

External walls

External walls are of a durable one-piece construction with high-performance, low-maintenance plastisol-coated galvanised steel cladding to offer protection against fire, extreme weather and accidental damage. Internally, the walls are of vinyl-faced plasterboard, providing a wipe-clean finish.

Floor

The floor has a rigid galvanised steel frame and underfloor thermal insulation of foil-faced rigid polymer slabs, which offers a sturdy and robust feel and also prevents infestation. The suspended floor is completely integrated into the structure of the building. A variety of floor coverings are available, depending on the purpose of the building, including hard-wearing vinyl, carpeting or chequerplate.

Roof

Outstanding insulation is provided by the construction of the roof. The roof deck is of one-piece construction and is impact resistant. It is covered with profiled plastisol-coated galvanised steel to reduce heat gain. Internally, the polyester-coated galvanised steel ceiling is designed to prevent condensation problems and has a low-maintenance finish.

Doors and windows

Steel-faced doors have an insulating core that minimises heat loss. The anodised aluminium frame also incorporates draughtproof weather seals. The windows have PVC-U frames and are double glazed with low energy glass for optimum thermal performance. Draught and condensation problems are minimised by effective weather seals and the low thermal conductivity of the window frame and glazing materials. Windows in critical locations are glazed with toughened safety glass as standard with a variety of other glazing available as an option. Titan Building System offers protection against theft and vandalism, with a wide range of security options.

Building layout

Titan Building System uses two modules, available in a range of sizes, to create large open plan spaces. Individual buildings can be linked form larger complexes.

Foundations

Titan Building System can be sited on simple pad foundations or level hard-standing capable of taking the total weight of the structure and the imposed loads. Portakabin staff will provide advice on the foundation loads and positions for single storey buildings.

Structural integrity

Peace of mind is guaranteed by the high levels of all-round performance achieved by the Titan Building System. The Titan Building System has been designed and manufactured in the UK under a Quality Management System meeting the requirements of ISO 9001. In addition, Portakabin also offers a 5-year product and a 30-year structural warranty on all new buildings.

Design loads

Floor: 3.00kN/m²

Roof: 0.75kN/m²

Basic wind speed

(To meet requirements of BS 6399: Part 2)

Thermal insulation

Walls, doors and roof are insulated with environmentally friendly CFC-free Envirofoam, a rigid polymer insulation material that is lightweight and yet enhances long-life structural strength and ensures an energy-efficient building.



Insulation values

Buildings comply with The Building Regulations (England and Wales) and The Building Standards (Scotland) Regulations by the carbon emissions calculation method.

Elemental U-values (W/m²K)

Floor: 0.25 Walls: 0.34 Roof: 0.25

Fire performance

Fire-engineered construction ensures safe fire performance. Non-combustible materials are used for all external cladding and internal lining of walls and ceilings, minimising the potential fire load. Walls and ceilings have Class O surfaces, roof decks have an FAA rating. The walls (from inside) have a one hour fire resistance and the underfloor insulation slabs have a Class 1 surface spread of flame rating.

Climate control

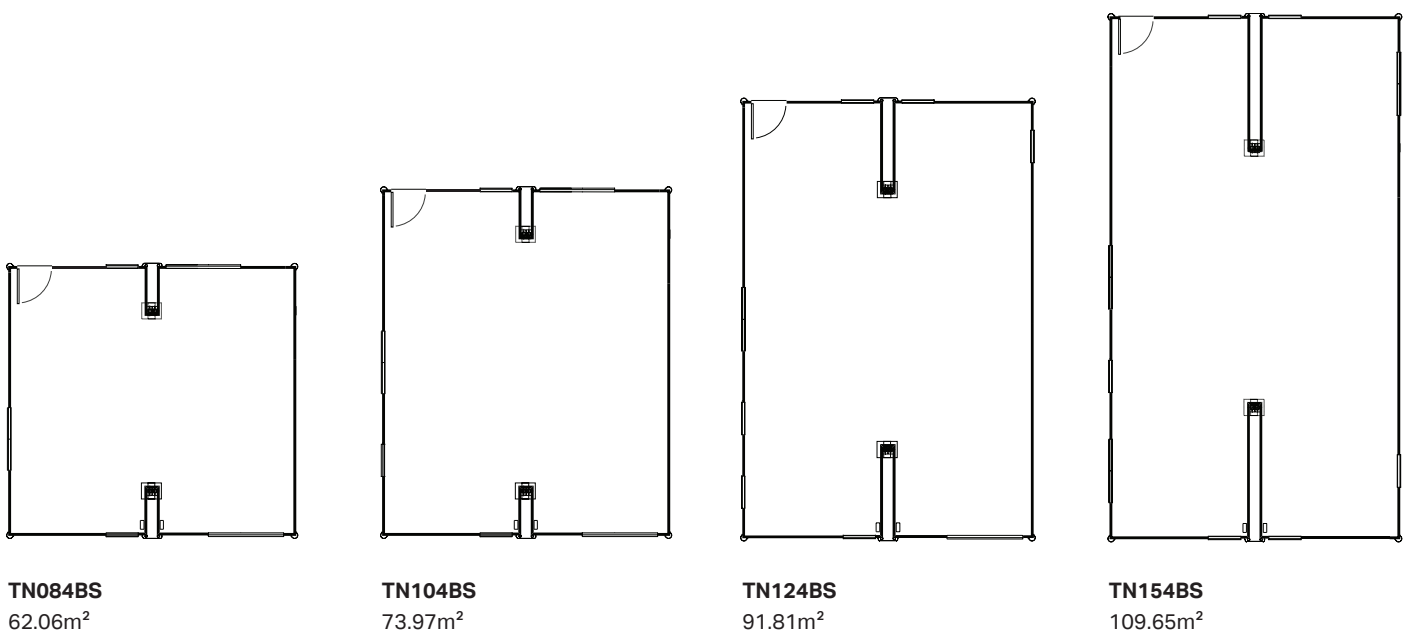
A variety of heating, ventilation and air-conditioning systems can be provided to meet comfort requirements.

Transport and handling

The Titan Building System is transported by lorry. Crane handling is facilitated by integral lifting points. Portakabin staff will provide full advice on the procedure.

Porta, Portakabin and Titan Building System are registered trademarks. © Portakabin 2018. Portakabin Limited, Yorkon House, New Lane, Huntington, York, YO32 9PT.

Registered company number 685303. 206/06/18.



Titan building system module specification	TN084BS	TN104BS	TN124BS	TN154BS
External length (m)	8.420	10.014	12.414	14.814
External width (m)	8.359	8.359	8.359	8.359
External height (m)	2.918	2.918	2.918	2.918
Building support centres - length (m)	7.200	7.200	7.200	7.200
Building support centres - width (m)	4.027	4.027	4.027	4.027
Internal length (m)	7.926	9.526	11.926	14.326
Internal width (m)	7.888	7.888	7.888	7.888
Ceiling height (m)	2.500	2.500	2.500	2.500
Foundation to floor level (m)	0.240	0.240	0.240	0.240
Floor area (m ²)	62.060	73.970	91.810	109.650
Empty building weight (kg) (per module)	3.690	4.370	5.320	6.256
Lifting dimensions - Minimum sling leg length (m) (per module) 90°	6.000	6.000	6.000	6.000
Lifting dimensions - Minimum hook height (m) (per module) 90°	7.300	7.300	7.300	7.300
Minimum sling length (max. of 60° between opposite sling legs)	8.5	8.5	8.5	10.5
Minimum hook height from foundation level	10.5	10.5	10.5	12.5

Note: all dimensions shown in mm.