

# ULTRACOR®



## MULTI-LAYER SEWER AND DRAIN SYSTEMS

### The product

Ultracor has smooth inner and outer walls separated by a dense cellular foam core. The multi-layer construction is engineered to deliver all the expected attributes of a world class sewer pipe.

- A smooth inner wall for optimal flow and lower cost;
- A smooth outer wall which makes the product compatible with all SABS jointing systems;
- Low pipe mass that contributes to competitive pricing and economic use;
- Ultracor carries the SANS 1601 mark of approval.

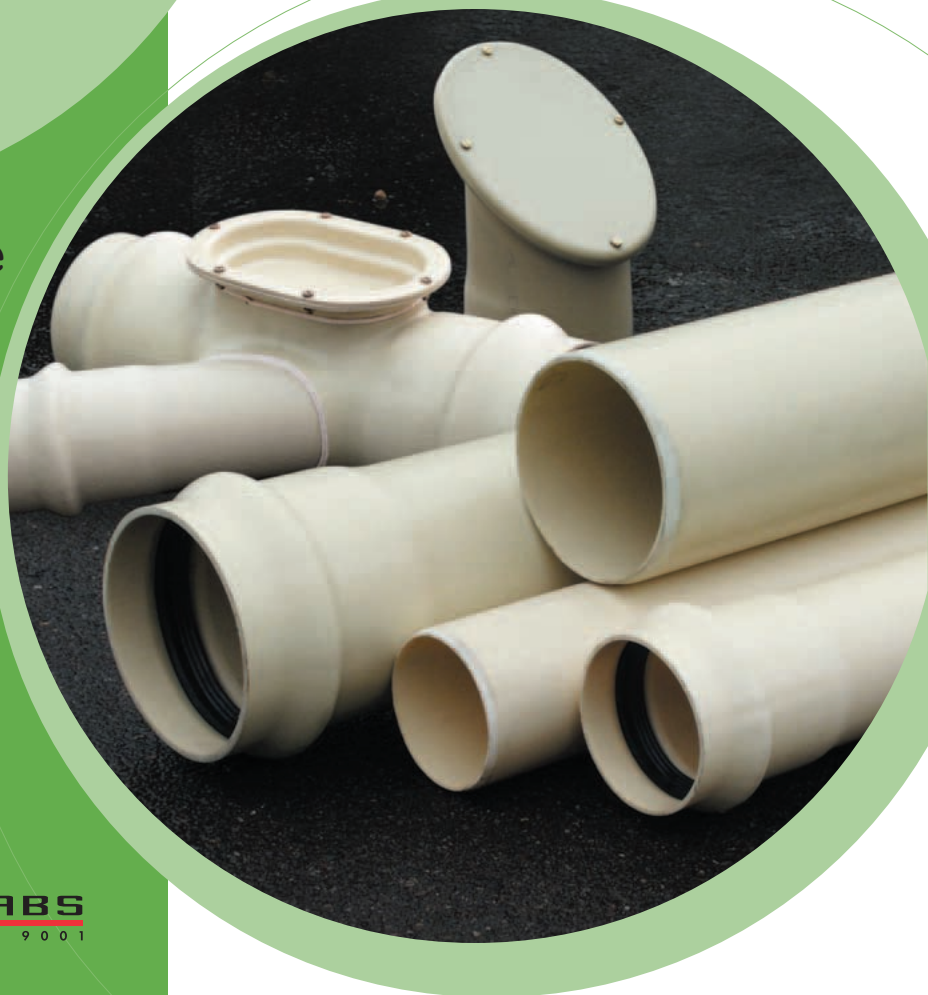
### DPI Plastics ... the market leader

DPI Plastics is committed to professional standards, quality products and service. Our extensive product range is manufactured to SABS and internationally accepted standards in ISO 9001 factories. We continuously strive to introduce new technologies and products with emphasis on cost effectiveness, ease of installation and aesthetics.

Millions of installed metres are testimony to our dedicated interaction with the trade.

### PVC-U a material of choice

- PVC-U (unplasticised polyvinyl chloride) is selected as a pipe material internationally because of its excellent performance characteristics.
- Resistance to abrasion, scouring, acid and alkaline attack.
- Good impact qualities, important during installation and transportation.
- Not damaged by modern cleaning methods.
- Ability to be modified - in this case by the addition of a foaming agent in the centre core.



SABS  
ISO 9001

# PIPE STIFFNESS

The introduction of structured wall pipes to the South African market led to the preparation of the SANS 1601: 2007 specification. This introduced the concept of the pipe stiffness rating as a pipe classification. The use of kPa rating (100, 200 and 400 kPa) is often confused with the pressure class rating, but in fact relates to the amount of pressure to deform the pipe by 5% of its diameter.

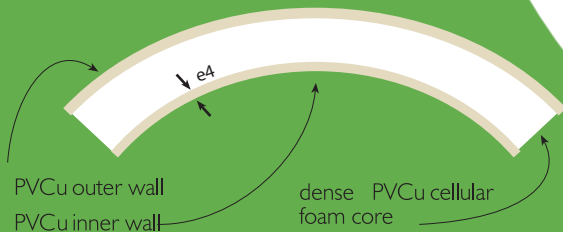
The solid wall specification (SANS 791) has two pipe stiffness classes being class 51 (normal duty) and class 34 (heavy duty). These relate to 100 kPa and 300 kPa respectively.

SANS Specification	Normal Duty		Medium Duty		Heavy Duty	
	class	stiffness kPa	class	stiffness kPa	class	stiffness kPa
SANS 791	51	100	-	-	34	300
SANS 1601	100	100	200	200	400	400



**SABS**  
ISO 9001

## The Product



The multi-layered structured wall configuration comprises of three layers, which provides strength and resistance to soil loads

Specification: SANS 1601: 2007 Amended

Colour: SANS 1091 White Sand (Ref: C68)

Integral Joint: "Duroseal" Rubber Seal Ring

Application: Ultracor sewer and drain pipes are designed for the conveyance of sewerage and are intended for use in buried applications.



# PRODUCT RANGE - PIPE



## Ultracor structured wall pipe to SANS 1601 : 2007 (type 1)

Size (mm)	Pipe ends	Length (m)	Class 100		Class 200		Class 400	
			Normal Duty		Medium Duty		Heavy Duty	
			e 4 (mm)	mass kg/m	e 4 (mm)	mass kg/m	e 4 (mm)	mass kg/m
110	pe	6	0.4	0.9	0.4	1.0	0.4	1.3
110	ijoe	6	0.4	1.0	0.4	1.1	0.4	1.4
160	pe	6	0.5	1.9	0.5	2.3	0.5	2.6
160	ijoe	6	0.5	2.0	0.5	2.5	0.5	2.8
200	ijoe	6	-	-	-	-	0.6	4.4
250	ijoe	6	-	-	-	-	0.7	6.9

Notation: pe (plain ended) ijoe (integral joint one end) e4 (inner wall) mass (average)

## PRODUCT RANGE - FITTINGS

### Injection moulded

Both the Durodrain ribbed and solid wall fittings range are compatible with Ultracor pipe. Durodrain ribbed SANS 1601: 2007 110mm Durodrain solid wall SANS 791: 2004 110 and 160mm

### Fabricated

A range of fittings has been developed for use with Ultracor pipe. They incorporate our Duroseal integral joint.



### Table of Radii - Long Radius Bends

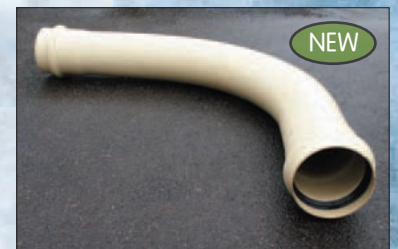
Degrees	110	160	200	250
22.5	400	600	700	875
45	400	600	700	875
90	600	600	700	875

Size Range:

110mm, 160mm, 200mm and 250mm

Colour:

SABS 1091 White Sand (Ref: C68)



# DPI PLASTICS

## PIPES FOR LIFE

For more information please call

Johannesburg 011 345 5600 - Cape Town 021 945 3656

# Codes of practice

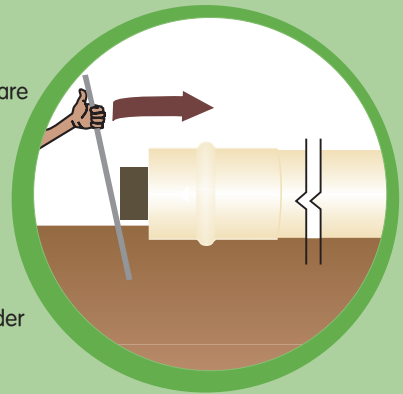
## Trenching, Bedding and Backfilling

For detailed information, consult our Durodrain Solid Wall Sewer and Drain catalogue.

## Cutting and Jointing



**Jointing** It is important that the pipe ends and sockets are aligned and free of burrs, otherwise insertion into the seal ring will be difficult. Insert the pipe into the socket fully. For protection of the pipe ends use a lever against a wooden block.



**Cutting** Cut the pipe square with a cross cut saw or angle grinder depending on the pipe size. Clean away swarf. The pipe end must be chamfered again to 15° to ensure easy insertion when making a joint.

**Cleaning the seal** It is important to ensure that the seal is free of grit and mud before making the joint. Pipe ends are often accidentally dipped into the sand.

**Lubrication** DPI Plastics supplies liquid lubricant and a jelly-like lubricant known as gel. Both products are designed for lubricating pipe seals. In order to make a leak-free joint effortlessly, use liberal amounts of lubricant, but avoid hang up and possible blockages.

**Joints** Flexible rubber ring joints are available for all types of pipe and should be used in preference to rigid joints, allowing the pipeline to flex in the event of soil movements and also allowing for thermal change.

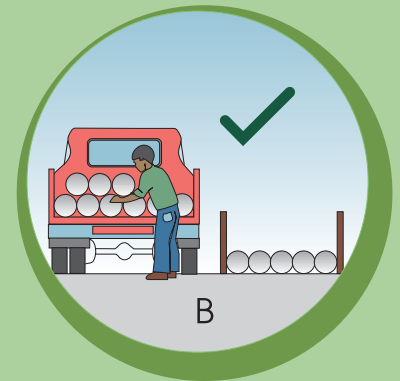
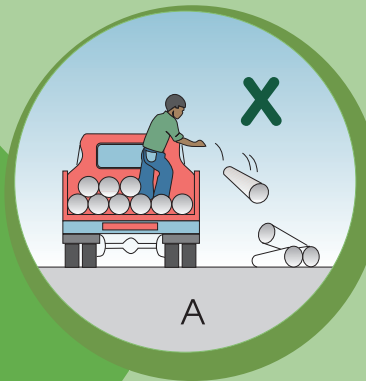
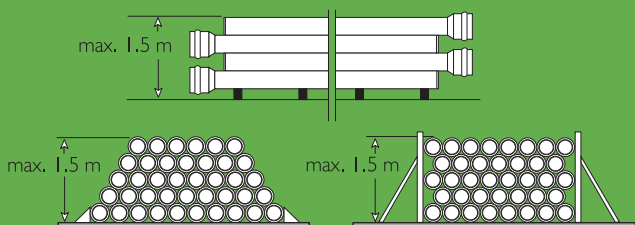
## Handling, Storage and Transportation

### Handling

Pipes and fittings should not be handled carelessly, as this may cause damage. Pipe should not be dropped or dragged along the ground.

### Storage

Pipes should be stored on level, flat ground, free of stones. They may be stored on timber supports of at least 75 mm width placed 1.5 metres apart with wide supports. The height of pipe stacks should not exceed 1.5 metres. All pipe stacks and stored fittings should be covered to avoid prolonged exposure to direct sunlight. Where the pipes are fitted with an integral socket, they should be stacked with sockets protruding at alternate ends.



### Transportation

A flat-bodied vehicle is ideal for transporting pipes. Pipes with integral cuffs should be loaded and spaced so that cuffs protrude at alternate ends. When a mixed load of pipes (i.e. varying diameters) is to be transported, the larger pipes should be placed at the bottom. Pipes should not overhang the vehicle by more than 1 metre.

