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Product Catalog 2024



S O L A R O TM
E N E R G Y

It's not different, it's better by design.

22955 McAuliffe Dr. • Suite A • Robertsdale, AL 36567



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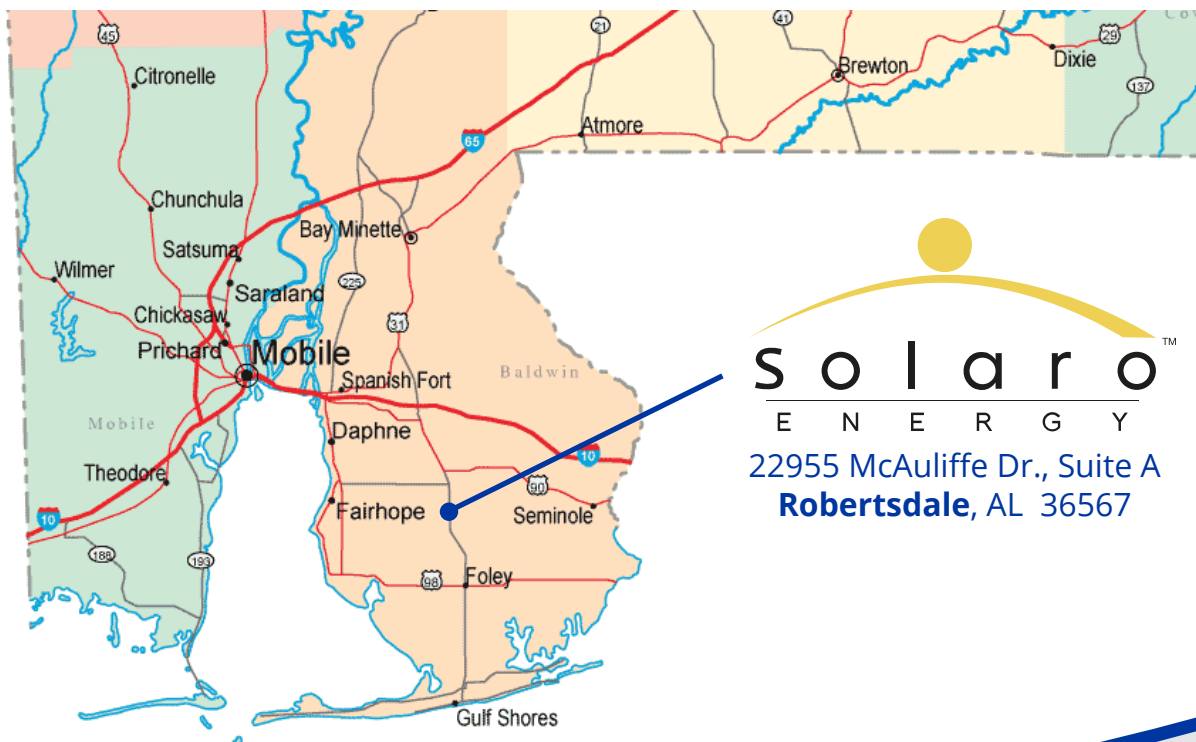
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Southern Alabama Map & Home of Solaro Energy, Inc.




Solaro
ENERGY
22955 McAuliffe Dr., Suite A
Robertsdale, AL 36567

INTRODUCTION



Dennis Grubb
CEO & Founder
Solaro Energy

At **Solaro Energy**, we are committed to helping the planet stay green. We are focused on preserving the environment with green products promoting off-grid independence. We have over 15 years experience in harnessing solar power, and over 25 years experience manufacturing energy efficient products.

Solaro Energy Inc. guarantees better air performance because of the Maximum Power Point Tracking feature. Which maintains the highest possible air flow under all solar conditions by utilizing all the power available from the solar panel, setting the highest fan speed.

Designed by experts in the art of air flow technology, with years of aerodynamic engineering experience. Your **Solaro Aire™** solar powered attic fan will out preform all other products on the market today. Not only in terms of air movement performance, but also curb appeal and durability.

During the hot summer months, your attic can reach temperatures of up to 160° F, making your home warm and uncomfortable. The **Solaro Aire™ extracts the heat from your attic**, keeping the temperature down in your home and lowering your AC bill. A great replacement for the old noisy turbine vents.

The **Solaro Aire™** is the world's most advanced, fully integrated, high efficiency solar powered attic fan. **Keep in mind, the attic fan will not make the attic cooler than the outside ambient temperature.**



INTRODUCTION

COMPANY MISSION STATEMENT

At **Solaro Energy, Inc.** we are driven to become the industry standard and worldwide source of solar powered solutions for residential, commercial, manufacturing and municipal structures. We are committed to helping the planet stay green. We will only produce high-quality, durable products. Which provide long lasting, reliable and maintenance-free performance. Giving measurable economic return to our customers.

COMPANY VISION

Solaro Energy, Inc. innovates, designs and engineers the highest quality, America Made solar powered solutions for residential and commercial structures. We provide durable product solutions that help users achieve more independence, contribute to the conservation of our natural resources and achieve meaningful economic savings.

COMPANY OVERVIEW

- In-House Research and Development, Manufacturing and Distribution.
- Focused on preserving the environment with Green Products and Renewable Energy.
- Provide American engineered and American made line of products that are built to last a lifetime.





Solaro Aire

Solar Powered Attic Ventilation System



Ideal for applications where additional clearance is needed between the bottom of the fan and the roof. Perfect for snowy areas, flat or "S" tile roofs where less clearance could cause airflow problems. This provides an additional 2" of height from the roof deck. Only product certified through Dade County and approved for high winds. (160 mph)



Technical Information

Weight

Fan Weight: 19 lbs / 8.61 kg

Fan Packaged: 27 lbs. / 12.24 kg

Performance

Air Flow Rate:
900 to 1200 CFM
Depending on solar exposure
Ventilation: Up to 1250 sq.ft.
Attic must support intake air
for best performance

Electrical

Solar Panel: 25 watt, 17 to 22 DC,
1.25 amp, 36 mono-crystalline
cell, solar cells with black back
sheet
Motor: Solaro Max Aire
Brushless DC Motor, 10-22VDC

Material

Housing System: Spun Formed,
Aircraft Grade Aluminum
Fan Blade: 12" Aluminum, Factory Balanced
Mesh Screen: Stainless Steel, 1/4"
Mesh, Rodent Control
Wiring: 18 Gauge Copper Conductors
with PVC Insulation



Housing & Flashing System

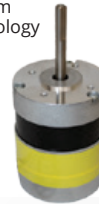
Aircraft grade, spun-formed
aluminum for the utmost
quality protection
Inner housing system is
aerodynamically designed
to produce the highest
possible radial air exhaust
Powder coated outer shell



Solaro Max Aire Motor

Maximum Efficiency Yield Technology

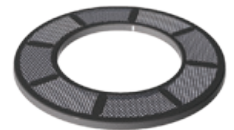
Brushless Electronic Motor with Maximum
Yield Technology. This new motor technology
was developed by Solaro Energy - Our
engineers leveraged lessons learned
from our original brushless electronic
motor that we used for over 12 years.
This new motor technology offers about
30% better efficiency and air moving
performance, with an amazing 100,000
hours average motor run time!



Components

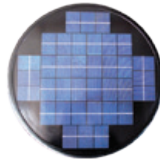
Mesh Screen

Constructed specifically for
the Solaro Aire
1/4" mesh screen keeps
animals and rodents
out while allowing
maximum air exhaust
Stainless Steel



Solar Panel

25 watt, 1.25 amp proprietary,
high purity, mono-crystalline
cell solar panel
Weather proof in the most
severe conditions
High transparent, low iron
tempered glass
Built for maximum performance and safety



Fan Blade

Specifically designed for the
Solaro Aire solar powered
ventilation system
12" - 5 blade aluminum fan,
aerodynamically optimized
blade to improve airflow
Operates whisper quiet
throughout the day

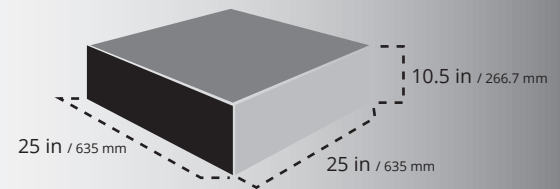
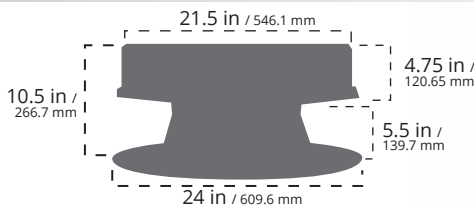


Motor & Fan Mount

The Max Aire motor is
mounted under the
aluminum air
deflector. Keeping it
out of the air stream



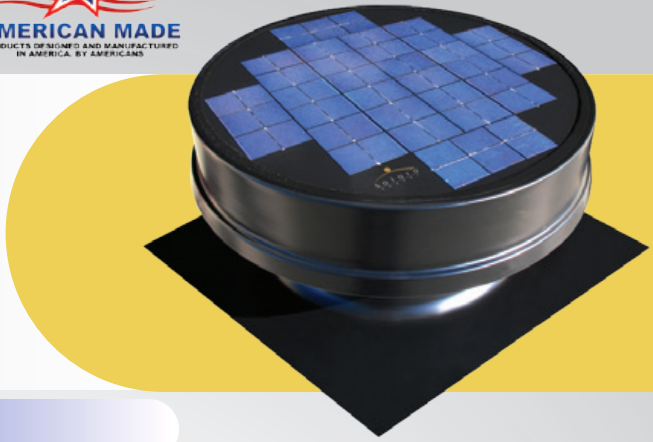
Dimensions & Weight



Important Note: The Solaro Aire Attic Fan Ventilation System is 100% fire proof and all electrical components are hidden under the air diverting cowling creating an extremely safe and efficient ventilation system

Limited Lifetime Warranty - See warranty details for additional information.

Provides the same performance as the high profile base, when additional clearance is not necessary. Tucks in closer to the roof to be less conspicuous and more resistant to high winds. Only product certified through Dade County and approved for high winds. (160 mph)



Technical Information

Weight

Fan Weight: 19 lbs / 8.61 kg

Fan Packaged: 27 lbs. / 12.24 kg

Performance

Air Flow Rate:
900 to 1200 CFM
Depending on solar exposure

Ventilation: Up to 1250 sq.ft.
Attic must support intake air
for best performance

Electrical

Solar Panel: 25 watt, 17 to 22 DC,
1.25 amp, 36 mono-crystalline
cell, solar cells with black back
sheet

Motor: Solaro Max Aire
Brushless DC Motor, 10-22VDC

Material

Housing System: Spun Formed,
Aircraft Grade Aluminum
Fan Blade: 12" Aluminum, Factory Balanced
Mesh Screen: Stainless Steel, 1/4"
Mesh, Rodent Control
Wiring: 18 Gauge Copper Conductors
with PVC Insulation



Housing & Flashing System

Aircraft grade, spun-formed
aluminum for the utmost
quality protection
Inner housing system is
aerodynamically designed
to produce the highest
possible radial air exhaust
Powder coated outer shell



Solaro Max Aire Motor

Maximum Efficiency Yield Technology

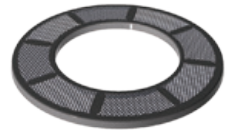
Brushless Electronic Motor with Maximum
Yield Technology. This new motor technology
was developed by Solaro Energy - Our
engineers leveraged lessons learned
from our original brushless electronic
motor that we used for over 12 years.
This new motor technology offers about
30% better efficiency and air moving
performance, with an amazing 100,000
hours average motor run time!



Components

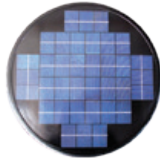
Mesh Screen

Constructed specifically for
the Solaro Aire
1/4" mesh screen keeps
animals and rodents
out while allowing
maximum air exhaust
Stainless Steel



Solar Panel

25 watt, 1.25 amp proprietary,
high purity, mono-crystalline
cell solar panel
Weather proof in the most
severe conditions
High transparent, low iron
tempered glass
Built for maximum performance and safety



Fan Blade

Specifically designed for the
Solaro Aire solar powered
ventilation system
12" - 5 blade aluminum fan,
aerodynamically optimized
blade to improve airflow
Operates whisper quiet
throughout the day

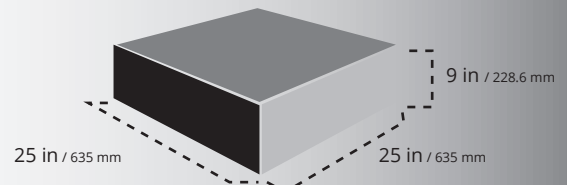
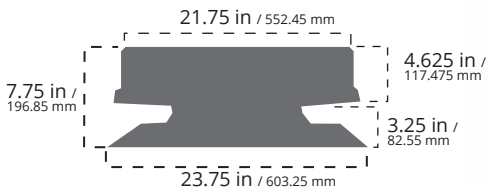


Motor & Fan Mount

The Max Aire motor is
mounted under the
aluminum air
deflector. Keeping it
out of the air stream



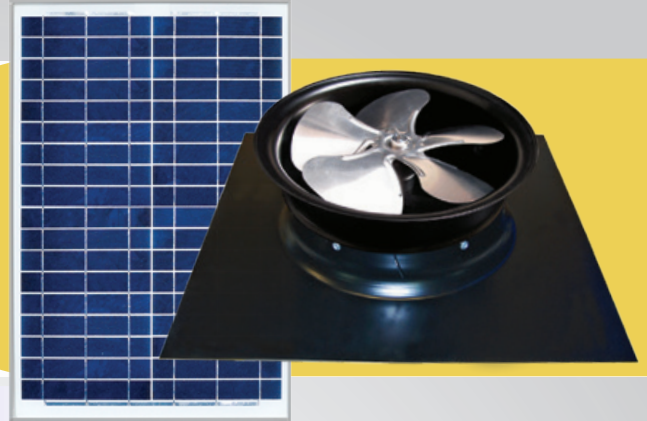
Dimensions & Weight



Important Note: The Solaro Aire Attic Fan Ventilation System is 100% fire proof and all electrical components are hidden under the air diverting cowling creating an extremely safe and efficient ventilation system

Limited Lifetime Warranty - See warranty details for additional information.

Can be mounted inside the attic over an existing gable vent or roof penetration to supercharge the vents already there. Remains hidden and out of the weather, except for the roof mounted solar panel .
No large holes to cut in your roof.



Technical Information

Weight

Fan Weight: 5 lbs / 2.26 kg

Fan Packaged: 18 lbs. / 8.16 kg

Performance

Air Flow Rate:
900 to 1200 CFM
Depending on solar exposure
Ventilation: Up to 1250 sq.ft.
Attic must support intake air
for best performance

Electrical

Solar Panel: 27 watt, 17 to 22 DC,
1.25 amp, 36 mono-crystalline
cell, solar cells with black back
sheet
Motor: Solaro Max Aire
Brushless DC Motor, 10-22VDC

Material

Housing System: Spun Formed,
Aircraft Grade Aluminum
Fan Blade: 12" Aluminum, Factory Balanced
Mesh Screen: Stainless Steel, 1/4"
Mesh, Rodent Control
Wiring: 18 Gauge Copper Conductors
with PVC Insulation



Housing & Flashing System

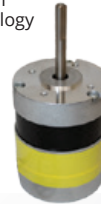
Aircraft grade, spun-formed aluminum for the utmost quality protection
Inner housing system is aerodynamically designed to produce the highest possible radial air exhaust
Powder coated outer shell



Solaro Max Aire Motor

Maximum Efficiency Yield Technology

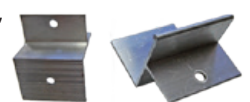
Brushless Electronic Motor with Maximum Yield Technology. This new motor technology was developed by Solaro Energy - Our engineers leveraged lessons learned from our original brushless electronic motor that we used for over 12 years. This new motor technology offers about 30% better efficiency and air moving performance, with an amazing 100,000 hours average motor run time!



Components

Solar Panel Brackets

Extruded Aluminum
Mill finished
Dimensions depth 0.60"
2"x2"
Supports solar panel



Solar Panel

27 watt, 1.25 amp proprietary, high purity, mono-crystalline cell solar panel
Weather proof in the most severe conditions
High transparent, low iron tempered glass
Built for maximum performance and safety



Fan Blades

Specifically designed for the Solaro Aire solar powered ventilation system
12" - 5 blade aluminum fan, aerodynamically optimized blade to improve airflow
Operates whisper quiet throughout the day

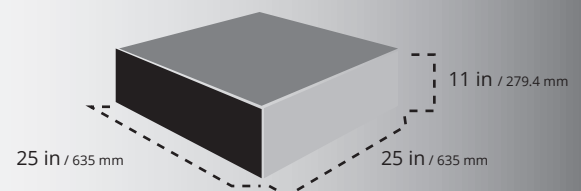
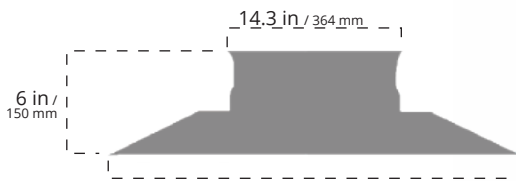


Interconnect Cable

Wire: 25' - 2 Conductor
18 Gauge stranded copper
U.V. Rated
Power transfer cable

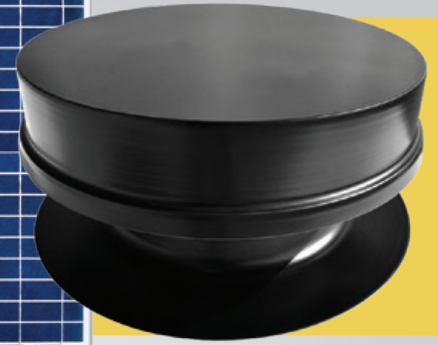


Dimensions & Weight



Important Note: The Solaro Aire Attic Fan Ventilation System is 100% fire proof and all electrical components are hidden under the air diverting cowling creating an extremely safe and efficient ventilation system
Limited Lifetime Warranty - See warranty details for additional information.

The Remote Solar Panel models are perfect for installing the attic fan and solar panel separately, due to limited light access in a desired fan location. Includes 25 ft. of Interconnect Cable. Only product certified through Dade County and approved for high winds. (160 mph)



Technical Information

Weight

Fan Weight: 19 lbs / 8.61 kg

Fan Packaged: 28 lbs. / 12.7 kg

Performance

Air Flow Rate:
900 to 1200 CFM
Depending on solar exposure

Ventilation: Up to 1250 sq.ft.
Attic must support intake air
for best performance

Electrical

Solar Panel: 27 watt, 17 to 22 DC,
1.25 amp, 36 mono-crystalline
cell, solar cells with black back
sheet

Motor: Solaro Max Aire
Brushless DC Motor, 10-22VDC

Material

Housing System: Spun Formed,
Aircraft Grade Aluminum
Fan Blade: 12" Aluminum, Factory Balanced
Mesh Screen: Stainless Steel, 1/4"
Mesh, Rodent Control
Wiring: 18 Gauge Copper Conductors
with PVC Insulation



Housing & Flashing System

Aircraft grade, spun-formed
aluminum for the utmost
quality protection
Inner housing system is
aerodynamically designed
to produce the highest
possible radial air exhaust
Powder coated outer shell



Solaro Max Aire Motor

Maximum Efficiency Yield Technology

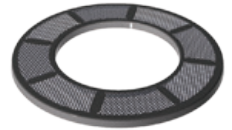
Brushless Electronic Motor with Maximum
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engineers leveraged lessons learned
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motor that we used for over 12 years.
This new motor technology offers about
30% better efficiency and air moving
performance, with an amazing 100,000
hours average motor run time!



Components

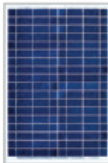
Mesh Screen

Constructed specifically for
the Solaro Aire
1/4" mesh screen keeps
animals and rodents
out while allowing
maximum air exhaust
Stainless Steel



Solar Panel

27 watt, 1.25 amp proprietary,
high purity, mono-crystalline
cell solar panel
Weather proof in the most
severe conditions
High transparent, low iron
tempered glass
Built for maximum performance and safety



Fan Blade

Specifically designed for the
Solaro Aire solar powered
ventilation system
12" - 5 blade aluminum fan,
aerodynamically optimized
blade to improve airflow
Operates whisper quiet
throughout the day

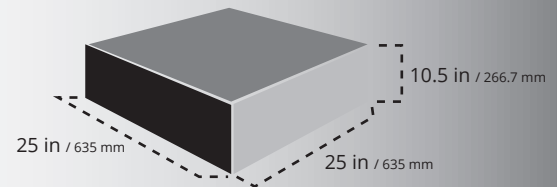
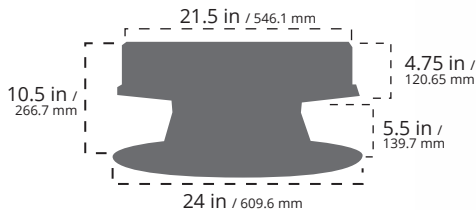


Motor & Fan Mount

The Max Aire motor is
mounted under the
aluminum air
deflector. Keeping it
out of the air stream



Dimensions & Weight



Important Note: The Solaro Aire Attic Fan Ventilation System is 100% fire proof and all electrical components are hidden under the air diverting cowling creating an extremely safe and efficient ventilation system

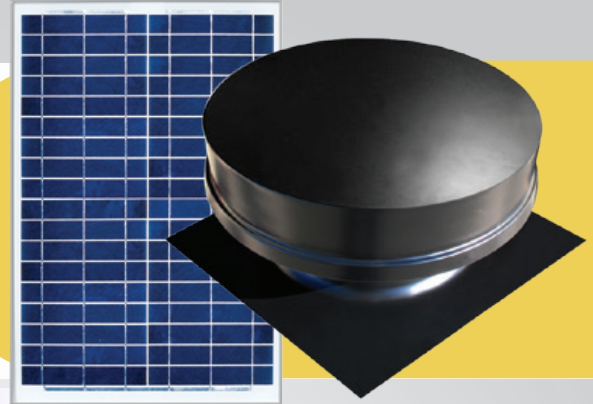
Limited Lifetime Warranty - See warranty details for additional information.



Specification Sheet

Model # SA-27WR-LPE

The Remote Solar Panel models are perfect for installing the attic fan and solar panel separately, due to limited light access in a desired fan location. Includes 25 ft. of Interconnect Cable. Tucks in closer to the roof to be less conspicuous and more resistant to high winds. Only product certified through Dade County and approved for high winds. (160 mph)



Technical Information

Weight

Fan Weight: 19 lbs / 8.61 kg

Fan Packaged: 28 lbs. / 12.7 kg

Performance

Air Flow Rate:
900 to 1200 CFM
Depending on solar exposure
Ventilation: Up to 1250 sq.ft.
Attic must support intake air
for best performance

Electrical

Solar Panel: 27 watt, 17 to 22 DC,
1.25 amp, 36 mono-crystalline
cell, solar cells with black back
sheet
Motor: Solaro Max Aire
Brushless DC Motor, 10-22VDC

Material

Housing System: Spun Formed,
Aircraft Grade Aluminum
Fan Blade: 12" Aluminum, Factory Balanced
Mesh Screen: Stainless Steel, 1/4"
Mesh, Rodent Control
Wiring: 18 Gauge Copper Conductors
with PVC Insulation



Housing & Flashing System

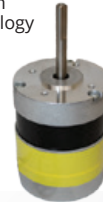
Aircraft grade, spun-formed
aluminum for the utmost
quality protection
Inner housing system is
aerodynamically designed
to produce the highest
possible radial air exhaust
Powder coated outer shell



Solaro Max Aire Motor

Maximum Efficiency Yield Technology

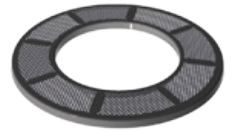
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Components

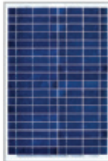
Mesh Screen

Constructed specifically for
the Solaro Aire
1/4" mesh screen keeps
animals and rodents
out while allowing
maximum air exhaust
Stainless Steel



Solar Panel

27 watt, 1.25 amp proprietary,
high purity, mono-crystalline
cell solar panel
Weather proof in the most
severe conditions
High transparent, low iron
tempered glass
Built for maximum performance and safety



Fan Blade

Specifically designed for the
Solaro Aire solar powered
ventilation system
12" - 5 blade aluminum fan,
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blade to improve airflow
Operates whisper quiet
throughout the day

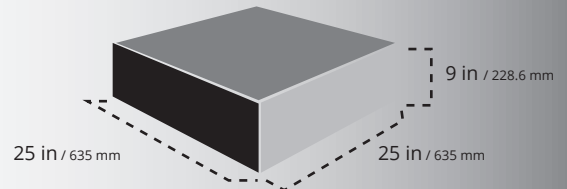
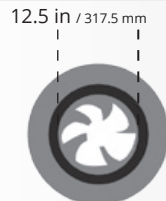
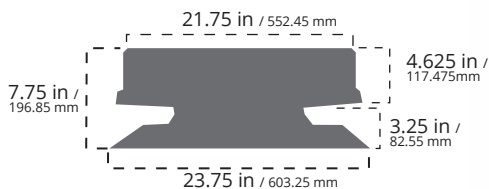


Motor & Fan Mount

The Max Aire motor is
mounted under the
aluminum air
deflector. Keeping it
out of the air stream



Dimensions & Weight



Important Note: The Solaro Aire Attic Fan Ventilation System is 100% fire proof and all electrical components are hidden under the air diverting cowling creating an extremely safe and efficient ventilation system

Limited Lifetime Warranty - See warranty details for additional information.

27w LOW PROFILE REMOTE

Perfect for any installation requiring movement of the solar panel. Can be tilted and raised to 35 degrees or set flat against the solar fan. The Tilt Fan can also be rotated 360 degrees. As the seasons change, so does the angle of the sun. This solar panel can be changed year round to provide maximum performance.



Technical Information

Weight

Fan Weight: 24 lbs / 10.88 kg

Fan Packaged: 29 lbs. / 13.15 kg

Performance

Air Flow Rate:
900 to 1200 CFM
Depending on solar exposure
Ventilation: Up to 1250 sq.ft.
Attic must support intake air
for best performance

Electrical

Solar Panel: 27 watt, 17 to 22 DC,
1.25 amp, 36 mono-crystalline
cell, solar cells with black back
sheet
Motor: Solaro Max Aire
Brushless DC Motor, 10-22VDC

Material

Housing System: Spun Formed,
Aircraft Grade Aluminum
Fan Blade: 12" Aluminum, Factory Balanced
Mesh Screen: Stainless Steel, 1/4"
Mesh, Rodent Control
Wiring: 18 Gauge Copper Conductors
with PVC Insulation



Housing & Flashing System

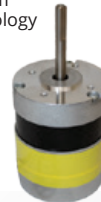
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Solaro Max Aire Motor

Maximum Efficiency Yield Technology

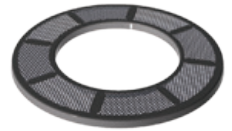
Brushless Electronic Motor with Maximum
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was developed by Solaro Energy - Our
engineers leveraged lessons learned
from our original brushless electronic
motor that we used for over 12 years.
This new motor technology offers about
30% better efficiency and air moving
performance, with an amazing 100,000
hours average motor run time!



Components

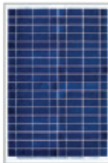
Mesh Screen

Constructed specifically for
the Solaro Aire
1/4" mesh screen keeps
animals and rodents
out while allowing
maximum air exhaust
Stainless Steel



Solar Panel

27 watt, 1.25 amp proprietary,
high purity, mono-crystalline
cell solar panel
Weather proof in the most
severe conditions
High transparent, low iron
tempered glass
Built for maximum performance and safety



Fan Blade

Specifically designed for the
Solaro Aire solar powered
ventilation system
12" - 5 blade aluminum fan,
aerodynamically optimized
blade to improve airflow
Operates whisper quiet
throughout the day

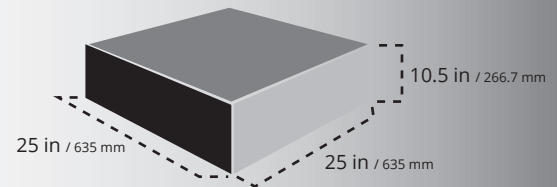
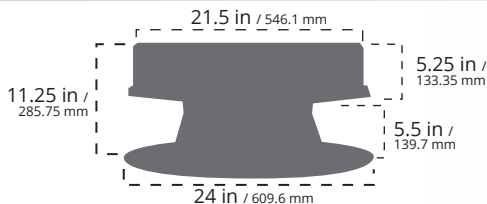


Motor & Fan Mount

The Max Aire motor is
mounted under the
aluminum air
deflector. Keeping it
out of the air stream



Dimensions & Weight



Important Note: The Solaro Aire Attic Fan Ventilation System is 100% fire proof and all electrical components are hidden under the air diverting cowling creating an extremely safe and efficient ventilation system

Limited Lifetime Warranty - See warranty details for additional information.

Provides the same performance as the high profile base, when additional clearance is not necessary. Tucks in closer to the roof to be less conspicuous and more resistant to high winds. Perfect for any installation requiring movement of the solar panel. Can be tilted and raised to 35 degrees or set flat against the solar fan. The Tilt Fan can also be rotated 360 degrees. As the seasons change, so does the angle of the sun. This solar panel can be changed year round to provide maximum performance.



Technical Information

Weight

Fan Weight: 24 lbs / 10.88 kg

Fan Packaged: 29 lbs. / 13.15 kg

Performance

Air Flow Rate:
900 to 1200 CFM
Depending on solar exposure
Ventilation: Up to 1250 sq.ft.
Attic must support intake air
for best performance

Electrical

Solar Panel: 27 watt, 17 to 22 DC,
1.25 amp, 36 mono-crystalline
cell, solar cells with black back
sheet
Motor: Solaro Max Aire
Brushless DC Motor, 10-22VDC

Material

Housing System: Spun Formed,
Aircraft Grade Aluminum
Fan Blade: 12" Aluminum, Factory Balanced
Mesh Screen: Stainless Steel, 1/4"
Mesh, Rodent Control
Wiring: 18 Gauge Copper Conductors
with PVC Insulation



Housing & Flashing System

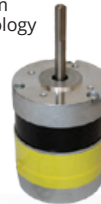
Aircraft grade, spun-formed
aluminum for the utmost
quality protection
Inner housing system is
aerodynamically designed
to produce the highest
possible radial air exhaust
Powder coated outer shell



Solaro Max Aire Motor

Maximum Efficiency Yield Technology

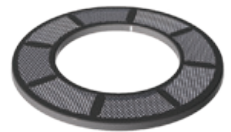
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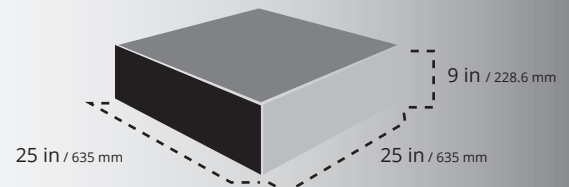
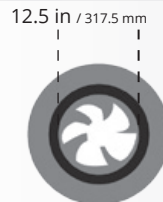
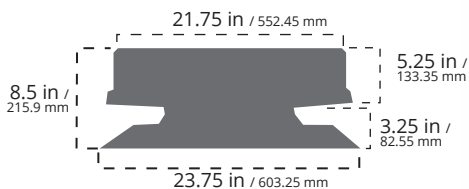


Motor & Fan Mount

The Max Aire motor is
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deflector. Keeping it
out of the air stream



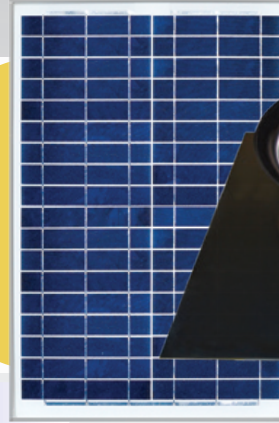
Dimensions & Weight



Important Note: The Solaro Aire Attic Fan Ventilation System is 100% fire proof and all electrical components are hidden under the air diverting cowling creating an extremely safe and efficient ventilation system

Limited Lifetime Warranty - See warranty details for additional information.

Can be mounted inside the attic over an existing gable vent or roof penetration to supercharge the vents already there. Remains hidden and out of the weather, except for the roof mounted solar panel.
No large holes to cut in your roof.



Technical Information

Weight

Fan Weight: 5 lbs / 2.26 kg
Fan Packaged: 18 lbs. / 8.16 kg

Performance

Air Flow Rate:
900 to 1200 CFM
Depending on solar exposure
Ventilation: Up to 1600 sq.ft.
Attic must support intake air for best performance

Electrical

Solar Panel: 37 watt, 17 to 22 DC, 1.5 amp, 36 mono-crystalline cell, solar cells with black back sheet
Motor: Solaro Max Aire Brushless DC Motor, 10-22VDC

Material

Housing System: Spun Formed, Aircraft Grade Aluminum
Fan Blade: 12" Aluminum, Factory Balanced
Mesh Screen: Stainless Steel, 1/4" Mesh, Rodent Control
Wiring: 18 Gauge Copper Conductors with PVC Insulation



Housing & Flashing System

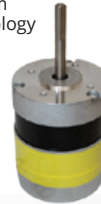
Aircraft grade, spun-formed aluminum for the utmost quality protection
Inner housing system is aerodynamically designed to produce the highest possible radial air exhaust
Powder coated outer shell



Solaro Max Aire Motor

Maximum Efficiency Yield Technology

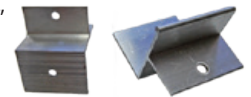
Brushless Electronic Motor with Maximum Yield Technology. This new motor technology was developed by Solaro Energy - Our engineers leveraged lessons learned from our original brushless electronic motor that we used for over 12 years. This new motor technology offers about 30% better efficiency and air moving performance, with an amazing 100,000 hours average motor run time!



Components

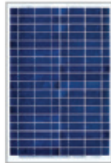
Solar Panel Brackets

Extruded Aluminum
Mill finished
Dimensions depth 0.60"
2"x2"
Supports solar panel



Solar Panel

37 watt, 1.5 amp proprietary, high purity, mono-crystalline cell solar panel
Weather proof in the most severe conditions
High transparent, low iron tempered glass
Built for maximum performance and safety



Fan Blades

Specifically designed for the Solaro Aire solar powered ventilation system
12" - 5 blade aluminum fan, aerodynamically optimized blade to improve airflow
Operates whisper quiet throughout the day

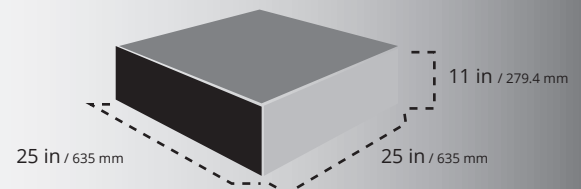
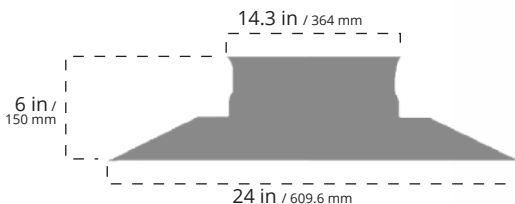


Interconnect Cable

Wire: 25' - 2 Conductor
18 Gauge stranded copper
U.V. Rated
Power transfer cable

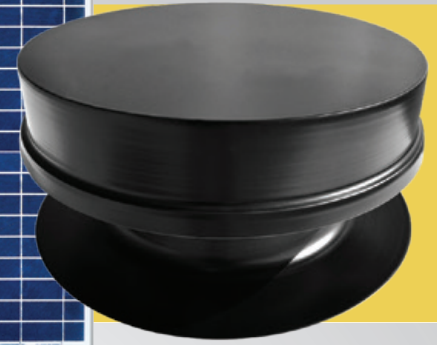


Dimensions & Weight



Important Note: The Solaro Aire Attic Fan Ventilation System is 100% fire proof and all electrical components are hidden under the air diverting cowling creating an extremely safe and efficient ventilation system
Limited Lifetime Warranty - See warranty details for additional information.

Allows solar panel location to be independent from the fan, so each can be placed in the ideal location on the roof. Can also be used with larger solar panels for improved performance, to offset poor lighting environments. Only product certified through Dade County and approved for high winds. (160 mph)



Technical Information

Weight

Fan Weight: 19 lbs / 8.61 kg

Fan Packaged: 28 lbs. / 12.7 kg

Performance

Air Flow Rate:
900 to 1200 CFM
Depending on solar exposure
Ventilation: Up to 1250 sq.ft.
Attic must support intake air
for best performance

Electrical

Solar Panel: 37 watt, 17 to 22 DC,
1.5 amp, 36 mono-crystalline
cell, solar cells with black back
sheet
Motor: Solaro Max Aire
Brushless DC Motor, 10-22VDC

Material

Housing System: Spun Formed,
Aircraft Grade Aluminum
Fan Blade: 12" Aluminum, Factory Balanced
Mesh Screen: Stainless Steel, 1/4"
Mesh, Rodent Control
Wiring: 18 Gauge Copper Conductors
with PVC Insulation



Housing & Flashing System

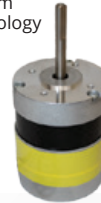
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Inner housing system is
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possible radial air exhaust
Powder coated outer shell



Solaro Max Aire Motor

Maximum Efficiency Yield Technology

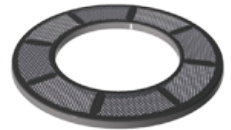
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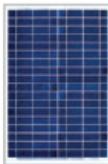
Mesh Screen

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1/4" mesh screen keeps
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Stainless Steel



Solar Panel

37 watt, 1.5 amp proprietary,
high purity, mono-crystalline
cell solar panel
Weather proof in the most
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High transparent, low iron
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Built for maximum performance and safety



Fan Blade

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12" - 5 blade aluminum fan,
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blade to improve airflow
Operates whisper quiet
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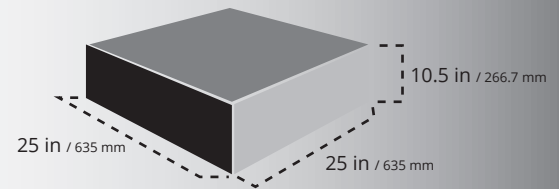
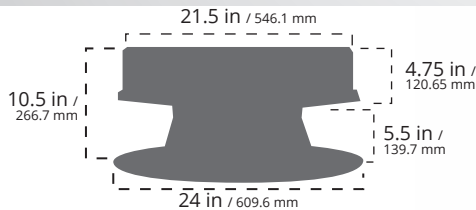


Motor & Fan Mount

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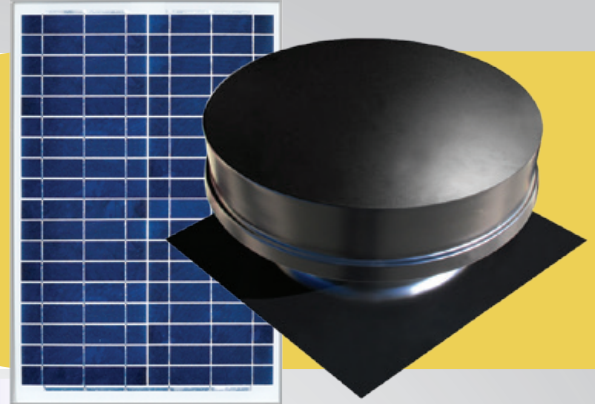
Dimensions & Weight



Important Note: The Solaro Aire Attic Fan Ventilation System is 100% fire proof and all electrical components are hidden under the air diverting cowling creating an extremely safe and efficient ventilation system

Limited Lifetime Warranty - See warranty details for additional information.

Allows solar panel location to be independent from the fan, so each can be placed in the ideal location on the roof. Can also be used with larger solar panels for improved performance, to offset poor lighting environments. Only product certified through Dade County and approved for high winds. (160 mph)



Technical Information

Weight

Fan Weight: 19 lbs / 8.61 kg

Fan Packaged: 28 lbs. / 12.7 kg

Performance

Air Flow Rate:
900 to 1200 CFM
Depending on solar exposure
Ventilation: Up to 1250 sq.ft.
Attic must support intake air
for best performance

Electrical

Solar Panel: 37 watt, 17 to 22 DC,
1.5 amp, 36 mono-crystalline
cell, solar cells with black back
sheet
Motor: Solaro Max Aire
Brushless DC Motor, 10-22VDC

Material

Housing System: Spun Formed,
Aircraft Grade Aluminum
Fan Blade: 12" Aluminum, Factory Balanced
Mesh Screen: Stainless Steel, 1/4"
Mesh, Rodent Control
Wiring: 18 Gauge Copper Conductors
with PVC Insulation



Housing & Flashing System

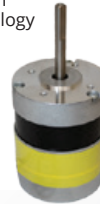
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Inner housing system is
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Powder coated outer shell



Solaro Max Aire Motor

Maximum Efficiency Yield Technology

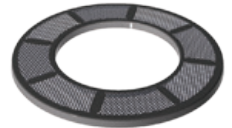
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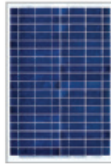
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the Solaro Aire
1/4" mesh screen keeps
animals and rodents
out while allowing
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Stainless Steel



Solar Panel

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high purity, mono-crystalline
cell solar panel
Weather proof in the most
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High transparent, low iron
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Fan Blade

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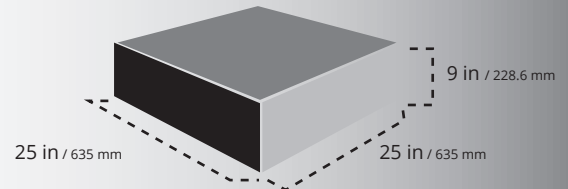
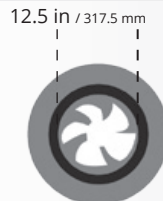
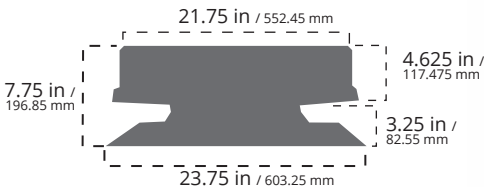


Motor & Fan Mount

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Dimensions & Weight



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Fan Packaged: 29 lbs. / 13.15 kg

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Mesh Screen: Stainless Steel, 1/4"
Mesh, Rodent Control
Wiring: 18 Gauge Copper Conductors
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Housing & Flashing System

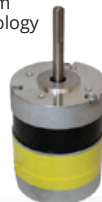
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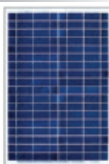
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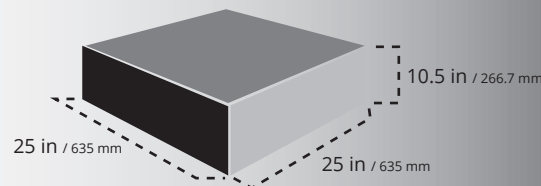
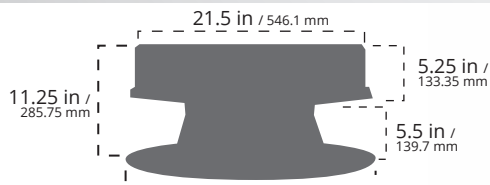


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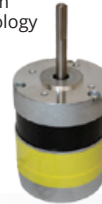


Housing & Flashing System

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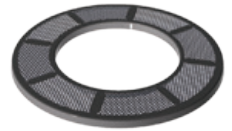
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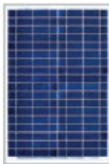
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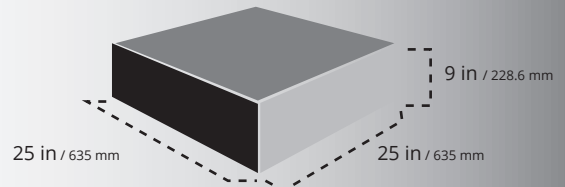
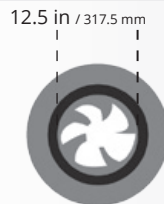
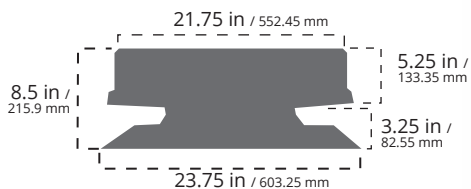


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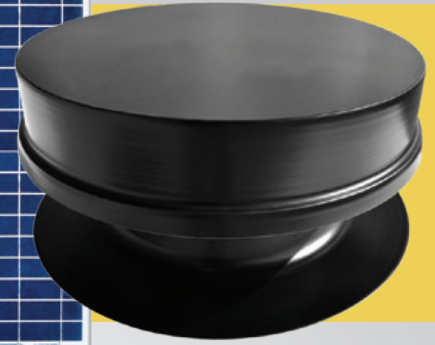
Dimensions & Weight



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Allows solar panel location to be independent from the fan, so each can be placed in the ideal location on the roof. Can also be used with larger solar panels for improved performance, to offset poor lighting environments. Only product certified through Dade County and approved for high winds. (160 mph)



Technical Information

Weight

Fan Weight: 11.3 lbs / 5.1 kg
Fan Packaged: 32 lbs. / 14.5 kg

Performance

Air Flow Rate:
900 to 1500 CFM
Depending on solar exposure
Ventilation: Up to 1250 sq.ft.
Attic must support intake air
for best performance

Electrical

Solar Panel: 40 watt, 17 to 22 DC,
1.75 amp, 36 mono-crystalline
cell, solar cells with black back
sheet
Motor: Solaro Max Aire
Brushless DC Motor, 10-22VDC

Material

Housing System: Spun Formed,
Aircraft Grade Aluminum
Fan Blade: 12" Aluminum, Factory Balanced
Mesh Screen: Stainless Steel, 1/4"
Mesh, Rodent Control
Wiring: 18 Gauge Copper Conductors
with PVC Insulation



Housing & Flashing System

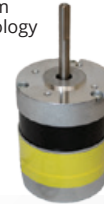
Aircraft grade, spun-formed
aluminum for the utmost
quality protection
Inner housing system is
aerodynamically designed
to produce the highest
possible radial air exhaust
Powder coated outer shell



Solaro Max Aire Motor

Maximum Efficiency Yield Technology

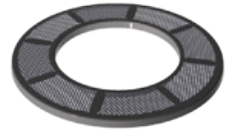
Brushless Electronic Motor with Maximum
Yield Technology. This new motor technology
was developed by Solaro Energy - Our
engineers leveraged lessons learned
from our original brushless electronic
motor that we used for over 12 years.
This new motor technology offers about
30% better efficiency and air moving
performance, with an amazing 100,000
hours average motor run time!



Components

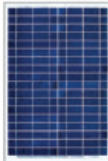
Mesh Screen

Constructed specifically for
the Solaro Aire
1/4" mesh screen keeps
animals and rodents
out while allowing
maximum air exhaust
Stainless Steel



Solar Panel

40 watt, 1.75 amp proprietary,
high purity, mono-crystalline
cell solar panel
Weather proof in the most
severe conditions
High transparent, low iron
tempered glass
Built for maximum performance and safety



Fan Blade

Specifically designed for the
Solaro Aire solar powered
ventilation system
12" - 5 blade aluminum fan,
aerodynamically optimized
blade to improve airflow
Operates whisper quiet
throughout the day

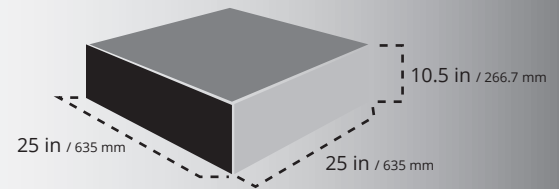
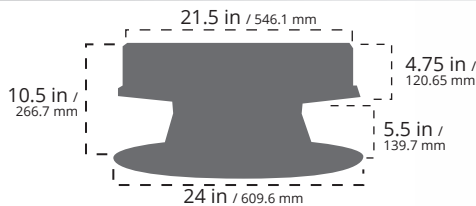


Motor & Fan Mount

The Max Aire motor is
mounted under the
aluminum air
deflector. Keeping it
out of the air stream



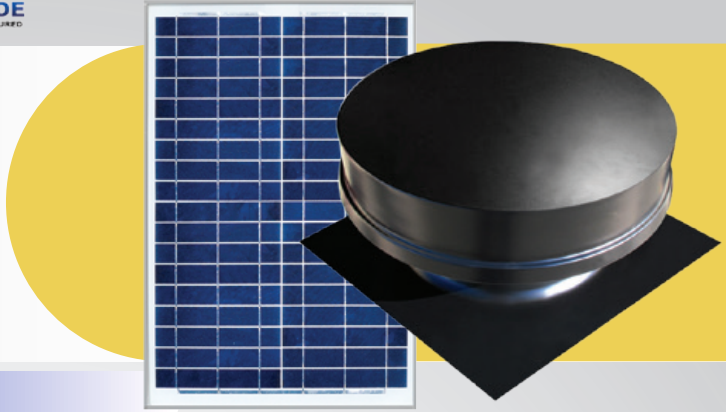
Dimensions & Weight



Important Note: The Solaro Aire Attic Fan Ventilation System is 100% fire proof and all electrical components are hidden under the air diverting cowling creating an extremely safe and efficient ventilation system

Limited Lifetime Warranty - See warranty details for additional information.

Allows solar panel location to be independent from the fan, so each can be placed in the ideal location on the roof. Can also be used with larger solar panels for improved performance, to offset poor lighting environments. Only product certified through Dade County and approved for high winds. (160 mph)



Technical Information

Weight

Fan Weight: 11.3 lbs / 5.1 kg
Fan Packaged: 32 lbs. / 14.5 kg

Performance

Air Flow Rate:
900 to 1500 CFM
Depending on solar exposure
Ventilation: Up to 1250 sq.ft.
Attic must support intake air
for best performance

Electrical

Solar Panel: 40 watt, 17 to 22 DC,
1.75 amp, 36 mono-crystalline
cell, solar cells with black back
sheet
Motor: Solaro Max Aire
Brushless DC Motor, 10-22VDC

Material

Housing System: Spun Formed,
Aircraft Grade Aluminum
Fan Blade: 12" Aluminum, Factory Balanced
Mesh Screen: Stainless Steel, 1/4"
Mesh, Rodent Control
Wiring: 18 Gauge Copper Conductors
with PVC Insulation



Housing & Flashing System

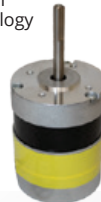
Aircraft grade, spun-formed
aluminum for the utmost
quality protection
Inner housing system is
aerodynamically designed
to produce the highest
possible radial air exhaust
Powder coated outer shell



Solaro Max Aire Motor

Maximum Efficiency Yield Technology

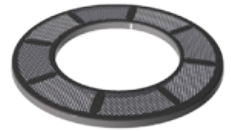
Brushless Electronic Motor with Maximum
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from our original brushless electronic
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This new motor technology offers about
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hours average motor run time!



Components

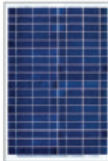
Mesh Screen

Constructed specifically for
the Solaro Aire
1/4" mesh screen keeps
animals and rodents
out while allowing
maximum air exhaust
Stainless Steel



Solar Panel

40 watt, 1.75 amp proprietary,
high purity, mono-crystalline
cell solar panel
Weather proof in the most
severe conditions
High transparent, low iron
tempered glass
Built for maximum performance and safety



Fan Blade

Specifically designed for the
Solaro Aire solar powered
ventilation system
12" - 5 blade aluminum fan,
aerodynamically optimized
blade to improve airflow
Operates whisper quiet
throughout the day

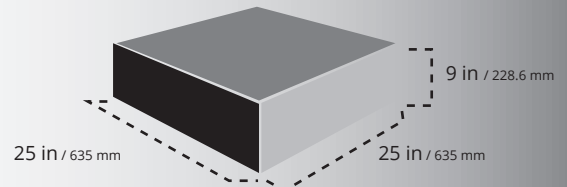
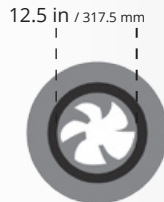
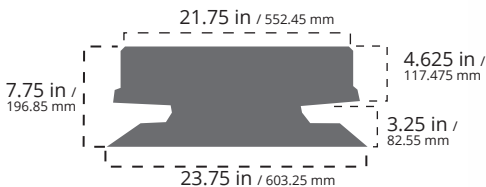


Motor & Fan Mount

The Max Aire motor is
mounted under the
aluminum air
deflector. Keeping it
out of the air stream



Dimensions & Weight



Important Note: The Solaro Aire Attic Fan Ventilation System is 100% fire proof and all electrical components are hidden under the air diverting cowling creating an extremely safe and efficient ventilation system

Limited Lifetime Warranty - See warranty details for additional information.

How Many Fans Needed Roof Pitch Chart

ROOF PITCH - HIGH

ROOF PITCH 9/12 TO 12/12

800 ft.	2 Fans
1200 ft.	2 Fans
1600 ft.	3 Fans
2000 ft.	4 Fans
2400 ft.	5 Fans



ROOF PITCH - MEDIUM

ROOF PITCH 5/12 TO 8/12

800 ft.	1 Fan
1200 ft.	2 Fans
1600 ft.	2 Fans
2000 ft.	3 Fans
2400 ft.	4 Fans



ROOF PITCH - LOW

ROOF PITCH UP TO 4/12

800 ft.	1 Fan
1200 ft.	1 Fan
1600 ft.	2 Fans
2000 ft.	2 Fans
2400 ft.	3 Fans





Solaro Aire

Solar Powered **Crawl Space Ventilation System**



The crawl space ventilation system is great for ventilating up to 1,000 sq. ft. this system ventilates moisture that would otherwise cause mold build up and rot your floor from the bottom up. Ideal for crawl spaces located under mobile homes or other residential areas that have a crawl space under the home.



Technical Information

Weight

Fan Weight: 19 lbs / 8.61 kg
Fan Packaged: 27 lbs. / 12.24 kg

Performance

Air Flow Rate:
900 to 1200 CFM
Depending on solar exposure
Ventilation: Up to 1250 sq.ft.

Electrical

Solar Panel: 37 watt, 17 to 22 DC, 1.25 amp, 36 mono-crystalline cell, solar cells with black back sheet
Motor: Solaro Max Aire Brushless DC Motor, 10-22VDC

Material

Housing System: Spun Formed, Aircraft Grade Aluminum
Fan Blade: 12" Aluminum, Factory Balanced
Mesh Screen: Stainless Steel, 1/4" Mesh, Rodent Control
Wiring: 18 Gauge Copper Conductors with PVC Insulation

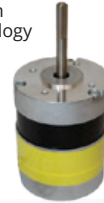


Housing & Flashing System

Aircraft grade, spun-formed aluminum for the utmost quality protection
Inner housing system is aerodynamically designed to produce the highest possible radial air exhaust
Powder coated outer shell



Brushless Electronic Motor with Maximum Yield Technology. This new motor technology was developed by Solaro Energy - Our engineers leveraged lessons learned from our original brushless electronic motor that we used for over 12 years. This new motor technology offers about 30% better efficiency and air moving performance, with an amazing 100,000 hours average motor run time!



Components

Divider

The "Y" shape twin head air distribution and reduction system separates the air flow which comes from 12" pipe into 2 - 8" pipes



Solar Panel

37 watt, 1.25 amp proprietary, high purity, mono-crystalline cell solar panel
Weather proof in the most severe conditions
High transparent, low iron tempered glass
Built for maximum performance and safety



Fan Blade

Specifically designed for the Solaro Aire solar powered ventilation system
12" - 5 blade aluminum fan, aerodynamically optimized blade to improve airflow
Operates whisper quiet throughout the day

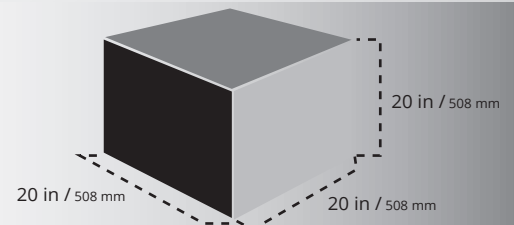
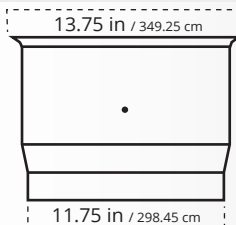
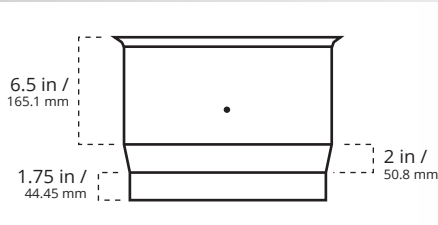


Air Exhaust Port

Output vent is the point where the air flow can exit. The size of the bottom rectangular output vent is 7"x4", and the diameter of the inlet is 6"



Dimensions & Weight



Important Note: The Solaro Crawlspace Ventilation System is 100% fire proof and all electrical components are hidden under the air diverting cowling creating an extremely safe and efficient ventilation system
Limited Lifetime Warranty - See warranty details for additional information.



Solaro Aire

Solar Powered **Basement Ventilation System**



The Solaro Basement Ventilation System helps keep your home safe for family, friends and pets by reducing moisture and harmful gas build-up (such as radon). And keeping fresh air circulating for a clean, energized feeling. Interface with our 37 or 40 watt solar panel.



Technical Information

Weight

Fan Weight: 41 lbs / 18.5 kg

Performance

Air Flow Rate:

37 watt 900 to 1200 CFM
40 watt 900 to 1500 CFM

Ventilation:

37 watt Up to 1600 sq.ft
40 watt Up to 2000 sq.ft

Electrical

Solar Panel: 37 watt, 17 to 22 DC,
36 mono-crystalline cell, solar
cells with black back sheet
37 watt 1.5 amp
40 watt 1.75 amp
Motor: Solaro Max Aire
Brushless DC Motor, 10-22VDC

Material

Housing System: Spun Formed,
Aircraft Grade Aluminum
Fan Blade: 12" Aluminum, Factory Balanced
Mesh Screen: Stainless Steel, 1/4"
Mesh, Rodent Control
Wiring: 18 Gauge Copper Conductors
with PVC Insulation



Housing & Flashing System

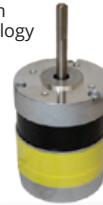
Aircraft grade, spun-formed aluminum for the utmost quality protection
Inner housing system is aerodynamically designed to produce the highest possible radial air exhaust
Powder coated outer shell



Solaro Max Aire Motor

Maximum Efficiency Yield Technology

Brushless Electronic Motor with Maximum Yield Technology. This new motor technology was developed by Solaro Energy - Our engineers leveraged lessons learned from our original brushless electronic motor that we used for over 12 years. This new motor technology offers about 30% better efficiency and air moving performance, with an amazing 100,000 hours average motor run time!



Components

Fan Blades

Specifically designed for the Solaro Aire solar powered ventilation system
12" - 5 blade aluminum fan, aerodynamically optimized blade to improve airflow
Operates whisper quiet throughout the day



Solar Panel

37 watt, 1.5 amp proprietary, high purity, mono-crystalline cell solar panel
Weather proof in the most severe conditions
High transparent, low iron tempered glass
Built for maximum performance and safety



Interconnect Cable

Wire: 25' - 2 Conductor
18 Gauge stranded copper
U.V. Rated
Power transfer cable

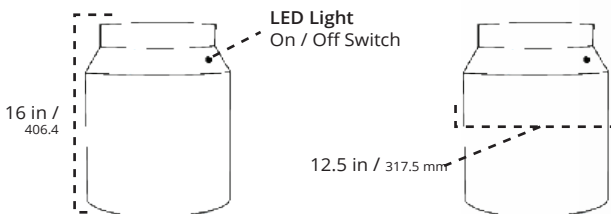


6" Flex Ducting and 6" Vents

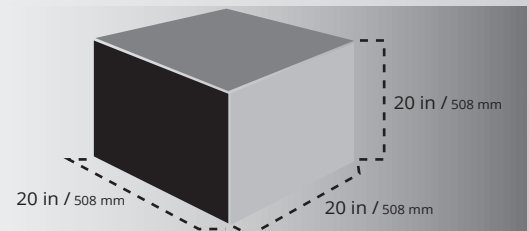
1 - 10' long / 6" Flex Ducting
(Flex ducting to be cut in half)



Dimensions



Top View
10 in / 254 mm



Important Note: The Solaro Basement Ventilation System is 100% fire proof and all electrical components are hidden under the air diverting cowling creating an extremely safe and efficient ventilation system

Limited Lifetime Warranty - See warranty details for additional information.



The Solaro Basement Ventilation System helps keep your home safe for family, friends and pets by reducing moisture and harmful gas build-up (such as radon). And keeping fresh air circulating for a clean, energized feeling. The Solaro BVS2 comes with a DC power supply to plug right into your home, but a 37W - solar powered kit is also available. All units also include a timer that can be used on DC (house) power and manually set to run your unit at maximum energy efficiency to maintain a safe and healthy radon level or to periodically kick on to the air for freshness.



Technical Information

Weight

Fan Weight: 56 lbs / 25.4 kg

NOTE: Total KIT weight could vary

Performance

Air Flow Rate:
900 to 1200 CFM
Depending on solar exposure
Ventilation: Up to 1600 sq.ft.

Electrical

Solar Panel: 37 watt, 17 to 22 DC, 1.5 amp, 36 mono-crystalline cell, solar cells with black back sheet
Motor: Solaro Max Aire Brushless DC Motor, 10-22VDC
DC ONLY 110W
6' reach with provided power cord
Use **ONLY** with Provided Power Supply

Material

Housing System: Spun Formed, Aircraft Grade Aluminum
Fan Blade: 12" Aluminum, Factory Balanced
Wiring: 18 Gauge Copper Conductors with PVC Insulation



Housing & Flashing System

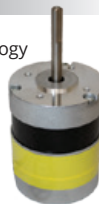
Aircraft grade, aluminum for the utmost quality and protection
Inner housing system is aerodynamically designed to produce the highest possible radial air exhaust
Powder coated outer shell



Solaro Max Aire Motor

Maximum Efficiency Yield Technology

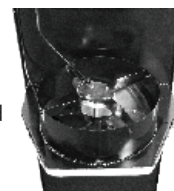
Brushless Electronic Motor with Maximum Yield Technology. This new motor technology was developed by Solaro Energy - Our engineers leveraged lessons learned from our original brushless electronic motor that we used for over 12 years. This new motor technology offers about 30% better efficiency and air moving performance, with an amazing 100,000 hours average motor run time!



Components

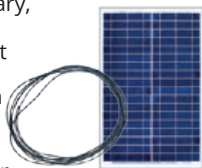
Fan Blades

Specifically designed for the Solaro Aire solar powered ventilation system
12" - 5 blade aluminum fan, aerodynamically optimized blade to improve airflow
Operates whisper quiet throughout the day



Solar Panel

37 watt, 1.5 amp proprietary, high purity, solar panel
Weather proof in the most severe conditions
High transparent, low iron tempered glass
Wire: 25' Cable
18 Gauge stranded copper



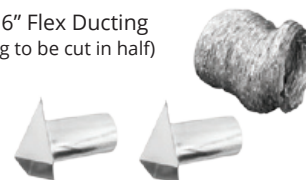
Timer

Allows on/off cycle to be set in 30 minute intervals
Easy to Set and Change

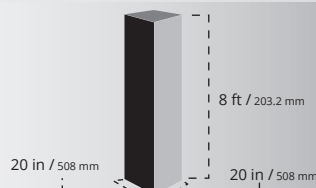
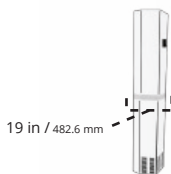


6" Flex Ducting and 6" Vents

1 - 10' long / 6" Flex Ducting (Flex ducting to be cut in half)
2 - 6" vents



Dimensions



Maintenance: Simple exterior cleaning with soap and water. Dry with soft cloth

Important Note: The Solaro Basement Ventilation System is 100% fire proof and all electrical components are hidden under the air diverting cowling creating an extremely safe and efficient ventilation system
Limited Lifetime Warranty - See warranty details for additional information.

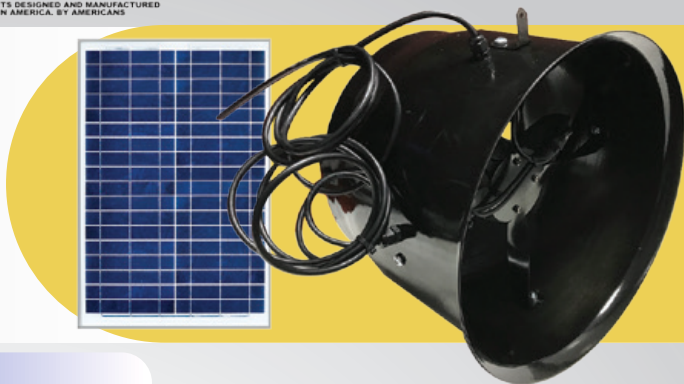


Solaro AireTM

Solar Powered Garage System



This product is designed to completely ventilate a 1 to 2 car garage, to remove heat, moisture and odors. The system is completely powered from a 37 watt, Solaro high energy, high performance, low iron, tempered glass, silicon based solar panel. The Day/Night Kit is supplied with a multifunction wall mount switch recessed wiring box, 37 watt DC power supply and various wiring and connectors.



Technical Information

Weight

Fan Weight: 19 lbs / 8.61 kg

Fan Packaged: 40 lbs. / 18.1 kg

Performance

Air Flow Rate:
900 to 1200 CFM
Depending on solar exposure
Ventilation: Up to 1250 sq.ft.

Electrical

Solar Panel: 37 watt, 17 to 22 DC,
1.25 amp, 36 mono-crystalline
cell, solar cells with black back
sheet
Motor: Solaro Max Aire
Brushless DC Motor, 10-22VDC

Material

Housing System: Spun Formed,
Aircraft Grade Aluminum
Fan Blade: 12" Aluminum, Factory Balanced
Mesh Screen: Stainless Steel, 1/4"
Mesh, Rodent Control
Wiring: 18 Gauge Copper Conductors
with PVC Insulation



Housing & Flashing System

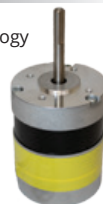
Aircraft grade, spun-formed
aluminum for the utmost
quality protection
Inner housing system is
aerodynamically designed
to produce the highest
possible radial air exhaust
Powder coated outer shell



Solaro Max Aire Motor

Maximum Efficiency Yield Technology

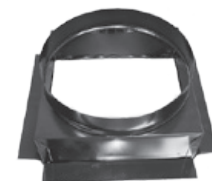
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Yield Technology. This new motor technology
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engineers leveraged lessons learned
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hours average motor run time!



Components

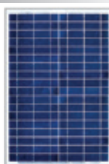
Register Boot

12" x 12 1/4" Aluminum
Shaft



Solar Panel

37 watt, 1.25 amp proprietary,
high purity, mono-crystalline
cell solar panel
Weather proof in the most
severe conditions
High transparent, low iron
tempered glass
Built for maximum performance and safety



Fan Blade

Specifically designed for the
Solaro Aire solar powered
ventilation system
12" - 5 blade aluminum fan,
aerodynamically optimized
blade to improve airflow
Operates whisper quiet
throughout the day

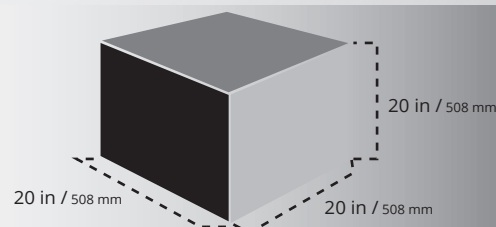
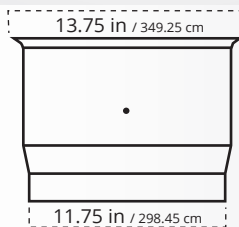
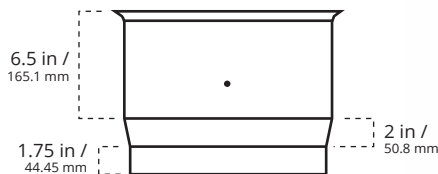


Flex Ducting

10 ft. Long,
10" Flex Ducting



Dimensions & Weight



Important Note: The Solaro Garage Ventilation System is 100% fire proof and all electrical components are hidden under the air diverting cowling creating an extremely safe and efficient ventilation system

Limited Lifetime Warranty - See warranty details for additional information.



Solaro AireTM

Solar Powered Delivery Truck Ventilation



Solaro Energy wants to present to you our newest ventilation system for multiple types truck trailers. This advanced system, extracts the air like no other fan, creating a more efficient air flow. This is a 25-watt unit fan that moves up to 900 cfm. This product has constant air flow throughout your trailer also known as air exchange or active air. Our fan is completely powered by the sun. By pulling outside air source in through existing windows and vents.



Technical Information

Weight

Fan Weight: 19 lbs / 8.61 kg
Fan Packaged: 27 lbs. / 12.24 kg

Performance

Air Flow Rate:
900 to 1200 CFM
Depending on solar exposure
Ventilation: Up to 1250 sq.ft.
Attic must support intake air
for best performance

Electrical

Solar Panel: 25 watt, 17 to 22 DC,
1.25 amp, 36 mono-crystalline
cell, solar cells with black back
sheet
Motor: Solaro Max Aire
Brushless DC Motor, 10-22VDC

Material

Housing System: Spun Formed,
Aircraft Grade Aluminum
Fan Blade: 12" Aluminum, Factory Balanced
Mesh Screen: Stainless Steel, 1/4"
Mesh, Rodent Control
Wiring: 18 Gauge Copper Conductors
with PVC Insulation



Housing & Flashing System

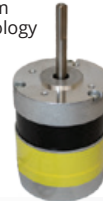
Aircraft grade, spun-formed
aluminum for the utmost
quality protection
Inner housing system is
aerodynamically designed
to produce the highest
possible radial air exhaust
Powder coated outer shell



Solaro Max Aire Motor

Maximum Efficiency Yield Technology

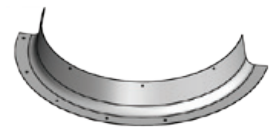
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Components

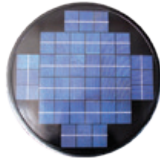
Wind Shield

This aerodynamic
wind reflector
creates a smooth
airflow with less
wind resistance



Solar Panel

25 watt, 1.25 amp proprietary,
high purity, mono-crystalline
cell solar panel
Weather proof in the most
severe conditions
High transparent, low iron
tempered glass
Built for maximum performance and safety



Fan Blade

Specifically designed for the
Solaro Aire solar powered
ventilation system
12" - 5 blade aluminum fan,
aerodynamically optimized
blade to improve airflow
Operates whisper quiet
throughout the day

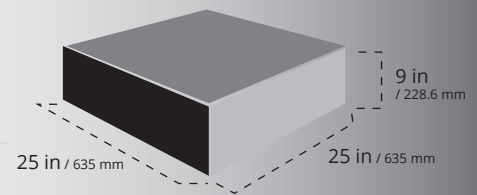
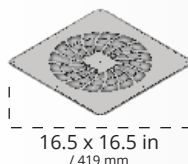
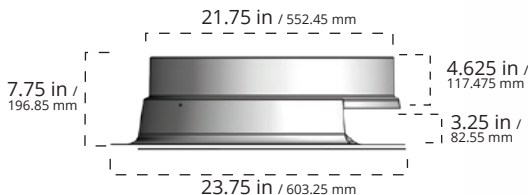


Motor & Fan Mount

The Max Aire motor is
mounted under the
aluminum air
deflector. Keeping it
out of the air stream



Dimensions & Weight



Important Note: The Solaro Aire Attic Fan Ventilation System is 100% fire proof and all electrical components are hidden under the air diverting cowling creating an extremely safe and efficient ventilation system

Limited Lifetime Warranty - See warranty details for additional information.



Insulated Paint
with Nano Shield
Technology



Specification Sheet

Model # **SP-PNT-W**

Solaro Shield Insulated Paint with 3M Nano Shield Technology

Solaro Energy has designed a line of **insulated paint**, with 3M Nano Shield Technology. This is a sunlight reflecting paint that can be applied to a truck rooftop. This concept has new support from the U.S. Green Building Council (USGBC) which has issued a pilot credit for the insulation of trucks. As well as, of cool exterior walls in new homes, schools, and commercial buildings to mitigate urban heat islands.



Insulation paint, also known as **infrared reflecting paint**, is an innovative and energy-efficient solution designed to enhance the thermal performance of buildings and surfaces. This advanced coating incorporates ceramic micro-spheres, which are tiny hollow spheres made from ceramic materials. The **ceramic micro-spheres** possess excellent heat-insulating properties, effectively acting as thermal barriers that minimize heat transfer. When applied to walls, roofs, or other structures, insulation paint helps regulate indoor temperatures by reflecting a significant portion of infrared radiation from the sun, thus reducing heat absorption. As a result, buildings stay cooler during hot summers and retain warmth in colder months, leading to improved energy efficiency and reduced reliance on heating and cooling systems. The technology of **insulation paint** with infrared reflecting capabilities and ceramic micro-spheres represents a promising step towards sustainable construction and climate-conscious design.

Insulated Paint Data

Description of Insulated Paint

- Thermal Insulation, Mold Resistant, UV and Moisture Resistant for Delivery Trucks and Horse Trailers
- Sustainable Coating which Reduces Energy Costs & Carbon Emissions
- Can be Used Over Both Metal and Non-Metal Substrates
- Indoor and Outdoor Use
- Can be Painted Over

Coverage

One Gallon Rate (3.79 liters): Yields approx. 12 mils/ 300 microns wet film thickness (3 coat) over 150 sq.ft.
 Wet Coat Thickness: 4 wet mils per coat
 Dry Coat Thickness of 1 Coat: .75 mil
 Touch Dry Time: 1-2 Hours
 Hard Dry Time: 72 Hours
 Cure Time: 30 Days, depending on environment

Insulated Paint Features & Benefits

Green Product

Environmentally Friendly
 Non-Toxic, Low VOC
 Water Based
 Breathable, won't act as a vapor barrier
 Non-Flammable
 Easy Cleanup

Thermal Insulation

Control Heat Loss
 Reduces Energy Costs
 UV Resistant
 Can Be Painted Over, provides protection to underlying building surfaces from weathering and damage due to the elements

Resistant to Moisture

Mold & Mildew Resistant tested to ASTM D5590 and ASTM G21 for mold resistance
 Reduces Chance of Food Contamination
 Vapor Permeable (breathes)

Easy to Apply & Durable

Outstanding Durability & Weathering
 Easy to Apply by Brush, Roller, or Paint Sprayer
 Cost Effective, with long-term savings and short payback



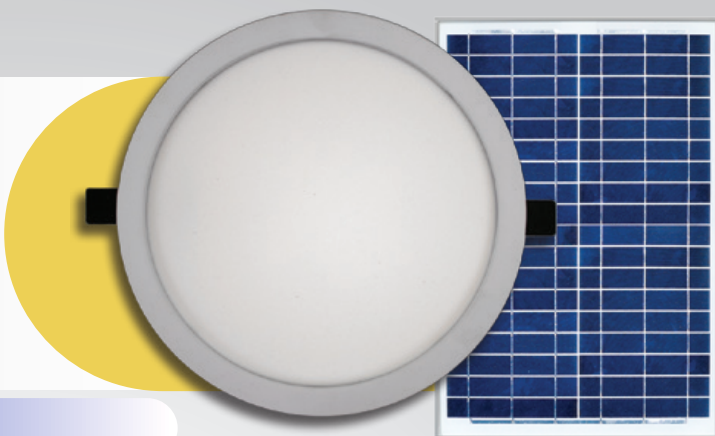


Solaro Day

Solar Powered Daylighting System



Solaro Day™ daylight system which uses one single source of solar power and multiple points of daylight simulators to light up your entire home, office, retail outlet, school, government building or factory. Follows the brightness of the sun like a traditional skylight without all the inconveniences of one.



Technical Information

Contents

Recessed Fixture
30 watt solar panel, 1.74 amp
25ft (7.5m) interconnect cable
Solar panel mounting kit

Performance

Lumen: 2200 Lumen
(equivalent to 2 - 100 watt
Incandescent light bulbs)
Light temp: 4500 - 5000 Kelvin
Power consumption: 30 watts
per light fixture

Construction Materials

Housing System: Spun Formed,
Aircraft Grade Aluminum
Solar Panel: 30 watt, 17 to 22 DC,
1.5 amp, 36 mono-crystalline
cell, solar cells with black back
sheet
Stainless Steel & Nylon Screws
Powder Coated Outer Shell

Electrical

Electronics: Proprietary current
control driver & light engine
Power Options: 18 - 24V DC
Input Current: 1.8 amps

Features

Durable & Compatible

Will never rust or get brittle
like steel or plastic
Weather proof solar panel



Light Quality

78 OPTO Semi-conductors
provide balanced light
High diffusion plastic lens
removes all hot spots
No harmful UV gets in
Wider spectrum than
Incandescents & Florescent light



Easy to Install

Spring Clips for a strong yet
Fastener free hold

Self contained, Runs
directly off solar panel
without additional
AC wiring



Driver

Hi-tech American Made daylight
simulator driver
0-24 Volts input power
30W minimum / 120 max.
solar panel
Simulates the sun and
works like a skylight
Gets light to dim with passing clouds



Day / Night Kit Compatible

Compatible with Day / Night
Kit for night time use



Solar Panel

30 watt, 1.5 amp proprietary,
high purity, mono-crystalline
cell solar panel
Weather proof in the most
severe conditions
High transparent, low iron
tempered glass
Built for maximum performance and safety

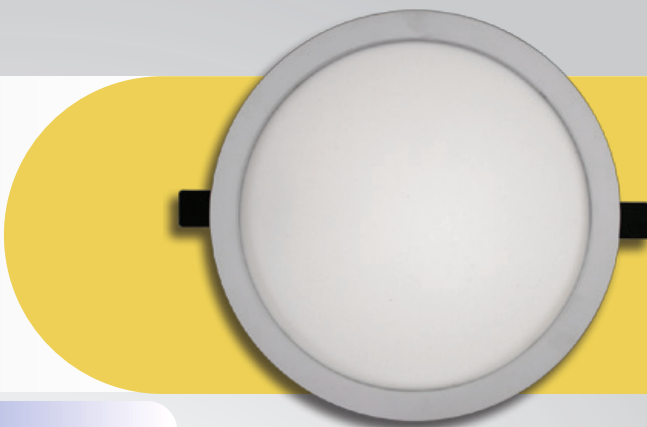


Dimensions & Weight



Limited Lifetime Warranty - See warranty details for additional information.

Solaro Day™ daylight system which uses one single source of solar power and multiple points of daylight simulators to light up your entire home, office, retail outlet, school, government building or factory. Follows the brightness of the sun like a traditional skylight without all the inconveniences of one.



Technical Information

Contents

Recessed Fixture

Performance

Lumen: 2200 Lumen
(equivalent to 2 - 100 watt
Incandescent light bulbs)
Light temp: 4500 - 5000 Kelvin
Power consumption: 30 watts
per light fixture

Construction Materials

Housing System: Spun Formed,
Aircraft Grade Aluminum
Stainless Steel & Nylon Screws
Powder Coated Outer Shell

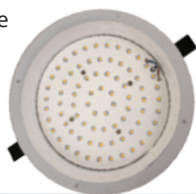
Electrical

Electronics: Proprietary current
control driver & light engine
Power Options: 18 - 24V DC
Input Current: 1.8 amps

Features

Durable & Compatible

Will never rust or get brittle
like steel or plastic
Weather proof solar panel



Light Quality

78 OPTO Semi-conductors
provide balanced light
High diffusion plastic lens
removes all hot spots
No harmful UV gets in
Wider spectrum than
Incandescents & Florescent light



Easy to Install

Spring Clips for a strong yet
Fastener free hold
Self contained, Runs
directly off solar panel
without additional
AC wiring



Driver

Hi-tech American Made daylight
simulator driver
0-24 Volts input power
30 W minimum / 120 max.
solar panel
Simulates the sun and
works like a skylight
Gets light to dim with passing clouds



Day / Night Kit Compatible

Compatible with Day / Night
Kit for night time use



Spring Clips

Strong Hold
Won't come loose



Dimensions



Limited Lifetime Warranty - See warranty details for additional information.



Solaro Day

Solar Powered Street Light



The Solaro Street Light integrates the green-energy solar panel, LED lamp and the lithium battery into a single product. This product is meant to be placed in your garden, residential area, courtyard, road, main area, parking area, parking area or provide light on roads where it is necessary. The battery provides the necessary energy for lighting. And the solar panel to charges the battery.



Technical Information

Specs.	Performance	Electrical	Material
Packaged Weight: 42 lbs / 18.16 kg Warranty: 1 Year Mounting Height: 5 - 6m	Lumen: 4100 - 4300 lumens 2700-7000K LED: 42 pcs, Bridgelux 45ml Solar Charging Time: 6-7 Hours in Bright Sunlight Lighting Time: 12 hrs per Night 3 Rainy Days Backup	Solar Panel: 70 watt Lithium Battery: 26AH, 12V Working Temp: -30°C ~ 60°C	Aluminum Alloy & PC Lens Size: 47' (1200 mm) x 12' (330 mm) x 5.5' (140 mm) Waterproof: IP65

Components

Durable

All air craft grade anodized aluminum
Will never rust or get brittle like steel or plastic
Weather proof solar panel



Light Quality

42 OPTO semi-conductors provide balanced light
High diffusion plastic lens removes all hot spots
No Harmful UV gets in
Wider spectrum incandescent & flourscent lights



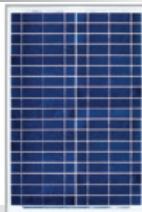
Solar Panel Brackets

Supports Solar Panel
Extruded Aluminum
Mill Finished
Dimensions: 2'x2'
Depth: 0.06"



Solar Panel

70 watt, proprietary, high purity, mono-crystalline solar cells
Weather proof in most severe conditions
High transparent, low iron tempered glass
Built for maximum performance and safety



Efficient

Proprietary, high purity, solar panel with high transparent low-iron tempered glass

Powered by the sun
Free Energy

FREE ENERGY

Control Remotely

Can be turned on and off by an app on your cellphone



Installment Images









Accessories

The Solaro Energy Day/Night Kit is designed to operate the Solaro Day daylight simulators and the Solaro Aire ventilation systems, completely on solar power during the day and uses converted AC grid power at night, or in inclement weather. Using the Decora switch, it allows the user the ability to completely turn off the fixture or unit between solar power and converted grid power via DC power supply. This allows the grid to act like a battery.

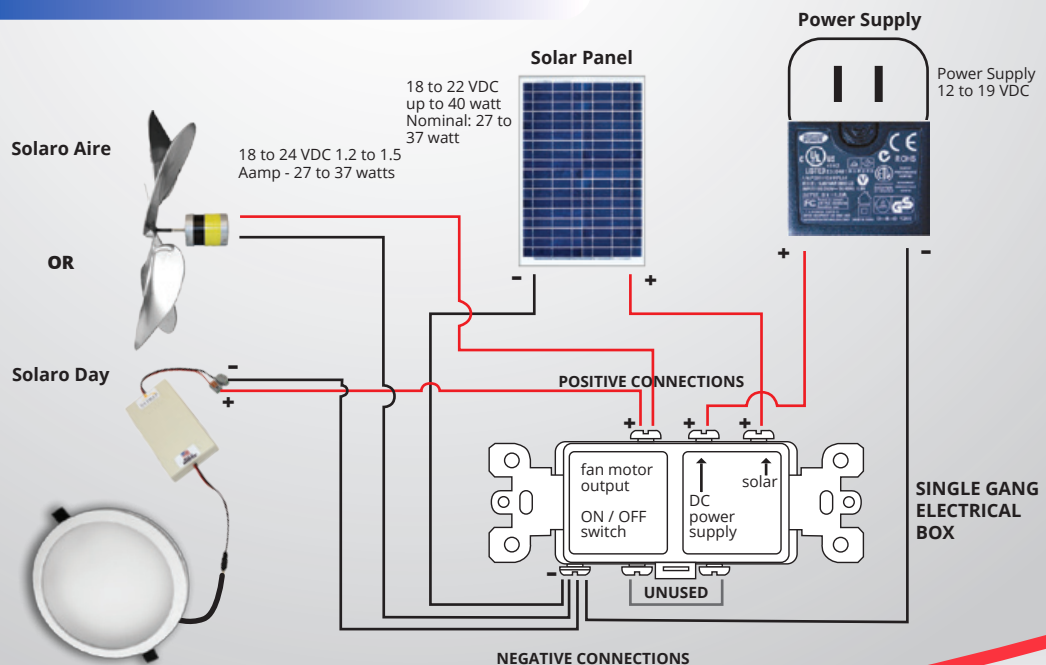


What's Included

<p>Switch</p> <p>Decora Multi-Functional Switch and Cover Plate (white)</p> 	<p>24V 30watt AC to DC Power Supply</p> <ul style="list-style-type: none"> • AC Adapter • I/P: AC 100-240V • 50/60Hz 1.5A • O/P: DC 24. 0V, 1.5A 
<p>Interconnect Cable</p> <ul style="list-style-type: none"> • 25' 2 Conductor Wire • 18 Gauge Stranded Copper • U.V. Rated • Power Transfer Cable 	<p>Junction Box</p> <ul style="list-style-type: none"> • 1 - Single Gang Remodel Box 

Wire Diagram

Note:
Be Polarity Conscience
+ to + & - to -
Reversing Polarity will
Damage Fan Motor



The thermostat allows temperature control of the Solaro Aire solar attic fan. A temperature sensor activates or deactivates the fan at 85° F threshold. This sensor can hang freely 2 ft below the attic fan attached to a roof beam to get a more accurate reading.



Components

Wire

85° F threshold switch mounted to 4 ft of 18 gauge 2 conductor fully jacketed wire and covered with shrink wrap.



Strain Relief

Heyco 1/2" Strain Relief



Wago / Rubber Grommet

Wago (2)

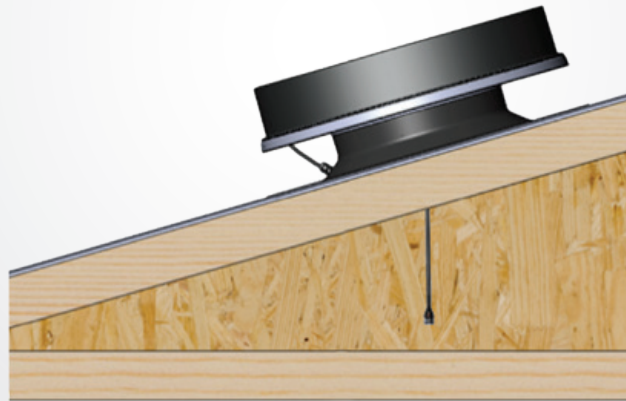


Grommet (1)



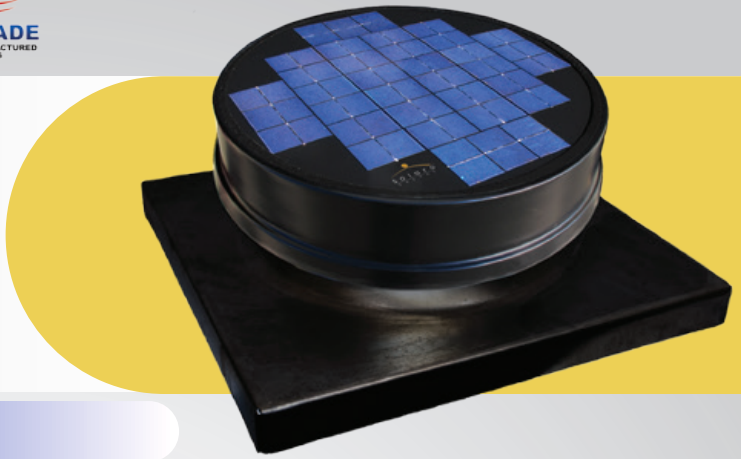
Material

Zip Ties (3)



Automatic Thermostat

Factory installed built-in thermostat allows the fan to operate only when the temperature is above 85° F. This is a great add on if you don't want the solar attic fan on during certain times of the day. This thermostat will also add YEARS of high performance to your attic fan. Can be included during manufacturing of the fan or a do-it-yourself kit is available including hardware and instruction.



Provides the same performance as the high profile base, when additional clearance is not necessary. Tucks in closer to the roof to be less conspicuous and more resistant to high winds. Only product certified through Dade County and approved for high winds. (160 mph)

Technical Information

Weight

Fan Weight: 19 lbs / 8.61 kg
Fan Packaged: 27 lbs. / 12.24 kg

Performance

Air Flow Rate:
900 to 1200 CFM
Depending on solar exposure
Ventilation: Up to 1250 sq.ft.
Attic must support intake air
for best performance

Electrical

Solar Panel: 25 watt, 17 to 22 DC,
1.25 amp, 36 mono-crystalline
cell, solar cells with black back
sheet
Motor: Solaro Max Aire
Brushless DC Motor, 10-22VDC

Material

Housing System: Spun Formed,
Aircraft Grade Aluminum
Fan Blade: 12" Aluminum, Factory Balanced
Mesh Screen: Stainless Steel, 1/4"
Mesh, Rodent Control
Wiring: 18 Gauge Copper Conductors
with PVC Insulation

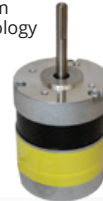


Housing & Flashing System

Aircraft grade, spun-formed
aluminum for the utmost
quality protection
Inner housing system is
aerodynamically designed
to produce the highest
possible radial air exhaust
Powder coated outer shell



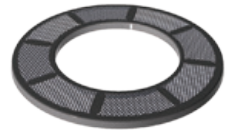
Brushless Electronic Motor with Maximum
Yield Technology. This new motor technology
was developed by Solaro Energy - Our
engineers leveraged lessons learned
from our original brushless electronic
motor that we used for over 12 years.
This new motor technology offers about
30% better efficiency and air moving
performance, with an amazing 100,000
hours average motor run time!



Components

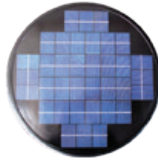
Mesh Screen

Constructed specifically for
the Solaro Aire
1/4" mesh screen keeps
animals and rodents
out while allowing
maximum air exhaust
Stainless Steel



Solar Panel

25 watt, 1.25 amp proprietary,
high purity, mono-crystalline
cell solar panel
Weather proof in the most
severe conditions
High transparent, low iron
tempered glass
Built for maximum performance and safety



Fan Blade

Specifically designed for the
Solaro Aire solar powered
ventilation system
12" - 5 blade aluminum fan,
aerodynamically optimized
blade to improve airflow
Operates whisper quiet
throughout the day

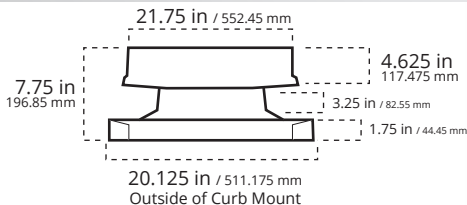


Motor & Fan Mount

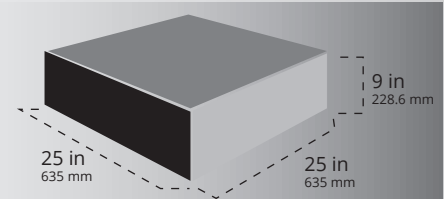
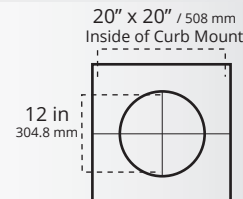
The Max Aire motor is
mounted under the
aluminum air
deflector. Keeping it
out of the air stream



Dimensions & Weight



NOTE: Outside of Curb
should be built slightly
SMALLER than Inside of Curb
Mount for proper fit. (approx.
19.75 in or smaller)



Important Note: The Solaro Aire Attic Fan Ventilation System is 100% fire proof and all electrical components are hidden under the air diverting cowling creating an extremely safe and efficient ventilation system

Limited Lifetime Warranty - See warranty details for additional information.

27 Watt high efficiency mono-crystalline PV module. Normal 18V DC for standard output. Outstanding low-light performance. Heavy Duty anodized frames. High transparency, low-iron tempered glass. Rugged design to withstand high wind pressure, hail and snow. Aesthetic appearance



Technical Information

Electrical Characteristics

Maximum Power (Pmax)	27W
Tolerance of Pmax	± 5%
Open Circuit Voltage (Voc)	22.3V
Maximum Power Voltage (Vmp)	18.0V
Short Circuit Current (Isc)	1.21A
Maximum Power Current (mp)	1.11A
Series Fuse Rating	2A
Maximum System (DC) Voltage	60V

Temperature Coefficients

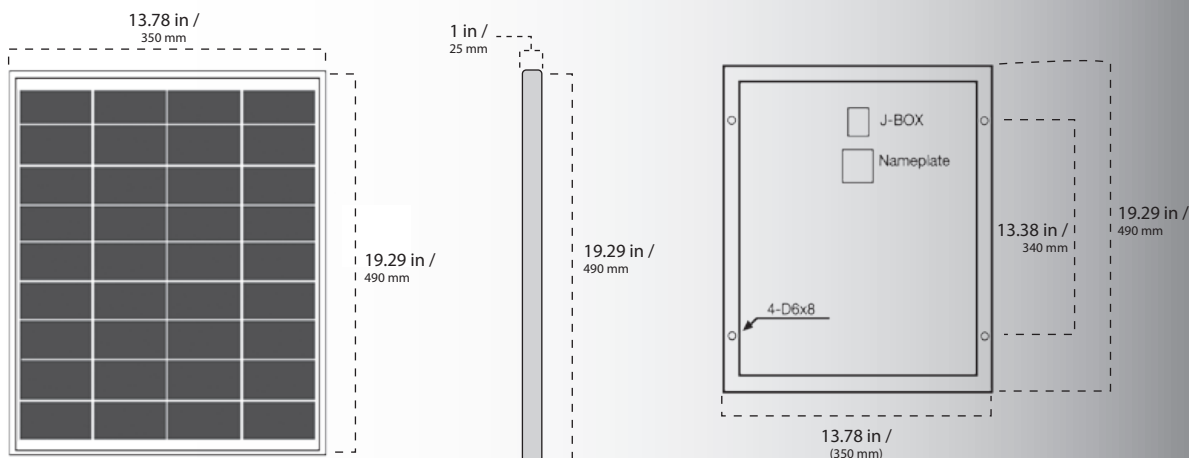
Temperature Coefficients	-40°C -85°C
NOCT	48 ± 3°C
Temperature Coefficients Isc	+0.084% / °C
Temperature Coefficients Voc	-0.39% / °C

Due to technological advances in solar panels, we reserve the right to modify system performance as efficiency improves.

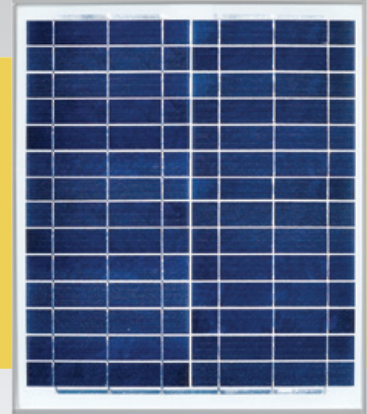
Dimensions & Weight

Weight

Panel: 4.1 lbs. /
2.0 kg



37 Watt high efficiency mono-crystalline PV module. Normal 18V DC for standard output. Outstanding low-light performance. Heavy Duty anodized frames. High transparency, low-iron tempered glass. Rugged design to withstand high wind pressure, hail and snow. Aesthetic appearance



Technical Information

Electrical Characteristics

Maximum Power (Pmax)	37W
Tolerance of Pmax	± 10%
Open Circuit Voltage (Voc)	22.3V
Maximum Power Voltage (Vmp)	18.0V
Short Circuit Current (Isc)	1.82A
Maximum Power Current (mp)	1.67A
Series Fuse Rating	2A
Maximum System (DC) Voltage	60V

Temperature Coefficients

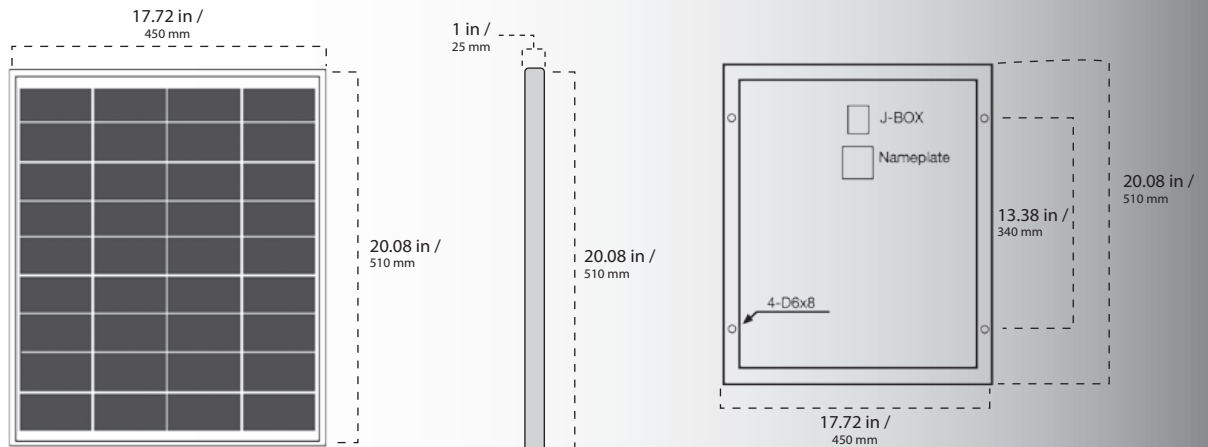
Temperature Coefficients	-40°C -85°C
NOCT	48 ± 3°C
Temperature Coefficients Isc	+0.084% / °C
Temperature Coefficients Voc	-0.39% / °C

Due to technological advances in solar panels, we reserve the right to modify system performance as efficiency improves.

Dimensions & Weight

Weight

Panel: 6.17 lbs. /
2.8 kg



40 Watt high efficiency mono-crystalline PV module. Normal 18V DC for standard output. Outstanding low-light performance. Heavy Duty anodized frames. High transparency, low-iron tempered glass. Rugged design to withstand high wind pressure, hail and snow. Aesthetic appearance



Technical Information

Electrical Characteristics

Maximum Power (Pmax)	40W
Tolerance of Pmax	± 10%
Open Circuit Voltage (Voc)	22.3V
Maximum Power Voltage (Vmp)	18.0V
Short Circuit Current (Isc)	2.42A
Maximum Power Current (mp)	2.22A
Series Fuse Rating	4A
Maximum System (DC) Voltage	600V

Specifications

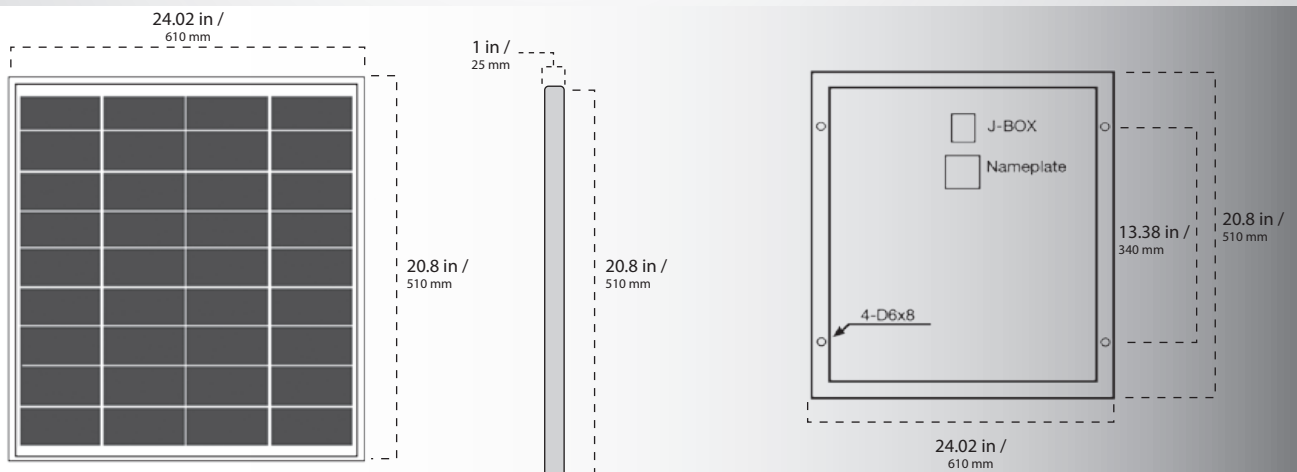
Temperature Coefficients	-40°C -85°C
NOCT	48 ± 3°C
Temperature Coefficients Isc	+0.084% / °C
Temperature Coefficients Voc	-0.39% / °C

Due to technological advances in solar panels, we reserve the right to modify system performance as efficiency improves.

Dimensions & Weight

Weight

Panel: 8.21 lbs. /
3.7 kg



A large teal circle is positioned on the left side of the page, partially overlapping the text. A thick teal curved line starts from the bottom left and extends towards the bottom right of the page.

Features & Benefits

MAX AIRE™ MOTOR

- Brushless Electronic Motor with Maximum Yield Technology. This new motor technology was developed by Solaro Energy. Our engineers leveraged lessons learned from our original brushless electronic motor that we used for over 12 years. This new motor technology offers about 30% better efficiency and air moving performance, with an amazing 100,000 hours average motor run time! That's about 25 years of system operation time!
- Solaro Max Aire™ Motor specs: 0 to 19 VDC power input Minimum of 10 watts to a maximum 50 watts current input.



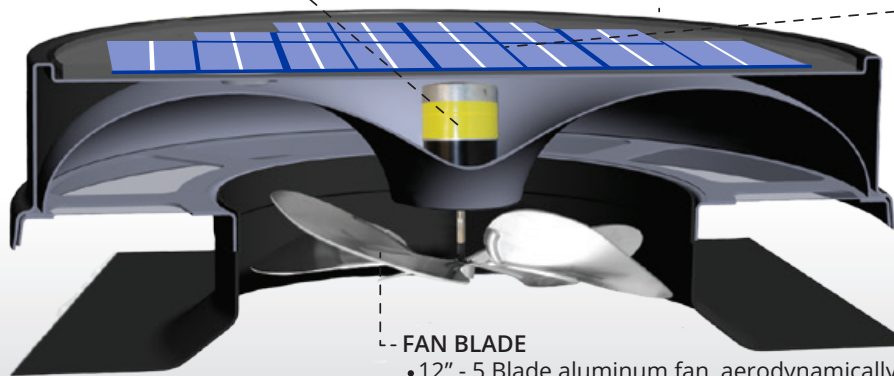
Solaro Max Aire Motor™
Maximum Efficiency Yield Technology

FAN HOUSING

- Encases the Max Aire™ Motor and all electrical components to eliminate moisture and corrosion.
- Seamless construct (no potential leaks)
- Aircraft grade spun aluminum
- Powder-coated finish for durability and curb appeal
- Will not rust or corrode
- 100% Fire Proof- Entire System

SOLAR PANEL

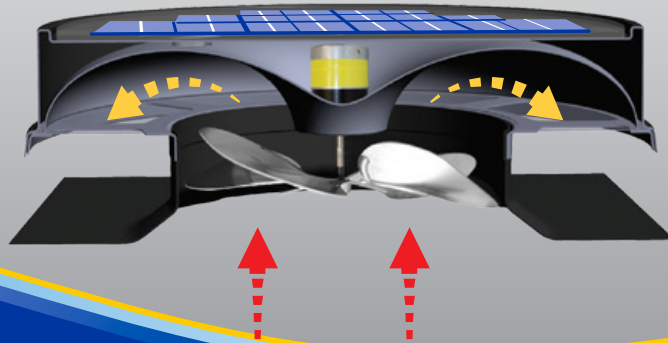
- Unique proprietary design
- Embedded into the unit for maximum beauty and performance
- Low iron - High transmission tempered glass
- High efficiency mono-crystalline solar cells
- Completely stand alone, no wiring required
- Works right out of the box



FAN BLADE

- 12" - 5 Blade aluminum fan, aerodynamically optimized blade to improve airflow.
- Specifically designed for the Solaro Aire™ solar powered ventilation system
- Highest airflow efficiency
- Will not bend or create vibrations
- Operates whisper quiet throughout the day

Active Aire™
Technology



The Solaro Aire™ is the only attic fan in the industry to feature Active Aire™ Technology. Specifically designed to guide air through the fan without any obstructions, preventing objects from getting trapped inside the housing causing the motor to overload. This advanced system of uniquely engineered curves extracts the air out of your attic like no other fan, creating a more efficient airflow. With Active Aire™ Technology, you can expect the highest airflow out of any attic fan on the market today.

As the sun begins to rise, your Solaro Aire™ kicks into gear. Working along side the fan blade and motor, Active Aire™ Technology creates a smooth, aerodynamic exit path through the fan's housing. By utilizing these calculated curves, your attic fan can run all day at it's full potential. Extracting the maximum amount of air from your attic.

Solaro Aire™

Solar Powered Attic Ventilation System

REMOTE Features & Benefits

MAX AIRE™ MOTOR

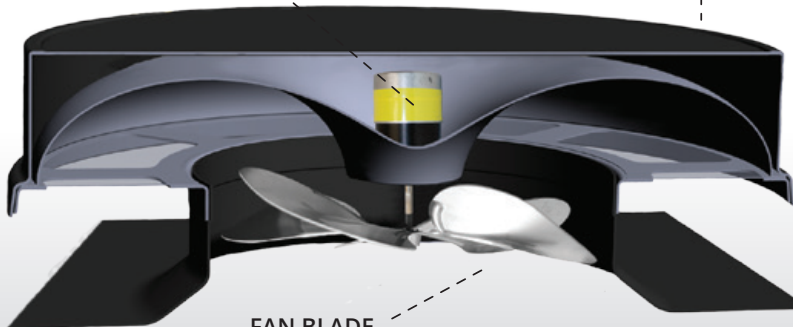
- Brushless Electronic Motor with Maximum Yield Technology. This new motor technology was developed by Solaro Energy. Our engineers leveraged lessons learned from our original brushless electronic motor that we used for over 12 years. This new motor technology offers about 30% better efficiency and air moving performance, with an amazing 100,000 hours average motor run time! That's about 25 years of system operation time!
- Solaro Max Aire™ Motor specs: 0 to 19 VDC power input minimum of 10 watts to a maximum 50 watts current input.



**Solaro
Max Aire Motor™**
Maximum Efficiency Yield Technology

FAN HOUSING

- Encases the Max Aire™ Motor and all electrical components to eliminate moisture and corrosion.
- Seamless construct (no potential leaks)
- Aircraft grade spun aluminum
- Powder-coated finish for durability and curb appeal
- Will not rust or corrode
- 100% Fire Proof- Entire System



FAN BLADE

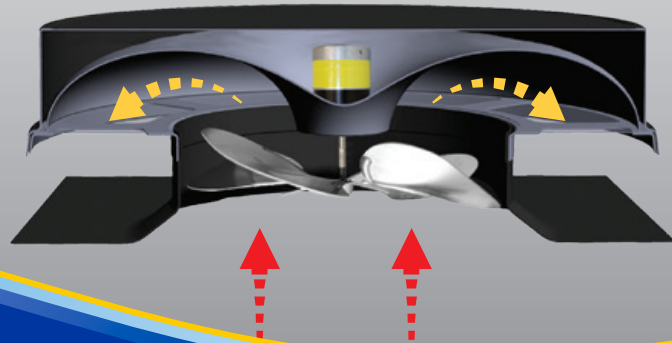
- 12" - 5 Blade aluminum fan, aerodynamically optimized blade to improve airflow.
- Specifically designed for the Solaro Aire™ solar powered ventilation system
- Highest airflow efficiency
- Will not bend or create vibrations
- Operates whisper quiet throughout the day



SOLAR PANEL

- 27watt, 37watt & 40 watt
- Mono-crystalline cell
- High transparent, low iron tempered glass
- Weather proof in most severe conditions

ActiveAire
Technology



The Solaro Aire is the only attic fan in the industry to feature Active Aire Technology. Specifically designed to guide air through the fan without any obstructions, preventing objects from getting trapped inside the housing causing the motor to overload. This advanced system of uniquely engineered curves extracts the air out of your attic like no other fan, creating a more efficient airflow. With Active Aire Technology, you can expect the highest airflow out of any attic fan on the market today.

As the sun begins to rise, your Solaro Aire kicks into gear. Working along side the fan blade and motor, Active Aire Technology creates a smooth, aerodynamic exit path through the fan's housing. By utilizing these calculated curves, your attic fan can run all day at it's full potential. Extracting the maximum amount of air from your attic.

FEATURES & BENEFITS

Solaro Aire™

Solar Powered Basement System

SA-37W-BVS2

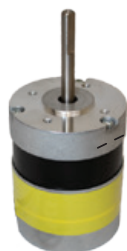
Features & Benefits

All year round, your home needs to be ventilated. This includes all areas of the home as well as the basement. With the Solaro Basement System, you can circulate the air from the living space to the basement that will lead the air to the outside. This helps prevent stale air that can cause bad odor. The basement system operates at 550 CFM. Other problems from stagnant air can cause mildew build up, mold, or bugs that seek out damp and warm areas. With this system ventilating up to approximately 116.1 sq.m. it can make your home healthier and smelling cleaner. This unit not only clears the air it also helps with naturally occurring radon gas.



MAX AIRE™ MOTOR

- Brushless Electronic Motor with Maximum Yield Technology. This new motor technology offers about 30% better efficiency and air moving performance, with an amazing 100,000 hours average motor run time! That's about 25 years of system operation time!
- Solaro Max Aire™ Motor specs: 0 to 19 VDC power input Minimum of 10 watts to a maximum 50 watts current input.



DAY/NIGHT SWITCH

- Designed to operate the Solaro Aire ventilation systems, completely on solar power during the day and uses converted AC grid power at night, or in inclement weather. Using the Decora switch, it allows the user the ability to completely turn off the fixture or unit between solar power and converted grid power via DC power supply. This allows the grid to act like a battery.

SOLAR PANEL

- 27, 37 or 40 Watt high efficiency mono-crystalline PV module. Normal 18V DC for standard output. Outstanding low-light performance. Heavy Duty anodized frames. High transparency, low-iron tempered glass. Rugged design to withstand high wind pressure, hail and snow. Aesthetic appearance.



FAN HOUSING

- Encases the Max Aire™ Motor and all electrical components to eliminate moisture and corrosion.
- Seamless construct (no potential leaks)
- Aircraft grade spun aluminum
- Powder-coated finish for durability and curb appeal
- Will not rust or corrode
- 100% Fire Proof- Entire System

FAN BLADE

- 12" - 5 Blade aluminum fan, aerodynamically optimized blade to improve airflow.
- Specifically designed for the Solaro Aire™ solar powered ventilation system
- Highest airflow efficiency
- Will not bend or create vibrations
- Operates whisper quiet throughout the day



ActiveAire
Technology



MAXIMUM EFFICIENCY: Our advanced solar powered Basement Systems are not only easy to install and maintain, but are highly developed and extremely efficient. Making them the most effective basement system on the market! Day/Night KIT is also available. The basement system can keep you and your home healthy by circulating the air nonstop. This functionality provides insurance that it can prevent stale air and molds forming in the basement. Also, the Solaro Basement Ventilation System is a powerful remover of harmful Radon gas.

Solaro Aire™

Solar Powered Crawlspace System

SA-37W-CS Features & Benefits

Throughout the year, the crawl space of your home or office building can collect moisture, heat, and radon gas. The Solaro Aire™ Crawlspace Ventilation System can help prevent all of those naturally occurring elements from destroying your home. The crawl space ventilation system is great for ventilating up to 1,000 sq. ft., this system ventilates moisture that would otherwise cause mold build up and rot your floor from the bottom up. Ideal for crawl spaces located under mobile homes or other residential areas that have a crawl space under the home.

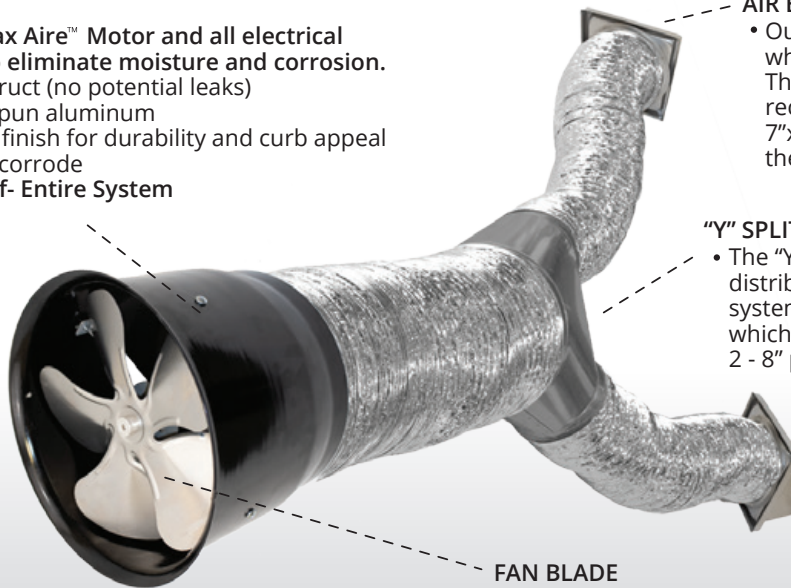
FAN HOUSING

- Encases the Max Aire™ Motor and all electrical components to eliminate moisture and corrosion.
- Seamless construct (no potential leaks)
- Aircraft grade spun aluminum
- Powder-coated finish for durability and curb appeal
- Will not rust or corrode
- 100% Fire Proof- Entire System



SOLAR PANEL

- 27, 37 or 40 Watt high efficiency mono-crystalline PV module. Normal 18V DC for standard output. Outstanding low-light performance. Heavy Duty anodized frames. High transparency, low-iron tempered glass. Rugged design to withstand high wind pressure, hail and snow. Aesthetic appearance.



AIR EXHAUST PORT

- Output vent is the point where the air flow can exit. The size of the bottom rectangular output vent is 7"x4", and the diameter of the inlet is 6"

"Y" SPLITTER

- The "Y" shape twin head air distribution and reduction system separates the air flow which comes from 12" pipe into 2 - 8" pipes

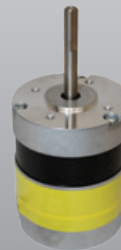
FAN BLADE

- 12" - 5 Blade aluminum fan, aerodynamically optimized blade to improve airflow.
- Specifically designed for the Solaro Aire™ solar powered ventilation system
- Highest airflow efficiency
- Will not bend or create vibrations
- Operates whisper quiet throughout the day



MAX AIRE™ MOTOR

- Brushless Electronic Motor with Maximum Yield Technology. This new motor technology offers about 30% better efficiency and air moving performance, with an amazing 100,000 hours average motor run time! That's about 25 years of system operation time!
- Solaro Max Aire™ Motor specs: 0 to 19 VDC power input, Minimum of 10 watts to a maximum 50 watts current input.



The Solaro Aire™ is the only ventilation system in the industry to feature ActiveAire™ Technology. Specifically designed to guide air through the ventilation system, preventing it from getting trapped inside the housing and causing the motor to overload. This advanced system of uniquely engineered created for more efficient airflow. With ActiveAire™ Technology, you can expect the highest airflow of any ventilation system on the market today!

Solaro Day™

Solar Powered Daylighting System

SD-2500-CC-KIT30W Features & Benefits



SOLARO DAY™ RECESSED FIXTURE

- The Solaro Day™ Recessed Fixture is installed so that very little is shown, ideal for Eco-friendly environments. This system uses one single source of solar power and multiple points of daylight simulators to light up your entire home, office, retail outlet, school, government building or factory. Can be centrally wired with more than one Solaro Day™ fixture powered by solar panels from 30 watt minimum to 250 watt maximum.



SOLARO DAY™ DRIVER

- Hi-tech American made daylight simulator driver. With 0 to 24 Volts DC input power, 30 W minimum, 240 W maximum solar panel power output to driver simulates the action of the sun. In the morning the Solaro Day starts off dim and gets brighter as the sun gets higher in the sky. As the sunset in Solaro Day daylight simulator will get dimmer and dimmer until the light gradually goes out, simulating the action of the sun, just like a roof mounted skylight. During the day, if a cloud casts a shadow on your roof the Solaro day will dim. As the sun returns the Solaro Day will get brighter, so you know if it's getting cloudy outside.



SOLAR PANEL

- 30 watt high efficiency mono-crystalline PV module. Normal 18V DC for standard output. Outstanding low-light performance. Heavy Duty anodized frames. High transparency, low-iron tempered glass. Rugged design to withstand high wind pressure, hail and snow. Aesthetic appearance. (2 fixtures can be put on a 60 watt solar panel, on up, divisible by 30)

Behind the **The Solaro Day™** acrylic diffuser are individual Opto Semiconductors designed with the highest quality and latest technology. Light emitting diodes (LEDs), only a few millimeters in length, convert electrical energy directly into light.

From the Solaro mono-crystalline solar panels, the sun's energy is converted into safe, low-voltage, high performing, simulated daylight.

The diffuser is made of modified acrylic and masterfully hides the Opto Semiconductors to give a smooth appearance. Provides simulated natural healthy sunlight that make bright, happy spaces with the same full spectrum light as sunlight.



Solaro Day™ daylight system which uses one single source of solar power and multiple points of daylight simulators to light up your entire home, office, retail outlet, school, government building or factory. Follows the brightness of the sun like a traditional skylight without all the inconveniences of one.



**Warranty
&
Manufacturer's
Certification
Statement**



On the date of your purchase of the Solaro Attic Ventilation System, Please complete and return the bottom section on this Limited Warranty certificate. Keep the top portion for your records.

Solaro Aire™

Solar Powered Attic Ventilation System

LIMITED LIFETIME WARRANTY

The Solaro Aire™ has a limited lifetime warranty

Each Solaro Aire™ System is carefully built to exact specifications and packaged with great care. We expect your purchase to be one that will last you a lifetime and we will make every effort to ensure your satisfaction. The Solaro Aire™ System cannot be altered in any way by the end user. The warranty is extended to the original purchaser, whose name appears on the warranty certificate and is in effect at the location shown on the warranty certificate. This warranty applies to residential or commercial installations and is non-transferable.

The word "defect(s)" as used in this warranty, is defined as imperfections that impair the functionality of the Solaro Aire™ System(s). Implied warranty of merchantability and fitness for a particular purpose are limited to the terms of this warranty. Solaro Energy, Inc. provides a Limited Lifetime Warranty on all parts and mechanisms on all of its Solaro Aire™ System(s) and to be free of defects in material and workmanship.

This Limited Lifetime Warranty does not cover damages caused by misuse, abuse, scratching, corrosive atmosphere contaminants, lightning, earthquakes, windstorms, tornadoes, flooding, fire, modification, vandalism, negligence, or other causes beyond our control. This includes any other acts of God.

In no event shall Solaro Energy, Inc. be liable for direct or indirect loss, consequential damage, or any other claims except as provided for in this warranty. Defective components will be replaced free of charge for up to 10 years from the date of installation. After 10 years of service, the solar panel and electronic brushless motor replacement may be subject to shipping and handling charges. The warranty will not cover the cost of labor, applicable taxes, shipping, or other consequential expenses related to the removal, return, or re-installation. See local dealer/distributor for applicable charges.



Please contact Solaro Energy if you have any questions or if you would like to purchase additional accessories.

www.solaroenergy.com

888-355-5786



REGISTRATION CARD (please print clearly) **Notice:** The warranty will be invalid after 90 days of purchase. Please send warranty promptly.

Place where unit was purchased: _____ Date Installed: _____

Customer Name: _____ Street Address: _____

City: _____ State: _____ ZIP Code: _____ Phone: _____

Email: _____ Are you satisfied with the performance of the Solaro Aire System? Yes No

Product Model #: _____

Please include any comments to help us further improve our products:

Please complete this Registration Card and Mail to:

Solaro Energy
22955 McAuliffe Dr.
Suite A
Robertsdale, AL 36567

If you prefer to register on-line, Please visit:





On the date of your purchase of the Solaro Day Daylighting System, Please complete and return the bottom section on this Limited Warranty certificate. Keep the top portion for your records.

Solaro Day™

Solar Powered Daylighting System

LIMITED LIFETIME WARRANTY

The Solaro Day™ has a limited lifetime warranty

Each Solaro Day™ System is carefully built to exact specifications and packaged with great care. We expect your purchase to be one that will last you a lifetime and we will make every effort to ensure your satisfaction. The Solaro Day™ System cannot be altered in any way by the end user. The warranty is extended to the original purchaser, whose name appears on the warranty certificate and is in effect at the location shown on the warranty certificate. This warranty applies to residential or commercial installations and is non-transferable.

The word "defect(s)" as used in this warranty, is defined as imperfections that impair the functionality of the Solaro Day™ System(s). Implied warranty of merchantability and fitness for a particular purpose are limited to the terms of this warranty. Solaro Energy, Inc. provides a Limited Lifetime Warranty on all parts and mechanisms on all of its Solaro Day™ System(s) and to be free of defects in material and workmanship.

This Limited Lifetime Warranty does not cover damages caused by misuse, abuse, scratching, corrosive atmosphere contaminants, lightning, earthquakes, windstorms, tornadoes, flooding, fire, modification, vandalism, negligence, or other causes beyond our control. This includes any other acts of God.

In no event shall Solaro Energy, Inc. be liable for direct or indirect loss, consequential damage, or any other claims except as provided for in this warranty. Defective components will be replaced free of charge for up to 10 years from the date of installation. After 5 years of service, the light engine/electronic driver replacement may be subject to shipping and handling charges. The warranty will not cover the cost of labor, applicable taxes, shipping, or other consequential expenses related to the removal, return, or re-installation. See local dealer/distributor for applicable charges.



Please contact Solaro Energy if you have any questions or if you would like to purchase additional accessories.

www.solaroenergy.com

888-355-5786



REGISTRATION CARD (please print clearly) **Notice:** The warranty will be invalid after 90 days of purchase. Please send warranty promptly.

Place where unit was purchased: _____ Date Installed: _____

Customer Name: _____ Street Address: _____

City: _____ State: _____ ZIP Code: _____ Phone: _____

Email: _____ Are you satisfied with the performance of the Solaro Day System? Yes No

Product Model #: _____

Please include any comments to help us further improve our products:

Please complete this Registration Card and Mail to:

Solaro Energy
22955 McAuliffe Dr.
Suite A
Robertsdale, AL 36567

If you prefer to register on-line, Please visit:





Solaro Energy, Inc.

22955 McAuliffe Dr., Suite A
Robertsdale, AL 36567
1-888-355-5786
www.SolaroEnergy.com

MANUFACTURER'S CERTIFICATION STATEMENT

For Solaro Day™ Lighting Systems and Solaro Aire™ Attic Fans Purchased and Placed in Service Between
01/01/22 and 12/31/22

Residential Homeowners Only - Solaro Energy Company is a manufacturer of solar powered lighting systems and solar powered attic ventilation systems that use photovoltaic's, through proprietary designs in our line of Solaro Day™ day-lighting systems and Solaro Aire™ attic fans.

Hereby, Solaro Energy Company certifies that the listed products below qualify for federal tax credits for energy efficiency building products as prescribed in the American and Reinvestment Act of 2009.

Solaro Day™

Solar Powered Daylighting System

Lighting system installed with solar panel

- Solaro Day™ 1000 lumen
- Solaro Day™ 1800 lumen
- Solaro Day™ 2200 lumen
- Solaro Day™ 8000 lumen

Solaro Aire™

Solar Powered Attic Ventilation System

Solar powered attic fan

- Solaro Aire™ Embedded Solaro Panel
- Solaro Aire™ Remote Panel
- Solaro Aire™ Gable Fan
- Solaro Aire™ Tilt Panel

Disclaimer: Solaro Energy Co. is not a tax advisor. Taxpayers claiming a tax credit should consult a tax professional with any questions. Solaro Energy Co. is not responsible or liable for the taxpayer's ability to receive tax credits. This document is not intended to constitute legal or tax advice. More comprehensive information will be made available by the IRS.

The user maintains he full and complete responsibility to comply with all codes, laws and regulations applicable to the safe and proper use, handling and installation of the product and should consult with a professional for all construction and design related questions. The information contained herein is believed to be accurate as of the time of preparation; however, Solaro Energy Co. makes no warranty concerning the accuracy of this information.

This Statement of Certification was prepared 01-01-2022 in accordance to the qualifications for tax credits as the law states on this date

This statement certifies only that the referenced Solaro Energy Co, Solaro Day™ and Solaro Aire™ products qualify for the Federal **26% tax credit** for energy-efficient products installed from **01-01-2022 through 12-31-2022**. Under Penalties of perjury, I declare that I examined this certification statement, and the best of my knowledge and belief that facts are true, correct and complete.

Dennis A. Grubb
President and CEO
Solaro Energy Company



Please contact Solaro Energy, Inc. if you have any questions or if you would like to purchase additional accessories.

www.solaroenergy.com

Or call us toll free at:
1-888-355-5786

HOMEOWNER'S CERTIFICATION: (fill out and retain for your tax records)

Homeowner's Name: _____ SSN: _____

Address: _____ Product(s) Installed: _____

Material Cost: \$ _____ Installation Cost: \$ _____

Purchase Date: _____ Installation Date: _____



Marketing Material

available styles
SOLARO AIRE

Your Solaro Aire™ Attic Fan can be installed on any style of roof. High Profile, Low Profile, Remote Solar Panel and Gable fan style options available to give you the best fit for your roof.

Solaro Aire™ High Profile
Ideal for applications where additional clearance (2") is needed between the bottom of the fan and the roof. Perfect for snowy areas or "S" tile roofs where less clearance could cause airflow problems.

Solaro Aire™ Low Profile
Provides the same performance as high profile bases when additional clearance is not needed. Tucks in closer to the roof to be less conspicuous and more resistant to high winds.

Solaro Aire™ Remote
Allows the solar panel location to be independent from the fan's so each can be placed in the ideal part of the roof. Can also be used with larger solar panels for improved performance or to offset poor light environments.

Solaro Aire™ Gable
Can be mounted inside the attic over an existing gable vent or roof penetration to supercharge the vents already there. Remains hidden and out of the weather, safe for the remote mounted solar panel. No large holes to cut in your roof.

Solaro Aire™ Tilt
27 watt or 37 watt solar panel, perfect for any installation that requires directing the panel towards the sun for better performance. 360° rotation and 35° tilt make it perfect for less than ideal fan locations.

Optional Accessories:

Solaro Aire™ Thermostat
Factory installed built-in thermostat allows the fan to operate only when the temperature is above 85°F.

Solaro Aire™ AC Connection Kit
Plug-in transformer and toggle switch kit offers opportunity to operate your solar fan during evening hours on AC power.

1-888-355-5786

The Benefits of the Solaro Aire™

Solar Powered Attic Ventilation System



All of the Solaro Aire™ attic fans qualify for a 30% Federal Tax Credit on materials and installation through the American Recovery and Reinvestment Act of 2009.



The Solaro Aire™ Limited Lifetime Warranty is the strongest in the industry.



The Solaro Aire™ doesn't cost one penny to operate! It's completely powered by the sun!



Built to be dependable. Weather resistant powder coated finish on all exposed fan parts provide a handsome and durable finish.



Removes heat during the hot summer months. Removes moisture that can cause mold and mildew in the winter.

AMERICAN MADE

PRODUCTS DESIGNED AND MANUFACTURED IN AMERICA BY AMERICANS



www.SolaroEnergy.com

Solaro Energy

22955 McAuliffe Dr., Suite A
Robertsdale, AL 36567

Solaro ENERGY
It's not just different, it's better by design.

Solaro Aire™

Solar Powered Attic Ventilation System

The world's most advanced, fully integrated, high efficiency Solar Powered Attic Ventilation System

When you use The Solaro Aire™ Attic Ventilation System the results are a cooler and drier attic, prolonged roof life and an overall more comfortable living environment inside your home.

how does it WORK?

During the hot summer months, your attic can reach temperatures of 160°F and above. The Solaro Aire™ Attic Ventilation Fan works by expelling this hot air and returning your attic's space closer to the outside ambient temperature. The Solaro Aire™ operates completely off solar energy, pulling the outside air in through existing static and soffit vents. By pulling from this external air source, the attic fan will extract the hot, humid air up through the fan and create a constant exchange of air in your attic. A well-ventilated attic will help reduce your energy costs and reduce the temperature in your home.

In the colder winter months, warm moist air rises from inside your home and collides with the cold underside of the roof. The Solaro Aire™ provides circulation that prevents the moist air from condensing on the surface, keeping your attic cooler and drier. By installing a Solaro Aire™ you will not only be creating a more pleasant living space but you will be protecting your roof, framing and attic from excessive heat and moisture.

For more information, please call us toll free at **1-888-355-5786**

Summer

Heat & Moisture Removed

Heat

Heat

Hot air is expelled by cooler air which is drawn in from lower intake vents.

↑ ↑ ↑ Moisture ↑ ↑ ↑

Everyday activities such as showers, laundry, and cooking creates moisture.

Winter

Moisture Removed

Snow Buildup

Rain

Moisture inside your home collides with the cold underside of the roof creating moisture.

↑ ↑ ↑ Moisture ↑ ↑ ↑

Everyday activities such as showers, laundry, and cooking creates moisture.

features & benefits

SOLARO AIRE

SOLAR PANEL

- Unique proprietary design
- Low Iron-High transmission tempered glass
- Completely stand alone, no wiring required (Embedded & Tilt models)

FAN HOUSING

- Seamless construction (no potential leaks)
- Aircraft grade Spun Aluminum
- Powder-coated finish for durability & curb appeal
- Resistant to rust and corrosion

FAN BLADE

- 12" - 5 blades (fire resistant)
- Specifically designed for this system
- Operates whisper quiet

Solaro Max Aire Motor™
Maximum Efficiency Yield Technology

Brushless Electronic Motor with Maximum Yield Technology. This new motor technology was developed by Solaro Energy - Our engineers leveraged lessons learned from our original brushless electronic motor that we used for over 12 years. This new motor technology offers about 30% better efficiency and air moving performance, with an amazing 100,000 hours average motor run time! That's about 25 years of system operation time!

You won't need to worry about rust or corrosion issues in diverse weather, a special Corrosion Resistant Aluminum Alloy is used for all structural components within the Solaro Aire™. The attic fan housing is fireproof with NO plastic parts, unlike the competition, which can deteriorate quickly in heat.

Featuring:

ActiveAire™ Technology

The Solaro Aire™ is the only attic fan in the industry to feature ActiveAire™ Technology. Specifically designed to guide air through the fan without any obstructions, and preventing it from getting trapped inside the housing causing the motor to overload. This advanced system of uniquely engineered curves extracts the air out of your attic like no other fan, creating a more efficient airflow. With ActiveAire™ Technology, you can expect the highest airflow of any attic fan on the market today!

available styles
SOLARO AIRE

Your Solaro Aire® Attic Fan can be installed on any style of roof. High Profile, Low Profile, Remote Solar Panel and Gable fan style options available to give you the best fit for your roof.

Solaro Aire® High Profile

Ideal for applications where additional clearance (2") is needed between the bottom of the fan and the roof. Perfect for snowy areas or "S" tie roofs where less clearance could cause airflow problems.

Solaro Aire® Low Profile

Provides the same performance as high profile bases when additional clearance is not needed. Tucks in closer to the roof to be less conspicuous and more resistant to high winds.

Solaro Aire® Remote

Allows the solar panel location to be independent from the fan's so each can be placed in the ideal part of the roof. Can also be used with larger solar panels for improved performance or to offset poor light environments.

Solaro Aire® Gable

Can be mounted inside the attic over an existing gable vent or roof penetration to supercharge the vents already there. Remains hidden and out of the weather, safe for the remote mounted solar panel. No large holes to cut in your roof.

Solaro Aire® Tilt

27 watt or 37 watt solar panel, perfect for any installation that requires directing the panel towards the sun for better performance. 360° rotation and 35° tilt make it perfect for less than ideal fan locations.

Optional Accessories:



Solaro Aire® Thermostat

Factory installed built-in thermostat allows the fan to operate only when the temperature is above 85°F.



Solaro Aire® AC Connection Kit

Plug-in transformer and toggle switch kit offers opportunity to operate your solar fan during evening hours on AC power.

1-888-355-5786

The Benefits of the
Solaro Aire™
Solar Powered Attic Ventilation System



All of the Solaro Aire™ attic fans qualify for a 30% Federal Tax Credit on materials and installation through the American Recovery and Reinvestment Act of 2009.



The Solaro Aire™ Limited Lifetime Warranty is the strongest in the industry.



The Solaro Aire™ doesn't cost one penny to operate! It's completely powered by the sun!



Built to be dependable. Weather resistant powder coated finish on all exposed fan parts provide a handsome and durable finish.



Removes heat during the hot summer months. Removes moisture that can cause mold and mildew in the winter.

AMERICAN MADE

PRODUCTS DESIGNED AND MANUFACTURED IN AMERICA BY AMERICANS



www.SolaroEnergy.com

Solaro Energy

22955 McAuliffe Dr., Suite A
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solaro
ENERGY

It's not just different, it's better by design.

The world's most advanced, fully integrated, high efficiency Solar Powered Attic Ventilation System

Solaro Aire™
Solar Powered Attic Ventilation System



Tilt

Remote



When you use The Solaro Aire™ Attic Ventilation System the results are a cooler and drier attic, prolonged roof life and an overall more comfortable living environment inside your home.

how does it
WORK?

During the hot summer months, your attic can reach temperatures of 160°F and above. The Solaro Aire® Attic Ventilation Fan works by expelling this hot air and returning your attic's space closer to the outside ambient temperature. The Solaro Aire® operates completely off solar energy, pulling the outside air in through existing static and soffit vents. By pulling from this external air source, the attic fan will extract the hot, humid air up through the fan and create a constant exchange of air in your attic. A well-ventilated attic will help reduce your energy costs and reduce the temperature in your home.

In the colder winter months, warm moist air rises from inside your home and collides with the cold underside of the roof. The Solaro Aire® provides circulation that prevents the moist air from condensing on the surface, keeping your attic cooler and drier. By installing a Solaro Aire® you will not only be creating a more pleasant living space but you will be protecting your roof, framing and attic from excessive heat and moisture.

For more information, please call us toll free at **1-888-355-5786**

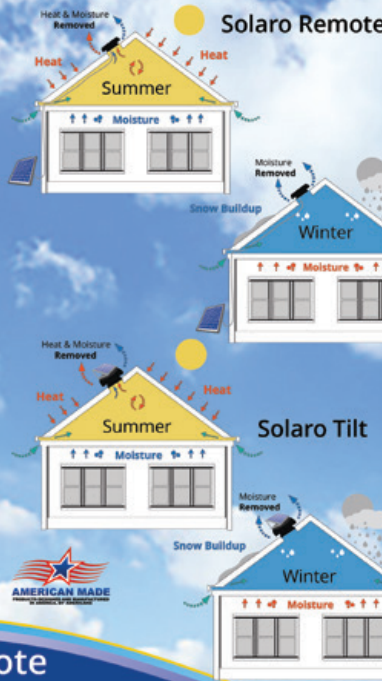


Remote

Solaro Aire™
Solar Powered Attic Ventilation System

You won't need to worry about rust or corrosion issues in diverse weather, a special Corrosion Resistant Aluminum Alloy is used for all structural components within the Solaro Aire™. The attic fan housing is fireproof with NO plastic parts, unlike the competition, which can deteriorate quickly in heat.

Tilt



features & benefits
SOLARO AIRE

SOLAR PANEL

- Unique proprietary design
- Low Iron-High transmission tempered glass
- Connects to the Gable using a 25' - 2 conductor 18 gauge stranded copper cable

FAN BLADE

- 12" - 5 blades (fire resistant)
- Specifically designed for this system
- Operates whisper quiet

FAN HOUSING

- Seamless construction (no potential leaks)
- Aircraft grade Spun Aluminum
- Powder-coated finish for durability & curb appeal
- Resistant to rust and corrosion



Brushless Electronic Motor with Maximum Yield Technology. This new motor technology was developed by Solaro Energy - Our engineers leveraged lessons learned from our original brushless electronic motor that we used for over 12 years. This new motor technology offers about 30% better efficiency and air moving performance, with an amazing 100,000 hours average motor run time! That's about 25 years of system operation time!



available styles
SOLARO AIRE

Your Solaro Aire™ Attic Fan can be installed on any style of roof. High Profile, Low Profile, Remote Solar Panel and Gable fan style options available to give you the best fit for your roof.

Solaro Aire™ High Profile
Ideal for applications where additional clearance (2") is needed between the bottom of the fan and the roof. Perfect for snowy areas or "S" tile roofs where less clearance could cause airflow problems.

Solaro Aire™ Low Profile
Provides the same performance as high profile bases when additional clearance is not needed. Tucks in closer to the roof to be less conspicuous and more resistant to high winds.

Solaro Aire™ Remote
Allows the solar panel location to be independent from the fan's so each can be placed in the ideal part of the roof. Can also be used with larger solar panels for improved performance or to offset poor light environments.

Solaro Aire™ Gable
Can be mounted inside the attic over an existing gable vent or roof penetration to supercharge the vents already there. Remains hidden and out of the weather, safe for the remote mounted solar panel. No large holes to cut in your roof.

Solaro Aire™ Tilt
27 watt or 37 watt solar panel, perfect for any installation that requires directing the panel towards the sun for better performance. 360° rotation and 35° tilt make it perfect for less than ideal fan locations.

Optional Accessories:

Solaro Aire™ Thermostat
Factory installed built-in thermostat allows the fan to operate only when the temperature is above 85°F.

Solaro Aire™ AC Connection Kit
Plug-in transformer and toggle switch kit offers opportunity to operate your solar fan during evening hours on AC power.

1-888-355-5786

The Benefits of the
Solaro Aire™

Solar Powered Attic Ventilation System

All of the Solaro Aire™ attic fans qualify for a 30% Federal Tax Credit on materials and installation through the American Recovery and Reinvestment Act of 2009.

The Solaro Aire™ Limited Lifetime Warranty is the strongest in the industry.

The Solaro Aire™ doesn't cost one penny to operate! It's completely powered by the sun!

Built to be dependable. Weather resistant powder coated finish on all exposed fan parts provide a handsome and durable finish.

Removes heat during the hot summer months. Removes moisture that can cause mold and mildew in the winter.

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solaro
ENERGY

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The world's most advanced, fully integrated, high efficiency Solar Powered Attic Ventilation System



Gable
Solaro Aire™

Solar Powered Attic Ventilation System

When you use The Solaro Aire™ Attic Ventilation System the results are a cooler and drier attic, prolonged roof life and an overall more comfortable living environment inside your home.

how does it
WORK?

The Solaro Gable Attic Fan will not increase the homeowner's energy costs. It is powered strictly by solar energy.

During the hot summer months, your attic can reach temperatures of 160°F and above. The Solaro Aire™ Attic Ventilation Fan works by expelling this hot air and returning your attic's space closer to the outside ambient temperature. The Solaro Aire™ operates completely off solar energy, pulling the outside air in through existing static and soffit vents. By pulling from this external air source, the attic fan will extract the hot, humid air up through the fan and create a constant exchange of air in your attic. A well-ventilated attic will help reduce your energy costs and reduce the temperature in your home.

In the colder winter months, warm moist air rises from inside your home and collides with the cold underside of the roof. The Solaro Aire™ provides circulation that prevents the moist air from condensing on the surface, keeping your attic cooler and drier. By installing a Solaro Aire™ you will not only be creating a more pleasant living space but you will be protecting your roof, framing and attic from excessive heat and moisture.

For more information, please call us toll free at 1-888-355-5786



Gable
Solaro Aire™

Solar Powered Attic Ventilation System

Can be mounted inside the attic over an existing gable vent or roof penetration to supercharge the vents already there. Remains hidden and out of the weather, save for the remote mounted solar panel. No large holes to cut in your roof.

features & benefits
SOLARO AIRE

SOLAR PANEL

- Unique proprietary design
- Aircraft grade Spun Aluminium
- Connects to the Gable using a 25' - 2 conductor 18 gauge stranded copper cable

FAN HOUSING

- Seamless construction (no potential leaks)
- Aircraft grade Spun Aluminium
- Powder-coated finish for durability & curb appeal
- Resistant to rust and corrosion

FAN BLADE

- 12" - 5 blades (fire resistant)
- Specifically designed for this system
- Operates whisper quiet



Brushless Electronic Motor with Maximum Yield Technology. This new motor technology was developed by Solaro Energy - Our engineers leveraged lessons learned from our original brushless electronic motor that we used for over 12 years. This new motor technology offers about 30% better efficiency and air moving performance, with an amazing 100,000 hours average motor run time! That's about 25 years of system operation time!

You won't need to worry about rust or corrosion issues in diverse weather, a special Corrosion Resistant Aluminum Alloy is used for all structural components within the Solaro Aire™. The attic fan housing is fireproof with NO plastic parts, unlike the competition, which can deteriorate quickly in heat.



what's included

SOLARO AIRE

Your Solaro Aire™ Crawl Space Ventilation System

Your Solaro Aire™ Crawl Space Ventilation System can be installed in your home or office building crawl space. This is what you can expect in your package.



Air Exhaust Port:

Output vent is the point where the air flow can exit. The size of bottom rectangular out put vent is 7" x 4", and the diameter of the inlet circle side is 6".



Divider:

The "Y" shape twin head air distribution and reduction system separates the air flow which comes from 12" pipe into two 8" pipes.



Fan Housing:

Air Input is heavy duty and unique design. The motor has a system inside that makes it whisper quiet. The fan consists of five 12" length blades that were specifically designed for the ventilation system.



Solar Panel:

The crawl space ventilation system can be connected to a 27 watt, 37 watt, or 40 watt. Contact your dealer or installer to get a recommended size of panel.

Accessories:



Material:

The crawl space ventilation system will include a 25ft (7.6m) of cable to run from the ventilation system to the solar panel, along with: humidity controller, Decora switch, aluminum tape, solar panel mounting brackets, dual thread hex screws, rubber grommet, self tapping screws, remodel box, zip ties and suspension straps.

1-888-355-5786

The Benefits of the Solaro Aire™

Solar Powered Crawl Space Ventilation System



All of the Solaro Aire™ crawl space fans qualify for a 30% Federal Tax Credit on materials and installation through the American Recovery and Reinvestment Act of 2009.



The Solaro Aire™ Limited Lifetime Warranty is the strongest in the industry.



The Solaro Aire™ doesn't cost one penny to operate! It's completely powered by the sun!



Built to be dependable. Weather resistant powder coated finish on all exposed fan parts provide a handsome and durable finish.



Removes heat during the hot summer months, as well as Radon gas. Removes moisture that can cause mold and mildew in the winter.

AMERICAN MADE

PRODUCTS DESIGNED AND MANUFACTURED IN AMERICA BY AMERICANS



www.SolaroEnergy.com

Solaro Energy

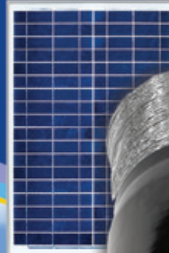
22955 McAuliffe Dr., Suite A
Robertsdale, AL 36567

SOLARO ENERGY

It's not just different, it's better by design.

Solaro Aire™

Solar Powered Crawl Space System



"The world's most advanced, high efficiency Solar Powered Crawl Space Ventilation System"

1-888-355-5786



how does it WORK?

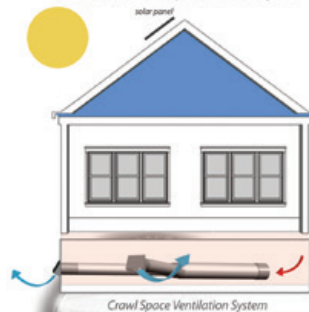
Throughout the year, the crawl space of your home or office building can collect moisture, heat, and radon gas. The Solaro Aire™ Crawl Space Ventilation System can help prevent all of those naturally occurring elements from destroying your home. The system works by extracting these elements through a ducting system using our brushless motor. Our system operates completely off solar energy, taking the excessive heat, moisture, and ventilating them outside. This helps keep you and your home healthy all year round!

The fan motor support ring is connected to a divider which then connects to two smaller ducts, that leads to exhaust vents outside. This system is meant to run in winter and summer. The crawl space ventilation provides circulation that prevents the moist air from condensing on the structures, keeping certain molds from growing. During the hot summer months, your crawl space can reach high temperatures that would accelerate mold growth. This system circulates the hot air out through the ducting.



For more information, please call us toll free at 1-888-355-5786

Air Flow for the Crawl Space Ventilation System



features & benefits

SOLARO AIRE

SOLAR PANEL

- Unique proprietary design
- Low Iron-High transmission tempered glass
- Completely self sufficient
- OPTIONAL- 27 watt, 37 watt and 40 watt power source

FAN HOUSING

- Seamless construction (no potential air leaks)
- Aircraft grade Spun Aluminium
- Resistant to rust and corrosion

FAN BLADE

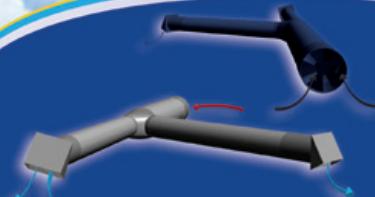
- 12" aluminium fan - 5 blades (fire resistant)
- Blade shaped for more efficient air flow
- Will not bend or create vibrations
- Computer balanced fan blades for dramatically longer motor life



Solaro Max Aire Motor
Maximum Efficiency Yield Technology

Brushless Electronic Motor with Maximum Yield Technology. This new motor technology was developed by Solaro Energy - Our engineers leveraged lessons learned from our original brushless electronic motor that we used for over 12 years. This new motor technology offers about 30% better efficiency and air moving performance, with an amazing 100,000 hours average motor run time! That's about 25 years of system operation time!

You won't need to worry about rust or corrosion issues in diverse weather, a special Corrosion Resistant Aluminum Alloy is used for all structural components within the Solaro Aire™. The crawl space ventilation system housing is fireproof with NO plastic parts, unlike the competition, which can deteriorate quickly in heat.



ActiveAir Technology

The Solaro Aire™ is the only ventilation system in the industry to feature ActiveAir™ Technology. Specifically designed to guide air through the ventilation system, preventing it from getting trapped inside the housing and causing the motor to overload. This advanced system of uniquely engineered created for more efficient airflow. With ActiveAir™ Technology, you can expect the highest airflow of any ventilation system on the market today.

available styles
SOLARO AIRE

Your Solaro Aire™ Basement System is meant to be installed in a commercial building or residential basement.



Solaro Aire™ Basement System

The Basement system was designed to be installed in commercial or residential basements. This system will clean and circulate clean air.



Solaro Aire™ High Profile

Ideal for applications where additional clearance (2") is needed between the bottom of the fan and the roof. Perfect for snowy areas or "S" tile roofs where less clearance could cause airflow problems.



Solaro Aire™ Gable

Can be mounted inside the attic over an existing gable vent or roof penetration to supercharge the vents already there. Remains hidden and out of the weather, safe for the remote mounted solar panel. No large holes to cut in your roof.



Solaro Aire™ Tilt

27 watt or 37 watt solar panel, perfect for any installation that requires directing the panel towards the sun for better performance. 360° rotation and 35° tilt make it perfect for less than ideal fan locations.



Solaro Aire™ Remote

Allows the solar panel location to be independent from the fan so each can be placed in the ideal part of the roof. Can also be used with larger solar panels for improved performance or to offset poor light environments.



1-888-355-5786

The Benefits of the Solaro Aire™

Solar Powered Basement Ventilation System



All of the Solaro Aire™ attic fans qualify for a 30% Federal Tax Credit on materials and installation through the American Recovery and Reinvestment Act of 2009.



The Solaro Aire™ Limited Lifetime Warranty is the strongest in the industry.



The Solaro Aire™ doesn't cost one penny to operate! It's completely powered by the sun!



Built to be dependable. Weather resistant powder coated finish on all exposed fan parts provide a handsome and durable finish.



Cleans the basement stale air and circulates air for the entire home. Designed to be placed on the wall so it doesn't take up space.

AMERICAN MADE

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Solaro Energy

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Robertsdale, AL 36567

solaro

ENERGY

It's not just different, it's better by design.



Solaro Aire™

Solar Powered Basement Ventilation System

Phone: (888) 355-5786
www.solaroenergy.com

how does it
WORK?

All year round, your home needs to be ventilated. This includes all areas of the home as well as the basement. With the Solaro Basement System, you can circulate the air from the living space to the basement that will lead the air to the outside. This helps prevent stale air that can cause bad odor. The basement system operates at 550 CFM. Other problems from stagnant air can cause mildew build up, mold, or bugs that seek out damp and warm areas. With this system ventilating up to approximately 116.1 sq.m. it can make your home healthier and smelling cleaner.

With the Solaro Basement System in your home, it can help prevent these problems. Not only can it help your home have clean air, it can save on your electric bill. This system is completely solar powered. This system comes with the unit itself, solar panel (27 watt, 37 watt, or 40 watt) and also a 25ft cable. This system is also capable of using a Day/Night KIT. This allows the unit to run from AC power to DC power.

For more information, please call us toll free at 1-888-355-5786



Featuring:

Solaro Aire

Solar Powered Basement System

MAXIMUM EFFICIENCY: Our advanced solar powered Basement Systems are not only easy to install and maintain, but are highly developed and extremely efficient. Making them the most effective basement system on the market! Day/Night KIT is also available. The basement system can keep you and your home healthy by circulating the air nonstop. This functionality provides insurance that it can prevent stale air and molds forming in the basement.

features & benefits
SOLARO AIRE

DAY/NIGHT KIT

The Day/Night KIT allows the basement system to switch from DC power to AC power. This a solar powered system, however the unit naturally turns off when the sun goes down. But with the Day/Night KIT you can switch to AC power. This allows the unit to run night and day.

LOW MAINTENANCE

The Solaro Aire are easy to install and operate and guaranteed to operate for years. There is very minimal maintenance, however if you feel that the solar panel needs to be cleaned please do so. Also, if you feel that the vents are dirty, clear any lint that may be in the way of air flow.

CLEANS THE AIR

This unit was designed to clean the air. Since this unit will be placed in the basement, the unit will draw air from the living space and direct it towards the basement. The unit will then ventilate the air through ducts that lead outside. This unit not only cleans the air it also helps with naturally occurring radon gas.



Brushless Electronic Motor with Maximum Yield Technology. This new motor technology was developed by Solaro Energy - Our engineers leveraged lessons learned from our original brushless electronic motor that we used for over 12 years. This new motor technology offers about 30% better efficiency and air moving performance, with an amazing 100,000 hours average motor run time! That's about 25 years of system operation time!

You won't need to worry about rust or corrosion issues in diverse weather, a special Corrosion Resistant Aluminum Alloy is used for all structural components within the Solaro Aire™. **NO plastic parts** unlike the competition, which can deteriorate quickly in heat or cold.

what's included

SOLARO AIRE

Garage Ventilation System

This Garage Ventilation System can be installed in your home garage. This is what you can expect in your package:



Housing

The durable external shell encases the inner housing system. The inner housing system is aerodynamically designed to produce the highest possible radial air exhaust.



Vent Connector

The vent connector will connect the flex ducting to the main housing unit.



Motor / Blades

The ventilation system, specially designed to be powered by solar panel, has an integrated motor electronics control board (MPPT), stainless steel double shielded ball bearings and a high performance brushless DC motor. The blades for the ventilation system were designed specifically to operate at a constant running pace.



Flexible Ducting

The included 10" diameter flexible ducting can extend up to 10 ft to connect to an external discharge opening.



Exhaust Cover

Designed to keep out foreign objects. And to inconspicuously cover the exhaust ventilation.



Solar Panel

The basement ventilation system can be powered by a 37 watt or a 40 watt solar panel.

Accessories:



Material:

The Garage Ventilation System will include a 25ft (7.6m) of cable to run from the ventilation system to the solar panel, two 6" flexible ducting that will be 12 ft long. Along with: Aluminum tape, solar panel mounting brackets, dual thread hex screws, self tapping screws and zip ties.

1-888-355-5786

The Benefits of the Solaro Aire™

Solar Powered Garage Ventilation System



All of Solaro Energy fans qualify for a 26% Federal Tax Credit on materials and installation through the American Recovery and Reinvestment Act of 2009.



The Solaro Aire™ fan's Limited Lifetime Warranty is the strongest in the industry.



The Garage Ventilation system doesn't cost one penny to operate! It's completely powered by the sun!



Built to be dependable. Weather resistant powder coated finish on all exposed fan parts provide a handsome and durable finish.



Removes heat & moisture that can cause mold and mildew in the summer and winter.

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Solaro Energy

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Robertsdale, AL 36567

Solaro ENERGY™

It's not just different, it's better by design.

"The world's most advanced, high efficiency Solar Powered Garage Ventilation System"



Solaro Aire™

Solar Powered Garage Ventilation System

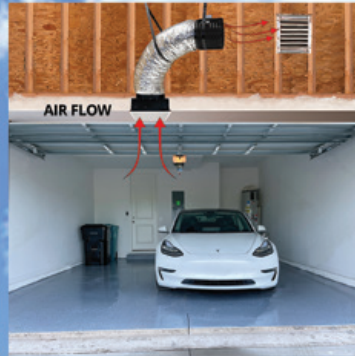
Phone: (888) 355-5786
www.solaroenergy.com

how does it WORK?

Throughout the year, the garage of your home or office building can collect moisture and heat buildup. The Garage Ventilation System can help prevent all of those elements from destroying your home. The ventilation system works by expelling these elements out through a ducting system using our brushless motor. Our ventilation system operates completely off solar energy, taking the excessive heat and moisture and ventilating it outside. This helps keep you and your home healthy throughout the years.

The fan motor is supported by a single unit. The air is then ventilated out through a 10" duct which is then directed to an exhaust port that leads outside. This is meant to run in winter and summer. The garage ventilation provides circulation that prevents the moist air from condensing on the structures, keeping certain molds from building up.

For more information, please call us toll free at 1-888-355-5786



WHAT'S INCLUDED

features & benefits

SOLARO AIRE

SOLAR PANEL

- Unique proprietary design
- Low-iron tempered glass

FAN HOUSING

- Seamless construction (no potential air leaks)
- Powder coat finish
- Resistant to rust and corrosion

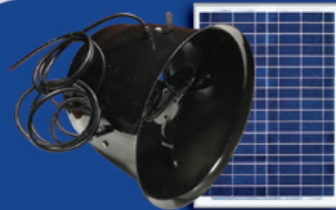
FAN BLADE

- 12" aluminium blades - 5 blades (fire resistant)
- Blade shaped for maximum efficient air flow
- Will not bend or create vibrations
- Computer balanced fan blades for dramatically longer motor life



Brushless Electronic Motor with Maximum Yield Technology. This new motor technology was developed by Solaro Energy - Our engineers leveraged lessons learned from our original brushless electronic motor that we used for over 12 years. This new motor technology offers about 30% better efficiency and air moving performance, with an amazing 100,000 hours average motor run time! That's about 25 years of system operation time!

You won't need to worry about rust or corrosion issues in diverse weather, a special powder coat is used for all structural components. The garage ventilation system housing is fireproof with NO plastic parts.



Featuring:

ActiveAire Technology

This uniquely engineered system creates a supremely efficient airflow. Specifically designed to guide air through the ventilation system. It prevents the air from getting trapped inside the housing and causing the motor to overload. With the Active Aire Technology of our garage ventilation system, you can expect the highest airflow of any garage fan on the market today.

available styles
SOLARO AIRE

Solaro Aire™ Attic Fans can be installed on any style of roof. High Profile, Low Profile, Remote Solar Panel and Gable fan style options available to give you the best fit for your roof.

Solaro Aire™ High Profile
Ideal for applications where additional clearance (2") is needed between the bottom of the fan and the roof. Perfect for snowy areas or 75" tile roofs where less clearance could cause airflow problems.

Solaro Aire™ Low Profile
Provides the same performance as high profile bases when additional clearance is not needed. Tucks in closer to the roof to be less conspicuous and more resistant to high winds.

Solaro Aire™ Remote
Allows the solar panel location to be independent from the fan's so each can be placed in the ideal part of the roof. Can also be used with larger solar panels for improved performance or to offset poor light environments.

Solaro Aire™ Gable
Can be mounted inside the attic over an existing gable vent or roof penetration to supercharge the vents already there. Remains hidden and out of the weather, safe for the remote mounted solar panel. No large holes to cut in your roof.

Solaro Aire™ Tilt
27 watt or 37 watt solar panel, perfect for any installation that requires directing the panel towards the sun for better performance. 360° rotation and 35° tilt make it perfect for less than ideal fan locations.

Optional Accessories:

Solaro Aire™ Thermostat
Factory installed built-in thermostat allows the fan to operate only when the temperature is above 85°F.

Solaro Aire™ AC Connection Kit
Plug-in transformer and toggle switch kit offers opportunity to operate your solar fan during evening hours on AC power.

1-888-355-5786

The Benefits of the SolaroAire™

Solar Powered Horse Trailer Fan

- All of the Solaro Aire™ fans qualify for a 30% Federal Tax Credit on materials and installation through the American Recovery and Reinvestment Act of 2009.
- The Solaro Aire™ Limited Lifetime Warranty is the strongest in the industry.
- The Solaro Aire™ doesn't cost one penny to operate! It's completely powered by the sun!
- Built to be dependable. Weather resistant powder coated finish on all exposed fan parts provide a handsome and durable finish.
- Can tolerate harsh weather conditions during that long drive down the highway.

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Robertsdale, AL 36567

Solaro ENERGY
It's not just different, it's better by design.

The world's most advanced, fully integrated, high efficiency Solar Powered Ventilation System

When you use The Solaro Aire™ Ventilation System the results are a cooler and drier space, prolonged roof life and an overall more comfortable living environment inside your trailer.




Solaro Aire™
Solar Powered Delivery Truck Ventilation

www.solaroenergy.com

how does it WORK?

Solaro Energy wants to present to you our newest ventilation system for multiple types of truck trailers. This advanced system, extracts the air like no other fan, creating a more efficient air flow. This is a 25-watt unit fan that moves up to 900cfm. This product has constant air flow throughout your trailer also known as air exchange or active air. Our fan is completely powered by the sun. By pulling outside air source in through existing windows and vents.

Wouldn't it be nice to be able to go on long trips from state to state while keeping your inventory at a comfortable and safe temperature? All of this is done through solar energy, so even when the vehicle is parked and the engine is off, the Solaro Aire Truck Trailer Ventilation System is on! This ventilation fan removes heat, odor, and provides continual air flow. Keeping your valuable inventory cool at all times!

For more information, please call us toll free at **1-888-355-5786**

ActiveAire Technology

features & benefits
SOLARO DAY

SOLAR PANEL

- Unique proprietary design
- Low Iron-High transmission tempered glass
- Completely stand alone, no wiring required (Embedded models)

FAN HOUSING

- Seamless construction (no potential leaks)
- Aircraft grade Spun Aluminium
- Powder-coated finish for durability & curb appeal
- Resistant to rust and corrosion

FAN BLADE

- 12" aluminium fan - 5 blades (fire resistant)
- Blade shaped for more efficient air flow
- Will not bend or create vibrations
- Computer balanced fan blades for dramatically longer motor life

Solaro Max Aire Motor
Maximum Efficiency Yield Technology

Brushless Electronic Motor with Maximum Yield Technology. This new motor technology was developed by Solaro Energy - Our engineers leveraged lessons learned from our original brushless electronic motor that we used for over 12 years. This new motor technology offers about 30% better efficiency and air moving performance, with an amazing 100,000 hours average motor run time! That's about 25 years of system operation time!

You won't need to worry about rust or corrosion issues in diverse weather; a special Corrosion Resistant Aluminum Alloy is used for all structural components within the Solaro Aire™. The fan housing is fireproof with **NO plastic parts**, unlike the competition, which can deteriorate quickly in heat.



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multiple applications
SOLARO SHIELD

Solaro Shield™
Insulating Paint with Nano Shield Technology

*Insulation Paint and Primer
For Truck Rooftops*




AMERICAN MADE
1-888-355-5786

The Benefits of the Solaro Shield™

Insulating Paint with Nano Shield Technology



Solaro Shield Insulated Paint is a Green Product. Environmentally Friendly, Non-Toxic, with Low VOC. A Non-Flammable, Water Based Paint for Easy Cleanup.



Thermal Insulated to Control Heat Loss and Reduce Energy Costs. This UV Resistant Paint can be Painted Over for Curb Appeal and Extra Protection.



Solaro Shield Insulated Paint is Moisture Resistant, Mold and Mildew Resistant. As well as Vapor Permeable. (breathes)



Solaro Shield Insulated Paint is Easy to Apply by Brush, Roller, or Paint Sprayer and is Cost Effective.



Solaro Shield Insulated Paint has Outstanding Durability and Weathering. Great Under Harsh Weather Conditions During that Long Drive Down the Highway.

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Solaro Energy

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Solaro ENERGY

It's not just different, it's better by design.

Solaro Shield™
Insulating Paint with Nano Shield Technology



The world's most advanced, innovative and energy efficient solution designed to enhance the thermal performance of your delivery vehicle.

Solaro Shield Insulated Paint, also known as infrared paint, is an advanced coating that incorporates ceramic micro-spheres. These micro-spheres possess excellent heat-insulating properties, effectively acting as a thermal barrier that minimizes heat transfer.

1-888-355-5786

www.solaroenergy.com

Features & Benefits
SOLARO SHIELD

- Nano Technology Based Material
- UV Resistant
- Moisture Resistant
- Mold and Mildew Resistant
- Reduces Energy Costs
- Reduces Carbon Emissions
- Corrosion/CIU Resistant
- Chemical Resistant
- A Green, Environmentally Friendly Product
- Non-toxic, Low VOC
- Water Based and Breathable (won't act as a vapor barrier)
- Non-Flammable
- Easy Cleanup
- Thermally Insulated
- Control Heat Loss
- Used On Metal and Non-Metal Surfaces
- Can Be Painted Over
- Indoor and Outdoor Use
- Vapor Permeable (breathes)
- Worker Safe
- Safe to Touch



For more information, please call us toll free at 1-888-355-5786


Features & Benefits
SOLARO SHIELD

Thermally Insulated
UV Resistant and Corrosive Resistant

Mold & Mildew Resistant
Tested to ASTM D5590 and ASTM G21 for Mold Resistance

Great Coverage & Dry Time
One Gallon Yields approx. 12 mils/300 microns
Wet Film Thickness (3 coats) over 150 sq.ft.
Touch Dry Time: 1-2 Hours
Hard Dry Time: 72 Hours
Cure Time: 30 Days, depending on environment

Durable & Easy to Apply
Outstanding Durability & Weathering
Easy to Apply by Brush, Roller, or Paint Sprayer




insulated paint
NANO SHIELD TECHNOLOGY

Solaro Energy has designed a line of insulated paint, with 3M Nano Shield Technology. This is a sunlight reflecting paint that can be applied to a truck rooftop. This concept has new support from the U.S. Green Building Council (USGBC) which has issued a pilot credit for the insulation of trucks. As well as, of cool exterior walls in new homes, schools, and commercial buildings to mitigate urban heat islands.

Insulation paint, also known as infrared reflecting paint, is an innovative and energy-efficient solution designed to enhance the thermal performance of buildings and surfaces. This advanced coating incorporates ceramic micro-spheres, which are tiny hollow spheres made from ceramic materials. The ceramic micro-spheres possess excellent heat-insulating properties, effectively acting as thermal barriers that minimize heat transfer. When applied to walls, roofs, or other structures, insulation paint helps regulate indoor temperatures by reflecting a significant portion of infrared radiation from the sun, thus reducing heat absorption. As a result, buildings stay cooler during hot summers and retain warmth in colder months, leading to improved energy efficiency and reduced reliance on heating and cooling systems. The technology of insulation paint with infrared reflecting capabilities and ceramic micro-spheres represents a promising step towards sustainable construction and climate-conscious design.

Solaro Shield™
Insulating Paint with Nano Shield Technology

Solaro Shield Insulated Paint with 3M Nano Shield Technology for Delivery Truck Rooftops

insulated paint
NANO SHIELD TECHNOLOGY




how does it WORK?

The Solaro Day™ can be installed in any location. There are no limitations as compared to a traditional tubular skylight. Simply install the solar panel on your roof, run the interconnect cable through the attic or wall, and install the Solaro Day™ like any other light fixture. *It's that easy!*



Step 1

Starting out on the roof simply install the solar panel that collects the sunlight's energy, even on cloudy days, and converts it into safe low voltage DC power.

Step 2

The power is then transferred down through your attic using our durable interconnect cabling. A small 1/2" diameter hole is all that's needed in the roof.



Option 2

For two story homes, run the interconnect cabling down the wall and into the living space.



Step 3

The Solaro Day™ is installed just like any other light fixture, in any location! Simulated natural sunlight into your home or office, completely powered by the sun.



1-888-355-5786

The Benefits of the Solaro Day™



The Solaro Day™ is eligible to receive a 30% Federal Tax Credit on both the cost of the product and installation.



The Limited Lifetime Warranty is the strongest in the industry. **Built to last for years!**



The Solaro Day™ doesn't cost one penny to operate! It's completely powered by the sun! Optional accessories available.



Installation is not inhibited by the structure of a building and there are no giant holes in your roof. Installs anywhere!



Provides simulated natural healthy sunlight that makes bright, happy spaces with the same full spectrum light as sunlight.

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www.SolaroEnergy.com

Solaro Energy

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Solaro Day™

Solar Powered Daylighting System

The World's First Solar Powered Natural Light Fixture

Start enjoying the benefits of solar powered, full spectrum, natural sunlight in your home, office, or retail outlet.



The Solaro Day™ will simulate the same light that a traditional or tubular skylight creates. It does this without the costly installation including the cutting of a large hole in your roof or ceiling. You will be able to experience the sun up, sun down and cloud movement inside just as you would experience with a skylight. The Solaro Day™ is truly a green product and is 100% free to operate!



Solaro Day™ Recessed Fixture

The Solaro Day™ Recessed Fixture is installed so that very little is shown, ideal for Eco-friendly environments. This system uses one single source of solar power and multiple points of daylight simulators to light up your entire home, office, retail outlet, school, government building or factory. Can be centrally wired with more than one Solaro Day™ fixture powered by solar panels from 30 watt minimum to 250 watt maximum.



Solaro Day™ Driver

Hi-tech American made daylight simulator driver. With 0 to 24 Volts DC input power, 30 W minimum, 240 W maximum solar panel power output to driver simulates the action of the sun. In the morning the Solaro Day starts off dim and gets brighter as the sun gets higher in the sky. As the sun sets in Solaro Day daylight simulator will get dimmer and dimmer until the light gradually goes out, simulating the action of the sun, just like a roof mounted skylight. During the day, if a cloud casts a shadow on your roof the Solaro Day will dim. As the sun returns the Solaro Day will get brighter, so you know if it's getting cloudy outside.



what's inside

Behind the The Solaro Day™ acrylic diffuser are individual Opto Semiconductors designed with the highest quality and latest technology. Light emitting diodes (LEDs), only a few millimeters in length, convert electrical energy directly into light. From the Solaro multi-crystalline solar panels, the sun's energy is converted into safe, low-voltage, high performing, simulated daylight.

The diffuser is made of modified acrylic and masterfully hides the Opto Semiconductors to give a smooth appearance. Provides simulated natural healthy sunlight that make bright, happy spaces with the same full spectrum light as sunlight.



Helping the Earth Stay Green.

At Solaro Energy we are committed to helping the planet stay green. We are focused on preserving the environment with green products and promoting off-grid independence. We have over 15 years experience in harnessing solar power and over 25 years experience in manufacturing energy efficient products.

available styles
SOLARO DAY

The Solaro Day™ Street Light is meant to be installed outside. The street light can be installed on the street, in parks, gardens, commercial or residential areas.

Solaro Day™ SL70W/3300
- 3300 Lumens
- LED: 30 pcs Bridgelux 45ML, 2700-7000K
- Solar charging time: 6-7 hours by bright sunlight

Solaro Day™ SL70W/4400
- 4100 - 4300 Lumens
- LED: 42 pcs Bridgelux 45ML, 2700-7000K
- Solar charging time: 6-7 hours by bright sunlight

Solaro Day™ SL70W/6300
- 6100 - 6300 Lumens
- LED: 60 pcs Bridgelux 45ML, 2700-7000K
- Solar charging time: 6-7 hours by bright sunlight

Solaro Day™ SD-2500-CC-FIX
- 25000 Lumens
- LED: SMD2835, 2700-7000K

Solaro Day™ SD-2500-CC-KIT30W
- 25000 Lumens
- LED: SMD2835, 2700-7000K
- 30 watt Solar Panel

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1-888-355-5786

The Benefits of the SolaroDay™

Solar Powered Street Light

- The Solaro Day™ is eligible to receive a 30% Federal Tax Credit on both the cost of the product and installation.
- The Solaro Day™ Limited Lifetime Warranty is the strongest in the industry.
- The Solaro Day™ doesn't cost one penny to operate! It's completely powered by the sun!
- Built to be dependable. Weather resistant powder coated finish on all exposed fan parts provide a handsome and durable finish.
- Can tolerate all forms of weather. This light is meant to be placed outside.

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www.SolaroLighting.com

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solaro
ENERGY

Solaro Day™
Solar Powered Street Light

It's not just different, it's better by design.

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www.solaroenergy.com

how does it WORK?

The Solaro Street Light is meant to be installed outside. This could be on the city streets, in parks, gardens, residential or commercial areas. This light is completely solar powered. It is recommended that the light fixture be charged for at least 6-8 hours before use. After the light is completely charged, it can light up an area of roughly 45 ft. Of course there are different models and different levels of lumens. It depends on what your needs are.

Extremely Bright: Our street lights use the brightest LEDs available allowing for brightness as high as 12,000 Lumens.

Cement Base: We recommend the use of a 2' to 3' diameter cement base, standing 2' to 3' tall.

14' - 18' Pole: We recommend the use of a 3" to 5" diameter pole standing 14' to 18' high.

Fast Charge Times: Our highly efficient batteries fully charge in as little as six hours.

For more information, please call us toll free at **1-888-355-5786**

AMERICAN MADE
PRODUCTS DESIGNED AND MANUFACTURED IN AMERICA BY AMERICANS

Featuring:
Solaro Street Light
Solar Powered Street Light

MAXIMUM EFFICIENCY: Our advanced solar powered street lights are not only easy to install and maintain, their highly developed systems are also extremely efficient. Making them the most effective street light on the market! Two forms of light control are available. The Solaro Solar Street Lights can be set on a timer, or can use built in day/night sensors. This functionality provides insurance that our lights will keep your roads, stadiums and parks bright throughout the night!

features & benefits

SOLARO DAY

MOTION SENSOR
At night, the street light is always on. However this does have a motion sensor. When someone walks by, the light gets brighter.

BATTERY BACKUP
A powerful battery is charged during the day so that the Solaro Street Lights can illuminate roads and sidewalks all night long.

LOW MAINTENANCE
Solar Street Lights are both easy to install and operate and guaranteed to operate for a long time.

DAYLIGHT SENSORS
The Solaro Street Light is equipped with Daylight sensors that turn the Ultra-Bright LEDs on when it gets dark.

You won't need to worry about rust or corrosion issues in diverse weather, a special Corrosion Resistant Aluminum Alloy is used for all structural components within the Solaro Day™. NO plastic parts, unlike the competition, which can deteriorate quickly in heat or cold.



Header



Top/side Panel

Top/middle Panel

Top/side Panel

Left Panel

Bottom/middle Panel

Right Panel



Research





Reference Publication: Danny S. Parker, John R. Sherwin, "Performance Assessment of Photovoltaic Attic Ventilator Fans", Presented at: The Symposium on Improving Building Systems in Hot and Humid Climates, May 15-17, 2000, San Antonio, TX

Disclaimer: The views and opinions expressed in this article are solely those of the authors and are not intended to represent the views and opinions of the Florida Solar Energy Center.

Performance Assessment of Photovoltaic Attic Ventilator Fans

Danny S. Parker, John R. Sherwin
Florida Solar Energy Center (FSEC)

FSEC-GP-171-00

Abstract

Controlling summer attic heat gain is important to reducing air conditioning energy use in homes in hot-humid climates. Both heat transfer through ceilings and to attic duct systems can make up a large part of peak cooling demand. Attic ventilation has long been identified as a method to abate such heat gains. We present test results from using the photovoltaic (PV) attic ventilator fans in a test home to assess impact on attic and cooling energy performance.

Background

Improving attic thermal performance is of fundamental to controlling residential cooling loads in hot climates. Accumulating research data have shown that the influence of attics on space cooling demand is not only due to the change in ceiling heat flux when cooling, but very often due to the conditions within the attic itself and their influence on heat gain to duct systems and on air infiltration into the building. The importance of ceiling heat flux has long been recognized with insulation a very effective method of controlling excessive gain. However, when ducts are present in the attic, the magnitude of heat gain to the thermal distribution system under peak conditions can be often much greater than the ceiling heat flux in well-insulated attics (Parker et al., 1993; Hageman and Modera, 1996). ⁽¹⁾ This influence may be exacerbated by location of the air handler within the attic space - a common practice in much of the southern U.S. The air handler is both poorly insulated with the greatest temperature difference (the evaporator) of any location of the cooling system. It also has the greatest negative pressures so that some leakage into the unit is inevitable. Evidence for this influence is contained in a monitoring study of sub-metered air conditioning energy in 48 Central Florida homes conducted by Cummings (1991) which found that homes with the air handlers located in the attic used 30% more space cooling energy than those with the air handlers located in garages or elsewhere.

Another emerging phenomenon from buildings research in cooling dominated climates shows that duct system supply air leakage can lead to negative pressures within the house interior when the air handler is operating. This, in turn, can result in hot air from the attic being drawn down to the conditioned space through interior wall headers, recessed cans or other bypasses from the attic to the interior. This phenomenon is commonly encountered in slab on grade homes in the Sunbelt states in the U.S. where the dominant leakage plane to the exterior is through the ceiling.

The Florida Solar Energy Center (FSEC) has performed numerous experiments in test buildings over the last decade on the potential of a variety of methods to reduce attic air temperatures in Florida residences. This includes radiant barrier systems (Fairey et al., 1988), white reflective roofs (Parker et al., 1995), enhanced attic ventilation and roof tiles (Beal and Chandra, 1995). Attic air temperatures vary considerably depending on roofing type, color and ventilation.

Potential Ventilation Impact on Cooling

Forced attic ventilation is a commonly encouraged technique to reduce residential heat gains from the ceiling. However, even those who are in favor of increased attic ventilation have often warned that the energy consumption associated with the attic fan motor is likely greater than any realized energy savings from its use (olfert and Hinrichs, 1974). Also, an early detailed study showed that while forced attic ventilation did reduce cooling energy use, the reduction was quite small and outweighed by the energy consumption of the fan itself (Dutt and Harrje, 1979). Another study in two instrumented side-by-side homes in Texas came to similar conclusions (Burch and Treado, 1979). Forced ventilation was found to reduce ceiling heat gain by 1.1 Btu/hr/ft² (328 W) over soffit venting and gains to the attic duct system by 94 W.⁽²⁾ At a normal air conditioning COP of 2.5, the overall reduction in cooling energy use could be expected to be approximately 170 W against the measured consumption of 284 W by the ventilation fan. Measured reduction to the maximum cooling load was only 6% for R-11 ceiling insulation. Thus, the powered ventilation does not typically result in a net energy savings for powered vent fans unless the attic is uninsulated. Under this scenario, other means of controlling attic heat gain are preferable and more cost effective than forced ventilation. Other analysis, tends to verify this conclusion. Detailed simulations suggest that the heat transfer in an attic to a residential building interior in mid-summer is dominated by radiative gains from the hot roof decking directly to the insulation surface (Parker et al., 1991; Wilkes, 1991). This mode of heat transfer is more effectively limited by 1) increased attic insulation, 2) a truss-mounted radiant barrier or 3) a white reflective roof surface that limits solar gain to the attic structure.

Although attic ventilation has been shown to reduce attic air temperatures and cooling loads the only examination of powered attic ventilators has shown the electricity consumption of the ventilator fans to be greater than the savings in air conditioning energy (Burch et al., 1979). In recent years, however, photovoltaic ventilator fans have become available which have no parasitic consumption of line electricity. These tend to be expensive, but are easier to install since no wiring is required.

Site Description

The test site is a three bedroom single family home located in Cocoa, Florida with approximately 1,045 square feet of conditioned floor space. The household consists of four members with the home occupied most of the day. The home is cooled by a 2.5 ton split system central air conditioner with electric strip heat. The air handler is located in a conditioned utility room. The interior temperature is maintained at a fairly constant 73°F throughout the summer.

The design is a simple rectangular floor plan with the long axis facing east and west (Figure 1). The ceiling of the home has approximately R-19 blown fiberglass insulation. Walls are of frame construction with R-11 insulation. The floor is over an open crawlspace with no insulation. Single pane windows with aluminum frames comprise approximately 12% of the conditioned floor area.



Figure 1. Photo of test site from the east.

The A-frame roof has a 3/12 pitch with asphalt shingles over plywood decking. The dark brown asphalt shingles with an approximate solar absorptance of 92%. A flex duct system is also present in the attic space which distributes the cooled air and is likely influenced by attic thermal conditions. The home had only perforated soffits prior to the retrofit; there were no ridge vents in place.

Instrumentation

A multi-channel data logger recorded various parameters in the home which affect energy use. Type-T

thermocouples record the ambient, interior air temperature and attic air temperatures in the home. A pulse initiating power transducer recorded the air conditioner power consumption. A number of other parameters are also recorded at the site including the attic air temperature, the interior temperature and relative humidity. A meteorological station mounted off and above the north edge of the roof records shielded ambient air temperature, humidity, horizontal solar irradiance and wind speed. All data are recorded every 15 minutes and sent back nightly to the host mainframe computer.

Photovoltaic Attic Ventilators

Two PV attic ventilators were installed on the house's asphalt shingle roof on August 6th, 1997.⁽³⁾ Both were installed near the peak of the A-frame roof with one on the east face and another on the west face as shown in Figure 2. The fans are designed to provide between 600 and 800 cfm of attic ventilation at peak solar irradiance (1000 W/m^2) depending on the free soffit ventilation area. The ventilators consist of a 19.5" x 16" mounting with a 10 Watt thin-film PV module. A five bladed radial fan and a direct coupled DC motor provides attic air exhaust. The units were purchased for \$300 each; installation would typically add another \$100 - \$150 per unit.



Figure 2. Photo of PV ventilators.

The home already had a radiant barrier (foil stapled to the roof trusses) with soffit ventilation, but no ridge or other venting. Even with the radiant barrier, however, attic air temperatures of up to 136°F had been measured during the summer leading up to the retrofit.

Analysis

To analyze the impact of the attic ventilators, we looked for several weeks of similar weather in the period before and after the retrofit. Figure 3 shows the measured thermal performance during two matching weather periods. The pre-retrofit period was from July 1st - August 5th; the post period was from August 7th - September 15th. The periods were chosen for their match on average ambient air temperature and solar insolation conditions.

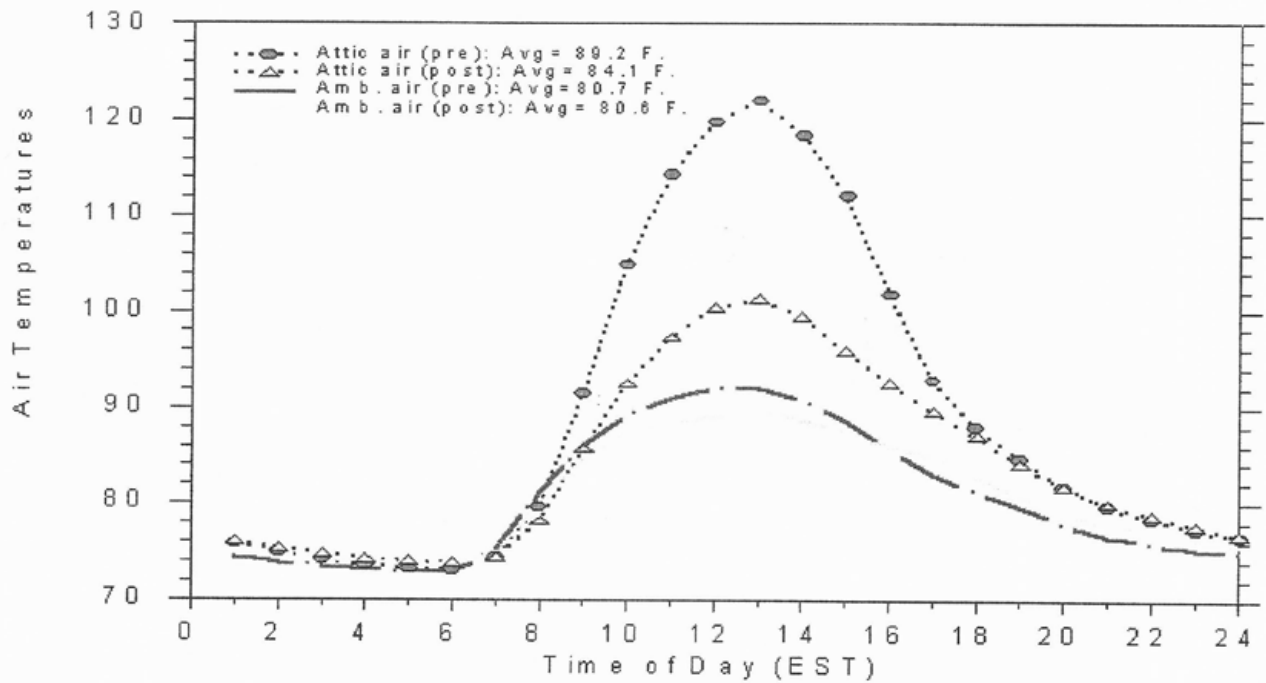


Figure 3. Measured average attic air and ambient air temperatures over the test period before and after retrofit.

The first plot shows a comparison of the ambient air temperatures (blue) before and after the change. The Upper two lines show the difference in the measure attic air temperature before and after the added ventilation. The daily peak attic air temperature is dropped by an average of 22°F. The monitored attic air temperature over the length of the summer clearly shows the impact of the added attic ventilation as shown in Figure 4.

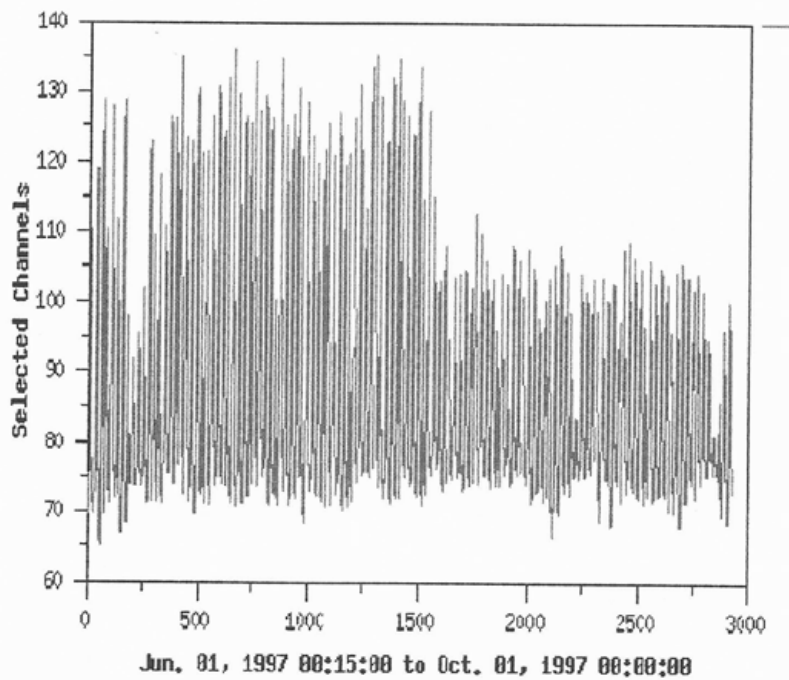


Figure 4. Monitored attic air temperatures over the summer test period.

Air conditioner energy use was also measured over the two periods. The AC consumption was reduced by an average of 6.0% (2.8 kWh/day) by the addition of the ventilators, with the largest difference around mid-day. Afternoon savings were not in evidence although differences were noted in evening hours are likely due to the impact of a greater amount of passive ventilation by having the two free outlet areas new the ridge vent area. The measured space cooling reduction load profile is shown in Figure 5.

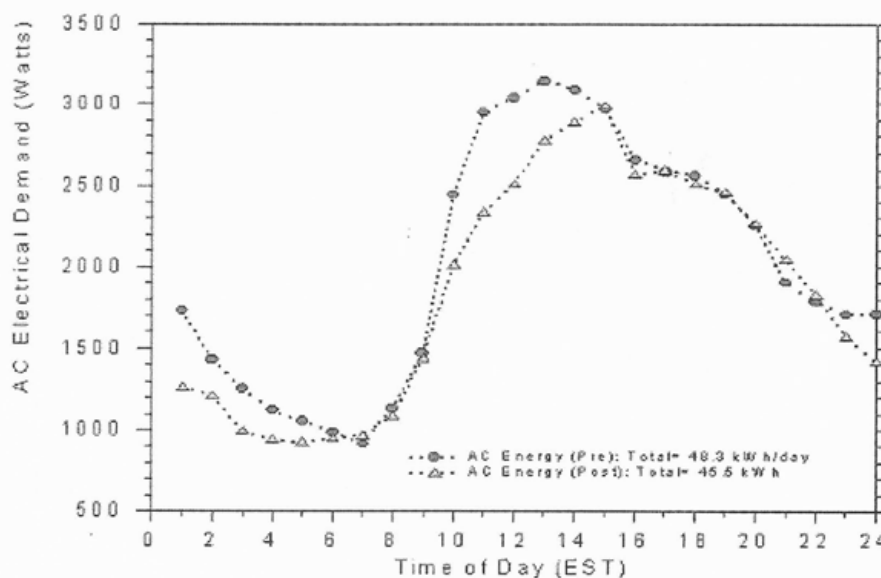


Figure 5. Measured space cooling demand over the summer test period.

Space cooling electricity use was sub-metered at the home for the entire year prior to the retrofit, totaling some 7,730 kWh (not including air handler and electric resistance consumption for space heating). Based on the matching period analysis, estimation of annual space cooling savings are on the order of 460 kWh. These savings have a value of approximately \$37 at current Florida energy prices. Given that the costs for the two units was approximately \$600, or about \$850 installed, the payback of the ventilators is not very favorable at over twenty years. It is important to note that this level of savings comes from a home with a radiant barrier system - savings may be larger for cases without a radiant barriers, in homes with less ceiling insulation or those with the air handler unit located in the attic. On the other hand, the monitored test home used more AC energy than the average Central Florida household and this would tend to overstate savings.⁽⁴⁾ One impact had nothing to do with energy: the homeowner noted that interior comfort seemed improved after the retrofit even with no adjustment to the thermostat. This may be due to a change in the interior mean radiant temperature.

Other Influences

Recently, the issue of attic ventilation has become a contentious issue, in part due to the lack of scientific basis for the 1:300 free ventilation rate (Rose, 1995), and measured and simulated influences of ventilation on humidity of attic materials in hot humid climates (Burch et al., 1996; TenoWold and Rose, 1999). The major problem is that passively ventilated attics bring in large amounts of moisture laden air into the attics during evening hours when relative humidity is often high. One intrinsic advantage of the PV ventilation scheme is that the attic is well ventilated only during daytime hours only when considerable insolation is present. Coincidentally, these also tend to be periods when the ambient relative humidity is low.

We have already described how PV ventilator fans have no parasitic electricity consumption beyond what is generated by the unit. Most attic ventilators often draw 250 - 300 Watts of electric power when in operation (they are typically triggered on when the attic air temperature reaches 105°F or more). This level of electrical the (approximately 10% of the peak air conditioner power draw) is greater than the savings in space cooling energy (Burch et al., 1979). One other advantage of the PV ventilators over AC powered units is noise. Although not quantified within our study, we did note that PV vent fans were almost silent in operation compared with the very noticeable fan noise generated by conventional units.

Conclusions

A case study of photovoltaic attic ventilator fans was conducted on an occupied single family home in Central Florida. Two fans were installed at mid-summer in an instrumented home where attic air temperature, meteorological conditions and space cooling electric power were measured. The home already had an attic radiant barrier, but still experienced attic air temperatures in excess of 130°F.

Comparing periods with similar weather conditions, the test revealed that the PV vent fans have the potential to reduce measured peak summer attic air temperatures by over 20°F. However, the impact over the cooling season is fairly modest with well insulated attics. Measured space cooling reduction was approximately 6% - worth about 460 kWh annually at the test home.

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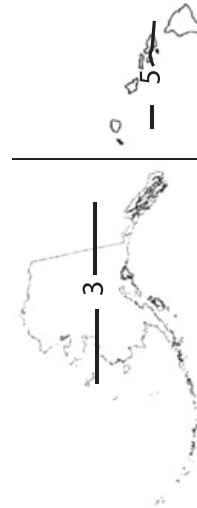
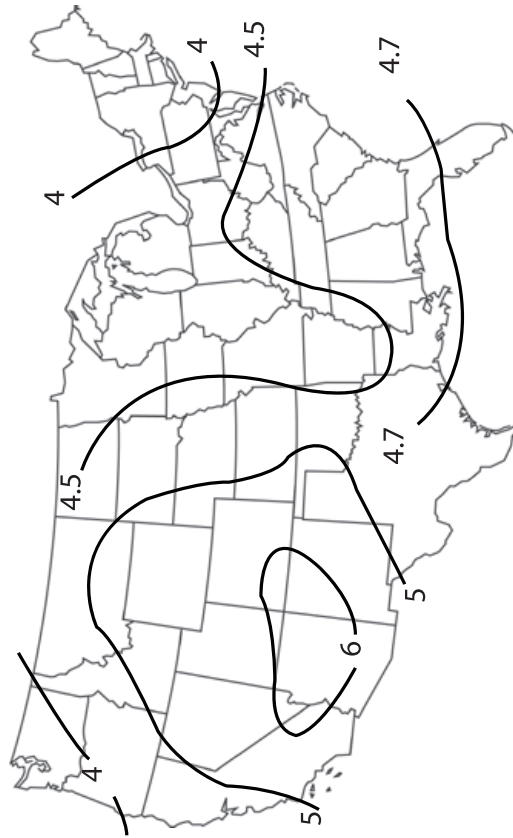
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Sun Hours/Day-Chart

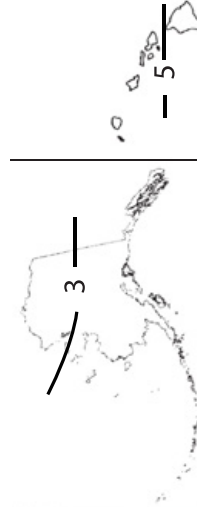
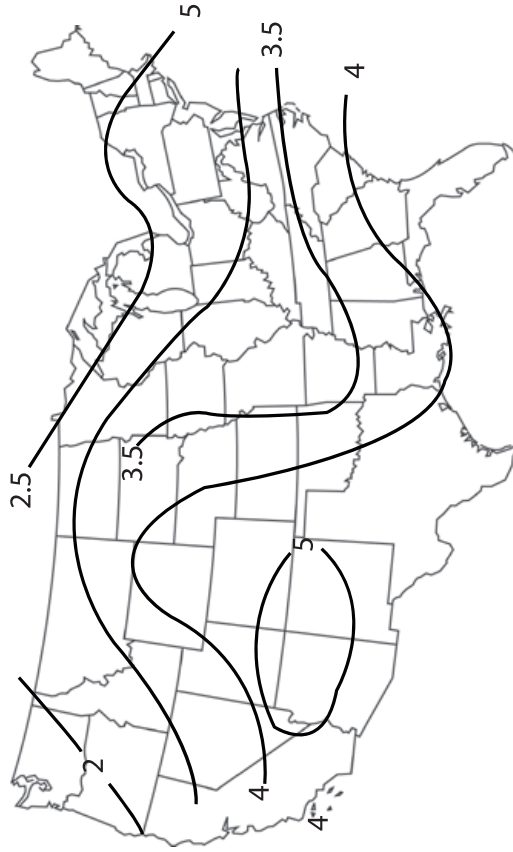
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AK	Matanuska	5.24	1.74	3.55	MO	St. Louis	4.87	3.24	4.38
AL	Montgomery	4.69	3.37	4.23	MS	Meridian	4.86	3.64	4.43
AR	Bethel	6.69	2.37	3.81	MT	Glasgow	5.97	4.09	5.15
AR	Little Rock	5.29	3.88	4.69	MT	Great Falls	5.70	3.66	4.93
AZ	Tuscon	7.42	6.01	6.57	MT	Summit	5.17	2.36	3.99
AZ	Page	7.30	5.65	6.36	NM	Albuquerque	7.16	6.21	6.77
AZ	Pheonix	7.13	5.78	6.58	NB	Lincoln	5.40	4.38	4.79
CA	Santa Maria	6.52	5.42	5.94	NB	N. Omaha	5.28	4.26	4.90
CA	Riverside	6.35	5.35	5.87	NC	Cape Hatteras	5.81	4.69	5.31
CA	Davis	6.09	3.31	5.10	NC	Greensboro	5.05	4.00	4.71
CA	Fresno	6.19	3.42	5.38	ND	Bismark	5.48	3.97	5.01
CA	Los Angeles	6.14	5.03	5.62	NJ	Sea Brook	4.76	3.20	4.21
CA	Soda Springs	6.47	4.40	5.60	NV	Las Vegas	7.13	5.84	6.41
CA	La Jolla	5.24	4.29	4.77	NV	Ely	6.48	5.49	5.98
CA	Inyokem	8.70	6.87	7.66	NY	Binghamton	3.93	1.62	3.16
CO	Grandby	7.47	5.15	5.69	NY	Ithica	4.57	2.29	3.79
CO	Grand Lake	5.86	3.56	5.08	NY	Schenetady	3.92	2.53	3.55
CO	Grand Junction	6.34	5.23	5.85	NY	Rochester	4.22	1.58	3.31
CO	Boulder	5.72	4.44	4.87	NY	New York City	4.97	3.03	4.08
DC	Washington	4.69	3.37	4.23	OH	Columbus	5.26	2.66	4.15
FL	Apalachicola	5.98	4.92	5.49	OH	Cleveland	4.79	2.69	3.94
FL	Belie Is.	5.31	4.58	4.99	OK	Stillwater	5.52	4.22	4.99
FL	Miami	6.26	5.05	5.62	OK	Oklahoma City	6.26	4.98	5.59
FL	Gainesville	5.81	4.71	5.27	OR	Astoria	4.76	1.99	3.72
FL	Tampa	6.16	5.26	5.67	OR	Corvallis	5.71	1.90	4.03
GA	Atlanta	5.16	4.09	4.74	OR	Medford	5.84	2.02	4.51
GA	Griffin	5.41	4.26	4.99	PA	Pittsburg	4.19	1.45	3.28
HI	Honolulu	6.71	5.59	6.02	PA	State College	4.44	2.79	3.91
IA	Ames	4.80	3.73	4.40	RI	Newport	4.69	3.58	4.23
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IN	Indianapolis	5.02	2.55	4.21	TN	Oak Ridge	5.06	3.22	4.37
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KY	Lexington	5.97	3.60	4.94	TX	El Paso	7.42	5.87	6.72
LA	Lake Charles	5.73	4.29	4.93	TX	Midland	6.33	5.23	5.83
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MA	Lynn	4.60	2.33	3.79	WA	Pullman	6.07	2.90	4.73
MD	Silver Hill	4.71	3.84	4.47	WA	Spokane	5.53	1.16	4.48
ME	Caribou	5.62	2.57	4.19	WA	Prosser	6.21	3.06	5.03
ME	Portland	5.23	3.56	4.51	WI	Madison	4.85	3.28	4.29
MI	Sault Ste. Marie	4.83	2.33	4.20	WV	Charleston	4.12	2.47	3.65
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MN	St. Cloud	5.43	3.53	4.53					

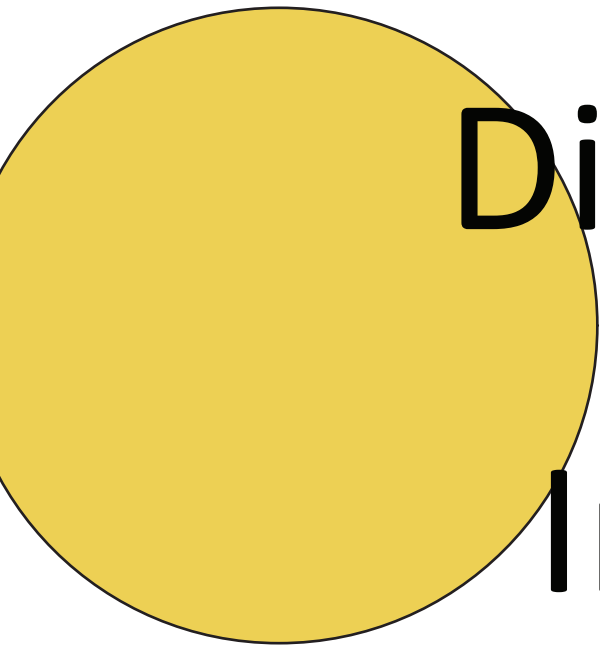
YEARLY HEAT AVERAGE

Yearly Average

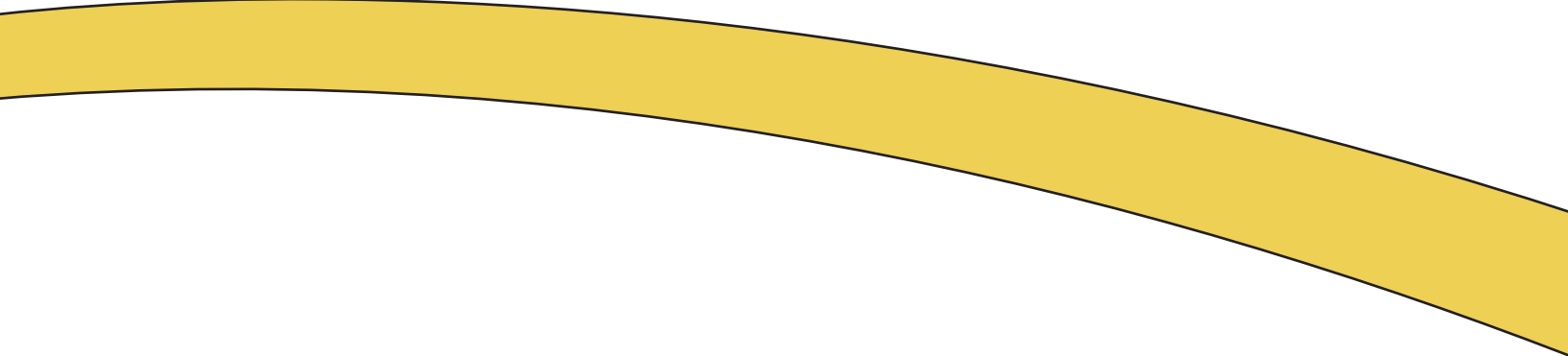


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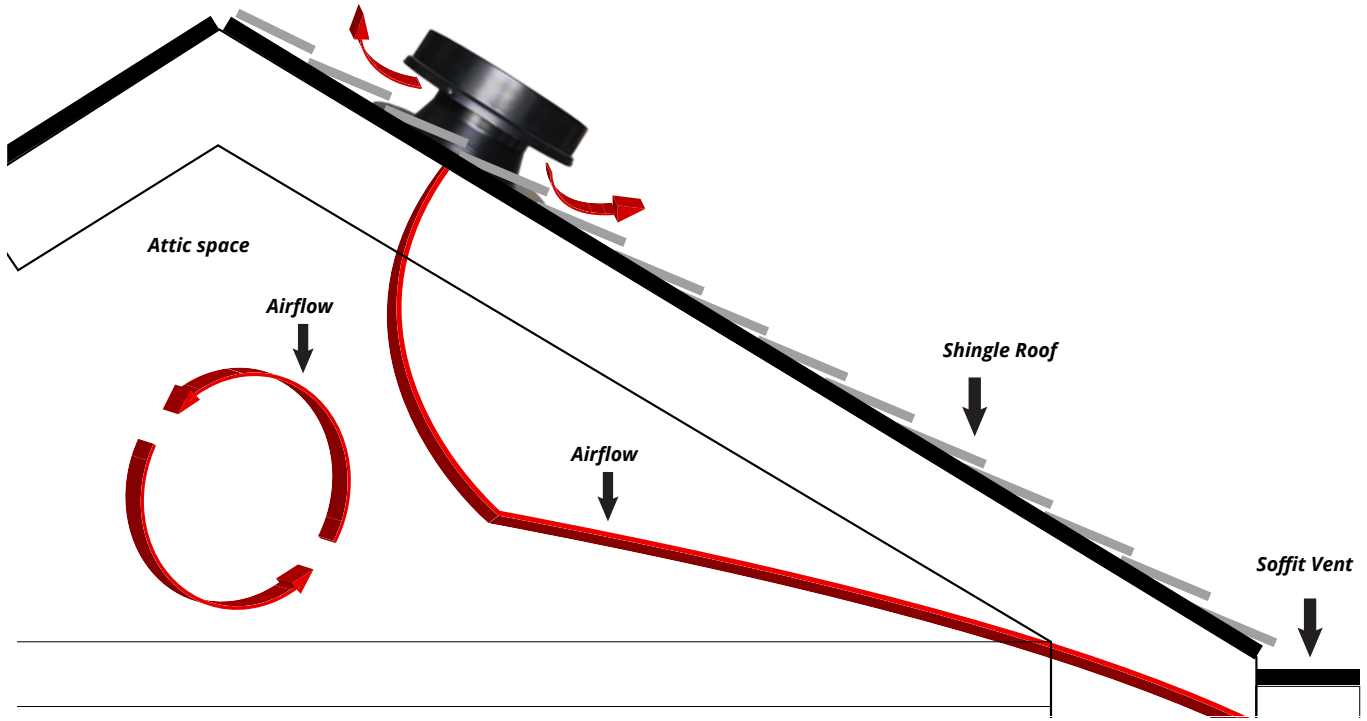




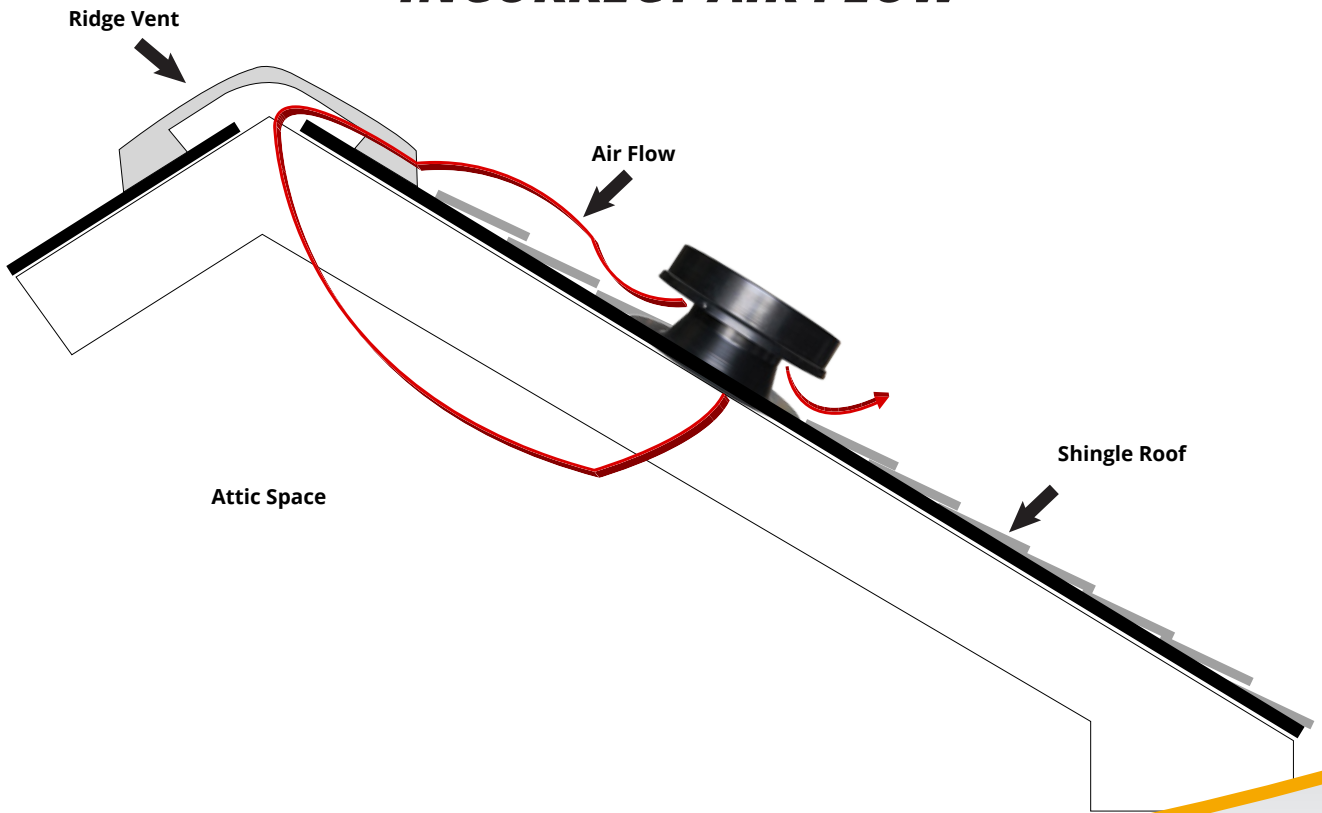
Diagrams & Images

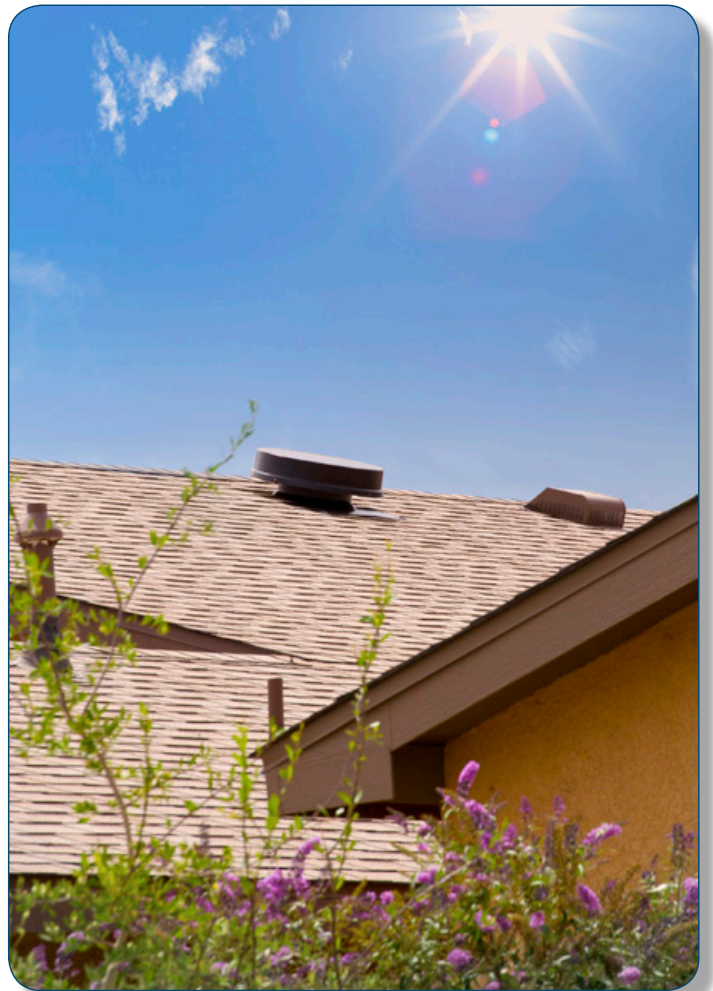


CORRECT AIR FLOW



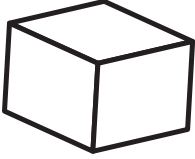
INCORRECT AIR FLOW





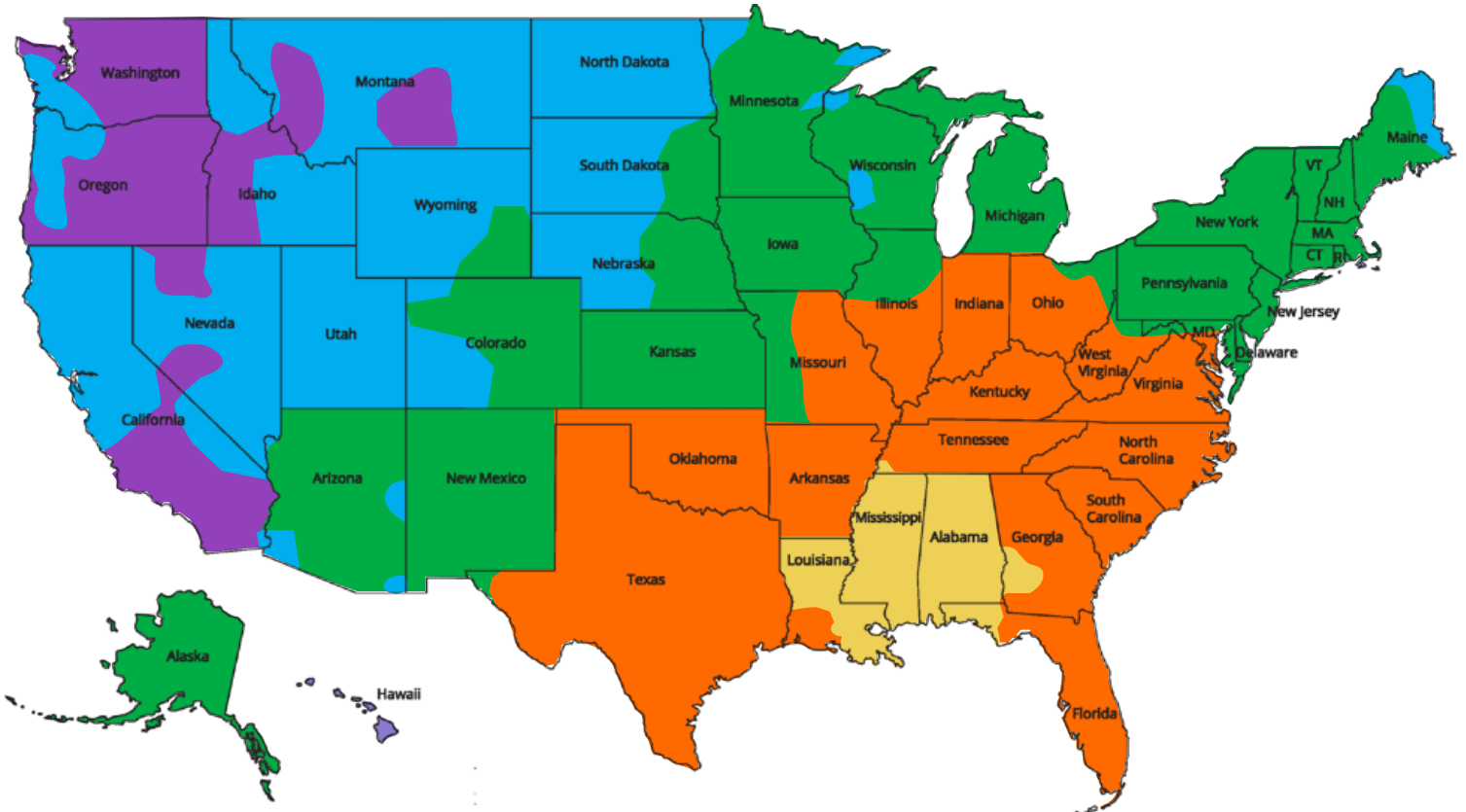


INSTALLED SOLARO DAY








Shipping Information

These are the *estimated* shipping transit days and charges from our manufacturing facility in Alabama.



Estimated Shipping Charges

	Transit days	Attic Fan	Light Fixture	Light Kit
	1 Day	\$45	\$30	\$35
	2 Days	\$50	\$30	\$40
	3 Days	\$60	\$30	\$50
	4 Days	\$65	\$35	\$55
	5 Days	\$70	\$35	\$60

Shipping charges are subject to change



Future Home of Solaro Energy



HOME OF SOLARO ENERGY, INC.

Solaro Aire™ Installments



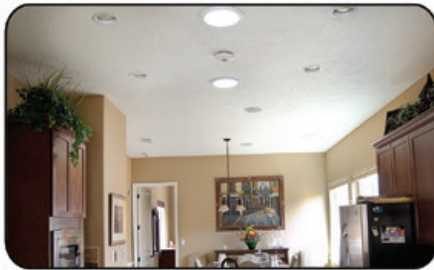
Solaro Aire™ Installments



Solaro Aire™ Crawl space system Installments



Solaro Day™ Installments



Solaro Day™ Street Lights Installments





Solaro™
ENERGY



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