CONSYSTEX
CONCRETE SYSTEM TECHNOLOGIES

CARE RECOMMENDATIONS

Circular Tubes

CONSYSTEX
CONCRETE SYSTEM TECHNOLOGIES

Consystex Pty Ltd
ABN: 14 160 650 368
62 Marigold St, Revesby NSW 2212
Tel: 1300 266 797 Fax: +61 2 9222 2633
Email: info@consystex.com
Web: www.consystex.com

Care Recommendations for Circular Tubes

PREINSPECTIONS

It is recommendable to check the goods once have been picked up:

- Cuts / Damage to outside of tube / reinforcing
- Inspection of internal liner
- Check tape at ends of tubes are properly secured Store tubes correctly
- Out of the weather
- Without deforming
- Secure from wind
- Store in a safety area out of the way of workers Check dimensions of the tubes
- When cutting is required, contact Consystex to ensure correct tapes and retaping techniques are employed
- Inspection of the tubes prior to installing over reinforcing steel
- No damage to inside liner
- No external damage
- Ensure that the tape at ends of the tube is secure and effective to avoid concrete egress

SET UP

1. Inspect the steel reinforcing to ensure that no tie wire, stirrups, reo bars, or other material is protruding that may scratch the liner of the form whilst installing.

   Fit PVS conduits on outside of reo bars to ensure safety and quality of form is maintained as per order requirements.

2. Tube to maintain outer round shape at all times:

a) Use round ply template or timber to do not allow horizontal movements on base and top of form.

IMPORTANT: no external bracing to be applied to the tubes unless specified and agreed to by a certified Consystex representative.

Consystex Pty Ltd
ABN: 14 160 650 368
62 Marigold St, Revesby NSW 2212
Tel: 1300 266 797 Fax: +61 2 9222 2633
Email: info@consystex.com
Web: www.consystex.com

POURING

Prior to commencing the concrete pour, inspect the inner liner and the outer tube for any obvious damage that may either result in poor surface finish, or any other potential risks.

Prior to pouring the concrete, check the Consystex Product Data sheet to ensure whether the pour is unrestricted or should meet a specific pour rate. The maximum unrestricted pour heights vary for each column diameter, and Consystex shall supply the relevant wall thickness to achieve safe filling up to the maximum allowable unrestricted pour heights. Higher columns requiring controlled pour rates shall be poured at the prescribed controlled pour rate up to the maximum allowable controlled pour height. For column heights greater than the maximum allowable controlled pour rate, confirm with Consystex as to whether thicker wall tubes are possible, or multiple pours are required for such column heights.

When pouring the concrete into the Consystex column form, place the concrete pump hose and vibrator within the centre of the steel cage and position both as low as possible towards the base of the tube.

Upon commencement of the concrete pour, withdraw both the hose and vibrator evenly during the pour. Do not move the vibrator up and down excessively as this will increase the incidence of honeycomb on the concrete surface, and may result in vibrator burns on the inner liner / tube.
Do not rest the hose on the top of the tube during a pour as this may result in damage to the top of the tube or taped liner interface, and concrete may enter between the tube and the inner plastic liner.

Do not direct the flow of concrete towards the wall of the tube, as the aggregate in the concrete may wear through the inner liner, or damage the inner liner join /seam and also result in concrete entering between the liner and the tube.

The reference to the suitability of Consystex for unrestricted concrete pour rates relates to the tubes ability to ensure adequate strength / burst resistance. Faster / unrestricted pour rates may however result in a poorer surface finish of the concrete which is purely a function of the concrete properties and the pouring method employed. (Consystex cannot be held responsible for poor surface finishes as a result of different concrete mixes or pouring methods).

Particular attention should be paid to high columns with modified or Greenstar concretes. Any concrete mix which has a significantly extended initial set time (say greater than 2 hours) should be identified and the concretes specific properties advised to Consystex to check the suitability of the individual pour heights required.

Consystex Pty Ltd
ABN: 14 160 650 368
62 Marigold St, Revesby NSW 2212
Tel: 1300 266 797 Fax: +61 2 9222 2633
Email: info@consystex.com
Web: www.consystex.com

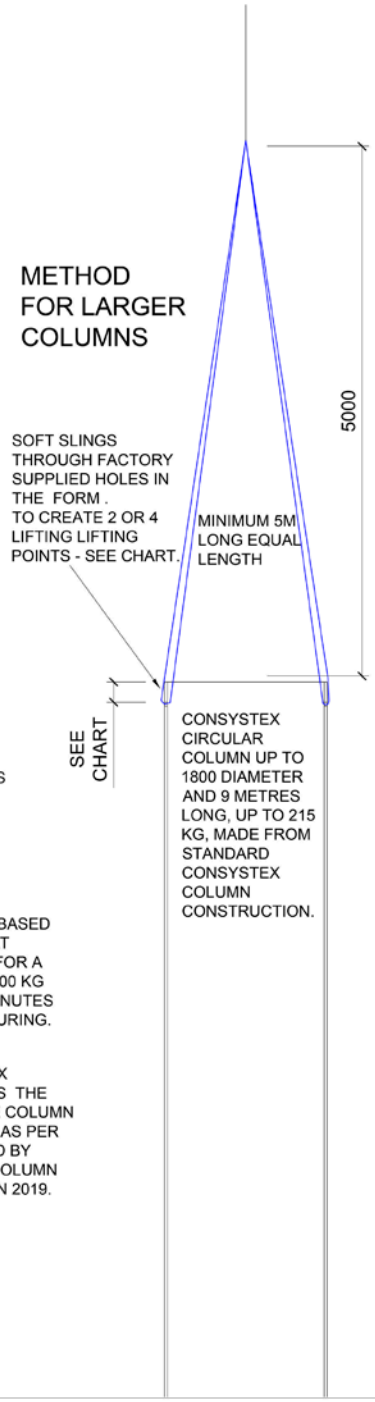
Other than ensuring adequate care is taken in storing and placing a column forming system, the greatest variable on achieving a suitable surface finish on the column form relates to the type of concrete used, and the method of placing/pouring and vibrating the concrete.

- Inspect the columns for internal damage to the liner, or delamination of the tape at the ends of the column form.
- The vibrator should be placed at the centre bottom of the column prior to the concrete being poured.
- The concrete should be placed using a suitable hose/rubber capable of reaching the base of the tube/ column form.
- As the concrete is poured, the rubber and the vibrator shall be withdrawn progressively in an even and upward motion, avoiding excessive downward motions of the vibrator.
- References that Consystex can be poured at unrestricted pour rate relates to the tubes strength and ability to resist rupturing (check the maximum unrestricted pour heights for each diameter column form as controlled pours may be required for columns higher than the approved level.)

NOTE: unrestricted/fast pours may result in reduced quality of surface finish of the column.

For any further information or clarification, please do not hesitate to contact the Consystex customer support team.

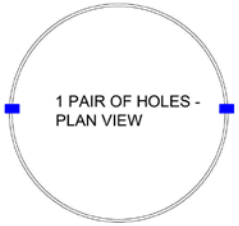
Crane Lifting Method



NOTE: CERTIFICATION IS FROM THE LIFTING POINTS DOWN. SHACKLES, CHAINS, SLINGS ETC ARE NOT INCLUDED.

NOTE:
THIS CERTIFICATION IS BASED ON A LIFTING TEST THAT TESTED BOTH SETUPS FOR A 900 DIA COLUMN WITH 400 KG OF LOAD HELD FOR 2 MINUTES WITHOUT FAILURE OCCURING.

NOTE:
"STANDARD CONSYSTEX CONSTRUCTION" MEANS THE BUILDUP TYPE FOR THE COLUMN DIAMETER AND HEIGHT AS PER INFORMATION SUPPLIED BY CONSYSTEX FOR THE COLUMN PRESSURE CHECKING IN 2019.



COLUMN TYPE, DIA, AND HEIGHT	APPROX WEIGHT (KG) AT LENGTH STATED	MIN DISTANCE OF HOLE FROM THE TOP	No. OF PAIRS OF HOLES
VLDH STANDARD TO 1250 - 4.0M	55	200	1
VLDH STANDARD TO 1300 - 4.0M	57	200	1
VLDH STANDARD TO 1350 - 4.0M	59	200	1
VLDH STANDARD TO 1400 - 3.5M	54	200	1
VLDH STANDARD TO 1450 - 3.5M	56	200	1
VLDH STANDARD TO 1500 - 3.5M	58	200	1
VLDH MEDIUM TO 1250 - 5.5M	84	300	1
VLDH MEDIUM TO 1300 - 5.5M	87	300	1
VLDH MEDIUM TO 1350 - 5.5M	90	300	1
VLDH MEDIUM TO 1400 - 5.0M	85	300	1
VLDH MEDIUM TO 1450 - 5.0M	88	300	1
VLDH MEDIUM TO 1500 - 5.0M	91	300	1
VLDH HEAVY TO 1250 - 6.5M	118	400	1
VLDH HEAVY TO 1300 - 6.5M	123	400	1
VLDH HEAVY TO 1350 - 6.5M	127	400	1
VLDH HEAVY TO 1400 - 6.0M	122	400	1
VLDH HEAVY TO 1450 - 6.0M	126	400	1
VLDH HEAVY TO 1500 - 6.0M	131	400	1
VLDH EXTRA HEAVY TO 1250 - 9.0M	190	400	2
VLDH EXTRA HEAVY TO 1300 - 9.0M	197	400	2
VLDH EXTRA HEAVY TO 1350 - 9.0M	205	400	2
VLDH EXTRA HEAVY TO 1400 - 9.0M	213	400	2
VLDH EXTRA HEAVY TO 1450 - 9.0M	220	400	2
VLDH EXTRA HEAVY TO 1500 - 8.5M	215	400	2
VLDH STD TO 1550 - 4.0M	75	200	1
VLDH STD TO 1600 - 4.0M	78	200	1
VLDH STD TO 1650 - 4.0M	80	200	1
VLDH STD TO 1700 - 3.5M	72	200	1
VLDH STD TO 1750 - 3.5M	75	200	1
VLDH STD TO 1800 - 3.5M	77	200	1
VLDH MEDIUM TO 1550 - 5.5M	114	400	1
VLDH MEDIUM TO 1600 - 5.5M	117	400	1
VLDH MEDIUM TO 1650 - 5.5M	121	400	1
VLDH MEDIUM TO 1700 - 5.0M	113	400	1
VLDH MEDIUM TO 1750 - 5.0M	117	400	1
VLDH MEDIUM TO 1800 - 5.0M	120	400	1
VLDH HEAVY TO 1550 - 6.5M	158	400	2
VLDH HEAVY TO 1600 - 6.5M	163	400	2
VLDH HEAVY TO 1650 - 6.5M	168	400	2
VLDH HEAVY TO 1700 - 6.0M	160	400	2
VLDH HEAVY TO 1750 - 6.0M	165	400	2
VLDH HEAVY TO 1800 - 6.0M	170	400	2
VLDH EXTRA HEAVY TO 1550 - 7.5M	210	600	2
VLDH EXTRA HEAVY TO 1600 - 7.0M	202	600	2
VLDH EXTRA HEAVY TO 1650 - 7.0M	208	600	2
VLDH EXTRA HEAVY TO 1700 - 7.0M	215	600	2
VLDH EXTRA HEAVY TO 1750 - 6.5M	205	600	2
VLDH EXTRA HEAVY TO 1800 - 6.5M	211	600	2

GENERAL NOTES

1. ALL LIFTING REGULATIONS MUST BE FOLLOWED.
2. THIS IS NOT A METHOD STATEMENT FOR LIFTING. IT APPLIES TO THE STRENGTH OF THE LIFTING POINTS ONLY. ANY OTHER ASPECT OF THE SAFETY OF LIFTING IS NOT COVERED
3. EQUIPMENT MUST BE IN GOOD CONDITION.
4. THE LIFTING HOLES MUST BE THE HOLES CREATE BY CONSYSTEX IN THEIR FACTORY

THIS DESIGN GENERALLY COMPLIES WITH AS3610 -1995 FORMWORK CODE STRUCTURAL REQUIREMENTS - AS DETAILED IN THE DRAWING NOTES .
GREG MCSWIGGAN NER (MEM No 659964) RPEQ 08189
SIGNED ON BEHALF OF
QUEENSLAND FORMWORK ENGINEERS PTY LTD.
8/6/20

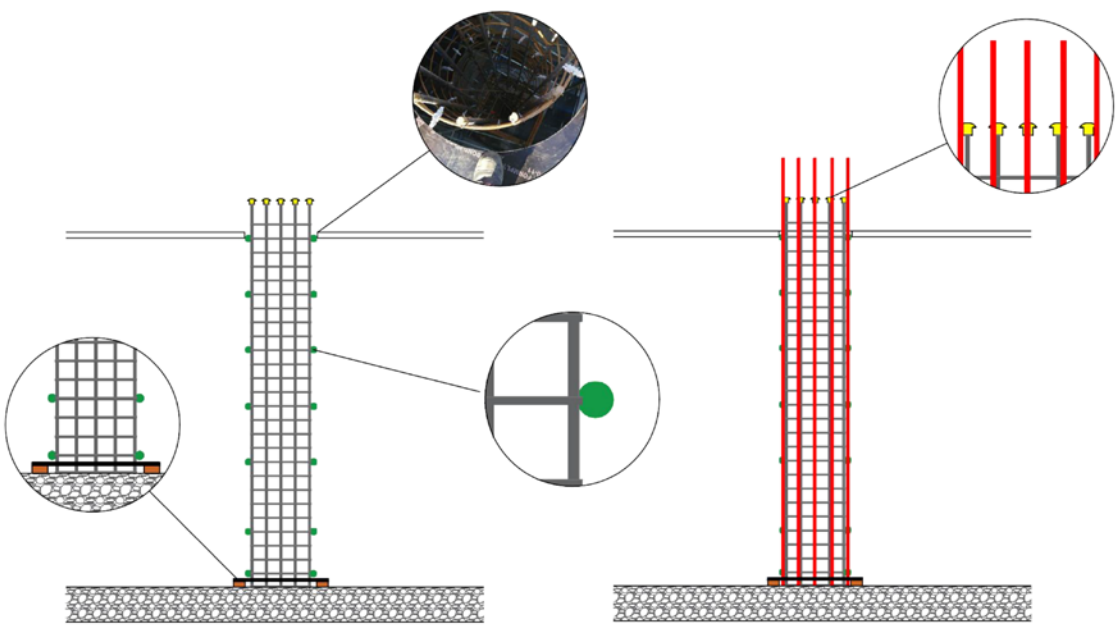
IN MAKING THIS CERTIFICATION WE HAVE RELIED UPON THE FOLLOWING.
1) THE SUPPLIED INFORMATION FROM CONSYSTEX

THIS CERTIFICATE SHALL NOT BE CONSTRUED AS RELIEVING ANY OTHER PARTY OF THEIR RESPONSIBILITIES.
THIS CERTIFICATION EXPIRES IN TWO YEARS FROM THE ABOVE DATE . THE DESIGN NEED TO BE REVIEWED BEFORE BEING RECERTIFIED. IT ONLY APPLIES TO AUSTRALIAN PROJECTS.
A NEW REVISION OF THIS DESIGN MAY BE ISSUED AT ANY TIME.

PRELIMINARY

QUEENSLAND FORMWORK ENGINEERS
QUEENSLAND FORMWORK ENGINEERS PTY LTD
QFEngineers@gmail.com

Client	CONSYSTEX
Project	AUSTRALIAN PROJECTS
Title	CIRCULAR COLUMN FORM LIFTING TO 1800 DIA MAX AND 215 KG MAX
Drawn	GREG MCSWIGGAN
Date	12/05/20
Scale	
Drawing No	CONSYS - LIFT - 002
Revision	2

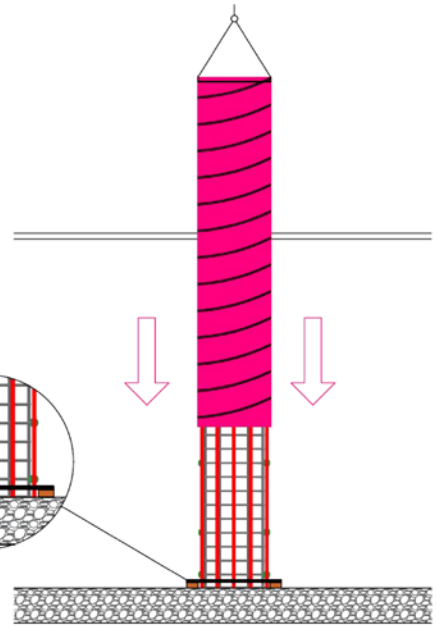


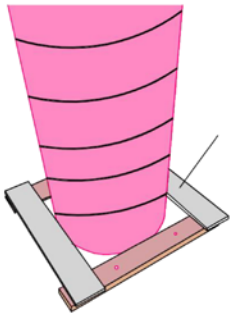
Ensure bar chair spacers are attached to the column reinforcement to avoid scratching or tearing the liner.

Use round ply template or timber to not allow horizontal movements on the base and top of form.

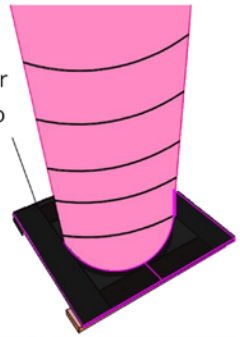
IMPORTANT: No external bracing is to be applied to the tubes unless specified and agreed upon by a certified Consystex representative.

PVC conduit can be attached to the outside of the column reinforcement and removed after the tube is positioned.





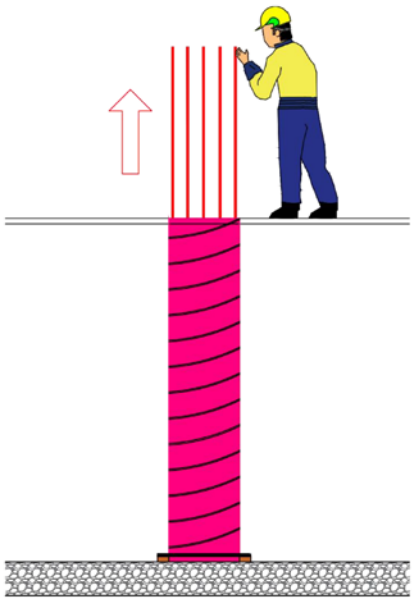
You can use timber or round ply template to unallow horizontal movement on base.



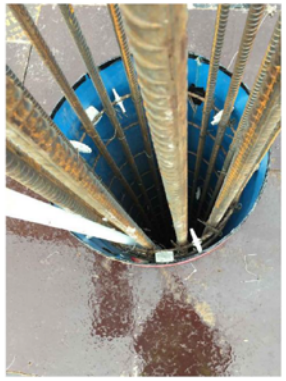
CONSYSTEX
CONCRETE SYSTEM TECHNOLOGIES

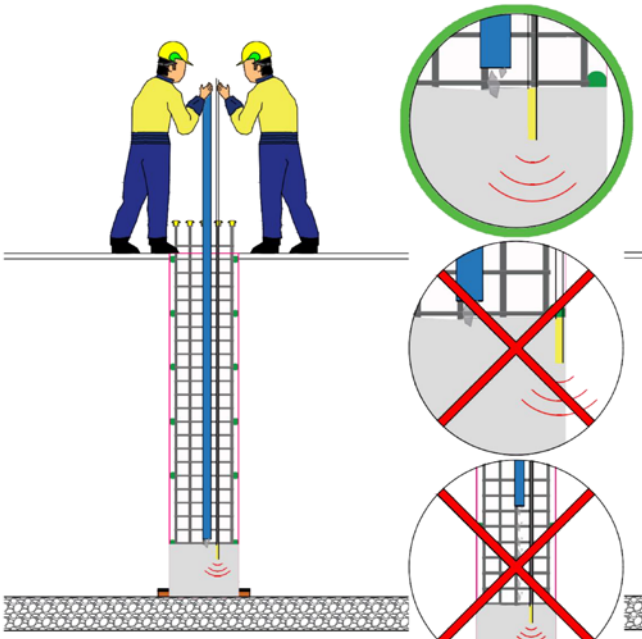
Column Installation

Consystex Pty Ltd
ABN: 14 160 650 368
62 Marigold St, Revesby NSW 2212
Tel: 1300 266 797 Fax: +61 2 9222 2633
Email: info@consystex.com
Web: www.consystex.com



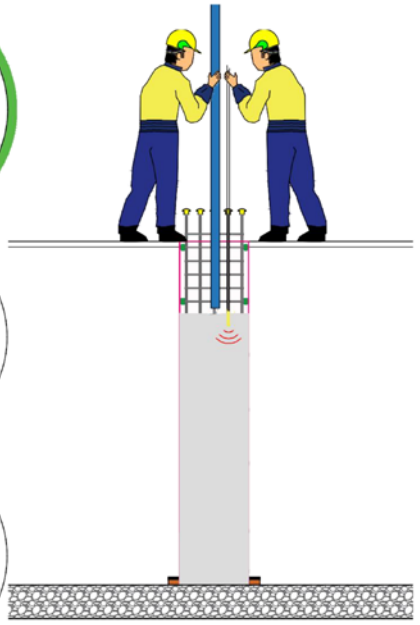
PVC Conduit must be removed after the tube is positioned





Before pouring check all columns are braced adequately and internal liners have not been displaced. It is crucial that the concrete is poured into the column by placing the pump hose and vibrator as far down as possible. Pouring from the top of the column is not recommended and can lead to damage of the liner and also to the finish of the tube.

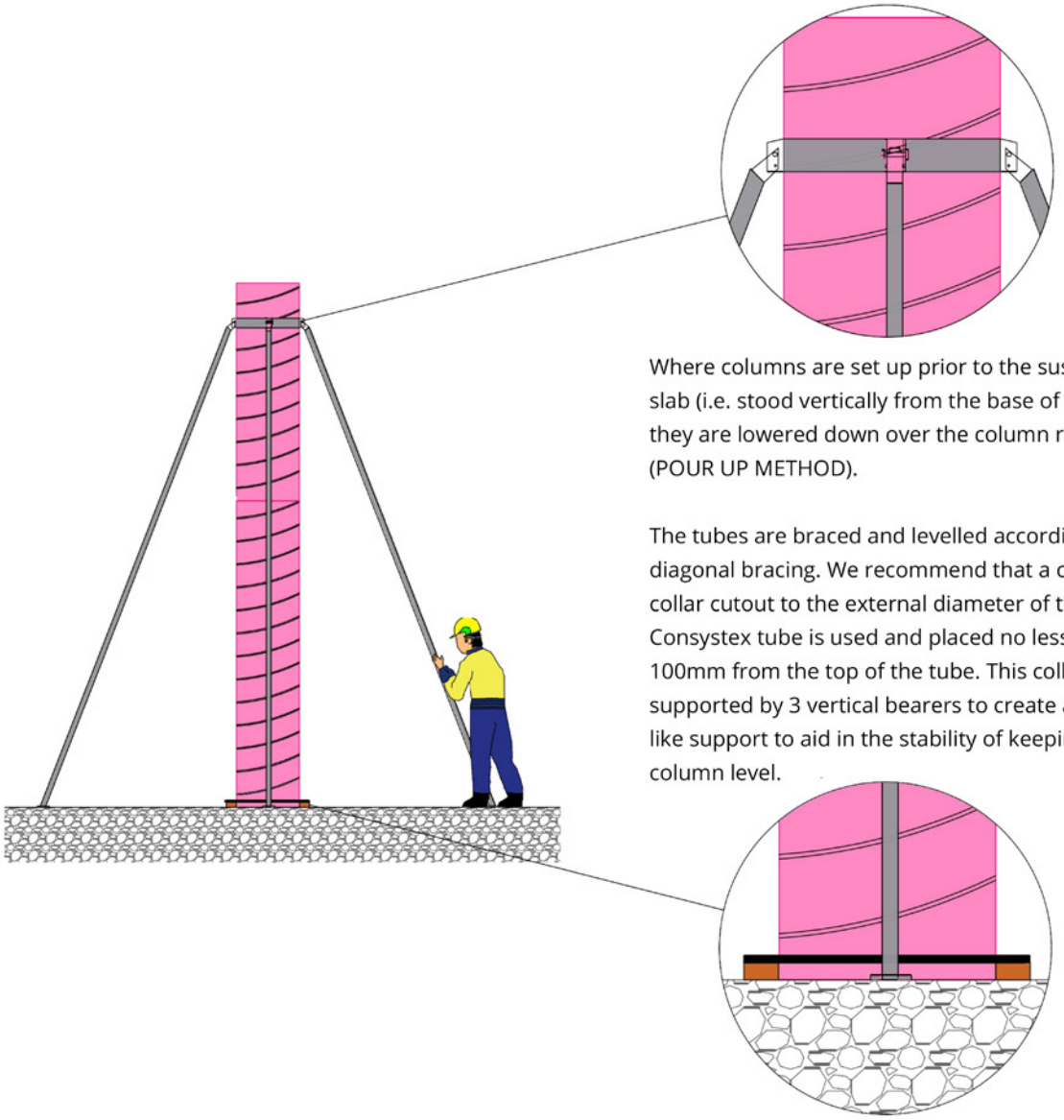
Vibrator should at no time contact the liner. Extended contact with the liner can cause damage and leakage. Ensure concrete pour rates are not exceeded.



CONSYSTEX
CONCRETE SYSTEM TECHNOLOGIES

Column Installation

Consystex Pty Ltd
ABN: 14 160 650 368
62 Marigold St, Revesby NSW 2212
Tel: 1300 266 797 Fax: +61 2 9222 2633
Email: info@consystex.com
Web: www.consystex.com



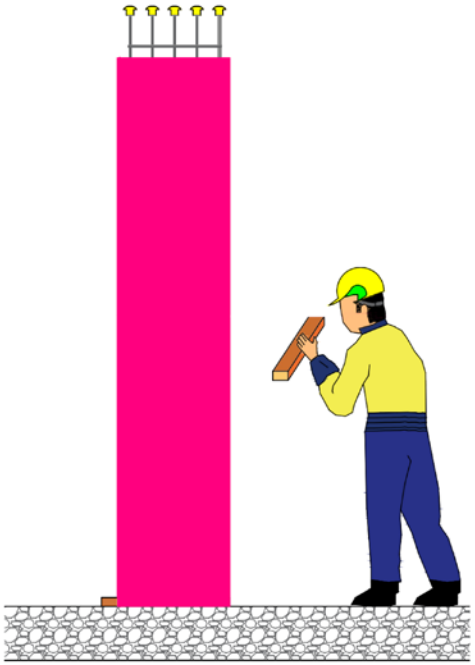
Where columns are set up prior to the suspended slab (i.e. stood vertically from the base of the slab), they are lowered down over the column reinforcement. (POUR UP METHOD).

The tubes are braced and levelled accordingly with diagonal bracing. We recommend that a circular collar cutout to the external diameter of the Consystex tube is used and placed no less than 100mm from the top of the tube. This collar can be supported by 3 vertical bearers to create a tripod like support to aid in the stability of keeping the column level.

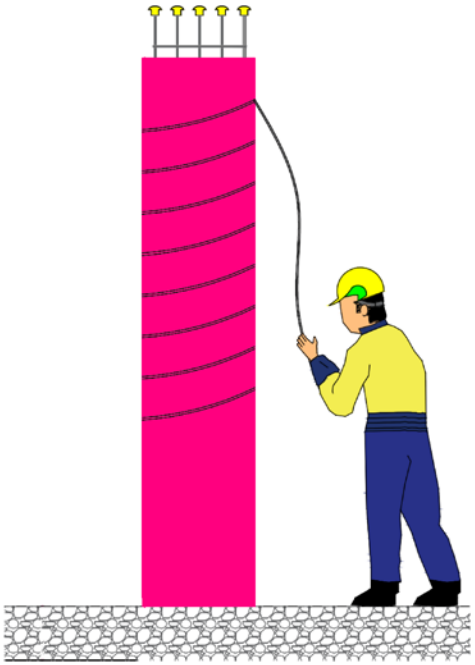
CONSYSTEX
CONCRETE SYSTEM TECHNOLOGIES

Column Installation

Consystex Pty Ltd
ABN: 14 160 650 368
62 Marigold St, Revesby NSW 2212
Tel: 1300 266 797 Fax: +61 2 9222 2633
Email: info@consystex.com
Web: www.consystex.com

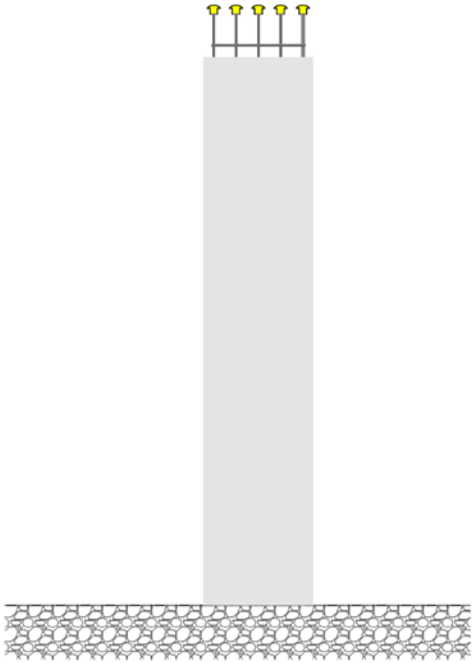


All supports should be removed and the column should be clear of any possible interference.



A knife can be used to cut a vertical incision from the top to the bottom of the column. Ensure not to cut through to the concrete as this may scratch or damage the surface finish of the concrete.

Alternatively, utilise the option of Consystex Stripping Tape, which will split the column vertically for easy removal of the tube.



Once the outer column shell is cut, peel off the tube and safely place on the ground. Cut the column shell into manageable pieces for ease of handling and dispose responsibly into rubbish bins.

CONSYSTEX
CONCRETE SYSTEM TECHNOLOGIES

Column Installation

Consystex Pty Ltd
ABN: 14 160 650 368
62 Marigold St, Revesby NSW 2212
Tel: 1300 266 797 Fax: +61 2 9222 2633
Email: info@consystex.com
Web: www.consystex.com