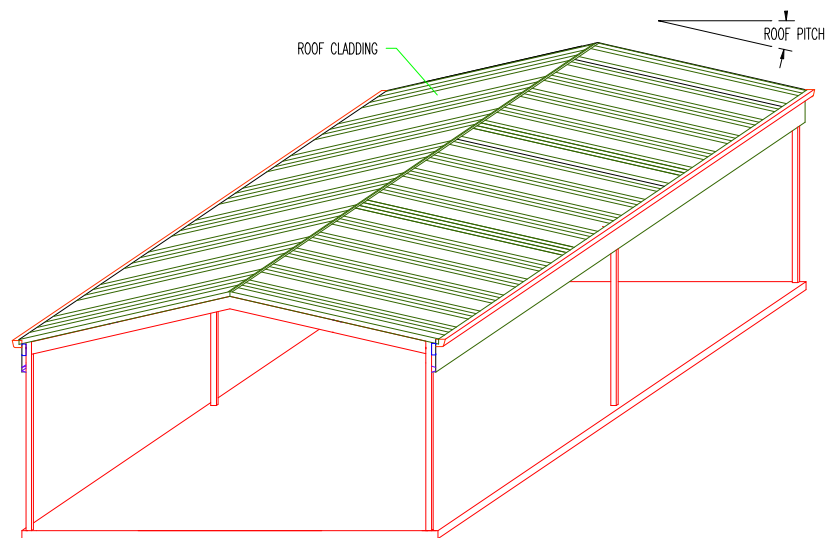


# Gable Roof Carport

## Galvanised Steel Frame



*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.

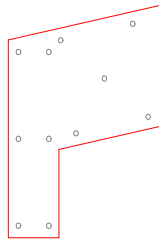
## Frame Components

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

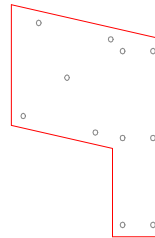
Galvanised “Boomerang” shaped plate to join columns to roof rafters.

Haunch plate **must always** be installed on the smooth side of the rafters.

### **LEFT SIDE**

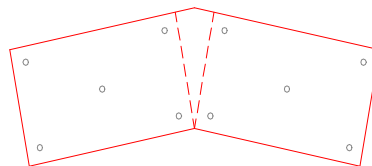


### **RIGHT SIDE**



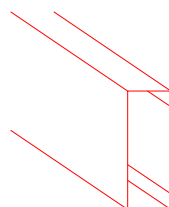
### **Apex Plates:**

For joining rafters to form apex to roof.



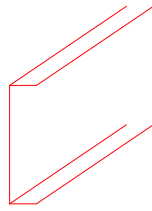
### **C150 Purlins:**

150mm x 65mm C section purlin. Used as eave wall purlin and rafters in gable carports.

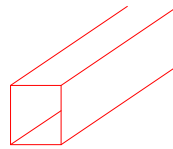


**Carport Flashing:**

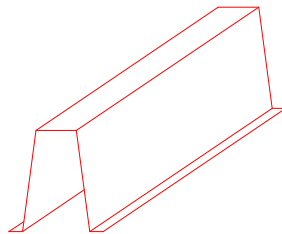
Fitted to open side of eave purlin.

**Columns:**

75mm x 75mm square tube.

**64mm Top Hat Purlins:**

Used as roof purlins.

**Tek Screws:**

**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.

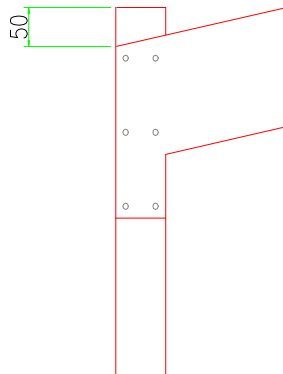
AG&S Building Systems P/L/Hi-Tech Designs P/L  
PO Box 252  
CAMDEN NSW 2570  
AUSTRALIA

For further enquiries, please contact your local distributor.

## Where To Start:

**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.



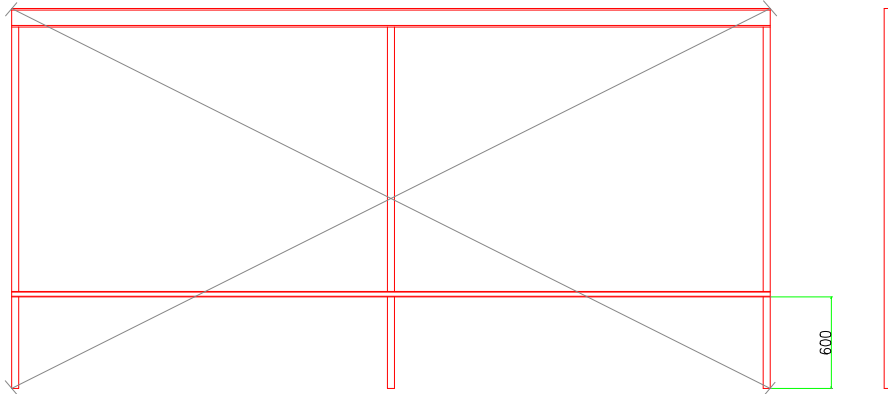
**Step 3** – Lay columns out with the tops of haunch plates facing each other (i.e. tops of columns). Distance between columns to suit bay size/s. Ensure smooth side of haunch plate/C section faces inside of carport.

**Step 4** – Measure 600mm from bottom of column to bottom lip of the temporary tophat purlin (if erecting into footings measure 1 metre from bottom of column).

**Step 5** – Join tophat purlins together, overlapping them evenly to suit length of carport. For ease of handling it is recommended that purlins be joined together in multiples of two at a time.

**NOTE** – Eave C purlin is always flush with top of post. Bottom lip of temporary tophat purlin is always fixed to mark (see 4)

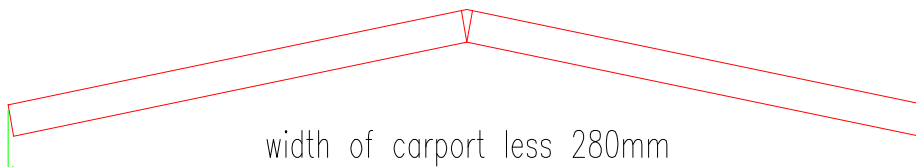
Tek screw eave C purlin and temporary top hat purlin to columns using only one screw per purlin per column at this stage.



**Step 6** – Sight along bottom of columns or use a string line to make sure bottom of columns are in a straight line.

**Step 7** – Measure diagonals of wall frame (both measurements **MUST** be the same). When frame is square fit a second screw to tophats and three screws to the eaves purlin per post.

**Step 8** – Using apex plates to join rafters together in pairs. With a crayon or texta, mark position of roof purlins (see attached details) and put aside until wall 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 10x16 screws.

**Step 10** – Fit gutter brackets to carport flashing with pop rivets. Gutters to be installed with a slight fall to downpipe end. Space brackets evenly at approximately 1200mm spacings.

**Step 11** – Fit gutter stop ends to gutter, fit nozzles and make up gutters the same length as the top eave purlins. Fit gutters to brackets previously fitted. **At this stage both sidewalls of the carport are ready to stand.**

**Step 12** – With the assistance of a competent offsider or two, one sidewall 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. When propping under gutters, it is recommended that some soft cloths or similar are tied around the end of the props to avoid marking the gutter.

**Step 13** – Using rapid set concrete, mix and pour concrete into footing holes to one sidewall, check that wall is plumb and level using a spirit level, re-adjust props as necessary. Stand other side wall (as per 12) but do not concrete this side yet.

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

**Step 15** – Fit gable end rafters (previously made up) into haunch plates and tek screw. Fit intermediate rafter/s and tek screw.

**Step 16** – Locate the roof purlins on the marks previously placed on the rafters. These are 61mm tophat section. Roof purlin ends will be flush with outside edge of rafters. Tek screw all purlins to rafters with one screw, check for square, then fit second screws.

**Handy Hint:** Before fixing roof, check both sidewalls are straight by using a string line along inside of columns. Re-prop columns if necessary. Check carport is square then pour rapid set concrete into remaining footing holes and wait 2 hours. This also keeps the structure more rigid when working on roof.

**Step 17** – Remove temporary tophat from sidewall and fit to roof.

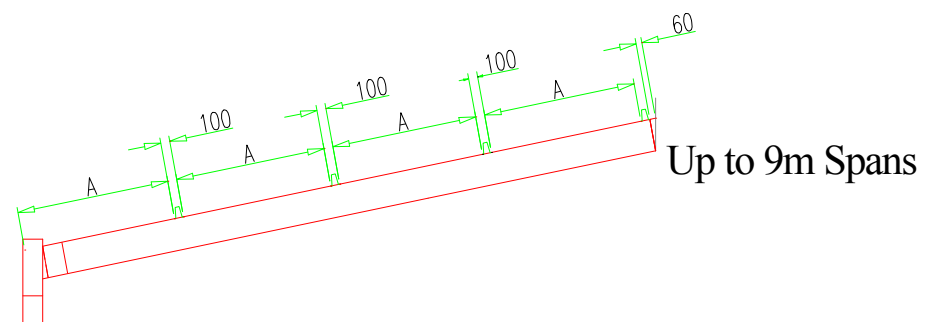
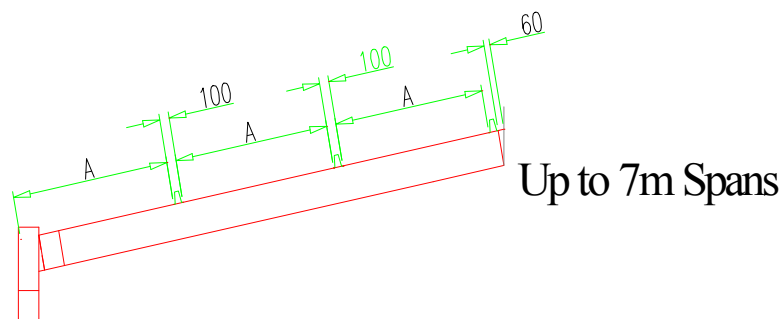
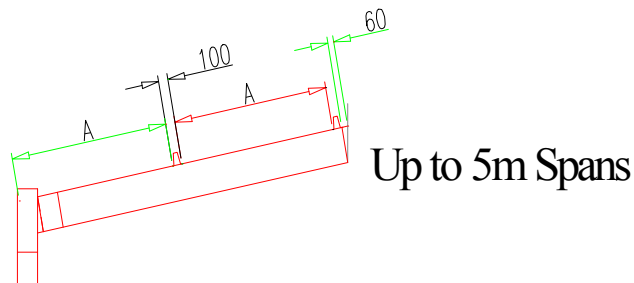
**Step 18** – Fix roof sheeting allowing approximately 50mm overhang into the gutter. Start sheeting 40mm back from front of carport and work towards rear. Check that roof sheets are running parallel to the front edge of gutter at all times. The correct procedure to screw roof is to start at the bottom of the sheet and screw every 2<sup>nd</sup> rib into the eave purlin. On all other purlins screw through the overlap, then every 3<sup>rd</sup> and 4<sup>th</sup> rib.

**Step 19** – Fit barge capping to each end of carport. Keep ends of barge flush to outside edge of the gutter. Sit one length of barge into position and 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 rafters and roof screws to top. Sit other barge into position and again mark centre line. Square line across top of barge only and mark a plumb mark to front using a spirit level. Repeat this procedure to other end of carport. Silicone join on top of ridge to avoid leakage. Pop rivet overlap on barges. Fit ridge cap.

**Step 20** – Cut and fit downpipes, pop rivet to nozzle. Temporarily secure bottom of downpipe until connection to stormwater system.

**Step 21** – Do a final check on carport making sure that no roof or frame screws have been missed.

**Step 22 – Brush complete carport down with a soft hair broom to remove any metal dust/filings caused by angle grinder. Don't forget the roof.**



SPAN	3.6m	4.2m	5.0m	5.4m	6.0m	7.0m	7.5m	8.0m	9.0m
DIMENSION A	770mm	922mm	1126mm	785mm	888mm	1057mm	831mm	895mm	1022mm

***Stand back and congratulate yourself on a job well done!***