

**KOTHARI**  
**KWIKDRAIN™**  
FOAMCORE UNDERGROUND DRAINAGE SYSTEM **FOAMCORE**

**OVERVIEW**

An Advanced drainage and sewerage solution, **KOTHARI KWIKDRAIN Foamcore UDS** Multi-layers pipes are ideal for housing and government developments. While the outer and innermost layers give the pipe a great load bearing capacity, the middle layer provides firmness to the overall pipe structure. In short, better strength with a lighter weight as compared to solid wall PVC pipes and these pipes are manufactured on Hi-Tech European Multilayer technology machine.

**KOTHARI KWIKDRAIN Foamcore UDS** pipes are noticeably lighter and less expensive than existing PVC Pipes / concrete pipes. These pipes are interchangeable with solid wall pipes and are compatible with regular PVC fittings.

**PRODUCT RANGE**

**Pipes :** 110, 160, 200, 250 & 315 mm **Fittings :** 110, 160 & 200 mm

**STANDARDS OF KWIKDRAIN FOAMCORE PIPE**

Pipes			Fittings	
Size (mm)	Standard	End Connection	Size (mm)	End Connection
SN 2 - 160, 200, 250, 315	IS 16098 (part 1)	Elastomeric Sealing Ring Joint & Solvent joint	110, 160 & 200	Elastomeric Sealing Ring Joint & Solvent joint
SN 4 - 110, 160, 200, 250, 315				
SN 8 - 110, 160, 200, 250, 315				
SN 16 - 110, 160, 200, 250, 315				

**FEATURES AND BENEFITS**

- ▶ Specially designed for underground non-pressure applications such as gravity drainage, sewerage flow & transportation of soil and waste discharge
- ▶ Pipes available in both types Self fit & Ring fit
- ▶ Excellent mechanical properties
- ▶ Corrosion and rust-proof & dust free
- ▶ Leak Proof
- ▶ High Impact Strength
- ▶ Friction Free due to smooth inner surface

**DIMENSIONS**

Nominal Size (Outside Diameter)	Mean Outside Diameter		RING STIFFNESS					
			SN2 (SDR 51)		SN 4 (SDR 41)		SN 8 (SDR 34)	
	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum
(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
110	110.00	110.40	-	-	2.80	3.30	3.20	3.70
160	160.00	160.50	3.20	3.70	4.00	4.60	4.70	5.40
200	200.00	200.60	3.90	4.50	4.90	5.60	5.90	6.70
250	250.00	250.80	4.90	5.60	6.20	7.00	7.30	8.30
315	315.00	316.00	6.20	7.00	7.70	8.70	9.20	10.40

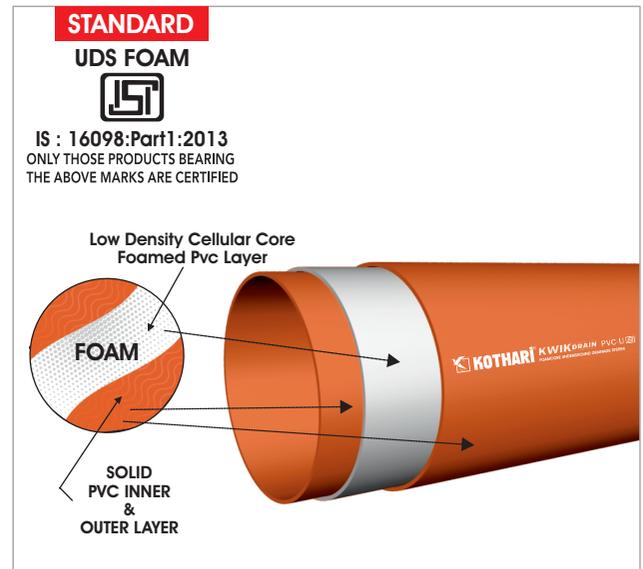
**PRODUCT STANDARDS**

**KWIK DRAIN FOAMCORE UDS** pipes are manufactured as per Indian, European and International standards published under structure wall pipes for drainage as well as sewerage and are mainly based on stiffness classes. These specifications are very well adopted at global levels and are in use for more than 25 years.

IS : 16098 : (Part1)



ONLY THOSE PRODUCTS BEARING THE ABOVE MARKS ARE CERTIFIED



**APPLICATIONS**

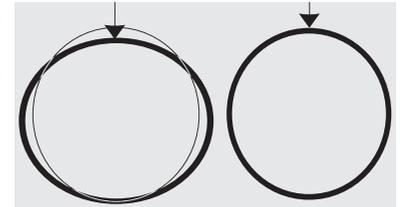


## WHAT ARE KWIK DRAIN FOAMCORE UDS PIPES?

**KWIK DRAIN FOAMCORE UDS** Pipes are multilayer pipes having outer and inner layers of conventional PVC and middle layer of foamed PVC. Outer and inner layers are designed to withstand the load and middle layer of foamed PVC gives rigidity and maintains the shape of the pipe under the load. It reduces the total weight of the pipe and makes it light when compared to solid wall PVC pipes.

## WHY KWIK DRAIN FOAMCORE UDS PIPES?

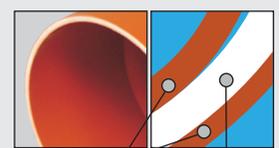
The pipe on the left is typical of solid wall PVC under the load and the type of distortion normally expected. The **KWIK DRAIN FOAMCORE UDS** pipe on the right, under equal load, distributes the load more evenly and does not show the same amount of distortion, as it has unique "I-Beam" structure. Due to its ability of absorbing the load, **KWIK DRAIN FOAMCORE UDS** pipes are the most suitable for underground drainage systems, where soil exerts a lot of pressure on the pipe surfaces. In solid wall pipes this soil pressure will rupture the pipe after some time where **KWIK DRAIN FOAMCORE UDS** pipes give better life as foamed PVC layer will absorb pressure and make pipes "stress free in working conditions."



SOLID WALL PVC PIPE KWIK DRAIN UDS

## What is KOTHARI FOAMCORE UDS Technology

Traditionally, in India soil and drain PVC pipes are extruded as a single solid monolayer during the manufacturing process. **KOTHARI FOAMCORE UDS** pipes are manufactured by a more complex production process and are composed of three distinct layers – a solid PVC outer layer, a rigid PVC foam middle layer and a solid PVC inner layer. This innovative technique produces pipes with improved performance properties whilst reducing the total material content.



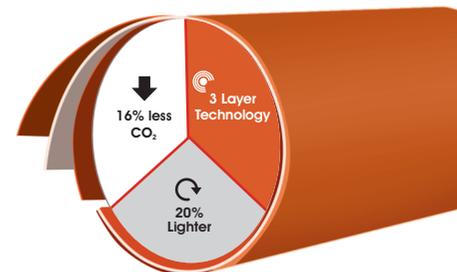
SOLID PVC INNER & OUTER LAYER HIGH DENSITY CELLULAR CORE FOAMED PVC LAYER

## THE MAIN BENEFITS OF MULTILAYER TECHNOLOGY ARE

Pipes are up to 20% lighter, making handling easier and improving site efficiency.

Pipes are stronger and have more impact resistance than conventional solid wall pipes, so they are less prone to damage when being transported and when handled on site.

Reduced material usage means that there are environmental advantages with regard to the lower carbon footprint (16% reduction in CO<sub>2</sub> emissions over the whole supply chain)



## FIELD OF APPLICATIONS

Drain and sewer systems in residences, commercial complexes, resorts, hospitals, academic institutes, industries etc.

## PRODUCT RANGE

**KWIK DRAIN FOAMCORE UDS** Pipes are available in 110 mm to 315 mm size, selfit and ringfit types with different stiffness classes mainly categorised as SN2, SN4 & SN8. SN2 pipes are recommended for above ground applications while SN4 & SN8 pipes are recommended for below ground applications depending on the level at which these pipes have to be installed. • OD 110 mm (11.0 cm) with stiffness class SN4 (SDR 41) & SN8 (SDR 34) • OD 160 mm (16.0 cm), 200 mm (20.0 cm), 250 mm (25.0 cm) & 315 mm (31.5 cm) with stiffness class SN2 (SDR 51), SN4 (SDR 41) & SN8 (SDR 34)

## RINGFIT PIPES

Ringfit pipes are socketed on the automatic online socketing machine with a very high degree of accuracy. The socket has groove inside for rubber ring. The rubber ring ensures trouble-free water tight joint with allowance to thermal expansion / contraction. One end of the pipe is plain and another is self socketed with an integral groove to hold the rubber ring. When joined with a rubber ring, the joint formed is a trouble-free, watertight, ready to take care of thermal expansion / contraction. AVAILABLE SIZES: 110 mm & 160 mm



## SELFIT PIPES

SELFIT PIPES Selfit pipes are socketed on the automatic socketing machine with self socket length (without groove). Such pipes are to be joined with solvent cement. One end of the pipe is plain and the another is self socketed on sophisticated automatic machines for a high degree of accurate diameters. When joined using solvent cement, the pipes form a permanent watertight joint. AVAILABLE SIZES: 110 mm, 160 mm, 200 mm, 250 mm & 315 mm



# KOTHARI<sup>®</sup> KWIKDRAIN<sup>™</sup>

UNDERGROUND DRAINAGE SYSTEM  
SOLID WALL

STANDARD

UDS PIPE



IS : 15328 : 2003



## OVERVIEW

KOTHARI KWIKDRAIN Pipes are noticeably lighter and less expensive PVC pipes/ concrete pipes. These pipes are interchangeable with solid wall pipes and are compatible with regular PVC fittings. We have introduced rubber and solvent fittings to offer a complete range of drainage piping systems.

**PRODUCT RANGE - Pipes :** 63 to 400 mm    **Fittings :** 110 & 160 mm

## STANDARDS OF KWIKDRAIN UDS PIPE

Pipes			Fittings		
Size (mm)	Standard	End Connection	Size (mm)	Standard	End Connection
SN 2 - 160 to 315 SN 4 - 125 to 250 SN 8 - 110 to 250	IS : 15328 : 2003	Elastomeric Sealing Ring & Solvent joint	110 & 160	EN-1404-1	Elastomeric Sealing Ring Joint & Solvent joint



## APPLICATIONS



Underground  
Drainage  
Systems



- ▶ Long life
- ▶ Leak proof
- ▶ Anti-rodent
- ▶ Easy transportation, light in weight & easy in wet condition
- ▶ Fast and easy installation, even in wet conditions
- ▶ Good Impact resistance
- ▶ Resistance to abrasion, smooth bore pipes reduces
- ▶ the risk of blockage

## DIMENSIONS

Nominal Size (Outside Diameter)	Mean Outside Diameter		Wall Thickness					
			SN 2 (SDR 51)		SN 4 (SDR 41)		SN 8 (SDR 34)	
	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum
(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
63	63.00	63.30	-	-	-	-	2.70	3.10
75	75.00	75.30	-	-	-	-	2.80	3.30
90	90.00	90.30	-	-	-	-	2.90	3.40
110	110.00	110.40	-	-	-	-	3.20	3.70
125	125.00	125.40	-	-	3.20	3.70	3.70	4.40
160	160.00	160.50	3.20	3.70	4.00	4.60	4.70	5.40
200	200.00	200.60	3.90	4.50	4.90	5.60	5.90	6.70
250	250.00	250.80	4.90	5.60	6.20	7.00	7.30	8.30
315	315.00	316.00	6.20	7.00	7.70	8.70	9.20	10.40
400	400.00	401.20	7.90	8.90	9.80	11.00	11.70	13.10