

Cost effective high level support



Large grid sizes, minimal components



Complex shapes easily accommodated

TITAN Support System

- The world's leading falsework system
- Fast and versatile
- Lightweight, yet exceptionally strong
- Supported by SmartTITAN design



The TITAN Support System is recognised as the leading product in its field by many professionals in the construction and civil engineering industries.

Key features and benefits

- Lightweight components can be easily handled by one person
- TITAN can be loaded up to 127kN per leg
- 2.58m of jack adjustment with jacks top and bottom
- Two components for fast, efficient erection and dismantling
- No loose fittings
- Rigid connection between TITAN legs and frames self-aligns the system
- Continuous vertical slots on the TITAN legs allow ledger frames to be positioned at convenient working heights
- One system suitable for erect and dismantle falsework and large, rigid flying tables for versatility and economy
- Modular components easily adapt to height and width variations
- Accessories include rocking headplates, guard post brackets, access platforms, cantilever frames and a full range of safety components.

Comprising two main components: legs and frames, together with a comprehensive range of accessories, the TITAN Support System offers one of the quickest, most effective and versatile means of providing rapid support and access solutions in a wide variety of situations.

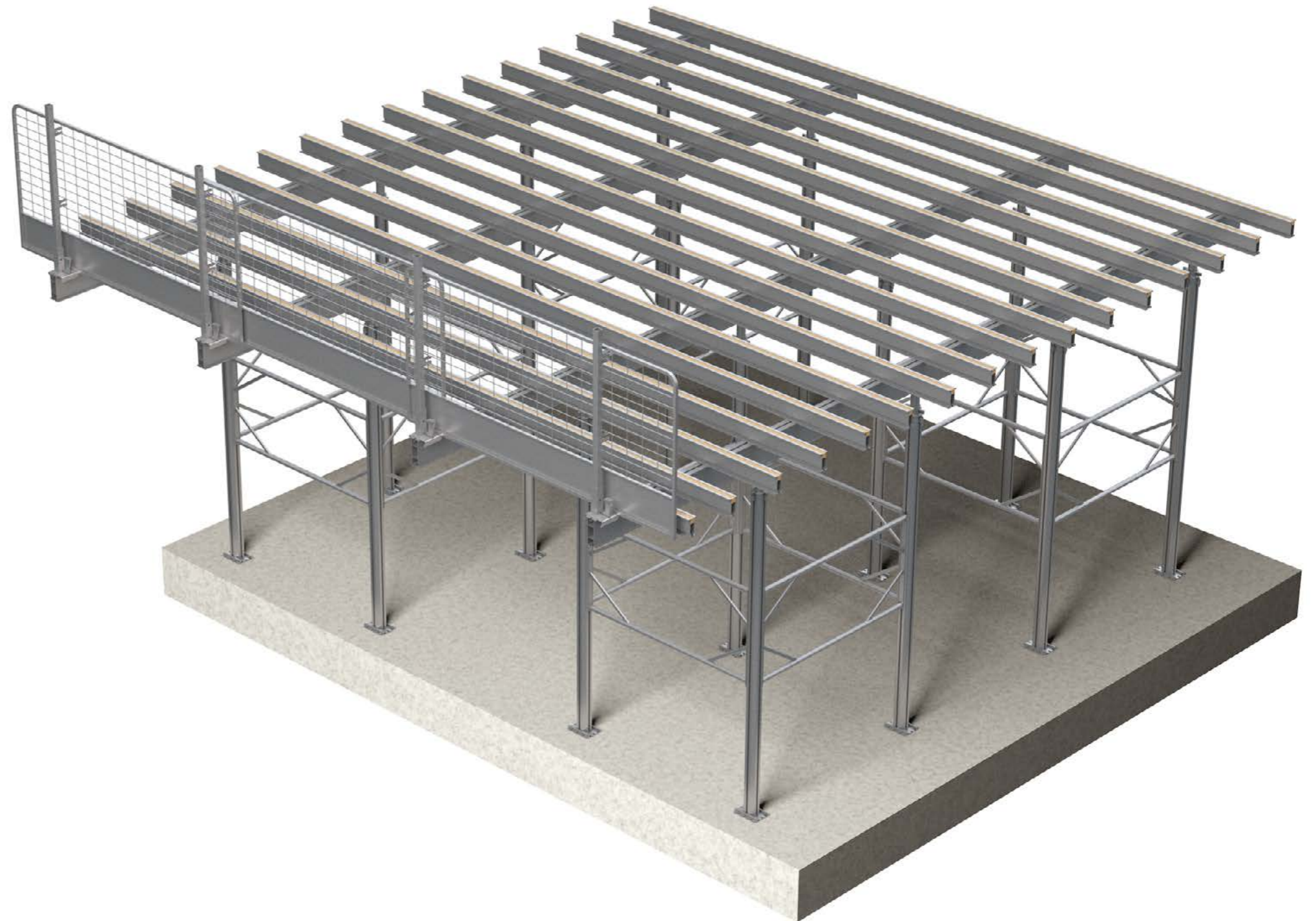
Description

The system can be used in both 'flying table' and erect and dismantle applications and is ideal for multi-storey structures, water reservoirs and soffit situations where mobility and ease of handling are required.

With the majority of components being manufactured from high grade aluminium to patented designs, the TITAN support system possesses an

exceptionally high strength to weight ratio which facilitates rapid erection, whilst its excellent corrosion resistance and robust build quality assure long term durability.

The TITAN support system is designed to reduce labour costs, increase site efficiency, improve safety and meet the demands of today's construction and civil engineering techniques.



Main components

TITAN Legs

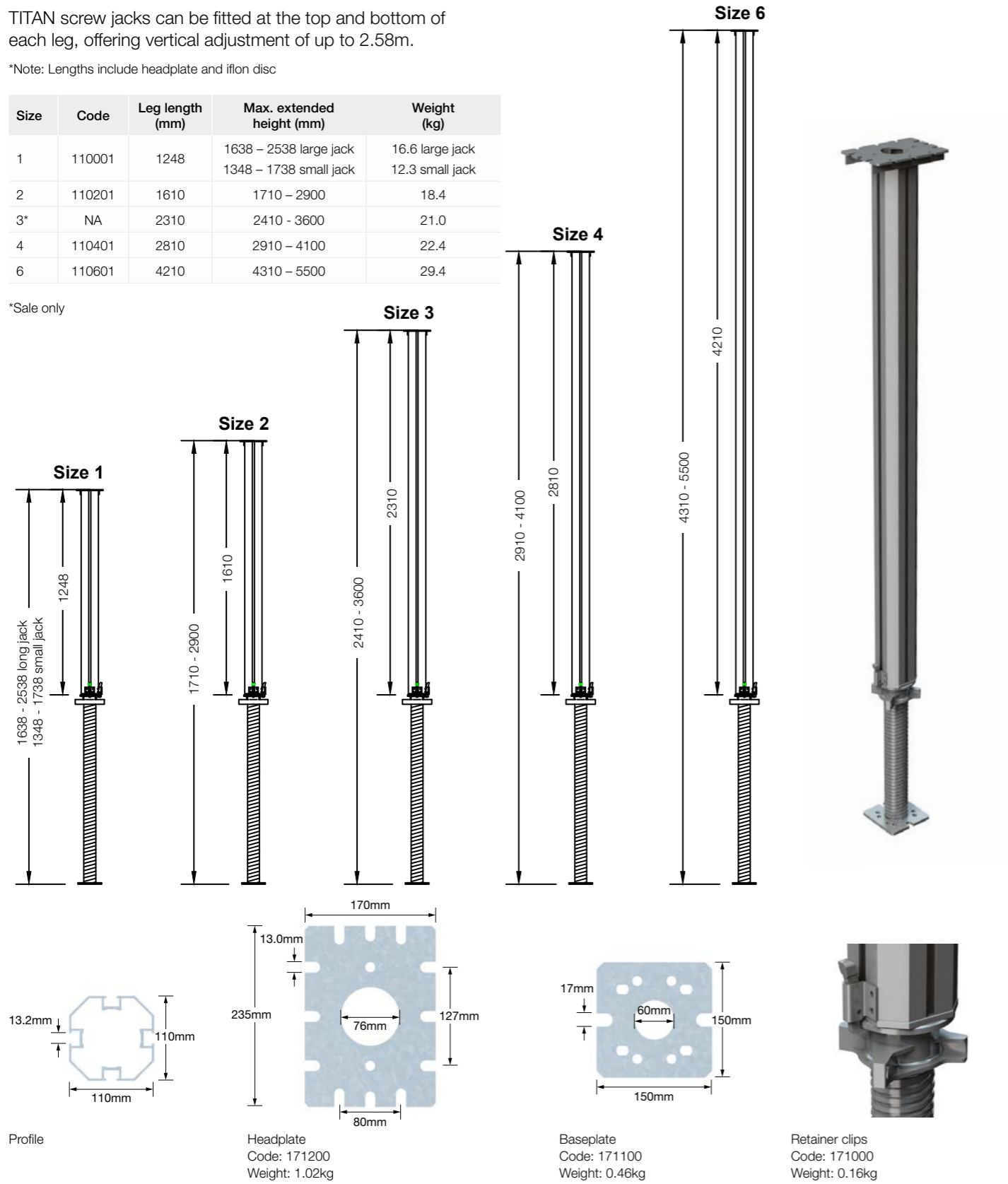
Available in five sizes, each with continuous vertical slots to allow ledger frames to be fitted quickly and securely at the optimum height.

TITAN screw jacks can be fitted at the top and bottom of each leg, offering vertical adjustment of up to 2.58m.

*Note: Lengths include headplate and iflon disc

Size	Code	Leg length (mm)	Max. extended height (mm)	Weight (kg)
1	110001	1248	1638 – 2538 large jack 1348 – 1738 small jack	16.6 large jack 12.3 small jack
2	110201	1610	1710 – 2900	18.4
3*	NA	2310	2410 - 3600	21.0
4	110401	2810	2910 – 4100	22.4
6	110601	4210	4310 – 5500	29.4

*Sale only



The TITAN Leg can be erected with the jack at the bottom or top.

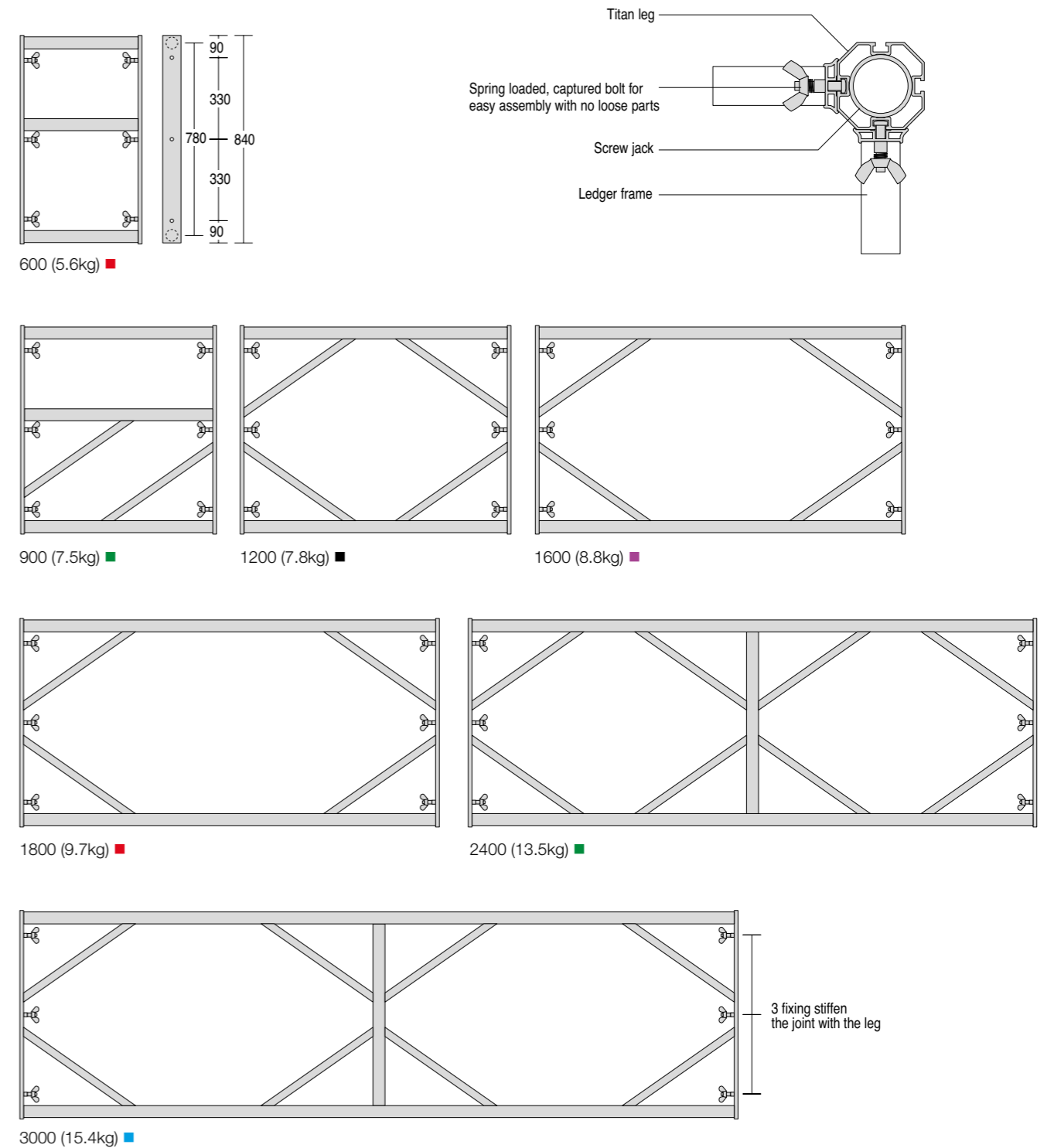
Ledger Frames

A range of seven ledger frames is available.

All frames are shown colour coded on Ischebeck TITAN design drawings.

Note: Frame dimensions shown are in mm and centre-to-centre of TITAN legs.

Size (m)	Code	Weight (kg)
0.6	120600	5.6
0.9	120900	7.5
1.2	121200	7.8
1.6	121600	8.8
1.8	121800	9.7
2.4	122400	13.5
3.0	123000	15.4

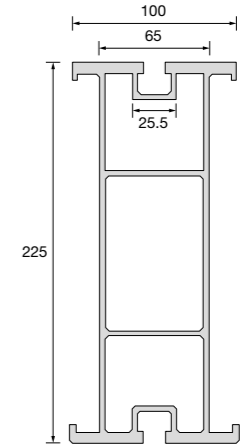
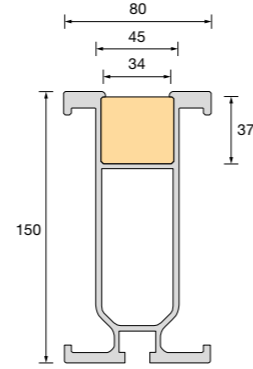
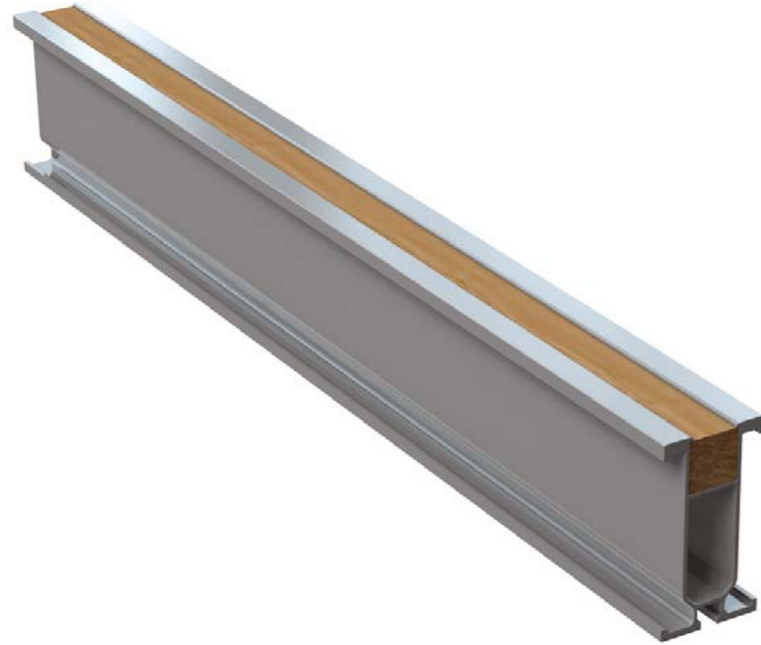


Main components (continued)

TITAN Beams

Manufactured from extruded aluminium section, TITAN beams offer a lightweight, easy to handle solution for decking/soffit applications.

All secondary beams are shown colour coded on Ischebeck TITAN design drawings. The universal slot is the same for beams and legs.



TITAN 150 Beam		
Length (m)	Weight (kg)	Code
1.2	6.77	211200
1.8	10.13	211800
2.4	13.51	212400
2.7	15.20	212700
3.0	16.88	213000
3.6	20.27	213600
4.2	23.65	214200
4.8	27.02	214800
5.4	30.40	215400
6.0	33.78	216000
6.4	36.03	216400
7.2	40.54	217200

TITAN 150 Beam			
Technical Data			
	Area	cm ²	18.6
l _{xx}	Moment of inertia	cm ⁴	596.9
Z _{xx}	Section modulus	cm ³	77.31
E	Modulus of elasticity	N/mm ²	68900
E.I.	Bending stiffness	kNm ²	411
M	Resistance moment	kNm	11.9
S	Allowable shear force	kN	30
	Max. centre bearing (on 80mm bearing)	kN	34*
	Max. end bearing (on 40mm bearing)	kN	22

* Minimum cantilever for a centre reaction = 600mm

TITAN 225 Beam		
Length (m)	Weight (kg)	Code
1.2	10.64	221200
1.8	15.97	221800
2.4	21.29	222400
2.7	23.95	222700
3.0	26.61	223000
3.6	31.93	223600
4.2	37.25	224200
4.8	42.58	224800
5.4	47.90	225400
6.0	53.22	226000
6.4	56.77	226400
7.2	63.89	227200

TITAN 225 Beam			
Technical Data			
	Area	cm ²	32.63
l _{xx}	Moment of inertia	cm ⁴	2241
Z _{xx}	Section modulus	cm ³	199.2
E	Modulus of elasticity	N/mm ²	68900
E.I.	Bending stiffness	kNm ²	1544
M	Resistance moment	kNm	28.5
S	Allowable shear force	kN	71.3
	Max. centre bearing (on 80mm bearing)	kN	100*
	Max. end bearing (on 40mm bearing)	kN	40

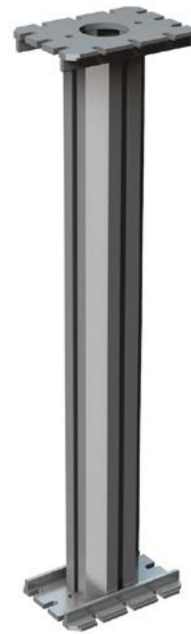
* Minimum cantilever for a centre reaction = 600mm

Longer lengths can be achieved, see page 9 for splice plates.

Ancillary components

The modular TITAN system has been designed to combine maximum flexibility in use with a minimum number of components.

The range of TITAN accessories enhances the versatility of the TITAN support system without adding significantly to the number of components or equipment required.



TITAN extension piece
Extension pieces are available to make up non-standard heights

Size (m)	Code	Weight (kg)
0.25	130200	3.25
0.5	130500	4.3
1.0	131000	5.7
5.0	-	24.0

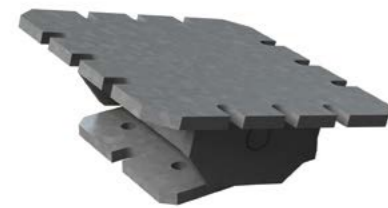


TITAN spanner
Simplifies jack adjustment and stripping
Code: 132200
Weight: 4.4kg



TITAN Cantilever bracket
(with Universal Jack, supplied separately)
Provides external access and support.

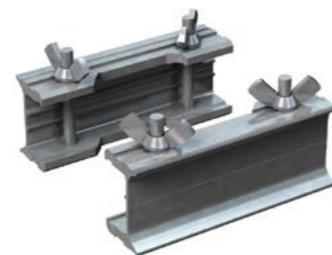
Unit	Code	Weight (kg)
TITAN Cantilever bracket	133300	17.20
Universal Jack	133400	2.96



TITAN rocking head plate
For sloping soffits, ramps and other inclined surfaces.
Code: 133800
Weight: 2.8kg



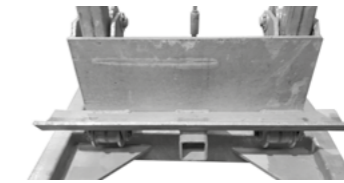
TITAN leg adaptor plate
For connecting to jack base plate.
Code: 133200
Weight: 1.43kg



TITAN leg connecting bracket
Provides rapid connection between headplates.
Code: 137000
Weight: 0.8kg



TITAN Trolley
For moving TITAN system when assembled as a tableform.
Code: 132100
Weight: 124kg
SWL: 10kN



Lifting Carriage



Gear and Handle



TITAN hinge unit
For hinging of legs to clear narrow vertical openings.
Code: 134500
Weight: 9.5kg



Splice plate
Used in pairs, for joining of TITAN 225 beams to achieve a longer length.
Code: 136900
Weight: 7.9kg



Simple Castor Wheel
Attaches to bottom of TITAN Leg to assist with movement of TITAN tables



Friction clamp
For shear-resistant connections between two or three TITAN 225 beams.



Bridging beam
Lightweight alternative to a steel beam.



TITAN clamp
For beam to beam fixing and headplate to beam fixing.
Code: 132600
Weight: 0.25kg

TITAN safety components and accessories

Designed to integrate with the TITAN support system, TITAN safety components provide the ideal means of assuring safety of site operatives and complying with health and safety at work requirements.



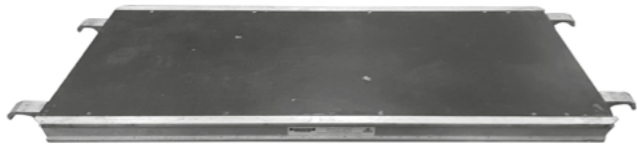
'C' Hook
for removal of small edge tables up to 1.0 tonne assembled from standard TITAN components

Safety components during erection and dismantling



Handrail Frames
for protection around perimeter of work area

Size (m)	Code	Weight (kg)
1.2	138212	15
1.8	138218	18



TITAN Platform

Size (m)	Code	Weight (kg)
1.2	139212	8.35
1.8	139218	11.48
2.4	139224	15.09



Guardpost Bracket
for fixing of guardposts and handrails at soffit level
Code: 502201
Weight: 2.5kg

Accessories



Half Coupler
for connecting scaffold tube to leg outer
Code: 132400
Weight: 0.56kg



48 x 76 Jack Swivel Coupler
for connecting scaffold tube to adjustable jack
Code: 138700
Weight: 1.75kg

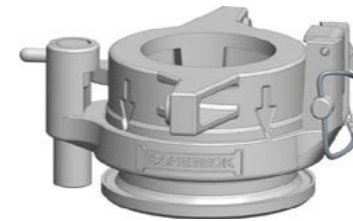
TITAN Strike

TITAN Strike makes easy work of striking and stripping TITAN legs, especially at high load levels and in noise sensitive areas. Quicker and less impactful on equipment and your team, TITAN Strike makes an efficient and economical addition to the TITAN Support system.



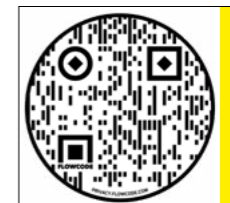
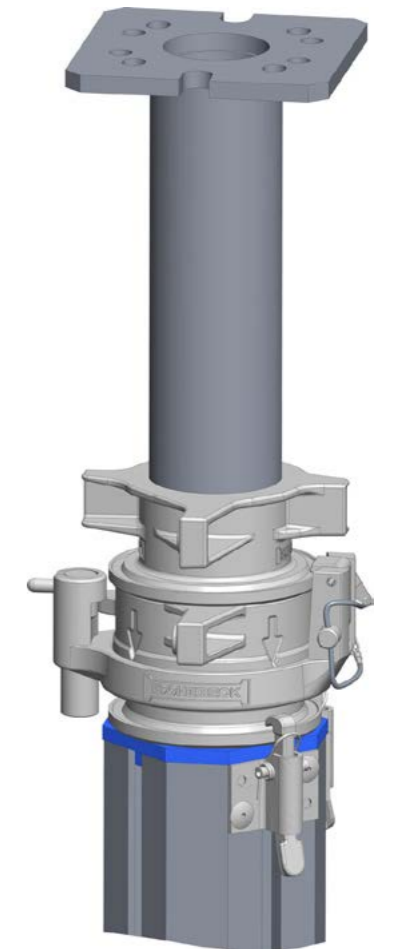
Key features and benefits

- 11mm of strike achieved
- For use at high leg loads/thick slabs
- Significantly reduces damage to TITAN Collars
- Ease of use in confined spaces
- Reduces noise and vibration – great for noise sensitive areas
- Requires less effort to strike
- Releases with just a few strikes
- For use with genuine TITAN equipment



TITAN Strike Unit

Code	Weight (kg)
110901	3.53



Watch TITAN Strike
in action

SmartTITAN – Design for TITAN Support

The SmartTITAN design program gives Ischebeck TITAN the ability to generate multiple configurations of genuine TITAN Support equipment, on all TITAN designs, achieving maximum economy and maximum safety.



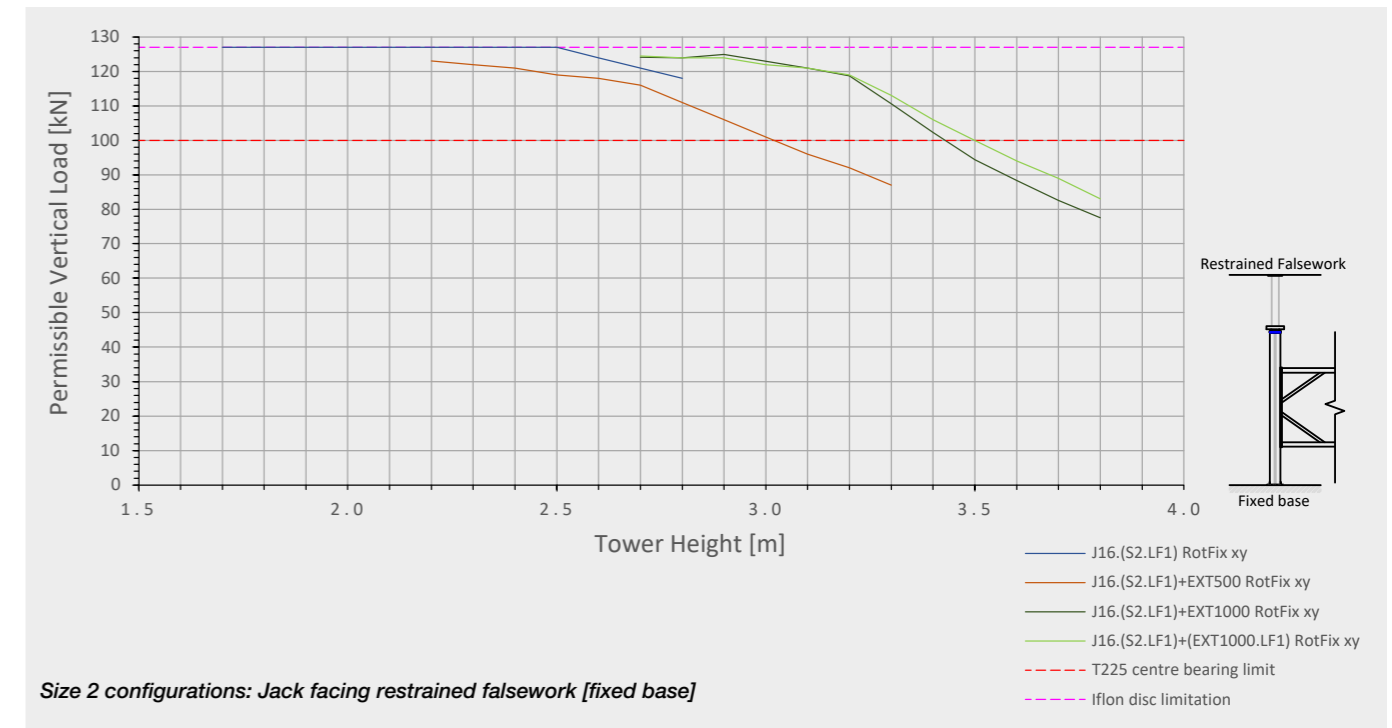
Key features and benefits

- Gives greater jack extensions at higher loads
- Ledger frames can be moved to optimum load positions
- The design of freestanding support structures to avoid bracing and lateral restraint
- Optimisation of birdcage structures, allowing for greater loads than towers
- Tower restraint at ledger frame levels
- Achieves greater loading capacity with genuine TITAN equipment – up to 127kN per leg
- Makes for more effective use of equipment
- Optimises the design grid and number of frames in height – requiring less equipment



SmartTITAN – Design for TITAN Support

Sample data for Size 2 Leg and 1.8m Ledger Frame configurations



Notes:

1. Permissible leg loads stated may be limited by other falsework and formwork components such as decking beams etc.
2. Load charts are based on SmartTITAN software. Any deviation from the leg configurations shown will require additional/ separate SmartTITAN analysis
3. The information shown is an extract from data sheets. It is for illustrative purposes only and must not be used for design in isolation. See full data sheets of frames groups and various leg configuration for safe working loads.
4. This chart and full data sheets supersede any existing Ischebeck UK design load charts.
5. Loads are based on the jack being at the top.



TITAN Support erection sequence



1. Connect ledger frame horizontally between two legs. Predetermined ledger frame position measured from headplate



2. Connect ledger frame vertically to leg



3. Repeat 2 to form three sides to bay



4. Repeat 1 to form 4th side of bay and then lift both sides of bay into position



5. Connect both sides to form a four leg tower



6. Now add additional frames and legs to form TITAN support structure



7. Place intermediate transoms and scaffold boards or walkway platforms and handrail frames in position for fixing of TITAN aluminium beams



8. Fix primary beam to headplate by means of two TITAN clamps



9. Position secondary beams and fix with a TITAN clamp at each intersection with a primary beam. Structure is now ready for fixing of plywood

Notes:

* We recommend the use of TITAN 'T' bolts with table assemblies
A Method Statement is available on request

TITAN Support applications

TITAN's versatility and light self-weight make it the preferred choice for thousands of projects throughout the world's construction industry.



Bridges



Offices



Hotels



Table forms



Hospitals



Residential

FRIEDR. ISCHEBECK GMBH

Founded in Germany over 130 years ago, Ischebeck is one of the world's principal manufacturers of formwork and falsework systems. Renowned internationally for its Titan Support system, the group has a long standing tradition of innovation and engineering excellence. Product quality is a hallmark of the group and the company's manufacturing facilities are amongst the most advanced of their type.

Ischebeck Titan Limited

Ischebeck Titan is a leading supplier of formwork, falsework, safety systems and ground engineering solutions. The company operates from headquarters centrally located in the heart of the U.K and has a team of product specialists ready to assist you with your concrete construction project.

Product availability

Substantial stocks of equipment are available ex-stock from the company's strategically located 4-acre distribution site with most items available nationwide on a 48 hour delivery.

Products are available for both hire and outright purchase.

Technical support

Backed by the resources of one of the most respected names in the industry, Ischebeck Titan offers a comprehensive range of support services.

The company's Technical Services Division can provide a full drawing and structural analysis service using the latest computerised software.

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