

# Dutch Gable Carport

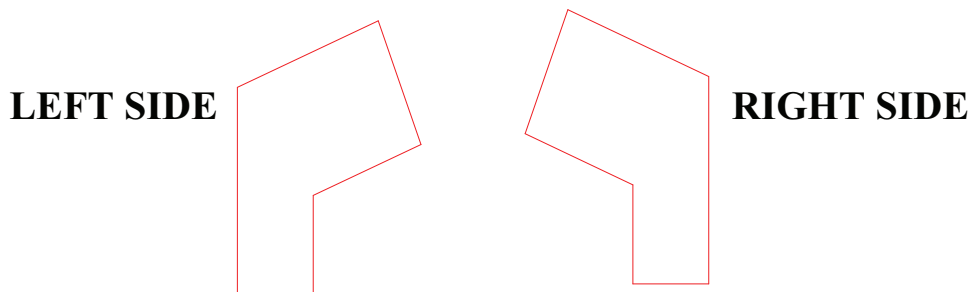
*Thank you for choosing this quality carport. We strongly recommend that you read these instructions thoroughly. The carport you are building may vary from a carport previously bought or those displayed as we are constantly upgrading designs and construction methods. Please take your time to and do not rush the erection of your new carport and you will ensure a finished product of which you may be justly proud.*

Due to the large range of sizes and styles available, it is impossible to prepare an instruction manual for each individual size and model. The following instructions relate to a 6m wide and 6m long carport. This manual is a guide only and should be used in conjunction with the components list and engineers plans as submitted to council.

## Frame Components

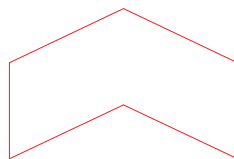
### **Haunch Plates – Left hand and right hand:**

Galvanised “Boomerang” shaped plate to join columns to roof rafters.  
Haunch plate **must always** be installed on the smooth side of the rafters.



### **Apex Plates:**

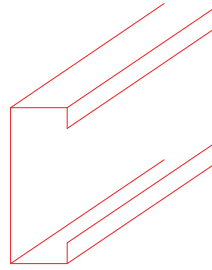
For joining rafters to form apex to roof.



**C Purlins:**

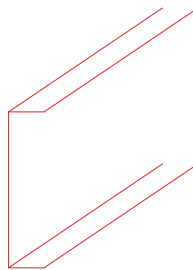
“C” section purlin. Used as rafters, eave purlins, cross beams, apex cross beams, hip beams and awning beams.

Smooth side of rafter and apex cross beam must face inside of carport



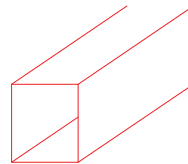
**Carport Flashing:**

Fitted to open side of eave purlins and cross bars.



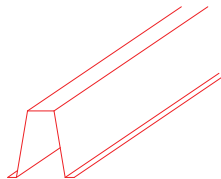
**Columns:**

75mm x 75mm square tube.



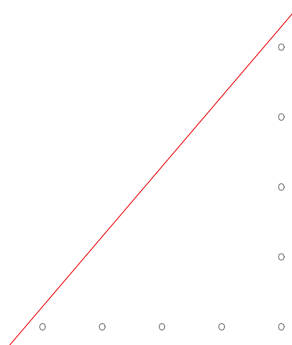
**64mm Top Hat Purlins:**

Used as roof purlins.



**250 Corner Bracket:**

Used to brace corners of carport. Attaches to underside of hip beam and eave purlin.



## Fasteners:

**3mm x 6mm pop rivet** For joining gutter lengths

**10 x 16 (no seal)** Smallest screw in kit, used to screw flashings and barges

**12 x 24 (no seal)** Stubby screw with washer type head, used to screw all bracketry to frames including purlins to rafters etc

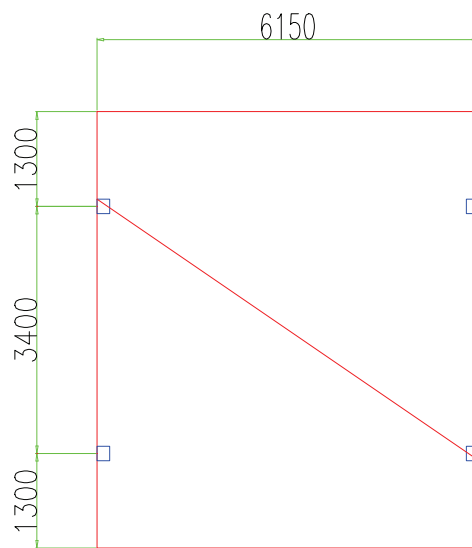
**12 x 35 (with seal)** For screwing corrugated roof sheets to roof purlins

**12 x 45 (with seal)** For screwing corrugated roof sheets to eave purlins and cross beams

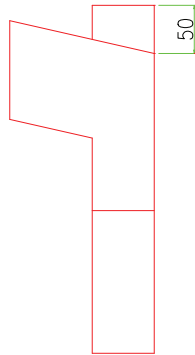
**12 x 30 Bolt** Used on larger carports or in cyclonic regions (see your components list to check if bolts are needed) if supplied, one bolt is fitted to both ends of rafters as well as tek screws

**Handy hint before starting:** *NEVER use an angle grinder close to the carport as grinding sparks will stick to sheets and cause surface rust. If an angle grinder has been used, sweep grinding sparks off straight away with a soft hair broom.*

**Step 1** – Mark out and dig footings. An exact plan for the correct position of the footings is available from your supplier on request. Check the engineers plan for the correct footing size for your carport.



**Step 2** – Fix left and right haunch plates to columns keeping back edge of plate 50mm below top of the column.



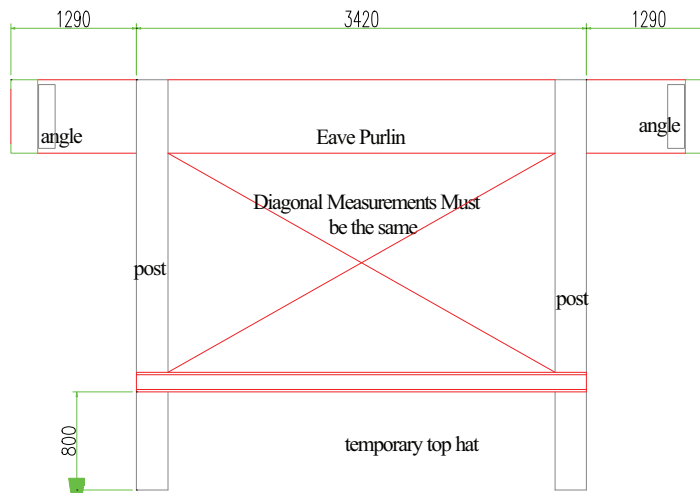
**Step 3** – Lay columns out with the tops of haunch plates facing each other (i.e. tops of columns). Distance between columns to suit bay size/s. Ensure smooth side of haunch plate/C section faces inside of carport.

**Step 4** – Measure 800mm from bottom of columns to bottom lip of a temporary tophat purlin. Tek screw eave purlin C purlin to the top of columns and the temporary tophat purlin to columns using only one screw per purlin per column at this stage.

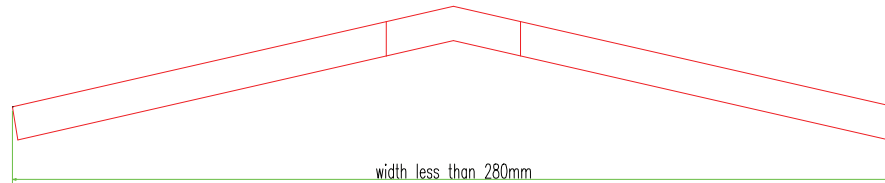
**Step 5** – Sight along bottom of columns or use a string line to make sure bottom of columns are in a straight line.

**Step 6** – Measure diagonals of wall frame (both measurements MUST be the same).

**Step 7** – When frame is square fit a second screw to tophats and eight screws to the eave purlin per post.



**Step 8** – Using apex plates, join rafters together in pairs, then attach the apex cross beam screwing through the smooth side of the apex cross beam C section and into the flange of the rafters. With a crayon or texta, mark position of roof purlins (see attached details) and put aside until frames are standing. The measurement across the rafter will be the width of the carport less 280mm i.e. 6m wide = 5720mm.



**Step 9** – Fit carport flashing to open side of eave purlin section using 10 x 16 screws.

**Step 10** – Fit gutter brackets to carport flashing with pop rivets. The brackets closest to the corners should be positioned 400mm away from the corners. Fit the brackets level with the top of the eave purlin at no more than 1.2m spaces. Fit gutters together using sealant. Allow overlap for the pre made gutter corners.

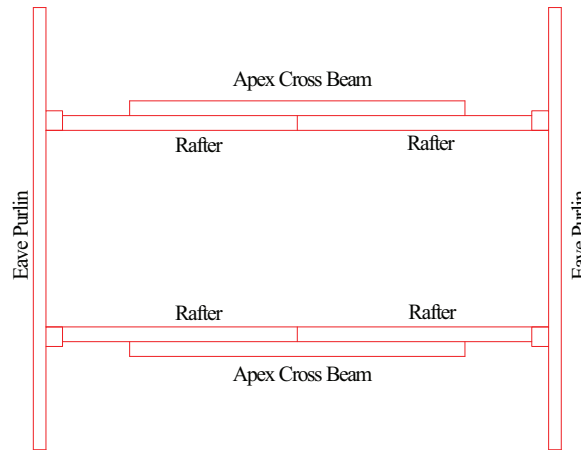
**Step 11** – Fit three or four roof screws to the bottom of the posts to help bind the post to the concrete footing.

**Step 12** – With the assistance of a competent offsider or two, one side wall frame can be lifted into position. Brace and prop both sides of the wall using timbers or alternatively ropes tied securely around stakes driven into the ground.

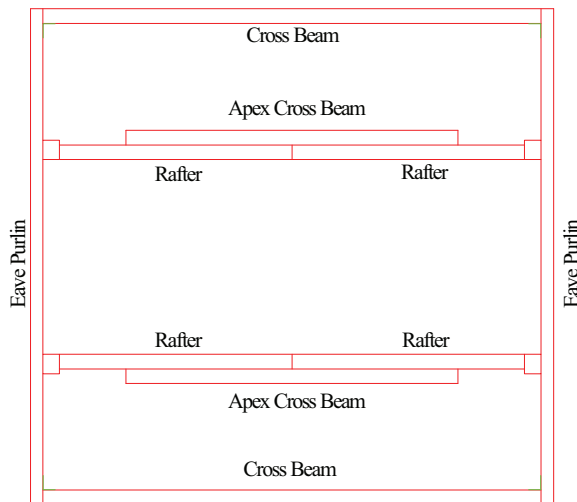
**Step 13** – Mix and pour concrete into the footing holes on one side of the carport, check that side is plumb and level using a spirit level, re-adjust props as necessary. Stand other side (as per step 10) but do not concrete this side yet.

**Step 14** – Measure distance between inside columns keeping this measurement 280mm less than the carport width. Check for plumb and re-prop if necessary.

**Step 15** – Fit rafters (previously made up) into haunch plates and tek screw.



**Step 16** – Fit front and rear cross bars using angle brackets and tek screws.

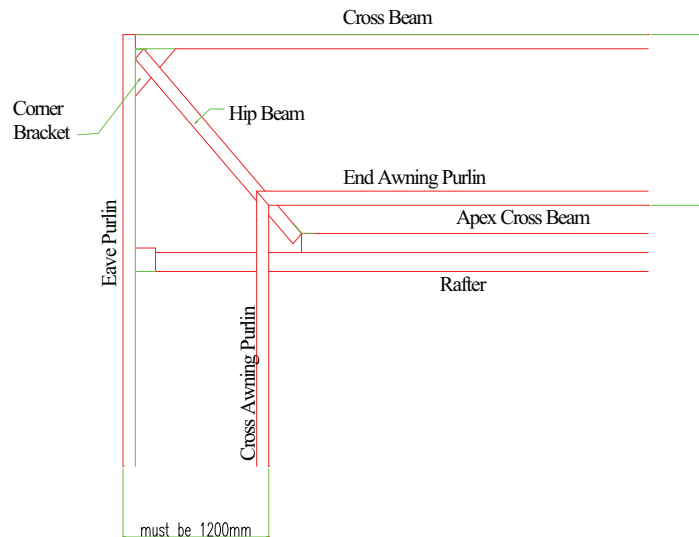


**Step 17** – Locate the roof purlins on the marks previously placed on rafters. These are 61mm tophat sections. Roof purlin ends will be flush with the outside edge of rafters. Tek screw all purlins to rafters with one screw, check it is square then fit second screw.

**Step 18** – Check that the columns are plumb and the carport has a slight fall to the downpipe location then concrete the remaining columns into position. It is advisable to wait at least a couple of hours before any further construction.

**Step 19** – Fit the 250 corner brackets to the under side of the C sections in the corner using 9 frame screws.

**Step 20** – Cut and fit the hip beams between the end of the apex cross beam and the corner of the carport. Attach the apex cross beam using 150mm angle brackets fitting 4 tek screws per side, then strike the angle bracket with a hammer to achieve the correct angle. Attach to the corner by screwing through the 250 corner bracket and into the hip beam then cut the strap into 350mm lengths and attach over the top of the hip beam and into the cross bars and eave purlins.



**Step 21** – Cut and fit the awning beam using a large angle bracket to the centre of each end of the carport.

**Step 22** – Fit the exact fit flashing to the crossbars.

**Step 23** – Fit the gutter brackets and gutter as you did to the sides of the carport.

**Step 24** – Place the corner awning purlin overlapping the bottom tophat purlin, mark the angle where the purlin goes over the hip beam to the centre of the hip beam and cut to suit, then attach using two framing screws per connection.

**Step 25** – Place the end awning purlins into position (1200mm from the cross beam) and mark the angles to match the corner awning purlins. Cut to suit and attach using two frame screws per connection.

**Step 26** – Remove temporary tophat from sidewall and fit to roof.

**Step 27** – Fit ridge capping to corners directly above hip beams, screw to eave purlin and cross bar at base and tophat purlins using 10-16 screws.

**Step 28** – Fix roof sheeting allowing approximately 50mm overhang into the gutter. Start sheeting level with the front rafter and work towards rear. Check that roof sheets are running parallel to the front edge of the gutter at all times. The last sheet may need to be overlapped more than usual to finish level with the rear rafters. The correct procedure to screw roof is to start at the bottom (eave purlin) of the sheet and screw every 2<sup>nd</sup> rib into the eave purlin using 45mm roof screws. On all other purlins screw through the overlap, the every 3<sup>rd</sup> and 4<sup>th</sup> rib using 35mm roof screws.

**Step 29** – Place the roof sheets to the corners, mark and cut roof sheet to the centre of the ridge capping, do not discard the off cuts from the corner sheets as they are fitted to the diagonally opposite corners of the carport. **Do not discard any sheeting until the carport is complete.** The cut ends of the corner sheets are then screwed to the ridge capping using 10-16 screws fitted to every valley of the corrugated sheet and fixed to the eave purlin in the usual manner.

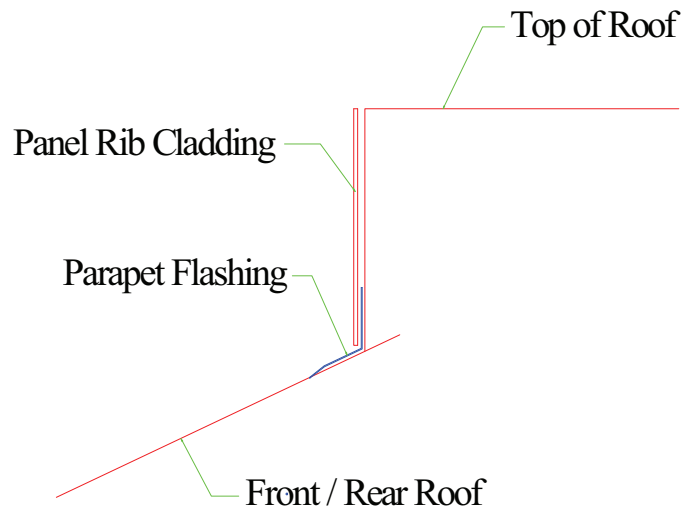
**Step 30** – Starting at a front corner, cut the sheeting to suit the ridge capping. The off cuts go to the diagonally opposite corner as you did with the side roofs.

**Step 31** – Fit the ridge capping to the corners of the carport using roof screws into the eave purlin, cross beam and roof purlins.

**Step 32** – Fit parapet flashing to the rafters and roof sheets using 10-16 screws.



**Step 33** – Fit panel rib cladding to the parapet flashing and rafters using flashing screws. The offcut from this sheeting is used to clad the opposite end of the carport.



**Step 34** – Fit ornamental flashing to whichever pattern you like.



Flashing Patterns

**Step 35** – Fit barge capping to each end of carport. Sit one length of barge into position and mark and cut to suit roof, mark centre line of ridge cap. Square line onto both faces of barge and cut to length. Fit this barge using 10-16 flashing screws on face into panel rib sheeting and roof screws to top. Sit other barge into position and again mark and cut to suit roof then mark centre line. Square line across top of barge and install as per the first side. Repeat this procedure to other end of carport. Pop rivet overlap on face of barges.

**Step 36** – Fit ridge capping to top of roof screwing through ridge capping into roof purlin.

**Step 37** – Cut a hole in the lowest corner of carport gutter to suit the downpipe socket.

**Step 38** – Use silicone and pop rivets to secure and seal in position.

**Step 39** – Cut and fit downpipes using 90 degree bends, pop rivet to nozzle. Secure bottom of downpipe until connection to stormwater system.

Do a final check on carport making sure that no roof or frame screws have been missed.

**BRUSH COMPLETE CARPORT DOWN WITH A SOFT BROOM TO REMOVE ANY METAL DUST/FILINGS CAUSED BY ANGLE GRINDER.**

***CONGRATULATE YOURSELF ON A JOB WELL DONE!***

