Features

The basic Igloo Satellite Cabin (3m diameter and 2.1m high) is a pre-fabricated, insulated, fibreglass cabin made from 8 wall panels and 4 self-supporting floor panels. The whole Igloo is bolted together and secured to the ground by 8 wire tie-down lines attached to tent pegs or similar depending on the terrain.

Each wall and floor panel is a composite of fibreglass and polyurethane insulation with an R rating of .904m2K/W. Windows are double-glazed polycarbonate panes, which are shockproof. Floor panels have a non-skid surface, and are bolted to wall panels and to each other. Each cabin has two ventilators, one in each door and top cover.



Igloos can be lengthened to six or more metres by adding sets of extension panels, or interlinked by tunnels to provide a complete weatherproof base. All Igloos are customized to suit specific requirements and are available in a range of colours and configurations. Basic assembly tools, bolts, sealant tie-down lines, assembly instructions and brochures are supplied with each order.

Specifications

Maximum Diameter	3100 mm
Floor Diameter	2850 mm
Internal Height	2150 mm
Main panel sizes	2400mm high x 1200 wide
Each extension panel	765mm wide
Crate for basic Igloo	3 metres long x 1.6 metres high x 1.6 metres wide
	approx.
Door	1250mm high x 620mm wide with twin lever bronze
	handles
Window	570mm diameter double-glazed polycarbonate
Top escape hatch	600mm diameter
Extended Igloo escape hatch	800mm high x 550mm wide
Ventilation	100mm diameter mushroom type air vents
Insulation	20mm thick PET sheet between inner and outer
	fibreglass laminates. Seals are silicone or rubber strip.
Maximum safe flight speed	70 knots - assembled, suspended beneath helicopter.
	Aluminium lugs are certified with a SWL of 150 kg per
	lug, for supporting 4 strops needed for lifting and flying
	a 245kg Igloo.

Dimensions

Igloo Panel Weights (approx.)

A basic 3 metre diameter Igloo consists of the following:

Half Moon Floor Panel (2)	15.5 kg each
Central Floor Panel (2)	23.2 kg each
Door Panel with Door (1)	22.5 kg
Window Panel (4)	18.7 kg each
Plain Panel (3)	19.5 kg each
Round top-knot (1)	11.0 kg

The number of windows, doors or plain panels can be altered.

An entrance tunnel weighing 114kgs can be added to basic or extended Igloos. Two Igloos can be interlinked when two entrance tunnels are conjoined.

Extended Igloos consist of increasing numbers of the following panels:

Plain extension panel	19.5 kg
Extension escape hatch	23.5 kg
Extension floor panel	26.8 kg
Half top-knots (2)	7.0 kg

A basic Igloo with one set of extensions contains one plain extension panel, one extension with an escape hatch and one extension floor panel. The round top-knot with air vent is replaced by two half top-knots with air vents. Sets of extensions always contain one panel with an escape hatch.

Igloo Total Weights and Volumes (approx.)

Igloo Satellite Cabin	245 kg	11.66 m3
With 1 set of Extension Panels	311 kg	15.78 m3
With 2 sets of Extension Panels	377 kg	19.90 m3
With 3 sets of Extension Panels	443 kg	24.02 m3
With 4 sets of Extension Panels	509 kg	28.14 m3

Each set of extension panels adds 4.12 m3.

Environmental Friendliness of Igloos

Igloos have a life expectancy of over 20 years in polar areas. Igloos will have extremely low Volatile Organic Compounds (VOC) emissions during service. End of life strategies may include safe/inert disposal or recycling of material components.

Component	Comment	Environmental Rating (1-5)
Resins	Purchased from suppliers with responsible Environmental Policies and ISO certification. Gelcoats are lead free.	3
Glass Fibre	Purchased from suppliers with responsible Environmental Policies and ISO certification.	3
PET Foam Core	Recycled PET material.	4
Packaging	Cardboard recycled. Shipping crate recyclable. Lightweight and modular design for efficient transport.	4
Manufacturing Process	Industry best-practice process and environmental steps used.	3

Packaging and Transport

Igloo panels can be packed close together on their sides in a crate measuring approx. 3m long x 1.6m high x 1.6m wide. Floor panels, top escape hatch and smaller furniture also fit within this space.

One or two sets of extension panels can fit in the same crate if its width is increased.

Stacking panels on top of each other, either side up, is not recommended as panels may be damaged from the weight of the others on top of them.

If there are several sets of extension panels, these are packed separately in crates measuring 3m long, up to 2m wide by 1m high.

Crates are made of wood, melamine or fibreglass, the last used as storage containers if required. If made less than 2m wide, these can be air freighted. Individual panels can also be loaded aboard a Twin Otter.

Depending on the size of Igloos ordered, several can be fitted into a 6m or 12m container. Curved panels are nestled together, as are extension panels and floors. A wooden framework can be fitted into a container to make a second layer to stack extension panels, floors and some furniture items. Panels are nestled together with minimal packaging, often with bubblewrap on pressure points only. Some panels are screwed to the base of the crate to reduce shifting and rubbing during sea voyages. Smaller furniture items are fully wrapped in bubblewrap.

Methods of transport

Basic Igloos weighing approx. 250kg are flown fully assembled, suspended by 4 lifting strops connected to a helicopter, at speeds up to 70 knots. Crated Igloos are also flown by helicopter. Basic Igloos fully equipped can be fitted into a cage on strops attached to a helicopter, to ensure total weight carried is secure.

Assembled Igloos fit on the back or a truck with flags either side due to the width being slightly over 3m.

Igloo panels can be nestled on a pallet on a trailer or truck.

Panels can be stacked on deck and Igloos assembled on deck can be flown off by helicopter or offloaded onto a smaller boat like a RHIB for taking ashore.