





Mast Climbing Work Platforms (MCWPs)

What you need to know

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Definition of an MCWP


“Mast climbing work platforms (MCWP) which are temporarily and permanently installed and are manually or power operated and which are designed to be used by one or more persons from which to carry out work.

The vertical moving components (work platform) are used to move those same persons and their equipment and materials to and from a single boarding point.


These restrictions differentiate MCWPs from builder’s hoists.”

- BS EN 1495:1998 and BS 7981:2002


What can an MCWP be used for?



- Bricklaying
- Refurbishment
- Cladding
- Rainscreens
- Curtain Walling




MCWP Terminology




Tied Platform
- Periodic Tie Assemblies

Can be used with 'freestanding' mast



Platform Performance




- What is the maximum working length of a platform?
- What is the maximum possible mast height?
- What is the maximum safe working load of a platform?

Answer:

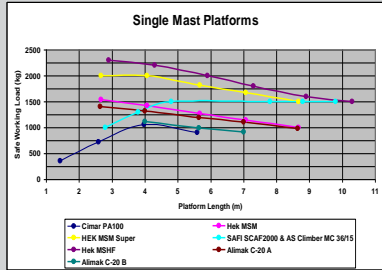
It depends on ...

- The type of platform
- The configuration used
- The distribution of the working load
- The frequency of the working duty
- The working envelope of the platform

Example: Typical Safe Working Loads



Single Mast Platforms



Platform Length (m)	Cimar PA100	WEG MSH Super	Hak MSHF	Alimak C-20 B	Hak MS5M	SAFEGRAF2000 & AS Climber MC 3015	Alimak C-20 A
1	500	1000	1500	1000	1500	1500	1500
2	500	1000	1500	1000	1500	1500	1500
3	500	1000	1500	1000	1500	1500	1500
4	500	1000	1500	1000	1500	1500	1500
5	500	1000	1500	1000	1500	1500	1500
6	500	1000	1500	1000	1500	1500	1500
7	500	1000	1500	1000	1500	1500	1500
8	500	1000	1500	1000	1500	1500	1500
9	500	1000	1500	1000	1500	1500	1500
10	500	1000	1500	1000	1500	1500	1500
11	500	1000	1500	1000	1500	1500	1500

General Performance

	Single	Twin
Platform Lengths	3m – 13m	8m – 30m
Safe Working Loads	500kg – 2000kg	1000kg – 5000kg
No. of Users	2 People	4 People

	Freestanding	Tied
Tie Distances	-	6m – 15m
Mast Height	Up to 20m	Up to 100m
Max. Wind Speed	12.5m/s = 28 mph	15.5m/s = 33.5mph

Note: There are platforms that can exceed these parameters.

Where can they be used?

- Practically any working environment
- If you have a special application ask your platform supplier or manufacturer for options



What regulations, standards and codes of practise exist for MCWPs?

Regulations and Standards

- Health and Safety at Work Act (1974)
 - Management Health and Safety at Work Regulations (1999)
 - Provision and Use of Work Equipment Regulations (1998)
 - Lifting Operations and Lift Equipment Regulations (1998)
 - Working at Height Regulations (2005)
- MCWP Specific**
- BS EN 1495 (1998) Lifting Platforms – Mast Climbing Work Platforms
 - BS 7981 (2002) Code of Practise for the installation, maintenance, thorough examination and safe use of mast climbing work platforms

BS EN 1495 (1998) Lifting Platforms – Mast Climbing Work Platforms
The design standard for Mast Climbing Work Platforms

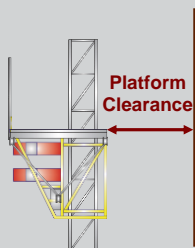
Wind Restrictions Clauses 5.1.2.5 and 5.1.2.8

'In Service' Wind Speed	The maximum wind speed at which the platform can still be used.	During Installation	12.7m/s = 27 mph
		Mobile MCWP	12.7m/s = 27 mph
		Tied MCWP	15.5m/s = 34 mph
'Out of Service' Wind Speed	The maximum wind speed the platform must be designed to withstand	Any MCWP	42m/s = 94 mph

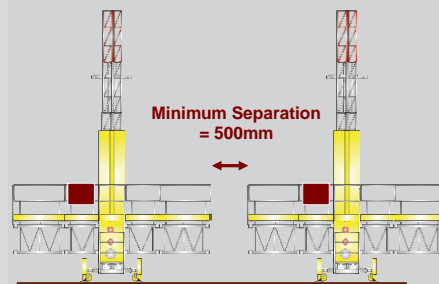
Platform Guarding
Clause 5.3.2



- Minimum Allowable Clearance = 150mm
- Clearance up to 250mm requires a 150mm high toe board at working face.
- Clearance greater than 250mm requires an 1100mm tall handrail at working face.



Platform Separation
Clause 7.1.2.12



BS 7981 (2002) Code of Practise for the installation, maintenance, thorough examination and safe use of mast climbing work platforms.

Operation and Use of MCWPs
Clause 11.1



“ No one should be allowed to operate or work from MCWPs unless they are familiar with its correct operation ”

Personnel Roles and Competencies
Clause 7



Title / Role	Responsibilities
Supplier appointed person	Planning & Execution of Installation, Dismantling and Moving of MCWP
Management appointed person	Planning, Safe use, Servicing and Inspection of MCWP
Installer	Erection, Dismantling and Moving MCWP
Demonstrator	User Inductions
Mobile Operator	Dismantling, Moving and re-installing MCWP in <u>original configuration only</u>
User	Tradesman working from platform

Installation Personnel
Clause 10.1



- No-one should be allowed to erect or dismantle an MCWP unless they are trained and authorised to do so, or are undergoing formal training under supervision. Training and assessment should be carried out to a formally documented scheme
- All personnel carrying out the erection or dismantling of MCWPs should be physically and mentally fit to undertake the work.

Use of Safety Harnesses Clause 11.6



- The work platform of an MCWP is provided with guardrails and toe boards to protect the occupants from falling. Consequently the use of harnesses is not required during use of MCWPs unless any part of the guardrail system has been removed
- If so a risk assessment should be carried out to ascertain the need for and specification of, fall arrest / work restraint equipment.
- Before attaching fall protection equipment to a work platform it is important that the Management appointed person ascertain both the location and suitability of anchor points

How are MCWPs maintained?



- Daily (or Pre-Use) Inspections
- Weekly Inspections
- Routine (or Periodic) Maintenance as prescribed by manufacturer
- Thorough Examinations at 6 month intervals

Daily Checks Clause 11.3



- At the beginning of each shift or working day, the Management appointed person should ensure MCWPs are checked and are in a fit condition to start work
- If the person conducting the checks has any concerns about a defect or the safety of the platform, they should consult the Management appointed person

Weekly Inspections Clause 11.4



- Once a week MCWPs should be inspected to ensure that no damage or wear has occurred and that all safety systems are functioning correctly
- The inspection should be carried out by a person who has been assessed as competent to carry out this task
- The results of the weekly inspection should be recorded in a retrievable form

Thorough Examination of MCWP Clause 12



- Thorough Examination (including testing/visual inspection) of MCWPs should be carried out by a competent person:
 - After erection
 - Before being taken into service
 - After the occurrence of a dangerous incident
 - Every six months thereafter



What are the 'Golden Rules' of using Mast Climbing Work Platforms

Golden Rules of MCWP Operation



1. Pre Use Check – Every time before using platform
2. Ensure there is a minimum of 2 people on the platform at all times.
3. Ensure that the Maximum Safe Working Load is not exceeded.
4. Check there are no obstacles in path of platform, when moving.

Golden Rules of MCWP Operation



5. Check the Power Cable does not get caught or snagged , when moving.
6. During Manual Descent / Brake Release - Extreme care must be taken to lower the platform slowly.
7. If there is a concern with the platform or its operation report it to a competent person.

Any Questions?

