



Quality - Built In

# ASSEMBLY INSTRUCTIONS



## MK4C

BASE SIZE 4210mm x 4210mm



## ASSEMBLY INSTRUCTIONS

### Tools Required:

- Drill
- Drill Bit 3.5mm
- Drill Bit 6mm (for clear roof panel only)
- Riveter
- Hammer
- Nail Punch
- Tape Measure
- Ladder or Saw stool
- Spanners x 2
- String Line
- Tin Snips
- Skillsaw and Jigsaw (for floor only)
- Masonry Drill and 10mm Masonry Bit (for Bolt Down Kit only)

### Before you start:

- **Read all instructions carefully.**
- Identify all parts and check quantities against checklist.
- If you are making your own floor refer to Raised Base Plate section now.

### Safety:

- Do not attempt to build your shed in high winds.
- Beware of sharp edges.
- Protect your eyes and ears.
- Use electric tools with care. Use a Safety Trip Switch.
- It is easier and quicker if this shed is erected by two people.

### Select your site:

- Your shed must be level. Achieve this by either levelling the ground or by using blocks.
- If your shed is to be positioned on wet or damp ground, we recommend that your shed is raised up off the ground slightly.

# KIWI MK4C PARTS LIST

ROOF COLOUR  WALL COLOUR  INVOICE NO:  BASE SIZE: 4.210 X 4.210

## STANDARD SHED KITSET

QTY	LENGTH	DESCRIPTION	PACKED	CHECKED
10	2.290m	Gable End Wall Sheets	<input type="checkbox"/>	<input type="checkbox"/>
7	1.890m	Wall Sheets	<input type="checkbox"/>	<input type="checkbox"/>
2	1.890m	MK4 1/2 Wall Sheets	<input type="checkbox"/>	<input type="checkbox"/>
2		Door - Standard <input type="checkbox"/> Security <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1		Instruction Booklet	<input type="checkbox"/>	<input type="checkbox"/>
2	0.260m	Jack Studs - 140 x 45mm	<input type="checkbox"/>	<input type="checkbox"/>
4	0.200m	Jack Studs - 60 x 45mm	<input type="checkbox"/>	<input type="checkbox"/>
1		Hardware Pack	<input type="checkbox"/>	<input type="checkbox"/>
		Touch-up Paint & Brush	<input type="checkbox"/>	<input type="checkbox"/>
5	4.560m	Roof Sheets	<input type="checkbox"/>	<input type="checkbox"/>
1	30m	Strip Bracing	<input type="checkbox"/>	<input type="checkbox"/>
1	10m	Strip Bracing	<input type="checkbox"/>	<input type="checkbox"/>

## OPTIONAL EXTRAS

QTY	LENGTH	DESCRIPTION	PACKED	CHECKED
<b>WINDOWS</b>				
		Fixed Window Frame	<input type="checkbox"/>	<input type="checkbox"/>
	0.580m	Glaze Beads	<input type="checkbox"/>	<input type="checkbox"/>
	0.603 x 0.603m	Glass	<input type="checkbox"/>	<input type="checkbox"/>
		Louvre Window Frame	<input type="checkbox"/>	<input type="checkbox"/>
	0.588 x 0.150m	Glass	<input type="checkbox"/>	<input type="checkbox"/>
1		Window Hardware Pack	<input type="checkbox"/>	<input type="checkbox"/>
<b>CLEAR ROOF PANEL</b>				
	4.560m	Roof Sheets	<input type="checkbox"/>	<input type="checkbox"/>
	2.255m	Flat Roof Sheet	<input type="checkbox"/>	<input type="checkbox"/>
	2.255m	Clear Roof Panel	<input type="checkbox"/>	<input type="checkbox"/>
	0.350m	Pressed Capping Sheet	<input type="checkbox"/>	<input type="checkbox"/>
	0.900m	Bevel Edge Support 45 x 45mm	<input type="checkbox"/>	<input type="checkbox"/>
1		Clear Roof Hardware Pack	<input type="checkbox"/>	<input type="checkbox"/>
<b>SECURITY PARTS</b>				
		Security Double Door Hardware Pack	<input type="checkbox"/>	<input type="checkbox"/>
		Alarm - MA20	<input type="checkbox"/>	<input type="checkbox"/>
		Shed light	<input type="checkbox"/>	<input type="checkbox"/>
		Bolt Down Kit	<input type="checkbox"/>	<input type="checkbox"/>
		Peg Down Kit	<input type="checkbox"/>	<input type="checkbox"/>

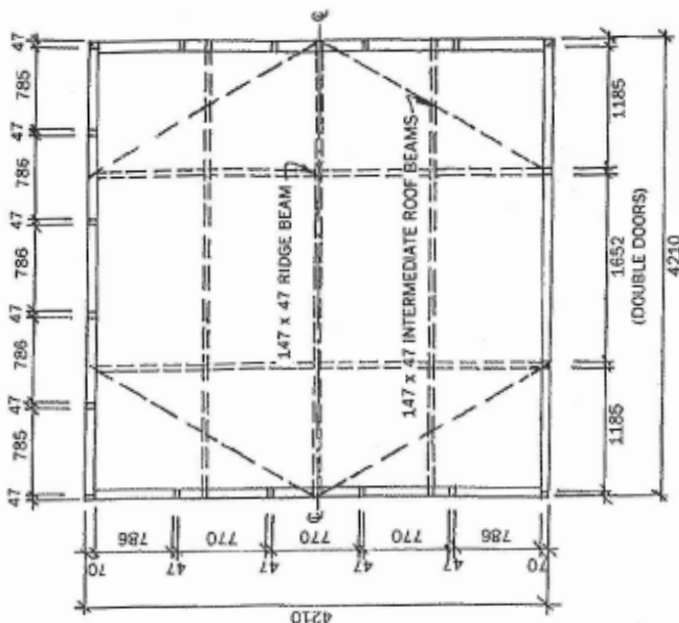
DATE: / /

PACKED BY:

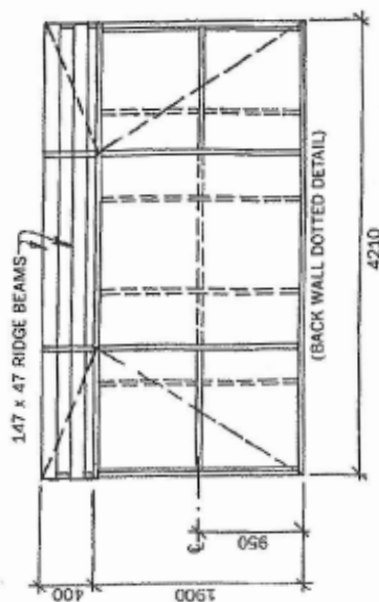
CHECKED BY:

Total Weight

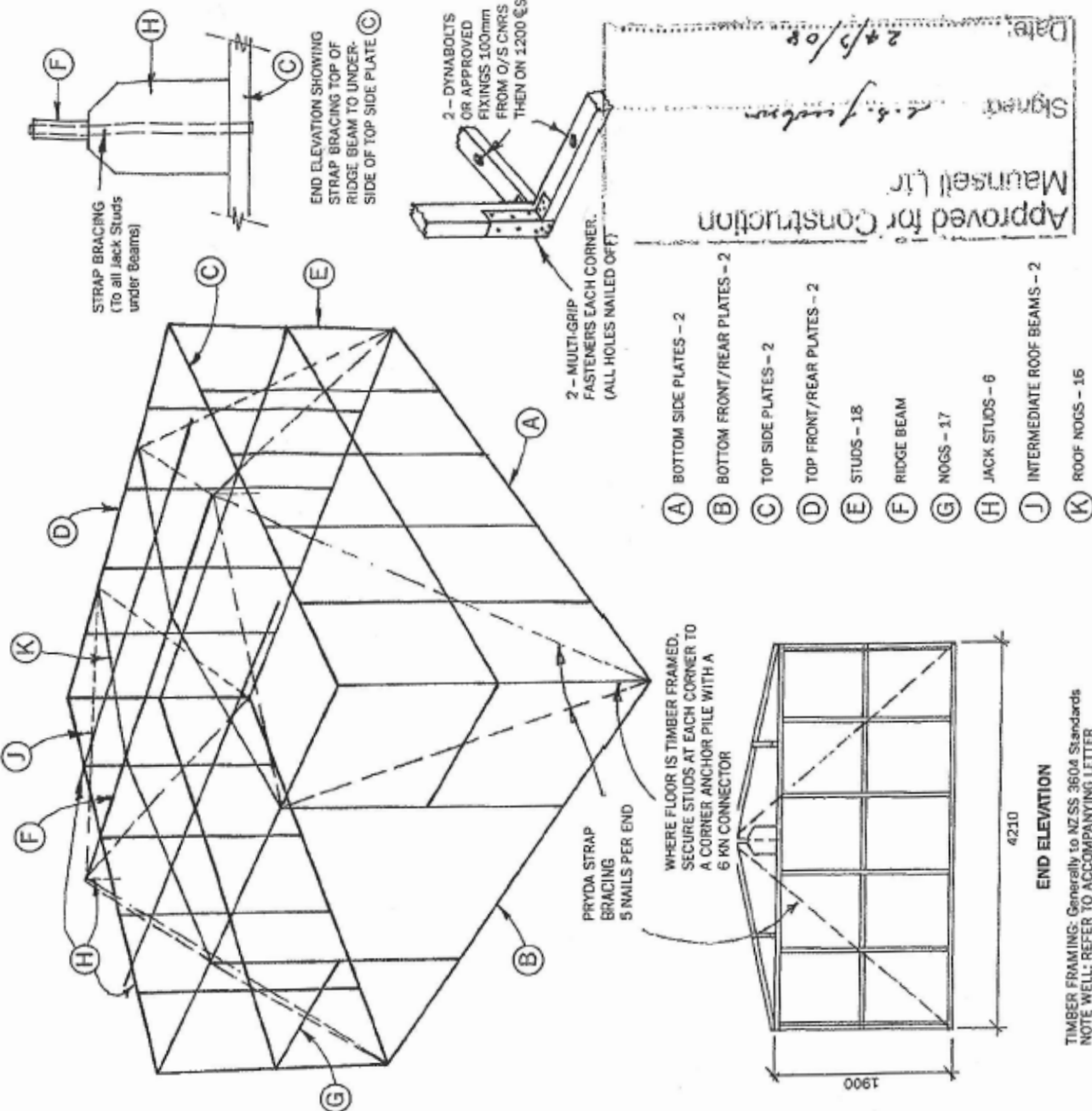
kg



PLAN



FRONT ELEVATION



END ELEVATION

TIMBER FRAMING: Generally to NZSS 3604 Standards  
NOTE WELL: REFER TO ACCOMPANYING LETTER FOR MAXIMUM WIND SPEEDS AND SITINGS

- (A) BOTTOM SIDE PLATES - 2
- (B) BOTTOM FRONT/REAR PLATES - 2
- (C) TOP SIDE PLATES - 2
- (D) TOP FRONT/REAR PLATES - 2
- (E) STUDS - 18
- (F) RIDGE BEAM
- (G) NOGS - 17
- (H) JACK STUDS - 6
- (J) INTERMEDIATE ROOF BEAMS - 2
- (K) ROOF NOGS - 16

Approved for Construction  
Maunsell Ltd  
Signed: *M. J. Maunsell*  
Date: 22/3/08

DWG. NO: 125  
SHEET: 11  
ISS: B

DRAWN

DATE: 16.12.98

SCALE: 1:50 A3

CONSTRUCTION DETAILS  
MARK IV C KIW GARDEN SHED  
(4210 x 4210 - 17.72m<sup>2</sup>)

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RIVERLEA INDUSTRIES LTD

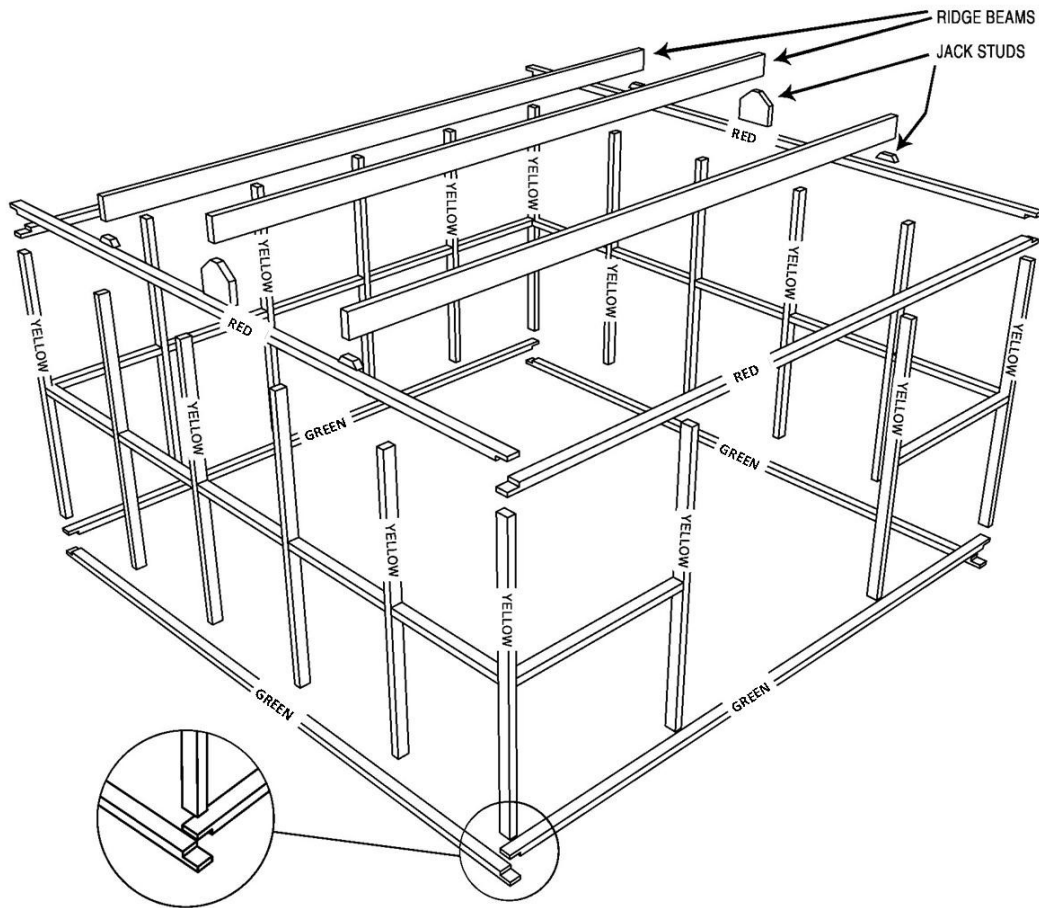
**KIWI GARDEN SHEDS**

BY RIVERLEA INDUSTRIES LTD P.O. BOX 11062 HAMILTON. PH: (07) 847 0204



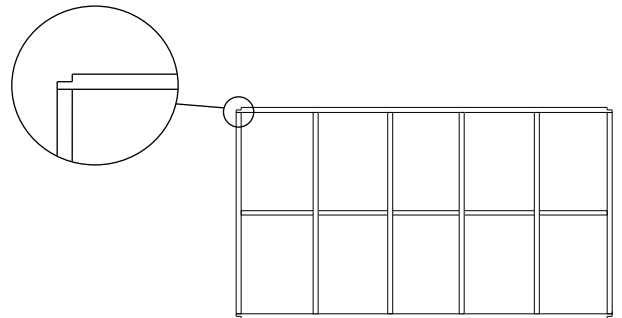


# MK4C TIMBER FRAME

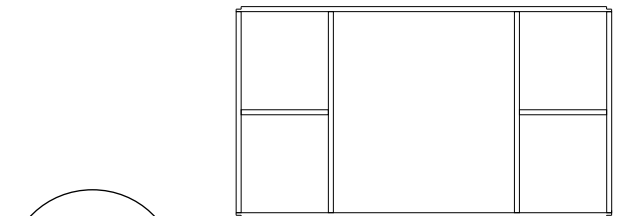


**Note:** For sheds with the Raised Floor Modification option the studs will be 1.780m long to allow the Wall Sheets to protrude 20mm below the Bottom Plate. Refer to Raised Floor Modification section (Page 15).

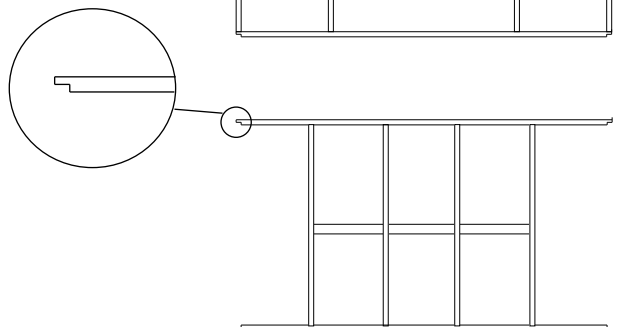
**Step 1: Back Wall:** Select one 4.210m Base Plate (Green), one 4.210m Top Plate (Red) and six Studs (Yellow). Lay out Plates and two Studs on a flat surface and nail together using two 75mm nails per join. Nail in remaining centre studs using Nogs to get correct position. Position Nogs .883m below Top Plate and nail in place. (All Plates, Studs and Nogs are joined together with two 75mm nails each end).



**Step 2: Front Wall:** Select one 4.210m Base Plate (Green), one 4.210m Top Plate (Red), four Studs (Yellow) and two 1.185m Nogs. Nail studs to each end of Plates. Nail in remaining two studs using 1.185m Nogs to get correct position. Position Nogs .883m below Top Plate and nail in place.

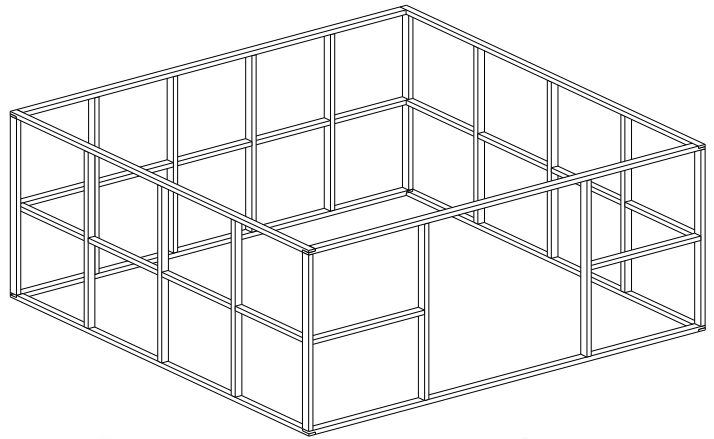


**Step 3: End Wall:** Select one 4.210m Base Plate (Green), one 4.210m Top Plate (Red), four Studs (Yellow) and three Nogs. Lay out Plates and one Stud on a flat surface and nail Stud centrally between Plates. Nail remaining Studs to Plates using 0.770m Nogs to get the correct position. Position Nogs 0.883m below Top Plate and nail in place. Repeat with second End Frame.



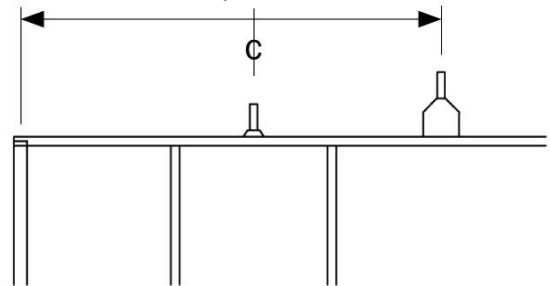
# MK4C TIMBER FRAME

**Step 4:** Stand up Back Wall frame and one End frame and nail together, using two 75mm nails per join, top and bottom. Stand remaining Frames up and nail together. Nail in remaining 0.786m Nogs in End Walls.



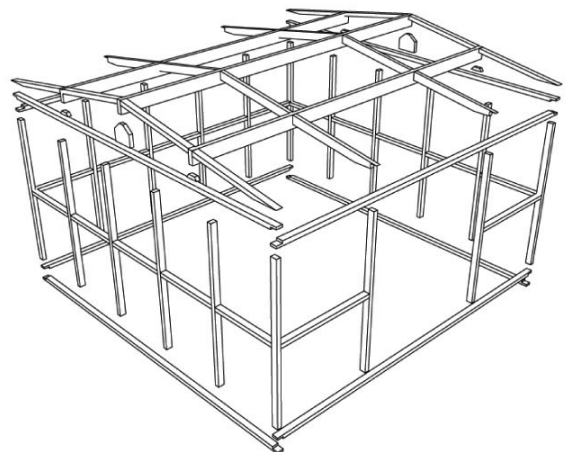
**Step 5:** Position middle Jack Stud, centrally on End Wall Top Plates and nail in place. Nail remaining Jack Studs in. Position middle Ridge Beam to Jack Stud and skew-nail in place using two 75mm nails each end. Pre-drilling holes before nailing will prevent timber from splitting.

5

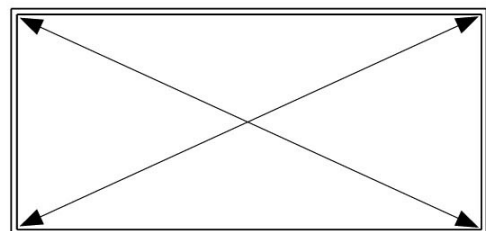


**Step 6:** Place intermediate Roof Beams by using Roofing Nogs to determine correct position (see *fig. 2*). Nail intermediate Roof Beams in place. Nail 70x45mm Roofing Nogs in place (End Wall) and 90x45mm Roofing Nogs in place (Middle).

6



*fig. 2.*



**Step 7:** Place Frame in correct position, checking the shed is square and level. Dynabolt Frame to concrete base as instructed on page 4.

**Step 8:** Temporarily brace each side and roof, making sure each side is square. Nail strip bracing to outside of Frame (see page 4), making sure it is tight. Nail multigrip brackets to each of the four bottom corners (two per corner). Use 30mm bracket nails supplied.

**Note:** Condensation can form on the underside of cladding. If building paper is required, fit now. The building paper will need to be supported by netting or roofing twine.

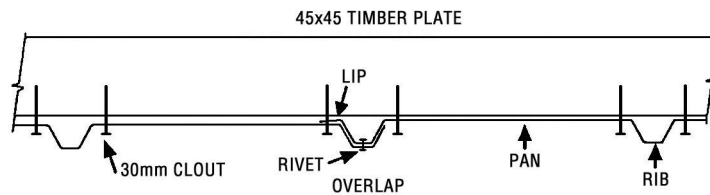
# MK4C WALL CLADDING

## TO AVIOD CORROSION:

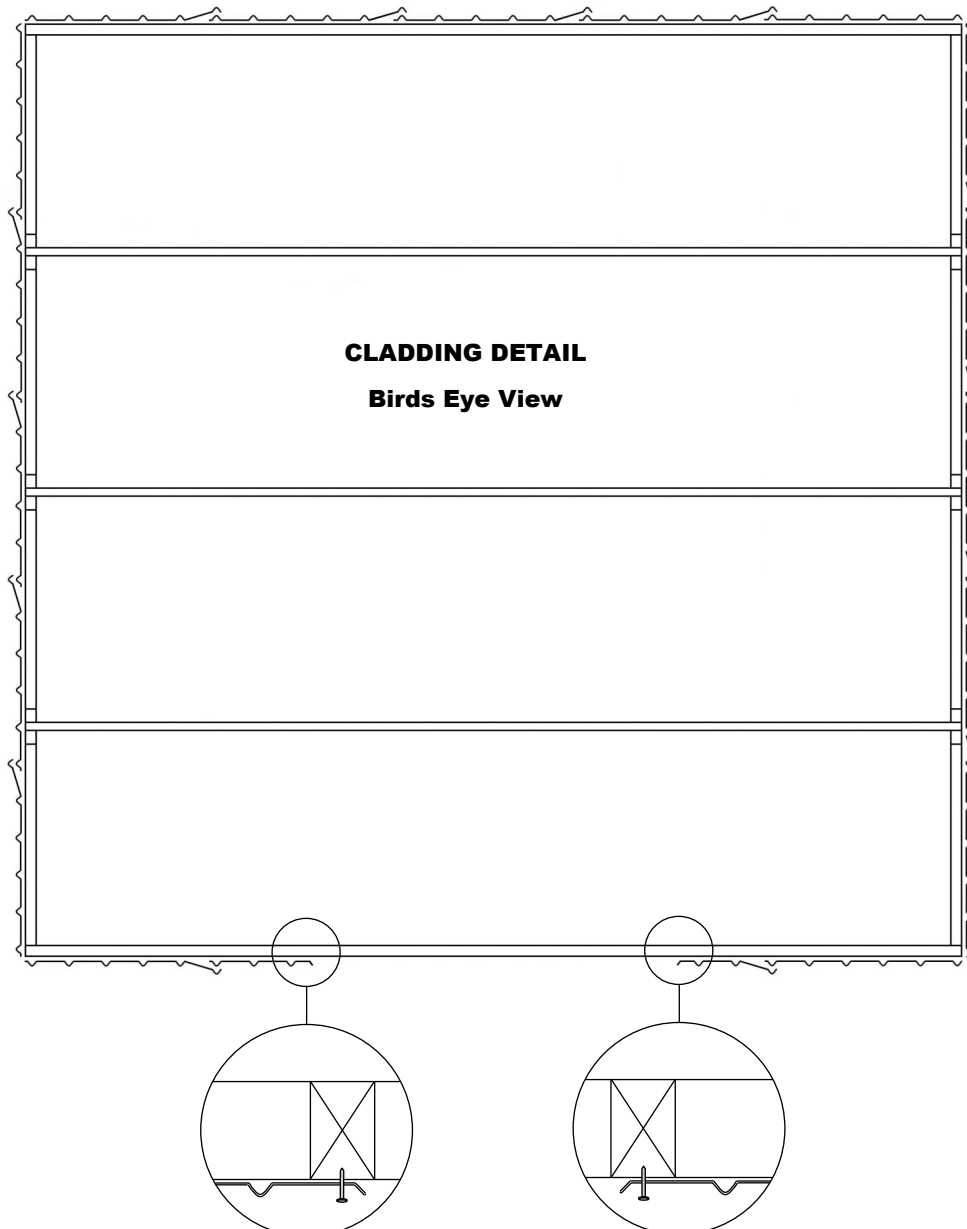
- Where at all possible try not to trap metal filings between two sheets. Remove all metal filings before riveting.
- Carbon in pencils reacts with the Zinc/Aluminium coating on steel. Use ink to mark steel.

## TERMS EXPLANATION

- **To Tack:** To Tack on a wall sheet means to use minimum nails hammered partly in to hold Wall Sheets in position. Should a Wall Sheet need to be re-positioned, the nails can easily be prized out.
- If a window is required, identify Wall Sheet(s) with window hole pre-cut. Lean up Wall Sheets where window(s) are to be located.



**fig. 1**



### Note:

When fitting Gable End Sheets ensure they overlap correctly (**fig 1**).

The overlap direction may differ from cladding detail.

# MK4C WALL CLADDING

**Step 1: Front Wall:** Start at the left hand side. Position the Wall Sheet with the LIP on the left hand side. Ensuring the LIP is flush with side of the Stud and the top of the Top Plate, tack in place. Repeat with Wall Sheet on the right hand side of doorway. Ensure Rib without LIP is on the right hand side of stud then tack in place. Position 1/2 Wall Sheets as shown in the Cladding Detail and tack in place.



**Step 2: Back Wall:** Position the first Wall Sheet with the LIP on the right hand side. Ensuring the LIP is flush with the side of the Stud and the top of the Wall Sheet is flush with the top of the Top Plate, tack in place. Position the next Wall Sheet with the LIP on the right hand side. Overlap as shown in *fig.1* (page 7). Ensuring Wall Sheet is flush with top of Top Plate, tack in place. Repeat with remaining sheets.



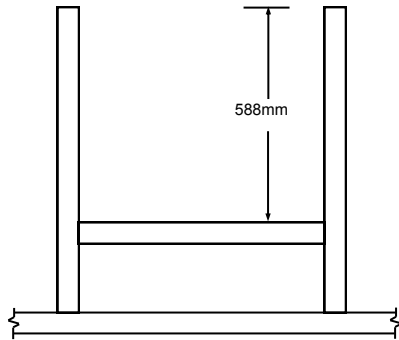
**Step 3: End Walls:** Lean Gable Wall Sheets against the shed to form gable shape. With the LIP flush with side of Stud tack in place ensuring the bottom of the Wall Sheet is 10mm above the bottom of the Bottom Plate. Tack on remaining Wall Sheets. Repeat with other gable end. If fitting a window, nail in Window Studs and Nog now. Refer to Window instructions.



**Step 4: Nailing Off:** Nail one 30mm Clout each side of the Rib (two per Pan) into the Top Plates and Bottom Plates. Nail Wall Sheets to mid wall Nogs (one per pan). Nail each corner Wall Sheet to Studs using two 30mm Clouts evenly spaced.

**Gable Ends:** When nailing Gable Wall Sheets to the Top Plate, use a String Line. At the top of the gable nail two 30mm Clouts into the end of each Ridge Beam. This will stop it from twisting.

# MK4C LOUVRE WINDOW (Optional)



**Step 1:** Lay out the two window studs (883mm) and Nog (634mm) on a flat surface. Position Nog and nail in place using 2x 75mm nails at each end.



**Step 2:** On the inside of the shed, position studs and Nog centrally on window opening. Make sure the studs are parallel and nail into Top Plate and end wall Nog.



**Step 3:** Nail wall Sheets to window framing using 30mm clouts. (return to step 4 on page 7 and complete). Then fit Window Frame). Position Window Frame centrally on window opening and rivet it to ribs. Pre-drill holes in each corner and nail Window Frame to framing, using 50mm nails.



**Step 4:** If the Window is in the gable end, temporarily position the Over Panel above Window Frame. Following the same angle as the gable, mark and cut to suit.



**Step 5:** Rivet Over Panel to the Window Frame with rivets.

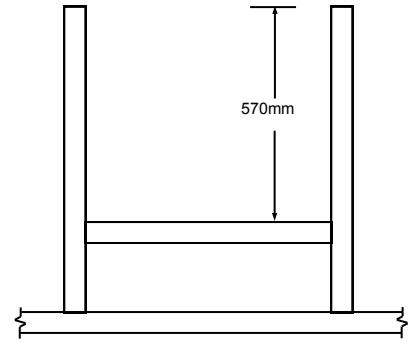


**Step 6:** From the inside of the shed, slide Louvre Glass into Louvre Units attached to the Window Frame. Bend up tabs to keep Glass in position.



## MK4C FIXED WINDOW (Optional)

**Step 1:** Lay out the two window studs (883mm) and Nog (590mm) on a flat surface. Position Nog and nail in place using two 75mm nails at each end.



Follow Steps 2 - 5 on page 8.

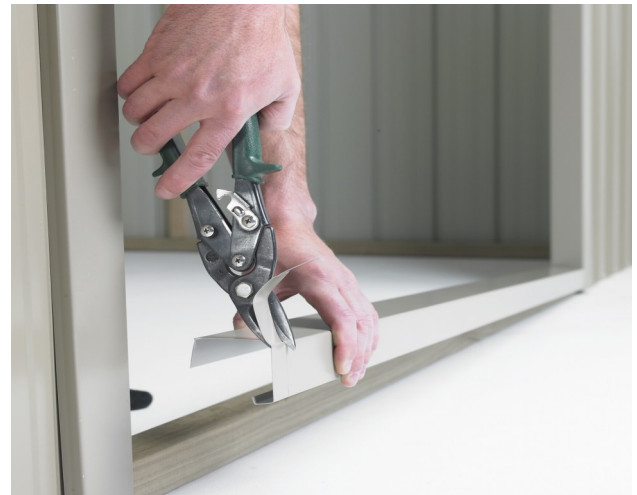
**Step 6:** From the outside of the shed, place glass in Window Frame. Attach a Glazing Bead (G100) with three rivets to each side of the Window Frame to hold glass in place. Pre-drilling Glazing Beads is recommended.



## MK4C DOOR JAMB & CORNER FLASHINGS



**Step1:** Fit Door Jamb Flashing (A104) in between Top and Bottom Plates and hard against Stud. Attach Door Jamb Flashing with three 30mm clouts into studs on the inside and three rivets into Rib on the outside. Pre-drill holes on the outside to protect flashing. Repeat with the other Door Jamb.



**Step2:** Measure and cut Doorstep Flashing (A106) to fit in between Door Jambs. Positioning the Doorstep Flashing in between Door Jambs at bottom of doorway, nail through top of flashing using five 30mm Clouts. Repeat with the Overdoor Flashing (A105).

# MK4C DOOR JAMB & CORNER FLASHINGS

**Step 3:** Fit Corner Flashing (101) over corner Ribs with the top flush with the top of the Top Plate. Rivet in place with six rivets, three each side. Repeat with other three Corner Flashings. When fitting Corner Flashings on front wall, ensure they are parallel with Door Jambs.



## MK4C ROOF

**Note:** Condensation can form on the under side of shed roof. If building paper is required, fit now. Building paper will need to be supported by netting or roofing twine.



**Step 1:** Position first Roof Sheet centrally over Ridge Beam on the right hand end of shed with the LIP on the left hand side. (For sheds with a Clear Roof Panel, go to the next page). Position the next Roof Sheet. Ensure it overlaps correctly then rivet together, one rivet in the centre and one 600mm and 1200mm down from the centre on both sides. Fit remaining Roof Sheets.



**Step 2:** Starting from the left hand end, centralise Roof on Ridge Beam. Ensure Roof is tight against end Wall Sheets and nail one 40mm Weatherseal through Lip into the Ridge Beam. At the back, line up Ribs on the Roof Sheet with the Ribs on Wall Sheet. Using one 40mm Weatherseal, nail through Lip into Top Plate. Repeat at the front.

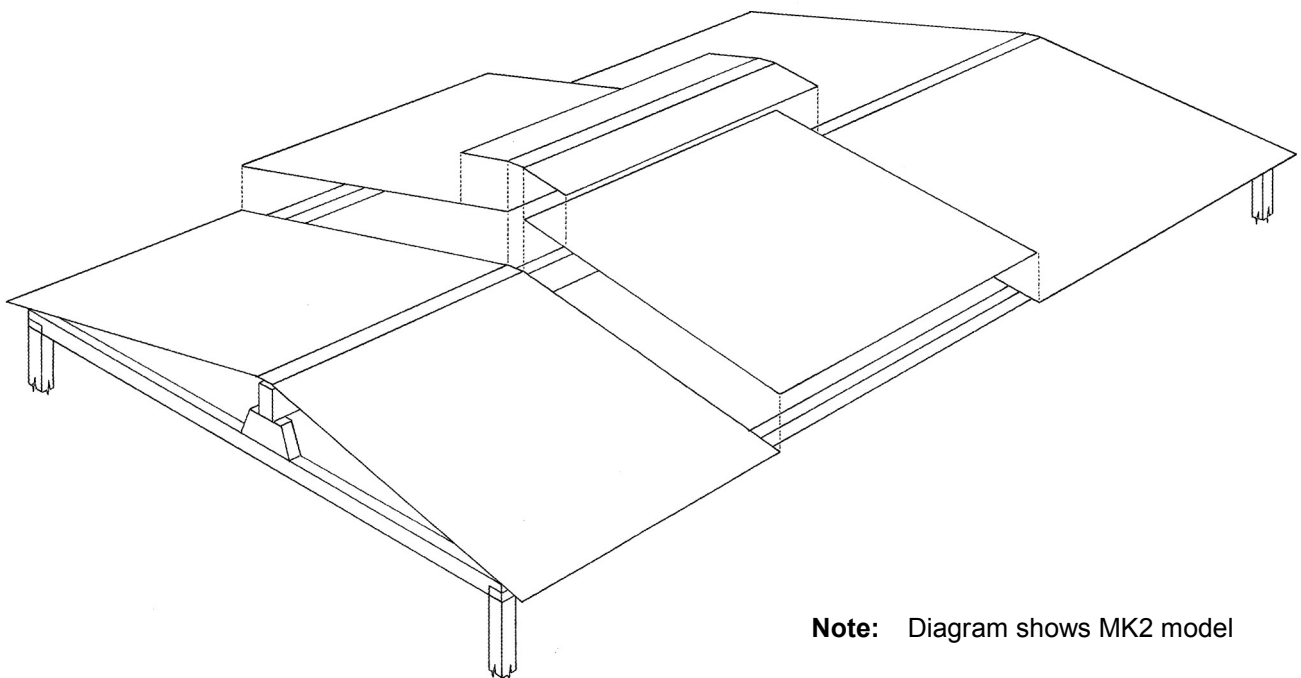
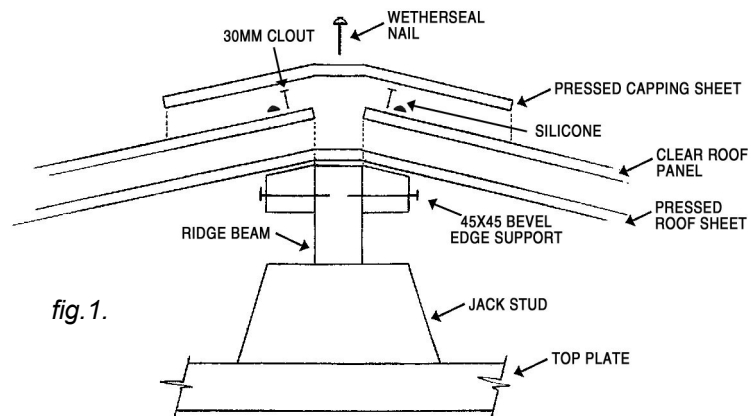
**Step 3:** Centralize Roof at the other end and nail through pan into Ridge Beam and Top Plates. Ensure Ridge Beam is straight, then nail one 40mm Weatherseal into Ridge Beam beside each overlap (one nail per sheet per beam). At the back, set up a String Line in centre of Top Plate. Ensure Top Plate is straight and nail off, using one 40mm Weatherseal per Pan. Repeat at the front.



# MK4C CLEAR ROOF PANEL (Optional)

- Step 1:** Leave a gap where the Clear Panel is to be fitted. Position the next Roof Sheet. Ensure it overlaps correctly, then rivet together, one rivet in the centre and one approximately 600 mm down from the centre on both sides. Rivet remaining Roof Sheets, overlapping and riveting as you go. Nail on first Roof Sheet (refer step 3 on page 11).
- Step 2:** Where the Clear Roof Panel is to be positioned, nail a 45x45mm Bevelled Edge Support on each side of the Ridge Beam. (*fig. 1*)
- Step 3:** Position Clear Roof Panel and Flat Roof Sheet (or second Clear Panel). The Flat Roof Sheet underlaps one sheet and overlaps the other. The Clear Roof Panel OVERLAPS both Roof Sheets. Ensure sheet joins are flush at the outside edge then rivet flat sheets to pressed sheets, three rivets per join. Centralise Roof at the other end and nail in place.
- Step 4:** Ensure Ridge Beam is straight, then nail the Clear Panel and Flat Roof Sheet (or second Clear Panel) to 45x45mm Bevelled Edge Supports using one 30mm Clout per Pan. Run two generous beads of Silicone on the under side of the Pressed Capping Sheet. Position Pressed Capping Sheet on Ridge Beam and nail in place using three 40mm Weatherseals. Nail one 40mm Weatherseal into Ridge Beam beside each overlap (one nail per sheet).
- Step 5:** At the Back set up a String line in the centre of the Top Plate. Ensure Top Plate is straight and nail off, one 40mm Weatherseal per Pan. Repeat at the front.

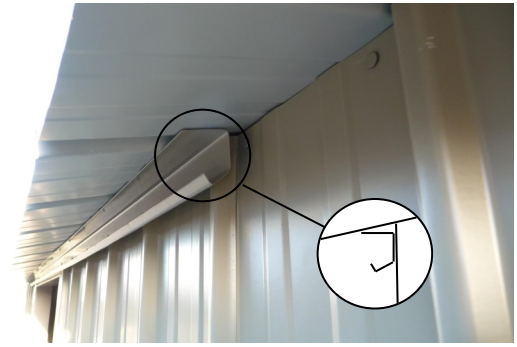
**Note:** When nailing through the Clear Panel, pre-drill a 6mm hole.



# MK4C DOORS



**Step 1: Top Door Tracks:** Mark the centre of the doorway on the Overdoor Flashing. Position Centre Door Stop on the front face of the Overdoor Flashing and up against the underside of roof. Pre-drill holes and nail in place with 50mm nails.



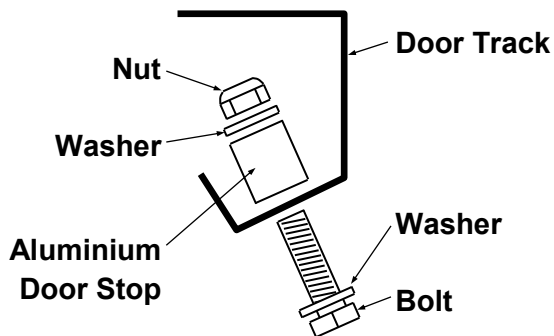
**Step 2:** Position right hand Door Track (D107) on front wall up against underside of Roof, with left hand end hard against the Centre Door Stop. Pre-drill hole in centre and rivet in place. Remove ALL drill filings



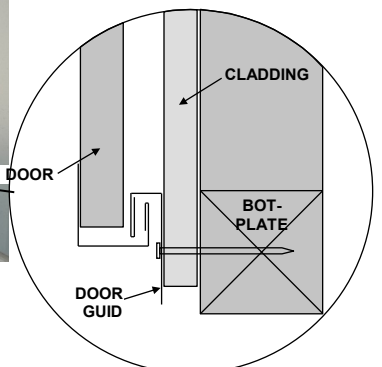
**Step 3:** Hang right hand door in Door Track. At the right hand end of Door Track, adjust up or down so that the Door hangs parallel with shed. Fit one rivet at right hand end to hold in place.



**Step 4:** Position left hand Door Track (C107). Follow Steps 2 and 3 to hang left hand Door. Where Door Tracks meet in the centre, adjust up and down so that the Doors fit snugly together, then rivet in place. Remove Doors. Pre-drill holes into each Rib and at similar spacings into Overdoor Flashing. At approximately 1/3 in from each end of Door Tracks put a 50mm nail. Rivet rest of holes.



**Step 5:** Clean out ALL drill filings. Also make sure the Wheels are cleaned of drill filings. Re-hang Doors, then insert door stops into the pre drilled holes at end of tracks as shown in diagram. Tighten with two spanners



**Step 6: Bottom Door Guides:** Slide Door to corner. Hang Door Guide (A108) on bottom of the Door. Lift up approximately 3mm so that the Door will Slide freely. Pre-drill hole and nail in place using a 50mm nail. Slide to centre. Ensuring Door slides freely, pre-drill hole and nail Door Guide in place. Check Door is not binding in the middle then pre-drill holes into each Rib at similar spacing into Door Step Flashing. Nail off using 50mm nails. Repeat with other Door.

**Note:** For sheds with Raised Base Plate option the Door Step Flashing will protrude down past the Bottom Plate. Attach Door Guide with rivets.



# MK4C BARGE & SPOUTING



**Step 1:** Attach left hand and right hand barges (C102 & D102) together with three rivets at top overlap. Position Barge Flashings on gable ends. Slide one Spouting (D103) inside another until it measures the correct length. Rivet together with four rivets. Repeat with the other Spouting. Position Spouting on the shed and rivet to barge Flashing at each end. Repeat with other Spouting.



**Step 2:** Centralise Barge Flashing on gable end and rivet in place, one rivet into every second Rib. Fit two rivets through top of Barge into Rib. Repeat with other Barge Flashing. Check Spoutings are straight, then rivet to Roof one rivet every second Rib.

## SECURITY DOOR (Optional)

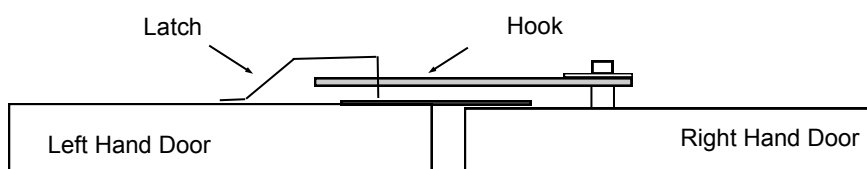


**Step 1:** Attach "T" locking handle with two 8x10mm screws TO R/H door (Door without the weather-strip). Slide hook onto square shaft and secure with a lock washer.

**Step 3:** On the back of the left hand door, position latch so that the hook on the door handle will be secure and go in and out easily. Rivet in place with four rivets.



**Step 2:** Once doors are hung, position the Locking Stays so they slide into the Locking Brackets easily. Screw Locking Stays to Door Jamb.





## MK4C HASP & STAPLE



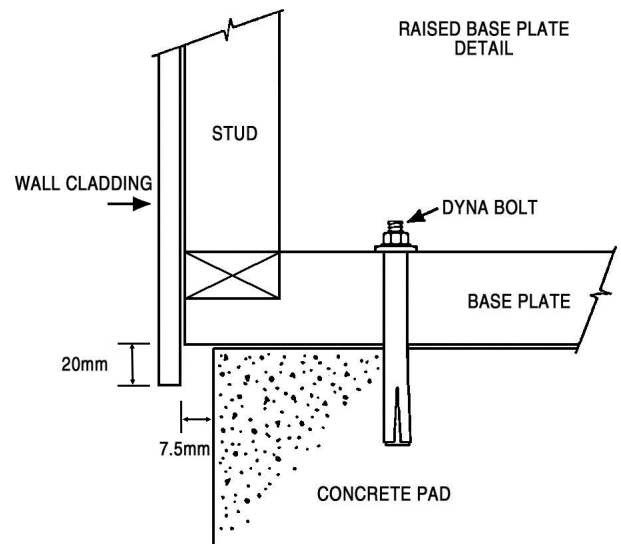
Using seven rivets, attach hasp to Left Hand Door and the staple to the Right Hand Door as shown.

## RAISED FLOOR MODIFICATION

For sheds being placed on a purpose built floor, (concrete, cobbles, ply etc.), the Wall Sheets will protrude 20mm below the Base Plate. This will stop water flowing in between the Base Plate and Floor.

The Floor should be made 15mm smaller than Base Size.

**Note:** Although it is not essential, fitting Damp Proof Course in between the Base Plate and the Floor will give added protection against moisture.



## CLEAN UP

- Remove all swarf (drill filings) with a soft brush or rag.
- Hose down roof and walls thoroughly.
- For Coloursteel sheds use touch-up paint provided on all nail heads, rivets and exposed cuts.



## DURATUF PREMIUM SHED WARRANTY

### GUARANTEE TO CUSTOMER

Congratulations on purchasing a Duratuf Storage Shed. With proper care and attention, this product will last many years. For your benefit **PLEASE READ THE FOLLOWING INFORMATION CAREFULLY.**

### WARRANTY ON METAL CLADDING

Riverlea Group Ltd guarantee that the metal roofing and wall cladding on Kiwi and Fortress Garden Sheds may be used in moderate and inland corrosion zones or areas where the first year mild steel corrosion rate is less than 200g/m<sup>2</sup>, and that in these conditions, they will not perforate due to corrosion within 18 years of date of manufacture.

### TERMS AND CONDITIONS

1. Damage or corrosion due to the following circumstances is not covered by this warranty.
  - ♦ Mechanical, chemical or other damage sustained during or after installation.  
**NOTE:** Clean swarf off shed **IMMEDIATELY** after assembly  
Do **NOT** mark cladding with pencil  
Do **NOT** allow manures, chemicals or other corrosive materials to have direct contact with cladding  
Chemical damage will result if these instructions are not carried out
  - ♦ Force majeure or other causes beyond the control of Riverlea Group Ltd.
2. This warranty does not cover material installed in severe and very severe environmental situations, or in any area where the mild steel corrosion rate (as published by BRANZ) exceeds 200g/m<sup>2</sup>.
3. Minimum maintenance must be carried out in accordance with instructions below.

Should the cladding fail to perform as specified above, the liability of Riverlea Group Ltd shall in all cases be limited to replacing or repairing the defective product. The balance of the original warranty will cover any repaired or replaced material. Riverlea Group Ltd will not be liable for any consequential loss or damage, labour or transport charges. All claims made in writing within 21 days of discovery, quoting the reference number at the top right hand corner of this page.

### MAINTENANCE

Following are the minimum maintenance requirements for cladding used in Kiwi Garden Sheds and Fortress Sheds.

- ♦ Washing all surfaces by rain, and annual hosing of sheltered areas using a hose and soft nylon brush.
- ♦ Within 2km of coast—wash every 3 months as above. After a storm, wash the cladding and the gutters as soon as possible to remove any highly corrosive salt deposits.
- ♦ Volcanic Ash Fallout—wash as soon as possible, removing fallout from roof and gutters
- ♦ Gutters to be kept clean of leaves and dirt.

Should you require additional technical information please contact us at the details below.

## WARRANTY REGISTRATION

Please visit <http://www.riverleagroup.co.nz/warranty-garden-sheds> to validate the Warranty on your shed.

Click on the Warranty Registration Link and complete all details.

If you are unable to access the computer, please phone us on 0800 438 274 and one of the customer services team will help you to activate the warranty on your garden shed.

*Many thanks, from the Team at Riverlea Group.*