

# INSTALLATION PROCEDURES FOR THE <u>POLARIA</u> AWNING



# **Warning:** PLEASE ENSURE SNOW OR ICE REMOVAL OF STRUCTURE IN CASE OF EXCESS SNOW OR ICE FOLLOWING A STORM !

FAILURE TO FOLLOW THESE PROCEDURES COULD RESULT IN INJURY !

## INSTALLATION PROCEDURES FOR THE POLARIO AWNINGS

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# REQUIRED TOOLS



- 1 power drill
- 1 drill bit 5/32" \*
- 1 drill bit 3/16" for cement \*
- 1 5/16" drill bit adaptor\*
- 1 5/16" hex wrench ( or stamped aluminium key ) \*
- 1 drill bit 1/2"
- 1 drill bit number 2 \*
- 1 sharp knife
- 1 pair of safety glasses
- 1 measuring tape
- 1 chalk line

one 8 foot long ladder

one small 3 foot ladder

• tools that are included with shipment

# LIST OF COMPONENTS

# Brackets and hardware:



	(U) Brackets for fixing
American American	#8 Metal screws, square head, 1 ½" long
	90° Bracket inserts
K.	5/16" Self taping screws, ¾" long
V V	



#8 Metal screws square head, 3" long

Cement screws  $1\frac{1}{4}$ " long

60

15

60

2

130

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Gauge used to fix the panels



Gauge used to fix the beam



- Upper door parts of 35" long with cappings





Handle (only for a hinging door)

Self-taping screws of 3/8" long (for hinging door)

8

10

1

1

1

1

# Roof components



1 - Cornice	1
2 - Flash attachment systems	1





Head part of the structure 1	Head part of	the structure	1
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Rafters ultra 2.5" x 1.5"	

Cappings for rafters ultra 16

Corner cappings

2

8

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#### WARNING

Please make sure that your balcony is level. This is a pre-requisite for this

#### modular type installation



#### WARNING

Depending which king of floor you have, it will be required to install aluminium flashing on the floor to avoid any water infiltrations. For acement floor, it is not required, you will only have to apply caulking inside your awning. To install the aluminium flashing, be sure to keep at least  $2\frac{1}{2}$  " (depth of panels) inside your balcony. Make sure that the flashing follows as well your balcony. This is necessary to expel water. When all your panels will be installed, you will apply caulking all around your awning. With the help of the aluminium flashing, the water will get out easily and avoid water infiltration.



with the panel. The other face must be on the wall. So

you will start by fixing one leg, and then install the first panel beside. long

• Start by fixing the first panel on the floor. Make sure that it is well positioned. The panels are fixed to the floor with U brackets. First, the U

brackets are fixed to the floor, and then the panel is fixed to the U brackets (like as shown on the following pictures).

#### Different floor types:

- CEMENT FLOOR: you will need to pre-drill a hole with an impact drill and use special cement screws.
- FIBREGLASS ON WOOD: make sure you use the length of screw that is appropriate to your floor structure. Apply caulking before to fix the screws.



- As a reference, the screen is always facing outwards and the polymer windows facing inwards.
- Once your first panel is inserted in your brackets and fixed with 5/16" self taping screws, you are ready to install the second panel. Make sure that both panels are aligned edge to edge, this is necessary to install the double capping later properly.



• Install the second panel, fix both panel together with three #8 square head metal screws of 3" long. Pre-drill one of them with a drill bit 5/32" inside the window lock to conceal the screws. Repeat this step 3 times.

Use a pair of grip to hold the panels together



• Now your first wall is completed and it's time to start the second wall. Before fixing the U bracket, be sure that the panel is positioned at 90° to the first wall as shown. This is necessary for installing the corner capping later on.



- Fix the simple interior capping before installing both panels together.
- Fix three "L trims" with four holes on the side of the panel, those will be use to fix the two walls together. Fix another L support onto the floor to secure.

Fixed right in the corner



Fixed with 5/16" self taping screws



It should have a little chink, easier to snap the 90° capping

- Use 5/16" self taping screws to fix the "L trims" and the bracket inserts to secure and solidify the structure.
- Fix the panel edge to edge with the previous one, as explained before.

#### THE DOOR OPENING

The door will be installed between two panels; usually it's supposed to be two small panels only with polymer. If your awning size is different, it may be installed between panels with windows. But in both situations, the procedures are all the same.





- Fix the U bracket to the floor and slide the panel in the bracket. Be sure that this panel is edge to edge with the other one. As a reference, the polymer must be facing outwards.
- Fix the panels together with the same step explained previously.
- When your panel is fixed, install a U bracket on the upper part of the panel, this U bracket will be used to support the upper part of the door.





Use the gauge to be sure that the bracket is well positioned. Screws on each side

- Slide the upper part of the door, which is 35" long, and fix it to the bracket with 5/16" self taping screws. Then install the two cappings of 35" long on each side of the upper part. The third capping of 35" long will be installed later on.
- Before installing the other side panel, make sure that your opening door is 35"



long. Use the measuring tape and verify again your dimensions. It's really important to get an opening door who works perfectly. Fix a U bracket to the floor, use the gauge to be sure that it is well positioned and slide the other panel in the bracket. The door will be installed at the end.





#### **INSTALLING THE CAPPINGS** :

Once the structure is secured to the floor, the capping can be installed. There is one simple capping, also, there are two kinds of capping that join the panels together: double cappings and 90° exterior cappings.

Install the interior cappings:

• Use a white rubber mallet to install the cappings.





#### Install 90° exterior capping in each corner:

 Place the capping as seen on the drawing below. Be sure that the screen is under the capping. The side with the little snap must be inserted at the end. Rest the other side of the capping on the other panel; make sure the screen is under the capping. With a rubber mallet, hit the side of the capping forcefully until the opposite end snaps into place.



- Start from the top of the structure and work your way down. If the walls have been joined correctly, the capping will snap in easily.
- Repeat the procedure until all capping are installed in each corner.





#### Installing double exterior cappings on each side:



- Place the capping as seen on drawing below. With a rubber mallet, hit the middle of the capping forcefully until it snaps into place.
- Start from the top of the structure and work your way down. If the walls have been joined correctly, the capping will snap in easily.
- Repeat the procedure until all cappings are installed in each side.
- Be sure that the screen is under the capping before the installation of the cappings.
- When your exteriors capping are done, do not forget that you have double interiors capping to insert too. To do so, follow the same procedures as above.





top view

INSTALLING THE HEAD (if your installation is wall mounted).



• The first important thing you need to know before you start installing your awning is that the referring dimensions must be tooked in the left part of your balcony. <u>You must start your installation by the left part of</u> <u>your balcony</u>. To determine this left part, be outside and have a look on your balcony:



• On this left side, you must be localized on the wall the installation high. Once this step is done, you must draw a straight line at level to be sure that your installation will be at the right high. D'ont do the same step on the right side. If you take the same high on your right side and your balcony is not at a perfect level, your installation will be on a wrong start.  Once this step is done, you will pre-drill the head part. If you have a wall of bricks, you can pre-drill the head part anywhere you want, just, be sure that your holes will be out of joins. If you have a wall of aluminium, woods or aggregate, you must find your studs (every 12", 16" or 24") and pre-drill afterward. Your holes will be right aligned with your studs, this is really



important. It is important to pre-drill the head part as shown.

- To pre-drill the head part, use a 1/2" drill bit. Fix the head part at level with the help of square head metal screws of 3" long.
- The last step is to put some caulking on the junction between the wall and the head part.
- As a final touch of the head part, insert the little caps of  $\frac{1}{2}$ " to conceal each holes of  $\frac{1}{2}$ " that you did previously to fix the head to the wall.
- Take the gables already assembled. In case it's not assembled, you will have to do it, please, follow the instructions.





- Before installing each gable, you will have to remove the gauge.
- Install the cornice to the gables. To do so, insert the cornice in the slot ready to accept it, and then tilt it back straight.





• When this step is done, with the help of someone else, install it on the head part, which is fixed to the wall. Insert it in the U brackets ready to accept gables. Fix it with 5/16" self taping screws.





Make sure that the right gables are at the right place. To be sure, have a look on the bottom part of each gable. There's a little slot, and that slot must be inside the awning. So use that slot to determine which is on the left, and which is on the right.

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# INSTALLING THE HEAD (if your installation is under cornice).



 Once this step is done, you will pre-drill the head part. Use a 5/32" drill bit to pre-drill the head part. You must do it right on the cap to be able to fix it to your cornice. Your holes are not obliged to be at a precise place. Your cornice is solid all the way long, so you just need to pre-drill it many times.



- Before fixing the head part to the cornice, you have to add to it the back extension built with two aluminium cubes.
- Take the initial gables already assembled.



 Remove the gauge and the back extension.



• Fix the back extension to the head part with 5/16" self taping screws.



• Add a full string of caulking on the junction to seal between the cornice and the head part.



MULTIPLE AWNINGS - 1701, de l'industrie - Beloeil (Québec) - J3G 455 Phone : 450-446-4182 or 1-866-446-4182 - <u>www.multipleawnings.com</u> • Install the head part to the cornice with the help of square head metal screws of 3" long.



• With the help of someone else, install the gables on the head part, which is fixed under your cornice. Insert it in the U brackets ready to accept gables. Fix it with 5/16" self taping screws.





Make sure that the right gables are at the right place. To be sure, have a look on the bottom part of each gable. There's a little slot, and that slot must be inside the awning. So use that slot to determine which is on the left, and which is on the right.

#### **INSTALLING THE BEAM**

 When the gables are ready, you will have to install the beam. <u>It's important to install the</u> <u>beam before to fixing the gables to the panels</u>. Install the U brackets of 4 inches long to the gables by using the gauge and make sure that it well positioned. Fix it in the middle of each gables, and follow the angle of the rafters. Slide one side of the beam, and then the other side. Solidify the beam to the brackets with 5/16" self-taping screws.



• To your information, the largest part of the beam must be to the top and the smallest one must be to the bottom.





- The beam is used to support each rafter and to secure your installation. This beam will support all the structure during the winter season.
- After the beam is installed, you can proceed to fix the gables to the front part. To do so, be sure that the cornice is well positioned with the panels as shown. Fix it with 5/16" self-taping screws to the top of each panels.



- <u>It's really important to position your panels as well under the cornice. If</u> your panels are not fixed against the little slot, your installation will be improperly done and you will get some problems to square it perfectly.
- Once your two gables are well fixed and hold by themselves as well, you are ready to install the front part.
- Slide the cornice in the slot of the front part.
- Slide the two 90° insert brackets in each side of the front part and fix it with 5/16" self-taping screws. Then insert the front in the two gables.



- You are now ready to install the rafters. Note that the rafters are cut with an angle and the brackets already fixed to the head and to the front part are in the same way.
- Start by fixing each rafter to the head part as shown with 5/16" self taping screws. Use the front part to support all rafters before installing them.



• Once they all fixed to the head part, insert the rafters in the front part, you will be able to do it cause you did not fix the front part to the gables.

So slide out the front part to have enough places to insert each rafter. Once it is done, then fix it with 5/16" self- taping screws and fix the front part to the gables with 5/16" self-taping screws on each end.



# Installing the vinyl roof

- Before you begin to slide the awning in the slot, apply some (Clear silicone in spray) to facilitate this step.
- With the help of someone else, insert the canvas in the slot. The other
- one will have to pull the canvas until it is done. Make sure that the sewed seams are well aligned with gables.
- Unfold the vinyl roof and insert each corner as well. Note that there is a rafter strip with Velcro® for each rafters. They will be used a as final touch.

## TIGHTENING THE VINYL ROOF

The white Fabreen® strip sewn on the canvas can now be inserted in the (Flash attachment system®) to be able to start tensioning the vinyl. To do so, fold the PVC strip in the grove of the Flash attachment system® as shown below. Follow this procedure until all 3 sides are inserted.







- Use a little knife to cut the Fabreen® on about 3 inches long. This cut will give you the access to the tension screws.
- Use a 5/16" hex wrench key to tight the roof. Start by the middle of the front part, then tight one side and then the

other side. When all the front tension screws are done, finish by both side. This logical procedure is used to tight equally your roof.



- Both side the Velcro<sup>®</sup> strip, it will be used to thight the last part of the awning. Have another look on both sides, there is a rubber strip to insert in the top of each gable, with this strip of rubber and with the Velcro<sup>®</sup>, you will be able to finish the tightening of your vinyl awning as well.
- When each side of the awning is well tightened, stick each rafter strip as a final touch.

#### INSTALLING THE DOOR (Depending of what kind you have)

#### THE HINGING DOOR

 The door will be ship to you completely assembled. Note that you can adjust your door as required. The bottom part and the side part of the door can be removed.

Hinges

- Remove the side part of the door and install y'our door. Make sure that it well centred and fix it with #6 self-taping screws.
- Slide the door in the hinges and adjust the door as well.



- When the door will be well positioned, fix the hinges to the door with square head metal screws of 3/4" long.
- Make sure that the polymer piping is inside the awning.



• The last step is the handle. The door will be pre-drill at the factory. The biggest hole will be for the locking system. In the middle, you will have to insert the cube support, which will be used to attach both handles. Please note that



there is no right or left handle, both handles are the same. The only difference between a right and a left opening door is about the biggest hole. For a left opening door, the hole will be in the top, for a right side, it will be on the bottom.

Outside lock

• Make sure that the lock is well positioned as shown and fix the interior and the exterior handles with the screws in the package.





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• Install the final lock as shown. Make sure



that it well alligned to facilitate his using.

 Finally, install the doorstopper. Depending which stopper you will receive in the shipment; install it to the floor or to the bottom of the panel in the capping.



#### THE SLIDING DOOR

List of components



Sliding door legs are long as your panels, with two U brackets already fixed to them.

#### Included are:

- 2 Simple cappings of 72" long



1 Simple capping as long as your panels.



Threshold of 72" long, with holes for draining the water are already made at the factory. Those holes must be outside the awning, they will avoid any water infiltration.



Upper door parts are 72" long with foam inside.



Leg with groove as long as your panels minus 2 ", this leg has a notch of 2 1/8" in the bottom and has felting of protection.



Upper door part of 35" long which is supposed to be fixed between the panels to keep a 35" opening door. In the package, you will find 3 cappings of 35" long, two of them will be used for the upper part and the other will be for the bottom.



- Cube of  $1\frac{1}{2}$  " x  $1\frac{1}{2}$ " are as long as your panels.
- Cube of  $1\frac{1}{2}$  " x  $1\frac{1}{2}$  " of 35" long with a plastic cap to the end
- Cube of  $1\frac{1}{2}$  " x  $1\frac{1}{2}$  " of 72 " long with a plastic cap to the end



The door framing as a logical installation. You have 2 frames to fix together. With these frames, the door will have a little distance in between the panels, then the door will get a perfect opening without any damage.



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other pieces, they always have the same size. First of all, you will have to install the cube of 35"

have 4 pieces with variable sizes; depend of the size of your panels. For the 7

For the sliding door, you will have a total of 11 different pieces. You will

long between your panels. It may be installed previously. The principal function of this cube is to keep a perfect 35" opening. In the bottom, you should have 35" between your panels to avoid any problems.

Before fixing the first frame, be sure that the simple cappings of your small panels are removed, it's important to be able to solidify the frame. <u>To</u> <u>facilitate the instructions, we will follow the procedures for a left opening door,</u> <u>with an inside view</u>. So the door will open by the left side and lock on the right side. If your door opens by the right side, just follow the same procedures and reverse each step.

The first step will start on our right. Take the cube of  $1\frac{1}{2}$ " x  $1\frac{1}{2}$ " as long as your panel and take the sliding door leg with felt and brackets. <u>Before to fix it</u>

together, do not forget to apply caulking between these pieces to avoid any water infiltration. You will have to fix both pieces together with 5/16" self









factory to fix the brackets are little different. The one with the angle to fix threshold the floor must be in the bottom.



Before to fix those pieces to the panel, apply caulking on the panel. Place your pieces edge to edge with the panel and hold it with grips to be sure that they will be well positioned. Pre drill the panel with a 5/32" drill bit and fix them with square head metal screws of 3" long.

The have a notch shorter than caulking The felt of the door, it awning. To fix





next step will be the leg with groove. It will of 2 1/8" in the bottom. This piece must be a panel by 2 ". Do not forget to apply between the panel and the leg with groove. protection will be use to avoid any damage on should be positioned in the inside of the the leg, use a 5/32" drill bit and pre drill the

panel. Solidify the leg to the panel with square head metal screws of 3" long.

Leg with groove minus 2"

Just before to finish the first frame, we will install the threshold. It's important to apply caulking all around the extrusion and to the floor, where the threshold will be installed. You will avoid any water infiltration under the threshold, and all around the U bracket.







Slide the threshold in the bracket; be sure that the caulking protect all infiltrations \_ as well. Fix it to the bracket with 5/16" self taping screws.



The next step will be to apply caulking between the threshold and the leg with

groove, which was





installed on the left part before. Do not forget to apply caulking between the two sliding slots to avoid infiltrations.

Then, you will have to use two L supports to distance the threshold of the leg with groove. When you will fix the threshold with screws, it's important to keep these L supports in place and be sure that they will be all covered by caulking.





To fix the threshold to the panel with the L supports between, pre drill with a 5/32" drill bit and use square head metal screws of 3" long. When you will solidify the threshold, be sure that it's levelled to facilitate the opening door. If your balcony has a soft slope, you will have to raise the threshold to get it at level.



The next step will be ther installation of the cube  $1\frac{1}{2}$ " x  $1\frac{1}{2}$ " of 72" long with a plastic cap at the end. To fix it, you will have to put it on the leg with groove and

use a 5/32" drill bit and screws of 3" long.



This cube of 72" will be used as a support for the upper door part. Slide the upper door part in the U brackets ready to accept it and fix it with 5/16" self taping screws. Pre drill the upper door with 5/32" drill bit to be able to fix it with screws later on.



Before to fix the upper part as well, insert the door in



the threshold and in the upper part. Adjust the high of the upper part to be sure that the door will open perfectly.



First, you have to solidify the upper part with screws of 3" long, you will have to do the same step that you did for the bottom. You will have to insert two L supports to move away the upper part and aligned the opening door with the lower section.

The last step is the final touch. The little cube of 35" with a plastic cap at the end should be slide behind the threshold to conceal the hole and complete the final touch. If your door do not slide perfectly and your frames are well done, you could apply clear silicone in spray. Your door will slide much better.





#### ADVICES

- To clean your polymer windows or to clean your vinyl roof, use soft soap without any detergent. Do not use a water gun with to much pressure. It's important to not damage your awning.
- You can clean the aluminium structure with the help of a paint thinner used. Be careful and do not apply some thinner in your polymer windows.
- If you have some little scratches in your aluminium structure, we have the touch paint available at the factory to your convenience.
- By an accident, if you get some silicone in your windows or on your vinyl roof, use only WD-40 to clean it. Do not use any oil or other product; they would damage your awning.
- Finally, during the winter season, be sure that your vinyl roof is regularly cleaned. With the rafters, the roof will be strong enough to support the snowfalls. But as a precaution, we recommend strongly sweep-out your awning after a snow precipitation; this will help the normal self-cleaning of the awning.

#### THE INSTALLATION IS NOW COMPLETED

#### CONGRATULATION!