CINLE

R.C. U-SHAPE DRAINS

CERTIFIED ISO 9001

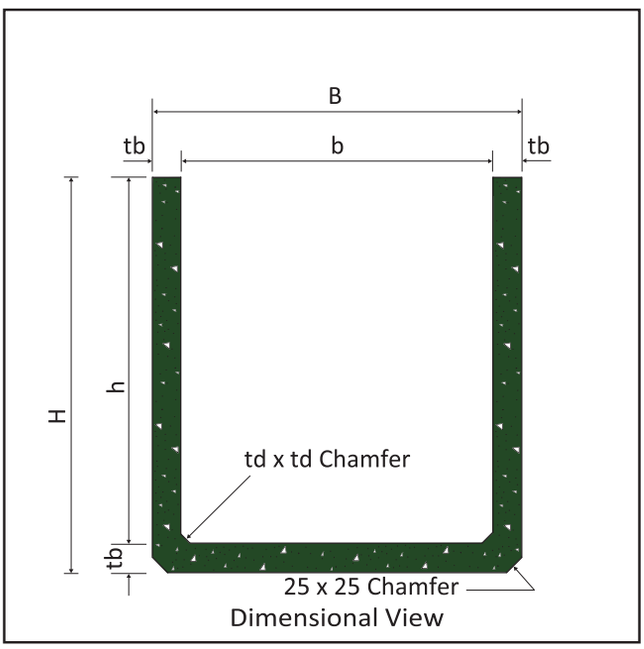
UKAS MANAGEMENT SYSTEMS 001

ISO 9001: 2015
Approval No.
ISO 9001-0049900

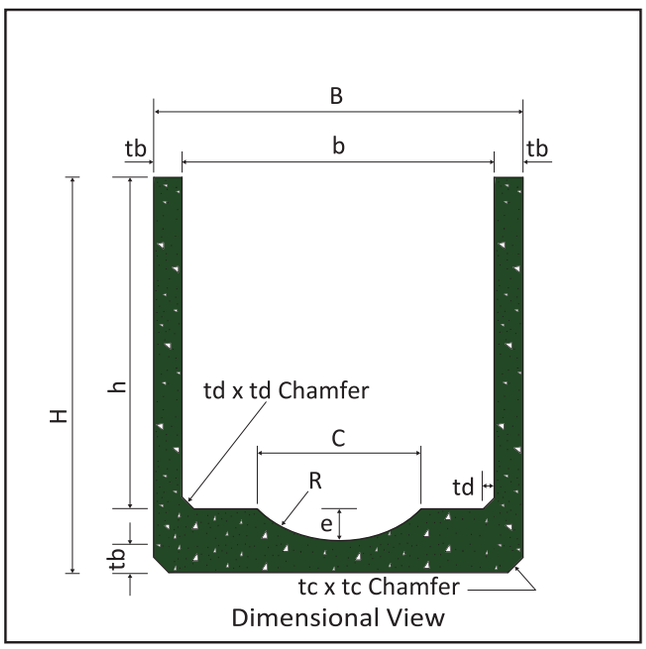
CINLE
CONCRETE PRODUCTS INDUSTRIES SDN. BHD. (216631-X)

Standard Size CINLE R.C. U-Shape Drains
(With & Without Dry Weather Flow)

Standard Size CINLE R.C. U-Shape Drains Without Dry Weather Flow



Standard Size CINLE R.C. U-Shape Drains Complete With Dry Weather Flow



BS 8110 : 1985
MS 1195 : 1991

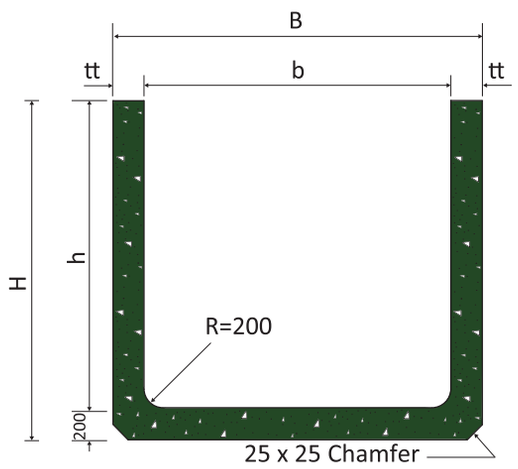
Standard Length = 1.00m

Standard Size CINLE R.C. U-Shape Drains Dimensions & Properties

										U-Drain without DWF		U-Drain with DWF	
Nominal Size mm X mm	B mm	b mm	h mm	tb mm	td mm	e mm	C mm	R mm	tc mm	H mm	Weight tonnes	H mm	Weight tonnes
600 x 300	740	600	300	70	70	70	300	195	95	370	0.25	440	0.32
x 450	740	600	450	70	70	70	300	195	95	520	0.30	590	0.37
x 600	740	600	600	70	70	70	300	195	95	670	0.35	740	0.42
750 x 300	910	750	300	80	80	80	450	356	105	380	0.32	460	0.41
x 450	910	750	450	80	80	80	450	356	105	530	0.38	610	0.47
x 600	910	750	600	80	80	80	450	356	105	680	0.44	760	0.53
x 750	910	750	750	80	80	80	450	356	105	830	0.50	910	0.59
900 x 300	1060	900	300	80	80	80	450	356	105	380	0.35	460	0.47
x 450	1060	900	450	80	80	80	450	356	105	530	0.41	610	0.53
x 600	1060	900	600	80	80	80	450	356	105	680	0.47	760	0.59
x 750	1060	900	750	80	80	80	450	356	105	830	0.52	910	0.65
x 900	1060	900	900	80	80	80	450	356	105	980	0.58	1060	0.71
1000 x 600	1200	1000	600	100	95	80	450	356	105	700	0.60	780	0.71
x 1000	1200	1000	1000	100	95	80	450	356	105	1100	0.79	1180	0.90
1200 x 300	1400	1200	300	100	95	225	1075	755	245	400	0.48	620	0.69
x 450	1400	1200	450	100	95	225	1075	755	245	550	0.55	770	0.76
x 600	1400	1200	600	100	95	225	1075	755	245	700	0.62	920	0.83
x 750	1400	1200	750	100	95	225	1075	755	245	850	0.69	1070	0.90
x 900	1400	1200	900	100	95	225	1075	755	245	1000	0.76	1220	0.97
x 1050	1400	1200	1050	100	95	225	1075	755	245	1150	0.83	1370	1.04
x 1200	1400	1200	1200	100	95	225	1075	755	245	1300	0.90	1520	1.12
1500 x 600	1700	1500	600	100	100	225	1075	755	250	700	0.75	925	1.13
x 900	1700	1500	900	100	100	225	1075	755	250	1000	0.89	1225	1.28
x 1200	1700	1500	1200	100	100	225	1075	755	250	1300	1.04	1525	1.42
x 1500	1700	1500	1500	100	100	225	1075	755	250	1600	1.19	1825	1.57
1800 x 600	2030	1800	600	115	115	225	1075	755	250	715	0.96	940	1.52
x 900	2030	1800	900	115	115	225	1075	755	250	1015	1.13	1240	1.69
x 1200	2030	1800	1200	115	115	225	1075	755	250	1315	1.30	1540	1.86
x 1500	2030	1800	1500	115	115	225	1075	755	250	1615	1.47	1840	2.04
x 1800	2030	1800	1800	115	115	225	1075	755	250	1915	1.64	2140	2.21

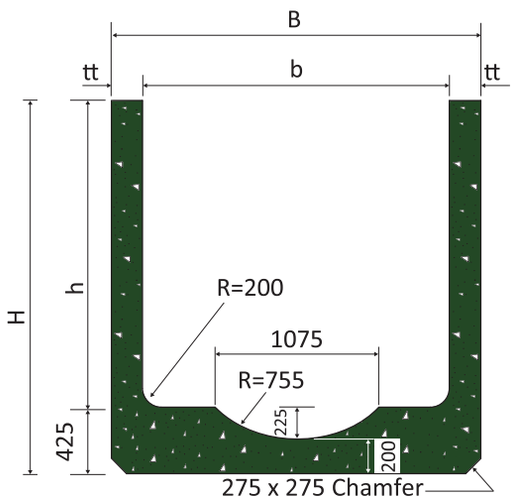
Super Size CINLE R.C. U-Shape Drains
(With & Without Dry Weather Flow)

Super Size CINLE R.C. U-Shape Drains Without Dry Weather Flow



Dimensional View

Super Size CINLE R.C. U-Shape Drains Complete With Dry Weather Flow



Dimensional View

BS 8110 : 1985
MS 1195 : 1991

Standard Length = 1.00m

Super Size CINLE R.C. U-Shape Drains Dimensions & Properties

					U-Drain without DWF		U-Drain with DWF	
Nominal Size mm X mm	B mm	b mm	h mm	tt mm	H mm	Weight tonnes	H mm	Weight tonnes
2100 x 1200	2500	2100	1200	200	1400	2.08	1625	2.86
x 1500	2500	2100	1500	200	1700	2.29	1925	3.08
x 1800	2500	2100	1800	200	2000	2.49	2225	3.27
x 2100	2500	2100	2100	200	2300	2.67	2525	3.46
2400 x 1200	2800	2400	1200	200	1400	2.21	1625	3.16
x 1500	2800	2400	1500	200	1700	2.42	1925	3.37
x 1800	2800	2400	1800	200	2000	2.62	2225	3.57
x 2100	2800	2400	2100	200	2300	2.80	2525	3.75
x 2400	2800	2400	2400	200	2600	2.97	2825	3.92
2700 x 1500	3100	2700	1500	200	1700	2.55	1925	3.67
x 1800	3100	2700	1800	200	2000	2.75	2225	3.87
x 2100	3100	2700	2100	200	2300	2.93	2525	4.05
x 2400	3100	2700	2400	200	2600	3.11	2825	4.22
x 2700	3100	2700	2700	200	2900	3.26	3125	4.38
3000 x 1500	3400	3000	1500	200	1700	2.69	1925	3.97
x 1800	3400	3000	1800	200	2000	2.88	2225	4.17
x 2100	3400	3000	2100	200	2300	3.07	2525	4.35
x 2400	3400	3000	2400	200	2600	3.24	2825	4.52
x 2700	3400	3000	2700	200	2900	3.39	3125	4.68
x 3000	3400	3000	3000	200	3200	3.55	3425	4.83
3300 x 1500	3700	3300	1500	200	1700	2.82	1925	4.27
x 1800	3700	3300	1800	200	2000	3.02	2225	4.46
x 2100	3700	3300	2100	200	2300	3.20	2525	4.65
x 2400	3700	3300	2400	200	2600	3.37	2825	4.82
x 2700	3700	3300	2700	200	2900	3.53	3125	4.97
x 3000	3700	3300	3000	200	3200	3.68	3425	5.13
3650 x 1800	4050	3650	1800	200	2000	3.15	2225	4.76
x 2100	4050	3650	2100	200	2300	3.33	2525	4.96
x 2400	4050	3650	2400	200	2600	3.50	2825	5.11
x 2700	4050	3650	2700	200	2900	3.66	3125	5.27
x 3000	4050	3650	3000	200	3200	3.81	3425	5.42

Due to constantly improved products, specifications may change without prior notice.
Special types of CINLE R.C. U-SHAPE DRAINS are also available upon request.

CINLE R.C. U-SHAPE DRAINS

CINLE R.C. U-Shape Drains are available in both Standard Sizes (for nominal widths between 600mm to 1800mm) and Super Sizes (for nominal widths in the range of 2100mm to 3650mm).

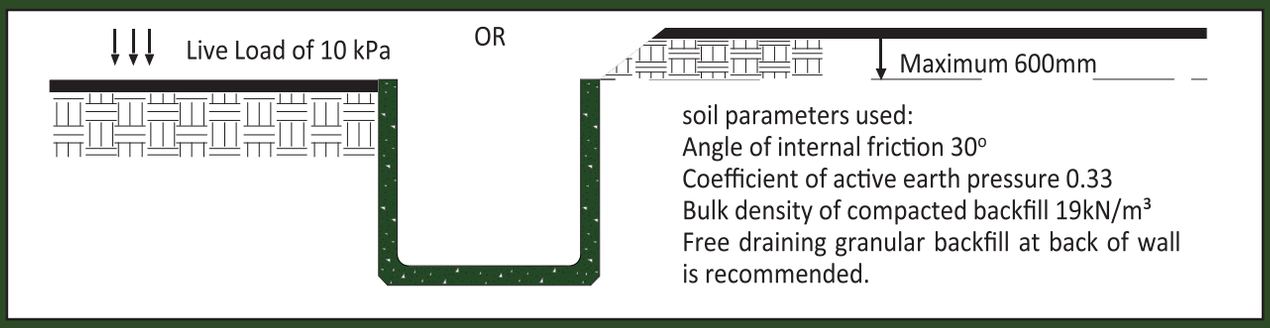
CINLE R.C. U-Shape Drains are available both with and without Dry Weather Flow (DWF) channels.

DESIGN AND SPECIFICATIONS :-

1. **CINLE R.C. U-Shape Drains** are designed to the requirement of BS 8110: 1985 / MS 1195: 1991 with the following concrete cover to reinforcement :
   a) Standard size CINLE R.C. U-Shape Drains 25mm cover
   b) Super size CINLE R.C. U-Shape Drains 30mm cover

2. **CINLE R.C. U-Shape Drains** are made from high strength concrete with a 28 day characteristic strength of 40MPa.

3. **CINLE R.C. U-Shape Drains** are designed for the standard load conditions shown below:



4. For other loading conditions or U-Drain size not shown in the tables here, please contact our Technical Marketing Department for a special design.

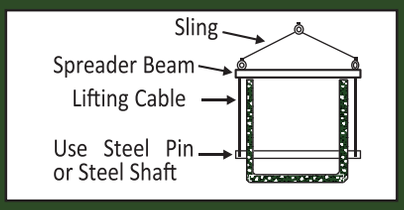
5. 50mm diameter weepholes are provided for drainage of the retained soil which, when combined with the butt jointed units, prevent the build up of hydrostatic pressures. As such, the design does not take into consideration hydrostatic pressures.

JOINTING

CINLE R.C. U-Shape Drains are supplied with plain butt joints standard lengths of 1 meter. Where necessary, cement mortar is normally used to fill the gap between U-Drain Units.

HANDLING

The weepholes provided in the **CINLE R.C. U-Shape Drain** units double up as lifting holes for handling. A spreader beam should be used when slinging the units to avoid crack in the legs. (See figure)



LAYING

For most installations, **CINLE R.C. U-Shape Drains** may be laid on sand bedding. However, in bad ground, it may be necessary to excavate deeper and place a layer of hardcore before placing the sand bedding. Sand bedding should be compacted by tamping or watering and screed off to the required level. A special timber screed should be used to check the bedding before the next unit is being placed in position to ensure the grade of the invert is maintained.

USES

The **CINLE R.C. U-Shape Drains** are designed as a way for fast and clean construction of open flow channel / waterways. These easy to handle and install drain units are manufactured under stringent quality control manufacturing process.

CINLE
CONCRETE PRODUCTS INDUSTRIES SDN. BHD. (216631-X)

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