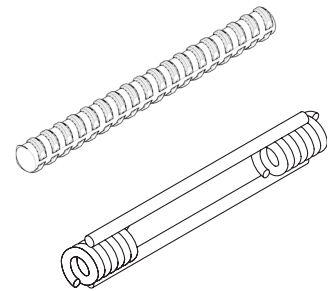


PRODUCT CATALOGUE

# Formwork Sales & Hardware

Catalogue



Genuine **Safety.**  
**Outstanding** Service.



# ACROW Formwork Sales & Hardware Catalogue

## Important

The erection and application instructions contained in this catalogue are the recommended methods to be adopted when using the products listed in this catalogue.

The technical instructions contained in this catalogue must be accurately followed to achieve the correct function of the products. Any deviation from the recommended usage may require a separate design and/or verification by Acrow Formwork & Scaffolding Engineering Department.

The use and application of the Hardware products must be in accordance with AS 3610, Occupational Health and Safety Regulations, approved industry codes of practice and relevant regulatory authority requirements in conjunction with information in this brochure.

The illustrations in these assembly instructions are guidelines only.

The combined use of Acrow Formwork & Scaffolding products listed in this catalogue with equipment from other suppliers may entail performance problems and therefore is not recommended.

Site specific Hazard and Risk assessments may need to be generated for specific projects.

## Safety Warning

It is recommended that users of these products employ and implement appropriate procedures and control measures to eliminate or control any risk of Musculoskeletal disorder/injury while manually handling them. It should be taken into consideration that bags or boxes of small items can be heavy due to the quantity involved. Please refer to the mass and quantity pack sizes for guidelines.

Refer to Code of Practice on manual handling published by the local Workcover Authority or other approved and recognised guidelines for correct and appropriate manual handling procedures.

## Usage Recommendations

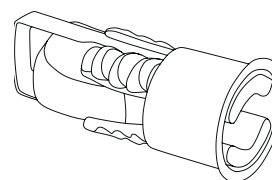
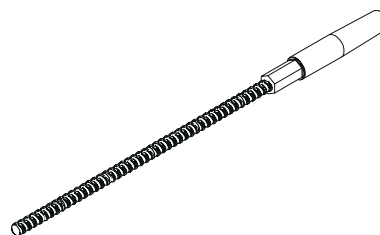
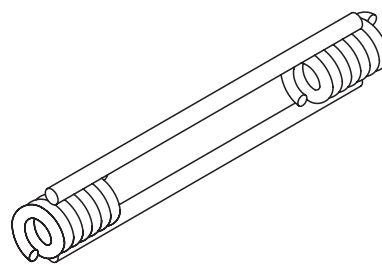
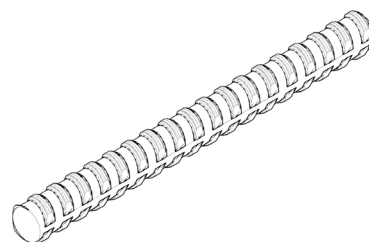
Where applicable, usage recommendations for products have been included in this catalogue, however if the user is not sure of the correct way to use any product then the nearest Acrow Formwork & Scaffolding Branch office should be contacted for clarification.

## Stock availability

The products listed in this catalogue are not necessarily carried as stock in all branches. Stocks are held in Branches to reflect the usage in the region. Please enquire at your local Acrow Formwork & Scaffolding Branch for product availability.

## Compliance

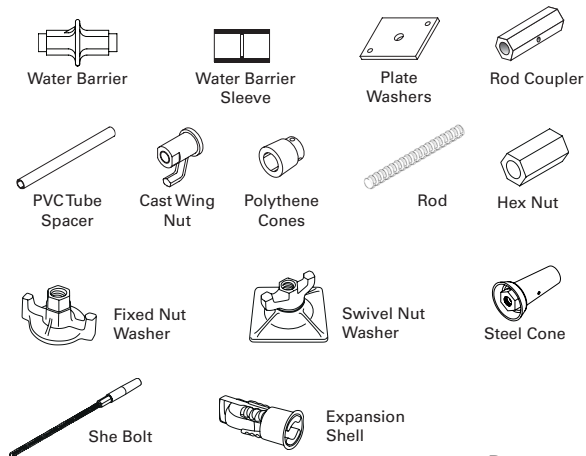
All working Load Limits stated in this catalogue conforms to AS3610-1995 unless noted otherwise. Limit State Conversion Factor = 1.5



- 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'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 outlet.

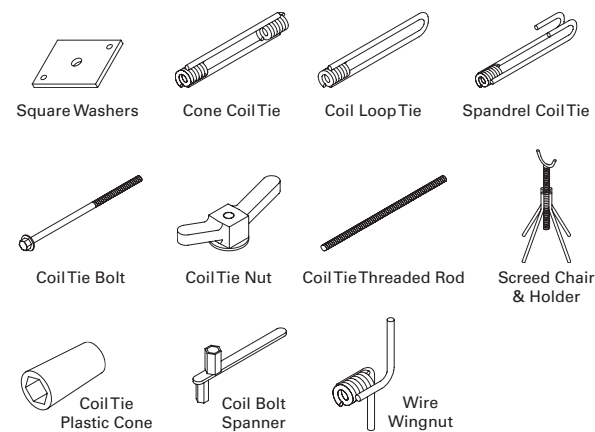
# General Technical and Application Manual

## HT Thru Tie System



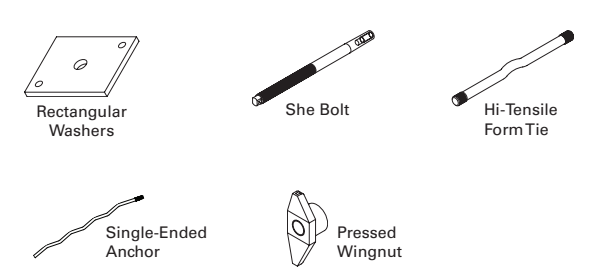
Pages 4 - 8

## Coil Tie System



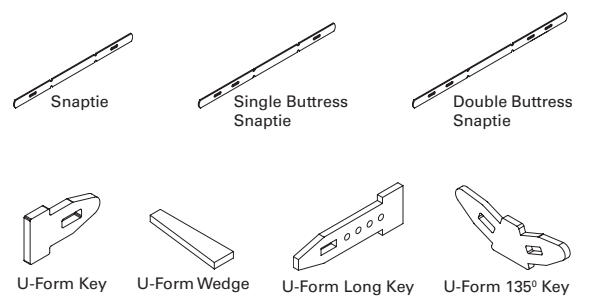
Pages 9-14

## Hi-Tensile Tie System



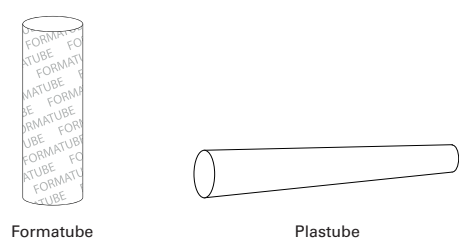
Pages 15-18

## U-Form Snaptie System



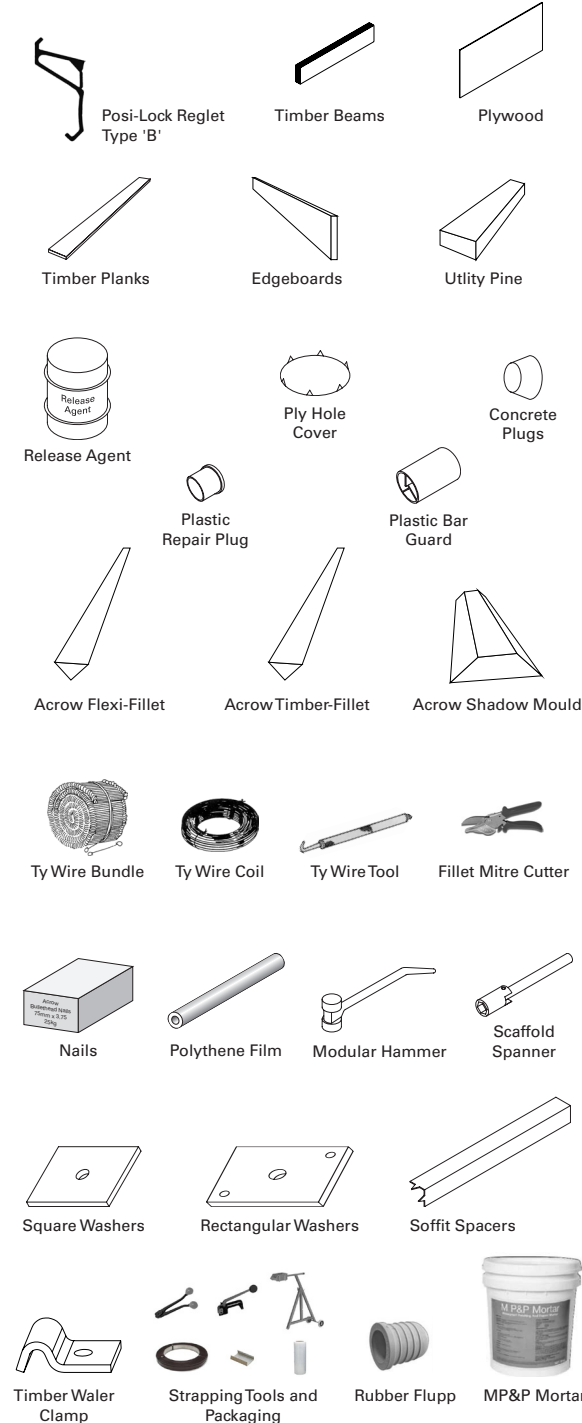
Page 19

## Circular Column Form



Pages 20-22

## Concrete and Formwork Accessories



Pages 23 - 30

# ACROW Formwork Sales & Hardware Catalogue

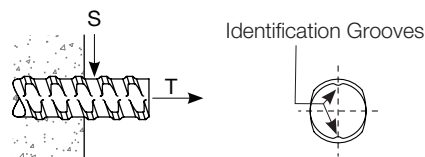
<b>Dia:</b>	<b>15mm</b>
<b>Mass:</b>	<b>1.44 kg/m</b>
<b>Code No:</b>	<b>QTTR015</b>
<b>Nom. Dia:</b>	<b>15/17mm</b>
<b>Available:</b>	<b>Lengths up to 5.8m</b>

<b>Dia:</b>	<b>20mm</b>
<b>Mass:</b>	<b>2.56 kg/m</b>
<b>Code No:</b>	<b>QTTR020</b>
<b>Nom. Dia:</b>	<b>20/23mm</b>
<b>Available:</b>	<b>Lengths up to 6.0m</b>

## HT Thru Tie Rod

The HT Thru Tie Rod is manufactured from high grade steel and features a special 'high speed' thread to reduce the time and cost of erecting and dismantling the HT Thru Tie assembly. Tie Rods need not be cut to exact lengths for each job. The Tie Rod is a continuously threaded hot rolled and mill treated bar intended for formwork.

Contact Acrow Formwork & Scaffolding for welding information of HT Thru Tie Rod.



### 15mm HT Thru Tie Rod Load Capacity

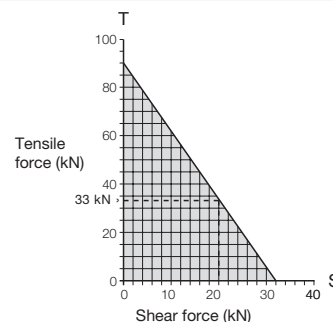
Tensile Working Load Limit = 90 kN

Shear Working Load Limit = 32 kN

For interaction between tensile force and shear force see graph opposite.

#### Example:

At shear force  $S = 20$  kN the HT Thru Tie Rod can simultaneously take a tensile force of  $T = 33$  kN.



### 20mm HT Thru Tie Rod Load Capacity

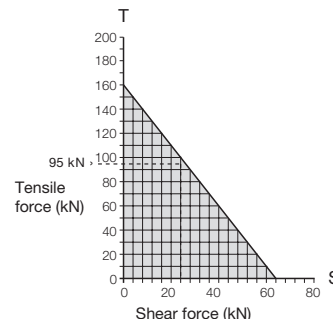
Tensile Working Load Limit = 160 kN

Shear Working Load Limit = 65 kN

For interaction between tensile force and shear force see graph opposite.

#### Example:

At shear force  $S = 26$  kN the HT Thru Tie Rod can simultaneously take a tensile force of  $T = 95$  kN



#### Note:

- 1) HT Thru Tie Bars must not be used as a load lowering/raising device.
- 2) For Welding or Galvanising HT Thru Tie Bars please refer Acrow Engineering Department.
- 3) When the Thru Tie is supporting the form weight in a climbing form application, the load must be applied directly at the concrete face.
- 4) The Thru Tie is not suitable to resist forces which impose bending moments.

#### Note:

Maximum capacities may be limited by other components, for example, washer and bearing stress under washer.

- Limit State conversion factor = 1.5
- Engineering principles dictate that when members are continuous over multiple spans, the reaction at the supports are not always equal to 'Spacing x Span x Pressure', so a Reaction Coefficient must be applied when assessing the force.

#### Example:

For members continuous over 2 equal spans -  
Reaction Coefficient = 1.25

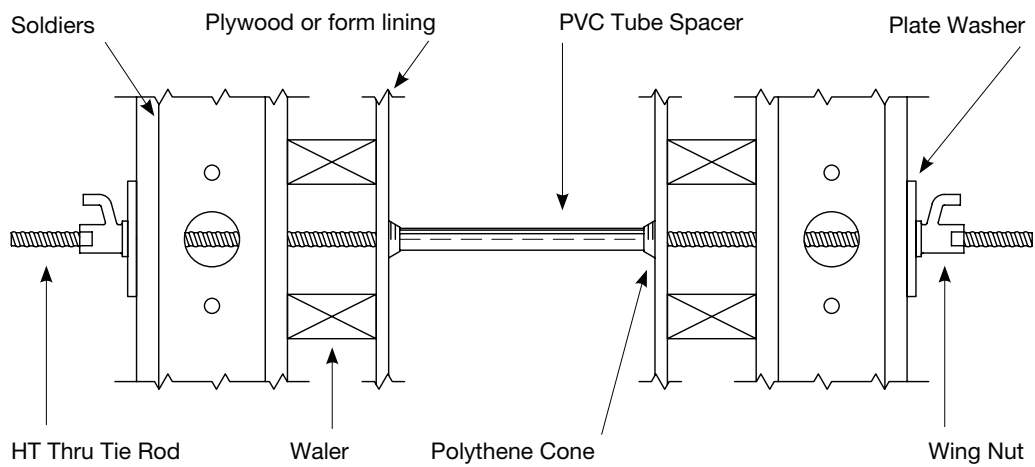
For members continuous over 3 equal spans -  
Reaction Coefficient = 1.1

(Reaction Coefficients may be applied in two directions.)

- In Formwork applications, Clause 4.5.6.3 (c) of AS 3610-1995 specifies that, 'for Tension Members resisting Lateral Concrete Pressure, the forces to be used shall be increased by at least 20%'.
- The force as adjusted by the above factors must be equal or less than the WLL for that member.
- For more information consult the AF&S Engineering Department or a competent engineer.

# General Technical and Application Manual

## Typical Thru Tie Assembly



<b>Dia:</b>	<b>15mm</b>
<b>Mass:</b>	<b>0.45 kg/m</b>
<b>Code No:</b>	<b>QTTCWN15</b>

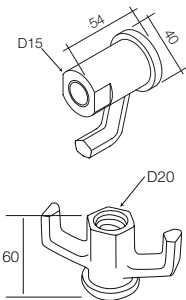
<b>Dia:</b>	<b>20mm</b>
<b>Mass:</b>	<b>0.48 kg/m</b>
<b>Code No:</b>	<b>QTTCWN20</b>

### HT Thru Tie Cast Wing Nut

Wing Nut is designed to spin freely on the 'high speed' thread by hand and may be tightened using either an AF spanner or a length of bar. The unbalanced, single wing design resists movement under vibration.

#### Tensile Working Load Limit when used with;

D15 HT Thru Tie Rod = 90 kN  
D20 HT Thru Tie Rod = 160 kN

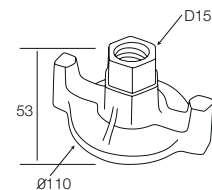


<b>Dia:</b>	<b>15mm</b>
<b>Mass:</b>	<b>0.7 kg/m</b>
<b>Code No:</b>	<b>QTTFNW015</b>

### HT Thru Tie Fixed Nut Washer

#### Tensile Working Load Limit when used and centrally positioned with:

Acrow Slim-Max Soldier, WLL = 50 kN  
Acrow Slim-Light Soldier, WLL = 60 kN

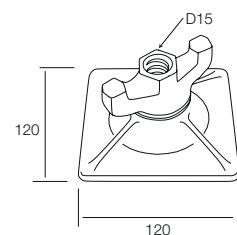


<b>Dia:</b>	<b>15mm</b>
<b>Mass:</b>	<b>1.08 kg/m</b>
<b>Code No:</b>	<b>QTTSNW015</b>
<b>Max Inclination:</b>	<b>15°</b>

### HT Thru Tie Swivel Nut Washer

#### Tensile Working Load Limit when used and centrally positioned with:

Acrow Slim-Max Soldier, WLL = 78 kN  
Acrow Slim-Light Soldier, WLL = 67 kN



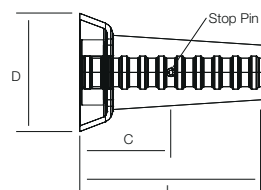
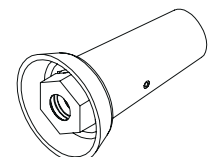
<b>Dia:</b>	<b>15mm</b>
<b>Mass:</b>	<b>0.25 kg</b>
<b>Code No:</b>	<b>QTSCC075</b>
<b>Length, L:</b>	<b>75mm</b>
<b>Concrete Cover, C:</b>	<b>35mm</b>
<b>D:</b>	<b>50mm</b>

### HT Thru Tie Steel Cone & Collar

Similar to Polythene Cones but screws to 15mm diameter Thru Tie with no spacer tube required as a result the tie is not recoverable. All the threads in the Cone MUST be fully engaged with Thru Ties. The Steel Cone is removed with a socket wrench after pour.

#### Tensile Working Load Limit when used with:

D15 HT Thru Tie Steel Cone & Collar (L=75) = 50 kN  
D15 HT Thru Tie Steel Cone & Collar (L=100) = 80 kN



<b>Dia:</b>	<b>15mm</b>
<b>Mass:</b>	<b>0.65 kg</b>
<b>Code No:</b>	<b>QTSCC100</b>
<b>Length, L:</b>	<b>100mm</b>
<b>Concrete Cover, C:</b>	<b>48mm</b>
<b>D:</b>	<b>62mm</b>

# ACROW Formwork Sales & Hardware Catalogue

<b>Dia:</b>	<b>15mm</b>
<b>Mass:</b>	<b>0.34 kg</b>
<b>Code No:</b>	<b>QTTC090</b>

<b>Dia:</b>	<b>20mm</b>
<b>Mass:</b>	<b>0.74 kg</b>
<b>Code No:</b>	<b>QTTC130</b>

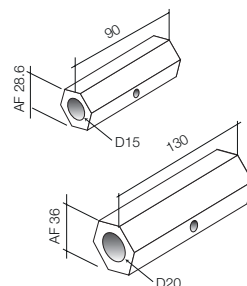
## HT Thru Tie Rod Coupler

Rod Couplers can be used to join HT Thru Ties where greater lengths are required (or for economical use of cut lengths). The Rod Coupler remains buried in the concrete. The HT Thru Tie Rod **MUST** be screwed hard up to the centre deformation inside the Rod Coupler.

### Tensile Working Load Limit when used with:

Dia 15 Thru Tie Coupler = 90 kN

Dia 20 Thru Tie Coupler = 160 kN

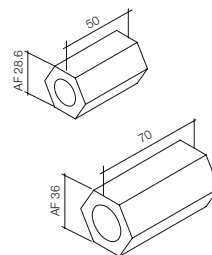


<b>Dia:</b>	<b>15mm</b>
<b>Mass:</b>	<b>0.2 kg</b>
<b>Code No:</b>	<b>QTTHN050</b>

<b>Dia:</b>	<b>20mm</b>
<b>Mass:</b>	<b>0.4 kg</b>
<b>Code No:</b>	<b>QTTHN070</b>

## HT Thru Tie Hex Nut

Hex Nuts **MUST NOT** be used as a substitute for Rod Couplers



### 24.5 OD Spacer Tube

<b>Mass:</b>	<b>70g/m</b>
<b>Code No:</b>	<b>QTTST015</b>

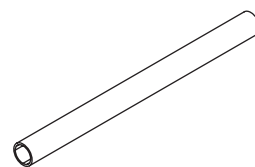
### 27.0 OD Spacer Tube

<b>Mass:</b>	<b>80g/m</b>
<b>Code No:</b>	<b>QTTST020</b>

## PVC Spacer Tube

The expendable PVC Tube Spacer is available in 2 diameters 24.5 OD to suit the 15/17mm Thru Tie Rod. 27.0 OD to suit the 19/21mm Thru Tie Rod.

**Note:** When using HT Thru Tie Rod, the length of the PVC Tube Spacer plus two Polythene Cones must be equivalent to the thickness of the concrete wall being constructed.



<b>Dia:</b>	<b>15mm</b>
<b>Mass:</b>	<b>0.3 kg</b>
<b>Code No:</b>	<b>QTTES015</b>

<b>Dia:</b>	<b>20mm</b>
<b>Mass:</b>	<b>0.4 kg</b>
<b>Code No:</b>	<b>QTTES020</b>

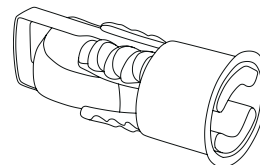
## HT Thru Tie Expansion Shell

Thru Tie Expansion Shells can be used for single sided shutters or temporary tie downs in concrete.

### Installation

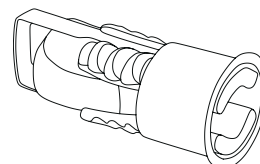
1. Drill hole with recommended diameter and depth. The diameter of the hole should be as small as possible.
2. Clean the borehole and remove all debris.
3. Screw the Thru Tie Rod into the cone of the Expansion Shell.
4. Remove the plastic sleeve and insert the anchor into the borehole. The Shell should have slight contact with the borehole.
5. After insertion of the anchor screw the Rod by hand (right hand thread) until the anchor is fixed and cannot be moved further.
6. Fill the borehole with cement grout.

\* This is an estimate of Working Load Limit for pull out force in 25MPa concrete. Acrow recommends to perform pull out tests on site.



Dia: 15mm

WLL*	40.2kN Tension
Drilled Hole Dia:	35-37mm
Min Eff. Anchor Depth:	200mm
Min Anchor Hole Depth:	290mm
Min Compressive Strength $f_c$ :	25MPa
Min Edge Distance:	300mm
Min Spacing:	600mm



Dia: 20mm

WLL*	73.8kN Tension
Drilled Hole Dia:	51-53mm
Min Eff. Anchor Depth:	300mm
Min Anchor Hole Depth:	420mm
Min Compressive Strength $f_c$ :	25MPa
Min Edge Distance:	450mm
Min Spacing:	900mm

# General Technical and Application Manual

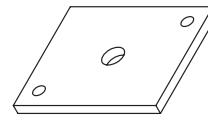
## Plate Washers

### 125x100x8 mm Plate Washer

Mass: 0.8 kg

Code No: QPWAS001

Working Load Limit when used and centrally positioned with:  
Acrow Slim-Max Soldier, WLL = 50 kN  
Acrow Slim-Light Soldier, WLL = 65 kN



125x100x8mm Plate Washer is shown.

### 130x130x12 mm Plate Washer

Mass: 1.6 kg

Code No: QPWAS003G

Working Load Limit when used and centrally positioned with:  
Acrow Slim-Max Soldier, WLL = 80 kN  
Acrow Slim-Light Soldier, WLL = 68 kN

### To suit 27.0 OD spacer tube

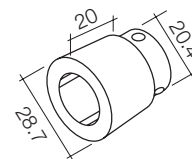
Mass: 1.0 kg per pack of 100

Code No: QTTPCL020

## Polythene Cones

Removable after use. These 'push-fit' Polythene Cones fit on the ends of the PVC Tube Spacer. Available in two sizes to suit the 24.5 and 27.0mm OD spacer tube.

The plastic cone leaves a clean-edged neat hole which can be filled with concrete plugs.



HD Cone to suit 24.5mm OD Spacer Tube is shown.

### To suit 24.5 OD spacer tube

Mass: 0.8 kg per pack of 100

STD Code No: QTTPCB001

HD Code No: QTTPC015

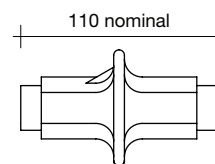
Dia: 15mm

Mass: 0.5 kg

Code No: QTTWB001

## Water Barrier

The Water Barrier is used to provide a water tight seal between the two sides of a concrete wall. It is used in conjunction with 15mm diameter HT Thru Tie, Polythene Cones, PVC Tube Spacers and Water Barrier Sleeves to allow recovery of the HT Thru Tie Rods. With this arrangement, it is suitable for wall thicknesses greater or equal to 200mm. The HT Thru Tie MUST be screwed hard up to the centre plate.



Tensile Working Load Limit = 85 kN

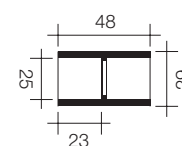
Mass: 1.46 kg per 100pk

Code No: QTTWBS001

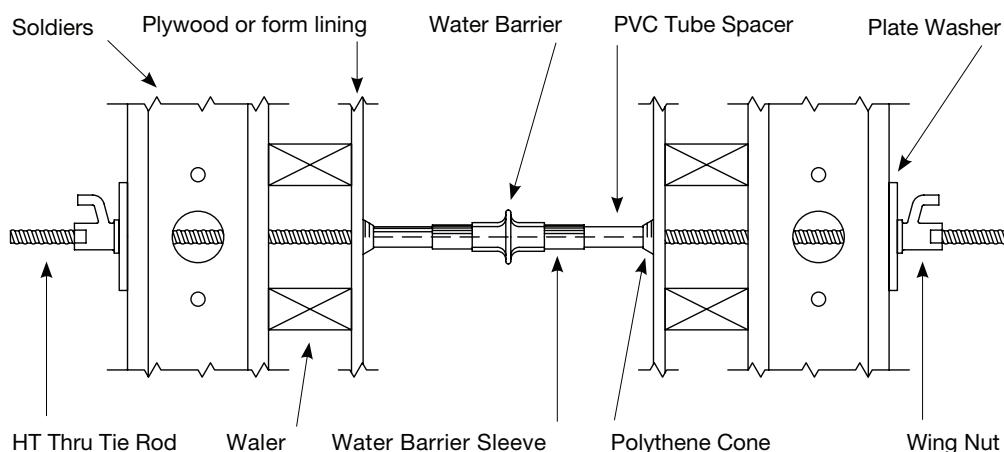
## Water Barrier Sleeve

(Clipsal Coupling 242/25)

Water Barrier Sleeve, a plastic sleeve used in the recovery of HT Thru Tie Rods when Water Barriers are used. All dimensions are nominal.



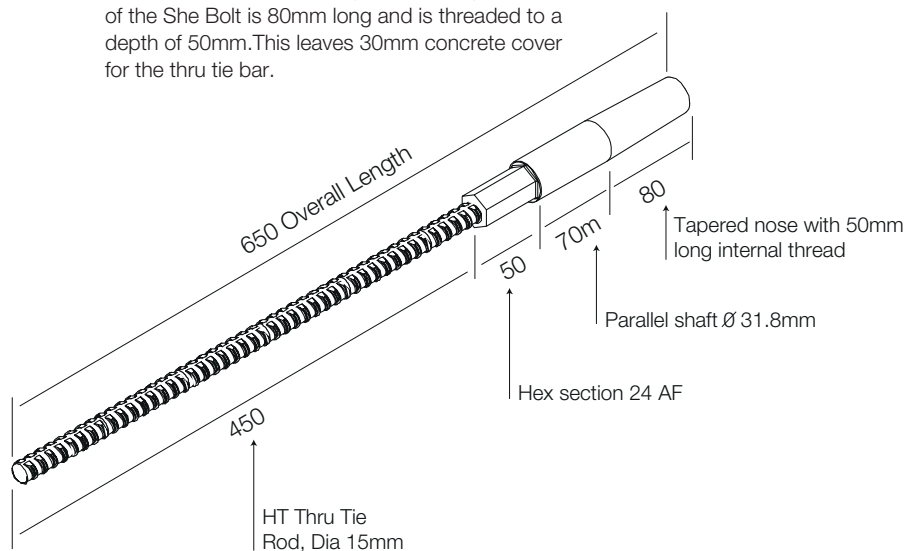
## Typical Water Barrier Assembly



<b>Dia:</b>	<b>15mm</b>
<b>Mass:</b>	<b>1.6 kg</b>
<b>Code No:</b>	<b>QSB15650</b>

### HT Thru Tie She Bolt

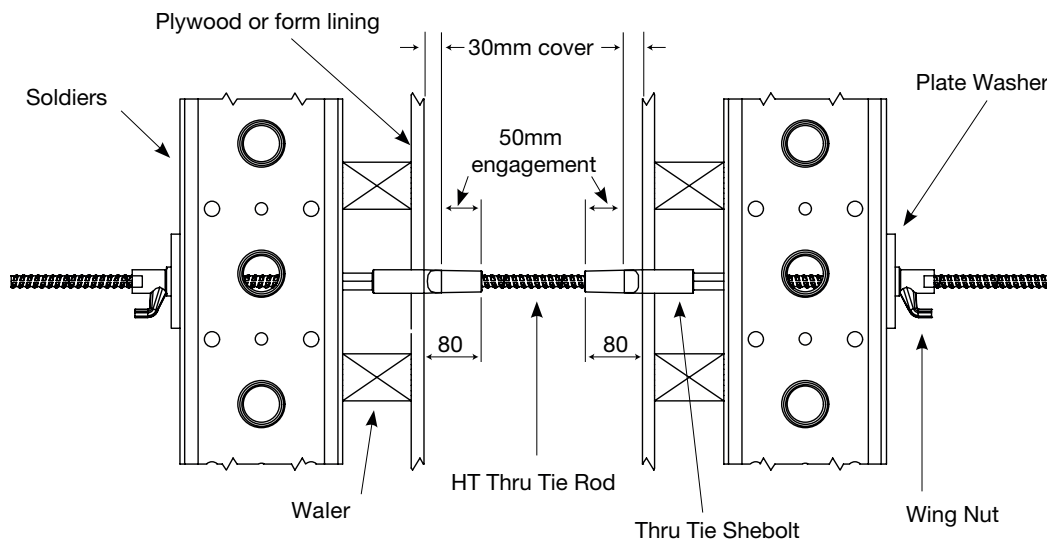
The Thru Tie She Bolt 15mm x 650mm is designed to be used with 15mm diameter thru tie rod which can be screwed into the tapered nose of the She Bolt. The thru tie bar **MUST** be fully screwed into the end of the She Bolt. Because the system does not use spacer tubes & cones, a tie can be inserted into the form at any time making it ideal when additional ties are required. The tapered nose of the She Bolt is 80mm long and is threaded to a depth of 50mm. This leaves 30mm concrete cover for the thru tie bar.



Tensile Working Load Limit = 90 kN

**Note:** The load capacity of HT Thru Tie She Bolt may be governed by soldier/washer combination used in conjunction with She Bolt and/or anchor pull out capacity.

### Typical She Bolt Assembly





# General Technical and Application Manual

## Bag size availability

C150 to C400  
available in bags of 100

C425 to C700  
available in bags of 50

C750 to C1000  
available in bags of 25

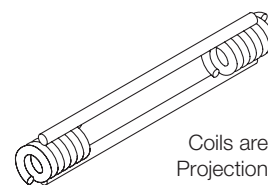
## Coil Ties

### Coil Tie (2 Rod)

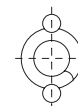
### H.D. Coil Tie (4 Rod)

Coil Ties are used in conjunction with plastic cones to provide a combined spacer and tying system for wall construction.

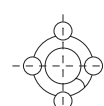
The form is attached to the Coil Tie using the Coil Tie Bolt which screws into the coil at the end of the tie. After concrete has set, the bolt and the cone are removed leaving the coil tie embedded in the concrete.



Coils are Projection welded to struts.



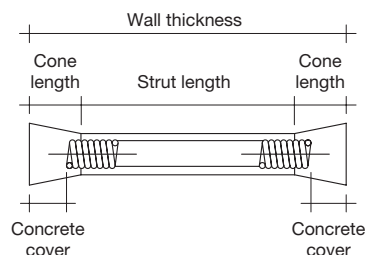
Coil Tie  
(2 Rod)



Coil Tie  
(4 Rod)

The predominate concrete cover for walls on most construction sites has proven to be 25mm. Acrow Formwork & Scaffolding stock of Coil Ties is therefore based on the 25mm cover cone (symbol C).

The ties sizes stocked are designated with the symbol C. For example a C300 indicates it is a coil tie which when used with two 25mm concrete cover cones will produce a 300mm thick wall.



To determine the correct stock size coil tie to use with the other concrete cover size cones the formula is as follows:

**Strut length = Wall thickness – twice cone length**

### Example:

Wall thickness say 400mm

Concrete cover required = 50mm

From cone chart, type E cone would be used which is 60mm long. Strut

length = 400 – 120 = 280mm

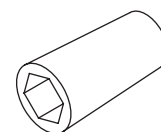
Checking strut lengths on chart

Coil Tie C350 would be ordered.

Tie Size for 25mm Cones (Wall Thickness)	Strut Length mm	2 Bar		4 Bar	
		Code No	Mass kg	Code No.	Mass kg
C150	80	QCTST150	0.11	QCTHD150	0.14
C175	105	QCTST175	0.12	QCTHD175	0.16
C200	130	QCTST200	0.13	QCTHD200	0.18
C225	155	QCTST225	0.14	QCTHD225	0.20
C250	180	QCTST250	0.15	QCTHD250	0.22
C275	205	QCTST275	0.16	QCTHD275	0.24
C300	230	QCTST300	0.17	QCTHD300	0.26
C325	255	QCTST325	0.18	QCTHD325	0.28
C350	280	QCTST350	0.19	QCTHD350	0.30
C375	305	QCTST375	0.20	QCTHD375	0.32
C400	330	QCTST400	0.21	QCTHD400	0.34
C425	355	QCTST425	0.22	QCTHD425	0.36
C450	380	QCTST450	0.23	QCTHD450	0.38
C475	405	QCTST475	0.24	QCTHD475	0.40
C500	430	QCTST500	0.25	QCTHD500	0.41
C525	455	QCTST525	0.26	QCTHD525	0.43
C550	480	QCTST550	0.27	QCTHD550	0.45
C575	505	QCTST575	0.27	QCTHD575	0.47
C600	530	QCTST600	0.28	QCTHD600	0.49
C625	555	QCTST625	0.29	QCTHD625	0.51
C650	580	QCTST650	0.30	QCTHD650	0.53
C700	630	QCTST700	0.32	QCTHD700	0.56
C750	680	QCTST750	0.34	QCTHD750	0.60
C800	730	QCTST800	0.36	QCTHD800	0.64
C850	780	QCTST850	0.38	QCTHD850	0.67
C900	830	QCTST900	0.40	QCTHD900	0.71
C950	880	QCTST950	0.42	QCTHD950	0.75
C1000	930	QCTST1000	0.43	QCTHD1000	0.79

### Coil Tie Plastic Cone

Plastic cones are available in four sizes to provide the concrete cover set out in the table below. The cone is tapered to enable easy retraction from the concrete after stripping the form. The cone has a threaded end to screw on to the coil tie and a hexagonal recess to insert an allen key to facilitate removal.

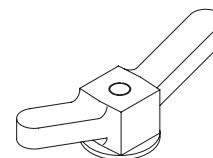


Cone Symbol Type	Concrete Cover mm	Cone Length mm	Code No	Mass per 100 kg
H	13	23	QCTPC013	2.2
C	25	35	QCTPC025	2.8
P	37.5	47.5	QCTPC037	3.4
E	50	60	QCTPC050	4.6

Mass: 0.42 kg  
Code No: QCTCN001

### Cast Wing Nut

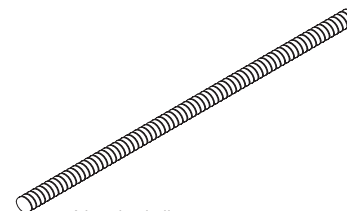
Robust nut used with coil tie bolt or coil tie threaded rod.



Avail Lengths: 3.66m  
Mass: 0.83 kg/m  
Code No: QCTRO036

### Coil Tie Threaded Rod

Coil Tie Threaded Rod is used when form depth is beyond the range of the coil tie bolts. It can also be used when the wall thickness is too great for a single coil tie. As the diagram on page 12 illustrates in this situation two short coil ties can be used joined together by a length of coil tie threaded rod. The coil tie threaded rod's load capacity makes it unsuitable for use with the HD Coil Tie.



Nominal diameter 15mm

### Screed Chairs

No. 1 Code No: QSCHA001

No. 2 Code No: QSCHA002

No. 3 Code No: QSCHA003

### Screed Holders

No. 1 Code No: QSHOL001

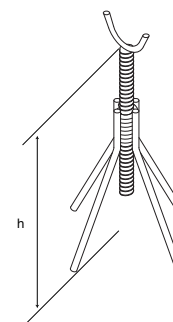
No. 2 Code No: QSHOL002

No. 3 Code No: QSHOL003

### Screed Chair and Holder

The Screed Chair and Holder is designed to support a tubular screed guide which is removed after screeding leaving the Screed Chair and Holder embedded in the concrete. The unit is adjustable and is available in three sizes to cater for slab thicknesses from 115mm to 290mm.

Screed Chair and Holder	Height, h (mm)		Mass kg
	Min	Max	
No. 1	95	125	0.15
No. 2	105	160	0.17
No. 3	160	260	0.18

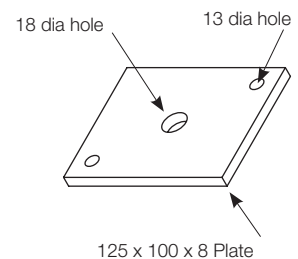


# General Technical and Application Manual

**Mass:** 0.80 kg  
**Code No:** QPWAS001

## Washer

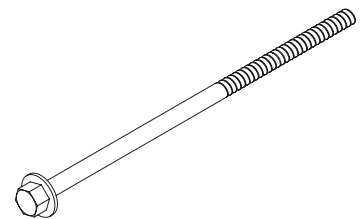
The plate washer recommended for use with coil tie bolts is the 125 x 100 x 8mm washer with 18mm dia central hole and 13mm nail holes.



**Bolt Length** 300mm  
**Mass:** 0.27 kg  
**Code No:** QCTB0300

## Coil Tie Bolt

Coil Tie Bolt is used to connect the form to the coil tie. The bolt can be used with any coil tie including the HD Coil Tie. It features a built in washer in the head, however a plate washer must also be used at the form outer face. Coil Tie Bolt must protrude 15mm minimum past Coil Tie Coil.



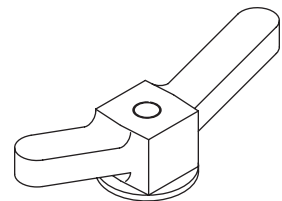
**Bolt Length** 350mm  
**Mass:** 0.31 kg  
**Code No:** QCTB0350

**Bolt Length** 405mm  
**Mass:** 0.40 kg  
**Code No:** QCTB0405

**Mass:** 0.42 kg  
**Code No:** QCTCN001

## Cast Wing Nut

Robust nut used with coil tie bolt or coil tie threaded rod.

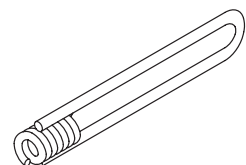


**Mass:** 0.07 kg  
**Code No:** QCTCL001

## Coil Loop Tie

Coil Loop Ties are used where an embedded anchor is required in a slab or single sided wall.

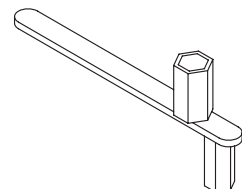
Available in sizes to order.



**Mass:** 0.50 kg  
**Code No:** QCBSP001

## Bolt Spanner

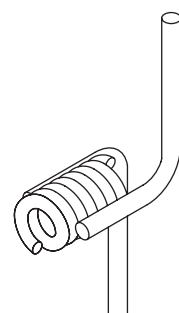
Double sided spanner featuring a socket for tightening the Coil Tie Bolt and an allen key for removal of cone.



**Mass:** 0.12 kg  
**Code No:** QCTWN001

## Wire Wing Nut

Lightweight nut suitable for applications requiring only finger tightening.



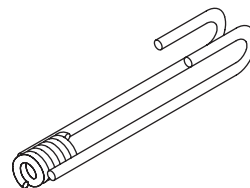
**Mass:** Varies in size  
**Range:** 150-900mm  
**MADE TO ORDER**

### Spandrel Coil Tie

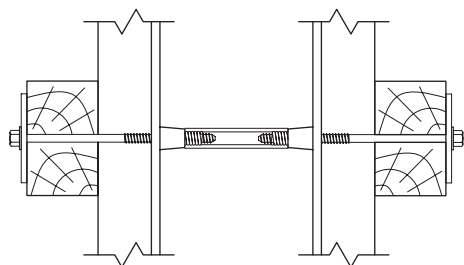
The Spandrel Coil Tie is used to anchor the formwork to an insitu universal beam (See application below).

#### Note:

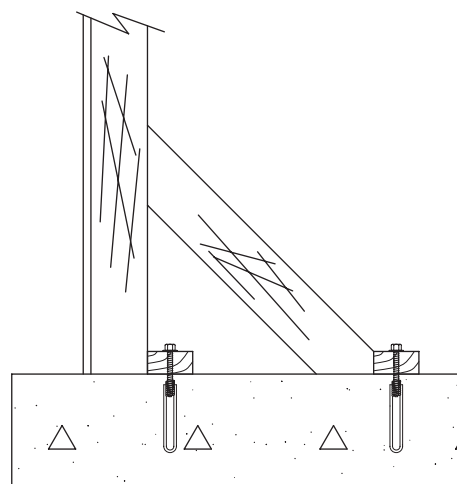
The Spandrel tie is only a tension member and cannot act as a spacer.



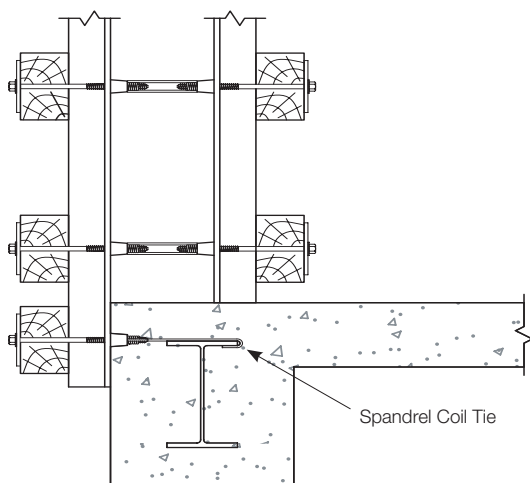
### Typical Applications



Typical tie system arrangement

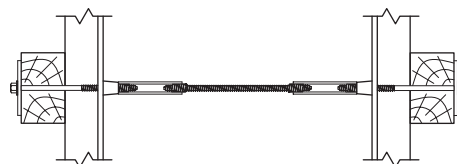


Coil Loop Ties used as Tie Down anchors



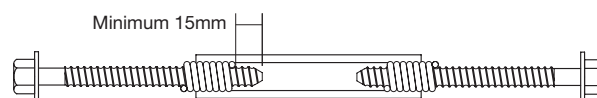
#### Spandrel and Coil Tie Combination

Spandrel Coil Tie would be embedded in previously poured slab and beam.



#### Adjustable Form Tie

Two Coil Ties and a length of Coil Tie Threaded Rod make an adjustable form tie. Also used when wall thickness exceeds 1m.

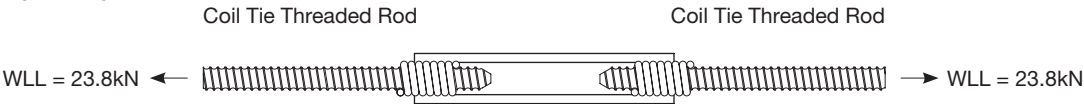


#### Coil Tie Bolt

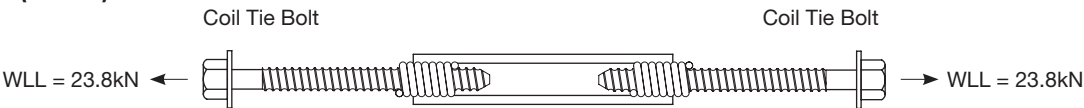
Coil Tie Bolts have a lead in taper at the end of the bolt so to gain the full strength of the Coil Tie System the Bolt must be screwed through the coil a minimum of 15mm to ensure full engagement.

TENSILE WORKING LOAD LIMITS

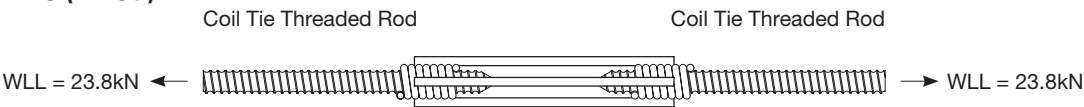
Coil Tie (2 Rod)



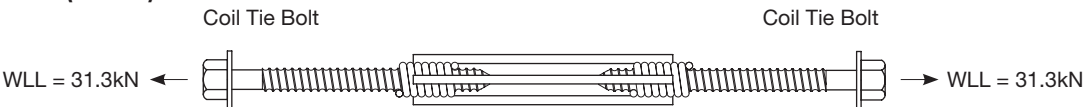
Coil Tie (2 Rod)



HD Coil Tie (4 Rod)



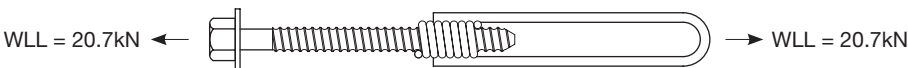
HD Coil Tie (4 Rod)



Coil Tie Threaded Rod



Coil Loop Tie



**Note:** Concrete bond must also be checked.

See notes on page 14 for other factors governing the tension loads applicable to coil ties.

### Coil Tie Spacing Chart

In general the design of the wall form would be based on:

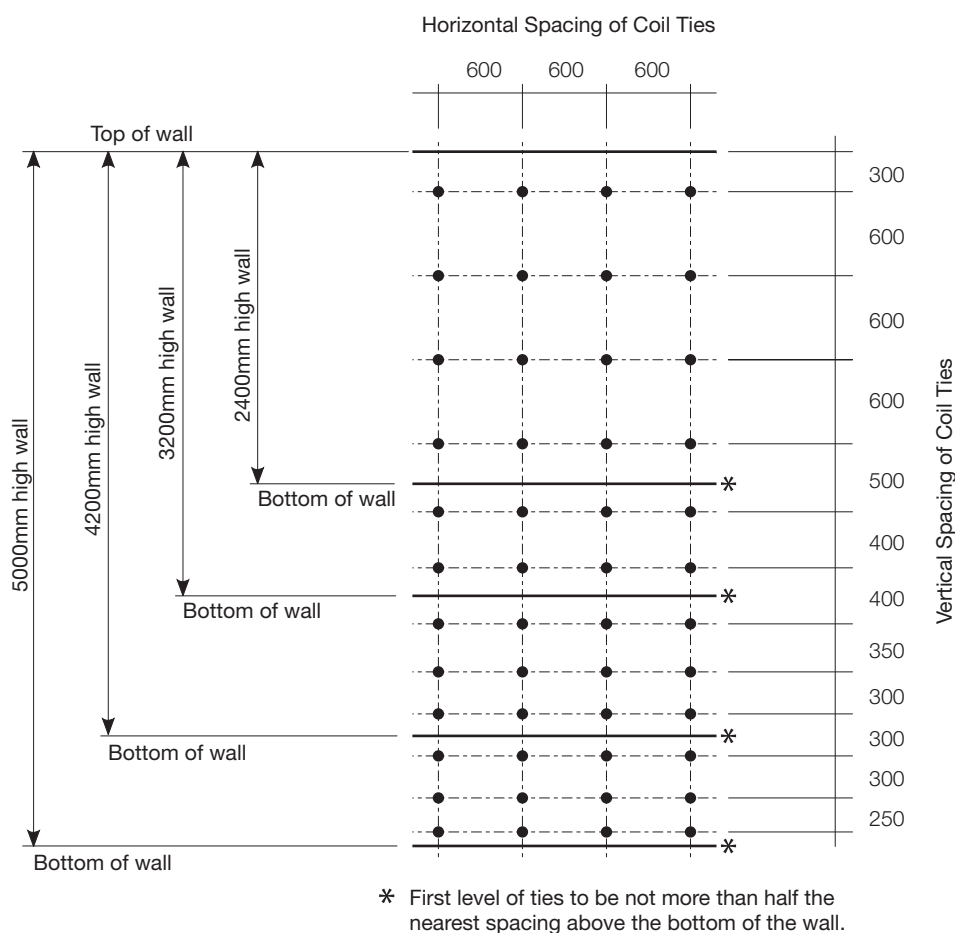
- Concrete pressure
- Maximum allowable span of plywood or face material
- Maximum allowable span of secondary members (eg, horizontal walers)
- Maximum allowable span of primary members (eg, vertical soldiers)
- Maximum working load limit of ties.

The tie spacings set out below are based on full concrete hydrostatic pressure, concrete density of 2500 kg/m, horizontal spacings between coil ties of 600mm and working load limit of **23.8 kN** for coil ties.

Face material, secondary and primary members must be checked separately.

A more economical form arrangement may be obtained by limiting the concrete pouring rate.

For more information refer to Acrow Formwork & Scaffolding Engineering Department.



### Notes:

- Maximum capacities may be limited by other components (eg: bearing stress under washer)
- Limit State conversion factor = 1.5
- Engineering principles dictate that when members are continuous over multiple spans, the reaction at the supports are not always equal to 'Spacing x Span x Pressure', so a Reaction Coefficient must be applied when assessing the force.

#### Example:

For members continuous over 2 equal spans - Reaction Coefficient = 1.25

For members continuous over 3 equal spans - Reaction Coefficient = 1.1

(Reaction Coefficients may be applied in two directions.)

- In Formwork applications, Clause 4.5.6.3 (c) of AS 3610-1995 specifies that, 'for Tension Members resisting Lateral Concrete Pressure, the forces to be used shall be increased by at least 20%'.
- The force as adjusted by the above factors must be equal or less than the WLL for that member.
- For more information consult the Acrow Formwork & Scaffolding Engineering Department or a competent engineer.

## General Technical and Application Manual

### Hi-Tensile Tie System

The Hi-tensile Tie System comprises three major components:

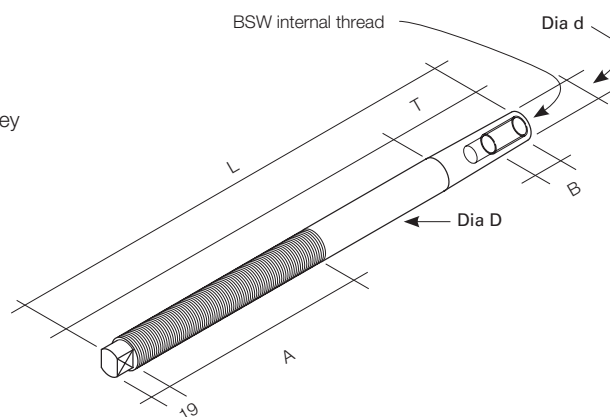
- She Bolt
- Wingnut
- Hi-tensile Tie

The system is a tension member of the formwork assembly only as it does not act as a spacer.

Because the system does not use spacer tubes and cones, a tie can be inserted into the form at any time making it ideal when additional ties are required due to a change in pouring rate or other factors.

### She Bolt

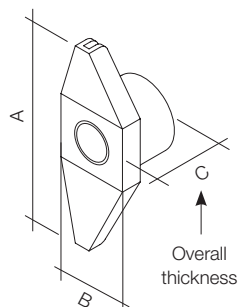
She Bolts provide positive screw connection as part of a strong form tying system. Their tapered shape ensures they are recoverable.



Diameter 'D' Nominal		Length 'L'	ACME Thread Length 'A'	BSW Thread	Thread Length 'B'	Minor Dia 'd'	Taper Length 'T'	Code No	Mass
mm	inches	mm	mm		mm	mm	mm		kg
16	5/8	250	150	3/8	26	13.65	63.5	QSB16254	0.32
16	5/8	400	200	3/8	26	13.65	63.5	QSB16400	0.51
16	5/8	450	250	3/8	26	13.65	63.5	QSB16450	0.57
16	5/8	500	230	3/8	26	13.65	63.5	QSB16500	0.64
16	5/8	600	300	3/8	26	13.65	63.5	QSB16600	0.76
22	7/8	500	230	1/2	26	20	63.5	QSB22500	1.33
22	7/8	600	350	1/2	26	20	63.5	QSB22600	1.6
22	7/8	700	300	1/2	26	20	63.5	QSB22700	1.87
25	1	500	230	5/8	26	23.5	63.5	QSB25500	1.79
25	1	600	350	5/8	26	23.5	63.5	QSB25600	2.15
25	1	700	300	5/8	26	23.5	63.5	QSB25700	2.51
32	1¼	500	230	3/4	38	28	102	QSB32500	2.83

### Pressed Wingnut

The Pressed Wingnut is a zinc plated robust unit comprising a threaded boss welded to a pressed wing section.



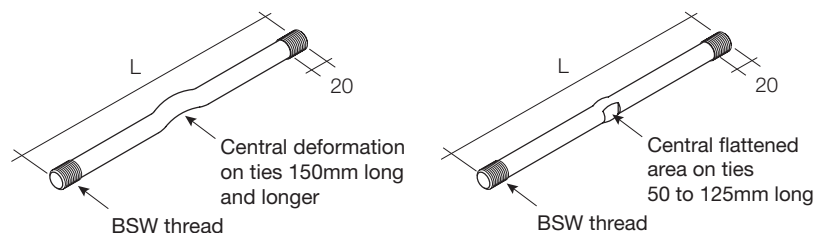
To Suit She Bolt mm	Dim 'A' mm	Dim 'B' mm	Dim 'C' mm	Code No	Mass kg
16	100	32	24	QPWNU016	0.11
22	125	45	30	QPWNU022	0.30
25	125	45	30	QPWNU025	0.30
32	125	45	45	QPWNU032	0.30

# ACROW Formwork Sales & Hardware Catalogue

## Hi-Tensile Form Tie

The Hi-Tensile Form Tie are available in four diameter sizes to cover a wide range of load capacities. Each diameter has a compatible She Bolt range to cover varying form depths.

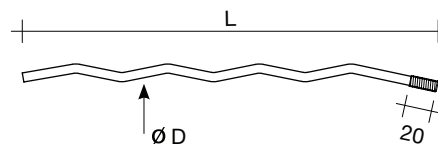
The tie has a central deformed or flattened area to prevent it from rotating in the concrete when removing the She Bolts.



Length mm	Diameter 3/8"		Diameter 1/2"		Diameter 5/8"		Diameter 3/4"	
	Mass per 100 kg	Code No	Mass per 100 kg	Code No	Mass per 100 kg	Code No	Mass per 100 kg	Code No
50	2	QHTT3850	4	QHTT1250				
75	3	QHTT3875	6	QHTT1275	10	QHTT5875	14	QHTT3475
100	4	QHTT38100	8	QHTT12100	13	QHTT58100	19	QHTT34100
125	5	QHTT38125	10	QHTT12125	16	QHTT58125	23	QHTT34125
150	6	QHTT38150	12	QHTT12150	19	QHTT58150	28	QHTT34150
175	7	QHTT38175	14	QHTT12175	22	QHTT58175	32	QHTT34175
200	8	QHTT38200	15	QHTT12200	25	QHTT58200	37	QHTT34200
225	9	QHTT38225	17	QHTT12225	29	QHTT58225	42	QHTT34225
250	11	QHTT38250	19	QHTT12250	31	QHTT58250	46	QHTT34250
275	12	QHTT38275	21	QHTT12275	35	QHTT58275	51	QHTT34275
300	13	QHTT38300	23	QHTT12300	38	QHTT58300	56	QHTT34300
325	14	QHTT38325	25	QHTT12325	41	QHTT58325	60	QHTT34325
350	15	QHTT38350	27	QHTT12350	44	QHTT58350	65	QHTT34350
375	16	QHTT38375	29	QHTT12375	47	QHTT58375	70	QHTT34375
400	17	QHTT38400	31	QHTT12400	50	QHTT58400	74	QHTT34400
425	18	QHTT38425	33	QHTT12425	54	QHTT58425	79	QHTT34425
450	19	QHTT38450	35	QHTT12450	57	QHTT58450	83	QHTT34450
475	20	QHTT38475	37	QHTT12475	61	QHTT58475	88	QHTT34475
500	21	QHTT38500	39	QHTT12500	65	QHTT58500	93	QHTT34500
525	22	QHTT38525	42	QHTT12525	67	QHTT58525	97	QHTT34525
550	23	QHTT38550	43	QHTT12550	70	QHTT58550	102	QHTT34550
575	24	QHTT38575	45	QHTT12575	73	QHTT58575	107	QHTT34575
600	25	QHTT38600	47	QHTT12600	76	QHTT58600	111	QHTT34600

## Single-Ended Anchor

Single-Ended Anchors are used as tie down anchors or climbing anchors for single sided form arrangements.



Length mm	Diameter 3/8"		Diameter 1/2"		Diameter 5/8"		Diameter 3/4"	
	Mass per 100 kg	Code No	Mass per 100 kg	Code No	Mass per 100 kg	Code No	Mass per 100 kg	Code No
300	13	QABSE001	•	•	•	•	•	•
375	16	QABSE005	30	QABSE040	50	QABSE075	•	•
450	20	QABSE010	34	QABSE045	58	QABSE080	90	QABSE115
600	26	QABSE015	38	QABSE050	78	QABSE085	120	QABSE120

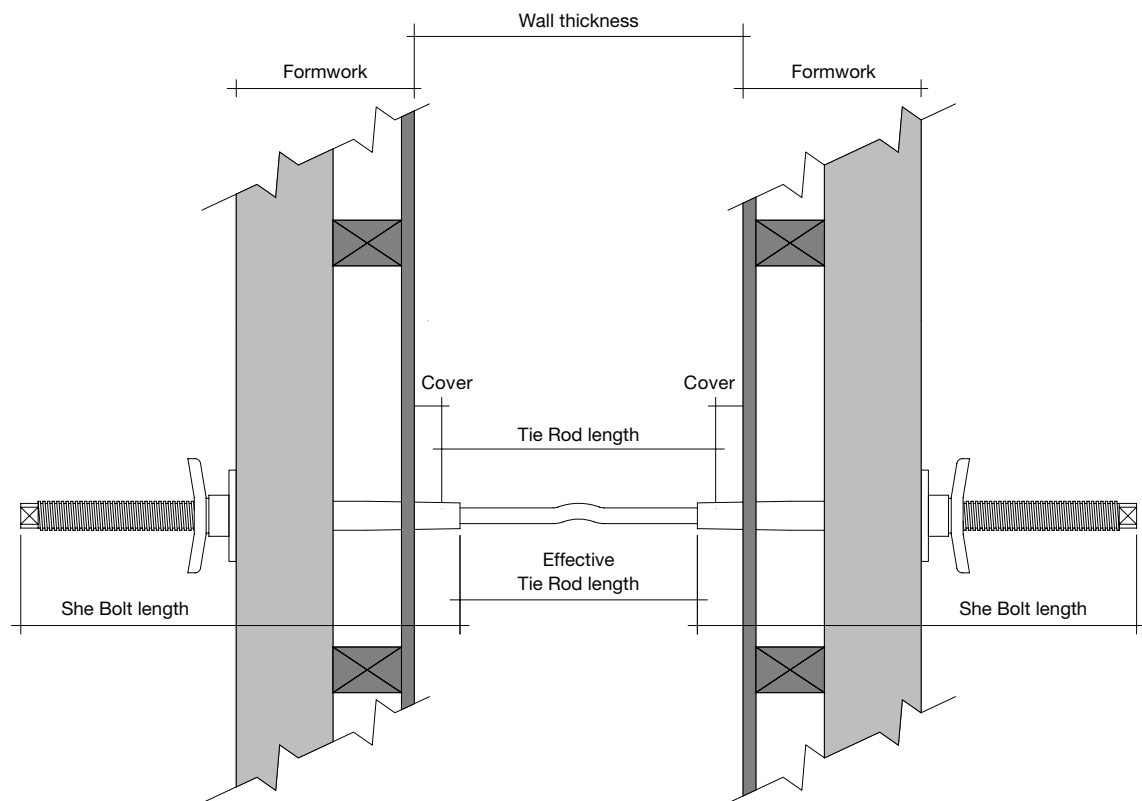
### Note:

Capacity of Single-Ended Anchors is governed by the pull out value of the concrete and the tensile strength of the anchor. For information consult the Acrow Formwork & Scaffolding Engineering Department or a competent engineer.



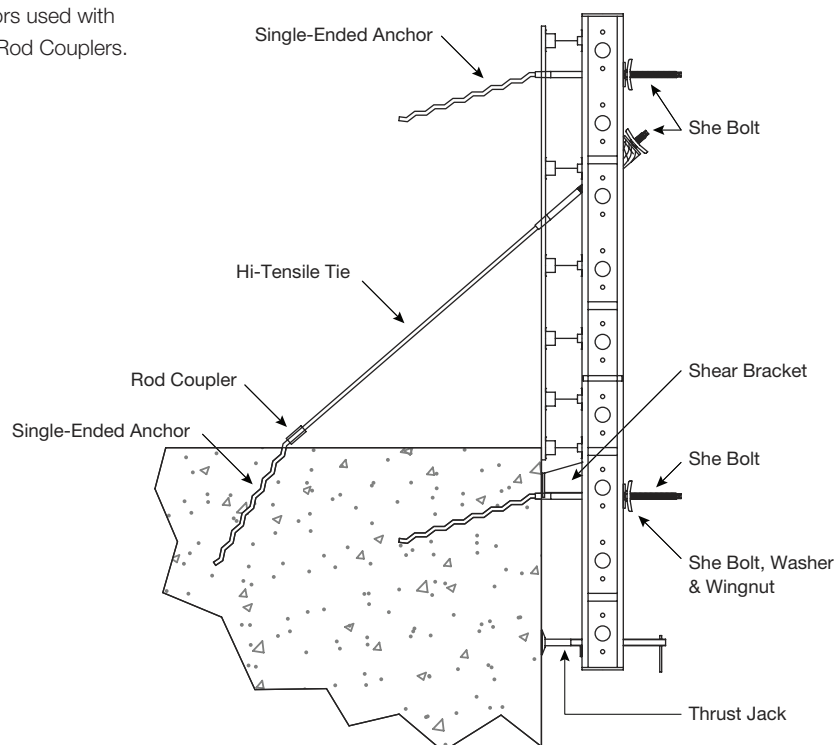
# General Technical and Application Manual

## Typical Application



## Single-Sided Wall Formwork

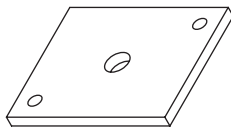
Single-Ended Anchors used with Hi-Tensile Ties and Rod Couplers.



# ACROW Formwork Sales & Hardware Catalogue

## Plate Washers

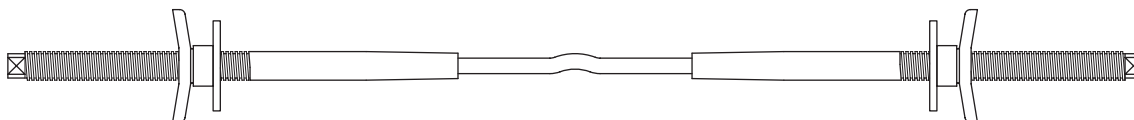
To suit She Bolts



She Bolt Diameter mm	Washer to Suit	Hole Diameter mm	Mass kg	Code No
25 & 32	Plate Washer 125 x 100 x 10	32	1.0	QSBWA032
22	Plate Washer 125 x 100 x 8	26	0.8	QSBWA2225
16	Plate Washer 125 x 100 x 8	18	0.8	QPWAS001

## She Bolt and Hi-Tensile Tie Assembly

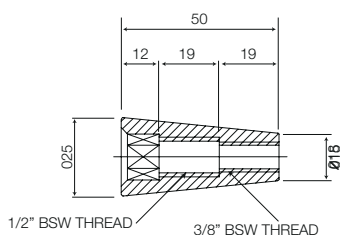
With **NO** Rod Coupler



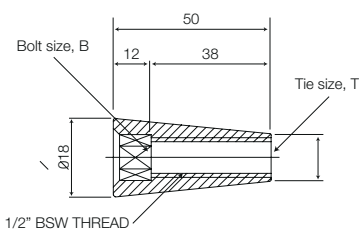
Hi-Tensile Form Tie BSW Thread	She Bolt Diameter mm	She Bolt Diameter inches	Working Load Limit WLL kN
3/8	16	5/8	24.8
1/2	22	7/8	43.7
5/8	25	1	66.1
3/4	32	1 1/4	82.8

## Steel Cones

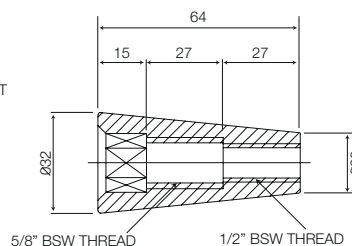
Tie Size, T	Bolt Size, B	Length, L mm	Mass kg	Code No
3/8" BSW	1/2" BSW	50	0.07	QSCO5038
1/2" BSW	1/2" BSW	50	0.11	QSCO5012
1/2" BSW	5/8" BSW	64	0.16	QSCO6458



QSCO5038



QSCO5012



QSCO6458

### Notes:

- Maximum capacities may be limited by other components (eg: washer and bearing stress under washer)
- Limit State conversion factor = 1.5
- Engineering principles dictate that when members are continuous over multiple spans, the reaction at the supports are not always equal to 'Spacing x Span x Pressure', so a Reaction Coefficient must be applied when assessing the force.

### Example:

For members continuous over 2 equal spans - Reaction Coefficient = 1.25

For members continuous over 3 equal spans - Reaction Coefficient = 1.1

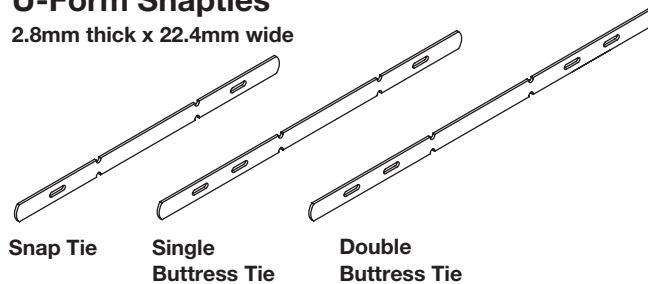
(Reaction Coefficients may be applied in two directions.)

- In Formwork Applications, Clause 4.5.6.3 (c) of AS 3610-1995 specifies that, 'for Tension Members resisting Lateral Concrete Pressure, the forces to be used shall be increased by at least 20%'.
- The force as adjusted by the above factors must be equal or less than the WLL for that member.
- For more information consult the Acrow Formwork & Scaffolding Engineering Department or a competent engineer.

# General Technical and Application Manual

## U-Form Snapties

2.8mm thick x 22.4mm wide

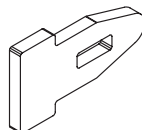


## U-Form Key

Mass: 0.04 kg

Pack Size: 250

Code No: ZU FK

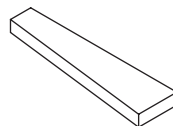


## U-Form Wedge

Mass: 0.03 kg

Pack Size: 250

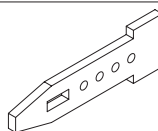
Code No: ZU FW



## U-Form Long Key

Mass: 0.08 kg

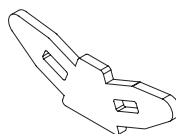
Code No: ZU FLK



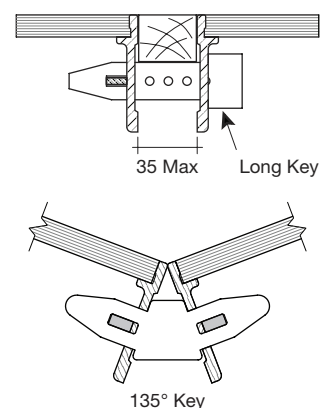
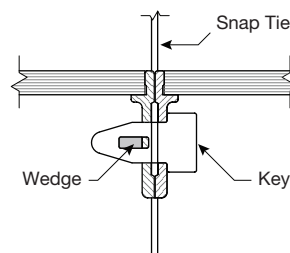
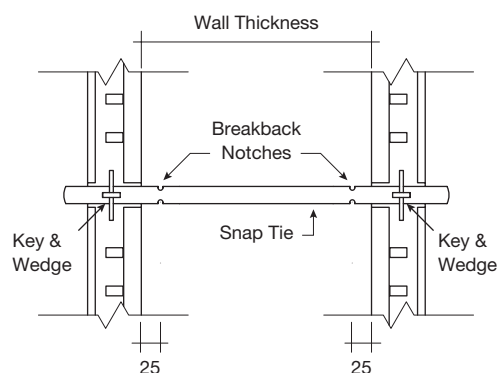
## U-Form External 135° Key

Mass: 0.09 kg

Code No: ZU F135K



25mm Breakback		
Snap tie size (wall thickness)	Code No	Mass kg
100	QUFST100	0.15
125	QUFST125	0.15
150	QUFST150	0.17
175	QUFST175	0.17
200	QUFST200	0.17
225	QUFST225	0.18
250	QUFST250	0.18
275	QUFST275	0.18
300	QUFST300	0.19
325	QUFST325	0.19
350	QUFST350	0.19
375	QUFST375	0.21
400	QUFST400	0.21
425	QUFST425	0.22
450	QUFST450	0.22
475	QUFST475	0.23
500	QUFST500	0.23
525	QUFST525	0.24
550	QUFST550	0.24
575	QUFST575	0.25
600	QUFST600	0.25



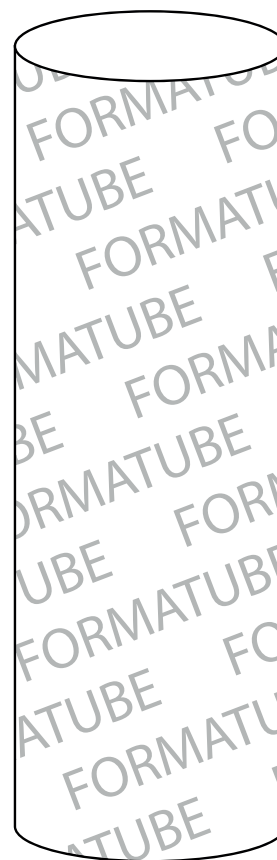
## Breaking off Snapties

Snapties should be broken off immediately after the concrete has set and the panels have been stripped, preferably within 24 hours after pouring. Snapties must be broken off by a downward hit by a hammer, care should be taken to prevent the tie from bending sideways as this will make it difficult to break off.

For technical information on U-Form Snapties and accessories, refer to the U-Form technical brochure or consult the Acrow Formwork & Scaffolding Engineering Department.

### Circular Column Forms - Formatube

Formatube Size	Wight kg	Code No
254mm ID x 4.2mm Wall x 3m	6.51	QFAT253M
306mm ID x 4.2mm Wall x 3m	7.80	QFAT303M
306mm ID x 4.2mm Wall x 4m	10.40	QFAT304M
306mm ID x 4.2mm Wall x 5m	13.00	QFAT305M
355mm ID x 4.7mm Wall x 3m	10.20	QFAT353M
355mm ID x 4.7mm Wall x 4m	13.60	QFAT354M
355mm ID x 4.7mm Wall x 5m	17.00	QFAT355M
407mm ID x 4.7mm Wall x 3m	11.70	QFAT403M
407mm ID x 4.7mm Wall x 4m	15.60	QFAT404M
407mm ID x 4.7mm Wall x 5m	19.50	QFAT405M
457mm ID x 5.2mm Wall x 3m	14.70	QFAT453M
457mm ID x 5.2mm Wall x 4m	19.60	QFAT454M
457mm ID x 5.2mm Wall x 5m	24.50	QFAT455M
505mm ID x 5.2mm Wall x 3m	16.20	QFAT503M
505mm ID x 5.2mm Wall x 4m	21.60	QFAT504M
505mm ID x 5.2mm Wall x 5m	27.00	QFAT505M
610mm ID x 5.8mm Wall x 3m	21.30	QFAT603M
610mm ID x 5.8mm Wall x 4m	28.40	QFAT604M
610mm ID x 5.8mm Wall x 5m	35.50	QFAT605M



#### Contact your nearest Acrow Formwork & Scaffolding branch for availability.

Formatube is a proven robust system for pouring circular columns. It is constructed from laminated plies of fibre using a non-water sensitive adhesive. The exterior surface is of laminated tar and fibreglass impregnated paper. The inside surface is coated with polyethylene with minimum thickness of 0.02mm. Formatube is designed so a vapour barrier forms to prevent penetration of moisture. Thus the dry strength of fibres and plies is not threatened.

Numerous uses over a period of many years has proven that the Formatube remains circular before and during the pouring of the concrete giving the desired column shape .

Formatube can be cut to length using a handsaw. Stability bracing is required to maintain the form in a plumb position, this can be done with timber raking bracing fixed to vertical batons nailed to the Formatube or by scaffolding built around the Formatube. When columns are poured in conjunction with the slab the top of the Formatube can be fixed to the slab formwork.

Formatube left in place prevents moisture loss of the concrete due to seepage, absorption and evaporation, ensuring proper cement hydration and curing. Moisture retention also enhances value of any concrete additives and averts any damage to concrete through misapplication of curing treatments. Formatube has heat conductivity of 0.108 watt per metre kelvin, providing good insulation qualities.

#### Stripping

Strip Formatube 1 to 5 days after curing. Stripping can be easily done by making two vertical cuts up the column and pulling forms off. Alternatively, make vertical 30mm cut in tube and peel spirally with broad-bladed tool.

To protect the column during construction, remove the form in the recommended time using the two vertical cut method then re-attach it to the column with wire.

## General Technical and Application Manual

### Circular Column Forms - Plastube

Plastube circular column formwork is made by spirally winding a continuous strip of plastic profile, locking the edges together to form a tube. It's a fast and effective process that results in the most convenient formwork available. Forms can be manufactured from 250 to 2000mm. Two finishes are available:

- Structural, which will show a spiral line on the finished column.
- Architectural, columns lined with a rigid plastic sheet, providing a smooth finish to the concrete column\*.

\*One or more visible lines will appear on the formed column where the liner(s) have been taped together.



Heavy  
Duty  
Profile



Standard  
Profile

### Storage

Column formwork should not be stored in direct sunlight for long periods; where possible columns should be stored vertically. It is recommended that architectural grade columns are protected from wet weather as the moisture degrades the fiberglass tape used to secure the formed tube. Where columns can be stored horizontally:

- The ground must be flat, even and clear of debris.
- Formwork stacks should not exceed 1.5 meters high.
- Formwork made from heavy profile should not be stored on top of formwork made from light profile.

### Fixing

The top and bottom of the column must be fixed in their designated positions. At the bottom typically the column is held by 4 equally spaced blocks of wood fixed to the floor slab. At the top the column is usually held in place by the soffit formwork, where there is no soffit formwork props should be placed on the vertical bracing to position the column. Note: Forms should be placed with the arrow facing upwards. Bracing is recommended for columns:

- 3.5 meters and longer with diameters larger than 450mm.
- 3.0 meters and longer with diameters less than 450mm.

Plastube columns are generally braced according to accepted industry practice. Bracing ensures the column remains straight and reduces the chances of bowing during pouring. It is especially important with tall, small diameter columns.

Cross bracing is typically placed at intervals of between 4 and 6 times the column diameter. Vertical bracing assists in ensuring the column remains plumb and in the correct position. Commonly 4 timbers (100mm x 75mm) for diameters below 600mm or 6 timbers (for larger diameters) are equally spaced around the circumference of the column, running the full height of the column. Props should not be placed directly onto the Plastube column formwork.

### Stripping

Two methods of stripping Plastube columns are commonly used:

- Unwinding: Use a strong knife and pliers to break the spiral lock at the top of the column and unwind it, pulling it away from the concrete column. Once started the unwinding process can be continued by hand.
- Slab Stripping: Using an angle grinder or similar, the plastic column may be cut from top to bottom and sprung free from the concrete. This method is typically quicker than unwinding, but may leave score marks on the finished column.

### Ordering

Plastube circular column formwork is custom made to the sizes ordered. There are no standard lengths or diameters. Plastube columns are ordered by specifying the diameter and length required. Two thicknesses of plastic profile are available, depending on the height of the concrete pour.

**Note:** The rate of concrete pour affects the load on the formwork. Please refer to Acrow Formwork & Scaffolding for the maximum height of column that can be poured in one pour and more information. This information sheet aims to give general guidance to experienced form-workers in the use of Plastube circular column formwork. It should be read in conjunction with relevant Standards, Specifications and Codes of Practice.

# ACROW Formwork Sales & Hardware Catalogue

## Plastube Heavy Duty

Description	Code No
450 Diameter Heavy Duty	QPLHD450
500 Diameter Heavy Duty	QPLHD500
550 Diameter Heavy Duty	QPLHD550
600 Diameter Heavy Duty	QPLHD600
650 Diameter Heavy Duty	QPLHD650
700 Diameter Heavy Duty	QPLHD700
750 Diameter Heavy Duty	QPLHD750
800 Diameter Heavy Duty	QPLHD800
850 Diameter Heavy Duty	QPLHD850
900 Diameter Heavy Duty	QPLHD900
950 Diameter Heavy Duty	QPLHD950
1000 Diameter Heavy Duty	QPLHD1000
1050 Diameter Heavy Duty	QPLHD1050
1100 Diameter Heavy Duty	QPLHD1100
1200 Diameter Heavy Duty	QPLHD1200
1250 Diameter Heavy Duty	QPLHD1250
1300 Diameter Heavy Duty	QPLHD1300
1400 Diameter Heavy Duty	QPLHD1400
1500 Diameter Heavy Duty	QPLHD1500
1600 Diameter Heavy Duty	QPLHD1600
1700 Diameter Heavy Duty	QPLHD1700
1800 Diameter Heavy Duty	QPLHD1800
1900 Diameter Heavy Duty	QPLHD1900

## Plastube Heavy Duty Lined (Smooth Finish)

Description	Code No
450 Diameter Lined Heavy Duty	QPLHDL450
500 Diameter Lined Heavy Duty	QPLHDL500
550 Diameter Lined Heavy Duty	QPLHDL550
600 Diameter Lined Heavy Duty	QPLHDL600
650 Diameter Lined Heavy Duty	QPLHDL650
700 Diameter Lined Heavy Duty	QPLHDL700
750 Diameter Lined Heavy Duty	QPLHDL750
800 Diameter Lined Heavy Duty	QPLHDL800
850 Diameter Lined Heavy Duty	QPLHDL850
900 Diameter Lined Heavy Duty	QPLHDL900
950 Diameter Lined Heavy Duty	QPLHDL950
1000 Diameter Lined Heavy Duty	QPLHDL1000
1050 Diameter Lined Heavy Duty	QPLHDL1050
1100 Diameter Lined Heavy Duty	QPLHDL1100
1200 Diameter Lined Heavy Duty	QPLHDL1200
1250 Diameter Lined Heavy Duty	QPLHDL1250
1300 Diameter Lined Heavy Duty	QPLHDL1300
1400 Diameter Lined Heavy Duty	QPLHDL1400
1500 Diameter Lined Heavy Duty	QPLHDL1500
1600 Diameter Lined Heavy Duty	QPLHDL1600
1700 Diameter Lined Heavy Duty	QPLHDL1700
1800 Diameter Lined Heavy Duty	QPLHDL1800
1900 Diameter Lined Heavy Duty	QPLHDL1900

## Plastube Standard\*

Description	Code No
250 Diameter Standard	QPLS250
300 Diameter Standard	QPLS300
350 Diameter Standard	QPLS350
400 Diameter Standard	QPLS400
450 Diameter Standard	QPLS450
500 Diameter Standard	QPLS500
550 Diameter Standard	QPLS550
600 Diameter Standard	QPLS600
650 Diameter Standard	QPLS650
700 Diameter Standard	QPLS700
750 Diameter Standard	QPLS750
800 Diameter Standard	QPLS800
850 Diameter Standard	QPLS850
900 Diameter Standard	QPLS900
950 Diameter Standard	QPLS950
1000 Diameter Standard	QPLS1000
1050 Diameter Standard	QPLS1050

## Plastube Standard Lined (Smooth Finish)

Description	Code No
250 Diameter Lined Standard	QPLSL250
300 Diameter Lined Standard	QPLSL300
350 Diameter Lined Standard	QPLSL350
400 Diameter Lined Standard	QPLSL400
450 Diameter Lined Standard	QPLSL450
500 Diameter Lined Standard	QPLSL500
550 Diameter Lined Standard	QPLSL550
600 Diameter Lined Standard	QPLSL600
650 Diameter Lined Standard	QPLSL650
700 Diameter Lined Standard	QPLSL700
750 Diameter Lined Standard	QPLSL750
800 Diameter Lined Standard	QPLSL800
850 Diameter Lined Standard	QPLSL850
900 Diameter Lined Standard	QPLSL900
950 Diameter Lined Standard	QPLSL950
1000 Diameter Lined Standard	QPLSL1000
1050 Diameter Lined Standard	QPLSL1050

\* Light weight profile can also be manufactured inside out allowing easy penetration in ground applications.

# General Technical and Application Manual

## Posi-Lock Type B Reglet

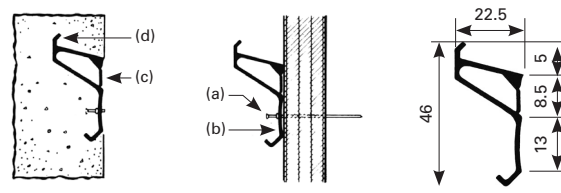
Pack Size:	20
Stn. Length:	2.5m
Code No:	QREGB001

The most efficient flashing system that provides leakproof joints, without caulking or burning in.

- (a) Reglet is fastened to form at 300mm centres with double headed nails before placing of concrete.
- (b) Concave design provides spring-like action to hold reglet tightly against form when nail is driven home.
- (c) Reglet in position after form is stripped but prior to removal of integral protective strip.
- (d) Lip acts as waterstop to prevent seepage behind reglet.

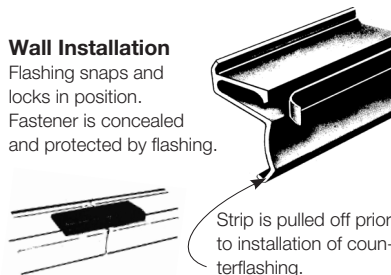
### Warning

Protruding ends of the double headed nails can be a safety hazard so they must be trimmed off flush with plywood after insertion of the nail and cut flush with the reglet after stripping of the form.



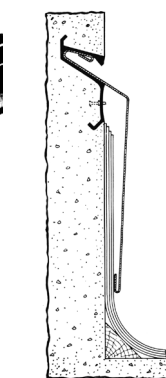
### Wall Installation

Flashing snaps and locks in position. Fastener is concealed and protected by flashing.



### Connectors

Connector plugs are supplied with reglet. They serve to connect lengths of reglet together as well as a plug to prevent entry of concrete.



Wall Installation

### Long Life

Made from extremely durable, high quality PVC, will not corrode, rust or stain.

### Completely

The Type B Reglet features a completely enclosed design which prevents any concrete from

### Enclosed Design

entering the reglet during concrete pouring. The integral protective strip is easily pulled off, just prior to installation of counterflashing. An exposed recess allows the snapping in and locking of the flashing, for a watertight joint. It also allows the easy removal of the flashing after installation, for repair or inspection.

### Complete Product

Each order comes complete with double headed nails and connectors.

### Accurate Alignment

The Type B Reglet comes with 75mm long connectors. These connectors allow the reglet to be accurately aligned at the ends and also serve as a plug to keep concrete from entering the reglet at the ends. The connectors are easily removed prior to flashing installation.

### Counterflashing

Recommended gauges for counterflashing are 0.5mm to 0.8mm maximum for aluminium or zinc; 0.5mm to 0.6mm gauge for steel; 450g for 560g for copper.

Pack Size:	25 lengths
Stn. Length:	3.0m

### Plastic Fillet 16x16x23

Code No: QPFIL001

### Plastic Fillet 10x10x14

Code No: QPFIL002

## Acrow Flexi-Fillet

### Multi-Use

The design of the Acrow Flexi-Fillet provides a range of uses from forming chamfers on all types of formwork to flexible drip or bead moulds.

### Extremely Durable

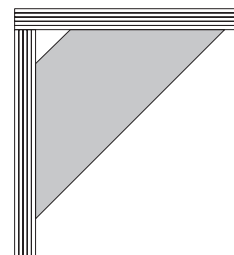
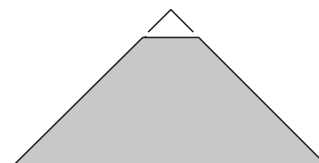
Acrow Flexi-Fillet is hard wearing and long lasting and with normal care may be re-used many times.

### Various Means of Fixing

Acrow Flexi-Fillet may be fixed to formwork with suitable nails and brads or glued when nails cannot be used.

### Variety of Shapes

Because Acrow Flexi-Fillet is made from high quality flexible PVC it may be curved, bent, etc for use in a variety of shapes of formwork.



## Acrow Timber Fillet

Product	Code No
Timber Fillet Maranti 17 x 17 x 24	TIMF1725
Timber Fillet Slash Pine 19 x 19	QFSTI001

## Acrow Shadow Mould

Product	Code No
Plastic Mould 40 x 24 x 20 x 24	QPMS001

# ACROW Formwork Sales & Hardware Catalogue

## Timber Beams

### e-form (LVL Beam from Wesbeam)

Description	Code No
E-form Lvl 150 x 77 x 1.8m	EW1507718
E-form Lvl 150 x 77 x 2.4m	EW1507724
E-form Lvl 150 x 77 x 3.0m	EW1507730
E-form Lvl 150 x 77 x 3.6m	EW1507736
E-form Lvl 150 x 77 x 4.2m	EW1507742
E-form Lvl 150 x 77 x 4.8m	EW1507748
E-form Lvl 150 x 77 x 5.4m	EW1507754
E-form Lvl 150 x 77 x 6.0m	EW1507760
E-form Lvl 95 x 47 x 1.8m	EW954718
E-form Lvl 95 x 47 x 2.4m	EW954724
E-form Lvl 95 x 47 x 3.0m	EW954730
E-form Lvl 95 x 47 x 3.6m	EW954736
E-form Lvl 95 x 47 x 3.9m	EW954739
E-form Lvl 95 x 47 x 4.2m	EW954742
E-form Lvl 95 x 47 x 4.8m	EW954748
E-form Lvl 95 x 47 x 5.4m	EW954754
E-form Lvl 95 x 47 x 6.0m	EW954760
E-form Lvl 95 x 65 x 1.8m	EW956518
E-form Lvl 95 x 65 x 2.4m	EW956524
E-form Lvl 95 x 65 x 3.0m	EW956530
E-form Lvl 95 x 65 x 3.6m	EW956536
E-form Lvl 95 x 65 x 3.9m	EW956539
E-form Lvl 95 x 65 x 4.2m	EW956542
E-form Lvl 95 x 65 x 4.8m	EW956548
E-form Lvl 95 x 65 x 5.4m	EW956554
E-form Lvl 95 x 65 x 6.0m	EW956560

### TruFORM (LVL Beam from CarterHoltHarvy)

Description	Code No
Truform Timber 150 x 77 x 1.8m	TR1507718
Truform Timber 150 x 77 x 2.4m	TR1507724
Truform Timber 150 x 77 x 3.0m	TR1507730
Truform Timber 150 x 77 x 3.6m	TR1507736
Truform Timber 150 x 77 x 4.2m	TR1507742
Truform Timber 150 x 77 x 4.8m	TR1507748
Truform Timber 150 x 77 x 5.4m	TR1507754
Truform Timber 150 x 77 x 6.0m	TR1507760
Truform Timber 95 x 47 x 3.6m	TR954736
Truform Timber 95 x 47 x 4.2m	TR954742
Truform Timber 95 x 47 x 4.8m	TR954748
Truform Timber 95 x 47 x 5.4m	TR954754
Truform Timber 95 x 47 x 6.0m	TR954760
Truform Timber 95 x 65 x 1.8m	TR956518
Truform Timber 95 x 65 x 2.4m	TR956524
Truform Timber 95 x 65 x 3.0m	TR956530
Truform Timber 95 x 65 x 3.6m	TR956536
Truform Timber 95 x 65 x 3.9m	TR956539
Truform Timber 95 x 65 x 4.2m	TR956542
Truform Timber 95 x 65 x 4.8m	TR956548
Truform Timber 95 x 65 x 5.4m	TR956554
Truform Timber 95 x 65 x 6.0m	TR956560

Please refer to Acrow Formwork & Scaffolding for technical information and guidelines for Timber Beams.

## Plywood

### Formply 17mm Good 2 Sides

Description	Code No
Ply 1.8 x 1.2m F11 Formrite 17mm (WL)	P64F11FR17
Ply 1.8 x 1.2m F14 Formrite 17mm (WL)	P64F14FR17
Ply 1.8 x 1.2m F17 Formrite 17mm (WL)	P64F17FR17
Ply 1.8 x 1.2m F22 Formrite 17mm (WL)	P64F22FR17
Ply 2.4 x 1.2m F11 Formrite 17mm (WL)	P84F11FR17
Ply 2.4 x 1.2m F14 Formrite 17mm (WL)	P84F14FR17
Ply 2.4 x 1.2m F17 Formrite 17mm (WL)	P84F17FR17
Ply 2.4 x 1.2m F22 Formrite 17mm (WL)	P84F22FR17
Ply 2.4 x 1.2m F11 Formrite 12 mm (WL)	P84F11FR12

### Formply Good 1 Side

Description	Code No
Ply 1.8 x 1.2m G1S Formrite 17mm (FR)	P64G1SFR17
Ply 2.4 x 1.2m G1s Formrite 6mm (FR)	P84G1SFR6
Ply 2.4 x 1.2m G1s Formrite 9mm (FR)	P84G1SFR9
Ply 2.4 x 1.2m G1s Formrite 17mm (FR)	P84G1SFR17



## General Technical and Application Manual

### Plywood

#### Structural Ply CD

Description	Code No
Ply Struct 2.4 x 1.2m F11 C/D 9mm	P84F11CD9
Ply Struct 2.4 x 1.2m F11 C/D 12mm	P84F11CD12
Ply Struct 2.4 x 1.2m F11 C/D 15mm	P84F11CD15
Ply Struct 2.4 x 1.2m F11 C/D 17mm	P84F11CD17
Ply Struct 2.4 x 1.2m F11 C/D 19mm	P84F11CD19
Ply Struct 2.4 x 1.2m F11 C/D 21mm	P84F11CD21
Ply Struct 2.4 x 1.2m F11 C/D 25mm	P84F11CD25

#### Structural Ply DD

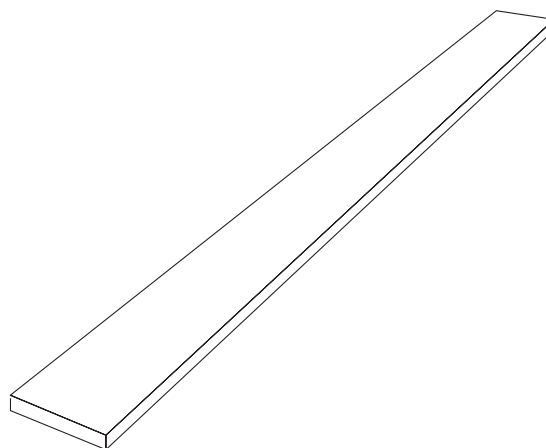
Description	Code No
Ply Struct 2.4 x 1.2m F11 D/D 9mm	P84F11DD9
Ply Struct 2.4 x 1.2m F11 D/D 12mm	P84F11DD12
Ply Struct 2.4 x 1.2m F11 D/D 15mm	P84F11DD15
Ply Struct 2.4 x 1.2m F11 D/D 17mm	P84F11DD17
Ply Struct 2.4 x 1.2m F11 D/D 19mm	P84F11DD19
Ply Struct 2.4 x 1.2m F11 D/D 21mm	P84F11DD21
Ply Struct 2.4 x 1.2m F11 D/D 25mm	P84F11DD25

Please refer to Acrow Formwork & Scaffolding for technical information and guidelines for Plywood.

### Timber Planks

#### Timber Planks (LVL HY-Planks)

Description	Code No
Timber Plank 230 x 40 x 1.2m	TP12
Timber Plank 230 x 40 x 1.5m	TP15
Timber Plank 230 x 40 x 1.8m	TP18
Timber Plank 230 x 40 x 2.4m	TP24
Timber Plank 230 x 40 x 3.0m	TP30
Timber Plank 230 x 40 x 3.6m	TP36
Timber Plank 230 x 40 x 4.2m	TP42
Timber Plank 230 x 40 x 4.8m	TP48
Timber Plank 230 x 40 x 5.4m	TP54
Timber Plank 230 x 40 x 6.0m	TP60

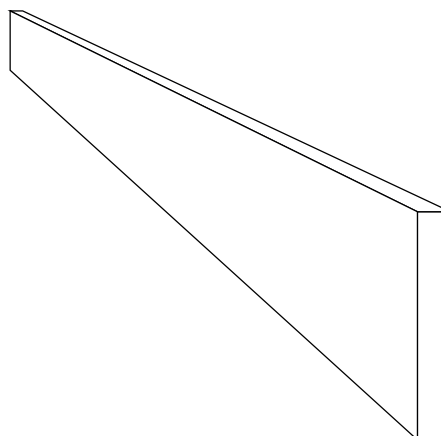


Please refer to Acrow Formwork & Scaffolding for technical information and guidelines for Timber Planks

### Edgeboards

#### Edgeboards

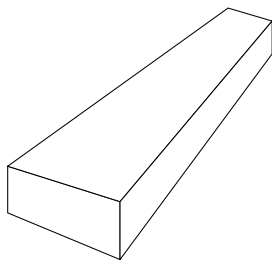
Description	Code No
Edgeboard Lvl 100 x 36 x 6.0m	EB1003660
Edgeboard Lvl 150 x 36 x 6.0m	EB1503660
Edgeboard Lvl 170 x 36 x 6.0m	EB1703660
Edgeboard Lvl 200 x 36 x 6.0m	EB2003660
Edgeboard Lvl 240 x 36 x 6.0m	EB2403660
Edgeboard Lvl 300 x 36 x 6.0m	EB3003660



Please refer to Acrow Formwork & Scaffolding for technical information and guidelines for Edgeboards.

# ACROW Formwork Sales & Hardware Catalogue

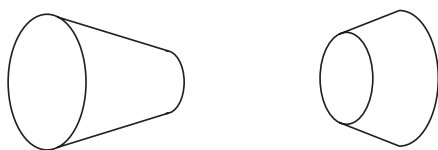
## Utility Pine



Description	Code No
Utility Pine 70 x 35mm - Non Struct	UP7035MTR
Utility Pine 90 x 35mm - Non Struct	UP9035MTR
Utility Pine 90 x 45mm - Non Struct	UP9045MTR

## Concrete Plugs

Concrete Plugs designed to fit the profile left in the concrete by the plastic cones of the various tie systems.



Description	System	Code No
Thru Tie Concrete Plug Recess	HT Thru Tie	QCPTTR01
Thru Tie Concrete Plug Flush	HT Thru Tie	QCPTTF01
Concrete Plug HT Flush 20mm	HT Thru Tie	QCPHF001
Coil Tie Concrete Plug Recess	Coil Tie	QCTRE001
Coil Tie Concrete Plug Flush	Coil Tie	QCTFL001
Snaptie Concrete Plug Recess	Snaptie	QCPSTR01
Snaptie Concrete Plug Flush	Snaptie	QCPSTF01

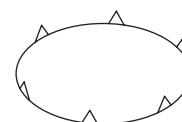
## Plastic Repair Plug



Description	To suit hole size	Code No
Repair Plug Plastic 14mm dia	12mm	QFRPP013
Repair Plug Plastic 17.5mm dia	16mm	QFRPP175
Repair Plug Plastic 21mm dia	19mm	QFRPP021
Repair Plug Plastic 24mm dia	21mm	QFRPP024

Dia: 70mm  
Code No: QPHCO001

## Ply Hole Repair Components

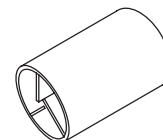


Fit: 12-20mm dia bras  
Code No: QPBAR001

## Plastic Bar Guards

Plastic Bar Guards are designed to fit over protruding reinforcement bars to protect passing personnel from direct contact with the ends of the bar.

The Bar Guard features an internal finger arrangement designed to fit bars ranging in diameter from 12mm to 30mm.



Fit: 24-32 dia bars  
Code No: QRSPR005

# General Technical and Application Manual

**Size:** 1 Litre

**Code No:** QALRA1 Lanolin

**Size:** 3 Litre

**Code No:** QALRA3 Lanolin 2.9ltr

**Size:** 5 Litre

**Code No:** QALRA5 Lanolin

**Size:** 20 Litre

**Code No:** QBORO20

**Code No:** QALRA20 Lanolin

**Size:** 200 Litre

**Code No:** QALRA200 Lanolin

**Code No:** QBORO205 205 Litre

## Form Release Agent

A wide range of formface release agents are available to provide a barrier against the sticking of concrete to the formface. Generally the liquid oil type is used which can be sprayed or brushed on, however a cream type is available to suit other types of application.

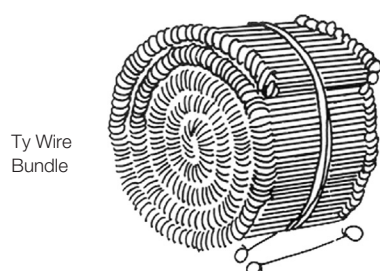
Applied as a thin coating to formwork prior to pour, release agent ensures clean stripping – no sticking or concrete build-up resulting in minimum cleaning down, with form ready for instant re-use.



**Warning: Do not allow the release agent to be applied to reinforcing steel at any time as it is a bond preventer.**

Contact your nearest Acrow Formwork & Scaffolding Branch for the current available Form Release Agent.

## Ty Wire (Black)



Ty Wire Bundle

Description	Mass Kg per bundle	Code No
Ty Wire Blk 110mm x 1.6mm	6.30	QTWBL110
Ty Wire Blk 125mm x 1.6mm	6.70	QTWBL125
Ty Wire Blk 150mm x 1.6mm	7.50	QTWBL150
Ty Wire Blk 175mm x 1.6mm	8.20	QTWBL175
Ty Wire Blk 200mm x 1.6mm	9.00	QTWBL200
Ty Wire Blk 250mm x 1.6mm	10.50	QTWBL250
Ty Wire Blk 300mm x 1.6mm	12.00	QTWBL300
Ty Wire Coil 1.42kg x 1.6mm	1.42 ea	QTWCO001

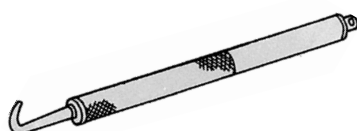


Ty Wire Coil

Dia of rods being tied	Length of Ty Wire required
10mm	110mm
12mm	125mm
16mm	150mm

## Ty Wire Tool

**Code No:** QTTLH001



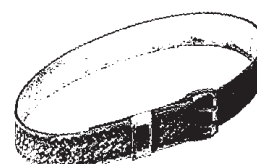
## Ideal Reel

**Code No:** QIREE001



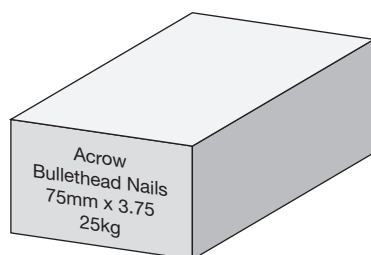
## Ideal Belt

**Code No:** QIBEL001



## ACROW Formwork Sales &amp; Hardware Catalogue

## Nails

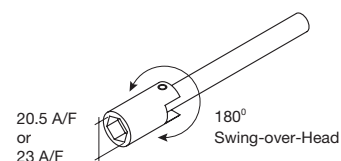


Description	Mass kg	Code No
Nails BH 30 x 1.6 - 2kg	2	QNBHE017
Nails BH (Fillet) 30 x 1.6 - 5kg	5	QNBHE020
Nails BH (Fillet) 30 x 1.6 - 15kg	15	QNBHE015
Nails BH (Fillet) 30 x 1.8 - 5kg	5	QNBHE025
Nails BH 50mm x 2.8 - 5kg	5	QNBHE035
Nails BH 50mm x 2.8 - 15kg	15	QNBHE036
Nails BH 75mm x 3.75 - 5kg	5	QNBHE055
Nails BH 100mm x 3.75 - 25kg	25	QNBHE060
Nails BH 100mm x 4.5 - 15kg	15	QNBHE065
Nails BH 75mm x 3.75 - 25kg	25	QNBHE075
Nails BH 75mm x 3.75 - 15kg	15	QNBHE076
Nails BH 50mm x 2.8 - 25kg	25	QNBHE050
Nails BH 75mm x 3.15 - 15kg	15	QNBHE045
Nails BH 75mm x 3.15 - 25kg	25	QNBHE046
Nails BH 30mm x 2.00 - 15kg	15	QNBHE030
Nails BH 25mm x 1.6 - 0.5kg	0.5	QNBHE010
Flathead Nail 50mm x 2.8 - 15kg	15	QNFHE001
Flathead Nail 65mm x 3.15 - 15kg	15	QNFHE005
Flathead Nail 75mm x 3.75 - 15kg	15	QNFHE010

Size: 9/16" (23 AF)  
 Mass: 0.75 kg  
 Code No: YSP916

## Scaffold Spanner

The scaffold spanner is available in two sizes to suit the nuts on scaffold couplers.

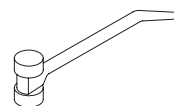


Size: 1/2" (20.5 AF)  
 Mass: 0.7 kg  
 Code No: YSP05

Mass: 0.8 kg  
 Code No: YMT

## Modular Tool

The Modular Tool is a universal tool for use in the assembly of scaffold and formwork systems. The podger at the end of the handle is ideal for lining up holes and can be used to tighten clamps with eye bolt securing bolts.



Code No: YFMC3104

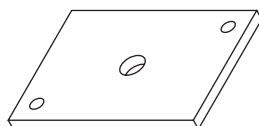
## Fillet Mitre Cutter



## Washers

Each system has a washer suited to its application. Currently additional washers are under development and have not been listed in this brochure, please check with your local Acrow Formwork & Scaffolding Branch.

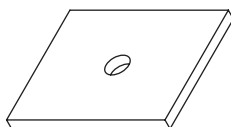
## Rectangular Washers



Description	Hole Dia mm	Mass kg	Code No
Plate Washer 125 x 100 x 10	32	1.00	QSBWA032
Plate Washer 125 x 100 x 8	26	0.80	QSBWA2225
Plate Washer 125 x 100 x 8	18	0.80	QPWAS001

## General Technical and Application Manual

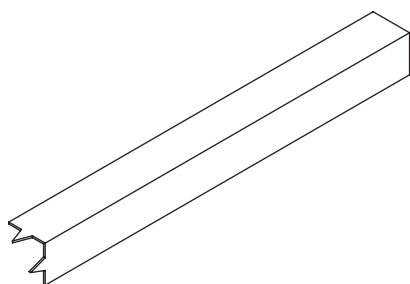
### Square Washers



Description	Hole Dia mm	Mass kg	Code No
Sq. Washer ZP 38 x 38 x 3	13	0.04	QWSQZ015
Sq. Washer ZP 50 x 50 x 3	13	0.06	QWSQZ025
Sq. Washer ZP 38 x 38 x 5	13	0.10	QWSQZ010
Sq. Washer ZP 50 x 50 x 5	17	0.10	QWSQZ005
Sq. Washer ZP 50 x 50 x 3	11	0.06	QWSQZ001
Sq. Washer ZP 50 x 50 x 3	17	0.06	QWSQZ030
Sq. Washer ZP 75 x 75 x 6	13	0.27	QWSQZ040
Sq. Washer ZP 75 x 75 x 6	17	0.27	QWSQZ045
Sq. Washer ZP 75 x 75 x 6	21	0.27	QWSQZ050
Plate Washer 130x130x12	18/25	1.60	QPWAS003G

### Soffit Spacers

Soffit spacers are designed to attach to the plywood face of the form to accurately space the form.



Manufactured from Galvabond sheet

Ty Wire	Mass kg per 25 bundle	Code No
Soffit Spacer 25mm	0.17	QSSPA025
Soffit Spacer 50mm	0.35	QSSPA050
Soffit Spacer 75mm	0.52	QSSPA075
Soffit Spacer 100mm	0.69	QSSPA100
Soffit Spacer 125mm	0.84	QSSPA125
Soffit Spacer 150mm	1.04	QSSPA150
Soffit Spacer 175mm	1.16	QSSPA175
Soffit Spacer 200mm	1.38	QSSPA200
Soffit Spacer 225mm	1.55	QSSPA225
Soffit Spacer 250mm	1.73	QSSPA250
Soffit Spacer 275mm	1.90	QSSPA275
Soffit Spacer 300mm	2.07	QSSPA300
Soffit Spacer 325mm	2.24	QSSPA325
Soffit Spacer 350mm	2.42	QSSPA350
Soffit Spacer 375mm	2.59	QSSPA375
Soffit Spacer 400mm	2.76	QSSPA400
Soffit Spacer 425mm	2.93	QSSPA425
Soffit Spacer 450mm	3.11	QSSPA450

### Soldier Timber Waler Clamp

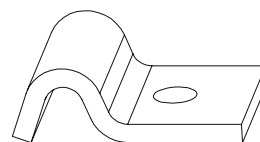
Code No: **STWC**

### Timber Waler Clamp Screw

14G HH 50mm

Code No: **QWCS14G50**

### Timber Waler Clamp



### Strapping Tools and Packaging



Description	Code No
Strapping Crimp Tool 19mm	YSEALER
Strapping Tensioner Tool 19mm	YSTRAPPER
Strapping Dispenser 19mm	YSTRAPDIS
Strapping 19mm	YSTRAP19MM
Strapping Seals 19mm	YSEAL19MM
Hand Wrap-Clear-22um X 0.5m X 375m	QHWC005

# ACROW Formwork Sales & Hardware Catalogue

Code No: **QRFLU001**

## Rubber Flupp 22ST

Internal water seal for spacer tubes.

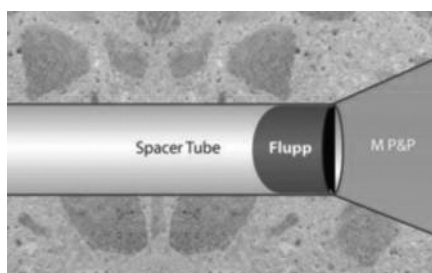
This soft PVC based material is resistant to:

- Saline Solutions
- Diluted Alkaline Solutions
- Soap Suds
- Ammonia Water

The Flupp 22ST is also conditionally resistant to:

- Detergents
- Sulphuric Acid – up to 40%
- Hydrochloric Acid – up to 35%
- Concentrated Caustic Soda Solution
- Concentrated Potash Lye
- Oil – mineral, vegetable and animal fats

When the Flupp is used in the recommended way, and M P&P mortar is used to seal the cone, materials such as those mentioned above do not come into direct contact with the Flupp.



Application schematic illustrating use of Flupp 22ST and M P&P Mortar

Size: **5 kg**  
Code No: **QMPP005**

## M P&P Mortar

M P&P Mortar is a fast setting, non shrink mortar for concrete repairs where waterproofing is a requirement. It is ideally suited to sealing tie bolt holes.

Size: **20 kg**  
Code No: **QMPP020**



Please refer to Acrow Formwork & Scaffolding for Material Safety and Product Data Sheets.



▲ Formwork

▲ Scaffolding

▲ Industrial & Mining Scaffolding



## Contact

Phone: 1300 138 362  
or contact your business  
development manager.  
[www.acrow.com.au](http://www.acrow.com.au)