

TRIMO MSS



TRIMO MODULAR SPACE SOLUTIONS Efficient, Innovative, Sustainable

Trimo modular unit is designed as a light steel construction consisting of a floor frame, roof frame and columns. Standard external walls of the modular unit are vertically oriented TRIMOTERM FTV fireproof insulation panels (60–240 mm).

The construction enables compounding of individual modular units in all 3 dimensions. Minimum life span is 10 years under harsh field conditions and more than 30 years in normal conditions with correct maintainance. Standard unit dimensions are adjusted to meet the requirements of all means of transport that are used for the transportation of ISO containers. Land, sea and air transportation is possible.

Up to 40 % time is saved due to shorter construction time, faster installation and no fabrication on site. Easy to build and install, TRIMO modular units can be assembled and disassembled several times, allowing them to be used on many consecutive projects over a long-time period.

Sustainable and durable materials create healthy and pleasant living environment.

Trimo Modular Unit 8' width (FTV100 panels):

Type	Lenght (m)		Width (m)		Area (m ²)	
	External	Internal	External	Internal	External	Internal
10'x8'	2,989	2,729	2,435	2,175	7,28	5,936
15'x8'	4,550	4,290	2,435	2,175	11,079	9,331
16'x8'	4,880	4,620	2,435	2,175	11,883	10,049
20'x8'	6,055	5,795	2,435	2,175	14,744	12,604
24'x8'	7,325	7,065	2,435	2,175	17,836	15,366
30'x8'	9,125	8,865	2,435	2,175	22,219	19,281

Standard external/internal height of the units are 2,591/2,326 m and 2,765/2,500 m.

Trimo Modular Unit 10' width (FTV100 panels):

Type	Lenght (m)		Width (m)		Area (m ²)	
	External	Internal	External	Internal	External	Internal
10'x10'	2,989	2,729	2,989	2,729	8,93	7,447
15'x10'	4,550	4,290	2,989	2,729	13,600	11,707
16'x10'	4,880	4,620	2,989	2,729	14,586	12,609
20'x10'	6,055	5,795	2,989	2,729	18,098	15,815
24'x10'	7,325	7,065	2,989	2,729	21,894	19,280
30'x10'	9,125	8,865	2,989	2,729	27,275	24,193

Standard external/internal height of the units are 2,591/2,326 m and 2,765/2,500 m.

Technical specifications:

CONSTRUCTION / STEEL FRAMEWORK:

- Primary structure made of hot rolled cold formed steel beams in a thickness of 3 mm, steel quality S355MC (EN 10025-2), cold formed steel columns in a thickness of 3-6 mm, steel quality S350G + Z275
- Secondary structure made of cold formed steel joists in a thickness of 3 mm, steel quality S235 and rectangular timber purlins, quality C20
- Welded corner blocks in a thickness of 4-6 mm, steel quality S325

PERMITTED LOADS (3 units high stacking):

- Snow load (characteristic snow load on the ground): $s_k = 1 \text{ kN/m}^2$
- Floor live load: $q_k = 2 \text{ kN/m}^2$
- Roof live load: $q_k = 0 \text{ kN/m}^2$
- Wind load (basic wind velocity): $v_b = 25 \text{ m/s}$ (terrain category III)

COLOUR:

- Complete steel frames and walls in RAL 9002 (default colour)
- Other standard steel frame colours: RAL 3000, RAL 5010, RAL 7016, RAL 7032, RAL 7035, RAL 9006, RAL 9010
- White Doors and PVC windows (default colour)

INSULATION & FINISHING:

- Floor (bottom to top): steel sheet in RAL 9002 (default colour), mineral wool DF39 100-150 mm, cement floor board 20 mm, PVC vinyl floor cover $1.5 \text{ mm/U} = 0.35 \text{ W/m}^2\text{K}$
- Ceiling (bottom to top): Chipboard 10 mm with a foil in white colour, mineral wool 100-200 mm, steel sheet in RAL 9002 (default colour), $U = 0.36 \text{ W/m}^2\text{K}$
- External/internal walls: fire resistant sandwich rockwool TRIMO panels 100 mm (default thickness), external/internal steel sheet 0.5 mm (SIST EN 4509:2007/AC:2009), fire behaviour A2-s1, d0(EN13501-1), fire resistant class EI-90/CE marked, $U = 0.37 \text{ W/m}^2\text{K}$

DOORS AND WINDOWS:

- External/internal white aluminium single leaf doors 805/905 mm x 2060 mm, furnished with a cylinder lock, thermally insulated with EPS
- PVC windows, 885/1372 mm, thermally insulated double-layer glazing 4/15/4 mm, turn/tilt mechanism, furnished with PVC rollingm shutters

ELECTRICAL INSTALLATION:

- IEC-60364 standard
- 230/400 V 50 Hz (230 V 50 Hz for the UK market)
- CEE connection plug/socket: 5 pole, 5 x 32 A, 400 V, IP44 (3-pole 3 x 32 A, 230 V, IP44 for UK market), mounted on the outer wall of the container, recessed into top frame in the upper corners of the shorter side wall
- Inner electric distribution box, NyM-J cables, flush-mounted
- Flush-mounted switches and sockets, LED ceiling lights, fire/smoke detector

SANITARY EQUIPMENT:

- Poly-propylene pipes sanitary water distribution
- PVC waste pipes, $\Phi 50 \text{ mm}$ and $\Phi 110 \text{ mm}$, surface-mounted
- Fittings: ceramic sink with mixing tap, mirror and plastic shelf, ceramic toilet pan and urinal, monolith polyester shower cabin
- Electric water heater
- PACKAGING: Flat-Packed/Assembled/Packed in High-Cube Container

OPTIONAL EQUIPMENT:

For complete comfort, highest functionality and an appearance to meet clients requirements, there are several possibilities of optional equipment:

- walls with inner wainscot of chipboard with a foil in white color or wood pattern (bright maple)
- doors: outer, inner, aluminium, steel, wooden, various colors, glazed
- windows: single panel, double panel, sanitary, with shutters, blinds, bars for protection against burglary
- fork-lift openings
- interior equipment (complete kitchen, laundry, furniture)
- outer and inner stairs
- fences and external terraces
- overhangs
- protruding roof
- secondary roofs and facades
- frames and walls in desirable RAL color
- electric HVAC systems (heaters, AC units)
- additional reinforcements for floor load up to 10 kN/m^2
- internal height and external width up to 3 m
- painting system (galvanization) for corrosion classes according to ISO standards

NON-STANDARD SOLUTIONS (DIMENSIONS, LOADS,...):

- Contact our sales/technical team

TRIMO

TRIMO MSS D.O.O.
PRIJATELJEVA CESTA 12,
8210 TREBNJE, SLOVENIA
T: +386 (0)7 34 83 500
E: TRIMO.MSS@TRIMO-GROUP.COM
WWW.TRIMO-MSS.COM