

ROCLA

OUR DIFFERENCE IS CONCRETE

Product Catalogue



Roodepoort Pipe's manufacturing and storage facility.



ROCLA

PRODUCT CATALOGUE

Rocla (Pty) Ltd is Southern Africa's leading manufacturer of precast concrete products for infrastructure, including pipes, culverts, manholes, poles and various other related products.

In this catalogue, we list the products currently manufactured within an extensive network of factories throughout South Africa, Namibia and Botswana. We also illustrate a portion of the special products we are able to design and

manufacture at customer request. This is made possible through the technical expertise and quality controls we have in place after 100 years of experience in the Precast Concrete field.

For any comments you may have concerning this catalogue, or for any further information, please refer to the contact details on the back cover.

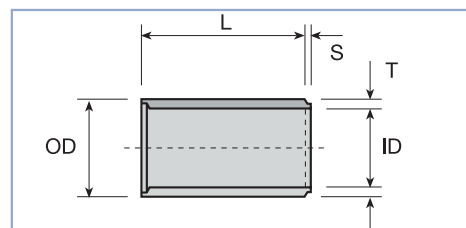
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STORMWATER INTERLOCKING JOINT (IJ) PIPES

Notes:

1. Manufactured to SANS 677 (concrete non-pressure pipes).
2. Pipe class greater than 1000 can be supplied. Contact Rocla for enquiries.
3. Pipe wall thickness may vary between factories.
4. Some of the larger diameter pipes are not available at all Rocla factories.
Please enquire before placing an order.

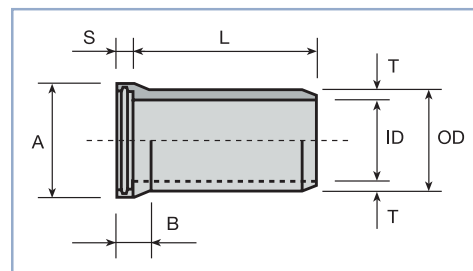


Pipe Class	Nominal diameter (ND) (mm)	Inside diameter (ID) (mm)	Outside diameter (OD) (mm)	Wall thickness (T) (mm)	Nominal length (L) (mm)	Inside socket (S) (mm)	Approximate pipe mass (kg)
50D	300	292	362	35	2440	16	226
	375	369	445	38	2440	16	306
	450	445	533	44	2440	20	426
	525	534	616	41	2440	20	466
	600	611	699	44	2440	15	570
	675	685	787	51	2440	17	742
	750	762	870	54	2440	18	871
	825	830	946	58	2440	18	1019
	900	903	1029	63	2440	18	1204
	1050	1034	1194	80	2440	22	1763
	1200	1181	1359	89	2440	22	2235
	1350	1328	1524	98	2440	25	2764
	1500	1461	1689	114	2440	25	3551
	1650	1608	1854	123	2440	25	4211
75D	1800	1755	2019	132	2440	30	4926
	1950	1898	2184	143	2440	30	5772
	300	292	362	35	2440	16	226
	375	369	445	38	2440	16	306
	450	445	533	44	2440	20	426
	525	514	616	51	2440	20	570
	600	585	699	57	2440	15	724
	675	647	787	70	2440	17	993
	750	718	870	76	2440	18	1193
	825	788	946	79	2440	18	1355
	900	853	1029	88	2440	18	1638
	1050	986	1194	104	2440	22	2242
	1200	1151	1359	104	2440	22	2581
	1350	1292	1524	116	2440	25	3230
100D	1500	1419	1689	135	2440	25	4149
	1650	1566	1854	144	2440	25	4870
	1800	1707	2019	156	2440	30	5748
	1950	1846	2184	169	2440	30	6735
	300	292	362	35	2440	16	226
	375	369	445	38	2440	16	306
	450	445	533	44	2440	20	426
	525	514	616	51	2440	20	570
	600	585	699	57	2440	15	724
	675	647	787	70	2440	17	993
	750	718	870	76	2440	18	1193
	825	788	946	79	2440	18	1355
	900	853	1029	88	2440	18	1638
	1050	986	1194	104	2440	22	2242
	1200	1127	1359	116	2440	22	2852
	1350	1262	1524	131	2440	25	3609
	1500	1383	1689	153	2440	25	4648
	1650	1524	1854	165	2440	25	5512
	1800	1665	2019	177	2440	30	6448
	1950	1800	2184	192	2440	30	7564

STORMWATER SPIGOT & SOCKET JOINT (R) PIPES

Notes:

1. Manufactured to SANS 677 (concrete non-pressure pipes).
2. The joint uses the rolling principal and no lubrication is required.
3. Pipe class greater than 1000 can be supplied. Contact Rocla for enquiries.
4. Pipe wall thickness may vary between factories.
5. RJ Pipes may also be used for sewerage applications.
Refer to Rocla Sewerage Catalogue for details.
6. For satisfactory performance the allowable joint deflection given below should not be exceeded.



Nominal diameters (mm)	300-375	450-600	675-900	1050-1200	1350-1800
Maximum deflection (°)	2	1,5	1	0,75	0,5

Pipe Class	Nominal diameter (ND) (mm)	Inside diameter (ID) (mm)	Outside diameter (OD) (mm)	Wall thickness (T) (mm)	Nominal length (L) (mm)	Socket Outside diameter (A) (mm)	Socket Outside length (B) (mm)	Socket slip (S) (mm)	Approximate pipe mass (kg)
50D	300	298	368	35	2440	464	225	114	258
	375	369	445	38	2440	540	235	127	340
	450	445	533	44	2440	641	260	127	476
	525	534	616	41	2440	730	265	121	527
	600	611	699	44	2440	825	300	139	658
	675	685	787	51	2440	920	315	139	849
	750	762	870	54	2440	1016	330	139	1007
	825	830	946	58	2440	1086	330	139	1159
	900	913	1041	64	2440	1194	360	139	1415
	1050	1034	1194	80	2440	1353	390	162	1998
	1200	1187	1365	89	2440	1543	425	168	2568
	1350	1328	1524	98	2440	1708	445	175	3151
	1500	1461	1689	114	2440	1886	490	190	4059
75D	1650	1640	1878	119	2440	2088	510	190	4758
	1800	1755	2019	132	2440	2250	525	190	5675
	300	298	368	35	2440	464	225	114	258
	375	369	445	38	2440	540	235	127	340
	450	445	533	44	2440	641	260	127	476
	525	514	616	51	2440	730	265	121	631
	600	585	699	57	2440	825	300	139	811
	675	659	787	64	2440	920	315	139	1022
	750	730	870	70	2440	1016	330	139	1243
	825	788	946	79	2440	1086	330	139	1495
	900	869	1041	86	2440	1194	360	139	1803
	1050	986	1194	104	2440	1353	390	162	2477
	1200	1157	1365	104	2440	1543	425	168	2916
100D	1350	1292	1524	116	2440	1708	445	175	3617
	1500	1419	1689	135	2440	1886	490	190	4657
	1650	1600	1878	139	2440	2088	510	190	5399
	1800	1707	2019	156	2440	2250	525	190	6496
	300	298	368	35	2440	464	225	114	258
	375	369	445	38	2440	540	235	127	340
	450	445	533	44	2440	641	260	127	476
	525	514	616	51	2440	730	265	121	631
	600	585	699	57	2440	825	300	139	811
	675	659	787	64	2440	920	315	139	1022
	750	730	870	70	2440	1016	330	139	1243
	825	788	946	79	2440	1086	330	139	1495
	900	869	1041	86	2440	1194	360	139	1803
	1050	986	1194	104	2440	1353	390	162	2477
	1200	1127	1365	119	2440	1543	425	168	3255
	1350	1262	1524	131	2440	1708	445	175	3996
	1500	1383	1689	153	2440	1886	490	190	5155
	1650	1584	1878	165	2440	2088	510	190	6208
	1800	1665	2019	177	2440	2250	525	190	7197

ROCLA SEWERAGE PRODUCTS

ROCLA OFFERS A RANGE OF SEWERAGE INFRASTRUCTURE SUCH AS PIPES, MANHOLES AND RELATED COMPONENTS.

PIPES:

Rocla offers the various types of pipes for sewerage applications:

- Pipes with a dolomitic aggregate.
- Pipes with a sacrificial layer.
- Pipes with HDPE lining.
- Pipes with Xypex BIO SAN C500.
- Rocla jacking pipes may also be used for sewerage application. Contact Rocla for details.

Manholes:

Rocla manufactures various manhole components for sewerage applications:

- Manhole components with dolomitic aggregates.
- HDPE lined manhole components
- Manhole components with Xypex BIO-SAN C500.

For more information refer to our Sewerage Catalogue.



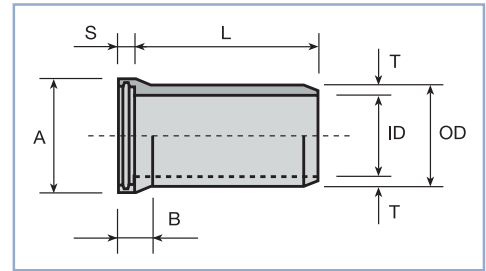
PRESSURE PIPES

SPIGOT & SOCKET (R) PIPES

Notes:

1. Manufactured to SANS 676 (concrete pressure pipes).
2. The joint uses the rolling principal and no lubrication is required.
3. Pipe wall thickness may vary between factories.
4. For satisfactory performance the allowable joint deflection given below should not be exceeded:

Nominal diameters (mm)	300-375	450-600	675-900	1050-1200	1350-1800
Maximum deflection (°)	2	1,5	1	0,75	0,5



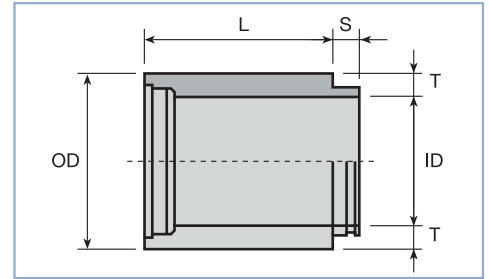
Pipe Class	Nominal diameter (ND) (mm)	Inside diameter (ID) (mm)	Outside diameter (OD) (mm)	Wall thickness (T) (mm)	Nominal length (L) (mm)	Socket Outside diameter (A) (mm)	Socket Outside length (B) (mm)	Socket slip (S) (mm)	Approximate pipe mass (kg)
T2	300	284	368	42	2440	464	225	114	298
	375	361	445	42	2440	540	235	127	369
	450	437	533	48	2440	641	260	127	511
	525	514	616	51	2440	730	265	121	631
	600	591	699	54	2440	825	300	139	776
	675	673	787	57	2440	920	315	139	930
	750	750	870	60	2440	1016	330	139	1097
	825	818	946	64	2440	1086	330	139	1257
	900	913	1041	64	2440	1194	360	139	1415
	1050	1066	1194	64	2440	1353	390	162	1666
	1200	1219	1365	73	2440	1543	425	168	2188
	1350	1352	1524	86	2440	1708	445	175	2833
T4	1500	1503	1689	93	2440	1886	490	190	3443
	300	284	368	42	2440	464	225	114	298
	375	361	445	42	2440	540	235	127	369
	450	437	533	48	2440	641	260	127	511
	525	514	616	51	2440	730	265	121	631
	600	591	699	54	2440	825	300	139	776
	675	673	787	57	2440	920	315	139	930
	750	750	870	60	2440	1016	330	139	1097
	825	818	946	64	2440	1086	330	139	1257
	900	901	1041	70	2440	1194	360	139	1523
	1050	1028	1194	83	2440	1353	390	162	2059
	1200	1181	1365	92	2440	1543	425	168	2639
T6	300	284	368	42	2440	464	225	114	298
	375	361	445	42	2440	540	235	127	369
	450	431	533	51	2440	641	260	127	537
	525	496	616	60	2440	730	265	121	721
	600	567	699	66	2440	825	300	139	914
	675	641	787	73	2440	920	315	139	1138
	750	706	870	82	2440	1016	330	139	1414
	825	770	946	88	2440	1086	330	139	1633
	900	845	1041	98	2440	1194	360	139	2006
T8	300	284	368	42	2440	464	225	114	298
	375	343	445	51	2440	540	235	127	369
	450	413	533	60	2440	641	260	127	537
	525	472	616	72	2440	730	265	121	721
	600	531	699	84	2440	825	300	139	914



JACKING PIPES IN-THE-WALL JOINT

Notes:

1. Manufactured to SANS 677 (concrete non-pressure pipes).
2. The joint uses the sliding rubber ring principal and a lubricant is required.
3. The allowable joint deflection is 0.5° for all pipe diameters.



Pipe Class	Nominal diameter (ND) (mm)	Outside diameter (OD) (mm)	Inside diameter (ID) (mm)	Wall thickness (T) (mm)	Nominal length (L) (mm)	Socket (S) (mm)	Approximate pipe mass (kg)
100D	900	1090	900	95	2440	120	1869
	1117	1371	1117	127	2440	133	3125
	1473	1778	1473	152	1220	154	2451
	1678	2032	1678	177	1220	164	3247
	1800	2160	1800	180	1220	165	3524
	2000	2400	2000	200	1220	170	4351
	2250	2700	2250	225	1220	175	5507
	2340	2800	2340	230	1220	178	5845
	2500	3000	2500	250	1500	178	8359

JACKING PIPES STEEL BAND JOINT

Notes:

1. Manufactured to SANS 677 (concrete non-pressure pipes).
2. The joint uses the sliding rubber ring principal and a lubricant is required.
3. The allowable joint deflection is 0.5° for all pipe diameters.



Pipe Class	Nominal diameter (ND) (mm)	Outside diameter (OD) (mm)	Inside diameter (ID) (mm)	Wall thickness (T) (mm)	Nominal length (L) (mm)	Socket (S) (mm)	Approximate pipe mass (kg)
100D	1000	1220	1000	110	2500	110	2474



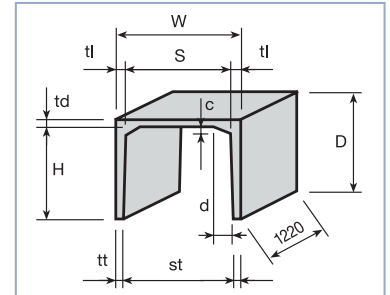
RECTANGULAR PORTALS

ROAD APPLICATION STORMWATER CULVERT - SANS 986

Notes:

1. Manufactured to SANS 986
(Precast reinforced concrete culverts).
2. Culverts to take greater loads than specified in SABS 986 can be manufactured. Please enquire from your nearest Rocla sales office.
3. For lifting hole arrangements see page 9.

Span mm	Class				
	75S	100S	150S	175S	200
450					x
600					x
750				x	
900				x	
1200			x		
1500		x			
1800	x				
2100	x				
2400	x				
3000	x				
3600	x				



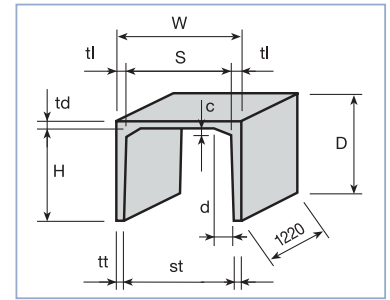
Nominal size			Dimensions							Waterway area (m²)	Approx. mass (kg/unit)
S (mm)	x (mm)	H (mm)	W (mm)	D (mm)	St (mm)	td (mm)	tl (mm)	tt (kg)	c (mm)	d (mm)	
450	300	600	390	470	90	75	65	37	75	0.135	311
	375	600	465	474	90	75	63	37	75	0.170	342
	450	600	540	480	90	75	60	37	75	0.206	370
600	300	760	390	620	90	80	70	50	100	0.178	373
	450	760	540	630	90	80	65	50	100	0.272	436
	600	760	690	640	90	80	60	50	100	0.367	495
750	300	920	390	770	90	85	75	50	100	0.223	427
	450	920	540	780	90	85	70	50	100	0.339	496
	600	920	690	790	90	85	65	50	100	0.457	560
	750	920	840	800	90	85	60	50	100	0.576	619
900	300	1100	400	920	100	100	90	50	100	0.268	541
	450	1100	550	930	100	100	85	50	100	0.407	624
	600	1100	700	940	100	100	80	50	100	0.547	702
	750	1100	850	950	100	100	75	50	100	0.689	775
	900	1100	1000	960	100	100	70	50	100	0.832	844
1200	300	1440	420	1220	120	120	110	50	100	0.358	777
	450	1440	570	1230	120	120	105	50	100	0.542	878
	600	1440	720	1240	120	120	100	50	100	0.727	975
	750	1440	870	1250	120	120	95	50	100	0.914	1067
	900	1440	1020	1260	120	120	90	50	100	1.102	1155
	1200	1440	1320	1280	120	120	80	50	100	1.483	1315
1500	300	1750	425	1520	125	125	115	75	225	0.436	968
	450	1750	575	1530	125	125	110	75	225	0.665	1075
	600	1750	725	1540	125	125	105	75	225	0.895	1176
	750	1750	875	1550	125	125	100	75	225	1.127	1273
	900	1750	1025	1560	125	125	95	75	225	1.360	1365
	1200	1750	1325	1580	125	125	85	75	225	1.831	1535
1800	1500	1750	1625	1600	125	125	75	75	225	2.308	1686
	600	2100	750	1840	150	150	130	100	300	1.062	1615
	900	2100	1050	1860	150	150	120	100	300	1.617	1851
	1200	2100	1350	1880	150	150	110	100	300	2.178	2068
	1500	2100	1650	1900	150	150	100	100	300	2.745	2266
	1800	2100	1950	1920	150	150	90	100	300	3.318	2446
2100	600	2400	750	2140	150	150	130	100	300	1.242	1756
	900	2400	1050	2160	150	150	120	100	300	1.887	1992
	1200	2400	1350	2180	150	150	110	100	300	2.538	2210
	1500	2400	1650	2200	150	150	100	100	300	3.195	2408
	1800	2400	1950	2220	150	150	90	100	300	3.858	2587
	2100	2400	2250	2240	150	150	80	100	300	4.527	2748
2400	600	2720	760	2440	160	160	140	100	300	1.422	2031
	900	2720	1060	2460	160	160	130	100	300	2.157	2286
	1200	2720	1360	2480	160	160	120	100	300	2.898	2522
	1500	2720	1660	2500	160	160	110	100	300	3.645	2739
	1800	2720	1960	2520	160	160	100	100	300	4.398	2937
	2100	2720	2260	2540	160	160	90	100	300	5.157	3117
3000	2400	2720	2560	2560	160	160	80	100	300	5.922	3277
	600	3460	790	3040	190	230	210	150	300	1.767	3042
	900	3460	1090	3060	190	230	200	150	300	2.682	3429
	1200	3460	1390	3080	190	230	190	150	300	3.603	3797
	1500	3460	1690	3100	190	230	180	150	300	4.530	4147
	1800	3460	1990	3120	190	230	170	150	300	5.463	4477
3600	2100	3460	2290	3140	190	230	160	150	300	6.402	4789
	2400	3460	2590	3160	190	230	150	150	300	7.347	5081
	3000	3460	3190	3200	190	230	130	150	300	9.255	5610
	600	4060	850	3640	250	230	210	150	300	2.127	4167
	900	4060	1150	3660	250	230	200	150	300	3.222	4555
	1200	4060	1450	3680	250	230	190	150	300	4.323	4923
4000	1500	4060	1750	3700	250	230	180	150	300	5.430	5272
	1800	4060	2050	3720	250	230	170	150	300	6.543	5603
	2100	4060	2350	3740	250	230	160	150	300	7.662	5914
	2400	4060	2650	3760	250	230	150	150	300	8.787	6207
	3000	4060	3250	3800	250	230	130	150	300	11.055	6736
	1500	4500	1750	4100	250	250	200	200	600	5.955	6043
4000	3000	4500	3250	4200	250	250	150	200	600	12.180	7696

Walkway Culvert (1 m unit length)

1500	2000	1850	2225	1590	225	175	130	150	300	3.045	2764
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SATS SAR RECTANGULAR PORTALS

RAIL APPLICATION STORMWATER CULVERT



Notes:

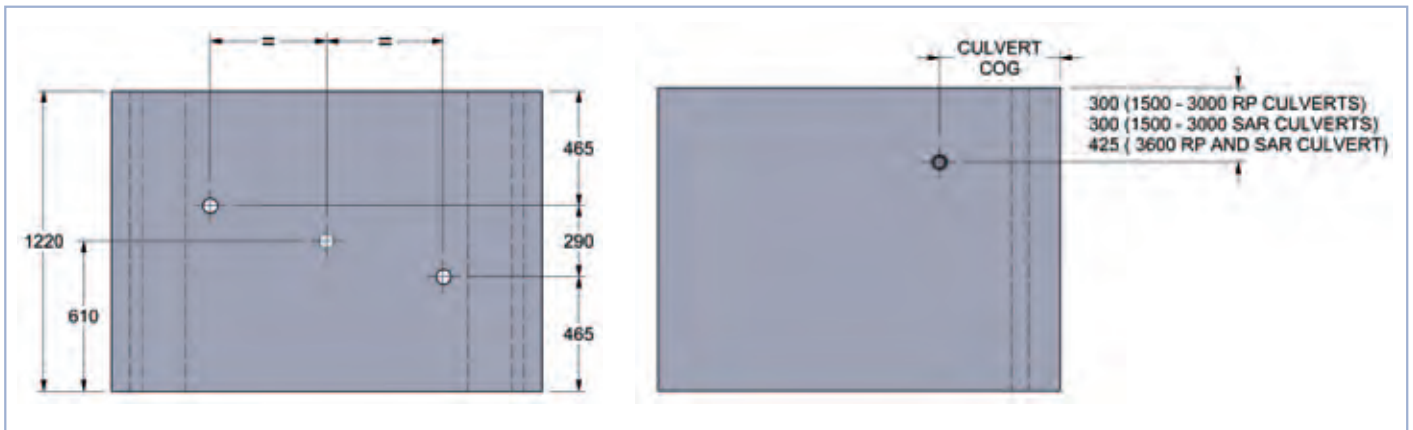
1. Designed to SATS Bridge Code.
2. Bespoke designs for non-standard applications can be done.
Please enquire from your nearest Rocla sales office.
3. For lifting hole arrangements see page 9.

Nominal Size			Dimensions								Waterway area (m ²)	Approx. Mass per unit (kg/unit)
S (mm)	x (mm)	H (mm)	Z (mm)	W (mm)	D (mm)	St (mm)	td (mm)	tl (mm)	tt (kg)	c/r (mm)		
750	450	0 - 5	950	600	780	150	100	85	50	100	0.339	726
	600	0 - 5	950	750	790	150	100	80	50	100	0.457	804
	750	0 - 5	950	900	800	150	100	75	50	100	0.576	877
900	450	0 - 5	1100	580	930	130	100	85	50	100	0.407	728
	600	0 - 5	1100	730	940	130	100	80	50	100	0.547	806
	750	0 - 5	1100	880	950	130	100	75	50	100	0.689	879
1200	900	0 - 5	1100	1030	960	130	100	70	50	100	0.832	947
	450	0 - 5	1440	610	1230	160	120	105	50	100	0.542	1060
	600	0 - 5	1400	760	1240	160	120	100	50	100	0.727	1156
1500	1200	0 - 5	1400	1360	1280	160	120	80	50	100	1.483	1496
	600	0 - 5	1750	755	1540	155	125	105	75	225	0.895	1341
	750	0 - 5	1750	905	1550	155	125	100	75	225	1.127	1438
	900	0 - 5	1750	1055	1560	155	125	95	75	225	1.360	1530
	1000	0 - 5	1860	1175	1566	175	180	147	150		1.523	2084
	1000	5 - 10	1860	1225	1566	225	180	147	150		1.523	2377
	1500	0 - 5	1860	1675	1600	175	180	130	150		2.315	2519
	1500	5 - 10	1860	1725	1600	225	180	130	150		2.315	2811
	1800	600	0 - 5	2100	750	1840	150	150	130	100	300	1.062
900		5 - 10	2100	1070	1860	170	150	120	100	300	1.617	1983
2000	1000	0 - 5	2420	1225	2066	225	210	177	200		2.016	2986
	1000	5 - 10	2420	1275	2066	275	210	177	200		2.016	3367
	1500	0 - 5	2420	1725	2100	225	210	160	200		3.058	3515
	1500	5 - 10	2420	1775	2100	275	210	160	200		3.058	3896
	1800	0 - 5	2420	2025	2120	225	210	150	200		3.691	3808
	1800	5 - 10	2420	2075	2120	275	210	150	200		3.691	4189
	2000	0 - 5	2420	2225	2134	225	210	143	200		4.117	3990
	2000	5 - 10	2420	2275	2134	275	210	143	200		4.117	4371
2500	1500	0 - 5	2960	1725	2600	225	230	180	250		3.798	4117
	1500	5 - 10	2960	1825	2600	325	230	180	250		3.798	5048
	2000	0 - 5	2960	2225	2634	225	230	163	250		5.107	4655
	2000	5 - 10	2960	2325	2634	325	230	163	250		5.107	5587
	2500	0 - 5	2960	2725	2666	225	230	147	250		6.431	5148
	2500	5 - 10	2960	2825	2666	325	230	147	250		6.431	6079
3000	1000	0 - 5	3570	1275	3066	275	285	252	300		2.994	4902
	1000	5 - 10	3570	1375	3066	375	285	252	300		2.994	6026
	1500	0 - 5	3570	1775	3100	275	285	235	300		4.536	5667
	1500	5 - 10	3570	1875	3100	375	285	235	300		4.536	6791
	2000	0 - 5	3570	2275	3134	275	285	218	300		6.095	6378
	2000	5 - 10	3570	2375	3134	375	285	218	300		6.095	7502
	2500	0 - 5	3570	2775	3166	275	285	202	300		7.669	7044
	2500	5 - 10	3570	2875	3166	375	285	202	300		7.669	8168
	3000	0 - 5	3570	3275	3200	275	285	185	300		9.261	7650
	3000	5 - 10	3570	3375	3200	375	285	185	300		9.261	8774
3600	2100	0 - 5	4200	2500	3740	400	300	230	150	300	7.662	8933
	2400	0 - 5	4200	2800	3760	400	300	220	150	300	8.787	9358

PRECAST WINGWALL UNITS

ROCLA MANUFACTURES A RANGE OF STANDARD PRECAST CONCRETE WINGWALL UNITS TO CONFORM TO INTERNATIONAL STANDARDS AND REQUIREMENTS. THESE UNITS MAY BE CUSTOMISED TO ACCOMMODATE MULTIPLE CONDUIT APPLICATIONS FOR BOTH PIPE AND PORTAL CULVERTS. REFER TO THE ROCLA WINGWALL BROCHURE FOR MORE DETAILS.

CULVERT LIFTING HOLES



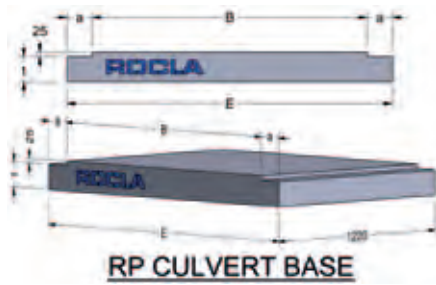
**PLAN & SIDE VIEW
SHOWING LIFTING HOLE ARRANGEMENTS**

Span	Hole arrangement (ø 50mm MIN.)
450 - 750	Single hole in centre in deck
900 - 3600	Two lifting holes in deck
1500 - 3600	Single hole in each leg

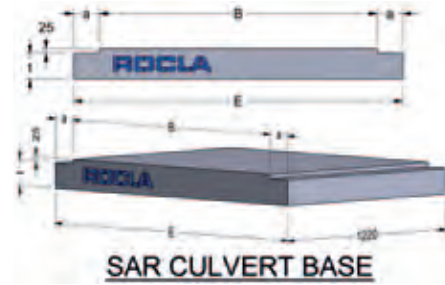


CULVERT BASE SLABS

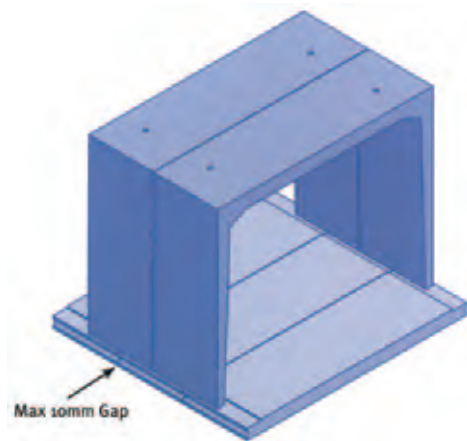
SLABS FOR RECTANGULAR PORTAL CULVERT



SLABS FOR SATS RECTANGULAR PORTAL CULVERT



Rectangular Portal Culvert with precast base.

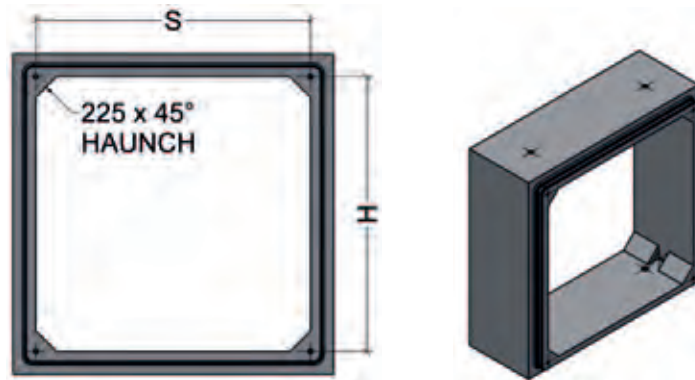


Culvert Span	Dimensions				Approx. Mass
S	E	t	a	B	
(mm)	(mm)	(mm)	(mm)	(mm)	(kg/unit)
450	640	65	95	450	166
600	800	85	95	610	262
750	960	100	100	760	362
900	1150	115	120	910	488
1200	1480	130	135	1210	701
1500	1800	140	140	1520	913
1800	2150	150	165	1820	1158
2100	2470	160	165	2140	1412
2400	2770	170	165	2440	1674
3000	3510	190	245	3020	2337
3600	4150	200	265	3620	2897
4000	4600	200	265	4070	3216

Culvert Span	Fill	Dimensions				Approx. Mass
S	Z	E	t	a	B	
(mm)	(m)	(mm)	(mm)	(mm)	(mm)	(kg/unit)
750	0 - 5	1000	160	120	760	563
900	0 - 5	1150	160	120	910	651
1200	0 - 5	1500	160	140	1220	851
1500	0 - 5	1900	180	185	1530	1197
1500	5 - 10	1900	220	185	1530	1436
1800	0 - 5	2150	200	165	1820	1497
2000	0 - 5	2450	220	200	2050	1858
2000	5 - 10	2450	280	200	2050	2321
2500	0 - 5	3000	250	225	2550	2561
2500	5 - 10	3000	330	225	2550	3317
3000	0 - 5	3600	270	275	3050	3299
3000	5 - 10	3600	370	275	3050	4433

JACKING CULVERTS

IN-THE-WALL JOINT (IWJ)



Class	Span S (mm)	Nominal H (mm)	Wall Thickness T (mm)	Length (mm)	Approx mass (kg)
100S	2000	2000	250	1215	7305
	2500	2000	250	1215	8089
	2500	2500	250	1215	8873
	3000	2500	250	1215	9656
	3000	3000	250	1215	10 440

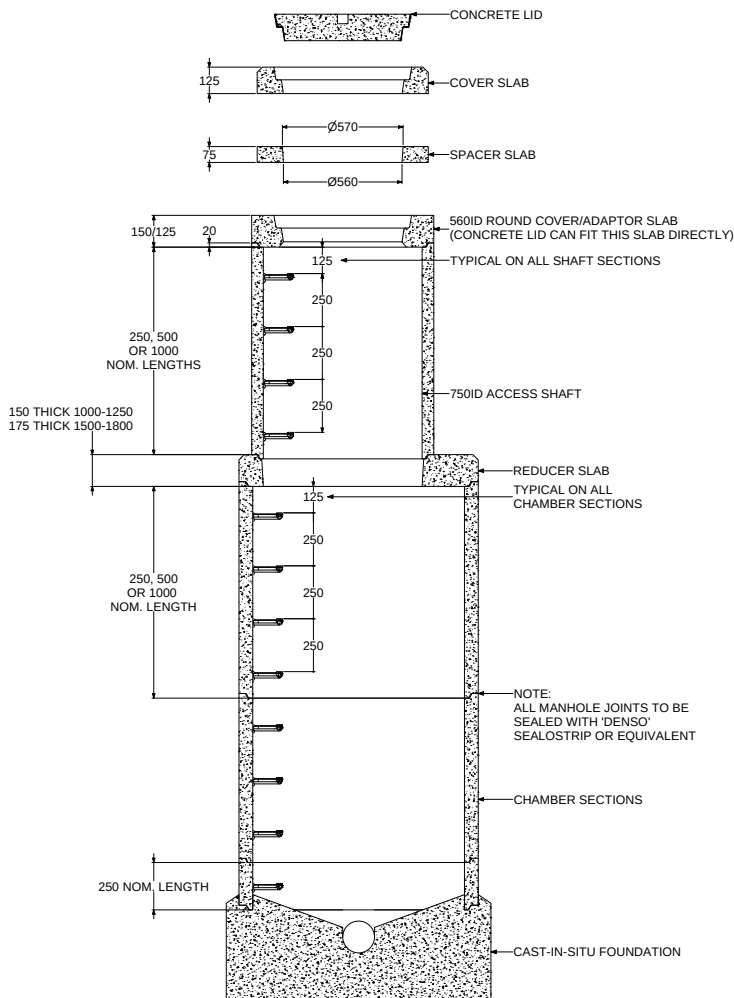
Allowable joint deflection: 0.25°



MANHOLES, CHAMBERS, SHAFT SECTIONS & SLABS - SANS 1294

Note:

1. 1950 Manholes are not made at all Rocla factories, please enquire before placing an order.
2. Manhole Components may be used for sewer applications. Refer to Rocla Sewerage Catalogue for details.



MANHOLE WITH CAST-IN-SITU BASE

Manhole Chambers

Normal Diameter	Inside Diameter	Outside Diameter	Wall Thickness	Nominal Length	Approx Mass	Proof Load
ND	ID	OD	T	L		
mm	mm	mm	mm	mm	kg/unit	kN/m
750	750	860	55	250	90	15
	750	860	55	500	179	15
	750	860	55	1000	359	15
1000	1000	1130	65	250	140	15
	1000	1130	65	500	281	15
	1000	1130	65	1000	561	15
1250	1250	1400	75	250	201	15
	1250	1400	75	500	403	15
	1250	1400	75	1000	805	15
1500	1523	1689	83	250	270	15
	1523	1689	83	500	540	15
	1523	1689	83	1000	1080	15
1800	1829	2019	95	250	370	15
	1829	2019	95	500	741	15
	1829	2019	95	1000	1418	15
1950	1944	2184	120	1000	2008	15

Reducer Slabs

Nominal Diameter	Reduce to	Thickness	Approx Mass
mm	mm	mm	mm
1000	750	150	217
1250	750	150	425
1500	750	175	812
1800	750	175	1246
1950	750	195	1662

Cover Slabs

Nominal Diameter	Reduce to	Thickness	Approx Mass
mm	mm	mm	kg
750	560	150	115
1000	560	150	279
1250	560	150	486
1500	560	175	884
1800	560	175	1380
1950	560	195	1742

Adaptor/Cover Slabs

Nominal Diameter	Opening	Thickness	Approx Mass
mm	mm	mm	kg
750	560	150	115

Spacer Slabs

Nominal Diameter	Opening	Thickness	Approx Mass
mm	mm	mm	kg
750	560	75	58

Concrete Lids

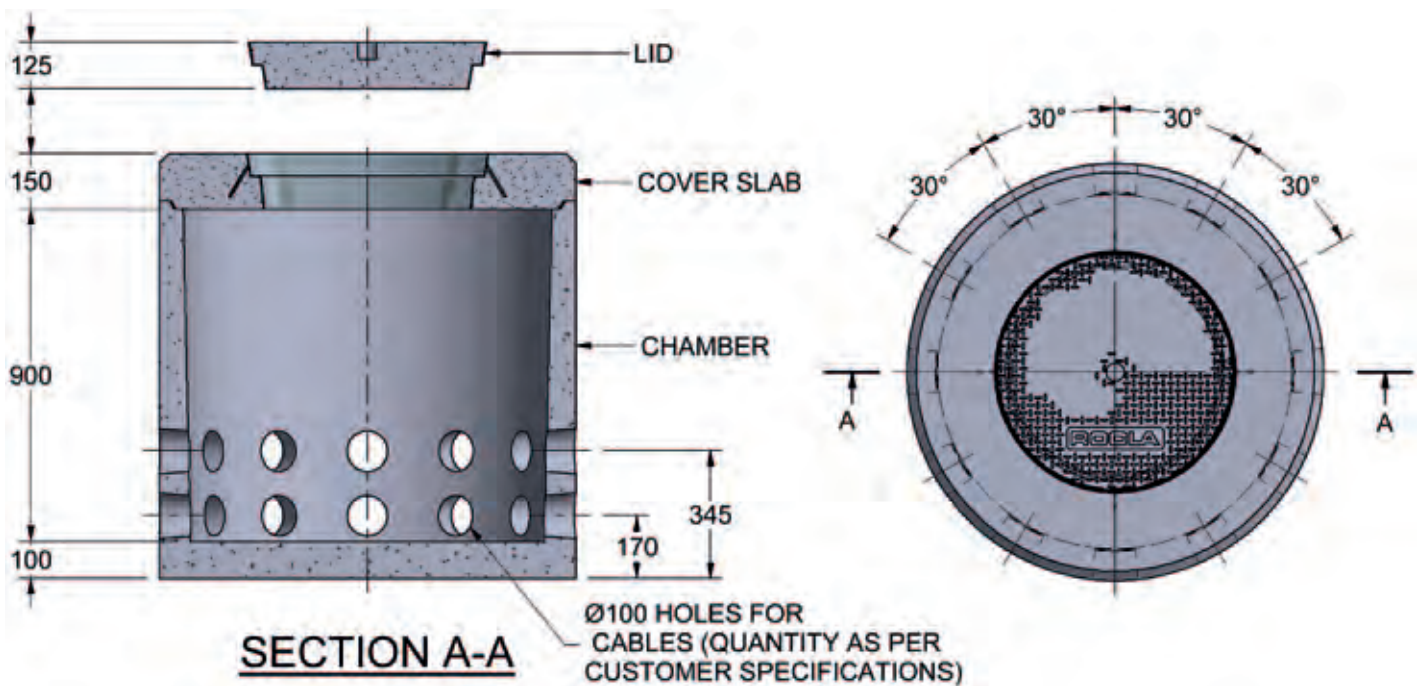
Nominal Diameter	Rating	Approx Mass
mm		kg
560	MD/HD/XHD	91

Section of Manhole Access Shaft and Precast Base Unit.
1000 Diameter, Mass 716kg, 6 outlets.

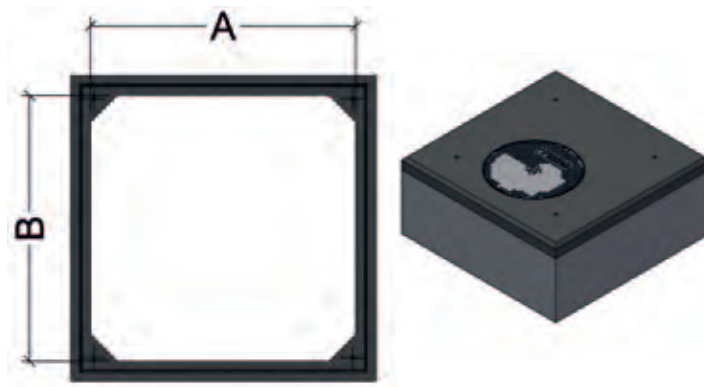




AIRPORT MANHOLE



SQUARE MANHOLE CHAMBERS & COVER SLABS



A (mm)	B (mm)	Wall thickness (mm)	Nominal length (mm)	Haunch (mm x mm)	Approximate chamber mass (kg)	Cover Slab Thickness (mm)	Approximate cover slab mass (kg)
1200	1200	100	500	175 x 175	750	125	507
2000	2000	150	500	200 x 200	1767	125	1532
3000	2500	150	500	200 x 200	2348	125	2776



CONCRETE POLES

Rocla is a pioneer in the manufacturing of concrete poles in South Africa. The use of pre-cast concrete poles has seen a massive growth across a variety of industries due to the many advantages of concrete poles compared to steel and wooden poles, thus offering a long-term cost effective solution.

Rocla poles fall into two broad categories: cast poles which are manufactured in lengths up to 13m and ratings up to 10kN, or higher if required; spun poles which are manufactured in single lengths up to 24m, jointed lengths up to 36m and ratings up to 106kN,

or higher if required. Double spun poles are also manufactured for applications where single spun poles will not suffice.

All Rocla poles conform to SANS 470 “Concrete poles for telephone, power and lighting purposes”. Rocla has an in-house quality assurance team that will ensure that the requirements of the standard are complied with.

Refer to “Rocla Poles” brochure for more details.

Jointed Double Concrete Poles for overhead power lines utilised as an unstayed angle structure.

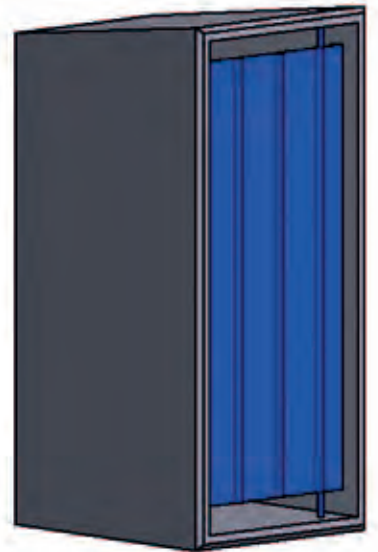
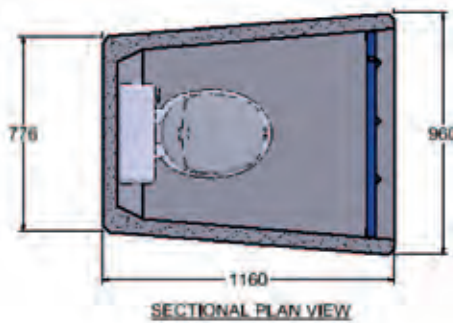
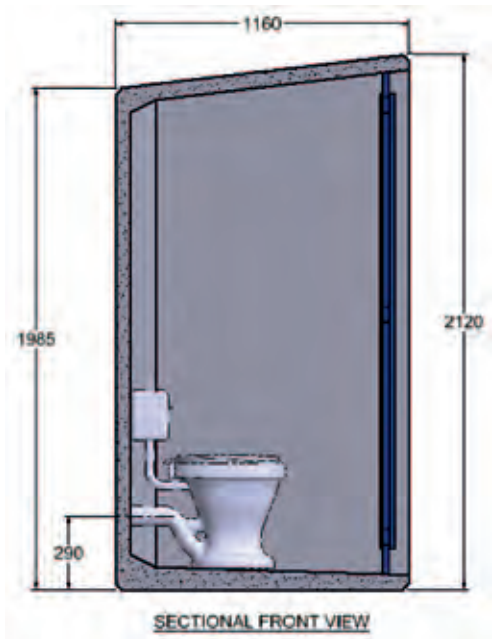


TOILET SYSTEMS

ONE-PIECE TOILET

Notes:

1. One piece, precast concrete toilet structure with water pipe above the cistern.



PANEL TOILET

Notes:

1. Rocla leads the way in providing mass employment in the provision of sanitation. Rocla has left no stone unturned in developing its new Lightweight Concrete Sanitation Unit.

Social Development Features:

- Labour intensive methods used.
- Community based labour.
- Up to 70% woman employed.
- Training and transfer of skills.
- On site training and employment.
- Toilet can be relocated by the household.
- Preferred product by communities.
- Most suited for Expanded Public Works Programme (EPWP).

Technical Features:

- New Patented Concrete Technology.
- All concrete structure.
- All components have convenient "hand grips".
- One piece walls, roof, floor and spreader slab.
- No "styrofoam" or "metal bits and pieces".
- Panels are light and easy to handle.
- Top structure erected in 15 minutes.
- Very low breakage/damage factor.
- Available in VIP or Waterborne format.
- Designed to be in line with all Standards.
- Large interior (900mm Wide x 1100mm Deep x 2000mm High).
- All bolts internal (no studs).
- Easy relocation when required.

- Bolts tap into plastic sleeve, ensuring ease for later relocation.
- Strong textured galvanised steel pivot door.
- "Real door" mechanism that self latches.
- Door can be opened from inside when locked on the outside.
- Integral cross ventilation built in.
- VIP pit adaptable to all conditions.
- All types of pans bolt to the floor.

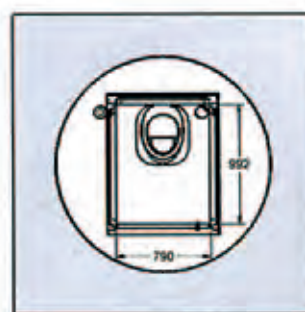
Logistical Facts:

- One manufacturing facility can produce a large quantity of units per month.
- Rocla is will partner with Municipalities/ communities to erect factories for large projects.

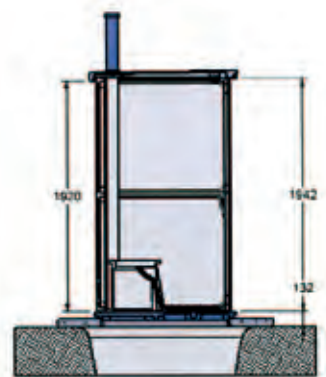


Panel Toilet
Front View

Panel Toilet
Side View

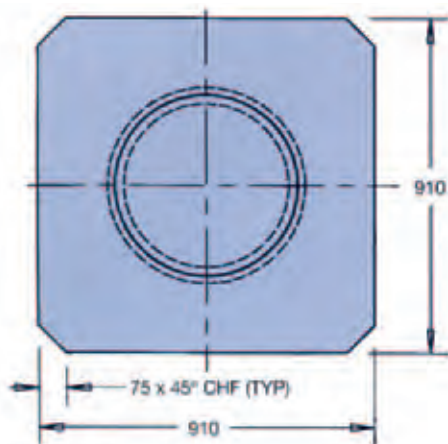


SECTION B-B



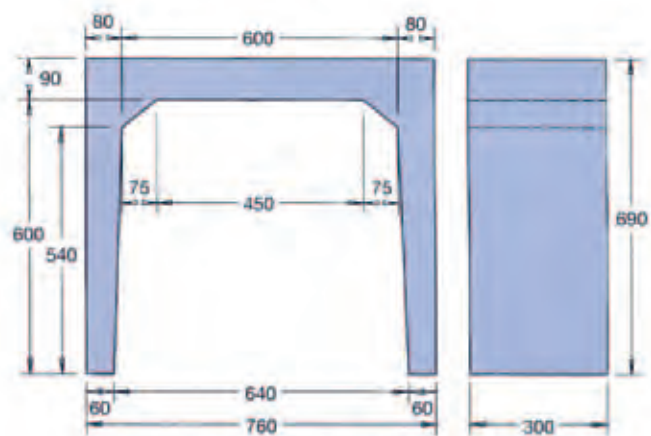
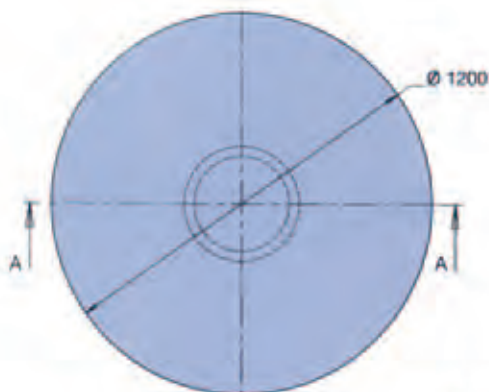
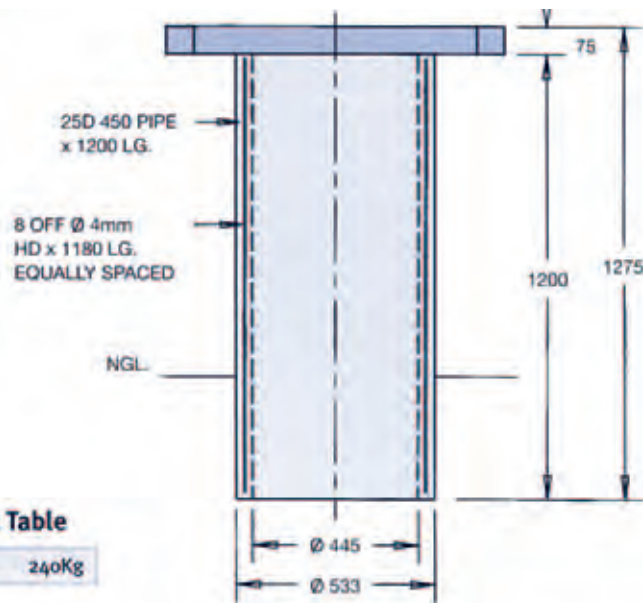
SECTION A-A

ROADSIDE FURNITURE



National Road Picnic Table

APPROX. CONCRETE MASS: 240Kg



Square National Road Picnic Bench

APPROX. CONCRETE MASS: 123Kg

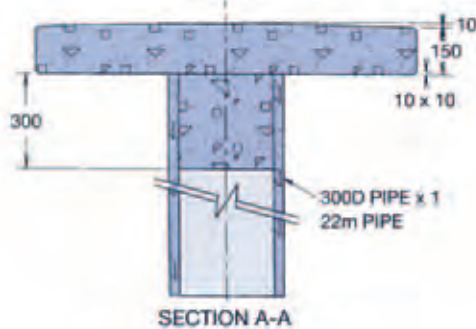
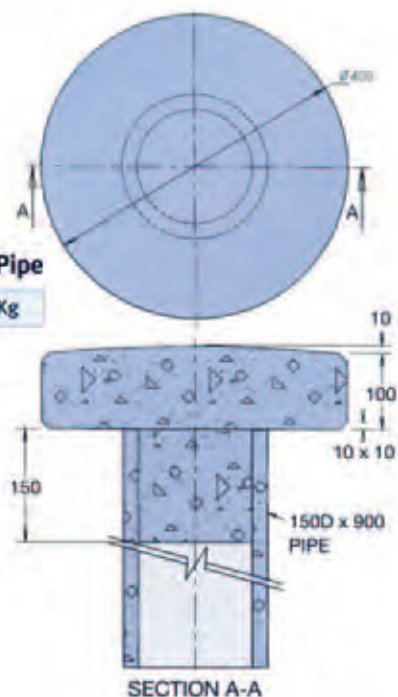
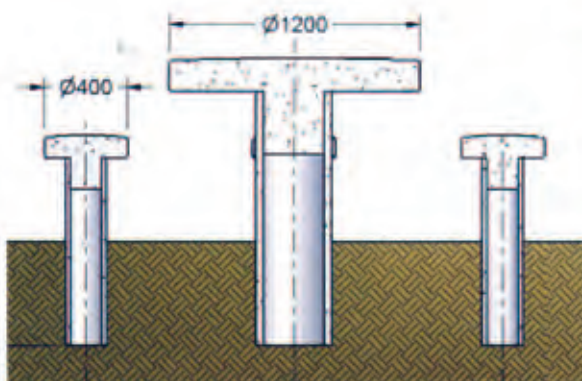


Table Top with Cast In Pipe

APPROX. CONCRETE MASS: 620Kg

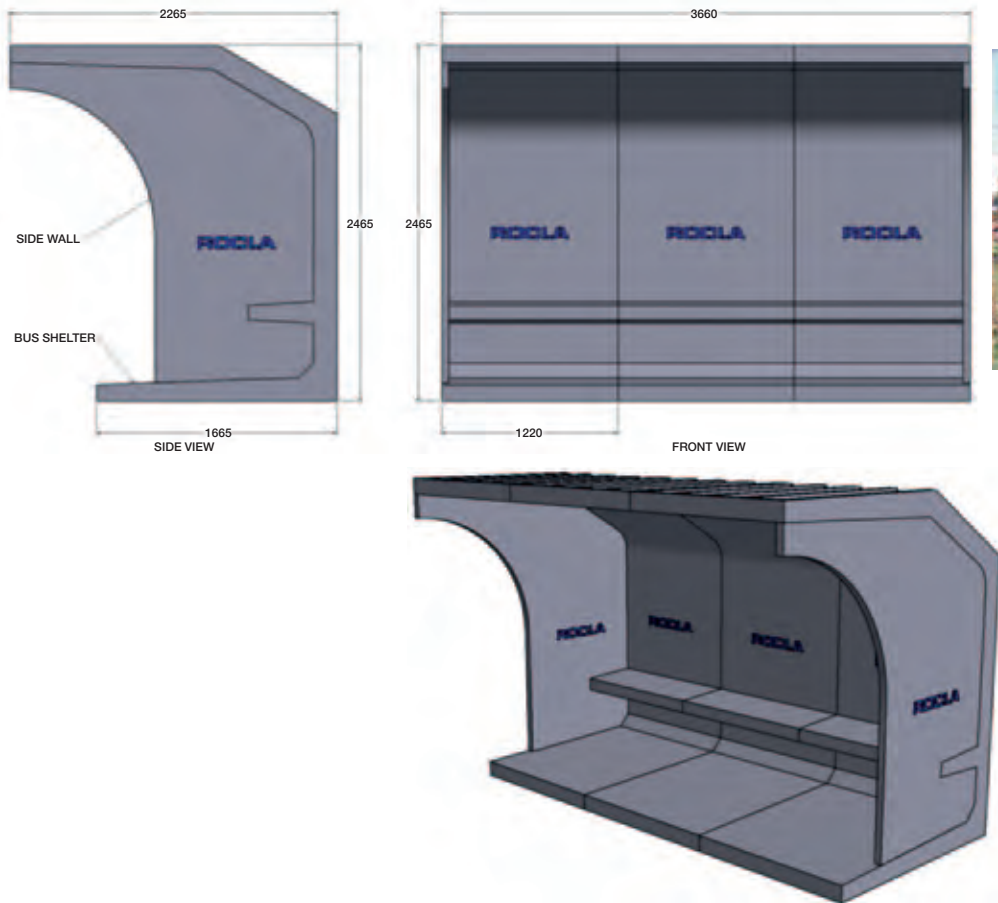
Round Chair Top with Cast In Pipe

APPROX. CONCRETE MASS: 70Kg

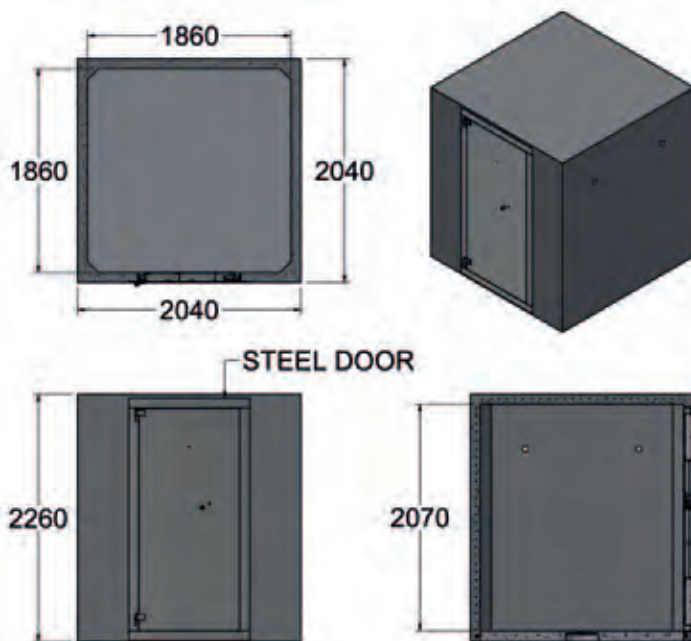


* Available at selected branches.

BUS SHELTERS



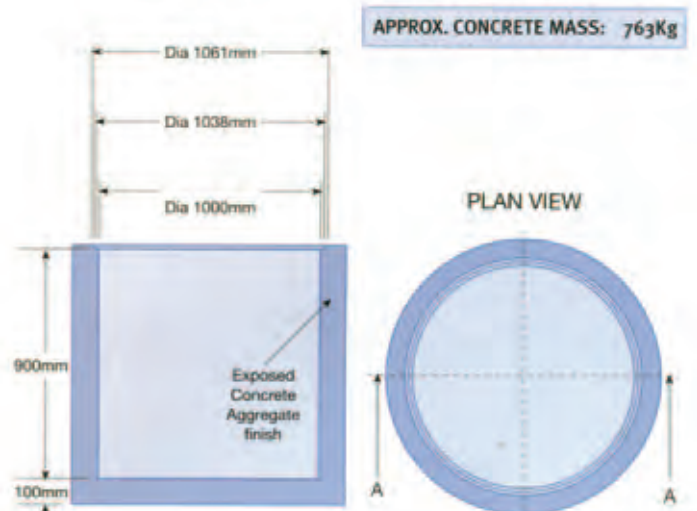
SECURE SIGNAL HOUSES



ROADSIDE DUSTBINS

Notes:

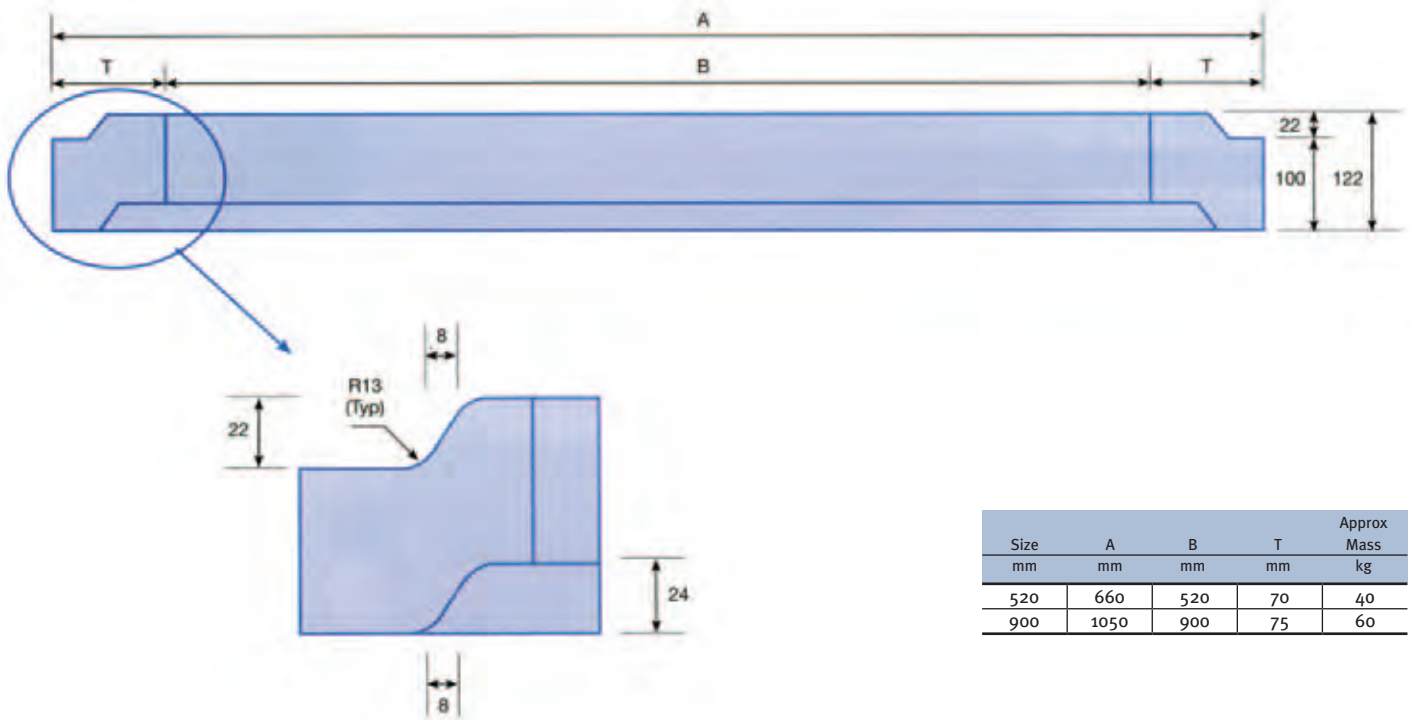
1. The exposed aggregate Roadside Dustbin manufactured by Rocla has become the standard for use along major motorways and in picnic areas, effectively replacing the traditional metal dustbin.
2. Special design features include:
 - a) Aesthetically pleasing
 - b) Resistant to vandalism and fire
 - c) Maintenance free and long life design
 - d) Termite free
 - e) No scrap value
 - f) Large capacity 1000 x 1000mm diameter
3. The Roadside Dustbin tackles the challenges of litter control by offering a quality long term product that is cost effective.



* Available at selected branches.



PENSTOCK RINGS

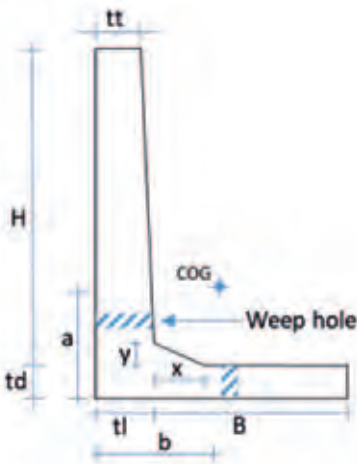


RETAINING WALLS

Notes:

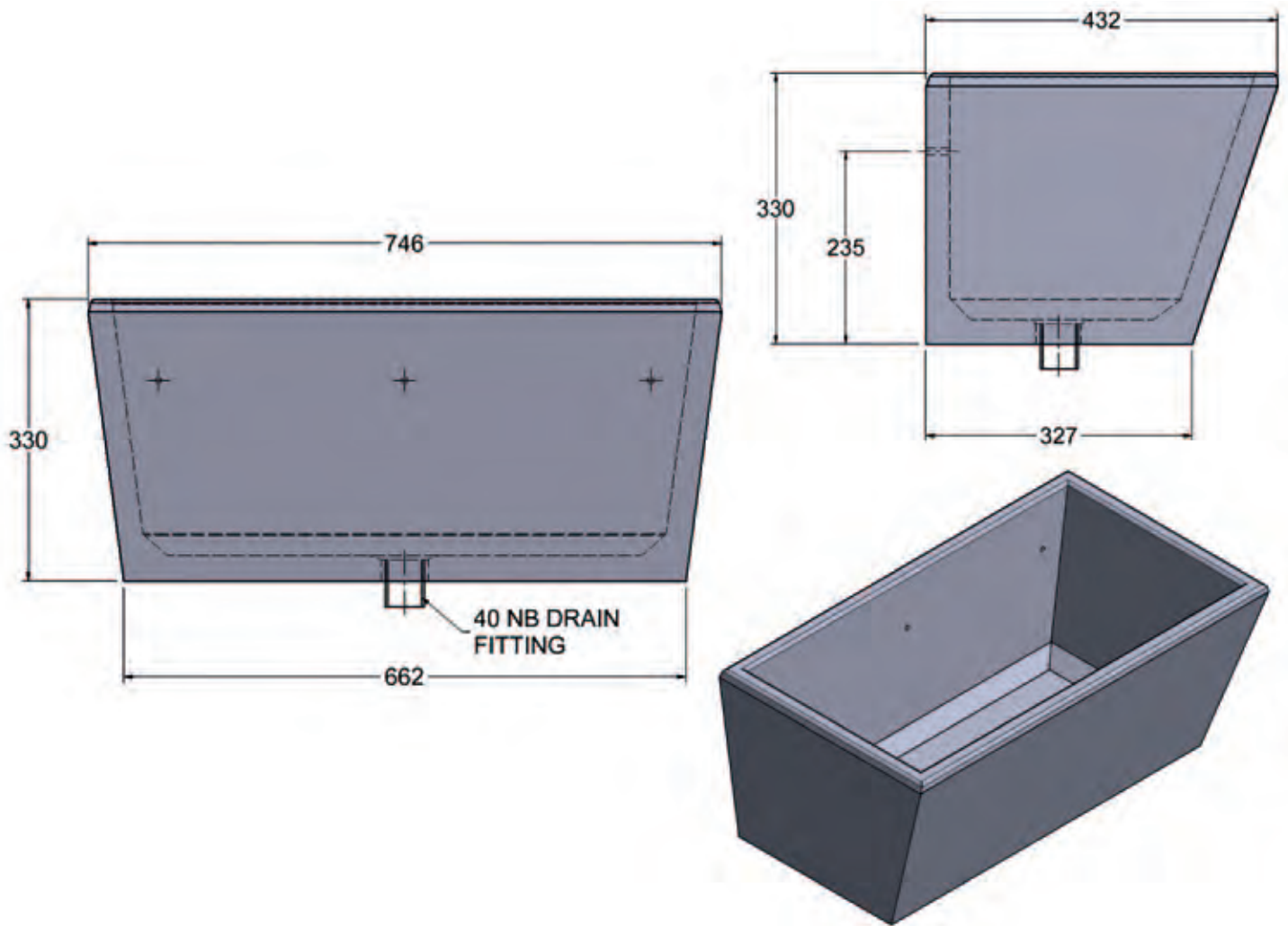
Designed for lateral earth pressure of 8kPa/m and lateral surcharge pressure of 1,5kPa/m.

Stability checks (overturning, sliding, etc.) to be checked by the engineer.

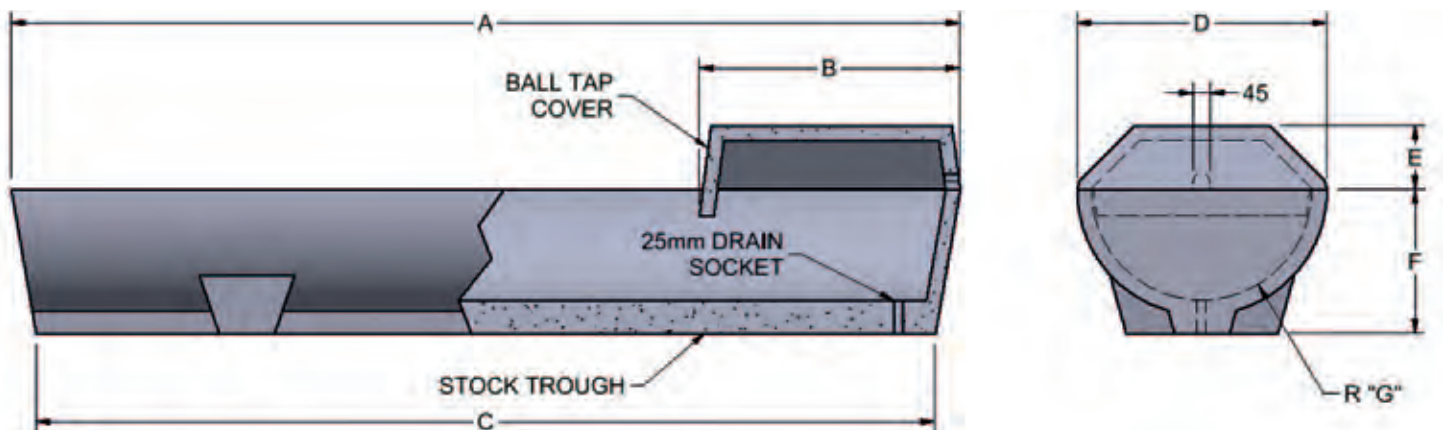


Dimensions								
H (mm)	600	900	1200	1500	1800	2100	2400	3000
B (mm)	300	450	600	750	900	1050	1200	1500
td (mm)	90	100	120	125	150	150	160	190
tl (mm)	80	100	120	125	150	150	160	230
tt (mm)	60	70	80	75	90	80	80	130
x (mm)	100	100	100	225	300	300	300	300
y (mm)	50	50	50	75	100	100	100	150
Length	1220	1220	1220	1220	1220	1220	1220	1220
a (mm)	223	322	417	485	580	642	718	981
b (mm)	110	147	189	224	269	302	341	405
Approx. mass (kg)	248	422	658	843	1223	1374	1639	2805

WASH TROUGHS



STOCK TROUGHS



STOCK TROUGH TYPES				
Mark	Type 1: 300mm diameter	Type 2: 450mm diameter	Type3: 600 diameter	
A	2 580	2 580	2 580	
B	640	710	710	
C	2 445	2 445	2 445	
D	362	533	680	
E	155	155	175	
F	235	315	390	
G	R150	R225	R300	
Approx Mass:	194 kg	292 kg	371 kg	
Volume:	90 Litres	200 Litres	350 Litres	





ROCLA NATIONWIDE

Positioned to serve your needs, Rocla's 11 factories are strategically located throughout South Africa's nine provinces and in Namibia and Botswana.

South Africa and offshore markets are cost effectively supplied by road, rail and sea.

Made by modern processes, supervised in accordance with the ISO 9001 Quality Management System, Rocla's factories make products that proudly carry the CMACS Mark of Approval.

- **Head Office, Roodepoort:** Tel: (011) 670-7600, Fax: (086) 677-1510
- **Blackheath:** Tel: (021) 905-1270, Fax: (021) 905-2913
- **Newcastle:** Tel: (034) 375-7848/9, Fax: (034) 375-6941
- **Nelspruit:** Tel: (087) 354-9202, Fax: (086) 681-1052
- **Polokwane:** Tel: (015) 293-1857/8, Fax: (015) 293-2821
- **Port Elizabeth:** Tel: (041) 486-1462, Fax: (041) 486-2835
- **Roodepoort:** Tel: (011) 670-7600, Fax: (086) 677-1510
- **Virginia:** Tel: (087) 354-8688, Fax: (086) 646-6291
- **Stilfontein Depot:** Tel: (010) 005-1703, Fax: (086) 685-1148
- **Windhoek, Rocla Pipes:** Tel: (002646) 126-3128, Fax: (002646) 121-5149
- **Gaborone, Kwena Rocla:** Tel: (00267) 390-4032, Fax: (00267) 390-7160

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**CMACS
APPROVED**

ROCLA
OUR DIFFERENCE IS CONCRETE

iSG
Infrastructure Specialist Group