

Borehole



uPVC Pipes
& Fittings



HDPE Pipes
& Fittings



Rotomolding



***Dura*plast Ltd.**

*Manufacturers of High Quality uPVC & HDPE Pipes, Fittings,
Rotational Molded Products and Associated Accessories*

DURAPLAST LTD specializes in the production of un-plasticized Polyvinyl Chloride (uPVC), Polyvinyl Chloride (PVC) and High Density Poly-ethylene (HDPE) Pipes and Fittings. The factory and offices are located on plots 10, 11 and 12 Dadeban Road, North Industrial Area, Accra, Ghana in West Africa.

The company started operations in November 1969 with the production of unplasticized polyvinyl chloride (uPVC) pipes of various sizes. However, over the years it has progressed to become a leader in the pipe industry in West Africa and parts of Central Africa.

The range of products which now includes uPVC pipes (up to 400 mm diameter), HDPE pipes (up to 1200 mm diameter), HDPE and PVC fittings, Double Wall Corrugated pipes are widely used in potable Water Supply and Distribution, Electrical Installations, Telecommunication, Irrigation, Mining, Bore hole Drilling, Sewage and Drainage Systems among others.

The Quality Management System of **DURAPLAST** is certified to ISO 9001:2008, and the company has the capacity and expertise to produce pipes and fittings that meet international standards like British Standard (BS), International Organization for Standardization (ISO) and individual requests and specifications. These products also conform to Ghana Standards Authority (GSA) specifications.

In recent times, **DURAPLAST** has diversified into the production of rotationally molded products. Rotational molding is a method that involves the processing of raw materials in a mold to produce seamless, hollow plastic parts.

This process is typically used to mold products such as *Durabox* (Plastic Inspection Chambers), *Durablock* (Water-Filled Safety Barriers), *Durafloat* (Plastic Floaters), *Moto-Box* (Plastic Motorcycle Delivery Boxes), *AD-Box* (Plastic Advertising Box), *Duraboat* (Plastic Canoe), *M-Box* (Multi-Purpose Storage Box) and the *Duraplast Sewage Treatment (DST) Plant*, which are all revolutionary and innovative products.



Map Key



**OUR NATIONAL
DISTRIBUTION POINTS**

All DURAPLAST products
can be delivered throughout
the country and exported to
any destination in the world.



Map Key

**OUR INTERNATIONAL
DISTRIBUTION POINTS**

All DURAPLAST products can be delivered throughout the country and exported to any destination in the world.



NETWORK AND DISTRIBUTION

Equipped with a fleet of articulated trucks and other medium to heavy-duty trucks and pick-ups, Duraplast is able to deliver products throughout the country and export to any destination in the world.



BOREHOLE CASING PIPE



FEATURES OF DURAPLAST BOREHOLE CASING PIPES

- They are blue in colour.
- The pipes are manufactured to DIN 4925 and BS 4346 Standards.
- We manufacture both Slotted and Plain Threaded Borehole Casings.
- Outside/ Nominal diameter of 113 mm to 400 mm
- Wall thickness of 6.5 mm to 17.5 mm.
- They are produced in standard length of 1m, 2m, 3m and 6m.



DIN 4925

OUTSIDE DIAMETER (mm)	INSIDE DIAMETER (mm)	MINIMUM WALL THICKNESS (mm)
113	102	6.5
125	112	6.5
125	111	7.0
125	110	7.5
125	107	9.0
140	127	6.5
140	126	7.0
140	125	7.5
140	124	8.0
140	122	9.0
140	120	10.0
165	152	6.5
165	150	7.5
165	147	9.0
169	179	8.5
169	175	10.5
200	179	10.5
200	177	11.5
225	203.4	10.8
250	226.2	11.9
250	229	13.0
280	255	12.5
280	248	16.0
400	365	17.5



STANDARD LENGTH:

1 metre, 2 metres
3 metres and 6 metres

COLOUR:

Blue

TYPE OF JOINT:

Plain Threaded and Slotted



uPVC PIPES AND FITTINGS



The importance of water in the socio-economic development of the world in general and Ghana in particular cannot be over-emphasized. Much as the quality of supply channels of water to homes and industries is paramount, it is equally essential to pay attention to the good and acceptable disposal of waste water through a well laid network of sewage systems. In both instances, the role of un-plasticized Polyvinyl Chloride (uPVC) and fittings is most crucial.

Duraplast produces the following types of uPVC Pipes-

.Pressure Pipes (Gray in color, with the black and yellow Powerlock or Rubber Ring seal), for water supply.

.Borehole Pipes (Blue in color, plain and slotted screen pipes).

.Telecom Pipes (White in color), for the installation of telecommunication cables and ducts.

.Conduit Pipes (Gray in color), used in electrical installations.

.Garden Hose (Red or Blue in color), for domestic watering, etc.

Features and Benefits of uPVC PIPES

1. Light weight

uPVC pipes are relatively light in weight; they weigh only 1/6 of steel pipes and 2/3 of cement pipes. They are therefore easier to handle, install and transport at a minimal cost.

2. High Resistance to corrosion and weather

uPVC does not react to most common chemicals. It is also not affected by sunlight, wind or rain. It is therefore one of the preferred means for transporting potable water and other chemicals.

3. Unflammable (Fire Resistant)

Hard uPVC pipes are not combustible or flammable, thus fire cannot travel along uPVC pipes. For this reason, uPVC pipes can hardly catch fire when used for ducting electrical and telecommunication cables.

4. High Electric Resistance

uPVC has very low electrical conductivity. They are therefore suitable for ducting electrical and telecommunication cables.

5. Consistent Flow

uPVC pipes have smooth internal surface. This prevents deposits in the pipes and ensures total drainage, this is especially useful for sewage systems.

6. Easy To Install

Easy to install and less time consuming than iron or asbestos cement systems. Special **Powerlock Seal** and rubber ring sealing ensures leak-proof joints.

WATER SUPPLY & DISTRIBUTION

½" to 8"

PVC

BS 3505 (Imperial Series)

NOMINAL SIZE (inch)	MIN. DIAMETER (inch)	MINIMUM WALL THICKNESS (mm)		
		Class C	Class D	Class E
½"	21.2			1.7
¾"	26.6			1.9
1"	33.4			2.2
1 ¼"	42.1		2.2	2.7
1 ½"	48.1		2.5	3.1
2"	60.2	2.5	3.1	3.9
3"	88.7	3.5	4.6	5.7
4"	114.1	4.5	6.0	7.3
5"	140.0	5.5	7.3	9.0
6"	168.0	6.6	8.8	10.8
8"	218.8	7.8	10.3	12.6

Standard Length:

6metres, 12metres

COLOUR:

Gray

Type Of Socket:

Bell Mouth up to 1 ½", Powerlock from 2" to 8"



WATER SUPPLY & DISTRIBUTION

ISO 4422-2 (Metric Series)

NOMINAL OUTSIDE DIAMETER (mm)	MINIMUM WALL THICKNESS (mm)				
	PN 6	PN 8	PN 10	PN 12.5	PN 16
20					1.5
25				1.5	1.9
32			1.6	1.9	2.4
40	1.5	1.6	1.9	2.4	3.0
50	1.6	2.0	2.4	3.0	3.7
63	2.0	2.5	3.0	3.8	4.7
75	2.3	2.9	3.6	4.5	5.6
90	2.8	3.5	4.3	5.4	6.7
110	2.7	3.4	4.2	5.3	6.6
125	3.1	3.9	4.8	6.0	7.4
140	3.5	4.3	5.4	6.7	8.3
160	4.0	4.9	6.2	7.7	9.5
200	4.9	6.2	7.7	9.6	11.9
225	5.5	6.9	8.6	10.8	13.4
250	6.2	7.7	9.6	11.9	14.8
280	6.9	8.6	10.7	13.4	16.6
315	7.7	9.7	12.1	15.0	18.7
355	8.7	10.9	13.6	16.9	21.1
400	9.8	12.3	15.3	19.1	23.7

Standard Length:

6metres, 12metres

COLOUR:

Grey

Type Of Socket:

Bell Mouth up to 50mm and Powerlock or Rubber ring from 63mm to 400mm



BS 3506 (Imperial Series)**PVC**

NOMINAL SIZE (inch)	CLASS O		CLASS B	
	Diameter (mm)	Minimum Wall Thickness (mm)	Diameter (mm)	Minimum Wall Thickness (mm)
2	60.2	1.8		
3	88.7	1.8	88.7	2.9
4	114.1	2.3	114.1	3.4
5	140.0	2.6	140.0	3.8
6	168.0	3.1	168.0	4.5
8	218.8	3.1	218.8	5.3

Standard Length:

3metres, 6metres

COLOUR:

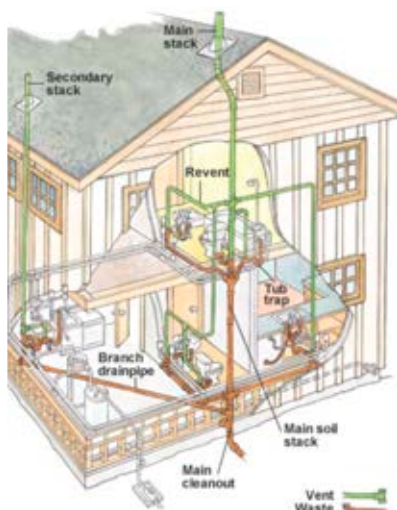
Grey

Type Of Socket:

Bell Mouth



PVC	MINIMUM WALL THICKNESS (mm)		
DIA (mm)	NFT 54-017	DIN 8062	WI-QA-21
32	3.0	1.8	1.3
40	3.0		1.3
50	3.0		1.3
63	3.0	1.9	1.3
63			1.9
75	3.0	1.8	1.3
75			2.2
90	3.0	1.8	1.5
90			2.7
100	3.0		1.3
110	3.0		1.5
125	3.0	2.5	2.0
140	3.0	2.8	
160	3.5	3.2	3.2
180		3.6	
200	4.7	4.0	4.0
225		4.5	4.5
250	6.1	4.9	4.9
280		5.5	
315	7.7	6.2	7.7
355		7.0	
400	9.8	7.9	9.8



WI-QA-21 is a set of specification evolved by Duraplast based on market demands.

Standard Length:

4metres, 6metres

COLOUR:

Grey

Type Of Socket:

Bell Mouth

NFT 54-018

PVC

OUTSIDE DIAMETER (mm)	MINIMUM WALL THICKNESS (mm)
28	1.5
33	1.5
45	1.5
45	1.8
60	2.0
80	1.5
80	2.5
100	1.5
100	2.0
110	3.0
110	5.3

Standard Length:

6metres

COLOUR:

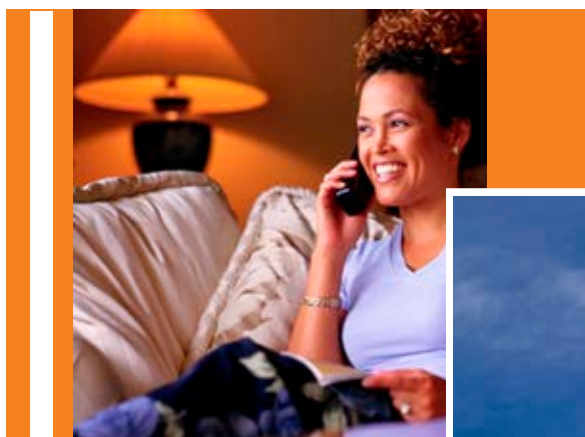
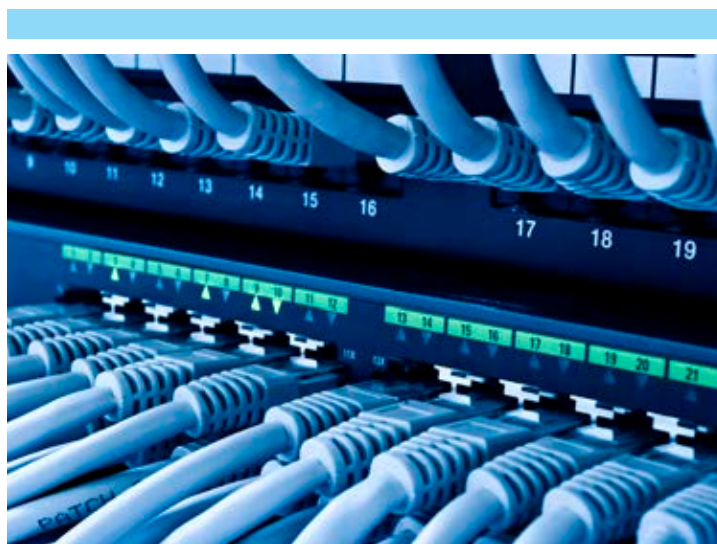
Ivory

Type Of Socket:

Bell Mouth

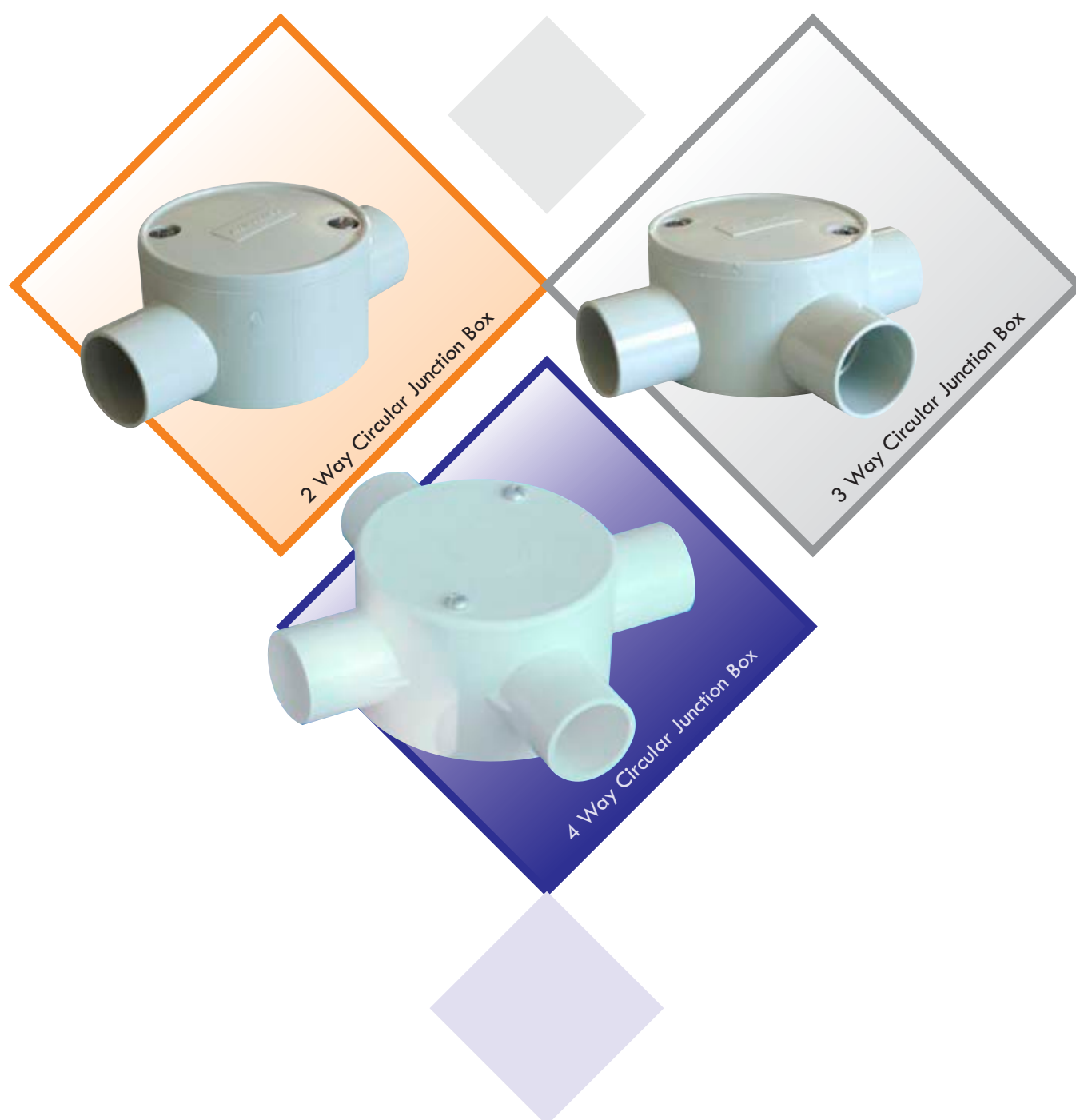
NOTE:

All the accessories for telecom pipes are available.
Example, Spacers, End Caps...



OUTSIDE DIAMETER (mm)	MINIMUM WALL THICKNESS (mm)
20	1.2
25	1.5

ELECTRICAL ACCESSORIES





DURAFLEX

Double Wall Corrugated Pipe



FEATURES OF DURAFLEX

- Flexible and so can be bent around corners.
- Double corrugated wall makes pipe very durable and can withstand pressure.

APPLICATIONS OF DURAFLEX

- Water supply from mains for domestic or industrial use.
- Irrigation of large farm lands, with reducers supplying regular irrigation pipes.
- Used in the laying of telecom and electrical cables





HDPE PIPES AND FITTINGS



HDPE (High Density Polyethylene) pipes are used widely in potable water supply and distribution, sewage, drainage, irrigation, gas transportation and distribution and telecommunication. HDPE pipes have been found to be very reliable and proven high performance in these areas. It is the preferred choice in installing pipes of several kilometers since current methods of jointing (such as butt welding, electro weld joints, screw thread jointing and ring seal jointing) ensures zero leak rate.

HDPE pipes produced by Duraplast range from 13 mm to 1200 mm in diameter for contractors, engineers and other users to choose from. The smaller sizes are available in coils whilst the bigger ones are cut to pipe lengths (e.g. 6 m, 12 m, 18 m). The Company provides transport for bulk purchases to customers' destinations within Ghana.

Duraplast offers technical support in butt welding the pipes on site and also provides butt welded fittings such as elbows and tees. It also stocks other standard molded HDPE fittings of various sizes.

Range: From 13 mm to 1200 mm Outer Diameter

FEATURES AND BENEFITS

Resistance to chemicals, corrosion and impact.

Duraplast HDPE pipes do not react to corrosive chemicals and soils and therefore are not subject to wear and deterioration. These pipes do not also support biological growth or scale buildup. **HDPE pipes** are tough, resilient and capable of withstanding external loads, seismic conditions, vibration and deep burial in the ground or continuous exposure above ground level.

Hydraulically Smooth

The smooth and non-wetting inner surface of Duraplast HDPE Pipes provides an inherently low resistance to liquid flows to reduce pumping and operating cost.

Stiffness, Hardness and Strength

Duraplast HDPE Pipes have superior physical characteristics such as stiffness, hardness and strength making them ideal for pressure piping applications.

Flexible, Lightweight and Coilable

Duraplast HDPE pipes are flexible (especially smaller diameter pipes which can be coiled) and lightweight compared to alternative pipes made from other materials. These properties can result in significant cost savings in shipping, handling and installation over several kilometers.

Other Features and Benefits

- Very good thermal insulation due to low thermal conductivity.
- Flame resistance classifying the material as self extinguishing.
- Low maintenance cost.
- Easy to install.
- Longer life than cement and other pipes.

Duraplast HDPE pipes have been described as durable, reliable, long lasting and economical.
What a better way of describing a pipe!!!

Duraplast produces HDPE Pipes as per ISO 4427, EN 12201 and DIN 8074

SPECIAL PRODUCT FOR TELECOM-PERMANENTLY LUBRICATED (PLB) HDPE TELECOM DUCTS FOR UNDERGROUND FIBRE OPTIC CABLE CONDUIT.

PRODUCT DESCRIPTION

The **PLB HDPE** duct prepared by Duraplast consist of two concentric layers, the outer layer being HDPE co-extruded with an inner layer of solid Permanently Lubricated Material, to reduce the co-efficiency of friction. The lubricated inner layer of the ducts makes it easy, fast and safe to install fibre-optic cables and the like.

DIMENSIONS

Length:

Duraplast PLB ducts are coiled up to 1000meters in length or according to the customer's specification.

Diameter:

Outside diameter 40mm with tolerance of +0.40mm.

Thickness:

Wall thickness 3.00mm with tolerance of +0.20.

Wall Thickness:

3.50mm with tolerance of +0.20mm

Colour Identification Line:

Red, Green and Blue



Customized colours are available.

THICKNESS CHART FOR HDPE PIPES FOR WATER DISTRIBUTION

ISO 4427

DIA. IN mm	PE 100				
	SDR 26	SDR 21	SDR 17	SDR 13.6	SDR 11
	PN 6	PN 8	PN 10	PN 12.5	PN 16
	THICKNESS	THICKNESS	THICKNESS	THICKNESS	THICKNESS
	MIN	MIN	MIN	MIN	MIN
13					1.9
20			2.3	2.3	2.3
25			2.3	2.3	2.3
32			3.0	3.0	3.0
40	2.0	2.0	2.4	3.0	3.7
50	2.0	2.4	3.0	3.7	4.6
63	2.5	3.0	3.8	4.7	5.8
75	2.9	3.6	4.5	5.6	6.8
90	3.5	4.3	5.4	6.7	8.2
110	4.2	5.3	6.6	8.1	10.0
125	4.8	6.0	7.4	9.2	11.4
140	5.4	6.7	8.3	10.3	12.7
160	6.2	7.7	9.5	11.8	14.6
180	6.9	8.6	10.7	13.3	16.4
200	7.7	9.6	11.9	14.7	18.2
225	8.6	10.8	13.4	16.6	20.5
250	9.6	11.9	14.8	18.4	22.7
280	10.7	13.4	16.6	20.6	25.4
315	12.1	15.0	18.7	23.2	28.6
355	13.6	16.9	21.1	26.1	32.2
400	15.3	19.1	23.7	29.4	36.3
450	17.2	21.5	26.7	33.1	40.9
500	19.2	23.9	29.7	36.8	45.4
560	21.4	26.7	33.2	41.2	50.8
630	24.1	30.0	37.4	46.3	57.2
710	27.2	33.9	42.1	52.2	64.5
800	30.6	38.1	47.4	58.8	
900	34.4	42.9	53.3		
1000	38.2	47.7	59.3		
1200	45.9	57.2			

THICKNESS CHART FOR HDPE PIPES FOR GAS DISTRIBUTION

EN 1555-2

	4 BAR	10 BAR	
EXTERNAL DIAMETER (mm)	MINIMUM WALL THICKNESS (mm)	MINIMUM WALL THICKNESS (mm)	LENGTH / ROLL (m)
20	2.3	3.0	50/100/150
25	2.3	3.0	50/100/150
32	2.3	3.0	50/100/150
40	2.3	3.7	50/100/150
50	2.9	4.6	50/100/150
63	3.6	5.8	50/100/150
75	4.3	6.8	50/100/150
90	5.2	8.2	50/100
110	6.3	10.0	50/100
125	7.1	11.4	50/100
140	8.0	12.7	6/12
160	9.1	14.6	6/12
180	10.3	16.4	6/12
200	11.4	18.2	6/12
225	12.8	20.5	6/12
250	14.2	22.7	6/12
280	15.9	25.4	6/12
315	17.9	28.6	6/12
355	20.2	32.3	6/12
400	22.8	36.4	6/12
450	25.6	40.9	6/12

OTHER SIZES ON REQUEST





TYPES AND RANGES OF MOULDED HDPE FITTINGS



Compression
Coupling



Compression Bend
90°



Compression Equal
Tee



Stub End with
backing ring



90° Bend



Compression Flanged
Adapter



Stub End



Compression Female
Adapter



Compression Male
Adapter

M-BOX

Multi Purpose Storage Box



FEATURES OF M-BOX

- Stainless steel locks and latches.
- Light weight makes for easy handling.
- Ribbed design ensures strength and durability.
- The rubber liner ensures effective sealing.
- Ridged and contoured design allows for ease of stacking.
- M-Box can be adapted to create an insulated storage of up to 340ltr volume, making it ideal for use:
 - * In social events as an “Ice Chest”.
 - In the hospitality industry as a “warmer”.
 - * In aquaculture, for transporting harvested fish from the farm to the marketplace.

Small: (W) 470mm (L) 590mm (H) 400mm **Medium:** (W) 530mm (L) 800mm (H) 360mm **Large:** (W) 780mm (L) 1100mm (H) 800mm

MULTI PURPOSES:

.Military Box .School Trunk/ Chopbox .Storage Box .Suitcase .Hamper .Food stuff

MOTO-BOX

Plastic Delivery Box

External: (W)480mm (L)520mm (H) 590mm

Internal: (W)430mm (L)490mm (H)540mm

FEATURES OF MOTO-BOX

- Light weight and easy to install.
- Ideal for **FOOD & PACKAGE** delivery
 - *Can be insulated for food.
- Sturdy design ensures stability of box.
- Environmentally friendly.

MOTO-BOX is a major tool in the delivery services industry in Ghana today. Satisfied customers include the major local and multi-national players in the courier services sector.



DURAFLOATS

Foam Filled Floats

FEATURES:

- . Very light weight, easy to carry and install.
- . Can be inter-locked to make various shapes and to various sizes.
- . Pipe floats for use in the oil and gas industries.
- . Pipe floats can be made for any size required.

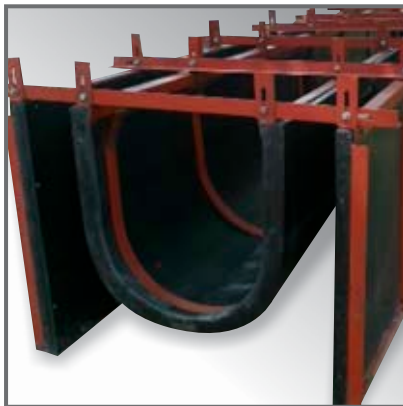
APPLICATIONS:

- . Ideal for fish farming cages, floating docks and platforms.
- . In social events and entertainment functions, may be used to create stages over swimming pools, lakes or very slow-moving rivers/ streams.

Available in 2 sizes:

0.5m x 0.5m x 0.4m

1.0m x 0.5m x 0.4m



U-DRAIN Form Work



. 450mm . 600mm . 900mm
in 2 meter lengths

ADVANTAGES

- Light weight compared to metal form work.
- Does not get damaged frequently like wood form work.
- Long lasting.
- Easy to assemble on site, hence longer casting length per day.
- Easy removal after concreting.
- Easy to clean after use.

DST

SEWAGE TREATMENT PLANT

Innovative
Septic Tank



AVAILABLE IN 2 SIZES

DST 3 (W)1500mm x (L)2500mm x (H)1700 (3000 Liters)

DST 5 (W)1700mm x (L)3000mm x (H)1900 (5000 Liters)

External chlorinated
filter

Consists of filter
media-sand, gravel,
charcoal and chlorine
pellets (which are to be
introduced periodically).

Installed after the DST
before effluent is
discharged into drains
or re-used

- Easy transportation and fast installation
- Durable, Leak-proof and long service life span
- Odourless and colourless effluent allows re-use of water for gardening.
- Less frequent dislodgement, virtually no maintenance
- Ideal for water-logged areas, commercial and residential sites
- Innovative filter balls technology enhances sewage treatment

STEP 1

Design the system, laying out where the DST will be installed and where you will discharge the effluent.

STEP 2

Excavate for the DST as follows: Taking into consideration the levels of service lines and discharged drains.

DST3 - 2700mm(L) x 1500mm(W) x 1800mm(H)

DST5 - 3200mm(L) x 2000mm(W) x 2000mm(H)

STEP 3

Create a Gravel bed of about 5" or Concrete bed of 3" such that the final height of the pit is not higher than 1600mm for DST3 and 1800mm for DST5.

STEP 4

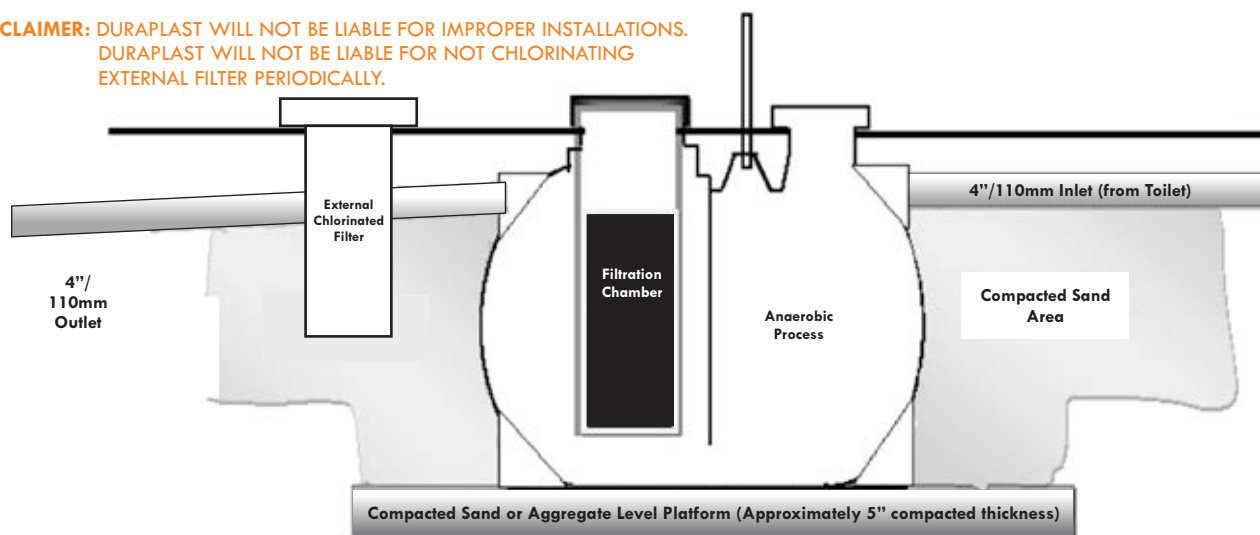
Lower DST into place and make all the pipe connections, **then fill the DST with water completely** to prevent it from "floating" out of the ground, should the area be water-logged. In severe water-logged areas, anchoring the DST to the concrete bed may be necessary.

STEP 5

Excavate for the External Chlorinated Filter according to the height of the filter provided and create the gravel or concrete bed just as in step 3. The External Chlorinated Filter **MUST** be used before the water is collected for re-use or to be sent to soak away.

DISCLAIMER: DURAPLAST WILL NOT BE LIABLE FOR IMPROPER INSTALLATIONS.
DURAPLAST WILL NOT BE LIABLE FOR NOT CHLORINATING
EXTERNAL FILTER PERIODICALLY.

DST INSTALLATION PROCEDURE



Cross-section of fully installed and operational DURAPLAST Sewage Treatment Plant, DST

DURABLOCK

Water-Filled Plastic Safety Barrier



DB 1500 - 500mm x 760mm x 1500mm

DB 1000 - 400mm x 580mm x 1000mm

All dimensions are external

FEATURES OF DURABLOCK

- Portable and economical
- Has a weight of 200kg/ 120kg when filled to recommended max level.
- Sand filled model also available for more permanent use.
- Reflective stickers for High visibility



POLICE BARRIER

DIMENSIONS 2m x 1m

DURABOAT

Plastic Canoe

FEATURES OF DURABOAT

- Durable.
- Light weight and fast moving.
- Environmentally friendly - as little wood as possible.
- Virtually no maintenance.
- Multiple layers of plastic around the bow area offers resistance to landing shocks.

4 seater - 6.5m



DURABOX

Double Wall Plastic Inspection Chamber

F1 - 600mm x 900mm x 1000mm

F2 - 800mm x 1500mm x 1200mm

F3 - 800mm x 2300mm x 1400mm

All dimensions are internal

FEATURES OF DURABOX

- Stiffner between double walls to prevent cave in.
- Durabox is a rectangular polyethylene access chamber with a reinforced steel cover within a galvanized steel frame for use in general construction and utility project. The steel cover has a specially designed locking system, making it secure, water-proof and tamper-proof.
- Durabox is suitable for use in footpaths, car parks, grass verges and areas with slow moving traffic.
- Durabox can be supplied with various duct entries and connectors to customer specification.



ADBOX

Plastic Lighted Box

Street ADBOX:

Dimensions - 980mm x 290mm x 1750mm

Taxi ADBOX:

Dimensions - 300mm x 240mm x 1000mm

All dimensions are external.

FEATURES OF ADBOX

Durable and maintenance free.

Easy to transport and install.

Environmentally friendly.

Ideal for use as advertising billboards or other forms of branding and signage.

ADBOX is currently in use as the median lighted sign in the middle of some major dual-carriage-ways in the country.





The ultimate in water storage

Beautiful, durable with water indicator and accurate volume of water



1000LTR | 2000LTR | 3000LTR | 4000LTR | 5000LTR

◀ Available in these sizes

DOUBLE LAYER PLASTIC WATER TANK

CODE	CAPACITY	CAPACITY	LENGTH/ DIA	HEIGHT
	Liters	Gallons	Inches	Inches
Watatank 1000	1000	220	44	49
Watatank 2000	2000	440	53	63
Watatank 3000	3000	660	59	75
Watatank 4000	4000	880	67	79
Watatank 5000	5000	1100	73	82

NOTE:

- . All dimensions are the external dimensions to enable space for installation.
- . Watatank should be installed on flat surface with the base of the tank well seated on the platform.
- . Water level indicator optional.

Pallet



128m (W) x 1100(L) x 1300(H)

Capacity: 3 tons made from HDPE

- Durable
- Sturdy Design
- Can take static load of 3 tons
- Useful in food and beverages industry
- Made from strong High Density Poly Ethylene



HEAD OFFICE: North Industrial Area, Accra P. O. Box 7136, Accra - North
Tel: +233-30-222 5001 / 222 3989 Mob.: +233-244-33 66 65 Fax: +233-30-222 8874
Email: info@duraplastghana.com Website: www.duraplastghana.com

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