

ODL Solar Tubular Skylights



Features & Benefits

How does an ODL Tubular Skylight work?

ODL Tubular Skylight's patented Solar Lens® dome captures the light and reflects low angle light and more ambient light down through the highly reflective tubing. The reflective tubing maximizes light more efficiently than a traditional drywall skylight shaft, or accordion style flexible tube. The diffuser, which looks like a recessed light fixture, then spreads the light evenly throughout the room.

What sizes does the Tubular Skylight come in?

- 10-inch diameter fits between 16" or 24" on-center rafters.
- 14-inch diameter fits between 16" or 24" on-center rafters.
(A slight adjustment to the shape of the hole opening must be made for 16" on center rafters with a 14" tube. See installation instructions for details.)

How much tubing comes with each unit?

Each unit includes components to complete a 48" installation from top rim of flashing to ceiling. If more is needed, 20" and 48" extension tubes are available. The installation instructions show how to determine length.

Do ODL Tubular Skylights leak?

The ODL Tubular Skylight is designed for leak-free operation when installed properly. Our metal and injection molded roof flashings are one-piece and seamless to eliminate leakage. Roof sealant should be applied generously to the bottom of the flashing. It is also recommended to use roof sealant to seal screw heads on flashing and shingles to flashing. Tubular Skylights meet the ASTM E-331 Water Resistance Standard.

What are the advantages of the ODL Tubular Skylight's patented Solar Lens® Technology?

The Solar Lens Dome features our patented Solar Lens® reflex optics molded into the dome. This prismatic surface increases the amount of light directed downward through the tube. While this occurs throughout the day, it is most noticeable when the sun is relatively low in the sky, such as during the morning, late afternoon, or during the winter months.

Is the ODL Tubular Skylight energy-efficient?

ODL Tubular Skylights meet Energy Star criteria throughout the United States. The U-Factor is .43. The Solar Heat Gain Coefficient (SHGC) is .24.

For best results in colder climates though, the tube shaft should be insulated in the attic space.

Will Tubular Skylights help my plants?

We all know the importance of sunlight for healthy plants. The ODL Tubular Skylight is ideal for your plants because it captures sunlight from all directions and provides it all day long.

Will Tubular Skylights help the winter blahs?

Wintertime means that most of us get stuck indoor at home and work. Studies show that sunlight can cause increased productivity in the workplace as well as an overall feeling of well-being. By

bringing the sun into your house or home office, an ODL Tubular Skylight can cure your household of the winter blahs.

What happens on a cloudy day?

The ODL Tubular Skylight's reflective system transfers light down to the room with minimal light loss on cloudy days. The patented Solar Lens® technology allows light coming from any direction to be transferred down the tube, allowing the best light output possible.

To what degree do colder weather and northern latitudes affect the ODL Tubular Skylights performance? (i.e. Maine, Alaska, Austria, Switzerland, "snow areas"?)

Many ODL Tubular Skylights have been installed in northern USA, Canada and Europe. Because it has a complete sealed system, the Tubular Skylight works very well in colder climates.

Because of its small size and seals at the ceiling level, the ODL Tubular Skylight causes almost no heat gain or loss. This also prevents warm moist air from inside the house escaping and condensing inside the skylight. There is a chance that frost will appear in extremely cold temperatures, but it will disappear once the temperature increases. Also, for best results in colder climates, the tube shaft should be insulated in the attic space.

How durable is the ODL Tubular Skylight?

All parts are covered by a Limited Lifetime warranty. A Severe Weather® Tubular Skylight is available for areas with hail or hurricane exposure.

Is the ODL Tubular Skylight maintenance free?

Unlike traditional skylights, cleaning and repainting is unnecessary.

The shape of the dome and flashing virtually eliminates the gathering of debris, which keeps the dome clean and makes the ODL Tubular Skylight completely maintenance free. All assemblies and joints have seals to stop bugs and dirt from entering the tube.

If a bug does ever get into the tube, you can remove the diffuser lens by twisting it counter-clockwise.

Are there any condensation problems?

No. Seals at the ceiling level prevent warm moist air from entering the tube from the house.

Outside air is allowed to enter the tube via the dome, eliminating the difference in air temperatures that often cause condensation.

Will a tube skylight fade my carpet? The ODL Tubular Skylight absorbs 99% of UV rays to protect rugs, furniture, and clothes from fading.

Will there be heat loss from the tube?

The ODL tubular skylight meets Energy Star national thermal performance criteria. The maximum U-factor to meet this criteria is 0.60. The ODL tubular skylight had a U-factor of 0.43. The lower the U-factor the lower the rate of heat flow. Less heat flows in or out so that both heating and cooling bills are reduced.

What are the snow and wind load ratings for the tubular skylight?

The tubular skylight has a live or snow load rating of 100 pounds per square foot. It has a wind uplift load rating of 100 pounds per square foot. This information is contained in the ICBO (International Council of Building Officials) report #3933.

Lighting Performance

How large an area does the ODL Tubular Skylight light?

The 10" size spreads light evenly up to 150 square feet. The 14" size spreads light evenly up to 300 square feet. The square feet of estimated lighted area is based upon a 48" tube in full midday sun. The brightness of the sun may cause the lighted areas to differ. For example, the highest light output usually occurs at noon. Light output will also decrease as the length of tube increases.

How does the ODL Tubular Skylight's light output compare to electric lights or traditional skylights?

Light is measured in lumens and energy usage in watts. A standard 100 watt incandescent bulb produces 1200 lumens. A 40-watt, 48-inch fluorescent tube produces 2300 lumens.

* The 10-inch Tubular Skylight produces up to 3750 lumens

* The 14-inch Tubular Skylight produces up to 6500 lumens

The 10 inch Tubular Skylight compares to a 2' x 2' skylight and the 14-inch compares to a 2' x 4' skylight.

How does an ODL Tubular Skylight bring in more light than a traditional skylight?

Using traditional skylights, the light is passed through a drywall shaft and into the home. With this process, more light is likely to be absorbed in the shaft rather than reaching the room.

ODL Tubular Skylight's patented reflective system redirects low angle light (early morning and evening light) down the reflective tubing and into the room. Because the tube is 95% reflective, less light is absorbed and more light reaches the room.

Will the ODL Tubular Skylight fit all roof types?

Yes. Different flashings are available to ensure a perfect fit for most roof types. See the [How to Choose](#) section to help determine the flashing you need.

What if there is no attic space? Or, if I have a cathedral ceiling?

Our product has been designed for installation even where there is no access to the attic, and with the adjustable tubes and flashing options, most all applications can be addressed. See Installation section of web site for cathedral ceiling example.

How long can the tube be?

The longer the tube length, the less light output is obtained. Good lighting results can be expected for tube lengths up to 10 feet for the 10-inch Tubular Skylight and 15 feet for the 14-inch Tubular Skylight. The recommended maximum tube length is 12 feet for the 10" tube and 24 feet for the 14" tube.

When do you install the ODL Tubular Skylight if you are re-roofing?

In most cases, the Tubular Skylight can easily be installed at the same time that the roof is going on. Due to the ease of installation, the Tubular Skylight can be even installed after the new roof is in place.

When installing a Tubular Skylight on a tile roof, installation is usually done after the new roof is in place. On hot mop applications installation can be done before or after.

Will an ODL Tubular Skylight work when installed on the north side of a house? A Tubular Skylight does work well on the north side of a house; however, the best light output is obtained by exposing the dome to direct sunlight. Therefore it performs better where it receives as much direct sunlight as possible.

Can Tubular Skylight's be installed in commercial buildings?

Yes. The ODL Tubular Skylight has been installed on many commercial buildings throughout the world, including schools, churches, industrial buildings, post offices, and hospitals. For flat roofs, the Tubular Skylight metal flashing is recommended.

Who can install my tube for me?

If there are no listings for your area, consult the yellow pages for a roofing contractor, skylight installer or carpenter.

I have 16" on-center rafter spacing. Will a 14" tube work?

Yes, see page 9 of the installation instructions on how to cut a hole in the roof and in the ceiling. Diagrams are provided on adjusting the shape of the cut to avoid rafters. You will need to rotate the ceiling trim ring to that the flip tabs are unobstructed. This is also shown on page 9.

What is the maximum angle of adjustable tubes? You can angle the tubes up to 45 degrees to avoid obstacles in the attic.

Why is the light blue?

The protective film used inside the tubing, if not properly removed, can cast a blue light down through the tube. Be sure to remove all protective film from the tubing. Pay attention to the adjustable tube components where the film may be tight against the formed adjustable sections. Variables in weather, over-hanging trees, the color of roofing materials, and other surrounding conditions may contribute to the color cast. The mirror-like coating in the tube reflects light down into the room. The blue sky can give the light a blue cast. The moisture in new construction can also cause a rainbow effect as light through a moist tube. This goes away once the house dries out

Why do I get condensation and how do I eliminate it?

Condensation occurs when humid air hits the surface of acrylic or glass. You either have to warm the surface, or reduce the humidity in your home. Wrapping insulation around the tube sections in the attic/air space reduces the opportunity for condensation to form by restricting cold air infiltration in the tube. New construction or remodel projects introduce sources of increased moisture within the home. New wood, drywall joint compound, plaster, blown texturing, and wallpapering are common factors in increased humidity. To reduce humidity levels: vent dryers properly, run ventilation fans in your laundry room, bathroom, and kitchen. Cover damp crawl spaces with plastic or moisture barriers, and make sure gas heaters are properly ventilated. Moisture on your windows indicates the humidity in your home is too high. If you can't control the common sources of moisture, use a dehumidifier if necessary. The inner lens on the dual lens glass diffuser reduces solar heat gain and eliminates condensation in colder climates.

Code Approvals

What approvals does the ODL Tubular Skylight have?

ODL has received confirmation from ICC Evaluation Service, Inc. that its skylights comply with the provisions of the 1997 Uniform Building Code™. This confirmation, as evidenced in ICC-EC evaluation report [ER 3933](#), provides guidance to code officials faced with approving the use of ODL skylights under these codes. The evaluation report is available at www.icc-es.org. See ICBO Acceptance Criteria ([ac16](#) and [ac79](#)) used to test products to qualify for the ICBO report.

Tubular Skylights meet the ASTM E-331 Water Resistance Standard.

Severe Weather® model meets Florida Building Code and Miami-Dade County impact requirements. Notice of Acceptance packed with each unit. [Miami-Dade County Notice of Acceptance 03-0415.20](#).

Warranty

What is your warranty?

A limited Lifetime warranty is included with the ODL Tubular Skylight. A copy of the warranty is available in the [Warranty section](#) under Product Info.

Limited Lifetime Warranty



ODL Tubular Skylights feature a limited lifetime warranty for lasting performance and value.

Choosing the Correct Tubular Skylight

We make it easy to select the right tubular skylight kit to meet your needs. Click on the appropriate selection criteria for more information.

Choose by Lighting Needs

Tubular skylights bring soft natural light into the home. 99% of UV rays are absorbed to protect rugs, furniture, and clothes from fading.

Light output will vary by time of day, roof orientation and shaft length. Tubular skylights are not recommended for heavily shaded roofs.

Below are guidelines to help determine the size and number of skylights for a given space.

DIAMETER	LIGHT COVERS	LIGHT OUTPUT
10"	150 SQ.FT.	UP TO 3-100 WATT LAMPS*
14"	300 SQ.FT.	UP TO 5-100 WATT LAMPS*

*Light coverage based on full mid-day sun and 48" tube.

[Electric Light Kit](#) available to convert your skylight to a ceiling light.

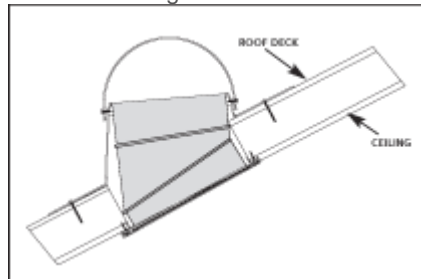
Choose by Length Requirements

The standard kit length is 48". 20" and 48" extension tubes are available to allow the skylight to be installed to longer lengths. The tubes have a highly reflective mirror finish but the maximum amount of light decreases as the length increases.

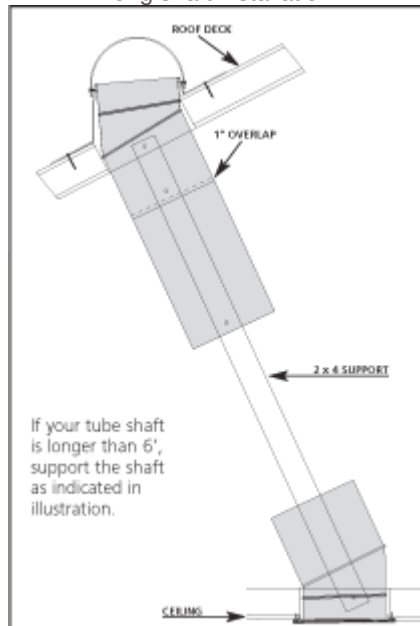
diameter	maximum length
10"	12'
14"	24'

Tip: Determine if you need extension tubes prior to starting installation.

cathedral ceiling / short shaft installation

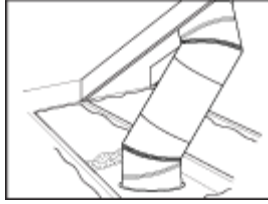


long shaft installation



See [installation instructions](#) for more detailed information. See page 7 of instructions for a "cut your tube length" chart.

Angled Tube Installation



Two adjustable tubes can be angled up to 45° to avoid interference with pipes, ducts, wires, etc.

This allows you to locate the diffuser in the best spot on the ceiling. Two adjustable tubes are included with every kit.

Choose by Roof Type*

Roof Type	Roof Pitch	Flashing in Kit	Tube Diameter Available
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Asphalt shingle	3:12 to 12:12	Composite	10" & 14"
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10"

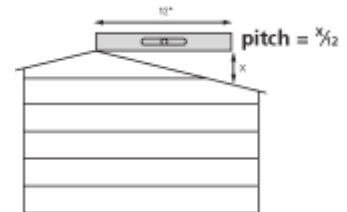
14"

Tile, asphalt shingle, flat or torch down roofs	Flat to 12:12	Seamless Aluminum	10" & 14"
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*Determining roof pitch

- "Roof Pitch" is how far the roof drops vertically for every 12" of horizontal run.



Choose by Weather Exposure

Severe Weather® Kit



Recommended in applications with hail or hurricane exposure. Meets Florida building code and Miami-Dade County impact requirements. Notice of Acceptance packed with each unit. Features a polycarbonate dome with seamless aluminum flashing.

