

# batten awnings installation

Outrigger batten awnings are generally installed as single stage jobs. Larger more complex awnings though, are installed as two stages as this makes for a smaller margin for error. Batten awnings can be attached to existing structures, freestanding supported by their own poles and framework, a combination of both, or, suspended like a sail without framework.

Poles, if required, are installed first. Then framework is attached to the poles or to the existing structure, ready for the fabric to be tensioned out onto.

The fabric and the battens are pre-assembled in our factory unless the awning is too large to be transported with the battens in place. If the fabric assembly is to take place on site, a large clear area covered with clean drop sheets is required. Preferably this area would be adjacent to where the awning is to be installed so that it doesn't have to be moved too far.



batten awning attached to roof mounted frame



# batten awnings installation/poles

## ■ poles with footings

Mark out pole positions using dimensions specified, confirming with client that the positions are correct and the locality of any services. Check the fabric dimensions from the paperwork and check the relationship between these and the pole positions before commencing pole footings. Refer to pole footing specification sheet at the back of this folder for footing size for the given pole diameter, length and ground condition. Before pouring footings, place pole into hole to make sure the pole is the correct height. Whilst pouring the footing, check pole with a spirit level.

## ■ Poles in sockets or other mounts

Mark out pole positions using dimensions specified, confirming with client that the positions are correct and the locality of any services. Check the fabric dimensions from the paperwork and check the relationship between these and the pole positions before commencing pole fitting.

## ■ Poles with baseplates on concrete

Mark out pole positions using dimensions specified, confirming with client that the positions are correct and the locality of any services. Check the fabric dimensions from the paperwork and check the relationship between these and the pole positions before commencing pole fitting. Unless otherwise stated, use chemically anchored galvanised or stainless steel threaded rod of specified size and length. Position all poles and use holes in the baseplates as templates. Mark all hole positions and drill 4mm larger than threaded rod diameter to a depth that allows sufficient thread showing above the baseplate for a stainless steel dome nut and washer. Following the manufacturers directions, bond the threaded rod into the holes. Finger tighten stainless steel dome nuts and washers onto the threaded rod only tightening fully after recommended curing period. Smaller less exposed awnings may only require large galvanised or stainless steel dyna bolts

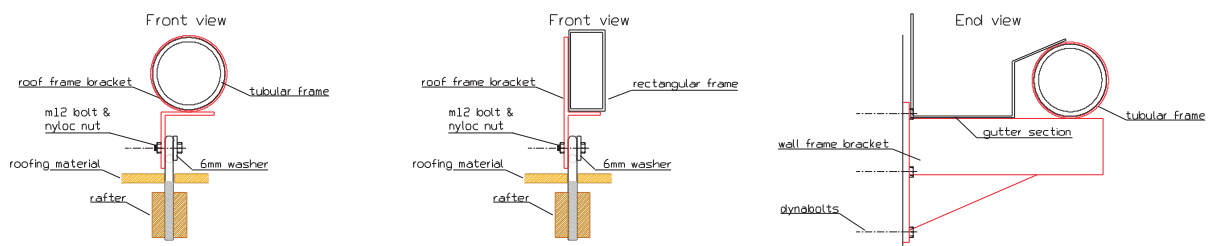
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# batten awnings installation/frame & fittings

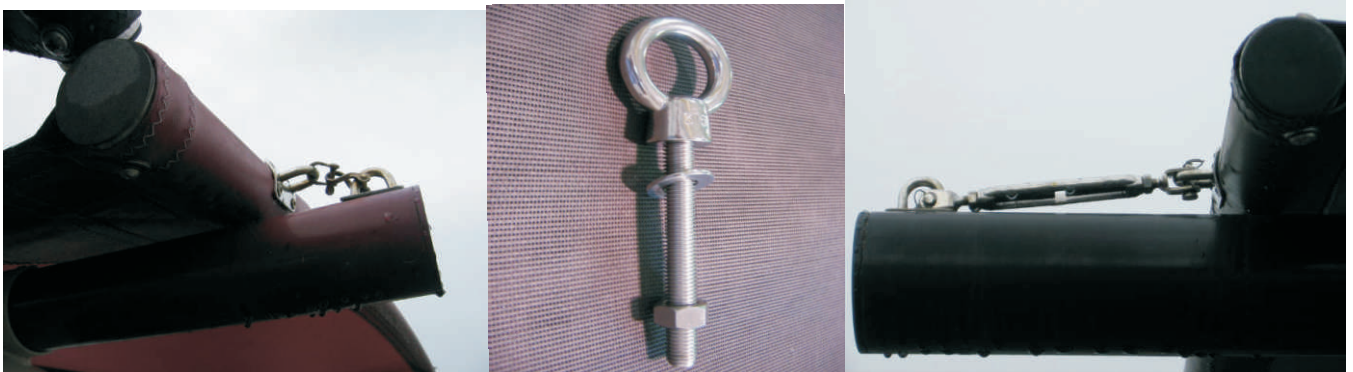
## ■ frame brackets

Frame brackets can be used to fix different section frame work to different parts of a structure. The three diagrams below show roof fixings for round and rectangular framework, and, a typical wall or eave fixing. The wall frame bracket also shows a custom gutter section that can be fitted if required, this gutter section can also be attached directly to the fabric end battens. Where possible, frame brackets should be attached loosely at first, until the frame can be put in position. This will ensure that all of the frame brackets are aligned. With the wall frame bracket type drawn below, the brackets should be placed onto the framework and then attached to the wall, if it is possible to support the assembly safely in place. Unless otherwise specified, framework needs to be installed level. Always leave up to 700mm excess frame at one end to use when tensioning the awning. If one end of the awning is to finish up against a building and or in a specific position, attach the awning at that end first and tension out at the other end



## ■ tension fittings

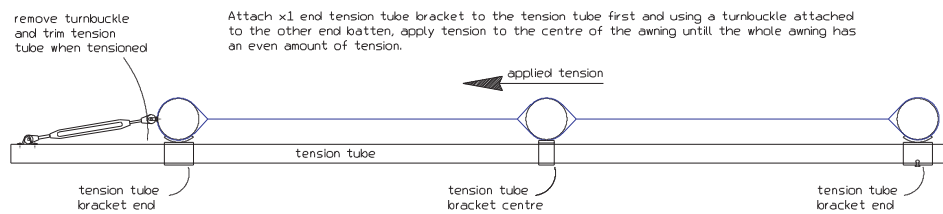
For a single stage job, once the framework is in position, attach stainless steel eyebolts (below centre) to the end where the fabric is going to be tensioned out from. Place the awning assembly onto the framework and position so that the required overhang is achieved either side. With the first batten up against the eyebolts, mark the fabric to give the position for stainless steel padeyes to be attached. Attach the padeyes using 3/16 stainless steel rivets and attach to the eye bolts using a stainless steel twist shackle (below left). At the other end of the awning, if the framework is parallel, use the same centres to attach pad eyes to the other end batten. Connect a large stainless steel turnbuckle to the padeye and unwind it fully. Pull the fabric out along the frame work and stand the centre battens up (if curved). With the fabric taugth, mark where the turnbuckles reach to and attach eyebolts. Pull the fabric up again and attach the turnbuckles. Lubricate the threads of the turnbuckles and tighten (below right) until the fabric is tight and ripple free..



# batten awnings installation/tensioning

## ■ tensioning awning

Most batten awnings, particularly curved batten awnings, will require a tension tube. This tube runs parallel to the battens, along the centre of the awning. The purpose of the tension tube is to maintain the tension through the middle of the awning. When the outside edges are tensioned, the centre of the battens can bow in, which decreases fabric tension and can cause ponding. Straight batten awnings under a four metre span may not require a tension tube although one maybe supplied. If the tension in the centre of the awning is only slightly less than the centre, the tension tube should be used. If there is any doubt weather to install the tension tube or not, er on the side of caution and install the tension tube. To install the tension tube, mark the centre of the battens from the underneath. Attach one of the end tension tube brackets (if one end of the awning is up against a building, attach the tension tube to this end first) using 3/16 stainless steel rivets. Insert the tension tube into the attached bracket and slide on the other brackets leaving the other end bracket till last. Raise the tube and its brackets into position and attach one of the other brackets to hold the tube in place. Attach the remaining brackets, ensuring that the tube remains straight. Rivet the tube to the bracket that was attached first and attach saddles and a turn buckle to the other end as shown in the diagram below. Use the turn buckle to apply the tension, rivet off the rest of the brackets to the tube, remove the turn buckle and trim off the excess tube. Use plastic end caps to finish off the tension tube.



## ■ tensioning awning cont.

After tension is applied to the awning and the tension tube is fitted, the fabric panel should be taught and ripple free. If ripples are still evident, it is usually due to either or both end battens being pulled at an angle. This can be overcome by re-positioning the stainless steel padeyes that attach the end battens to the frame, so that the battens sit in a neutral position.



# batten awnings installation/finishing

## ■ finishing awning

After the awning is properly tensioned out and the tension tube is complete. all that is left to do is secure the battens to the framework using either batten brackets or batten bolts. Batten brackets simply attach to the underside of each end of each batten and then to the side of the awning framework as shown on the photos below and on the previous page. The brackets may need adjusting by hand to ensure that they fit tight against the batten whilst the return against the framework is vertical. Attach the batten brackets with 3/16 stainless steel rivets, two rivets into the batten and one into the frame. Batten bolts are used on larger awnings or awnings that are in exposed positions. This is simply a matter of bolting the batten to the frame using M10 stainless steel all thread, dome nuts, washers and thread lock. Drill a hole up through the centre of the frame work in line with the centre of each batten and through the batten. Cut all thread to length to make up the bolts and tighten the end of each batten down to the frame using the dome nuts, washers and liquid thread lock. When all battens are secured, the turnbuckles used to tension the awning can be removed and the frame trimmed to length. Tidy up the cut edges of the frame and insert end caps. Silicone may need to be used if the caps are a loose fit.



## ■ finishing awning cont.

After the awning is complete, thoroughly clean off all marks on the fabric and wipe down all of the frame work and poles. Clean off any excess silicone from the end caps. Check that all bracketry is neat and touch up any paint chips. If any brackets have been attached to masonry or brick, hose them down to remove dust, when they have dried, neatly silicone around the brackets to stop water ingress. Finally, when safe to do so, check water run off and guttering, if used, with a hose.

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# carport awnings installation

Outrigger carport awnings are generally either batten awnings or sails that are adapted to cover car parking spaces. Batten awnings, unless large or complex shapes, are installed as single stage jobs and sail are installed as two stages. Batten awnings can be attached to existing structures, freestanding supported by their own poles and framework, a combination of both, or, suspended like a sail without framework.

Apart from cantilevered awnings (pictured below), Carport awnings are installed in the same fashion as either batten awnings or sails, there are just a couple of things to bear in mind. Clearance height needs to be checked with customer, does the car have fixed ariels or roof racks etc. also, position of the posts. Cars will usually be parked in the same position each time and doors need to be able to clear supporting posts when opened whilst still having satisfactory cover from the fabric.



# carport awnings installation/poles

## ■ Poles with footings

Mark out pole positions using dimensions specified, confirming with client that the positions are correct and the locality of any services. Check the fabric dimensions from the paperwork and check the relationship between these and the pole positions before commencing pole footings. Refer to pole footing specification sheet at the back of this folder for footing size for the given pole diameter, length and ground condition. Before pouring footings, place pole into hole to make sure the pole is the correct height. Whilst pouring the footing, check pole with a spirit level.

## ■ Cantilevered poles with footings

As above, but, unless otherwise specified, ensure that the arms are parallel, square and level. If the arms are out of line, the frame and frame brackets will not sit onto the arms neatly. This will put unwanted tension on the framework and can cause a bowed appearance. If possible, assemble the frame brackets and the frame work onto the arms before footings are fully set, without disturbing the footings too much.

## ■ Poles in sockets or other mounts

Mark out pole positions using dimensions specified, confirming with client that the positions are correct and the locality of any services. Check the fabric dimensions from the paperwork and check the relationship between these and the pole positions before commencing pole fitting.

## ■ Cantilevered poles in sockets or other mounts

As above, but, unless otherwise specified, ensure that the arms are parallel, square and level. If the arms are out of line, the frame and frame brackets will not sit onto the arms neatly. This will put unwanted tension on the framework and can cause a bowed appearance. If possible, assemble the frame brackets and the frame work onto the arms before fully securing poles in mounts.

## ■ Poles with baseplates on concrete

Mark out pole positions using dimensions specified, confirming with client that the positions are correct and the locality of any services. Check the fabric dimensions from the paperwork and check the relationship between these and the pole positions before commencing pole fitting. Unless otherwise stated, use chemically anchored galvanised or stainless steel threaded rod of specified size and length. Position all poles and use holes in the baseplates as templates. Mark all hole positions and drill 4mm larger than threaded rod diameter to a depth that allows sufficient thread showing above the baseplate for a stainless steel dome nut and washer. Following the manufacturers directions, bond the threaded rod into the holes. Finger tighten stainless steel dome nuts and washers onto the threaded rod only tightening fully after recommended curing period. Smaller less exposed awnings may only require large galvanised or stainless steel dyna bolts

## ■ Cantilevered poles with baseplates on concrete

As above, but, unless otherwise specified, ensure that the arms are parallel, square and level. If the arms are out of line, the frame and frame brackets will not sit onto the arms neatly. This will put unwanted tension on the framework and can cause a bowed appearance. If possible, assemble the frame brackets and the frame work onto the arms before fully tightening down the baseplates.

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# carport awnings installation/frame

## ■ Frame brackets

Cantilevered posts may already come with frame brackets attached. If not slide the brackets onto the cantilevered post arm. If using framework that is a different diameter to the arm, check the brackets are around the correct way. Slide the framework into the brackets and position the frame work so that it is square and at the right distance apart to create the correct overhang for the width of awning. Secure the frame and frame brackets using 1/4 stainless steel rivets.

## ■ Awning completion

The rest of the awning is installed as per a standard batten awning .

