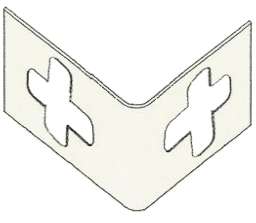
INSTRUCTION MANUAL

FAIRFORD SHED

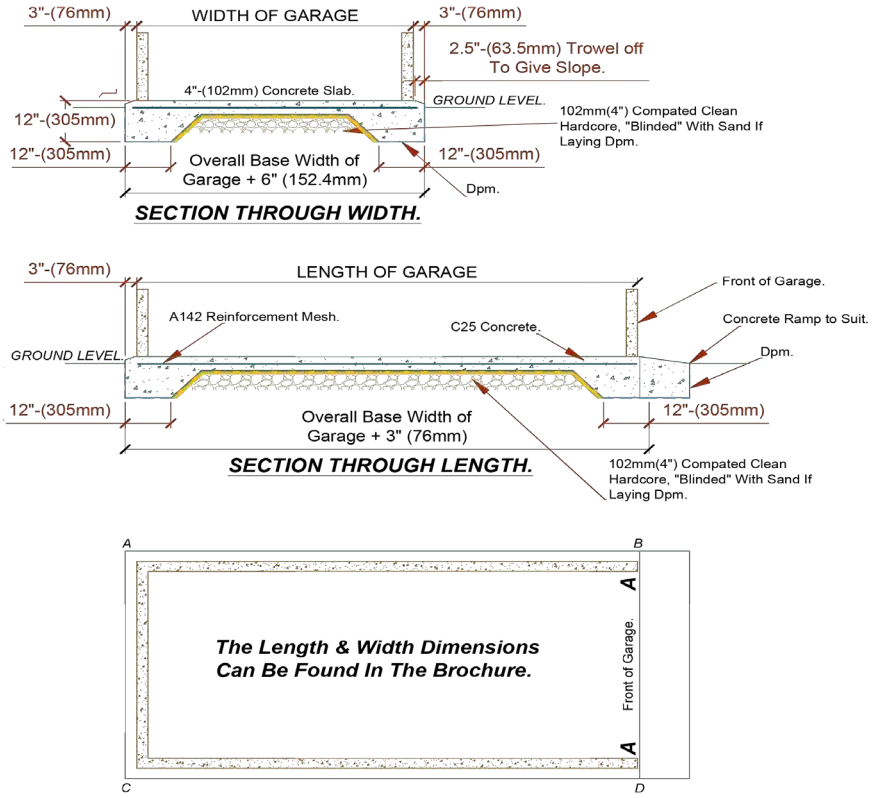
Fixing Accessories

DESCRIPTION	USED FOR	PRODUCT
M8 x 120mm MUSHROOM HEAD BOLT	Securing Panels and Wall Plate Together	
M8 x 140mm MUSHROOM HEAD BOLT	Securing Corner Panel to Wall Panels	
M8 HEX NUT	Securing Panels and Wall Plate Together	
M8 WASHER	Securing Panels and Wall Plate Together	
M8 PLASTIC TAPER WASHER	Securing Panels and Wall Plate Together	
48mm GALV TRUSS HANGER	Securing wooden trusses to the Wall Plate	
30mm GALV TWIST NAIL	Truss Hanger	
M8 x 75 COACH SCREW	Gable Fascia to Wall	
M1500 ANGLE BRACKET	Batten to Gable Fascia	

DESCRIPTION	USED FOR	PRODUCT
40mm POLY TOP PIN	Gutter Board	
No. 10 x 50mm C.S.K WOOD SCREW	Batten to Inter Truss	
28mm BLACK SELA CAP	Roof Sheet	
28 x 6mm BLACK SELA WASHER	Roof Sheet	
No. 10 x 38mm C.S.K WOOD SCREW	Roof Sheet	
M6 x 50mm MUSH HEAD BOLT	Batten to M1500 Angle Brk't	
M6 NUT	Batten to M1500 Angle Brk't	
M6 WASHER	Batten to M1500 Angle Brk't	
WOOD TEK 6.3 x 32 T19	M1500 Angle Brk't to Gable Fascia	
CLEAR SILICONE TUBES	Seal Panels	
BLACK BASE SEAL STRIP	Base of Panels to Concrete Slab	

DESCRIPTION	USED FOR	PRODUCT
30 x 30 x 90 DEG UPVC ANGLE mr	Base of Panels to Concrete Slab	
No. 10 x 50mm C.S.K WOOD SCREW	Batten to Inter Truss	

Ensure that you have a **CLEAR** and **LEVEL** base on which to assemble the garage.



Concrete Shed Base

Why do I need a concrete base? Can't I use paving blocks or slabs, or just put it on tarmac?

The design of the concrete prefabricated building with panels bolted together requires a strong concrete raft base. Any movement in the base will cause the shed to move.

The concrete base is the customer's responsibility

The old saying, "a building is as good as its foundations", is as true for your concrete sectional shed as it is for any other type of building. The better the specification of the base, the more peace of mind you will have in the future. If you skimp on the base, you may regret it later!

Concrete base design

Your concrete base needs to be designed properly to be strong enough not to crack or sink over the lifetime of your shed.

Your shed base should be designed to suit the soil on your site. For instance, if the soil is clay, with the likelihood of movement in the future, you will need to reinforce it, and probably make the raft thicker. If your building is over 30 sq.m, you will need to gain approval from your local control office, who will need to inspect and approve your concrete shed base plans.

You should thicken the edges of the base to a depth to suit the ground conditions. The thickness of the concrete in the base will also depend on the soil conditions. The concrete mix design should be suitable for a shed base – speak to your supplier and tell them what the concrete is intended for so they can provide the correct mix. A minimum concrete thickness of 100mm (4") is normally recommended, laid over at least the same thickness of well compacted clean hardcore. The hardcore should be "blinded" with sand if you are going to lay a damp proof membrane (dpm), normally 1200g polythene sheet. Steel reinforcement mesh will further strengthen your base, your local agent or local builder will advise.

If you intend to store items in your shed once it has been built, we recommend the inclusion of a dpm. Without the dpm there is no guarantee that damp will not spread into the building. Don't forget that the base will need time to "go off" or cure, before building on it. Allow at least a week, and more in winter.

The concrete base should be square. The shed needs to sit on a base about 75mm (3") larger all round. When setting out your base, make sure that the shuttering is square. To make sure your base is square, measure the diagonals AD and BC – they should be the same. If not, adjust your shuttering until they are – your base will then be square.

The external dimensions should be 150mm (6") larger (75mm each side and front and rear) than the size of the building you have bought. If in any doubt, seek advice and confirmation of the size of your building from the company.

The concrete base should be level. There must be no slope from side to side, back to front or front to back.

If you build your concrete shed on an unlevel base, the panels may not fit together properly it may be difficult for you to lay the necessary concrete fillet, and the roof may not fit properly. If the fall is to the rear, you may well get puddles forming at the back of the shed.

The base must be higher than the surrounding area. It should stand out of the ground by at least 25mm (1"). If not, water will stand on the base and may leak under the panels.

If the ground slopes down to the base, you should ideally dig out a trench 150mm (6") deep around the base, backfilling with gravel or pea shingle, after retaining the existing ground. Don't forget to take into account surrounding ground levels when you position your personnel door – if the ground is higher than the base, it will catch as you open it. Obvious when you think about it, bit late when you have built the shed!

So, your base should be designed to suit your local conditions. It should be strong enough, flat, square and level, higher than surrounding ground and 150mm (6") larger than the building size (external dimensions).

Finally, your concrete base should be positioned properly. Don't forget that the personal door will project from the side of the building when it is being opened, so position the base so that the door doesn't foul a wall or other building when you open it.

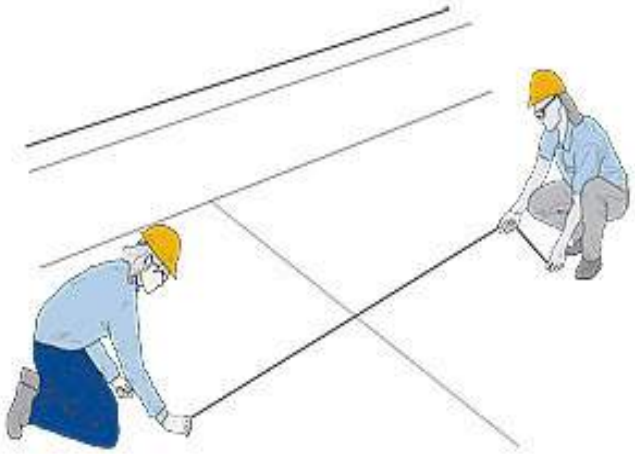
PLEASE LOOK UP! Trees, buildings etc can overhang, branches and gutters can affect the positioning, just because it fits on the base, doesn't mean it will fit at eaves height!

Don't position the building too close to other buildings or walls, as this can form a water trap – always specify gutters on your shed to minimise the potential for water leaking into your shed. Allow for guttering on your building if you order it – add in 150mm each side ++for guttering.

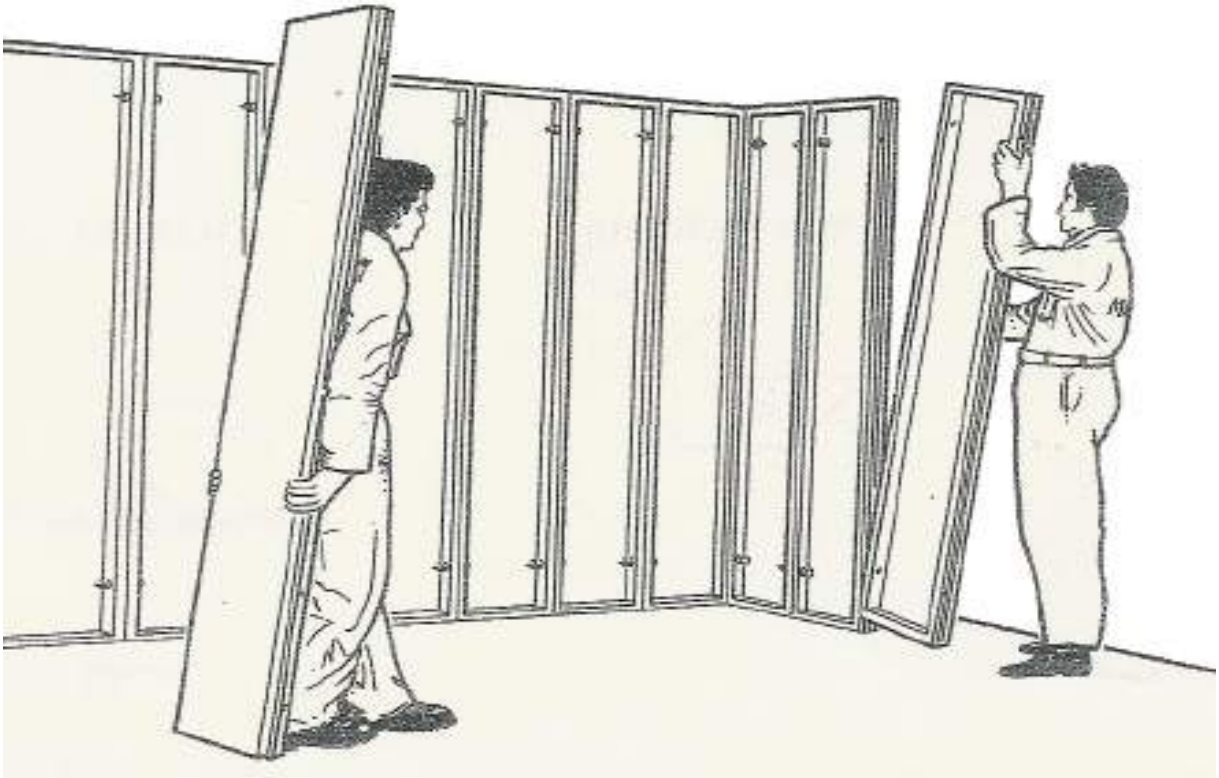
If you are using a local builder to carry out the base works for you, please give him this before he starts work.

Step 1

With a **CHALK LINE** mark out the external size of your shed ensuring that it is square, then apply black Bitumen tape to the base just inside of the **CHALK LINE**, so you can still see the **CHALK LINE** when your concrete panels are in position.



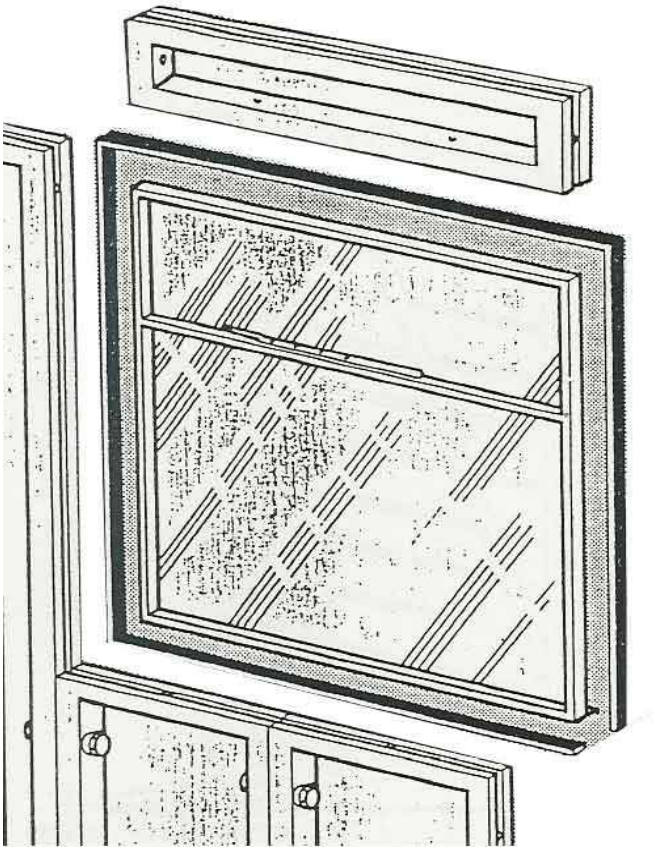
Step 2



Starting in the **LEFT** hand **REAR CORNER** assemble your corner using the **HEEL AND TOE** method of assembling, assemble 3 panels either way loosely, then using a **SPIRIT LEVEL** upright your panel and tighten the bolts ensuring that the tops are flush against each other.

Once you have done this continue with the rest of your building keeping it fairly even until all of your concrete is assembled. Place your doors and windows in the required positions with the header panels fitted above them.

Windows



Where required, a window consists of the frame, two short panels and a lintel. Butt the short panels together and to a standing standard panel. Secure with **bolts** 4" (100mm) long, nuts and **tapered washers**.

Fit plastic angle to top of panels. Stand the window on the short panels with the outside face of the panels and the small sill projecting over the short panels. Support the window until the lintel and the adjacent panels are fixed.

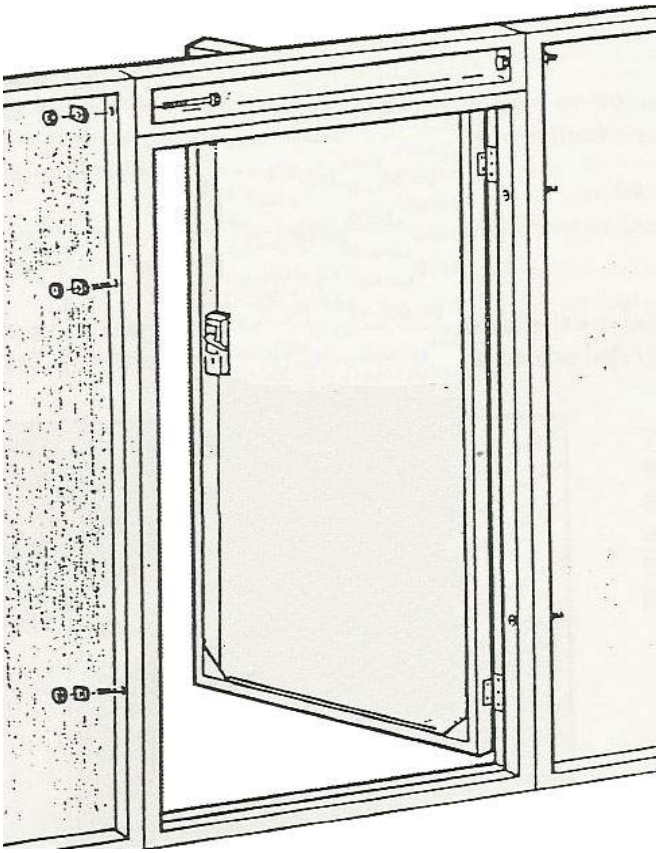
Place the concrete lintel on top of the window and secure to the adjacent standard panels. Secure with **bolts** 4" (100mm) long, nuts and **tapered washers**.

NOTE that there must be at least one standard panel width between windows or between a window and a personal door.

Window Fixing

Fix the window to the short panels and to the lintel with 80mm **Self Drill Screws**.

Doors

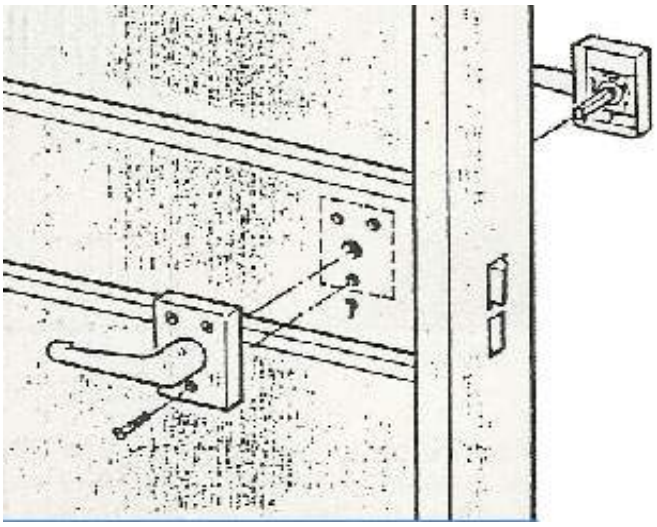


Fort Knox Personal Door

Butt the door frame against the adjacent standard panel in the required position. Secure with **Coach bolts** 4" (100mm) long, nuts and **tapered washers**.

Place a lintel above the frame and fix to the standard panels with **Hexagon Head bolt** 4" (100mm) long, nuts and **tapered washers**.

NOTE: It may be necessary to remove and refix the weather strip from the steel frame to gain access for the Coach bolts.



Closure Set

Fit square bar through the hole in the door and place the handle / lock sets on the ends of the square bar. Fix the handle / lock sets with the screws provided and check operation of handles and lock.

Step 3

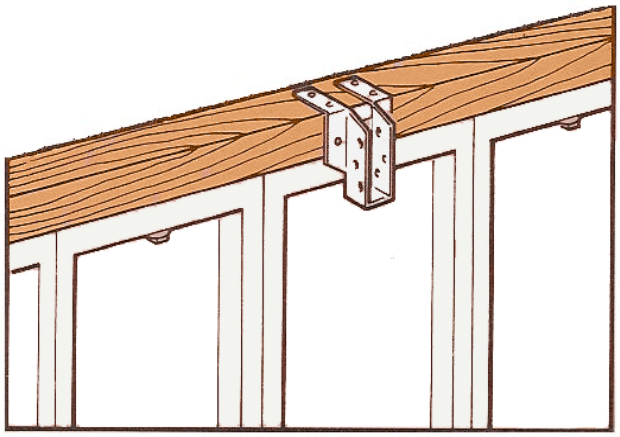
Fit your internal **ROOF TRUSSES** into position using the **COACH SCREWS** at **4ft** intervals then prop them up so they are upright and attach your **TIMBER PURLINS** to the roof.

Truss Hangers

Place truss hangers equidistantly on wall plate at a maximum distance of 3'4" (1m) apart.

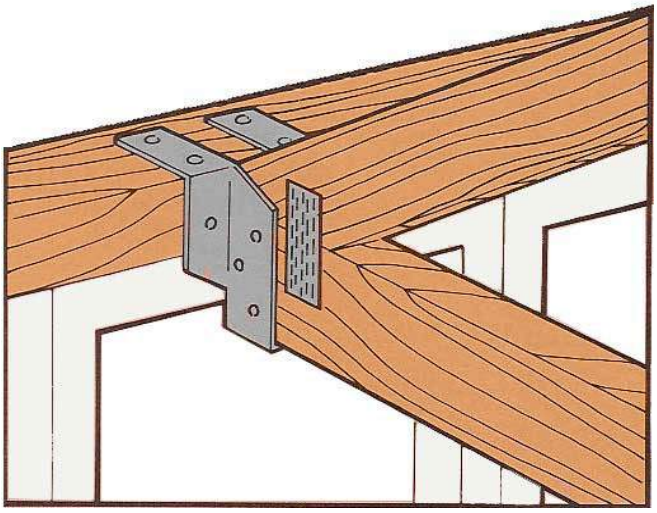
Ensure hangers on opposite walls are in line so that the intermediate trusses will be square to the walls.

Fix the truss hangers by nailing **square twisted nails** 1 1/2" (40mm) long into the tops of the wall plates. The inside face of each truss hanger must be flush with the inside face of the wall plate.



Intermediate Trusses

Lower intermediate trusses into truss hangers and fix in position with **square twisted nails** 1 1/2" (40mm) long.



Step 4

Now attach your uPVC fascia boards to the outside of your building, making the two ends flush with your front and rear fascias. The gutter brackets can be attached to your desired fall.

Fixing Gutter Brackets to Wall Plate

Using a string line mark positions for gutter brackets on the outside edge of the wall plate, a fall is not necessary for the gutter.

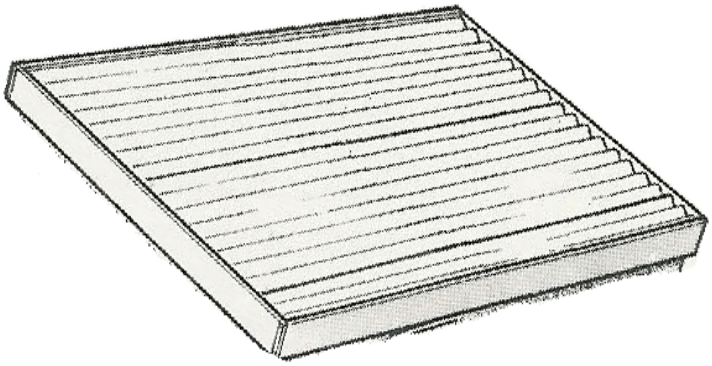
Fix one bracket 1' (300mm) in from each end of the wall plate with the tops of the brackets in line with the mark. Fix brackets with two **No. 8 countersunk screws** 5/8" (16mm) long. Fix remaining brackets equidistantly between end brackets, and not more than 3' (900mm) apart.

Step 5

Roof Sheets

NOW you are ready to attach your **ROOF SHEETS**. Place your roof sheets one at a time making sure you have **ADJUSTABLE OVERHANG** either side and that they are square, and fix them as required using the **WASHERS** and **CAPS** supplied.

WARNING: Whilst fixing roof sheets, a ladder or duck-boards must be used to avoid damage. Observe utmost caution when working on roof sheets which are wet or frosty.



A **No8 x 65 round head screw** and **sela washer** and **cap** to be used to fix the roof sheet. Lay the first roof sheet against the back front fascia with the same overhang each side fix, to timber roof battens with **No8 x 65 round head screw**, screws evenley spaced.

Lay the rest of the roof sheets along the roof with a minimum of one overlap, fix in the same way as before.

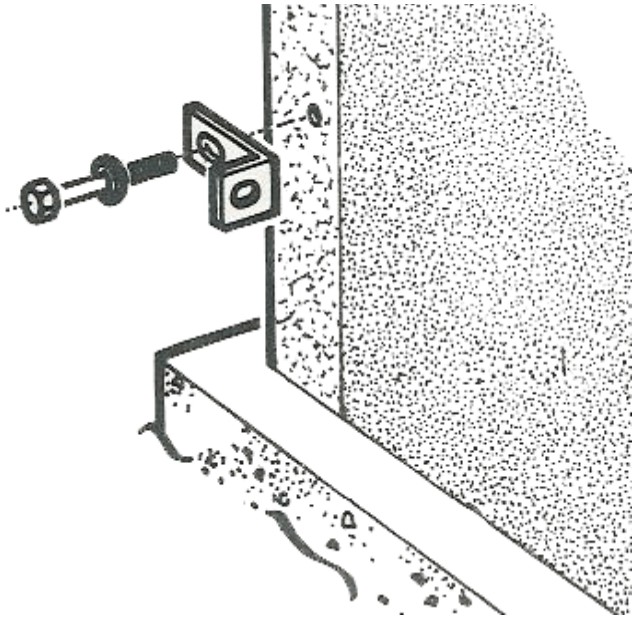
Fixing

When the fascias are securely fixed, place the sheets on the roof structure.

Mark accurately the position of all fixing holes on the roof sheeting for intermediate purlins.

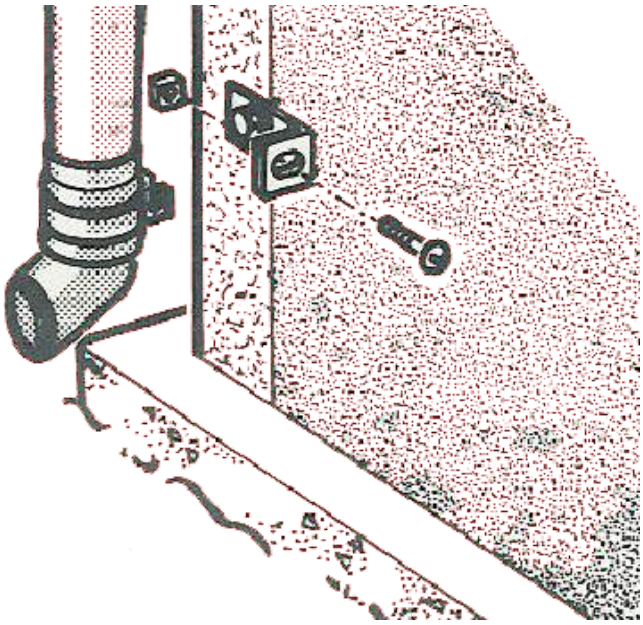
Fix all screws complete with plastic sealing washers in the positions shown,
tightening suffiiciently to seat the plastic washer firmly over the corrugations.

NOTE: Where guttering is fitted, before securing the roof sheets lay the felt strip provided along the top edge of the rear wall panels so that half the width of the felt drapes into the gutter.



Bolt a metal bracket **(S89)** to the top and bottom of the rear corner panel at which the downpipe is to be fitted - special holes are provided for this purpose.

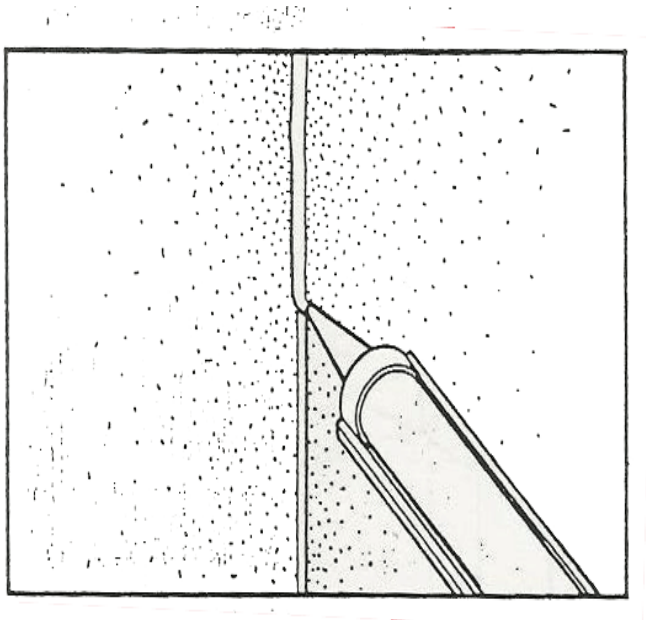
Attach one plastic pipe clip to the barrel of the downpipe at a position corresponding to the top metal bracket and a second clip to the shoe, which slots over the bottom of the downpipe. Offer up the downpipe to the gutter outlet and secure to the previously placed metal brackets via the plastic with one **seam bolt** and nut per bracket.



Silicone

External Finish - Joints

Ensure joints are clear then seal the external joints between panels by applying mastic with the gun provided. Cut the nozzle of the cartridge so that a bead of approximately 1/4" (6mm) is delivered.



After applying to the outside of all joints press finishing granules into the surface of the mastic.

Where, as an optional extra, the outside walls are to be separately finished with a textured weather coating **Do Not** apply a mastic filling.

Silicone all internal joints with clear silicone as detailed above.