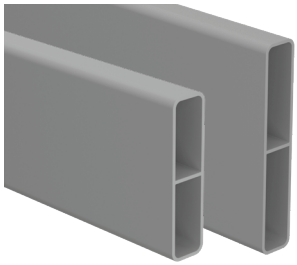
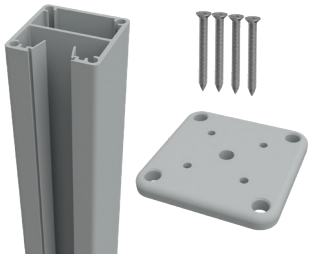
SOLAR BATTERY ENCLOSURE FEATURING 65x16.5MM or 90x16.5MM ALUMINIUM SLATS

FABRICATION OVERVIEW



65mm or 90mm Slat at various lengths, inc 4 x guide slats



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



Angle Bar



Side Frame for Doors



Side frame end caps with screws



Locking clip
with ST4.8x19mm CSK screw



5mm, 9mm or 20mm Spacer blocks (if using)



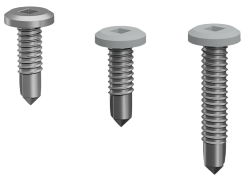
20mm starter blocks



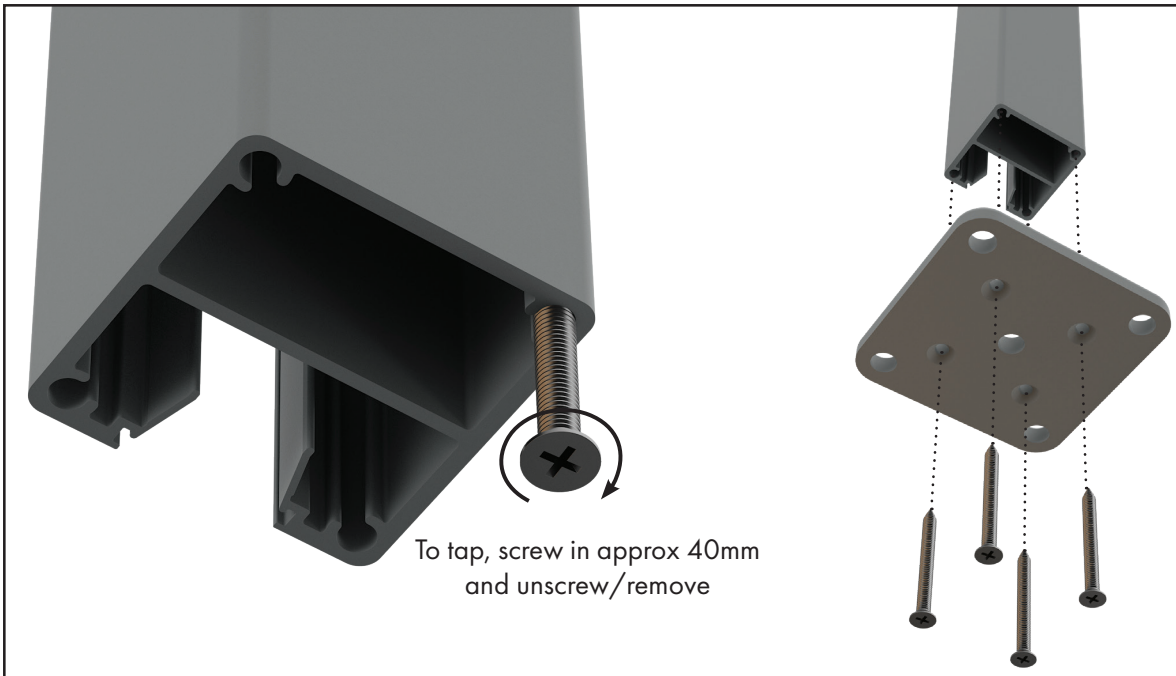
Tru close hinge pair



Stop
with black 10Gx25mm screws



Philips head screws
10Gx16mm SS Wafer Head
10Gx16mm Wafer Head
12Gx16mm Pan Head



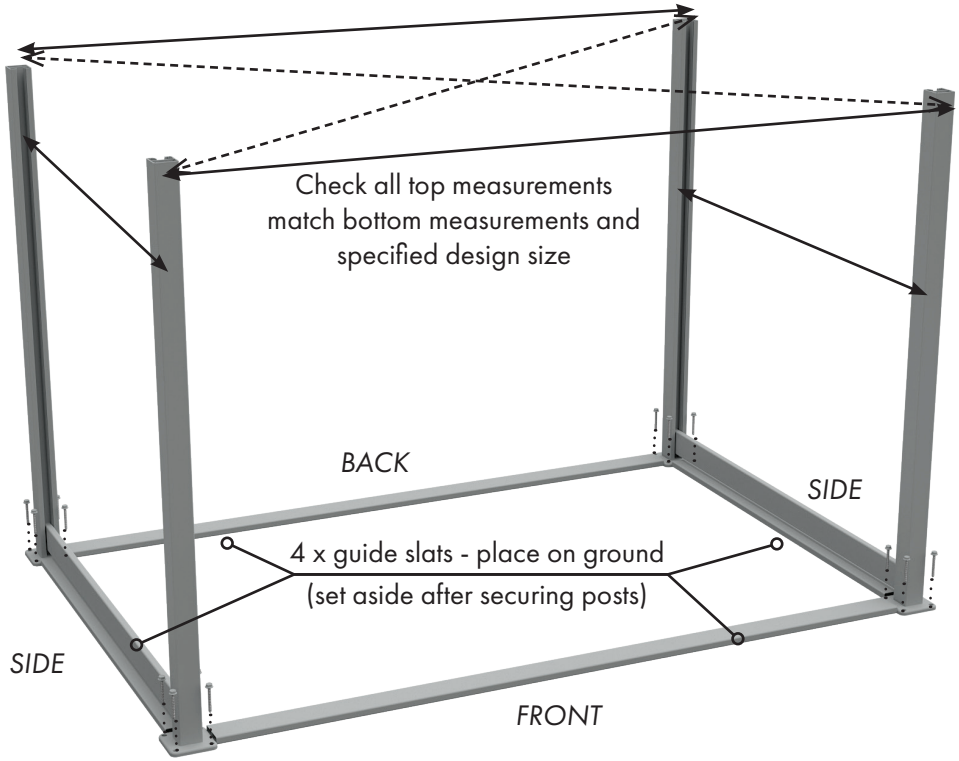
1 Using one of the supplied 12Gx50mm countersunk screws, tap all screw flutes in bottom of all 50x50mm friction fit posts. Attach base plates to posts using 4 x 12Gx50mm countersunk screws per post.



Insert 20mm spacer blocks into the bottom of each post



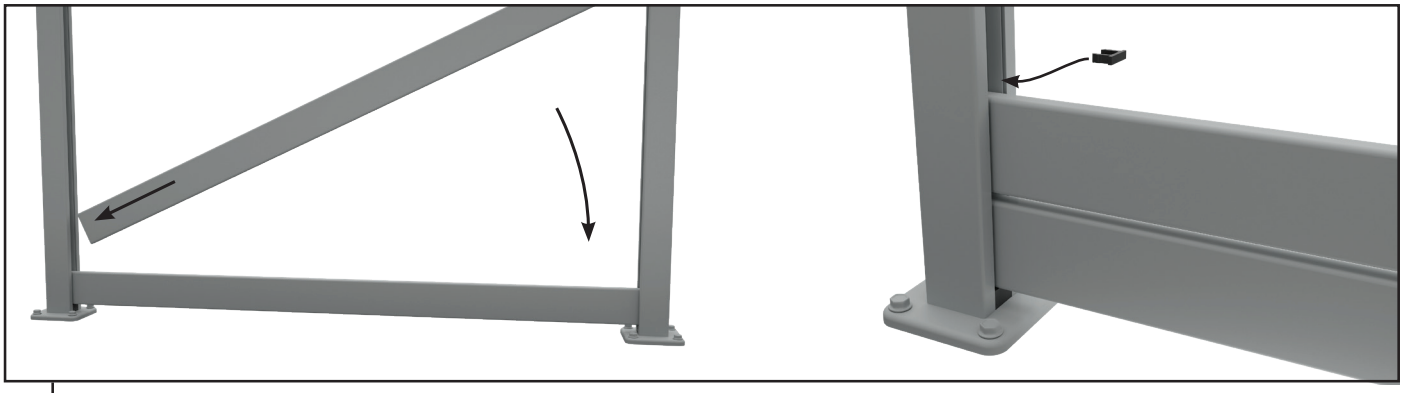
Insert first slat into both sides of posts for stability.



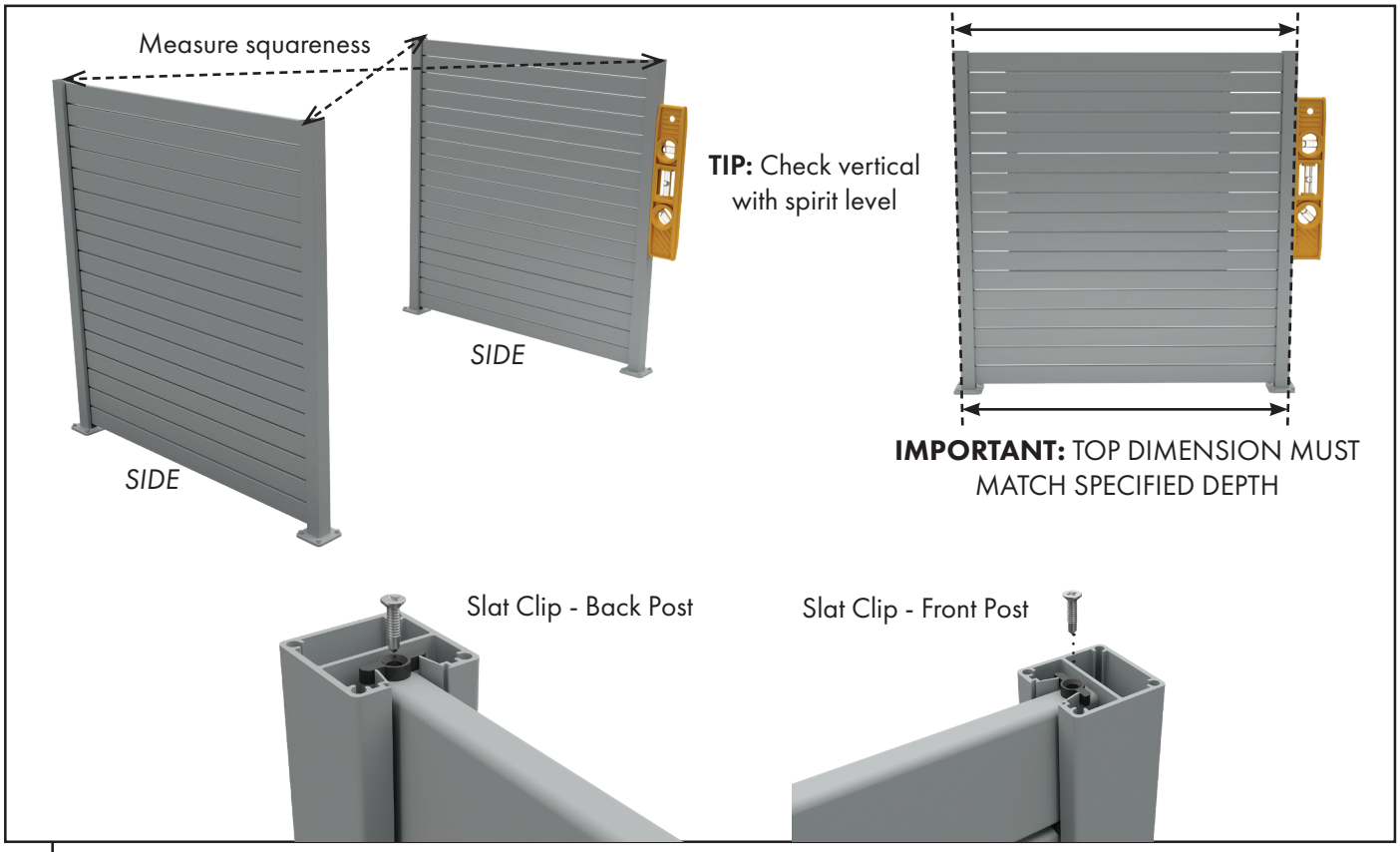
2 Insert 20mm spacers into the bottom of the side posts so that the spacers sit on top of the base plates.

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

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.

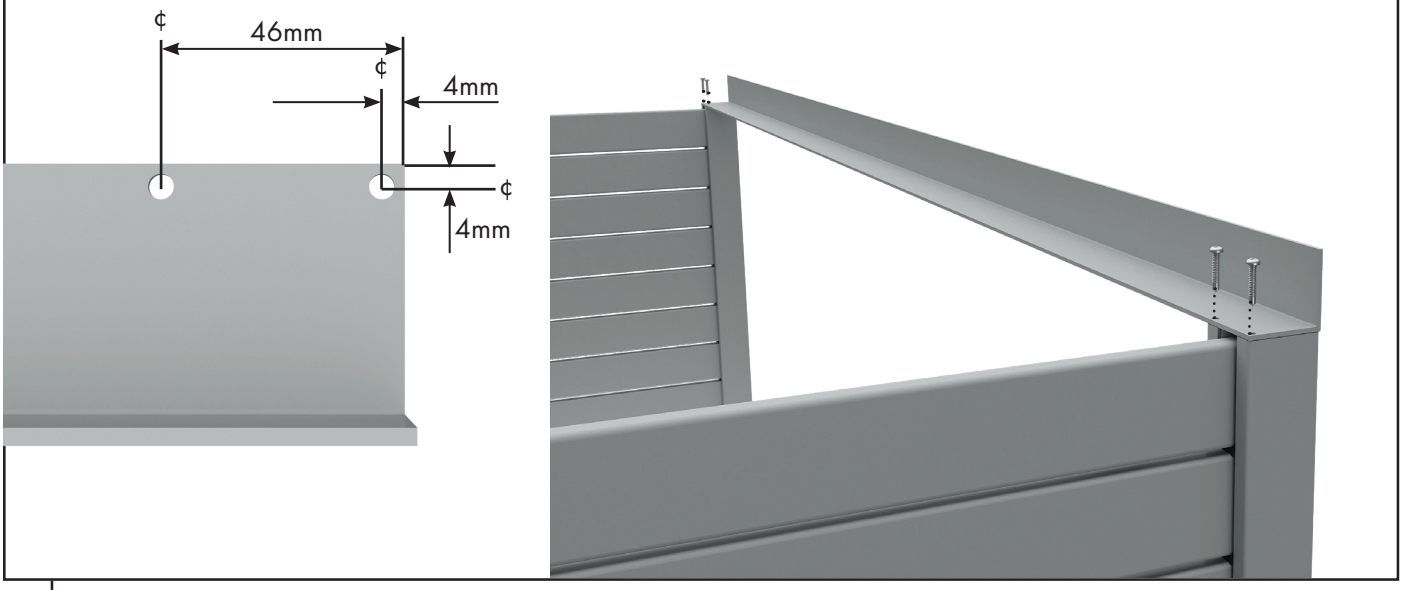


4 Once all slats are in position, check measure squareness of structure at bottom and top on both diagonals.

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). 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.

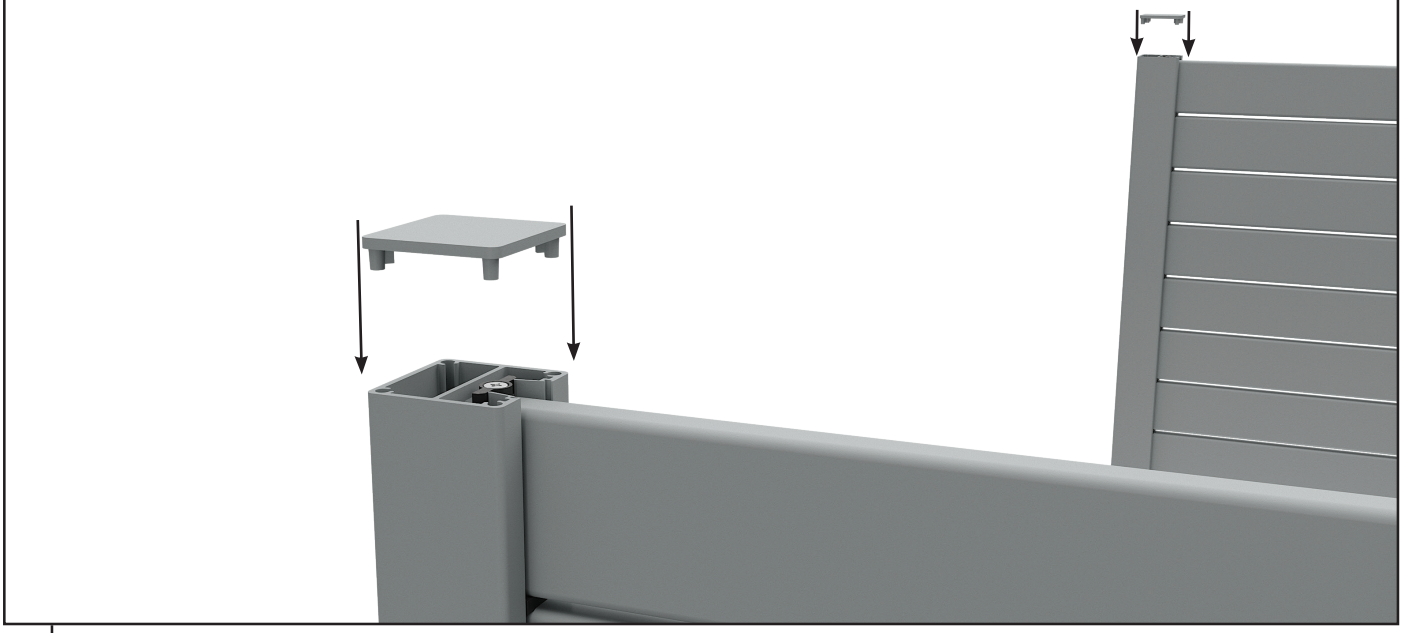
FRONT ANGLE



5 Carefully mark drill points on each end of your the front angle as shown. Drill 5mm pilot holes with precision. Pilot holes are very close to edge of front angle and must be drilled accurately, otherwise angle may sit off front posts.

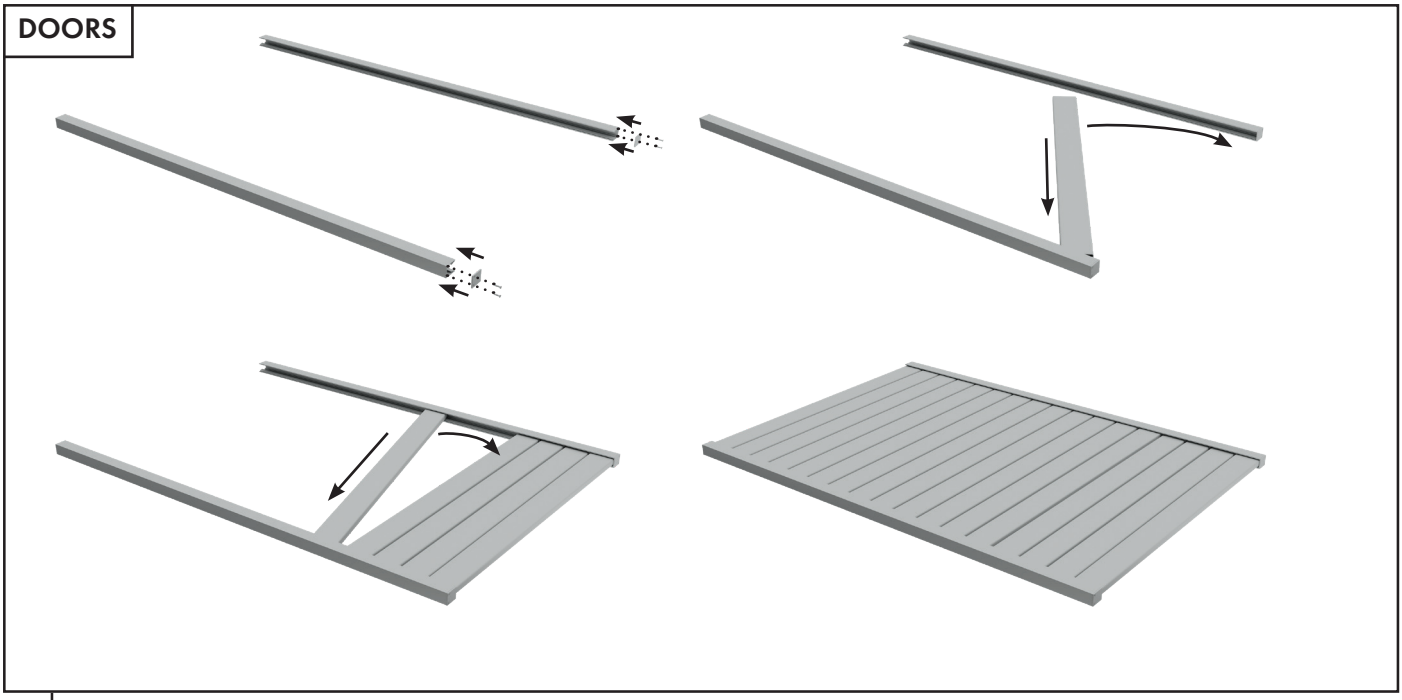
Using 4 x 12Gx16mm pan head screws, attach front angle to front posts as shown. 2 x screws are used each side. Screws fix into screw flutes in posts. Inspect front angle from side, if front angle appears bowed, lightly tap front angle with a mallet to correct.

BACK POSTS



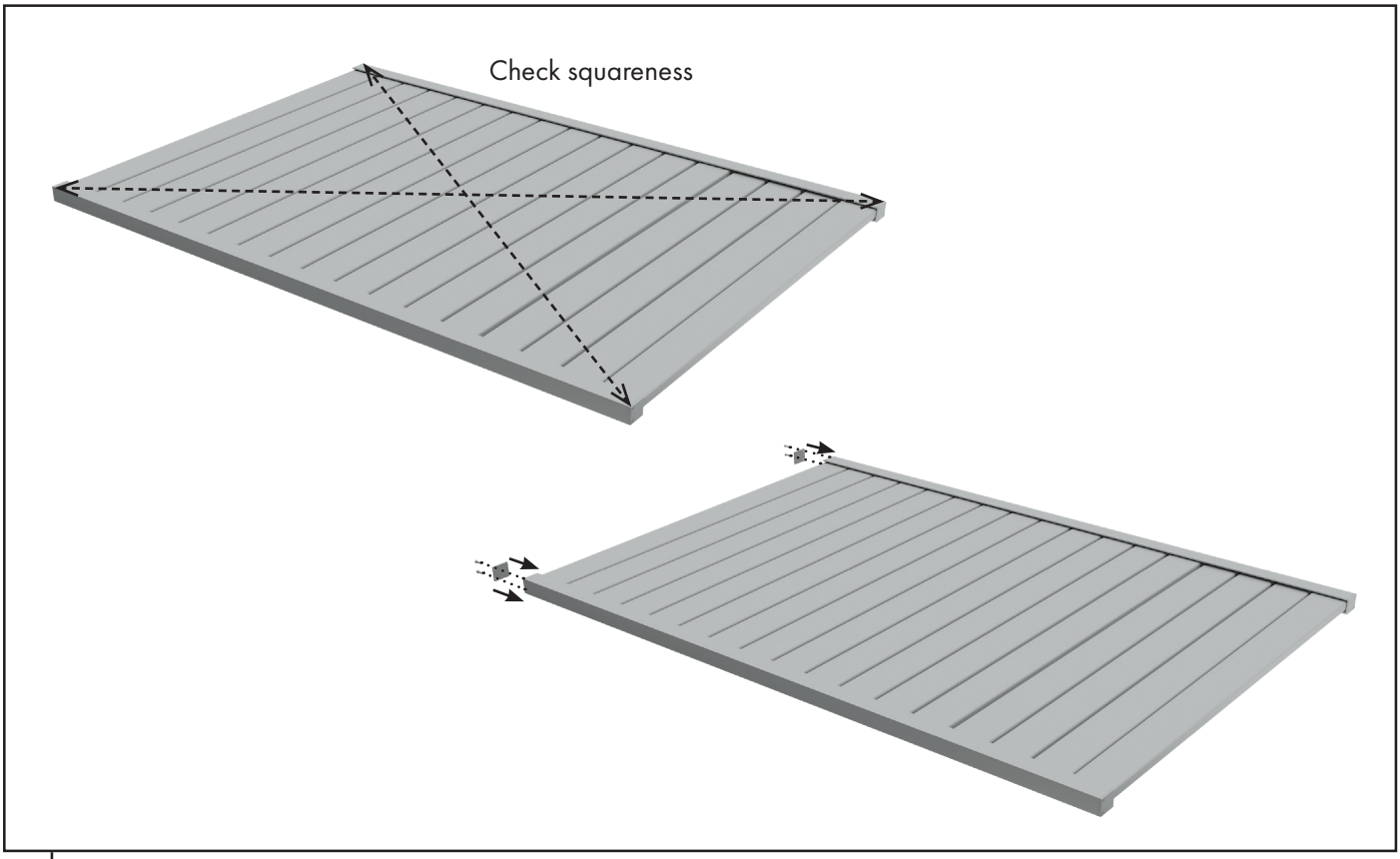
6 Press caps into back posts.

DOORS



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

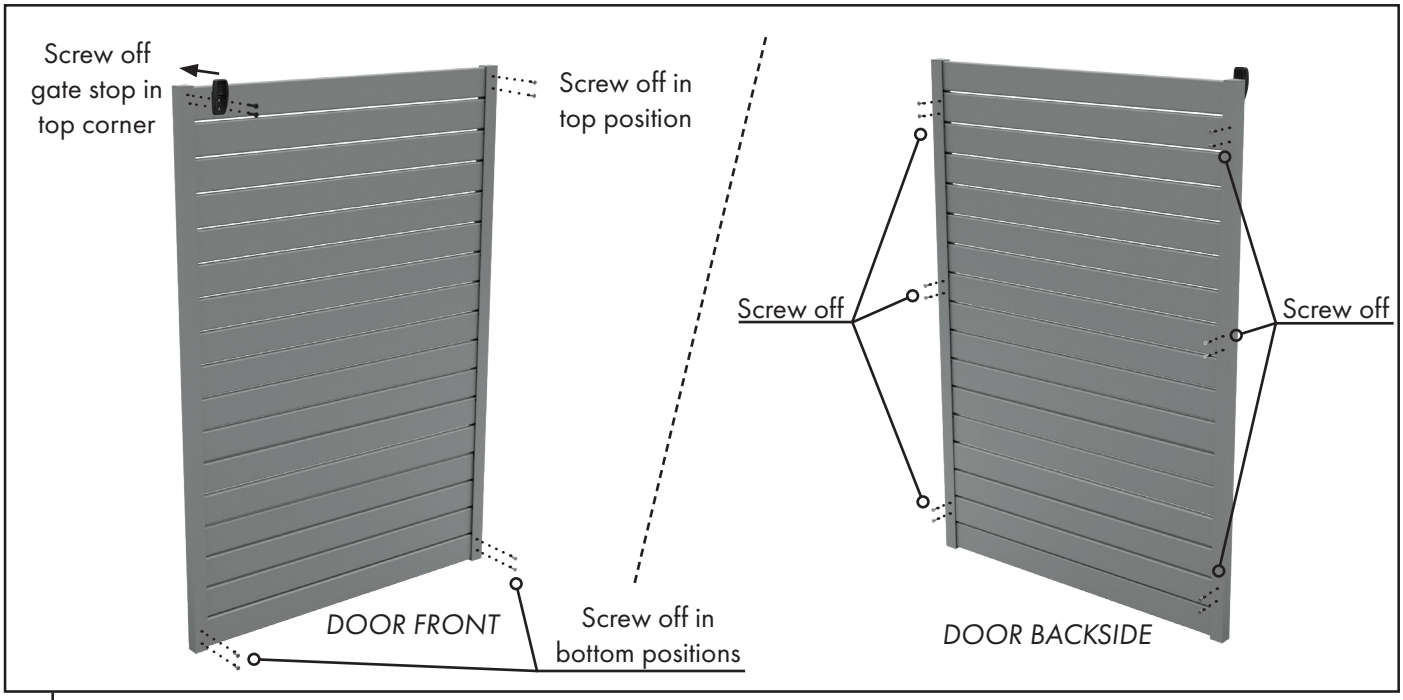
Construct door with first slat on end plate and alternating between slats and spacer blocks (no spacers required for 'nil' spacing). Use a padded mallet as required to ensure slats are positioned fully down and inside side frames but taking care not to push out/damage end plates.



8 Check measure squareness of door and adjust as necessary.

Screw fix on end caps to open ends.

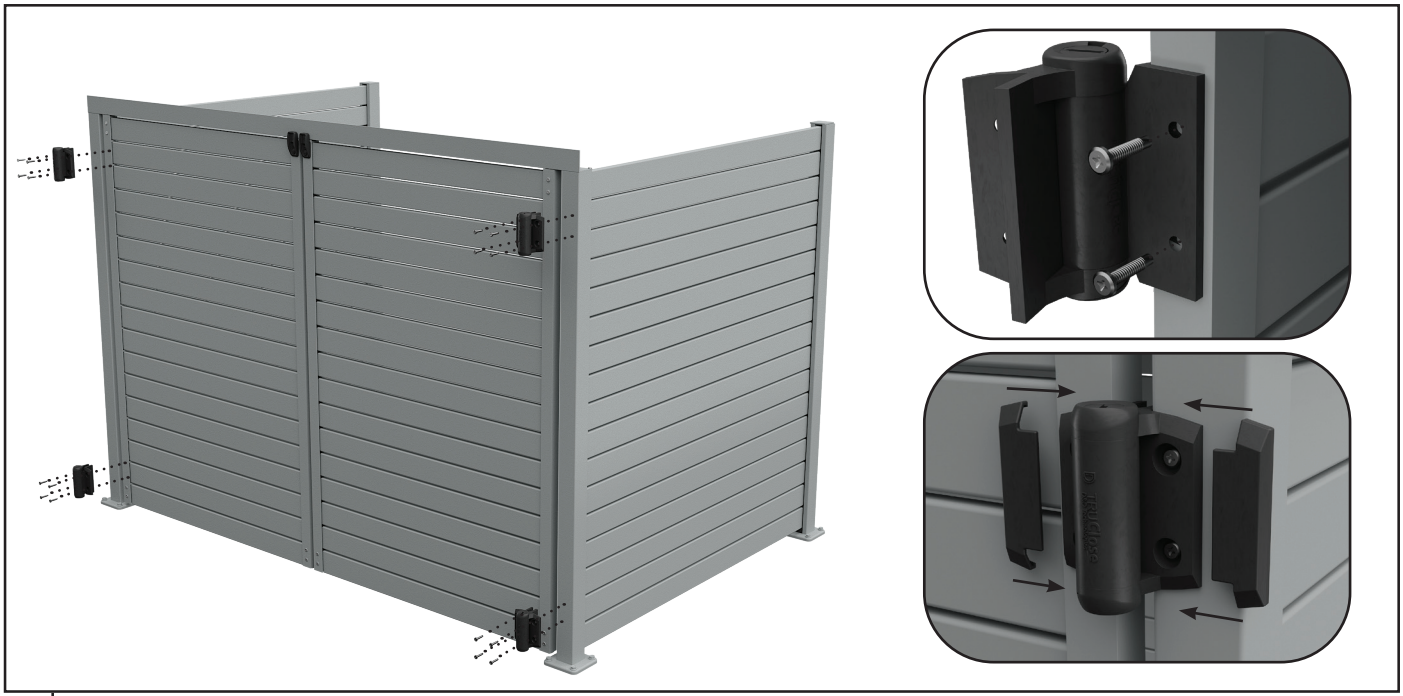
It is very important doors are made square to ensure correct functioning.



9 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.



10 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.