

## MANUFACTURE'S OF ALUMINIUM SCAFFOLD TOWER EQUIPMENT

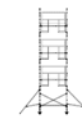
### DOUBLE WIDTH ADVANCED GUARDRAIL INSTRUCTION MANUAL



**GS Product Approval to DIN BS EN 1004 3 8/12 XXXD**

**MAX SAFE WORKING LOAD FOR STRUCTURE: 750KG**  
**MAX SAFE WORKING LOAD FOR PLATFORM: 250KG**

## GENERAL SAFETY RULES



1. Check instructions before use. Mobile access working towers may only be erected and dismantled by persons familiar with these instructions for erection use.
2. Do not use any scaffold tower which is damaged, which has not been properly erected, which is not firm and stable, and which has any missing or damaged parts.
3. Do not erect a scaffold tower on unstable ground or objects such as loose bricks, boxes or blocks. Only a sound rigid footing must be used.
4. Ensure that the scaffold tower is always level and the adjustable legs are engaged. Check that you have taken all necessary precautions to prevent the tower being moved, or rolling away. Always apply all castor brakes or use base plates.
5. Ensure that all frames, braces and platforms are firmly in place and that all locking hooks are functioning correctly. Ensure that all frame locking clips are engaged. If any missing, replace them.
6. Ensure that the scaffold tower is within the maximum platform height is stated, and that the appropriate stabilizers are fitted.
7. Outdoor scaffold towers should, wherever possible, be secured to a building or other structure. It is good practice to tie in all scaffold towers of any height, especially when they are left unattended, or in exposed or windy conditions.
8. A scaffold tower must not be used in winds stronger than 7.7 meters per second. Beaufort scale 4. Be cautious if erecting or using the tower in open places, such as hangers or unclad buildings. In such circumstances the wind forces can be increased, as a result of the funnelling effect.
9. Do not use sheeted towers.
10. Do not erect or use a scaffold tower near un-insulated, live or energised electrical machinery or circuits, or near machinery in operation.
11. If an overhead hazard exists, head protection should be worn.
12. Do not lean ladders against the tower, or climb the outside of the tower. Whatever your intended access system, it should only be used inside the tower.
13. Never climb on horizontal or diagonal braces. Do not gain access or descend from the working platform other than by the intended access system.
14. Do not work from ladders or stairways, they are a means of access only.
15. Guardrails and toeboards must be fitted to the working platforms.
16. Never jump on to or off platforms.
17. DO not exceed the safe working load of the platform or structure by accumulating debris, material or tools on platforms as these can be a significant additional load.
18. If you must move a tower, remove all materials and personnel. When moving a scaffold tower, force must always be moved from the base. The tower should only be moved manually on firm, level ground which is free from obstacles. Normal walking speed should not be exceeded during relocation. The ground over which a tower is moved should be capable of supporting the weight of the structure.
19. Should you require additional platform height, add further frames. NEVER extend your adjustable legs to achieve extra height, these are for levelling only. NEVER use a ladder or other objects on the platform to achieve additional height.
20. It is not permissible to attach and use hoisting facilities on towers, unless specifically provided for by the manufacturer.
21. It is not permissible to attach bridging sections between a scaffold tower and a building. Refer to the tower manufacturer.
22. ALWAYS TAKE CARE OF ALUMINIUM SCAFFOLD TOWER EQUIPMENT. REMEMBER YOUR SAFETY DEPENDS ON THE SAFE ERECTION AND USE OF THE EQUIPMENT. RESPECT IT.

## MAINTENANCE RULES

1. Ensure that the scaffold tower is kept clean, especially the spigots and sockets. These should fit together with ease and be secured by an interlock clip.
2. Check frames and braces, adjustable legs and boards for paint, grit, burrs etc. Remove any foreign substance with a light wire brush. Check no slip hazards exist on the platform.
3. Where brace, ladder and platform hooks attach the frames, ensure that the frame rungs are kept clean.
4. Ensure that all locking hooks function correctly. If necessary lubricate with light oil.
5. The inside diameter of all hooks should be kept clean to ensure they fit to other components without being forced.
6. If in any doubt about the proper use and maintenance of the scaffold tower equipment, consult the manufacturer.
7. Do not misuse or abuse the scaffold tower with heavy objects, hammers etc. Do not throw components in and out of vehicles or to the ground when the tower is being dismantled. Such abuse may reduce the structural integrity of the scaffold tower.
8. Under no circumstances use a scaffold tower which damaged, has not been properly erected, is it not rigid and which has any missing parts.
9. REMEMBER YOUR SAFETY DEPENDS ON THE SAFE ERECTION AND USE OF THIS EQUIPMENT. RESPECT IT.

## USE OF STABILIZERS

Stabilizers increase the EFFECTIVE BASE dimensions and improve the STABILITY of the tower.

Position the stabilizers symmetrically to obtain the MAXIMUM BASE DIMENSION.

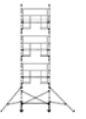
Maximum platform heights for free standing towers are based on the base to height ratio of 3:1 outdoors and 3.5:1 indoors. When moving a tower with stabilizers the height to base ratio must not exceed 2.5:1.

OPTIMUM BASE DIMENSION	MAX HEIGHTS	STABILIZER TYPE
DOUBLE WIDTH OR STEP TOWER		
Double Width	2.34M	NONE
4.20M	5.13M	STANDARD
4.90M	10.23M	TELESCOPIC
5.40M	12.10M	LARGE

## DISMANTLING NOTES:

- Remove the AGR frames by disengaging the top hooks from the vertical members completely before descending through the trapdoor platform.
- Disengage Windlock clips to remove platforms.
- Disengage lower AGR hooks to complete removal

# DOUBLE WIDTH ADVANCED GUARDRAIL KITTING LIST



PLATFORM LEVELS (M)		K5CR	KALA	FKD3	FDL3	FKD4	FDL4	FKD5	FDL5	BKD1	BKH1	AGR1	PKP1	PKT1	TKD1			
										BKD2	BKH2	AGR2	PKP2	PKT2	SKS1	Y250	SKL2	TKD2
0.94 M	(3' 1")	4	4			1	1					2	1	1				1
1.41 M	(4' 7")	4	4					1	1	2	2	2	1	1				1
1.88 M	(6' 2")	4	4	2	2					2	2	2	1	1				1
2.34 M	(7' 8")	4	4	1	1	1	1			2	2	2	1	1				1
2.81 M	(9' 3")	4	4			2	2			2		4	2	2	4			1
3.27 M	(10' 9")	4	4			1	1	1	1	2	2	4	2	2	4			1
3.73 M	(12' 3")	4	4	2	2	1	1			2	2	4	2	2	4			1
4.20 M	(13' 9")	4	4	1	1	2	2			2	2	4	2	2	4			1
4.66 M	(15' 4")	4	4			3	3			2		6	2	2	4			1
5.13 M	(16' 10")	4	4			2	2	1	1	2	2	6	3	3	4			1
5.59 M	(18' 4")	4	4	2	2	2	2			2	2	6	3	3		4		1
6.05 M	(19' 10")	4	4	1	1	3	3			2	2	6	3	3		4		1
6.52 M	(21' 5")	4	4			4	4			2		8	3	3		4		1
6.98 M	(22' 11")	4	4			3	3	1	1	2	2	8	4	4		4		1
7.45 M	(24' 5")	4	4	2	2	3	3			2	2	8	4	4		4		1
7.91 M	(26' 0")	4	4	1	1	4	4			2	2	8	4	4		4		1
MAXIMUM HEIGHT 8M OUTDOOR																		
8.37 M	(27' 6")	4	4			5	5			2		10	4	4		4		1
8.84 M	(29' 0")	4	4			4	4	1	1	2	2	10	5	5		4		1
9.30 M	(30' 7")	4	4	2	2	4	4			2	2	10	5	5		4		1
9.77 M	(32' 0")	4	4	1	1	5	5			2	2	10	5	5		4		1
10.23 M	(33' 7")	4	4			6	6			2		12	5	5		4		1
10.69 M	(35' 1")	4	4			5	5	1	1	2	2	12	6	6			4	1
11.16 M	(36' 7")	4	4	2	2	5	5			2	2	12	6	6			4	1
11.62 M	(38' 2")	4	4	1	1	6	6			2	2	12	6	6			4	1
12.09 M	(39' 8")	4	4			7	7			2		14	6	6			4	1
MAXIMUM HEIGHT 12M INDOOR DO NOT EXCEED MAXIMUM HEIGHT																		

## BASE SET UP

YOU MUST GET YOUR BASE SET UP CORRECT IN ORDER TO ACHIEVE SAFE GUARDRAIL HEIGHTS

### PLATFORM REPOSITIONS

TEMPORARY PLATFORMS ENABLE CORRECT WORK PLATFORM LEVELS  
CORRECT PLATFORM LEVELS ACHIEVE SAFE ASSEMBLY

### RESTRICTED CEILING HEIGHTS

THE TOP 4 RUNGS CAN BE REPLACED USING 2 RUNG FRAMES & GUARDRAIL FRAMES  
GUARDRAIL FRAMES MUST BE SECURELY FITTED TO THE 2 RUNG FRAMES BEFORE FITTING TO THE TOWER TO ENSURE SAFE ASSEMBLY

### STOCK UTILIZATION

2 x 4 RUNG FRAMES CAN BE REPLACED BY 1x 5 RUNG + 1 x 3 RUNG (LADDER & PLAIN REQUIRED)  
THE 5 RUNG FRAME MUST BE FITTED BEFORE THE 3 RUNG TO ENSURE SAFE ASSEMBLY

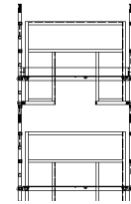
K5CR	5" Castors	BKD1	2 M Diagonal Brace	Y250	Telescopic Stabilizer
K6CR	6" Castors	BKD2	2.5 M Diagonal Brace	SKL2	Large Stabilizer
KALA	Adjustable Leg Assembly	BKH1	2 M Horizontal Brace	TKD1	2 M DW Toe board Assembly
FKD3	3 Rung DW Frame	BKH2	2.5 M Horizontal Brace	TKD2	2.5 M DW Toe board Assembly
FKD4	4 Rung DW Frame	PKP1	2 M Plain Platform	AGR1	2m Advanced G'rail Frame
FKD5	5 Rung DW Frame	PKP2	2.5M Plain Platform	AGR2	2.5m Advanced G'rail Frame
FDL3	3 Rung DW Ladder Frame	PKT1	2 M Trapdoor Platform		
FDL4	4 Rung DW Ladder Frame	PKT2	2.5 M Trapdoor Platform		
FDL5	5 Rung DW Ladder Frame	SKS1	Standard Stabilizer		

## BASIC

The Assembly pictures are for illustrative purposes only; the tower set up is that of 4.20m.

This base also sets up the following towers...

1.88m / 2.34m / 3.73m / 5.59m / 6.05m / 7.45m / 7.91m



WORK PLATFORM	BASE FRAME	NEXT FRAME	PLATFORMS		AGR TOWER WEIGHTS (KG)		
			1ST LEVEL	* REPOSITION 2	Platform Height	2m	2.5m
0.94 M	4 RUNG	N/A	2		0.94m	90Kg	103Kg
1.41 M	5 RUNG	N/A	3		1.41m	102Kg	117Kg
1.88 M	3 RUNG	3 RUNG	4		1.88m	109Kg	124Kg
2.34 M	3 RUNG	4 RUNG	1*	5	2.34m	114Kg	128Kg
2.81 M	4 RUNG	4 RUNG	2*	1	2.81m	176Kg	200Kg
3.27 M	5 RUNG	4 RUNG	3		3.27m	184Kg	209Kg
3.73 M	3 RUNG	3 RUNG	4		3.73m	191Kg	216Kg
4.20 M	3 RUNG	4 RUNG	1*	9	4.20m	195Kg	220Kg
4.66 M	4 RUNG	4 RUNG	2*	10	4.66m	215Kg	242Kg
5.13 M	5 RUNG	4 RUNG	3		5.13m	250Kg	285Kg
5.59 M	3 RUNG	3 RUNG	4		5.59m	263Kg	299Kg
6.05 M	3 RUNG	4 RUNG	1*	9	6.05m	268Kg	303Kg
6.52 M	4 RUNG	4 RUNG	2*	10	6.52m	287Kg	325Kg
6.98 M	5 RUNG	4 RUNG	3		6.98m	322Kg	368Kg
7.45 M	3 RUNG	3 RUNG	4		7.45m	329Kg	375Kg
7.91 M	3 RUNG	4 RUNG	1*	9	7.91m	333Kg	379Kg
8.37 M	4 RUNG	4 RUNG	2*	10	8.37m	353Kg	401Kg
8.84 M	5 RUNG	4 RUNG	3		8.84m	387Kg	444Kg
9.30 M	3 RUNG	3 RUNG	4		9.30m	395Kg	451Kg
9.77 M	3 RUNG	4 RUNG	1*	9	9.77m	399Kg	456Kg
10.23 M	4 RUNG	4 RUNG	2*	10	10.23m	418Kg	478Kg
10.69 M	5 RUNG	4 RUNG	3		10.69m	462Kg	529Kg
11.16 M	3 RUNG	3 RUNG	4		11.16m	469Kg	536Kg
11.62 M	3 RUNG	4 RUNG	1*	9	11.62m	473Kg	541Kg
12.09 M	4 RUNG	4 RUNG	2*	10	12.09m	493Kg	562Kg

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1. Insert 2 legs and castors into each frame.



2. Klik in 2 horizontal braces to the vertical member of the frames, as low as possible, below the 1<sup>st</sup> rung.



3. Add 2 diagonal braces, from the 1st to 3rd rung as shown.



4. Add next level frames – according to your kit list.



5. Engage Interlock Clips.



6. Fit temporary platform to the 1<sup>st</sup> rung and level base.



7. Standing on the platform, with the green label facing you, position the 1<sup>st</sup> pair of AGR frames to the vertical members above the rungs in the required position as shown.



8. Position the trapdoor platform to the appropriate rung (Trapdoor facing the ladder section) 1 rung above the bottom section of the AGR frames.

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9. Secure stabilizers as soon as possible to increase tower stability.



10. Access and egress to the next platform level through the trapdoor, using the ladder provided.



11. Add 4 rung frames, ensuring that the ladder is continuous.



12. Safely pass up the next set of AGR frames as shown.



13. With the green label facing you, position the AGR frames to the vertical members, above the rungs in the required position as shown.



14. Remove the temporary trapdoor platform Position to the appropriate rung (Trapdoor facing the ladder section) 1 rung above the bottom section of the AGR frames.



16. Fit toeboards in the correct position.



## DISMANTLING NOTES:

- Remove the AGR frames by disengaging the top hooks form the vertical members completely before descending through the trapdoor platform.
- Disengage Windlock clips to remove platforms.
- Disengage lower AGR hooks to complete removal

**Manufactured To a TUV Certified ISO 9001:2008 Quality Control System**

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