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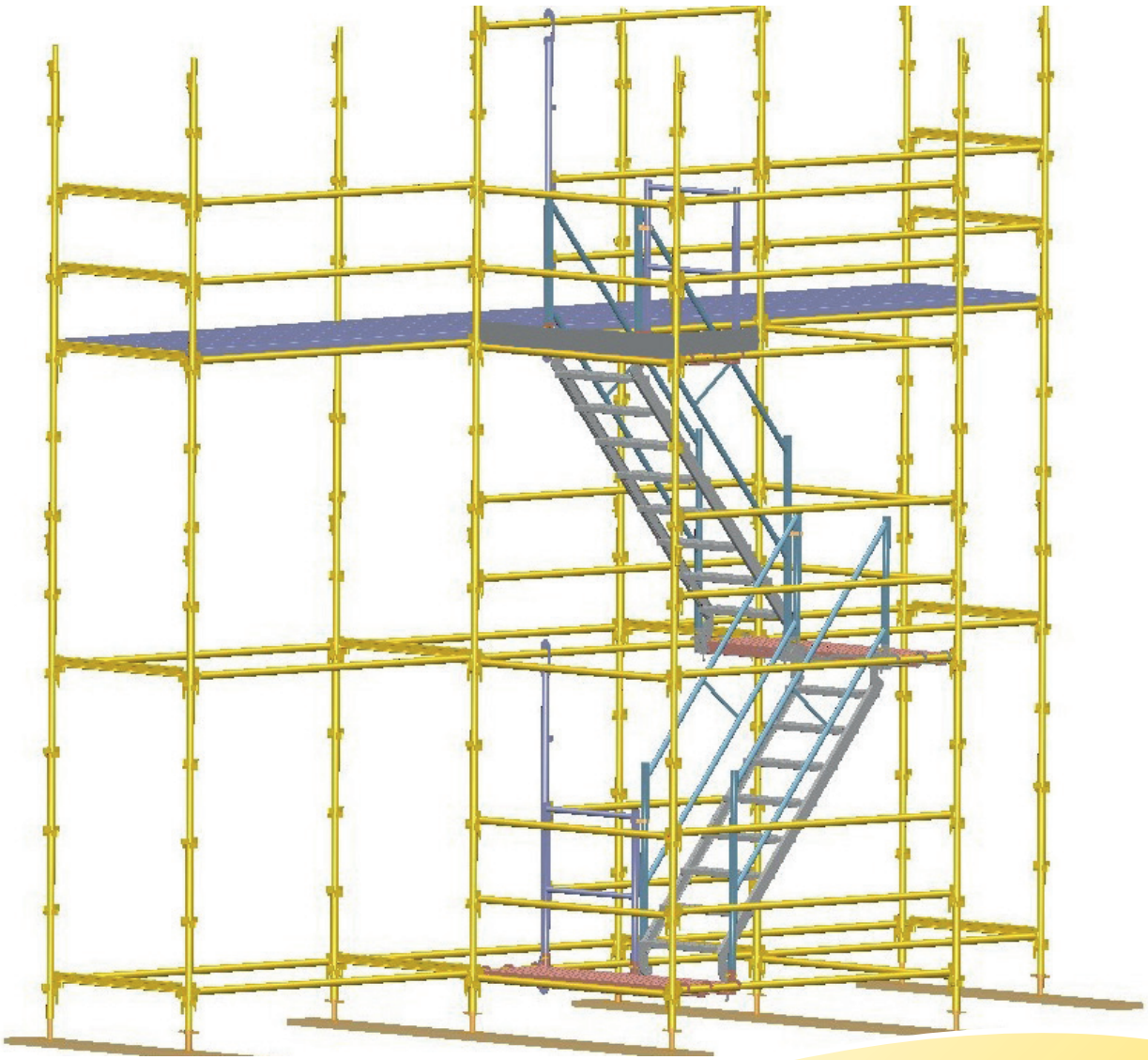

kwikstage

one bay stair unit user guide

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One Bay Stair Tower used in conjunction with Kwikstage System Scaffolding and designed to conform to all current British and European Standards.

With only five main components, that all weigh less than 25 kilos, One Bay is also compliant with all current regulations regarding materials handling by one person.

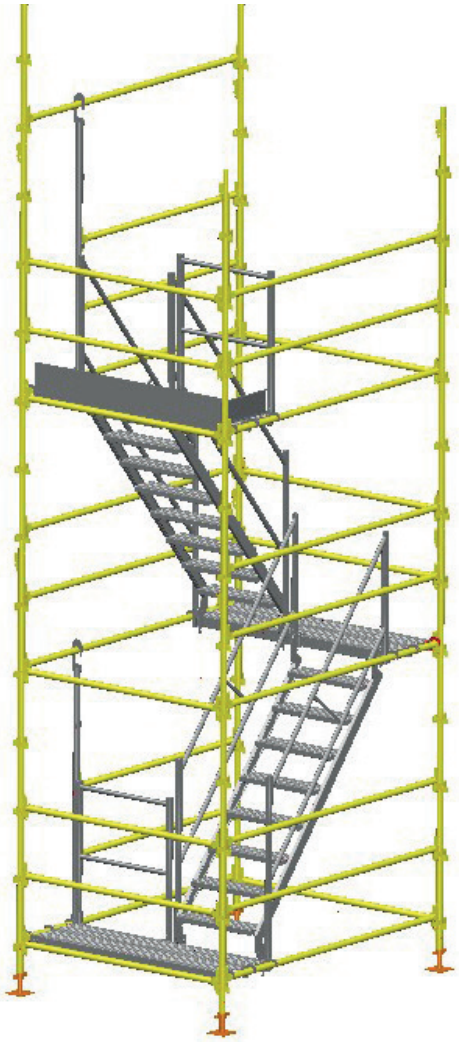
General Notes

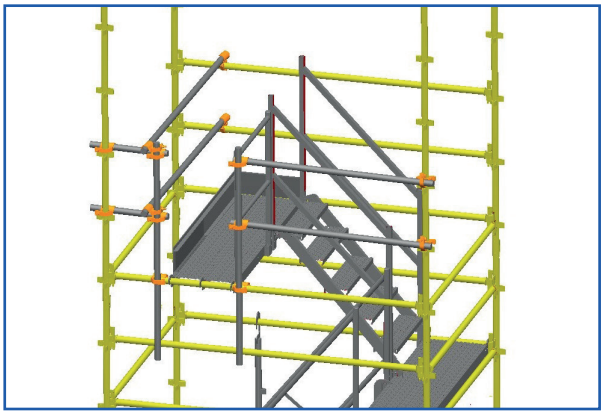
Ideally, the scaffold should be made up of equipment from one source of manufacture but in all cases must comply with the original manufacturer's specification.

To gain the maximum benefit of using **One Bay** the Stair System should be included in an adjacent 8'-0" bay, as shown. If erected as an independent Stair Tower ensure that diagonal bracing is installed to the full height on all faces of the structure and that tying-in to a rigid structure is provided in accordance with good scaffolding practice.

One Bay has been designed to provide safe access and egress in compliance with BS EN 12811-1:2003 Temporary Works Equipment Part 1 : Scaffolds – Performance Requirements and General Design. For any exceptional applications refer to your supplier for further technical support.

One Bay has been specifically designed so that it can be quickly and easily maintained to guarantee continued safe use. Refer to page 7 for simple inspection procedures to ensure **One Bay** is always ready for use.





ALTERNATIVE 1M STAIR TOP LIFT WITH GUARD RAILS USING TUBE AND FITTING SCAFFOLDING COMPONENTS

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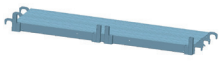
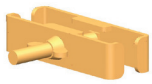
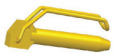
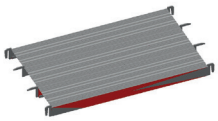
Components

Description	Item No	Weight	Component
1.0m Stair Unit (5 tread)	AS2010	20.6kg	
1.0m Banister Handrail	AS2004	5.1kg	
2.0m Stair Unit (8 tread)	AS2020	24.9kg	
1.5m Stair Unit (7 tread)	AS2015	21.8kg	
2.0m Banister Handrail	AS2002	6.8kg	
1.5m Banister Handrail	AS2003	6.7kg	
Landing Platform (2 Board)	AS2006	17.5kg	

Description	Item No	Weight	Component
Landing Handrail	AS2019	4.5kg	
Handrail Clamp	AS2031	0.36kg	
Connecting Pin	AS2030	0.06kg	
Auxiliary Work Platform	AS2301	17.51kg	
2.0m Ledger	AS2090	8.0kg	
Landing Guard Rail Post	AS2065	11.4kg	
Aluminium Folding Toeboard	AS2092	4.5kg	

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Erecting Notes

Work at Height regulations require that Collective Fall Prevention (e.g. Advanced Guardrails) be given priority over Personal Measures (e.g. Harnesses) when erecting/dismantling scaffolding. **One Bay** can be safely and easily erected, using the Temporary Work Platform, by both options.
In either case please ensure Manufacturers instructions are strictly adhered to.

Ensure an 8'- 0" bay has been included in an appropriate position to supply the inside legs of the One Bay Stairtower.

In compliance with current Codes of Practice ensure that ground conditions are both level and suitable for load-bearing.

One Bay must be attached to a façade scaffold and diagonally braced on the outside face. For overall clarity this has not been shown on the illustrations.
It is advisable to fit the Diagonal Brace prior to the **One Bay** aluminium equipment, as it will help vertically align the scaffold making the build sequence easier.

If used as a Free Standing Stair Tower each face of the tower must be Diagonally Braced for the full height of the structure and tied to an adjacent structure at maximum intervals of 4.0m

Toe Boards

Current Codes of Practice only require toe boards to be fitted where there is a "risk of falling materials and objects" (i.e. a working platform), therefore since the Landing Platform is only providing access to the working platform toe boards are not required.

If toeboards are required then the **One Bay** system Toeboard can be used.

In conditions where the installation of conventional toe boards would present a difficulty then to satisfy Codes of Practice which require the provision of "Adequate side protection" then Mesh brick guards or 'Kwikguards' may provide an adequate solution.

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Erection Procedure

1. Set out a 8′ x 6′ bay using 3m standards with the next row of ledgers 1.5m or 2m above depending on lift height. Level, plumb and brace in readiness for further equipment. Fit double handrails (Fig.1).
2. Locate a Landing Platform and a temporary Landing Platform making sure the connecting sockets face into the bay (Fig.4f). Ensure all platform locks are engaged onto the Ledger. Close off the scaffold using the Landing Post and two 6′ Ledgers (Fig.2).
3. Using collective measures or personnel fall restraint equipment together with the temporary Landing Platform install the next set of standards.

   Note: Please refer to the NASC SG4:15 document for guidance
4. Using collective measures or personnel fall restraint equipment together with the temporary Landing Platform install double guard rails as shown.
5. Move up the temporary Landing Platform to the next level. Fit a Landing Handrail into the taller sockets at the Landing Platform and fit the Banister Handrails into the other taller pockets first which automatically position the upper Landing Platform correctly,some adjustment may be necessary to ensure alignment.(Fig.5).
6. Locate the Stair Unit vertically onto the lower Landing Platform by engaging bottom stair connections (Fig.4a)into the inner sockets and slowly lower the stair unit onto the upper Landing Platform (Fig.4b).

   The upper stair connecting lugs should automatically drop into the pocket. Flick the upper stair locking connections (Fig.4b) into the same pocket to securely lock the stair. Fit the connecting pins (fig.4c) to all the handrails and secure the handrail clamp (Fig.4d).Install a temporary Landing Platform as shown.The first lift is now complete. (Fig.6)

fig 1

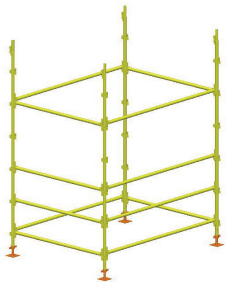


fig 2

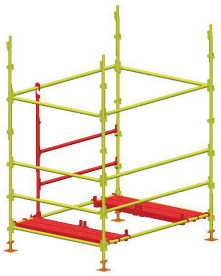


fig 3

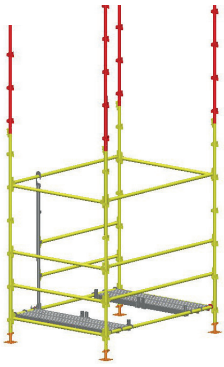


fig 4

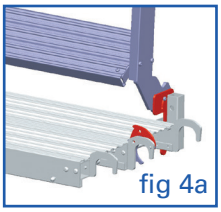


fig 4a

fig 4b

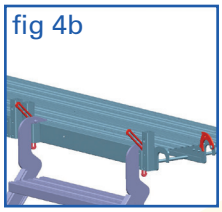


fig 4c

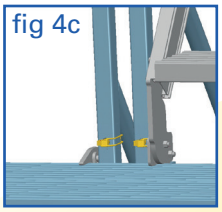


fig 5

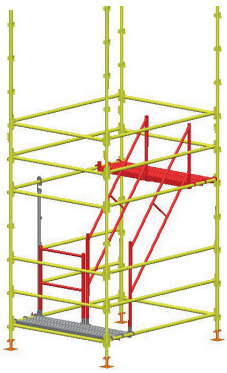


fig 6

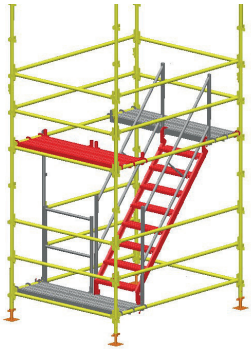


fig 4d

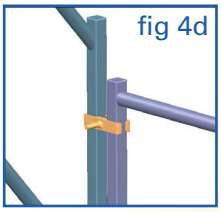


fig 4e

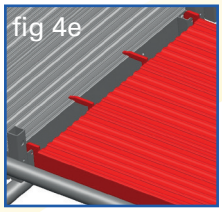
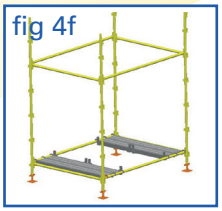


fig 4f



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7. Fit the Auxiliary Platform between the two Landing Platforms,locate hooks into the pockets (Fig.4e).Fit the Auxiliary Platform Handrail into the taller pockets of the Landing Platforms. (Fig.7).

8. Using collective measures or personnel fall restraint equipment together with a temporary Landing Platform install the next row of ledgers 2m above the platform level then fit the next set of standards. Install the double guard rails as shown.

9. Install a Landing Platform to the next level as indicated making sure the connecting sockets face into the bay. (Fig.9).

10. Remove the Auxiliary Platform and the temporary Landing Platform then install the Banister Handrails as shown in note 5.

11. Locate stair unit as outlined in note 6. Continue building Stair Tower following the same sequence using either 2.0 metre or 1.5 metre lifts and in any combination to the height required (Fig.11).

12. Once the top platform has been reached install a Landing Handrail to close off the landing and secure to internal Banister with a Handrail Clamp. A Landing Post is then fitted vertically between the two internal Ledgers to provide a connection for two 6'-0" Ledgers to close off the gap between the top Landing and the main scaffold.
The same Landing Post can be used at intermediate lifts where access onto the main scaffold is required.

13. Although the Landing Post is shown hooked onto two Ledgers the top connection is not vital so if an obstruction prevents an extended inside leg then two 6'-0" Ledger Guardrails can be securely supported by the Landing Post only mounted by the lower hook position. However it should be noted that the post is not fully stable until fitted with a pair of 6ft Ledgers with the wedges locked. If required, the outside Banister can be replaced by fitting Ledgers at every 'V' pressing position.

fig 7

fig 8

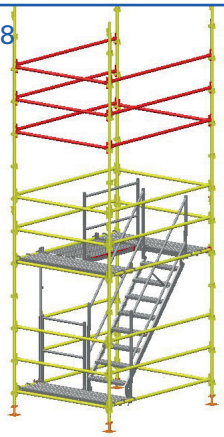


fig 9

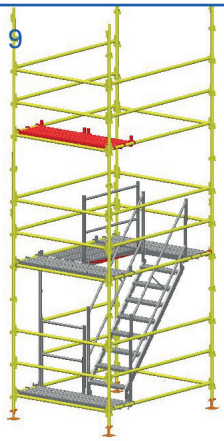


fig 10

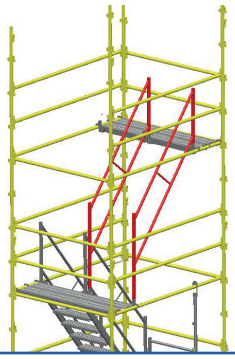


fig 11

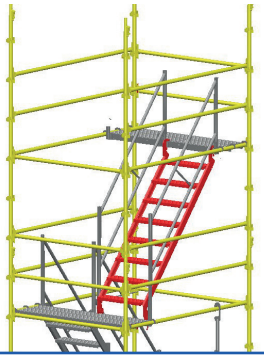
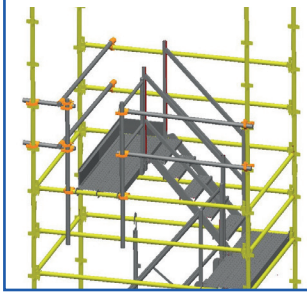


fig 12

fig 13

ALTERNATIVE 1M STAIR TOP LIFT WITH GUARD RAILS USING TUBE AND FITTING SCAFFOLDING COMPONENTS



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Inspection & Maintenance

Stair Units

1. Clean off all site debris. **Do not use chemicals containing Acid or Alkali as corrosion damage can occur.**

2. Inspect stiles (side members) for dents or other damage and check the tee-slots for any distortion. If miss-formed or severely damaged then remove from service for further evaluation.

3. Inspect all the stair treads for security and for evidence of impact damage and where necessary replace damaged components ensuring all fixing bolts are installed and are secure.

4. Ensure all side fixing bolts, connecting the cleat to the stile, are secure and tightened.

5. Check that top and bottom Stair locking mechanisms are free to move correctly and are not damaged. If damage is found then replace components.

6. The top and bottom pairs of Aluminium hooks are unlikely to be damaged other than by abuse. If evidence is found and the stile has not badly deformed then the hook can be easily unbolted and replaced.

The Stair Units are a completely bolted assembly and in the very unlikely event of a bolt working loose, the tread would tend to rattle, and therefore be very easy to identify, making inspection and rectification quick and straightforward.

This assembly method also means that no tread can ever become separated from the Stair Unit since no joint relies on a single bolt.

Banister Handrails and Landing Guardrails

1. Inspect for any distortion, damage or signs of cracked welds as a result of impact or abuse.

2. Check that the Spigot casting is not cracked or broken

3. Replace any missing or damaged post top caps.

Landing Platforms

1. Inspect platform for impact damage and any resulting distortion.

Individual board sections can un-bolted and replaced if considered necessary

2. Check all platform hooks for damage i.e. bending. Replace damaged items.

3. Check the Stair and Banister Landing Platform sockets are clear of debris, are undamaged and securely attached to the main platform.

4. Check that the locking latch moves freely and is securely bolted to the Hook.

5. Inspect the Handling Tie Bars for damage and straightness.

Clamps and Connecting Pins

1. Ensure that all threads are in working orders and liberally spray with WD40 or Scaffolding coupler lubricant.

2. Check that they are complete and stocks are high enough to ensure that each **One-Bay** set is complete.

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Notes

Under no circumstances should any attempt be made to straighten aluminium components, as this could result in serious weakening to the product. In such circumstances remove the item from service for further evaluation.

Weld repairs must be carried out in a workshop environment using argon shielded T.I.G. welding and using compatible filler materials and must only be carried out by competent, trained welders.

If there are any doubts concerning inspection, maintenance or repair refer immediately to your supplier for further guidance.

Transport

1. The Stairs, Landing Platforms and other Aluminium components should be stored and transported in Pallets - Preferably Aluminium or alternatively steel fitted with protective sleeving.

2. Aluminium items can distort if incorrectly or over zealously secured – use ratchet straps with caution.

One Bay Stair System Component Schedule

ALSURE STOCK CODE	STOCK ITEM	Unit Kg	2m	3m	3.5m	4m	4.5m	5m	5.5m	6m	6.5m	7m	7.5m	8m
AS2015	ONE BAY-STAIR UNIT 1.5M	21.80		2	1		3	2	1		3	2	1	
AS2020	ONE BAY-STAIR UNIT 2.0M	24.90	1		1	2		1	2	3	1	2	3	4
AS2003	ONE BAY-BANISTER HANDRAIL 1.5M	6.70		4	2		6	4	2		6	4	2	
AS2002	ONE BAY-BANISTER HANDRAIL 2M	6.70	2		2	4		2	4	6	2	4	6	8
AS2006	ONE BAY- LANDING PLATFORM	17.50	2	3	3	3	4	4	4	4	5	5	5	5
AS2019	ONE BAY-LANDING HANDRAIL	4.50	2	2	2	2	2	2	2	2	2	2	2	2
MP224A	ONE BAY-CONNECTING PIN	0.10	8	12	12	12	16	16	16	16	20	20	20	20
MP229A	ONE BAY-TYPE A CLAMP	0.36	2	3	3	3	4	4	4	4	5	5	5	5
AS2092	ONE BAY TOEBOARD	4.50												
ALSURE STOCK CODE	STOCK ITEM	Unit Kg	8.5m	9m	9.5m	10m	10.5m	11m	11.5m	12m	12.5m	13m	13.5m	14m
AS2015	ONE BAY-STAIR UNIT 1.5M	21.80	3	2	1		3	2	1		3	2	1	
AS2020	ONE BAY-STAIR UNIT 2.0M	24.90	2	3	4	5	3	4	5	6	4	5	6	7
AS2003	ONE BAY-BANISTER HANDRAIL 1.5M	6.70	6	4	2		6	4	2		6	4	2	
AS2002	ONE BAY-BANISTER HANDRAIL 2M	6.70	4	6	8	10	6	8	10	12	8	10	12	14
AS2006	ONE BAY- LANDING PLATFORM	17.50	6	6	6	6	7	7	7	7	8	8	8	8
AS2019	ONE BAY-LANDING HANDRAIL	4.50	2	2	2	2	2	2	2	2	2	2	2	2
MP224A	ONE BAY-CONNECTING PIN	0.10	24	24	24	24	28	28	28	28	32	32	32	32
MP229A	ONE BAY-TYPE A CLAMP	0.36	6	6	6	6	7	7	7	7	8	8	8	8
AS2092	ONE BAY TOEBOARD	4.50												
ALSURE STOCK CODE	STOCK ITEM	Unit Kg	14.5m	15m	15.5m	16m	16.5m	17m	17.5m	18m	18.5m	19m	19.5m	20m
AS2015	ONE BAY-STAIR UNIT 1.5M	21.80	3	2	1		3	2	1		3	2	1	
AS2020	ONE BAY-STAIR UNIT 2.0M	24.90	5	6	7	8	6	7	8	9	7	8	9	10
AS2003	ONE BAY-BANISTER HANDRAIL 1.5M	6.70	6	4	2		6	4	2		6	4	2	
AS2002	ONE BAY-BANISTER HANDRAIL 2M	6.70	10	12	14	16	12	14	16	18	14	16	18	20
AS2006	ONE BAY- LANDING PLATFORM	17.50	9	9	9	9	10	10	10	10	11	11	11	11
AS2019	ONE BAY-LANDING HANDRAIL	4.50	2	2	2	2	2	2	2	2	2	2	2	2
MP224A	ONE BAY-CONNECTING PIN	0.10	36	36	36	36	40	40	40	40	44	44	44	44
MP229A	ONE BAY-TYPE A CLAMP	0.36	9	9	9	9	10	10	10	10	11	11	11	11
AS2092	ONE BAY TOEBOARD	4.50												

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