

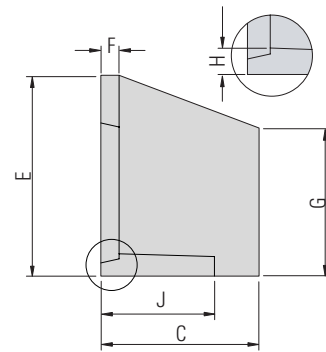
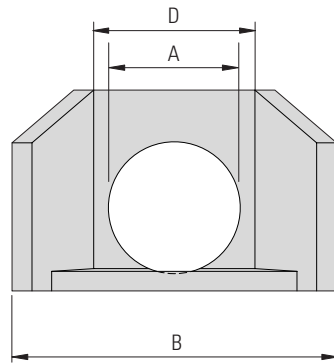
## Headwalls

### Small Pipe Headwalls

Used primarily for drainage applications. Annulus between pipe and headwall should be grouted after installation.



Half Base



### Small Pipe Headwalls - Half Base

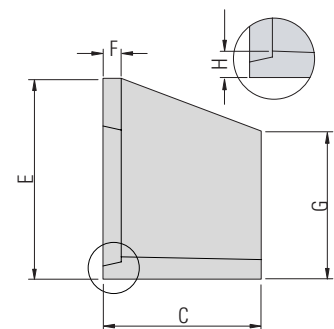
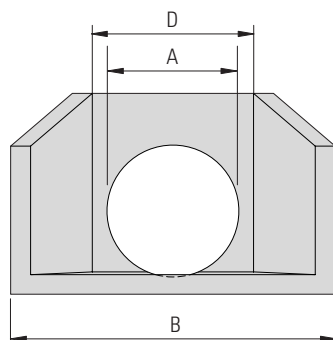
Product Code	Pipe Size	Nominal Dimensions (mm)								
		A	B	C	D	E	F	G	H	J
HWL225L	225	300	1270	550	600	590	80	560	90	270
HWL300L	300	390	1370	690	600	710	80	560	90	320
HWL375L	375	470	1370	690	600	710	80	560	90	320
HWL450L	450	550	1410	690	750	850	80	600	90	270



Full Base

### Small Pipe Headwalls - Full Base

Product Code	Pipe Size	Nominal Dimensions (mm)							
		A	B	C	D	E	F	G	H
HWL300H	300	380	1660	650	800	750	85	560	85
HWL375H	375	470	1660	650	800	750	85	560	85
HWL450H	450	550	1600	650	750	825	85	620	85
HWL525H	525	625	1700	800	800	1040	90	775	105
HWL600H	600	710	1700	800	800	1040	90	775	105
HWL675H	675	815	1850	1000	1000	1100	95	775	105
HWL750H	750	890	1850	1000	1000	1300	95	925	105
HWL825H	825	965	1850	1000	1000	1300	95	925	105
HWL900H	900	1060	1850	1000	1000	1300	95	925	105



### Project Drawings

Rocla is able to provide general arrangement details to suit site specific requirements showing headwall dimensions.

Contact Rocla for more information.

Headwalls

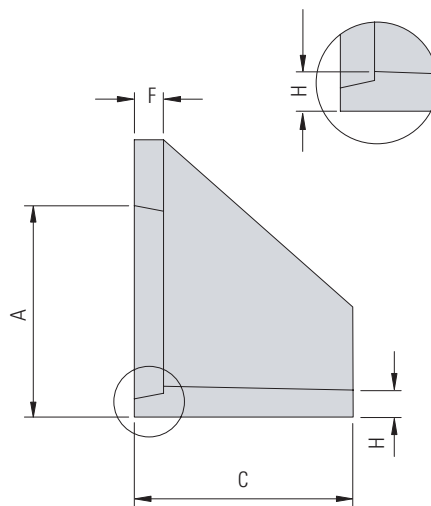
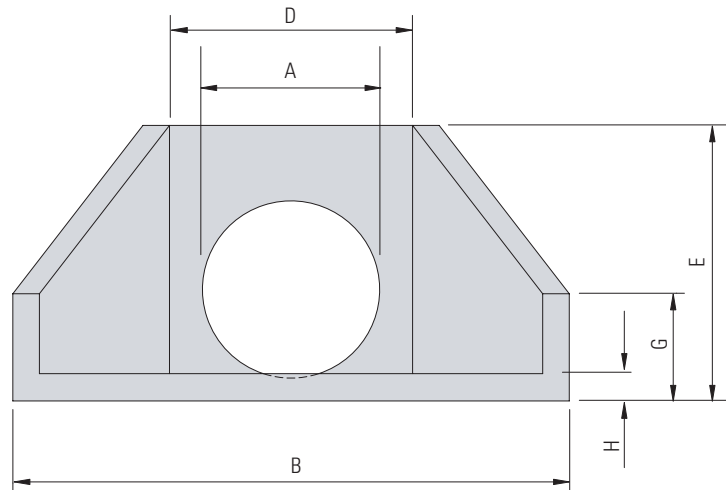
Large Pipe Headwalls

Used for drainage and irrigation applications. May need to grout annulus between pipe and headwall.



Large Pipe Headwalls

Product Code	Pipe Size	Nominal Dimensions (mm)							
		A	B	C	D	E	F	G	H
HWC1050JV	1050	1215	3415	1620	1515	1520	120	520	120
HWC1200JV	1200	1385	3415	1620	1515	1670	120	670	120
HWC1350JV	1350	1545	3915	1620	2015	1900	120	900	120
HWC1500JV	1500	1710	3915	1620	2015	2065	120	1065	120
HWC1650JV	1650	1900	5010	2400	2100	2180	120	660	150
HWC1800JV	1800	2040	5010	2400	2100	2320	120	800	150
HWC1950JV	1950	2230	5310	2400	2400	2580	120	1060	150
HWC2100JV	2100	2355	5310	2400	2400	2705	120	1185	150
HWC2250JV	2250	2600	5610	2400	2700	2900	120	1380	150
HWC2400JV	2400	2680	5644	2400	2700	3000	150	1500	180
HWC2550JV	2550	2830	6537	3000	3000	3110	150	1210	180



## Headwalls

### Sloped Headwalls

Sloping face headwalls are manufactured to Queensland Main Roads specifications and are available to suit pipes from 300mm to 600mm diameter.



Sloping face headwall

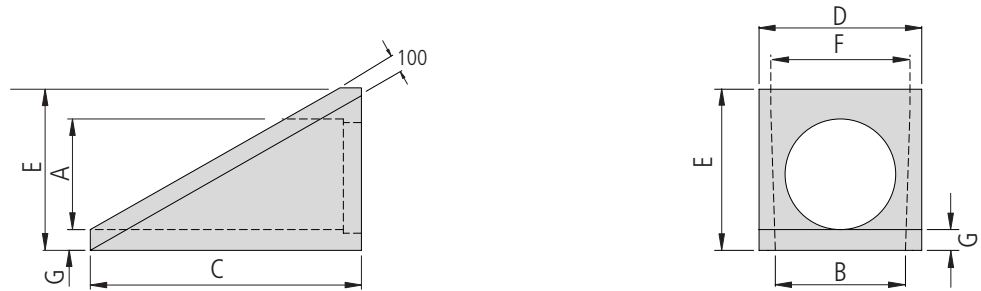


Low-profile sloping face headwall

### Sloping Face Headwalls

Product Code	Pipe Size	Nominal Dimensions (mm)						
		A	B	C	D	E	F	G
HWL300AH	300	457	650	1250	840	820	700	125
HWL375AH	375	457	650	1250	840	820	700	125
HWL450AH	450	457	650	1250	840	820	700	125
HWL525AH	525	612	800	1500	900	920	850	115
HWL600AH	600	612	800	1500	900	920	850	115

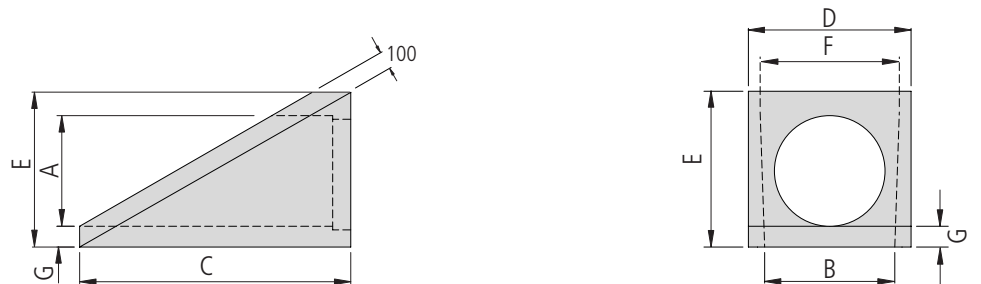
Note: Flat section at top of sloping face headwalls is 55mm wide on 300 to 450 sizes and 85mm wide on larger sizes.



### Low-profile Sloping Face Headwalls

Product Code	Pipe Size	Nominal Dimensions (mm)						
		A	B	C	D	E	F	G
HWL300APH	300	457	650	1250	840	725	700	125
HWL375APH	375	457	650	1250	840	725	700	125
HWL450APH	450	57	650	1250	840	725	700	125
HWL525APH	525	612	800	1500	900	830	850	115
HWL600APH	600	612	800	1500	900	830	850	115

Note: Flat section at top of low-profile sloping face headwalls is 200mm wide on 300 to 450 sizes and 220mm wide on larger sizes



## Headwalls

### Multi-cell Pipe Headwalls

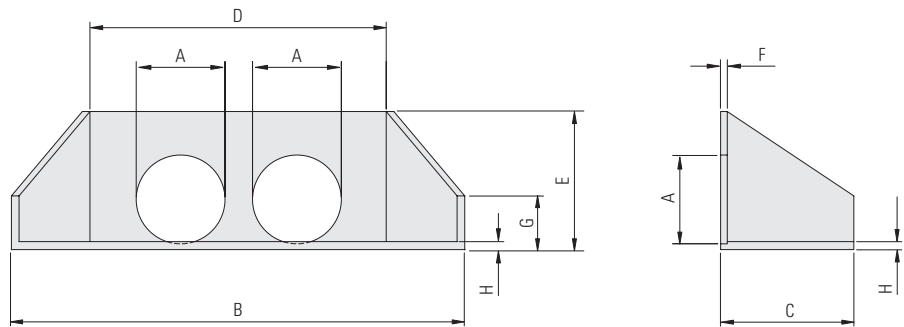
Rocla can manufacture multi-cell headwalls with up to 12 cells, or more if required.

Jointing of multi-piece headwalls as per brochure.



### Twin-cell Pipe Headwalls

Product Code	Pipe Size	Type	Nominal Dimensions (mm)							
			A	B	C	D	E	F	G	H
HWC300JZ02	300	One Piece	378	1756	650	1180	840	90	467	90
HWC375JZ02	375	One Piece	460	2351	650	1775	840	90	467	90
HWC450JZ02	450	One Piece	545	2351	650	1775	840	90	467	90
HWC525JZ02	525	One Piece	630	2351	650	1775	840	90	467	90
HWC600JZ02	600	One Piece	710	2440	780	1775	1035	90	575	90
HWC675JZ02	675	One Piece	800	2983	1010	2160	1120	90	507	90
HWC750JZ02	750	One Piece	885	2983	1010	2160	1120	90	507	90
HWC825JZ02	825	One Piece	985	3329	1010	2505	1300	90	687	90
HWC900JZ02	900	One Piece	1060	3329	1010	2505	1300	90	687	90
HWC1050JZ02	1050	One Piece	1215	4715	1620	2815	1520	120	520	120
HWC1200JZ02	1200	One Piece	1385	5215	1620	3315	1670	120	670	120
HWC1350JZ02	1350	One Piece	1545	5415	1620	3515	1900	120	900	120
HWC1500JZ02	1500	One Piece	1710	5915	1620	4015	2065	120	1065	120
HWC1650JZ02	1650	Two Piece	1900	7070	2400	4160	2180	120	660	150
HWC1800JZ02	1800	Two Piece	2040	7370	2400	4460	2320	120	800	150
HWC1950JZ02	1950	Two Piece	2230	7730	2400	4820	2580	120	1060	150
HWC2100JZ02	2100	Two Piece	2355	8005	2400	5095	2705	120	1185	150



*Note: The above dimensions are based on a pipe spacing of 300mm (between the outside of the pipes). Other spacings are available. Contact Rocla for details.*

## Headwalls

### Multi-cell Pipe Headwalls

Multi-cell pipe headwalls can be supplied with virtually any number of cells.



25-cell 750mm diameter pipe headwalls under rail line



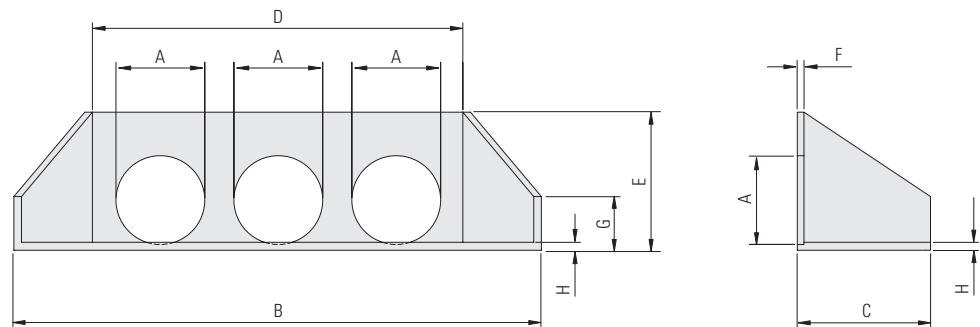
Triple-cell 1050mm diameter pipe headwall



Triple-cell, high bulkhead 1200mm diameter pipe headwall with 450mm diameter pipe in wing wall

### Triple-cell Pipe Headwalls

Product Code	Pipe Size	Type	Nominal Dimensions (mm)							
			A	B	C	D	E	F	G	H
HWC300.JZ03	300	One Piece	378	2351	650	1775	840	90	467	90
HWC375.JZ03	375	One Piece	460	2736	650	2160	840	90	467	90
HWC450.JZ03	450	One Piece	545	3081	650	2505	840	90	467	90
HWC525.JZ03	525	One Piece	630	3081	650	2505	840	90	467	90
HWC600.JZ03	600	One Piece	710	3556	780	2890	1035	90	575	90
HWC675.JZ03	675	One Piece	800	3409	1010	3485	1120	90	507	90
HWC750.JZ03	750	One Piece	885	3409	1010	3485	1120	90	507	90
HWC825.JZ03	825	One Piece	985	4694	1010	3485	1300	90	687	90
HWC900.JZ03	900	One Piece	1060	4694	1010	3870	1300	90	687	90
HWC1050.JZ03	1050	Two Piece	1215	6215	1620	4315	1520	120	520	120
HWC1200.JZ03	1200	Two Piece	1385	6705	1620	4805	1670	120	670	120
HWC1350.JZ03	1350	Two Piece	1545	7205	1620	5305	1900	120	900	120
HWC1500.JZ03	1500	Two Piece	1710	7690	1620	5790	2065	120	1065	120
HWC1650.JZ03	1650	Two Piece	1900	9230	2400	6320	2180	120	660	150
HWC1800.JZ03	1800	Two Piece	2040	9690	2400	6780	2320	120	800	150
HWC1950.JZ03	1950	Two Piece	2230	10220	2400	7310	2580	120	1060	150
HWC2100.JZ03	2100	Two Piece	2355	10645	2400	7735	2705	120	1185	150



Note: The above dimensions are based on a pipe spacing of 300mm (between the outside of the pipes). Other spacings are available. Contact Rocla for details.

## Headwalls

### RCBC Headwalls

Rocla manufactures headwalls to suit most RCBC sizes and configurations from 300mm span up to 3600mm span, including unlimited multiple spans. A range of standard small span RCBC headwalls is also available, as shown in the table.



Single cell box culvert headwall

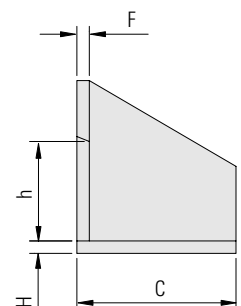
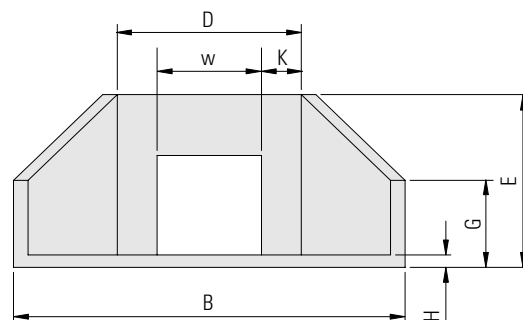


Multi-cell box culvert headwalls

When using Rocla® RCBC headwalls, the base slab may need to be shortened to allow the precast wingwalls to slide past the side of the box culvert legs, rather than butt up to them. Contact Rocla for more information.

### Small Box Culvert Headwalls

Product Code	RCBC Size	Nominal Dimensions (mm)									
		W	h	B	C	D	E	F	G	H	K
HWC030015BJ	300 x 150	444	248	1371	650	795	630	90	467	90	176
HWC030022BJ	300 x 225	444	323	1371	650	795	720	90	467	90	176
HWC037015BJ	375 x 150	519	248	1371	650	795	630	90	467	90	138
HWC037022BJ	375 x 225	519	323	1371	650	795	720	90	467	90	138
HWC045015BJ	450 x 150	594	258	1371	650	795	630	90	467	90	101
HWC045022BJ	450 x 225	594	333	1371	650	795	720	90	467	90	101
HWC045030BJ	450 x 300	594	408	1371	650	795	790	90	467	90	101
HWC060015BJ	600 x 150	754	258	1756	650	1180	630	90	467	90	213
HWC060022BJ	600 x 225	754	333	1756	650	1180	720	90	467	90	213
HWC060030BJ	600 x 300	754	408	1756	650	1180	790	90	467	90	213
HWC060037BJ	600 x 375	754	483	2004	1010	1180	900	90	287	90	213
HWC060045BJ	600 x 450	754	558	2004	1010	1180	1000	90	387	90	213
HWC075015BJ	750 x 150	914	268	1756	650	1180	630	90	467	90	133
HWC075022BJ	750 x 225	914	343	1756	650	1180	720	90	467	90	133
HWC075030BJ	750 x 300	914	418	1756	650	1180	790	90	467	90	133
HWC075037BJ	750 x 375	914	493	2004	1010	1180	900	90	287	90	133
HWC075045BJ	750 x 450	914	568	2004	1010	1180	1000	90	387	90	133
HWC075060BJ	750 x 600	914	718	2004	1010	1180	1120	90	507	90	133
HWC090015BJ	900 x 150	1074	278	2351	650	1775	630	90	467	90	351
HWC090022BJ	900 x 225	1074	353	2351	650	1775	720	90	467	90	351
HWC090030BJ	900 x 300	1074	428	2351	650	1775	790	90	467	90	351
HWC090037BJ	900 x 375	1074	503	2599	1010	1775	900	90	287	90	351
HWC090045BJ	900 x 450	1074	578	2599	1010	1775	1000	90	387	90	351
HWC090060BJ	900 x 600	1074	728	2599	1010	1775	1120	90	507	90	351
HWC090075BJ	900 x 750	1074	878	2599	1010	1775	1280	90	667	90	351
HWC120022BJ	1200 x 225	1384	368	2351	650	1775	750	90	467	90	196
HWC120030BJ	1200 x 300	1384	443	2351	650	1775	840	90	467	90	196
HWC120037BJ	1200 x 375	1384	518	2599	1010	1775	900	90	287	90	196
HWC120045BJ	1200 x 450	1384	593	2599	1010	1775	1000	90	387	90	196
HWC120060BJ	1200 x 600	1384	743	2599	1010	1775	1120	90	507	90	196
HWC120075BJ	1200 x 750	1384	893	2599	1010	1775	1280	90	667	90	196
HWC120090BJ	1200 x 900	1384	1030	3915	1620	2015	1520	120	520	120	316
HWC120120BJ	1200 x 1200	1430	1322	3915	1620	2015	1850	120	850	120	293



Note: Opening ( $W \times h$ ) to specification.

Headwalls are also available to suit large-span and multi-cell box culverts. Contact Rocla for further details. Headwalls to suit box culverts up to 3000 x 2400mm ( $B \times D$ ) are generally supplied as a single piece.

Headwalls with greater spans are supplied as multi-piece units.

## Headwalls

### RCBC Headwalls

Rocla manufactures customised box culverts headwalls to suit individual site requirements. Multi-cell headwalls can be supplied in sections to aid handling on site.



### Large Box Culvert Headwalls

Product Code	RCBC Size	Nominal Dimensions (mm)									
		W	h	B	C	D	E	F	G	H	K
HWC150060BJ	1500 x 600	1730	798	2984	1010	2160	1120	90	507	90	215
HWC150090BJ	1500 x 900	1730	1085	3915	1620	2015	1520	120	520	120	143
HWC150120BJ	1500 x 1200	1730	1385	3915	1620	2015	1850	120	850	120	143
HWC150150BJ	1500 x 1500	1730	1685	3915	1620	2015	2140	120	1140	120	143
HWC180060BJ	1800 x 600	2030	798	3329	1010	2505	1120	90	507	90	238
HWC180090BJ	1800 x 900	2030	1085	4715	1620	2815	1520	120	520	120	393
HWC180120BJ	1800 x 1200	2030	1385	4715	1620	2815	1850	120	850	120	393
HWC180150BJ	1800 x 1500	2030	1685	4715	1620	2815	2140	120	1140	120	393
HWC180180BJ	1800 x 1800	2030	1985	5310	2400	2400	2520	120	1000	150	185
HWC210060BJ	2100 x 600	2360	813	3714	1010	2890	1120	90	507	90	265
HWC210090BJ	2100 x 900	2360	1100	4715	1620	2815	1520	120	520	120	228
HWC210120BJ	2100 x 1200	2360	1400	4715	1620	2815	1850	120	850	120	228
HWC210150BJ	2100 x 1500	2360	1700	4715	1620	2815	2140	120	1140	120	228
HWC240060BJ	2400 x 600	2690	828	4309	1010	3485	1120	90	507	90	398
HWC240090BJ	2400 x 900	2690	1115	5215	1620	3315	1520	120	520	120	313
HWC240120BJ	2400 x 1200	2690	1415	5215	1620	3315	1850	120	850	120	313
HWC240150BJ	2400 x 1500	2690	1715	5215	1620	3315	2140	120	1140	120	313
HWC270090BJ	2700 x 900	3020	1130	5215	1620	3315	1520	120	520	120	148
HWC270120BJ	2700 x 1200	3020	1430	5215	1620	3315	1850	120	850	120	148
HWC270150BJ	2700 x 1500	3020	1730	5215	1620	3315	2140	120	1140	120	148
HWC210180BJ	2100 x 1800	2360	2000	5510	2400	2600	2520	120	1000	150	120
HWC210210BJ	2100 x 2100	2360	2300	5544	2400	2600	2820	150	1320	180	120
HWC240180BJ	2400 x 1800	2690	2015	5910	2400	3000	2520	120	1000	150	155
HWC240210BJ	2400 x 2100	2690	2315	5944	2400	3000	2820	150	1320	180	155
HWC240240BJ	2400 x 2400	2690	2615	5944	2400	3000	3110	150	1610	180	155
HWC270180BJ	2700 x 1800	3020	2030	6410	2400	3500	2520	120	1000	150	240
HWC270210BJ	2700 x 2100	3020	2330	6444	2400	3500	2820	150	1320	180	240
HWC270240BJ	2700 x 2400	3020	2630	6444	2400	3500	3110	150	1610	180	240
HWC300120BJ	3000 x 1200	3350	1445	5915	1620	4015	1850	120	850	120	333
HWC300150BJ	3000 x 1500	3350	1745	5915	1620	4015	2140	120	1140	120	333
HWC300180BJ	3000 x 1800	3350	2045	6460	2400	3550	2520	120	1000	150	100
HWC300210BJ	3000 x 2100	3350	2345	6494	2400	3550	2820	150	1320	180	100
HWC300240BJ	3000 x 2400	3350	2645	6494	2400	3550	3110	150	1610	180	100