Discover if a Sunward Solar Hot Water System will work on your property in less than 20 minutes by following these 3 Simple Steps:

Congratulations on your decision to evaluate a Sunward Solar Hot Water System! These instructions will help you make a preliminary assessment as to whether the system will work on your property.

This assessment should take less than 20 minutes to complete. You can upload your information to the Sunward website (see page 3), and receive a summary analysis by email. In addition, one of our Solar Specialists will review them and contact you to discuss results.

NOTE: If you haven't already done so, please take a few minutes to visit our website (www.GoSunward.com) and get better acquainted with the Sunward Solar Hot Water System and how it works.

Step 1:
Check your Current System

First, we want to make certain your existing system is in good working order and that there is ample room to locate the Sunward Solar Storage Tank and Heat Exchanger. Let's get started by answering a few simple questions.

Please record the answers to these questions here. When finished you can transfer them to the site assessment page of our web site for evaluation by one of our Solar Specialists.

1. Do you see any indication that your existing hot water system is leaking? (Check around the plumbing connections for rust or greenish crusting of pipes, valves, or joints.)

☐ Yes ☐ No

Next, we need to make sure there is enough room in your basement or utility space for the Sunward Solar Storage Tank and Heat Exchanger. Ideally, these components will be located within 20 feet of your existing hot water system to minimize heat loss.

2. Is there enough room in your basement or utility room to house the solar storage tank and heat exchanger? (4' x 3' footprint, and at least five feet of ceiling height).

☐ Yes ☐ No ☐ Not Sure

3. If so, about how many feet away is this space from your existing water heating appliance?

_____feet

TIP: Take a digital photo of the location you've chosen for the Solar Storage Tank and Heat Exchanger. (You can upload to our website for review. See page 3.)

Step 2:
Choosing a location for the Solar Collectors

There is a tremendous amount of flexibility when deciding where to locate the Sunward Solar Collectors. Here are the most important considerations to maximize solar performance. The collectors should:

— face within 45° to either side of due south

— receive 4-6 hours of sun per day, and

— mount on a roof, or on one of our ground mount frames within 95 feet of your home.

Orienting the Collectors

The Solar Collectors will function with virtually no loss in efficiency as long as they face within 45° to either side of true south. You can use page 5 of this document to check the angle of a possible location. Place the sheet on a firm surface (a clipboard or piece of cardboard) and hold it level such that the "S" is facing due south. Then use the grey arrow lines as a guide to see whether you can mount the collectors so they will face within 45° of either side of south.

Finding a location that receives enough sunlight each day.

The most important factor in how much solar hot water you'll make is how much sunlight your Solar Collectors receive. Ideally they'll be mounted in a location facing more or less south, in a spot that receives a total of 4-6 hours of sunlight per day (ideally with half of that time in midday, as the sun is most intense within 3 hours either before or after noon each day.)

You should stand at various locations on our property and determine whether they are sunny or shady spots. In general the horizon within 45 degrees to either side of the direction the collectors face should be relatively free of objects such as trees or buildings that may create shade on the collectors, remembering that shadows may be longer in winter months when the sun is lower in the sky.

Choosing Roof- or Ground-Mounting

Sunward provides both roof and ground-based options for mounting the Solar Collectors. For example, our ground mounting frame options allow you to mount the collectors up to 95 feet from your home.

The roof of your home, garage or existing outbuilding is also a logical mounting location. You'll need an open roof area at least 9' x 9' to accommodate the collectors.

In general we believe ground mounting using our Steel Frame or Timber Frame mounting kits is the best choice if you are considering performing some of the installation yourself, but this chart lists pros and cons of each:

	Roof-Mounting	Ground-Mounting
PROS	• Takes up no space on your property • Usually less visible than ground-mounting • No trenching required	• Easier to install for homeowners • Easy access for snow removal or cleaning • Can be oriented towards south most easily • Optional Timber Frame can be finished as shed
CONS	• Roof replacement or maintenance may require taking collectors down and reinstalling • Not easily accessible for snow removal or cleaning • Requires professional installation	• Ground Mount or Timber Frame takes space on property • Requires a trench: minimum of 8" deep x 4" wide

Evaluating Ground Mounting - It's generally easy to determine if there is a location within 95' of your house that is oriented correctly and receives sufficient sunlight. *Please see page 4 for more information about ground-mount options.*

Evaluating Roof Mounting - If you are thinking of mounting the Solar Collectors on the roof of your home or garage, we do NOT recommend climbing on your roof to evaluate the site. Instead, stand on the ground below the section of your roof where you think you'd like to mount the collectors and check the orientation the roof surface is facing. If the roof surface you are considering is not facing within 45° to either side of true south then you'll need to consider another location.

TIP: Take a digital photo, standing at the location you would like to mount the collectors and facing the direction they will point.

Step 3:

Planning a route to connect your Solar Collectors to the Heat Exchanger

With either a ground-mount or roof-mount system, you need to map out how to route the micro-tubing from the Solar Collectors to the Heat Exchanger.

Ground-Mounting

With a ground-mount system, you will bury the micro-tubing in a shallow trench. This is fairly easy to accomplish unless you are on ledge or have buried hazards to consider.

Exterior: Measure the path from the collector site to the point where the Micro-Tubing will enter your house (most commonly a sill, directly above your foundation). Use a string or flexible tape measure, and follow the path of the prospective trench, navigating around any places you can't (or prefer not to) trench through. This distance needs to be 95' or less. We do not recommend burying more than 95'.

Interior: Measure the distance from where the Micro-Tubing enters your house to the Heat Exchanger. Use a string or flexible tape measure, and follow the path you will use to route the micro-tubing. This should be less than 50' (but it is possible to extend this dimension with the purchase of additional materials).

Roof-Mounting

With a roof-mount system, you will normally route the lines down the exterior of the house and enclose it in the attractive conduit we provide. (Please note that since we don't recommend going on your roof, measurements for roof-mount will be estimates only.)

Exterior: Measure the path from the collector site to the point where the micro-tubing will enter your house (most commonly, a sill). Use a string or flexible tape measure, and follow the prospective path of the micro-tubing.

Measurement: _____

Interior: Measure the distance from where the micro-tubing enters your house to the Heat Exchanger. Use a string or flexible tape measure, and follow the path you will use to route the micro-tubing.

Measurement: _____

Exterior/Interior Combined: _____

Ideally, the total of the exterior and interior measurements should be less than 95'. However, it is possible to extend either dimension with the purchase of additional micro-tubing.

Not Sure About Collector Location?

If you don't have a mounting option that is a clear "winner," we recommend looking at two or more options. Our Solar Specialists can help you zero in on the best choice for your property

That's it! Your Site Assessment is almost done!

Please take this booklet to your computer and visit www.GoSunward.com/Sitescreen.

You'll enter the answers to these questions (plus a few more we'll ask you), and upload your photos (if you have taken them). A Sunward Solar Specialist will review your Solar Screening Assessment shortly and will contact you to talk about the results and to answer any questions you have about the Sunward System. Thanks!

SUNWARD™

Solar hot water made simple.™

SUNWARD™ Solar Collector Mounting Choices

Ground-Mount: Steel Rack (included)

Features:
- Durable powder-coated finish • Corrosion-free stainless steel hardware
- Adjustable feet for easy leveling • No footings required
- Earth anchors provide stability • Assembles in about 2 hours

Includes:
- Frame and all hardware
- Earth anchors (5) and drive rod
- 50' Exterior Micro-Tubing Burial Kit (2 50' lengths Micro-Tubing, 100' length of PV Cable, all housed in 3" sewer conduit)
- 50' Interior Micro-Tubing Kit (2 50' preinsulated lengths)
- Ducts (for housing above-ground exterior Micro-Tubing)
- Assembly instructions

Ground-Mount: Timber Frame Kit (optional)

Features:
- Rough-cut hemlock can be finished to your taste into a shed, playhouse or simply used free-standing as a firewood shelter
- Pressure-treated sill • Galvanized roofing • No footings required
- Earth anchors provide stability • Assembles in about 8 hours

Includes:
- Hemlock frame and all fastening hardware
- Earth anchors (5) and drive rod
- 50' Exterior Micro-Tubing Burial Kit (2-50' lengths Micro-Tubing, 100' length of PV Cable, all housed in 3" flexible sewer conduit)
- 50' Interior Micro-Tubing Kit (2-50' preinsulated lengths)
- Ducts (for housing above-ground exterior Micro-Tubing)
- Assembly instructions

Roof-Mount: Steel Mounting Kit (included)

Features:
- Durable powder-coated finish
- Corrosion-free stainless steel hardware

Includes:
- All brackets and hardware
- 100' Micro-Tubing Kit (2 100' preinsulated lengths with 100' length PV cable)
- Ducts (for housing Micro-Tubing routed from collectors down the exterior of your house)
- Assembly instructions

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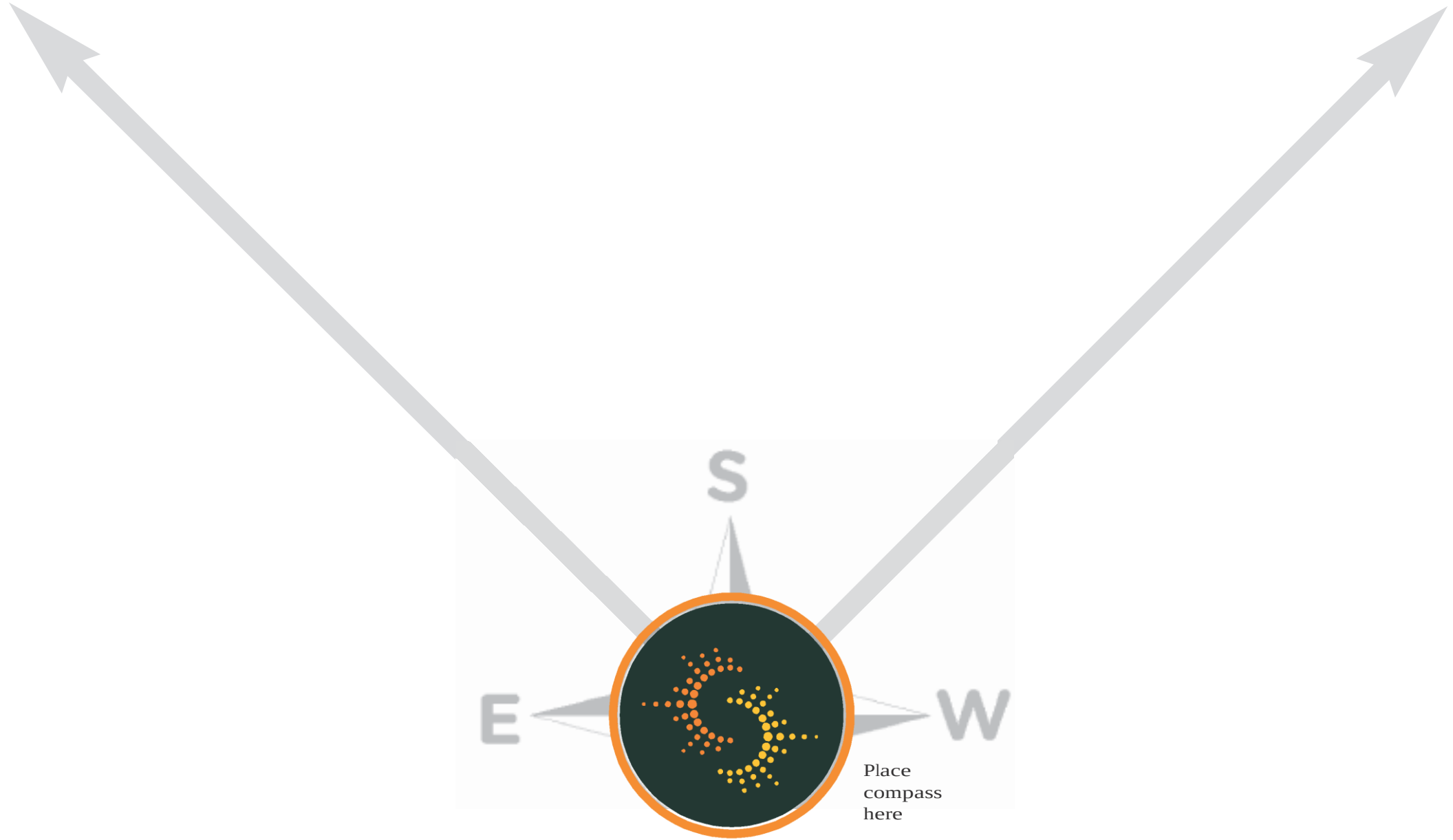
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