

# HDPE Drain Pipe System



# HDPE Drain Pipe System



## HDPE DRAIN PIPE 5M LENGTHS

Size OD (mm)	Code	NB (mm)
50	920005	40
56	920006	50
63	920007	57
75	920008	65
90	920009	80
110	920010	100
125	920012	115
160	920013	150
200	920015	200
250	920017	225
315	920019	300

# HDPE Drain Pipe System


## WELDING SLEEVES - WAVI SOLO

Size OD (mm)	Code	Pack Qty	
50	910005	20	
56	910056	20	
63	910006	20	
75	910007	20	
90	910009	20	
110	910011	20	
125	910012	20	
160	910016	3	
200	910020	1	
250	910025	1	
315	910031	1	




# HDPE Drain Pipe System


## MOULDED BENDS 15°

	Size OD (mm)	Code	Pack Qty
	90	102501	1
	110	921542	20

## MOULDED BENDS 30°

	Size OD (mm)	Code	Pack Qty
	75	102102	1
	90	102502	1
	110	921544	20
	125	921554	10

## MOULDED BENDS 45°

	Size OD (mm)	Code	Pack Qty
	50	921254	10
	56	921264	10
	63	921274	20
	75	921284	20
	90	921294	20
	110	921304	25
	125	921314	10
	160	921334	5
	200	921354	5

# HDPE Drain Pipe System

## SEGMENTED BENDS 45°

Size OD (mm)	Code	Pack Qty
250	921374	1
315	921394	1

## SWEPT BENDS 88½°

Size OD (mm)	Code	Pack Qty
50	921258	10
56	921268	10
63	921519	20
75	921528	20
90	921538	20
110	921548	20
125	921558	10
160	921568	5



## SEGMENTED BENDS 88½°

Size OD (mm)	Code	Pack Qty
200	921015	1
250	921017	1
315	921019	1



## MOULDED ELBOWS 88½°

Size OD (mm)	Code	Pack Qty
90	921298	20
110	921308	20



# HDPE Drain Pipe System

## CONCENTRIC REDUCERS

	Size OD (mm)	Code	Pack Qty
	63/50	920526	20
	63/56	920527	20
	75/50	920531	20
	75/63	920533	20
	90/50	920536	20
	90/63	920538	20
	90/75	920539	20
	110/50	920543	10
	110/56	920544	10
	110/63	920545	10
	110/75	920546	10
	110/90	920547	10
	160/110	920558	5


## ECCENTRIC REDUCERS

	Size OD (mm)	Code	Pack Qty
	63/50	920626	20
	75/50	920631	20
	75/63	920633	20
	90/50	920636	20
	90/63	920638	20
	90/75	920639	20
	110/50	920643	20
	110/56	920644	20
	110/63	920645	20
	110/75	920646	20
	110/90	920647	20
	160/110	920671	5
	200/110	920675	1
	200/160	920678	1
	250/160	920688	1
	250/200	920690	1
	315/200	920696	1
	315/250	920698	1

# HDPE Drain Pipe System


## Y BRANCHES 45°

Size OD (mm)	Code	Pack Qty
50/50	921018	40
56/56	922023	20
63/50	922026	20
63/63	922028	20
75/50	922031	20
75/63	922033	20
75/75	922034	20
90/50	922036	10
90/63	922038	10
90/75	922039	10
90/90	922040	15
110/50	922043	10
110/63	922045	10
110/75	922046	10
110/90	922047	10
110/110	922048	15
125/110	922055	10
125/125	922056	5
160/110	922071	5
160/160	922074	5
200/110	922075	1
200/160	922078	1
200/200	922079	1
250/110	922086	1
250/160	922089	1
250/250	922092	1
315/110	922093	1
315/160	922095	1
315/315	922099	1



# HDPE Drain Pipe System

## BRANCHES 88½°

	Size OD (mm)	Code	Pack Qty
	50/50	922218	40
	56/56	922223	20
	63/50	922226	20
	63/63	922228	20
	75/50	922231	20
	75/63	922233	20
	75/75	922234	20
	90/50	922236	10
	90/63	922238	10
	90/75	922239	10
	90/90	922240	10
	110/50	922243	10
	110/63	922245	10
	110/75	922246	10
	110/90	922247	10
	110/110	922248	15
	160/110	922271	5
	160/160	922274	5
	200/200	922279	1
	250/160	922289	1
250/250	922292	1	
315/160	922295	1	
315/315	922299	1	

## SWEPT JUNCTIONS 88½°

	Size OD (mm)	Code	Pack Qty
	110/110	922280	10



# HDPE Drain Pipe System

## SCREWED ACCESS TEES

Size OD (mm)	Code	Description	Pack Qty
63	920867		10
75	920868		10
90	920869		10
110	920870	Horizontal	10
110	920870B	Vertical	1
160/110	920873		5
160/160	920874		1



## DOUBLE BRANCHES 88½°

Size OD (mm)	Code	Pack Qty
110/110	922448	1




## FOUR WAY RISERS 88½°

Size OD (mm)	Code	Pack Qty
110/56/50	922717	1
110/56/56	922718	1
110/63/63	922719	1
110/63/50	922720	1




# HDPE Drain Pipe System

## RING SEAL SOCKETS

	Size OD (mm)	Code	Pack Qty
	40	924203	120
	50	924205	100
	56	924206	100
	63	924207	20
	75	924208	20
	90	924209	20
	110	924210	20
	160	924213	10

## EXPANSION SOCKETS

	Size OD (mm)	Code	Pack Qty
	50	924105	20
	56	924106	20
	63	924107	20
	75	924108	20
	90	924109	10
	110	924110	20
	160	924113	5
	200	924115	1
	250	924117	1
	315	924119	1

# HDPE Drain Pipe System

## STOP ENDS COMPLETE

Size OD (mm)	Code	Pack Qty
63	924450	10
75	924451	10
90	924452	10
110	924453	10
160	924454	1




## WELD ON END CAPS

Size OD (mm)	Code	Pack Qty
50	924625	20
63	924627	20
75	924628	20
90	924629	20
110	924630	20
160	924633	10



# HDPE Drain Pipe System

## SILT TRAPS WITH STAINLESS STEEL BUCKET & GRATE

	Size OD (mm)	Code	Description	Overall Height (mm)	Base to Level of Invert (mm)	Size NB (mm)
	160/110	ST160BG	Silt Trap Complete	700	250	150/100
	250/110	ST250BG	Silt Trap Complete	600	260	225/100
	50	STI50	Pipe Inlet			40
	56	STI56	Pipe Inlet			50
	63	STI63	Pipe Inlet			57
	75	STI75	Pipe Inlet			65
	90	STI90	Pipe Inlet			80
	110	STI110	Pipe Inlet			100
	160	STI160	Pipe Inlet			150



# HDPE Drain Pipe System

## FLOOR WASTE GULLY TUNDISH TRAPS

Size OD (mm)	Code	Pack Qty
50	845258	1
63	846519	1
75	847528	1
90	849538	1
90/75	849538P	1
110	850548	1



## S & P COMBINATION TRAPS

Size OD (mm)	Code	Pack Qty
63	320150B	20




## PALAZZI TRAPS

Size OD (mm)	Code	Pack Qty
110/63	811063	1
110/75	811075	1




# HDPE Drain Pipe System


## WC PAN COLLARS COMPLETE

	Size OD (mm)	Code	Pack Qty
	110	923031	1


## WELD ON PUDDLE FLANGES

	Size OD (mm)	Code	Flange D (mm)
	50	PF50	150
	56	PF56	156
	63	PF63	163
	110	PF110	210

## CAP & LININGS

	Size OD (mm)	Code	BSP
	50	924757	1½" (40mm)
	50	924758	2" (50mm)
	63	924760	2" (50mm)

## TRAP ADAPTORS


	Size OD (mm)	Code	Trap Size (mm)
	50	325274	40
	63	326350	50
	75	327550	50

# HDPE Drain Pipe System

## MALE THREADED ADAPTORS (POLY)

PN16

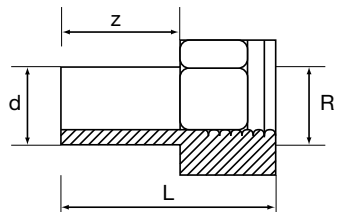
d (mm)	R (inch)	Code	L (mm)	z (mm)	Weight (kg)
20	½"	250005	65	39	0.012
25	¾"	250010	66	39	0.022
25	1"	250015	72	40	0.024
32	1"	250020	75	43	0.036
40	1¼"	250025	84	49	0.052
50	1½"	250030	92	54	0.076
50	2"	250032	95	52	0.108
63	1½"	250033	95	52	0.104
63	2"	250035	110	63	0.112
75	2½"	250040	110	63	0.176
90	3"	250045	115	63	0.268
110	4"	250050	120	65	0.404



## FEMALE THREADED ADAPTORS (POLY)


PN16

d (mm)	R (inch)	Code	L (mm)	z (mm)	Weight (kg)
20	½"	250100	74	39	0.068
25	¾"	250105	74	39	0.068
32	1"	250110	83	43	0.068
40	1¼"	250115	90	49	0.185
50	1½"	250120	98	54	0.180
63	2"	250125	108	63	0.296
75	2½"	250130	108	63	0.280
90	3"	250135	120	63	0.460
110	4"	250140	130	65	0.630





# HDPE Drain Pipe System

## DROP-IN FLOOR GRATES WITH S/STEEL GRATE

	Size OD (mm)	Code	Pack Qty
	75	320753G	1
	90	320903G	1
	110	321103G	1
	160	321603G	1

## DROP-IN BOLTED TRAPSCREWS (SIO) WITH S/STEEL LID

	Size OD (mm)	Code	Pack Qty
	110	321103	1
	160	321603	1






# HDPE Drain Pipe System

## RUBBER GROMIT ADAPTORS

Size HDPE (mm)	Code	Flow	Other Material (mm)
50	40COPGR	←	40 COPPER
63	50COPGR	←	50 COPPER




## ADAPTORS TO OTHER MATERIALS

Size HDPE (mm)	Code	Flow	Other Material (mm)
50	5040PV	←	40 PVC
50	5050PV	→	50 PVC
50	5040CO	←	40 COPPER
50	5050CO	←	50 COPPER
63	6350PV	←	50 PVC
63	6365PV	→	65 PVC
63	6350CO	←	50 COPPER
63	6365CO	←	65 COPPER
75	7565PV	←	65 PVC
75	7580PV	→	80 PVC
75	7565CO	←	65 COPPER
75	7580CO	←	80 COPPER
90	9080PV	←	80 PVC
90	9080CO	←	80 COPPER
110	110100PV	→	100 PVC
110	100110PV	←	100 PVC
110	110100COSS	←	100 COPPER/SS
110	110110SS	←	110 S/STEEL
160	150160PV	←	150 PVC
160	160150PV	→	150 PVC
160	160160SS	←	160 S/STEEL




# HDPE Drain Pipe System


## MATRIX WELD WIPES

	Code	Qty/Unit	Pack Qty
	326835	75 Wipes/Pack	12

## WAVISOLO ELECTROFUSION WELDING MACHINES


	Size Range	Code	Description
	40 - 315mm	700315	Drainage Welding Unit - Solo
	40 - 160mm	40160SC	Spare Connection Cable
	40 - 315mm	40315SC	Spare Connection Cable

## WAVIDUO ELECTROFUSION WELDING MACHINES

	Size Range	Code	Description
	40 - 160mm	700020	Drainage Welding Unit - Duo, with Hand Scraper
	40 - 160mm	40160DSC	Spare Connection Cable

# HDPE Drain Pipe System

## CUBO ELECTROFUSION WELDING MACHINES

Size Range	Code	Description	
200-315mm	700200	Drainage Welding Unit - Duo	
200-315mm	200315SC	Spare Connection Cable	

# HDPE Drain Pipe System

## Properties of HDPE Drain Pipe



### Resistance to high temperatures

HDPE guarantees resistance to temperatures of up to 100°C and is therefore suitable for carrying waste water from washing-machines and dishwashers.



### Elasticity

HDPE is suitable for use in buildings exposed to vibrations in earthquake prone areas and across expansion joints.



### Resistance to UV rays

Thanks to the addition of a percentage of carbon black, HDPE can be installed in the open air without deterioration due to UV exposure.



### Ease of jointing using welding

HDPE joints are welded (both butt and electrofusion welding), ensuring a completely airtight pipe system.



### Low weight

HDPE is lightweight, making it easy to transport and handle.



### HDPE cannot be glued

Owing to its high resistance to chemical agents, HDPE cannot be glued.



### Resistance to low temperatures

The elasticity of HDPE makes pipe systems resistant to failure even when frozen.



### Impact resistance

Thanks to its high elasticity, HDPE is resistant to impact to -40°C; meaning there is no problem carrying out installation at low temperatures.



### Absence of clogging

The smooth surfaces of HDPE allow a perfect downflow of every kind of waste water and self cleaning of the pipe systems.



### Behaviour in presence of fire

HDPE does not emit any toxic gas during combustion.



### HDPE fittings: rubber rings

Even if the rubber rings in the push-fit sockets and expansion sockets are slightly wet by waste waters, they are resistant to all the chemical agents. They are made of an elastomeric material which guarantees tightness and durability, even under extreme conditions.

### 5.1 Density

The high normal density equal to 0.950 g/cm<sup>3</sup> makes polyethylene compact. The low melt flow index of 0.6 g/10 min. influences its molecular weight: the lower the melt flow index, the higher the molecular weight.

As a consequence, with a high density and with a low melt flow index, the resistance to high temperatures and corrosion improves, and stiffness and elasticity increase.

Wavin PE is produced with a high density polyethylene following the specification of the IIP (Italian Institute for Plastics), which guarantees that the UNI standards concerning plastics are respected.

### 5.2 Expansion

The coefficient of expansion of polyethylene is considerable, especially if compared to some metals;

0.2mm/m°C, which means that it has an expansion of 2mm per every 10°C of temperature difference per metre.

For this reason, its installation requires special expansion supports, when the pipe systems are hanging or free standing. In case of built-in pipe systems, the effects of the variation in temperature are limited or null.

### 5.3 Thermal Conductivity

The coefficient of thermal conductivity of polyethylene is very low: 0.43 W/mk or 0.37kcal/mk°C. Therefore a rapid thermal load on the pipe will never be able to heat it completely.

### 5.4 Stabilisation

Stabilisation or malleability is a necessary process, without which the polyethylene pipe submitted to increase of temperature, would have irreversible shortening. A stabilisation process avoids the phenomenon, called heat reversion. Stabilisation guarantees jointing security and eliminates every drawback due to shrinkage after assembling.