

POUR RECOMMENDATIONS

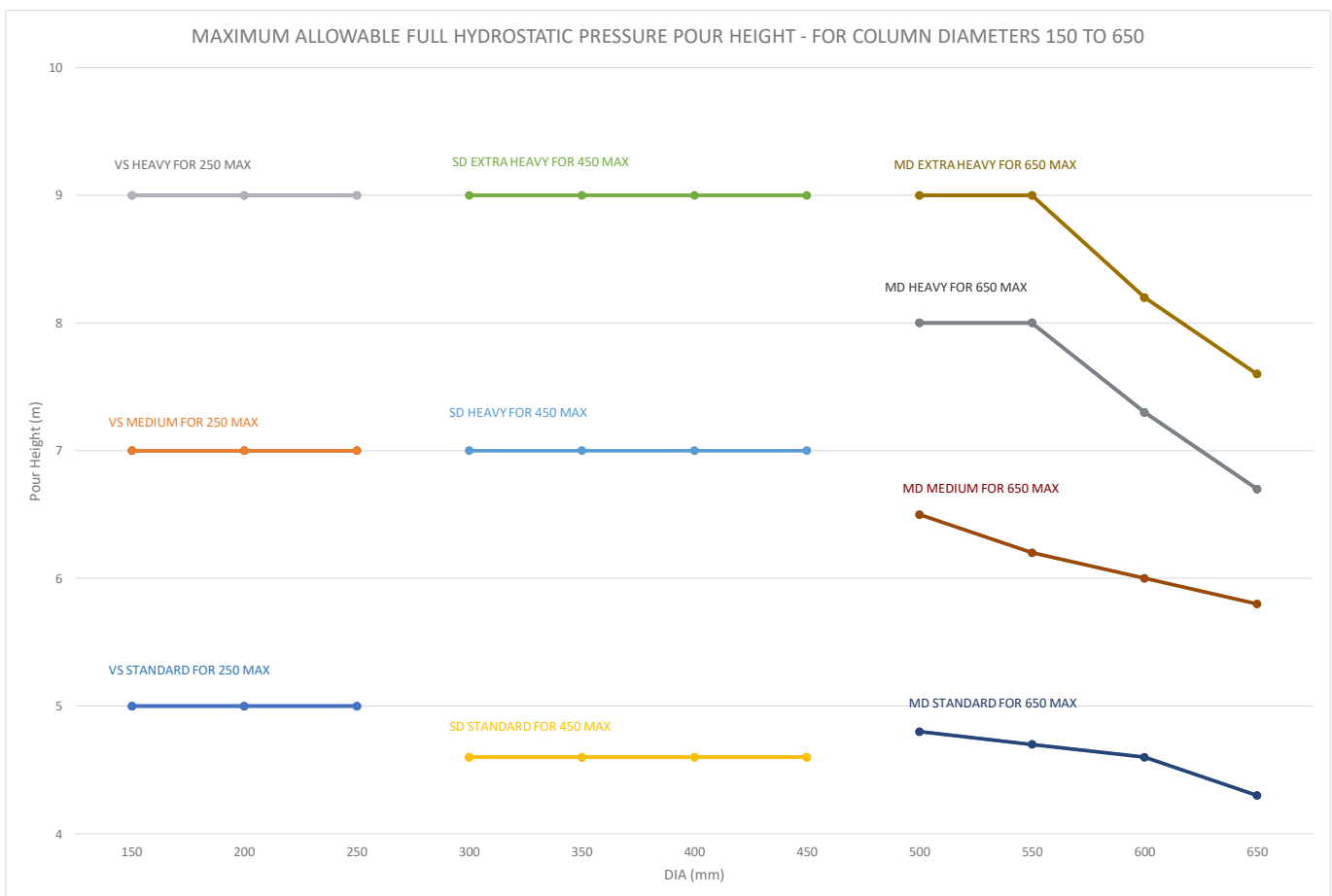
Circular Tubes

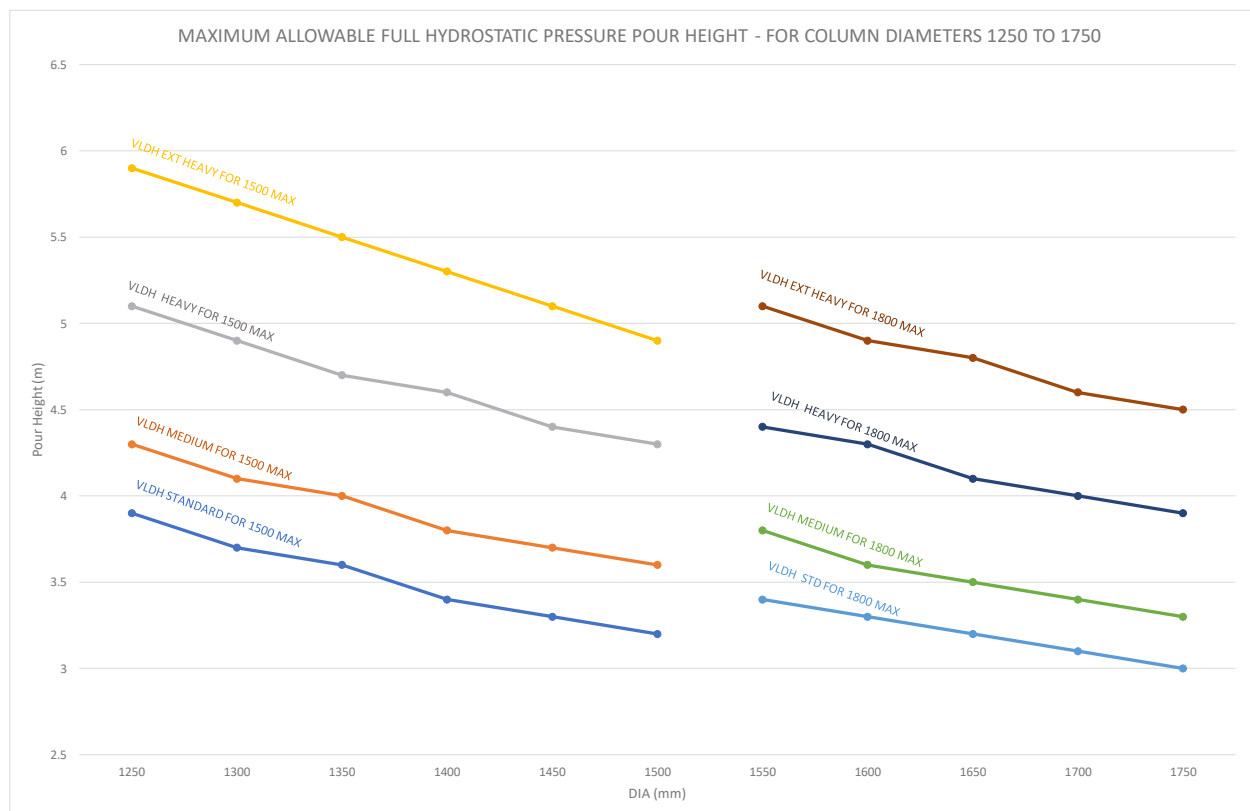
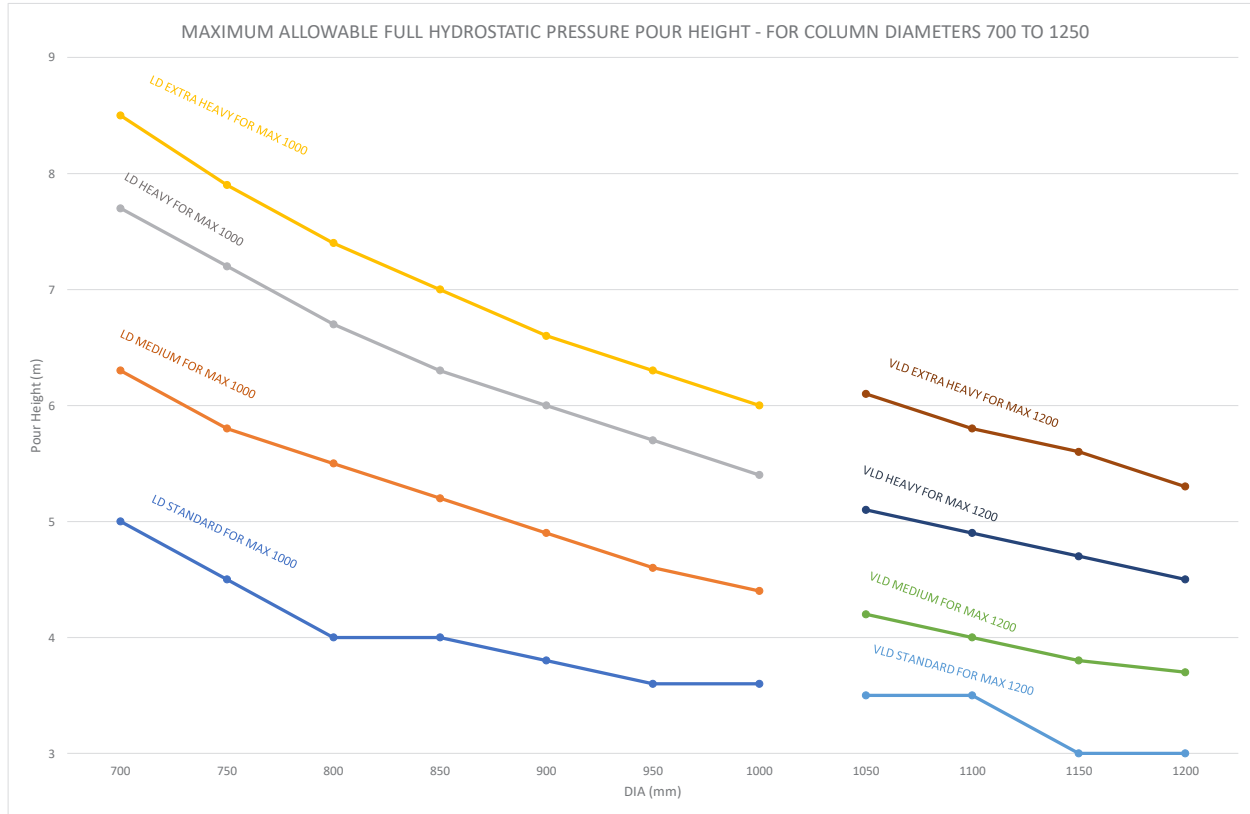


CONSYSTEX
CONCRETE SYSTEM TECHNOLOGIES

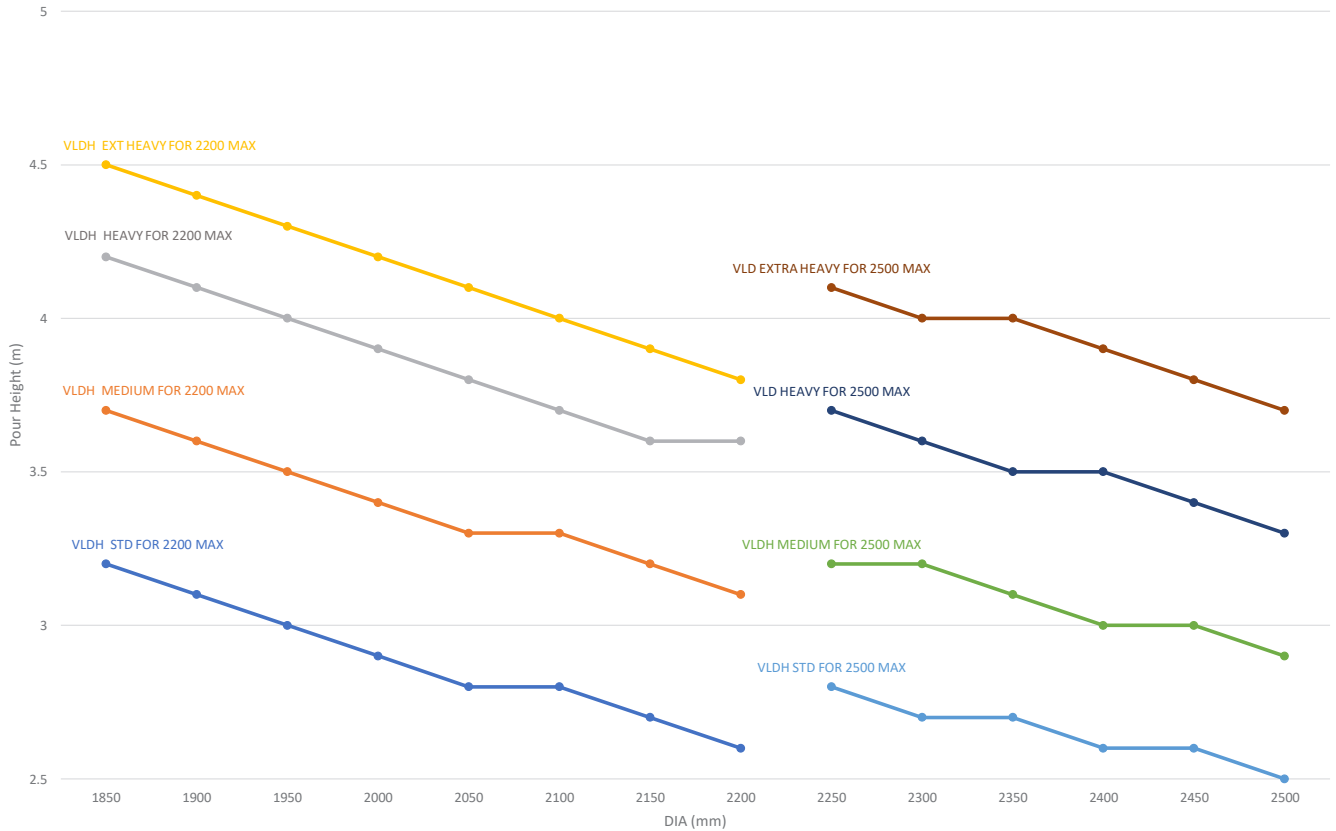
Pour Recommendations for Circular Tubes

The charts provided indicate the recommended pour methods that should be used when pouring concrete into circular tubes. Please refer to the Column Pouring Information Chart provided for numeric values for pour rates in ratio to specific values relating to the diameter and length of the tube.





MAXIMUM ALLOWABLE FULL HYDROSTATIC PRESSURE POUR HEIGHT - FOR COLUMN DIAMETERS 1850 TO 2500



CONSYSTEX COLUMN POURING INFORMATION CHART

REV 0 12/112019. 6 PAGES TOTAL. Read in conjunction with notes below.

BUILDUP TYPE (PINK, BROWN, AND FILLS AS PER CONSYSTEX SUPPLIED CHARTS) DIAMETER IS INDICATED AND THE MAXIMUM HEIGHT THAT THIS BUILDUP IS SUPPLIED TO.	DIA (mm)	MAXIMUM ALLOWABLE CONCRETE PRESSURE (KPa) WORKING LOAD	MAXIMUM FULL HYDROSTATIC PRESSURE POUR HEIGHT (m) MAX ALLOWABLE POUR RATE IS NOMINALLY 10M/HR FOR A CONTROLLED POUR.	MAXIMUM POUR HEIGHT FOR 1 HOUR POUR (m) POUR RATE = HEIGHT OF COLUMN/HR. SEE NOTES FOR ALLOWABLE USE OF THIS COLUMN	MAXIMUM POUR HEIGHT FOR 2 HOUR POUR (m) POUR RATE = 0.5 x HEIGHT OF COLUMN/HR. SEE NOTES FOR ALLOWABLE USE OF THIS COLUMN
VS STANDARD TO 250 - 5.0M	150 TO 250	227	5.0	5.0	5.0
VS MEDIUM TO 250 - 7.0M	150 TO 250	270	7.0	7.0	7.0
VS HEAVY TO 250 - 9.0M	150 TO 250	324	9.0	9.0	9.0
SD STANDARD TO 450 - 4.6M	300 TO 450	150	4.6	4.6	4.6
SD HEAVY TO 450 - 7.0M	300 TO 450	180	7.0	7.0	7.0
SD EXTRA HEAVY TO 400 - 9.0M	300 TO 400	236	9.0	9.0	9.0
SD EXTRA HEAVY TO 450 - 9.0M	450	210	8.7	9.0	9.0
MD STANDARD TO 510 - 4.8M	500	135	4.8	4.8	4.8
MD STANDARD TO 550 - 4.7M	550	123	4.7	4.7	4.7
MD STANDARD TO 600 - 4.6M	600	112	4.6	4.6	4.6
MD STANDARD TO 650 - 4.4M	650	104	4.3	4.4	4.4
MD MEDIUM TO 510 - 6.5M	500	183	6.5	6.5	6.5
MD MEDIUM TO 550 - 6.2M	550	167	6.2	6.2	6.2
MD MEDIUM TO 600 - 6.0M	600	153	6.0	6.0	6.0
MD MEDIUM TO 650 - 5.8M	650	141	5.8	5.8	5.8
MD HEAVY TO 500 - 8.0M	500	210	8.0	8.0	8.0
MD HEAVY TO 550 - 8.0M	550	191	8.0	8.0	8.0
MD HEAVY TO 600 - 7.5M	600	175	7.3	7.5	7.5
MD HEAVY TO 650 - 7.2M	650	162	6.7	7.2	7.2
MD EXTRA HEAVY TO 500 - 9.0M	500	237	9.0	9.0	9.0
MD EXTRA HEAVY TO 550 - 9.0M	550	216	9.0	9.0	9.0
MD EXTRA HEAVY TO 600 - 9.0M	600	198	8.2	9.0	9.0

MD EXTRA HEAVY TO 650 - 9.0M	650	183	7.6	9.0	9.0
LD STANDARD TO 700 - 5.0M	700	131	5.0	5.0	5.0
LD STANDARD TO 750 - 4.5M	750	122	4.5	4.5	4.5
LD STANDARD TO 800 - 4.0M	800	114	4.0	4.0	4.0
LD STANDARD TO 850 - 4.0M	850	108	4.0	4.0	4.0
LD STANDARD TO 900 - 3.8M	900	102	3.8	3.8	3.8
LD STANDARD TO 950 - 3.6M	950	96	3.6	3.6	3.6
LD STANDARD TO 1000 - 3.6M	1000	92	3.6	3.6	3.6
LD MEDIUM TO 700 - 6.5M	700	150	6.3	6.5	6.5
LD MEDIUM TO 750 - 6.0M	750	140	5.8	6.0	6.0
LD MEDIUM TO 800 - 5.5M	800	131	5.5	5.5	5.5
LD MEDIUM TO 850 - 5.5M	850	124	5.2	5.5	5.5
LD MEDIUM TO 900 - 5.2M	900	117	4.9	5.2	5.2
LD MEDIUM TO 950 - 5.0M	950	111	4.6	5.0	5.0
LD MEDIUM TO 1000 - 5.0M	1000	105	4.4	4.8	5.0
LD HEAVY TO 700 - 8.0M	700	185	7.7	8.0	8.0
LD HEAVY TO 750 - 7.5M	750	172	7.2	7.5	7.5
LD HEAVY TO 800 - 7.0M	800	162	6.7	7.0	7.0
LD HEAVY TO 850 - 7.0M	850	152	6.3	7.0	7.0
LD HEAVY TO 900 - 6.5M	900	144	6.0	6.5	6.5
LD HEAVY TO 950 - 6.3M	950	136	5.7	6.3	6.3
LD HEAVY TO 1000 - 6.3M	1000	129	5.4	6.3	6.3
LD EXTRA HEAVY TO 700 - 9.0M	700	204	8.5	9.0	9.0
LD EXTRA HEAVY TO 750 - 9.0M	750	190	7.9	9.0	9.0
LD EXTRA HEAVY TO 800 - 9.0M	800	179	7.4	9.0	9.0
LD EXTRA HEAVY TO 850 - 9.0M	850	168	7.0	9.0	9.0
LD EXTRA HEAVY TO 900 - 9.0M	900	159	6.6	9.0	9.0
LD EXTRA HEAVY TO 950 - 9.0M	950	150	6.3	9.0	9.0
LD EXTRA HEAVY TO 1000 - 9.0M	1000	143	6.0	8.0	9.0
VLD STANDARD TO 1050 - 3.5M	1050	87	3.5	3.5	3.5
VLD STANDARD TO 1100 - 3.5M	1100	83	3.5	3.5	3.5
VLD STANDARD TO 1150 - 3.0M	1150	80	3.0	3.0	3.0
VLD STANDARD TO 1200 - 3.0M	1200	76	3.0	3.0	3.0
VLD MEDIUM TO 1050 - 4.5M	1050	100	4.2	4.5	4.5
VLD MEDIUM TO 1100 - 4.5M	1100	96	4.0	4.2	4.5
VLD MEDIUM TO 1150 - 4.0M	1150	91	3.8	3.9	4.0
VLD MEDIUM TO 1200 - 4.0M	1200	88	3.7	3.7	4.0

VLD HEAVY TO 1050 - 6.0M	1050	123	5.1	6.0	6.0
VLD HEAVY TO 1100 - 6.0M	1100	118	4.9	5.8	6.0
VLD HEAVY TO 1150 - 5.5M	1150	112	4.7	5.5	5.5
VLD HEAVY TO 1200 - 5.5M	1200	108	4.5	5.0	5.5
VLD EXTRA HEAVY TO 1050 - 9.0M	1050	146	6.1	8.5	9.0
VLD EXTRA HEAVY TO 1100 - 9.0M	1100	139	5.8	8.0	9.0
VLD EXTRA HEAVY TO 1150 - 9.0M	1150	133	5.6	7.4	9.0
VLD EXTRA HEAVY TO 1200 - 9.0M	1200	128	5.3	6.8	9.0
VLDH STANDARD TO 1250 - 4.0M	1250	93	3.9	4.0	4.0
VLDH STANDARD TO 1300 - 4.0M	1300	89	3.7	3.8	4.0
VLDH STANDARD TO 1350 - 4.0M	1350	86	3.6	3.6	4.0
VLDH STANDARD TO 1400 - 3.5M	1400	83	3.4	3.4	3.5
VLDH STANDARD TO 1450 - 3.5M	1450	80	3.3	3.3	3.5
VLDH STANDARD TO 1500 - 3.5M	1500	77	3.2	3.2	3.5
VLDH MEDIUM TO 1250 - 5.5M	1250	103	4.3	4.8	5.5
VLDH MEDIUM TO 1300 - 5.5M	1300	99	4.1	4.5	5.5
VLDH MEDIUM TO 1350 - 5.5M	1350	96	4.0	4.2	5.5
VLDH MEDIUM TO 1400 - 5.0M	1400	92	3.8	4.0	5.0
VLDH MEDIUM TO 1450 - 5.0M	1450	89	3.7	3.8	5.0
VLDH MEDIUM TO 1500 - 5.0M	1500	86	3.6	3.6	4.6
VLDH HEAVY TO 1250 - 6.5M	1250	123	5.1	6.4	6.5
VLDH HEAVY TO 1300 - 6.5M	1300	118	4.9	6.0	6.5
VLDH HEAVY TO 1350 - 6.5M	1350	114	4.7	5.6	6.5
VLDH HEAVY TO 1400 - 6.0M	1400	110	4.6	5.2	6.0
VLDH HEAVY TO 1450 - 6.0M	1450	106	4.4	5.0	6.0
VLDH HEAVY TO 1500 - 6.0M	1500	102	4.3	4.6	6.0
VLDH EXT HEAVY TO 1250 - 9.0M	1250	142	5.9	8.2	9.0
VLDH EXT HEAVY TO 1300 - 9.0M	1300	137	5.7	7.6	9.0
VLDH EXT HEAVY TO 1350 - 9.0M	1350	132	5.5	7.2	9.0
VLDH EXT HEAVY TO 1400 - 9.0M	1400	127	5.3	6.7	9.0
VLDH EXT HEAVY TO 1450 - 9.0M	1450	122	5.1	6.2	8.6
VLDH EXT HEAVY TO 1500 - 9.0M	1500	118	4.9	6.0	7.8
VLDH STD TO 1550 - 4.0M	1550	82	3.4	3.4	4.0
VLDH STD TO 1600 - 4.0M	1600	79	3.3	3.3	4.0
VLDH STD TO 1650 - 4.0M	1650	77	3.2	3.2	3.8
VLDH STD TO 1700 - 3.5M	1700	74	3.1	3.1	3.5
VLDH STD TO 1750 - 3.5M	1750	72	3.0	3.0	3.5
VLDH STD TO 1800 - 3.5M	1800	70	2.9	2.9	3.3

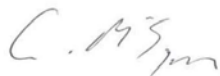
Product	Length (mm)	Width (mm)	Height (mm)	Weight (kg)	Volume (m³)
VLDH MEDIUM TO 1550 - 5.5M	1550	90	3.8	3.8	4.9
VLDH MEDIUM TO 1600 - 5.5M	1600	87	3.6	3.6	4.5
VLDH MEDIUM TO 1650 - 5.5M	1650	85	3.5	3.5	4.1
VLDH MEDIUM TO 1700 - 5.0M	1700	82	3.4	3.4	3.8
VLDH MEDIUM TO 1750 - 5.0M	1750	80	3.3	3.3	3.5
VLDH MEDIUM TO 1800 - 5.0M	1800	78	3.2	3.2	3.3
VLDH HEAVY TO 1550 - 6.5M	1550	106	4.4	5.0	6.5
VLDH HEAVY TO 1600 - 6.5M	1600	103	4.3	4.6	6.4
VLDH HEAVY TO 1650 - 6.5M	1650	99	4.1	4.5	5.8
VLDH HEAVY TO 1700 - 6.0M	1700	97	4.0	4.3	5.2
VLDH HEAVY TO 1750 - 6.0M	1750	94	3.9	4.0	4.8
VLDH HEAVY TO 1800 - 6.0M	1800	91	3.8	3.9	4.5
VLDH EXT HEAVY TO 1550 - 9.0M	1550	121	5.1	6.2	8.5
VLDH EXT HEAVY TO 1600 - 9.0M	1600	118	4.9	5.8	7.6
VLDH EXT HEAVY TO 1650 - 9.0M	1650	114	4.8	5.6	6.8
VLDH EXT HEAVY TO 1700 - 9.0M	1700	111	4.6	5.4	6.2
VLDH EXT HEAVY TO 1750 - 9.0M	1750	108	4.5	5.1	5.6
VLDH EXT HEAVY TO 1800 - 9.0M	1800	105	4.4	4.9	5.2
VLDH STD TO 1850 - 4.0M	1850	76	3.2	3.3	4.0
VLDH STD TO 1900 - 4.0M	1900	74	3.1	3.2	4.0
VLDH STD TO 1950 - 4.0M	1950	72	3.0	3.1	4.0
VLDH STD TO 2000 - 3.5M	2000	70	2.9	3.1	3.5
VLDH STD TO 2050 - 3.5M	2050	68	2.8	3.1	3.5
VLDH STD TO 2100 - 3.0M	2100	67	2.8	3.0	3.0
VLDH STD TO 2150 - 3.0M	2150	65	2.7	3.0	3.0
VLDH STD TO 2200 - 3.0M	2200	64	2.6	3.0	3.0
VLDH MEDIUM TO 1850 - 5.5M	1850	89	3.7	4.3	5.5
VLDH MEDIUM TO 1900 - 5.5M	1900	86	3.6	4.2	5.5
VLDH MEDIUM TO 1950 - 5.5M	1950	84	3.5	4.0	5.2
VLDH MEDIUM TO 2000 - 5.0M	2000	82	3.4	4.0	5.0
VLDH MEDIUM TO 2050 - 5.0M	2050	80	3.3	4.0	5.0
VLDH MEDIUM TO 2100 - 5.0M	2100	78	3.3	4.0	5.0
VLDH MEDIUM TO 2150 - 5.0M	2150	76	3.2	4.0	5.0
VLDH MEDIUM TO 2200 - 5.0M	2200	75	3.1	3.8	5.0
VLDH HEAVY TO 1850 - 6.5M	1850	102	4.2	5.5	6.5
VLDH HEAVY TO 1900 - 6.5M	1900	99	4.1	5.2	6.5
VLDH HEAVY TO 1950 - 6.5M	1950	97	4.0	5.0	6.5
VLDH HEAVY TO 2000 - 6.5M	2000	94	3.9	5.0	6.5

VLDH HEAVY TO 2050 - 6.0M	2050	92	3.8	5.0	6.0
VLDH HEAVY TO 2100 - 6.0M	2100	90	3.7	5.0	6.0
VLDH HEAVY TO 2150 - 6.0M	2150	88	3.6	5.0	6.0
VLDH HEAVY TO 2200 - 6.0M	2200	86	3.6	4.8	6.0
VLDH EXT HEAVY TO 1850 - 9.0M	1850	109	4.5	6.2	8.0
VLDH EXT HEAVY TO 1900 - 9.0M	1900	106	4.4	5.8	7.0
VLDH EXT HEAVY TO 1950 - 9.0M	1950	103	4.3	5.6	6.8
VLDH EXT HEAVY TO 2000 - 9.0M	2000	101	4.2	5.6	6.8
VLDH EXT HEAVY TO 2050 - 9.0M	2050	98	4.1	5.6	6.8
VLDH EXT HEAVY TO 2100 - 9.0M	2100	96	4.0	5.6	6.8
VLDH EXT HEAVY TO 2150 - 9.0M	2150	94	3.9	5.6	6.8
VLDH EXT HEAVY TO 2200 - 9.0M	2200	92	3.8	5.5	6.5
VLDH STD TO 2250 - 4.0M	2250	67	2.8	3.2	4.0
VLDH STD TO 2300 - 4.0M	2300	65	2.7	3.1	4.0
VLDH STD TO 2350 - 3.5M	2350	64	2.7	3.0	3.5
VLDH STD TO 2400 - 3.5M	2400	63	2.6	2.9	3.5
VLDH STD TO 2450 - 3.0M	2450	61	2.6	2.8	3.0
VLDH STD TO 2500 - 3.0M	2500	60	2.5	2.7	3.0
VLDH MEDIUM TO 2250 - 5.5M	2250	78	3.2	4.1	5.4
VLDH MEDIUM TO 2300 - 5.5M	2300	76	3.2	4.0	5.0
VLDH MEDIUM TO 2350 - 5.0M	2350	74	3.1	3.8	5.0
VLDH MEDIUM TO 2400 - 5.0M	2400	73	3.0	3.6	4.7
VLDH MEDIUM TO 2450 - 5.0M	2450	71	3.0	3.5	4.5
VLDH MEDIUM TO 2500 - 5.0M	2500	70	2.9	3.5	4.2
VLDH HEAVY TO 2250 - 6.5M	2250	88	3.7	5.2	6.5
VLDH HEAVY TO 2300 - 6.5M	2300	86	3.6	5.0	6.5
VLDH HEAVY TO 2350 - 6.5M	2350	85	3.5	4.8	6.3
VLDH HEAVY TO 2400 - 6.0M	2400	83	3.5	4.6	6.0
VLDH HEAVY TO 2450 - 6.0M	2450	81	3.4	4.4	5.8
VLDH HEAVY TO 2500 - 6.0M	2500	80	3.3	4.2	5.5
VLDH EXT HEAVY TO 2250 - 9.0M	2250	99	4.1	6.4	8.0
VLDH EXT HEAVY TO 2300 - 9.0M	2300	97	4.0	6.0	7.6
VLDH EXT HEAVY TO 2350 - 9.0M	2350	95	4.0	5.8	7.2
VLDH EXT HEAVY TO 2400 - 9.0M	2400	93	3.9	5.6	6.5
VLDH EXT HEAVY TO 2450 - 9.0M	2450	91	3.8	5.4	6.2
VLDH EXT HEAVY TO 2500 - 9.0M	2500	89	3.7	5.2	6.0

NOTES:

1. THIS CHART PROVIDES THE STRENGTH CAPABILITY OF THE COLUMN FORM AND IT IS UP TO THE USER TO ENSURE IT IS NOT OVERLOADED PAST THAT LIMIT.
2. THIS CHART DOES NOT PROVIDE INFORMATION FOR THE SETUP OF THE COLUMN FORMS. SEE CONSYSTEX PRODUCT INFORMATION FOR THOSE DETAILS. THIS CHART ASSUMES THAT THE COLUMN FORMS ARE UNDAMAGED, DRY, HORIZONTALLY STABLE AGAINST CONSTRUCTION LOADS AND WIND, PROTECTED FROM UPLIFT, AND HAVE BEEN ERECTED BY EXPERIENCED TRADESPEOPLE ACCORDING TO THE MANUFACTURERS INSTRUCTIONS.
3. IT IS ASSUMED THAT THE COLUMN IS POURED FROM THE TOP IN A CONTROLLED MANNER BY EXPERIENCED TRADESPEOPLE. THE CONCRETE SHOULD NOT BE DROPPED FROM A GREAT HEIGHT, IT SHOULD BE PLACED AT THE LEVEL OF THE POUR. NO PUMPING FROM BELOW, NO EXTERNAL VIBRATION, NO DEEP REVIBRATION OF PREVIOUSLY PLACED CONCRETE. COLUMNS MUST BE PLUMB, KEEP STEEL REO CAGE BETWEEN THE VIBRATOR AND THE FORM, POUR IS TO BE MONITORED BY EXPERIENCED FORMWORKERS AND ADJUSTED AS REQUIRED.
4. THE AS3610 PARAMETERS USED FOR THE CALCULATION OF THE LAST TWO COLUMNS OF THE CHART ARE AS FOLLOWS: POUR HEIGHT = COLUMN HEIGHT, CONCRETE DENSITY = 2400 KG/CUBIC M, CONCRETE TEMP = 15 DEG CEL. MINIMUM, CONCRETE C2 FACTOR = 0.6, THE C1 FACTOR IS ASSUMED TO BE 1.5 UP TO 1800 DIA, 1.25 FOR 1850 TO 1950, AND 1.0 FOR 2000 AND ABOVE. NOTE: MANY NEW TYPES OF CONCRETES ARE DIFFICULT TO ASSIGN AN AS3610 C2 FACTOR TO, IF IN DOUBT USE FULL HYDROSTATIC PRESSURE.

Regards,



Greg McSwiggan NER (Mem No. 659964) RPEQ

On behalf of

Queensland Formwork Engineers Pty Ltd

In making this certification we have relied upon the testing information supplied by Consystex and the technical information supplied by Consystex.

This certificate shall not be construed as relieving any other party of their responsibilities.

We reserve the right to issue changes to this chart at anytime. This chart certification expires in four years, at which time it should be reviewed in light of new regulations, work practices, and materials.