

DIY INSTALLATION GUIDE

# Container House 3×5 & 3×6.

A step-by-step assembly manual covering floor frame, columns, roof, panels, doors, windows and finishing — designed to be followed on-site, in order.

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SECTIONS

10 stages · ~12 pages

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## PART CODE KEY

**CH-BAS-XXX**      Base frame & flooring components

**CH-COL-XXX**      Columns & column covers

**CH-ROF-XXX**      Roof beams, tubes & panels

**CH-WAL-XXX**      Wall & ceiling panels

**CH-PRT-XXX**      Profiles, channels, PVC pipe

**CH-FAS-XXX**      Fasteners — bolts, screws, nails, sealant

**1 Base frame assembly**

Install **4 base corner castings** and fix them to the long and short main beams. Secure with high-strength bolts.

- 2 × long base main beams **CH-BAS-001A**
- 2 × short base main beams **CH-BAS-001B**
- Fasten with high-strength bolts **CH-FAS-019001**

**2 Secondary beam installation**

Insert the 2.99 m secondary beams (50 × 100 mm) and distribute them **evenly** between the main beams.

- 9 × secondary beams for the 3 × 6 model
- 7 × secondary beams for the 3 × 5 model
- Connect with bolts **10 × 70 mm** **CH-FAS-019003**

**! PRO TIP – DO THIS NOW**

Install the **PVC pipes** before fixing the top corner. Once the top corner is on, space is limited and routing becomes very difficult.



**CH-FAS-019001, CH-FAS-019002**



FIG. 1.1 · 3 × 5  
MODEL

Base frame plan — 6055 × 2990 mm with FG100 × 50 × 1.1 secondary beams at 588 mm centres (678 mm at the ends).



FIG. 1.2 · 3 × 5 EXAMPLE (NOT 3 × 6)

Completed 3 × 5 base frame on site with secondary beams evenly distributed between the main beams.

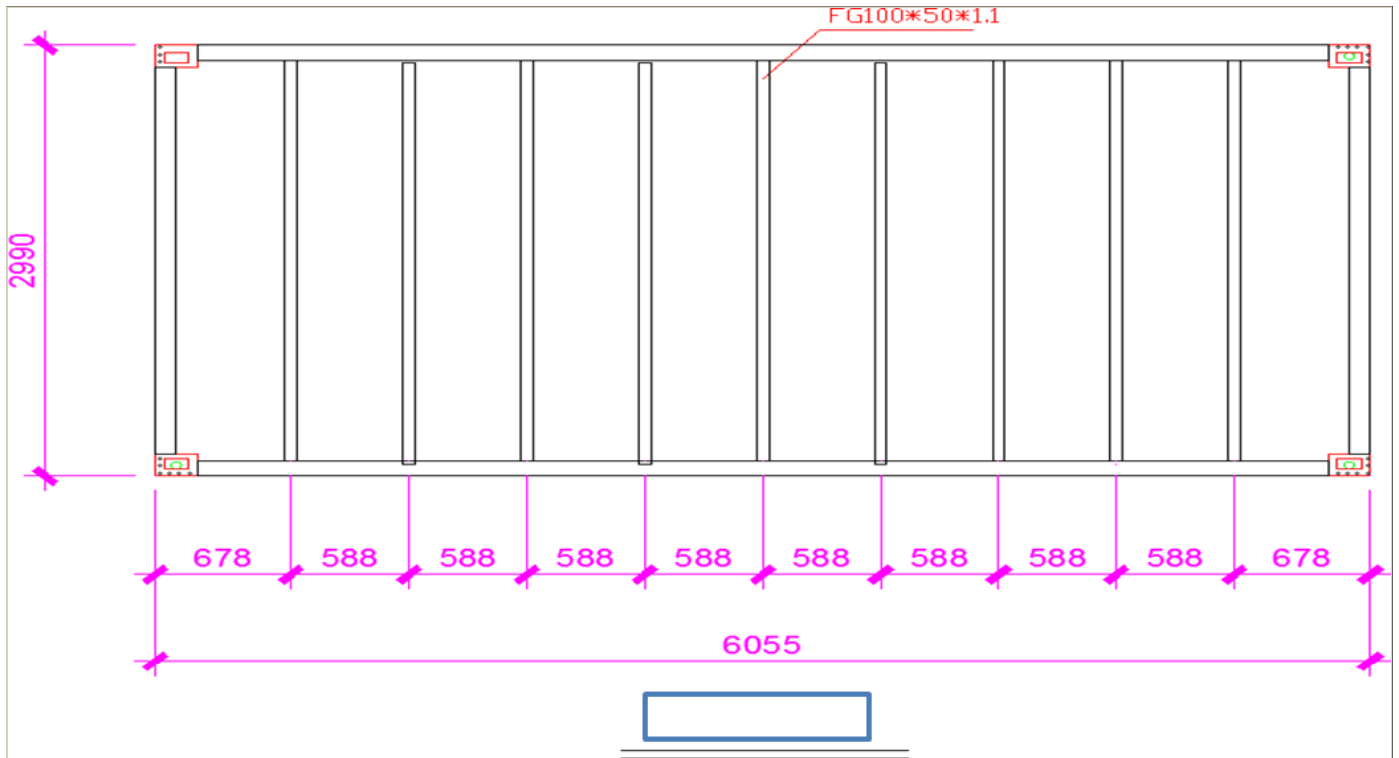


FIG. 1.3 · 3 × 6 EXAMPLE

High-strength bolt (CH-FAS-019001 / CH-FAS-019002) used to fix corner castings to the base main beams — 3 × 6 model shown.

**1** Route the PVC pipe first

Insert the PVC pipe through the column path **before** the top corner is installed.

**CH-PRT-016****2** Install the four columns

Stand the columns on the base corner castings and bolt them in place. Choose the column variant for your model size.

■ 3 × 5 model **CH-COL-014**

■ 3 × 6 model **CH-COL-015**

■ Fasten with **CH-FAS-019001** **CH-FAS-019002**

**SAFETY**

Columns are tall and top-heavy until braced. Have **two people** on each column during stand-up, and tighten bolts only after all four are vertical and plumb.



FIG.  
2.1

Left: column bolted onto the base corner casting. Right: top corner with PVC pipe routed through before the corner is closed.

**1 Install roof main beams**

Fit two 5.58 m beams along the long sides and two 2.7 m beams across the short sides, joining at the top corners.

- 2 × 5.58 m main beams CH-R0F-006A
- 2 × 2.7 m main beams CH-R0F-006B CH-R0F-006C

**2 Install roof square tubes**

Across the 3 m direction, fit C-shaped 80 × 40 × 1.2 mm steel members and 20 × 20 mm square tubes for cross-bracing.

- C-shaped steel — 7 × for 3 × 6, 6 × for 3 × 5 CH-R0F-007
- 4 × 20 × 20 mm square tubes CH-PRT-009
- Fasten with CH-FAS-019009 CH-FAS-019010 CH-FAS-019011

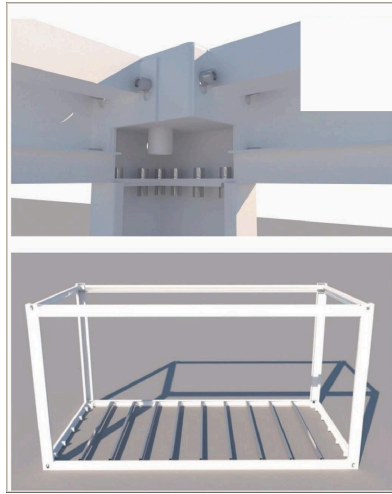


FIG. 3.1

Top corner connection detail with high-strength bolt, and full roof main beam frame in place.

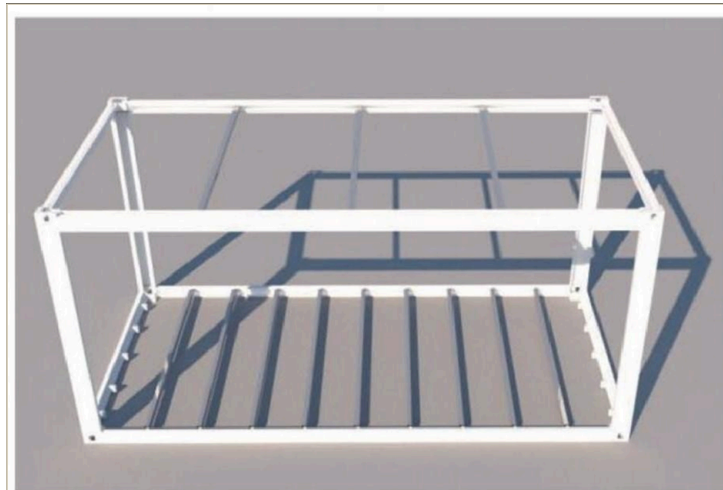


FIG. 3.2

Roof main beams installed on the four columns — ready for the C-shaped steel and square tubes.

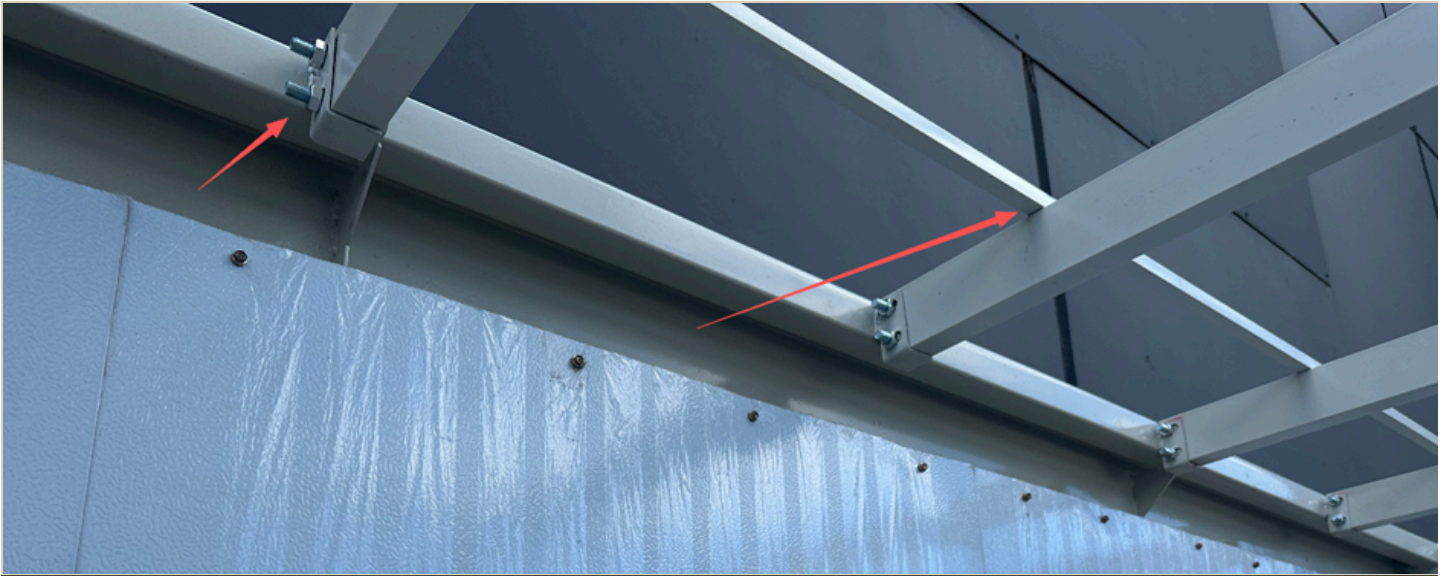


FIG. 3.3

C 80 × 40 × 1.2 mm steel members and 20 × 20 mm square tubes fixed across the 3 m direction.

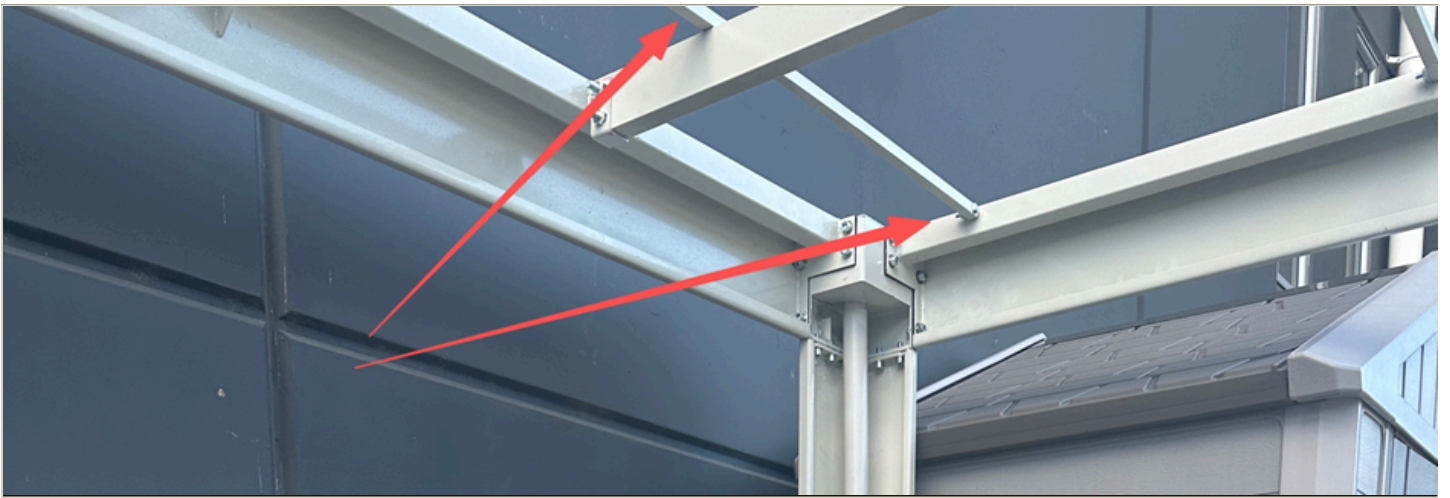


FIG. 3.4

Fastening points at the roof corner — bolt every junction marked, paying attention to the column-to-beam connection.

**1 Lay the plastic sheet**

Lay the plastic sheet over the secondary roof beams (C 80 × 40 × 1.2 mm), securing it to each beam with **double-sided tape** so it stays flat while you work above it.

CH-FAS-019015

Double-sided tape

**2 Place the insulation**

Roll the fibreglass foil insulation on top of the plastic sheet. Trim to fit your project — make sure adjacent rolls butt together with no gaps over the beams.

**3 Install steel roof panels**

Lay the steel roof panels onto the framing. You may need to cut the corner sheets to fit the size.

■ Steel roof panels CH-ROF-010

■ Fix with screws CH-FAS-019005



FIG. 5.1 Plastic sheet (CH-FAS-019015) laid over the secondary beams and held down with double-sided tape — view from below.



FIG. 5.2 Fibreglass foil insulation rolled on top of the plastic sheet.

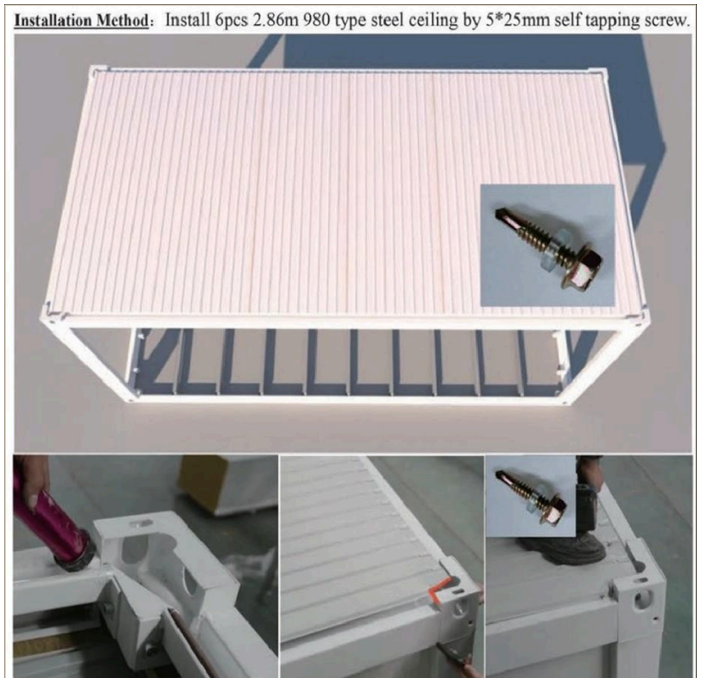


FIG. 5.3 Install 6 × 2.86 m 980-type steel ceiling panels with 5 × 25 mm self-tapping screws.

1

**Fix the cement boards**

Install the floor boards onto the secondary beams using 4.2 × 38 mm floor nails.

- **3 × 6 model:** 5 × 1175 × 2792 mm boards
- **3 × 5 model:** 3 × 1175 mm boards + 1 × 708 mm + 1 × 587 mm

Boards & nails CH-BAS-003 CH-FAS-019007

**CRITICAL**  
The **edges of every cement board must be supported on a secondary beam**. An unsupported edge will flex and crack underfoot.

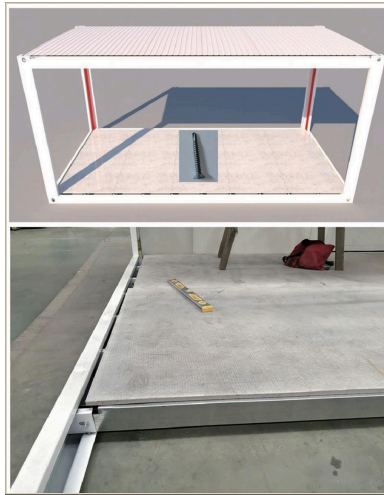


FIG. 6.1 Cement boards laid onto the secondary beams and fixed with 4.2 × 38 mm floor nails — board edges supported on every beam.

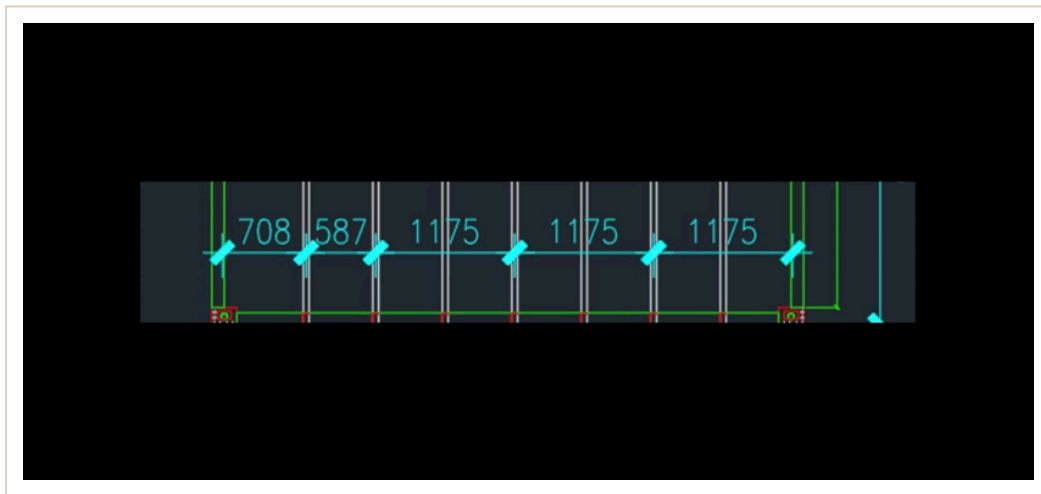


FIG. 6.2 · 3 × 5 FLOOR EXAMPLE (NOT 3 × 6!) 3 × 5 board layout: 708 mm + 587 mm + 1175 mm + 1175 mm + 1175 mm cement boards.

**1 Fix the flash channel**

Install the flash channel onto the base frame using screws.

CH-PRT-017

CH-FAS-019005

**2 Plan door & window positions**

You can design the position of windows and doors to fit your needs. The example below shows one valid layout for the 3 m wall.

**3 Install panels in order**

- Install the standard wall panels (**A panel**) side-by-side along the long walls.
- For the 3 m side: install **one door** (finished with D Panel), **one window** — install C Panel first, then fix the window, then B Panel — and complete the remaining section with **half an A Panel**.

**i CUSTOMISING PANELS TO YOUR LAYOUT**

Standard **A panels can be cut on-site** into B / C / D / E shapes to suit the exact position of your door and windows. Plan your openings first, then mark and trim panels accordingly.



FIG. 7.1

Flash channel (CH-PRT-017) fixed to the base frame with screws — arrows indicate placement on both walls.

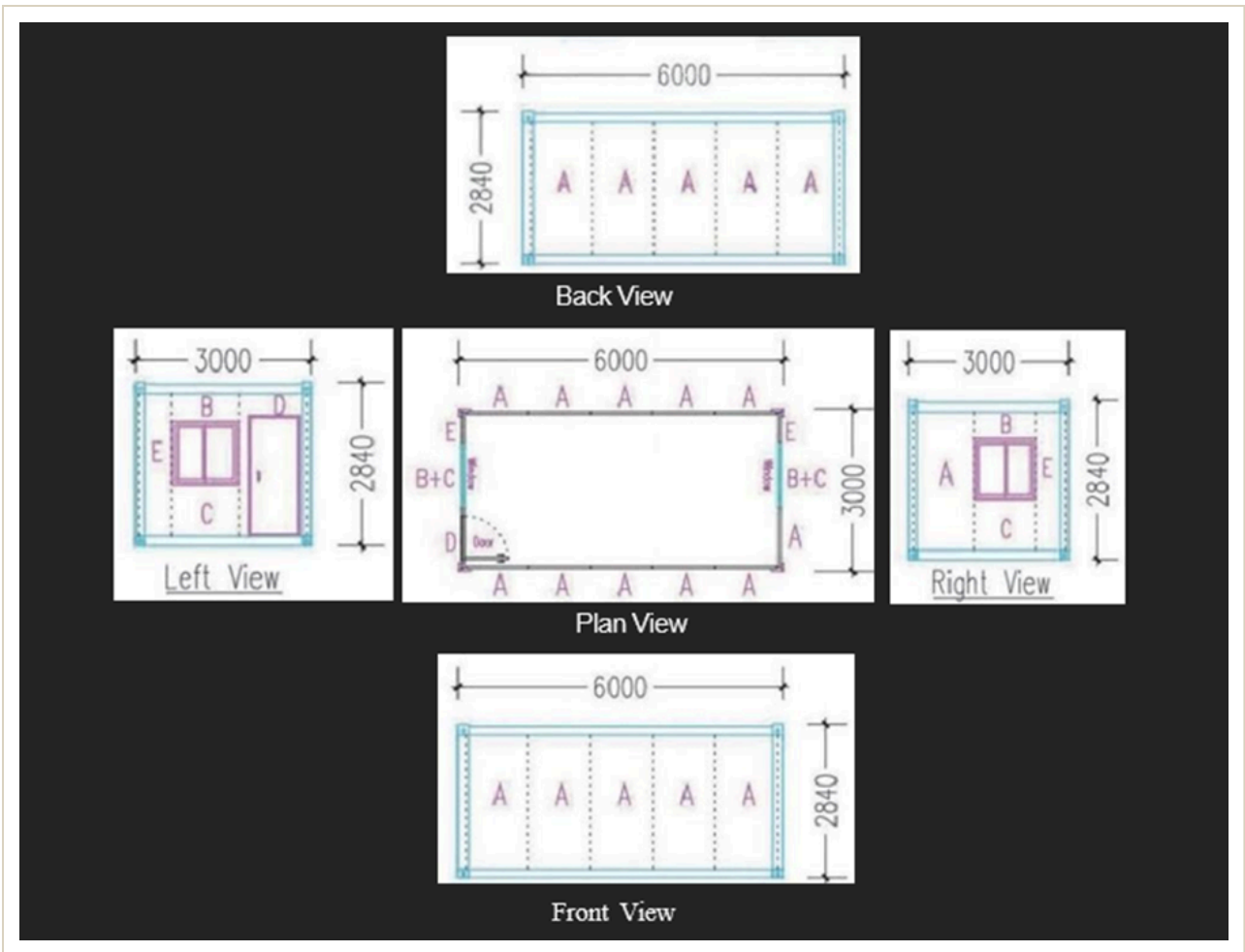


FIG. 7.2 Example panel layout — plan, front, back, left and right elevations showing A / B / C / D / E panel positions.

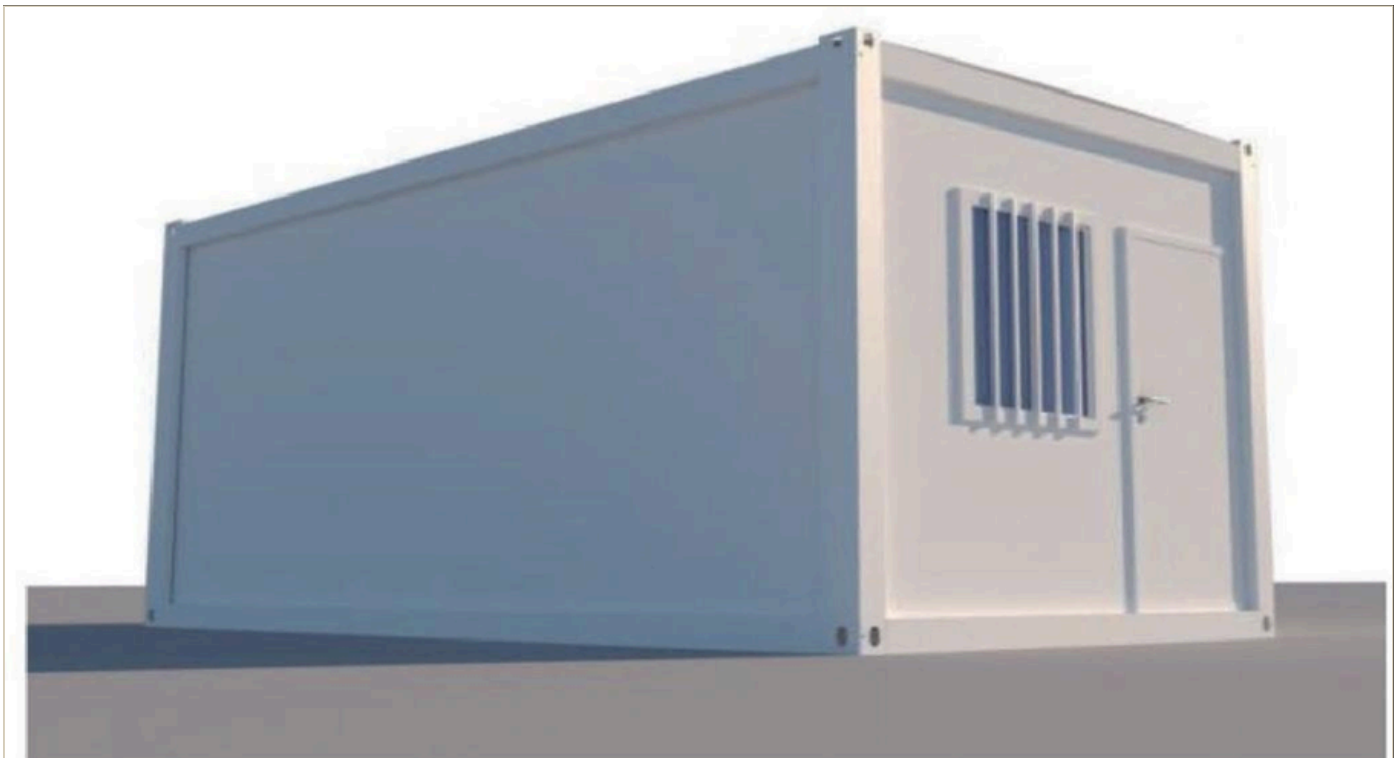


FIG. 7.3 Finished exterior render — door and window installed on the 3 m wall.

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**Fix the L-angle to top beam**

Fix the L-angle and the wall panels into the top beam using screws.

■ L-angle profile **CH-PRT-012**

■ Use **CH-FAS-019006** **CH-FAS-019008**

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**Place internal ceiling sheet**

Lay the internal ceiling sheet on top of the L-angle.

**CH-WAL-011****QUALITY CHECK**

Before moving to closing work, walk the perimeter and confirm every panel sits flush against the L-angle with no gaps. Gaps now will leak later.

FIG.  
8.1

L-angle (CH-PRT-012) fixed to the top beam with self-tapping screw — drive through the L-angle into the wall panel head.

FIG.  
8.2

Internal ceiling sheets (CH-WAL-011) sitting on top of the L-angle — arrows show the L-angle line where the ceiling rests.

**1 Corner section**

Install the corner metal angle to the panels, then fit the column cover panels over it.

- Corner metal angle **CH-FAS-019012**
- Column cover panels **CH-COL-018**

**2 Locks, sealant, finish**

- Install the door lock.
- Apply sealant to **all joints** — door, window, wall panels and frame — wherever required.
- Remove the protective film from all panels.
- Carry out final cleaning.

**! DON'T SKIP THE SEALANT**

Every joint between dissimilar parts (panel ↔ frame, door ↔ wall, window ↔ panel) must be sealed. Missed joints are the #1 cause of weather ingress on completed builds.



FIG. 9.1 Column cover panel (CH-COL-018) being fitted over the corner metal angle — arrows highlight the snap-fit edges that must engage along the column length.



FIG. 9.2 Door lock installation — secure the lock body with screws (left), then fit the handle and cylinder (right) and test before sealing.

**3 Install the floor finish**

Roll out the floor finish layer over the cement boards. Cut to size where it meets walls or door thresholds.

CH-PRT-004

**4 Set the ceiling junction box**

Fit the plastic box into the ceiling. It can be used for future electrical connections routed through the ceiling void.

CH-FAS-019014

**HEADS UP**

All electrical work beyond mounting the junction box must be carried out by a **licensed electrician** in accordance with local regulations.



FIG.  
10.1

Apply sealant continuously around window frame, door frame and along the floor-to-wall edge — left: window perimeter, right: floor skirting line.



FIG.  
10.2

Plastic junction box (CH-FAS-019014) installed at the upper wall — arrow indicates position for future electrical entry through the ceiling.



# Congratulations — your container house is complete.

Walk the perimeter, double-check every sealed joint, and document the build with a few photos for your records. For warranty support, quote your build date and serial label.

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