

THE NATURAL CHOICE FOR ENERGY SAVINGS!

# INSTALLATION GUIDE

# **ENERGY SAVER LINE**

Premier E-Commerce Distributor www.quietcoolfan.com CALL US 1-877-667-4663

MODELS:

ES-1250, ES-1700, ES-2000, ES-2850



MODELS:

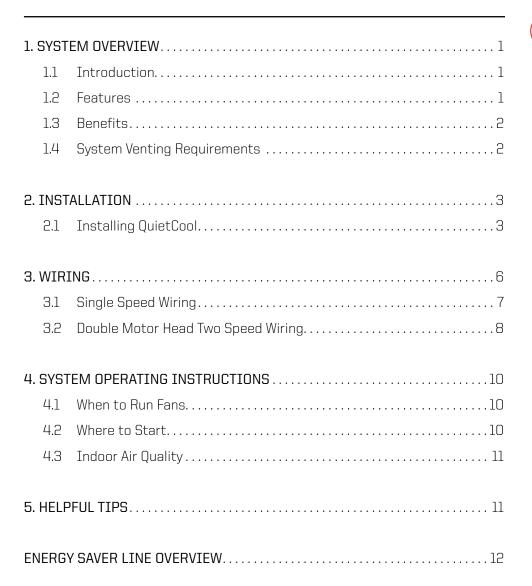
ES-5400



#### **GENERAL SAFETY INSTRUCTIONS**

- 1. **Read Instructions** All safety and operation instructions must be read.
- **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. Water** The QuietCool system should not be used near water. If you live in a very humid climate, be sure to cover your damper box with insulation to reduce condensation.
- **6. Heat** The QuietCool system should be situated away from heat sources.
- **7. Damage Requiring Service** Only qualified service personnel should service the QuietCool system. The user should not attempt to service the product.

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QuietCoolSystems.com

#### 1. SYSTEM OVERVIEW

#### 1.1 INTRODUCTION

# Congratulations on the purchase of your new QuietCool system!

The **QuietCool** whole house fans dominate the market in energy efficiency and quietness. Whole house fans operate by pulling the cool air from outside your home, through the home, into your attic, and out your attic vents. This accomplishes a cooling effect that can save you up to 90% off your A/C related energy costs depending on where you live. The difference between **QuietCool** and a standard whole house fan is a mix between it's astounding energy efficiency and it's jaw-dropping sound level. A standard whole house fan operates around 75dB; that's equivalent to a loud vacuum cleaner running! In contrast, our **QuietCool** whole house fans average at just around 45 dB; that's equivalent to quiet conversation!

The **QuietCool** system uses a cutting edge, patented design to get our sound levels down to a respectable level. Our fans suspend in the attic and use an acoustical duct that connects to a ceiling box and grille. The result is an easy installation and quiet operation.

Once the air outside is nice and cool, crack open a few windows, turn your **QuietCool** on, and enjoy the hot air being sucked out of your home and pushed out of your attic with a nice, cool breeze. While performing 15-22 complete air exchanges per hour, the **QuietCool** whole house fan system will force the hot stale air out of the attic which will help your house stay cooler during the hotter hours of the next day!

#### 1.2 Features

- · High Efficiency ECM Motor
- · Patented Design
- · Made in USA
- 10 Year Warranty



#### 1.3 Benefits









# 1.4 System Venting Requirements



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

# REQUIRED VENTILATION: 1 SQ. FT FOR EACH 750 CFM

Vent Type	Model Type Average Size		Venting Sq. Ft.
Gable vent	12" × 19.5"		1.20
Dormer Vent		14" × 8"	0.70
Eave Vent	(3)	Various	Various
Ridge Vent		Various	Various
Soffit Vent	HILLIAM	Various	Various

# 2. INSTALLATION

#### 2.1 Installing QuietCool



NOTE: Be sure to plug in your fan before attempting to install to ensure that the fan is operational. If the fan is not operational, call the company that you purchased the fan from and request an exchange.

Installing the **QuietCool** system is very easy. Simply follow the steps given below:

1. Determine from down below in which areas you would like to install your QuietCool fans. Go up into the attic to mark the exact location for each fan. Take the cardboard cut-out template and a small screwdriver with you. Make sure the template fits between the framing.

The rough opening size varies depending on which model of **QuietCool** fan you are installing:

QuietCool Fan Model	Rough Opening	
ES Single Motor Head ES-1250, ES-1700, ES-2000, ES-2850	14-1/4" x 18-1/4"	
ES Double Motor Head ES-5400	14-1/4" x 36-1/4"	

2. When you have chosen your exact spot, place the template on the spot and mark it at each corner by pushing the screwdriver through at each corner to make a hole so that you can find it from below.



**3.** From below, place the cut-out template on the ceiling at each location, making sure that you have at least 2 inches of clearance all around it. While holding the template in place, mark its outline with a pencil.





NOTE: Repeat these steps at each location.

**4.** Using a drywall saw or similar device, cut out the hole in the ceiling.





NOTE: Repeat these steps at each location.

5. Open and unpack each QuietCool fan. Attach the motor head to the duct with the included screws. Then take the main assembly, which includes the motor housing, ceiling box, and duct into the attic through the crawl hole and move into position near the ceiling cut-out hole.



**6.** Hang the motor head from the rafters using the included chain in the accessory bag. Secure duct to ceiling box using three black sharp screws. Make sure the duct has a gentle 90 degree bend to help reduce noise level.





NOTE: Once all of the QuietCool fans are hung, it's time to go below and install the ceiling box and ceiling grill at each intake location.

7. Look through the hole and make sure there are no kinks or twists in the ducting. Pull the ceiling box down through the hole in the ceiling. Fasten the ceiling box to either the drywall or the joist in the attic.

While holding it in place, install a 1-3/8" drywall screw through the drywall into the flange of ceiling box on each side to temporarily hold the box in place. Remove ceiling grille and screws from its packaging. Center the grille over the ceiling box. Install the grille with the white screws provided by screwing through flange of the ceiling box. Some ceiling surfaces are uneven and may cause a small gap to be present. This can easily be caulked later if excessive.







# NOTE: Repeat these steps at each location. Always fasten the damper box to the joist in the attic!

**8.** Return to the attic and go to each location. Using the nylon straps and the long wood screws provided, support the duct to the framing. This will stabilize the entire assembly. Replace any insulation that was removed. The installation of the fan is now complete.





**VERY IMPORTANT:** Make sure the fan blade spins freely. This is very important to system operation



NOTE: Local building codes and standards must be adhered to in the installation of this unit.



AVOID BACK DRAFTS: Care should be taken to avoid back drafting combustion appliances that are installed in the conditioned space. It is strongly recommended that combustion appliances NOT be installed in such a manner that they use room air for combustion. Whole house fans are capable of pulling large quantities of air, from the home and particularly if not enough windows are open. This could easily back draft gas appliances located inside your home.





NOTE: Wiring Diagrams are for examples only and wiring should be done by an experienced electrician!

#### 3.1. Single Speed Wiring

For wiring of the Energy Saver single Motor Head Whole House Fans with one speed

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#### 3.2. Two Speed Wiring

For wiring of the Energy Saver Dual Motor Head Whole House Fans with two speeds.



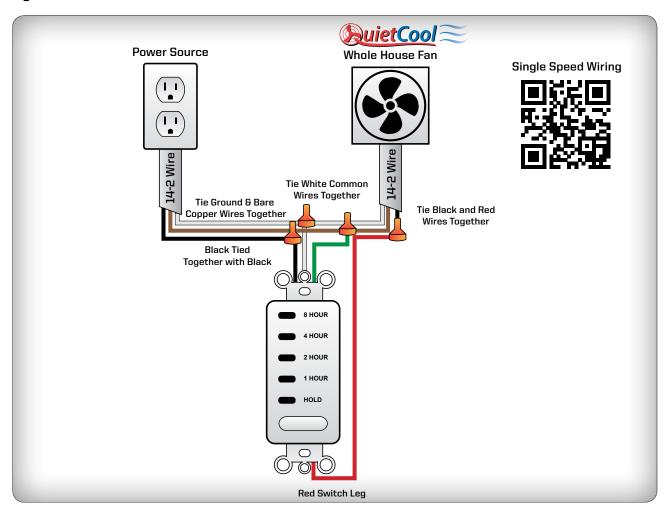


NOTE: The QuietCool whole house fans can be used with the included power cord with a plug outlet, but will only operate on high speed. The system will also work with a wireless system using the power cord.

#### 3.1 Single Speed Wiring (for ES-1250/1700/2000/2850)

- 1. For this installation, you will need (2) 2 wire Romex, and an 8 Hour Timer. Using the included wire nuts, tie the black wire from the first 2 wire Romex from the power source to the black wire on the timer.
- 2. Using a wire nut, tie the black wire on the 2 wire Romex from the fan to the red wire on the timer.
- **3.** Using a wire nut, tie the bare copper wires together with the green ground wire on the timer.

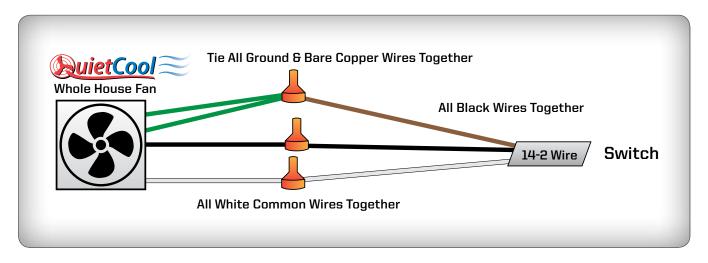
Figure 3.1A



- 4. Using a wire nut, tie the white neutral wires from the Romex to the white neutral wire on the timer.
- **5.** Begin wiring the fan by opening up the handy box. Take off the wire nuts within the handy box. Unscrew the green ground wire. Detach the green ground wire from the power cord. Remove the power cord. Re-attach the ground screw and wire to the handy box. Cut your green ground wire in half and strip both sides. **(see Figure 3.1B)**

- **6.** Feed the 2 wire Romex through the handy box. Using the included wire nuts, tie the black wires together. Tie the white neutral wires together. Tie your bare copper wire and green ground wires together.
- 7. Carefully reinstall the handy box cover.

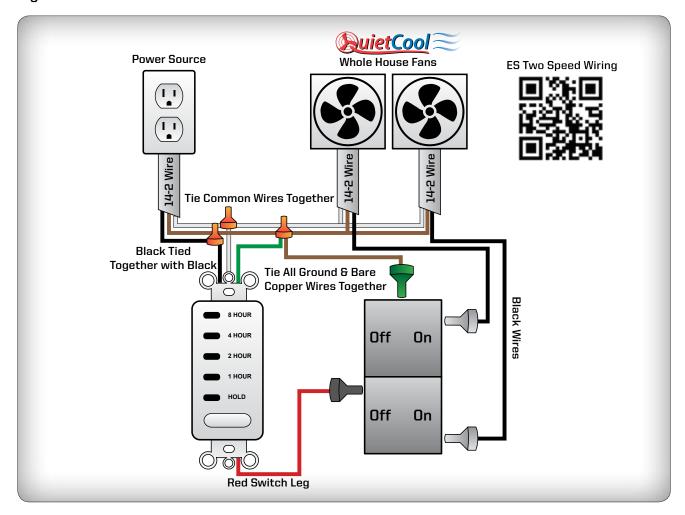
Figure 3.1B



#### 3.2 Two Speed Wiring (for ES-5400)

- 1. For this installation, you will need (3) 2 wire Romex an 8 Hour Timer, and a Double Stack Single Pole Switch.
- 2. Using the 2-wire Romex from the first fan motor head, attach the black wire to the top gold screw on the right. Using the 2-wire Romex from the second fan motor head, attach the black wire to the bottom gold screw on the right. (see Figure 3.2A)
- 3. Attach the red wire from the 8 Hour Timer to the bottom black screw on the switch.
- **4.** Using the 2 wire Romex from your power source, tie the black wire to the black wire on the timer with a wire nut.
- **5.** Take a piece of bare copper wire and attach it to the green ground screw on the switch. Using a wire nut, tie all copper wires together with the green ground wire from the timer. Tie all the white wires together. Finish the installation of your switches and switch cover plate.

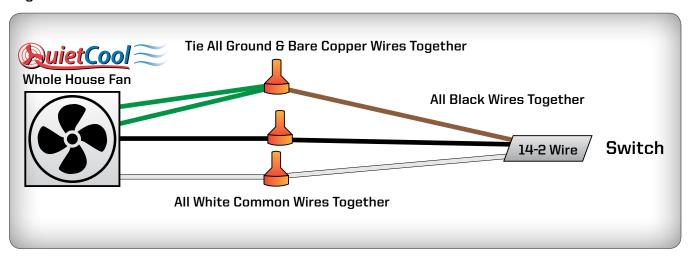
Figure 3.2A



- **6.** Start by wiring the first motor head. Open up the handy box and take off all the wire nuts. Unscrew the green ground wire and detach the green ground wire from the power cord. Remove the power cord. Reattch the green ground wire to the handy box. Cut your green ground wire in half and strip both sides. **(see Figure 3.2B)**
- 7. Move to the second motor head. Open up the handy box and take off all the wire nuts. Unscrew the green ground wire and detach the green ground wire from the power cord. Remove the power cord. Reattach the green ground wire to the handy box. Cut your green ground wire in half and strip both sides.
- **8.** Move to the second motor head. Open up the handy box and take off all the wire nuts. Unscrew the green ground wire and detach the green ground wire from the power cord. Remove the power cord. Reattach the green ground wire to the handy box. Cut your green ground wire in half and strip both sides.
- **9.** Feed the 2 wire Romex into the handy box. Using the included wire nuts, tie the black wires together for high speed. Tie the remaining white neutral wires together. Tie your bare copper wires and green ground wires together. Carefully reinstall the handy box cover.

- 10. Now let's open up the handy box on the second motor head. First begin by un-grounding and removing the power cord. Now reattach the ground wire with the ground screw and cut the green ground wire loop in half and strip both sides. We will use these two wires to ground the motor and switch to the motor housing.
- 11. Feed the 2 wire Romex into the handy box. Using the included wire nuts, tie the black wires together for high speed. Tie the remaining white neutral wires together. Tie your bare copper wires and green ground wires together. Carefully reinstall the handy box cover.

Figure 3.2B



#### 4. SYSTEM OPERATING INSTRUCTIONS

#### 4.1 When to Run the QuietCool Whole House Fans

Anytime it is cooler outside than the inside of your home, the system will work effectively. In the summer this normally happens in the late afternoon to early evening, through to the next morning. We recommend running your fan through the evening. If you have a multi-speed fan, you will get the best cooling effect when you turn the fan on low after desired cooling occurs and let it run throughout the night.

#### 4.2 Where to Start Cooling the Home

We recommend cooling the area where you are going to be spending the most time for the next few hours. For example, in most family situations, the early evening is spent in the kitchen or family room area. Assuming this to be true, this is where you would want to start the cooling process.

Begin by opening a few windows in the area you are going to be spending your time and turn on all of your **QuietCool** fans at once, for maximum cooling. The cooler air outside will immediately begin to create a breeze in the home making you feel up to 10 degrees cooler, instantly. Opening windows too wide or opening too many windows will lessen the cooling breeze you feel.

The breeze will flow through your home and make its way to each QuietCool you have in operation.

As it gets later in the evening, and even cooler outside, you can begin to open windows in other rooms of your home, to prepare for bedtime. Then when it's time for bed, you should close all the windows in your main living space, but leave the windows in your occupied bedrooms open. This will provide each room with a cool breeze as long as desired. If you are using an 8 hour timer, you can automate your fan and have it turn off when you anticipate it being comfortable for sleeping. If you have a **QuietCool** installed in each bedroom as we recommend, you can enjoy the breeze and your privacy with your door closed.

#### 4.3 Indoor Air Quality

You will want to ventilate your home on a very regular basis. Many studies show that the air inside the homes in the United States is more polluted than the air outside. This is generally true even in the smoggiest of cities. Your **QuietCool** system can greatly reduce this problem by bringing in fresh air and exhausting stale polluted air all year round.

#### 5. HELPFUL TIPS:

- 1. Don't run fans when it is hot outside!
- **2.** Cool house in early morning and close all windows during mid-morning.
- **3.** Open a few windows at first when it starts to cool down in the afternoon or evening, then later open more windows.
- **4.** Leaving your fans on longer through the night down to your lowest comfort temperature will allow your home to stay cool longer the next day.
- 5. Close window shades and blinds during mid-morning to prevent sun from heating up home as quickly.
- **6.** In wintertime you may turn on the system at the warmest time of the day and bring in fresh warmer air to heat the home.

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

Quiet Cool is proudly designed and built in California.











ECM Energy Saver Motor = 🅖



# QC ES-1250

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The QC ES-1250 is ranked 2nd on the California Energy Commission Appliance Efficiency Database and is perfect for a small bedroom. This fan will cool and ventilate up to a 625 square foot room at a fraction of the cost of A/C

Watts	Airflow	CFM/Watt	Sound	
36	1,265 CFM	35.14	42 DB	

#### QC ES-1700



At an astounding use of only 76.8 watts of power, this fan uses less energy than a typical light bulb in your home! The QC ES-1700 is ranked 6th on the California Energy Commission Appliance Efficiency Database and is perfect for a medium sized bedroom.

Watts	Airflow	CFM/Watt	Sound
76.8	1,765 CFM	22.98	43 DB

#### QC ES-2000



At a miniscule 88.8 watts, the QC ES-2000 will cool off your master bedroom in minutes! This fan is ranked 7th on the California Energy Commission Appliance Efficiency Database. After using this fan all summer, you will be shocked by how much you can save on your electric bill!

Watts	Airflow	CFM/Watt	Sound
88.8	2,035 CFM	22.92	44 DB

#### QC ES-2850



The QC ES-2850 is our most powerful single motor head fan in the ES line of fans. This fan would be perfect for a typical master bedroom or large room.

Watts	Airflow	CFM/Watt	Sound
177.6	2,850 CFM	16.05	47 DB

#### QC ES-5400



Nicknamed the "Green Giant". This is our most powerful whole house fan in our Energy Saver line. This will cool and ventilate an entire home in minutes. Install one ES-5400 in your hallway and a couple ES-1700s in your bedrooms and watch your electricity bill decrease and your comfort increase.

Watts	Airflow	CFM/Watt	Sound
Lo: 179	Lo: 2,860 CFM	Lo: 15.98	Lo: 47 DB
Hi: 358	Hi: 5,412 CFM	Hi: 15.12	Hi: 49 DB



#### WHOLE HOUSE FANS LIMITED WARRANTY

# 10 YEAR LIMITED WARRANTY QC ES LINE (Energy Saver) WHOLE HOUSE FANS



QC Manufacturing Inc. extends this warranty to the original purchaser of the following QuietCool Classic Line Models ----QC ES-1250, QC ES-1700, QC ES-2000, QC ES-2850 and QC ES-5400 ---- installed and used in a residence under normal conditions within the United States:

- **A.** Ten 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 ten 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:
  - Incidental or consequential damage resulting from the operation of our equipment or any malfunction thereof.
  - 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 address below.
- E. Please register your product(s) for warranty on line at www.QuietCoolSystems.com

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 #	

Product Registration: Please register your product on line at www.QuietCoolSystems.com/support/registration Be sure to keep a copy of this warranty form for future reference and submit proof of purchase with any warranty claim. QC Manufacturing, Inc. will not process any warranty claim without proof of purchase from an authorized QuietCool dealer. Where consumer may have additional warranty rights in accordance with federal and state law, such rights shall supersede those stated herein."

Rev. 4.15.1 4

