# technical sheet

# SUSPENSION JIBS for temporary suspended platforms

ref.: **T-482\*** rev. no.: **3** 

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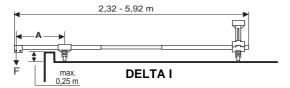
\*replaces sheets T-482-12/95 (DELTA) and T-176-10/91 (parapet clamps)

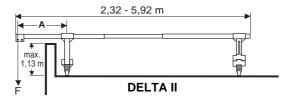
In most applications, it is possible to use a system of mobile suspension jibs in the roof for the attachment of temporary suspended platforms.

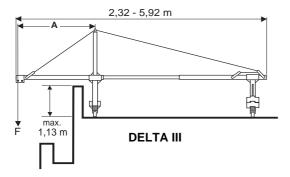
We offer the following solutions.

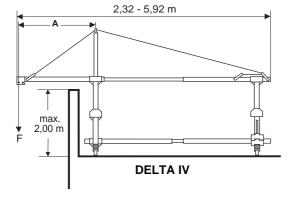






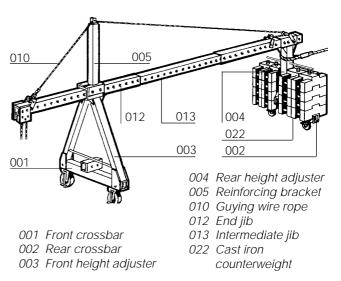






#### 1. DELTA SUSPENSION JIBS

DELTA suspension jibs have been designed specially for use with our ALTA and TANGOR suspended platforms. Following the instructions of this technical sheet, they can also be used for suspending other types of platform.



### 1.1. Standard configurations

DELTA jibs are made up of components which give the following standard assemblies. The stability of the jibs is provided by counterweights.

**DELTA I** – The telescopic jib (012/013) is mounted directly on the front (001) and rear (002) crossbars. It can be moved on the castor wheels. This assembly is only for use on parapets not exceeding 25 cm.

**DELTA II** – A height adjuster (003/004) is fitted to both the front and rear crossbars, to allow the telecopic jib to pass over obstacles up to 1.13 m high (chimneys, ventilation shafts, parapets, etc.).

**DELTA III** – Fitted with a reinforcing bracket (005) and guying wire rope (010), this model is recommended for longer overhangs.

**DELTA IV** – Fitted with two additional height adjusters (004) on the front and rear crossbars, with a second complete set of telescopic jibs (012/013) and crossbar extensions to increase the distance between the front wheels, this model is able to pas over obtacles up to 2 m high.



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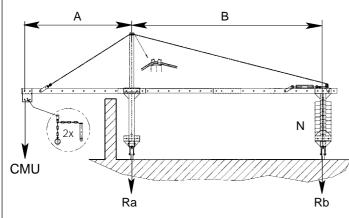
\*replaces sheets T-482-12/95 (DELTA) and T-176-10/91 (parapet clamps)

## 1.2. Maximum permitted overhang (A)

working load limit (WWL)* per jib	DELTA I + II	DELTA III + IV
300 kg	1,00 m	2,00 m
500 kg	0,80 m	2,00 m
700 kg	-	1,40 m
800 kg	-	1,20 m

<sup>\*&</sup>quot;Maximum loading" should be taken to mean the nominal capacity of the hoist and not the actual suspended load.

The loads indicated above apply to the capacities of our TIRAK hoists X-300, X-500, X-720 and T-1020.



# 1.3. Calculation of the number of counterweights

The tables below (page 3/4) illustrate the number of counterweigths needed for the different capacities (WLL) depending on the overhang (A) and the distance (B) behind the fulcrum.

The tables show that it is always best to have the maximum distance (B) behind the fulcrum, space permitting, to reduce the number of counterweights, making assembly and dismantling much easier.

It should be noted that the total length of the telescopic jib (A + B) should not excedd 5.60 m.

## 1.4. Installation and operating advice

- Before assembly of the DELTA mobile suspension jibs, always check to ensure that the roof is suitable to take the relevant loadings. If necessary check the loadings with the authorities responsable for the building.
- Adjust the jib centres to suit the stirrup centres of the platform used.
- The traversing castors should always stand on planks to protect the roof covering and the weatherproofing, as well as to spread the loadings more evenly, and facilitate moving the jib.
- Never allow the jibs to rest on the parapet.
- When assembly is complete, lock the brake on the castor wheels.
- The jibs must be completely assembled and fitted with all the required counterweights before the platform is attached to the jibs.
- Conversely, the platform should be detached from the jibs before the counterweights are removed.
- Regularly check the condition of the various components. Use only original manufacturer's spare parts and components.
- The suspension jibs should be anchored at the rear to a fixed point using a sling.



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# **SUSPENSION JIBS** for temporary suspended platforms

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\*replaces sheets T-482-12/95 (DELTA) and T-176-10/91 (parapet clamps)

### Platforms fitted with TIRAK X-300 hoists. Nominal capacity per hoist: F = 300 kg

Overha	ang				Dis	stance l		Ra max*	Rb max**						
A	m	1,4	1,6	1,8	2,0	2,4	2,8	3,2	3,6	4,0	4,4	5,0	5,2	(kg)	(kg)
	0,4	9	7	6	6	4	4	2	1	1	1	0	0	300	240
without	0,6	14	12	11	9	7	5	4	4	3	2	2		310	290
guy wire	0,8	19	17	15	13	11	8	7	6	5	4			340	340
	1,0	24	21	19	17	12	10	9	8	7	6			380	390
	1,2	30	26	23	20	16	13	11	10	9	8	1		420	460
with	1,4	35	30	27	23	19	16	14	12	10		-		450	510
guy wire	1,6		35	30	27	22	19	16	14	12				470	490
	1,8			34	31	25	21	18	16					480	470
	2,0	1			34	28	24	21	18	1				490	460
		N = Number of counterweights <b>per iib</b>													

Platforms fitted with TIRAK X-500 hoists. Nominal capacity per hoist: F = 500 kg

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Overha	ing	Distance behind the fulcrum B (m)											Ra max*	Rb max**	
A	m	1,4	1,6	1,8	2,0	2,4	2,8	3,2	3,6	4,0	4,4	5,0	5,2	(kg)	(kg)
without	0,4	16	13	12	10	8	7	5	4	3	3	2	2	430	320
guy wire	0,6	24	21	19	17	13	10	9	8	7	6	5		490	410
	0,8	33	29	25	23	19	15	13	11	10	9		•	540	510
	1,0		36	32	29	22	19	16	14	13	11			570	530
	1,2				35	28	23	20	18	16	14			590	500
with	1,4					33	28	24	21	19				590	470
guy wire	1,6						32	28	25	22				590	450
	1,8							32	28					590	450
	2,0							36	31					610	500
					1 = N	Number	r of cou	nterwe	ights <b>p</b> e	er jib					

#### Platforms fitted with TIRAK X-720 hoists. Nominal capacity per hoist: F = 700 kg

Overha	Overhang Distance behind the fulcrum B (m)											Ra max*	Rb max**		
А	m	1,4	1,6	1,8	2,0	2,4	2,8	3,2	36	4,0	4,4	5,0	5,2	(kg)	(kg)
	0,4	23	19	17	15	12	10	8	7	6	5	4	4	590	410
	0,6	35	30	27	24	19	15	13	12	10	9	8		660	550
with	0,8			36	32	27	21	19	16	14	13			700	540
guy wire	1,0					32	28	24	21	19	17			700	470
	1,2						34	29	26	23	21			720	480
	1,4						•	35	31	27				730	490
	N = Number of counterweights <b>per iib</b>														

Platforms fitted with TIPAK T-1020 hoists. Naminal canacity per hoist: E = 800 kg

Platform	Platforms fitted with TIRAK 1-1020 hoists. Nominal capacity per hoist: F = 800 kg														
Overha	Overhang Distance entre appuis B (m)										Ra max*	Rb max**			
А	m	1,4	1,6	1,8	2,0	2,4	2,8	3,2	36	4,0	4,4	5,0	5,2	(kg)	(kg)
	0,4	26	22	20	18	14	12	9	8	7	6	5	5	670	450
with	0,6		35	31	27	22	18	15	14	12	11	9		740	540
guy wire	0,8					31	25	22	19	17	15			750	460
	1,0						32	28	24	22	19			770	460
	1,2							34	30	27	24			790	480
N = Noumber of counterweights <b>per jib</b>															

<sup>\*</sup> Ra max = dynamic response for each front wheel, with the platform suspended (dynamic coefficient = 1,25). For final response for each front wheel (operating load multiplied by a coefficient of 3): multiply the Ra max. values by approximately 2.2.

<sup>\*\*</sup> Rb max = maximum response **for each rear wheel**, with the platform on the ground.

