

Perfect Manhole System

Designed and manufactured to last a minimum of 120 years, this sealed manhole system gives up to 40% savings on greenhouse gases compared to traditional manhole construction and eliminates the need for ready mixed concrete to form the traditional base and chamber benching.

- **Complies with TII (NRA) & Irish Water specification where approved**
- **Installation in as little as 25 minutes**
- **Reduces the need to work in confined spaces**
- **Eliminates the need for wet trades, can be installed in wet ground conditions and during bad weather**

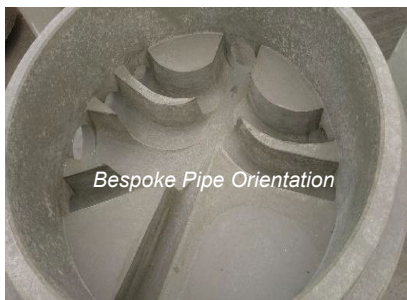


The perfect manhole system can connect to plastic, clay, twinwall, uPVC or concrete pipes giving you the largest choice of options. Due to our modern production methods, we offer a short lead time for your bespoke configuration. Once your site specific inlet sizes, locations and inverts have been entered, our state of the art computerised program optimises the hydraulic flow to avoid unwanted turbulence and pile up zones by a constant decline in the whole channel.



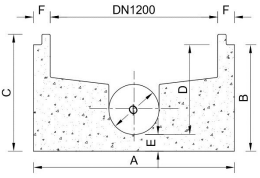
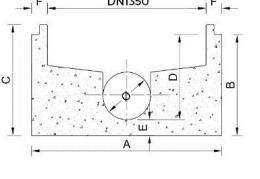
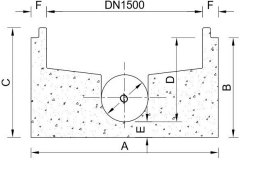
- **Perfect hydraulics optimised for each bespoke base**
- **Pre-benched in any configuration normally within 3 working days**
- **No water ingress into sewerage network reducing treatment costs due to sealed chamber ring with sealed cover slab**
- **With a minimum 130mm wall & sealed joints, the system is guaranteed to withstand a minimum of 5m head pressure**
- **No need to surround in concrete unless specifically required**
- **Choice of rubber joint or butyl sealant strip**
- **Correct joint installation can be visually confirmed**
- **Certified to ISEN 1917 & IS420 2004**

The Perfect is truly bespoke, not only can you position the inlets to different sizes and in any location to suit the site requirements, our computerised manufacturing process will optimise the benching on each chamber to avoid unwanted turbulence and pile up zones by a constant decline in the whole channel.



- **Manufactured in wide range of sizes and depths**
- **Simple to assemble requiring relatively unskilled labour on site**
- **The structure is durable with its own inherent strength**
- **Complete system tested in factory conditions**
- **Manhole step can be supplied cast into the base if needed**
- **Supplied with lifting anchors or lifting holes cast into rings**
- **Soffit of inlet pipes can be same level as soffit of outlet pipe where requested.**



Dimensions	Outlet Diameter mm	A mm	B (min) mm	C (min) mm	D mm	E (min) mm	F mm	Weight (SWL)KG
	100mm	1460	534	600	384	150	130	1409
	150mm	1460	534	600	384	150	130	1409
	225mm	1460	609	675	459	150	130	1700
	300mm	1460	684	750	534	150	130	1818
	375mm	1460	784	850	634	150	130	2004
	375mm - Concrete Only	1580	884	950	734	150	190	2696
	400mm	1580	984	900	834	150	190	2925
	450mm	1580	984	900	834	150	190	2877
	100mm	1700	605	671	455	150	175	2191
	150mm	1700	605	671	455	150	175	2182
	225mm	1700	705	771	555	150	175	2580
	300mm	1700	755	821	605	150	175	2741
	375mm	1700	855	921	705	150	175	3036
	375mm - Concrete Only	1700	855	921	705	150	175	3036
	400mm	1700	855	921	705	150	175	3023
	450mm	1700	955	1021	805	150	175	3266
	100mm	1800	605	700	455	150	150	2346
	150mm	1800	605	700	455	150	150	2346
	225mm	1800	705	800	555	150	150	2798
	300mm	1800	705	800	555	150	150	2986
	375mm	1800	855	950	705	150	150	3328
	400mm	1800	955	1050	805	150	150	3650
	450mm	1800	955	1050	805	150	150	3599
	500mm	1920	975	1070	825	210	210	3650
	525mm (500mm channel depth)	1920	975	1070	825	210	210	4198
	600mm (500mm channel depth)	1920	975	1070	825	210	210	4133
675mm (500mm channel depth)	1920	1275	1370	1075	210	210	6000	
750mm (750mm channel depth)	1920	1275	1370	1075	210	210	6000	
1800mm Diameter System	675mm (500mm channel depth)	2340	1450	1550	1200	250	275	6420
	750mm (500mm channel depth)	2340	1500	1600	1200	300	275	6745
	900mm (600mm channel depth)	2340	1600	1700	1300	300	275	10000
2100mm Diameter System	1050mm (750mm channel depth)	2700	1820	1915	1500	300	300	13000
	1200mm (900mm channel depth)	2400	2050	2150	1650	300	150	13000

Note: Smaller connections for the 1800 & 2100mm dia. standard base unit are available on request. All weights are approx.



Ring c/w Steps	Chamber Ring Height & Approx. Weight (kg)				
	Wall "F"	0.25m	0.50m	0.75m	1.00m
1200mm Ø - Regular	110mm (LH)	290kg	570kg	800kg	1,120kg
1350mm Ø - Regular	140mm (LH)	n/a	850kg	1,250kg	1,700kg
1500mm Ø - Regular	155mm (LH)	n/a	1,050kg	1,565kg	2,080kg
1800mm Ø - Regular	160mm (LH)	n/a	1,120kg	n/a	2,420kg
2100mm Ø - Regular	155mm (LH)	n/a	1,520kg	n/a	3,000kg
1200mm Ø - WTS	130mm (LA)	350kg	690kg	n/a	1,350kg
1350mm Ø - WTS	140mm (LA)	n/a	850kg	1,250kg	1,700kg
1500mm Ø - WTS	155mm (LA)	n/a	1,050kg	1,565kg	2,080kg

EN13101 Integrated polypropylene manhole step supplied with all chamber rings.



Cover Slab	Thickness	Effective Thickness	Weight
1200mm	230mm	150mm	580kg
1350mm	300mm	200mm	1,020kg
1500mm	300mm	200mm	1,260kg
1800mm	300mm	200mm	1,780kg
2100mm	350mm	230mm	3,200kg

WTS = Water Tight System.
(LH) = lifting holes.
(LA) = 3 lifting anchors.

For more details see table 9 on www.condronconcrete.ie

Please note: All dimensions are correct at time of publication, please check drawings supplied at approval stage.