EN PROPS

EUROPEAN STANDARD EN 1065

- This standard sets out the relevant requirements for adjustable telescopic steel props with open threading. The standard covers straight props only.

- The aim of EN 1065 is to define the structural properties of steel props in terms of safety and load bearing, grouping these products into 4 categories (B,C,D,E).

A Prop is deemed compliant with the regulations as long as it had the following properties:

- An anti-hand-trap system of at least 100mm in length.

- At least 300mm of the inner tube must remain within the outer tube when the prop is fully extended.

- A fixed anti-disengagement system making it impossible for the inner and outer tubes to come apart.

- A system making it impossible for the adjusting device to slip off its thread.

- A minimum adjust ability of at least 1 meter (length difference between fully-extended and fully-compressed)

- Attached pin with a nominal diameter greater than 13mm.

- The prop must also fulfill the following requirements: The diameters and thickness of the inner and outer tubes must be specified so that test (by calculation or by pressure testing) determine a satisfactory collapse load as define for the 4 categories of props, with the following load criteria.

- Whatever the position of the prop, the collar nut should always cover atleast 30mm of the thread on the outer tube - for class B props atleast 3 full thread rotations should be covered by the nut, for classes C, D and E the nut should cover atleast 4 full rotations.

- The nominal diameter of the pin should be no less than 13mm.

- The pin must be connected to the prop so that it cannot be detached unintentionally.

- The inner and outer tubes of the prop must have permanent prevention against unintentional disengagement.

- The endplates should be either square [SQ] or shaped [SH]. They must contain atleast 2 holes.

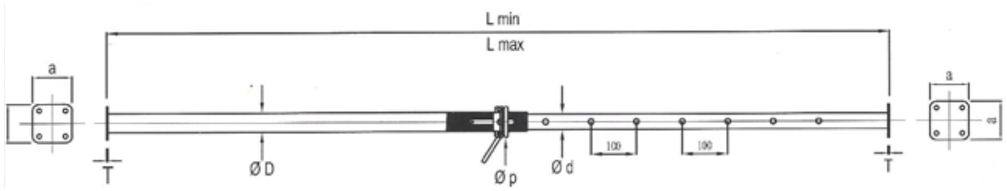
- Endplates must be made of a material with a minimum elastic limit of 235 N/mm, and have a minimum thickness of 6mm for props in classes B,C & D.

- It should be possible to draw the following circles on endplates: 110mm diameter for class B props; 120mm for props in higher classes. Corners should be rounded off, maintaining a radius between 5 and 10mm.

EN 1065 PROPS

CHART OF PERMISSIBLE LOAD IN ACCORDANCE WITH THE EN 1065

EXTENSION [METERS]	CLASS 'B' WITH OPEN THREAD					
	B30 [kN]	B35 [kN]	B40 [kN]	B45 [kN]	B50 [kN]	B55 [kN]
5.4M						7.00
5.2M						8.00
5.0M					8.00	9.00
4.8M					8.50	9.00
4.6M					9.00	10.00
4.4M				9.00	10.00	11.00
4.2M				10.00	11.00	12.00
4.0M			10.00	11.00	12.00	14.00
3.8M			11.00	12.00	14.00	15.00
3.6M			12.00	14.00	15.00	17.00
3.4M		12.00	14.00	16.00	17.00	19.00
3.2M		14.00	16.00	18.00	20.00	22.00
3.0M	13.00	16.00	18.00	20.00	22.00	
2.8M	15.00	18.00	21.00	23.00		
2.6M	18.00	21.00	24.00	27.00		
2.4M	21.00	25.00	28.00			
2.2M	25.00	29.00				
2.0M	30.00					
1.8M	30.00					



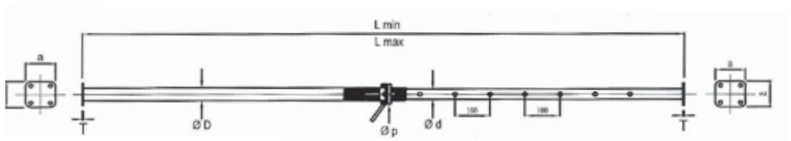
TYPE	Ø d (mm)	Ø D (mm)	Regulation	axa (mm)	T (mm)	Ø p (mm)	Lmin (mm)	Lmax (mm)	Weight (kg)
B30	48.3	60.3	G	120x120	6	14	1750	3000	12.0
B35	48.3	60.3	G	120x120	6	14	2000	3500	14.0
B40	48.3	60.3	G	120x120	6	14	2300	4000	17.0
B45	48.3	60.3	G	120x120	6	14	2500	4500	19.0
B50	48.3	60.3	G	120x120	6	14	2800	5000	24.0

Detailed catalogue of EN Props available on request

EN 1065 PROPS

CHART OF PERMISSIBLE LOAD IN ACCORDANCE WITH THE EN 1065

EXTENSION [METERS]	CLASS 'C' WITH OPEN THREAD				
	C30 [kN]	C35 [kN]	C40 [kN]	C45 [kN]	C50 [kN]
5.0M					13.00
4.9M					13.50
4.8M					14.00
4.7M					15.00
4.6M					16.00
4.5M				15.00	17.00
4.4M				16.00	19.00
4.3M				17.00	20.00
4.2M				18.00	21.00
4.1M				21.00	23.00
4.0M			17.00	22.00	24.00
3.9M			18.00	25.00	26.00
3.8M			24.00	26.00	27.00
3.7M			25.00	28.00	29.00
3.6M			27.00	30.00	30.00
3.5M		21.00	27.00	31.00	32.00
3.4M		22.00	27.00	34.00	34.00
3.3M		26.00	27.00	34.00	34.00
3.2M		26.00	29.00	34.00	34.00
3.1M		26.00	30.00	34.00	34.00
3.0M	20.50	26.00	30.00	34.00	34.00
2.9M	22.50	26.00	30.00	34.00	34.00
2.8M	24.00	26.00	30.00	34.00	
2.7M	25.00	26.00	30.00	34.00	
2.6M	26.00	28.00	30.00	34.00	
2.5M	30.00	30.00	30.00		
2.4M	30.00	30.00	30.00		
2.3M	30.00	30.00	30.00		
2.2M	30.00	30.00			
2.1M	30.00	30.00			
2.0M	30.00				
1.9M	30.00				
1.8M	30.00				

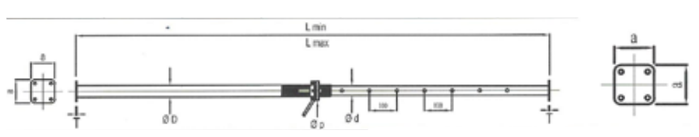


TYPE	Ø d (mm)	Ø D (mm)	Regulation	axa (mm)	T (mm)	Ø p (mm)	Lmin (mm)	Lmax (mm)	Weight (kg)
C30	48.3	60.3	G	120x120	8	16	1750	3000	17.0
C35	48.3	60.3	G	120x120	8	16	2000	3500	20.1
C40	63.5	76.1	G	120x120	8	16	2300	4000	24.0
C45	63.5	76.1	G	120x120	8	16	2500	4500	26.0
C50	63.5	76.1	G	120x120	8	16	2800	5000	28.0

EN 1065 PROPS

CHART OF PERMISSIBLE LOAD IN ACCORDANCE WITH THE EN 1065

EXTENSION [METERS]	CLASS 'C' WITH OPEN THREAD				
	D30 [kN]	D35 [kN]	D40 [kN]	D45 [kN]	D55 [kN]
5.0M					20.00
4.9M					20.00
4.8M					20.00
4.7M					20.00
4.6M					20.00
4.5M				20.00	20.00
4.4M				20.00	20.00
4.3M				20.00	20.00
4.2M				20.00	20.00
4.1M				20.00	20.00
4.0M			20.00	20.00	20.00
3.9M			20.00	20.00	20.00
3.8M			20.00	20.00	20.00
3.7M			20.00	20.00	20.00
3.6M			20.00	20.00	20.00
3.5M		20.00	20.00	20.00	20.00
3.4M		20.00	20.00	20.00	20.00
3.3M		20.00	20.00	20.00	20.00
3.2M		20.00	20.00	20.00	20.00
3.1M		20.00	20.00	20.00	20.00
3.0M	20.00	20.00	20.00	20.00	20.00
2.9M	20.00	20.00	20.00	20.00	20.00
2.8M	20.00	20.00	20.00	20.00	20.00
2.7M	20.00	20.00	20.00	20.00	
2.6M	20.00	20.00	20.00	20.00	
2.5M	20.00	20.00	20.00		
2.4M	20.00	20.00	20.00		
2.3M	20.00	20.00	20.00		
2.2M	20.00	20.00			
2.1M	20.00	20.00			
2.0M	20.00				
1.9M	20.00				
1.8M	20.60				

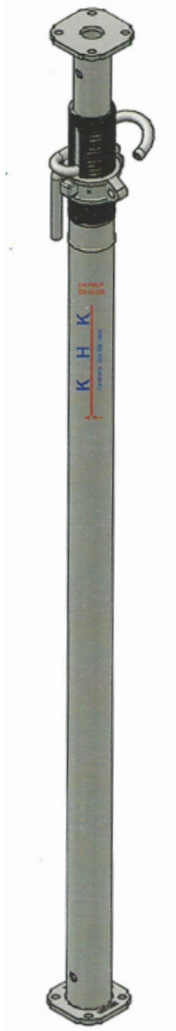


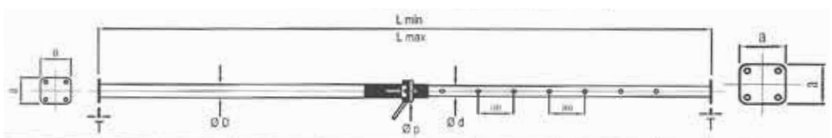
TYPE	Ø d (mm)	Ø D (mm)	Regulation	axa (mm)	T (mm)	Ø p (mm)	Lmin (mm)	Lmax (mm)	Weight (kg)
D30	48.3	60.3	G	120x120	8	16	1750	3000	17.0
D35	63.5	76.1	G	120x120	8	16	2000	3500	20.0
D40	63.5	76.1	G	120x120	8	16	2300	4000	24.0
D45	63.5	76.1	G	120x120	8	16	2500	4500	29.0
D55	76.1	88.9	G	120x120	8	16	3000	5500	38.0

EN 1065 PROPS

CHART OF PERMISSIBLE LOAD IN ACCORDANCE WITH THE EN 1065

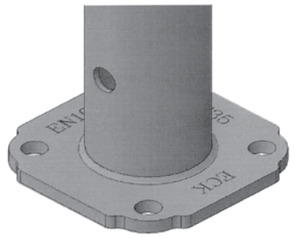
EXTENSION [METERS]	CLASS 'E' WITH OPEN THREAD			
	E30 [kN]	E35 [kN]	E40 [kN]	E45 [kN]
5.0M				
4.9M				
4.8M				
4.7M				
4.6M				
4.5M				30.00
4.4M				30.00
4.3M				30.00
4.2M				30.00
4.1M				30.00
4.0M			30.00	30.00
3.9M			30.00	30.00
3.8M			30.00	30.00
3.7M			30.00	30.00
3.6M			30.00	30.00
3.5M		30.00	30.00	30.00
3.4M		30.00	30.00	30.00
3.3M		30.00	30.00	30.00
3.2M		30.00	30.00	30.00
3.1M		30.00	30.00	30.00
3.0M	30.00	30.00	30.00	30.00
2.9M	30.00	30.00	30.00	30.00
2.8M	30.00	30.00	30.00	30.00
2.7M	30.00	30.00	30.00	30.00
2.6M	30.00	30.00	30.00	30.00
2.5M	30.00	30.00	30.00	
2.4M	30.00	30.00	30.00	
2.3M	30.00	30.00	30.00	
2.2M	30.00	30.00		
2.1M	30.00	30.00		
2.0M	30.00			
1.9M	30.00			
1.8M	30.00			



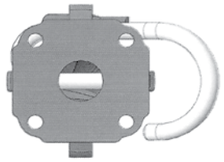


TYPE	Ø d (mm)	Ø D (mm)	Regulation	axa (mm)	T (mm)	Ø p (mm)	Lmin (mm)	Lmax (mm)	Weight (kg)
E30	63.5	76.1	G	120x120	8	16	1750	3000	19.0
E35	63.5	76.1	G	120x120	8	16	2000	3500	24.0
E40	63.5	76.1	G	120x120	8	16	2300	4000	28.0
E45	76.1	88.9	G	140x140	8	16	2500	4500	32.0

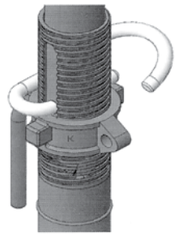
INNER TUBE END



PLAN

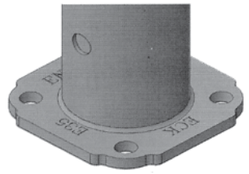


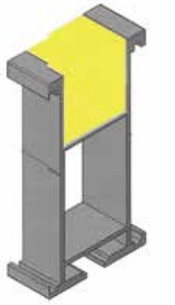
EN PROPS



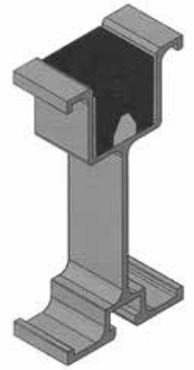
SLEEVE, PIN & PROP NUT WITH HANDLE

OUTER TUBE END





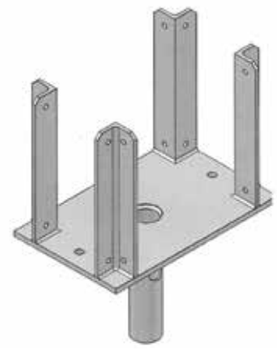
TWIN BEAM (WITH TIMBER INSERT)



K6 ALUMINIUM BEAM (WITH PLASTIC INSERT)

K6 X ALUMINIUM BEAM (WITH PLASTIC INSERT)

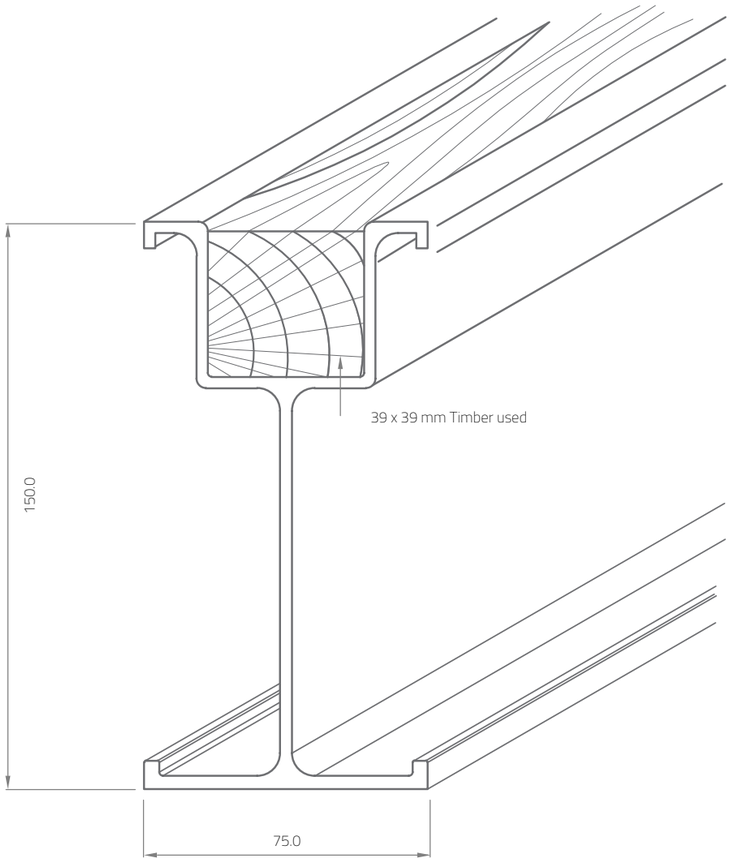
EN PROPS TRIPOD



4 WAY FORK HED FOR EN-PROPS

Detailed catalogue of EN Props available on request

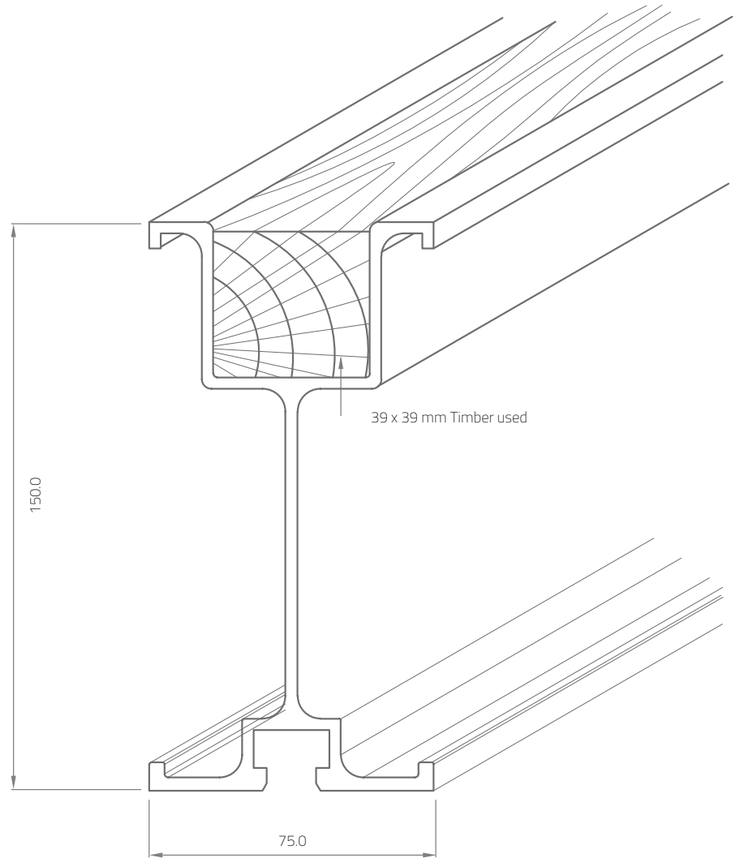
K-6 ALUMINUM BEAM SIZES:



TECHNICAL PROPERTIES OF K-6 ALUMINUM BEAM:

Permissible bending stress	14.55 kN/cm^2
Permissible shear stress	8.40 kN/cm^2
Max: Moment of Inertia	361.40 cm^4
Total Area, A	1160.0 mm^2
Weight	3.13 Kg/m - w/o Timber
Section Modulus	46.90 cm^3
Max: Permissible Bending Moment (M)	6.82 kN-m
Max: Permissible Shear Force (Q)	25.60 kN
Grade of Material	AA 6082 T6 / 6061 T6

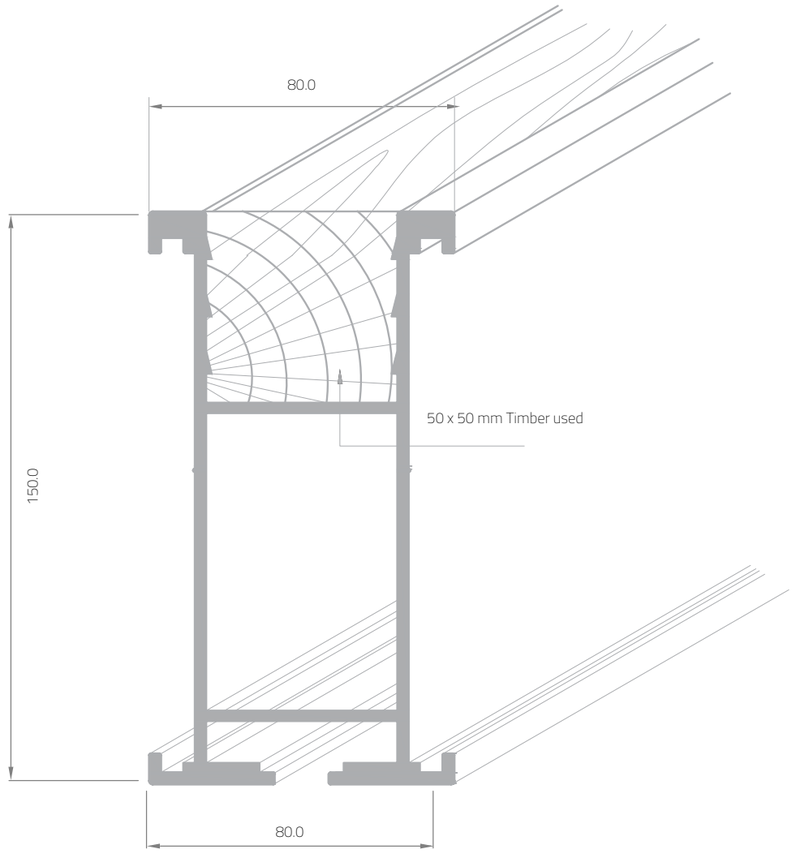
K-6 X ALUMINUM BEAM SIZES:



TECHNICAL PROPERTIES OF K-6 X ALUMINUM BEAM:

Permissible bending stress	14.55 kN/cm^2
Permissible shear stress	8.40 kN/cm^2
Max: Moment of Inertia	363.9 cm^4
Total Area, A	1247.56 mm^2
Weight	3.368 Kg/m - w/o Timber
Section Modulus	47.25 cm^3
Max: Permissible Bending Moment (M)	6.87 kN-m
Max: Permissible Shear Force (Q)	28.30 kN
Grade of Material	AA 6082 T6 / 6061 T6

T-150 PRIMARY ALUMINUM BEAM SIZE:



TECHNICAL PROPERTIES OF T -150 PRIMARY ALUMUNUM BEAN:

Permissible bending stress	14.55 kN/cm^2
Permissible shear stress	8.40 kN/cm^2
Max: Moment of Inertia	493.33 cm^4
Total Area, A	1732.29 mm^2
Weight	4.677 Kg/m - w/o Timber
Section Modulus	60.30 cm^3
Max: Permissible Bending Moment (M)	8.77 kN-m
Max: Permissible Shear Force (Q)	5 kN
Grade of Material	AA 6082 T6 / 6061 T6

PAINTED EN PROPS

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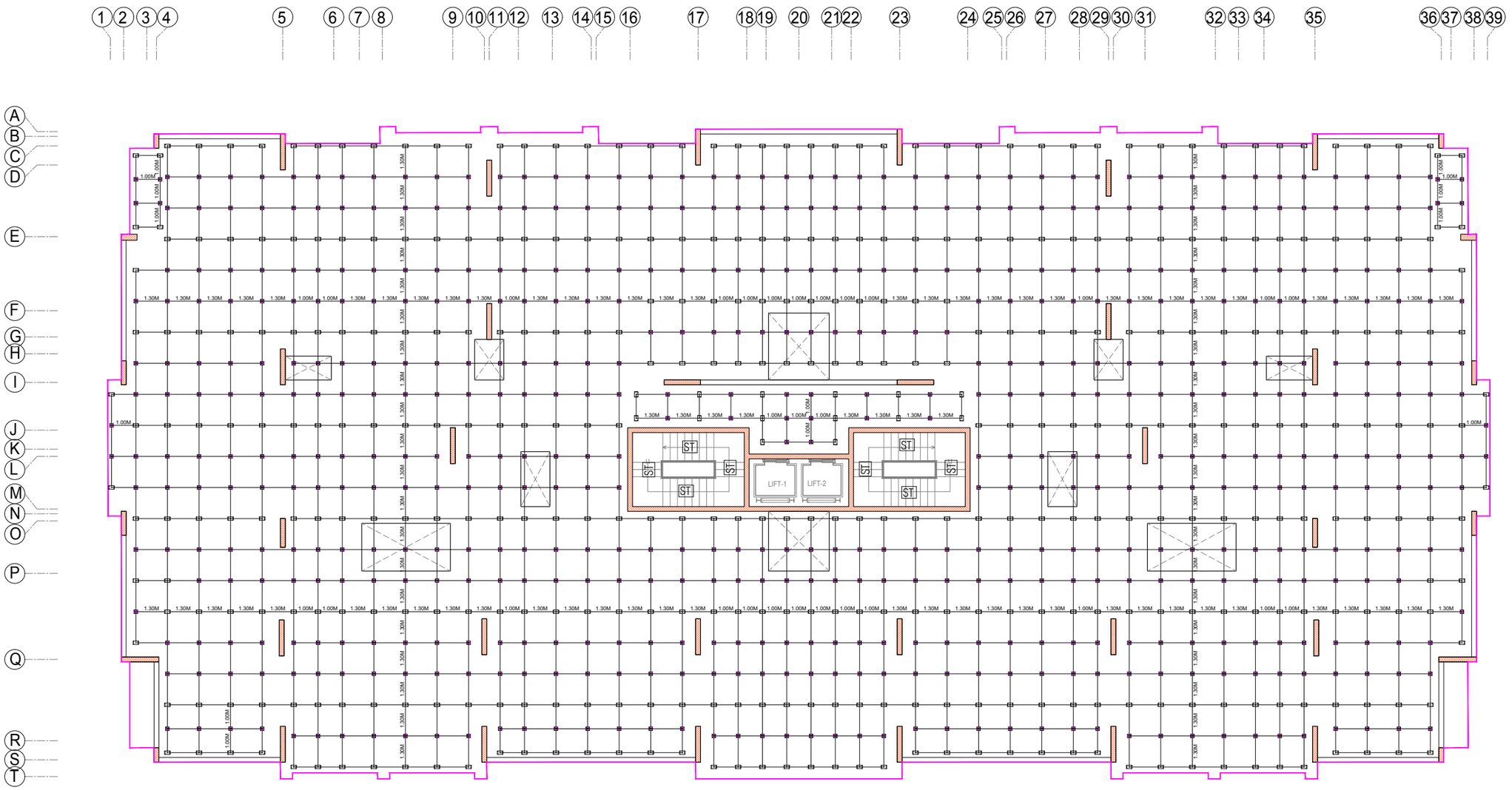
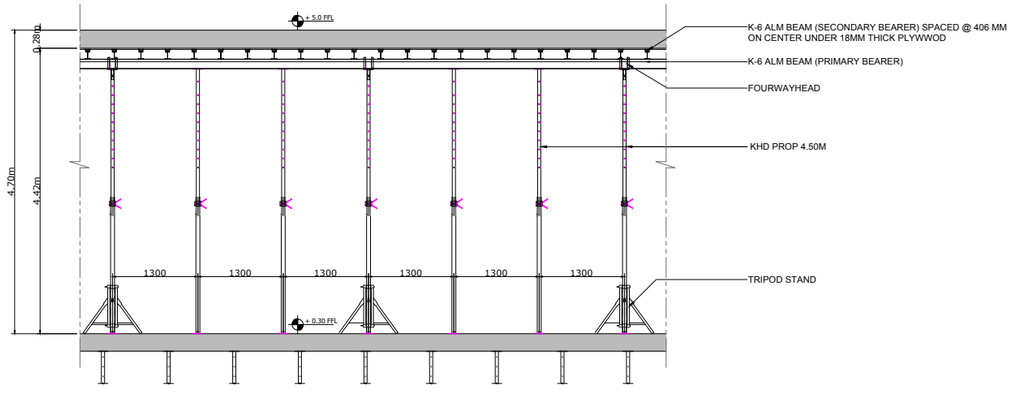


GROUND FLOOR SLAB SCAFFOLDING LAYOUT



SECTION A-A

ADDITIONAL NOTES:

1. The contractor shall support unsupported beams and make-up areas with props.
2. Guardrail and toeboard on all access by contractor.
3. Temporary support must be sufficiently braced and/or butt tied and linked while erection is in progress and stabilized prior to installation of reinforcements or any loadings.
4. Joints on standards are the responsibility of the contractor.
5. Contractor shall cover all slab openings with suitable materials.
6. Erection and dismantling by contractor.
7. DO NOT INSTALL ANY DEFECTIVE COMPONENTS OF DECKING AND SUPPORT.
8. This drawing has prepared with limited reference to KHK design data.
9. Bridging across slab openings by contractor.
10. Protection fans and safety net by contractor.
11. Backpropping by contractor.

PRELIMINARY NOT FOR CONSTRUCTION

DRAWING NOTES

1. KHK SCAFFOLDING AND FORMWORK

The drawing is confidential and is exclusive property of KHK. No unauthorized use, copy or disclosure is to be made and it is to be returned upon request. The drawing is supplied subject to the company's standard conditions of Hire or Sale, as applicable.

2. BASIS OF DESIGN

This drawing has been prepared from information supplied to us by or on behalf of the customer, who should check that we have correctly interpreted his requirements and that all loadings, dimensions, details, erections, pouring and striking sequences etc, are as required and practicable.

3. ASSUMPTIONS

The following assumptions affecting the use of the equipment shown on this drawing has been made:

N / A

4. IMPOSED LOADS

The structure detailed on this drawing has been designed to support the following imposed loads only:-
Access Main working lifts....no.at....kN/sq m no.at..kN/sq m
Hop-up brackets.....no.at....kN/sq m no.at...kN/sq m
(All loads assumed uniformly distributed)
Additional number of boarded(non working)lifts.....no.
Self weight of concrete.....24.5kN/cu m
Self weight of formwork.....0.5kN/sq m
Live loading .....1.5kN/sq m
Wall forms Max:Concrete pressure assumed .....kN/sq m
Wind Wind loads, where applicable have been calculated in accordance with B.S.5973 and/or B.S 5975
Max design wind pressure.....kN/sq m

5. TIMBER

No timber is supplied by KHK unless specifically stated.
All timber design is the responsibility of the customer, but to enable us to prepare this drawing we have assumed the following:-
Main Bearer..by contractor...Secondary Bearers.by contractor
Waling .....N / A.....
The above sizes have been calculated using stresses derived from the B.S.code of practice 5975.
Timber assummed Grade SC4:-Bending.....8.67N/sqmm
Bearing 2.87N/sq mm.....Shear..1.34N/sq mm."E" mean. 8035N/sq.mm
Plywood 19mm Douglas Fir(unless otherwise noted).
Deflection has been limited to 1/270 of the Span for each member.

6. Foundations: No Soleplates or other means of spreading the imposed loads are supplied by KHK. The customer must ensure that the foundation provided are adequate.

MAXIMUM CALCULATED LEG LOAD.....00.00.....kN

7. TEMPORARY WORKING PLATFORMS

Unless specifically detailed, it is assumed that any temporary working platforms required for erection or dismantling purposes will be designed,supplied and erected by the customer.

8. SCAFFOLD TUBE AND FITTINGS

All tube and fittings not supplied by KHK but forming part of this structure must comply with B.S.1139(see also note.9.below)

9. MODIFICATIONS

The design has been prepared using the Safe Working Load of KHK Components specified.

THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH THE FOLLOWING:
KHK Drg. Nos.....N / A.....
KHK Data Sheet Nos.....N / A.....

No alterations to components, assembly, loading or any other aspect must be made without written authority from KHK.

10. TYING AND BRACING

The customer is responsible for ensuring that all structures are adequately tied and/or braced to carry the load and ensure stability as indicated on the drawing.
Where KHK equipment is supported, suspended, anchored or tied to an existing structure or the ground, the customer must ensure that the structure or ground adequate to safely support the additional imposed loads.

11. ACCESS SCAFFOLD

Scaffold boards assumed capable of spanning 1.5m.
The supply and fixing of all building ties is the responsibility of the customer. All ties to be of the two way positive type as specified in BS 5973.

NO.	DATE	BY	REVISION

KHK SCAFFOLDING and FORMWORK
AJMAN: P.O. BOX 2701
TEL : 06-7439013
FAX : 06-7439017

TITLE : FIRST FLOOR COVERING SLAB SCAFFOLDING LAYOUT AND SECTION
PROJECT : COMMERCIAL & RESIDENTIAL BUILDING (G + 4 TYPICAL FLOORS) - 8 BUILDINGS
CLIENT : PRESTIGE CONSTRUCTION

DRAWN BY	: MKS	DATE	: 15-10-20	DRAWING NO.
CHECKED BY	: MAK	DATE	: 15-10-20	DUBAI / 9044 / 01
SCALE	: AS SHOWN			