

FORMWORK PRODUCT
TECHNICAL GUIDE

Acrow Prop

The first in the World.



Genuine **Safety.**
Outstanding Service.



Formwork & Scaffolding

ACROW PROP... The original & genuine Acrow prop

First in the world

- The original ACROW PROP revolutionised construction:
 - Simple and innovative
 - Strong and durable
 - Fast to erect in 3 simple steps by one person
 - Versatile with infinitely variable height adjustment
 - Reliable and economic.
- Today, ACROW PROP would be used on almost every construction site across Australia.

Multitude of uses

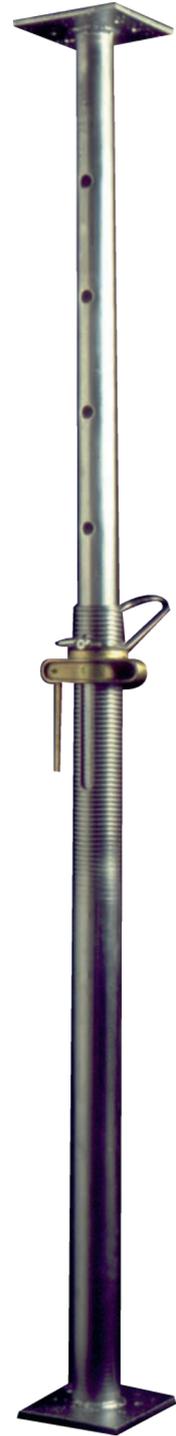
- Falsework support:
formwork for reinforced concrete floors and beams.
- Raking shores:
to brace formwork for columns, walls and stairs.
- Temporary support:
for repair work, canopies, lintels and the like.

Simple and innovative construction

- The Acrow-built ACROW PROP consists of:
 - Inner-tube with welded top-plate
 - Outer-tube with welded base-plate
 - Nut and handle
 - Chainless prop pin.
- Available in 5 sizes covering a range from 1050mm to 4900mm with axial compression working load limits ranging from 7kN to 42.5kN. (1kN >> 102kg).
- Spare parts are available for all Prop sizes.

Strong and durable

- Manufactured from high yield steel to Acrow's specifications.
- The prop outer-tube features a rolled thread which retains the tube wall thickness and thereby maintains maximum strength.
- Galvanized finish offers long life protection against corrosion.



- 1 Photographs/illustrations shown within this brochure are intended as expressing the diversity and possible applications of the product and as such must not be used as assembly instructions.
- 2 In line with Acrow Formwork & Scaffolding Pty Ltd's commitment to continuous product development and improvement, the information contained in this brochure may be changed without notice.
- 3 Every effort has been made to give appropriate guidelines for the use of this product, however, Acrow Formwork & Scaffolding Pty Ltd accepts no responsibility for any loss or damage suffered by any person acting or refraining from action as a result of this information.

Should the users require any further information or guidance, they are encouraged to contact their local Acrow Formwork & Scaffolding Pty Ltd outlet.

Fast to erect in 3 simple movements by one person



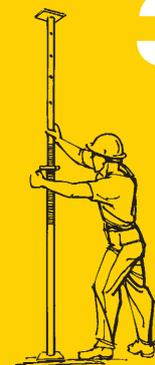
1

Lift inner-tube to approximate height required. The outer-tube is kept steady by placing foot on base-plate.



2

Insert pin through slot in outer-tube passing through the adjacent hole in the inner-tube.



3

Turn handle of nut for final adjustment.

Easy-Use Accessories To Speed Up The Job



Swivel Reduction Coupler

- Used for coupling ACROW PROP outer tube (60.3mm OD) to standard scaffolding tube (48.3mm OD) – for inclined bracing.

Standard Swivel Coupler

- Used for coupling ACROW PROP inner-tube (48.3mm OD) to standard scaffold tube – for inclined bracing.



Double Reduction (90°) Coupler

- Used for coupling ACROW PROP outer-tube (60.3mm OD) to standard scaffolding tube (48.3mm O.D.) – for horizontal bracing.

Standard Double (90°) Coupler

- Used for coupling ACROW prop inner-tube (48.3mm OD) to standard scaffold tube – for horizontal bracing.



Chainless Acrow Prop Pin

- High tensile pin with solid steel loop.
- No tangled or lost chains.
- Reduces loss of pins on the job.

Components in Detail

Acrow Prop Head and Base Plate:

- 150mm x 150mm steel plates with drilled holes for securing to timber beams or facilitating the use of accessories.

Acrow Prop Inner-Tube:

- 48.3mm OD tube with holes at 152.5mm centres.
Tube diameter enables standard scaffold tube and couplers to be used for bracing purposes.

Acrow Prop Outer-Tube:

- 60.3mm OD tube which accommodates the thread section and slot for fine height adjustment. Reduction couplers enable standard scaffold tube to be connected to the ACROW PROP outer-tube for bracing purposes.

Thread:

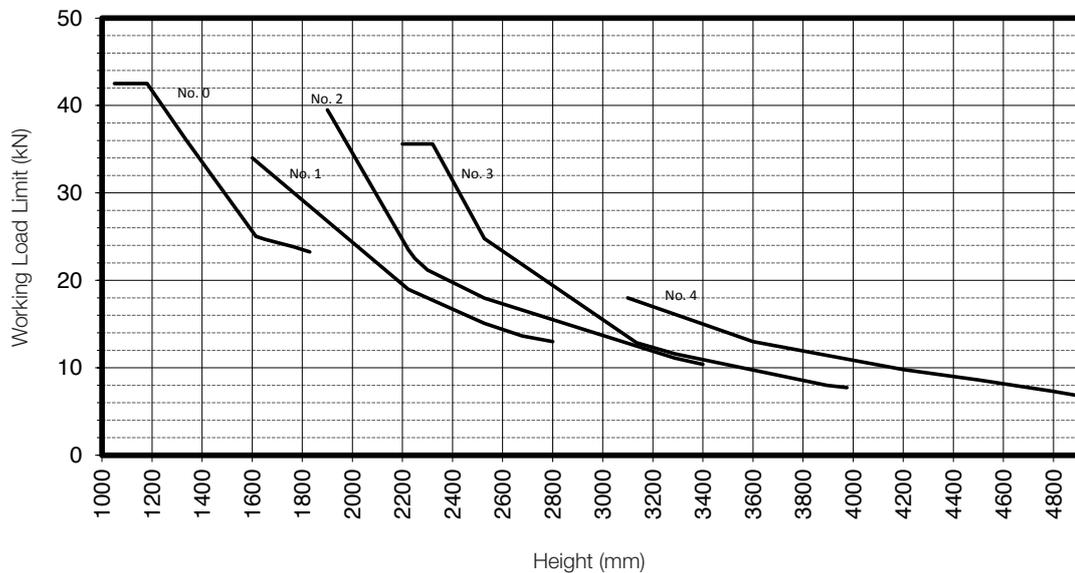
- The thread on the outer-tube provides fine adjustment within the props given range. The rolled thread retains the wall thickness of the tube and thereby maintains maximum strength.

Acrow Prop Nut:

- The self-cleaning ACROW PROP nut has a hole at one end for easy turning when the prop handle is close to walls. An extra nut can be added to convert the prop to a push-pull strut.

ACROW PROP RANGE			
SIZE	CLOSED HEIGHT (mm)	OPEN HEIGHT (mm)	EST. WEIGHT (kg)
No.0	1050	1830	13.0
No.1	1600	2800	17.3
No.2	1900	3400	20.0
No.3	2170	3975	22.6
No.4	3100	4900	30.0

COMPRESSION WORKING LOAD LIMITS TO AS3610-95



1. Working load limits are applicable to Acrow Props made from Galtube Plus or hot dipped galvanised tubes only.
2. Limit state conversion factor = 1.5
3. Refer to AS3610 for acceptable criteria for installation of props and eccentricity of loading. Load eccentricity must not exceed 25mm.
4. For concentric loading and Acrow painted Props please refer to Acrow Engineering.

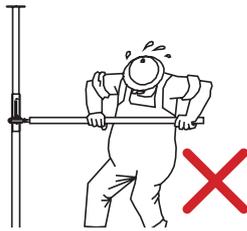
Know how to use Acrow Prop

ALWAYS USE ACROW PROP PINS.

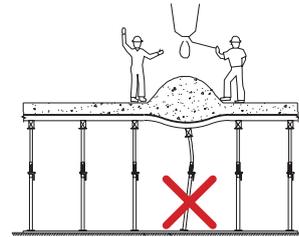


Don't replace an ACROW PROP pin with a piece of reo or a bolt.

ACROW PROP MUST NOT BE USED AS A JACK.

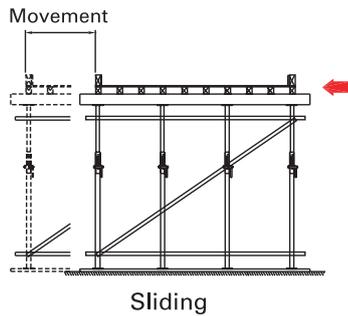


DO NOT OVERLOAD.

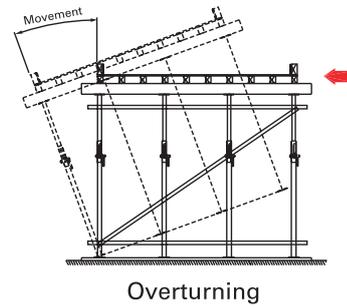


Overloading can cause the props to buckle and lead to the collapse of the shoring system.

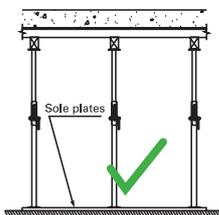
HORIZONTAL FORCES (EG: WIND LOADS) CAN CAUSE OVERTURNING OR SLIDING



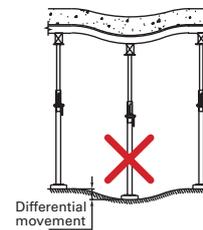
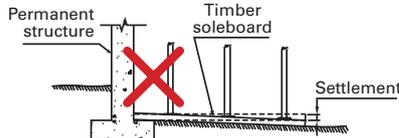
Attention must be given to prevent these situations



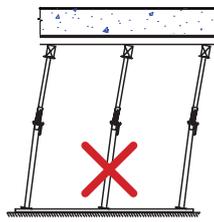
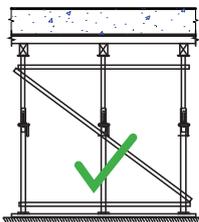
USE SOLE PLATES WITH ADEQUATE STIFFNESS UNDER THE PROPS WHERE THE PROP IS NOT BEARING ON A CONCRETE FOUNDATION.



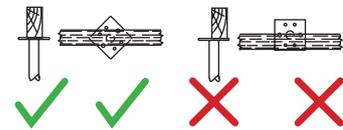
The foundation material must be sufficiently firm to prevent differential settlement and have adequate bearing capacity. Prevent differential settlement due to non-uniform foundation material.



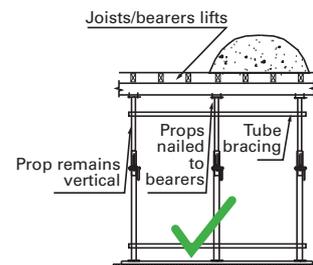
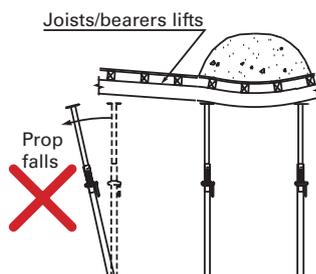
PROVIDE ADEQUATE BRACING TO PREVENT MOVEMENT OF FORMWORK AND PROVIDE STABILITY TO THE FALSEWORK.



AVOID ECCENTRIC LOADS



AVOID DISLODGEMENT BY NAILING THE BEARERS TO THE PROP HEAD PLATE AND TIE THE PROPS TOGETHER.



- ▲ Formwork
- ▲ Scaffolding
- ▲ Industrial & Mining Scaffolding



Contact

Phone: 1300 138 362
or contact your business
development manager.
www.acrow.com.au