



Code Explanation	
Product Code	Length (metres)
NEXUS CULVERT 2005	
	OD (mm)



Iplex NEXUS™ Culvert

Iplex NEXUS™ Culvert is a heavy duty, twin wall, smooth bore, HDPE culvert pipe, intended for stormwater culverts under farm access roads and raceways. Its relatively light weight makes handling and installation easier, compared to alternative heavier weight culvert materials.

Features and Benefits

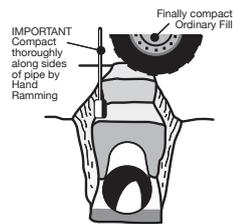
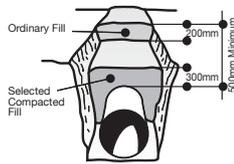
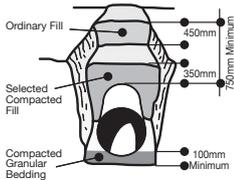
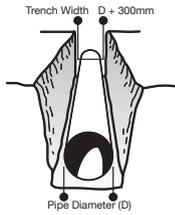
<i>Smooth Bore</i>	NEXUS™ Culvert’s smooth bore supports flow performance and function at low gradients
<i>Structural Stiffness</i>	NEXUS™ Culvert’s corrugated outer wall, and twin wall construction, gives it structural stiffness, for long-term buried performance
<i>Fittings</i>	NEXUS™ Culvert is compatible with commercially available injection moulded and fabricated PVC stormwater, fittings to assist with greater flexibility of use.
<i>Choice of sizes</i>	NEXUS™ Culvert is available in seven diameters allowing a degree of choice to match the performance requirement.
<i>Coupling</i>	NEXUS™ Culvert is supplied with a PVC coupler or pre-formed socket on one end so culverts can be fabricated to the required length on site.
<i>Material</i>	NEXUS™ Culvert is manufactured from high density polyethylene, a plastic material which is impact resistant, rust proof, abrasion resistant, and durable for in-ground service.
<i>Light weight</i>	NEXUS™ Culvert’s twin wall polyethylene construction makes it relatively light weight to handle and install compared to alternative heavier weight culvert pipes
<i>Quality System</i>	NEXUS™ Culvert is manufactured in New Zealand by Iplex Pipelines using a Quality Management System accredited to AS/NZS ISO 9001:2015
<i>Identification</i>	NEXUS™ Culvert is colour coded with a co-extruded coloured stripe to support product identification.
<i>Recycled HDPE</i>	NEXUS™ Culvert contains significant proportions of recycled HPDE derived during production and from other local sources within New Zealand

Product Range

Product Code	Nominal OD (mm)	Length (m)	Coupling	Colour of pipe and stripe
NEXUS CULVERT 1105	110	5	c/w Push fit coupler	Black with brown stripe 
NEXUS CULVERT 1605	160	5	c/w Push fit coupler	
NEXUS CULVERT 2005	200	5	c/w Push fit coupler	
NEXUS CULVERT 2506	250	6	Socketed	Black with green stripe 
NEXUS CULVERT 3156	315	6	Socketed	
NEXUS CULVERT 4006	400	6	Socketed	
NEXUS CULVERT 5006	500	6	Socketed	

Installation Instructions

Important for the correct performance of Iplex NEXUS™ Culvert Pipe



Excavation

When digging a trench, ensure that the width of the trench at the top of the pipe is sufficient to allow the bedding and side fill to be properly placed and compacted. As a rule, 300mm wider than the pipe is normally sufficient. This will minimise structural loading on the buried pipe.

Culverts Under Roads, Farm Tracks and Raceways

Compacted granular bedding material is preferred in the particle size range 5mm to 20mm. Suitable granular materials include scoria, pumice, river gravel, sandstone or limestone. The minimum depth of the cover for PVC culverts under roads, farm tracks, raceways, etc. should be 750mm.

Culverts Under Areas Not Subject to Traffic or Heavy Stock Movement

Selected excavation fill may be used as bedding. It should be substantially free from rock, tree roots or rubbish. Wet or saturated clay should not, under any circumstances, be used as bedding or surround material. The minimum depth of cover should be 500mm.

Compaction of Bedding

Iplex NEXUS™ Culvert pipes use their flexibility to transfer load to the surrounding compacted bedding. One purpose of the bedding is to ensure longitudinal support to the pipe. Another purpose is to provide lateral support to the pipe and increase its load capacity. Thorough compaction of the bedding along the pipe sides is important to assist with trouble-free, long term service from your NEXUS™ Culvert pipe. Fill should be carefully compacted by hand ramming along the sides and around the pipe, and built up in compacted layers to the finished ground surface.

Extra considerations

It is important to protect the ends of the culvert with a protective bund or "wing-wall" at each end, to support the backfill. The culvert pipe may be projected out from the surface of filled earth face (suggested 300-500mm) to prevent erosion of the fill. In hill country, fluming is recommended to guard against surface erosion from culvert discharge.

Note: Iplex NEXUS™ Culverts are not approved for gravity sewer applications.



Application of Iplex NEXUS™ Culvert under a farm vehicle-access to stock loading yards, with "wing walls" to protect the bedding and backfill from erosion, around the pipe entry and exit positions.

Typical arrangement of protective "bunds" on either side of a Iplex NEXUS™ Culvert, under a farm vehicle-access raceway, to protect the bedding and backfill around the pipe from erosion, at the entry and exit positions.

