

INDUSTRIAL MODULAR ACCESS STAIR TOWER

KI



INDUSTRIAL MODULAR ACCESS STAIR TOWER

A completely modular, lightweight stair access system, reducing structural load requirements and lead times with a safer, easier installation.



High-strength construction

Manufactured with structural grade aluminum components and stainless steel profiled brackets for a high-strength system.



Adjustable components

Components can be adjusted using the t-bolt connection system to suit specific site requirements.



T-bolt

M10 T-bolt fastener providing rapid installation to minimize any drilling required of all brackets and supports.



Fully compliant

Manufactured and designed in compliance with OSHA standards.



Self supportable

Additional bracing and spreader trusses allow the system to be free standing up to 6ft (conditions apply.)



Bracing excluded for visual clarity

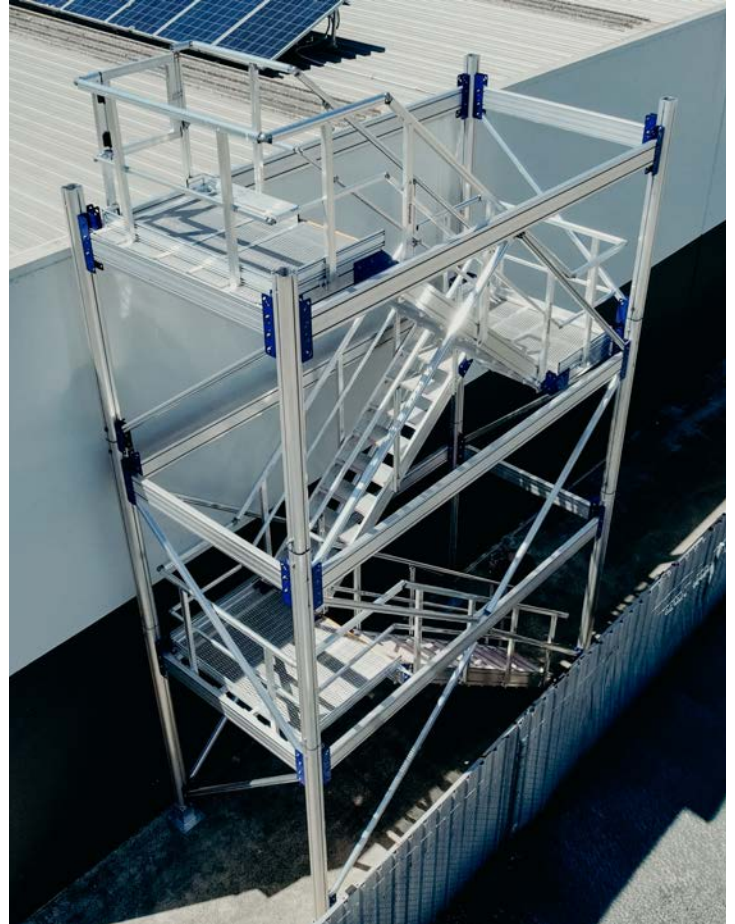
The industrial modular access stair tower is a proprietary designed roof access system that is fully versatile to suit a wide range of building types, with rapid design and installation times providing significant cost saving and long term durability advantages.

The industrial access stair tower provides safe access ideally suited to commercial and industrial structures where safe and efficient access to roofs and mezzanines for maintenance is required.

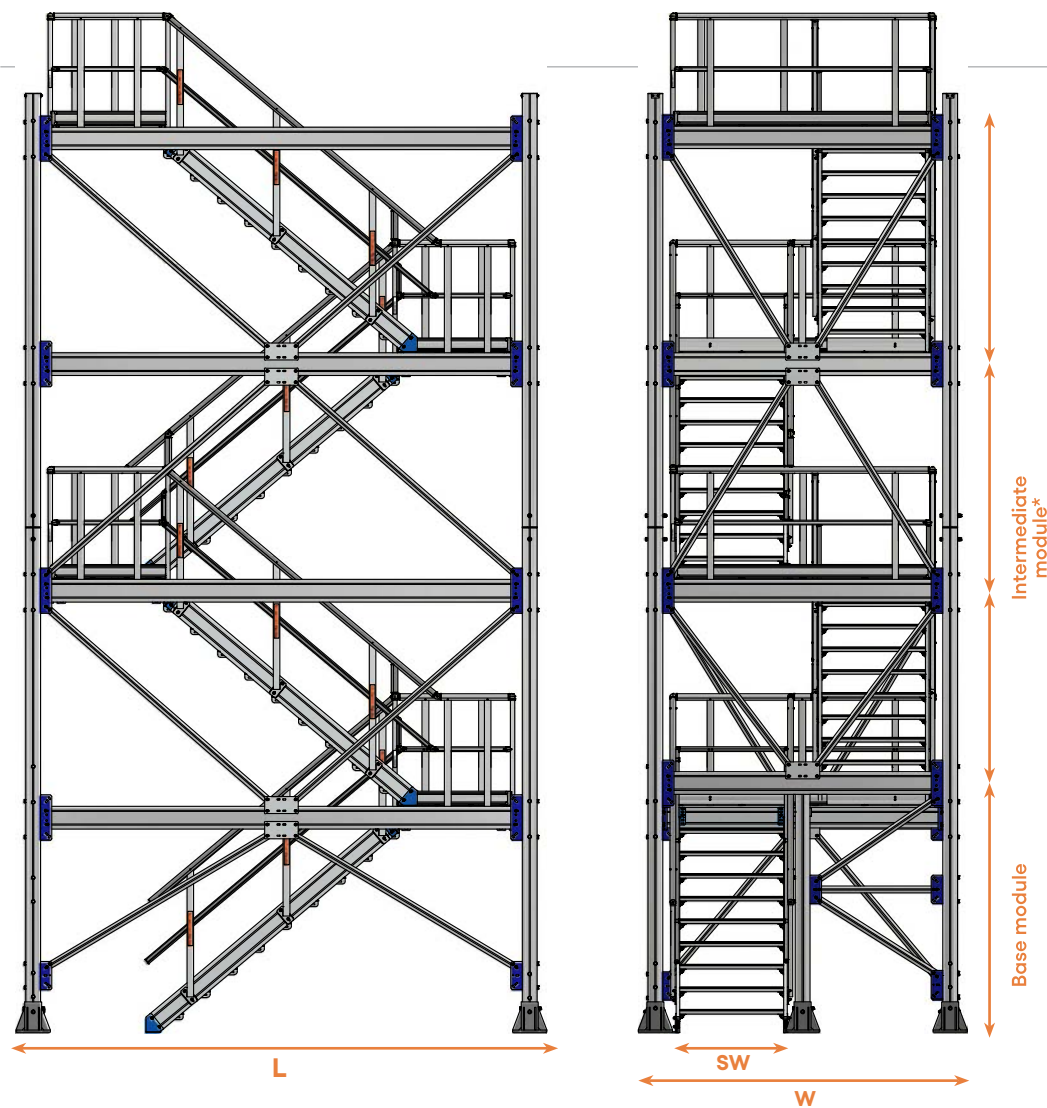
The access system has multiple configurations which can incorporate different sizes and levels depending on the structure height and application.

Features and benefits of the system:

- Light weight, reduced loads on base and support structure.
- Rapid installation and minimized installation safety risk with a completely modular construction.
- Proprietary system with engineered, off the shelf components allows rapid turn around times.
- Pre-assembled for flat pack delivery or fully assembled modules for timely installations.
- Rapid design and costing using the Kattsafe Builda™
- Aluminum construction, non-corrosive high-strength structural grade components.



SYSTEM DIMENSIONS



	KI.600	KI.1000	KI.1200
Load rating (psf)	52.2psf (2.5 kPa)	52.2psf (2.5 kPa)	52.2psf (2.5 kPa)
SW: Stair width (ft)	2ft (600mm)	3.2ft (1000mm)	4ft (1200mm)
W: Structure width (ft)	6.8ft (2100mm)	9.5ft (2900mm)	10.5ft (3200mm)
L: Structure length (ft)	15.5ft (4700mm)	15.5ft (4700mm)	15.5ft (4700mm)
Base module height (ft)	7.8ft (2400mm)	7.8ft (2400mm)	7.8ft (2400mm)
Intermediate module height (ft)	6.5ft - 8ft (2000mm - 2500mm)	6.5ft - 8ft (2000mm - 2500mm)	6.5ft - 8ft (2000mm - 2500mm)
Weight per module (lbs)	550lbs (250kg)	680lbs (310kg)	815lbs (370kg)

Note: Dimensions and weights are a guide only and depends on site conditions.

*Can be varied based on required height

STAIR TOWER SYSTEM COMPONENTS

KB801 High span beam

7.8in x 2.4in (200mm x 60mm)

Aluminum construction, designed as the primary horizontal structural stair support.



KB804 Primary support column

5in x 5in (130mm x 130mm)

Aluminum construction, designed as the primary vertical structural stair support.



KB806 Bracing extrusion

2.4in x 2.4in (60mm x 60mm)

Aluminum construction, designed to provide lateral bracing to stair system.



KB810 Column splice join

Powder coated steel Duragal with stainless steel flange designed to join vertical support columns.



KB815 Column support foot

Galvanized steel construction. High strength stair column anchor.

Dissimilar metal barrier applied to internal sleeve.



KB820 Primary structure connection bracket

Stainless steel powder coated profiled construction designed to connect the primary elements of the stair structure together.



Stair module

Structural grade aluminum stair system designed to simple connect to stair landings.

(Maximum 17 treads at 38°)



TECHNICAL STATEMENT

Material

Criteria	Data	Notes
Primary structure and stair system	6005A – T5 Structural Aluminum	
Attachment support brackets	304 profiled stainless steel powder coated	
Base column support foot	Mild steel, galvanized	Dissimilar metal barrier coating applied to internal sleeve.

Weight

Criteria	Data	Notes
KB804 Primary support column	80lbs/13ft (36kg/4.0m)	6005A – T5 Structural Aluminum
KB801 High span beam	100lbs/19.5ft (45kg/6.0m)	6005A – T5 Structural Aluminum
KB806 Brace extrusion	20lbs/13ft (9kg/4.0m)	6005A – T5 Structural Aluminum
KB815 Column support foot	22lbs (10.0kg)	Galvanized steel construction with dissimilar metal barrier applied to internal sleeve.
KB150 Top rail extrusion	17.5lbs/19.5ft (8kg/6.0m)	6005A – T5 Structural Aluminum
KB151 Mid rail extrusion	13lbs/19.5ft (6kg/6.0m)	6005A – T5 Structural Aluminum

Dimensions

Criteria	Data	Notes
Maximum free standing height	26ft (8.0m)	Higher wind regions will require intermediate supports at this height
Stair angle	35° - 45° (38° default)	Custom angles can be designed where required but will change footprint and structural performance.
Stair widths available	2ft (600mm) 3ft (1000mm) 4ft (1200mm)	Custom widths can be manufactured to suite specific applications but will change footprint and structural performance.
Maximum slope stair tower can be attached to	5 degrees	Shim packers will need to be added inside base plate to ensure stair structure is 100% level

Fixings

Criteria	Data	Notes
KB815 Column support foot connection into concrete	4 fasteners per base plate: – M16 SS Thread and chemical epoxy	Dependent on site conditions, this may change. Concrete to be minimum 8in (200mm) thick at 5,000psi (32mPa).
Connection to KB816 column support foot	QTY (2) 1/2" x 7" SS	
KB810 Column splice join	QTY (2) 1/2" x 6" SS	
KB801 Beam connection to KB820 support bracket	– QTY 10 x T-bolts – QTY (2) 1/2" x 6" SS – QTY (4) 3/8" x 4" SS	

DESIGN SPECIFICATION

Kattsafe Industrial modular access stair tower

The industrial stair tower is a proprietary designed roof access structure that is fully versatile to suit a wide range of building designs with rapid design and installation for areas requiring unrestricted safe maintenance and personnel access. System design, supply installation and certification must be completed by Kattsafe approved installers as per manufacturer's instructions and relevant codes and standards.

Application

Used for general access to elevated areas for maintenance and personnel where higher frequency of access is required and transportation of maintenance equipment and parts is necessary. The system is suited to multi users at any one time.

Design requirements

The Kattsafe stair tower is a proprietary designed system and is designed using the Kattsafe Builda configurator using a series of predetermined loads, spans and deflections.

All final designs must be signed off by a structural engineer competent in the use of structural grade aluminum based on the location, elevation and connection details to the main building structure.

The stair tower system must only use components designed and approved by Kattsafe to ensure structural conformance. This structure has a design life of 50 years under normal usage conditions.

Soil design and footings are not part of our design.

Installation requirements

The Kattsafe stair tower must be installed by a Kattsafe approved installer and must comply with all requirements as set out in the design and installation manual for the system.

The install company to provide a minimum warranty of the system and installation of 5 years.

User requirements

The Kattsafe stair tower does not require the use of fall protection harness gear making the system a simple, safe and efficient access solution.

Any personnel accessing roofs or other elevated areas must obtain the required permissions from the site coordinator prior to working at heights.

Maintenance requirements

Inspection of the system is recommended every 3 years by a competent person in accordance with manufacturers specifications and the required codes and Australian Standards.

Where the system has been installed in corrosive or constant maximum load applications, inspections should be conducted more regularly as determined suitable.

Maintenance must be carried out by a competent technician and documented in a location that is accessible by the site coordinator.

Compliance

The Kattsafe stair tower has been designed in accordance with OSHA standards.

Product warranty

5 years from date of purchase subject to correct installation. Use and maintenance to be in accordance with manufacturer's specifications and recommendations. (This excludes wearing parts).

WARRANTY INFORMATION

Warranty period on this system:
5 years from date of purchase

Should you have a warranty claim as a result of a defect the following procedure must be followed:

Identify the following information:

- The product/system name and code number.
- The date of purchase/installation.
- Installation company details.
- The installation identification number.
- The name of the company using this system.
- A description of the defect/warranty claim.
- The periodic system maintenance report.

Forward the above information to sales@kattsafe.com or call at 888-637-7872.

Terms and conditions

All warranty claims must be made in writing within 14 days of the appearance of the defect.

Incorrect installation or work done by a non accredited Kattsafe system installer will void all warranty rights.

Systems that have been installed using non proprietary equipment will void all warranties.

System roof/cladding and concrete penetration seals are not covered in this warranty.

Systems/components that have not been maintained in accordance with manufacturer's/ legislative requirements will void warranty.

Systems used by incompetent persons or use with non compatible accessories ie. harness gear, lanyards, travelers, fall arrestors etc. will void warranty.

Systems/components used for purposes other than their intended use will void warranty.

General wear and tear is expected and will depend on the frequency of use and is not covered by warranty.



Product brochure
Modular access systems

Find all related products and resources on our
website. kattsafe.com

Kattsafe®

Height access
and fall protection

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