

# HUMES

## Concrete Wingwalls



### Improves culvert inlet and outlet hydraulics

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**Humes precast concrete wingwalls have been designed to allow for maximum flow performance both at the inlet and outlet ends of the culvert.**

The haunched base ensures the incoming water is unimpeded and debris does not lodge in the corners of the unit.

The cast-in heel under the front of the apron prevents movement and scouring after installation, by keying into the levelled hardfill. It also strengthens the unit against impact loads during flood conditions.

#### Features

- Units capable of fitting a wide range of pipe sizes
- Swiftlift anchors cast into unit
- Thinwall knockout section for pipe openings

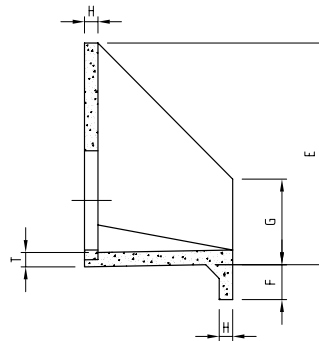
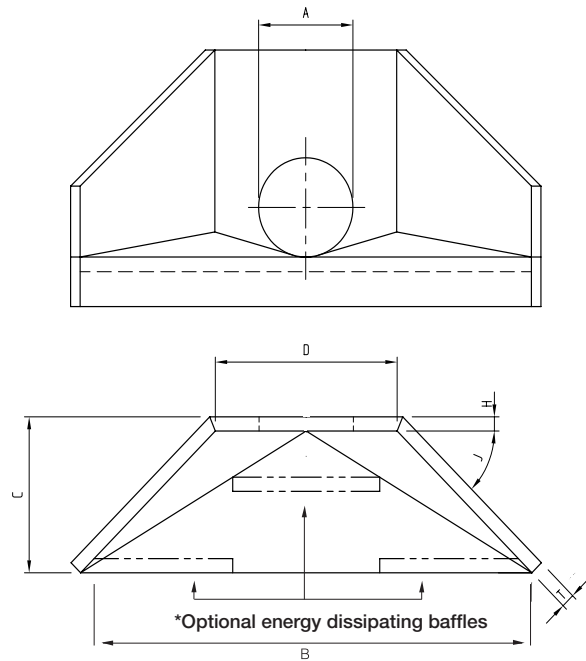
#### Benefits

- Minimises bank scouring and culvert blockages
- Economical and efficient installation
- No costly moulds or formwork
- Improves inlet and outlet hydraulics

#### Options

- Galvanised steel grills
- Energy dissipation can be increased at the outlet by adding baffles to the apron slab (see diagram overleaf)

# Concrete Wingwalls to improve culvert flow



Item number	Series	Nominal Pipe Diameter	Approximate Mass (kg)	A*	B	C	D	E	F	G	T	H	J
04637	200	100-200	20	200	460	205	300	375	N/A	325	57	57	60°
04640	300	150-300	240	300	990	660	450	600	170	180	57	57	60°
04638	600	300-600	650	700	2300	825	800	910	175	395	80	80	45°
05609	1050 (small)	600-1050	2100	1300	3350	1100	1350	1595	250	600	100	100	45°
05536	1050 (large)	900-1050	3700	1300	3800	2200	1400	1550	300	450	100	125*	60°
05537	1350	1200-1350	5300	1630	4100	2200	1700	1875	300	625	125	125*	60°
05538	1800	1600-1800	7700	2120	4600	2200	2200	2400	300	800	150	125*	60°

1950 and larger sizes can be made to order. Please discuss your requirements with your local Humes Representative.

\*Baffles retro-fitted to design specification provided by customer.

## Dimensions

- All dimensions in mm unless marked otherwise.
- Dimensions may vary slightly between regions.
- + The cut off wall and headwall are 125mm for this size.
- \* Standard hole openings to fit barrels of Humes spun, RCP and VT standard concrete pipes. Special openings up to this diameter can be made to order. Rubber ring joint collar dimensions restrict the upper sizes for inlet structures. See Humes concrete pipe brochure for pipe dimensions.

## Installation

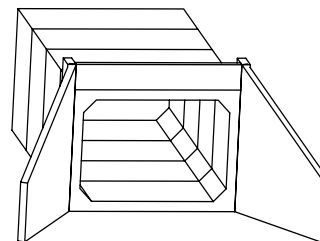
The Swiftlift lifting system is placed into the structure of the units for easier and safer handling. The gap between the pipe and the wingwall opening is to be sealed with Humebond. Ask your nearest Humes Sales Centre for advice.

## Manufacturing standards

Precast manufacture is to NZS 3109:1997 with surface finishes to NZS 3114:1987.

## Box culvert wingwalls

Precast wingwalls are available for box culvert installations. See Humes Box Culvert brochure for further details.



Example of wingwall option on Humes Culvert System

For further information or advice freephone  
0800 502 112 or visit [www.humes.co.nz](http://www.humes.co.nz)

Buyers and users of the products described in this brochure must make their own assessment of the suitability and appropriateness of the products for their particular use and the conditions in which they will be used. All queries regarding product suitability, purpose or installation should be directed to the nearest Humes Sales Centre for service and assistance. Availability of product may differ slightly from that available in your area © Humes Pipeline Systems 2014. Printed 03/14.

