



## USER MANUAL

### MODULAR TRIANGULAR BRIDGE (MTB)

DIN EN 12811-1  
Version November 2006

#### I. TABLE OF CONTENTS

I.	Table of contents .....	1
II.	General information .....	1
III.	Parts .....	3
IV.	Assembly instructions Modular Triangular Bridge .....	5
V.	Operation .....	10
VI.	Disassembly .....	10
VII.	Inspection, care and maintenance .....	10

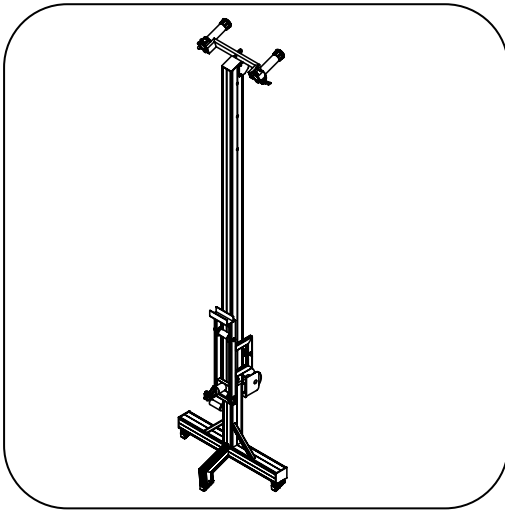
#### II. GENERAL INFORMATION

1. Always read attentively and thoroughly before use the manufacturer's (Altrex B.V.) user manual.
2. The platform load permitted is 150 kg/m<sup>2</sup> evenly distributed over the platform or 500 kg max, according to class 2 of EN 12811.
3. Do not use the MTB with parts from other manufacturers. Use the MTB only with parts stipulated in this user manual.
4. Use the MTB only as a suspended work platform. Application as a guide rail construction is NOT permitted.
5. Assembly and use of the MTB is permitted only at a wind force less than 6 Beaufort (< 14 m/s).
6. The MTB may be used with leg posts at a minimum platform height of 3 m and a maximum platform height of 5 m.
7. Always place the leg post at the correct angle against the wall (ca. 70°). All three feet of the leg post will then touch the ground.
8. Place the leg post of the MTB in all cases on a firm, horizontal and non-slippery surface with adequate bearing capacity. Place in the event of a soft surface a plank under the foot of the MTB leg post.  
Do not support against a weak wall such as plastic or membrane wall.
9. The leg posts should be anchored against sideways movement after placement. The anchorage must be able to take horizontal loads up to 1,0 kN
10. Always use, after setting the height of the MTB, the locking pin to secure the correct operating height. Only then can the work platform be loaded.  
NB: The work platform may not be walked on before this security has been provided.
11. Always use a ladder to access a secured work platform.

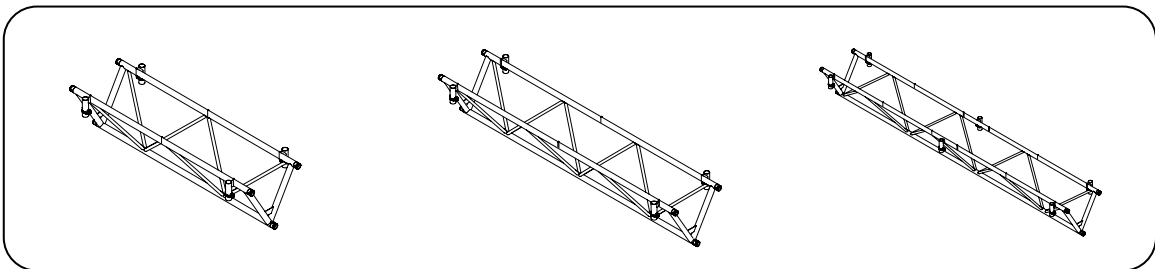


12. For operation outside the mentioned areas of application in this manual you should contact the manufacturer.
13. The MTB shall not be used as goods and/or passenger lift
14. When assembling the following points should be checked:
  - the bearing capacity of the ground surface should be adequate
  - any obstructions around the workplace to the assembly and use of the MTB
  - the wind force
  - the winch cable should be undamaged and neatly rolled
  - the availability of all parts required at the workplace. Damaged or incorrect parts may not be used.
15. At least two persons should assemble the MTB. These persons should be appropriately qualified. Assemble only after studying this user manual carefully.
16. All necessary parts must be used during assembly and after assembly checked for reliable fixing. The operating bridge may not be used without guide rails or platforms.
17. Parts should not be assembled or disassembled with extreme force.
18. It's not permitted to enlarge the platform surface height with ladders, boxes or other appliances. It's not permitted to jump on the platform surface.
19. The application and use of a hoisting device is not permitted
20. Maximum total length of the MTB is 12m.
21. Deviations from this user manual are not permitted.

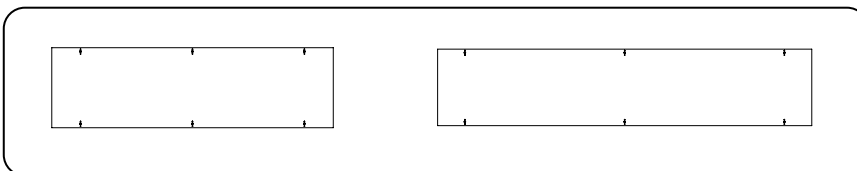
### III. PARTS



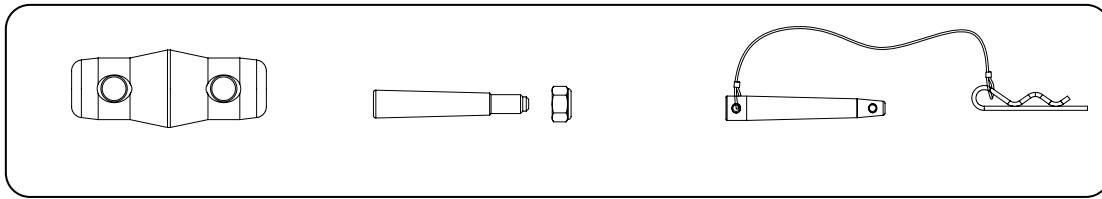
Leg post MTB incl.  
console with winch  
3-5 m      331526



Truss MTB  
2 m      331502  
3 m      331503  
4 m      331504

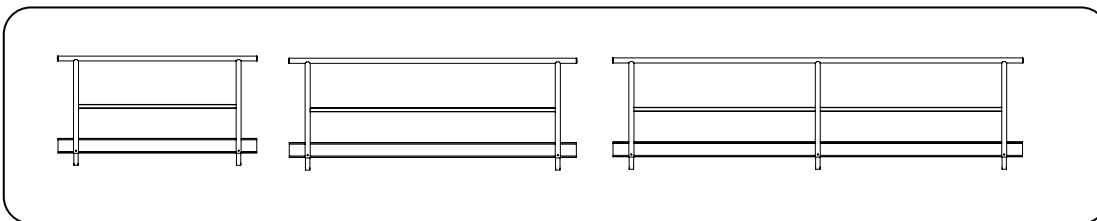


Platform MTB Timber  
2 m      331512      For truss MTB 2 m and truss MTB 4 m  
3 m      331513      For truss MTB 3 m



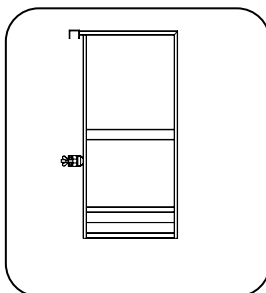
Truss coupling set complete MTB 331580

Consisting of 1 Coupling truss  
1 Pin stainless steel including nut  
1 Pin incl. fastening clip

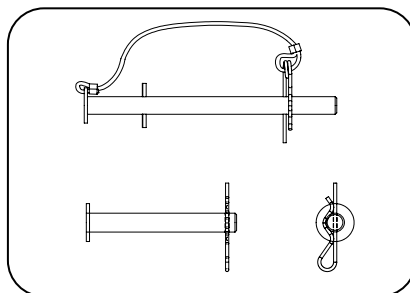


Aluminium guardrail frame MTB incl. mid-rail and toe-board

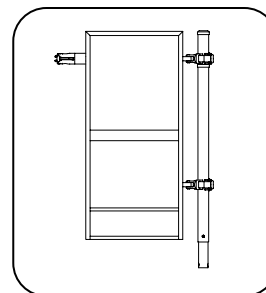
2 m	331522
3 m	331523
4 m	331524



Aluminium end guardrail MTB  
331544



Coupling pin MTB	
Short	331565
Long	331566



Aluminium end guardrail door MTB  
331545



#### IV. ASSEMBLY INSTRUCTIONS MODULAR TRIANGULAR BRIDGE

Configurations:

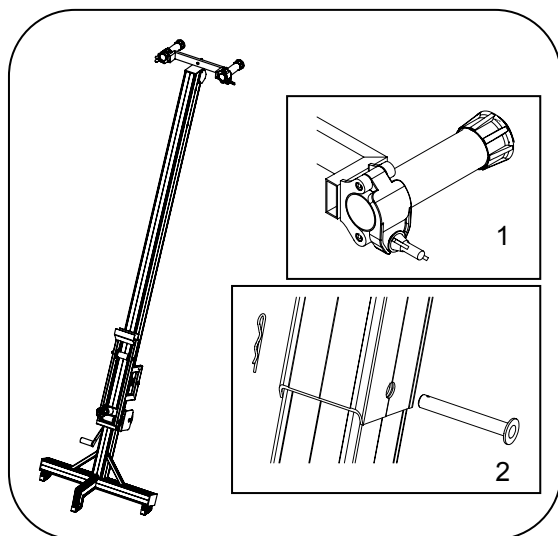
Length MTB (m)		2	3	4	5	6	7	8	9	10	11	12
Total distributed load (kg)		180	270	360	450	500	500	500	500	500	500	500
Description	Art. No.											
Leg post complete with hand winch	331526	2	2	2	2	2	2	2	2	2	2	2
Truss MTB 2 m (L = 211.3 cm)	331502	1	-	-	1	-	-	-	-	1	-	-
Truss MTB 3 m (L = 295.5 cm)	331503	-	1	-	1	2	1	-	3	-	1	-
Truss MTB 4 m (L = 421.8 cm)	331504	-	-	1	-	-	1	2	-	2	2	3
Platform MTB 2 m	331512	1	-	2	1	-	2	4	-	5	4	6
Platform MTB 3 m	331513	-	1	-	1	2	1	-	3	-	1	-
Guardrail frame 2 m MTB	331522	1	-	-	1	-	-	-	-	1	-	-
Guardrail frame 3 m MTB	331523	-	1	-	1	2	1	-	3	-	1	-
Guardrail frame 4 m MTB	331524	-	-	1	-	-	1	2	-	2	2	3
End guardrail MTB	331544	1	1	1	1	1	1	1	1	1	1	1
Truss coupling set complete*	331580	-	-	-	3	3	3	3	6	6	6	6
Accessory												
Aluminium end guardrail door MTB	331545											

\*) 1 x truss coupling + 1 pin incl. nut + 1 pin incl. fastening clip



## Assembly

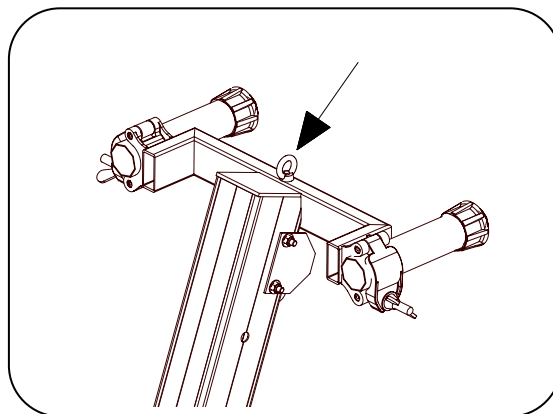
- Slide the wall spacers (1) out as far as possible so that the console can reach its highest position. Set both leg posts at the height required against the wall. Height adjustments are made by removing the short coupling pin from the lower hole of the exterior cylinder (2), sliding the cylinders out and replacing the pin and securing it with the fastening clip.



- Place the leg posts in such a way that all three rubber feet rest on the surface. The leg posts will then lean onto the wall at an angle of 70°. Place in the event of a soft surface a plank under the feet to avoid sinking.



- It's possible to anchor the leg posts against sideways movement after setup. The next figure shows the place for the anchoring on the leg post.

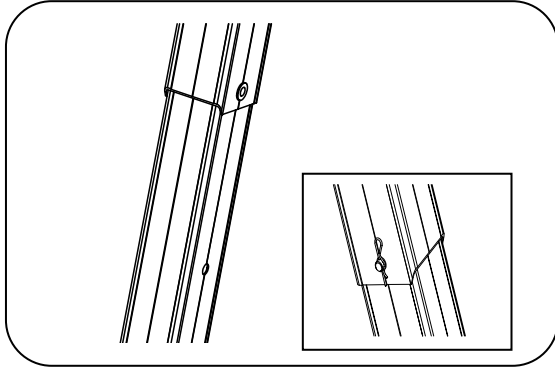


- Always ensure that the leg posts are placed parallel. The minimal distance between leg posts should be according to next table

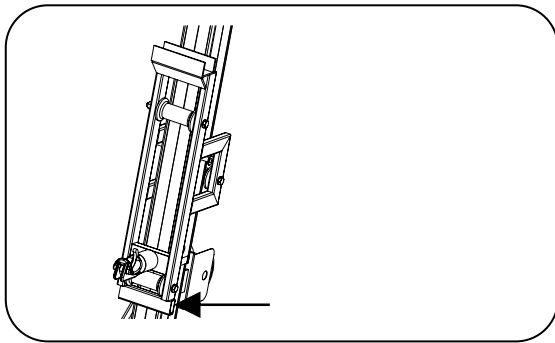
Length work platform (m)	Min. distance between leg posts (m)
2	1.5
3	2.0
4	2.5
5	3.5
6	4.5
7	5.0
8	5.5
9	6.0
10	7.0
11	7.0
12	8.0

Always assemble the system symmetrical with both sides of the MTB protruding with an equal distance from the leg posts.

5. Check that the coupling pins are placed and secured. Coupling pins should be secured at all times while the MTB is being used.

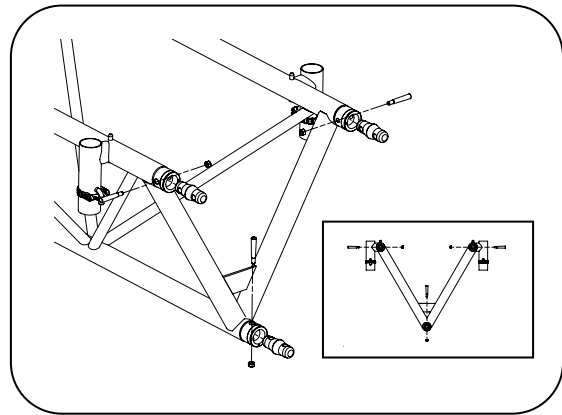


6. During assembly of the MTB the console should rest on the transverse profile at the bottom of the legpost.

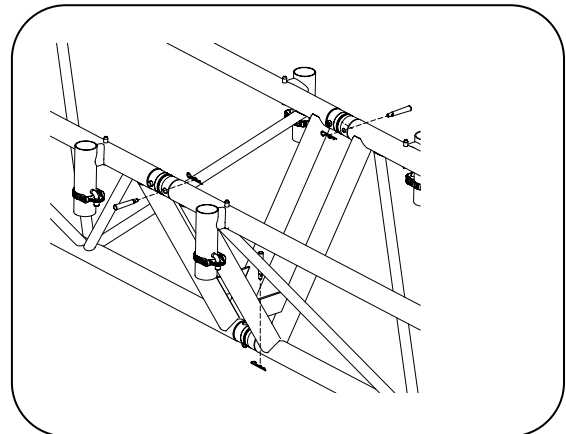


When you do not wish to couple more trusses together please proceed with point 8.

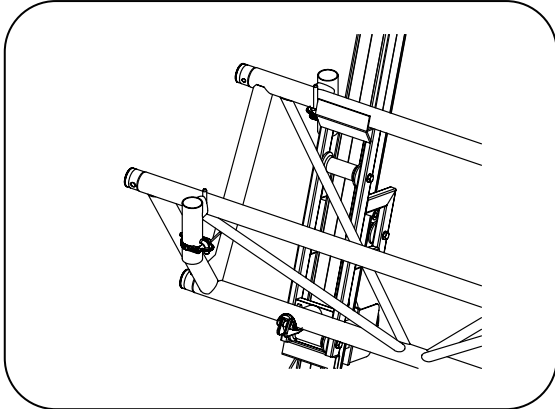
7. To couple 2 trusses you will require 3 coupling sets. Slide the couplings in one side of the trusses and secure them with pins fitted with screw threads. Place the lower pin from above to below, the upper two from outside to inside. They are secured by tightening the Nyloc nut firmly. **Caution:** the pin fits in one way only. Only limited force is required to fit the pin. When necessary the pin can be fitted or removed using a hammer. Make sure that the pin has been fitted correctly and the coupling is properly placed.



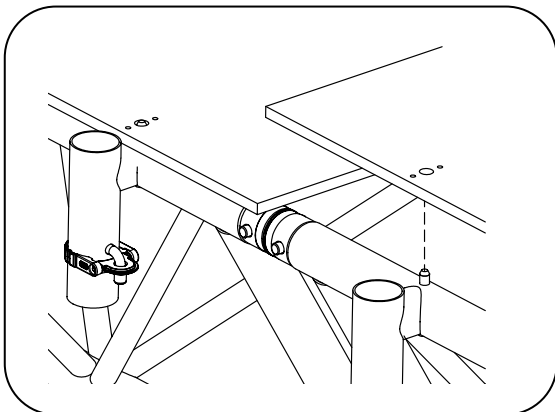
8. Slide the following truss over the secured couplings. Place the other securing pins in the couplings as described above. Place the securing clip in the pin to secure the coupling. After use these pins can be removed easily. The pins with nuts may be left behind in the truss to save assembly time during the next assembly.



9. Place the (coupled) truss on the consoles of the leg posts. Lay the truss first in the U-profile at the top of the console and click the underside into the claw. Make sure that the truss is secure in the claw and that the clapper of the claw secures the truss properly.

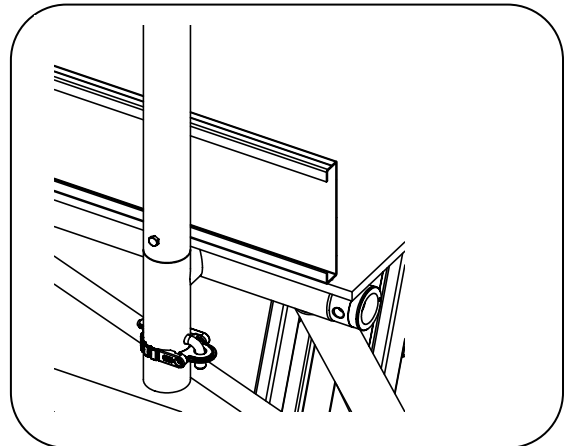


10. Place the platforms on the trusses with the non-skid side on top. The metal rings in the platform will now be on the underside. Ensure that the holes in the platform drop precisely over the pins of the truss. Press the platforms well to ensure that they connect tightly to the upper tubes.

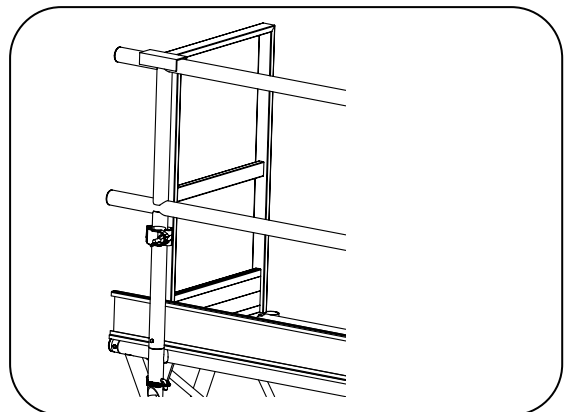


11. Remove the securing pins from the guardrail holders of the truss on the side where the guardrail is to be placed. Place the guardrails in such fashion that the toe-board encloses the platform. Place the pins through the truss guardrail tubes and secure them by placing the red clip horizontally. If the pins cannot be placed check whether the platform sections are

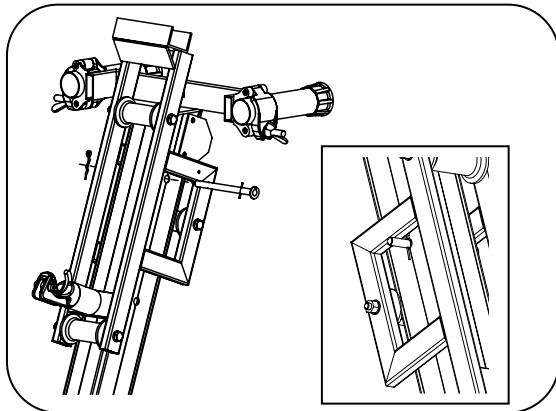
lying properly on the truss with all pins in the platform holes.



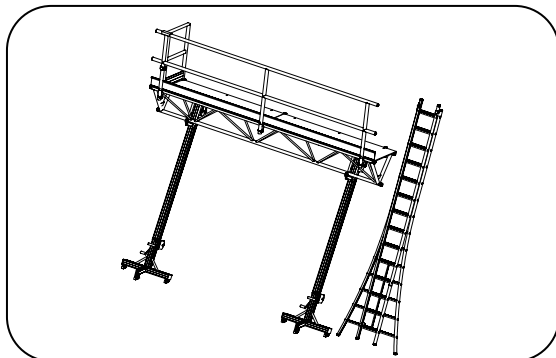
12. Place an end guardrail on one side. The end guardrail will hook over the guardrail at the height of the final legpost of the guardrail. Then secure the clamping brace round the legpost of the guardrail and secure tightly by hand.



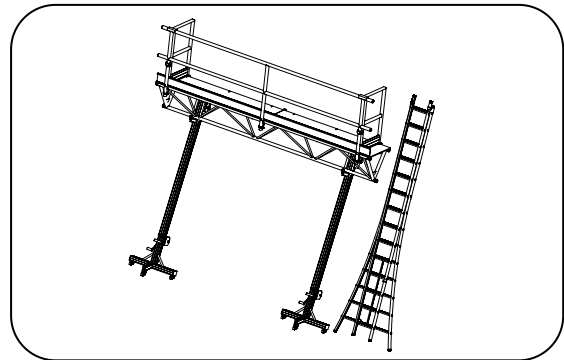
13. Remove the long coupling pin that locks the console in its rest position. Raise the bridge, with the hand winch when available or, when not, by pushing the bridge up by hand. Winch/push the bridge up until the long pin can be inserted through the hole in the console. Push the pin as far as possible through the leg post. Secure the pin with securing clip. Then lower bridge and let the console rest completely on the coupling pin.



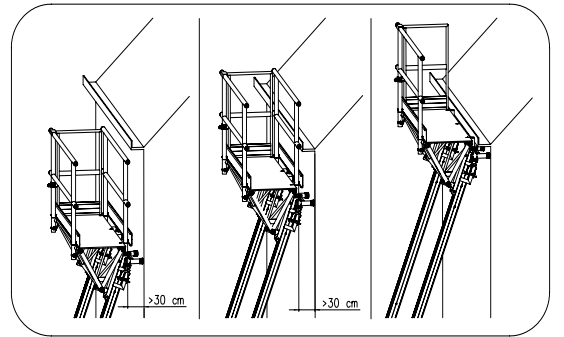
14. For access to the MTB place a ladder against the wall. The ladder should protrude at least 1 m above the platform. Should you be unable to place the ladder against the outside edge and place it against the wall instead, you should then place a second end guardrail.



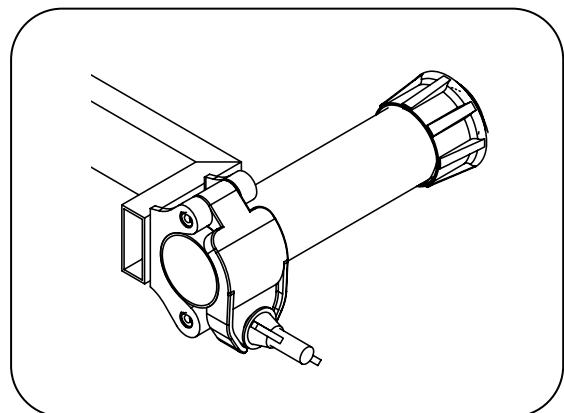
15. After entering the platform, a second end guard rail must be placed. As an alternative, a end guardrail door can be placed. This has to be built in in such a way that the door can only open to the inside.



16. An inner guard rail must be placed when the distance between the platform and the wall or other supporting surfaces is greater than 30cm.



17. Adjust where necessary the separators to the distance required from the wall. To do this loosen the butterfly nuts of the separators and slide the tube to the distance required.  
**CAUTION:** To lower the bridge you should place the separators in completely expanded position.





## **V. OPERATION**

1. Before usage the following points must be checked:
  - Is the structure complete and in good condition?
  - Are all fasteners present?
  - Does the construction site allow safe operation?
  - Are the winch and lifting cable in good condition?
2. The MTB may be accessed only via a ladder on the side.
3. Materials and tools should be transported to the work platform manually using (for example) a rope and a bucket. These should be hoisted as close to the scaffold as possible.
4. The application of hoisting devices to the MTB that are not manually powered is not permitted.
5. The MTB should be raised without load.
6. The wind force at wind sensitive locations, for example open structures and at the corner of a building, requires particular attention. Where necessary extra fasteners should be used.

## **VI. DISASSEMBLY**

Disassembly should be carried out in reverse order of assembly of the MTB.

## **VII. INSPECTION, CARE AND MAINTENANCE**

1. Parts must be treated and transported with care in order to avoid damage.
2. Storage should be organized in such fashion that parts can not be damaged.
3. Check all parts for proper operation, visible damage and/or contamination.
4. Damaged parts must be destroyed or returned to the manufacturer.
5. The winch must be regularly serviced.