

## TABLE OF CONTENTS

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INSTALLATION INSTRUCTIONS.....	1
LIGHT CYCLES .....	2
HANGING HEIGHTS.....	3
INDOOR GROWING GUIDE .....	8

## INSTALLATION INSTRUCTIONS

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1. Open the bag containing the swag hook, two fairleads and three white hooks. The three white hooks can be used in place of the other accessories for an easier install or to keep the cord tidy along the floor.
2. Using the Hanging Height section of this manual, determine the distance the Aspect should be hung above the canopy of your plant.
3. Determine the best location to hang the Aspect and mark the ceiling.

**CAUTION:** Never attempt to use sticky hooks on the ceiling.

**CAUTION:** Do not install on a radiant heated ceilings or walls.

4. Install the swag hook. For wood ceilings, do not use an anchor. For drywall ceilings, use a 3/16" drill bit to pre-drill the hole for the anchor. For plaster or cement ceilings, please use the appropriate anchors found at your hardware store. Place the screw inside of the swag hook, then use a #2 Philips screwdriver to tighten the screw.



5. Install the fairleads on the wall. Install one fairlead along the top of the wall near the ceiling and one fairlead near the floor. The fairleads are designed to tighten down on the wire, keeping the Aspect in place and the cord taut along the wall.



6. Plug the light in! Make sure the plug is not loose fitting in the outlet. If the outlet is loose, have a qualified electrician replace your outlet. If you have pets in the home, make sure you read the section on the Safety Instructions for Pets.

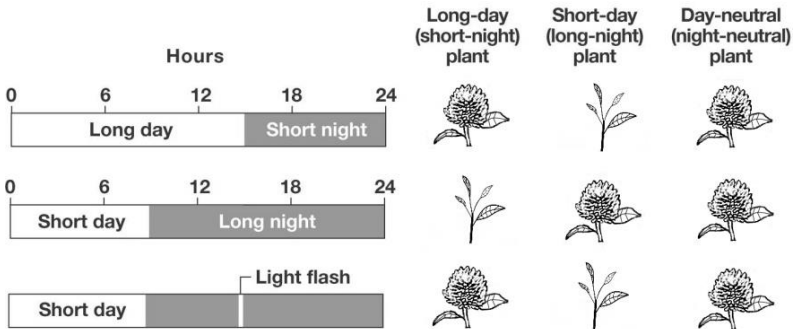


7. To install the Aspect through drop ceiling tiles, walls or other permanent structures, contact a qualified electrician. By opening the power supply box or cutting the wire, you are voiding the warranty of the Aspect. Follow all local laws and codes, including the National Electrical Code and National Fire Codes.

# LIGHT CYCLES

Most plants grow in two stages, the vegetative stage and flowering stage. During the vegetative growth stage, the plant is focused on growing in preparation for flowering. Some plants can be left in the vegetative stage indefinitely with no adverse effects. The flower stage is initiated when the light cycle changes into the critical light period, explained below. This change will cause your plant to focus completely on making flowers and seeds for reproduction.

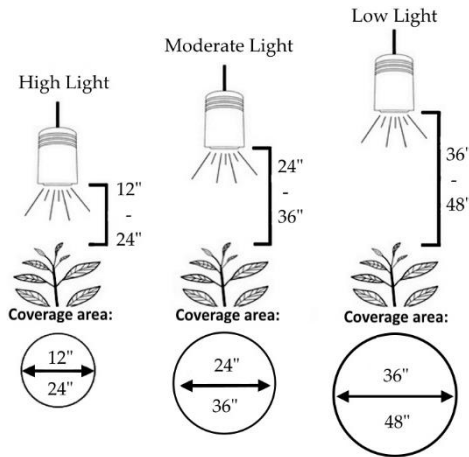
There are three types of plant responses: short-day, long-day, and day-neutral. The first two types have a critical light and dark period associated with them and can vary from plant to plant. This critical period will determine when the plant switches from the vegetative stage to the flowering stage. Day-neutral plants are generally unaffected by light cycles and flower when the plant is mature. If you find that it is difficult to flower a short-day plant due to a light flash at night, we recommend flowering in a closet or grow tent.



Long-day (Short-night)	Short-day (Long-night)	Day-neutral (Night-neutral)
Flowers when exposed to light longer than a certain number of hours.	Flowers when exposed to light for less than a certain number of hours.	Unaffected by day-length; flowers at a certain stage of maturity.
Maintain a lightcycle of under 12* hours to promote vegetative growth.	Maintain a lightcycle of over 12* hours to promote vegetative growth.	Generally unaffected by the lightcycle. More light may encourage more growth.
Flowering is stimulated if dark period is interrupted by a flash of light.	Flowering is prevented if dark period is interrupted by a flash of light.	Unaffected by flash of light; flowering not based on photoperiodism.
Normally flower in spring and summer when day length is over 12 hours.	Normally flower in early spring or fall when day length is under 12 hours.	Affected more by temperature change, plant maturity, and other factors.
<b>Common examples:</b> <ul style="list-style-type: none"> <li>• Chrysanthemums</li> <li>• Cosmos</li> <li>• Green Onion</li> <li>• Morning Glory</li> <li>• Soya Beans</li> </ul>	<b>Common examples:</b> <ul style="list-style-type: none"> <li>• Cabbage</li> <li>• Larkspur</li> <li>• Petunia</li> <li>• Spinach</li> <li>• Carrot</li> <li>• Lettuce</li> <li>• Poppy</li> <li>• Wheat</li> <li>• Henbane</li> <li>• Onion</li> <li>• Radish</li> </ul>	<b>Common examples:</b> <ul style="list-style-type: none"> <li>• Balsam</li> <li>• Cotton</li> <li>• Corn</li> <li>• Tomato</li> <li>• Beans</li> <li>• Cucumber</li> <li>• Potato</li> <li>• Rhododendrons</li> <li>• Chillies</li> <li>• Dandelion</li> <li>• Tobacco</li> </ul>

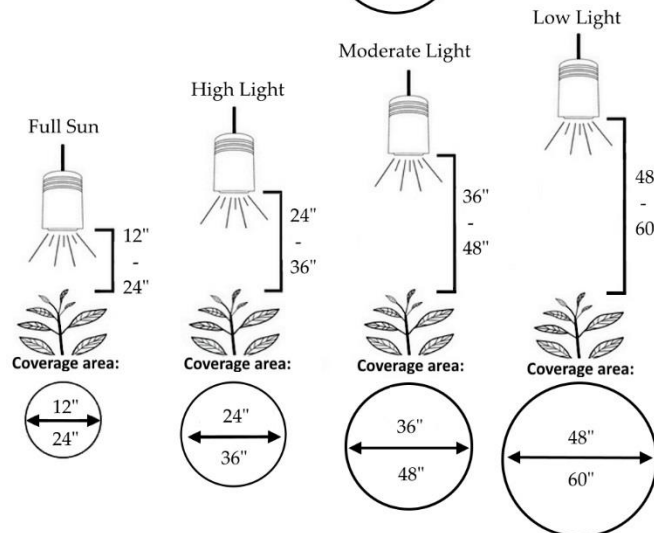
# HANGING HEIGHTS

Finding the right distance between the Aspect grow light and your plant can be a challenge. The hanging height may vary if your plant receives significant natural light or no light at all. Below are the hanging heights and corresponding coverage area for both the small and large Aspect grow light. The following pages list out the most popular plants with recommended hanging heights. Make sure to pay attention to your plants. Make sure to pay attention to your plants. Adjust the hanging height if you notice your plant stretching or the leaves burning.



## Small Aspect Grow Light

The small Aspect grow light (left) is recommended for most small herb gardens and low – moderate light plants.



## Large Aspect Grow Light

The large Aspect grow light (below) is recommended for moderate – high light plants, small trees, and more!

<b>Common Name</b>	<b>Lighting Requirements</b>	<b>Small Aspect</b>	<b>Large Aspect</b>
African Violets	Moderate to Low Light	24" - 48"	48" - 60"
Aglaonemas	Moderate to Low Light	24" - 48"	48" - 60"
Aloe	High Light	12" - 24"	24" - 36"
Aluminum Plant	Moderate to Low Light	24" - 48"	48" - 60"
Amaryllis	High Light	12" - 24"	24" - 36"
Anthurium	Moderate Light	24" - 36"	36" - 48"
Aralia, Balfour	High Light	12" - 24"	24" - 36"
Aralia, False	High to Moderate Light	12" - 36"	24" - 48"
Aralia, Ming	High to Moderate Light	12" - 36"	24" - 48"
Arrowhead Vine	Moderate Light	24" - 36"	36" - 48"
Azalea	High Light	12" - 24"	24" - 36"
Begonia, Angel Wing	Moderate Light	24" - 36"	36" - 48"
Begonia, Iron Cross	Moderate Light	24" - 36"	36" - 48"
Begonia, Strawberry	Moderate Light	24" - 36"	36" - 48"
Bird-of-Paradise	High to Moderate Light	12" - 36"	24" - 48"
Bomeliad, Earth Star	Moderate Light	24" - 36"	36" - 48"
Bougainvilla	High Light	12" - 24"	24" - 36"
Brake, Victoria	High Light	12" - 24"	24" - 36"
Bromeliad, Air Plant	High Light	12" - 24"	24" - 36"
Bromeliad, Bird Nest	Moderate to Low Light	24" - 48"	48" - 60"
Bromeliad, Blushing	Moderate Light	24" - 36"	36" - 48"
Bromeliad, Dyckia	High Light	12" - 24"	24" - 36"
Bromeliad, Flaming Sword	Moderate to Low Light	24" - 48"	48" - 60"
Bromeliad, Friendship	Moderate Light	24" - 36"	36" - 48"
Bromeliad, Pineapple	High Light	12" - 24"	24" - 36"
Bromeliad, Star	Moderate to Low Light	24" - 48"	48" - 60"
Bromeliad, Living Vase	Moderate Light	24" - 36"	36" - 48"
Burro's (Donkey's) Tail	High Light	12" - 24"	24" - 36"
Cactus, Christmas	Moderate Light	24" - 36"	36" - 48"
Cactus, Easter	Moderate Light	24" - 36"	36" - 48"
Cactus, Old Man	High Light	12" - 24"	24" - 36"

<b>Common Name</b>	<b>Lighting Requirements</b>	<b>Small Aspect</b>	<b>Large Aspect</b>
Cactus, Prickly Pear	High Light	12" - 24"	24" - 36"
Cactus, Thanksgiving	Moderate Light	24" - 36"	36" - 48"
Calathea	Moderate Light	24" - 36"	36" - 48"
Cast Iron Plant	Moderate to Low Light	24" - 48"	48" - 60"
Century Plant	High Light	12" - 24"	24" - 36"
Chenille Plant	High Light	12" - 24"	24" - 36"
Chinese Evergreens	Moderate to Low Light	24" - 48"	48" - 60"
Citrus	High Light	12" - 24"	24" - 36"
Coffee Plant	High to Moderate Light	12" - 36"	24" - 48"
Coralberry	Moderate Light	24" - 36"	36" - 48"
Croton	High Light	12" - 24"	24" - 36"
Crown of Thorns	High to Moderate Light	12" - 36"	24" - 48"
Cyclamen	High to Moderate Light	12" - 36"	24" - 48"
Dracaena, Corn Plant	Moderate to Low Light	24" - 48"	48" - 60"
Dracaena, Dragon Tree	High to Moderate Light	12" - 36"	24" - 48"
Dracaena, Gold Dust	High to Moderate Light	12" - 36"	24" - 48"
Dracaena, 'Janet Craig'	Moderate to Low Light	24" - 48"	48" - 60"
Dracaena, Red Margined	Moderate Light	24" - 36"	36" - 48"
Dracaena, Song of India	Moderate Light	24" - 36"	36" - 48"
Dracaena, 'Tri-color'	Moderate Light	24" - 36"	36" - 48"
Dumbcane	Moderate Light	24" - 36"	36" - 48"
Elephant's Ear	Moderate Light	24" - 36"	36" - 48"
Fern, Asparagus	Moderate Light	24" - 36"	36" - 48"
Fern, Bird's Nest	Moderate to Low Light	24" - 48"	48" - 60"
Fern, Button	High to Moderate Light	12" - 36"	24" - 48"
Fern, Rabbit's Foot	High to Moderate Light	12" - 36"	24" - 48"
Fern, Staghorn	Moderate Light	24" - 36"	36" - 48"
Ferns (Sword, Dallas, Boston)	High to Moderate Light	12" - 36"	24" - 48"
Ferns, Maidenhair	Moderate Light	24" - 36"	36" - 48"
Fig, Creeping	Moderate Light	24" - 36"	36" - 48"
Fig, Fiddleleaf	Moderate Light	24" - 36"	36" - 48"

<b>Common Name</b>	<b>Lighting Requirements</b>	<b>Small Aspect</b>	<b>Large Aspect</b>
Fig, Weeping	Moderate Light	24" - 36"	36" - 48"
Fuchsia	Moderate Light	24" - 36"	36" - 48"
Gardenia	High to Moderate Light	12" - 36"	24" - 48"
Gloxinia	High Light	12" - 24"	24" - 36"
Goldfish Plant	High Light	12" - 24"	24" - 36"
Hawaiian Ti Plant	Moderate Light	24" - 36"	36" - 48"
Haworthia	Moderate Light	24" - 36"	36" - 48"
Hibiscus	High to Moderate Light	12" - 36"	24" - 48"
Hoya / Wax Plant	High Light	12" - 24"	24" - 36"
Indian Rubber Plant	High Light	12" - 24"	24" - 36"
Ivy, Algerian	High to Moderate Light	12" - 36"	24" - 48"
Ivy, Aralia (Fatshedra)	High to Moderate Light	12" - 36"	24" - 48"
Ivy, English	High to Moderate Light	12" - 36"	24" - 48"
Ivy, Grape	Moderate Light	24" - 36"	36" - 48"
Ivy, Parlor	Moderate Light	24" - 36"	36" - 48"
Ivy, Swedish	Moderate Light	24" - 36"	36" - 48"
Ivy, Variegated Mintleaf	Moderate Light	24" - 36"	36" - 48"
Ivy, Wax	Moderate Light	24" - 36"	36" - 48"
Jade Plant	High to Moderate Light	12" - 36"	24" - 48"
Kalanchoe	High Light	12" - 24"	24" - 36"
Lantana	High Light	12" - 24"	24" - 36"
Lipstick Plant	High Light	12" - 24"	24" - 36"
Natal Plum	High Light	12" - 24"	24" - 36"
Nerve Plant	Moderate to Low Light	24" - 48"	48" - 60"
Norfolk Island Pine	Moderate Light	24" - 36"	36" - 48"
Orchid, Buttonhole	High Light	12" - 24"	24" - 36"
Orchid, Cattleya	High Light	12" - 24"	24" - 36"
Orchid, Dendrobium	High to Moderate Light	12" - 36"	24" - 48"
Orchid, Lady's Slipper	Moderate Light	24" - 36"	36" - 48"
Orchid, Moon/Vanda	Moderate Light	24" - 36"	36" - 48"
Orchid, Oncidium	Moderate Light	24" - 36"	36" - 48"
Orchid, Phalanopsis	High to Moderate Light	12" - 36"	24" - 48"

<b>Common Name</b>	<b>Lighting Requirements</b>	<b>Small Aspect</b>	<b>Large Aspect</b>
Palm, Fan	High to Moderate Light	12" - 36"	24" - 48"
Palm, Parlor	Moderate to Low Light	24" - 48"	48" - 60"
Palm, Sago	Moderate Light	24" - 36"	36" - 48"
Panda Plant	High Light	12" - 24"	24" - 36"
Peace Lily	Moderate to Low Light	24" - 48"	48" - 60"
Peperomia	Moderate Light	24" - 36"	36" - 48"
Philodendron	Moderate to Low Light	24" - 48"	48" - 60"
Philodendron, Split Leaf (Monstera)	Moderate to Low Light	24" - 48"	48" - 60"
Piggyback Plant	High Light	12" - 24"	24" - 36"
Pitcher Plant	High Light	12" - 24"	24" - 36"
Poinsettia	High Light	12" - 24"	24" - 36"
Polka Dot Plant	High to Moderate Light	12" - 36"	24" - 48"
Ponytail Plant	High to Moderate Light	12" - 36"	24" - 48"
Pothos	High to Moderate Light	12" - 36"	24" - 48"
Prayer Plant	Moderate Light	24" - 36"	36" - 48"
Primrose	Moderate Light	24" - 36"	36" - 48"
Primrose, Cape	High Light	12" - 24"	24" - 36"
Purple Passion (Velvet)	High Light	12" - 24"	24" - 36"
Purple Waffle Plant	Moderate to Low Light	24" - 48"	48" - 60"
Rosary Vine	High Light	12" - 24"	24" - 36"
Schefflera (Umbrella)	High to Moderate Light	12" - 36"	24" - 48"
Shamrock Plant	High to Moderate Light	12" - 36"	24" - 48"
Shrimp Plant	High Light	12" - 24"	24" - 36"
Snake Plant	Moderate to Low Light	24" - 48"	48" - 60"
Spiderplant	Moderate Light	24" - 36"	36" - 48"
String-of-Pearls	High Light	12" - 24"	24" - 36"
Tahitian Bridal Veil	High to Moderate Light	12" - 36"	24" - 48"
Tradescantia Zebrina	High to Moderate Light	12" - 36"	24" - 48"
Venus Fly Trap	High Light	12" - 36"	24" - 36"
Yucca	High to Moderate Light	12" - 36"	24" - 48"
Zebra Plant	Moderate Light	24" - 36"	36" - 48"



# INDOOR GROWING GUIDE

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Plants should not be an overlooked element in creating a warm and inviting room; a perfectly placed plant can bring the entire room to life! For beginner gardeners, or even those with a year or two under their belts, the world of garden tools, materials, and supplies can be overwhelming. We provided this guide to help you decide what essentials you need to get started.

## **Lighting:**

Lighting is the most important first step for your plants! This manual will help you determine the appropriate hang height, light cycles and more. You can tell if your plant is not receiving enough light if it stops growing, the spaces between the leaves on new growth are much longer than before, the new leaves are smaller, the leaf color is lighter, or older leaves are dead.

It is important that light covers the entire plant, including the sides of the plant. Larger plants may require two or more Aspects to provide adequate light intensity. If you have questions, you can contact Soltech Solutions and we would be glad to assist you.

## **Temperature:**

Temperature is a major factor influencing plant growth indoors. Before picking out your plants, consider the optimal temperature the plant needs. While many plants grow at temperatures around 60°F – 85°F (15°C – 29°C), some tropical plants grow best at temperatures exceeding 85°F. Be careful not to place plants near AC vents or heaters, the change in temperature may kill them.

## **Humidity:**

Some indoor plants need high humidity and excellent air circulation for optimal growth. Humidity below 20% is considered low, up to 50% is medium, and above 50% is high. Many plants come from tropical regions and require high humidity. Since most homes have low humidity levels, you can do a few things to increase humidity.

- Place plants close together. Plants naturally humidify the air around them.
- Set your plants on a tray of pebbles filled with water.
- Use a humidifier if your air is very dry.

Take caution when misting plants, especially if your plant has hairy leaves. Your plant may be more susceptible to disease and mildew. You may want to consider adding a fan to increase air circulation.

**Pots & Containers:**

To start your garden, you need the right type of container for your plant. The container should have drainage holes; water should be able to drain out. Plants cannot sit in waterlogged soil or they will die.

**Watering:**

Often overlooked, watering your plants properly is important. When dealing with how much water to apply, consider the plant type, plant size, container size, soil moisture and light intensity. For most plants, when deciding when you should water, feel the soil by pushing your finger about 1-2 inches below the dirt's surface. If the soil is still moist, do not water the plant. Overwatering can lead to root rot, mildew, and disease. Water meters are available at most greenhouses to simplify watering.

**Soil:**

Do not use topsoil or soil from your garden! We recommend that you find a high quality, pre-mixed soil at your local garden stores that was designed for container gardening. Topsoil and garden soil have extremely poor drainage abilities and you may introduce unwanted pests in your home. If you find your soil does not drain well, you can add perlite, coarse sand, or peat moss to increase drainage. Different plants grow better in different soil, make sure you know which soil you plant needs before planting.

**Buying New Plants:**

Buying new plants is always fun, but make sure to look for healthy plants with medium to dark green foliage. Avoid plants with unnatural yellow or brown leaves. Look for pest, especially small white mites on the undersides of the leaves. Remove the plant from the pot and examine the root system. Healthy roots generally are visible along the outside of the soil and have an earthy smell. Brown or black roots, especially if they have a foul smell, are signs of a problem.

**Acclimatization:**

Acclimatization is the adaptation of a plant to a new environment. Changing the environment, the plant is accustomed to will stress the plant and may cause damage, prevent growth, or even kill the plant. The greater the difference between the previous environment and the new environment, the greater the stress the plant endures.

**Pruning:**

Pruning your plant is a great way to encourage dense growth while maintaining an optimal size and shape. Plants concentrate growing on the top and outer parts; pruning these growth areas regularly will encourage growth

closer to the inner parts of the plant. Although not all houseplants need pruning, most will benefit from some attention, even if it is simply removing dead leaves or diseased or damaged stems.

### **Pest Management:**

Like all plants, indoor plants will occasionally come under attack from pests. If you notice a plant dropping leaves or otherwise looking ill, take a close look. Chances are, it is infected with unwanted pests. If not quickly treated, infestations can be very severe, spread quickly and kill your plants.

Some of the most commonly encountered arthropod pests found on plants are those that feed on plant juices. These pests include aphids, scales, mites, leafhoppers, and plant bugs. Some of these pests can even act as vectors of plant diseases.

To remove the infestation, we recommend diluted organic Neem Oil or Mighty Wash. Both can be bought in stores or online. You should first test these in a small area before using them on the plant. Some plants are sensitive to the sprays and you could kill them. You can also treat the plants by wiping leaves and stems with insecticidal soap. Heavy infestations may be too difficult to treat, consider discarding these plants.

### **Fungus Gnats:**

These gnats are a common pest of plants grown indoors, especially where humidity and moisture are high. You normally notice one or two gnats flying around your plants or near windows and you think nothing about it. Before you know it, they lay eggs in the wet soil and multiply.

To rid your plant and home of fungus gnats, you need to let your plant soil dry out between watering. Fungus gnats do well in damp soil, allowing your soil to dry out an inch or two down will kill larvae and inhibit egg development. We found that yellow sticky paper is the best method of killing flying adults. For plants that can tolerate neem oil, we recommend adding a small amount of Neem oil when you water your plants. Neem Oil will help kill eggs and larvae deep down in the soil. It may take over a month to fully rid our home of Fungus Gnats.