EASYSPACE

SPACEMAKER

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TECHNICAL SERVICES

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Introduction

Spacemaker was founded in the UAE in 1990 and since then has grown to become one of the highest quality modular building construction suppliers in the Middle East.

A turnkey solution provider, able to deliver **prefabricated modular building solutions** without having to rely on third party providers or sub-contractors.

All the engineering necessary is provided by our in-house team and we thrive on providing solutions to complex requirements.

Whatever the project and however remote, we can provide design, manufacturing, logistics, installation and maintenance.

Our innovation strategy ensures **creative solutions and the newest of technologies** are considered for every project.

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Product Range

RIGSPACE

RAPIDSPACE

ECOSPACE (+)

EASYSPACE

FLATSPACE

CONTAINERSPACE

OFFSHORESPACE

LUXSPACE

TRAILERSPACE

BALLISTICSPACE

BLASTSPACE

eSPACE

Spacemaker provides modular buildings for a variety of uses across a range of industries in the Middle East.

Our tailor-made engineering solutions can be used for simple or complex purpose-built structures including oilfield camps, office buildings, warehouses and schools.

Because we offer a turnkey service, there is no reliance on third party providers or sub-contractors which means projects that require fast-track turnaround are able to delivered in the shortest of times.

Quality

It is Spacemaker's policy to identify the requirements of our customers and provide a service that meets or exceeds these requirements by the use of processes, materials, or products that avoid, reduce, or control pollution and comply with relevant laws, standards and regulations applicable to our business.

Our internal quality procedures adhere to the highest standard in the industry - from detailed documentation of material procurement, to thorough certified inspections. This internal process ensures the highest quality of workmanship is met at all times.

ISO Certification

Recognising the hazards present in our industry, we take every practical step to provide and maintain a safe and healthy work environment for all employees, subcontractors and visitors who may be affected by or come into contact with a Spacemaker project.

At Spacemaker our structured process for managing quality, health, safety and environmental activities in compliance with ISO certification is consistent with QHSEMS standards. Our QHSE management system procedures are documented to ensure our activity, conditions and tasks affecting quality, health, safety and environmental protection are planned, organised, executed, reviewed and improved.

Our Certifications

ISO9001:2015	(Quality)	**ISO45001:2018**	(Health & Safety)
ISO14001:2015	(Environment)	**ISO17065**	(Product Certification – fire rated wall panels)

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Capability

We provide modular and flat-packed warehouse solutions. Our modular warehouse (EasySpace) is a unique product developed for situations where an immediate space solution is required.

Transportable in a flat-pack arrangement, even a warehousing need in the most remote location can be facilitated in a short space of time.

Each cell has an erection time of two hours, meaning a warehouse of 500m^2 can be erected in just one day.

Technical Info

- Quick deployment
- Module ranges between 9.6m and 12m modules
- Re-deployable storage solutions
- Expandable options with customisations available
- Perfect solution for small aircraft hangers, dry storage, covered car parking
- Simple requirement for foundations which can be engineered in-house

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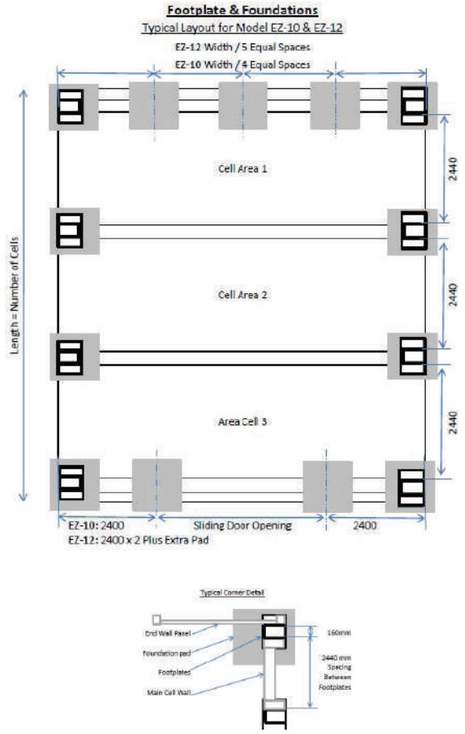
Installation Guide

Step 1

Site Preparation

The structure should be erected on Concrete Foundation Pads or Slab, refer to Technical Specifications for more details.

- Foundation pads or slab must be level, maximum tolerances per drawing
- Secure bottom brackets using chemical or mechanicalanchor bolts as per Technical Specification. Brackets must be fixed with the closed side of the C part of the bracket facing to the inside of the foundation as indicated in the layout diagram
- For EZ-12 Model 2 more foundations need to be installed for the end wall section
- The layout is showing foundations for a unit with a solid wall in the backand a sliding door in the front. These are not required if no front or rear walls will be installed



Step 2

Offloading

Use a suitable crane to unload the various packed assemblies, and a forklift can be used to move assemblies to the desired location. Care should be taken not to damage components while offloading. Important, if a forklift is used make sure fork extensions of at lest 2.44m long are fitted to ensure forks reach from beam to beam and the cladding sheet is not damaged.

Main Cells are all fitted with encapsulated M24 nuts to enable an Eyebolt to be screwed in for lifting purpose.

If only forklifts are available for unloading, use these points to secure slings from the forks to create enough gap for the forks to fit. Suitable timber shims should be used to maintain the cap.

Installation Guide

Step 3

Site Preparation

Use a suitable crane to erect the main cells, the weight of each cell should not exceed 2.5T each. A 25T crane should be large enough in most cases, but crane load charts should always be consulted prior to any lift.

Step 3.1 - Secure rigging to lifting points of each cell

Step 3.2 - Carefully start lifting

Step 3.3 - Secure knee braces and continue with placement afterwards

Step 3.4 - Place Cell between Footplate brackets fixed earlier and bolt inplace to both top and bottom brackets.

Step 3.5 - Repeat previous steps for remaining cells

Installation Guide

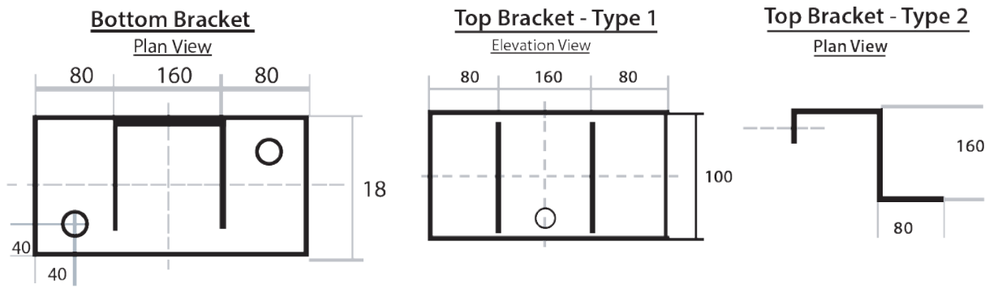
Step 4

Installing End Wall Panels

Step 4.1 – Lift end wall panels in place by using a crane or forklift. Panels are secure to the main structure with bent plate top and bottom brackets.

Step 4.2 – End panels are bolted into place using the Foot plate brackets fixed earlier at the corners and T-Brackets at mid sections. Panels are also bolted together.

Bracket Details & Dimensions

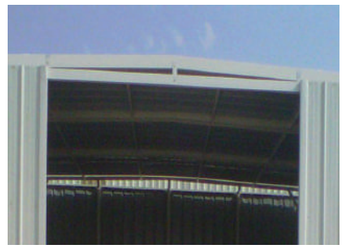


Step 5

Installing Doors

Step 5.1 – Install Sliding Door Beam

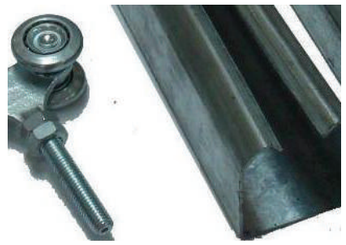
Lift Sliding Door support beam into place and bolt to front wall panel columns on both sides and also secure back to the main rafterbeam of the end cell using a bent plate Z-Type bracket.



Step 5.2 – Install Sliding Doors

Prepare guide groove for sliding doors. This groove is important for the security and operation of the sliding door. Care should be taken to ensure that it is right and level and the center of the groove lines up with the center of the sliding door guide channel above.

Insert rollers into the track, 2 per side per door panel. Door panels are the lifted into place through the gap between end cell after the door beam. The secured by bolting them to the bottom of the rollers. Doors are leveled by adjusting the nuts on each roller.



Installation Guide

Step 6

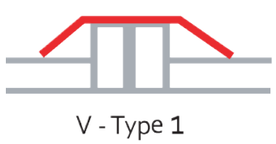
Installing Flashings and Bracing Wires

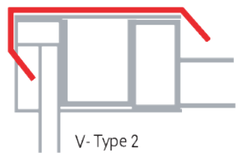
Step 6.1 – Bracing Wires

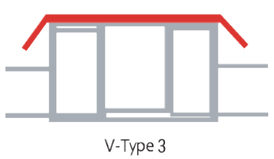
Install bracing wires diagonally across from the bottom bracket to the top bracket. Wires are attached to brackets using Shackles and Crosby clamps. Ropes are tensioned using Turnbuckles at mid point. Install on both sides.

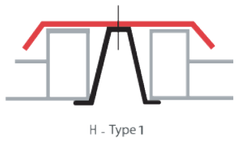
Step 6.2 – Vertical Flashings

Various Types of vertical flashings are fitted by riveting to the cladding sheet. Flashings are bent to cover all corner and level connecting sections of the building. Type 1 for End Wall Flat joint, Type 2 for Corner between end wall, Type 3 for between Main Cell Wall Panels. And Type 4 used at door end panels.









Step 6.3 – Horizontal Flashings

Gable and Eve flashings are fitted by riveting to the cladding sheet. Roof flashings in the middle between Cells are secures using a bracket that is turned and snapped into position. By using this bracket no roof access is required.

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