



CON-IMEX CONTAINERS 2009



AKAR Logistics
70 Beecham Court
Owings Mills, MD 21117
USA

Sophia Akar
Tel: + 410-961-7232 / + 410-961-0327
Fax: + 410-356-8267
sophia@akarlogistics.com



GENERAL

The proposed containers are "Flat-pack" type. Disassembled and reduced as "sandwich" made up of base, and roof chassis, connected by suitable metallic spacers. Wall panels, door and windows panels, finishing profiles, screws and bolts as well as the electrical preassembled installation will be placed inside the flat-pack package. This system has been particularly designed per 2.4mt x 6.0mt as a standard in order to reduce the transport space as well as quick and easy handling and can be produced in different sizes rather than the standard. Joining on adjacent sides to achieve a larger area, CON-IMEX CONTAINERS can also be built as two storey units. The CON-IMEX CONTAINERS have been designed so that they can be handled with forklifts or cranes and are suitable for truck, train or ship transportation.



BOTTOM CHASSIS

The bottom chassis is made up of 2,5 mm thick sheet metal press-formed into profiles and welded to the four corner blocks.

bottom chassis

strength	250 kg/m ²
material	2.5mm con-imex steel profiles all welded
painting	chemical treatment + 100 micron electrostatic powder dyed color RAL 7032

The floor surface consists of 18 mm thick OSB-3 (Oriented Strand Board), fixed to the omega profiles by means of self-threading screws and covered with PVC sheets glued at the top layer. The base insulation is made of 50 mm thick glasswool planks placed to the cross bars of the perimetric profile.

floor

top layer	2mm vinyl flooring
board	18mm OSB-3
vapor barrier	100 micron polyethylene
insulation	50mm glasswool
protection	0.4mm galvanized sheet metal



ROOF CHASSIS

The roof consists of a 2.5 mm sheet metal press-formed into profiles and welded to the four corner blocks. 0.8mm Galvanized steel sheet covering is at the top layer. The insulation is 50 mm glasswool planks and over it polyethylene vapour barrier is laid for vapour barrier. The ceiling will be covered with 8 mm thick white laminated chipboard.

Roof frame will be painted with electrostatic powder paint.

top chassis

strength

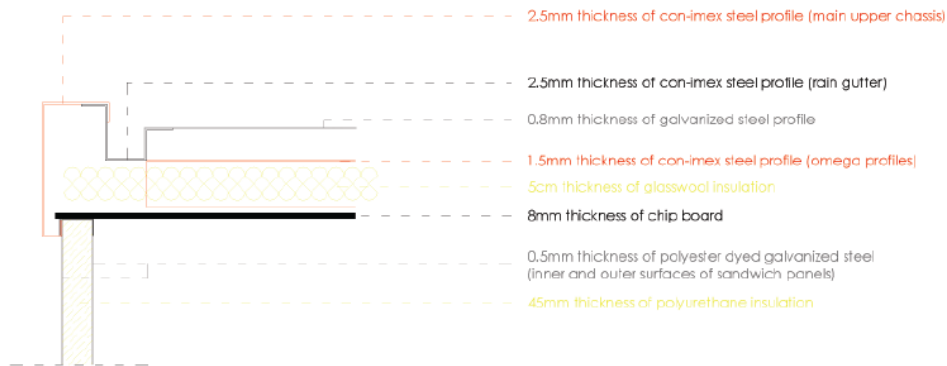
100 kg/m²

material

2.5mm con-imex galvanized steel profiles all welded

painting

chemical treatment + 100 micron electrostatic powder dyed color RAL 7032



ceiling

8mm white laminated chipboard

board

100 micron polyethylene

vapor barrier

50mm glasswool

insulation

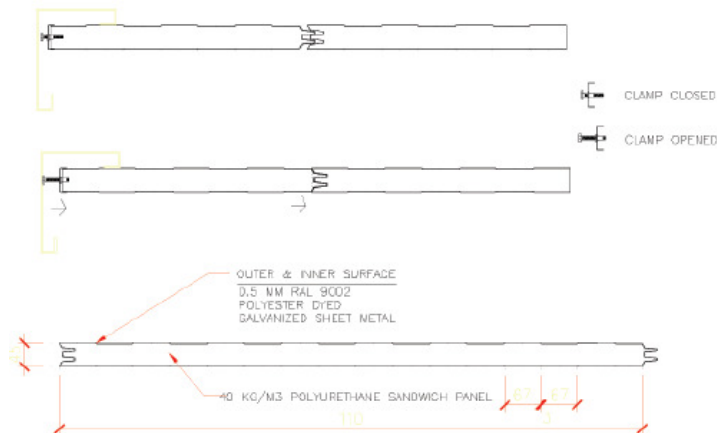
0.8mm galvanized sheet metal

roof cover

WALLS

The inner and outer wall surfaces are polyester dyed galvanized sheet metal with polyurethane inner core. Panels shall be tongue and groove joined and completed with dust and water proofing rubber seals.

45mm 40kg/m³ polyurethane sandwich panels. outer surface:
 0.5mm RAL 9002 (outside) & RAL 9010 (inside) polyester dyed
 galvanized sheet metal inner surface: 0.5mm RAL
 9002 (outside) & RAL 9010 (inside) polyester dyed
 galvanized sheet metal



Panel thickness: 45 mm
 External side plane sheet thickness: 0.5 mm
 Internal side plane sheet thickness: 0.5 mm



Four columns which are made of 2,5 mm thick steel sheet metal are electrostatic powder dyed. In order to connect the roof chassis to the base chassis columns are fixed by means of bolts.



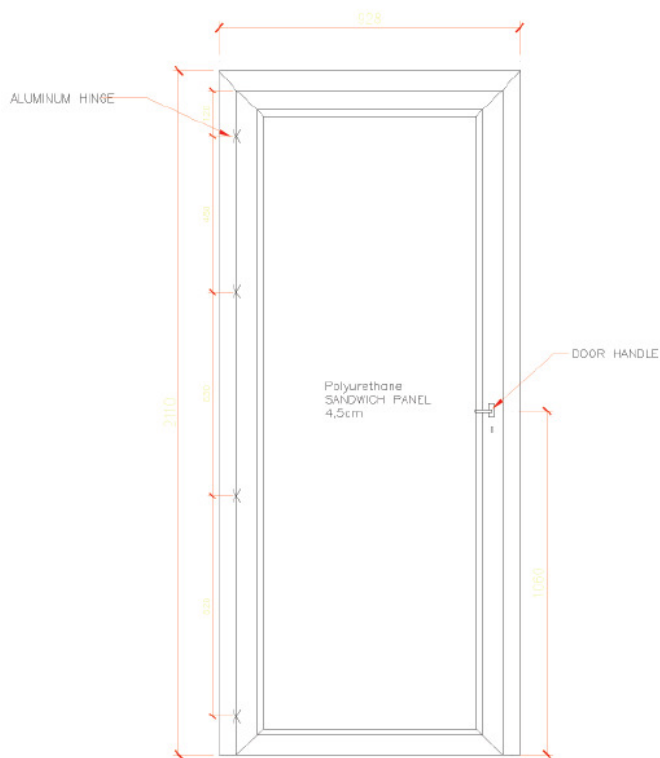
During the assembly phase, the panels are fixed to the upper roof profile by means of sliding joints easy placed at the bottom of the base guide U profile.



DOORS AND WINDOWS

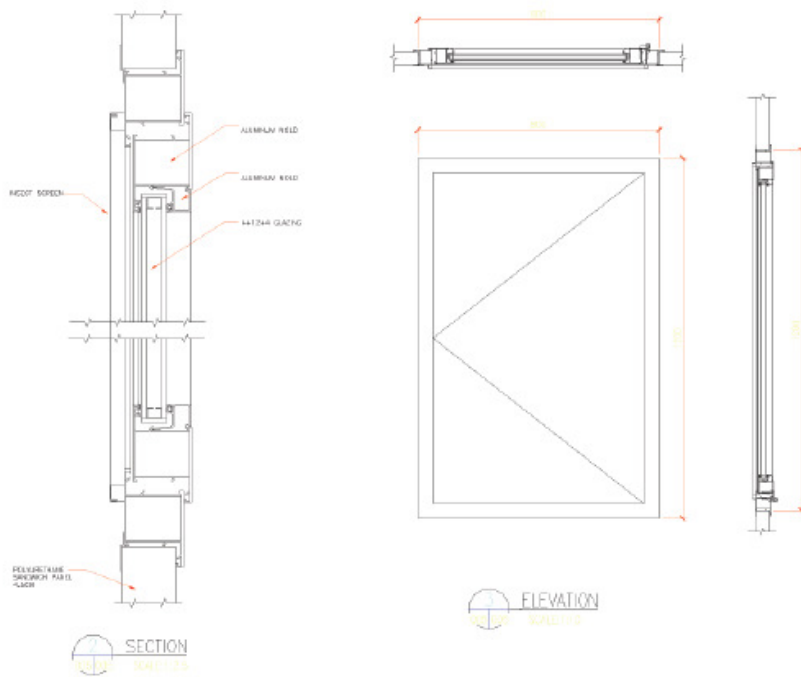
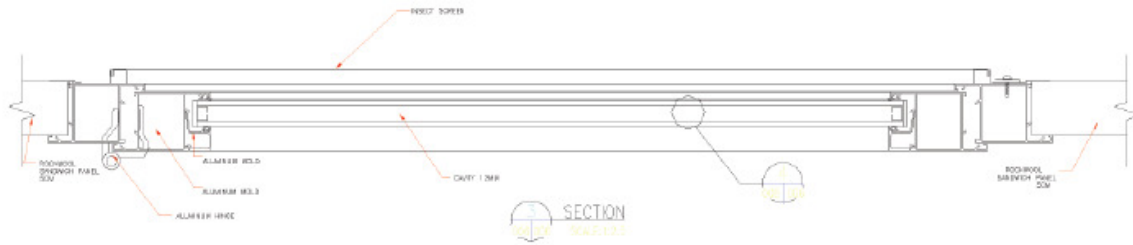
External door (850 x 2100 mm.)

The door shall be mounted into the wall panel composed of a fixed frame and a wing frame made of Aluminium or PVC. Polyurethane panel is fixed into the door wing and shall be equipped with 4 hinges, dust and water-proofing gaskets. The external doors are opening outwards.



Windows (800 x 1200 mm.)

The windows are Aluminum or PVC and, shall be fitted into the wall panel and equipped with 4/12/4 mm float, double glazing.



ELECTRICAL INSTALLATION

Electrical supply voltage provided 220 V
- 50 Hz or 380 V – 50 Hz

- **External connection**

It shall consist of inlet composed of fixed plug 16 A connected to the main panel by means of a flexible cable 3x4mm² or 5x4mm² NYM. The cables shall be positioned indoors on ceiling and shall come out through the holes placed on roof profiles near the fixed plug. The fixed plug shall be mounted and fixed to their supports. The maximum power rating for a group of modules sharing the same electrical system shall not exceed 16 A measured in each single phase at the electrical system source.



- **Main electrical panel**

It shall be made of self-extinguishing PVC and placed in suspended ceiling close to the external connection. Its colour shall be white RAL 9001.





GUARD HOUSES



OFFICE CONTAINERS







GENERATOR CABINS



ABLUTION TRAILER



2 STOREY CONTAINERS

Instead of placing two containers on top of each other, 2 Storey CON-IMEX CONTAINERS are built with a middle chassis acting as the floor of the first floor and the ceiling of the ground floor. The flatpack package is 115cm high.





TWO STOREY UNIT INSTALLATION

1. Flat-packed first unit will be placed on the concrete surface.
2. The protection around the package will be dismantled.
3. For the roof chasis to be lifted, the package footings of the package will be dismantled from the middle chasis. After the top layer is lifted, the package footings will be also dismantled from the roof chasis. The columns will be placed at 4 corners of the unit and the connections will be placed to the sockets. Afterwards, the secondary columns at the longitudinal sides, total 6 of them, will be mounted.. The columns will be placed to the middle chasis corner sockets and it is important that they are not mounted to the middle chasis before placing the top chasis on top of the columns. After the roof chasis is placed on the columns, the columns will be fixed to both middle and roof chasis. There are montage holes on the column plates.
4. The package footings of the middle and bottom chasis will be dismantled.
5. The mounted upper floor will be lifted with a crane and the footing connections to the upper chasis will be dismantled.
6. After the upper floor is lifted the columns will be placed in the corner sockets and the bloning will be made at 50%.
7. The top floor will be mounted on the columns and will be fixed.
8. The first two floor container skeleton will be established. The alignment of the containers is crucial on the concrete blocks.
9. Before the second container is erected and put adjacent to the first, a black stripe of sticker will be mounted on the columns and chassis
10. After the second container is erected the same way as the first one, it will be placed adjacent to the first one and the two will be bloned from the holes on the columns to each other.
11. After the black stripe of sticker will be mounted on the columns and chassis of the second container, the third container will be erected and connected to the second.



12. This way, the containers will be connected till the eight.
13. The panel montage will start with the erection of the skeletons.
14. On the panels, there is a galvanized hanger hook. This is on the upper part of the panels and will be hung and placed inside the U shaped panel runners on the bottom chasis. The galvanized hook will be checked for right placement to the 2.5cm notch of the above chasis.
15. First, the whole panels which are 1.10mt w x 2.30mt h will be installed and the half panels will be installed last.
16. Panels in the short side of the container will be from column to column and the longitudinal panels will be from panel to panel.
17. After the whole panels are run till the end, the short panels with clamps on them(5cm galvanized U profiles with screws on them) will be fastened against the columns.
18. The most important issue in the panel installation is that they are not to be forced in place.
19. Corner clamps must be used and must be fastened to make sure the panels are tongue and groove joined.
20. After the panel mounting, first the skirtings and then the plastic ceiling and corner profiles will be installed.
21. Where the containers are adjacent, rubber band and at roof silicone will be used in between and 20 cm wide flashing will be mounted.
22. On the outer surface where the panels meet the columns and the chasis on the top surface there will also be a rubber band installation.

