



Authorised
Agent for



GLOBAL
PRECAST

PRODUCT **BROCHURE**

QUALITY PRECAST CONCRETE SOLUTIONS



www.fcsholdings.co.za



WELCOME TO

FCS HOLDINGS

Our extensive product range offers an array of products, including pipes, culverts, manholes, toilet structures and other related items, all manufactured across our network of state-of-the-art facilities in South Africa and across Africa. Moreover, we highlight a selection of specialized products tailored to meet individual customer requirements, reflecting our commitment to innovation and customization.

We specialize in the manufacturing of a comprehensive range of concrete products

Infrastructure Products.....3

Sanitation Products.....19

Special Products.....23

INFRASTRUCTURE PRODUCTS

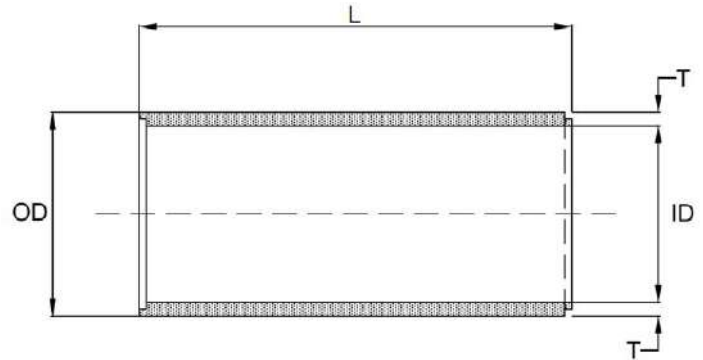
Interlocking Joint Pipes (SANS 677)	4
Spigot & Socket Joint Pipes (SANS 677)	5
In-the Wall Joint Jacking Pipes (SANS 677).....	6
Rectangular Portal Culverts: Roads (SANS 986).....	7
Base Slabs: Roads.....	9
Rectangular Portal Culverts: SATS/SAR 0.3 – 5m.....	10
Base Slabs: SATS/SAR 0.3 – 5m	12
Rectangular Portal Culverts: SATS/SAR 0.3 – 10m	13
Base Slabs: SATS/SAR 0.3 – 10m	15
Jacking Box Culverts	16
Manholes (SANS 1294): Sewer Chambers (750–2000)	17
Manholes (SANS 1294): Components (750–2000)	18



Interlocking Joint Pipes (SANS 677)

Important Information:

- Global Precast Interlocking Joint Pipes can only be used for storm water drainage.
- These pipes are non-water tight pipes and are designed with male and female joints inside the wall of the pipe i.e. there is no widening of the pipe.
- Rubber Collars for installation are available upon request.
- Other pipe classes, including 75D, are available upon request.



Pipe Class	Dimensions (mm)				Nominal Length (L) m	Approximate Mass	
	Nominal	Inside	Outside	Wall		kg/m	kg/no
	Diameter (ND)	Diameter (ID)	Diameter (OD)	Thickness (T)			
50D & 100D	300	300	370	35	2.5	106	265
	375	375	450	37.5	2.5	136	340
	450	450	540	45	2.5	190	475
	525	525	625	50	2.5	250	625
	600	600	720	60	2.5	344	860
	675	675	815	70	2.5	448	1,120
	750	750	900	75	2.5	540	1,350
	825	825	982	78.5	2.5	620	1,550
	900	900	1,070	85	2.5	730	1,825
	1,050	1,050	1,230	90	2.5	896	2,240
	1,200	1,200	1,400	100	2.5	1,120	2,800
	1,350	1,290	1,502	100	2.5	1,260	3,150
	1,500	1,410	1,670	130	2.5	1,684	4,210

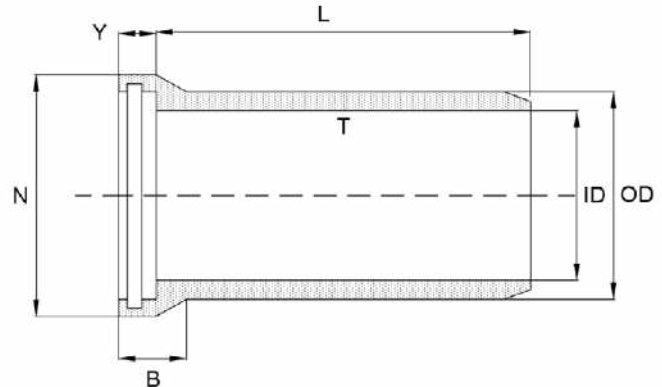
Please be advised: The mass per meter provided is an approximation only.
Global Precast cannot ensure the exact mass as listed in this table due to tolerances.



Spigot & Socket Joint Pipes (SANS 677)

Important Information:

- Global Precast Spigot and Socket Pipes can only be used for storm water drainage and are sealed using a rolling and sliding rubber ring. This rolling and sliding rubber ring is installed using a soft soap lubricant.
- To ensure optimal performance, it is important not to exceed the allowable joint deflections provided below.
- Other pipe classes, including 75D, are available upon request.
- Nominal Diameters with Maximum deflection:
 - o 300 – 375 mm 2.0° 1050 – 1200 mm 0.75°
 - o 450 – 600 mm 1.5° 1350 – 1800 mm 0.5°
 - o 675 – 900 mm 1.0°



Class	Dimensions (mm)						Nominal Length (L)	Approximate Mass	
	Nominal	Inside	Outside	Wall	Socket				
	Diameter (ND)	Diameter (ID)	Diameter (OD)	Thickness (T)	Diameter (N)	Length (B)	m	kg/m	kg/no
50D & 100D	300	295	370	37.5	455	265	2.5	128	320
	375	360	430	35	530	245	2.5	144	360
	450	450	540	45	660	250	2.4	213	510
	525	520	620	50	754	255	2.4	263	630
	600	595	710	57.5	840	270	2.5	350	875
	675	670	790	60	925	275	2.5	418	1,045
	750	740	860	60	1,025	315	2.5	502	1,256
	825	820	970	75	1,135	335	2.5	612	1,530
	900	880	1,060	90	1,235	365	2.5	788	1,970
	1,050	1,020	1,225	102.5	1,425	400	2.5	1,116	2,790
	1,200	1,170	1,400	115	1,590	410	2.5	1,380	3,450

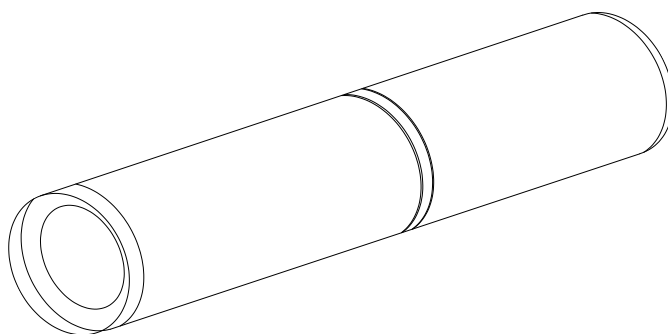
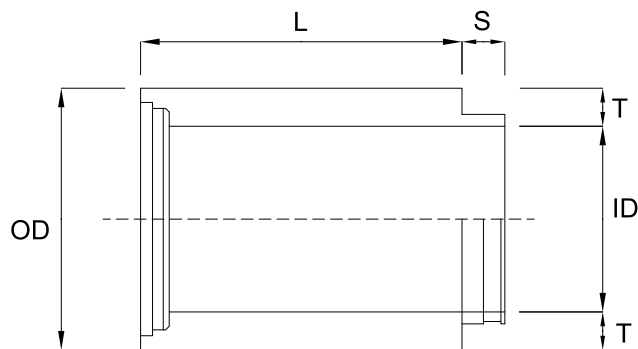
Please be advised: The mass per meter provided is an approximation only.
Global Precast cannot ensure the exact mass as listed in this table due to tolerances.



In-the Wall Joint Jacking Pipes (SANS 677)

Important Information:

- The permissible deflection for all sizes is 0.5
- The joint operates on the sliding rubber ring principle and necessitates the use of lubrication.
- These pipes are compatible for jacking applications.
- Other pipe sizes are available upon request.



Pipe Class	Dimensions (mm)				Nominal Length (L)	Approximate Mass	
	Nominal	Inside	Outside	Wall		kg/m	kg/no
	Diameter (ND)	Diameter (ID)	Diameter (OD)	Thickness			
100D	900	880	1,100	110	2.5	861	2,152
	1,050	1,030	1,250	110	2.5	997	2,492
	1,200	1,160	1,390	115	2.5	1,172.4	2,931
	1,350	1,330	1,600	135	2.5	1,574.4	3,936
	1,500	1,430	1,720	145	2.5	1,821	4,552
	1,800	1,770	2,120	175	2	2,700	5,400
	2,340	2,340	2,800	230	1.2	4,705	5,646

Please be advised: The mass per meter provided is an approximation only.
Global Precast cannot ensure the exact mass as listed in this table due to tolerances.

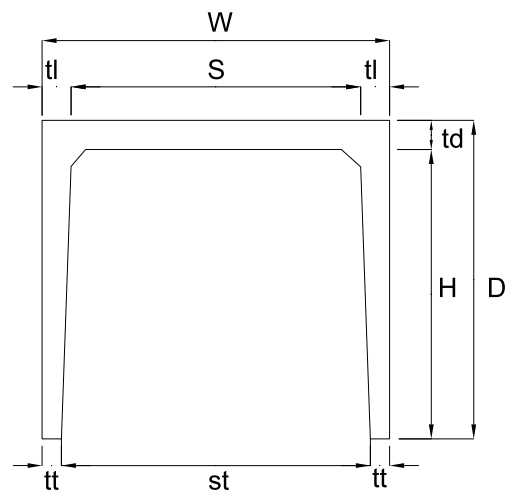


Rectangular Portal Culverts: Roads (SANS 986)

Important Information:

- The Rectangular Portal Culvert is used in storm water applications with high loadings, primarily in providing a waterway underneath roads.
- The unit consists of a deck and two legs and is placed on a concrete base.
- Culvert dimensions may vary slightly depending on location, please contact local factory for confirmation.
- Culverts designed to withstand loads greater than those specified in SANS 986 can be custom manufactured. Kindly inquire at your nearest Global Precast sales office.
- All culverts are 1.2m long.

Span mm	Class				
	75S	100S	150S	175S	200
450					x
600					x
750				x	
900				x	
1,200			x		
1,500		x			
1,800	x				
2,100	x				
2,400	x				
3,000	x				
3,600	x				



Nominal Size		Class	Dimensions						Water Area	Approximate Mass	
S	H		W	D	St	td	tl	tt	m²	kg/m	kg/no
450	300	200S	610	380	470	80	80	70	0.135	242	290
450	375	200S	610	455	474	80	80	68	0.169	275	330
450	450	200S	610	530	480	80	80	65	0.203	292	350
600	300	200S	780	390	620	90	90	80	0.180	292	350
600	450	200S	780	540	630	90	90	75	0.270	354	425
600	600	200S	780	690	640	90	90	70	0.360	404	485
750	300	175S	950	400	770	100	100	90	0.225	383	460
750	450	175S	950	550	780	100	100	85	0.338	433	520
750	600	175S	950	700	790	100	100	80	0.450	508	610
750	750	175S	950	850	800	100	100	75	0.563	533	640
900	300	175S	1,110	405	920	105	105	95	0.270	471	565
900	450	175S	1,110	555	930	105	105	90	0.405	508	610
900	600	175S	1,110	705	940	105	105	85	0.540	563	675
900	750	175S	1,110	855	950	105	105	80	0.675	654	785
900	900	175S	1,110	1,005	960	105	105	75	0.810	719	863
1,200	450	100S	1,440	570	1,230	120	120	105	0.540	750	900
1,200	600	100S	1,440	720	1,240	120	120	100	0.720	817	980
1,200	900	100S	1,440	1,020	1,260	120	120	90	1.080	983	1,180
1,200	1,200	100S	1,440	1,320	1,280	120	120	80	1.440	1,133	1,360

Rectangular Portal Culverts: Roads (SANS 986)

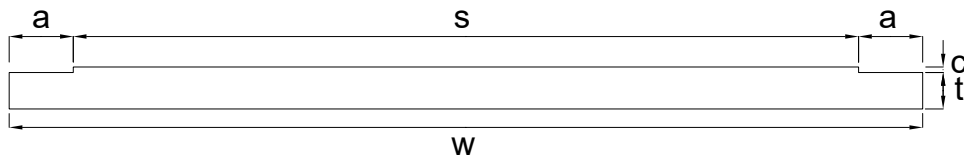
Nominal Size		Class	Dimensions						Water Area	Approximate Mass	
S	H		W	D	St	td	tl	tt	m²	kg/m	kg/no
1,500	450	100S	1,770	585	1,530	135	135	120	0.675	938	1,125
1,500	600	100S	1,770	735	1,540	135	135	115	0.900	983	1,180
1,500	750	100S	1,770	885	1,550	135	135	110	1.125	1,067	1,280
1,500	900	100S	1,770	1,035	1,560	135	135	105	1.350	1,300	1,560
1,500	1,200	100S	1,770	1,335	1,580	135	135	95	1.800	1,400	1,680
1,500	1,500	100S	1,770	1,635	1,600	135	135	85	2.250	1,533	1,840
1,800	600	75S	2,100	750	1,840	150	150	130	1.080	1,333	1,600
1,800	900	75S	2,100	1,050	1,860	150	150	120	1.620	1,517	1,820
1,800	1,200	75S	2,100	1,350	1,880	150	150	110	2.160	1,683	2,020
1,800	1,500	75S	2,100	1,650	1,900	150	150	100	2.700	1,883	2,260
1,800	1,800	75S	2,100	1,950	1,920	150	150	90	3.240	1,983	2,380
2,100	600	75S	2,430	765	2,140	165	165	145	1.260	1,567	1,880
2,100	900	75S	2,430	1,065	2,160	165	165	135	1.890	1,783	2,140
2,100	1,200	75S	2,430	1,365	2,180	165	165	125	2.520	2,017	2,420
2,100	1,500	75S	2,430	1,665	2,200	165	165	115	3.150	2,233	2,680
2,100	1,800	75S	2,430	1,965	2,220	165	165	105	3.780	2,333	2,800
2,100	2,100	75S	2,430	2,265	2,240	165	165	95	4.410	2,500	3,000
2,400	600	75S	2,760	780	2,440	180	180	160	1.440	1,925	2,310
2,400	900	75S	2,760	1,080	2,460	180	180	150	2.160	2,158	2,590
2,400	1,200	75S	2,760	1,380	2,480	180	180	140	2.880	2,367	2,840
2,400	1,500	75S	2,760	1,680	2,500	180	180	130	3.600	2,559	3,071
2,400	1,800	75S	2,760	1,980	2,520	180	180	120	4.320	2,717	3,260
2,400	2,100	75S	2,760	2,280	2,540	180	180	110	5.040	2,917	3,500
2,400	2,400	75S	2,760	2,580	2,560	180	180	100	5.760	3,100	3,720
3,000	900	75S	3,420	1,110	3,060	210	210	180	2.700	2,893	3,471
3,000	1,200	75S	3,420	1,410	3,080	210	210	170	3.600	3,233	3,880
3,000	1,500	75S	3,420	1,710	3,100	210	210	160	4.500	3,467	4,160
3,000	1,800	75S	3,420	2,010	3,120	210	210	150	5.400	3,700	4,440
3,000	2,100	75S	3,420	2,310	3,140	210	210	140	6.300	3,950	4,740
3,000	2,400	75S	3,420	2,610	3,160	210	210	130	7.200	6,650	7,980
3,000	3,000	75S	3,420	3,210	3,200	210	210	110	9.000	4,470	5,364
3,600	900	75S	4,080	1,140	3,660	240	240	210	3.240	3,763	4,515
3,600	1,200	75S	4,080	1,440	3,680	240	240	200	4.320	4,167	5,000
3,600	1,500	75S	4,080	1,740	3,700	240	240	190	5.400	4,367	5,240
3,600	1,800	75S	4,080	2,040	3,720	240	240	180	6.480	4,775	5,730
3,600	2,100	75S	4,080	2,340	3,740	240	240	170	7.560	5,066	6,079
3,600	2,400	75S	4,080	2,640	3,760	240	240	160	8.640	5,133	6,160
3,600	3,000	75S	4,080	3,240	3,800	240	240	140	10.800	5,673	6,808

Please be advised: The mass per meter provided is an approximation only.
Global Precast cannot ensure the exact mass as listed in this table due to tolerances.

Base Slabs: Roads

Important Information:

- In instances where time-critical installations of culvert crossings are required, the “Precast Culvert Base Slab” is an ideal solution. It is designed and manufactured to suit the Precast Concrete Portal already manufactured by Global Precast.
- Generally, culvert base slabs are cast with joints that are not watertight so that any excess ground water pressure (which accumulates under them) is relieved.
- All bases are 1.2m long.



Span	Dimensions						Approximate Mass	
	W	S	a	t	c	t+c	kg/m	kg/no
450	680	440	120	95	20	115	171	205
600	805	525	140	95	20	115	229	275
750	1,000	740	130	100	25	125	296	355
900	1,250	880	185	110	30	140	350	420
1,200	1,600	1,180	210	130	30	160	517	620
1,500	1,950	1,470	240	165	25	190	767	920
1,800	2,300	1,780	260	180	25	205	968	1,162
2,100	2,480	2,100	190	165	25	190	1,225	1,470
2,400	2,810	2,400	205	115	25	205	983	1,180
3,000	3,470	2,990	240	135	25	240	1,342	1,610
3,600	4,130	3,550	290	165	25	275	1,800	2,160

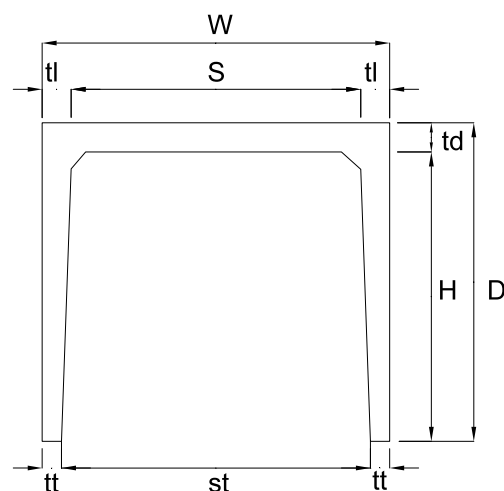
*Please be advised: The mass per meter provided is an approximation only.
Global Precast cannot ensure the exact mass as listed in this table due to tolerances.*



Rectangular Portal Culverts: SATS/SAR 0.3 – 5m

Important Information:

- The SATS/SAR Portal Culvert is used in storm water applications with high loadings, primarily in providing a waterway underneath railway.
- The unit consists of a deck and two legs and is placed on a concrete base.
- Culvert dimensions may vary slightly depending on location, please contact local factory for confirmation.
- All culverts are 1.2m long.



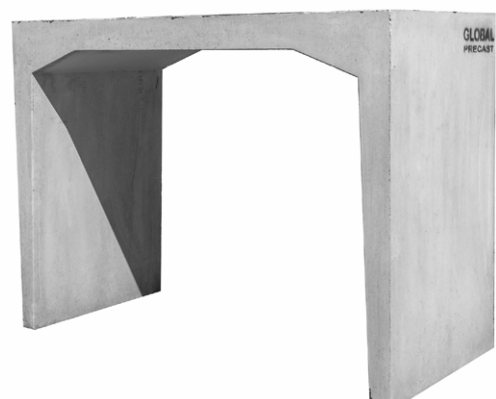
Nominal Size		Class	Dimensions						Water Area	Approximate Mass	
S	H	Z	W	D	St	td	tl	tt	m ²	kg/m	kg/no
600	450	0.3 – 5	800	550	630	100	100	85	0.270	416	500
600	600	0.3 – 5	800	700	640	100	100	80	0.360	478	574
750	300	0.3 – 5	970	410	770	110	110	100	0.225	437	524
750	450	0.3 – 5	970	560	780	110	110	95	0.338	510	612
750	600	0.3 – 5	970	710	790	110	110	90	0.450	580	696
750	750	0.3 – 5	970	860	800	110	110	85	0.563	645	774
900	300	0.3 – 5	1,140	420	920	120	120	110	0.270	533	640
900	450	0.3 – 5	1,140	570	930	120	120	105	0.405	614	737
900	600	0.3 – 5	1,140	720	940	120	120	100	0.540	691	829
900	750	0.3 – 5	1,140	870	950	120	120	95	0.675	764	917
900	900	0.3 – 5	1,140	1,020	960	120	120	90	0.810	833	1,000
1,200	450	0.3 – 5	1,480	590	1,220	140	140	130	0.540	855	1,026
1,200	600	0.3 – 5	1,480	740	1,240	140	140	120	0.720	941	1,129
1,200	900	0.3 – 5	1,480	1,040	1,260	140	140	110	1.080	1,114	1,337
1,200	1,200	0.3 – 5	1,480	1,340	1,280	140	140	100	1.440	1,271	1,525
1,500	450	0.3 – 5	1,810	605	1,530	155	155	140	0.675	1,085	1,302
1,500	600	0.3 – 5	1,810	755	1,540	155	155	135	0.900	1,188	1,426
1,500	750	0.3 – 5	1,810	905	1,550	155	155	130	1.125	1,288	1,545
1,500	900	0.3 – 5	1,810	1,055	1,560	155	155	125	1.350	1,383	1,660
1,500	1,000	0.3 – 5	1,810	1,155	1,570	155	155	120	1.500	1,441	1,729
1,500	1,200	0.3 – 5	1,810	1,355	1,580	155	155	115	1.800	1,563	1,876
1,500	1,500	0.3 – 5	1,810	1,655	1,600	155	155	105	2.250	1,728	2,074
1,800	600	0.3 – 5	2,130	775	1,840	175	165	145	1.080	1,472	1,766
1,800	900	0.3 – 5	2,130	1,075	1,860	175	165	135	1.620	1,682	2,018
1,800	1,200	0.3 – 5	2,130	1,375	1,880	175	165	125	2.160	1,877	2,252
1,800	1,500	0.3 – 5	2,130	1,675	1,900	175	165	115	2.700	2,057	2,468
1,800	1,800	0.3 – 5	2,130	1,975	1,920	175	165	105	3.240	2,222	2,666

Please be advised: The mass per meter provided is an approximation only.
Global Precast cannot ensure the exact mass as listed in this table due to tolerances.

Rectangular Portal Culverts: SATS/SAR 0.3 – 5m

Nominal Size		Class	Dimensions						Water Area	Approximate Mass	
S	H	Z	W	D	St	td	tl	tt	m ²	kg/m	kg/no
2,100	600	0.3 – 5	2,450	820	2,140	220	175	155	1.260	1,945	2,334
2,100	900	0.3 – 5	2,450	1,120	2,160	220	175	145	1.890	2,170	2,604
2,100	1,000	0.3 – 5	2,450	1,220	2,170	220	175	140	2.100	2,237	2,685
2,100	1,200	0.3 – 5	2,450	1,420	2,180	220	175	135	2.520	2,380	2,856
2,100	1,500	0.3 – 5	2,450	1,720	2,200	220	175	125	3.150	2,575	3,090
2,100	1,800	0.3 – 5	2,450	2,020	2,220	220	175	115	3.780	2,755	3,306
2,100	2,100	0.3 – 5	2,450	2,320	2,240	220	175	105	4.410	2,920	3,504
2,400	900	0.3 – 5	2,770	1,150	2,460	250	185	155	2.160	2,629	3,155
2,400	1,200	0.3 – 5	2,770	1,450	2,480	250	185	145	2.880	2,855	3,426
2,400	1,500	0.3 – 5	2,770	1,750	2,500	250	185	135	3.600	3,065	3,678
2,400	1,800	0.3 – 5	2,770	2,050	2,520	250	174	125	4.320	3,210	3,852
2,400	2,100	0.3 – 5	2,770	2,350	2,540	250	185	115	5.040	3,381	4,057
2,400	2,400	0.3 – 5	2,770	2,650	2,560	250	185	105	5.760	3,605	4,326
3,000	900	0.3 – 5	3,420	1,205	3,060	305	210	180	2.700	3,694	4,433
3,000	1,000	0.3 – 5	3,420	1,305	3,070	305	210	175	3.000	3,779	4,535
3,000	1,200	0.3 – 5	3,420	1,505	3,080	305	210	170	3.600	3,957	4,748
3,000	1,500	0.3 – 5	3,420	1,805	3,100	305	210	160	4.500	4,204	5,045
3,000	1,800	0.3 – 5	3,420	2,105	3,120	305	210	150	5.400	4,437	5,324
3,000	2,000	0.3 – 5	3,420	2,305	3,130	305	210	145	6.000	4,592	5,510
3,000	2,100	0.3 – 5	3,420	2,405	3,140	305	210	140	6.300	4,583	5,500
3,000	2,400	0.3 – 5	3,420	2,705	3,160	305	210	130	7.200	4,920	5,904
3,000	2,500	0.3 – 5	3,420	2,805	3,150	305	210	135	7.500	4,973	5,967
3,000	3,000	0.3 – 5	3,420	3,305	3,200	305	210	110	9.000	5,216	6,259
3,600	1,200	0.3 – 5	4,080	1,565	3,680	365	240	200	4.320	5,343	6,412
3,600	1,500	0.3 – 5	4,080	1,865	3,700	365	240	190	5.400	5,636	6,763
3,600	1,800	0.3 – 5	4,080	2,165	3,720	365	240	180	6.480	5,913	7,096
3,600	2,100	0.3 – 5	4,080	2,465	3,740	365	240	170	7.560	6,168	7,402
3,600	2,400	0.3 – 5	4,080	2,765	3,760	365	240	160	8.640	6,423	7,708
3,600	3,000	0.3 – 5	4,080	3,365	3,800	365	240	140	10.800	6,873	8,248

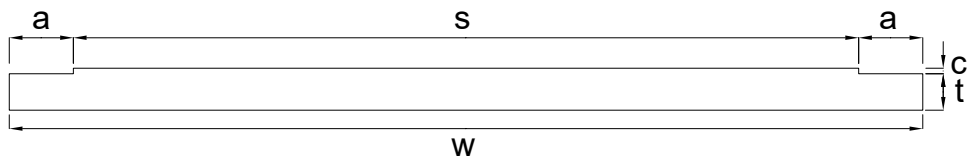
Please be advised: The mass per meter provided is an approximation only.
Global Precast cannot ensure the exact mass as listed in this table due to tolerances.



Base Slabs: SATS/SAR 0.3 – 5m

Important Information:

- In instances where time-critical installations of culvert crossings are required, the “Precast Culvert Base Slab” is an ideal solution. It is designed and manufactured to suit the Precast Concrete Portal already manufactured by Global Precast.
- Generally, culvert base slabs are cast with joints that are not watertight so that any excess ground water pressure (which accumulates under them) is relieved.
- All bases are 1.2m long.



Span	Dimensions						Approximate Mass	
	W	S	a	t	c	t + c	kg/m	kg/no
450								
600								
750	1,000	740	130	110	25	135	321	386
900	1,250	880	185	115	30	145	425	510
1,200	1,600	1,180	210	145	30	175	669	802
1,500	1,950	1,470	240	170	25	195	921	1,105
1,800	2,300	1,780	260	200	25	225	1,261	1,514
2,100	2,480	2,100	190	220	25	245	1,495	1,794
2,400	2,810	2,400	205	250	25	275	1,906	2,288
3,000	3,470	2,990	240	305	25	330	2,833	3,399
3,600	4,130	3,550	290	365	25	390	3,991	4,789

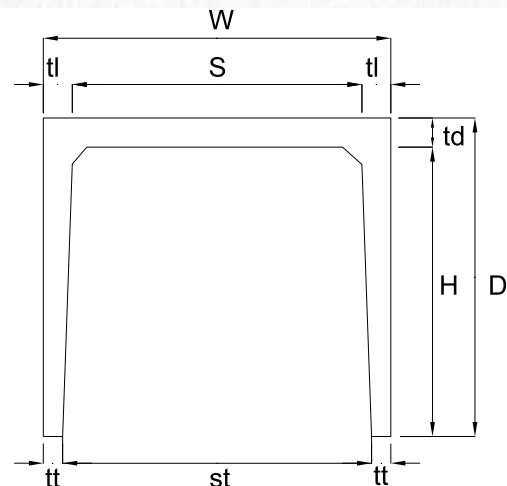
Please be advised: The mass per meter provided is an approximation only.
Global Precast cannot ensure the exact mass as listed in this table due to tolerances.



Rectangular Portal Culverts: SATS/SAR 0.3 – 10m

Important Information:

- The SATS/SAR Portal Culvert is used in storm water applications with high loadings, primarily in providing a waterway underneath railways.
- The unit consists of a deck and two legs and is placed on a concrete base.
- Culvert dimensions may vary slightly depending on location, please contact local factory for confirmation.
- All culverts are 1.2m long.



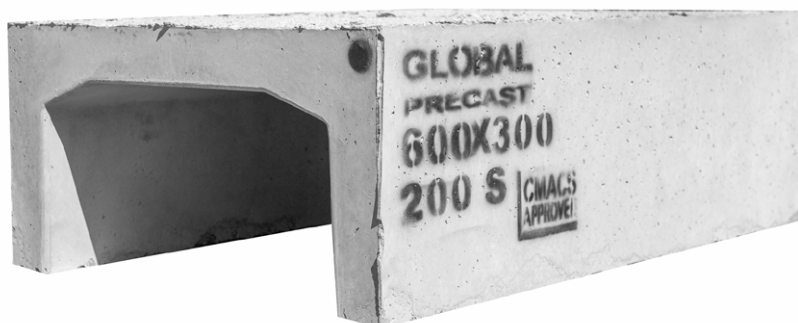
Nominal Size		Class	Dimensions						Water Area	Approximate Mass	
S	H	Z	W	D	St	td	tl	tt	m ²	kg/m	kg/no
600	450	0.3 – 10	830	135	630	135	135	100	0.270	553	663
600	600	0.3 – 10	830	135	640	135	135	95	0.360	633	760
750	300	0.3 – 10	1,000	445	770	145	125	115	0.220	556	667
750	450	0.3 – 10	1,000	595	780	145	125	110	0.330	640	768
750	600	0.3 – 10	1,000	745	790	145	125	105	0.450	721	865
750	750	0.3 – 10	1,000	895	800	145	125	100	0.560	797	956
900	300	0.3 – 10	1,170	460	920	160	135	125	0.270	682	818
900	450	0.3 – 10	1,170	610	930	160	135	120	0.400	774	928
900	600	0.3 – 10	1,170	760	940	160	135	115	0.540	862	1,034
900	750	0.3 – 10	1,170	910	950	160	135	110	0.670	946	1,135
900	900	0.3 – 10	1,170	1,060	960	160	135	105	0.810	1,027	1,232
1,200	450	0.3 – 10	1,520	640	1,220	190	160	150	0.540	1,104	1,325
1,200	600	0.3 – 10	1,520	790	1,240	190	160	140	0.720	1,205	1,446
1,200	900	0.3 – 10	1,520	1,090	1,260	190	160	130	1.080	1,408	1,690
1,200	1,200	0.3 – 10	1,520	1,390	1,280	190	160	120	1.440	1,595	1,914
1,500	450	0.3 – 10	1,880	675	1,530	225	190	175	0.670	1,520	1,824
1,500	600	0.3 – 10	1,880	825	1,540	225	190	170	0.900	1,650	1,980
1,500	750	0.3 – 10	1,880	975	1,550	225	190	165	1.120	1,775	2,130
1,500	900	0.3 – 10	1,880	1,125	1,560	225	190	160	1.350	1,897	2,276
1,500	1,000	0.3 – 10	1,880	1,225	1,570	225	190	155	1.500	1,972	2,366
1,500	1,200	0.3 – 10	1,880	1,425	1,580	225	190	150	1.800	2,129	2,555
1,500	1,500	0.3 – 10	1,880	1,725	1,600	225	190	140	2.250	2,347	2,816
1,800	600	0.3 – 10	2,240	865	1,840	265	220	200	1.080	2,189	2,627
1,800	900	0.3 – 10	2,240	1,165	1,860	265	220	190	1.620	2,482	2,978
1,800	1,200	0.3 – 10	2,240	1,465	1,880	265	220	180	2.160	2,759	3,311
1,800	1,500	0.3 – 10	2,240	1,765	1,900	265	220	170	2.700	3,022	3,626
1,800	1,800	0.3 – 10	2,240	2,065	1,920	265	220	160	3.240	3,269	3,923

Please be advised: The mass per meter provided is an approximation only.
Global Precast cannot ensure the exact mass as listed in this table due to tolerances.

Rectangular Portal Culverts: SATS/SAR 0.3 – 10m

Nominal Size		Class	Dimensions						Water Area	Approximate Mass	
S	H	Z	W	D	St	td	tl	tt	m²	kg/m	kg/no
2,100	600	0.3 – 10	2,560	900	2,140	300	230	210	1,260	2,682	3,219
2,100	900	0.3 – 10	2,560	1,200	2,160	300	230	200	1,890	2,990	3,588
2,100	1,000	0.3 – 10	2,560	1,300	2,170	300	230	195	2,100	3,085	3,702
2,100	1,200	0.3 – 10	2,560	1,500	2,180	300	230	190	2,520	3,282	3,939
2,100	1,500	0.3 – 10	2,560	1,800	2,200	300	230	180	3,150	3,560	4,272
2,100	1,800	0.3 – 10	2,560	2,100	2,220	300	230	170	3,780	3,822	4,587
2,100	2,100	0.3 – 10	2,560	2,400	2,240	300	230	160	4,410	4,070	4,884
2,400	900	0.3 – 10	2,870	1,235	2,460	335	235	205	2,160	3,527	4,232
2,400	1,200	0.3 – 10	2,870	1,535	2,480	335	235	195	2,880	3,827	4,592
2,400	1,500	0.3 – 10	2,870	1,835	2,500	335	235	185	3,600	4,112	4,934
2,400	1,800	0.3 – 10	2,870	2,135	2,520	335	235	175	4,320	4,382	5,258
2,400	2,100	0.3 – 10	2,870	2,435	2,540	335	235	165	5,040	4,554	5,465
2,400	2,400	0.3 – 10	2,870	2,735	2,560	335	235	155	5,760	4,877	5,852
3,000	900	0.3 – 10	3,550	1,285	3,060	385	275	245	2,700	4,796	5,755
3,000	1,000	0.3 – 10	3,550	1,385	3,070	385	275	240	3,000	4,913	5,896
3,000	1,200	0.3 – 10	3,550	1,585	3,080	385	275	235	3,600	5,156	6,187
3,000	1,500	0.3 – 10	3,550	1,885	3,100	385	275	225	4,500	5,500	6,600
3,000	1,800	0.3 – 10	3,550	2,185	3,120	385	275	215	5,400	5,831	6,997
3,000	2,000	0.3 – 10	3,550	2,385	3,130	385	275	210	6,000	6,051	7,261
3,000	2,100	0.3 – 10	3,550	2,485	3,140	385	275	205	6,300	6,042	7,250
3,000	2,400	0.3 – 10	3,550	2,785	3,160	385	275	195	7,200	6,542	7,850
3,000	2,500	0.3 – 10	3,550	2,885	3,150	385	275	200	7,500	6,594	7,913
3,000	3,000	0.3 – 10	3,550	3,385	3,200	385	275	175	9,000	7,000	8,400
3,600	1,200	0.3 – 10	4,330	1,660	3,680	460	365	325	4,320	7,350	8,820
3,600	1,500	0.3 – 10	4,330	1,960	3,700	460	365	315	5,400	7,830	9,395
3,600	1,800	0.3 – 10	4,330	2,260	3,720	460	365	305	6,480	8,295	9,954
3,600	2,100	0.3 – 10	4,330	2,560	3,740	460	365	295	7,560	8,745	10,493
3,600	2,400	0.3 – 10	4,330	2,860	3,760	460	365	285	8,640	9,180	11,016
3,600	3,000	0.3 – 10	4,330	3,460	3,800	460	365	265	10,800	10,005	12,006

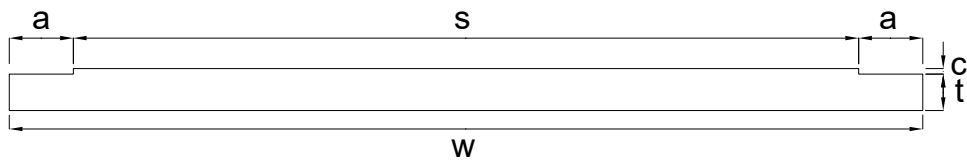
Please be advised: The mass per meter provided is an approximation only.
Global Precast cannot ensure the exact mass as listed in this table due to tolerances.



Base Slabs: SATS/SAR 0.3 - 10m

Important Information:

- In instances where time-critical installations of culvert crossings are required, the "Precast Culvert Base Slab" is an ideal solution. It is designed and manufactured to suit the Precast Concrete Portal already manufactured by Global Precast.
- Generally, culvert base slabs are cast with joints that are not watertight so that any excess ground water pressure (which accumulates under them) is relieved.
- All bases are 1.2m long.



Span	Dimensions						Approximate Mass	
	W	S	a	t	c	t+c	kg/m	kg/no
450								
600								
750	1,000	740	130	135	25	160	384	461
900	1,250	880	185	145	30	175	519	623
1,200	1,600	1,180	210	175	30	205	789	946
1,500	1,950	1,470	240	210	25	235	1,116	1,339
1,800	2,300	1,780	260	250	25	275	1,549	1,859
2,100	2,480	2,100	190	300	25	325	1,991	2,390
2,400	2,810	2,400	205	335	25	360	2,503	3,004
3,000	3,470	2,990	240	390	25	415	3,570	4,284
3,600	4,130	3,550	290	475	25	500	5,126	6,152

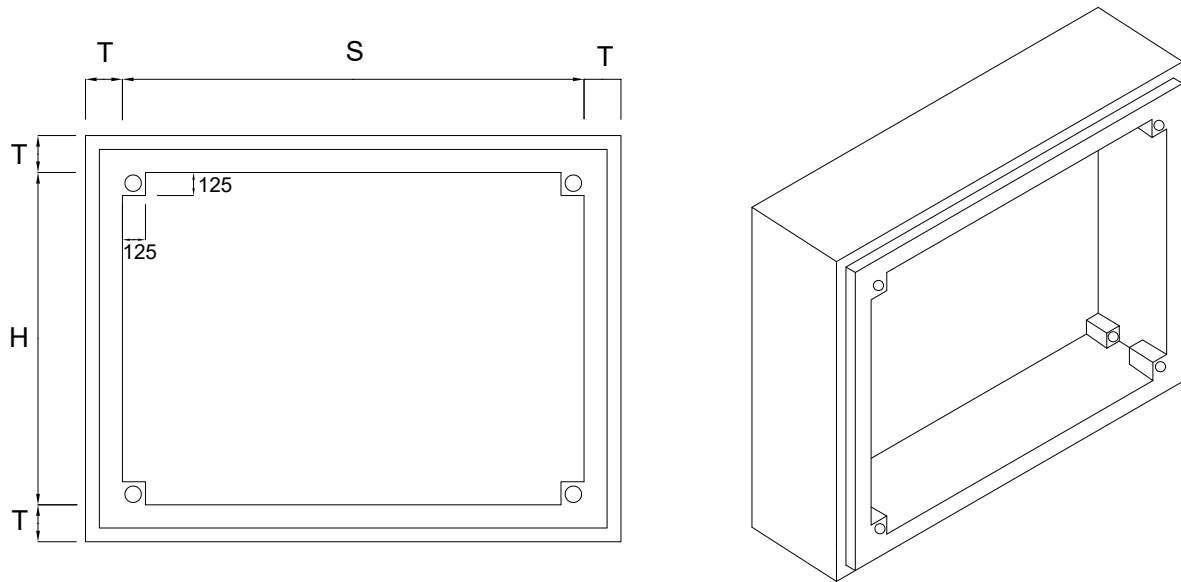
Please be advised: The mass per meter provided is an approximation only.
Global Precast cannot ensure the exact mass as listed in this table due to tolerances.



Jacking Box Culverts

Important Information:

- Dimensions and thus the mass of the culverts are subject to change without notice.
- For details of culverts from any particular factory, please contact our sales office.



Culvert Size		Wall Thickness	Length	Approximate Mass	
S	H	T	m	kg/m	kg/no
2,500	1,800	200	1.2	4,917	5,900
2,500	2,000	200	1.2	5,167	6,200
3,000	2,500	275	1.2	8,667	10,400
3,000	3,000	275	1.2	9,417	11,300



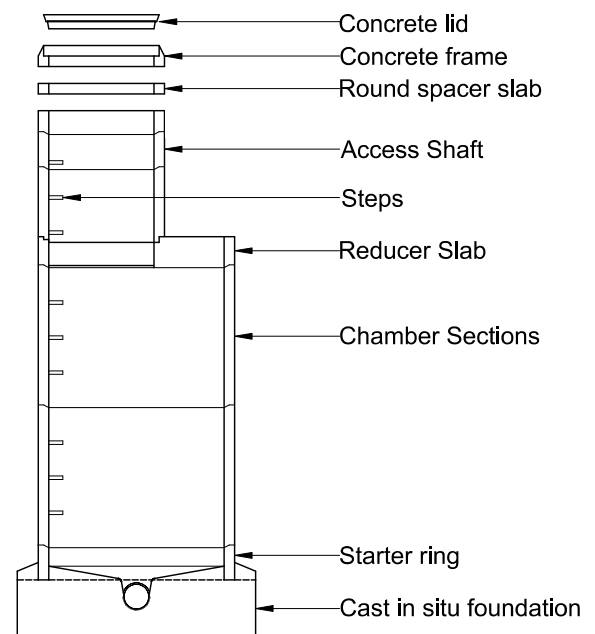
Manholes (SANS 1294): Sewer Chambers (750-2000)

Important Information:

- Sewer Manholes are required to provide safe means of access to the pipeline for men and equipment, for maintenance and inspection purposes.
- Sketch as per SANS-1294:2020
- Manhole Components are versatile for both stormwater and sewer applications. However, for sewer applications, customers must specify the use of dolomitic aggregates.
- Please be advised: The mass per meter provided is an approximation only. Global Precast cannot ensure the exact mass as listed in this table due to tolerances.

* Additional products manufactured on request and tested using SANS specifications as a guideline.

Dimensions (mm)					Unit Mass
Nominal Diameter	Height	Outside Diameter	Inside Diameter	Wall Thickness	
750	250	860	750	55	95
	500	860		55	190
	1,000	860		55	380
1,000	250	1,130	1,000	65	150
	500	1,130		65	300
	1,000	1,130		65	600
1,250	250	1,400	1,250	75	220
	500	1,400		75	440
	1,000	1,400		75	880
1,500	250	1,670	1,500	85	295
	500	1,670		85	590
	1,000	1,670		85	1,180
1,750	250	1,940	1,750	96	375
	500	1,940		96	750
	1,000	1,940		96	1,500
* 2,000	250	2,180	1,972	104	415
	500	2,180		104	830



Manholes (SANS 1294): Components (750-2000)

* Additional products manufactured on request and tested using SANS specifications as a guideline.

MANHOLE COMPONENTS				
Product	Dimensions (mm)			Unit Mass
	Outside	Inside	Thickness	
	Diameter	Diameter		kg
Type 2A Cover	640	560	120	84
Type 2A Frame	860	560	80	69
Round Spacer	860	560	80	71
Square Spacer	870	560	80	108
750 Valve Box	860	N/A	150	204
1000 Valve Box	1,130	N/A	150	370
Concrete Lids				
Medium Duty Lid	640	545	120	77
Heavy Duty Lid	640	545	120	83
Extra Heavy Duty Lid	640	545	120	86
* Lockable Lid	640	454	120	86
Frames				
Frames	860	560	120	90
Extra Heavy Duty Frame	860	560	120	100
Six Way Base	1,130	1,000	75	872

Dimensions (mm)				Unit Mass
Coverslabs / Nominal	Outside	Inside	Thickness	
Diameter	Diameter	Diameter	mm	kg
750 Eldoslab HD	860	560	150	111
* 750 Eldoslab XHD w/insert	860	560	150	116
1,000 Eldoslab MD	1,130	560	150	269
1,000 Eldoslab HD	1,130	560	150	271
1,000 Eldoslab XHD w/insert	1,130	560	150	276
1,250 Eldoslab HD	1,400	560	150	473
* 1,250 Eldoslab XHD w/insert	1,400	560	150	477
1,500 Eldoslab HD	1,670	560	180	847
* 1,500 Eldoslab XHD w/insert	1,670	560	180	857
1,750 Eldoslab HD	1,940	560	180	1,171
* 2,000 Eldoslab HD w/insert	2,180	560	195	1,646

Dimensions (mm)				Unit Mass
Reducer Slabs / Nominal	Outside	Inside	Thickness	
Diameter	Diameter	Diameter		kg
1,000 ND	1,130	750	155	200
1,250 ND	1,400	750	155	397
1,500 ND	1,670	750	185	739
1,750 ND	1,940	750	195	1,095
* 2,000 ND	2,180	750	195	1,492

Special Manholes
available upon request



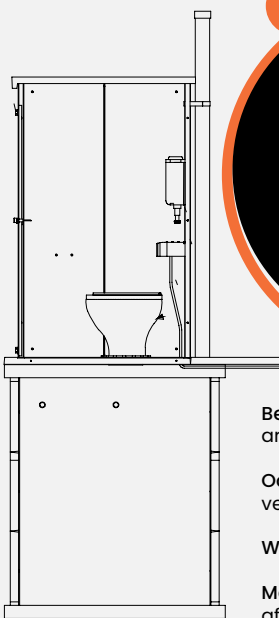
SANITATION PRODUCTS

///	Type of Toilet Systems	20
///	Toilet Structures.....	21
///	Pit Structures	22



Type of Toilet Systems

From basic rural setups to semi-urban and urban sanitation, here's a demonstration to help you choose the right precast toilet structure based on functionality, infrastructure, and waste disposal needs.



VIP System

LONG-DROP PIT WITH VENTILATION PIPE

Best for: Rural & off-grid areas

Odor Control: Fly screen + vent pipe for natural airflow

Water Usage: None

Maintenance: Pit empties after long-term use



UD System

SEPARATES URINE & FECES

Best for: Eco-friendly & water-scarce environments

Odor Control: Dry system with optional vent

Water Usage: None

Waste Use: Enables composting or reuse in agriculture



Pour Flush System

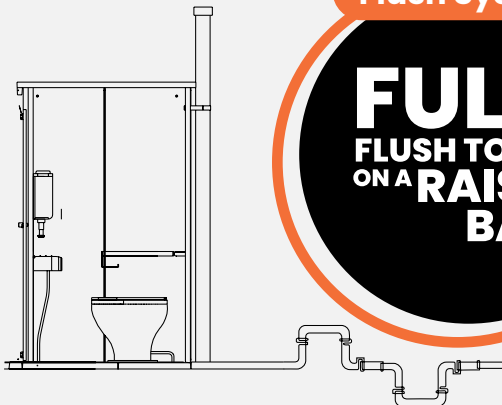
WATER POURED BY HAND FOR FLUSHING

Best for: Areas with intermittent water access

Odor Control: Water seal traps smells

Water Usage: Low to moderate

Waste Disposal: Into sealed pit or septic tank



Flush System

FULL FLUSH TOILET ON A RAISED BASE

Best for: Semi-urban/urban areas with septic systems

Maintenance: Regular plumbing checks

Water Usage: High

Waste Disposal: Into septic tank or municipal system

Type	Water Needed	Odor Control	Maintenance	Eco-Friendly
VIP	None	Vent Pipe	Low	Moderate
Urinal Diversion	None	Dry Separation	Moderate	High
Flush Top	Yes	High Hygiene	High	Low
Pour Flush	Minimal	Water Seal	Medium	Moderate

Toilet Structures

Our range of precast toilet structures includes single, double, and physically challenged-accessible units—each designed to meet specific user needs, site conditions, and accessibility requirements.



Single Toilet Structure

A Single Toilet Structure is a compact, standalone sanitation unit designed to serve individual households or small user groups. It typically features one toilet cubicle, making it ideal for rural homes, remote locations, or temporary worksites.

This structure offers easy installation, low maintenance, and privacy while ensuring hygienic waste management with minimal space requirements.

VIP

UD

FLUSH

POUR
FLUSH

Double Toilet Structure

The Double Toilet Structure includes two separate toilet cubicles within a single precast unit, offering an efficient and cost-effective solution for communal or high-traffic areas.

It is commonly used in schools, community centers, or construction camps where shared access is needed. The dual compartments can be designated for male/female use or general use, enhancing convenience and reducing wait times.

VIP

UD



Physically Challenged Toilet Structure

The Physically Challenged Toilet Structure is specifically designed to cater to the needs of individuals with physical disabilities. It offers easy accessibility for wheelchairs to enter and move freely without obstruction, thanks to its carefully crafted dimensions.

Moreover, the pedestal is positioned to facilitate seamless movement from the wheelchair onto the pedestal. Inside the structure, handles are conveniently located on both sides of the pedestal, aiding individuals in moving to and from the pedestal with ease.

VIP

UD

FLUSH

POUR
FLUSH

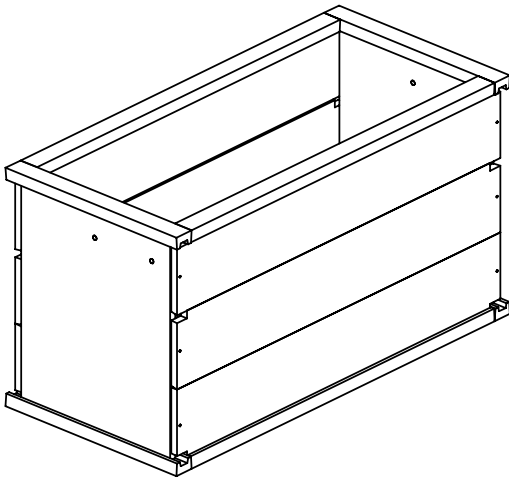
1.75m³ Single Pit Structure

To prevent water contamination in both high and low water table conditions, it is essential to ensure that all pits are sealed watertight. This is achieved by completely sealing the pits with either a 250 or 500 Micron High Density Polyethylene (HDPE) Sleeve. If emptying is necessary, simply remove the vent pipe and the pit cover slab.

You also have the option to request a sealable 250 micron HDPE plastic bag to maintain the watertight integrity of the pit.

The concrete top structure consists of:

- 6 x Pit Side Panels | 2 x End panels | 4 x Short Beams | 4 x Long Beams



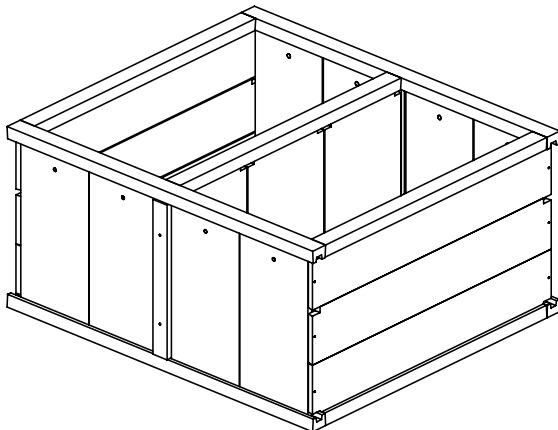
4m³ Double Pit Structure

When pits are lined with bricks or blocks, the top structure can also be installed on these pits, provided it adheres to the base and pit cover slab dimensions specified by us. We highly recommend that an engineer supervises the construction of a brick or block-lined pit system.

Additionally, you have the option to request a sealable 250-micron HDPE plastic bag to maintain the watertight integrity of the pit.

The concrete top structure consists of:

- 6 x Pit Side Panels | 8 x End panels (small) | 3 x Divider Panels | 6 x Short Beams
4 x Long Beams | 2 x Upright Beams



SPECIAL PRODUCTS

	Kerb	24
	Kerb Inlets	24
	Grid Inlets	24
	Median Drain Channel HD	24
	Median Drain Channel MD	25
	Median Drain Grids	25
	Trench Covers	25
	Cover Slabs	25
	Penstock Rings	26
	Concrete Shelters	26
	Road Barriers	26
	Wash Trough	26
	Square Chambers	27
	Pipe Plinths	27
	Carport Plinths	27
	Water Meter / Hydrant Box	27
	Pavers	28
	Various Markers	28
	Bollards	28
	Pipe Culvert Wing Walls	28
	Bus Shelter	29
	Dogbones	29
	Stock & Horse Trough	29
	Down Chutes	29
	Eskom T-Wall Panels	30
	Prasa Walls	30



Kerb

Our precast kerbs are produced in accordance with municipal and highway standards.

Various figure types available upon request. Contact your nearest sales office to confirm figure types available in your area.



Kerb Inlets

Precast concrete Kerb Inlets are supplied to various municipal specifications:

- Tswane profile
- Pretoria profile
- Joburg straight
- Ekurhuleni Profile

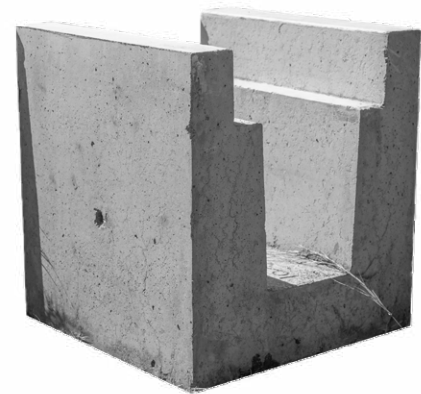
They come in configurations of precast concrete channel (600mm lengths), steel angle-frames and concrete slabs, and can be supplied in any length of 600mm sections.



Grid Inlets

A "grid inlet with Mentis grating" refers to a stormwater drainage inlet where the grate covering the opening is made by the company Mentis, known for producing high-quality steel grating.

Grid Inlets are used in various industrial and construction applications; essentially, it's a drainage grid with a Mentis brand grating on top to allow water to flow in while filtering out debris.



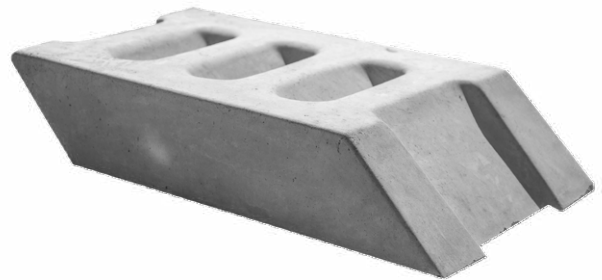
Median Drains HD

Heavy-duty median drains are designed to handle higher volumes of water and withstand more traffic load. Typically used in areas with frequent heavy vehicle traffic or where the drainage system must endure significant stress.



Median Drains MD

Medium-duty median drains are designed for areas with moderate traffic and water flow. They are typically used in less demanding environments compared to heavy-duty drains, and offer sufficient strength and capacity for everyday road drainage needs without the need for the high load-bearing capacity of heavy-duty versions.



Median Drain Grid

Concrete median drain grid covers are designed to protect drainage channels in road medians, and their design varies based on the load they need to withstand.

Heavy-duty covers are for areas with frequent heavy vehicle traffic, while medium-duty covers are suitable for areas with moderate traffic.

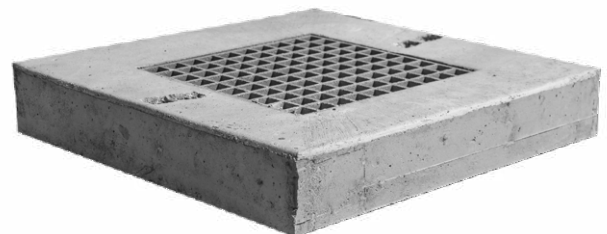


Trench Covers

Precast concrete trench covers are designed to protect electric conduits and cabling.

Covering these is vital for pedestrian protection as well as to shield the cables from traffic.

Various sizes available upon request. Our trench covers comply with Eskom standards.



Cover Slabs

Global Precast produces a wide selection of precast concrete cover slabs suitable for various purposes.

We provide our customers with a comprehensive range of services, encompassing design, manufacturing, transportation, and installation.



Penstock Rings

Penstock rings, resembling compressed framed manhole chambers, are primarily used in the mining sector for slime dams and mine dumps. These rings, available in standard sizes of 525mm and 750mm or custom sizes, align using male and female joints and are stacked to form chambers. As mining waste accumulates, additional rings are added to prevent slurry backflow, allowing denser solids to settle while excess water spills over into chambers for redirection to treatment plants. Although treated, the water remains unsuitable for drinking and is typically reused in mining operations.



Concrete Shelter

Reinforced concrete shelters are sturdy, durable structures designed to safely store equipment.

Made with concrete reinforced by steel bars or mesh, these shelters provide strong protection against weather, theft, and physical damage. They are often used for storing valuable or sensitive equipment in various industries, offering a secure, long-lasting solution.



Road Barriers

Concrete road barriers are robust, precast concrete structures used for safety and traffic control. They act as physical barriers to prevent vehicles from veering off the road, colliding with hazards, or entering opposing traffic lanes.

These barriers are commonly seen on highways, construction sites, and at events to separate traffic, protect pedestrians, and secure perimeters.



Wash Trough

The wash trough is tough and durable and ideally suited outside as wash basins. Small and large wash troughs are available.

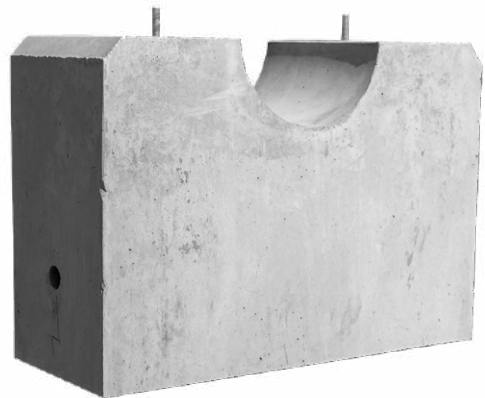
Constructed from high-quality concrete for durability and easy to clean and maintain. Excluding waste and trap.



Square Chambers

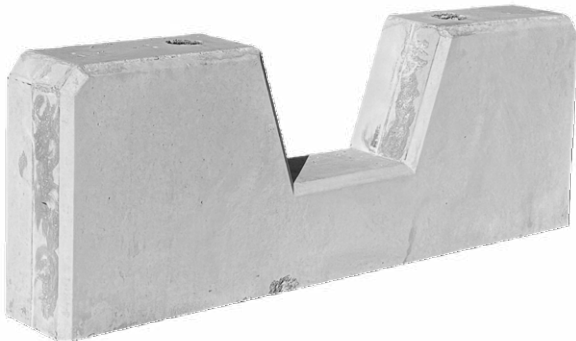
Square concrete chambers are precast concrete structures used in drainage and utility systems to provide access for inspection, maintenance, and repair.

Various sizes and heights are available. Please contact your nearest sales agent for more information.



Pipe Plinths

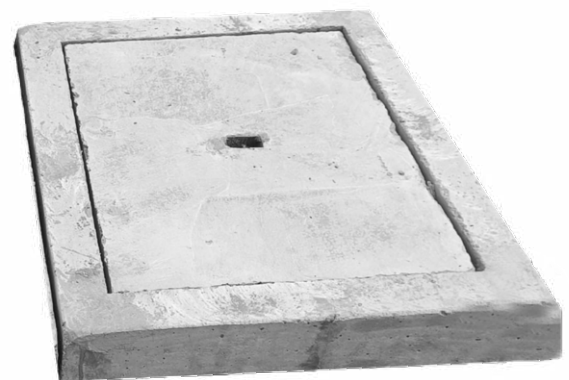
A precast concrete pipe plinth is a prefabricated concrete base designed to support and stabilize various types of equipment, including precast concrete pipes, mini-substations, electrical cabinets, and more. These plinths provide a stable, level platform for equipment installation and offer features like anchoring points for secure attachment.



Carport Plinths

Precast concrete carport plinths used as solar panel bases provide the essential support and stability needed for efficient and long-lasting solar installations, making them a key component in the renewable energy landscape.

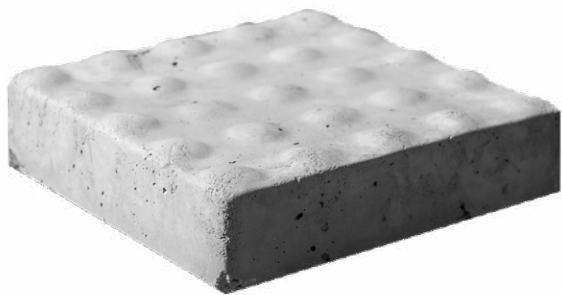
Available in a range of different sizes, Gobal Precast manufactures solar panel blocks, which can also be built to your exact requirements. Designed with cast-in lifting points for ease of handling, the blocks can be relocated if required and will outlive the lifespan of the panels themselves.



Water Meter / Hydrant Box

Precast concrete meter and hydrant valve boxes are enclosures typically made of reinforced concrete, used to house and protect water meters and hydrant valves underground.

These boxes are designed to be durable and provide easy access for maintenance and operation of the water infrastructure.



Pavers

Precast block pavers are versatile, durable, and aesthetically pleasing paving options made from concrete. They are manufactured in various shapes, sizes, colors, and textures, allowing for a wide range of design possibilities in outdoor spaces.

Precast concrete pavers are commonly used for driveways, patios, walkways, and other hardscaping projects, offering a cost-effective and customizable alternative to natural stone or brick.



Various Markers

Precast concrete markers are used to indicate the location of underground utilities like pipelines and electrical cables. They are typically made of concrete and can be customized with various markings, such as text or symbols, to identify the specific utility.

Precast road markers, like kerbs and traffic islands, are also used to delineate roadways, guide traffic, and provide pedestrian safety.



Bollards

Precast concrete bollards are durable, short vertical posts designed for traffic control, perimeter security, and pedestrian safety.

They effectively prevent vehicle intrusion into restricted areas while enhancing overall safety.



Pipe Culvert Wing Walls

Precast concrete wingwalls are structures designed to be installed at the ends of culvert pipes or box culverts to guide water flow, prevent erosion, and provide structural support for embankments.

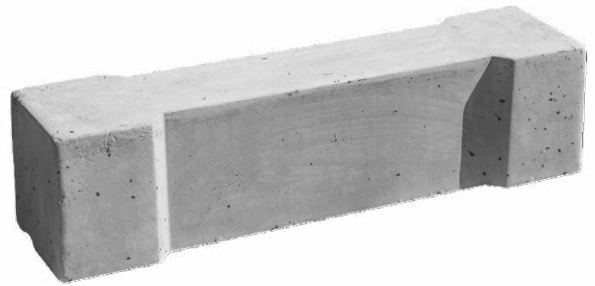
They are typically used at the inlet and outlet of culverts to improve hydraulic efficiency and protect the surrounding area.



Bus Shelters

Precast concrete bus shelters are durable, low-maintenance structures that protect waiting passengers from the elements.

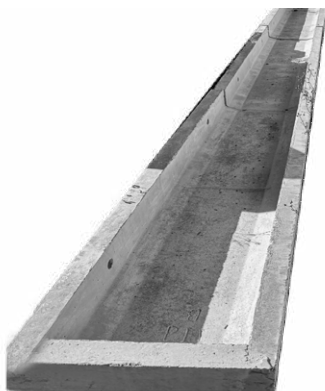
Factory-made and easily installed on-site, they often include seating and can be customized with lighting, signage, or advertising panels.



Dogbones

A popular Grid Cover is the so called "Dog Bone" trench cover. It is a rectangular cover with narrowing on either long side towards the middle. When laid side-by-side the narrowing's form slits through which the water can flow.

Custom made Precast Concrete Heavy Duty Dog Bone for Storm Water Grid Inlet where you require a road crossing.



Stock & Horse Trough

Precast concrete stock and horse troughs are durable, long-lasting water reservoirs designed for livestock, often made with reinforced concrete for strength and longevity.

They are available in various sizes and shapes to suit different needs and animal types, with features like rounded corners for safety, and options for drainage and water access.



Down Chutes

Precast concrete down chutes are prefabricated concrete components designed to safely and efficiently channel water or materials, like refuse, from higher to lower elevations.

They are commonly used in stormwater management, erosion control, and refuse disposal systems.

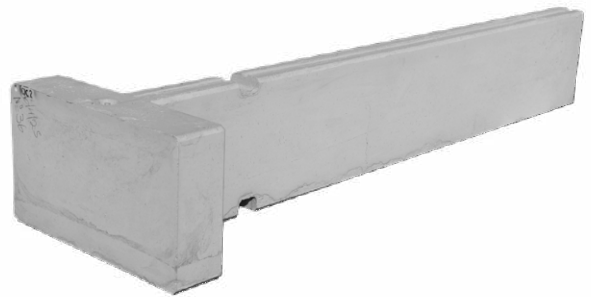


Prasa Walls

Our latest product range includes high-impact security walling to provide an extensive solution to improve security at rail corridors and substations. These heavy-duty units are made to offer secured protection against looting, theft, trespassing, and riots.

These walls come in precast bases, I-section columns and panels of 4m high and 5m long sections. This wall system has been used at several Prasa premises and we have the necessary approval by Prasa.

Specifications and more details are available upon request.



Eskom Walls

One of our offerings is the Eskom Security Wall, 2.4m in height with a thickness of 150 mm. This wall offers a sophisticated, high-strength concrete structure, ensuring exceptional security. Designed as a monolithic guardian, these walls are specifically engineered to offer formidable resistance against intrusion and to endure the severe tests imposed by environmental elements and potential breaches.

The Eskom Security Walls are modular and designed with a robust base, ensuring an easy and straightforward setup without the need for on-site concrete work, thereby minimizing preparatory efforts. These security barriers are instrumental across South Africa, safeguarding assets in sectors like energy, government infrastructure, and commercial sites.

CONTACT US

FCS HOLDINGS

- +27 51 492 1716
- admin@fcsholdings.co.za
- 18 Mill St, Bloemfontein, Free State, 9301, ZA

www.fcsholdings.co.za

