Kinloch

Assembly Instructions

Base size: 2400 x 4200

Contents

Required tools

Riveter

Pipe wrench

Caulking gun

Tin snips (left & right hand)

Hacksaw

Adjustable spanner

Flat file

Hand saw

Hammer

Level

Utility knife

Cordless drill screwdriver

- Hex drive 5/16
- Hex drive 3/8

Philips drill bit

Square drive drill bit

Slotted drill bit

Ladder

- Drill bit 3.5mm
- Drill bit 7mm

Hammer drill and 10mm and 12mm masonry bits

Tape measure

String line

Before you start

- Read all instructions carefully.
- All dimensions are in millimetres.
- 2 people are required for shed install.
- Ensure all parts are included and you have access to all required tools.

Safety precautions

- Do not attempt to build your shed in high winds.
- Wear work gloves, and ear and eye protection when assembling.
- Be cautious of sharp edges when handling parts.
- Use electric tools with care. Use a Safety Trip Switch.
- Ensure safety requirements are met when working with ladder. For more information visit: https://www.worksafe.govt.nz/topic-and-industry/working-at-height/safe-working-with-ladders-and-stepladders-construction/.

Select your site

- Site must be level, with appropriate access around shed for installation.

Warranty requirements

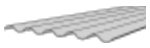
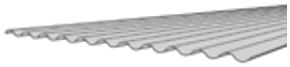
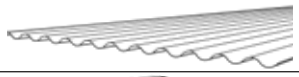
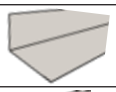
The following maintenance process needs to be adhered to, to qualify for the steel warranty of your shed:

- Using water and soft nylon brush wash all surfaces annually.
- 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 corrisive salt deposits.
- Volcanic ash fallout: wash as soon as possible, removing fallout from roof and gutters.
- Do not allow manures, chemicals or other corrosive materials to have direct contact with cladding.
- Force majeure or other causes are beyond the control of Riverlea Group.
- All metal filings (swarf) must be removed immediately after assembly.
- Avoid contacting steel with sunscreen or pencil, as this could damage the steel cladding.

Parts list

Duratuf LIFESTYLE Kinloch

Part ID	Part name	Timber size (mm)	Quantity	Length (mm)	Diagram
TB008	Bottom plate-8 (Side)	70x45	2	4060	
TT008	Top plate-8 (Side)	70x45	2	4060	
TB007	Bottom plate-7 (Front+Back)	70x45	2	2400	
TT007	Top plate-7 (Front+Back)	70x45	2	2400	
TN003	Nog-3 (Back)	70x45	2	1131	
TN004	Nog-4 (Side)	70x45	4	1154	
TN006	Nog-6 (Front)	70x45	2	162	
TN007	Nog-7 (Side)	70x45	4	761	
TS001	Stud-1 (Front)	70x45	3	310	
TS003	Stud-3 (Back+Side)	70x45	13	2250	
TS005	Stud-5 (Front)	70x45	4	2399	
TS006	Stud-6 (Front)	70x45	2	2044	
TL002	Lintel-2	70x45	1	1892	
TR016	Ridge beam (19mm Notch)	140x45	1	2400	
TR017	Ridge beam (63mm Notch)	140x45	1	2400	
TR018	Ridge beam (108mm Notch)	140x45	1	2400	

Part ID	Part name	Quantity	Length (mm)	Diagram
	Front wall half sheet-1	1	2400	
	Front wall sheet-1	6	300	
	Side wall sheet-1	6	4200	
	Back wall sheet-1	3	2400	
	Roof sheet-1	3	4790	
	Optional clear roof sheet		4790	
FDH002	Door head flashing-2	1	1800	
FBS003	Back spouting-3	1	2525	
FS001	Spouting end cap	2		
FBC001	Back corner flashing	2	2365	
FB007	Barge flashing-4	2	4860	
FB008	Barge support-4	2	4060	
FFS003	Front spouting-3	1	2525	
FDP001	Downpipe cover flashing	1	2170	
FDJ002	Door jamb flashing-2	2	2115	
FFC002	Front corner flashing-2	2	2515	
FFT003	Front top plate flashing-3	1	2400	
FDF002	Door top flashing-2	1	1995	
	PVC downpipe	1	3000	
	Steel roller door	1	1800	
	Damp proof course (DPC)	1		
	Dropper and sleeve	1		
	Downpipe bracket	2		

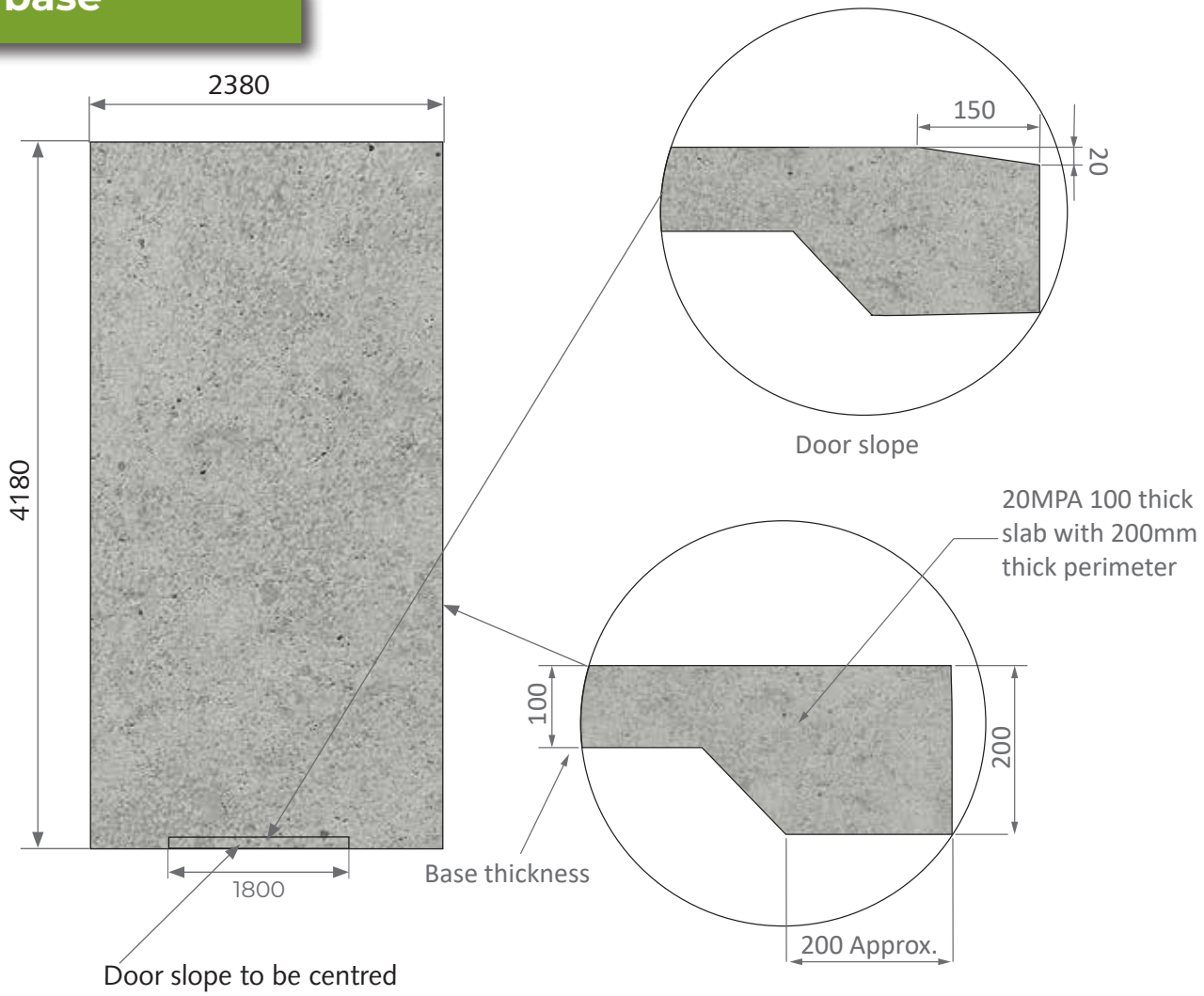
Hardware list

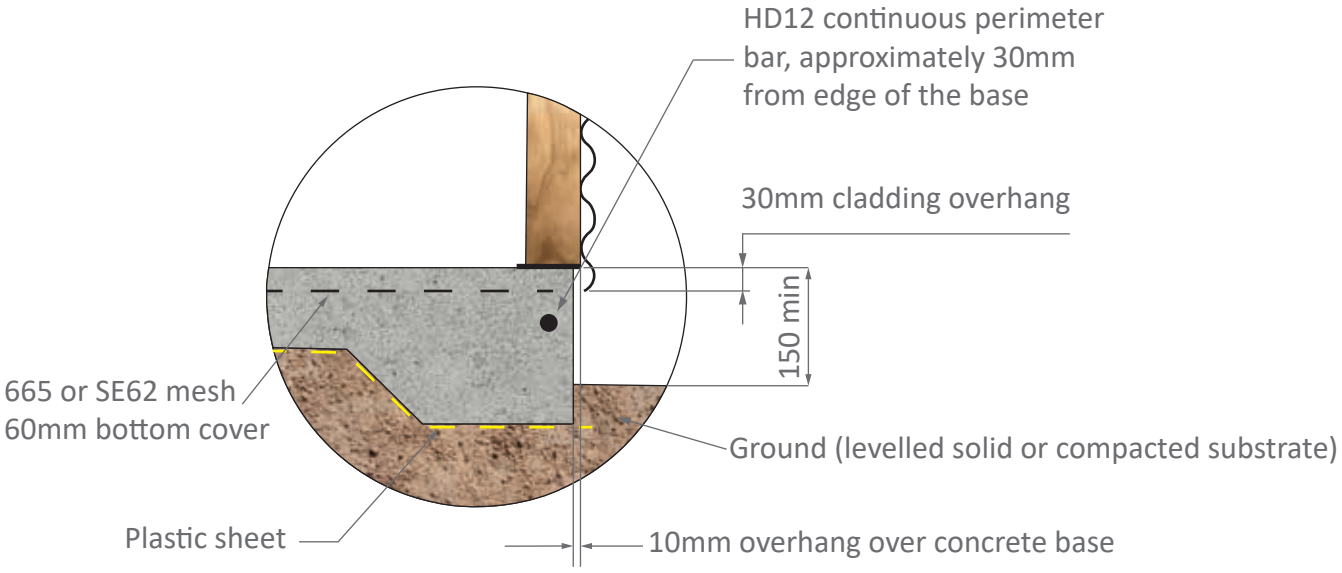
Part name	Quantity	Diagram
30mm clout nails (cladding)	80 pcs	
90mm nails (framing)	200 pcs	
Rivets	80 pcs	
25mm Tek Screw (coloured/zinc)	240 pcs	
55mm Tek Screw (coloured/zinc)	220 pcs	
100mm Tek Screw (coloured/zinc)	20 pcs	
M12 X 135 through bolt	17 pcs	
Purlin concealed cleats 86x40mm	18 pcs	
Dome washer (for clear roof sheet)	20 per clear sheet	
Silicone tube	1	

Base specifications

Shed should be positioned on either a concrete base or plywood floor.

Concrete base

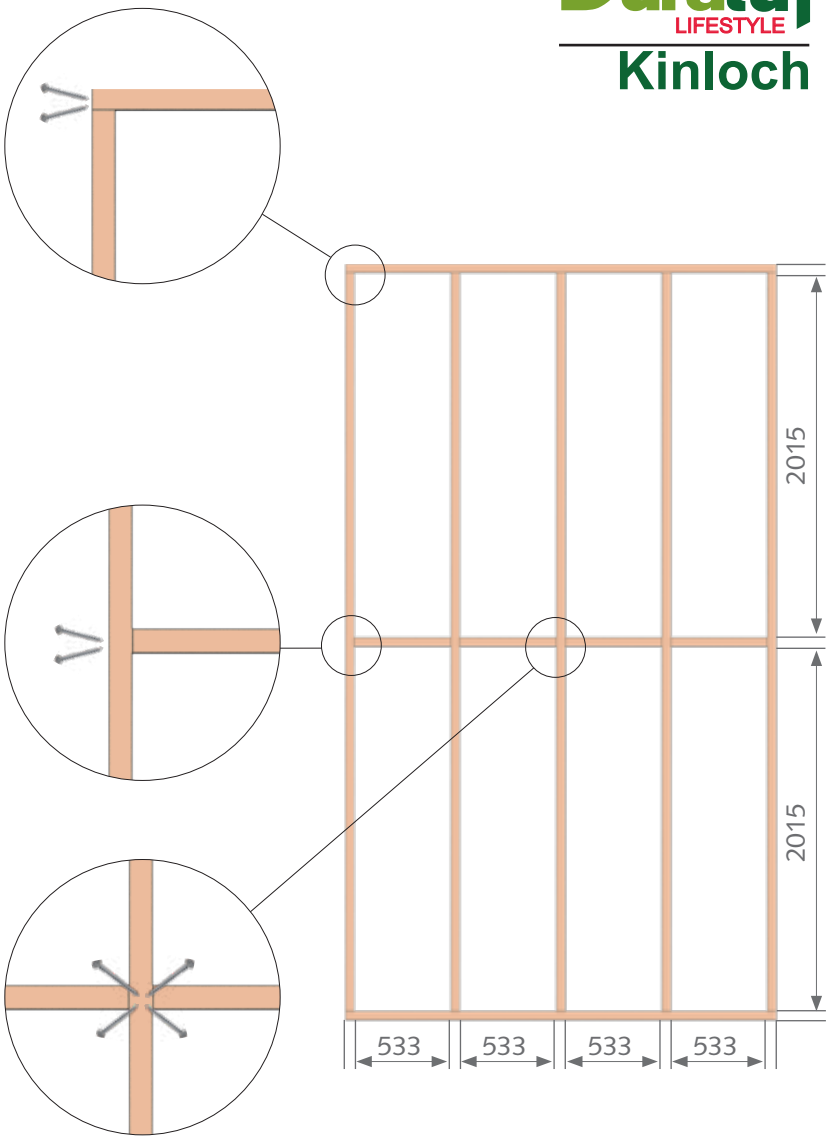




- Concrete to NZS 3101

Plywood floor

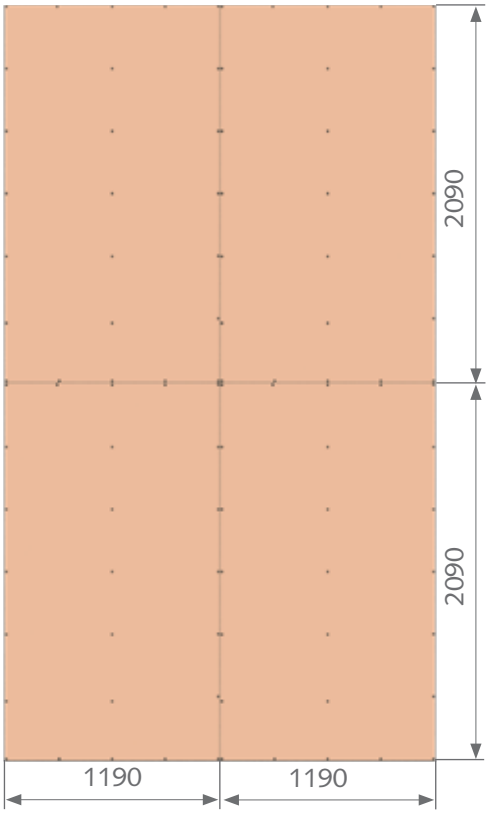
Parts list		
Item	Qty	Deswcription
1	5	Joist 100x50x4080
2	2	Joist 100x50x2380
3	4	Joist 100x50x533
4	4	Plywood 17mm - 2400x1200



1 Lay out joists and assemble sub floor frame as shown, nailing joists together with two 90mm nails per joint.

2

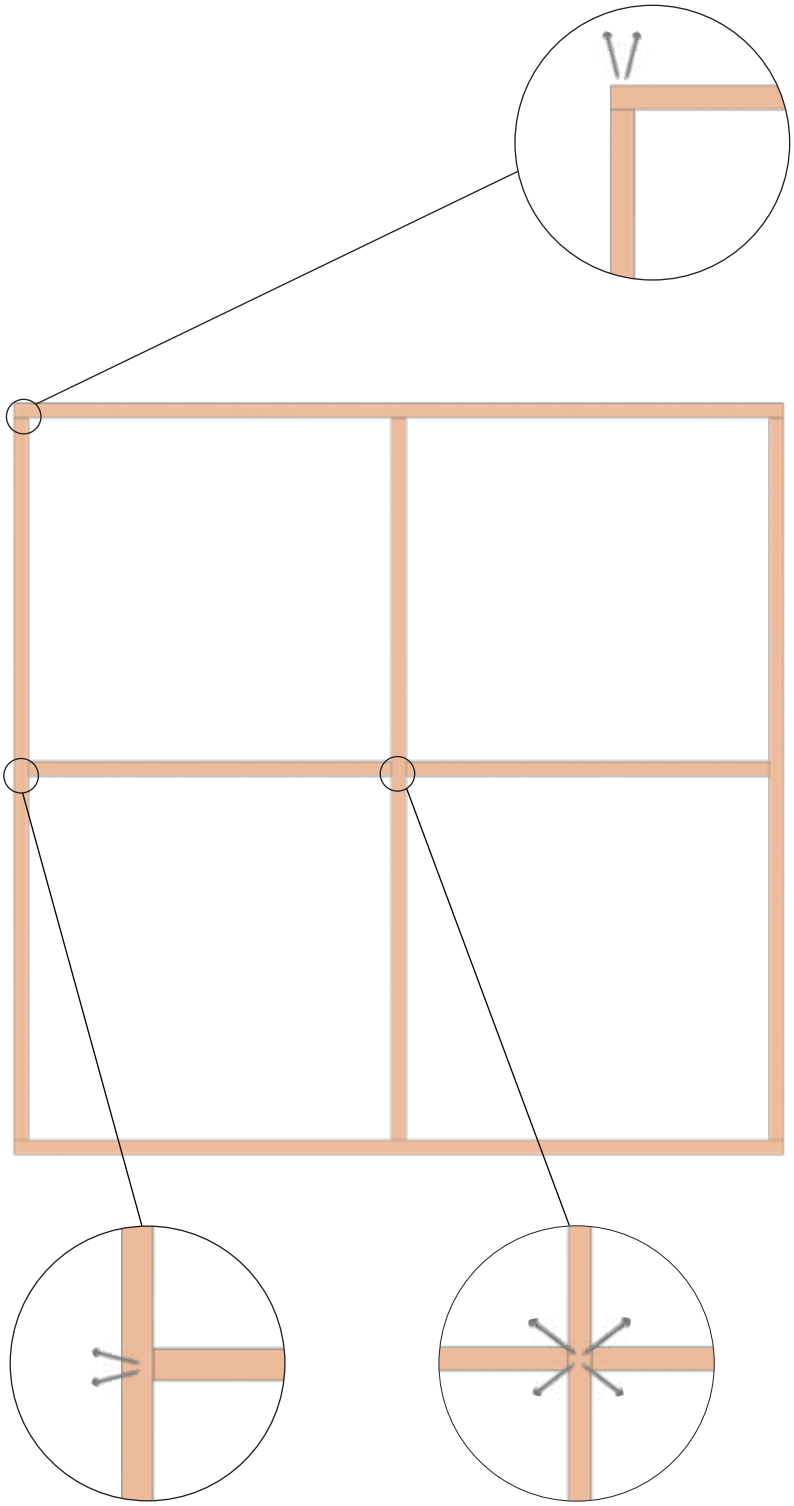
- Position sub floor frame, ensuring frame is well supported and level, and diagonals are correct.
- Trim supplied plywood sheets to 2090x1190.
- Using 40mm screws, screw plywood to sub floor frame as shown.
- Ensure timber floor is sufficiently down to foundation.



- 533mm joists may need to be trimmed, due to inaccuracies inherent in "rough-cut" sections of timber.

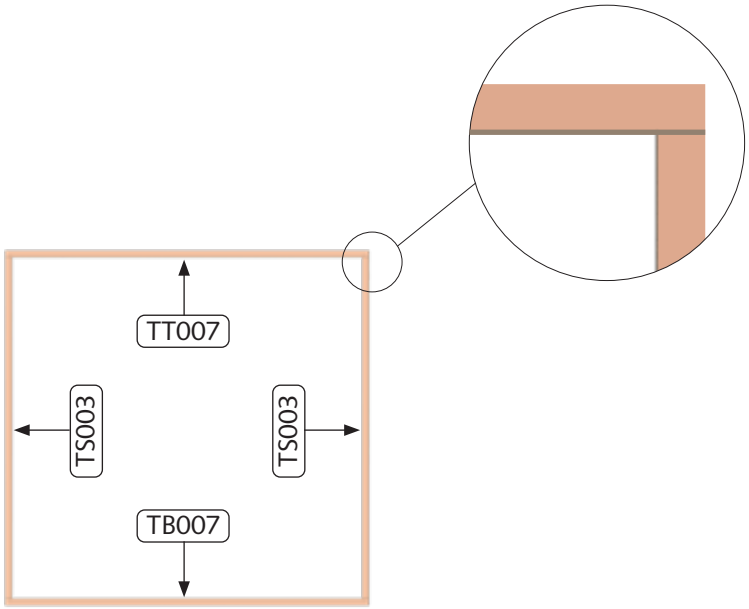
1. Timber frame assembly

- Arrange the parts specified in the following steps on a flat surface and attach them together using two 90mm nails at each join.
- Studs should be positioned between top and bottom plates.

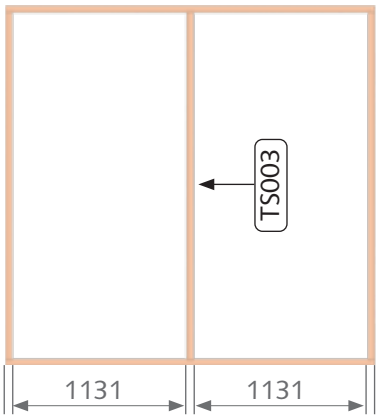


1.1 Back wall assembly

1 Nail top and bottom plates to end studs.

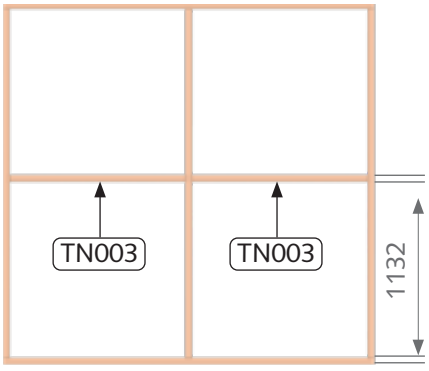


2 Nail remaining studs in correct position.



- Use nogs to get correct spacing.
- End nogs may need to be trimmed due to stud thickness.

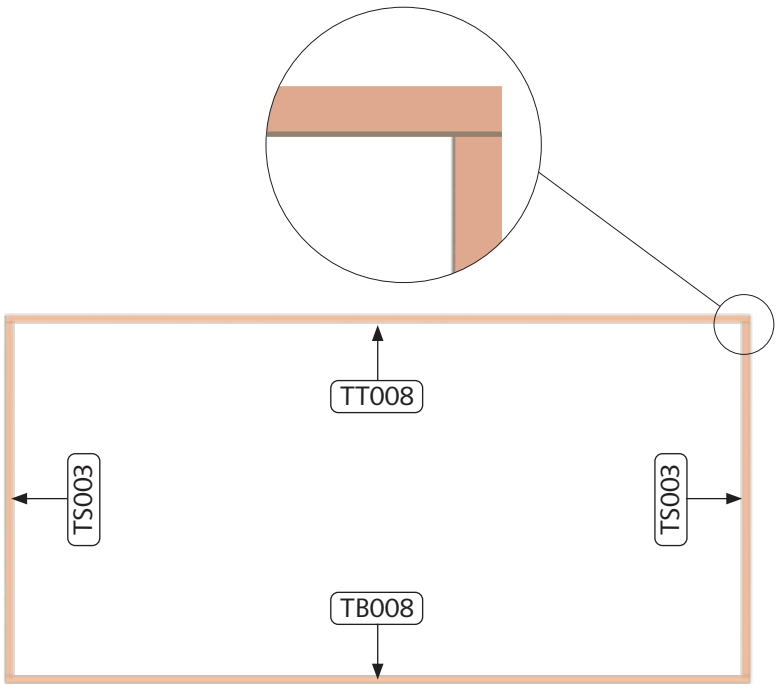
3 Nail in nogs at correct height.



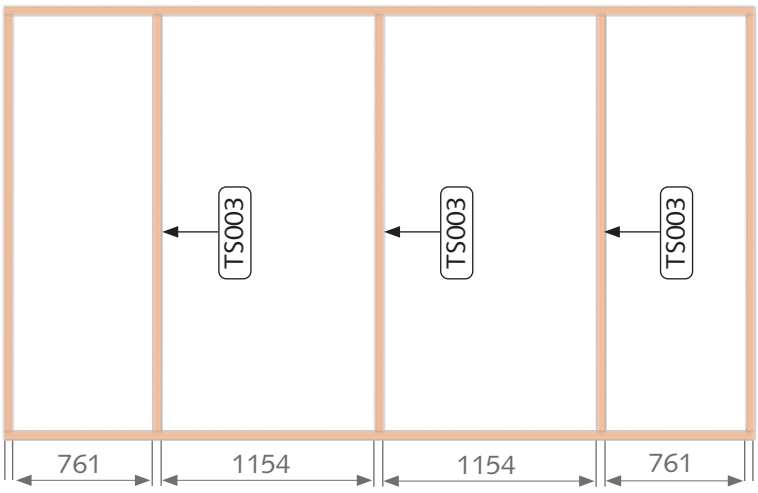
•Regarding Part IDs refer to the Parts list in pages 4 & 5.

1.2 Side walls assembly

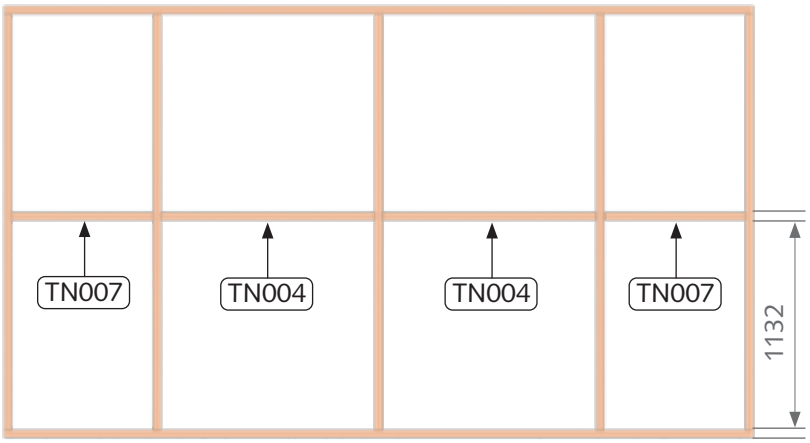
1 Nail top and bottom plates to end studs.



2 Nail remaining studs in correct position.



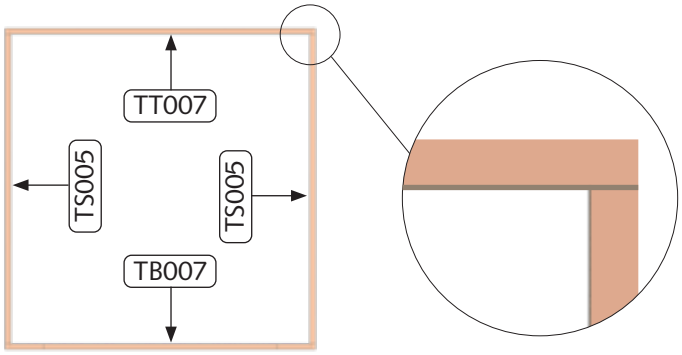
3 Nail in nogs at correct height.



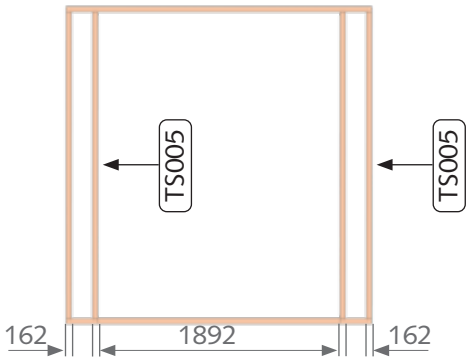
•Regarding Part IDs refer to the Parts list in pages 4 & 5.

1.3 Front wall assembly

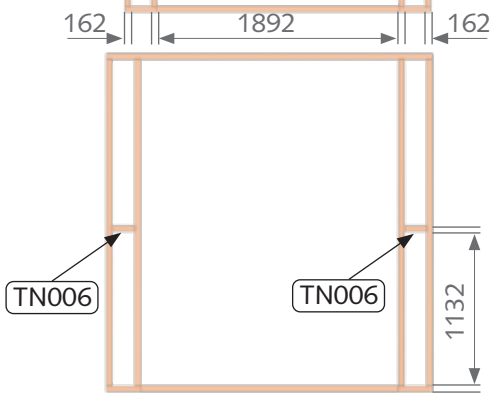
1. Nail top and bottom plates to end studs.



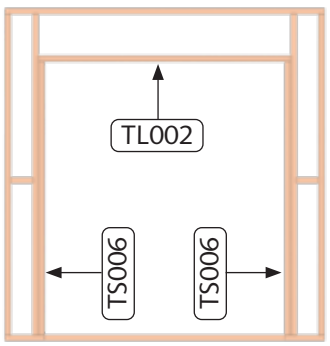
2. Nail remaining studs in correct position.



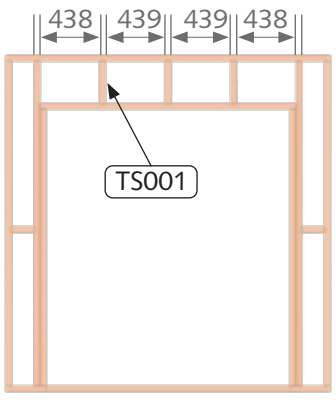
3. Nail in nogs at correct height.



4. Nail shorter studs each side of doorway, using 4 nails evenly spaced into longer stud and 2 nails through bottom plate. Nail lintel to studs at each end.

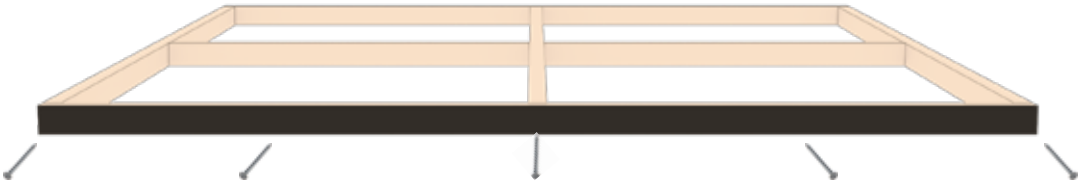


5. Nail studs above doorway to top plate and lintel.



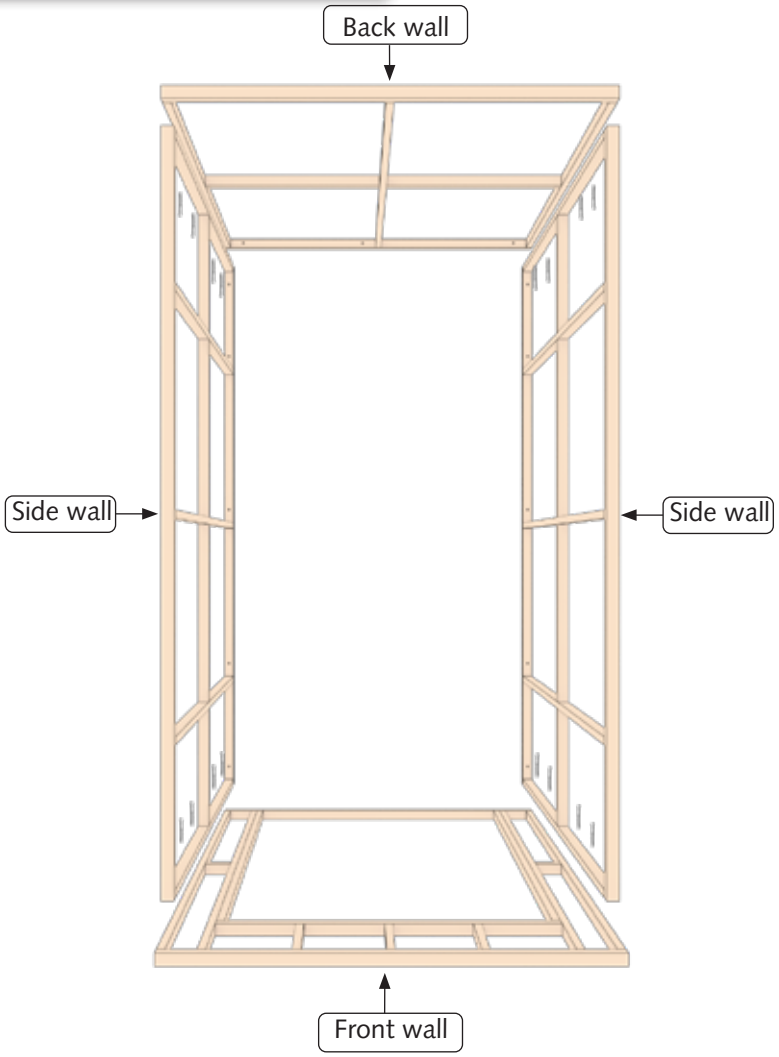
•Regarding Part IDs refer to the Parts list in pages 4 & 5.

1.4 DPC attachment to bottom plate



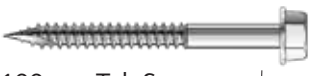
Cut pieces of the DPC roll to the length of each wall panel and nail them to underside of bottom plate on wall panels (using 30mm clouts underneath each stud, flush with the outside edge of the bottom plate).

1.5 Joining walls to each other

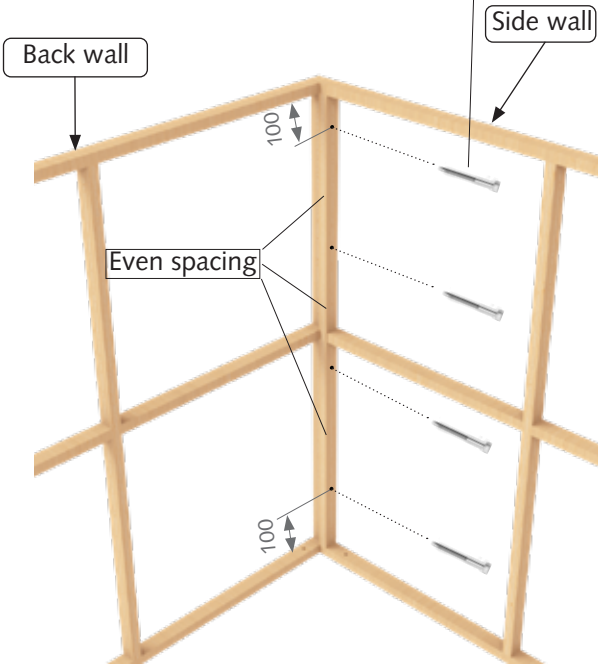


1

Pre-drill side wall frames as shown using 7mm drill bit.



100mm Tek Screw

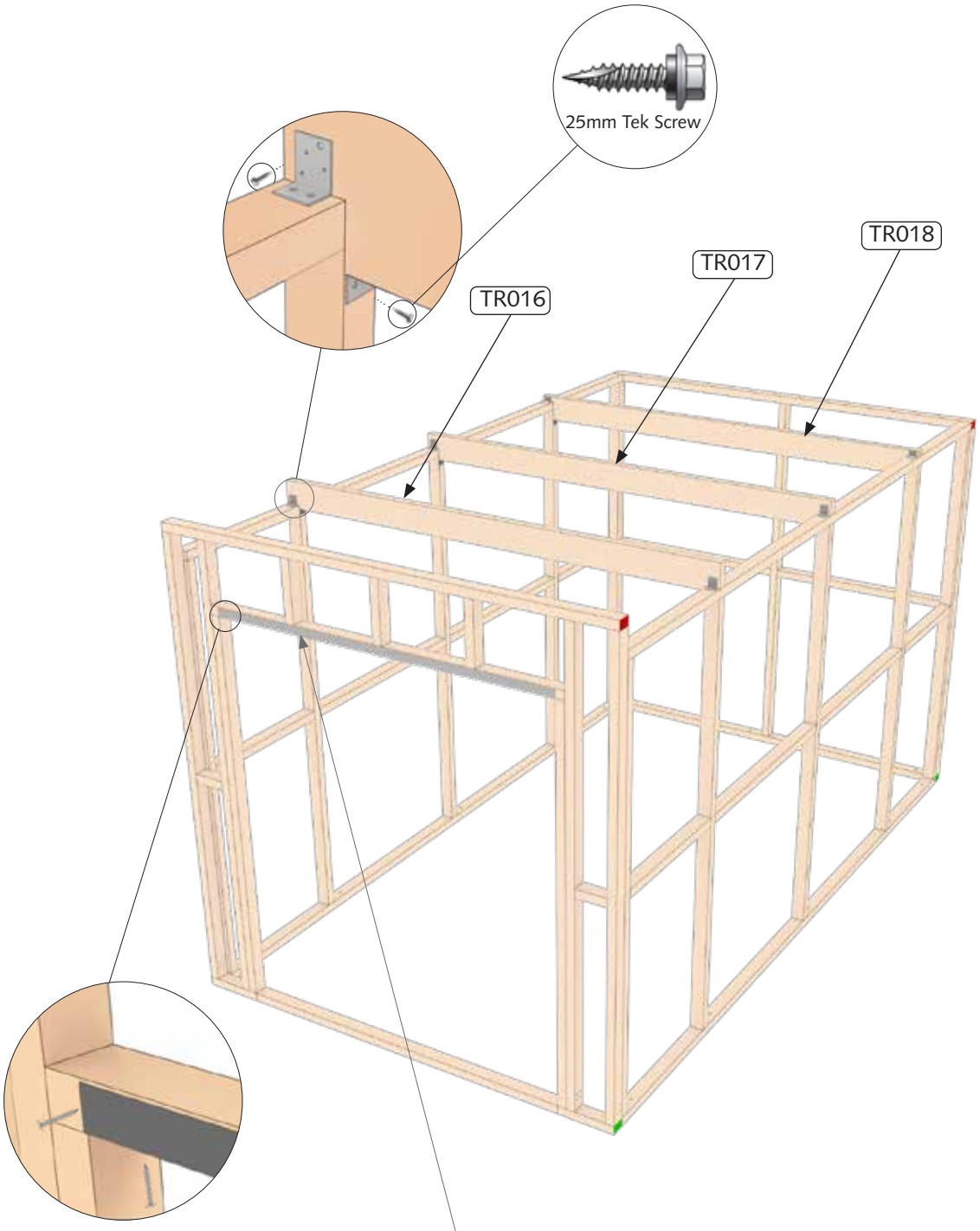


2

Screw frames together using a cordless drill screwdriver and four 100mm Tek Screws at each corner.

1.6 Ridge beam and door head flashing attachment

1 Fix each ridge beam's 2 ends to the side walls above each stud, using 3 cleats (2 at the top and 1 underneath) and four 25mm Tek Screws, per cleat.

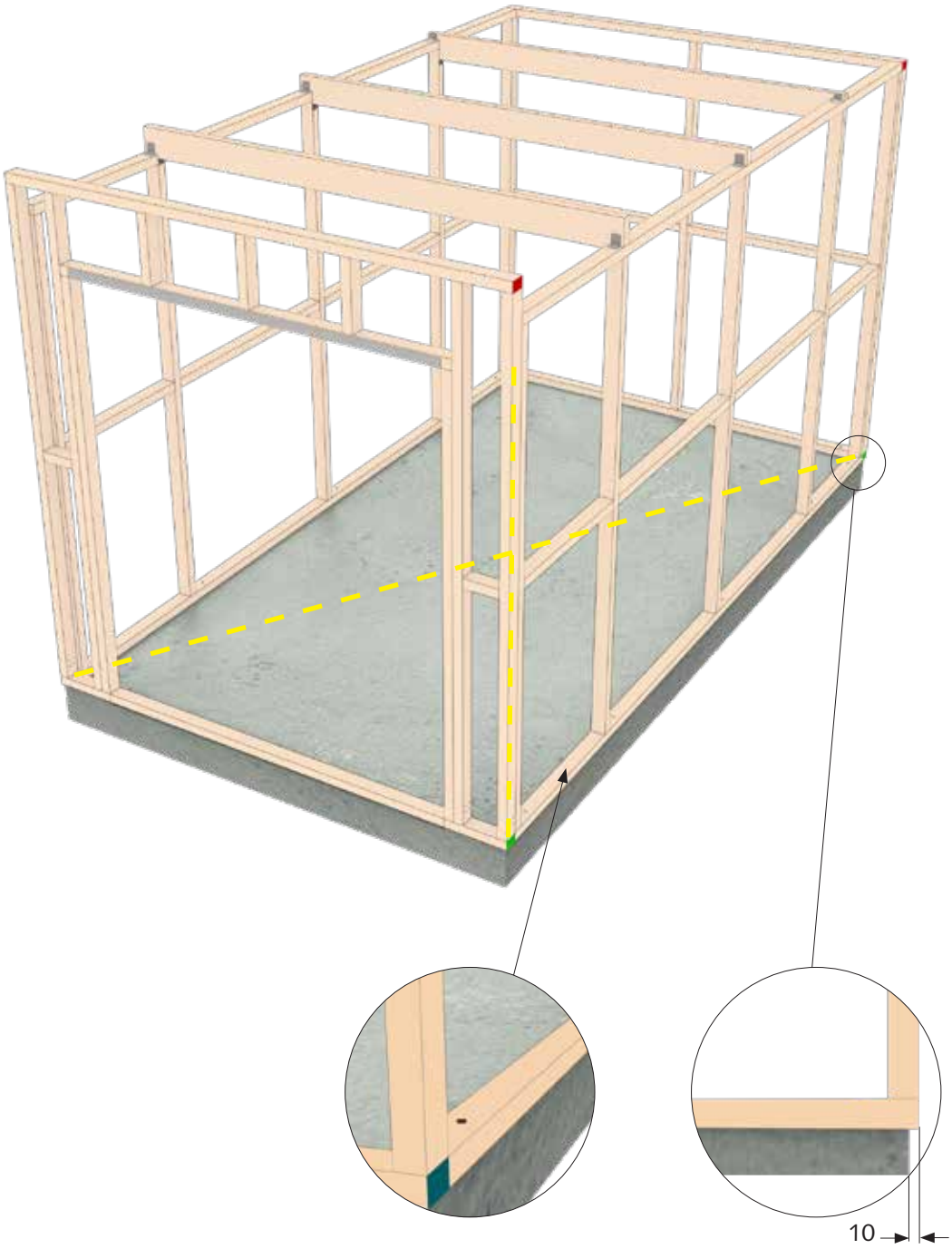


2 Attach door head flashing (FDH002) to the lintel using six 30mm clouts (3 outside, 3 underside).

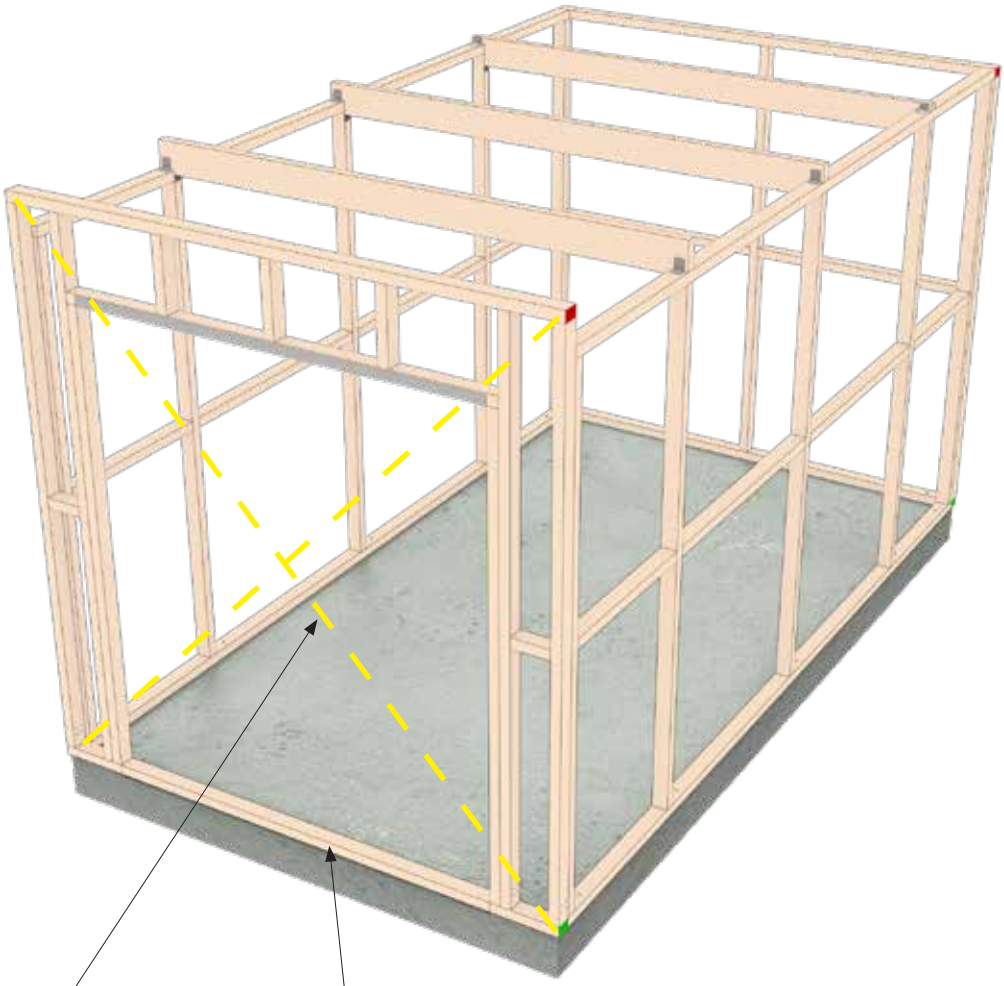
•Regarding Part IDs refer to the Parts list in pages 4 & 5.

1.7 Timber frame to base securement

1 Adjust the frame to get a 10mm overhang on all 4 sides. Then, make sure diagonal measurements as shown are the same, to ensure frame is straight and square.



2 Pre-drill a hole within 50mm from one side of studs as shown, through timber and concrete base using hammer drill and 12mm masonry drill bit (18 holes in total). Fasten timber frame to the base through the holes using M12x135 through bolts.

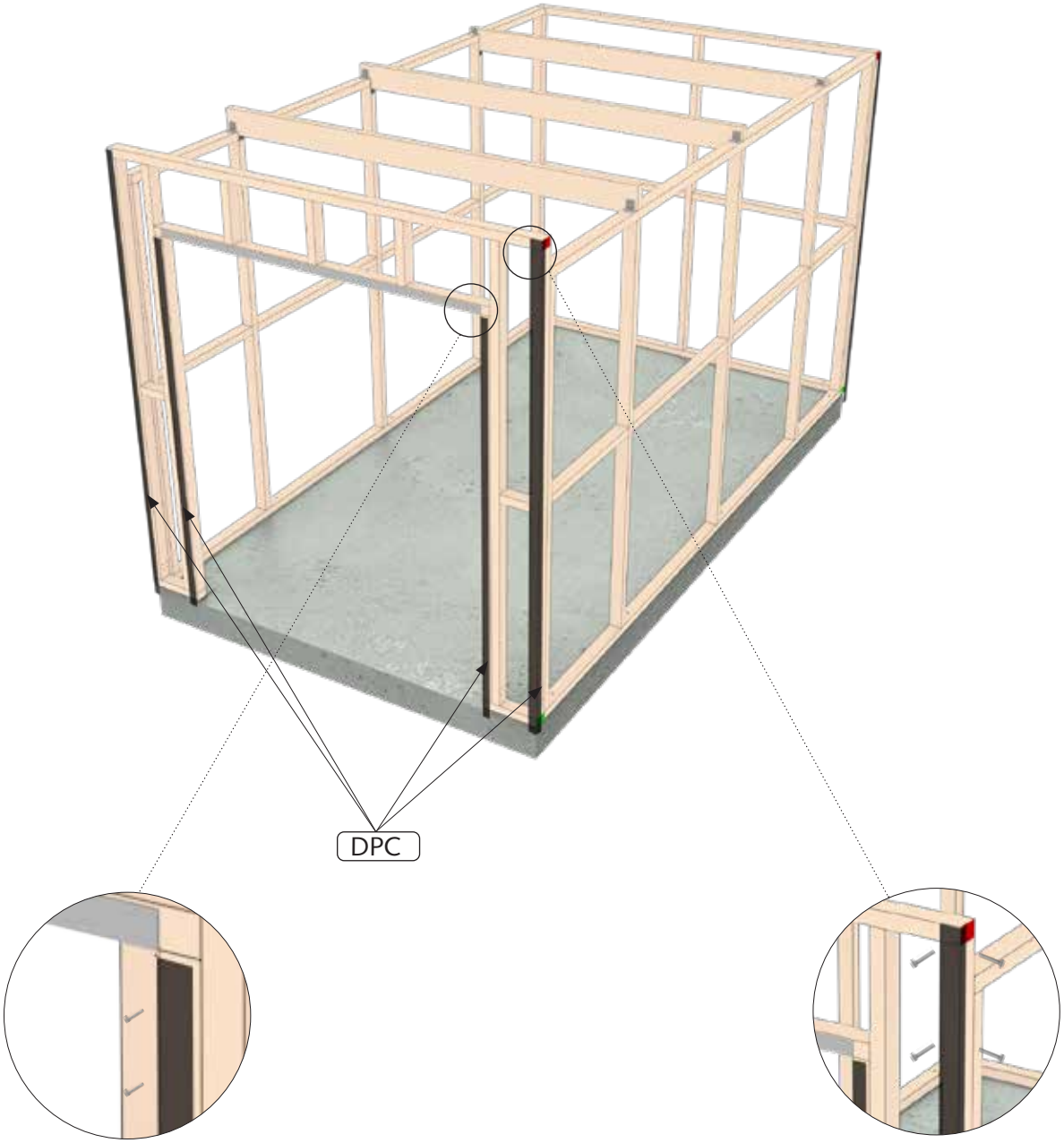


3 Ensure diagonal measurements on front wall are the same. Then attach brace strapping in a cross on both left and right sides of the front door, using 30mm nails.

4 Cut bottom plate between door studs using a hand saw (flush with inside of front wall studs).

1.8 DPC attachment to studs

- Using ten 30mm clouts, attach DPC to each corner as shown. DPC should be level with top of top plate and 20mm below bottom of bottom plate.
- Repeat above, attaching DPC to door studs with top of DPC level with underside of lintel.



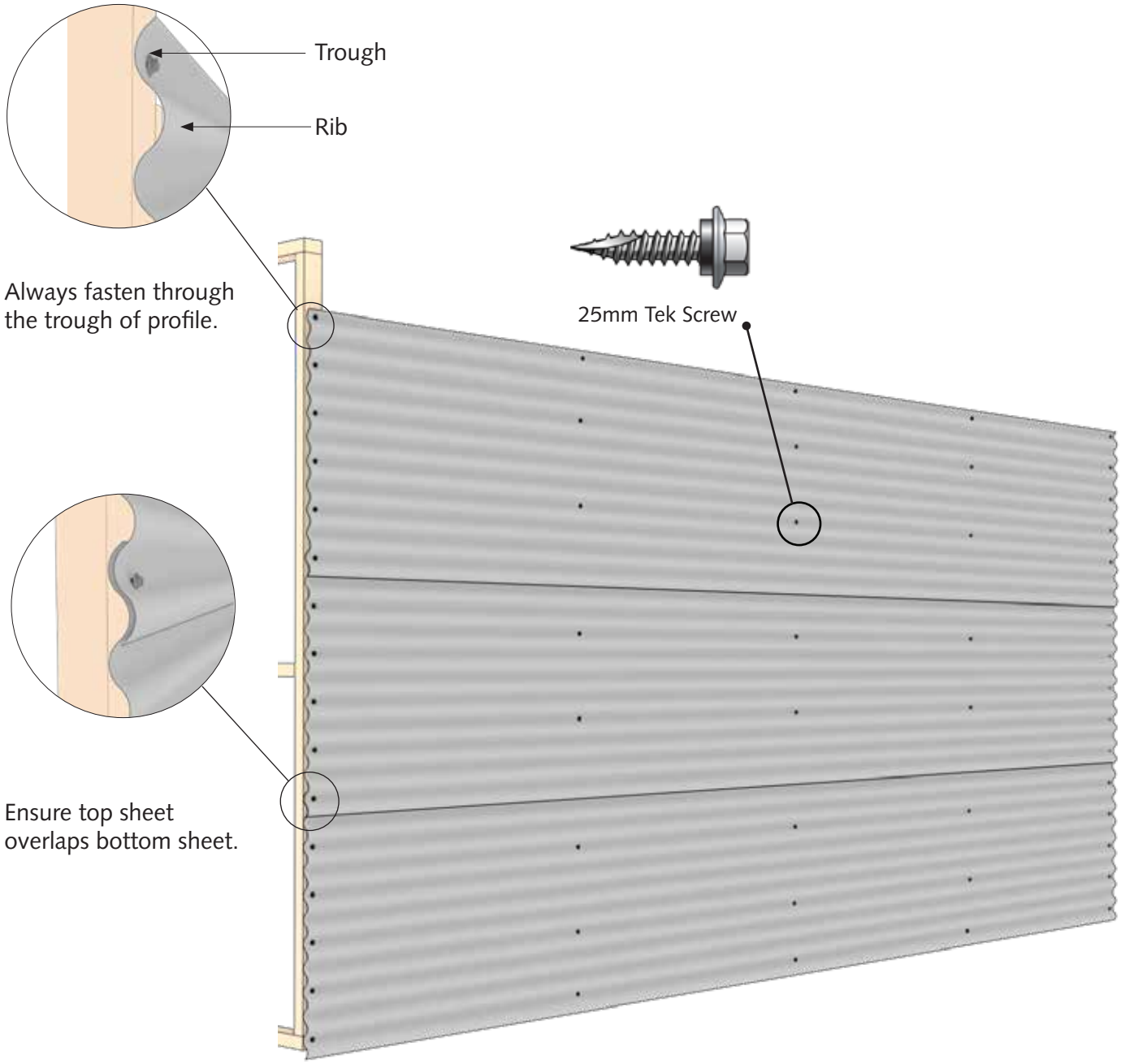
- If fitting optional building paper to walls, ensure diagonal measurements on each wall frame are the same.
- Use packaging timber (or similar) as bracing and nail to inside of frame to temporarily hold wall panel square.
- Staple building paper to outside of frame and proceed with wall claddings. Once the cladding is complete, remove timber bracing.

2. Cladding attachment

External edges: use Tek Screws through every 2nd trough.

Internal edges: use 2 Tek Screws per sheet, per stud.

Top & bottom plate: use Tek screws at every stud.

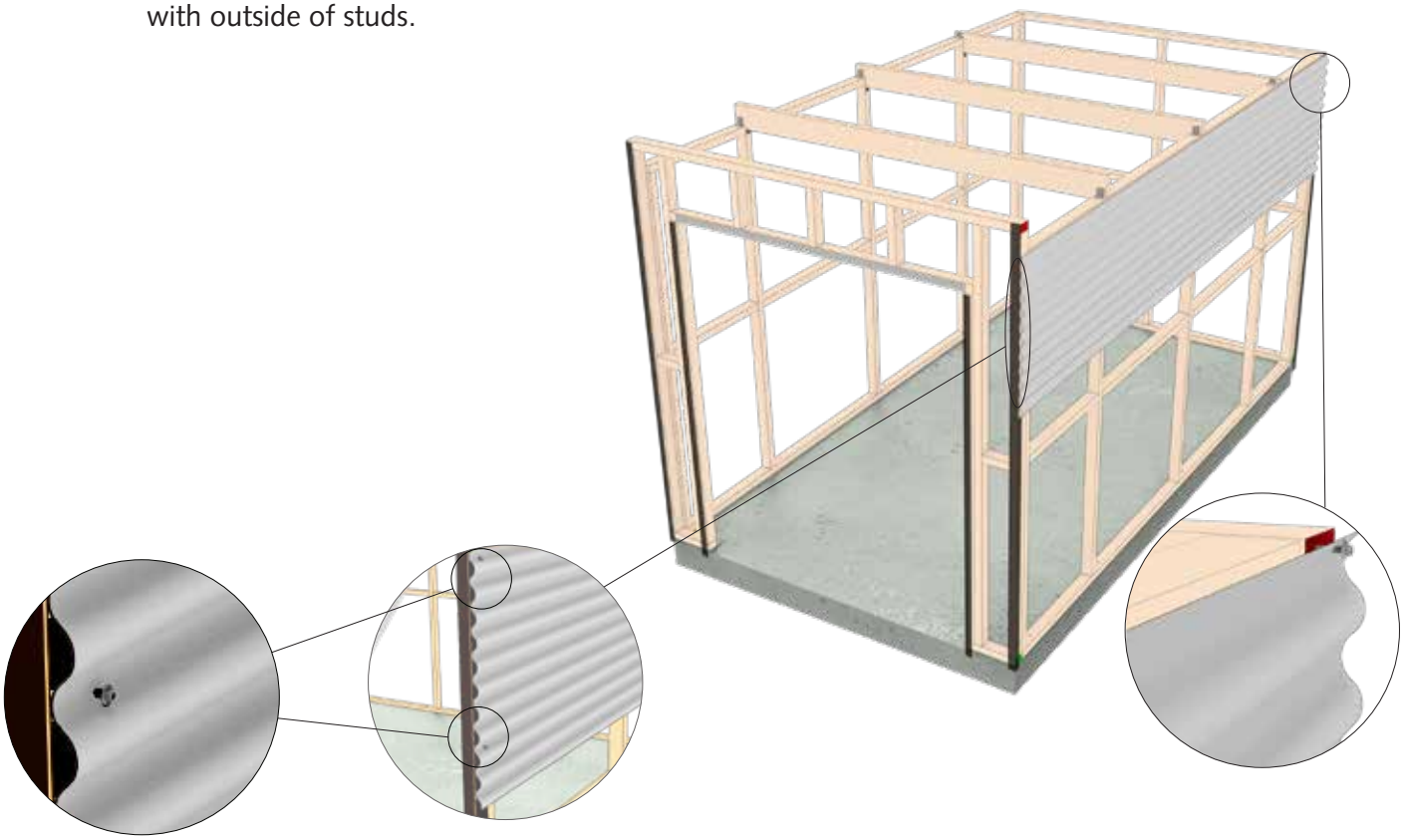


- Top sheet must be flush with the top of the top plate.
- Ends of the corrugated sheets must be flush with outside of studs.
- Ensure metal filings have been removed from between sheets, and between sheets and fasteners.
- Pre-drill cladding using 3.5mm drill bit for easy fastening.

2.1 Side and back walls cladding attachment

1

- Position first sheet and secure it to timber frame using two 25mm Tek Screws at the top corners (about 30mm back from end of sheet). Top of the sheet to be flush with top of top plate and both ends flush with outside of studs, ensuring bottom of sheet is approximately 850mm down from side top plate (TT006).
- Fasten two 25mm Tek Screws 2 ribs up from the bottom of sheet ensuring end of sheet is flush with outside of studs.



2

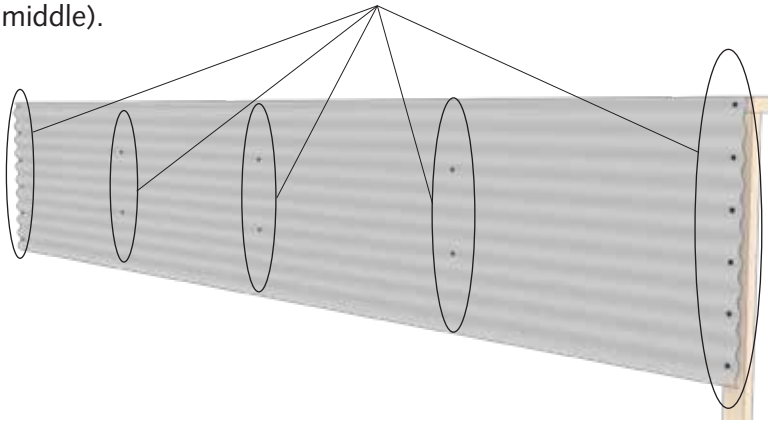
- Position the second sheet underneath the first sheet, ensuring top sheet overlaps the outside of the bottom sheet, and bottom of sheet is approximately 1612mm down from side top plate (TT006).
- Attach the sheet to timber frame using two 25mm Tek Screws at the top corners in the overlap.
- Fasten two 25mm Tek Screws 2 ribs up from the bottom of sheet ensuring end of sheet is flush with outside of studs.

•Regarding Part IDs refer to the Parts list in pages 4 & 5.

3 Position and attach third sheet.

4 Repeat these steps for remaining back and side walls sheets.

5 Screw the 3 sheets of back and side walls using 25mm Tek Screws in the middle of each sheet (5 screws per end of each sheet and 2 in the middle).

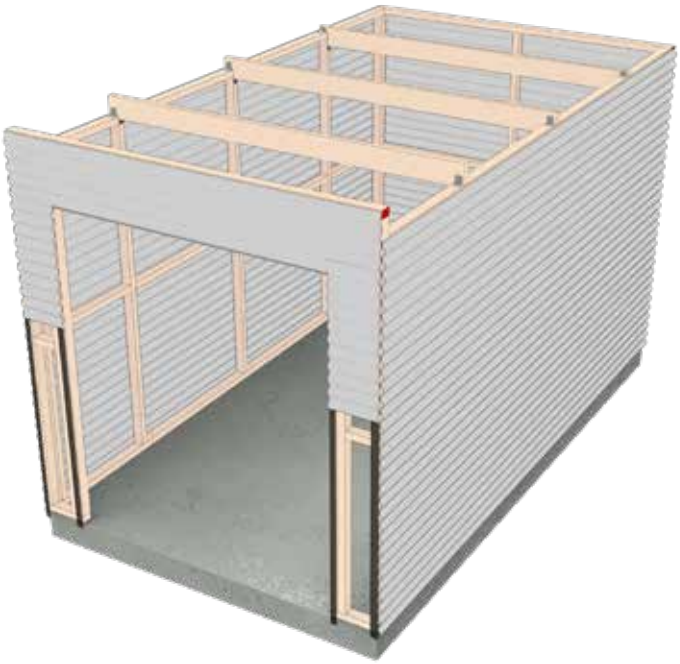


2.2 Front wall cladding attachment

- Position and attach sheets (as shown in the following steps) to the front wall frame, using three 25mm Tek Screws at each end.
- For front wall half sheet, also use 3 screws along the top plate (1 Tek Screw in each 310mm stud). Top of this sheet to be flush with top of the top plate.
- For all sheets both ends should be flush with outside of studs.

1 Ensure bottom of front wall half sheet is approximately 390mm down from top of front top plate (TT007), and front wall cladding profile height matches side wall profile height.

2 Ensure bottom of first row of front wall sheets is approximately 1147mm down from top of front top plate (TT007), and front wall cladding profile height matches side wall profile height.



•Regarding Part IDs refer to the Parts list in pages 4 & 5.

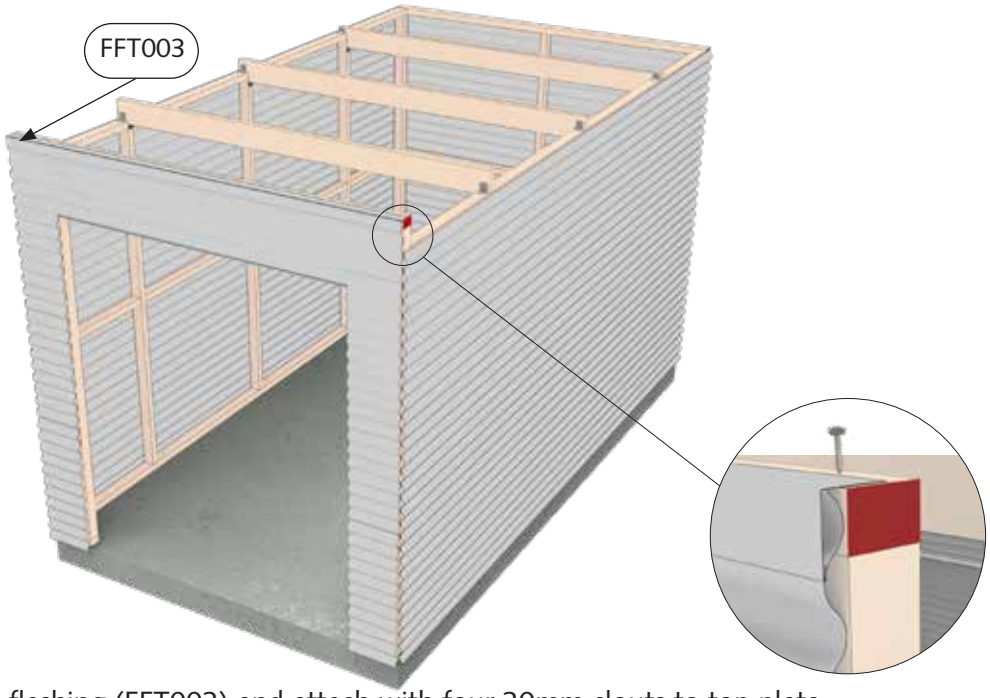
3 Ensure bottom of second row of front wall sheets is approximately 1832mm down from top of front top plate (TT007), and front wall cladding profile height matches side wall profile height.

4 Attach third row of front wall sheets and screw off sheets as per cladding plan.

•Regarding Part IDs refer to the Parts list in pages 4 & 5.

3. Flashing attachment

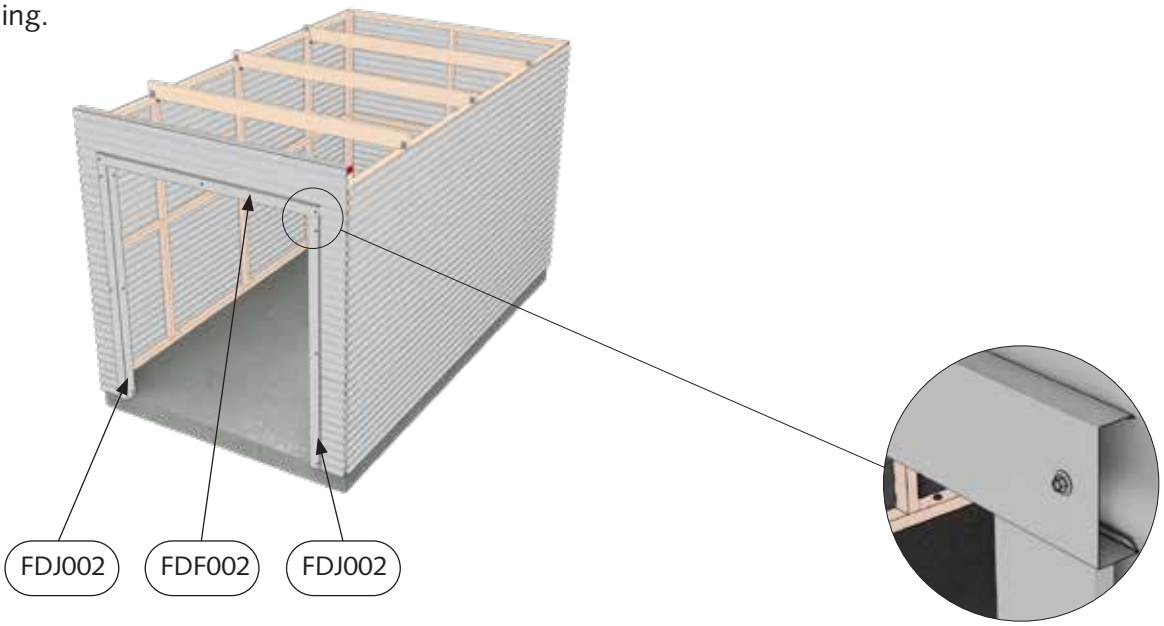
3.1 Top plate and door flashing attachment



1. Centralise front top plate flashing (FFT003) and attach with four 30mm clouts to top plate.

2.
- Position door jamb flashing (FDJ002), so top is level with underside of lintel (TL002).
- If required, notch bottom of flashing around concrete using tin snips.
- Nail door jamb flashing to inside of stud using three 30mm clouts and screw it into stud through the front of wall cladding using three 55mm Tek Screws.

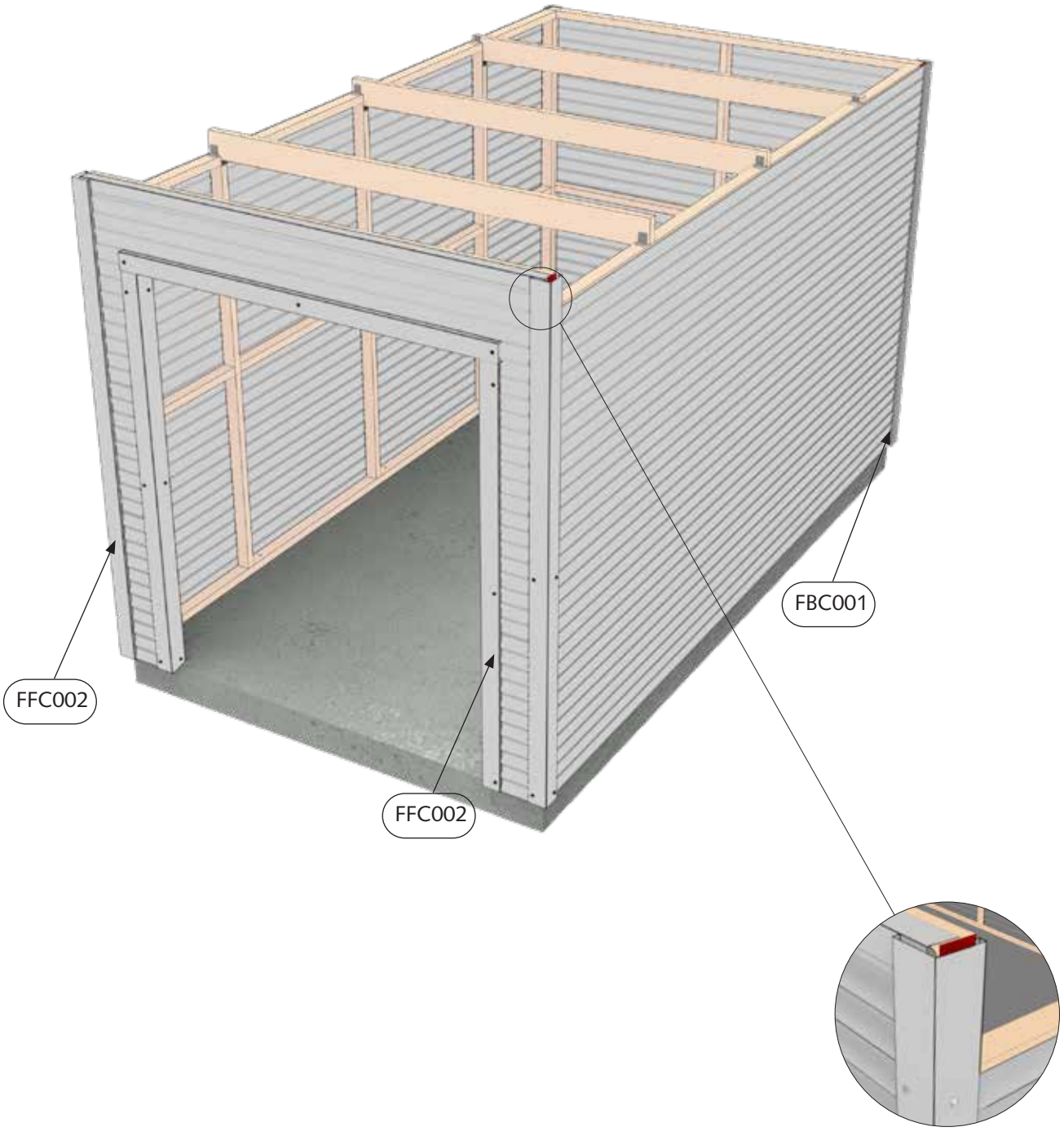
3. Screw door top flashing (FDF002) to lintel (TL002) using three 55mm Tek Screws (1 at each end and 1 in the middle). Door top flashing length will protrude about 10mm past outside edge of each door jamb flashing.



•Regarding Part IDs refer to the Parts list in pages 4 & 5.

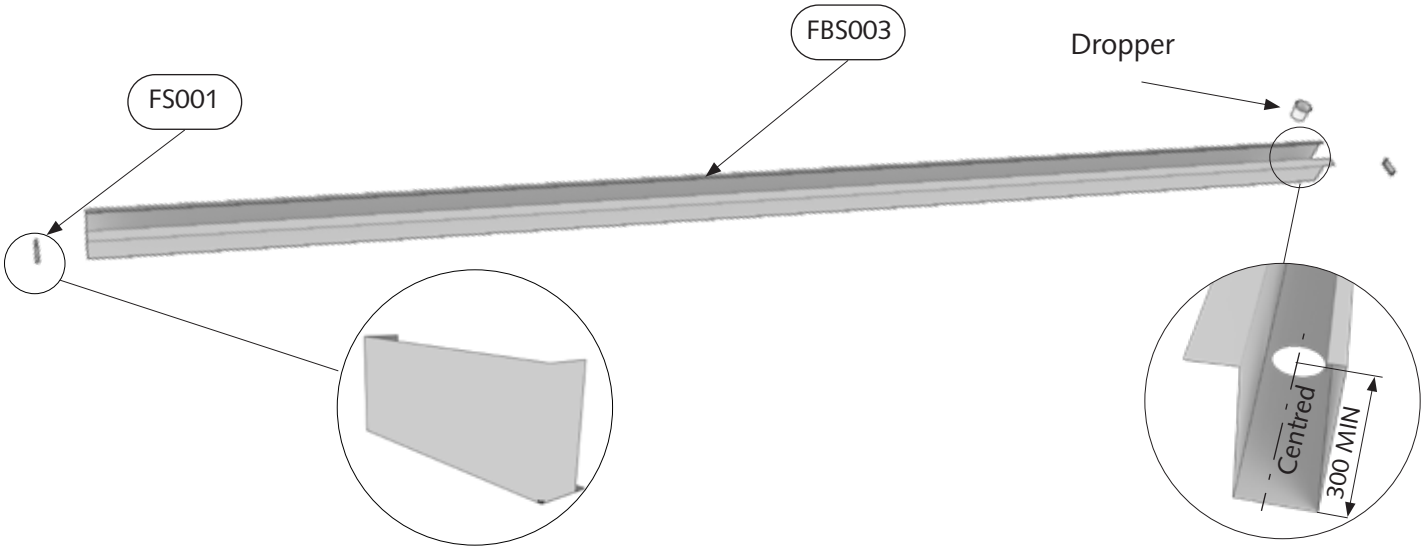
3.2 Corner flashings attachement

- Attach corner flashings onto corners using six 55mm Tek Screws per corner, approximately 250mm down from top of the top plate.
- Ensure corner flashings are square and parallel with wall panels.
- Ensure bottom of flashings are level with bottom of cladding.



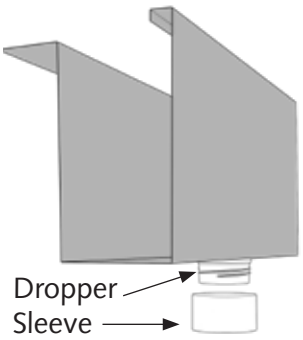
•Regarding Part IDs refer to the Parts list in pages 4 & 5.

3.3 Back spouting assembly

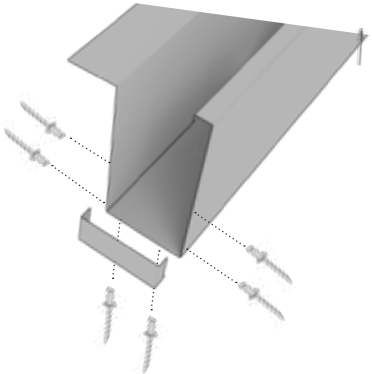


1
- Position dropper anywhere on the back spouting (at least 300mm from either end, centred front and back) and mark diameter of dropper.
- Drill a small hole, and using tin snips, cut a larger hole (slightly larger than the diameter of dropper).

2
- Silicone around the hole and insert dropper into hole.
- Screw sleeve onto dropper from underneath.



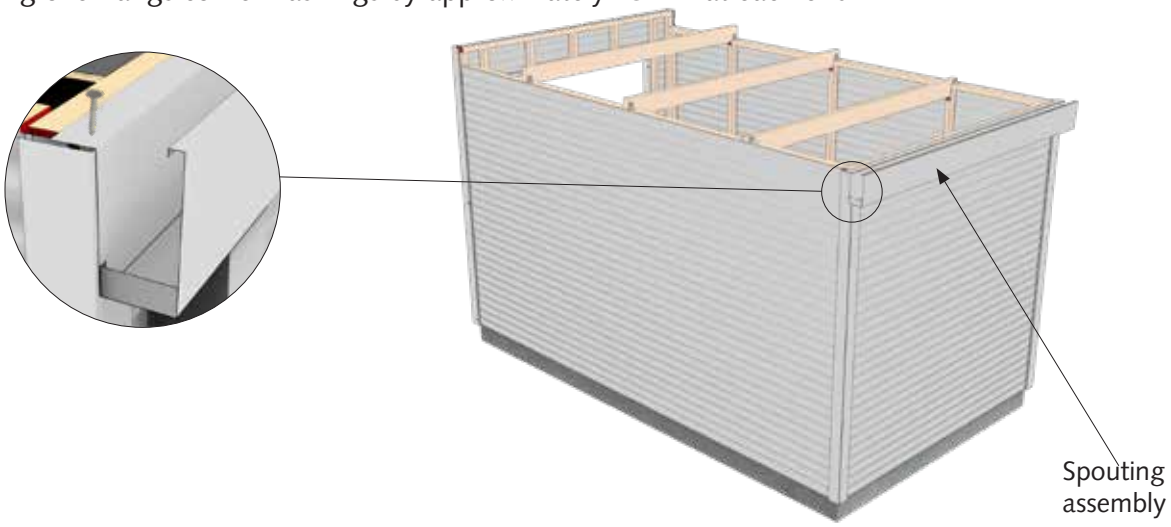
3
- Fit and rivet end caps to each end using 6 rivets per end.
- Silicone both end caps to back spouting to ensure there is no leak.



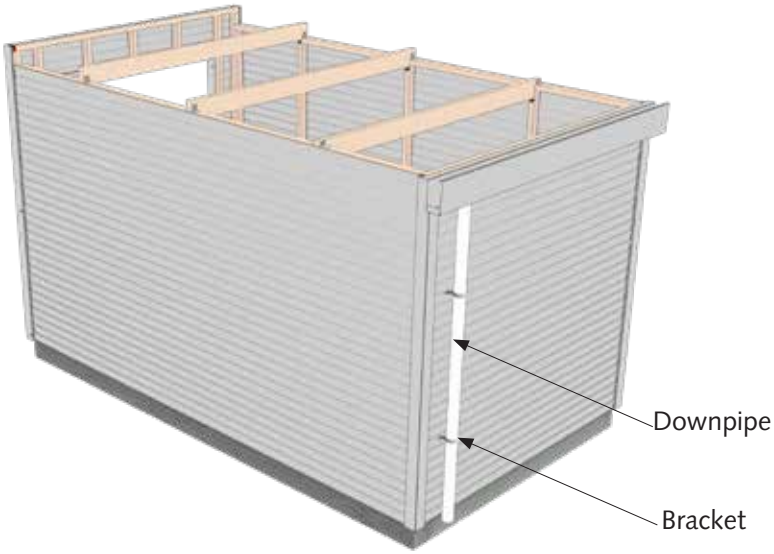
•Regarding Part IDs refer to the Parts list in pages 4 & 5.

3.4 Back spouting attachment

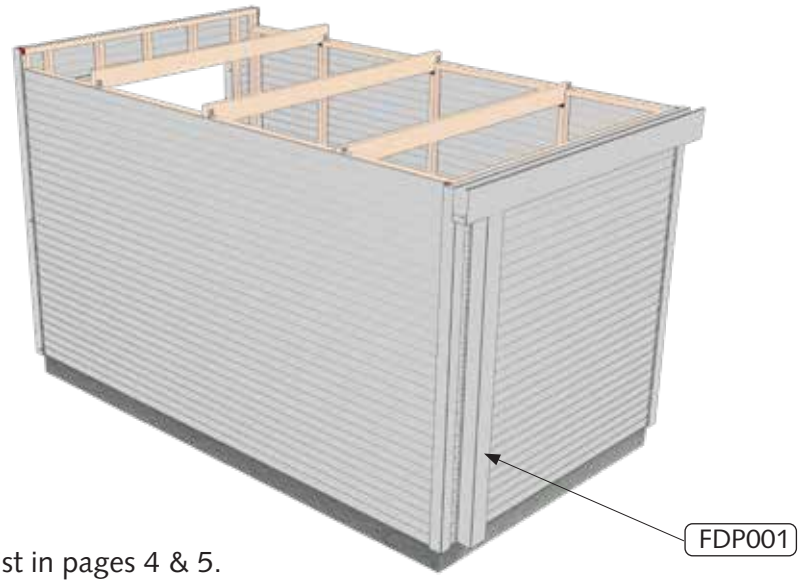
1. Centralise and nail the assembled spouting to top of the back top plate using four 30mm clouts, so spouting overhangs corner flashings by approximately 25mm at each end.



2.
- Cut downpipe to desired length.
- Insert downpipe into dropper, and fasten it using 1 rivet.
- Fix downpipe to the back wall cladding using 2 downpipe brackets, equally-spaced, riveting them into back wall cladding.



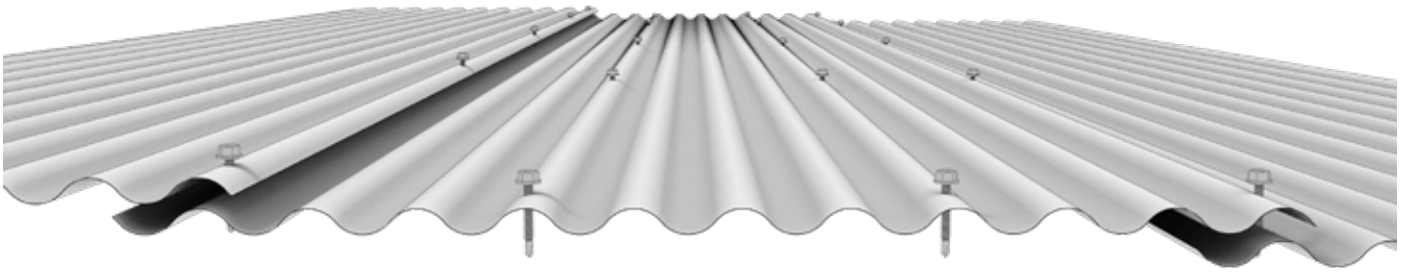
3. Using 6 rivets equally-spaced attach downpipe flashing to wall cladding.



•Regarding Part IDs refer to the Parts list in pages 4 & 5.

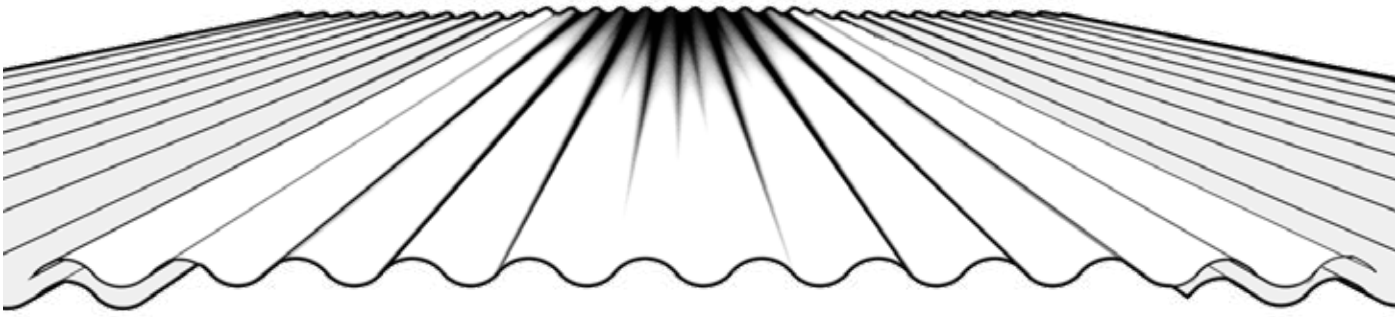
4.Roof sheets attachment

4.1 Layout for fastening roof sheets



- Use 55mm Tek Screws to fasten roof sheets.
- Always fasten through top of rib of profile.
- Use 4 Tek Screws per sheet / top plate / ridge beam.

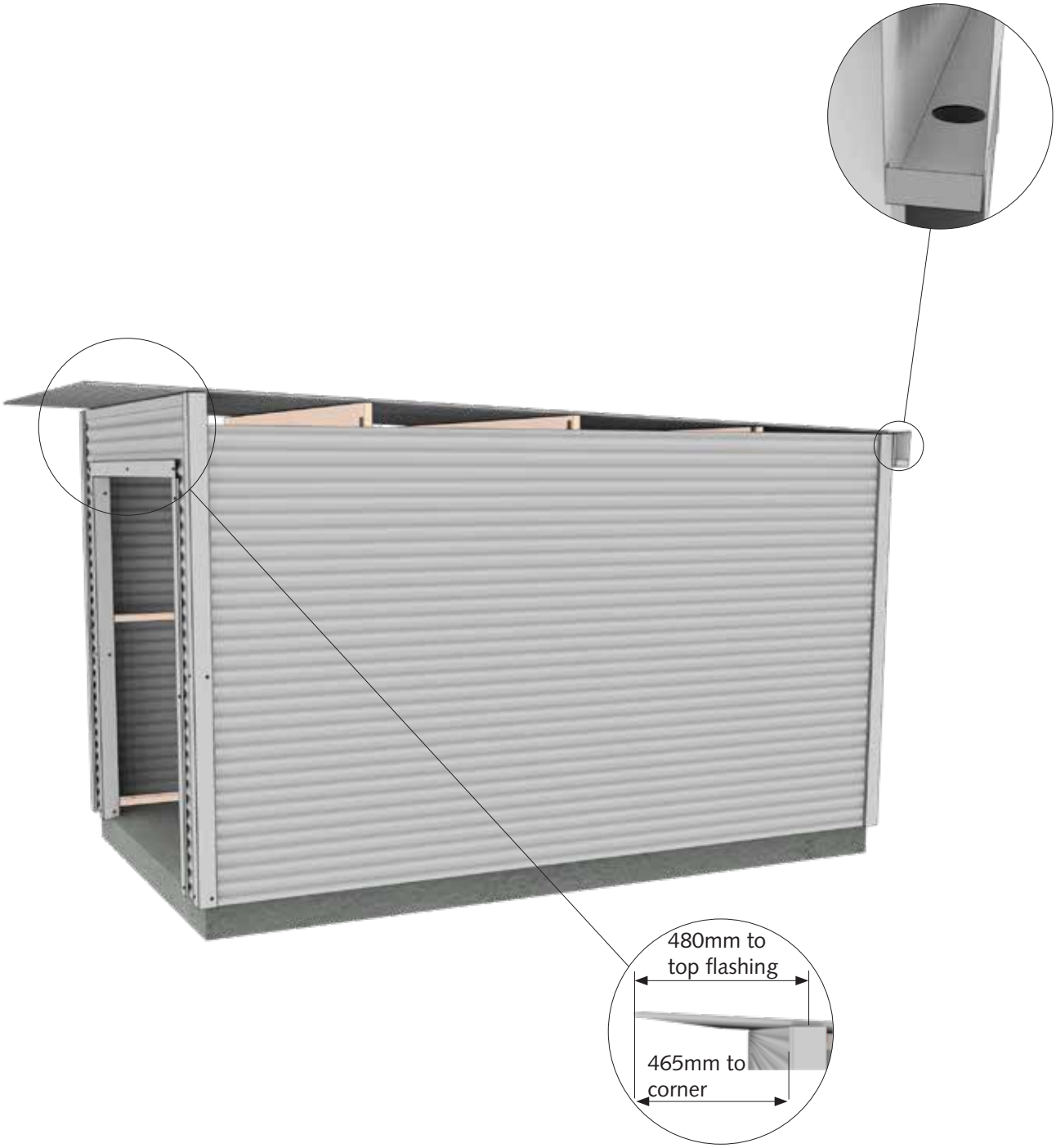
4.2 Optional clear roof sheet attachment



- An optional clear roof sheet (if supplied) needs to be fitted so both edges of the clear roof sheet overlap standard sheets on either side.
- For fastening clear sheet, follow the screw pattern of standard roof sheets.
- On clear sheet use dome washers under the screw heads.

4.3 Roof sheets fastening

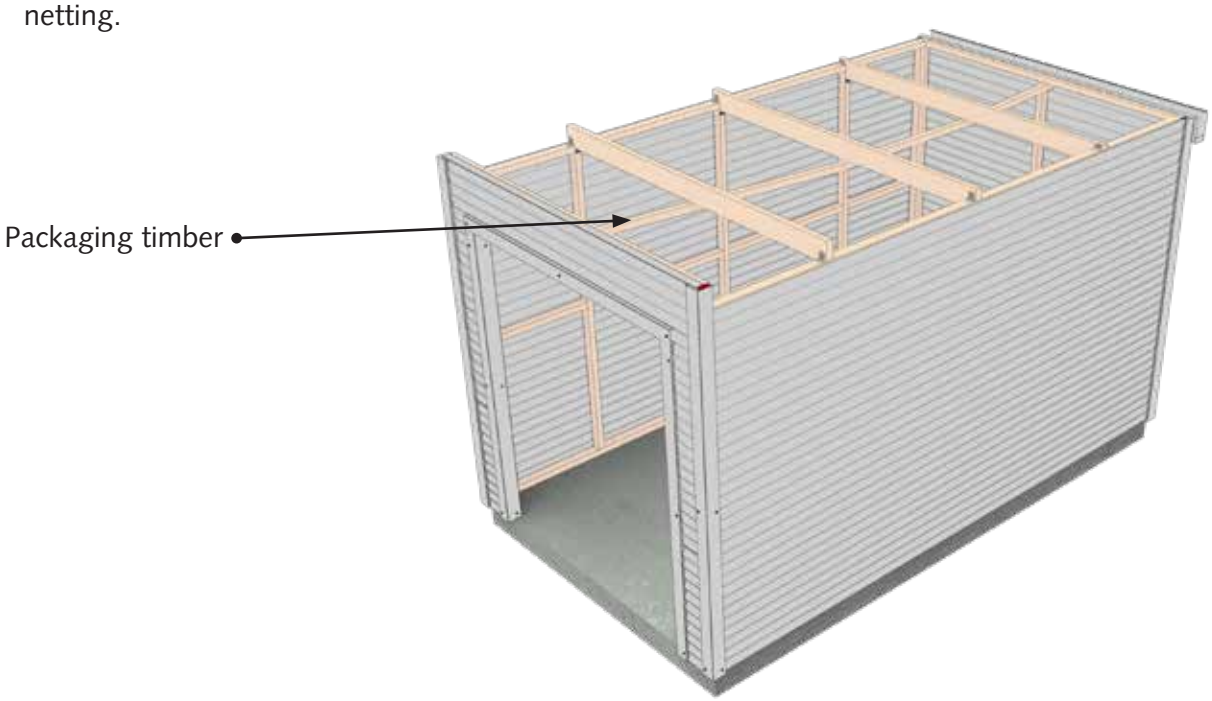
- Each sheet must correctly overlap the previous sheet.
- Sheets must be 480mm past front top plate flashing (FFT001) and overlap back spouting (FBS001).
- After fastening all roof sheets, ensure metal filings have been removed from between sheets, and between sheets and fasteners.



•Regarding Part IDs refer to the Parts list in pages 4 & 5.

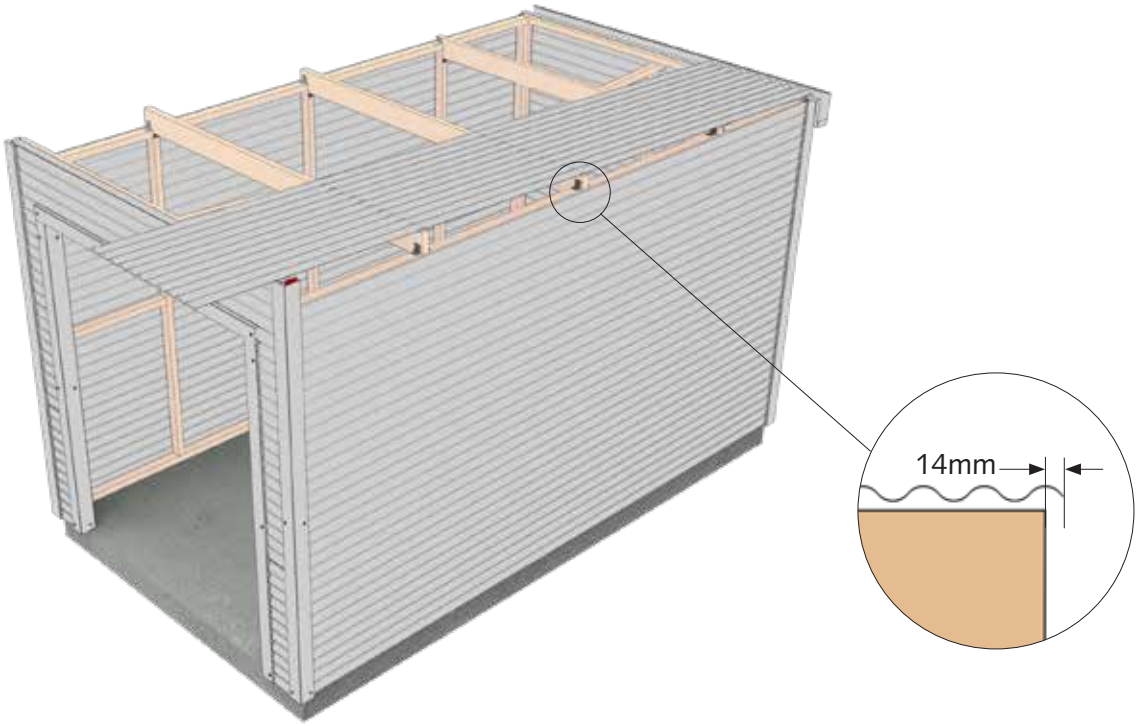
1 Ensure top plate and ridge beams are straight before attaching roof sheets.

You may temporarily brace top plates and ridge beams to ensure they are straight, by nailing timber from packaging crate, as shown. Nail to underside if you are using building paper or netting.

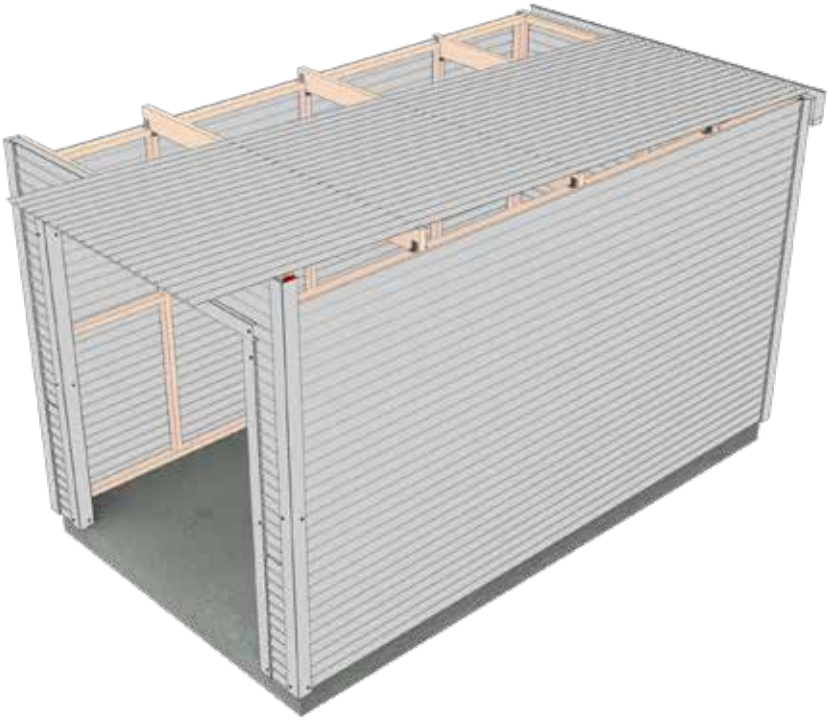


Condensation can form on underside of the shed roof. If building paper is required, fit it now. Building paper will need to be supported by netting.

2 Position first roof sheet ensuring right edge of sheet overhangs end of ridge beam by approximately 14mm, and correct front overhang of distance of 480mm from top flashing.



3 Position and attach second roof sheet ensuring correct overlap and 762mm from edge of previous sheet.



4

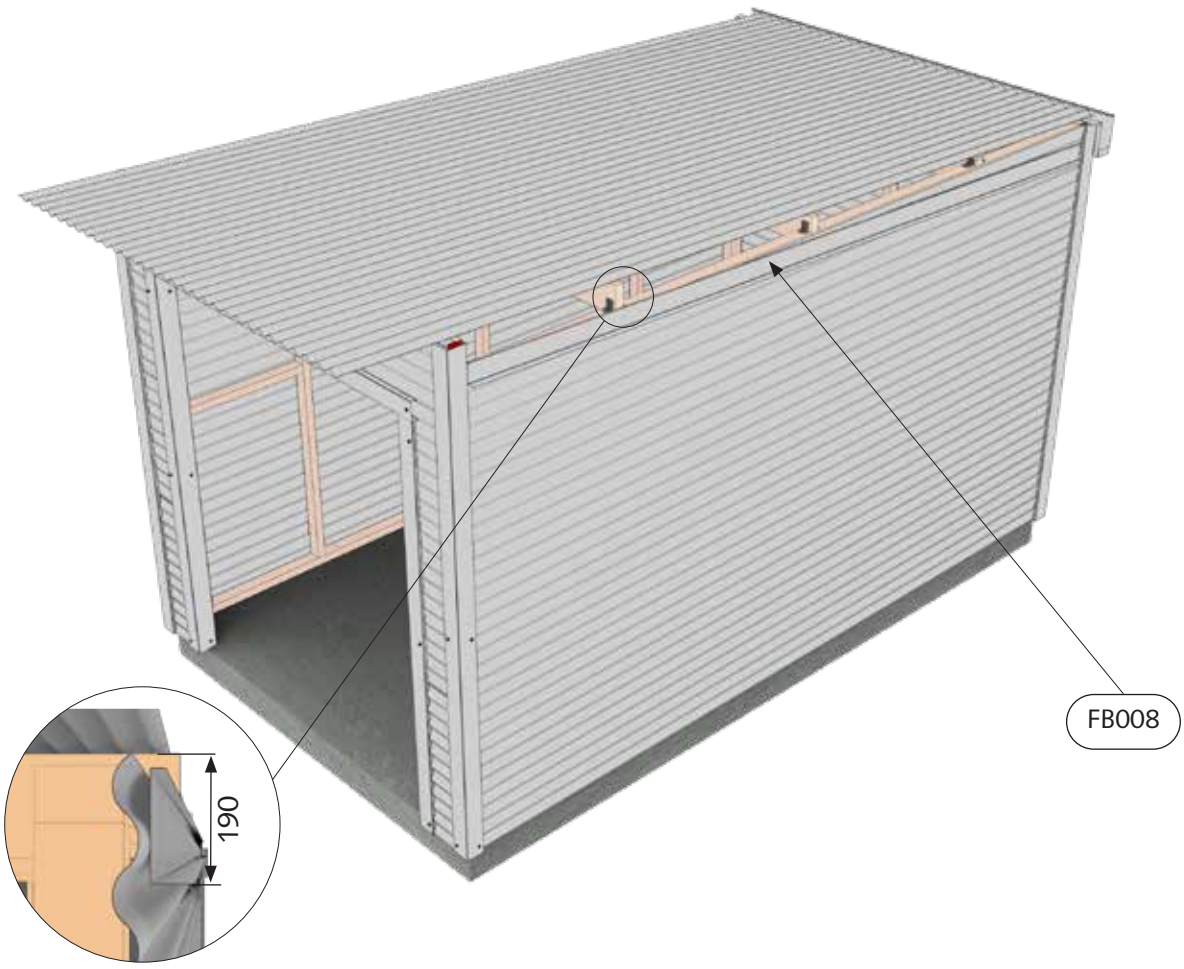
- Position and attach remaining roof sheets ensuring correct front overhang and each sheet is 762mm from previous sheet.
- Position and attach last sheet to ensure it overhangs end of ridge beams by 0-30mm.
- Remove bracing timber, after roof is attached.

5. Front spouting and barges attachment

5.1 Barge support attachment

1. Position barge support flashings (FB008) on each side of shed so bottom of barge support flashing is 190mm below top of ridge beams, parallel with roof slope and centrally between corner flashings.

2. Attach barge support to wall sheet using 5 rivets at either side.

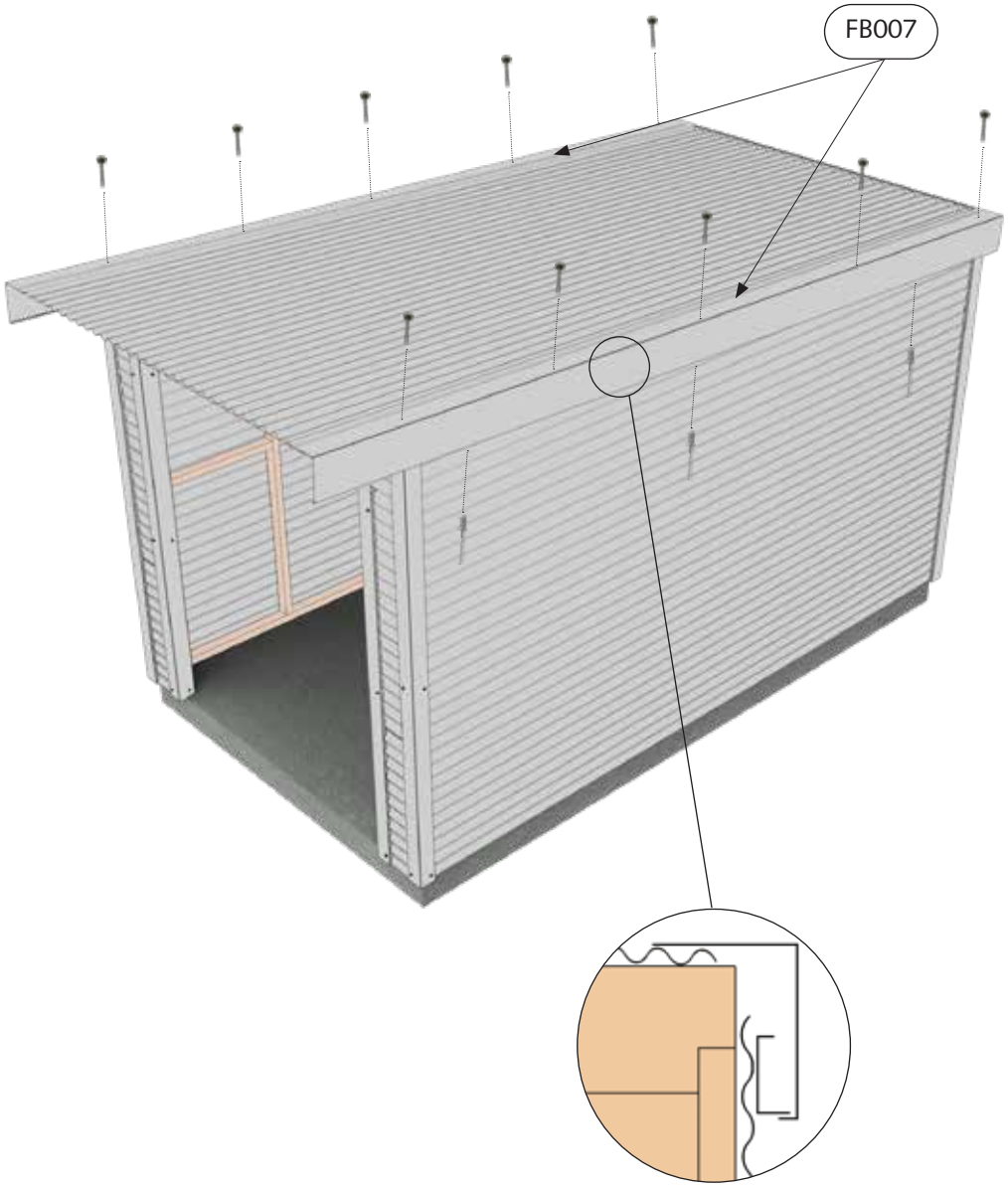


•Regarding Part IDs refer to the Parts list in pages 4 & 5.

5.2 Barge flashings and front spouting attachment

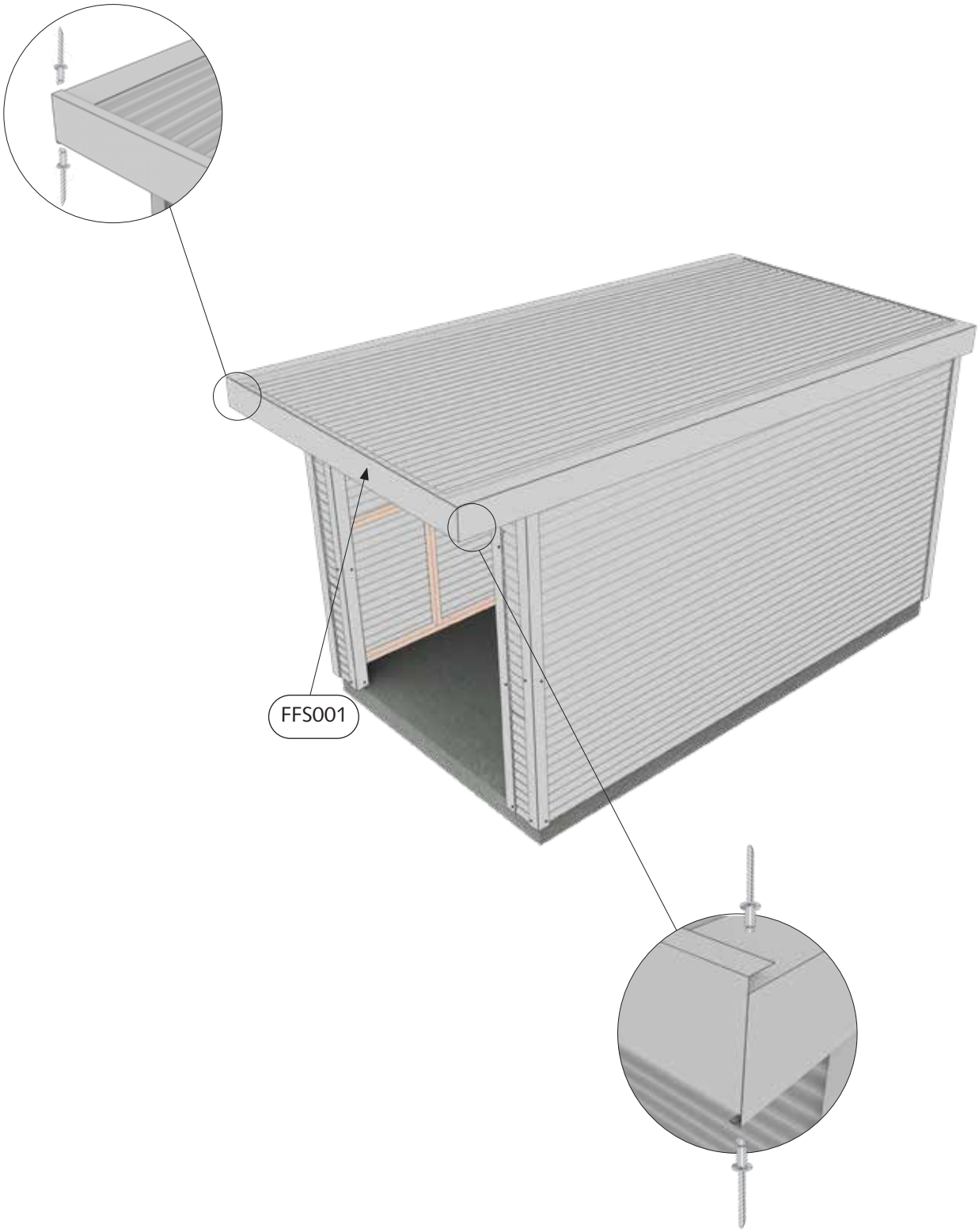
1

- Using five 55mm Tek Screws equally spaced per barge, secure barge flashings through roof sheets into the end of ridge beams and top plates.
- Attach bottom of barge to barge support using 3 rivets equally spaced per side.



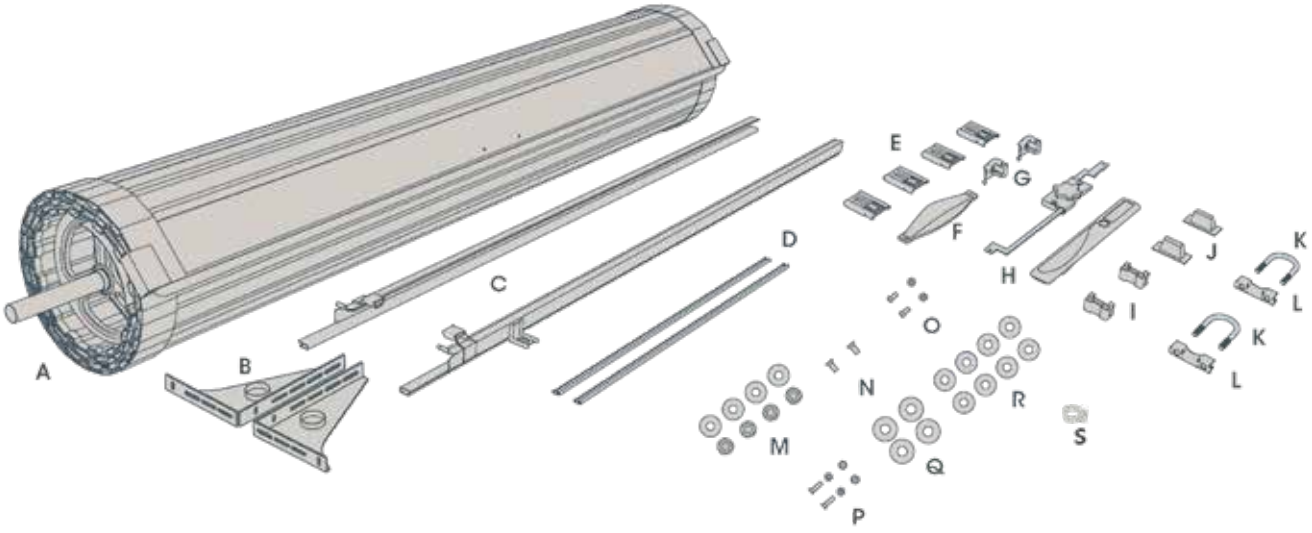
•Regarding Part IDs refer to the Parts list in pages 4 & 5.

2 Install the front spouting, and rivet spouting ends to barge flashings at both top and bottom. Then, fasten front spouting to the roof sheets using rivets, equally spaced, 3 rivets per sheet.



•Regarding Part IDs refer to the Parts list in pages 4 & 5.

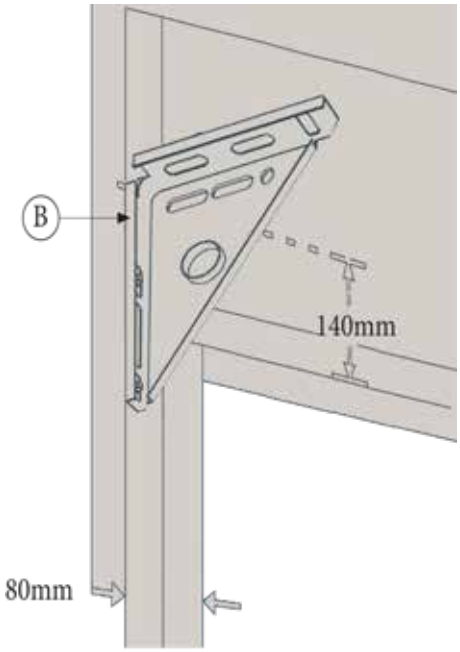
6. Roller door installation



Series 1 Roll-A-Door		
Item	**Description**	**Quantity**
A	Rolled plastic wrapped door	1
B	"A" Style brackets, left and right hand	2
C	Doors guides, Left and right handed	2
D	Steel locking bars	2
Small parts bag		
E	Guide clips(door size dependant)	4
F	Door handle and fixing to suit	1
G	Bottom rail stops and 6mm screws	2
H	Faceplate and fixing to suit	1
I	Locking bar retainer	2
J	Locking bar covers	2
K	U-Bolts	2
L	Axle / Bracket saddles	2
M	8mm Nuts for Ubolts	4
N	Counter sunk screws for lock and facia	2
O	7mm x 4mm Mushroom head screws for locking bar	2
P	4mm x 6mm Screws for handle	2
Q	10mm Washers	4
R	8mm Washers (Door size dependent)	8
S	Plastic Clamp	1

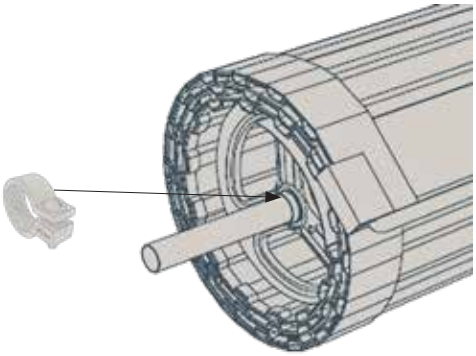
6.1 Brackets installation

- Position bracket (B) centre on outer stud, approximately 140mm up from bottom of lintel and 80mm from inside of door opening to outside of bracket.
- Mark 2 hole positions using the bracket's top and bottom slots.
- Drill both holes, then attach brackets using 50mmx10mm coach screws and 10mm washers.
- Install second bracket as per above and make sure it is level with the first bracket.

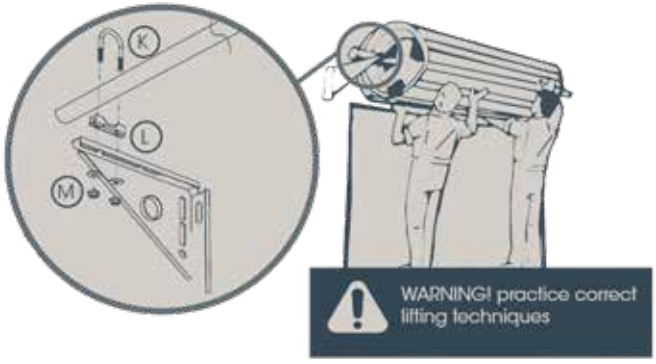


6.2 Door placement on brackets

Centralise shaft on roller door and fit plastic clamp onto shaft at one end to ensure shaft stays centralised.

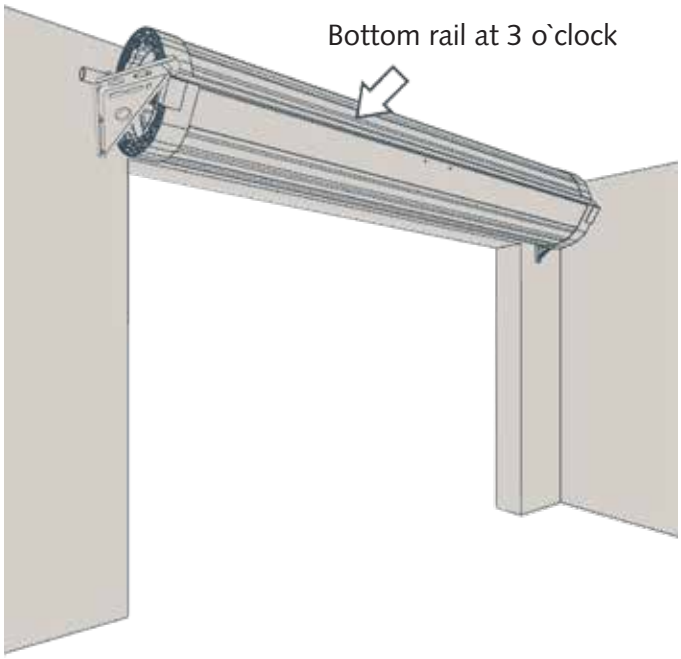


- Do not cut plastic yet.
- Using 2 persons and correct lifting techniques, lift door onto brackets (right way around, so door will roll down from the front of the opening).
- Immediately loosely fit "U" bolts (K), saddles (L), washers and nuts (M) to the brackets in position shown.
- Fitting "U" bolts eliminates the door falling from the brackets. (Do not tighten yet.)



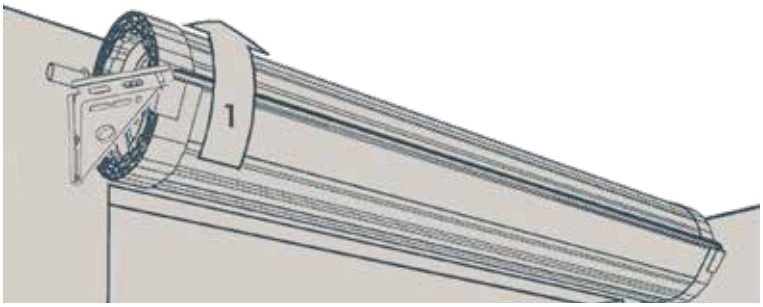
6.3 Door positioning

- Rotate the curtain and axle so that the bottom rail of the door is positioned at 3 o`clock.
- Centralise the curtain on doorway opening.
- Push the axle forward in slots (toward the opening) and tighten the nuts firmly without overtightening.

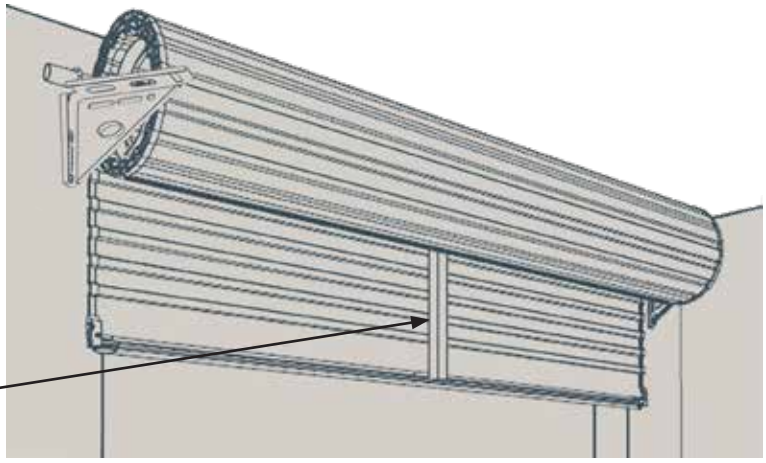


6.4 Springs tensioning

- Ensure the bottom rail is at 3 o`clock.
- Ensure "U" bolts are tightened, then rotate the door one turn in a forward direction to apply tension.
- Do not let go off the door, as the springs are now tensioned.
- Hold the door firmly and cut the plastic wrap along the bottom rail (take care not to damage the door surface).

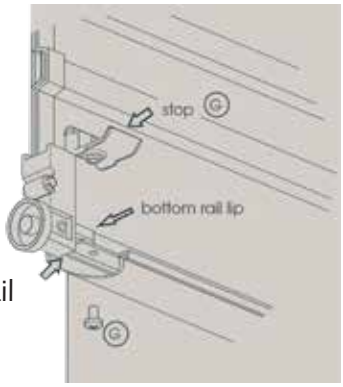


- Slowly pull the curtain down and carefully position a wooden chock (or any other appropriate stop) between bottom rail and rolled curtain as shown.
- Take care not to damage the door surface.
- Chock will hold the door until the guides and stops are in place.



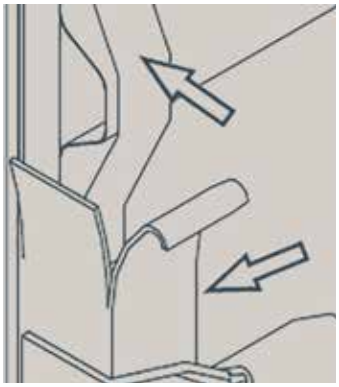
6.5 Bottom rail stop attachment

- Hook stop behind lip in rail.
- Secure the rail from underneath with 6mm screws (G).
- Trim weatherseal flush with end of the bottom rail.

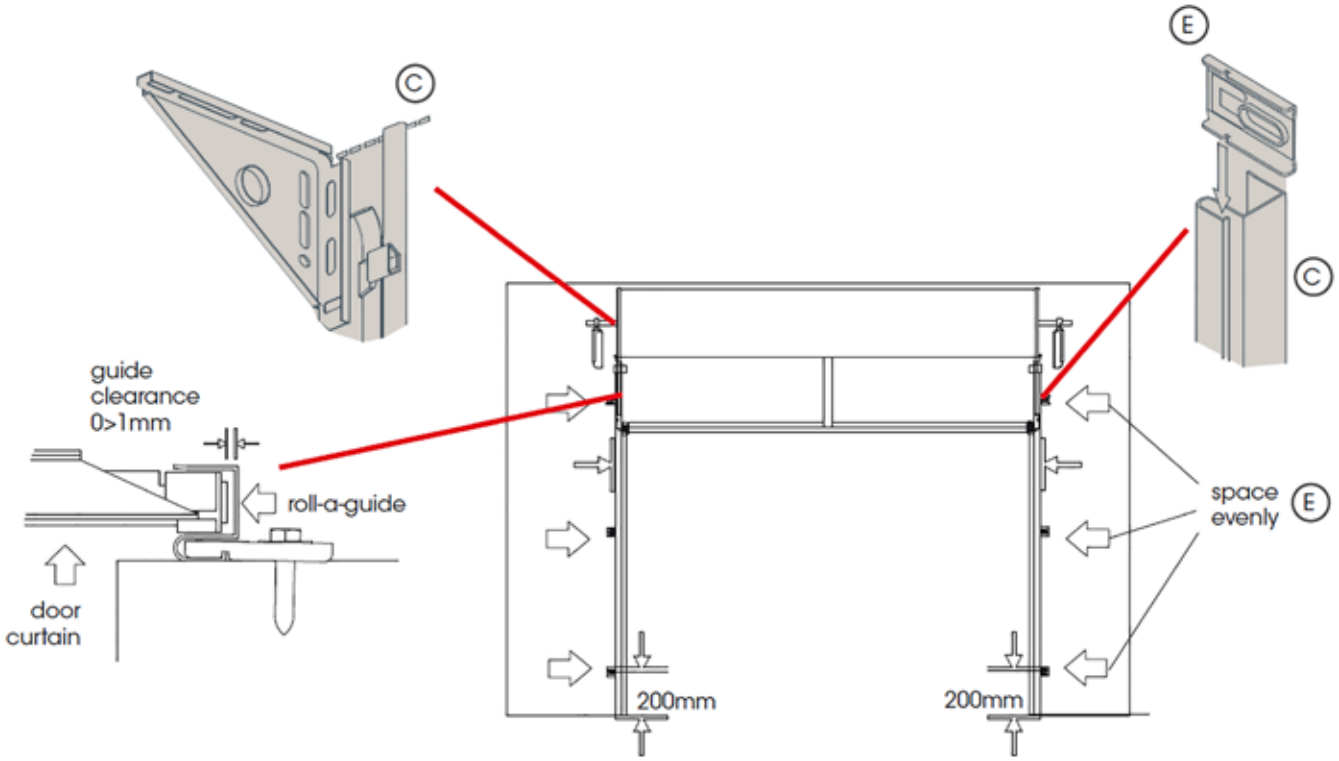


6.6 Guides installation

- Ensure curtain overlaps equally on both sides, and cut the guides the correct length (top of guides is level with top of the brackets while the guides bottom is touching the floor).
- Slide 2 guide clips (E) into each guide. Position the bottom clip 200mm from the floor with the rest evenly spaced along the guide.
- Position 1 guide over the edge of the door curtain. Mark and drill the top fixed guide clip and secure it using 40mmx8mm coach screw and washer, allowing 3mm clearance between inside of guide and plastic roll-a-guide. Ensuring guide is plumb, fix remaining clips.

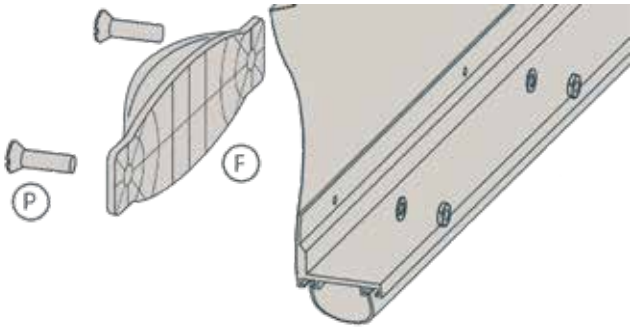


- Repeat with second guide.
- Remove the wooden chock and slowly lower the door. Removing the plastic wrap as you pull the door down. Reposition the guides as necessary to allow smooth and even operation with 0>1mm clearances.
- Ensure door curtain enters guides smoothly. It will be necessary to adjust the guide lead in to achieve this.



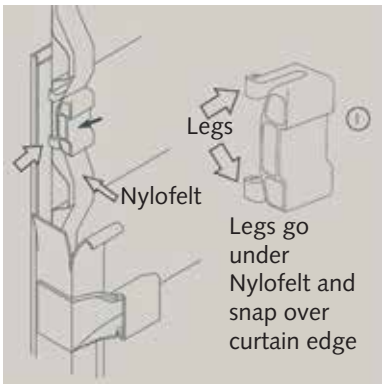
6.7 Handle fitment

- Fit handle (F) to the outside of the door using the supplied screws (P), nuts, and washers.
- Complete drilling holes with 5mm drill bit, through pre-drilled holes on the back of the door.

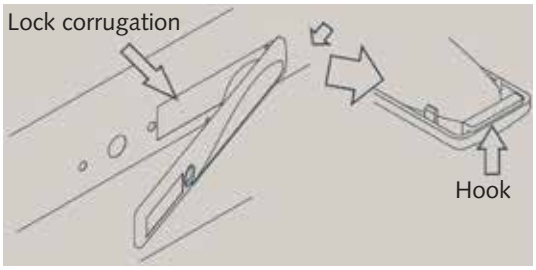


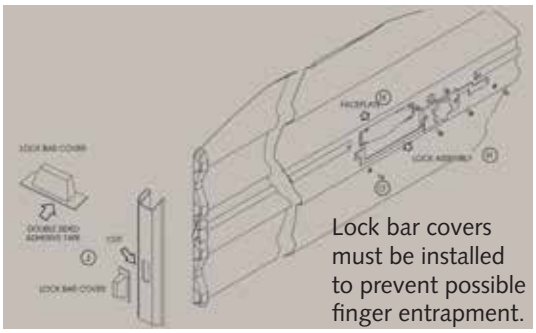
6.8 Lift lock centring

- Raise the curtain until the lock corrugation is visible above door guides.
- Install locking bar retainer (I) in line with lock corrugation by pushing retainer towards door edge, sliding the legs under the Nylofelt® and hooking them over the curtain edge. Ensure lock bar retainers sit squarely on door curtain.



- Fit faceplate (H) to outside of door, where the hook will latch onto curtain edge. Then, slide the faceplate as far to the right as possible. Use adhesive tape on outside to hold in position.
- Attach the lock body (H) to the faceplate from the inside, using the mounting screws and washers. Do not overtighten the screws.
- With the door in the closed position, slide the end of the locking bars (D) through the locking bar retainers, and while holding the bars level, mark the side of the guides.
- Drill and file out a rectangular slot no longer than 25mm and no wider than 10mm, ensuring top of the slot remains in line with top of the locking bar.
- Slide bars through the guide slot, then back onto locking arms. **Note:** These may need to be cut shorter.





- Screw on securely using the countersunk screws (O). Ensure locking bars do not protrude more than 20mm beyond guide when engaged in locked position. It may be necessary to adjust the length of the bars.
- Ensure a clean and dry guide using clean rag.
- Peel lining from lock bar cover (J) and position over hole. Ensure locking bars move freely.

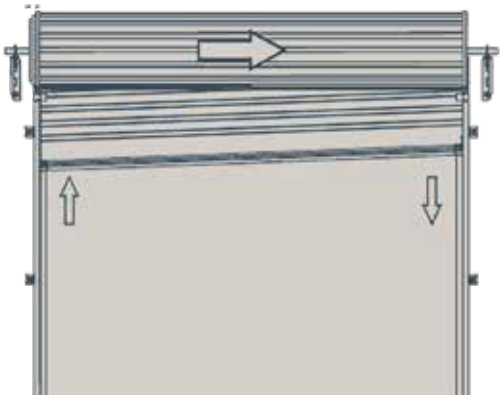
6.9 Clean-up

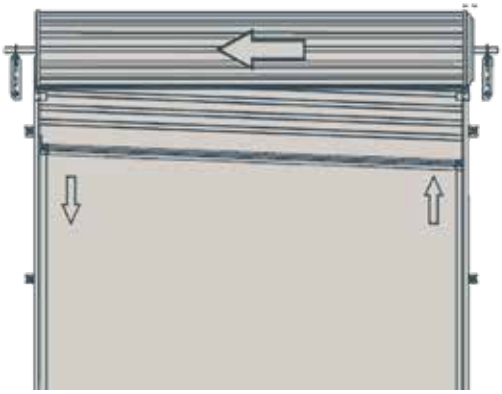
- Remove all swarf (drill filings) with a soft brush or rag.
- Hose down roof and walls thoroughly.
- For Colorsteel sheds, use touch-up paint provided on all rivets and exposed cuts.

6.10 Troubleshooting

Symptom	Possible cause	Remedy
Door is hard to operate in any direction	Door Jamming in the guides	a) Check guide clearances. b) Check guides are plumb. c) Check guide surfaces are clean and free from oil. d) Check locking bars are correct length. e) Check the weatherseal is correct length.
Door is hard to operate in one direction	Spring tension requires adjustment	a) If door is hard to lift, but tends to drop, refer to section "Centralise the axle when door is mounted".
	Brackets are not level	b)If door is hard to close, but tends to rise, refer to section "Centralise the axle when door is mounted".
Door rolls up crooked	Guides are not plumb Axle is not centered	Make sure breackets are level. Refer to page 35. Make sure the guides are plumb. Refer to page p37. Centralise the axle. Refer to section "Centralise the axle when door is mounted".

WARNING: Ensure pipe wrench is fitted correctly to axle and it is gripped onto the axle. Do not underestimate the tension in the spring when undoing the clamps.
CAUTION: This adjustment requires two persons to perform.





If the door rolls up crooked with one side than the other, proceed as follows:

- Roll the door up as high as possible and tie two ropes around the door roll approximately 300mm from each end, as a safety precaution.
- With a person at each end of the door, hold the axle firmly with a large pipe wrench (Stillson) at least 450mm long.
- Loosen the "U" bolt nuts at both ends and KEEP A FIRM GRIP ON WRENCH.
- Move the axle to the RIGHT between 20 - 40mm.
- Re-tighten "U" bolts before releasing pipe wrench.
- Test and repeat if further adjustment in needed.
- If the door is stiff to work or rattles over lead-in on top of guide, then refer to page 36.

6.11 Spring tension adjustment

WARNING: Ensure that pipe wrench is fitted correctly to axle and it is gripped onto the axle. Do not underestimate the tension in the spring when undoing the clamps.
CAUTION: This adjustment requires two persons to perform.

- With the door rolled up tie two ropes around the door roll approximately 300mm from each end, as a safety precaution.
- With a person at each end of the door, hold the axle firmly with a large pipe wrench (Stillson) at least 450mm long.
- Loosen the "U" bolt nuts at both ends and **KEEP A FIRM GRIP ON WRENCH.**
- Rotate the axle in the required direction (see diagram).
- Re-tighten the "U" bolts **BEFORE** releasing pipe wrench.
- Test and repeat if further adjustment is necessary.