# ACCESS SCAFFOLDING



# 440 Series Aluminium Scaffold Suppliers Information

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MAS10-0003

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# Scaffolding Requirements

- 1. A person requires a Certificate of Competency in Basic Scaffolding to erect a modular scaffold "where persons or objects could fall more than 4.0 metres from the work platform". Note: Access Scaffolding provides training and assessment in Basic, Intermediate and Advanced Scaffolding, National Certificate, Licence to Perform High Risk Work.
- **2.** A scaffold must have an internal access ladder and complete edge protection, when a person or object could fall more than 2 metres from the work platform.

Edge protection consists of a kick board, midrail and guard rail.

- 3. An access ladder must extend at least 900mm above the work platform.
- 4. A scaffold must have a handrail between 900mm and 1100mm above the work platform.
- 5. There must be a midrail between the work platform and the top handrail.
- 6. The kick board must be at least 150mm above the work level.
- 7. Castor wheels should have a braking system.
- 8. Castor wheel adjustment should not be used to gain extra height, but be used to level a scaffold on a slightly sloping surface of less than 5 degrees.
- 9. When a scaffold is built on an uneven surface, adjustable base plates should be used for levelling.
- 10. Soleboards should be used under adjustable base plates to distribute the load of the scaffold.
- 11. The minimum size of a soleboard is 500mm long x 225mm wide. They should be a minimum of 38mm thick in softwood and 32mm thick in hardwood.
- 12. The maximum distance between a structure and an unprotected platform edge should be less than 225mm.
- 13. The maximum height that you may free stand a scaffold is 3 x the least base width (3xLBW), eg: **3m x 1.3m wide base can free stand to 3.9m high**.
- 14. Extension ladders, step ladders and domestic grade ladders may not be used to gain access to a scaffold.
- 15. Scaffolds have 3 safe working loads or duty categories, those being light duty 225kg, medium duty 450kg and heavy duty 675kg.

# An Overview of Requirements

Scaffolding is to be used in accordance with current Australian and New Zealand Standards, Workplace Health and Safety Advisory Standards, codes of practice and suppliers information. Scaffolding should be erected in accordance with planned hazard prevention and control measures including personal protective equipment and acceptable safe work practice. It is recommended to ensure you have completed a **Safe Work Methods Statement (formerly a JSA – Job Safety Analysis)**.

For safe and efficient erection, alteration and dismantling of scaffolding, scaffolders must:

- Be able to understand the supplier's information, general site plans and specifications for scaffolds. (An ability to make simple calculations of dead load and live load is often needed.)
- Have a thorough knowledge of the scaffolding equipment being used.
- Have a thorough knowledge of the construction methods and design requirements associated with that equipment.
- Be able to recongnise common hazards at the work place and be capable of taking effective precautions to control risks to health and safety arising from these hazards.
- Visually inspect scaffolding for faults. Ensure safety and compliance with design and statutory requirements with codes of practice and guidelines.
- Have the physical ability needed for scaffolding construction.
- Be competent in manual lifting techniques.
- Work safely and confidently at heights.
- Erect and dismantle scaffolding in the correct sequence in accordance with AS4576 and the suppliers or manufacturers information.
- Possess a Certificate of Competency in Basic Scaffolding to erect a modular scaffold where a person or object can fall more than 4.0m in height

# A guide to safe working practices...

including the stability of the erected scaffold

### Check for potential hazards such as:

- Overhead power and service lines
- Underground services
- Uneven and/or unstable ground
- Trees
- The bearing pressure of the supporting surface
- Other workers and persons

- Corrosive substances
- Surrounding buildings/structures/vessels/ equipment/vehicular traffic/cranes
- Barricades
- Inadequate lighting
- Hazardous materials
- Dynamic loading such as concrete pump line or containment sheeting

### **Scaffold Vicinity**

- Has sufficient public protection been provided?
- Have sufficient safeguards against powerlines been provided?
- Is there sufficient control over vehicle movement?
- Is there sufficient control over crane operations?

### **Supporting Structure**

- Is the supporting structure in good condition?
- Does the supporting structure have adequate strength?
- Are there sufficient controls to prevent adverse deterioration of the supporting structure?
- Are all measures to strengthen the supporting structure adequate?
- Is the risk of the supporting structure being overloaded from other sources adequately controlled?

## Soleboards, Adjustable Bases and Castors

- Are there sufficient soleboards?
- Are the soleboards of suitable material and in a serviceable condition?
- Are the soleboards secured?
- Are there sufficient base plates?
- Are the adjustable bases/castors serviceable and of suitable dimension?
- Are the base plates secure?

### Scaffold Structure

Are the frames bearing firmly? Are the frame uprights plum (or as designed)? Are the frames level (or as designed)? Is the bracing installed in accordance with these instructions? Is the scaffold sufficiently stable? Are the ties correctly positioned and correctly fixed?

### **Platforms**

Does the scaffold have the required number of working platforms? Are the working platforms at the required locations? Are catch platforms correctly positioned? Are the platform dimensions suitable for the intended work? Is there adequate edge protection? Are the platforms correctly placed on the scaffold?

### Access and Egress (getting on and off the scaffold)

Is there access and egress to all working platforms? Are temporary stairways correctly installed? Are portable ladders of an industrial grade, serviceable and correctly installed? Are access ways and access platforms correctly installed? Do ladders extent at least 900mm above the work platform?

### **Containment Sheeting**

Has the scaffold been designed for wind loading or containment sheeting? Are the fixing ties secured? Are there any rips or tears?

### **General Fitness for Purpose**

Is there adequate provision for material handling? Are the clearances between the scaffold and the work face less than 225mm? Is there adequate protection from falling debris? Are all approaches and platforms effectively lit (if working in low light areas)?

#### **Mobile Scaffolds**

Is the supporting surface hard and flat? Is the work area free of floor penetrations, power lines and other hazards? Are the castor wheel locks in working order. Are the castors locked for the erection process?

# Erection of an Access Scaffolding 440 Series Scaffold

Carry out a risk assessment and check for potential hazards before erecting scaffolding.

Please note that when horizontals are clipped to the standards (vertical component) they are designed for sideways deflection only and are not load supporting. Therefore, **do not step** on these horizontals when climbing into the scaffold. Do not stand on midrails or guardrails.

Instructions:



### Step 1

Lock the brakes on the castor wheels and attach 2 horizontal (yellow) braces to the insides of the standards (vertical component) above the bottom rung (horizontal component).



## Step 2

Lock the brakes on the castors of the second base frame and attach the horizontal braces to the INSIDE of the standards. Use the threaded spindle to approximately level scaffold. Always ensure that you understand and you can comply with the regulations that apply to the erection and use of scaffolding.



### Step 3

Attach a plan (red) brace to the diagonally opposite corners of the base. The suggested position is above the cup nut, which is below the bottom transom or rung of the base frame. Plan bracing is fixed at the base of the scaffold to prevent twisting when it is being moved.



### Step 4

Install 4 diagonal (silver) braces inside the frame from the bottom rung to the third rung up (2 spaces). These should be as close as possible to the outside of the frame. Level the scaffold using the height adjustment on the castor wheels.. Note: 0.7m wide scaffolds require only 2 diagonal braces fixed in opposite directions.

### Step 5



Add upper frames 1.9m high, 1.4m high and 0.9m high as required, installing 4 diagonal braces per lift in 1.3m wide frames and 2 diagonal braces per lift in 0.7m wide frames. Each brace should be attached to the top rung of the frame below. For a scaffold that requires intermediate platforms to aid erection, fix horizontal braces as handrails whilst erecting.

The platform height or working height must not exceed 3 x the least base width on mobile scaffolds.



### Step 6

When required platform height is reached, ensure 2 rung spaces extend beyond the work platform for handrails. Install platforms. Attach 4 horizontal (yellow) braces to the inside of the frames as guardrails and midrails. Install internal access ladders and toeboards ensuring the ladder extends past platform level (min. 900mm).

IT IS THE OBLIGATION OF THE SCAFFOLD ERECTOR TO ENSURE HIS/HER OWN SAFETY AT ALL TIMES WHILST ERECTING/DISMANTLING ANY SCAFFOLD

# Dismantle of a 440 Series Aluminium Scaffolding

Dismantle is the reverse of pages 8 & 9

It is important that the dismantling procedure adopted for any scaffold must mirror the construction procedure in reverse.

Take the scaffold down in a planned manner, starting at the top and ensuring that workers have a handrail around them at all times and the structural integrity of the scaffold system is maintained.

Do not remove ties or braces before you have dismantled the upper working platforms.

Carefulness, commonsense and caution are factors that cannot be built into scaffolding. These must be provided by the person(s) erecting, using, dismantling and maintaining the scaffold.

# 440 Series Graspers

Access Scaffolding believes scaffolding assembly and dismantle should be quick and easy, We use a simple spring loaded pin that locks effectively and safely. It is easy to maintain and to clip on and off.

The Grasper is protected from damage by the heavy-duty reinforced grasper 'nose' which absorbs the shock if a brace is dropped.



Access Scaffold 440 Series Grasper 100% Australian Made

# 440 Series Outrigger Props

Adjustable Outrigger Props are normally used to increase the base size of a scaffold when space or obstructions do not permit the use of Extra Wide Base Frames.

Two outrigger props may be used when the scaffold is against a wall or solid structure and the scaffold platform height does not exceed the wall height. At all other times four outrigger props should be used (two on each side).

The normal industry accepted rule for mobile scaffolds is that the platform height must not exceed 3 x the least base width. When outrigger props are used this is included in the formula, eg: a 1.3m wide scaffold with outrigger props adjusted outwards by 0.7m can be erected to a 6.0m platform height.

### 1.3m + 0.7m = 2.0m x 3 = 6.0m to platform

Outriggers must be adjusted to provide firm pressure on the supporting surface and be positively fixed to the scaffold. Ideally, stand off arms should be horizontal.



# 440 Series Platforms and Ladders Requirements for Access

Ladder access to a platform is fixed within the frame work of the scaffold with a hinged trap door in one of the working platforms. The ladders are single industrial grade ladders and are pitched at an angle of 75 degrees. Note: In Victoria the maximum distance between ladder landings should not exceed 4 metres. Ladders on mobile scaffolds need to be clear of the supporting surface.

Access Scaffolding 440 Series Platforms are designed to support **225kg of live load per individual platform** with a maximum of **450kg live load for multiple width platforms**.

A working platform should be the full width of the frames.

Intermediate platforms are generally installed for access purposes only not as working platforms.

Platforms have a non-skid surface



Single width platform

**Double width platform** 

# 440 Series 3.9m High Scaffold With Outrigger Props



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# Tying static scaffolds to supporting structures

Static scaffolds can be built to greater heights than  $3 \times$  the least base width when tied into a suitable supporting structure.

Compatible tube and fittings must be used to construct ties.

Access Scaffold 440 Series Scaffold has an outside tube diameter of 48mm.

Only 90 degree couplers (right angle couplers) should be used to construct ties as they are loaded rated fittings with a SWL of 630kg (AS1576). All couplers must be designed to fit a 48mm tubes.

Example of a lip tie



Example of a box tie



Example of a through tie



# Mobile Scaffolds

Access Scaffolding 440 Series scaffold can be fitted with mobile castors. Castor wheels are non marking neoprene rubber. They have:

- a cup nut with a locking handle to ensure they do not slide out of the base frame.
- a colour coded on/off foot brake.
- 450mm of adjustment in the threaded spindle.
- a large welded hand for ease of height adjustment.



#### Non marking neoprene rubber

Colour coded on/off foot brake

- Never access the scaffold until all the castors are locked to prevent movement
- Never relocate the scaffold while anyone is on it.
- Only use castors on a hard flat service.

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# Maintenance

- **Plywood** used on the platforms is 12mm thick structural grade ply and will withstand many years of use without any maintenance.
- **Castor wheels** have sealed bearings, which are sealed against dirt and moisture. The threaded spindles should be fully wound out occasionally, brushed clean and lightly oiled
- Screw jacks should be fully wound out occasionally, brushed clean and lightly oiled.
- **Brace grasper pins and springs** should also be given a few drops of light oil, particularly if stored in the weather (repair kits are available).
- All base frames are fitted with plastic plugs internally on the standards to exclude dirt, plaster, etc from interfering with the free turning of the castor. Base frames should be turned upside down and tapped on the ground whenever a build up of foreign material occurs.
- **Couplers and accessories** should be maintained so that they can be used as intended, for example: nuts should be free running and swivels should turn freely. Avoid excessive oil, grease or paint, which can cause a coupler or accessory to slip.

Do not apply uncontrolled heat to couplers or accessories.

### When to discard a component

- If a platform hook becomes closed or extended in any way it should be discarded.
- If a grasper becomes closed or extended in any way for any reason it should be discarded.
- If a coupler is cracked it should be discarded
- Whilst mild denting or bowing of tube components may be straightened, if the component is creased, it should be discarded.

**Corrosion** All aluminium scaffolds should be stored away from corrosive substances. Any aluminium scaffold that has been subjected to chemical attack should be inspected before use by an authorised person.

# Safety Directive

## ATTENTION: ALL ACCESS ALUMINIUM SCAFFOLDING CUSTOMERS

Please note that when horizontals are clipped to standards (vertical component) they are designed for sideways deflection only and are not load supporting.

Do not step on these horizontals when climbing into the scaffold.

Please do not stand on midrails or guardrails.

Misuse by dropping from height or throwing onto the back of vehicles, for example, can damage the ends of graspers. Fitting should be regularly inspected and any damaged fittings should be replaced.

Further, if the grasper becomes closed or extended in any way for any reason it is to be discarded.

It is the obligation of the scaffold erector to inspect all scaffolding components for serviceability and to ensure they are serviceable before they are used in a scaffold

Any unserviceable components are to be discarded, replaced or returned to the supplier.

# Proximity to Powerlines

Ensure your correctly erected scaffold is no closer than 4.6m horizontally and 5m vertically to live electrical powerlines. The 5m vertical distance is from the guardrail.

Ensure insulation on live electric powerlines extends a minimum of 5m past each end of the scaffold.

For further information contact your local supply authority or the office of electrical safety for Victoria. www.oes.vic.gov.au

# Glossary of Terms

- Access Platform is a platform that provides access for person, or persons and materials to or from places of work.
- **Base Frame** houses the castors or adjustable bases (screw jacks) and forms the base of the scaffold.
- **Brace** is a component fixed diagonally or horizontally between frames of the scaffold to provide rigidity to the scaffold
- **Castor –** is a swiveling wheel attached to the lower end of a standard, for the purpose of supporting and moving a scaffold and has a threaded spindle for height adjustment
- **Corrosion** occurs when the scaffold or any part thereof remains in contact with acid or alkaline materials over an extended period.
- **Diagonal Brace** has silver coloured graspers and provides diagonal bracing between the frames.
- **Doorway Scaffold –** 0.7m wide frame for use in narrow areas.
- **Frame Scaffold –** is a scaffold assembled from prefabricated frames, braces and accessories.
- Fully Decked the scaffold has all the platforms in place.
- **Grasper** (frame scaffold) is the end part of the aluminium brace, which allows it to be fixed to either the rung or standards of the frame.
- **Guardrail** is a structural component to prevent persons from falling off any platform, walkway, stairway or landing.
- Horizontal Brace yellow coloured grasper and provides correct spacing at base of scaffold and acts as handrails on the work level.
- Lift is the distance between ledgers or work platforms required to keep the integrity, strength and rigidity of the scaffold

**Loading** – is the working load limit of the scaffold and is subject to a formula. Maximum duty live load is:

Light Duty 225kg Medium Duty 450kg Heavy Duty 675kg

**Live Load** is the weight distributed to each of the scaffold standards. To obtain the live load, divide the duty of the scaffold (light, medium or heavy duty) by 3, and then multiply the answer by the number of working bays attached to that standard.

**Dead Load** is the self-weight of the standards plus part weight of all connecting components.

Size of Sole Board – length in metres.

**Dead Load + Live Load** divided by bearing pressure in kg divided by width of soleboard in metres = length in metres.

- Midrail a safety rail located halfway between a work platform and the top railing running parallel with the work platform
- Mobile Scaffolding an independent, freestanding scaffold that is mounted on castors.
- **One Rung Brace –** green coloured grasper and provides diagonal bracing for the handrail upper frames. Does not interfere with toeboard assembly.
- Outrigger is an inclined load-bearing component that is attached to the standard part of the frame to increase the size of the base to enable the scaffold to be increased in height.
- **Plan Brace** a brace placed at the base of the frame that lies horizontally and braces the scaffold diagonally.
- **Risk Management –** is a process consisting of well defined steps which when taken in sequence, support better decision making by contributing to a greater insight into risk and its impact. It is as much about identifying opportunities as it is about avoiding risks. Refer Appendix A-AS/NZS 4360:1999 Risk Management.
- **Soleboard** is a componenet used to distribute a load through a base plate to the ground or other supporting structure.

- **Tie** is a component or assembly of components used to tie a scaffold to a supporting structure.
- **Toeboard** a scaffold plank or purpose designed component fixed on edge/at the edge of the platform, to prevent material falling from the platform.
- **Upper Frame** sits on top of the base frame with the spigots pointing down. Available in 0.9m, 1.4m and 1.9m modules.
- **Working Platform –** is a platform that is intended to support persons, materials and equipment.

# Quality Assurance

Access Scaffolding's 440 Series Prefabricated Scaffolding is designed, manufactured and tested in compliance with Australian Standards AS1576. The aluminium used in manufacturing the scaffold also complies with AS1576. *Refer to Attachment A* 

The 440 Series is WorkSafe approved and has the following Plant Registration Numbers:

- Victoria V1003127 (700mm wide) & V1003128 (1300mm wide) Refer to Attachment B
- South Australia SD-20101587-1 (700mm wide) & SD-200101588-1 (1300 wide) Refer to Attachment C

NOTE: Plant Registration Applications have been made for both Tasmania and Queensland

The castor wheels used have been tested to Australian Standard 1576.2, Appendix H. Refer to Attachment D

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# **ATTACHMENTS**

# Attachment A – Engineers Certificate

# $\mathbb{A}\text{II}\ \mathbb{G}\text{rane}\ \text{and}\ \mathbb{H}\text{oist}\ \text{Consulting}\ \&\ \text{Inspection}\ \text{Services}$

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**CERTIFICATE OF TEST.** 

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- ACCIDENT & FAILURE INVESTIGATIONS
- INSURANCE LOSS ASSESSMENTS
   PLANT & DESIGN REGISTRATIONS

#### ACCESS SCAFFOLDING

440 SERIES PREFABRICATED SCAFFOLD. 1300mm WIDE x 3000mm LONG. MEDIUM DUTY.

MANUFACTURER. MATERIAL. TYPE OF TEST. WEIGHT SOURCE USED.

SWL. PLACE OF TEST.

DATES OF TESTS. WITNESS. TESTING AUTHORITY.

SIGNATORY.

ACCESS SCAFFOLDING. ALUMINIUM 6061 - T6. LOAD & DEFLECTION. STEEL SCALE WEIGHTS OF KNOWN WEIGHT. 450Kg. ACCESS SCAFFOLDING. FACTORY 3-5 BERENDS DRIVE DANDENONG VIC 3175. 22 APRIL & SATURDAY 10 JULY 2010 M. K. THOMPSON. ALL CRANE & HOIST CONSULTING & INSPECTION SERVICES. G. G. WILLIAMS.

#### BRIEF DESCRIPTION OF ACCESS PLATFORM.

The unit consists of prefabricated scaffold end units with two standard working platforms between end frames.

The unit is supported on four standard adjustable casters with brakes.

Bracing is provided in both planes.

The aluminium complies with Specification 6061-T6.

Designed, manufactured and tested in compliance with AS1576.1.2010

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ABN 45 007 377 442 All Crane & Hoist Consulting & Inspection Services is a Trading Name of ACH Consulting & Inspection Services Pty Ltd ACN 007 337 442

MAS10-0003

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- PLANT & DESIGN REGISTRATIONS

# ACCESS SCAFFOLDING

700mm WIDE x 3000mm LONG. LIGHT DUTY.

MANUFACTURER. MATERIAL. TYPE OF TEST. WEIGHT SOURCE USED.

SWL. PLACE OF TEST.

DATES OF TESTS. WITNESS. TESTING AUTHORITY.

SIGNATORY.

ACCESS SCAFFOLDING. ALUMINIUM 6061 - T6. LOAD & DEFLECTION. STEEL SCALE WEIGHTS OF KNOWN WEIGHT. 225Kg. ACCESS SCAFFOLDING. FACTORY 3-5 BERENDS DRIVE DANDENONG VIC 3175. 22 APRIL & SATURDAY 10 JULY 2010 M. K. THOMPSON. ALL CRANE & HOIST CONSULTING & INSPECTION SERVICES. G. G. WILLIAMS.

#### BRIEF DESCRIPTION OF ACCESS PLATFORM.

The unit consists of prefabricated scaffold end units with one standard working platform between end frames.

The unit is supported on four standard adjustable casters with brakes.

Bracing is provided in both planes.

The aluminium complies with Specification 6061-T6.

Designed, manufactured and tested in compliance with AS1576.1.2010.

Page

# Attachment B - Victorian Plant Registration



Occupational Health and Safety Act 2004, OHS Regulations 2007 Equipment (Public Safety) Act 2004, Equipment (Public Safety) Regulations 2007

## **CONFIRMATION OF REGISTERED PLANT DESIGN**

Plant Type	Prefabricated Scaffolding
Representational Drawing(s)	123 / 1
Design Description and Extent	Model/ID No: 440 Series – 1300mm Wide
<b>Technical Information</b>	Duty Load – S.W.L. 450 Kg Max Platform Height – 7300mm
Maker	Access Scaffolding
Confirmation Number	V1003128
Date of Confirmation	0 9 AUG 2010
Published technical standards or engineering principles (as listed by designer and confirmed by design verifier)	AS1576.1, AS1576.2, AS 1576.3

IMPORTANT INFORMATION

- 1. This confirmation applies only to the above design, which has been registered according to the above-named Regulations. The Authority has not verified that the designer has complied with the design obligations prescribed by the Regulations or the above mentioned technical standards or engineering principles.
- 2. The plant owner will require this confirmation and, therefore, a copy of it should be supplied to the manufacturer, so that it can in turn be provided to the supplier and owner with the plant or equipment.
- 3. The Regulations require the designer to keep and maintain, in a suitable state for examination, all records that the Regulations require for 10 years.
- 4. The Authority reserves the right to audit the registered design at any time to assess compliance with the above Acts and Regulations. If an audit is undertaken, the Authority may ask the person seeking registration or the plant owner or both to supply detailed information relating to the design of the plant. Design systems of work and documentation may also be audited. If an audit identifies noncompliance with the Acts and Regulations, all plant built to that design may require modifications and may be prohibited from use.
- 5. This confirmation is automatically invalidated if the design is altered to an extent that requires new measures to control risk. A person must not use, or cause or allow plant manufactured to the altered design to be used at a workplace unless the Authority has confirmed registration of the alteration.
- 6. You should quote the confirmation number in all correspondence to the Authority regarding this design. Any queries should be addressed to the Authority's Licensing Branch, 1300 852 562.
- 7. This confirmation can also be considered a confirmation of Notification of Plant Design under the Equipment (Public Safety) Regulations 2007.

Gladys Khoury Authorised Officer Work Safe

PMS-055-LTR Last revised: April 2008



Occupational Health and Safety Act 2004, OHS Regulations 2007 Equipment (Public Safety) Act 2004, Equipment (Public Safety) Regulations 2007

## CONFIRMATION OF REGISTERED PLANT DESIGN

Plant Type	Prefabricated Scaffolding
Representational Drawing(s)	262 / 1 Rev A
Design Description and Extent	Model/ID No: 440 Series – 700mm Wide
<b>Technical Information</b>	Duty Load – S.W.L. 225 Kg Max Platform Height – 400mm
Maker	Access Scaffolding
Confirmation Number	V1003127
Date of Confirmation	0 9 AUG 2010
Published technical standards or engineering principles (as listed by designer and confirmed by design verifier)	AS1576.1, AS1576.2, AS 1576.3

**IMPORTANT INFORMATION** 

- 1. This confirmation applies only to the above design, which has been registered according to the above-named Regulations. The Authority has not verified that the designer has complied with the design obligations prescribed by the Regulations or the above mentioned technical standards or engineering principles.
- 2. The plant owner will require this confirmation and, therefore, a copy of it should be supplied to the manufacturer, so that it can in turn be provided to the supplier and owner with the plant or equipment.
- The Regulations require the designer to keep and maintain, in a suitable state for examination, all 3. records that the Regulations require for 10 years.
- The Authority reserves the right to audit the registered design at any time to assess compliance with 4. the above Acts and Regulations. If an audit is undertaken, the Authority may ask the person seeking registration or the plant owner or both to supply detailed information relating to the design of the plant. Design systems of work and documentation may also be audited. If an audit identifies noncompliance with the Acts and Regulations, all plant built to that design may require modifications and may be prohibited from use.
- 5. This confirmation is automatically invalidated if the design is altered to an extent that requires new measures to control risk. A person must not use, or cause or allow plant manufactured to the altered design to be used at a workplace unless the Authority has confirmed registration of the alteration.
- 6. You should quote the confirmation number in all correspondence to the Authority regarding this design. Any queries should be addressed to the Authority's Licensing Branch, 1300 852 562.
- 7. This confirmation can also be considered a confirmation of Notification of Plant Design under the Equipment (Public Safety) Regulations 2007.

**Gladys Khoury** Authorised Officer

PMS-055-LTR Last revised: April 2008

# Attachment C – South Australian Plant Registration

#### Occupational Health, Safety and Welfare Act. REGISTRATION OF PLANT DESIGN FOR PREFABRICATED SCAFFOLDING

9/2010	03/09	Printe	Client No: 22215
	vices	on Services Pty nts & Inspection	ACH Consulting & Inspe All Crane & Hoist Cons
			41 North Road BRIGHTON VIC 3186 AUSTRALIA
			AUSTRALIA



Licensing Clerk Address: 1 Richmond Road KESWICK SA 5035

Postal:

Phone:

Fax:

GPD Box 465

ADELAIDE SA 5001 1300 365 255 +61 8 8303 0411

Website: www.safework.sa.gov.au

DETAILS OF REGISTERED DESIGN

Site Address:	41 North Road BRIGHTON VIC 3186 AUSTRALIA
Design Registration Number:	SD-20101588-1
Issued:	18 August 2010
Description:	PREFABRICATED SCAFFOLD (440 SERIES 1300 WIDE)
Design Drawing Numbers:	123/1 Rev A; 123/2 Rev 0
Designer:	K BLACKBURN - ACCESS SCAFFOLDING (VIC) PTY LTD
Design Code:	AS1576.1-2010
Design Criteria:	RATED LOAD PER BAY: 450 KG; MAXIMUM PLATFORM HEIGHT: 7.384M
Hazard Level:	NOT APPLICABLE

This is to certify that the design of the item of plant described has been registered pursuant to Regulation 3.4.2 of the Occupational Health Safety and Welfare Regulations 1995 and the National Occupational Health and Safety Standard for Plant.

If this registered design is altered, it must be re-submitted for re-registration within 21 days or this registration will lapse. The Registered design number must be provided to any manufacturer, importer or supplier of the plant. The Design Registration Number: SD-20101588-1 must be permanently marked on the plant. Non compliance with the regulations may incur a penalty.

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Delegate of Director SafeWork SA, Department of Premier and Cabinet

A business unit of the Department Premier and Cabinet

Infonet Form GL301

2963-9696-6-19

PAGE 03/04

**Government of South Australia** 

SafeWork 5A

#### Occupational Health, Safety and Welfare Act. REGISTRATION OF PLANT DESIGN FOR PREFABRICATED SCAFFOLDING

Client No: 22215	Printed:	03/09/2010		ABN 50 560 588 327
CHERRY ZZZ (U			Contact d	letails let
ACH Consulting & Inspect	on Services Pfv Ltd		Address:	1 Richmond Road KESWICK SA 5035
All Crane & Hoist Consult 41 North Road	ints & Inspection Ser	vices	Postal:	GPO Box 465 ADELAIDE SA 5001
BRIGHTON VIC 3186 AUSTRALIA			Phone: Fax:	1300 365 255 +61 8 8303 0411
			Website:	www.safework.sa.gov.au

#### DETAILS OF REGISTERED DESIGN

Sile Address:	41 North Road BRIGHTON VIC 3186 AUSTRALIA			
Design Registration Number:	SD-20101587-1			
Issued:	18 August 2010			
Description:	PREFABRICATED SCAFFOLD (440 SERIES 700 WIDE)			
Design Drawing Numbers:	262/1 Rev B			
Designer:	K BLACKBURN - ACCESS SCAFFOLDING (VIC) PTY LTD			
Design Code:	AS1576.1-2010			
Design Criteria:	RATED LOAD PER BAY: 225 KG; MAXIMUM PLATFORM HEIGHT: 3.936M			
Hazard Level:	NOT APPLICABLE			

This is to certify that the design of the item of plant described has been registered pursuant to Regulation 3.4.2 of the Occupational Health Safety and Welfare Regulations 1995 and the National Occupational Health and Safety Standard for Plant.

If this registered design is altered, it must be re-submitted for re-registration within 21 days or this registration will lapse. The Registered design number must be provided to any manufacturer, importer or supplier of the plant. The Design Registration Number: SD-20101587-1 must be permanently marked on the plant. Non compliance with the regulations may incur a penalty.

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Delegate of Director SafeWork SA, Department of Premier and Cabinet

A business unit of the Department Premier and Cabinet

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03/05/5011 08:32 PT-3-226-8322

# Attachment D - Castor Wheel Laboratory Report

8 Mercier St, COBURG VIC 3058 AUSTRALIA P O Box 170 COBURG VIC 3058 AUSTRALIA

> Telephone: 03 9350 8600 Facsimile: 03 9354 1971 Email: mechtest@intico.com.au

### MECHANICAL TESTING LABORATORY REPORT - No.: 1-M-398299

Client:	RICHMOND WHEEL & CASTOR CO.	Client #:	116195
	590 Clayton Road, Clayton South VIC 3169	WV Ref:	398299/1
Description of Test :	Compression Testing of 700kg Castor	Report Date:	21/05/07
Client Order No :	342423	Date of Test:	18/05/07
Test Specification :	Client Requirements (AS 1576.2, Appendix II)	Position:	Not Applicable
Material:	Not Specified	Process:	Not Applicable
Identification:	Wanda Scaffold Castor (P/N: 083SCAS879B)	Procedure No:	Not Applicable
Job ID:	Research & Development – Eng & QA	Welder ID:	Not Applicable

Definitions: All abbreviations and terminology where possible is in accordance with relevant Australian Standards referred to by the applicable specifications reported herein.

#### COMPLIANCE/NON COMPLIANCE

The castor supplied and identified above complied with AS 1576.2-1991 Appendix H.

#### LOCATION OF TEST

8 Mercier Street, Coburg, VIC 3058.

#### **IDENTIFICATON OF CASTORS & SCOPE OF TESTING**

One assembled adjustable castor (frame and wheel) was submitted for compression testing. The castor was to be tested to a rating of 700kg. Testing was conducted in accordance with AS 1576.2 Appendix II - 1991.

#### LOAD TESTING

The assembled castor was loaded at 1.5 times and 3 times the rated load for 15 minutes each. The brake on the castor was applied during the testing.

The method of loading the castor is shown in Figure 1.

After the application of a force 1.5 times the rated load of the castor, no change in the movement of the castor was noted. The castor was able to smoothly rotate 360 degrees in both directions with no binding or additional looseness in the swivel bearing. No visible permanent set had developed in the castor supplied for testing.

When a force 3 times the rated load of the castor was applied, the castor did not collapse and no change in the movement of the castor was noted. The castor was able to smoothly rotate 360 degrees in both directions with no binding or additional looseness in the swivel bearing. No visible permanent set had developed in the castor supplied for testing.

Indentations due to the application of the brake were observed on the wheel after each stage of testing. This is shown in Figure 2.

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D. Le Metallurgist

Please note: Unless other arrangements have been made, all unclaimed test coupons and specimens will be disposed of after 30 days from the date of this report.

> Intico Pty Ltd - Mechanical Testing Laboratory Report Page 1 of 2





INTICO Pty. Ltd. Telephone: 03 9350 8600 Facsimile: 03 9354 1971 Email: mechtest@intico.com.au

### MECHANICAL TESTING LABORATORY REPORT - No.: 1-M-398299

Client:

**RICHMOND WHEEL & CASTOR CO.** 590 Clayton Road, Clayton South VIC 3169 Description of Test : Compression Testing of 700kg Castor

Client #: 116195 WV Ref: 398299/1 Report Date: 21/05/07



Figure 1: The loading of the castor in the test machine





Figure 2: The depressions on the wheel after the application of the load. The load applied for the impression shown is marked on the photograph: 10.5kN for 1.5 times the rated load and 21.0kN for 3 times the rated load

mill D. Le Metallurgist

Please note: Unless other arrangements have been made, all unclaimed test coupons and specimens will be disposed of after 30 days from the date of this report.

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# ACCESS SCAFFOLDING



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