PASMA

Prefabricated Aluminium Scaffolding Manufacturers' Association

PASMA CERTIFIED
Signature
Date 7.3.99

One day basic course on the Safe Assembly, Use, Repositioning and Disassembly of Aluminium Towers

The Aliscaff Version

12th August 1998

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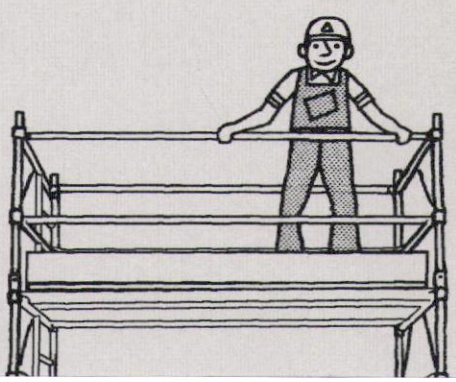
CERTIFIED TO BRITISH STANDARD LIC KM 07045 1139 Pt.3



ITEM NO : 90.0028

The Prefabricated Aluminium Scaffolding Manufacturers Association (PASMA)

PASMA ONE DAY TRAINING SCHEME

OPERATIONS MANUAL

TITLE: FOREWORD

PASMA have since 1982 offered through its full members a one day basic training course in the safe use of Mobile Access Towers (MATs). An increasing number of PASMA Associate Members have recently indicated that they would also like to instruct and certify delegates to the PASMA basic MAT Standard.

A Training Committee was established to formulate a new National One Day Basic Course with a formal scheme management system containing the necessary controls to ensure that the requisite high standards were maintained. A fully documented Training Course Operations Manual has now been prepared in respect of each members' MAT's.

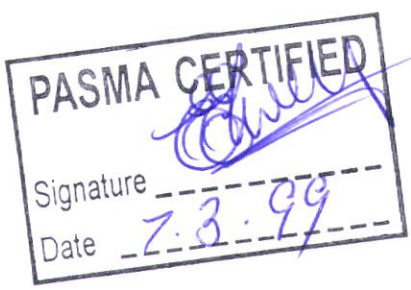
Training Centres and Instructors are required to meet the PASMA criteria and will be centrally registered and monitored.

A stringent auditing procedure will be in place to continually monitor the Approved Training Centres, the Instructors, course contents, and the written and practical examination criteria.

The content of each course is, as in the past, dedicated to a particular member's MAT, but a delegate who has successfully passed any PASMA course will be considered competent as required by The Construction (Health, Safety & Welfare) Regulations 1996 in respect of any MAT manufactured by another PASMA member, provided he is in possession of the appropriate Instruction Manual (IM).

Member Companies and Instructors are encouraged to retain their individuality by being given discretion in the presentation of their course provided certain key areas are addressed to ensure that the criteria set by PASMA is maintained.

..... **K.E. RICHARDSON - CHAIRMAN, PASMA**



PASMA ONE-DAY BASIC TRAINING COURSE IN THE SAFE USE OF ALUMINIUM ACCESS TOWERS (ALISCAFF LTD VERSION)

The following is an extract from the PASMA (Prefabricated Aluminium Scaffolding Manufacturer's Association) Code of Practice.

12. TRAINING

The Construction (Health, Safety & Welfare) Regulations 1996, require that the installation or erection of MATs should be carried out only under the supervision of a competent person. A competent person is considered to be a person possessing such training, technical knowledge or experience as may be appropriate having regard to the nature of the activity. PASMA therefore sponsors a training course operated by certain authorised member companies.

The course is based on a format and content agreed by all PASMA members influenced by their own extensive experience. Hence it has great value as a training programme, and it widely recognised by safety professionals.

A PASMA A4 size Competency Certificate and a credit card sized ID Card with encapsulated photograph is issued to successful delegates who pass the written and practical test. The rear of the ID Card is endorsed as follows:-

This is to certify that the person named overleaf is now considered "competent" in that he meets the requirements of "training" as required by Section 28 of the Construction (Health, Safety & Welfare) Regulations 1996, and is considered to be competent in the following areas relating to "PASMA type" Mobile Access Towers (MATs).

1. The assembly of MATs
2. The use of MATs
3. The repositioning of MATs
4. The disassembly of MATs
5. The Supervision of others involved in 1-4
6. The Inspection and reporting on MATs as required by Section 29 of the Construction (Health, Safety & Welfare) Regs 1996.

PASMA Training Courses are only available from approved PASMA members (full or associate), they are not available from any other source. **Please be aware that so called "PASMA Type" courses offered by non approved companies are not authorised by PASMA and their standards are not subject to the PASMA stringent auditing procedures used to continually monitor the PASMA Approved Training Centres, the Instructor, course contents and the written and practical examination criteria.**

Whilst individual PASMA Training Courses use one particular make of MAT, it is considered that a successful candidate would be equally competent as above in respect of any other PASMA manufacturer's MAT, provided he was in possession of the appropriate manufacturer's IM

The course is designed to instruct a maximum of 12 delegates per course and is charged to employers at £95.00 + VAT per delegate. If the attendance is less than 10 delegates, then a minimum charge of £950.00 + VAT will apply. Arrangements can usually be made to consolidate delegates from different companies to minimise cost.

PASMA ONE DAY STANDARD COURSE IN THE SAFE USE OF ALUMINIUM

MOBILE ACCESS TOWERS (MATs) ALISCAFF LTD VERSION

Introductory talk - Instructor's personal presentation (not recorded)

Show Slide - PASMA Standard Course

Good Morning, may I welcome all delegates to the PASMA One Day Basic Course in the safe assembly, use, repositioning and disassembly of Aluminium MATs (Aliscaff version).

My name is ***(name of instructor),*** I am registered by PASMA as an instructor, which means that I have been vetted by PASMA and am considered to be suitably qualified as an instructor to give this course. The course itself, whilst it was prepared by Aliscaff, has also been vetted by PASMA and contains all the necessary information to instruct delegates. The premises in which the course is held has also been vetted as to its suitability and has passed muster. The premises, the course and myself are subject to periodic audit to ensure that standards are maintained.

PASMA stands for the Prefabricated Aluminium Scaffolding Manufacturers Association. PASMA members are the major manufacturers in the UK who have come together to recommend Codes of Practice, Standards etc. for the safe use of Prefabricated Aluminium MATs. They are all licensed to manufacture MATs to BS 1139 (HD 1004) - ***Show Slide - Aliscaff BSI Licence*** - by organisations such as BSI, Quality Assurance, Lloyds Register, SGS Yarsley Intentional Certification Services Ltd. etc. They are in turn accredited by the United Kingdom Accreditation Service, who are in their turn evaluated internationally as working to the agreed international standards for the operation of accreditation bodies by a peer group consisting of representatives from 3 or 4 European accreditation bodies, they in turn report to a European Forum known as the European Accreditation Service who would if necessary serve non conformity reports on the accreditation body! You will see that quality control has been paramount in all aspects of PASMA member's MATs

After completion of today's course you will have a better understanding of prefabricated aluminium MATs, including their potential hazards, maximum designed loads, maintenance, storage, inspection for damage, how to deal with accidents or damage involving MATs, the completion of inspection reports, together with a better knowledge of the relevant British Standard and the Regulations and Recommendations relating to their use.

It is a requirement that operatives using MATs must be competent, it is not possible to anticipate the level of experience of all candidates, which will of course vary. The instruction has therefore been pitched to what we consider is likely to be the lowest common denominator of knowledge and experience, thus the person with a limited knowledge will still be able to follow everything whilst the person with a greater knowledge and experience will have some useful revision.

A competent person is defined in the Construction (Health, Safety & Welfare) Regulations 1996 as "a person who possesses such **training, technical knowledge or experience** as may be appropriate having regard to the nature of the activity or to be adequately supervised by such a person

We use the audio visual method of presentation to ensure uniformity of presentation, but of course I am on hand to answer questions, to give practical demonstrations and to conduct the final written examination. If any delegates have reading or writing difficulties I will assist them on a one to one basis.

However knowledgeable and experienced one may be, it is difficult to prove this quickly to an HSE inspector. There will be a written test at the end of this course if you answer certain important questions correctly and meet the qualifying standard of 88% you will obtain an A4 size Certificate of Competency - ***Show Slide - Certificate of Competency.*** For use on site you will also be given an ID Card indicating you have been trained - ***Show Slide - Sample ID Card*** - you can therefore satisfy persons requiring such proof of your competency by producing your Competence ID Card, proving that you are competent to assemble, use, reposition and dis-assemble aluminium MATs, to supervise others doing the above and to complete inspection reports.

The rear of the ID cards reads: - ***Show Slide - Rear of ID Card***

This is to certify that the person named overleaf is now considered "competent" in that he meets the requirements of "training" as required by Section 28 of the Construction (Health Safety & Welfare) Regulations 1996 and is considered to be competent in the following areas relating to "PASMA type" MATs.

1. The assembly of MATs
2. The use of MATs
3. The repositioning of MATs
4. The disassembly of MATs
5. The supervision of other involved in 1-4
6. The inspection and reporting on MATs are required by Section 29 of the Construction (Health Safety & Welfare) Regulations 1996.

Whilst this course is in respect of Aliscaff MATs, the certificate and ID card proving your competence is equally applicable to any other MAT produced by a PASMA member, provided you are in possession of the appropriate Instruction Manual (IM). This is because the basic safety rules are common to all PASMA makes of MATs.

We asked your employers to ensure that you wore work boots or shoes, I will issue safety helmets and gloves during the practical exercises and I will give you name tags so I can monitor your practical work. Later I will also issue IM's, the PASMA Code of Practice and a synopsis of the course.

Not only does your employer have a legal responsibility to provide a duty of care to you, your colleagues, and other people, you and your work mates also have a legal responsibility not to cause injury to yourself or others. and to co-operate with your employer.

You must remember the overriding general safety principal that you must abide by when about to assemble a MAT. It is that if you cannot do what is dictated by safety considerations (such as tying in, fitting stabilisers in the required position etc.) then do not assemble the MAT until you have sought advice from your employer

Manufacturers and intermediate suppliers also have a legal responsibility to provide a duty of care.

START OF AUDIO VISUAL PRESENTATION - ***Show Slide with 13 specifications***

1. Introduction to the Aliscaff range of MATs.

There are currently 13 specifications of MATs in the Aliscaff Range.

1.	6ft Stairladder	)	
2.	6ft Single Width Span	)	
3.	8ft Single Width Span	)	
4.	10ft Single Width Span	) 20" rung centres	The only difference
5.	6ft Double Width Span	)	in the component
6.	8ft Double Width Span	)	breakdown between 6', 8'
7.	l0ft Double Width Span	)	and 10' span is that the horizontal (guardrail)
8.	6ft Single Width Span	)	braces, the diagonal braces
9.	8ft Single Width Span	)	and the platforms are longer
10.	l0ft Single Width Span	) 10" rung centres	
11.	6ft Double Width Span	)	
12.	8ft Double Width Span	)	
13.	l0ft Double Width Span	)	

2. Regulations, Advisory Notices, British Standards

There are at least 12 significant Regulations, Advisory Notices and British Standards that govern the use of MATs, they are:- ***(Show Slide listing them)***

Construction (Health, Safety & Welfare) Regulations 1996

Management of Health & Safety at Work Regulations 1992

Provision and Use of Work Equipment Regulations 1992

Personal Protective Equipment at Work Regulations 1992

Manual Handling Operations Regulations 1992

BS 1139 Part 3 1994 (HO 1004 1992) - Kite Mark, Test Guard, GS Mark etc.

BS EN 1298

HSE Guidance Note 0842 1987

Health & Safety in Construction (HS (G) 150)

PASMA Code of Practice (COP) (5th revision) compiled by PASMA, taking into account current legislation, guidance notes, HD 1004 etc. Complying with the PASMA COP maximises safety.

Reporting of Injuries, Diseases and Dangerous Occurrences Regs 1995 (RIDDOR).

All these Regulations Advisory Notes and British Standards have one major purpose, to ensure that you, your work mates and the public are safe. If you are not convinced that safety is important, then ask "Mummy" - ***Show Slide with "Mummy'***

You may be tempted to take "short cuts" when erecting a tower, because "the job will only take a few minutes and it's not worth fitting the guard rails or toeboard, or perhaps, not tying in, or fitting the outriggers". "You will be up and down in 5 minutes". Yes but you may be down even quicker than that, if you are tempted to take short cuts. ***Never compromise safety, it is just not worth it***

Regulations are enforced by the HSE or by the Local Enforcement Officer. Where a Regulation etc. is at variance with another, we will advise using the highest feature of safety.

3. *Stability*

A MATs stability is governed by its narrowest base dimension relative to its height -***Show Slide - Basic 6' D/W Tower - Show Slide 6' D/W - Show Slide 6' D/W Tower without Stabilisers (Not a Perfect Square).*** It therefore follows that if its base can be extended by the use of stabilisers or outriggers, and if each base dimension is the same (by forming a perfect square with the four points of contact), then the free standing height will be maximised. Whilst stabilisers are generally specified by customers rather than outriggers, it must be remembered that where a MAT is moved frequently, outriggers are preferable to stabilisers.

In the past there was a simple formula for determining the free standing height of a MAT. The narrowest base dimension was multiplied by 3½, 3 or 2½ depending on circumstances and this distance indicated the maximum free standing height of the MAT. Higher standards are now required by HD 1004 and to determine the free standing height of a MAT you should refer to the manufacturer's breakdown for that particular height of MAT using all those components and maximising the base area by fully extending the telescopic stabilisers and setting the stabilisers/outriggers to form a perfect square - ***Show Slide - The Perfect Square.*** When used against a wall that is at least $^{2}/_{3}$ of the height of the tower, the inboard stabilisers are set parallel to the wall - ***Show Slide*** of ***Tower Against a Wall*** - and the outboard stabilisers are orientated to form the perfect square based on the notional position of the inboard stabilisers, assuming the wall was not there.

4. Maximum Designed Load

Another major safety consideration is the maximum designed load. The assembled MAT has a maximum designed load (MDL) capacity (formerly referred to as its SWL) **the Aliscaff MDL is 750 Kg**. The MDL is made up of its self weight (which varies with its height), the weight of any tools or materials on the MAT, and the weight of the operatives on it. Obviously any ballast has also to be taken into account and guy ropes and ground anchors also place a loading on the MAT which is why ballast weights, guy ropes and ground anchors should be as specified by the supplier -***Show Slide - Breakdown of Tower Showing Net MDL.***

The third major factor affecting stability is wind.

5. Wind Loads on the Tower (Free Standing Towers)

PASMA type towers are designed to be safe to use in wind speeds up to 17 m.p.h. -Beaufort Scale 4.

Wind imposes a horizontal load on the tower tending to overturn it. In normal safe working conditions this tendency is counteracted by the self weight of the tower, and the stabilising effect of the outriggers or stabilisers. BS 1139 Part 3 1994 (RD 1004) states that towers must be stable in a free-standing condition in a wind pressure that equates to 28 m.p.h. or Beaufort force 6. If the wind speed should exceed 17 m.p.h., this is recognised by the leaves on the trees rustling and light debris such as leaves and paper blowing about, you should cease to work upon the tower. If the wind reaches 25 m.p.h. the tower should be tied in to a rigid structure, and if it is likely to reach 40 m.p.h. the tower should be dismantled.

Towers erected in accordance with the PASMA C.O.P. are safe to be used in winds up to these speeds when the specific recommendations of the supplier are followed.

Be cautious about the use of towers in open ended buildings, such as hangars or unclad buildings, as the wind forces in such locations can often be greater than if the towers are used outside the building, due to the funnelling effect of the wind.

Never sheet MATs that are not tied in - ***Show Slide - "We Go Anywhere MAT***

6. Other Horizontal Loads

Apart from wind loads, other horizontal loads can act on the tower. These are mainly caused by the actions of operatives working on the tower. For example, when using hand tools, such as a drill, pushing on the drill causes an equal and opposite force on the tower. Such forces should be avoided as much as possible and in no circumstances should they exceed 20 Kg (44lb) on free standing towers.

This hazard also applies to shot blasting, water jetting, pressure etc.

7. Vertical Eccentric Loads (Lifting Material etc.)

Any vertical load outside the area of the tower can be hazardous. For example, heavy materials hoisted outside the effective base area of the tower have a tendency to overturn the tower particularly if no outriggers or stabilisers are fitted as can be the case with towers of lower height - ***Show Slide - Pulling Up Fork Lift.***

Loads must be hoisted within the EFFECTIVE BASE AREA of the tower (i.e. within the area bounded by the tower or stabilisers/outriggers where fitted). The advice of the suppliers must be sought about hoisting loads to ensure safe and stable use of the tower - Show ***Slide - Footprint of Tower.***

8. Tying In

MATs should be tied in at every opportunity, especially when left unattended or located in exposed conditions. There are an infinite number of circumstances, some you can imagine, - ***Show Slide - MAT on Road*** - some you cannot, - ***Show Slide - One of those you Can't Foresee*** - when the fact that an otherwise free standing MAT is tied in will prevent or reduce the severity of an accident.

Tie arrangements are shown in the PASMA C.O.P., but show Supa Tie - ***Show 2 Slides - Revised Page 10 COP and Supa Tie.***

The Supa Tie is the best method of fixing a tube to the wall and it does not need check fittings. Supa Tie fittings come in two versions, one to accept a tube parallel to the wall - ***Show Slide*** - the other to accept a tube at right angles to the wall - ***Show Slide.*** There is a cam action on this fitting which enables the expanding anchor to be positioned anywhere within 63.5mm (2½") of the pick up tube. Supa Ties only accept conventional scaffold tube $1^{29}/_{32}$" (48.3mm) outside diameter (OD).

9. Fittings

PASMA type MAT tube is 2" (50.8mm) OD tube, whilst conventional scaffold tube is $1^{29}/_{32}$" (48.3mm) OD. Therefore conventional scaffold fittings must not be used directly on PASMA type MATs. - ***Show Slide - Scaffold Fittings.***

Aliscaff aluminium couplers can be used and will close down to $1^{29}/_{32}$" (48.3mm) if conventional steel or aluminium tube is used to tie in to a fixed structure - ***Slide Showing Aliscaff 90° Fitting.*** Whilst normally 90° fittings would be used to tie in, swivels, parallels and single fittings are available, they have a MDL of 500 Kgs. The single fitting can be used as check fittings to increase the coefficient of friction -Show ***Slide - Other Fittings.*** When using reveal ties they should not exceed 50% of all the ties used.

The tubes used to tie in a MAT should be in pairs, one on each side of the MAT and attached to each of the two verticals of each frame, close to the rungs of the frame.

The first pair of ties should be in the middle of the first 2M lift, and thereafter at least every 4M - ***Show Slide - Correct Tying In.***

10. Climbing

MATs must only be climbed on the inside and only using the method proposed by the manufacturer. This will be by using a 45° stairway, a vertical clip in ladder or by an integral ladder in the frame. The distance to the first step or rung must not exceed 4OOmm (16") unless the first platform is at 6OOmm (24") or less. The stairladder MAT has horizontal (guardrail) braces or diagonal braces to the stairladder - ***Show Slide of Stairway.***

Whilst the stairway MAT is only available in a 1.8M (6') length, span type MATs are available in 1.8M (6'), 2.5M (8') and 3M (10') lengths. Whilst this requires different lengths of diagonal braces, horizontal (guardrail) braces, platforms and toeboards, all other components are the same.

11. Working Platform - on double width MATs

A working platform is achieved by placing two platforms side by side, access through the working platform is by using a full hatch platform when using the 45° stairladder or the small hatch platform for other forms of vertical access - ***show slide*** HD 1004 requires that is shall be possible to secure platforms so that lifting by wind and overturning is not possible, Aliscaff offer the windlock coupler - ***show slide of Windlock Coupler.***

12. Protection on Platform

The Construction (Health, Safety & Welfare) Regulations 1996 that dictates safety standards for MATs, require that where a person is liable to fall 2M or more, the main guard rail, or other similar means of protection, shall be at least 9lOmm above the edge from which any person is liable to fall, and there shall not be an unprotected gap exceeding 470mm between any guard rail, toeboard barrier or other similar means of protection, this is to prevent persons or material falling from the platform. In practise this normally requires 2 horizontal (guardrail) braces each side of the platform. Where risk assessment requires it then, horizontal (guardrail) braces on a lower platform height may be required - ***show slide an illustration of relative positions.*** There is a dispensation in that with the intermediate platforms on stairladder MATs. the inboard guard rails are omitted to facilitate access from the stairladder to the platform, but as the working platform is double boarded all four guard rails must be fitted and access obtained through a full hatch platform.

HD 1004 requires a horizontal (guardrail) brace at 1M ± 50mm and an intermediate horizontal (guardrail) brace positioned so that the requirement of a maximum gap of 470mm is met. This is therefore a safer standard than the C (HS&W) Regs 1966 and this requirement is met by all PASMA type towers.

Toeboards at least 15Omm high are required on all working platforms to prevent persons or materials from falling and where a person can fall 2M or more, or on non working platforms where a person can fall 2M or more and where materials or substances are stored but non working platforms without stored materials or substances are not required to have toeboards.

13. Single width MATs

Single width (S/W) MATs are used where there is insufficient space at the base to accommodate a Double Width (D/W) MAT. S/W MATs will accept only one platform board and are available in lengths of 1.8M (6'), 2.5M (8') and 3M (10'). S/W MATs require less diagonal bracing but are otherwise similar to D/W MATs.

14. Disassembly

The disassembly of MATs is basically the reverse procedure of assembly, the only difference is that prior to going to a position half way through the hatch, the hooks on the horizontal (guardrail) braces at the opposite end of the MAT to the hatch should be detached but left primed before you take up your position halfway through the hatch. Never drop components to the ground. Pass them down or lower by rope, never use force on components, ensure braces are kept in line when one end has been removed.

15. Assessment Of MAT Requirements

When assessing the specification of a MAT for a particular job, you must assess the height required, the space available for the base, S/W or D/W, 1.8M (6'), 2.5M (8') or 3M (10') and the weight loading requirement. At the same time checking the suitability of the site and of any route if you are required to reposition the MAT. The IM will indicate if the MAT is free standing or if it requires to be tied in at a certain height. You must also arrange for any necessary "tying in" equipment and if necessary rope to raise or lower components.

16 Ordering a MAT

When arranging for the delivery of an appropriate MAT the IM will give you a breakdown of the components required.

When delivered to site, all components should be carefully checked against the delivery note and the IM breakdown for quantity and examined for condition, compatibility or possible damage (all of the same manufacturer and type of MAT).

The names and descriptions of all the components are shown on the first page of the IM.

17. Components

Aliscaff castors have the ability to lock the trail as well as the rotation - ***show slide - Trail, No Trail Castor***. Aliscaff currently use castors that have a "trail no trail" facility. This means the locking of the castor moves the wheel from the trail position to a point immediately under the vertical.

Castors should only be used on firm ground and must always be locked unless actually moving the MAT. 5" castors have a 425 Kg MDL each (1700 Kg total MDL).

Base plates can be used where the MAT is not going to be repositioned.

Adjustable legs which accept either the castor or the base plate are to be used for levelling only, not to gain height, it follows therefore that one adjustable leg must always be fully retracted. Press the concealed trigger to retract or extend rapidly in increments of $^1/_8$, infinite adjustment is obtained by turning the castleated nut.

D/W frames will accept two platform boards.

S/W frames wilt accept one platform board.

Integral ladder frames have the advantage that the ladder does not impinge on the inside of the MAT, so climbing can continue from one 2M lift directly onto the next, one does not have to go to the other side of the MAT as each 2M lift is climbed.

Horizontal (guardrail) braces - they are the same length at the appropriate platform boards 1.8M (6'), 2.5M (8') or 3M (10'), they should be stored on parking pieces. Four horizontal (guardrail) braces/horizontal (guardrail) braces are required at all platforms where a person can fall 2M or more, exceptionally on Stairladder MATs, on intermediate platforms the inboard horizontal (guardrail) braces are omitted.

Diagonal braces vary in length according to the length of the MAT they are designed for. They are labelled to indicate the length of the MAT they are designed for, they should be stored on parking pieces. When fitting any brace always ensure that the hook at the other end is fitted in the corresponding position on the other side.

Vertical clip in ladders, these are available in 2M (6'6") or 3M (10') lengths to suit MATs of an even metre height or an odd metre height, odd height MATs have one 3M ladder at the base. They impinge on the inside of the MAT, therefore after each clip in ladder is fitted, the next clip in ladder is fitted at the opposite end of the MAT to the previous one, otherwise the operator would not be able to open the hatch.

45° stair ladders, these are used in the stairladder MAT and should not be used for carrying heavy tools. Access is safer and more convenient than vertical access and normally has parallel handrails.

16° inclined ladder is used in lieu of the clip in vertical ladder and is marginally more convenient to climb.

Standard platforms - all platforms have slip resistant decking as per HD 1004, all have an MDL of 250 kgs UDL irrespective of length which may be 1.8M (6'), 2.5M (8), or 3M (10').

Small hatch platforms have the hatch designed for vertical access, they may be 1.8M (6'), 2.5M (8') or 3M (10').

Full hatch platforms are only available in 1.8M (6') lengths and have the hatch designed for stairladder/stairway 45° access. Remember the hinge of the hatch must always be sited outboard.

Toeboards are available for double or single width platform board applications.

Stabilisers have pad feet, standard and telescopic models are available. They should be fitted ASAP after the first lift has been assembled. When moving a MAT they should be adjusted so the pad feet are 12mm (½") from the floor, when repositioned the stabilisers should be adjusted to sit firmly on the ground with the MAT vertical (2 planes), forming a perfect square and the couplers retightened. To obtain the maximum extension of the stabiliser, the lower arm should be as close to the horizontal as possible.

Outriggers perform a similar function to stabilisers in that they enlarge the base of the MAT but they are preferable to stabilisers if the MAT is moved frequently, again like stabilisers they should be fitted ASAP after the first lift has been assembled. Instead of having pad feet (which have to be lifted when moving), they have adjustable legs and castors. Because they can rotate on the verticals of the MAT (unlike stabilisers that are firmly clamped) they require a brace to triangulate them and hold them in their optimum position - show ***slide - plan view showing triangulation and perfect square at base for optimum stability.*** Remember the narrowest base dimension dictates stability. Ballast, guy ropes and ground anchors should only be used on instructions from the manufacturer.

The IM is a vital document and must be in your hands during assembly. When assembling the MAT follow the IM closely, not only what to fit where, but when, the sequence of operations is important - show ***slide - "they left the base frames till last"***

18. Location Pins

You will notice that you are required to fit a platform board temporarily at a low level, because all rungs have seven location pins this is the perfect method to ensure that the MAT is square. Remember when fitting any platform board or brace, always ensure that the hook at the other end is fitted in the same corresponding position on the other side of the MAT.

The distance to the first step or rung must not be more than 400mm, unless the first platform is at 600mm or less.

19. Rest Platforms

HD 1004 requires a 4M maximum climb between rest platforms exceptionally 4.4M on first lift. C (HS&W) Reqs 1996 requires 9M maximum between rest platforms. Aliscaff supplies platforms at 2M (6'6") intervals exceptionally in "odd height" MATs the first platform is as 3.3M (10,10"). ***Show Slide - Cross Over of Stairladders***

Remember that when fitting stabilisers or outriggers the optimum position is a perfect square ***- Show Slide - when used against a wall.***

20. Frames Locked to One Another

Frame collars are semi automatic in that if they are primed the frame collar pin will automatically engage in the spigot hole of the frame beneath. Having fitted one frame onto another the next thing to do is to check that the interlock pins have engaged by attempting to lift the upper frame.

If additional height is required use more components. do not stand on boxes, steps, ladders etc.

We have all been guilty of taking something home in a "knock down" state and trying to assemble it. If we run into problems we refer to the instructions, we are presumably abiding by the dictum "when all else fails, look up in the instructions". This dictum may not matter too much when assembling a wardrobe, but a MAT is a different matter, ***safety is paramount***

When assembling a MAT you must have the IM in your possession

We will commence by looking at the 6' x 4' span MAT and then a stairladder MAT on the AV - ***Show Slide - showing breakdown of components alongside an assembled 4.3M platform height MAT*** You will note there are 12 different types of components used in this MAT. Before erecting a MAT on site you should have assessed the height, type and size required - ***show slide.*** When delivered you should ensure, using the IM, that the component quantities delivered correspond to the breakdown of that height of MAT - ***show slide.*** You should also ensure that all the components are serviceable, and compatible (that is of the same manufacture) using the Aliscaff check list - ***show slides.***

You should satisfy yourself that the surface you are erecting the MAT on is suitable to take the weight of the MAT on its castors or base plates and suitable to support the stabilisers or outriggers and that the SWL and cross section of the MAT is as per your order. If the ground is soft, substantial boards or other suitable material must be used to provide a firm foundation - ***show slide***

It should be remembered that braces are not load bearing members and components such as platforms have an MDL capacity of 250 Kgs which must be a universally distributed load.

When assembling the MAT, you will require a minimum of one assistant. If he is not considered to be a competent person as defined by the Construction (Health, Safety & Welfare) Regulations 1996, he must be closely supervised by you in your capacity as a "competent" person. You must ensure he does not assemble the MAT in advance of your instructions and supervision, remember that under the Health and Safety Legislation you will be held responsible in the event of an accident.

Assemble the MAT exactly as per the IM. You will find that the Aliscaff IM sequence is designed so that at all times you are working within the MAT. At no time will you find yourself erecting the MAT without some form of effective restraint around you - ***show slide.***

21. Repositioning MATs

If you intend to reposition the MAT, check the proposed path of the castors, stabilisers or outriggers. The path should be firm and level and unencumbered. You should pay particular attention to potential overhead hazards such as electricity cables, overhanging trees, telephone wires, open windows, brackets attached to buildings, horizontal roof trusses etc., also check the proposed route for holes, ducts etc. - ***show slide.*** After unlocking the castors the MAT must be moved by physical effort by pushing at the base only. Never move it by mechanical means, never by pulling from the platform, never by lifting with a crane.

Care should be taken to ensure that the MAT remains vertical when being moved. If the ground slopes, check that there will be sufficient operatives to guide and restrain the MAT. When moving the MAT it must be reduced if necessary to a height that the IM shows can be moved. If the stabilisers/outriggers are not in the optimum position, for example, because of a wall or obstruction, position them in that optimum position (forming a perfect square) before moving, ensure the MAT remains vertical. There must be no men or materials on the MAT and any ties must be progressively removed as the MAT is dismantled to its free standing height, the castors on the MAT and, if necessary, the outriggers should be unlocked, the stabiliser feet should be raised l2mm from the floor and tightened firmly again. When resited the castors should be relocked, the stabiliser feet seated firmly on the ground and tightened. Stabilisers/outriggers should be aligned as dictated by walls or other obstructions subject to the instructions in the IM. The MAT should then be checked for vertical alignment (both planes),the adjustable legs adjusted if necessary and the castors relocked, the MAT should then be secured by tying in if necessary.

22. Demonstration of assembly of 14' platform height D/W span MAT

Instructor issued IM to all delegates and demonstrates assembly whilst delegates follow it stage by stage in the IM, showing how to ensure MAT is square by fitting a platform and to check vertical alignment. Delegates are advised how to dismantle, not to drop components, but to pass them down or lower them by rope, they are instructed not to forcibly disengage components and to keep braces in line.

23. Delegates disassemble the D/W Span Tower

24. Delegates assemble a 14' platform height D/W Span Tower

25. Delegates relocate the D/W Span Tower against a wall on uneven ground.

26. Delegates disassemble the D/W Span Tower

27. Demonstration of assembly of 14' platform height Stairladder MAT

Instructor issues IM to all delegates and demonstrates assembly whilst delegates follow it stage by stage in IM. Delegates are advised how to dismantle.

28. Delegates disassemble the Stairladder MAT

29. Delegates assemble the Stairladder MAT

30. Delegates disassemble the Stairladder MAT

31. Periodic Inspection and Reporting on MATs

The Act requires periodic inspection of any working platform (which includes a MAT) by a competent person, and the submission of a report when first taken into use in the same place for 7 days or more, after any subsequent addition, dismantling or other alteration, after any event likely to have affected its strength or stability, and at regular intervals not exceeding 7 days since the last inspection. A specimen report is in your synopsis. A report is not required if a person cannot fall 2M or more. If a tower is incomplete or faulty a warning notice should be displayed - **"Danger Incomplete or Damaged - Not to be Used"**

You should remember the 4 situations when an inspection report is required on a qualifying MAT (that it one from which a person can fall 2M or more and which is going to remain in one position for 7 days or more):-

1. Before being taken into use for the first time

2. After any substantial addition, dismantling or other alteration.

3. After any event likely to have affected its strength or stability.

4. At regular intervals not exceeding 7 days since the last inspection.

The persons who produced the Construction (Health, Safety and Welfare) Regulations 1996 were obviously mindful that MATs are frequently used for a very short duration of time at any particular position on a site, they therefore incorporated under Report 30 (b) a dispensation that "Nothing in this Regulation shall require a report to be prepared in respect of any mobile MAT scaffold unless it remains erected in the same place for a period of seven days or more" - ***show slide***

Whilst if moved or dismantled before seven days this absolves the person assembling the MAT of the need to produce a report at the time of assembly If it will be, or does remain erected in the same place for seven days or more, then a report is necessary both at the time of assembly and within seven days of assembly. Aluminium MATs are so easy to erect and so versatile they are increasingly being used where previously a conventional tube and fittings scaffold or a system scaffold would have been used and are now more frequently used in the same position for seven days or more - ***show slide - Inspection Report.***

32. Method Statement

Show Slide - Method Statement. Method Statements are increasingly being required by clients where a MAT is assembled for a third party. The statement refers to 19 procedures which set out your responsibilities to the client, together with a Handing Over Certificate which indicates that the client is satisfied with the assembled MAT. It. also acts as a receipt for the Inspection Report - ***Show Slide - Handing Over Certificate*** - and the IM draws the clients attention to a five point risk assessment. This Method Statement has no copyright and may be copied if required, a copy appears in your synopsis.

It is advisable when assembling a MAT for the supervisor to always complete an Inspection Report in case the tower remains there for 7 days. A blank inspection report appears in your synopsis there is also one is each IM.

ALISCAFF LIMITED

Unit 2 Hotspur Ind. Estate - West Road - Tottenham - London N17 0XJ
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METHOD STATEMENT

ALUMINIUM MOBILE ACCESS TOWER (MAT)

1. On arrival on site, staff will report to the Client's Personnel to advise of their arrival.

2. The proposed location of the MAT will be confirmed with the Client on site before commencement of work.

3. A visual inspection of the site will be made to check for potential hazards, with attention to the overhead obstructions, access routes, ground conditions and any weight loading restrictions.

4. The Erectors will be briefed by our Supervisor on any potential hazards as indicated in (3) above.

5. All MAT's will be erected by personnel having the necessary training, technical knowledge or experience who will be PASMA certified, or be under such degree of supervision by a person having such training or experience who will be PASMA certified.

6. All MAT's will be constructed in accordance with the manufacturer's instruction manual (IM). Each unit will be levelled where necessary to accommodate uneven ground conditions and to ensure that all legs and stabilisers are fully supporting their load. The correct number of braces, ladders and platforms to be used as indicated in the IM. Where the MAT is being used on soft ground, plywood spreader plates of 300mm x 300mm x 18mm will be used under all the legs.

7. Whilst the MAT is being erected, immediate access to the MAT will be restricted to the Erectors only, with no unauthorised personnel being allowed onto the part constructed MAT.

8. All ancillary equipment including toeboards, stabilisers and any ties that are necessary will be constructed in accordance with the manufacturer's IM.

9. All MAT's will meet the requirements of BS COP 5973, BS 1139 Part 3 1994 and the Construction (Health, Safety & Welfare) Regulations 1996.

10. On completion a review of the MAT will be made by our Supervisor, who will confirm the construction is in accordance with the manufacturer's IM and that the MAT has been levelled, with all MAT components correctly positioned.

Page2/Con't..... (Tower)

11. After the review has taken place, the Client or his Personnel will be informed of the completion and invited to inspect the MAT. When it is approved by the Client, our Erectors will supply a "Handing Over Certificate" together with risk assessment information which gives details of the necessary measures to counteract those risks.

12. A MAT Inspection Report in the format required by the Construction (Health, Safety & Welfare) Regulations 1996 will be prepared by our Supervisor.

13. Any surplus/unused material taken to site will be removed and no materials will be stored on site.

14. All work will be undertaken with due regard to the personal safety of our staff as well as the safety of others. All personnel will comply with any prevailing regulations requiring protective head gear, reflective vests, identity tags etc.

15. Any accidents or dangerous occurrences will be reported immediately to:-

    1. The Client's Representative on Site
    2. The Client
    3. An Aliscaff Ltd Director

16. Dismantling procedures are as shown in the IM. As in 7 above access to the MAT during dismantling will be restricted to the dismantling team only.

17. Once dismantling is complete, a final review will take place, checking the site to ensure that no items have been left.

18. Any comments (praise, criticism, suggestions etc.) passed to either the Erection or Dismantling Team will be reported to Aliscaff Limited Personnel for the appropriate action.

ALUMINIUM TOWER INSPECTION REPORT

Report of Inspection of an Aluminium Tower as required by Section 29 of the Construction (Health, Safety & Welfare) Regulations 1996.

NB Section 30 (5 & 6a) states:-

5) No report is required to be prepared under paragraph (1) in respect of any working platform or alternative means of support from no part of which a person is liable to fall 2M or more

6) Nothing in this regulation shall require

(a) a report to be prepared in respect of any mobile tower scaffold unless it remains erected in the same place for a period of 7 days a more

SCHEDULE 8 Regulation 30

PARTICULARS TO BE INCLUDED IN A REPORT OF INSPECTION

1. Name and address of the person on whose behalf the inspection was carried out

2. Location of the place of work inspection

3. Description of the place of work or part of that place inspected (including any plant and equipment and materials, if any)

4. Date and time of inspection

5. Details of any matter identified that could give rise to a risk to the health or safety of any person

6. Details of any action taken as a result of any matter identified in paragraph 5 above

7. Details of any further action considered necessary

8. Name and position of the person making the report

Signature ..... PASMA Course Certificate No. .....

ALISCAFF LIMITED

Tel: 0181-808-5005 Fax: 0181-801-9851

ALUMINIUM MOBILE ACCESS TOWER (MAT) HANDING-OVER CERTIFICATE

(White Aliscaff Copy, Yellow Client's Copy)

Client : **Location:**

Basic description of equipment supplied:

Signature ..... Date .....

(Aliscaff Ltd Supervisor)

1. The above mentioned MAT has been assembled to my satisfaction and has now been handed over.
2. I acknowledge receipt of a copy of the manufacturer's Instruction Manual (IM)
3. I acknowledge receipt of the MAT Inspection Report

RISK ASSESSMENT FOR THE INFORMATION OF THE CLIENT - MAT POTENTIAL RISKS AND NECESSARY MEASURES TO COUNTERACT.

1. Where the MAT is used outdoors, I have been advised of the dangers of using the MAT in hazardous weather conditions, and my attention is directed to the IM.
2. When the MAT is erected with castors to allow relocation, I am again advised to refer to the IM regarding relocation of MAT's.
3. I have been advised that no modification to the MAT (subsequent to the issue of the Handing Over Certificate) is permitted as this may affect the stability of the MAT, in particular no braces should be removed.
4. I have been advised that if the MAT remains assembled in the same place for 7 days or more it must be inspected by a competent person at regular intervals not exceeding 7 days since the last inspection, after any event likely to have affected is strength or stability, such as adverse weather conditions, or after any substantial addition, dismantling or other alteration.
5. I have been advised that the Safe Working Load (SWL) of the MAT (as shown in the IM) should not be exceeded at any time.

Signature ..... Date .....
(Client or Client's Agent)

33. Scafftags

The proprietary Scafftag System has much to commend it when meeting safety requirements on Mobile Access MATs (MATs) - ***show slide - Scafftag.***

34. Storage and Maintenance

Components should be stacked neatly when stored. Braces should be stored vertically on parking pieces, do not load heavy equipment on top of aluminium components. Refer to the Manufacturer's recommendations with regard to maintenance, there is a copy in your synopsis.

35. Working in Public Places

Council Licences are required when MAT's are assembled on public footways. Extra care must be exercised if persons pass near the MAT. The MAT should be dismantled or boarded up when unattended to prevent unauthorised use - ***Show Slide***

36. Issue synopsis and PASMA Code of Practice, obtain receipt for all documents issued

37. Written Test

file: p-basic