

CPPC SA

CONCRETE INFRASTRUCTURE SOLUTIONS

RECTANGULAR PORTAL STORMWATER CULVERTS

Road Application • SANS 986

PRODUCT OVERVIEW

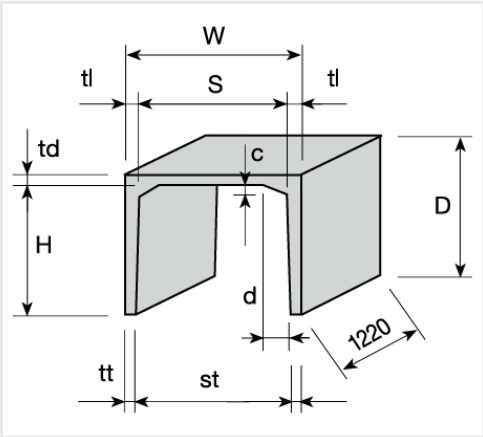
CPPC SA supplies rectangular precast portal culverts for stormwater drainage, road crossings, channels, access crossings and civil infrastructure projects. The portal profile provides a rectangular waterway with a broad range of span and height combinations.

TYPICAL APPLICATIONS

- Road and highway stormwater drainage
- Culvert crossings and drainage channels
- Industrial and commercial developments
- Municipal and civil infrastructure
- Walkways, access crossings and drainage structures

TECHNICAL INFORMATION

The dimensional schedule on the following pages provides the principal product dimensions, unit mass, mass per metre and waterway area for the available combinations supplied in this catalogue.



PRECAST CONCRETE Durable infrastructure solution	MULTIPLE SIZES 450 to 4000 mm spans	RECTANGULAR WATERWAY Efficient stormwater passage	PROJECT SUPPORT Confirm sizing and requirements
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Important: Dimensions and masses shown are based on the schedule supplied for this catalogue. Confirm final product configuration, availability, loading requirements, installation conditions and project-specific engineering requirements with CPPC SA before ordering.

RECTANGULAR PORTAL CULVERTS

450–900 mm SPANS

All dimensional values are in millimetres. Mass values are approximate and shown as supplied.

S × H	W	D	St	td	tl	tt	c	d	kg/m	kg/unit	Area (m ²)
450 x 300	600	390	470	90	75	65	37	75	255	311	0.13
450 x 375	600	465	475	90	75	63	37	75	280	342	0.17
450 x 450	600	540	480	90	75	60	37	75	303	370	0.20
600 x 300	760	390	620	90	80	70	50	100	305	373	0.18
600 x 450	760	540	630	90	80	65	50	100	358	436	0.27
600 x 600	760	690	640	90	80	60	50	100	406	495	0.36
750 x 300	920	390	770	90	85	75	50	100	350	427	0.22
750 x 450	920	540	780	90	85	70	50	100	406	496	0.34
750 x 600	920	690	790	90	85	65	50	100	459	560	0.45
750 x 750	920	840	800	90	85	60	50	100	507	619	0.57
900 x 300	1100	400	920	100	100	90	50	100	444	541	0.26
900 x 450	1100	550	930	100	100	85	50	100	511	624	0.40
900 x 600	1100	700	940	100	100	80	50	100	575	702	0.54
900 x 750	1100	850	950	100	100	75	50	100	635	775	0.68
900 x 900	1100	1000	960	100	100	70	50	100	691	844	0.83

Column reference: S × H = nominal span × height; W, D, St, td, tl, tt, c and d are the dimensional parameters used in the portal culvert schedule. kg/m = mass per metre; kg/unit = approximate unit mass; Area = waterway area.

RECTANGULAR PORTAL CULVERTS

1200–1800 mm SPANS

All dimensional values are in millimetres. Mass values are approximate and shown as supplied.

S × H	W	D	St	td	tl	tt	c	d	kg/m	kg/unit	Area (m²)
1200 x 300	1440	420	1220	120	120	110	50	100	637	777	0.35
1200 x 450	1440	570	1230	120	120	105	50	100	720	878	0.53
1200 x 600	1440	720	1240	120	120	100	50	100	799	975	0.72
1200 x 900	1440	1020	1260	120	120	90	50	100	946	1155	1.09
1200 x 1200	1440	1320	1280	120	120	80	50	100	1078	1315	1.47
1500 x 300	1750	425	1520	125	125	115	75	225	794	968	0.44
1500 x 450	1750	575	1530	125	125	110	75	225	881	1075	0.67
1500 x 600	1750	725	1540	125	125	105	75	225	964	1176	0.90
1500 x 900	1750	1025	1560	125	125	95	75	225	1119	1365	1.36
1500 x 1200	1750	1325	1580	125	125	85	75	225	1258	1535	1.83
1500 x 1500	1750	1625	1600	125	125	75	75	225	1382	1686	2.31
1800 x 600	2100	750	1840	150	150	130	100	300	1324	1615	1.08
1800 x 900	2100	1050	1860	150	150	120	100	300	1517	1851	1.63
1800 x 1200	2100	1350	1880	150	150	110	100	300	1695	2068	2.19
1800 x 1500	2100	1650	1900	150	150	100	100	300	1858	2266	2.76
1800 x 1800	2100	1950	1920	150	150	90	100	300	2005	2446	3.33

Column reference: S × H = nominal span × height; W, D, St, td, tl, tt, c and d are the dimensional parameters used in the portal culvert schedule. kg/m = mass per metre; kg/unit = approximate unit mass; Area = waterway area.

RECTANGULAR PORTAL CULVERTS

2100–3000 mm SPANS

All dimensional values are in millimetres. Mass values are approximate and shown as supplied.

S × H	W	D	St	td	tl	tt	c	d	kg/m	kg/unit	Area (m²)
2100 x 600	2400	750	2140	150	150	130	100	300	1440	1756	1.26
2100 x 900	2400	1050	2160	150	150	120	100	300	1633	1992	1.88
2100 x 1200	2400	1350	2180	150	150	110	100	300	1811	2210	2.55
2100 x 1500	2400	1650	2200	150	150	100	100	300	1974	2408	3.21
2100 x 1800	2400	1950	2220	150	150	90	100	300	2121	2587	3.81
2100 x 2100	2400	2250	2240	150	150	80	100	300	2252	2748	4.54
2400 x 600	2720	760	2440	160	160	140	100	300	1665	2031	1.44
2400 x 900	2720	1060	2460	160	160	130	100	300	1874	2293	2.17
2400 x 1200	2720	1360	2480	160	160	120	100	300	2067	2533	2.91
2400 x 1500	2720	1660	2500	160	160	110	100	300	2245	2752	3.66
2400 x 1800	2720	1960	2520	160	160	100	100	300	2408	2954	4.41
2400 x 2100	2720	2260	2540	160	160	90	100	300	2578	3145	5.19
2400 x 2400	2720	2560	2560	160	160	80	100	300	2686	3277	5.94
3000 x 600	3480	790	3040	190	230	210	150	300	2454	2994	1.76
3000 x 900	3480	1090	3060	190	230	200	150	300	2771	3381	2.68
3000 x 1200	3480	1390	3080	190	230	190	150	300	3184	3885	3.60
3000 x 1500	3480	1690	3100	190	230	180	150	300	3360	4099	4.53
3000 x 1800	3480	1990	3120	190	230	170	150	300	3631	4430	5.46
3000 x 2100	3480	2290	3140	190	230	170	150	300	3886	4741	6.40
3000 x 2400	3480	2590	3160	190	230	150	150	300	4126	5034	7.34
3000 x 3000	3480	3190	3200	190	230	130	150	300	4599	5562	9.25

Column reference: S × H = nominal span × height; W, D, St, td, tl, tt, c and d are the dimensional parameters used in the portal culvert schedule. kg/m = mass per metre; kg/unit = approximate unit mass; Area = waterway area.

RECTANGULAR PORTAL CULVERTS

3600–4000 mm SPANS

All dimensional values are in millimetres. Mass values are approximate and shown as supplied.

S × H	W	D	St	td	tl	tt	c	d	kg/m	kg/unit	Area (m ²)
3600 x 600	4060	850	3640	250	230	210	150	300	3416	4167	2.12
3600 x 900	4060	1150	3660	250	230	200	150	300	3733	4555	3.22
3600 x 1200	4060	1450	3680	250	230	190	150	300	4035	4923	4.32
3600 x 1500	4060	1750	3700	250	230	180	150	300	4322	5272	5.43
3600 x 1800	4060	2050	3720	250	230	170	150	300	4592	5603	6.54
3600 x 2100	4060	2350	3740	250	230	160	150	300	4848	5914	7.66
3600 x 2400	4060	2650	3760	250	230	150	150	300	5088	6207	8.78
3600 x 3000	4060	3250	3800	250	230	130	150	300	5521	6736	11.05
4000 x 1500	4500	1750	4100	250	250	200	300	600	5108	6232	5.89
4000 x 3000	4500	3250	4200	250	250	150	300	600	6463	7884	12.12

Column reference: S × H = nominal span × height; W, D, St, td, tl, tt, c and d are the dimensional parameters used in the portal culvert schedule. kg/m = mass per metre; kg/unit = approximate unit mass; Area = waterway area.

ORDERING INFORMATION

Help us quote the correct portal culvert for your project

Ref.	ITEM	INFORMATION REQUIRED
01	Portal size	Specify the required S × H combination, e.g. 1200 × 900 mm.
02	Quantity	State the number of units required.
03	Loading requirements	Confirm road, traffic, cover and other project loading requirements.
04	Site / delivery location	Provide the project location and site access information.
05	Installation details	Where available, provide invert levels, bedding, cover and connection details.
06	Special requirements	Advise of headwalls, wingwalls, base slabs, walkway requirements or other project-specific needs.

CPPC SA

Concrete Products. Infrastructure Solutions. Built to Deliver.

CPPC SA supplies precast concrete infrastructure products for civil construction, stormwater management, roadworks, developments and infrastructure projects.

Technical note: This catalogue is a product reference and does not replace project-specific structural design or engineering requirements. Final selection should consider the applicable loading, cover, bedding, installation conditions and site requirements.