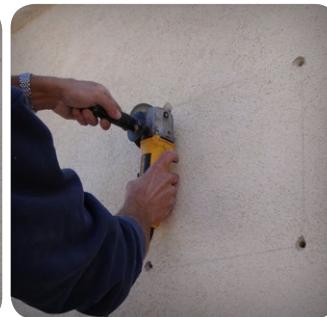


Figure 2.3D



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**).

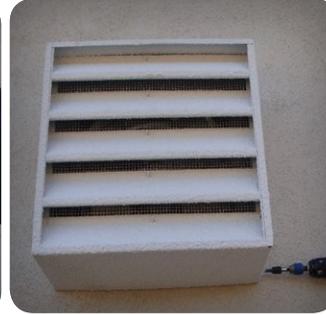
**Figure 2.3E**



**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

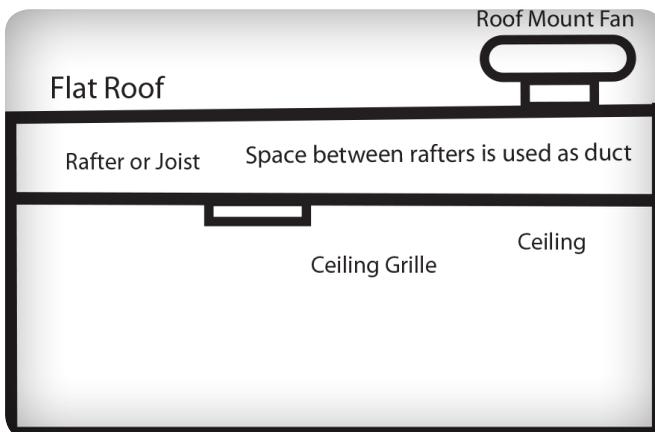


Figure 2.4D: Roof Mount Application Diagrams

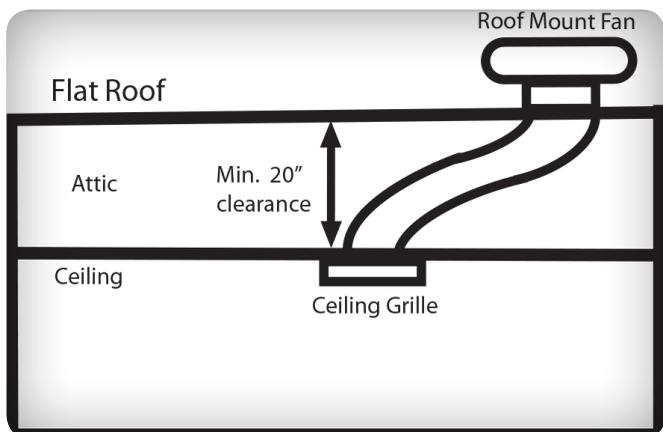


**EXTREMELY IMPORTANT:** It is very important that you install the RM fans correctly, as shown in the following diagram, as it will dramatically affect the sound level of the fan. **NEVER** install the ceiling grille directly underneath the fan. Always offset at least two feet.

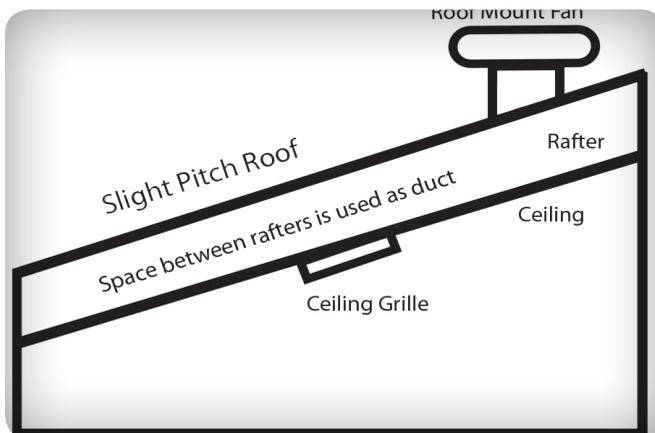
Flat Roof - No Duct: Works with CRB and FLT Models



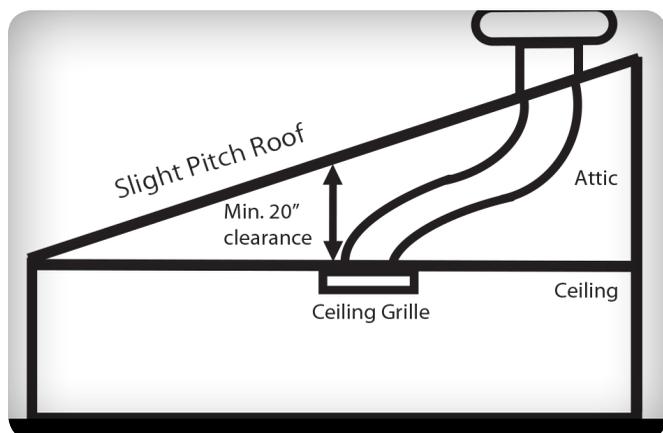
Flat Roof - With Duct: Works with CRB and FLT Models



Sloped Roof - No Duct: Works with SLP Models



Sloped Roof - With Duct: Works with SLP Models



## 3. WIRING

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

### 3.1. Specialty Fan Wiring - Thermostat

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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 junction box that is connected to the fan. Bring your 2 wire romex from the power source into the junction box.
3. With a wire nut, tie the white common wires together with a wire nut. Using the green ground screw, ground the green wire from the fan to the handy box.



**NOTE:** If you are NOT installing the thermostat in the junction box on the fan, continue to step 7 to wire the thermostat.

4. With the thermostat, tie the black wire from the fan to the red wire on the thermostat.
5. Tie the two remaining black wires together.
6. Using the ground screw on the thermostat, ground your power source. Mount thermostat to junction box.

#### WIRING THE THERMOSTAT REMOTELY:

7. Mount a junction box for your thermostat in the best location for thermostat readings. Begin wiring the thermostat.
8. With a 3 wire Romex, tie the black wire to the black wire from the thermostat.
9. Tape the white common wire on both sides of the 3 wire Romex because we will be using this as our switch leg.
10. Tie the red wire and the taped white wire together.
11. Attach the ground wire to the ground screw on the timer.

12. In the fan's junction box, tie the black wire from the fan to the taped white wire.
13. Tie the two remaining black wires together. Then, tie the remaining copper wires together.

Figure 3.1A: Thermostat Wiring at the Junction Box

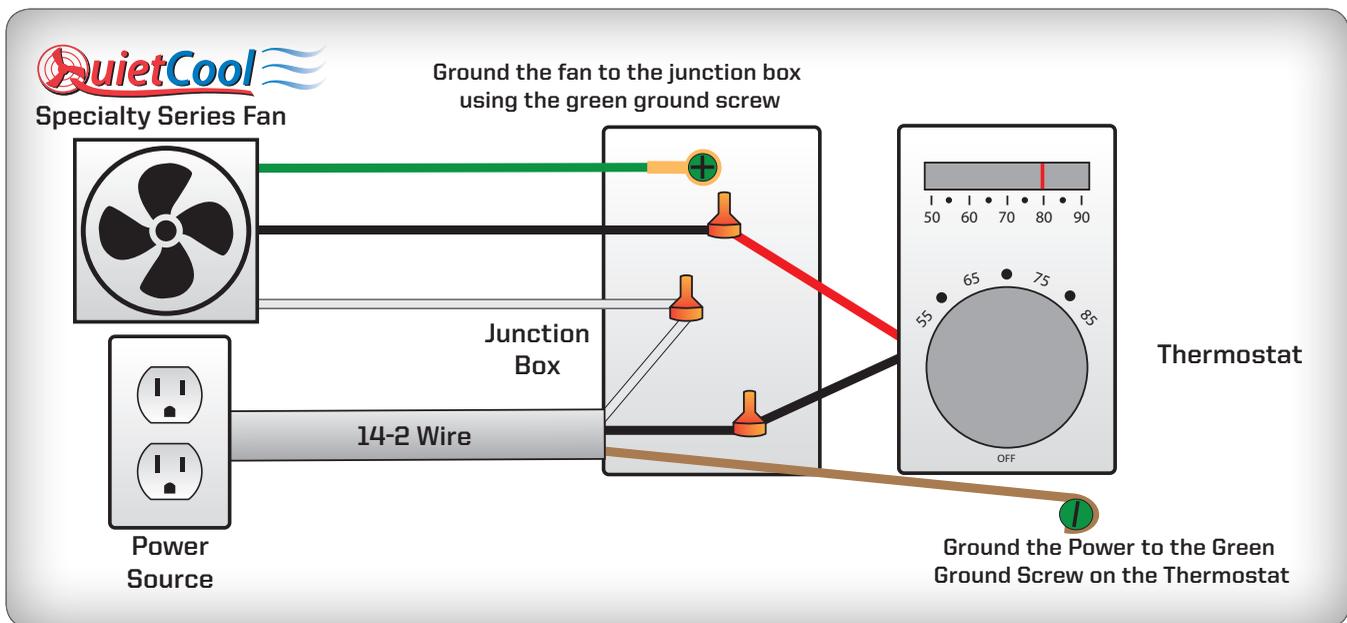
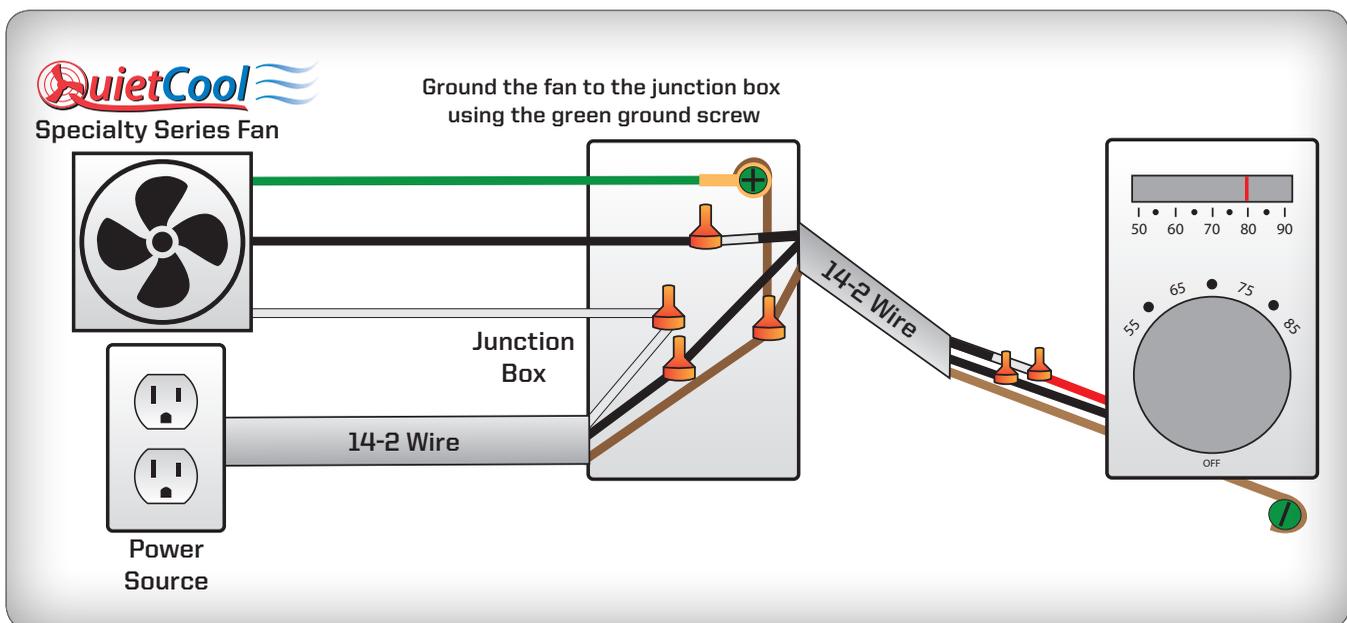


Figure 3.1B: Thermostat Wiring in a Remote Location

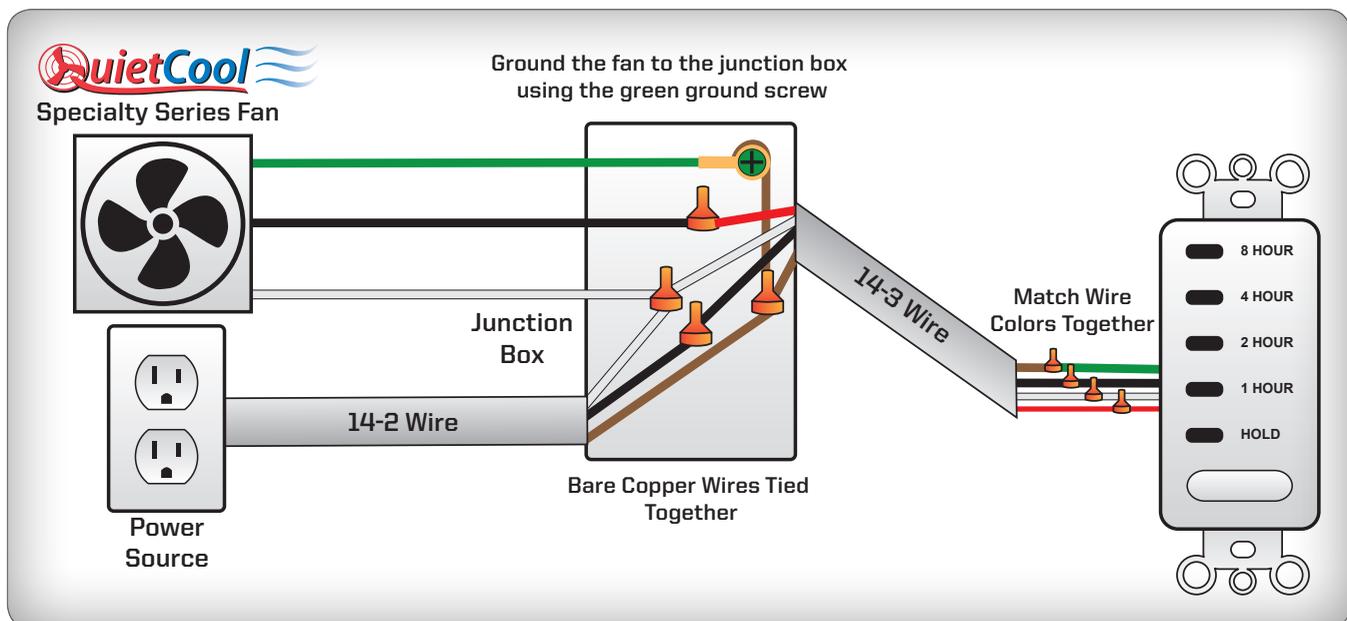


### 3.2. Specialty Fan Wiring - Timer

For wiring of a Specialty Series Fan with a timer. This wiring method works with all of our Specialty Series fans. We recommend using this method if installing a Roof Mount fan as a whole house fan. This also works well with a Garage fan.

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 3.2A



## 4. SYSTEM OPERATING INSTRUCTIONS

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### 4.1 QuietCool Attic Fans

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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. Set your thermostat and forget about your QuietCool Attic Fan. You will probably not even realize it was running when you look at your electric bill either. Our AFG ES-1500 runs on only 30 watts. or as we like to say, just pennies an hour. Our AFG PRO-3.0 runs on only 250 watts while moving over 3000 CFM! That is 3 times more efficient and two times more powerful than an average big box store attic fan.

### 4.2 QuietCool Garage Fans

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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!

### 4.3 QuietCool Roof Mount Fans

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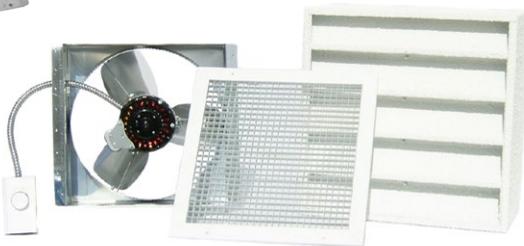
The QuietCool Roof Mount Fans are the most versatile fans that we offer. They can be used as an attic fan, a whole house fan with a duct, or a whole house fan with multiple inlet vents. QuietCool Roof Mount Fans also work where a conventional QuietCool Whole House Fan will not. Roof Mount fans work with 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 timer 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](http://www.QuietCoolSystems.com) or call us at 951-325-6340 for support.

**Quiet Cool is proudly designed and built in California.**



## SPECIALTY SERIES OVERVIEW

### AFG PRO-3.0

The AFG PRO-3.0 is the most powerful residential attic fan on the market today. At a great 12.1 CFM/Watt, this fan won't break the bank either.

Watts	Airflow	CFM/Watt
250	3013 CFM	12.1

### AFG ES-1500

The AFG ES-1500 is the most energy efficient attic fan on the market today.



Watts	Airflow	CFM/Watt
30	1560 CFM	52

### GA-ES-1500

The GA ES-1500 is the perfect fan to cool your garage and attic for pennies an hour.



Watts	Airflow	CFM/Watt
47	1452 CFM	30.8

### GX ES-1100

The GX ES-1100 is the perfect fan to cool and ventilate your garage, man cave, or workshop.



Watts	Airflow	CFM/Watt
69	1103 CFM	15.9

### RM ES-1100

The RM ES-1100 is the perfect fan to cool and ventilate your attic, home, or warehouse building. The RM line is extremely versatile offering almost any application imaginable.



Watts	Airflow	CFM/Watt
66	1130 CFM	17.1

### RM ES-2200

The RM ES-2200 is the perfect fan to cool and ventilate your attic, home, or warehouse building. The RM line is extremely versatile offering almost any application imaginable.



Watts	Airflow	CFM/Watt
197	2245 CFM	11.4

Ultra Energy Efficient ECM Motor =





SPECIALTY SERIES FANS LIMITED WARRANTY

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 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 #

Rev.5.18.16

QuietCool is Proudly Designed and Built in California



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