



Product Installation Guide

Table of Contents

Measuring	2
Installation Location.....	2
Awning Width.....	2
Additional awning measurement considerations.....	2
Position of Crank / Motor / Override.....	2
Awning Projection.....	3
Drop arm kit.....	3
Additional projection considerations.....	3
Crank measurement.....	3
Operation Options	3
Spring Assist for manual operation.....	3
Motorized.....	3
Additional motor information.....	3
Crank Manual Override (C.M.O.).....	4
Type of Mount/Bracket Required	4
Mounting considerations.....	4
Wall Bracket.....	4
Ceiling Bracket.....	4
Roof Bracket.....	4
Additional roof bracket information.....	4
Installation	6
Wall Mount Installation.....	6
Determine bracket mounting height.....	6
Ceiling (soffit/eave/rafter) mount installation.....	7
Roof Mount Installation.....	7
Hanging the Awning	7
Installing optional hood.....	8
Attach awning to mounting brackets.....	8
Pitch Adjustment.....	8
Awning operation.....	8

Measuring

Installation Location

The location where the retractable awning is installed must be free from any interference, such as vents, lights, speakers, downspouts, trim, etc. There must be a minimum of 14 inches of clear space on the surface on which you plan to mount the awning. [See figure 1, measurement A on page 5 of 8.](#)

Awning Width

The width (from left to right) of the awning is determined by the overall width of the roller tube and its support brackets. Measure the width of the opening/deck/porch to be covered as shown in figure 1, and add at least 24 inches to the measured width. [See figure 1, measurement B.](#)

The width of the optional flat hood will be 6 inches (total) wider than the width of the awning (3 inches wider on each side). Should you need further assistance in measuring, just email us at tech@bestawnings.com for additional information.

Note: The fabric is approximately 5" less (2 1/2" on each side) than the awning width, but this is not a consideration when determining the space needed to mount the awning frame to your structure.

Additional awning measurement considerations

The height of the front bar will determine the mounting height of the wall brackets.

The suggested pitch for the awning is 3" per foot of projection (i.e. 10' projection = 30" height difference of brackets and front bar).

Example:

Front bar height	7'
Projection length	10'
Drop 3"/foot	30"
Bracket mounting height (84"+30"+3.25=117.25")	9'6 1/4"

If the suggested pitch cannot be obtained due to the mounting height restrictions, you may want to consider mounting on the roof. The goal is to be able to mount the awning at a height in which the front bar will be high enough to clear the height of those benefiting from the awning.

After determining the wall bracket height, add 3 1/4" to height and snap a level chalk line on the wall. This line indicates the top of the wall bracket. Also mark on the wall the location of both ends of the awning and arm brackets.

Position of Crank / Motor / Override

Face the wall where your awning will be mounted from outside the building and determine on which side of the awning it will be best to locate the crank/motor (left or right). If motorized, try to place the motor closest to an available power source. If purchasing a manual crank or Crank Manual Override (CMO) motor, remember that the crank will hang below the awning. Try and keep the crank away from obstacles and door openings. [See figure 1.](#)

Awning Projection

The projection is the distance the arms project out from the mounting location to the front of the retractable awning. [See figure 1, measurement C](#). Make sure that there are no obstructions in the area that the awning will cover.

Drop arm kit

Areas where minimum width is required for each size of arm projection should be noted. In some instances where the minimum width is not obtainable, there are some units available with a drop arm kit that allows one arm to fold below the other when the unit is retracted. This allows a narrow width to have a longer projection. With the drop arm kit, the pitch is only adjustable to a maximum of approximately 25 degrees from horizontal.

Additional projection considerations

The awning projection measurement taken above does not consider the pitch/angle required for water runoff. When considering the pitch requirement, the shade provided by the awning is reduced slightly. Note that these awnings are not designed for rain protection. It is not advised to leave the awning open during a rain event.

Crank measurement

Cranks, used in manual and backup override operation, are available in four lengths, 40", 60", 70" and 90". Measure from the mounted height of the roller tube to approximately waist high, this is where the end of the crank should fall.

Operations Options

Manual Operation - Manually operated awnings can not roof mount.

The awning is extended and retracted with a hand crank. The spring assist is highly recommended.

Spring Assist for manual operation

The spring assist option helps when retracting the awning by reducing the pressure needed to retract the awning. The spring assist option is included on MANUAL awnings only. Because this option is strongly recommended if not purchasing a motor, we've automatically included it with all MANUAL awnings

Motorized

Our retractable awnings can be motorized to make operation effortless. Motors can be controlled by hard-wired switch or radio remote control. An optional sun and wind sensor can automatically extend and retract our awnings. When the sun hits the sensor, the awning opens, when it gets dark, the awning retracts. If the wind speed gets too high, the wind sensor will cause the awning to retract, protecting your investment. The motors have adjustable limits, switching themselves off when the awning reaches fully open or fully closed.

Additional motor information

Designed in Europe and in worldwide use, these fully sealed maintenance free tubular motors are incorporated into the roller tube for a clean, concealed installation. All motors used are Underwriters Laboratory (UL) recognized and CE approved.

Crank Manual Override (C.M.O.)

The manual override allows the awning to be retracted in the event of a power failure, preventing damage to the awning by high winds, excessive rains or other events. This CMO motor is **strongly recommended**. If a CMO (Crank Manual Override) motor is not purchased and there is a power failure there will be no way to retract your awning. The purchase of a CMO motor ensures that if there is a loss of electrical power you will be able to protect your investment.

Type of Mount/Bracket Required

Mounting considerations

The retractable awning can be mounted to any solid surface, however you should ensure that the lag bolts penetrate a structural member (stud, brick, header, beam etc.) a minimum of 2". The bottom of the frame, measured at the point of attachment should be a MINIMUM of 7'6" from the deck or patio. If you are ordering the optional protective hood allow an **additional 2"** in height. Should you be mounting the awning over an out swinging French door or storm door, the awning should be mounted at least 10" above the top of the door, in addition to the 18 inches span needed for mounting. For difficult or low applications we offer ceiling and roof mounting brackets. Based on manufacturers' specifications, the awning width determines the number of brackets.

Wall Bracket

A wall bracket is used when mounting the awning into the framing supporting a flat vertical wall. If mounting over siding, we recommend shims of 2"x8" pressure treated lumber between siding and wall brackets to eliminate the angle of the siding. Boards or shims are not needed for existing flat vertical surfaces. [See figure 2.](#)

Ceiling Bracket

A ceiling bracket is used when the awning is mounted under an eave into a roof truss. If the eave is angled, use shims of pressure treated lumber so the ceiling brackets will be mounted in a horizontal position. [See figure 2.](#)

Roof Bracket

A roof adjustable bracket is used when the awning is mounted on a flat or angled roof, bolting directly into the roof trusses. [See figure 2. Page 5 of 8.](#)

Additional roof bracket information

If the roof is a barrel or concrete roof tile, the tiles (where the brackets are installed) will need to be removed and replaced after the awning is installed. In addition to the roof mount brackets, a roof mount will require wall brackets if no hood is ordered and will require ceiling mount brackets if a hood is ordered. Make sure to caulk well around the base of the bracket and mounting bolt heads.

Figure 1

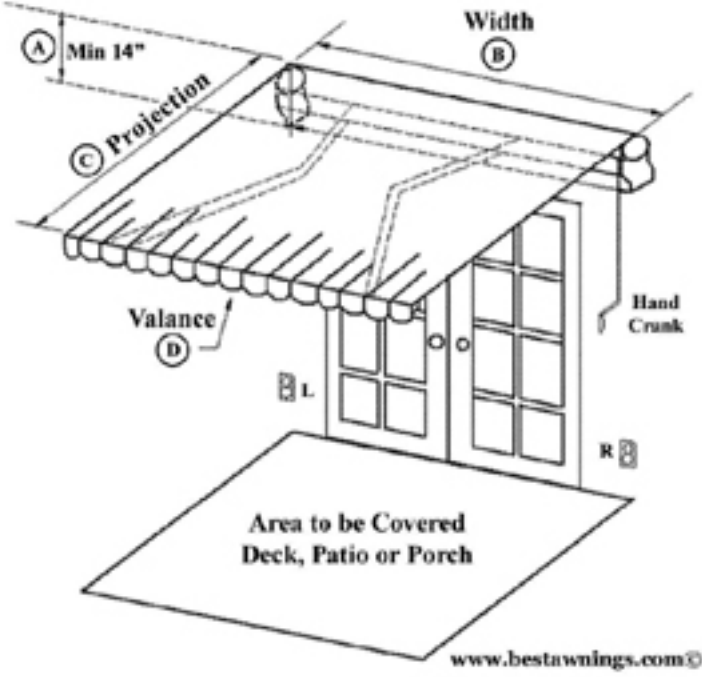
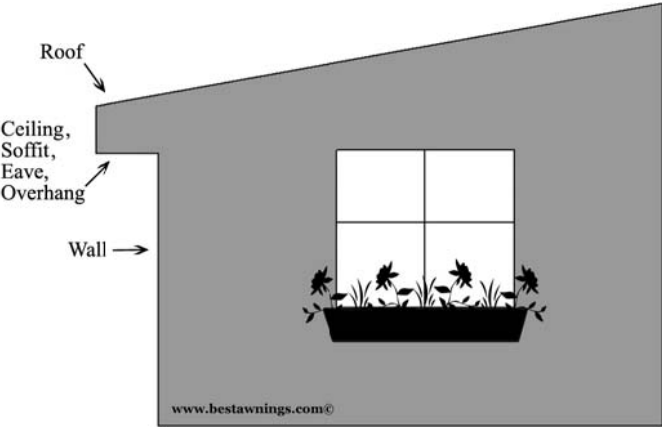


Figure 2



Wall Mount Bracket



Roof Mount Bracket



Installation

Wall Mount Installation

It is critical for the awning to be mounted square, plumb, and level. The brackets must be securely fastened into studs, joists, headers or other major structural members. The fasteners must penetrate a minimum of 2" into the structural members.

When mounting with two wall brackets, position the first bracket by centering it between the end of the square bar and arm attachment. The second bracket will mount the same way on the opposite end of the awning. [See figure 3.](#)

When mounting with three wall brackets, install two brackets as above. The third bracket should be positioned in the center of the awning (plus or minus 12 inches to allow for mounting into structural member that may not be located at the center of the awning).

On wide widths, the awning will be supplied with a center support. The center support should be as close as possible to the center of the awning and placed directly opposite the closest fabric seam.

On projections of 8' 10" and over, a wall bracket should be mounted on both sides of each arm as close as possible to the arm attachments. [See figure 4.](#)

Figure 3

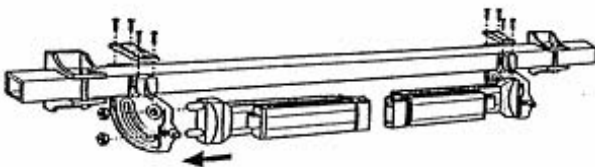
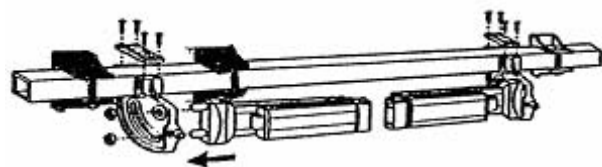


Figure 4



Determine bracket mounting height

The height of the front bar will determine the mounting height of the wall brackets.

The suggested pitch for the awning is 3" per foot of projection (i.e. 10' projection = 30" height difference of brackets and front bar)

If the suggested pitch cannot be obtained due to the mounting height restrictions, you may want to consider mounting on the roof.

After determining the wall bracket height, add 3 ¼” to height and snap a level chalk line on the wall. This line indicates the top of the wall bracket. Also mark on the wall, the location of both ends of the awning and arm brackets.

Example:

Front bar height (min 6.5')	7'
Projection length	10'
Drop 3"/foot	30"
Bracket mounting height (84"+30"+3.25=117.25")	9'6 ¼"

Locating Studs or Joists

Measure the distance from a door or window to the appropriate location of where the bracket is to be mounted. Perform the same measurement from inside the building. Using a stud finder, locate the stud and record the measurement. Measure the same distance outside and drill locator holes 7/8” below chalk line to find center of stud. Draw a vertical line at this location. **MOUNTING TO THE CENTER OF THE STUD IS IMPORTANT FOR ADEQUATE SUPPORT.**

Position the bracket on the vertical line; make sure that the top of the bracket is even with the horizontal chalk line. Place a mark on the vertical line indicating the center of upper and lower holes in the bracket. Drill pilot holes into the stud. Fill all locator holes before mounting the bracket. Do not over tighten lag bolts (or other type of installation bolts) as this can split the studs.

Shims may be needed to keep brackets level on siding or walls that are bowed. Mounting hardware such as through bolts or toggle bolts may be required for hollow core walls. Solid concrete walls may need special “expansion” bolts. If mounting to a brick veneer wall, you may need to install a 2” x 8” pressure treated board through the wall into the studs with lag screws, and then mount the awning to the board. You may want to use extra installation bolts. Based on the type of home or building construction in your area we strongly recommend that you check with your local DIY merchant, for their suggestions.

Ceiling (soffit/eave/rafter) mount installation

After locating joists and drilling pilot holes, attach awning brackets through the flat surface of the soffit with appropriate fasteners.

Roof Mount Installation

One roof mount bracket is needed for each awning mount bracket. Remember to locate joists and drill pilot holes.

Hanging the Awning

Installing optional hood

If the optional hood is being used, it must be attached to the awning prior to hanging the awning. If awning brackets are being used, insert the mounting bolts into both channels of the hood. (One bolt per channel per bracket) Position the hood on top of the brackets and tighten the bolts. If “L” brackets are being used, attach them before hanging the awning.

Attach awning to mounting brackets

Lift the awning up to the mounted brackets; line up the end of the awning with appropriate marks on the wall. Push the square bar into the bracket, insert and tighten the retaining bolts. After the awning has been mounted, remove all protective wrapping.

Pitch Adjustment

The retractable awning angle is adjustable via a hex head bolt located at each arm. To adjust the pitch of the awning, use a wrench to loosen the two nuts at the base of the arm to be adjusted. Then use an Allen wrench to turn the pitch-adjusting bolt (left to lower the pitch, and right to raise the pitch) until the desired pitch is attained.

If the crank adjustable pitch option was purchased, you will use the crank to adjust the pitch instead of the two nuts mentioned above. The front bar on the optional crank system also has two bubble levels to help get the front bar perfectly level. Adjustable pitch is only on units up to 20 foot wide x 10’6” projection.

The projection measurement is based on the arms at a horizontal position however they should NEVER be installed at a horizontal position as a pitch / angle is required for water runoff. Also note that when the arms are at a pitch / angle the shade amount will be less than the arm projection purchased.

Awning operation

Manually operated awnings can be opened as much or as little as desired. Motorized awning systems are preset to full projection at the factory. The motor limits can be adjusted to limit projection further, if necessary.

We will provide a complete set of instructions for Sun/wind sensors if you purchase these options.