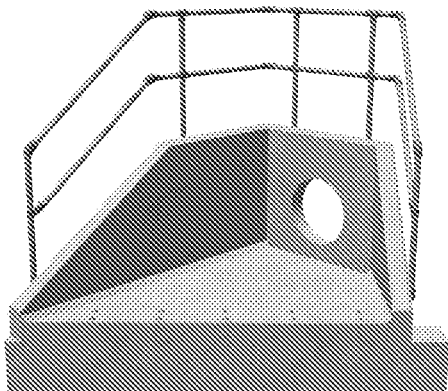




Angled Precast Concrete Headwalls





Index

Althon Precast Concrete Headwalls Overview	02
Gratings	03
AH10C Angled Headwall Range	04
AH4C Left Hand Angled Headwall Range	05
AH4C Right Hand Angled Headwall Range	06
AH12C Angled Headwall Range	07
RSFA12 Angled Headwall Range	08
R18A Left Hand Angled Headwall Range	09 - 10
R18A Right Hand Angled Headwall Range	11 - 12
R18B Left Hand Angled Headwall Range	13 - 14
R18B Right Hand Angled Headwall Range	15 - 16
R20B Left Hand Angled Headwall Range	17 - 18
R20B Right Hand Angled Headwall Range	19 - 20
Headwall Accessories	21 - 22

Althon Precast Concrete Headwalls

Althon Headwalls offer a cost effective alternative to in-situ structures for connecting pipework discharging into open watercourse. All drainage pipes discharging into open watercourse, such as swales, ditches, ponds and rivers should be fitted with a suitable headwall. These units help to protect and locate outfall pipes and to minimise erosion at the point of discharge. Althon headwalls can accommodate pipework with an internal diameter of up to and including 1650mm ID and PCC box culverts up to 2400mm wide x 1500mm deep. Multiple pipe outlets can also be accommodated.

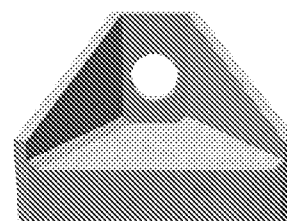
Headwall units can be fitted with or supplied with a range of accessories such as flap valves, penstocks, grates, hand railing etc.

Wherever water is to be fed from an open watercourse into a pipe outlet, an Althon Silt Trap Inlet should be provided. The sloped grating minimises the risk of blockage from floating material, and silt will be collected by the silt chamber prior to the outfall pipe. Althon manufacture a range of Silt Trap Inlets to cater for pipework with an internal diameter of up to and including 1200mm.

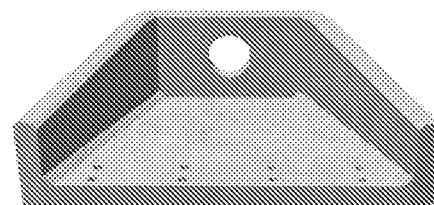
Althon Headwalls and Silt Traps have been used on contracts requiring approval from organisations such as the Environment Agency, Local Authorities and the Highways Agency. Althon Headwalls and Silt Traps are quick and simple to install and reduce the need for skilled labour.

Please note when reviewing this information openings shown on illustrations for pipe entry are indicative only. See tables for maximum opening sizes.

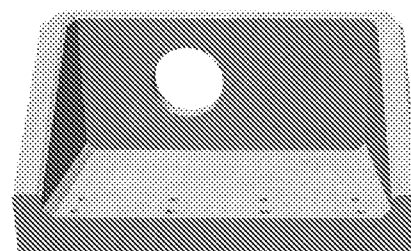
If a Penstock or Flap Valve is to be fitted to the Headwall, the frame size will determine the maximum pipe diameter that can be accommodated - please contact the Althon Sales office for details.



Standard Precast Concrete Headwalls



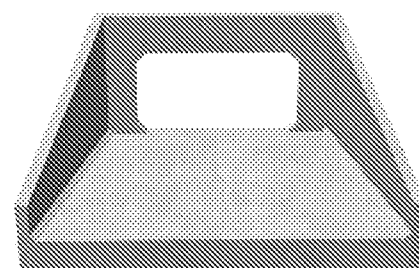
Sewers for Adoption Headwalls



Rectangular Precast Headwalls



Angled Precast Headwalls



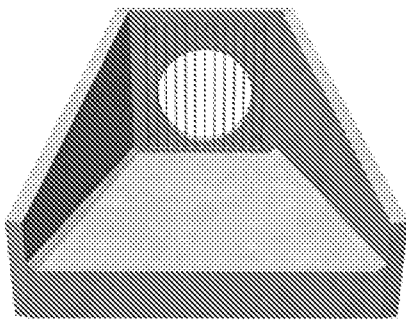
Precast Headwalls for Culverts

Grating Configurations for Althon Headwalls

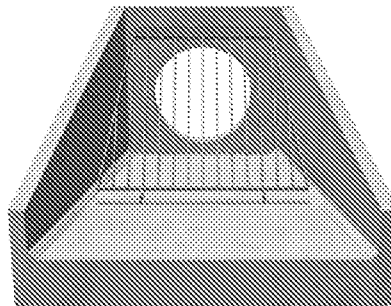
Althon Headwalls can be supplied fitted with either mild steel (unit fully welded then hot dip galvanised or stainless steel gratings. Three different configurations are available. Gratings provide safety against persons entering the pipe or culvert and protection against the ingress of debris. Bespoke gratings can be manufactured to suit customer requirements, please contact the Althon Sales Office for further details.

The sloped Grating is normally used where a flap valve is fitted, it allows the flap valve to operate efficiently and offers better protection against blockage as it allows debris to be pushed up the grating as the water level rises, minimising build up and potential blockage.

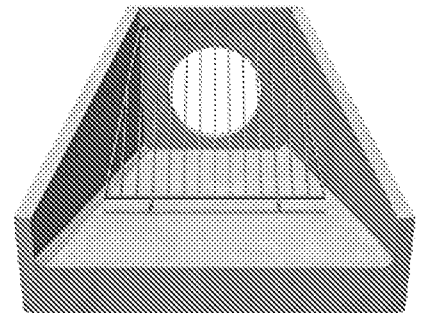
The cranked grating is normally used where a large flap valve or penstock is fitted. This type of grating allows the flap valve or penstock to operate efficiently. Special access points can be made available with the grating to allow access to operating gear for penstocks etc.



Close Coupled Grating



Sloped Grating

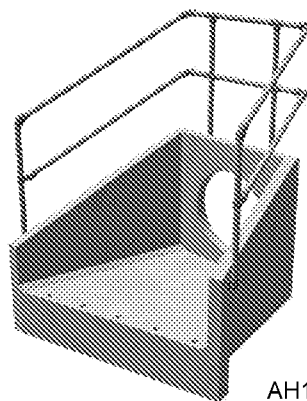


Cranked Grating

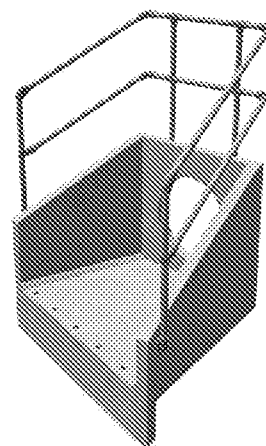


AH10C Headwall Range

Up to 900mm Pipework
1250mm - 2130mm Backwall Height



AH10C LH



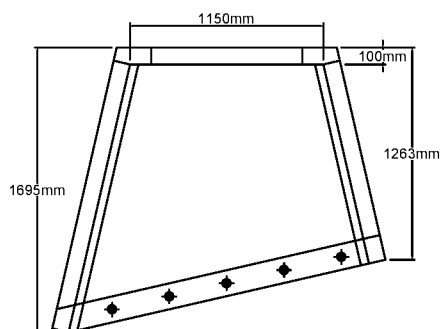
AH10C RH

A one-piece reinforced concrete headwall to suit plastic or clayware or PCC pipes up to 900mm I.D. Available with three standard backwall heights 1.25m, 1.65m and 2.13m. Stainless steel sockets are provided for the attachment of gratings and special brackets are available for use with the anchorage system.

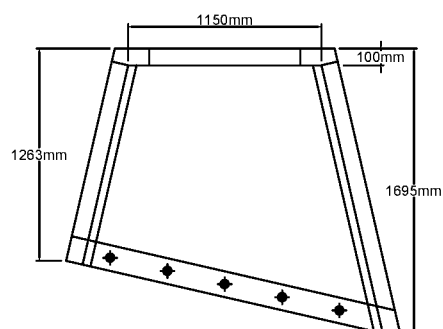
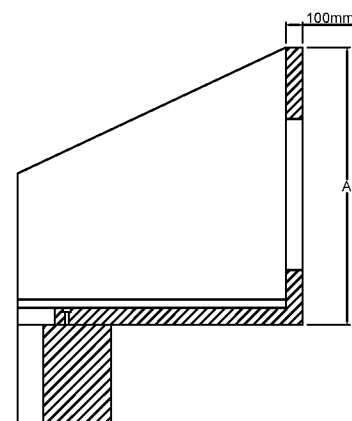
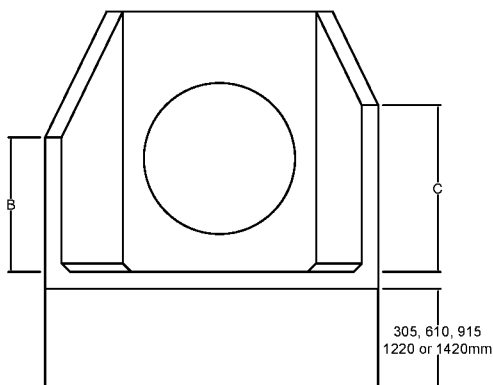
Optional Kee Klamp handrail

These headwalls allow pipework entering a watercourse at an angle to be accommodated or for and outfall to be sited on a bend in a river. The toe is cast separately and is available in depths of 305, 610, 915, 1220 or 1420mm dependent on site conditions. The toe is fixed to the underside of the headwall with 5 stainless steel bolts which are fastened from the top and are hidden in a recess cast into the splash plate.

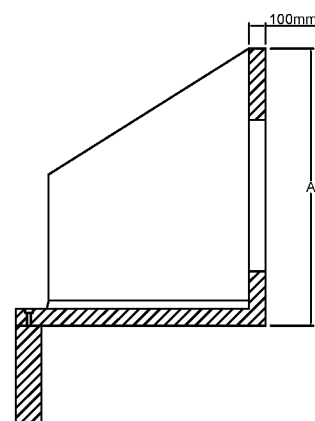
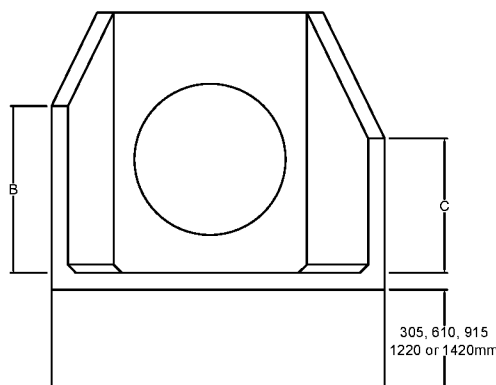
Headwall	Max Pipe Opening Plastic/C.ware	Max Pipe Opening PCC	A	B	C	Approx Weight kg	Weight with toe kg				
							305mm	610mm	915mm	1220mm	1420mm
AH10CA LH	900	750	1250	400	595	1800	2045	2290	2538	2780	2945
AH10CA RH	900	750	1250	595	400	1800	2045	2290	2538	2780	2945
AH10CB LH	900	900	1650	800	995	2100	2345	2590	2838	3080	3245
AH10CB RH	900	900	1650	995	800	2100	2345	2590	2838	3080	3245
AH10CC LH	900	900	2130	417	830	2300	2545	2790	3038	3280	3445
AH10CC RH	900	900	2130	830	417	2300	2545	2790	3038	3280	3445



AH10C LH



AH10C RH



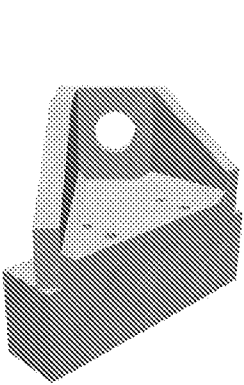


AH4C LH Headwall Range

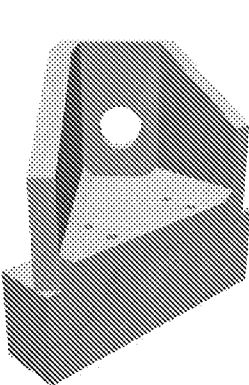
Up to 300mm Pipework
600mm - 950mm Backwall Height

The AH4C Headwall is a two part Pcc Headwall that allows water to discharge at a 45 Deg. angle, the Environment Agency's preferred method when discharging into a watercourse. The AH4C headwall fully meets the Environment Agency's 'Standard rules SR2015 No 27 – Constructing an outfall pipe of 300mm diameter through a headwall into a main river' & Exempt flood risk activities: environmental permits section FRA12 'Outfall pipes less than 300mm diameter through a headwall'.

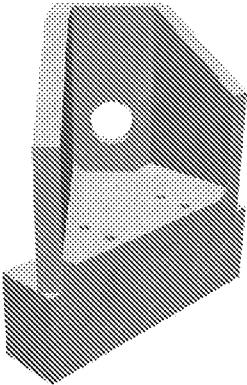
The AH4C is available with three different back wall heights and three different toe depths for Twin Wall or Clay Pipes up to & including 300mm ID. Having a separate toe makes it easier to handle and more importantly ensures the foundation around the toe and beneath the Headwall structure can be well compacted.



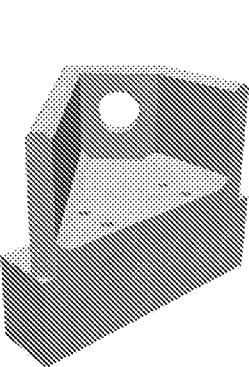
AH4CA LH
600mm Backwall



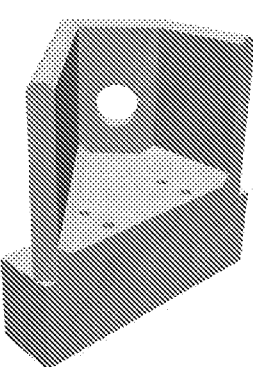
AH4CB LH
800mm Backwall



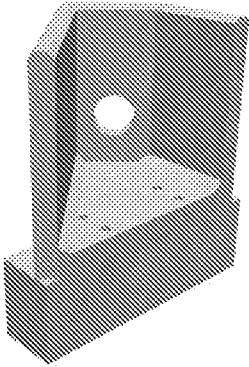
AH4CC LH
950mm Backwall



AH4CD LH
600mm Backwall

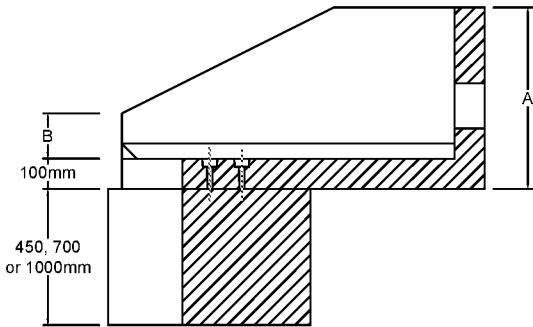
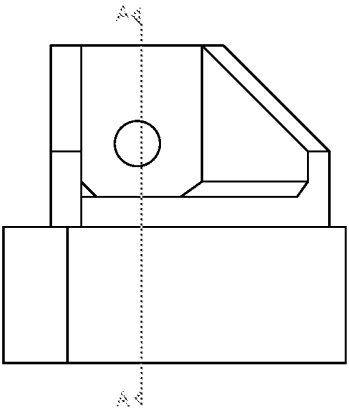
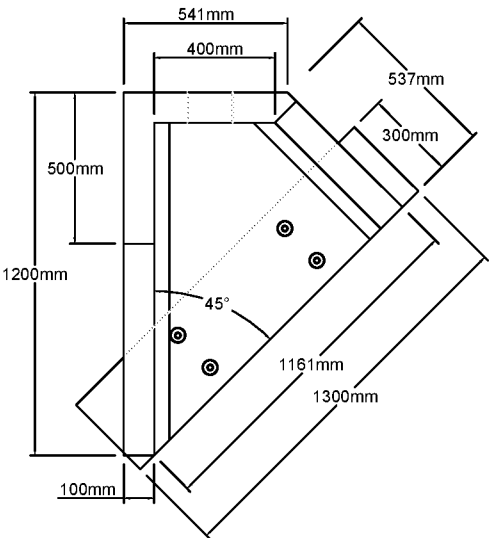


AH4CE LH
800mm Backwall



AH4CF LH
950mm Backwall

Headwall	Max Pipe Opening Plastic/Clay	A	B	Approx Weight kg	Weight with toe kg		
					450mm	700mm	1000mm
AH4CA LH	300	600	150	375	795	1030	1310
AH4CB LH	300	800	350	475	895	1130	1410
AH4CC LH	300	950	500	550	970	1205	1485
AH4CD LH	300	600	500	428	795	1030	1310
AH4CE LH	300	800	700	530	895	1130	1410
AH4CF LH	300	950	850	608	970	1205	1485



Section AA

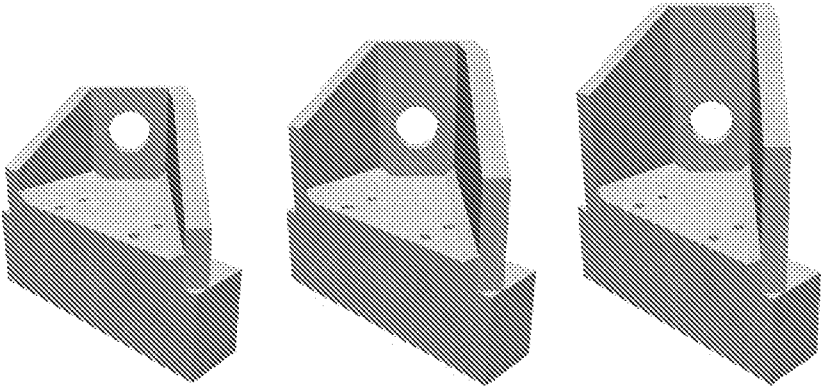


AH4C RH Headwall Range

Up to 300mm Pipework
600mm - 950mm Backwall Height

The AH4C Headwall is a two part Pcc Headwall that allows water to discharge at a 45 Deg. angle, the Environment Agency's preferred method when discharging into a watercourse. The AH4C headwall fully meets the Environment Agency's 'Standard rules SR2015 No 27 – Constructing an outfall pipe of 300mm diameter through a headwall into a main river' & Exempt flood risk activities: environmental permits section FRA12 'Outfall pipes less than 300mm diameter through a headwall'.

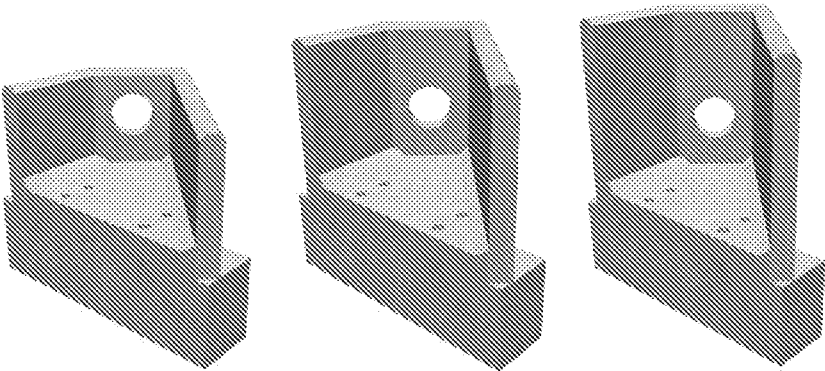
The AH4C is available with three different back wall heights and three different toe depths for Twin Wall or Clay Pipes up to & including 300mm ID. Having a separate toe makes it easier to handle and more importantly ensures the foundation around the toe and beneath the Headwall structure can be well compacted.



AH4CA RH
600mm Backwall

AH4CB RH
800mm Backwall

AH4CC RH
950mm Backwall

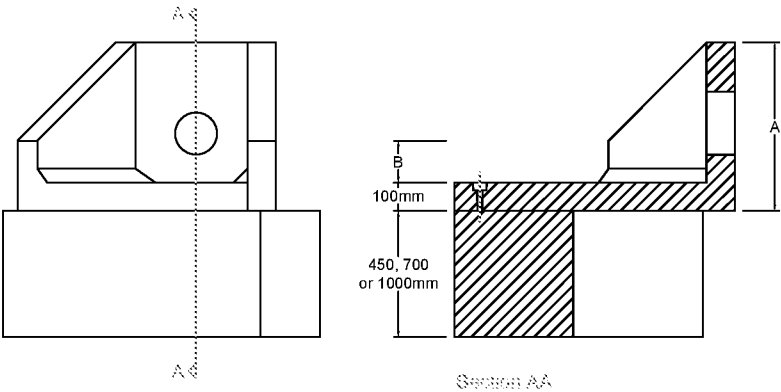
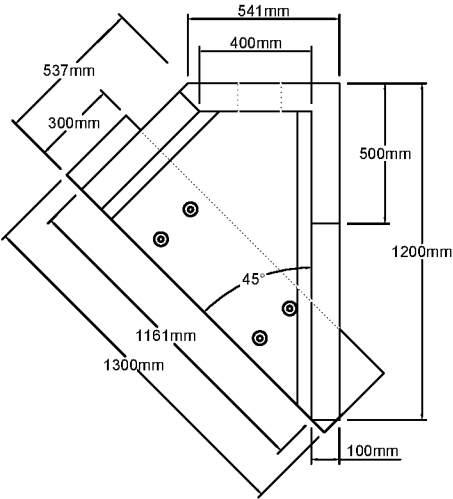


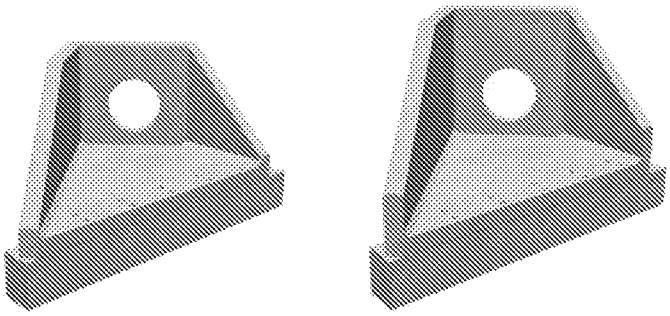
AH4CD RH
600mm Backwall

AH4CE RH
800mm Backwall

AH4CF RH
950mm Backwall

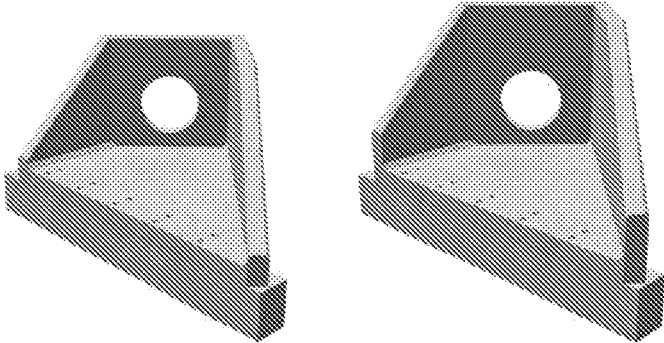
Headwall	Max Pipe Opening Plastic/Clay	A	B	Approx Weight kg	Weight with toe kg		
					450mm	700mm	1000mm
AH4CA RH	300	600	150	375	795	1030	1310
AH4CB RH	300	800	350	475	895	1130	1410
AH4CC RH	300	950	500	550	970	1205	1485
AH4CD RH	300	600	500	428	795	1030	1310
AH4CE RH	300	800	700	530	895	1130	1410
AH4CF RH	300	950	850	608	970	1205	1485





AH12CA LH

AH12CB LH



AH12CA RH

AH12CB RH

AH12C Headwall Range

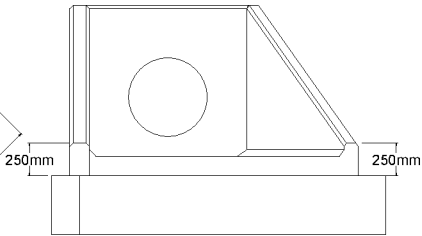
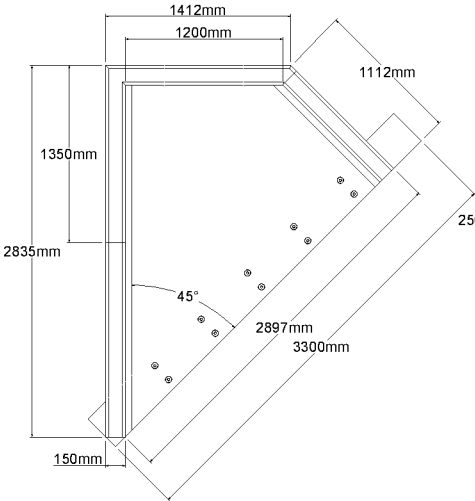
Up to 900mm Pipework
 1300mm - 1550mm Backwall Height

The AH12C Headwall is a two part PCC Headwall that allows water to discharge at 45 Deg. angle, the Environment Agency's preferred method when discharging into a watercourse. The AH12C Headwall also complies with 'Sewers for Adoption' guidelines.

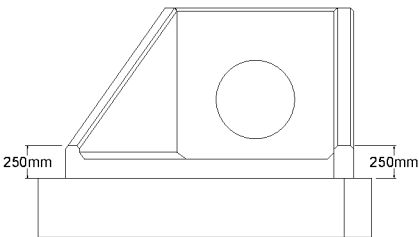
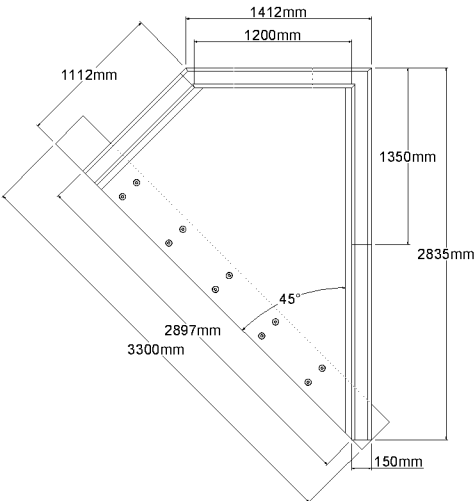
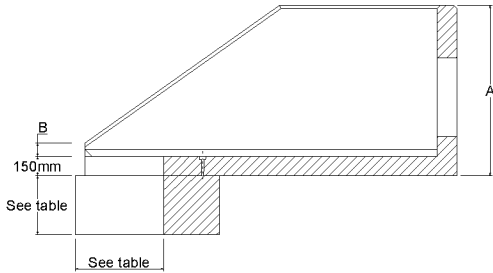
The AH12C is available with two back wall height options, two toe thickness options both available in three depths. The AH12C A option can accommodate Twin Wall or PCC pipes up to and including 750mm ID and the Ah12C B option can accommodate Twin Wall or PCC pipe up to and including 900mm ID.

Headwall	Max Pipe Opening Twin Wall	Max Pipe Opening Concrete	A	B	Approx Weight kg	Weight with 300mm thick toe kg			Weight with 500mm thick toe kg		
						400mm	650mm	950mm	500mm	750mm	1000mm
AH12CA LH	750	750	1300	100	3025	3975	4575	5285	4405	5095	5785
AH12CA RH	750	750	1300	100	3025	3975	4575	5285	4405	5095	5785
AH12CB LH	900	900	1550	350	3490	4440	5040	5750	4870	5560	6250
AH12CB RH	900	900	1550	350	3490	4440	5040	5750	4870	5560	6250

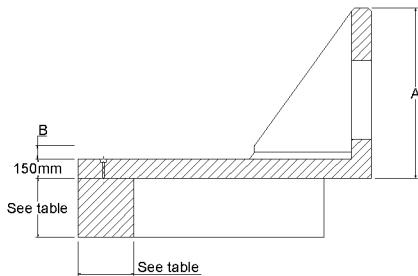
*All figures based on a invert level of 100mm. If invert level of less or greater than 100mm is required max pipe size might vary.



AH12C Left Hand Angled Headwall



AH12C Right Hand Angled Headwall





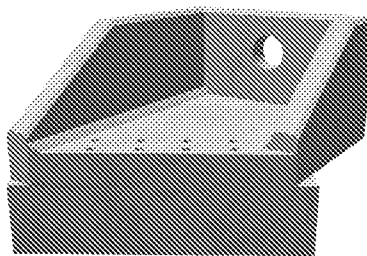
RSFA12 Angled Headwall Range

Up to 400mm Pipework
775mm Backwall Height

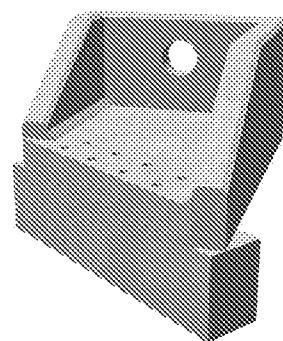
The RSFA12 Headwall is a single piece structure available with a wing wall profile of (A) 1:2.85 or (F) Horizontal. It has an internal back wall height of 600mm, suitable for pipes with a maximum internal diameter of 225mm and supplied with a separate toe beam.

There are two thicknesses of toe beam available each in three depths to suit site conditions.

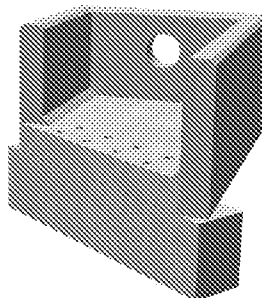
The RSFA12 Headwall is in accordance with Severn Trent Water Drawing No STD6001 Rev 02



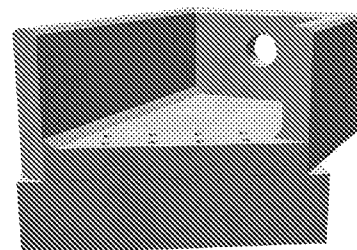
RSFA12A LH



RSFA12A RH

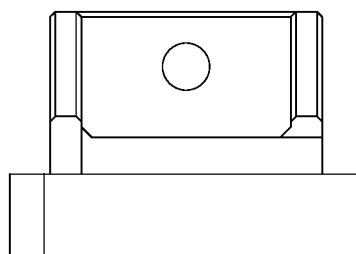
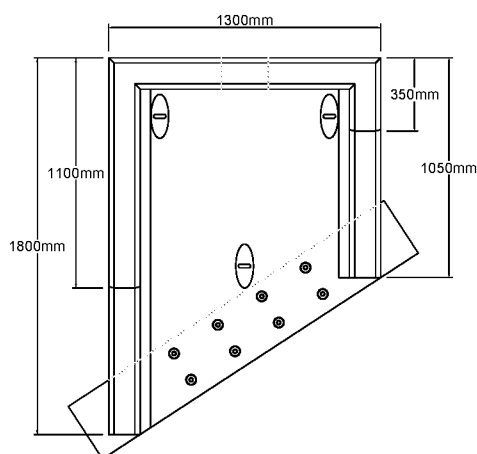


RSFA12F RH

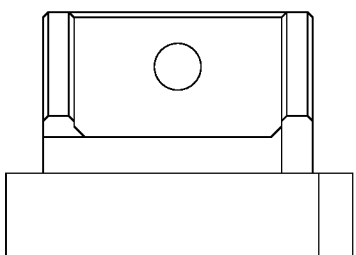
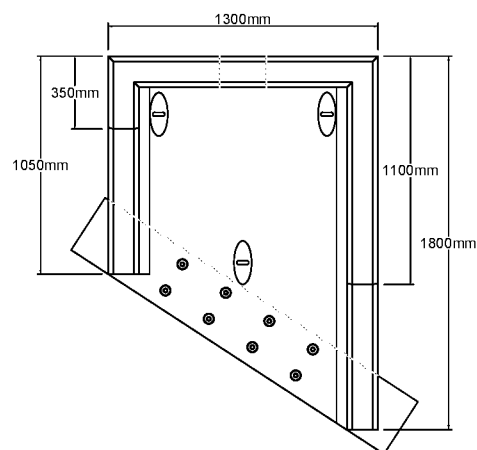
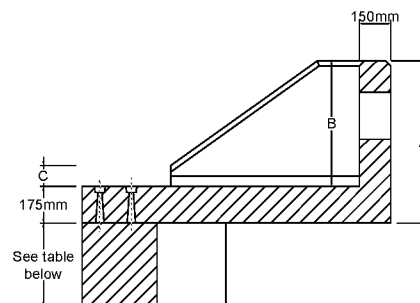


RSFA12F LH

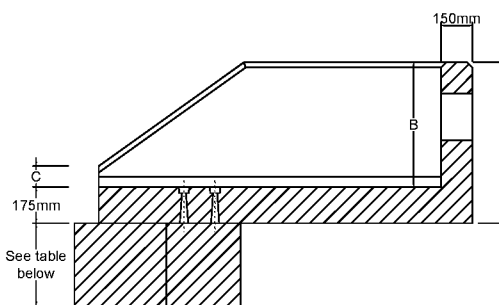
Headwall Ref	A	B	C	Approx Weight kg	Weight with 300mm thick toe kg			Weight with 500mm thick toe kg			Max Pipe Opening	Max Pipe Opening	Max Pipe Opening	Max Pipe Opening	Max Pipe Opening	Max Pipe Opening
					400mm	650mm	950mm	500mm	750mm	1000mm	Invert Level with Apron		100mm Invert Level		225mm Invert Level	
											TW / Clay	Concrete	TW / Clay	Concrete	TW / Clay	Concrete
	mm	mm	mm								mm	mm	mm	mm	mm	mm
RSFA12A LH	775	600	100	1530	2000	2295	2645	2610	3150	3690	400	375	300	300	225	N/A
RSFA12A RH	775	600	100	1530	2000	2295	2645	2610	3150	3690	400	375	300	300	225	N/A
RSFA12F LH	775	600	600	1650	2120	2415	2765	2730	3270	3810	400	375	300	300	225	N/A
RSFA12F RH	775	600	600	1650	2120	2415	2765	2730	3270	3810	400	375	300	300	225	N/A



Left Hand Headwall



Right Hand Headwall





R18A Left Hand Angled Headwall Range

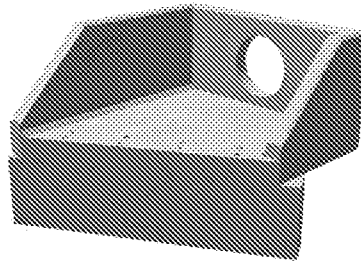
Up to 600mm Pipework
1080mm Backwall Height

300 and 500mm Thick Toe

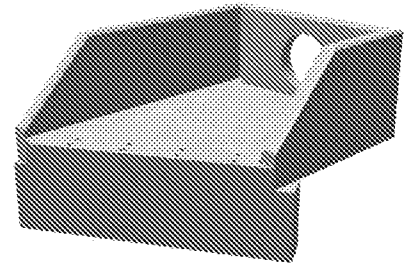
Althon R18 Rectangular Angled Precast Headwalls are for outfalls discharging into ponds, swales, ditches beaches and rivers. Rectangular precast headwalls come with the option of two thicknesses of toe, 300mm and 500mm, each of which is available in three depths.

Althon manufacture R18 precast headwalls with three different wall profiles to suit the gradient of the bank as follows 1 : 1 slope, 1 : 2 slope and 1 : 3 slope.

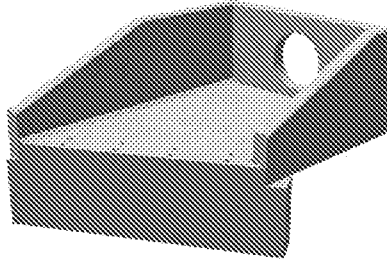
All Rectangular Headwalls are cast with the opening in the back wall to suit the size and type of pipe being used at the invert level required.



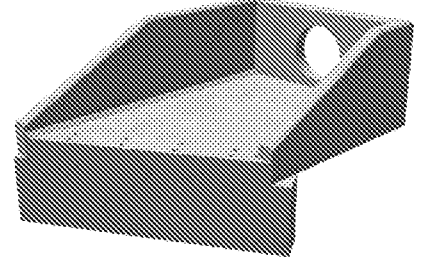
R18A 01 2270 LH
1:1 Wing Wall
1 Piece Headwall



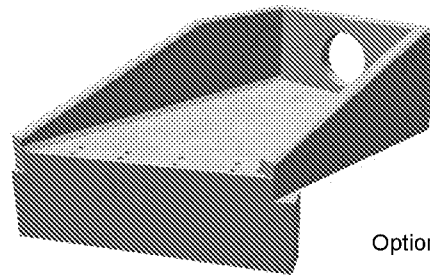
R18A 01 2940 LH
1:1 Wing Wall
1 Piece Headwall



R18A 05 2940 LH
1:2 Wing Wall
2 Piece Headwall

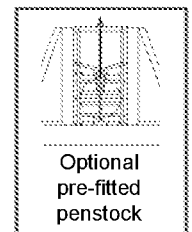
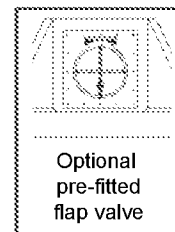
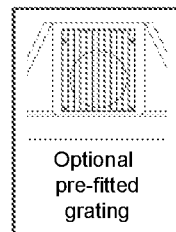
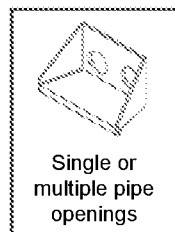
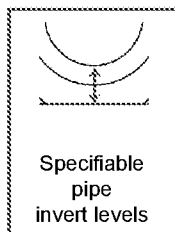
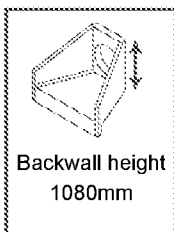
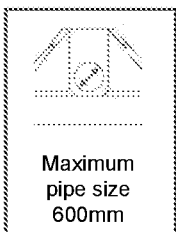
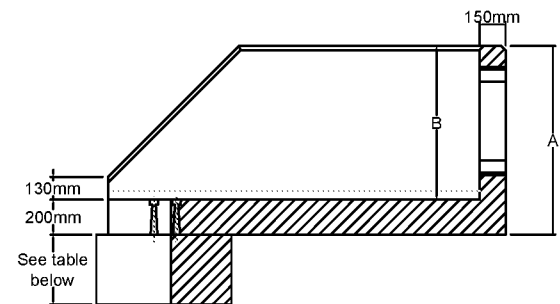
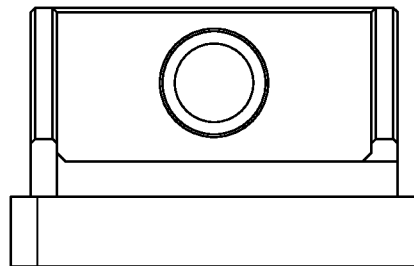
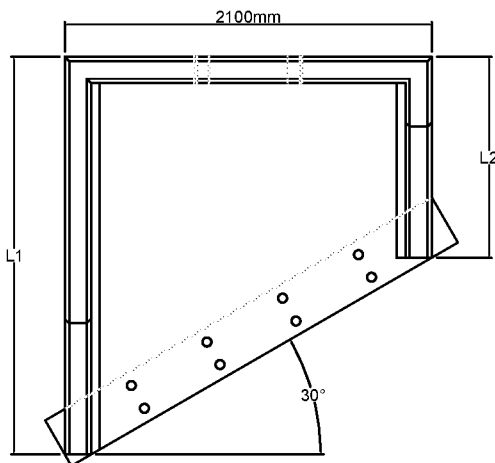


R18A 05 3210 LH
1:2 Wing Wall
2 Piece Headwall



R18A 10 3570 LH
1:3 Wing Wall
2 Piece Headwall

Optional Kee Klamp handrail

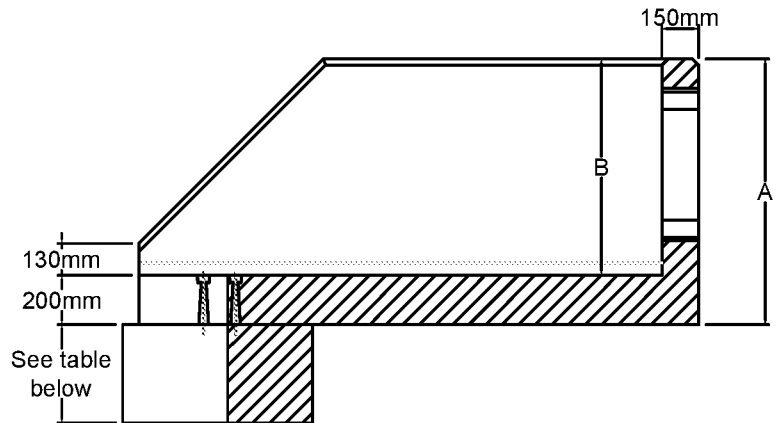




R18A Left Hand Angled Headwall Range

Up to 600mm Pipework
1080mm Backwall Height

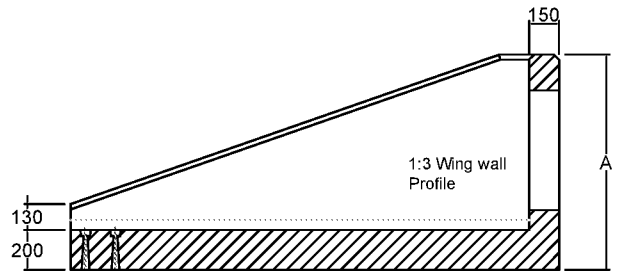
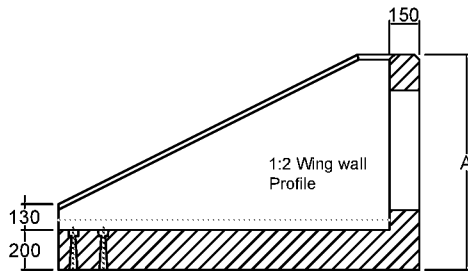
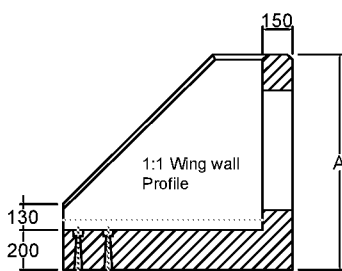
300mm Thick Toe



Headwall Ref	Back Wall Height A	Back Wall Height B	Length L1	Length L2	Wing Wall Profile	Weight	Weight with Toe			Max Pipe Opening	Max Pipe Opening	Max Pipe Opening	Max Pipe Opening	Max Pipe Opening	Max Pipe Opening
							400mm	650mm	950mm	Invert Level with Apron		100mm Invert Level		225mm Invert Level	
										TW / Clay	Concrete	TW / Clay	Concrete	TW / Clay	Concrete
	mm	mm	mm	mm		kg	kg	kg	kg	mm	mm	mm	mm	mm	mm
R18A 01 2270 LH	1080	880	2276	1150	1:1	3210	3960	4420	4980	600	800	600	525	450	450
R18A 01 2940 LH	1080	880	2946	1820	1:1	4290	5040	5500	6060	600	600	600	525	450	450
R18A 05 2940 LH	1080	880	2946	1820	1:2	4080	4830	5290	5850	600	800	600	525	450	450
R18A 05 3210 LH	1080	880	3216	2090	1:2	4500	5250	5710	6270	600	600	600	525	450	450
R18A 10 3570 LH	1080	880	3576	2450	1:3	4950	5700	6160	6720	600	800	600	525	450	450

500mm Thick Toe

Headwall Ref	Back Wall Height A	Back Wall Height B	Length L1	Length L2	Wing Wall Profile	Weight	Weight with Toe			Max Pipe Opening	Max Pipe Opening	Max Pipe Opening	Max Pipe Opening	Max Pipe Opening	Max Pipe Opening
							500mm	750mm	1000mm	Invert Level with Apron		100mm Invert Level		225mm Invert Level	
										TW / Clay	Concrete	TW / Clay	Concrete	TW / Clay	Concrete
	mm	mm	mm	mm		kg	kg	kg	kg	mm	mm	mm	mm	mm	mm
R18A 01 2270 LH	1080	880	2276	1150	1:1	3210	4830	5640	6450	600	600	600	525	450	450
R18A 01 2940 LH	1080	880	2946	1820	1:1	4290	5910	6720	7530	600	600	600	525	450	450
R18A 05 2940 LH	1080	880	2946	1820	1:2	4080	5700	6510	7320	600	600	600	525	450	450
R18A 05 3210 LH	1080	880	3216	2090	1:2	4500	6120	6930	7740	600	600	600	525	450	450
R18A 10 3570 LH	1080	880	3576	2450	1:3	4950	6570	7380	8190	600	800	600	525	450	450





R18A Right Hand Angled Headwall Range

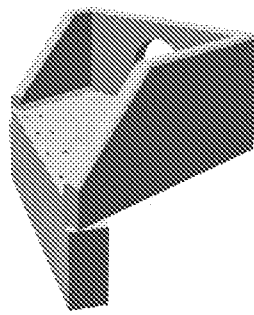
Up to 600mm Pipework
1080mm Backwall Height

300 and 500mm Thick Toe

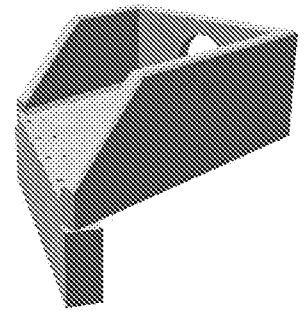
Althon R18 Rectangular Angled Precast Headwalls are for outfalls discharging into ponds, swales, ditches beaches and rivers. Rectangular precast headwalls come with the option of two thicknesses of toe, 300mm and 500mm, each of which is available in three depths.

Althon manufacture R18 precast headwalls with three different wall profiles to suit the gradient of the bank as follows 1 : 1 slope, 1 : 2 slope and 1 : 3 slope.

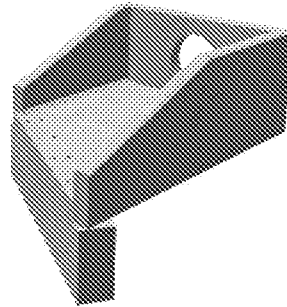
All Rectangular Headwalls are cast with the opening in the back wall to suit the size and type of pipe being used at the invert level required.



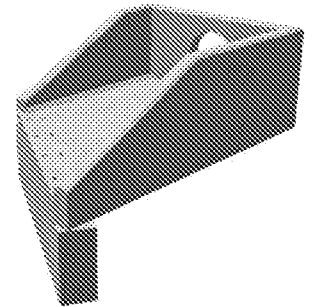
R18A 01 2270 RH
1:1 Wing Wall
1 Piece Headwall



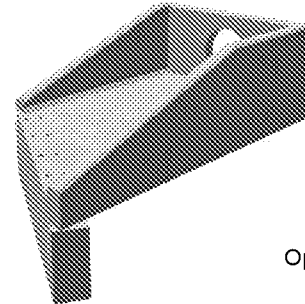
R18A 01 2940 RH
1:1 Wing Wall
1 Piece Headwall



R18A 05 2940 RH
1:2 Wing Wall
2 Piece Headwall

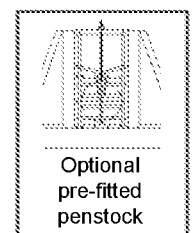
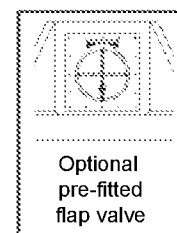
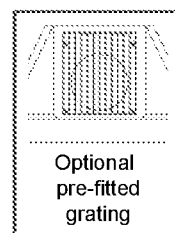
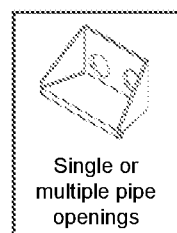
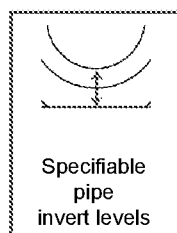
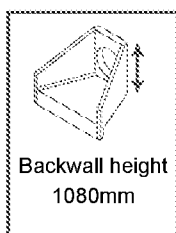
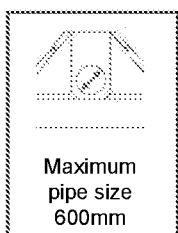
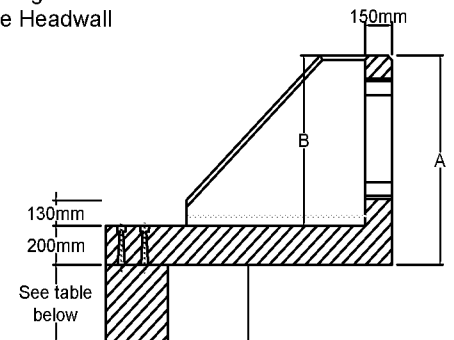
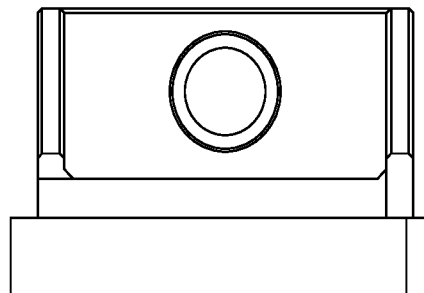
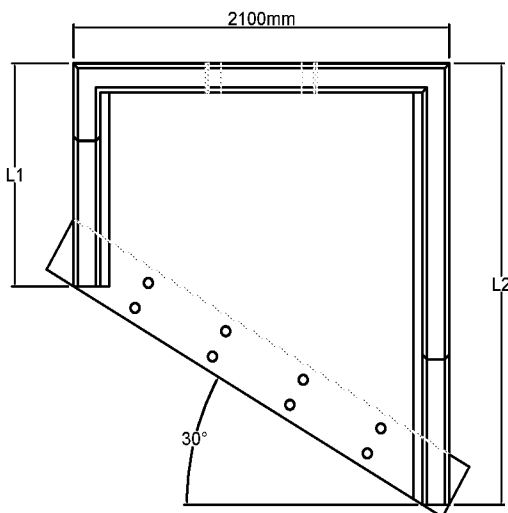


R18A 05 3210 RH
1:2 Wing Wall
2 Piece Headwall



R18A 10 3570 RH
1:3 Wing Wall
2 Piece Headwall

Optional Kee Klamp handrail

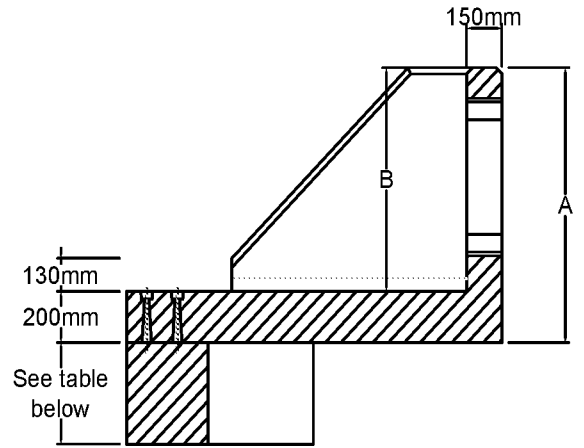




R18A Right Hand Angled Headwall Range

Up to 600mm Pipework
1080mm Backwall Height

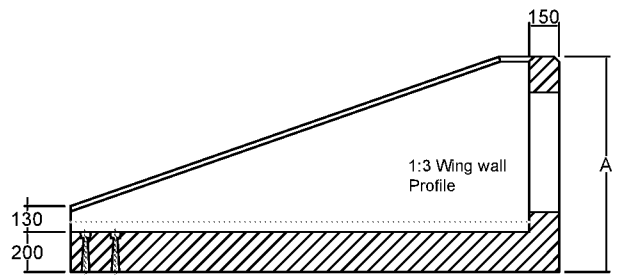
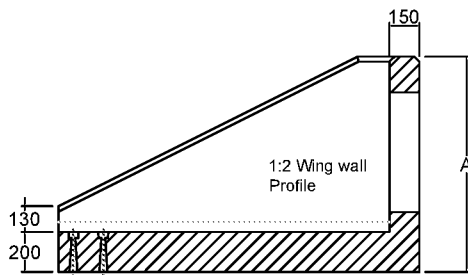
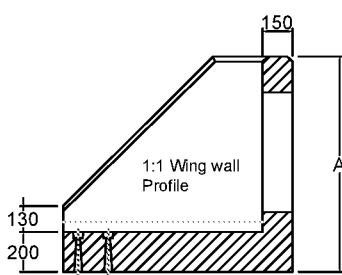
300mm Thick Toe



Headwall Ref	Back Wall Height A	Back Wall Height B	Length L1	Length L2	Wing Wall Profile	Weight	Weight with Toe			Max Pipe Opening	Max Pipe Opening	Max Pipe Opening	Max Pipe Opening	Max Pipe Opening	Max Pipe Opening
							400mm	650mm	950mm	Invert Level with Apron		100mm Invert Level		225mm Invert Level	
										TW / Clay	Concrete	TW / Clay	Concrete	TW / Clay	Concrete
	mm	mm	mm	mm		kg	kg	kg	kg	mm	mm	mm	mm	mm	mm
R18A 01 2270 RH	1080	880	1150	2276	1:1	3210	3960	4420	4960	600	800	600	525	450	450
R18A 01 2940 RH	1080	880	1820	2946	1:1	4290	5040	5500	6060	600	800	600	525	450	450
R18A 05 2940 RH	1080	880	1820	2946	1:2	4080	4830	5290	5850	600	800	600	525	450	450
R18A 05 3210 RH	1080	880	2090	3216	1:2	4500	5250	5710	6270	600	800	600	525	450	450
R18A 10 3570 RH	1080	880	2450	3576	1:3	4950	5700	6160	6720	600	800	600	525	450	450

500mm Thick Toe

Headwall Ref	Back Wall Height A	Back Wall Height B	Length L1	Length L2	Wing Wall Profile	Weight	Weight with Toe			Max Pipe Opening	Max Pipe Opening	Max Pipe Opening	Max Pipe Opening	Max Pipe Opening	Max Pipe Opening
							500mm	750mm	1000mm	Invert Level with Apron		100mm Invert Level		225mm Invert Level	
										TW / Clay	Concrete	TW / Clay	Concrete	TW / Clay	Concrete
	mm	mm	mm	mm		kg	kg	kg	kg	mm	mm	mm	mm	mm	mm
R18A 01 2270 RH	1080	880	1150	2276	1:1	3210	4830	5640	6450	600	800	600	525	450	450
R18A 01 2940 RH	1080	880	1820	2946	1:1	4290	5910	6720	7530	600	800	600	525	450	450
R18A 05 2940 RH	1080	880	1820	2946	1:2	4080	5700	6510	7320	600	800	600	525	450	450
R18A 05 3210 RH	1080	880	2090	3216	1:2	4500	6120	6930	7740	600	800	600	525	450	450
R18A 10 3570 RH	1080	880	2450	3576	1:3	4950	6570	7380	8190	600	800	600	525	450	450





R18B Left Hand Angled Headwall Range

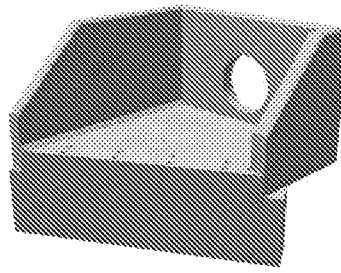
Up to 825mm Pipework
1300mm Backwall Height

300 and 500mm Thick Toe

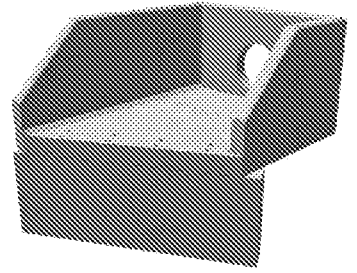
Althon R18 Rectangular Angled Precast Headwalls are for outfalls discharging into ponds, swales, ditches beaches and rivers. Rectangular precast headwalls come with the option of two thicknesses of toe, 300mm and 500mm, each of which is available in three depths.

Althon manufacture R18 precast headwalls with three different wall profiles to suit the gradient of the bank as follows 1 : 1 slope, 1 : 2 slope and 1 : 3 slope.

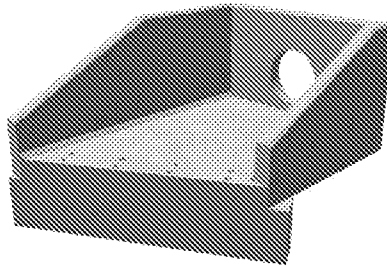
All Rectangular Headwalls are cast with the opening in the back wall to suit the size and type of pipe being used at the invert level required.



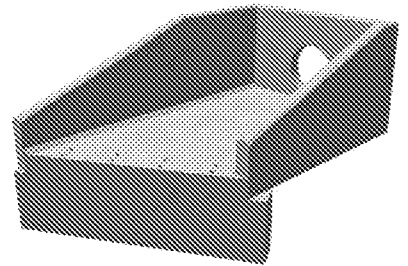
R18B 01 2270 LH
1:1 Wing Wall
1 Piece Headwall



R18B 01 2790 LH
1:1 Wing Wall
2 Piece Headwall

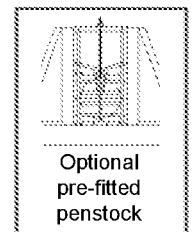
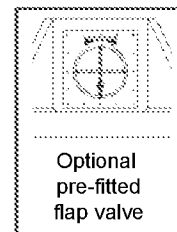
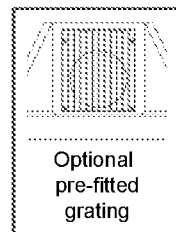
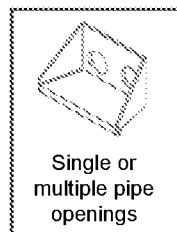
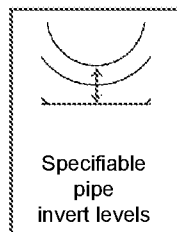
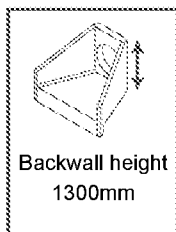
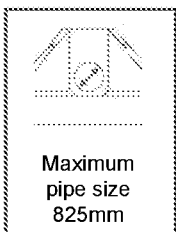
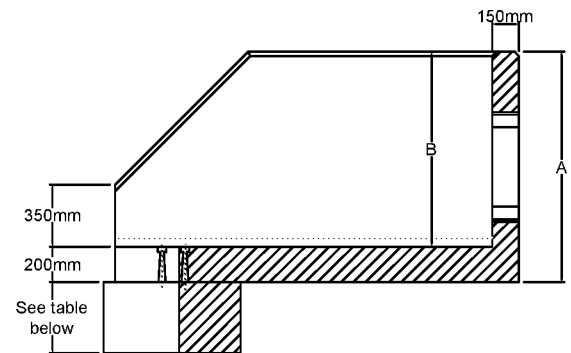
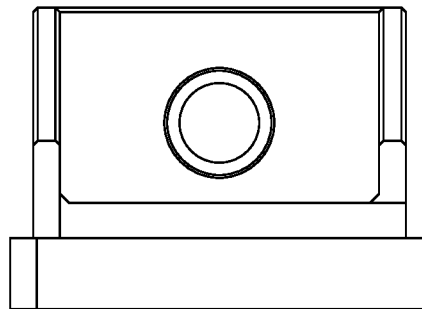
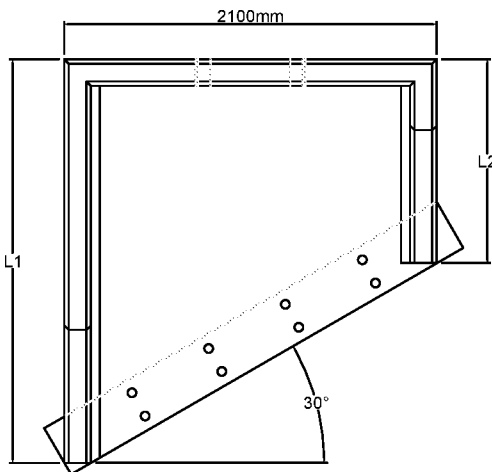


R18B 05 2940 LH
1:2 Wing Wall
2 Piece Headwall



R18B 10 3570 LH
1:3 Wing Wall
2 Piece Headwall

Optional Kee Klamp handrail

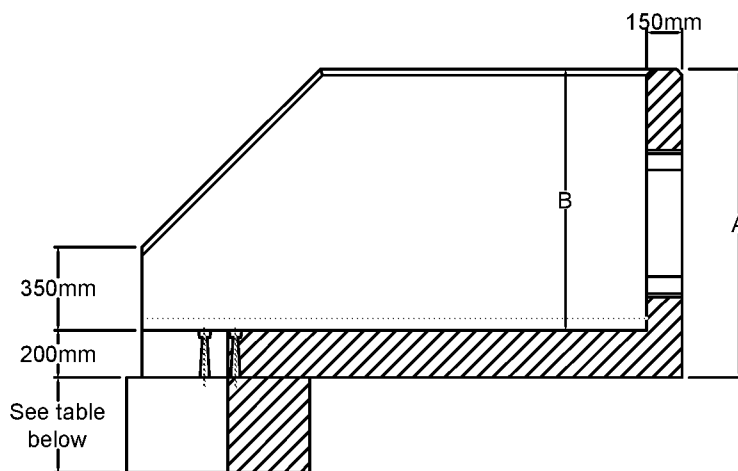




R18B Left Hand Angled Headwall Range

Up to 825mm Pipework
1300mm Backwall Height

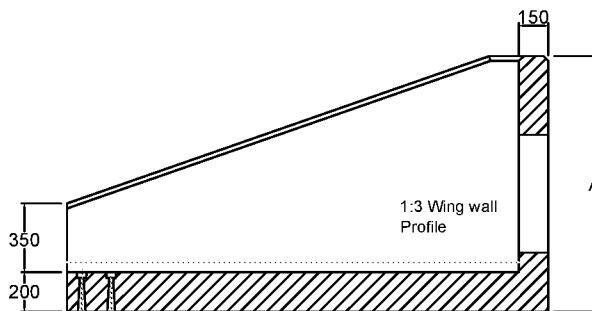
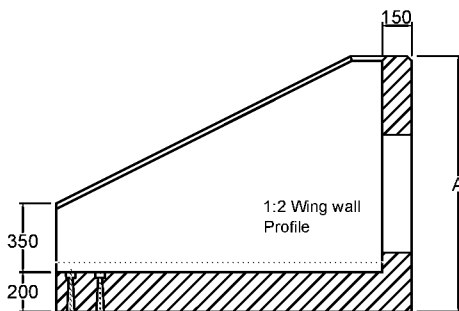
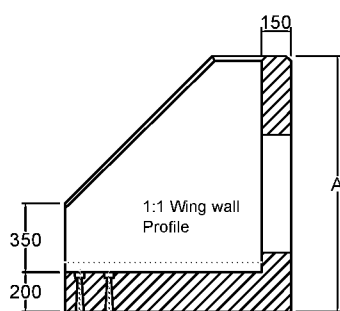
300mm Thick Toe



Headwall Ref	Back Wall Height A	Back Wall Height B	Length L1	Length L2	Wing Wall Profile	Weight	Weight with Toe			Max Pipe Opening	Max Pipe Opening	Max Pipe Opening	Max Pipe Opening	Max Pipe Opening	Max Pipe Opening
							400mm	650mm	950mm	Invert Level with Apron		100mm Invert Level		225mm Invert Level	
										TW / Clay	Concrete	TW / Clay	Concrete	TW / Clay	Concrete
	mm	mm	mm	mm		kg	kg	kg	kg	mm	mm	mm	mm	mm	mm
R18B 01 2270 LH	1300	1100	2276	1150	1:1	3620	4370	4930	5390	750	825	750	750	600	600
R18B 01 2790 LH	1300	1100	2796	1670	1:1	4500	5250	5710	6270	750	825	750	750	600	600
R18B 05 2940 LH	1300	1100	2946	1820	1:2	4600	5350	5910	6370	750	825	750	750	600	600
R18B 10 3570 LH	1300	1100	3576	2450	1:3	5580	6330	6790	7350	750	825	750	750	600	600

500mm Thick Toe

Headwall Ref	Back Wall Height A	Back Wall Height B	Length L1	Length L2	Wing Wall Profile	Weight	Weight with Toe			Max Pipe Opening	Max Pipe Opening	Max Pipe Opening	Max Pipe Opening	Max Pipe Opening	Max Pipe Opening
							500mm	750mm	1000mm	Invert Level with Apron		100mm Invert Level		225mm Invert Level	
										TW / Clay	Concrete	TW / Clay	Concrete	TW / Clay	Concrete
	mm	mm	mm	mm		kg	kg	kg	kg	mm	mm	mm	mm	mm	mm
R18B 01 2270 LH	1300	1100	2276	1150	1:1	3620	5240	6050	6860	750	825	750	750	600	600
R18B 01 2790 LH	1300	1100	2796	1670	1:1	4500	6120	6930	7740	750	825	750	750	600	600
R18B 05 2940 LH	1300	1100	2946	1820	1:2	4600	6220	7030	7840	750	825	750	750	600	600
R18B 10 3570 LH	1300	1100	3576	2450	1:3	5580	7200	8010	8820	750	825	750	750	600	600





R18B Right Hand Angled Headwall Range

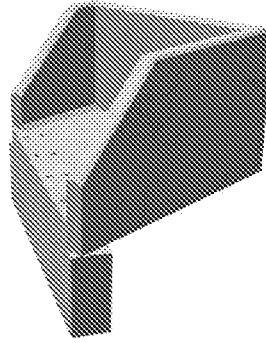
Up to 825mm Pipework
1300mm Backwall Height

300 and 500mm Thick Toe

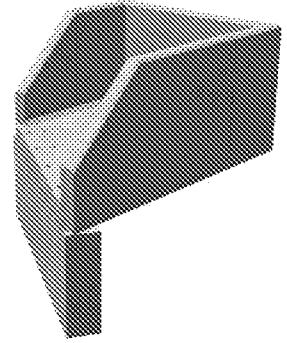
Althon R18 Rectangular Angled Precast Headwalls are for outfalls discharging into ponds, swales, ditches beaches and rivers. Rectangular precast headwalls come with the option of two thicknesses of toe, 300mm and 500mm, each of which is available in three depths.

Althon manufacture R18 precast headwalls with three different wall profiles to suit the gradient of the bank as follows 1 : 1 slope, 1 : 2 slope and 1 : 3 slope.

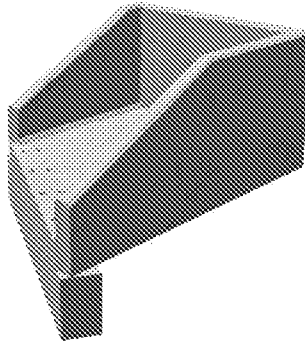
All Rectangular Headwalls are cast with the opening in the back wall to suit the size and type of pipe being used at the invert level required.



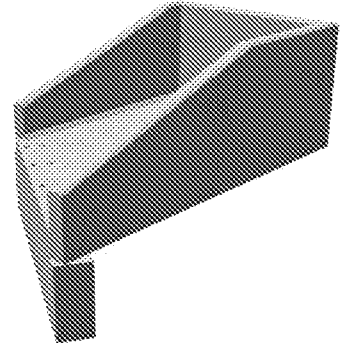
R18B 01 2270 RH
1:1 Wing Wall
1 Piece Headwall



R18B 01 2790 RH
1:1 Wing Wall
2 Piece Headwall

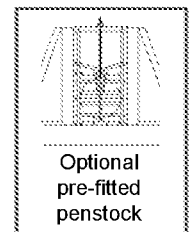
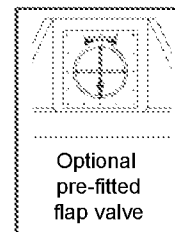
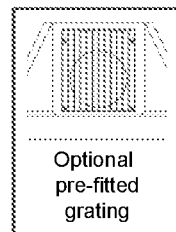
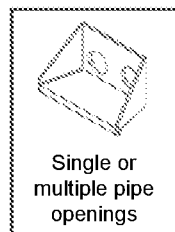
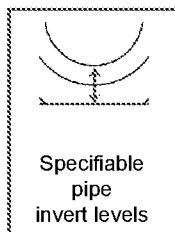
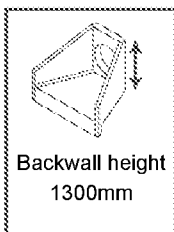
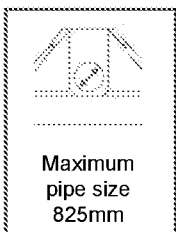
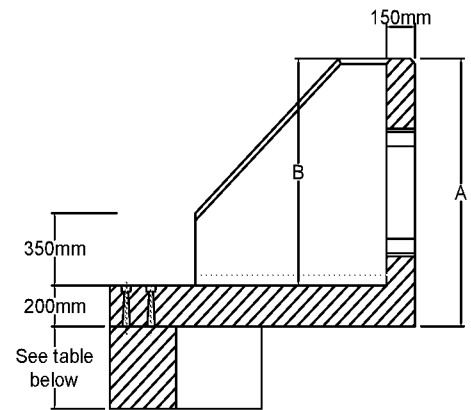
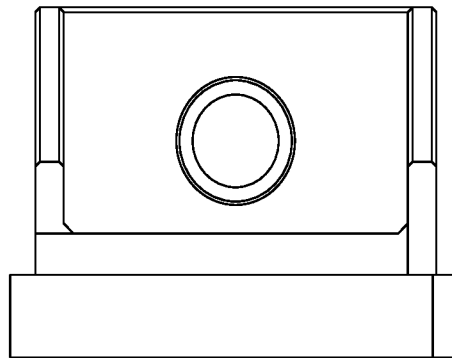
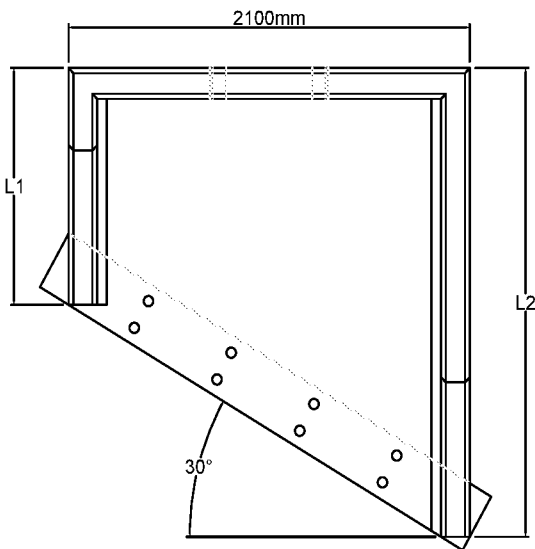


R18B 05 2940 RH
1:2 Wing Wall
2 Piece Headwall



R18B 10 3570 RH
1:3 Wing Wall
2 Piece Headwall

Optional Kee Klamp handrail

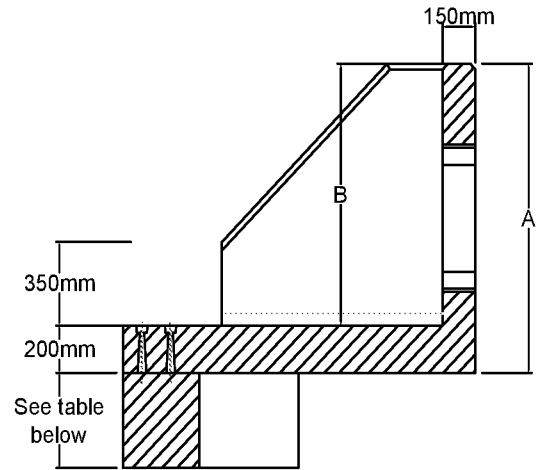




R18B Right Hand Angled Headwall Range

Up to 825mm Pipework
1300mm Backwall Height

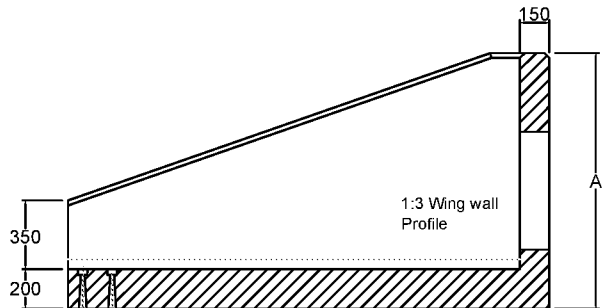
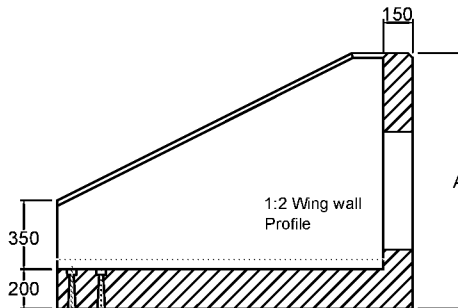
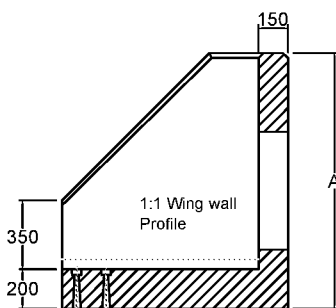
300mm Thick Toe



Headwall Ref	Back Wall Height A	Back Wall Height B	Length L1	Length L2	Wing Wall Profile	Weight	Weight with Toe			Max Pipe Opening	Max Pipe Opening	Max Pipe Opening	Max Pipe Opening	Max Pipe Opening	Max Pipe Opening
							400mm	650mm	950mm	Invert Level with Apron		100mm Invert Level		225mm Invert Level	
										TW / Clay	Concrete	TW / Clay	Concrete	TW / Clay	Concrete
	mm	mm	mm	mm		kg	kg	kg	kg	mm	mm	mm	mm	mm	mm
R18B 01 2270 RH	1300	1100	1150	2276	1:1	3620	4370	4830	5390	750	825	750	750	600	600
R18B 01 2790 RH	1300	1100	1670	2796	1:1	4500	5250	5710	6270	750	825	750	750	600	600
R18B 05 2940 RH	1300	1100	1820	2946	1:2	4600	5350	5810	6370	750	825	750	750	600	600
R18B 10 3570 RH	1300	1100	2450	3576	1:3	5580	6330	6790	7350	750	825	750	750	600	600

500mm Thick Toe

Headwall Ref	Back Wall Height A	Back Wall Height B	Length L1	Length L2	Wing Wall Profile	Weight	Weight with Toe			Max Pipe Opening	Max Pipe Opening	Max Pipe Opening	Max Pipe Opening	Max Pipe Opening	Max Pipe Opening
							500mm	750mm	1000mm	Invert Level with Apron		100mm Invert Level		225mm Invert Level	
										TW / Clay	Concrete	TW / Clay	Concrete	TW / Clay	Concrete
	mm	mm	mm	mm		kg	kg	kg	kg	mm	mm	mm	mm	mm	mm
R18B 01 2270 RH	1300	1100	1150	2276	1:1	3620	5240	6050	6860	750	825	750	750	600	600
R18B 01 2790 RH	1300	1100	1670	2796	1:1	4500	6120	6930	7740	750	825	750	750	600	600
R18B 05 2940 RH	1300	1100	1820	2946	1:2	4600	6220	7030	7840	750	825	750	750	600	600
R18B 10 3570 RH	1300	1100	2450	3576	1:3	5580	7200	8010	8820	750	825	750	750	600	600





R20B Left Hand Angled Headwall Range

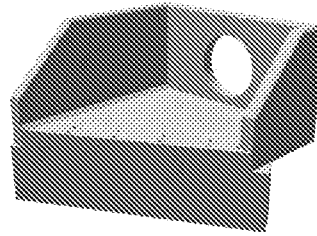
Up to 825mm Pipework
1300mm Backwall Height

300 and 500mm Thick Toe

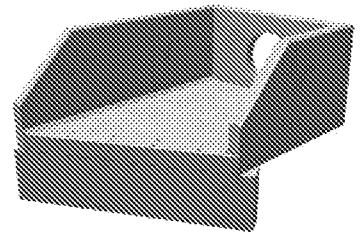
Althon R18 Rectangular Angled Precast Headwalls are for outfalls discharging into ponds, swales, ditches beaches and rivers. Rectangular precast headwalls come with the option of two thicknesses of toe, 300mm and 500mm, each of which is available in three depths.

Althon manufacture R18 precast headwalls with three different wall profiles to suit the gradient of the bank as follows 1 : 1 slope, 1 : 2 slope and 1 : 3 slope.

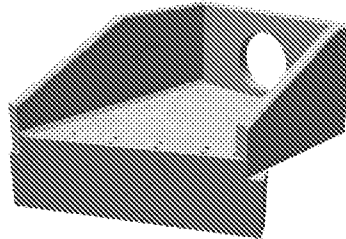
All Rectangular Headwalls are cast with the opening in the back wall to suit the size and type of pipe being used at the invert level required.



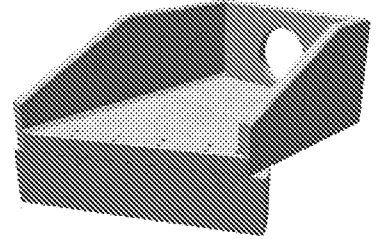
R20B 01 2390 LH
1:1 Wing Wall
1 Piece Headwall



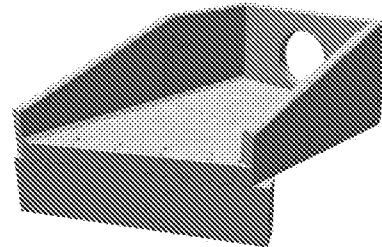
R20B 01 3330 LH
1:1 Wing Wall
2 Piece Headwall



R20B 05 3050 LH
1:2 Wing Wall
2 Piece Headwall

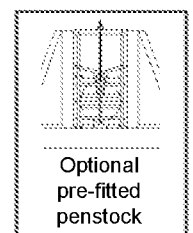
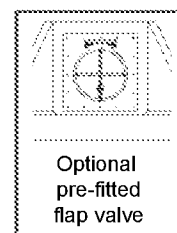
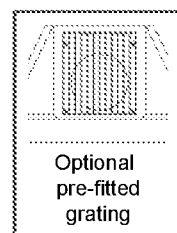
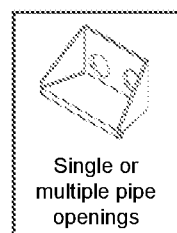
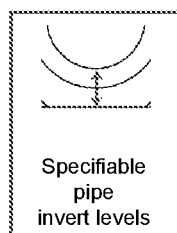
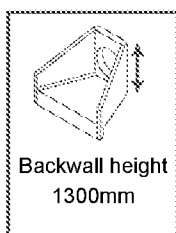
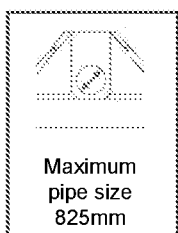
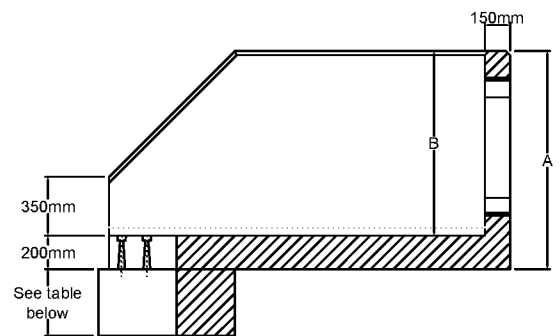
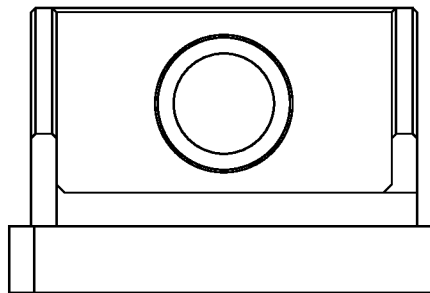
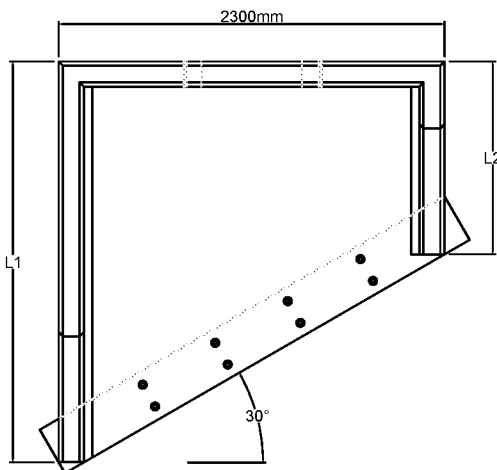


R20B 05 3390 LH
1:2 Wing Wall
2 Piece Headwall



R20B 10 3690 LH
1:3 Wing Wall
2 Piece Headwall

Optional Kee Klamp handrail

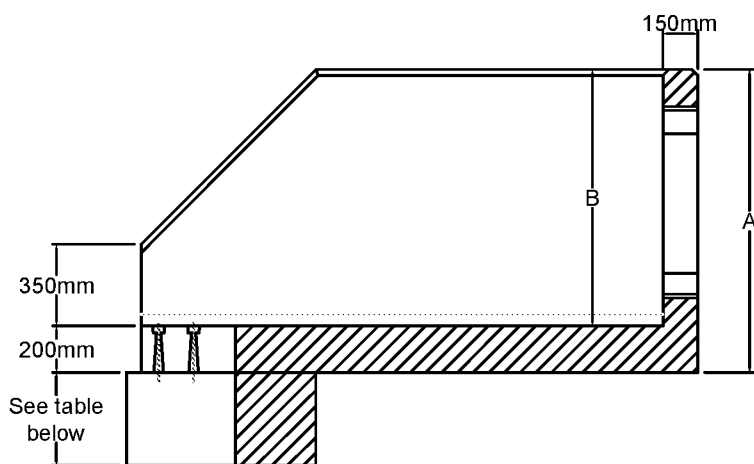




R20B Left Hand Angled Headwall Range

Up to 825mm Pipework
1300mm Backwall Height

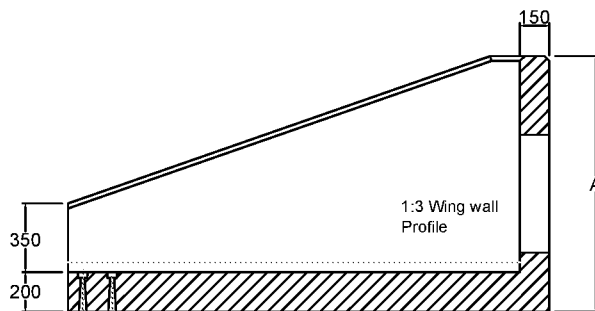
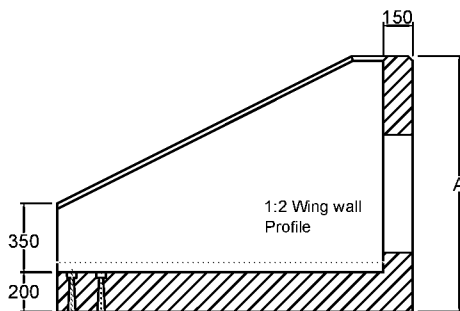
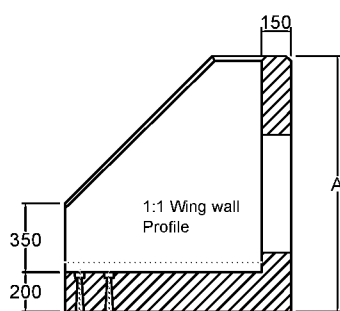
300mm Thick Toe



Headwall Ref	Back Wall Height A	Back Wall Height B	Length L1	Length L2	Wing Wall Profile	Weight	Weight with Toe			Max Pipe Opening	Max Pipe Opening	Max Pipe Opening	Max Pipe Opening	Max Pipe Opening	Max Pipe Opening
							400mm	650mm	950mm	Invert Level with Apron		100mm Invert Level		225mm Invert Level	
										TW / Clay	Concrete	TW / Clay	Concrete	TW / Clay	Concrete
	mm	mm	mm	mm		kg	kg	kg	kg	mm	mm	mm	mm	mm	mm
R20B 01 2390 LH	1200	1100	2390	1150	1:1	3950	4750	5250	5850	750	825	750	750	600	600
R20B 01 3330 LH	1300	1100	3330	2090	1:1	5590	6390	6890	7490	750	825	750	750	600	600
R20B 05 3050 LH	1500	1100	3050	1810	1:2	5010	5810	6310	6910	750	825	750	750	600	600
R20B 05 3390 LH	1300	1100	3390	2150	1:2	5680	6480	6980	7580	750	825	750	750	600	600
R20B 10 3690 LH	1300	1100	3690	2450	1:3	6080	6880	7380	7980	750	825	750	750	600	600

500mm Thick Toe

Headwall Ref	Back Wall Height A	Back Wall Height B	Length L1	Length L2	Wing Wall Profile	Weight	Weight with Toe			Max Pipe Opening	Max Pipe Opening	Max Pipe Opening	Max Pipe Opening	Max Pipe Opening	Max Pipe Opening
							500mm	750mm	1000mm	Invert Level with Apron		100mm Invert Level		225mm Invert Level	
										TW / Clay	Concrete	TW / Clay	Concrete	TW / Clay	Concrete
	mm	mm	mm	mm		kg	kg	kg	kg	mm	mm	mm	mm	mm	mm
R20B 01 2390 LH	1300	1100	2390	1150	1:1	3950	5370	6380	7190	750	825	750	750	600	600
R20B 01 3330 LH	1300	1100	3330	2090	1:1	5590	7210	8020	8830	750	825	750	750	600	600
R20B 05 3050 LH	1300	1100	3050	1810	1:2	5010	6630	7440	8250	750	825	750	750	600	600
R20B 05 3390 LH	1300	1100	3390	2150	1:2	5680	7300	8110	8920	750	825	750	750	600	600
R20B 10 3690 LH	1300	1100	3690	2450	1:3	6080	7700	8510	9320	750	825	750	750	600	600





R20B Right Hand Angled Headwall Range

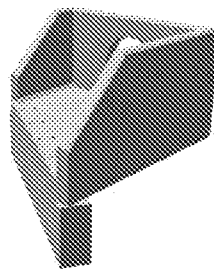
Up to 825mm Pipework
1300mm Backwall Height

300 and 500mm Thick Toe

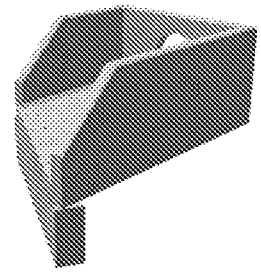
Althon R18 Rectangular Angled Precast Headwalls are for outfalls discharging into ponds, swales, ditches beaches and rivers. Rectangular precast headwalls come with the option of two thicknesses of toe, 300mm and 500mm, each of which is available in three depths.

Althon manufacture R18 precast headwalls with three different wall profiles to suit the gradient of the bank as follows 1 : 1 slope, 1 : 2 slope and 1 : 3 slope.

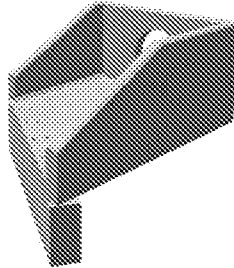
All Rectangular Headwalls are cast with the opening in the back wall to suit the size and type of pipe being used at the invert level required.



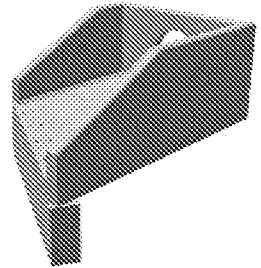
R20B 01 2390 RH
1:1 Wing Wall
1 Piece Headwall



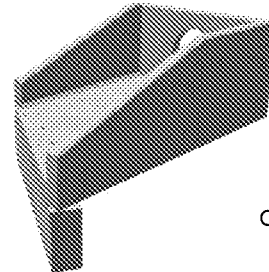
R20B 01 3330 RH
1:1 Wing Wall
2 Piece Headwall



R20B 05 3050 RH
1:2 Wing Wall
2 Piece Headwall

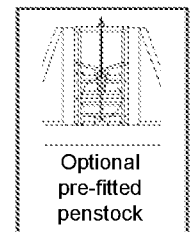
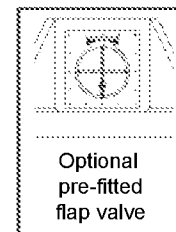
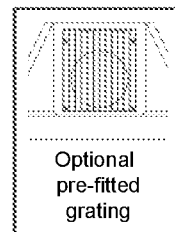
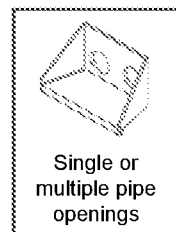
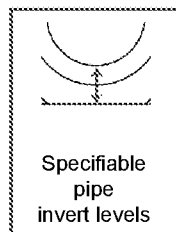
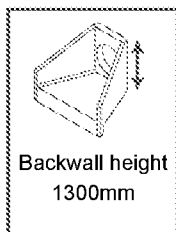
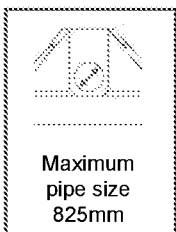
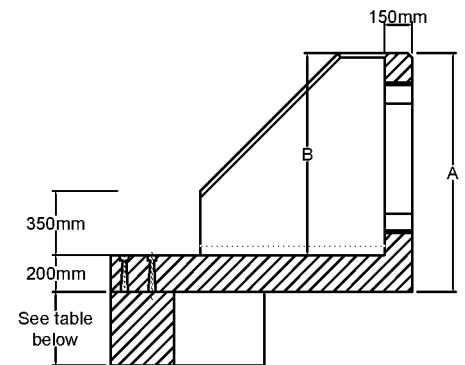
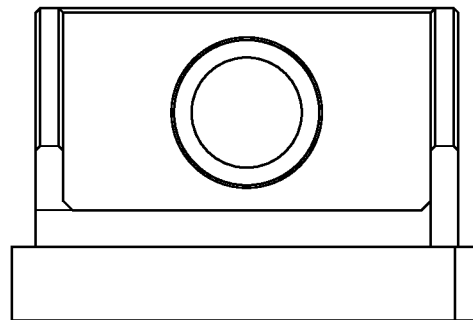
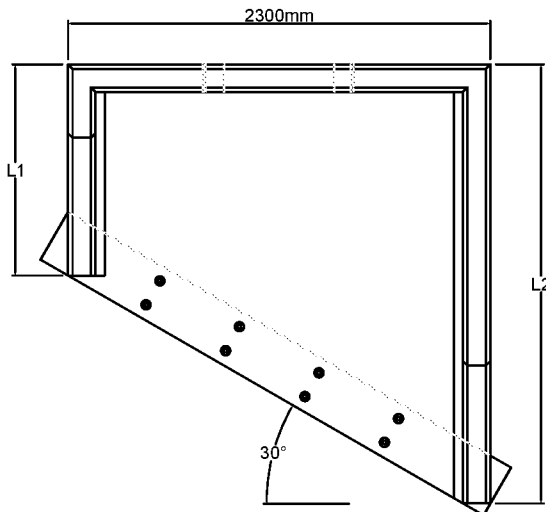


R20B 05 3390 RH
1:2 Wing Wall
2 Piece Headwall



R20B 10 3690 RH
1:3 Wing Wall
2 Piece Headwall

Optional Kee Klamp handrail

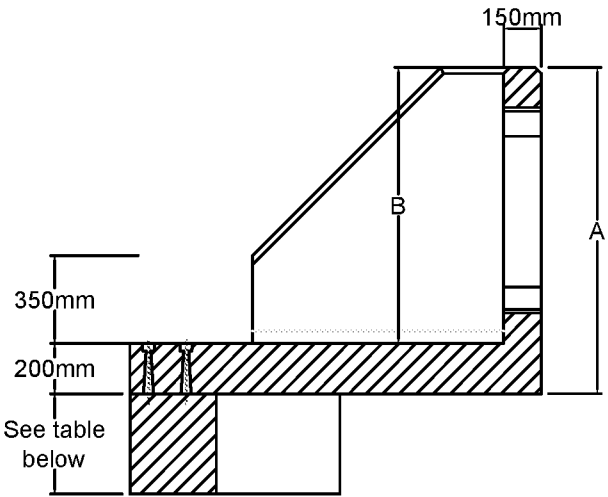




R20B Right Hand Angled Headwall Range

Up to 825mm Pipework
1300mm Backwall Height

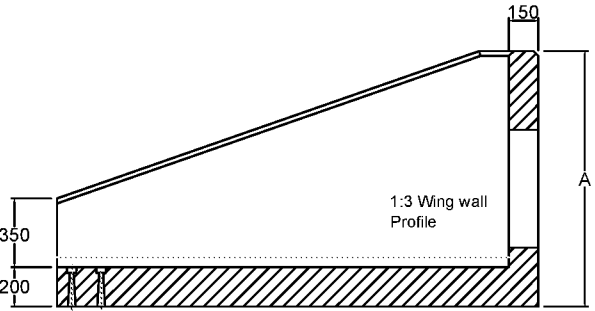
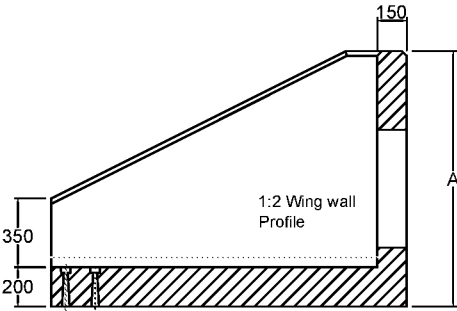
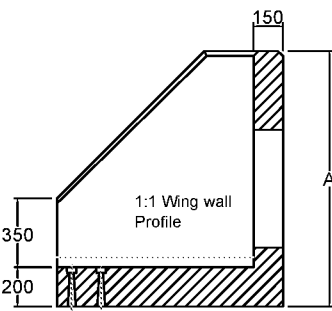
300mm Thick Toe



Headwall Ref	Back Wall Height A	Back Wall Height B	Length L1	Length L2	Wing Wall Profile	Weight	Weight with Toe			Max Pipe Opening	Max Pipe Opening	Max Pipe Opening	Max Pipe Opening	Max Pipe Opening	Max Pipe Opening
							400mm	650mm	950mm	Invert Level with Apron		100mm Invert Level		225mm Invert Level	
										TW / Clay	Concrete	TW / Clay	Concrete	TW / Clay	Concrete
	mm	mm	mm	mm		kg	kg	kg	kg	mm	mm	mm	mm	mm	mm
R20B 01 2390 RH	1300	1100	1150	2390	1:1	3650	4750	5250	5850	750	825	750	750	600	600
R20B 01 3330 RH	1300	1100	2090	3330	1:1	5590	6390	6890	7490	750	825	750	750	600	600
R20B 05 3050 RH	1300	1100	1810	3050	1:2	5010	5810	6310	6910	750	825	750	750	600	600
R20B 05 3390 RH	1300	1100	2150	3390	1:2	5680	6480	6980	7580	750	825	750	750	600	600
R20B 10 3690 RH	1300	1100	2450	3690	1:3	6080	6880	7380	7980	750	825	750	750	600	600

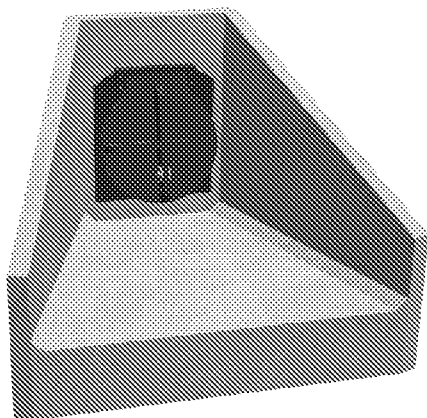
500mm Thick Toe

Headwall Ref	Back Wall Height A	Back Wall Height B	Length L1	Length L2	Wing Wall Profile	Weight	Weight with Toe			Max Pipe Opening	Max Pipe Opening	Max Pipe Opening	Max Pipe Opening	Max Pipe Opening	Max Pipe Opening
							500mm	750mm	1000mm						
										Invert Level with Apron		100mm Invert Level		225mm Invert Level	
										TW / Clay	Concrete	TW / Clay	Concrete	TW / Clay	Concrete
	mm	mm	mm	mm		kg	kg	kg	kg	mm	mm	mm	mm	mm	mm
R20B 01 2390 RH	1300	1100	1150	2390	1:1	3950	5570	6380	7190	750	825	750	750	600	600
R20B 01 3330 RH	1300	1100	2090	3330	1:1	5590	7210	8020	8830	750	825	750	750	600	600
R20B 05 3050 RH	1300	1100	1810	3050	1:2	5010	6630	7440	8250	750	825	750	750	600	600
R20B 05 3390 RH	1300	1100	2150	3390	1:2	5680	7300	8110	8920	750	825	750	750	600	600
R20B 10 3690 RH	1300	1100	2450	3690	1:3	6080	7700	8510	9320	750	825	750	750	600	600

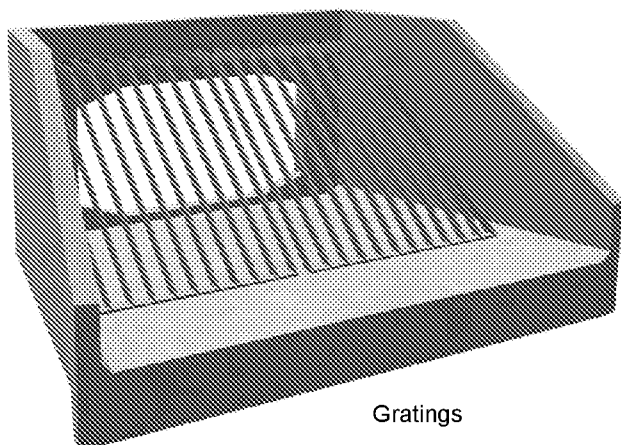


Headwall Accessories

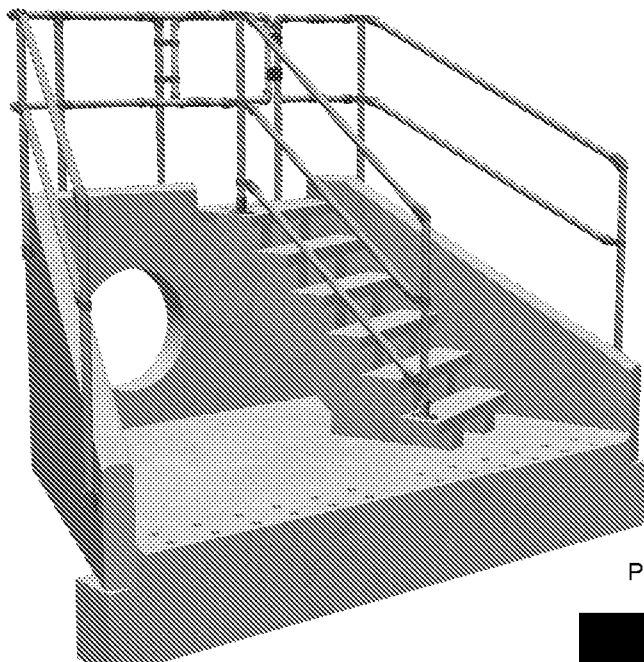
This page gives an overview of the alterations and additions that can be accommodated. For more specific information, please visit our website www.althon.co.uk If you can't see what you are looking for please contact our sales office on 01603 488700



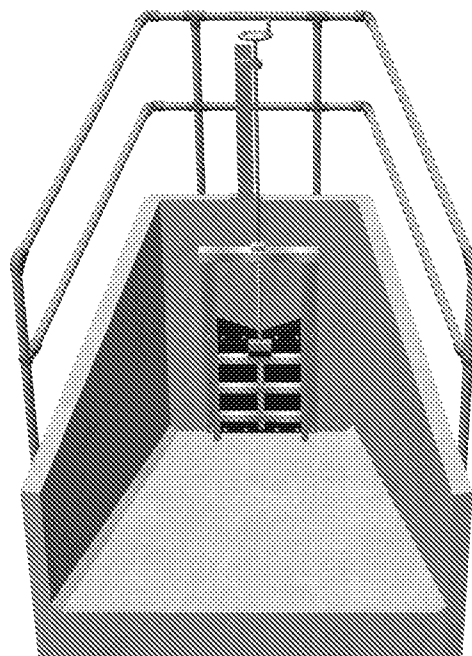
Flap Valve



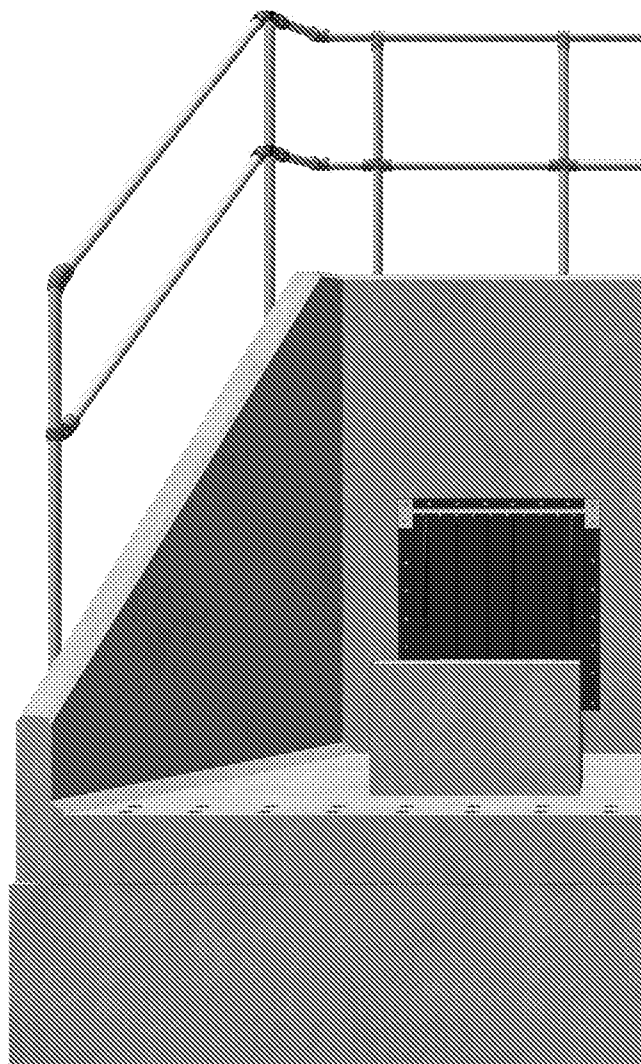
Gratings



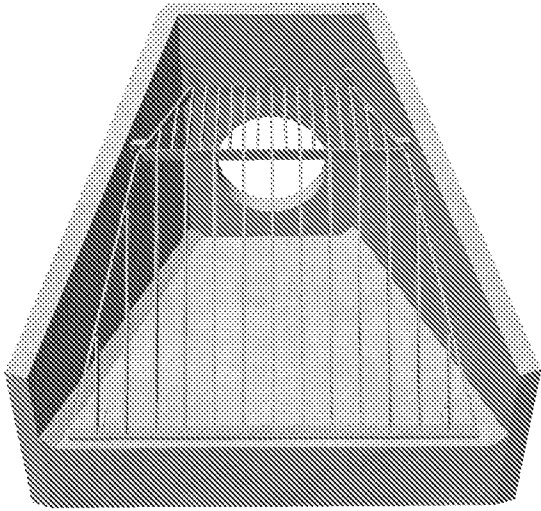
PCC Steps



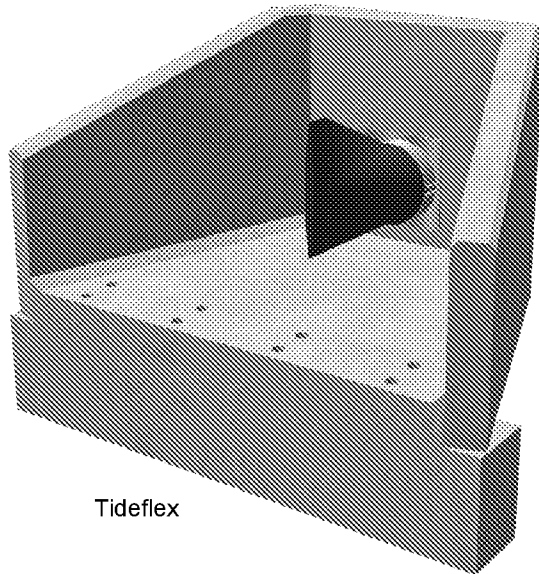
Penstock



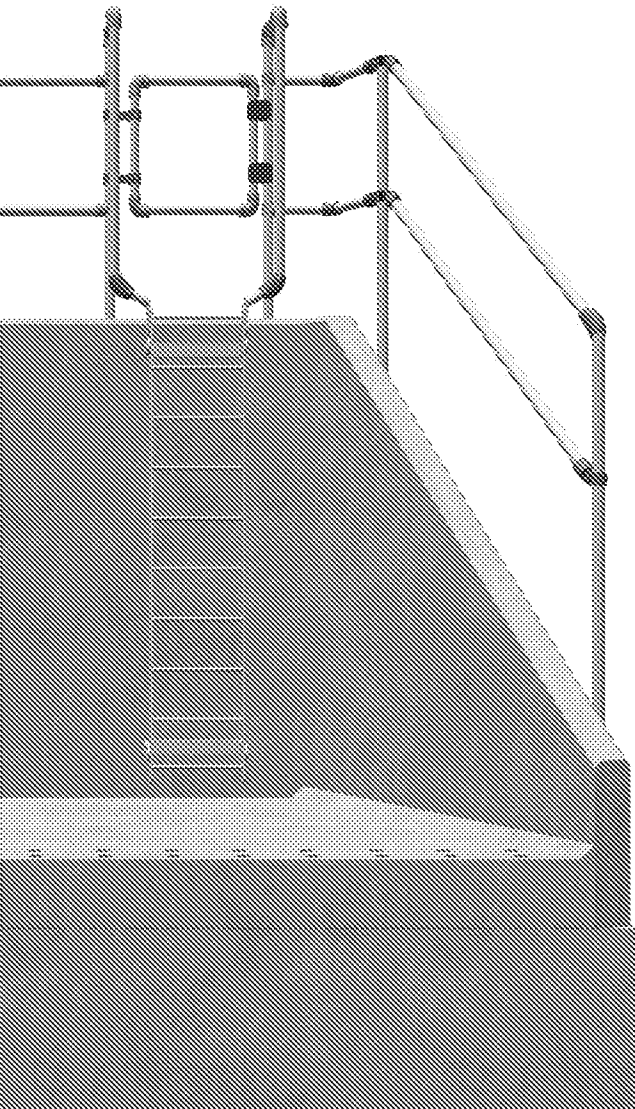
Stepped Baffle Blocks



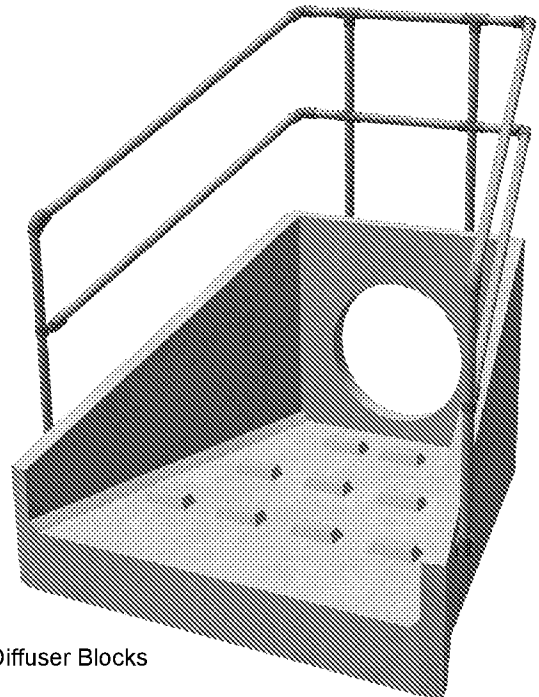
Catwalk Gratings



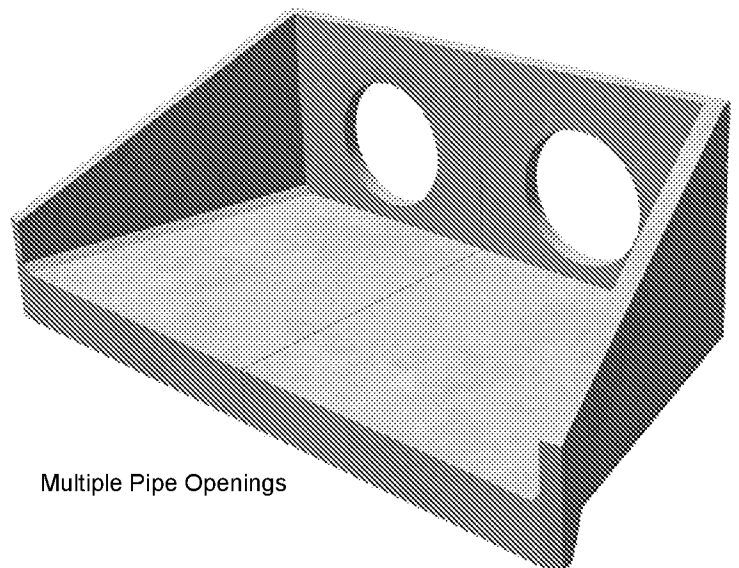
Tideflex



Kee Klamp Handrail and Ladders



Diffuser Blocks



Multiple Pipe Openings

We can also factory fitted other accessories such as Orifice Plates, Extended spillways, Weir Walls, Extended Toes, Pipe openings in Wingwalls, Stop Logs, Dovetail Slots and more.