Installation Instructions
for the Rolltec®
Adalia X3M™ Awning

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General Tool Requirements
- Hammer drill
- Masonry bit set
- Drill bit 3/16” (for 3/8” lag bolts) or 1/4” (for 1/2” lag bolts) if mounting on surface that requires pilot holes
- 3/4” wrench-and-ratchet set (for slope adjustment)
- 13mm socket (for securing square bar in mounting brackets)
- 3/16” Allen key (for slope adjustment) and 5mm Allen key (for hood brackets)
- Phillips driver #2 (for hood end plates)
- Ladders
- Level
- Chalk line

Supplied: Installation wall brackets. Other brackets available upon request.
Not Supplied: Anchors, lag bolts, or mounting screws for installation. We recommend 3/8” lag bolts with washers and corresponding anchors.

Notes
When mounting a retractable awning, it is extremely important to take into consideration the type of building surface you will be installing on. Whether the building’s exterior is stucco, siding or brick, it is imperative to install the mounting brackets in a correct manner, to properly secure the awning to the building’s surface.

A retractable fabric awning is designed to provide shade and light rain protection*, and should be retracted during heavy rain, snow, or severe wind conditions.

* A Minimum of 15° slope is required, and should be used under proper care.
Available Installation Brackets for the Adalia X3M™

**Wall Bracket**
Extruded aluminum with a powder coated finish. For flat surface mounting, such as brick, wood, or siding.

**Ceiling Bracket (optional)**
To be used for installations under the soffit. Can be used individually or in combination with rafter brackets.

**Rafter Bracket (used in combination with ceiling brackets, optional)**
Rafter brackets are made of steel with a white powder coated finish. They are available in 4 sizes, and must be used in combination with a ceiling bracket.

**Roof Bracket**
Roof brackets are made of stainless steel and used in combination with a wall bracket when installing on a roofline.

Roof brackets can be adjusted between 10° and 90° to accommodate the slope of the roof.
Side Dimensions for Various Installations

**Installation on wall**

- 8.9" (225mm) x 5.2" (132mm) x 10.7" (271mm)

**Installation under overhang**

- 10.2" (258mm) x 5.8" (147mm) x 10.1" (256mm)

*Installation on wall with optional protective hood*

- 10.1" (257mm) x 6.9" (176mm) x 12.0" (305mm)

When mounting under a soffit, make sure that the back edge of the ceiling bracket is at least 11" from the front edge of the roof. This protects the retracted awning from weather elements.

Bolt only 3 holes (2 holes if trusses are 2x4) of the rafter bracket to the center of the roof truss, the wood might crack if all 4 holes are bolted.

**Installation on roof with protective cover**

- 12.0" (305mm) x 6.0" (152mm)

The angle of the roof brackets is adjusted between 10° and 90° to ensure that the awning is mounted upright despite the slope of the roof. A protective hood is recommended.
Determining Installation Height and Coverage

The horizontal coverage of an awning is determined by the length of the arms and the angle of the awning. Arms come in several standard sizes, and the angle can be adjusted.

### Tables for Various Arm Sizes and Angles

<table>
<thead>
<tr>
<th>Arm Size</th>
<th>5° Angle</th>
<th>10°</th>
<th>15°</th>
<th>20°</th>
</tr>
</thead>
</table>
| 5'4"     | 8' 1"    | 8' 7" | 9' 0" | 9' 5"
| 6'9"     | 8' 2"    | 8' 9" | 9' 4" | 9' 11" |
| 8'8"     | 8' 4"    | 9' 1" | 9'10" | 10' 7" |
| 10'0"    | 8' 5"    | 9' 4" | 10' 2" | 11' 0" |
| 11'8"    | 8' 7"    | 9' 7" | 10' 7" | 11' 7" |

<table>
<thead>
<tr>
<th>Arm Size</th>
<th>Vertical Drop</th>
<th>Angle</th>
</tr>
</thead>
<tbody>
<tr>
<td>5'4&quot;</td>
<td>1' 1&quot;</td>
<td>1' 7&quot;</td>
</tr>
<tr>
<td>6'9&quot;</td>
<td>1' 2&quot;</td>
<td>1' 9&quot;</td>
</tr>
<tr>
<td>8'8&quot;</td>
<td>1' 4&quot;</td>
<td>2' 1&quot;</td>
</tr>
<tr>
<td>10'0&quot;</td>
<td>1' 5&quot;</td>
<td>2' 4&quot;</td>
</tr>
<tr>
<td>11'8&quot;</td>
<td>1' 7&quot;</td>
<td>2' 7&quot;</td>
</tr>
</tbody>
</table>

### Suggested Installation Height

<table>
<thead>
<tr>
<th>Arm Size</th>
<th>Angle</th>
</tr>
</thead>
<tbody>
<tr>
<td>5'4&quot;</td>
<td>8' 1&quot;</td>
</tr>
<tr>
<td>6'9&quot;</td>
<td>8' 2&quot;</td>
</tr>
<tr>
<td>8'8&quot;</td>
<td>8' 4&quot;</td>
</tr>
<tr>
<td>10'0&quot;</td>
<td>8' 5&quot;</td>
</tr>
<tr>
<td>11'8&quot;</td>
<td>8' 7&quot;</td>
</tr>
</tbody>
</table>

**NOTE:** In order to use an awning for light rain protection, it must be installed with a 15° slope or greater.

### Brackets in Relation to Awning Width

<table>
<thead>
<tr>
<th>Number of Installation Brackets</th>
<th>7'-'10'</th>
<th>11'-'13'</th>
<th>14'-'15'</th>
<th>16'-'18'</th>
<th>19'-'23'</th>
<th>24'</th>
</tr>
</thead>
<tbody>
<tr>
<td>5'4&quot;-10'0&quot;</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>11'8&quot;</td>
<td>n/a</td>
<td>n/a</td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

**NOTE:** The table of suggested installation heights uses 7' of headroom below the front valance. To calculate the installation height for a different amount of headroom, use the table of vertical drops and add to your preferred headroom:

**INSTALLATION HEIGHT = HEADROOM + VERTICAL DROP**

**NOTE:** Awnings wider than 20' require 3 arms.
Positioning Installation Brackets

Refer to these illustrations when determining the positions of installation brackets. See the next page for step-by-step installation instructions.

Brackets that are placed on the outside of the arm shoulder (bracket 1 and 2 in all the illustrations) should be as close to the arm shoulder as possible, up to 12”.

Brackets placed inside the arm shoulder (bracket 3 or 4 in Fig.2) should be 12” to 24” from the arm shoulder.

**NOTE 1:** There should be a bracket on the outside of the shoulder whenever possible! If not, place bracket inside as close to the arm shoulder as possible.

**NOTE 2:** Wider awnings come with a fabric centre support. It should be taken into consideration when positioning the brackets.

It is important to properly secure the installation brackets to the surface. The weight of the awning, added pulling forces and aerodynamic lifts (when the awning is extended) are creating considerable stress on the installation brackets.

Expected stress values are factored into the number of brackets shipped with an awning. However, it is assumed that the awning will be installed on a solid surface. When installing on a weaker surface, it is recommended to use additional brackets to spread the load. Extra brackets are available on request, for a small added charge.
Mounting Wall Brackets to Surface

NOTE: Check to see that the wall is flat and even. If it is not, it is advisable to mount the brackets on a cedar wooden board first. The brackets can be attached to the board with carriage bolts, before the board is mounted on the wall. Use a 2"x8" board; if the awning has a protective hood use a 2"x10".

**Step 1. Draw a Horizontal Line**
Chalk a horizontal line at the optimum installation height (as determined on page 4). The level of the line corresponds to the level of the bottom installation screw. This step is not necessary if installing on brick.

**Step 2. Mark Where to Drill Holes**
Align a wall bracket so that the chalk line goes through the middle of the bottom hole (A). If installing on brick, make sure that both holes are on brick and not mortar (fastening an awning to mortar will cause it to loosen over time).

Use a level to make sure that the bracket is upright (B).

Use a pencil to draw a line down the middle of the small visible wall area through the bottom hole. Keeping the bracket in place, draw a pair of perpendicular lines that intersect in the centre of the top hole. C illustrates the resulting marks.

**Step 3. Drill Holes and Attach Outside Brackets**
After marking the locations of drill holes for the two outside brackets, drill the holes and attach them loosely.

**NOTE:** If a protective hood is to be used, the hood brackets should be installed together with the wall brackets (D).

**Step 4. Align and Attach Remaining Brackets**
Align the remaining wall brackets with respect to the two outside ones. They will need to be able to fit and support installation bar, and good alignment is important.

Once you are satisfied with the alignment, tighten all screws firmly and check that each bracket is attached solidly to the surface.
Attaching and Operating the Awning

Attaching the Awning

1. Make sure that both your hands and the working area are clean.

2. Remove the awning from the protective sleeve. **Do not use a knife**, as you risk damaging the fabric.

3. Slide awning square bar into the mounted brackets. Use a 13mm socket and the supplied bolts to secure the square bar inside the brackets.

The procedure is identical for both wall and ceiling installations.

Extending and Retracting the Awning

**Manual Operation**

Start by attaching the crank by hooking it through the loop in the gear mechanism, as shown.

For a **right side** crank (pictured), turning the crank counter-clockwise will extend the awning, and turning clockwise will retract it. For a left side crank, it’s the other way around.

You will know that the awning has fully extended once the fabric becomes slightly slack. When this happens, turn the crank in the opposite direction just enough for the fabric to go back to being taut.

When retracting from a fully extended position, the first turn or two can offer a fair amount of physical resistance. This is normal and should not cause alarm.

**Motorized Operation**

Use the supplied electrical 3-way control (switch or remote) to operate your awning. The **UP** button is to close the awning, and the **DOWN** button is to open the awning. The middle button lets you stop the awning partway. If you adjust the slope, you might have to adjust the limit switches on your motor. Also, resetting the limit switches on your motor is recommended after the first few months of use, as awning fabric has a tendency to stretch. Please refer to instructions supplied with the motor or contact Rolltec®.
Installation of the Protective Hood (Optional)

Structure of a Protective Hood

The hood is manufactured in two pieces: a female part, and a male part. The female part holds a PVC weather strip. This strip goes against the wall, eliminating the need for caulking.

The two parts joined as shown, and hold together mainly with gravity. The three small grooves in the hood are screw holes, and are used in attaching side cover plates. The remaining two grooves (which are significantly larger), are used to fit the hood onto hood brackets.

Hood brackets are usually installed at the same time as wall brackets (see page 6, Fig.D), but can be added later. Remember that hood brackets must go in front of the wall brackets, but behind the washers of the screws securing the brackets to the wall.

NOTE: A protective hood is optional, but it comes very highly recommended when the awning is installed on a flat, exposed surface. If the awning is equipped with an electric motor and there is no overhang shielding the awning from the elements, a hood is mandatory. A hood cannot be used in conjunction with ceiling brackets.

Fitting a Hood onto Hood Brackets

Each hood bracket comes with two tongues that fit into the large grooves on the underside of the protective hood. The hood is slid on after the brackets have been installed.

Afterwards, the screw shown in the picture on the left should be tightened.

NOTE: A protective hood can be installed before or after mounting the awning onto the wall brackets.
**Slope Adjustment Instructions**

### Preparation
- You will need a 3/16” Allen key and a 3/4” wrench-and-ratchet set to perform the adjustment procedure.
- Before starting, extend the awning fully.
- Note that slope adjustment is done on one arm at a time, the arms should not differ in slope by more than 10° (you need to go back and forth between arms if you want a steeper adjustment), and the final slope of each arm must be equal.
- You should support the arm being adjusted.

### Procedure (for each arm)
1. Locate two side bolts on the arm shoulder.
2. Remove the plastic end caps (see A) covering both bolts and nuts.
3. Using a 3/4” wrench and ratchet, loosen (but do not remove: max. 1.5 turns!) both bolts (see B).
4. Before turning the adjustment screw, lift the arm from the bottom to alleviate the pressure from the arm shoulder.
5. Use a 3/16” Allen key to turn the adjustment screw (see C), located on the bottom of the arm shoulder. Turning clockwise raises the angle, while turning counter-clockwise lowers it.
6. Once the arm is at the desired slope, retighten the bolts and replace the plastic end caps back on.