

# UN5x7EF

### Membrane covered steel frame structure













#### > Introduction

The UN5x7EF shelter is a reusable shelter for long-term deployment to provide spaces for living, working and recreation in remote areas. The shelters can be configured to the user's requirements and can be used for accommodation, recreation, storage, and office space and are particularly suitable to be used as medical facilities.

The UN5x7EF shelter is a pitched roof structure made of a box profile metal frame with a PVC coated polyester cover and an insulating liner with integrated PVC groundsheet. The standard dimensions are 5.00 m wide, 7.00 m long and 2.50/3.50 m high. The gables have a roll-up soft door in the center. The main roof cover has 2 large windows with mesh and transparent and opaque cover flaps on both sides. The substructure of the shelter has an integrated elevated flooring system adjustable in height. The outer cover is fully HF welded for complete protection against the elements.

The UN5x7EF shelter can be fitted with an electrical system, including LED lighting and outlet sockets. The UN5x7EF shelter is prepared for installing air-conditioning or heating devises. Optionally can the modular frame be extended in length in sections of 8.75 m² additional floor space.

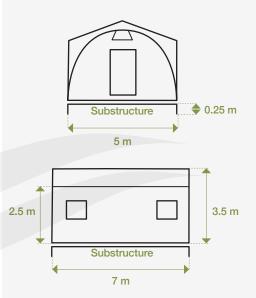
## > Key features

- » Heavy duty structure for long exposure to harsh climates
- » High wind resistance up to 140 km/h
- » Elevated flooring with height adjustment
- » High performance insulation liner
- » Easy assembling without tools

#### > Dimensions

Width x Length	5.00 x 7.00 m
Floor space	35 m²
Eave height	2.50 m (above substructure)
Center height	3.50 m (above substructure)
Substructure	25 cm above ground, adjustable in height ±17 cm
Flooring	240 kg/m² load resistance
Modulatiry	Additional sections 1.75 x 5.00 m / 8.75 m <sup>2</sup>

## > Graphic reference

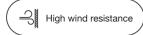


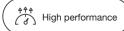


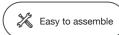


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#### > Add-ons

- » Air conditioning with heat pump
- » Electrical system for light and power supply

## > Structural performance

Wind loads resistance	40 m/s			
Snow loads resistance	75 kg/m²			
Point loads resistance	150 kg			
Floor load resistance	240 kg/m <sup>2</sup>			
Seismic design	Category A			

## > Climatical characteristics

Wind	Wind load up to 140 km/h, capable of handling gust winds up to 160 km/h provided the shelter is properly anchored			
Temperature	+45°C and -20°C during prolonged deployment			
Humidity	Up to 100% during prolonged exposure			
Driving rain	The shelter will keep rainwater out during driving rain and prolonged heavy rain			
Sand & dust	The shelter is designed to keep sand and dust out as long as the tent is kept close			

# > Fire and flammability behavior

Load bearing frame	Class A (EN ISO 13501-2)
Membrane	Class B-s2, d0 (EN ISO 13501-1) / DIN 4102: B1
Ground cover	Class D-s1, d2 (EN ISO 13501-2)

#### > Resistance to water

Artificial rain test Pass (no leakage) (ISO 5912)

#### > Ventilation

Air volume	>40 m³/h/person (Ashrea)
CO2	<1200 ppm average (Ashrea)
Ventilation area	0.4 m <sup>2</sup> gable vents / 2.6 m <sup>2</sup> windows / 4.0 m <sup>2</sup> doors

## > Thermal comfort

Fitted with insulation liner	Laminated PES non-woven fabric
U-value insulation liner	<1.12/W/m².K

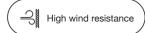
#### > Insect and vector control

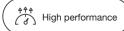
UV stabilized mosquito mesh and curtains on all windows, ventilation grades and door. Parameters of shelter sealed against rodents and crawling insects

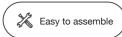


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#### > Terrain

The shelter can be deployed in all kind of stable terrain, including sand, tarmac surfaces and concrete slabs. The substructure with elevated flooring can be adjusted in height over 17 cm to set the shelter horizontal in uneven terrain

## > Deployment

Set-up time	3 hours (optional equipment as electrical systems and air conditioning require additional time)			
Personnel	5 trained personnel			
Required tools	Hammer, spanners (Included in the package)			

## › Dismantling and disposal

The shelters are designed to be re-packed, relocated and re-used. Contact owner or donor before disposing in accordance with local legislation. All materials can be re-used or recycled

## > Packing and shipping

Content	Package name	Length (cm)	Width (cm)	Height (cm)	Volume (m³)	Weight (kgs)
Membrane, floor cover	А	75	75	65	0.37	330
Parts of substructure, superstructure, elevated flooring, tools	В	230	82	57	1.08	512
Parts of substructure, Superstructure, gable structure	С	230	72	45	0.75	422
Floorboards	D	190	81	55	0.85	300
Weight and volume of structure only					2.2	1,264
Air conditioning	E	115	50	115	0.66	115
Insulation liner	F	115	78	45	0.40	125
Electrical system & fire detection system	G	120	40	17	0.08	22
Total weight and volume of structure	and accessories		Total weight and volume of structure and accessories			

# > Estimated loadability<sup>1</sup>

Tentative data including accessories		Shelter only
20'GP	6	9
40'DC	12	18
40'HC	13	18



<sup>&</sup>lt;sup>1</sup> The loadability provided is based on the maximum volume and weight capacity of the containers. This might change due to road weight restrictions in the country of destination. Please contact our sales team for further clarifications.