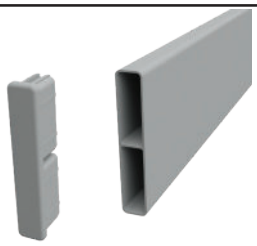
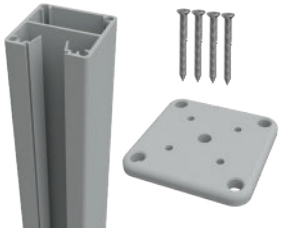
EQUIPMENT ENCLOSURE WITH LID FEATURING 65x16.5MM ALUMINIUM SLATS

FABRICATION OVERVIEW

65mm Slat at various lengths, inc 4 x guide slats

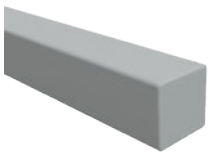


90mm Slat with end caps

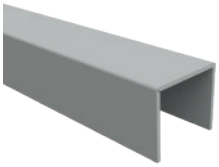


50x50mm Friction Fit Post with Base Plate and 12Gx50mm countersunk screws

Centre Support Rail



50x50mm Profile with end caps

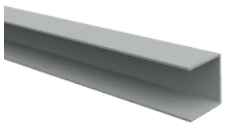


U Channel

Angle Bar

Side Frame for Doors

Side Frame for Lid



U Channel for lid

Bump stops
with black 10Gx25mm screws

Locking clip
with ST4.8x19mm CSK screw

5mm or 9mm Spacer blocks (if using)

20mm starter blocks

Tru close hinge pair

Side frame end caps with screws

Stop
with black 10Gx25mm screws

Gas strut pair
with 10Gx16mm SS wafer head screws

Philips head screws
10Gx16mm SS Wafer Head
10Gx16mm Wafer Head

Warning Sticker

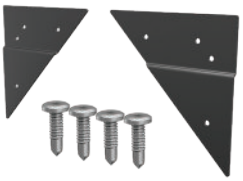
Stainless Steel Hinge pair with screws

IF CONSTRUCTING A CLOSED BACK ENCLOSURE

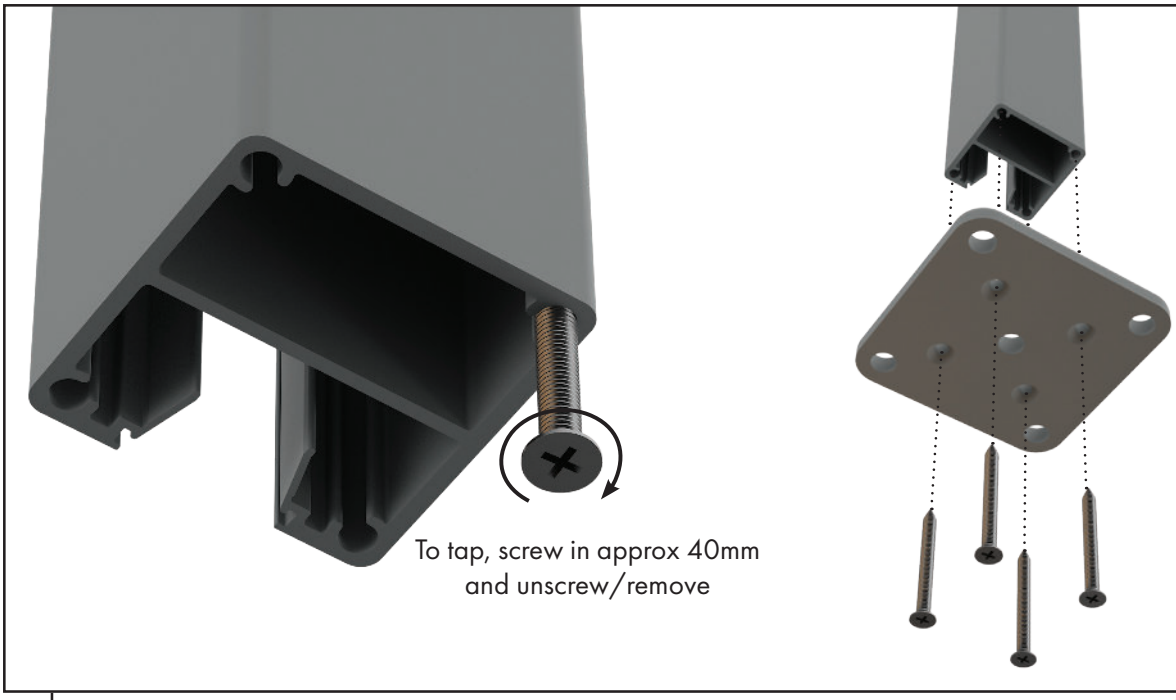
Side Frame for Back enclosure

F Channel

IF CONSTRUCTING AN OPEN BACK ENCLOSURE



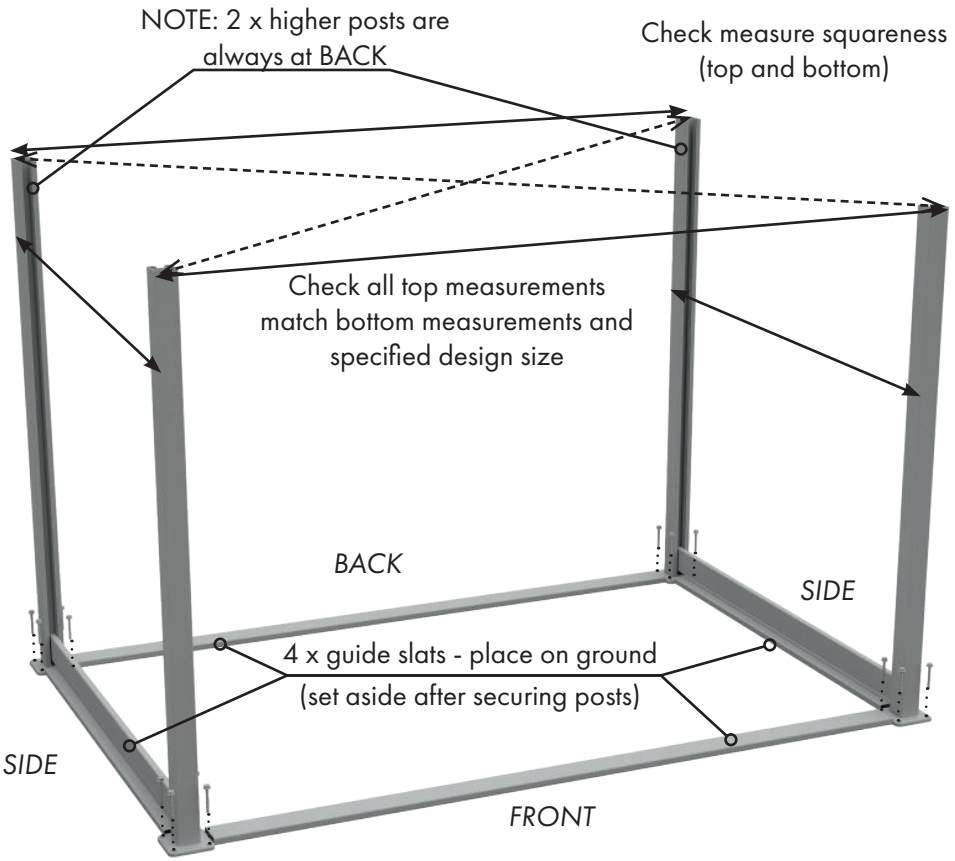
Left and Right Back Brace
with 10Gx16mm SS Wafer Head screws



1 Using one of the supplied 12Gx50mm countersunk screws, tap all screw flutes in bottom of all 50x50mm friction fit posts. Attach base plates to posts using 4 x 12Gx50mm countersunk screws per post.

Insert 20mm spacer blocks into the bottom of each post

Insert first slat into both sides of posts for stability.

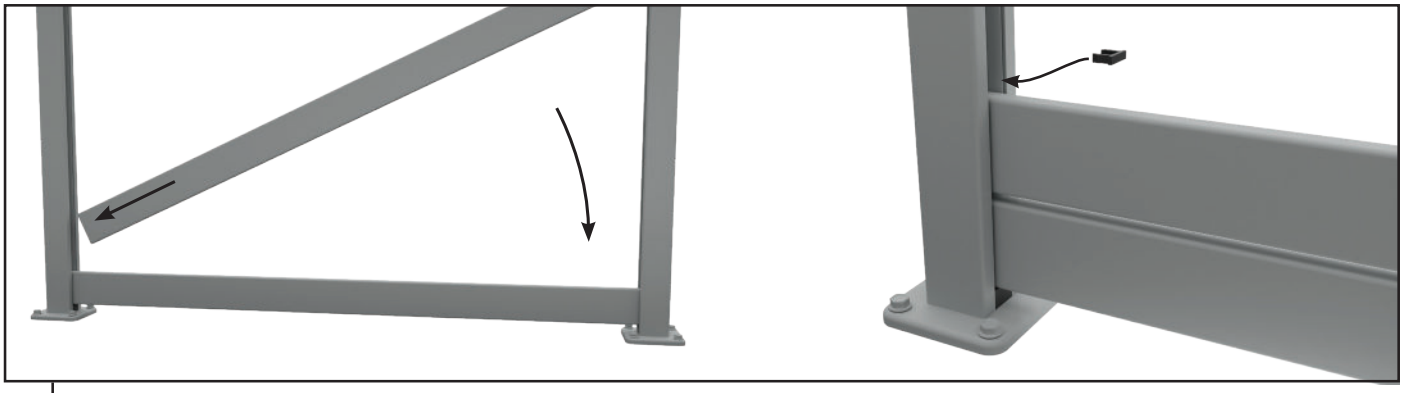


2 Insert 20mm spacers into the bottom of the side posts so that the spacers sit on top of the base plates.

Then insert first slat into both sets of posts on top of 20mm spacers for stability.

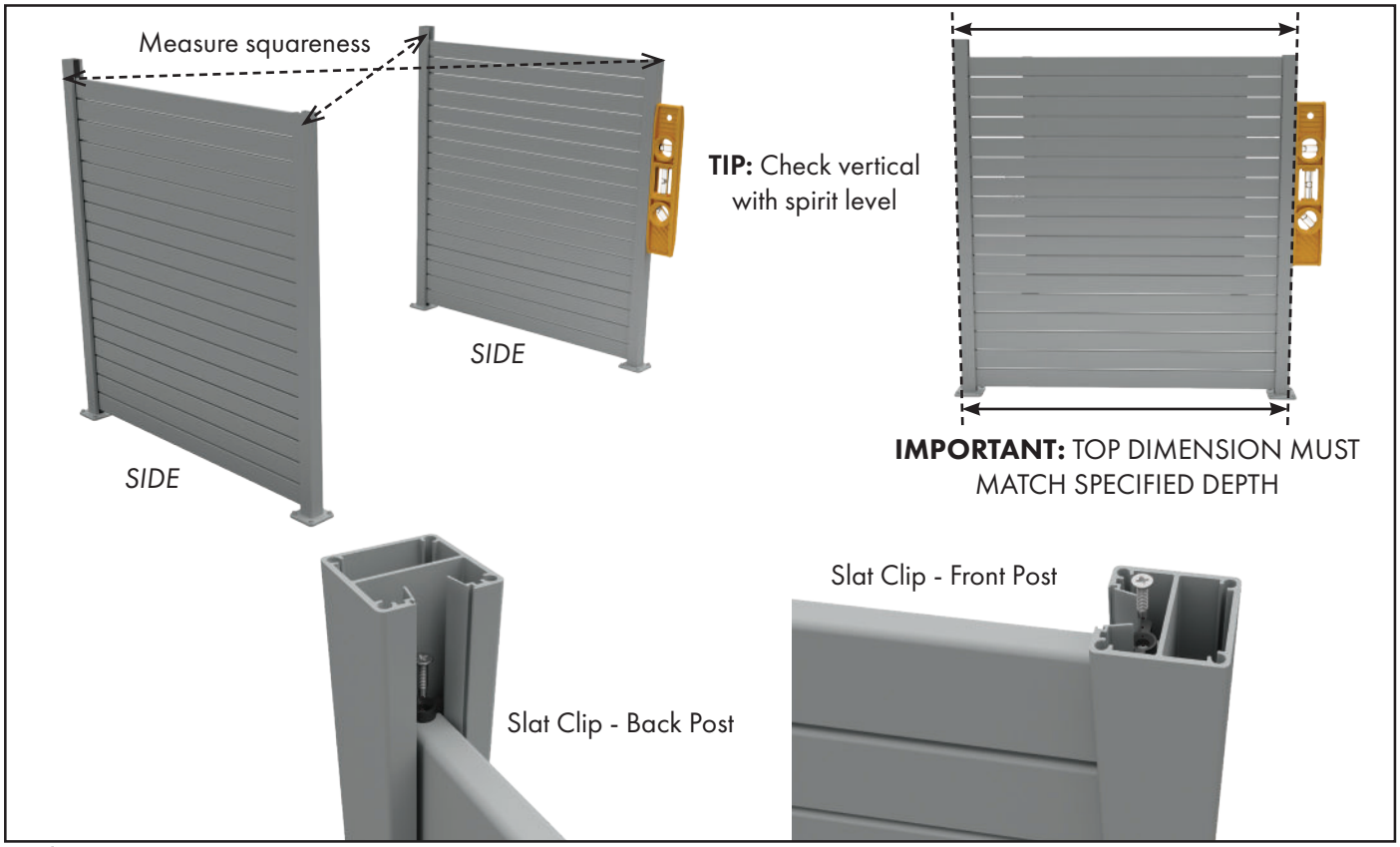
IF CONSTRUCTING AN OPEN BACK ENCLOSURE, REFER TO "APPENDIX 1 STEP A" AT THIS STAGE.

Position posts using the provided guide slats to assist in exact placement of posts. Check measure the squareness of your layout as well as the outside distance between posts (which should match the defined width and depth of your enclosure). Adjust as necessary before screwing down posts to ground with appropriate fixtures (not supplied).



3 Build the enclosure SIDES by pivoting slats into position. Insert a spacer block above the first slat, followed by a slat, inserting into one post and levering the other side into the other post. Alternate between spacer blocks and slats. Do not install a spacer block on top of the final top slats. Use a rubber mallet if needed to ensure slats are fully pushed down in post.

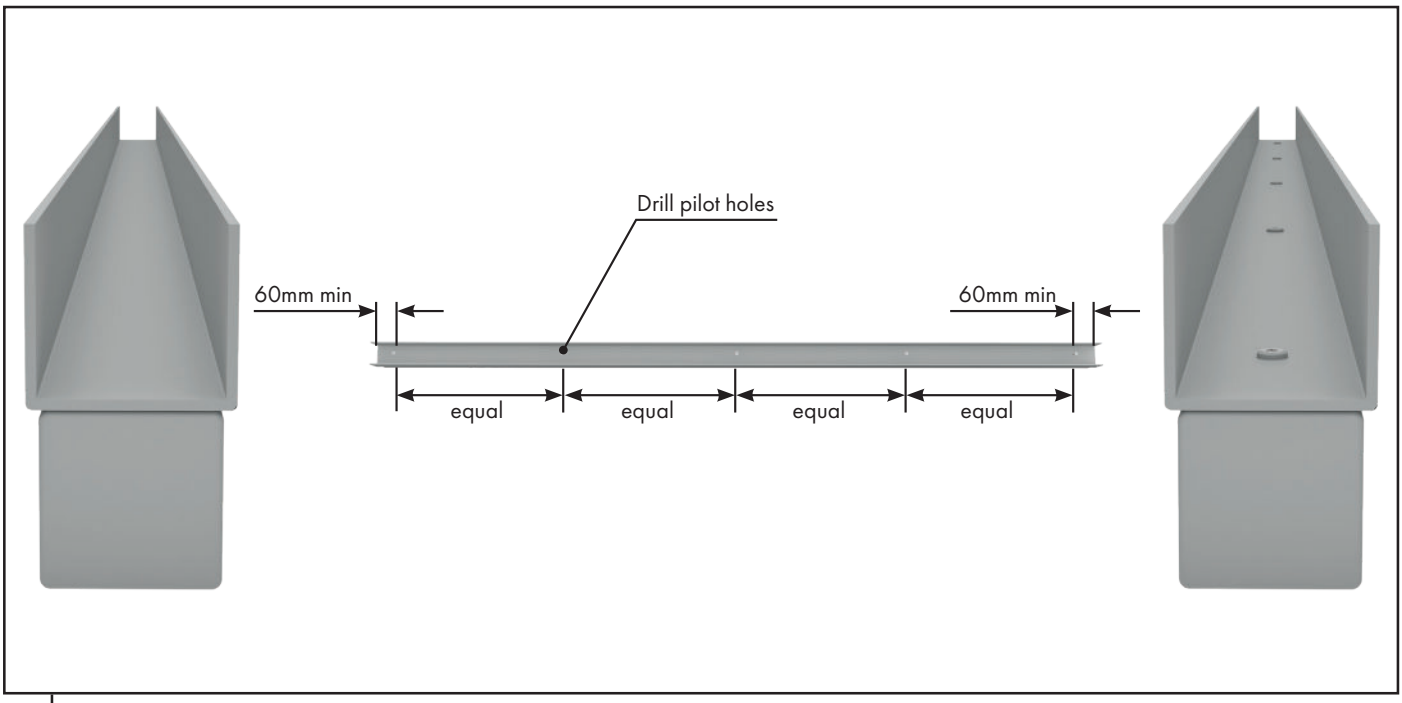
NOTE: If building zero spacing enclosure, omit spacer blocks between slats (20mm spacer at bottom is still required).



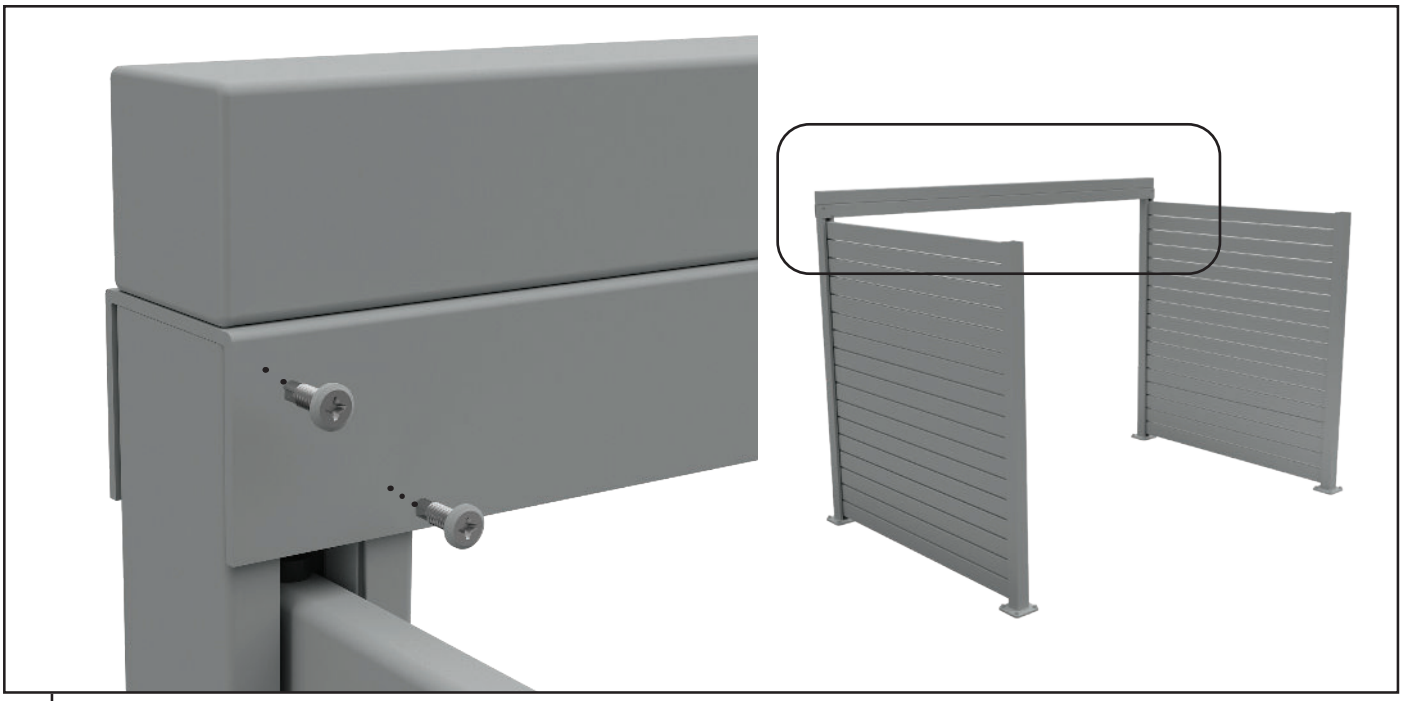
4 Once all slats are in position, check measure squareness of structure at bottom and top on both diagonals.

IMPORTANT: Measure the depth of your structure from top of outside edge of side posts (see above). This must match the depth of your enclosure (and also match the depth of the structure at the bottom of posts). If posts are not positioned correctly, the lid will not fit. Adjust as necessary using a padded mallet to move the post inwards or outwards.

Once correctly positioned, add a slat clip to the top slat in each post and screw off with countersunk screws provided.



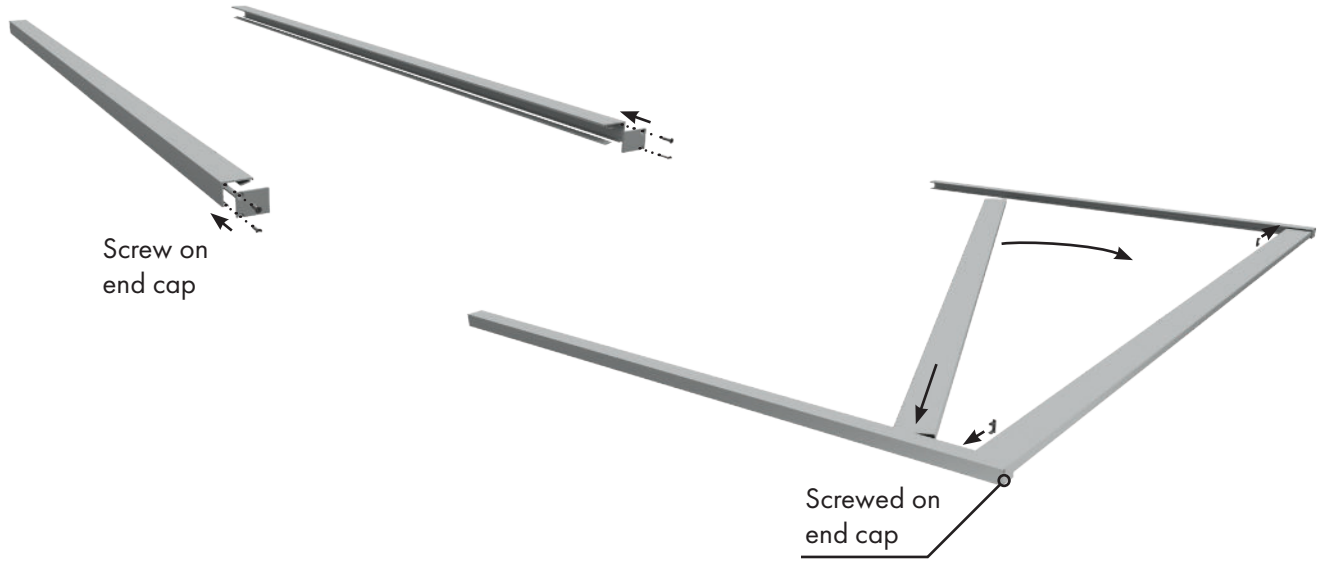
5 Position the U channel centrally on the capped 50x50mm profile. Measure 60mm in from each end and drill 5 x 3mm pilot holes equally spaced through U channel and first wall of post. Affix U channel to post with 5 x 10Gx16mm wafer head screws.



6 Flip over and position U Channel/Profile sub-assembly over the back posts of enclosure. Drill 2 x 3mm pilot holes on front side of channel into back posts and affix with 2 x 10Gx16mm wafer head screws on front side of each post.

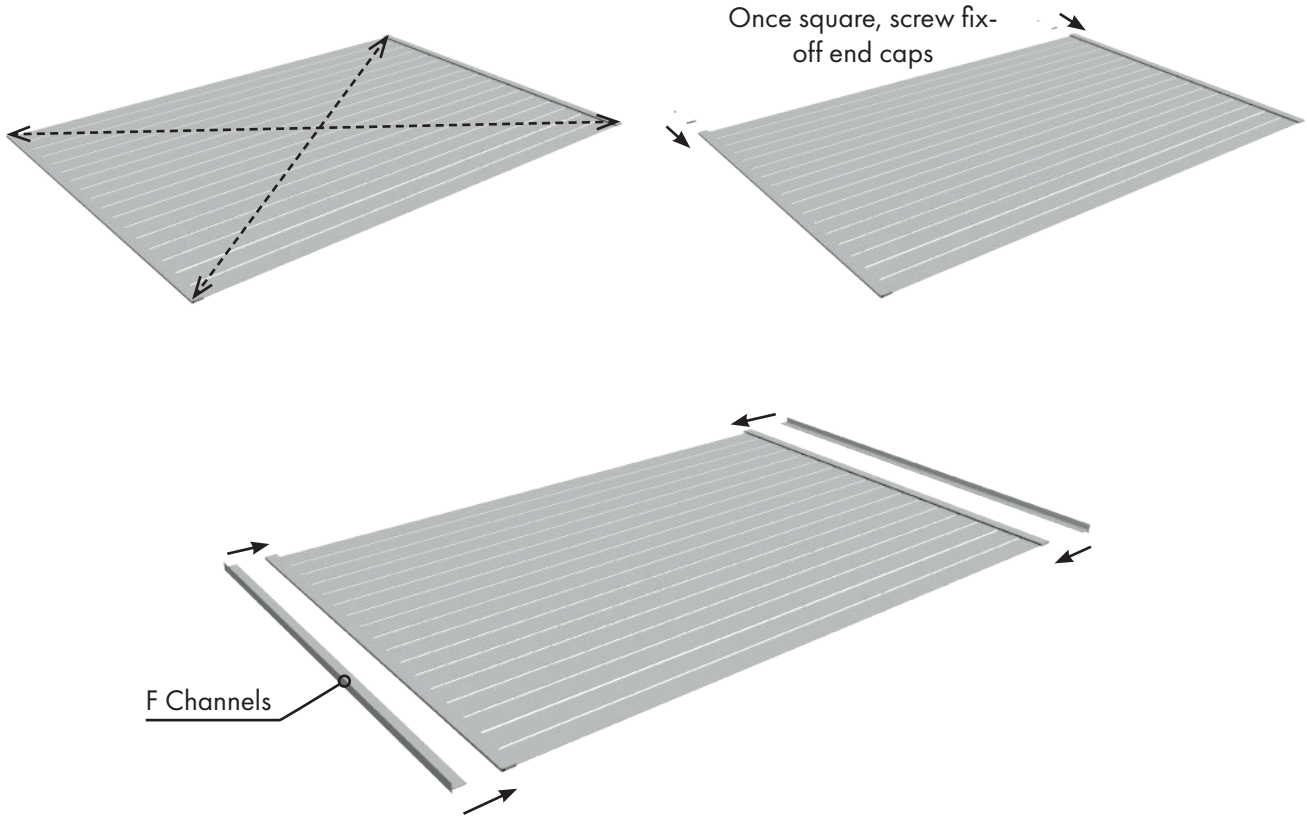
IF CONSTRUCTING AN OPEN BACK PANEL, GO TO APPENDIX 1 STEP B

ASSEMBLING REAR PANEL



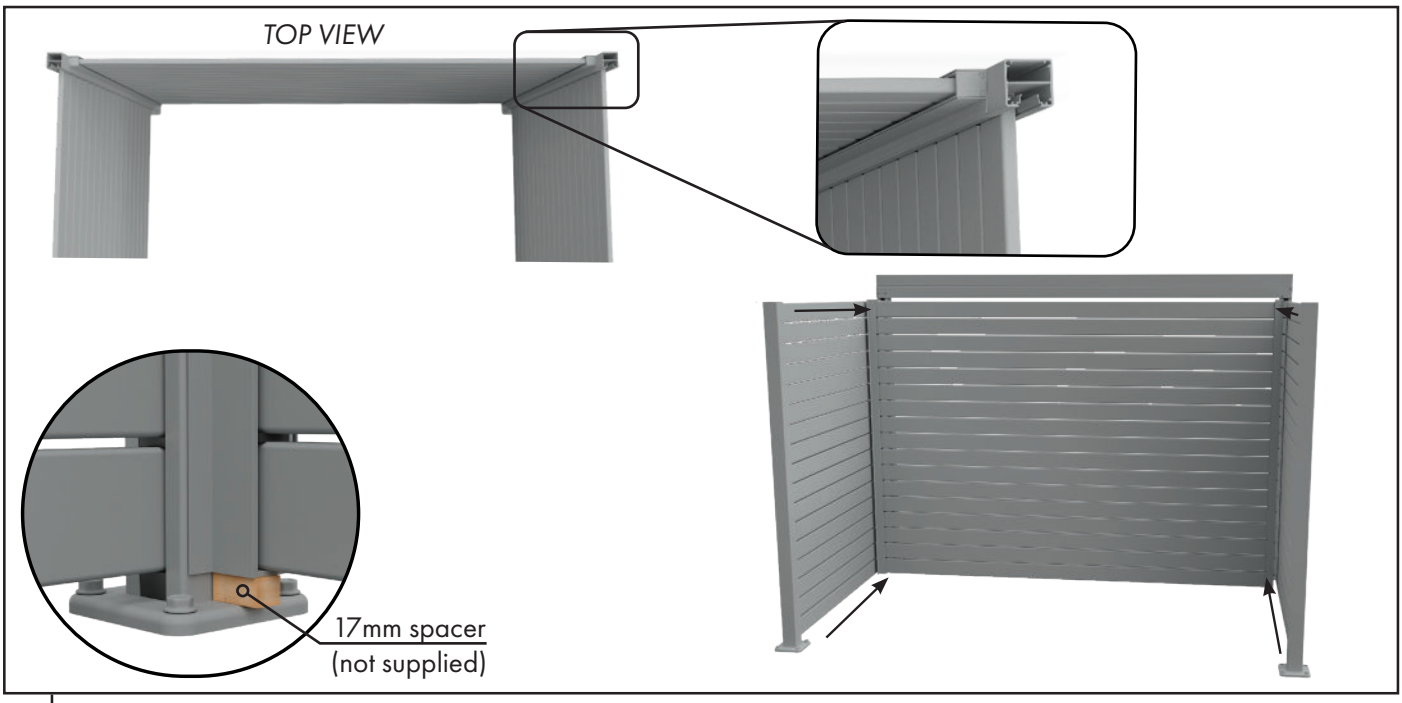
7 On a flat padded surface, position two back side frames. Screw fix on an end cap to each side frame and position capped ends of side frames same side. Install first slat directly onto end caps followed by spacer blocks (if using). Alternate between slats and spacers, and finish with a slat at other end.

NOTE: If nil spacing, no spacers are required.



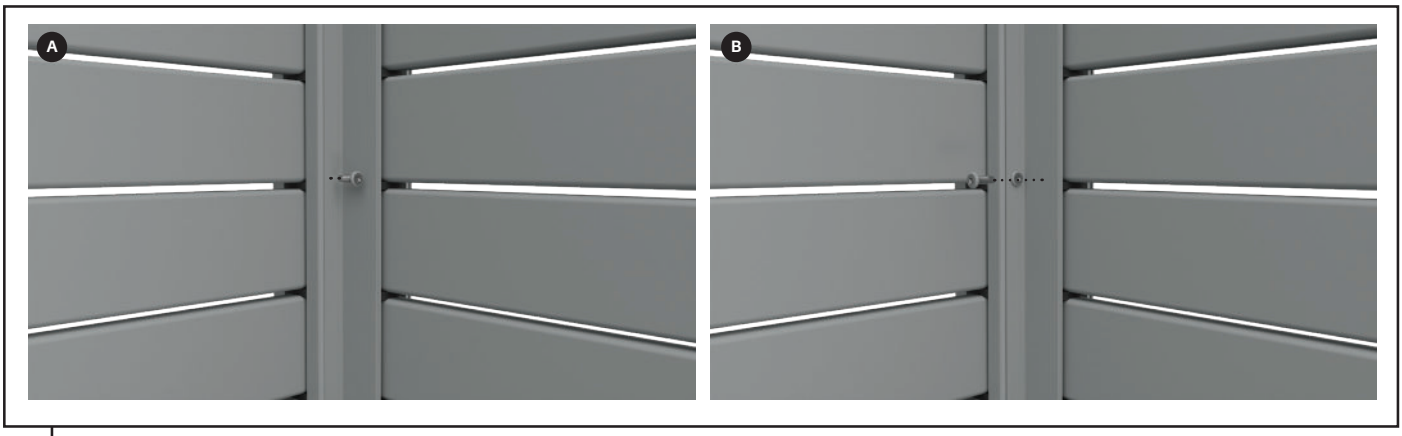
8 Check measure closed back assembly is square, using a soft mallet to adjust and ensure all slats are positioned fully down and inside both side frames. Add end caps to open ends. Re-check squareness.

Position F channels over side frames with flanges pointing in the same direction but do not screw off at this stage.



9 Lift back slat assembly into position between back two posts.

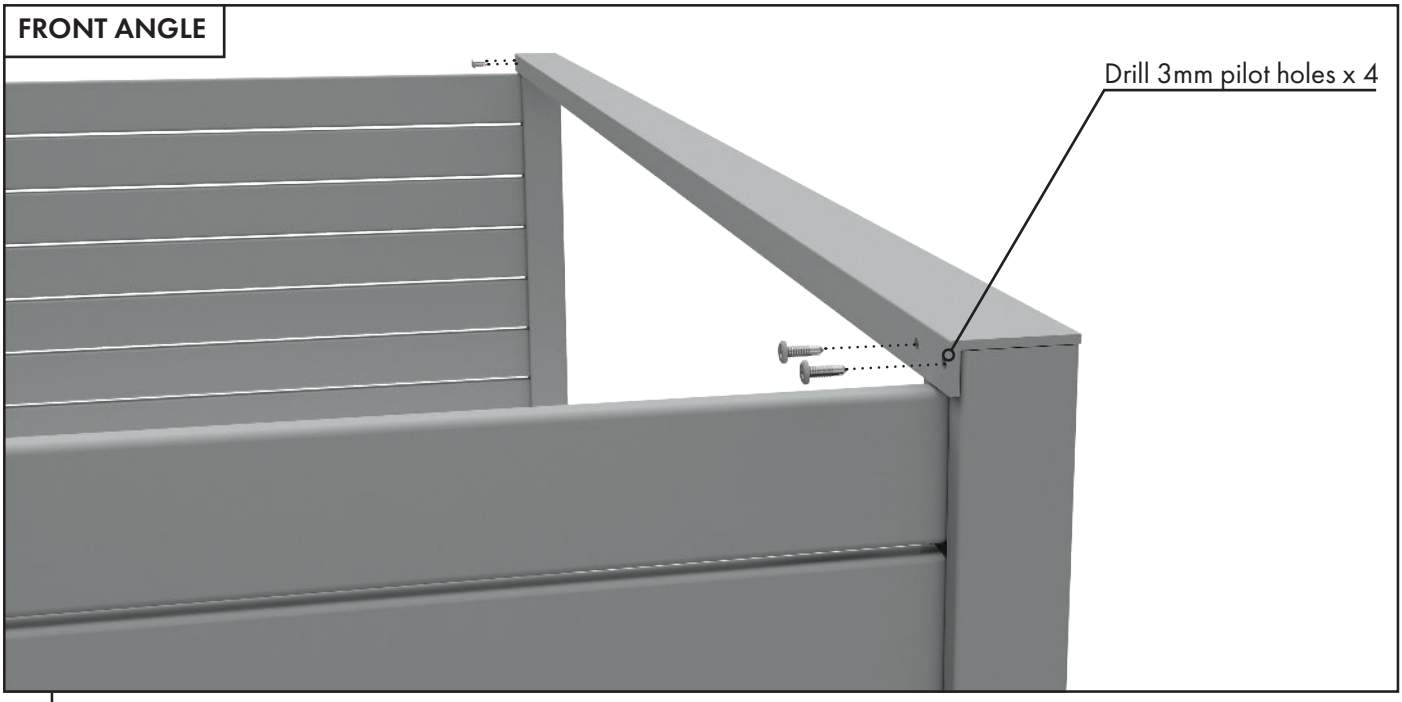
ASSEMBLY TIP: Use 17mm high spacers (not supplied) placed on top of base plate to set height of rear panel slats to match side slats.



10 A) Move F channels out against rear side posts and drill 3 x 3mm pilot holes through F channel leg into rear post at the top, middle and bottom. Screw fix with 3 x 10Gx16mm wafer head screws. Repeat on other side. F channel is now screw fixed to rear posts at both sides.

B) Ensure rear slats are correctly positioned relative to side slats and drill 3 x 3mm pilot holes at top, middle and bottom of F channel into side frame and slats. Screw fix F channel to side frame with 3 x 10Gx16mm wafer head screws. Repeat on other side. Rear panel is now screw fixed to F channel.

FRONT ANGLE



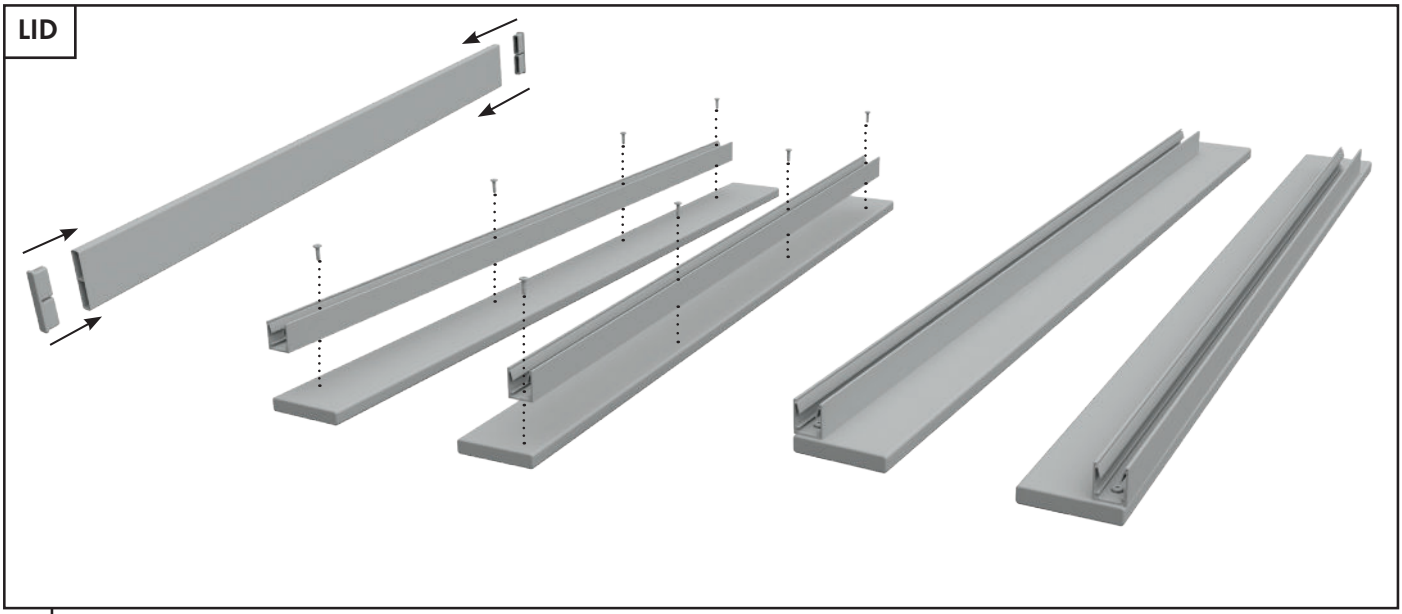
11 **NOTE:** Assembly is shown with closed back from this stage, same steps apply to open back version.

Drilling 3mm pilot-holes to the inner face of the angle and posts, affix 4 x 10G x 16mm colour-matched Wafer head screws to secure the angle bar to both posts. 2 x wafer scres are used on each post.

NOTE: Ensure the drill chuck does not rub on the top horizontal slat.

IF CONSTRUCTING AN OPEN BACK PANEL, REMOVE CONSTRUCTION FROM SACRIFICIAL BOARD AND INSTALL TO GROUND IN FINAL POSITION USING APPROPRIATE FIXTURES.

LID

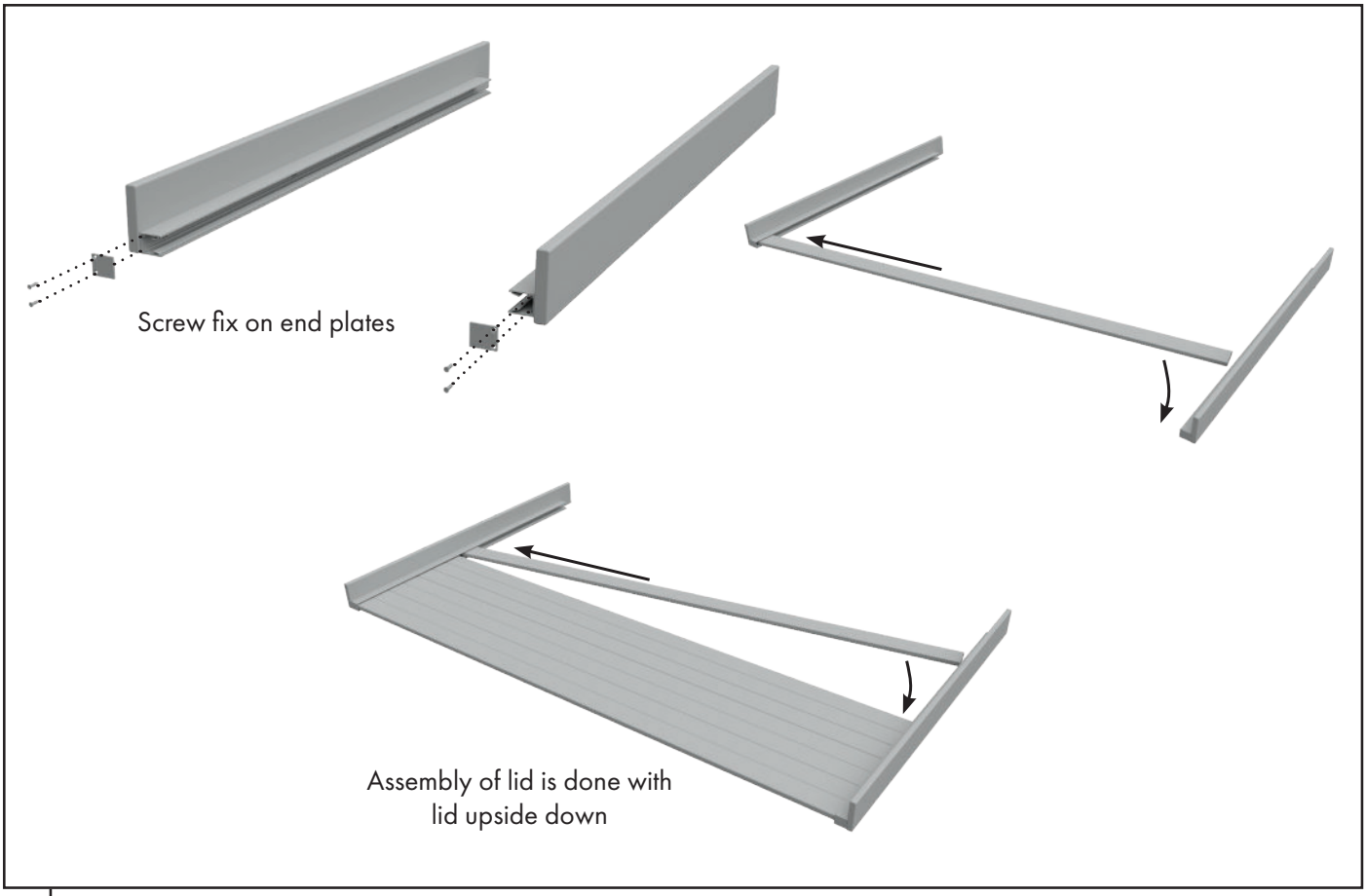


12 **LID**

Press on end caps to both ends of each 90mm slat.

Both 90mm slats are longer than the lid side frames. Align one end of the lid side frame with one end of the 90mm slat, leaving the 90mm slat longer at the other end. Ensure a “left” and “right” side frame results.

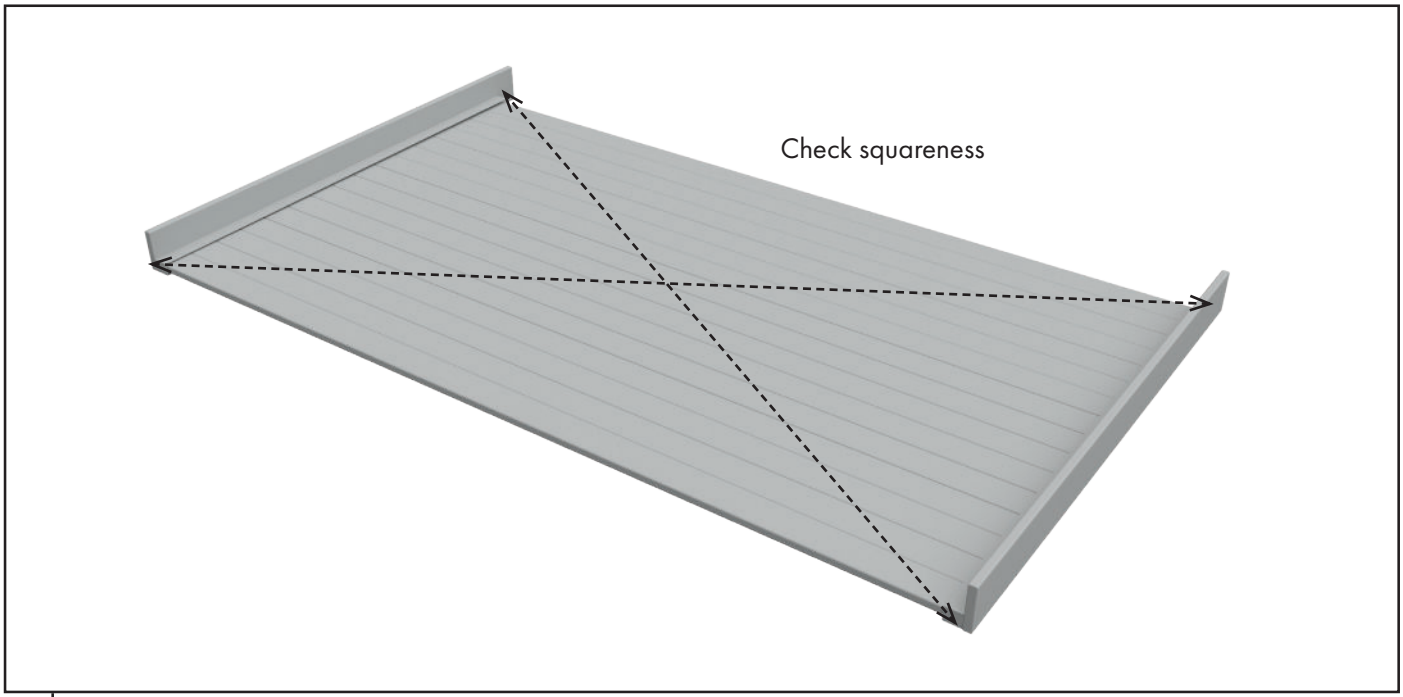
Drill 4 x 3mm pilot holes 15mm in from each end and equally spaced. Secure side frame to 90mm slat with 4 x 10Gx16mm wafer head screws. Repeat with other 90mm slat/side frame.



13 Lay left and right lid side frames on a flat padded surface with the side frames at the bottom and facing each other. The extended 90mm slat will face the back of the lid. Screw fix on end plates to the front of both side frames with 2 x countersunk screws ensuring end plates are added to the same side as laid out (see above).

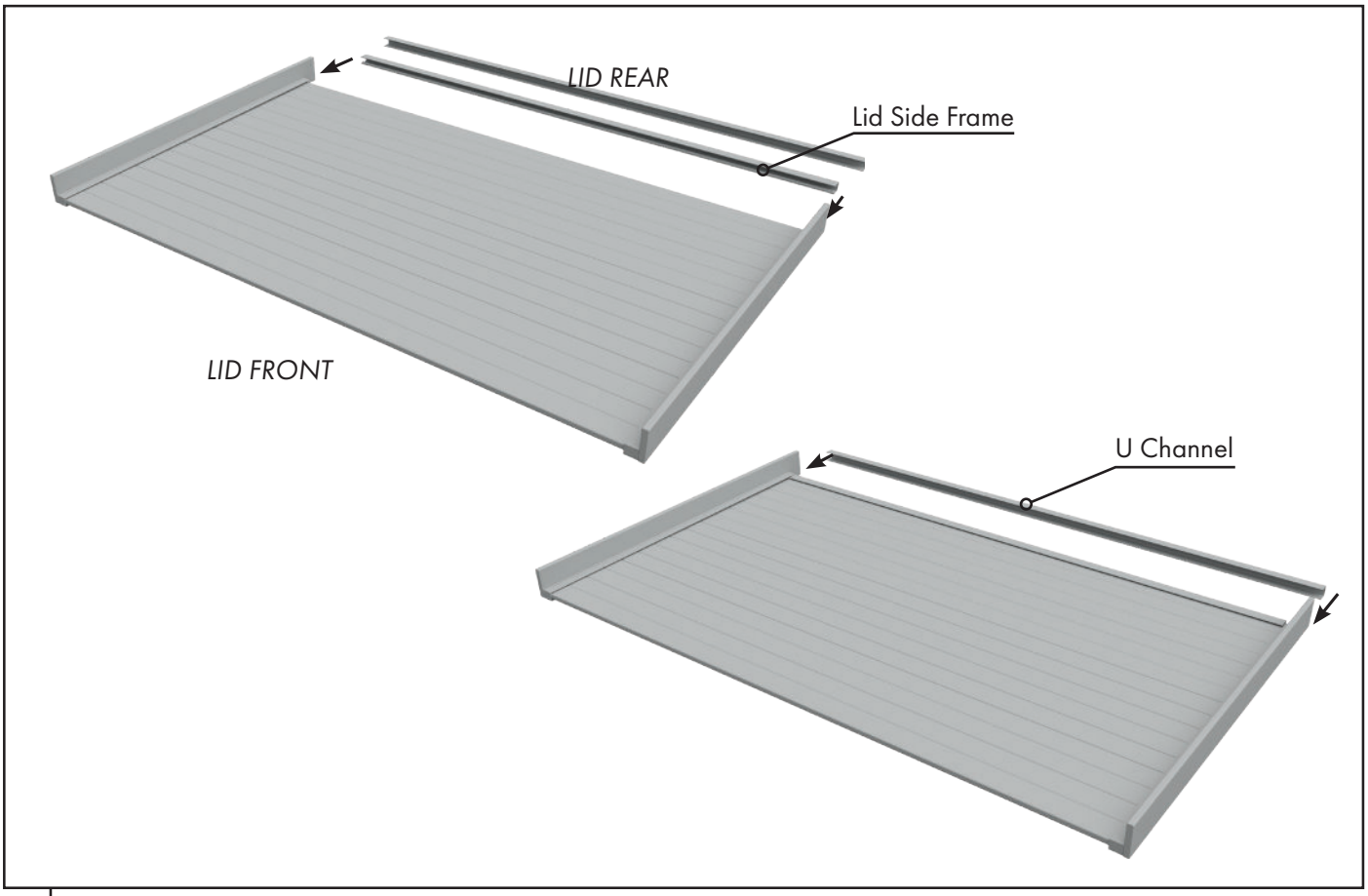
Insert slats into both side frames working from the closed off (end plate) end. Use a padded/rubber mallet to ensure slats are fully inserted into each side frame. Tap lightly taking care not damage slats/side frame and to avoid pushing out/damage end plates.

NOTE: No spacer blocks are used for lid - lids have 'nil' spacing.

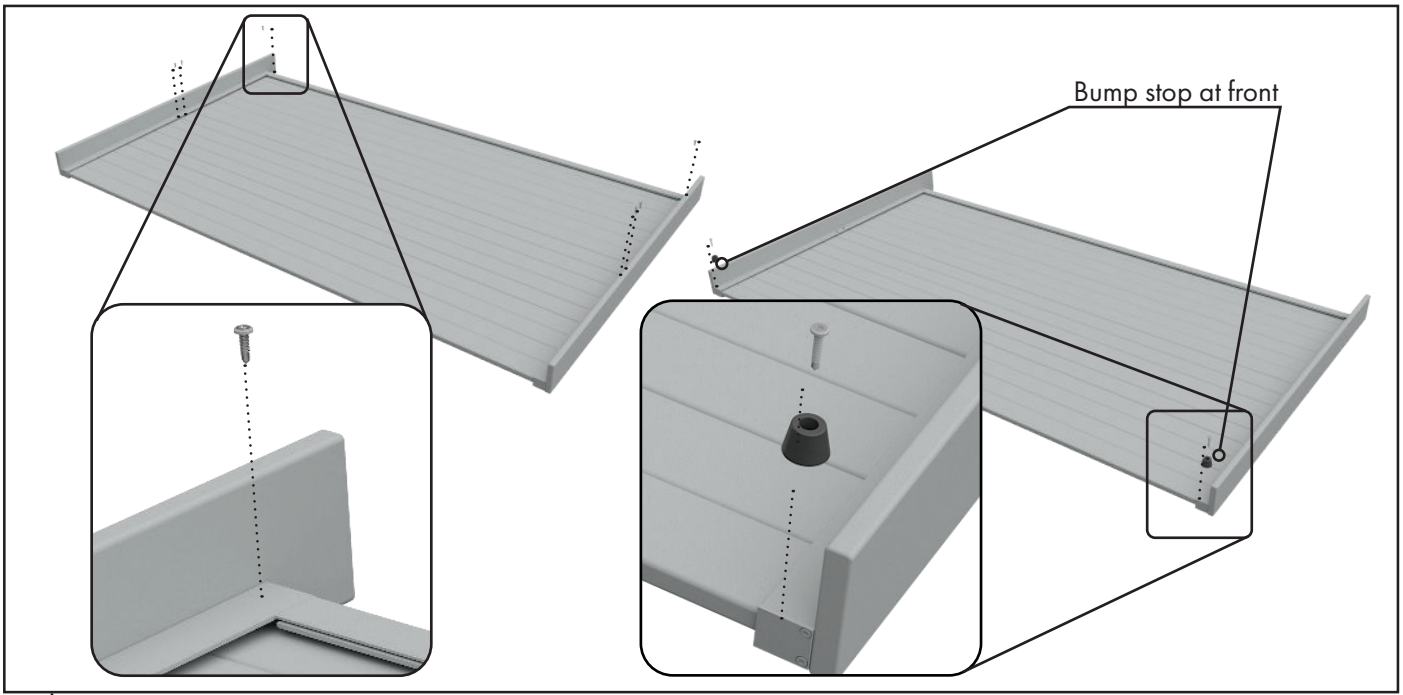


14 Check measure squareness of lid, measuring corner to corner. Adjust as required with a padded rubber mallet, taking care not to dent/damage any parts.

NOTE: Multiple adjustments may be required to achieve squareness.



15 Add side frame to rear open end of lid assembly (i.e. end without end caps on side frames).
Add U Channel over side frame (see above) and check square again, adjust as necessary.

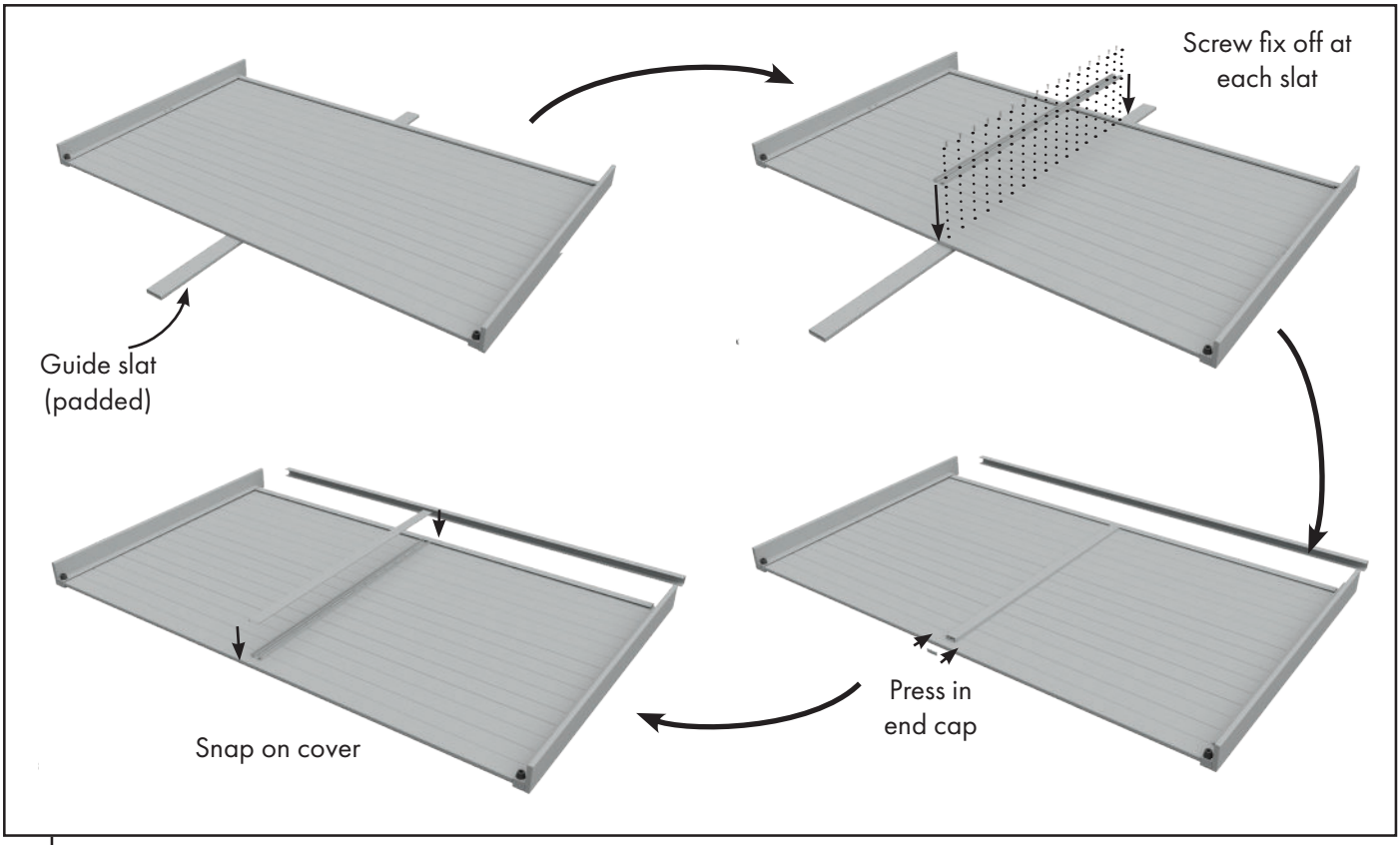


16 Drill 3mm pilot holes through side frames into slats: 1 x pilot hole at back slat (through U Channel), 2 in middle slat 1 at front slat. **NOTE:** Front hole uses bump stops - use as a guide to position bump stop close to the front edge of the lid.

Secure side frames to slats with 4 x 10Gx16mm wafer head screws per side and secure bump stop to front, through side frame and slat with 1 x wafer screw per bump stop/side.

Repeat on other lid side frame.

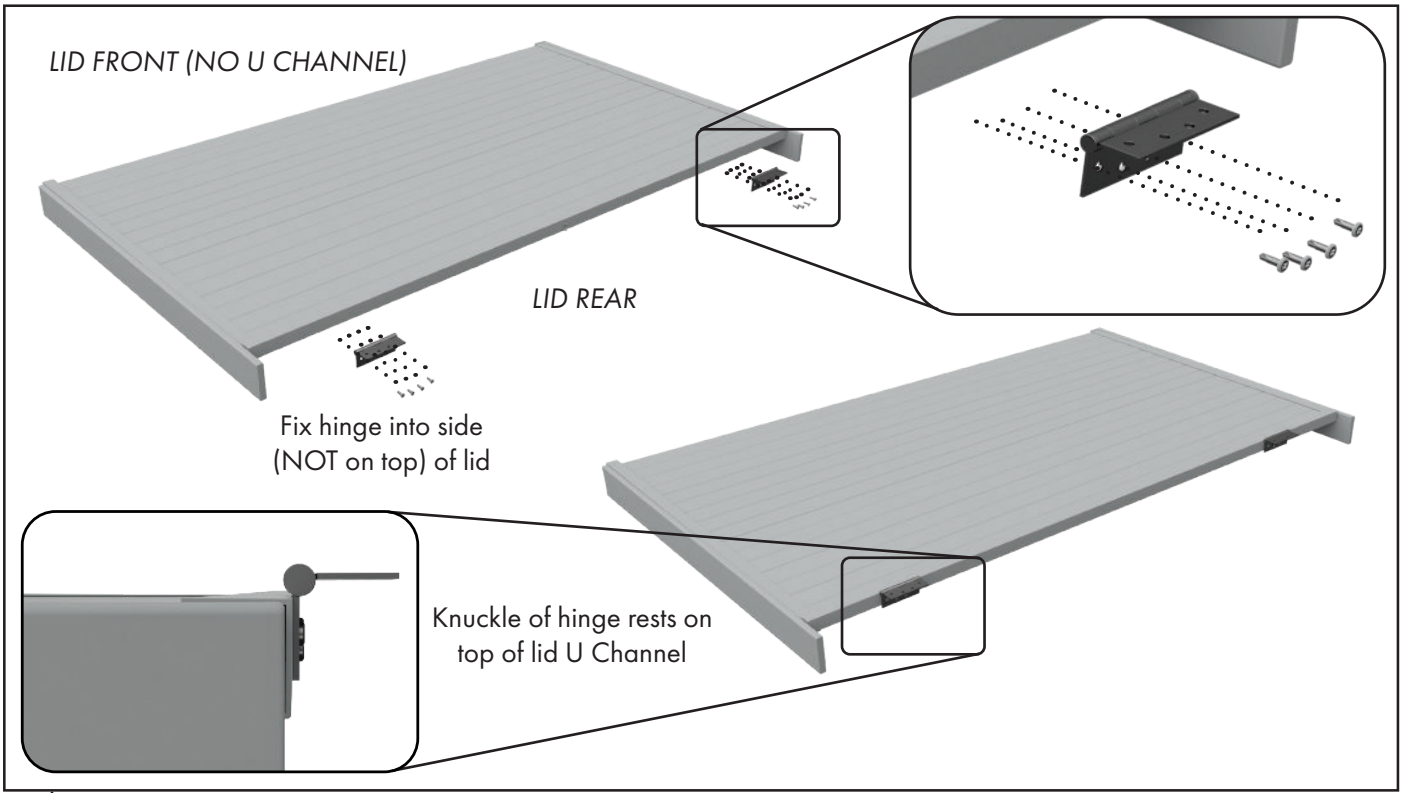
IMPORTANT: Use a low torque clutch setting when drilling to prevent side frame from pulling and twisting around slats.



17 Re-use guide slat(s) positioning under the lid in the centre of the slats where centre support rail will be positioned. Ensure protection or padding is used between guide slat and lid.

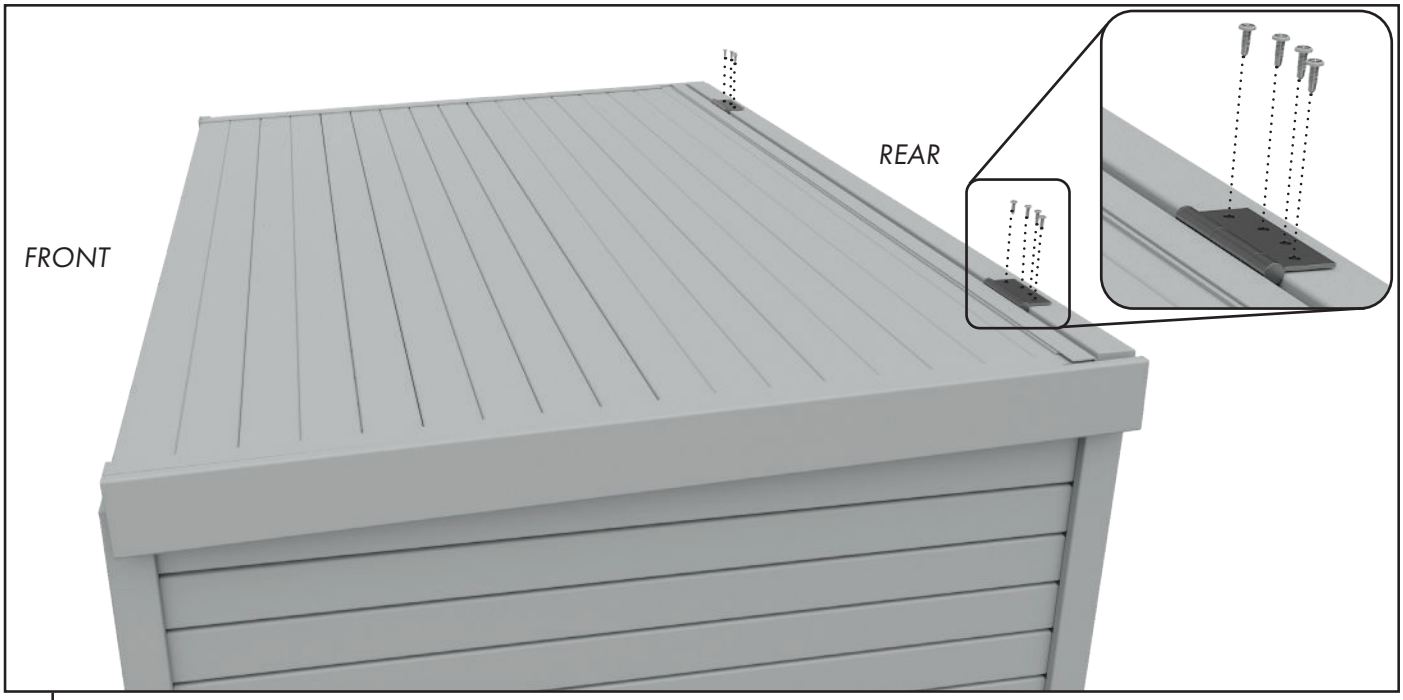
Position centre support rail in centre of lid, with one end against the U Channel. Drill 3mm pilot holes through centre support rail into every slat, slightly off centre for each slat (to avoid hitting the centre web in slats). Secure centre support rail to each slat with 10Gx16mm wafer head screws.

Snap on centre support rail cover and press in end cap into exposed front of centre support rail.

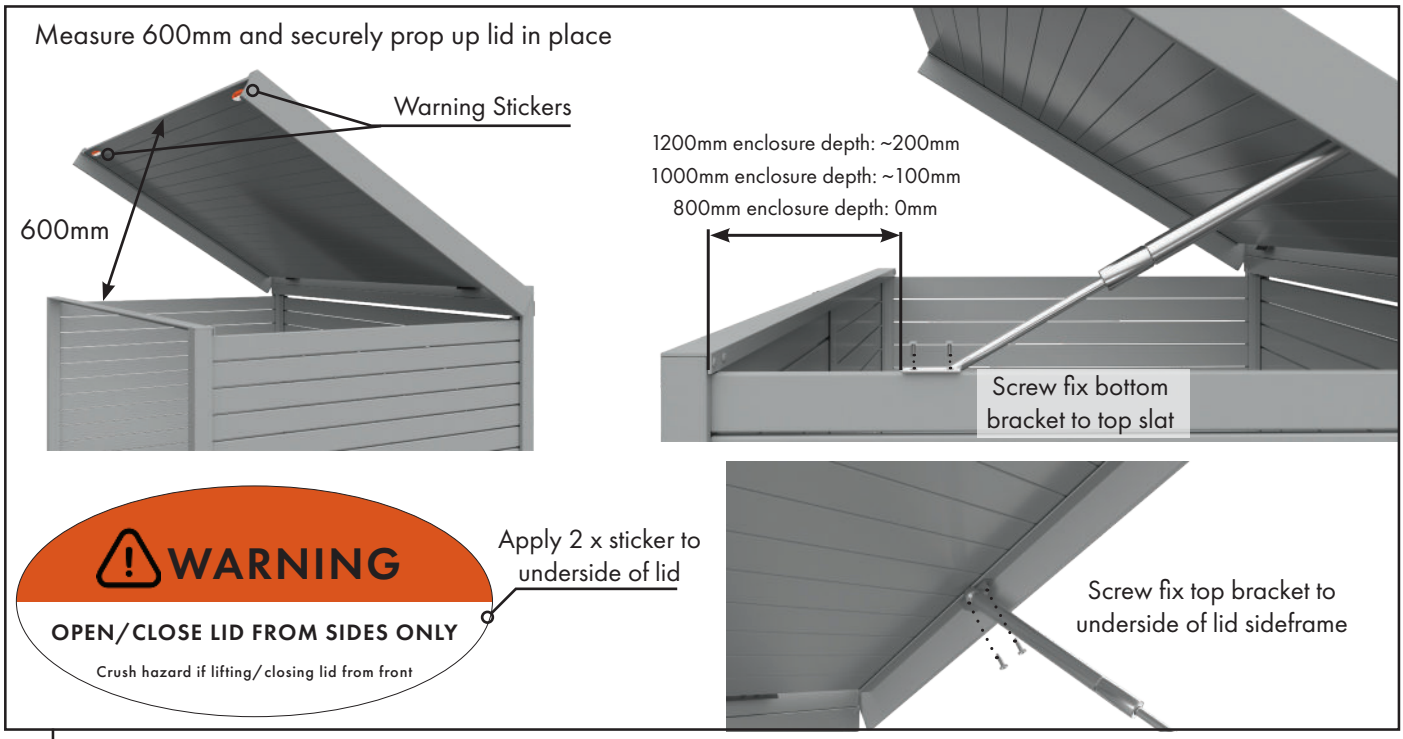


18 Carefully turn lid over. Position hinges onto U Channel on lid equally positioned from each end, approximately 100-250mm in from edges depending on enclosure width. Drill 4mm pilot holes for the hinges and screw off with 4 x stainless steel 10Gx16mm wafer head screws.

INSTALLATION TIP: Use a low torque clutch setting when drilling to avoid stripping screw heads.



19 Using help as required, carefully lift lid into position and locate with hinge knuckle resting against top of capped 50x50mm profile. Drill 4 x 4mm pilot holes per hinge and screw off hinges into top surface of capped post with 4 x stainless steel 10Gx16mm wafer head screws.



20 **WARNING:** GAS STRUTS OPERATE WITH LARGE FORCES - HANDLE WITH CARE.

NOTE: Gas strut must be installed with thicker diameter cylinder at top when lid fully open.

Securely prop the lid up measuring 600mm from the front angle bar to the lid.
Use the measurements provided to approximate the ideal position of the gas strut bottom bracket based on your enclosure depth.

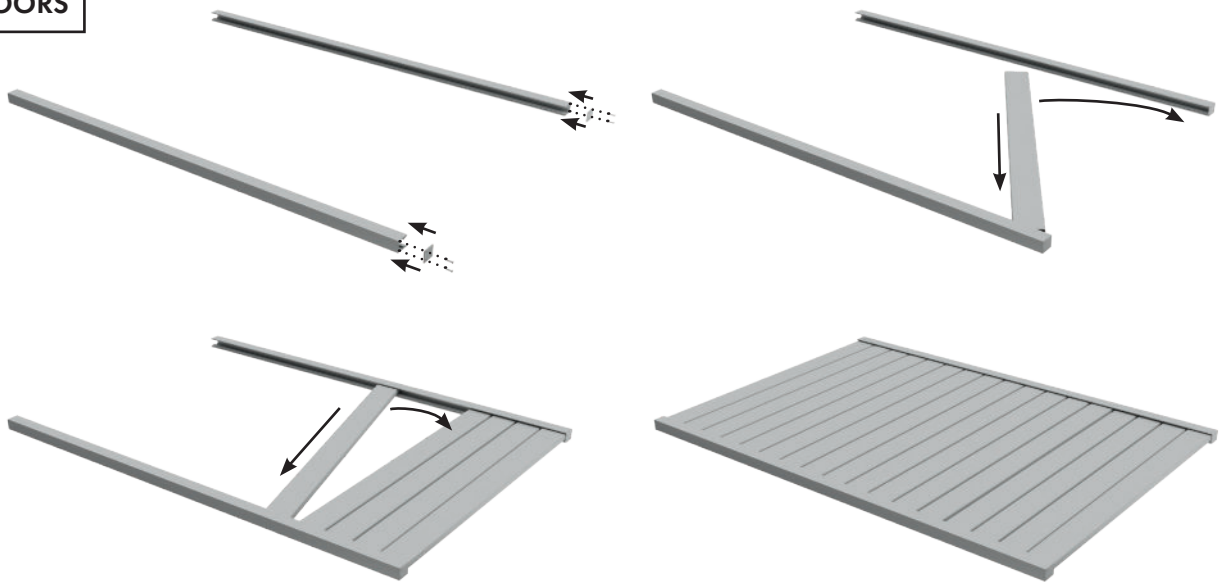
Drill 2 x 3mm pilot holes into the top slat on the side of enclosure then fix off gas strut bottom bracket with 2 x 10Gx16mm wafer head screws.

With gas strut fully extended locate the position it touches the lid. Drill 2 x 3mm pilot holes into the underside of the lid side frame and fix off with 2 x 10Gx16mm wafer head screws.

Repeat with second gas strut on other side.

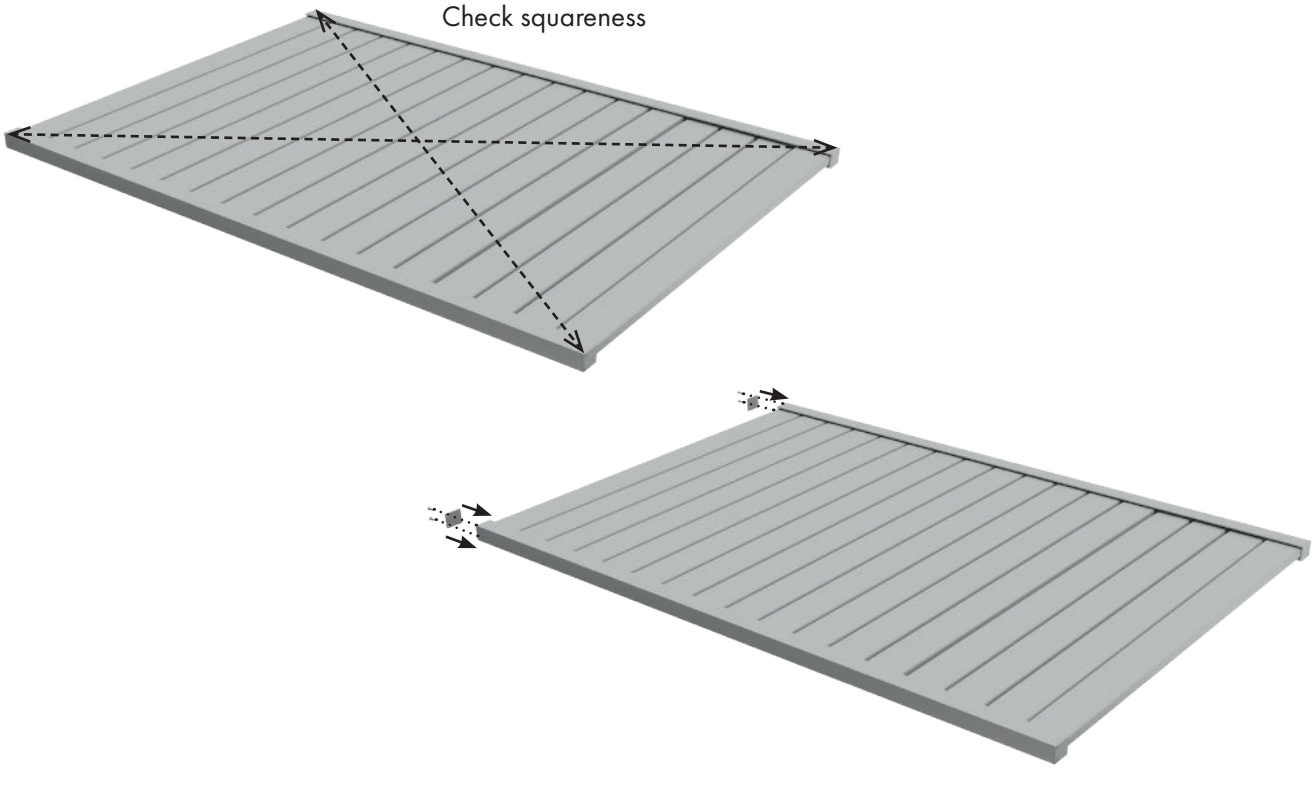
Apply 2 x warning stickers to underside of lid, on each side, ensuring stickers are clearly visible when lid is open.

DOORS



21 Screw fix end plates to 1 end of each door side frame.

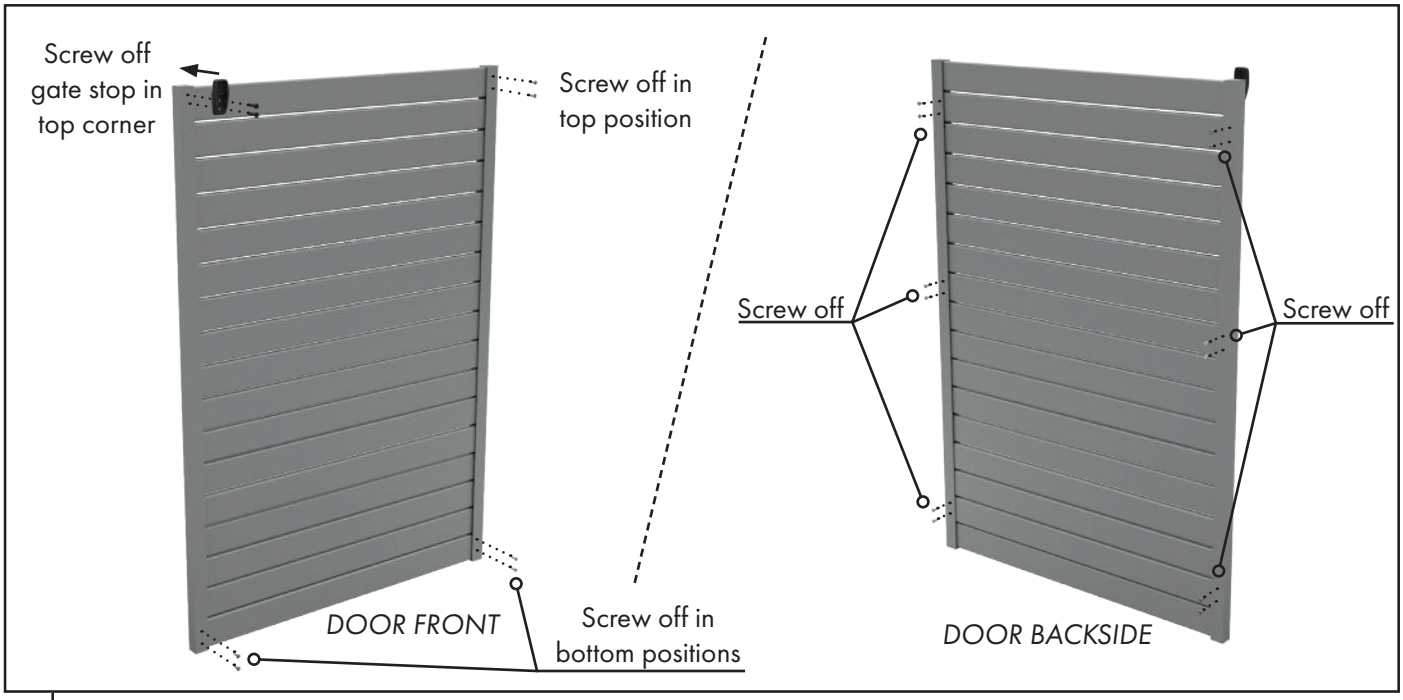
Construct door with first slat on end plate and alternating between slats and spacer blocks (no spacers required for 'nil' spacing). Use a padded mallet as required to ensure slats are positioned fully down and inside side frames but taking care not to push out/damage end plates.



22 Check measure squareness of door and adjust as necessary.

Screw fix on end caps to open ends.

It is very important doors are made square to ensure correct functioning.



23 Screw off side frames to slats with 3mm pilot holes and secure with 10Gx16mm wafer head screws.
On **front hinge** side add: two screws to top slat and two screws to bottom slat.
On **front catch** side add: Stop at top with two black screws to top slat and two screws to bottom slat.

On **both rear sides** add: two screws to one slat down from top, two screws to middle slat and two screws to one slat up from bottom slat.

If building a 2 door enclosure repeat process taking care to add Stop (and hinges) to other side of door.
NOTE: On a single door enclosure, hinge/Stop can be added to either side of door.

24 Attach 2 x hinges to each door with 3mm pilot holes and 4 x 10Gx16mm wafer head screws screws per hinge: 2 screws into holes at front of door and 2 screws going into the door through the side leg of the hinge. Equally space hinge from top and bottom at around the 3rd slat up/down or as desired.

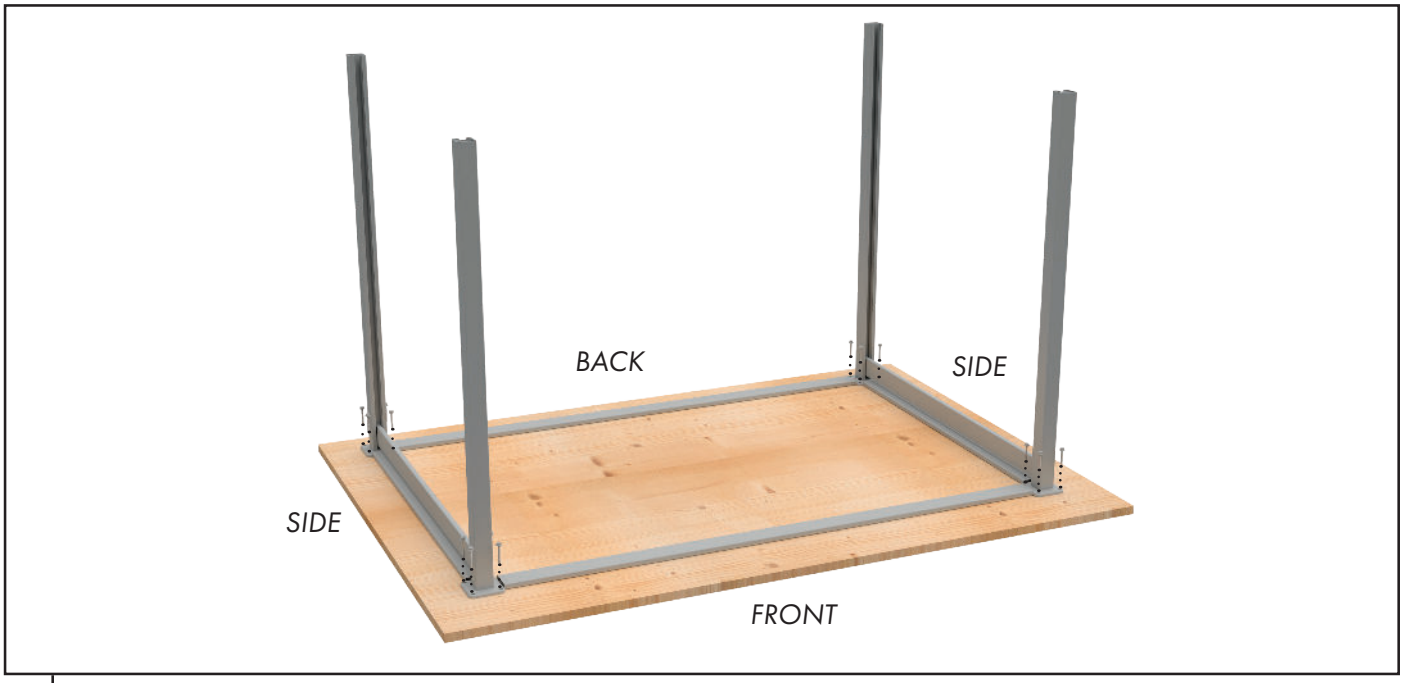
Ensure hinge legs are pushed up fully against door to ensure correct spacing.

Attach hinges to side posts ensuring hinge legs are pushed up fully against post to ensure correct spacing. Use 3mm pilot holes and 4 x10Gx16mm wafer head screws per hinge: 2 screws into holes at front of post and 2 screws going into the post through the side leg of the hinge.

Slide covers over hinges to conceal screws.

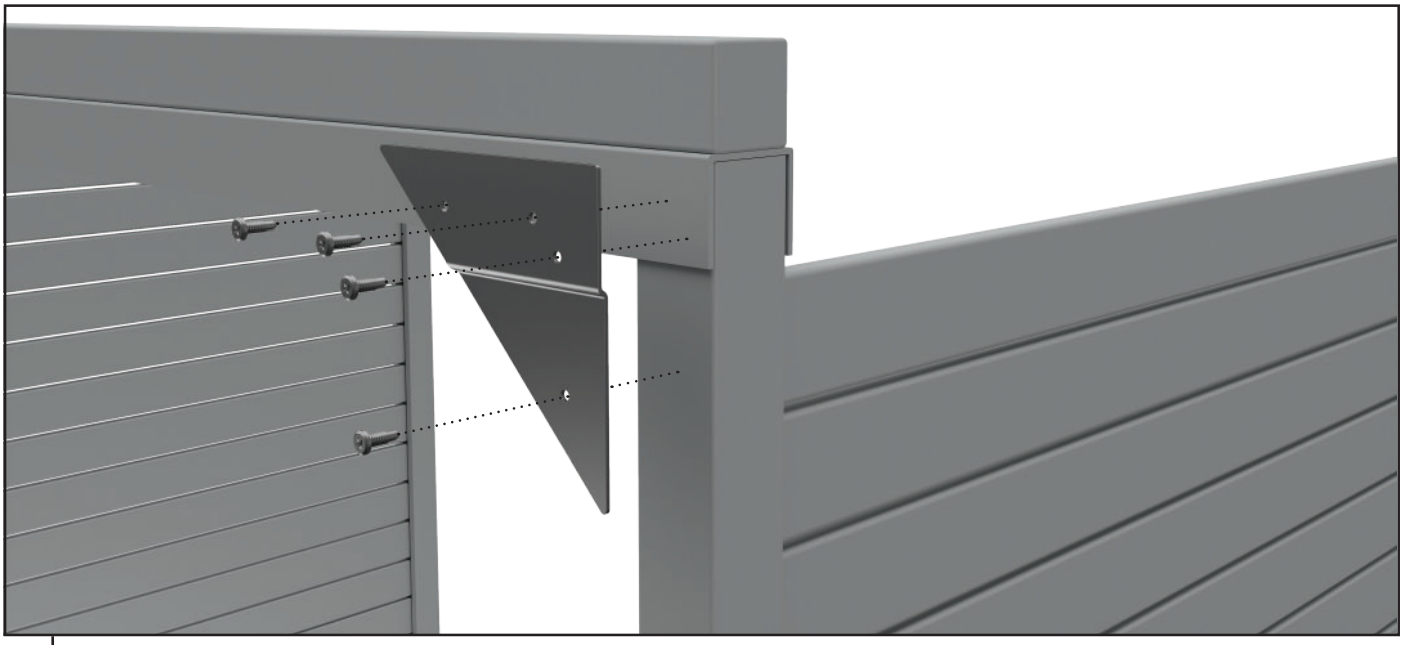
APPENDIX 1
ENCLOSURE
OPEN BACK

FABRICATION OVERVIEW



A On top of a sacrificial board made from minimum 15mm thick structural timber, position posts using the provided guide slats to measure their location. Check measure the squareness of your layout as well as the outside distance between posts (which should match the defined width and depth of your enclosure). Adjust as necessary before screwing down posts into the sacrificial board.

RETURN TO STEP 3



B **WHEN BUILDING AN OPEN BACK ENCLOSURE**

Position bracket at back of post, mark and drill 4 x 4mm pilot holes into back post and capped post. Screw off with 4 x stainless steel 10Gx16mm wafer head screws. Repeat on other side.

NOTE: Brackets are marked left and right and are not interchangeable.

INSTALLATION TIP: Use a low torque clutch setting when drilling to avoid stripping screw heads.

Remove construction from sacrificial slab and position in place, securing post base plates to ground with appropriate fixings (not supplied).

RETURN TO STEP 11.