

# Awning Installation Guide

# WARNING:

Before starting assembly and installation, please note: awning frame parts are made of metal and may have sharp corners, please handle the awning carefully. You MUST read and follow our assembly and installation instructions or consult a licensed awning specialist. Please keep children away from your working area.

Before opening or operating the awning, be sure all brackets are mounted precisely and securely into wall studs and all screws are properly tightened. Please carefully read the installation guide; improper installation, such as failure to secure brackets, could result in possible awning collapse, serious injury and/or property damage. Securely anchoring the awning is your responsibility.

Never attempt to remove the fabric from awning. Do not attempt to loosen, adjust, or remove the arms. The arms are under extremely heavy tension from arm springs, located inside both the left and right arms. Serious bodily injury and/or property damage can occur.

It is highly recommended never to attempt to repair or adjust units without consulting an awning specialist or the manufacturer.

Awnings should always be closed during high or gusting winds, rain, snow, ice and when not in use. The product's main purpose is for shading. Acacia Group Inc does not warrantee the awning against any weather-related damage under any circumstances.

For any question or assistance with installation and assembly, please contact an awning installer, awning specialist or us at Toll Free: 1 855 866 877 0 or visit our website www.Acacia-Group.ca for more detailed information.

# Preparation of Awning Installation

## Important Information

Before attempting to install the awning, it is necessary to read ALL instructions carefully. Damage to the awning during installation is not covered by the warranty.

If you need further assistance, please contact a local contractor for professional installation.

IN ORDER TO INSTALL THE AWNING, YOU'LL NEED THE FOLLOWING TOOLS

- Drill
- 1/8" drill bit for locating studs
- <sup>1</sup>/<sub>4</sub>" masonry bit (for drilling through stucco, brick or concrete)
- Level (a 3' or 4' would be best), or a string level.
- Ratchet with a 9/16" socket drive
- ½" open end wrench
- Stud finder (optional)
- Ladder (two or three 6' or 8' step ladders)
- Tape measure
- Allen wrench, 3/8"
- Phillip's head screwdriver
- Pencil or marker
- Mounting hardware (For wood structure we recommend for example 3/8" x 5 1/8" GRK Fasteners RSS™ RUGGED STRUCTURAL SCREW from your local hardware store.)

Parts included in the package

- Awning unit (assembled unit)
- Wind Sensor
- Remote Control
- Wifi Hub
- Wall mounting brackets (2 6 pieces) with bolts, nuts, and washers for securing the awning to the bracket
- Soffit mounting brackets (2 6 pieces) with bolts, nuts, and washers for securing the awning to the bracket

Note: For brick and concrete surfaces, special anchors can be purchased at your local hardware store.

#### Installation Requirements

Normal installation height of brackets center should be between 8' to 9'. A height of 7' is the lowest mounting height recommended. If doors swing out, a minimum 12" clearance is required, so the awning will clear doors with sufficient pitch. Calculate the headroom your awning will require.

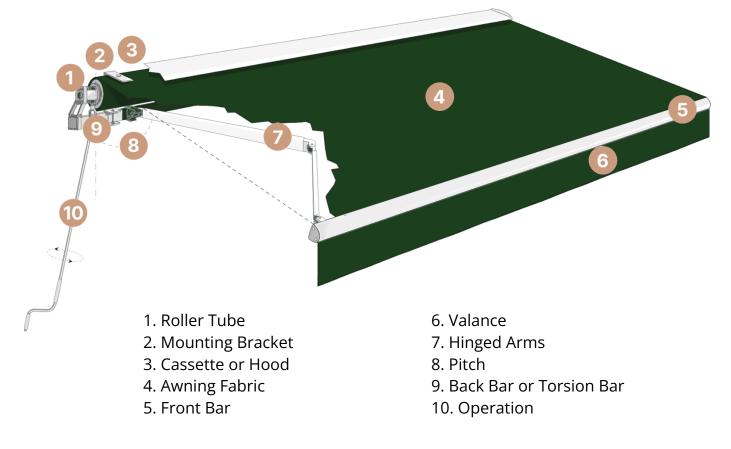
The recommended pitch for the awning is between 1" to 2" per foot projection. If you are mounting it under an overhang, please allow a 4" clearance between the top of the roller tube and the overhang, and a 6" clearance for a cassette unit if applicable. For a 10' projection awning, it is necessary to have 10" to 20" of pitch, depending on the mounting height.

After installation height is determined, draw a "mounting bracket" line with a string level or pencil a line using a 3' or 4' long straight level. It is VERY important that this line is leveled, which may mean the line might not be parallel with structural lines, such as siding on the exterior wall.

The ideal placement of wall mount brackets is no further than 12" away from the shoulder support bracket, which carries all the weight of the lateral arm.

Caution: The lateral arm awning exerts significant tension on the torsion mounting bar. Failure to install properly could result in property damage and/ or bodily injury.

# Awning Components



## INSTALLING WALL BRACKETS

The correct wall bracket installation is the most essential aspect of the awning mounting process. Wind of even moderate intensity can place great stress on the brackets; therefore, proper installation is an absolute necessity.

Verify that your shipment contains all the necessary components. Ensure that your installation location is free of interference. Check that obstructions, such as downspouts, lights, vents, trim, etc. will not impede the installation or operation of the awning.

Place safe, stable ladders on a flat, dry, secure surface at both ends of where the awning will be installed. Next determine where brackets can be fastened to the wall. All wall brackets must be securely mounted to **STUDS**. Failing to secure wall brackets in studs may result in awning collapse, possible bodily injury, and /or property damage. You may use a stud finder to establish the location of nails. Nails are a sign, but not guarantee of where studs and rafters are. It is vital that you verify your conclusions completely. While tightening the lag bolt in a stud or rafter, it should never become extremely easy to turn the ratchet. Mark the positions of the studs or rafters where you have decided to install your awning.

After locating the studs, verify the edges and center of the stud by drilling a series of small holes. (Be sure that you have hit a stud). Confirm that the bracket is level with the line, and place over the center of the stud. Fasten lag bolts at least two inches into stud centers in order to firmly secure brackets. When fastening brackets into siding, trace and cut the area around the base of the bracket. Repeat all previous steps for the remaining brackets. Be sure to use all the brackets provided. Position a bracket as close as possible to each of the lateral arms. Position the remaining bracket(s) evenly across the awning torsion bar into the nearest stud. It is of absolute importance that all brackets are aligned with each other, in order that the torsion bar can be easily fitted. Using a string as reference, ensure that the brackets are completely level and aligned properly. After finishing fastening the wall brackets, fill in and seal any extra holes that may have been drilled. Caulking around the brackets is essential to prevent moisture buildup behind cut siding.

**CAUTION:** Brackets <u>MUST</u> be installed into wall studs. The brackets should be secured with lag bolts as close to the center of the stud or joist as possible.

# MOUNTING AWNING TO BRACKETS

Place safe, stable ladders on a flat, dry, secure surface at both ends of where the awning will be installed.

In order to prevent the awning from unexpectedly opening during the installation process, make certain that the awning is in the closed position with restraining straps securing the arms. **WARNING: Do not remove restraining straps until installation is complete.** Because the lateral extension arms are under high tension, they have the potential to cause serious property damage or bodily injury if not tied close during installation. Do not attempt to repair or disassemble the lateral extension arms yourself.

With assistance, lift the awning to the wall brackets and slip the torsion bar (back bar) into brackets. Ideally, the torsion bar should be moved to very back of the bracket. If the torsion bar has difficulty slipping into the brackets, first hold the bar in place. Then slowly lift or lower the front bar until the torsion bar completely slides into the bracket. This may require the brackets to be loosened slightly. Once the torsion bar is secure, retighten the lag bolts on the brackets. Next, install the retaining bolts onto the brackets. Make sure the awning is centered, and then secure the retaining bolts with nuts. You may now remove all restraining straps. While removing the restraining straps from the awning, be careful not to damage the fabric.

CAUTION: Verify that all nuts and bolts are completely tightened.

REMEMBER: To avoid damage from wind, retractable awnings should be retracted when not in use.

# Installation on Various Types of Surfaces

## For Stone

When determining a location to install the awning, be sure **not** to choose an unstructured facade. The awning requires a structured and flat surface. If the surface is uneven, the brackets will not align well enough for awning installation or may impede the normal operation. In order to make a non-flat surface useable, you may be able to use a grinder to even out the areas needed to mount brackets. A second option is fastening a pressure treated 2"x 8" wood board to the wall and into the beam. Toggle style fasteners should be used for mounting into block which will require longer bolts. Place safe, stable ladders on a flat, dry, secure surface at both ends of where the awning will be installed. Next determine where brackets should be mounted to the wall. Then draw a level, horizontal line at a selected height above the patio. Be sure to confirm that the line is level using either a laser or string level. When drilling through stone, use a masonry bit. Caulking around the holes and brackets is essential to prevent moisture buildup.

# For Brick

When determining a location to install the awning, be sure **not** to choose an unstructured facade. The awning requires a structured and flat surface. If the surface is uneven, the brackets will not align well enough for awning installation or may impede the normal operation. In order to make a non-flat surface useable, you may be able to use a grinder to even out the areas needed to mount brackets. When installing into brick, bricks must be full brick (not hollow). In addition, in order to obtain adequate weight strength, the brick structure should be at least two stories high. A second option is fastening a pressure treated 2"x 8" wood board to the wall and into the beam. In order to ensure a more secure installation, anchor brackets into the studs or wood beams. Place safe, stable ladders on a flat, dry, secure surface at both ends of where the awning will be installed. Next determine where brackets should be mounted to the wall. Then draw a level, horizontal line at a selected height above the patio. Be sure to confirm that the line is level using either a laser or string level. When drilling through brick, use a masonry bit. Caulking around the holes and brackets is essential to prevent moisture buildup.

## For Siding

When determining a location to install the awning, be sure **not** to choose an unstructured facade. The awning requires a structured and flat surface. Place safe, stable ladders on a flat, dry, secure surface at both ends of where the awning will be installed. Next, determine where brackets should be mounted to the wall. Then draw a level, horizontal line at the selected height above the patio. Be sure to confirm that the line is level using either a laser or string level. In order to ensure a more secure installation, anchor brackets into the studs or wood beams.

Option one: first requires mounting a 2" x 8" pressure treated wood board to the house. Then, using long bolts, secure the brackets through the board. Make sure to fasten bracket into studs and header. Bolts should penetrate through the board and enter the studs. For aesthetics, the board can now be painted or stained to match the house.

Option two: determine a location with suitable studs or header where the awning can be mounted. First, drill a 1" hole x 1-1/2" deep to the studs. This method requires a spacer; it is recommended to use a 1/2" pipe x 1-3/4" long. Modify the spacer by trimming the pipe until  $\frac{1}{4}$ " emerges out of the siding. Caulking around the holes and brackets is essential to prevent moisture buildup. Also, in order to prevent splitting the studs while tightening the bolts, remember to pre-drill studs.

## For Wood

You may use a stud finder to establish the location of nails. Nails are a sign, but not guarantee of where studs and rafters are. It is vital that you verify your conclusions completely. While tightening a lag bolt in a stud or rafter, it should never become extremely easy to turn the ratchet. Mark the positions of the studs or rafters where you have decided to install your awning. Normally studs found in the interior of the house are suitable for use on the exterior. Be sure to use long bolts that are suitable to be secured 2-3" into studs. In order to prevent splitting the studs while tightening the bolts, remember to pre-drill studs. Also avoid stripping the thread by not over tightening the bolts.

## FOR CEILINGS (Soffit Brackets are included)

Ceiling mount installations are ideal if inadequate head clearance or obstructions impede standard style awning mounts. Ensure the selected joists or soffits will be sufficiently sturdy to support an extended awning. In addition, ensure that the intended installation location has adequate clearance to fasten and operate the awning. Verify that all nuts and bolts are secure and completely tightened. Finally, caulking around the holes and brackets is essential to prevent moisture buildup. Retracted awnings without an easy crank pitch adjustment will have height of at least 11".

# For Stucco or Cultured Stone

When determining a location to install the awning, be sure not to choose an unstructured facade. The awning requires a structured and flat surface. If the surface is uneven, the brackets will not align well enough for awning installation or may impede the normal operation. In order to make a non-flat surface useable, you may be able to use a grinder to even out the areas needed to mount brackets. To drill through stucco or cultured stone, use a masonry bit. In order to prevent splitting the studs while tightening the bolts, remember to pre-drill studs. Drill a pilot hole into the stud. Using a ratchet, fasten the bracket to the wall with two lag bolts and washers. Caulking around the holes and brackets is essential to prevent moisture buildup.

#### For Concrete Surfaces

When determining a location to install the awning, be sure not to choose an unstructured facade. The awning requires a structured and flat surface. If the surface is uneven, the brackets will not align well enough for awning installation. In order to make a non-flat surface useable, you may be able to use a grinder to even out the areas needed to mount brackets. Use a masonry bit to drill into the concrete. Drill 3" deep holes into the surface and put in two wedge anchors. Each anchor should have its own washer installed. The brackets and anchors should be positioned so that the anchors emerge through the mounting holes. Install an additional washer and securely tighten the nuts. Caulking around the holes and brackets is essential to prevent moisture buildup.

#### For Fascias

All guttering must be removed before an awning can be installed on fascia. In order to facilitate installation, the fascia board must also be greater than 5" high. For this style of installation, because the lowest parts of the awning are the mounting brackets, the top of the awning must be above the roof line. Drill holes using the brackets as a guide into the center of the rafter. Using a ratchet, secure the bracket to the fascia with two lag bolts and two washers. It may be necessary to reinforce the fascia board to the rafters using angle brackets. Repeat the procedure for the remaining brackets. Finally, caulking around the holes and brackets is essential to prevent moisture buildup.

#### For Metal Buildings

First, locate the buildings structural supports. Structural supports are normally recognized by the presence of surface screws. Typically, metal buildings' structural supports will be positioned vertically. In order to create a horizontal surface, a piece of 2x6 treated lumber, 4" longer than the awning, needs to be mounted onto the metal supports. A line should be drawn that is aligned with the bottom corner of the lumber. Using 3" self tapping sheet metal screws, briefly position and secure the board. Likewise, it is necessary to secure an additional and identical 2x6 onto the inside of the metal wall. Position a bracket as close as possible to each of the lateral arms. Spread out the remaining bracket(s) evenly across the awning torsion bar. Using the brackets as a guide, trace and pre-drill holes through the front board, the metal wall and the back board. Next, fasten the bracket through the front board and into the back board with lag bolts and washers. Repeat this procedure for all remaining brackets. Finally, finish by caulking where the metal siding meets the top of the board. Caulking around the holes and brackets is essential to prevent moisture buildup.

#### For Concrete Block Walls

When determining a location to install the awning, be sure not to choose an unstructured facade. The awning requires a structured and flat surface. If the surface is uneven, the brackets will not align well enough for awning installation or may impede the normal operation. In order to make a non-flat surface useable, you may be able to use a grinder to even out the areas needed to mount brackets. You must be able to access the back of the block. Draw a level horizontal line using a laser or string level. Next, clearly mark the position of both ends of the awning on the line. Mark the positions of the wall brackets on a piece of 2x6 treated lumber, the same length as the awning. Drill holes through the lumber between the marked locations of the wall brackets. By using the newly drilled holes in the lumber as a template, mark and drill holes completely through the block wall. Fasten the board to the block wall using bolts long enough to pass thru the wood and out the backside of the block including all nuts and washers. Position a bracket as close as possible to each of the lateral arms. Spread out the remaining bracket(s) evenly across the awning torsion bar. Repeat the procedure for all remaining brackets. Finally, caulking around the holes and brackets is essential to prevent moisture buildup.

INSTALLING TO EAVES OR BOTTOMS OF A BEAM (Soffit Brackets are included)

Place safe, stable ladders on a flat, dry, secure surface at both ends of where the awning will be installed. Next determine locations suitable for bracket mounting. All wall brackets should be firmly attached to studs. Failing to secure wall brackets in studs may result in awning collapse, possible bodily injury, and /or property damage. You may use a stud finder to establish the location of nails. Nails are a sign, but not guarantee of where studs and rafters are. It is vital that you verify your conclusions completely. When you have decided where to install your awning, mark the positions where you will mount the wall brackets. Also mark the ends of where the awning will be installed. Mark the holes using the bracket as a template. Draw a line to use as a guide and position the front of the bracket suitably. Drill a pilot hole into the board and fasten the bracket into the boards by using a ratchet. Ensure that bolts and washers are securely fastened. Repeat this procedure for all remaining brackets. Finally, caulking around the holes and brackets is essential to prevent moisture buildup.

# PITCH ADJUSTMENT

If your awning is not perfectly straight you can adjust the pitch on one side to straighten it. To adjust the pitch angle, loosen the 2 shoulder bolts (19 mm wrench) of the arm and modify the tilt to your liking with a 6 mm Allen key. To raise it turn the set screw clockwise and to lower it counterclockwise.

To reduce the tension on the adjustment screw, lift up the arm a bit and/or retract the awning by 50%.

Don't forget to tighten the 19 mm shoulder bolts.