

# DOUBLE CARPORT Installation Guide

A step-by-step guide to install your carport



### INTRODUCTION

Thankyou for choosing the Streamline Carport. This product will provide you with many years of trouble free protection if installed in accordance with the directions outlined in this document.

This document should outline most of the technical information required to install.

If you have further questions, please contact the Technical Team on 0800 227 767. We are always happy to help!

### BEFORE YOU START, READ THIS

- ✓ This guide does not apply to Carports wider than 6m. if your carport is wider than 6m, please contact Streamline for further advice
- Ensure you describe your site details when ordering material.
- ✓ Make sure you are aware of underground services before you start digging! These could be gas, electricity, or water mains. Call your local council for more information

- Check your local council regulations on proximity to boundary
- Check the delivered material for correct quantities and components and general condition before you begin installation.



It is recommended that you pay particular attention to the items identified as IMPORTANT in this manual, to ensure correct installation and longevity.

### **CARPORT DURABILITY STATEMENT**

Reference the NZ Building Code Section B-2 Durability

Streamline Double Carports should have a durability of 25 years if fixed, assembled and erected in accordance with the manufacturers instructions. The following maintenance requirements are an essential part of this durability statement.

- 1. Gutters and Downpipes are to be cleaned at intervals of four to six months each year, specifically after autumn leaves have fallen.
- 2. The underside of the roof MUST be thoroughly washed with clear water at least annually.
- 3. Volcanic Ash Fallout: Any such fallout must be removed from roof gutters as soon as possible using a hose, soft brush and copious amounts of water. Ensuring any resulting debris is removed from gutters.
- 4. Within 2km of the coast, wash down roofing (especially underside) gutters and posts on a quarterly basis (once every 3 months), using a hose and soft nylon bristled brush. In this environment it is necessary in the event of a storm to wash the underside of the carport as soon as possible afterwards, since the highly corrosive salt deposits will accumulate and cause a rapid deterioration (particularly on tension bends on the underside) of the protective coatings of the steel product.
- 5. It is recommended in severe industrial or coastal environments that any unpainted surfaces be painted using approved surface preparation and a suitable painting system as specified by the paint manufacturer. Also, over painting for aesthetic reasons will greatly extend the life of your product.

### LIST OF TOOLS REQUIRED

Ensure you choose the right tools before you begin installing your carport.

### **TOOLS**

- Tape measure
- Shovel
- Level
- String line
- Concrete
- Timber for bracing
- Drill
- Rivet Gun
- Ladder
- Planks
- 60mm hole drill
- Silicone Gun

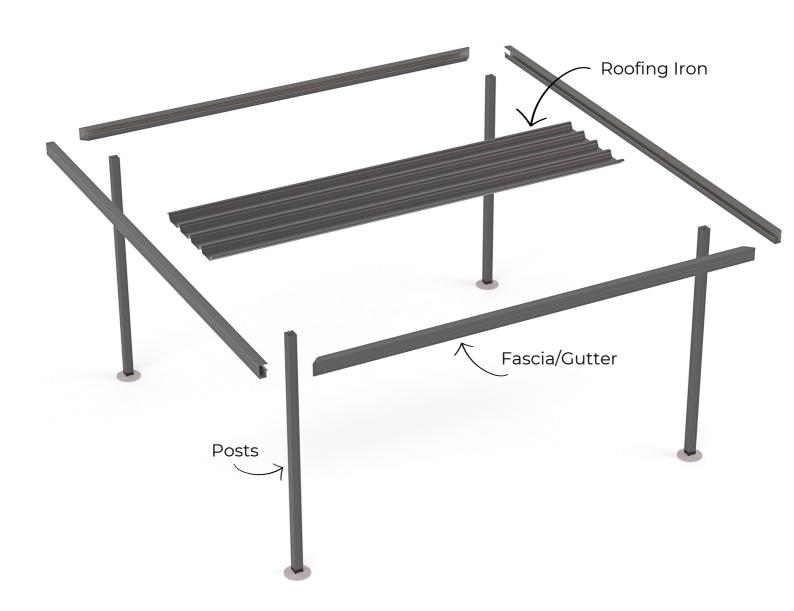
### **SAFETY GEAR**

- Foot protection
- Eye protection
- Helmet
- Gloves
- Hearing protection
- Sun Protection



# CARPORT OVERVIEW

The 3 main components

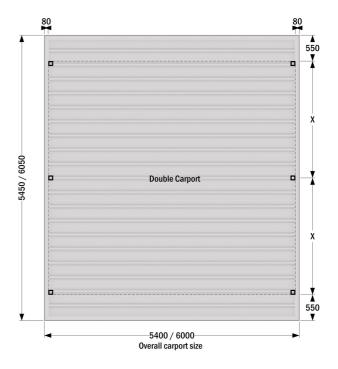


### YOUR STEP BY STEP GUIDE TO INSTALLAIONS

### **STEP 1:** PEG OUT OVERALL CARPORT SIZE

- ✓ Determine and mark out any legal boundaries and underground services
- ✓ Accurately measure off post and mark the positions
- ✓ Use string line or laser-level to make sure any straight lines are aligned.
- Post spacing should be no more than 2.4m for a double

✓ Posts need to be in no more than 550mm from the end, and 80mm in from each side - see diagram below



Clearance distance between entrance posts is 360mm less than the overall width dimensions. I.e. 3600m wide carport will have 3240mm clearance between opening.

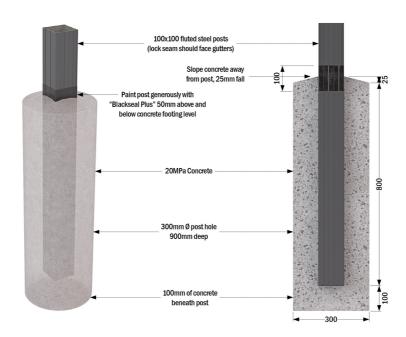
### **STEP 2:** DIG POST HOLES

Note: Maximum span between posts down the length of the carport is 2.4m for a double carport.

Dig post holes using hand tools and/or power tools. 300mm diameter and 900mm deep - allowing for 800mm of the posts to be in the ground, with 100mm of concrete beneath the post.

### **STEP 3: INSTALL POSTS IN THE GROUND**

- Apply 'Blackseal plus' (a bitumen concrete waterproof membrane, supplied) to the posts, 50mm above and 50mm below the concrete level interface to protect posts against corrosion damage. (Cleaning area with an alcohol based solvent is recommended prior to application)
- To create the correct fall for a double carport, place posts 100mm deeper on one side.
- Position all posts with correct vertical alignment and brace for stability. Use one post for a datum height and work off that to arrive at the heights of the other posts.
- **3.4** Ensure downpipe side of carport is lower than opposite side to allow for roof slope. Double check all posts are straight before moving on.
- **3.5** Fill the hole with concrete around the post, ensuring the posts remain in the correct position.
- **3.6** Check with a level regularly to ensure the posts are plumb.
- 3.7 Bracing should be left in place until concrete is dry.



**NOTE**: Where posts have a height greater than 3m above ground (or for optional strength) posts are to be filled with course grout with a maximum aggregate size of 9mm, one part cement to four parts aggregate with no sand, and a D12 bar full length of the posts.

### STEP 4: INSTALLING BASE PLATE (OPTIONAL)

Galv top mount base plates are designed to allow carports to be erected securely on an already poured concrete slab.

Firstly, ensure sure your concrete slab is a minimum of 20MPa and minimum of 100mm thick, with steel reinforcing mesh.

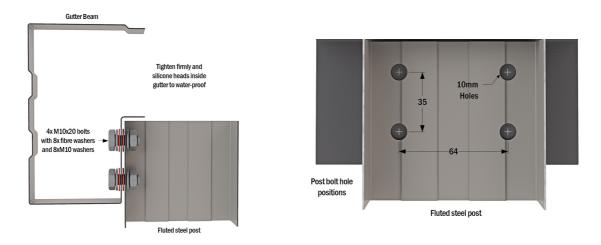
# Hot dip galv base plate: 180x180x10mm mild steel plate connected to a 89x89mm (5mm) x200mm high SHS with a 6mm fillet weld all around. Four 15mm holes, one in each corner for the trubolts to be drilled 20mm in from each corner to the centre of the diameter 4/M12 Trubolts (100mm Long)

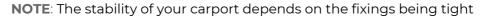
- 4.2 Slab shall extend a minimum of 100mm in one direction and a minimum of 500mm in the other 3 directions from the base plates
- Posts are fitted over the base upright and attached using 6/14gx30 long tek screws to each side of the post (24 screws per post)

### **STEP 5: ATTATCHING GUTTER BEAM**

- 5.1 Remove any protective plastic wrap from the items before fixing in place.
- First drill the bolt holes in all the posts, and lift the gutter beam into place and transfer the hole positions over.
- Then determine downpipe positioning. Using a hole saw, cut a hole through the gutter, rivet PVC dropper in place and seal around edges with silicone.

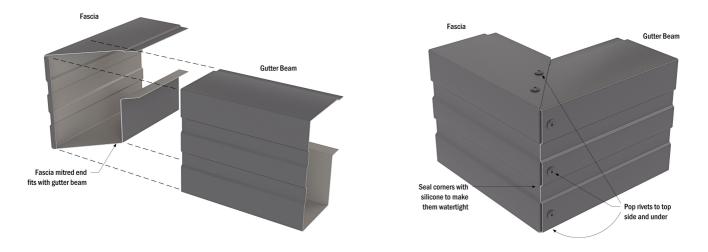
Fix each gutter beam by using M10x20mm bolts, nuts and washers - use silicone between washer and gutter to seal gap







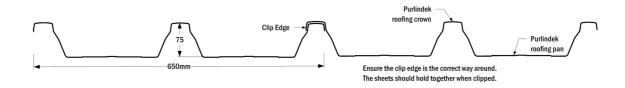
Clip in one fascia end, sealing the corner with silicone to make i water tight. Leave one fascia end off to allow for roof sheets to slide in.



### **STEP 6: INSTALLING ROOF SHEETS**

If you are installing fibreglass clearlite panels please also refer to step 7.

- Once gutter beams are up, mark 600mm centers along the length to indicate where each sheet of roofing will cover to.
- 6.2 Next slide the roofing sheets into the gutter beams, clipping the overlaps and riveting together as they are inserted.



6.3 Once clipped fix pop rivets from underside of the roof, or from a ladder to the top side, and repeat until all sheets are slid in.

Take care when pre-drilling rivet holes that the roofing is aligned correctly (i.e. carport is not pushed out of square)

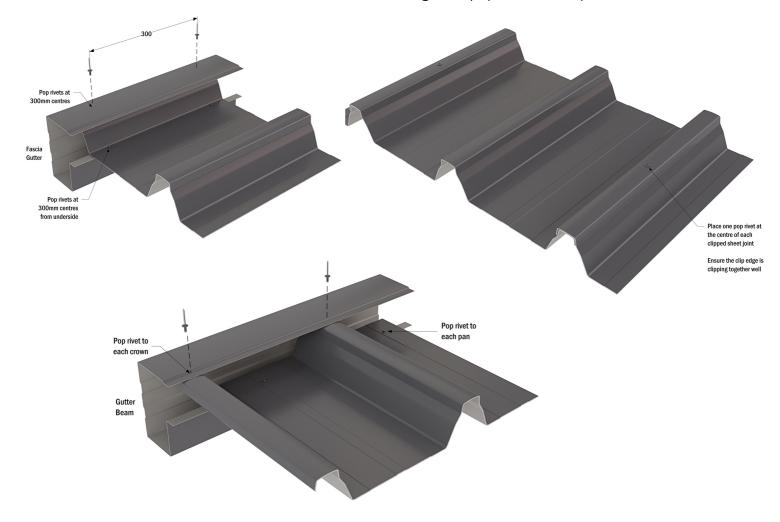
**NOTE**: You may find it helpful to use a broom handle to knock the clips into place fully.

Once all sheets are positioned and clipped together, check that the pans of the roof profile are not sitting directly over any of the posts. This will allow for ease of riveting- see below.



**6.5** Ensure all iron swarf from drilling is thoroughly washed off the carport. Any iron filings or swarf will quickly cause discolouration of your carport.

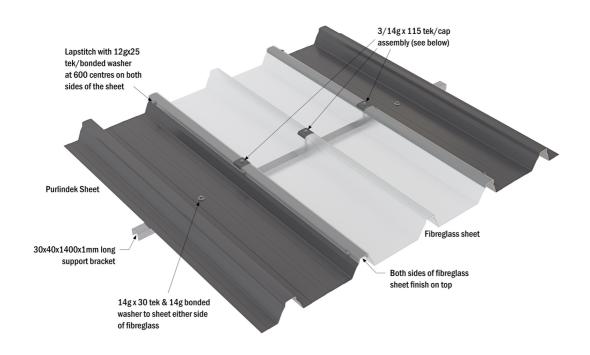
NOTE: DO NOT walk on the roof until all fixings and pop rivets are in place.

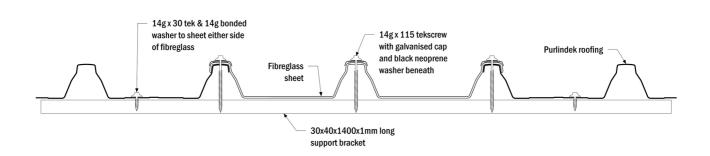


## STEP 7: Clearlite fibreglass panel (Optional)

Clearlite panels should only be installed between sheets of iron. i.e Every second sheet.

- 7.1 Identify where you want the clearlites to be situated on the roof and clip over roofing iron and slide in, as per normal iron sheets.
- 7.2 Once all sheets are in place and end fascia fixed and silicone in place, ensure brackets are placed at equal centres on the sheet and secure to the steel roofing sheets at either side - see below diagram

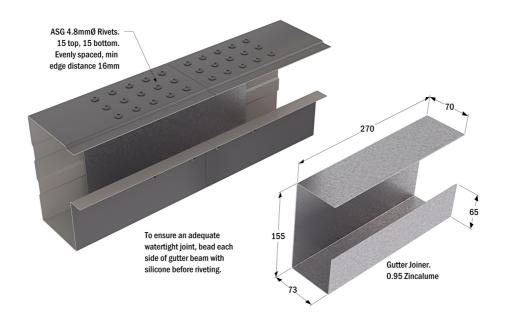




### STEP 8: Gutter Beam Joiner (Optional)

For non-standard or modular carports where it is necessary to join extra-long gutter beams.

- Insert the joiner inside the gutter beam, where the join is. Rivet with 15 rivets at the 8.1 top and 15 rivets at the bottom, spaced evenly.
- Silicone each end of the joiner on the inside of the gutter, and the join to avoid 8.2 water leaking
- Rivet with 15 rivets at the top and 15 rivets at the bottom, spaced evenly.



**8.5** Place a final 2 rivets in each beam, as per below

