

# Product Guide

#### naylor

Introduction to Naylor	03
Our Product Ranges	04
Drain	05
Duct	16
Sewer	29
Storm	31
Deliveries	37
Contact	38

N

# Engineered for life

Naylor provides a comprehensive range of high quality, high performance drain, duct, sewer and storm systems for use in the highways, power, utilities, commercial, industrial, housing, rail and agriculture sectors to enable essential infrastructure.

An entrepreneurial, modern business, Naylor uses its comprehensive market knowledge to support the delivery of construction and major infrastructure projects all over the country. Having a reputation for being straightforward, supportive and easy-to-deal-with, Naylor are committed to making significant, ongoing organisational investment to further develop product offer, reducing carbon emissions and continuing to meet the needs of the customer.



### Our four product ranges

We design, develop and manufacture high performance construction products within the four categories of drain, storm, duct and sewer. Our team is continually searching for new ways to improve products, services and processes. Their enthusiasm is backed by significant investment in R&D and state-of-the-art manufacturing facilities.

This enables us to provide our customers with innovative products which are backed by stringent testing and industry certifications.

## drain

Our Drain range comprises high-density polyethylene (HPDE) high performance twin wall pipe products which are designed for use with all non-pressure, surface and sub-surface drainage applications.

# storm

Our environmental and sustainable urban drainage (SuDS) systems mimic the way water drains in the natural world, so water run-off can be more effectively managed in commercial and domestic spaces.

## duct

Our plastic ducting systems are designed to support essential infrastructure including the civils, utility (power) and telecommunication markets.

#### sewer

Our adoptable sewer range is developed with strength, versatility and reliability in mind. MetroSewer offers an unrivalled and comprehensive foul water and surface water system with Naylor's excellent reputation for reliability, quality and value.

# CICIII

Naylor's range of high performance drain systems comprises MetroDrain, MetroDrain LC, N-Drain and Land Drain. Our drain systems are suitable for use in wide range of applications including: highways, rail, infrastructure, commercial and industrial projects, car parks, retail areas, golf courses and sports fields and agricultural projects.



## MetroDrain

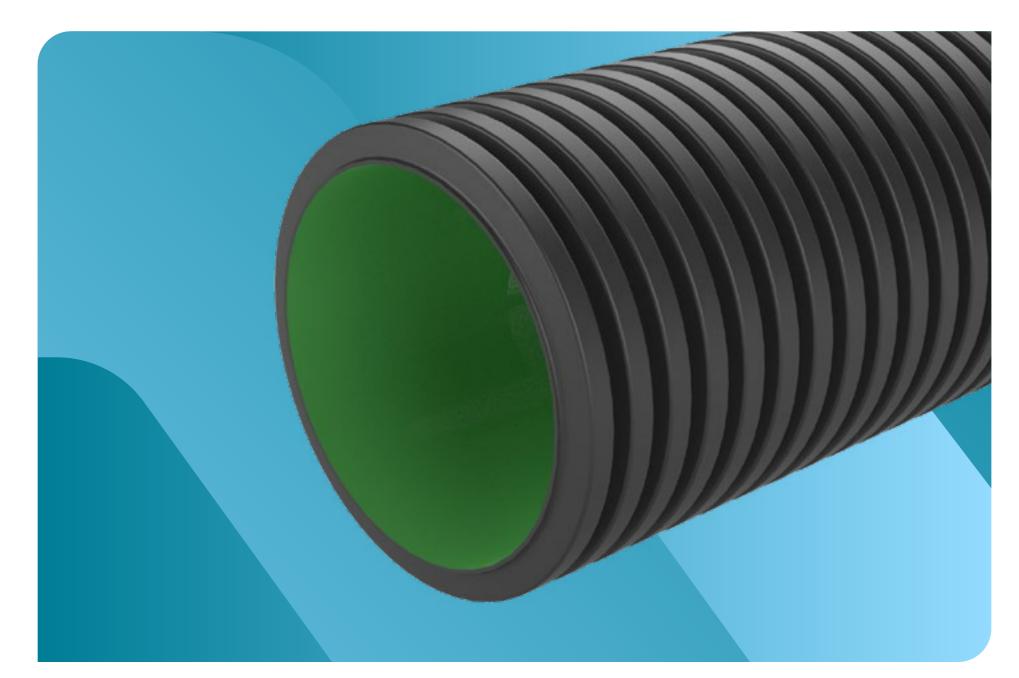
# Perfect for use in environmental water management systems.

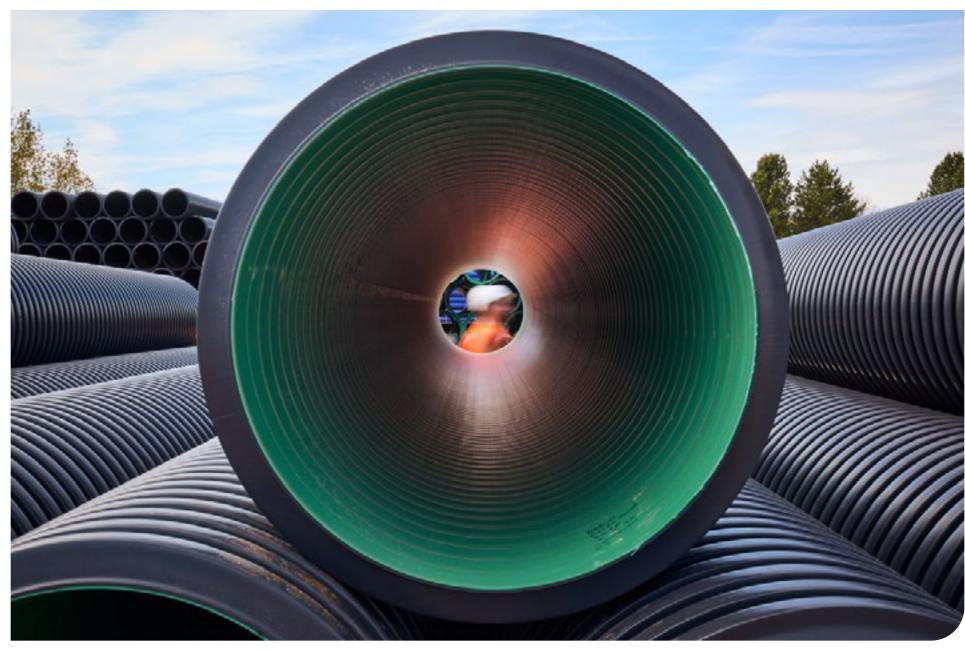
Designed for environmental water management, MetroDrain is a BBA certified, sub-surface drainage system used nationwide, including by National Highways. MetroDrain can be used with pumps and sampling chambers, catchpits, soakaways, manholes and storm water attenuation systems to collect and dispose of surface and sub-surface storm water.

Available in sizes 150mm to 1050mm in solid, perforated or half perforated configurations, MetroDrain meets the specific requirements of the Highways Agency Manual of Contact Documents for Highway Works, is an approved alterative to the products in Table 5/1 of the Specification for Highway Works and can be adopted under the Highways Act (1980).

#### Why MetroDrain?

- Smooth bore for superior hydraulic flow
- Corrugated outer wall for additional strength
- · Available in filter, perforated or half-perforated configurations
- Less brittle, less vulnerable to crack propagation
- Suitable for cold weather applications
- Excellent impact and abrasion resistance
- Resistance to differential ground settlement
- · Recognised alternative to concrete and clayware pipes
- · Easily cut to required length and minimal jointing
- HAPAS approved by the BBA





drain

# MetroDrain<sup>LC</sup>

# All the performance, half the carbon\*

\*Average 48% reduction in kgCO2e

MetroDrain LC is our newest product in Naylor's drainage range. With all the benefits of the original MetroDrain system, but manufactured with 48% less carbon, the new system has been designed to give customers a more environmentally friendly solution, without losing any of the performance.

MetroDrain LC is also just as easy to install, handle and transport, and has been through the same stringent testing and certification process.

As one of the UK's largest users of recycled HDPE, Naylor ensures recycled and repossessed materials are incorporated into our products whenever possible and when it does not compromise product quality. All materials are subject to stringent quality checks, and internal mixing and blending procedures are strictly controlled and monitored.

Product	HDPE	kgCO2e/m of pipe						
		DN150	DN225	DN300	DN375	DN450	DN600	
MetroDrain	Virgin & Recycled HDPE	1.8	3.9	6.5	9.6	14	24.1	
MetroDrain <sup>LC</sup>	Recycled HDPE	1.0	2.1	3.1	4.7	6.8	13.2	





drain

# N-Drain

# A lighter-duty drainage system for non-BBA applications including agriculture.

Naylor's non-BBA twin wall drainage pipe system, N-Drain, is available in solid, fully perforated or half perforated designs. Although N-Drain is a 'non-sealed' system, seals can be used to prevent soil ingress.

A lighter-duty drainage system, N-Drain is suitable for most non-BBA applications, can be cut to length and is available in diameters between 150mm to 600mm.

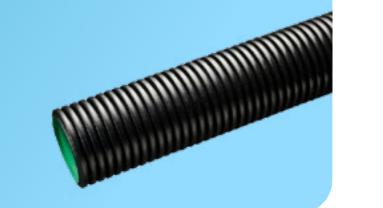
#### Why N-Drain?

- Lighter duty drainage system
- Wide range of fittings
- Wide range of pipe sizes
- Can be cut to length without the need for special tools
- Competitively priced for agricultural and private use
- Fabricated fittings available upon request





#### MetroDrain



#### HDPE Premium Twin Wall Drainage System

ID (mm)	Nom OD (mm)	Length (m)	Pack Qty	Nom Wt (kg/m)	Code	Cert.	ID (mm)	Nom OD (mm)	Length (m)	Pack Qty	Nom Wt (kg/m)	Code	Cert.	ID (mm)	Nom OD (mm)	Length (m)	Pack Qty	Nom Wt (kg/m)	Code	Cert.
Solid/pl	ain ended						Perforat	ed/plain er	ded					Half Peri	forated/pla	in ended				
150	173	6	33	1.4	71302	BBA	150	173	6	33	1.4	71312	BBA	150	173	6	33	1.4	71322	BBA
225	265	6	14	3.0	71303	BBA	225	265	6	14	3.0	71313	BBA	225	265	6	14	3.0	73123	BBA
300	353	6	9	5.0	71304	BBA	300	353	6	9	5.0	71314	BBA	300	353	6	9	5.0	71324	BBA
375	432	6	5	7.4	71305	BBA	375	432	6	5	7.4	71315	BBA	375	432	6	5	7.4	71375	BBA
450	518	6	4	10.8	71306	BBA	450	518	6	4	10.8	71316	BBA	450	518	6	4	10.8	71376	BBA
600	692	6	28/Load	18.6	71307	BBA	600	692	6	28/Load	18.6	71317	BBA	600	692	6	28/Load	18.6	71377	BBA
750	860	6	18/load	26.8	71358	BBA	750	860	6	18/load	26.8	71361	BBA	750	860	6	18/load	26.8	71126	BBA
900	1034	6	8/load	36.0	71359	BBA	900	1034	6	8/load	36.0	71137	BBA	900	1034	6	8/load	36.0	71155	BBA
1050	1189	6	8/load	51.2	71360	-	1050	1189	6	8/load	51.2	71166	-	1050	1189	6	8/load	51.2	71183	-
Solid/so	cketed						Perforat	ed/sockete	d					Half Peri	forated/soc	keted				
750	918‡	3	36/load	26.8	71363	BBA	750	918‡	3	36/load	26.8	71319	BBA	750	918‡	3	36/load	26.8	71381	BBA
900	1093‡	3	16/load	36.0	71364	BBA	900	1093‡	3	16/load	36.0	71320	BBA	900	1093‡	3	16/load	36.0	71327	BBA
1050	1255‡	3	16/load	51.2	71331	-	1050	1255‡	3	16/load	51.2	71329	-	1050	1255‡	3	16/load	51.2	71327	-
750	918‡	6	18/load	26.8	71311	BBA	750	918‡	6	18/load	26.8	71319	BBA	750	918‡	6	18/load	26.8	71311	BBA
900	1093‡	6	8/load	36.0	71321	BBA	900	1093‡	6	8/load	36.0	71320	BBA	900	1093‡	6	8/load	36.0	71321	BBA
1050	1255‡	6	8/load	51.2	71328	-	1050	1255‡	6	8/load	51.2	71329	-	1050	1255‡	6	8/load	51.2	71328	-

‡Nominal OD including socket

‡Nominal OD including socket

‡Nominal OD including socket



#### MetroDrain<sup>LC</sup>

HECO

HDPE Low carbon Twin Wall Carrier Drainage System

ID (mm) Solid/plai	Nom OD(mm)	Length (m)	Pack Qty	Nom Wt (kg/m)	Code
Jona, plan	renaca				
150	173	6	33	1.6	74202
225	265	6	14	3.3	74203
300	353	6	9	5.0	74204
375	432	6	5	7.4	74205
450	518	6	4	10.8	74206
600	692	6	28/Load	21.0	74207

Performance Testing	Metrodrain	Metrodrain <sup>LC</sup>
Material properties & specification	✓	<b>✓</b>
Dimensions	✓	✓
Ring stiffness	✓	✓
Creep ratio	✓	✓
Resistance to longitudinal bending	<b>✓</b>	<b>✓</b>
Impact strength	✓	✓
Rodding resistance	✓	✓
Water jetting	✓	✓
Leaktightness including subject to diameter distortion and angular deflection	<b>✓</b>	<b>✓</b>



ID (mm)	Nom OD(mm)	Length (m)	Pack Qty	Nom Wt (kg/m)	Code
Unperforate	ed/plain ended				
100	117	6	85	0.63	71107
150	173	6	33	1.18	71260
225	267	6	14	2.52	71076
300	354	6	9	3.9	71075
375	433	6	5	5.59	71117
450	521	6	4	9.1	71118
600	695	6	28/Load	17.05	71093
Solid/plain	ended				
100	117	6	85	0.63	71108
150	173	6	33	1.18	71259
225	267	6	14	2.52	71080
300	354	6	9	3.9	71079
375	433	6	5	5.59	71119

71120

71121

9.1

17.05

28/Load

6

521

695

450

600

<sup>\*</sup>Half Perforated subject to minimum quantities and lead time.

#### Accessories

The following accessories fit our MetroDrain, MertoDrain LC and N-Drain products.

- T Juctions
- Y Junctions
- Bends
- Level Invert Reducers
- Couplings
- Sealing Rings
- Ribbed Road Gullies
- Yard Gully
- Gully Connection Pipe
- Outlet Adapter
- End Caps
- Lubricant

#### T Junctions



ID (mm)	Code	Cert.	ID (mm)	Code	Cert.	
90° Junctions/socketed			90° Junctions/plain ended			
100 x 100	71406	-	750 x 150	71834	-	
150 x 100	71604	BBA	750 x 225	71836	-	
150 x 150	71585	BBA	750 x 300	71838	-	
225 x 150	71587	BBA	750 x 375	71840	-	
225 x 225	71588	BBA	750 x 450	71842	-	
300 x 150	71624	BBA	750 x 600	71844	-	
300 x 225	71626	BBA	750 x 750	71846	-	
300 x 300	71628	BBA	900 x 150	71854	-	
375 x 150	71634	BBA	900 x 225	71856	-	
375 x 225	71636	BBA	900 x 300	71858	-	
375 x 300	71638	BBA	900 x 375	71860	_	
375 x 375	71640	BBA	900 x 450	71862	-	
450 x 150	71644	BBA	900 x 600	71864	_	
450 x 225	71646	BBA	900 x 750	71866	-	
450 x 300	71648	BBA	900 x 900	71868	_	
450 x 375	71650	BBA	1050 x 150	71884	-	
450 x 450	71652	BBA	1050 x 225	71886	_	
600 x 150	71664	BBA	1050 x 300	71888	-	
600 x 225	71666	BBA	1050 x 375	71890	-	
600 x 300	71668	BBA	1050 x 450	71892	-	
600 x 375	71670	BBA	1050 x 600	71894	_	
600 x 450	71672	BBA	1050 x 750	71896	-	
600 x 600	71674	BBA	1050 x 900	71898	-	
			1050 x 1050	71900	-	

#### Y Junctions



			_					
ID (mm)	Code	Cert.	ID (mm)	Code	Cert.			
45° Junctions	s/socketed		45° Junctions	45° Junctions/plain ended				
100 x 100	-	BBA	750 x 150	71833	_			
150 x 100	71698	BBA	750 x 225	71835	_			
150 x 150	71581	BBA	750 x 300	71837	_			
225 x 150	71586	BBA	750 x 375	71839	-			
225 x 225	71584	BBA	750 x 450	71841	-			
300 x 150	71623	BBA	750 x 600	71843	_			
300 x 225	71625	BBA	750 x 750	71845	_			
300 x 300	71627	BBA	900 x 150	71853	_			
375 x 150*	71633	BBA	900 x 225	71855	_			
375 x 225*	71635	BBA	900 x 300	71857	-			
375 x 300*	71637	BBA	900 x 375	71859	_			
375 x 375*	71639	BBA	900 x 450	71861	_			
450 x 150*	71643	BBA	900 x 600	71863	-			
450 x 225*	71645	BBA	900 x 750	71865	-			
450 x 300*	71647	BBA	900 x 900	71867	-			
450 x 375*	71649	BBA	1050 x 150	71883	-			
450 x 450*	71651	BBA	1050 x 225	71885	_			
600 x 150*	71663	BBA	1050 x 300	71887	-			
600 x 225*	71665	BBA	1050 x 375	71889	-			
600 x 300*	71667	BBA	1050 x 450	71891	-			
600 x 375*	71669	BBA	1050 x 600	71893	-			
600 x 450*	71671	BBA	1050 x 750	71895	-			
600 x 600*	71673	BBA	1050 x 900	71897	-			
			1050 x 1050	71899	-			

Requires sealing rings on all sealed systems/couplers.

Requires sealing rings on all sealed systems/couplers.



#### Bends



100	ID (mm)	Bend	Code	Cert.
100	100	11¼	71401	-
100 90 71404 BBA 150 11¼ 71351 BBA 150 22½ 71352 BBA 150 45 71353 BBA 150 90 71354 BBA 225 11¼ 71563 BBA 225 22½ 71573 BBA 225 45 71583 BBA 225 90 71593 BBA 300 11¼ 71504 BBA 300 22½ 71514 BBA 300 45 71524 BBA 300 90 71534 BBA 375 11¼ 71505 BBA 375 22½ 71515 BBA 375 22½ 71515 BBA 375 45 71525 BBA 375 90 71535 BBA 450 11¼ 71506 BBA 450 45 71526 BBA 450 45 71526 BBA 450 45 71526 BBA 450 90 71536 BBA 600 11¼ 71507 BBA 600 45 71527 BBA 600 45 71527 BBA 600 90 71537 BBA 6750 11¼ 71508 - 1750 45 71528 - 1750 45 71528 - 1750 45 71528 -	100	22½	71402	BBA
150 11¼ 71351 BBA 150 22½ 71352 BBA 150 45 71353 BBA 150 90 71354 BBA 225 11¼ 71563 BBA 225 22½ 71573 BBA 225 45 71583 BBA 225 90 71593 BBA 300 11¼ 71504 BBA 300 45 71524 BBA 300 90 71534 BBA 375 11¼ 71505 BBA 375 22½ 71515 BBA 375 45 71525 BBA 375 90 71535 BBA 450 11¼ 71506 BBA 450 22½ 71516 BBA 450 45 71526 BBA 450 45 71526 BBA 450 90 71536 BBA 450 90 71536 BBA 600 11¼ 71507 BBA 600 45 71527 BBA 600 45 71527 BBA 600 90 71537 BBA 6750 11¼ 71508 - 1750 45 71528 - 1750 45 71528 - 1750 90 71538 -	100	45	71403	BBA
150	100	90	71404	BBA
150	150	11¼	71351	BBA
150 90 71354 BBA 225 11¼ 71563 BBA 225 22½ 71573 BBA 225 45 71583 BBA 225 90 71593 BBA 300 11¼ 71504 BBA 300 45 71524 BBA 300 90 71534 BBA 375 11¼ 71505 BBA 375 22½ 71515 BBA 375 45 71525 BBA 375 90 71535 BBA 450 11¼ 71506 BBA 450 22½ 71516 BBA 450 45 71526 BBA 450 45 71526 BBA 450 90 71536 BBA 600 11¼ 71507 BBA 600 45 71527 BBA 600 45 71527 BBA 600 90 71537 BBA 6750 22½ 71518 - 7750 45 71528 -	150	22½	71352	BBA
225 11¼ 71563 BBA 225 22½ 71573 BBA 225 45 71583 BBA 225 90 71593 BBA 300 11¼ 71504 BBA 300 45 71524 BBA 300 90 71534 BBA 375 11¼ 71505 BBA 375 22½ 71515 BBA 375 45 71525 BBA 375 90 71535 BBA 450 11¼ 71506 BBA 450 22½ 71516 BBA 450 45 71526 BBA 450 45 71526 BBA 600 11¼ 71507 BBA 600 22½ 71517 BBA 600 45 71527 BBA 600 90 71537 BBA 600 90 71537 BBA 600 90 71537 BBA 600 90 71536 BBA 600 90 71537 BBA 600 90 71537 BBA 600 90 71537 BBA 6750 11¼ 71508 - 1750 22½ 71518 - 1750 45 71528 - 1750 45 71528 -	150	45	71353	BBA
225	150	90	71354	BBA
225	225	11¼	71563	BBA
225 90 71593 BBA 300 11¼ 71504 BBA 300 22½ 71514 BBA 300 45 71524 BBA 300 90 71534 BBA 375 11¼ 71505 BBA 375 22½ 71515 BBA 375 45 71525 BBA 375 90 71535 BBA 450 11¼ 71506 BBA 450 22½ 71516 BBA 450 45 71526 BBA 450 90 71536 BBA 600 11¼ 71507 BBA 600 22½ 71517 BBA 600 45 71527 BBA 600 90 71537 BBA 600 90 71537 BBA 600 90 71537 BBA 6750 11¼ 71508 - 1750 45 71528 - 1750 90 71538 -	225	22½	71573	BBA
300 11¼ 71504 BBA 300 22½ 71514 BBA 300 45 71524 BBA 300 90 71534 BBA 375 11¼ 71505 BBA 375 22½ 71515 BBA 375 45 71525 BBA 375 90 71535 BBA 450 11¼ 71506 BBA 450 45 71526 BBA 450 45 71526 BBA 450 90 71536 BBA 600 11¼ 71507 BBA 600 22½ 71517 BBA 600 45 71527 BBA 600 90 71537 BBA 600 90 71537 BBA 600 90 71537 BBA 600 90 71537 BBA 6750 11¼ 71508 - 1750 11¼ 71508 - 1750 45 71528 - 1750 90 71538 -	225	45	71583	BBA
300	225	90	71593	BBA
300 45 71524 BBA 300 90 71534 BBA 375 11¼ 71505 BBA 375 22½ 71515 BBA 375 45 71525 BBA 375 90 71535 BBA 450 11¼ 71506 BBA 450 22½ 71516 BBA 450 45 71526 BBA 450 90 71536 BBA 600 11¼ 71507 BBA 600 22½ 71517 BBA 600 45 71527 BBA 600 90 71537 BBA 600 90 71537 BBA 1750 11¼ 71508 - 1750 22½ 71518 - 1750 45 71528 - 1750 90 71538 -	300	11¼	71504	BBA
300 90 71534 BBA 375 11¼ 71505 BBA 375 22½ 71515 BBA 375 45 71525 BBA 375 90 71535 BBA 450 11¼ 71506 BBA 450 22½ 71516 BBA 450 45 71526 BBA 450 90 71536 BBA 600 11¼ 71507 BBA 600 22½ 71517 BBA 600 45 71527 BBA 600 90 71537 BBA 600 90 71537 BBA 6750 11¼ 71508 - 1750 22½ 71518 - 1750 45 71528 - 1750 90 71538 -	300	22½	71514	BBA
375 11¼ 71505 BBA 375 22½ 71515 BBA 375 45 71525 BBA 375 90 71535 BBA 450 11¼ 71506 BBA 450 22½ 71516 BBA 450 45 71526 BBA 450 90 71536 BBA 600 11¼ 71507 BBA 600 22½ 71517 BBA 600 45 71527 BBA 600 90 71537 BBA 600 90 71537 BBA 7750 11¼ 71508 - 1750 45 71528 - 1750 90 71538 -	300	45	71524	BBA
375	300	90	71534	BBA
375	375	11¼	71505	BBA
375 90 71535 BBA 450 11¼ 71506 BBA 450 22½ 71516 BBA 450 45 71526 BBA 450 90 71536 BBA 600 11¼ 71507 BBA 600 22½ 71517 BBA 600 45 71527 BBA 600 90 71537 BBA 600 90 71537 BBA †750 11¼ 71508 - †750 22½ 71518 - †750 45 71528 - †750 90 71538 -	375	22½	71515	BBA
450 11¼ 71506 BBA 450 22½ 71516 BBA 450 45 71526 BBA 450 90 71536 BBA 600 11¼ 71507 BBA 600 22½ 71517 BBA 600 45 71527 BBA 600 90 71537 BBA 600 90 71537 BBA †750 11¼ 71508 - †750 45 71528 - †750 90 71538 -	375	45	71525	BBA
450 22½ 71516 BBA 450 45 71526 BBA 450 90 71536 BBA 600 11¼ 71507 BBA 600 22½ 71517 BBA 600 45 71527 BBA 600 90 71537 BBA †750 11¼ 71508 - †750 45 71528 - †750 90 71538 -	375	90	71535	BBA
450	450	11¼	71506	BBA
450 90 71536 BBA 600 11¼ 71507 BBA 600 22½ 71517 BBA 600 45 71527 BBA 600 90 71537 BBA †750 11¼ 71508 - †750 22½ 71518 - †750 45 71528 - †750 90 71538 -	450	22½	71516	BBA
600 11¼ 71507 BBA 600 22½ 71517 BBA 600 45 71527 BBA 600 90 71537 BBA †750 11¼ 71508 - †750 22½ 71518 - †750 45 71528 - †750 90 71538 -	450	45	71526	BBA
600 22½ 71517 BBA 600 45 71527 BBA 600 90 71537 BBA †750 11¼ 71508 - †750 22½ 71518 - †750 45 71528 - †750 90 71538 -	450	90	71536	BBA
600 45 71527 BBA 600 90 71537 BBA †750 11¼ 71508 - †750 22½ 71518 - †750 45 71528 - †750 90 71538 -	600	11¼	71507	BBA
600 90 71537 BBA †750 11¼ 71508 - †750 22½ 71518 - †750 45 71528 - †750 90 71538 -	600	22½	71517	BBA
†750       11¼       71508       -         †750       22½       71518       -         †750       45       71528       -         †750       90       71538       -	600	45	71527	BBA
†750 22½ 71518 - †750 45 71528 - †750 90 71538 -	600	90	71537	BBA
†750 45 71528 – †750 90 71538 –	†750	111/4	71508	-
†750 90 71538 <b>-</b>	†750	22½	71518	-
•	†750	45	71528	-
†900 11¼ 71509 -	†750	90	71538	-
	†900	111/4	71509	-

ID (mm)	Bend	Code	Cert.
†900	22½	71519	-
†900	45	71529	-
†900	90	71539	-
†1050	11¼	71510	-
†1050	22½	71520	-
†1050	45	71530	-
†1050	90	71540	-
† Plain e	ended.		

#### Level Invert Reducers



ID (mm)	Code
Socketed	
150 x 100	71701
225 x 150	71703
300 x 150	71705
300 x 225	71706
375 x 150	71708
375 x 225	71709
375 x 300	71710
450 x 150	71712
450 x 225	71713
450 x 300	71714
450 x 375	71715
600 x 150	71717
600 x 225	71718
600 x 300	71719
600 x 375	71720
600 x 450	71721
750 x 150	71742
750 x 225	71743
750 x 300	71744
750 x 375	71745
750 x 450	71746
750 x 600	71747
900 x 150	71752
900 x 225	71753
900 x 300	71754
900 x 375	71755
900 x 450	71756
900 x 600	71757
900 x 750	71758
1050 x 150	71772
1050 x 225	71773
1050 x 300	71774

Code
71776
71777
71778
71779

#### Outlet Adaptor



OD (mm)	Code		
160/178*	67012		
Adaptor Coupling			
178/172	71700		
	150mm ID	178mm OD	Twinwall
	150mm ID	178mm OD	Ultra-Rib
	150mm ID	178mm OD	Clayware
160mm Outlet	150mm ID	160mm OD	Quantum
Connects to	-	160mm OD	PVC-u
	-	160mm OD	Land Drain
	-	160mm OD	Gully Connection Pipe
	-	178mm OD	Gully Connection Pipe
	150mm ID	160mm OD	Quantum
178mm Outlet	-	160mm OD	PVC-u
Connects to	-	160mm OD	Land Drain
	-	160mm OD	Gully Connection Pipe

71775

1050 x 375

#### Couplings



ID (mm)	Dimension A (mm)	Code	Cert.
100*	-	29101	-
150	176	71332	BBA
225	284	71333	BBA
300	353	71334	BBA
375	330	71335	BBA
450	396	71336	BBA
600	485	71337	BBA
750	700	71045	BBA
900	800	71047	BBA
1050	900	71050	-

One coupling and two seals are required per joint if coupling used.

#### Ribbed Road Gullies

All Plastic HDPE Gullies are supplied complete with internal trap and rodding eye. Supplied into stock in pack quantities only. 100% recycled.

Pack Qty	DN Internal (Nominal)	Internal Depth (Nominal)	DN Outlet (Nominal)	Code
20	450	900	178	67003
20	450	900	160	67004
20	450	750	160	67005
20	450	750	178	67009
20	375	750	178	67002

#### Yard Gully

Supplied into stock in pack quantities only. 100% recycled.

Pack Qty	Diameter (mm)	Hight	DN	Code
30	300	600	110	67006

#### Sealing Rings



ID (mm)	Material	Pack Qty	Code	Cert.
100	EPDM	1	29115	-
150	EPDM	1	71342	BBA
225	EPDM	1	71343	BBA
300	EPDM	1	71344	BBA
375	EPDM	1	71345	BBA
450	EPDM	1	71346	BBA
600	EPDM	1	71347	BBA
750	EPDM	1	71099	BBA
900	EPDM	1	71102	BBA
1050	EPDM	1	71104	-

Two seals are required per joint

#### Gully Connection Pipe

Length (m)

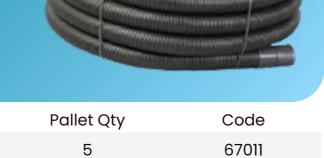
25

25

Diameter (mm)

160

178



67008

Size (mm)	Code
150	71802
225	71803
300	71804
375	71805
450	71806
600	71807

#### **End Caps**



Lu	bricant
	UNIVERSAL JOINT
	LUBRICANT (DRAINAGE PIPE)
	SALE CRANCE OF

Size (Kg)	Code
1.0	50001
2.5	50002

Suitable for all types of push fit gravity pipe systems. We cannot guarantee the performance of the product if Naylor Lubricant is not used.

## Land Drain

# Quick and easy to install with excellent water flow.

The range of Land Drain systems from Naylor is designed specifically to reduce surface water run-off in agricultural applications. Our Land Drain System comprises a single wall, corrugated pipe manufactured from high-density polyethylene (HDPE).

Flexible, durable and easy to lay, Land Drain pipes are available in sizes ranging from 60mm to 160mm diameter, and can be provided in coil lengths ranging from 25 metres to 150 metres. Pipes are available in solid and perforated designs, and all pipe and fittings in the system are available in Kitemarked BS4962 versions.

#### Why Land Drain?

- Quick and easy to install
- Strong (manufactured from HDPE)
- Produced from 100% recycled materials
- Available in KiteMarked (BS4926) and non-KiteMarked solutions
- Available in sizes 60mm to 160mm diameter
- Available in coils upto 150m in length
- Available with geotextile wrap
- Suitable for agricultural, sports field and domestic applications





#### Land Drain



External Dia (mm)	Length (m)	Pack Qty	Code
Solid – Black			
60	25	12	68029
60	50	8	68032
60	150	5	68033
80	25	9	68034
80	50	7	68035
80	100	4	68036
100	25	7	68037
100	50	6	68038
100	100	4	68039
160	50	4	68007
160†	35	-	68094
Manufactured in acc †Scotland only.	cordance with BS4962.		
60	50	8	68042
60	150	5	68043
80	25	9	68048
80	50	7	68053
80	100	4	68049
100	25	7	68050
100	50	6	68044
100	100	4	68045
160	50	4	68009
160†	35	-	68046

Manufactured in accordance with BS4962. †Scotland only.

#### Kitemarked Land Drain



External Dia (mm)	Length (m)	Pack Qty	Code	Cert.
Perforated – Black				
60*	50	8	68202	BS
60*	150	5	68204	BS
80*	25	9	68301	BS
80*	50	7	68302	BS
80*	100	4	68303	BS
100*	25	7	68401	BS
100*	50	6	68402	BS
100*	100	4	68403	BS
160*	50	4	68502	BS
Kitemarked to BS4	962			
Solid – Black				
60*	150	5	68214	BS
80*	100	4	68313	BS
100*	100	4	68413	BS
160*	50	4	68512	BS

<sup>\*</sup>Marked Naylor BS4962

#### Land Drain Connectors



External Dia. (mm)	Code
60	68086
80	68087
100	68062
160	68063

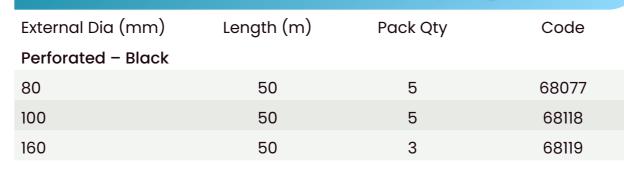
#### **End Caps**



External Dia (mm)	Code
60	68090
80	68088
100	68091
160	68109

#### Wrapped Land Drainage

Geotextile wrapped land drainage coil prevents ingress of very fine particles, such as sand and sediment.



#### Land Drain Universal Fittings



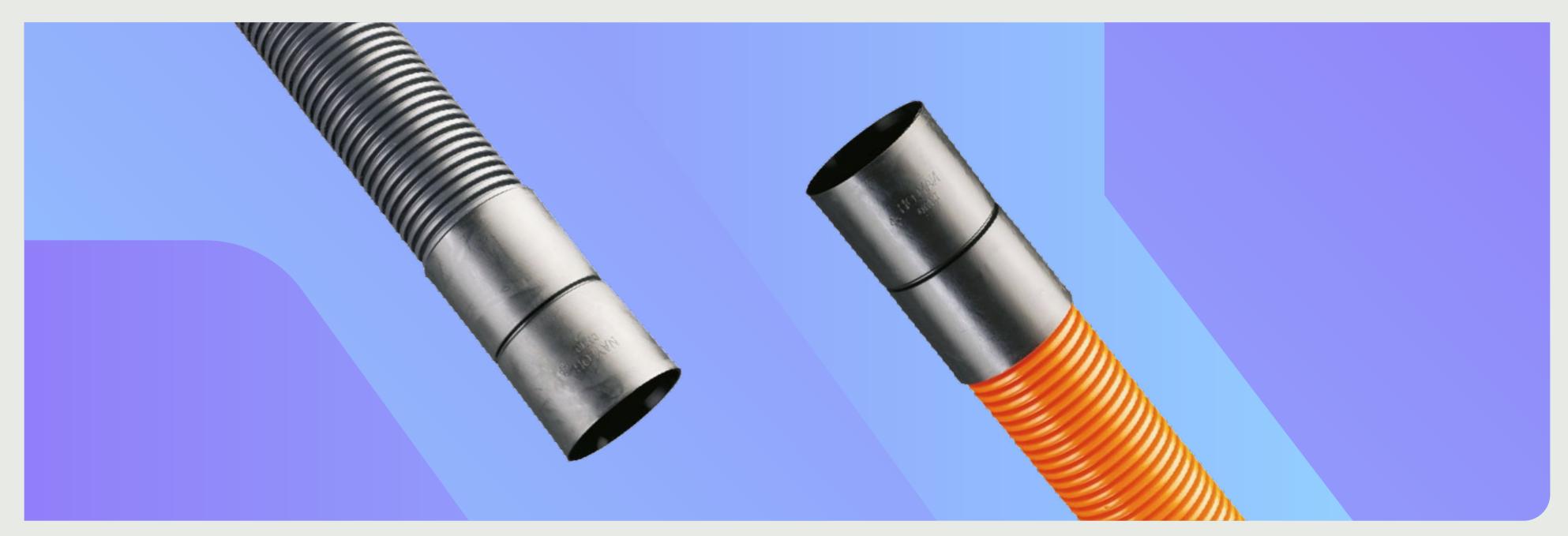
Description	Pack Qty	Code
60/80/100 Multi Junction	50	68064
60/160 Multi Junction	10	68061

# CUCC

Naylor offers a technically advanced and comprehensive range of ducting systems. With production facilities in both England and Scotland we are well placed to meet the needs of civils, utility, telecommunication markets and others.

The Naylor ducting system comprises of three main groups: ducting pipes, access chambers and covers and frames.

Naylor 50-150mm ducting is manufactured to BBA and BS EN61386 as required by the Highways Agency.



## MetroDuct

# Designed for essential infrastructure.

Our MetroDuct system is designed to support the development of essential infrastructure. Used in high performance and demanding applications, our products provide reliable connectivity in everything from traffic signalling to power supplies.

Our Duct range comprises:

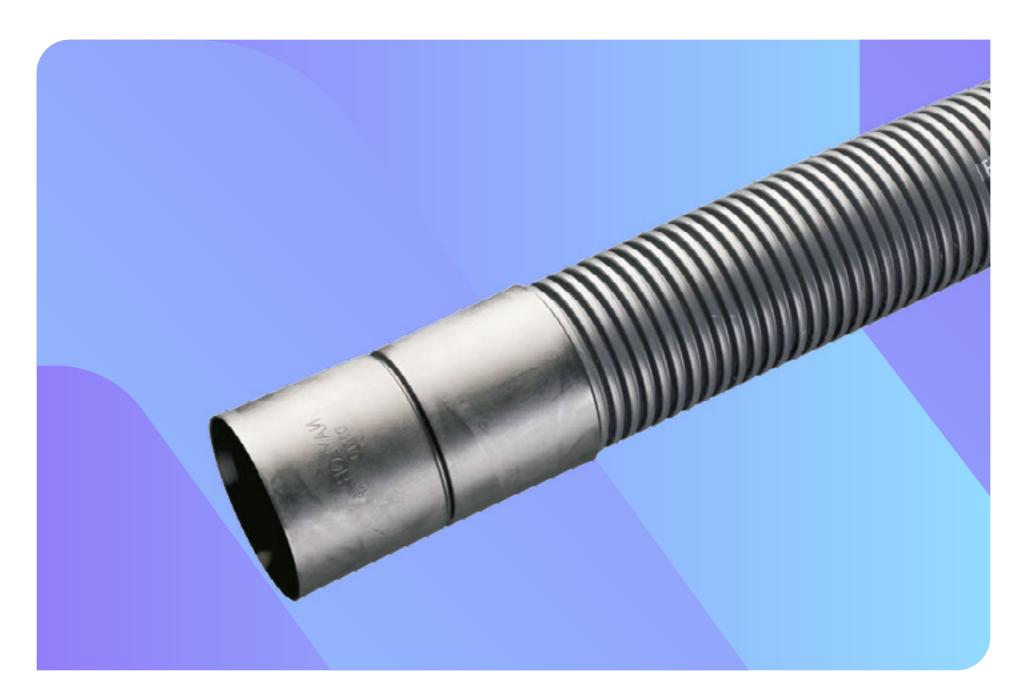
- · Class 1 Polypropylene MetroDuct
- · Class 2 and 3 HDPE MetroDuct
- $\cdot$  Class 1 and 2 PVC duct
- · Fittings

#### NJUG Colour Coding

Up to 150mm manufactured in accordance to BSEN61386

All MetroDuct Twin Wall Pipes up to 150mm Manufactured to BS EN 61386

Colour	Application
Black/Red	Electricity/Power
Orange	Street Lighting & Traffic Signal
Purple	Motorway Communication/Street Lighting (Scotland)
Yellow	Gas
Blue	Water
Green	CCTV
Grey	Telecommunications







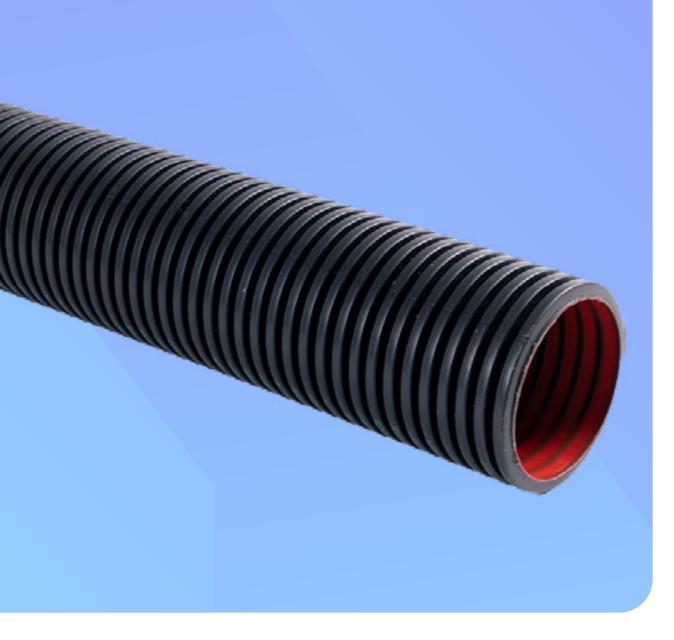
#### MetroDuct

Class 1 & 2 Twin Wall Duct





ID (mm)	OD (mm)	Cert.	Length (m)	Pack Qty	Code
100mm	120mm	ENATS 12/24	6m	85	29516
100mm	120mm	ENATS 12/24	3m	72	29513
125mm	145mm	ENATS 12/24	6m	72	29616
150mm	178mm	ENATS 12/24	6m	33	29716
150mm	178mm	ENATS 12/24	3m	33	29713



#### Class 1 & 2 HDPE Twin Wall bends



ID (mm)	OD (mm)	Angle	Length (m)	Code
100mm	120mm	11.25	1.2m	29800
100mm	120mm	11.25	3.9m	29802
100mm	120mm	22.5	1.2m	29803
100mm	120mm	22.5	3.9m	29805
100mm	120mm	45	1.2m	29807
125mm	145mm	11.25	3.9m	29812
125mm	145mm	22.5	3.9m	29815
125mm	145mm	45	1.2m	29817
150mm	178mm	11.25	1.2m	29820
150mm	178mm	11.25	3.9m	29822
150mm	178mm	22.5	1.2m	29823
150mm	178mm	22.5	3.9m	29825
150mm	178mm	45	1.2m	29827

#### MetroDuct

Class 3 HDPE **Utility Duct** 



ID/OD (mm)	Length (m)	Pack Qty	Code	Cert.
Printed - Electri	c Cable Duct			
94/110	6	100	29120	BBA
100/120	6	85	29278	BBA
125/145	6	72	29111	BBA
137/160	6	33	29119	BBA
150/178	6	33	29112	BBA



ID/OD (mm)	Length (m)	Pack Qty	Code
94/110+	6	100	29007
100/120+	6	85	29388
150/178+	6	33	29370

For sealed system 2 sealing rings required per 6m length.



#### Class 3 HDPE Twin Wall **Unmarked Black** ID/OD (mm) Length (m) Pack Qty Code Cert. 94/110\* 100 29450 BBA 100/120\* 85 29451 BBA 125/145\* 72 29452 BBA 137/160\* 33 29453 BBA

33

29454

BBA

150/178\*

#### Class 3 HDPE Twin Wall Coiled Electric Black



ID/OD (mm)	Length (m)	Colours	Pack Qty	Code	Cert.
Printed Elec	tric Cable Duc	t			
50/63	50	Black	8	29113	BS
94/110	50	Black	5	29267	BS
137/160	25	Black	7	29268	BS
137/160	50	Black	4	29092	BS

Coils supplied with pre-installed draw string and coupling.

<sup>\*</sup>Subject to minimum order quantity and lead time.

<sup>\*</sup>Subject to minimum order quantity and lead time.

# Class 3 HDPE Twin Wall Sealed System Motorway Communication

ID/OD (mm)	Length (m)	Pack Qty	Code	Cert.
94/110	6	100	29046	BBA
100/120	6	85	29364	BBA
150/178	6	33	29420	BBA

For sealed system 2 sealing rings required per 6m length. \*Subject to minimum order quantity and lead time.

#### Class 3 HDPE Twin Wall

Motorway Communication

Length (m)	Pack Qty	Code	Cert
6	100	29043	BBA
6	85	29200	BBA
6	33	29249	BBA
6	33	29059	BBA
	6 6 6	6 100 6 85 6 33	6 100 29043 6 85 29200 6 33 29249

Supplied with one coupling per length.

#### Class 3 HDPE Twin Wall

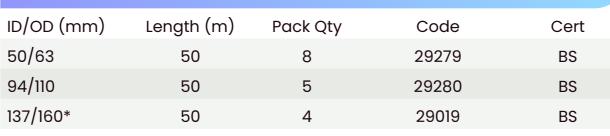


Street Lighting/Traffic Signal

ID/OD (mm)	Length (m)	Marked	Pack Qty	Code	Cert
50/63*	6	SL	158	29087	BBA
50/63*	6	TS	158	29086	BBA
94/110	6	SL	100	29085	BBA
94/110	6	TS	100	29084	BBA
94/110	6	Plain	100	29042	BBA
100/120*	6	SL	85	29083	BBA
100/120*	6	TS	85	29082	BBA
100/120*	6	Plain	85	29052	BBA
137/160*	6	SL	33	29198	BBA
137/160*	6	TS	33	29189	BBA
137/160*	6	Plain	33	29197	BBA
150/178	6	SL	33	29061	BBA
150/178	6	TS	33	29356	BBA
150/178*	6	Plain	33	29357	BBA

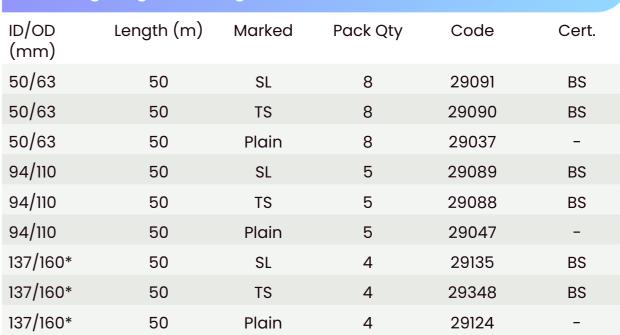
#### Class 3 HDPE Twin Wall Coiled





#### Class 3 HDPE Twin Wall Coiled





\*Subject to minimum order quantity and lead time.



#### Class 3 HDPE Twin Wall



#### Utility – Water

ID/OD (mm)	Length (m)	Pack Qty	Code	Cert.
Blue				
94/110	6	100	29110	BBA
100/120*	6	85	29350	BBA
137/160	6	33	29241	BBA
150/178	6	33	29355	BBA
225/266+	6	14	29413	-
300/353+	6	9	29414	-
450/518	6	4	29434	-
Blue Perforated	I			
150/178	6	33	29432	
225/266	6	14	29428	-
300/353	6	9	29433	-
450/518	6	4	29435	-

#### Class 3 HDPE Twin Wall



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ID/OD (mm)	Length (m)	Pack Qty	Code	Cert.
Yellow				
94/110	6	100	29045	BBA
100/120*	6	85	29349	BBA
137/160	6	33	29244	BBA
150/178	6	33	29358	BBA
225/266+	6	14	29411	-
300/353+	6	9	29412	-
450/518	6	4	29437	-
Yellow Perforate	ed			
150/178	6	33	29431	-
225/266	6	14	29424	-
300/353	6	9	29427	-
450/518	6	4	29436	-

#### Class 3 HDPE Twin Wall



ID/OD (mm)	Length (m)	Pack Qty	Code	Cert.
Green				
94/110	6	100	29281	BBA
100/120*	6	85	29351	BBA
137/160*	6	33	29250	BBA
150/178	6	33	29359	BBA

#### Class 3 HDPE Twin Wall Coiled



ID/OD (mm)	Length (m)	Pack Qty	Code	Cert.
50/63	50	8	29039	BS
94/110	50	5	29049	BS

#### Class 3 HDPE Twin Wall Coiled



ID/OD (mm)	Length (m)	Pack Qty	Code	Cert.
50/63	50	8	29040	BS
94/110	50	5	29050	BS

#### Class 3 HDPE Twin Wall Coiled



ID/OD (mm)	Length (m)	Pack Qty	Code	Cert.
50/63	50	8	29094	BS
94/110	50	5	29171	BS

Coils supplied with pre-installed draw string and coupling. Other colours available subject to a minimum order quantity and lead time.

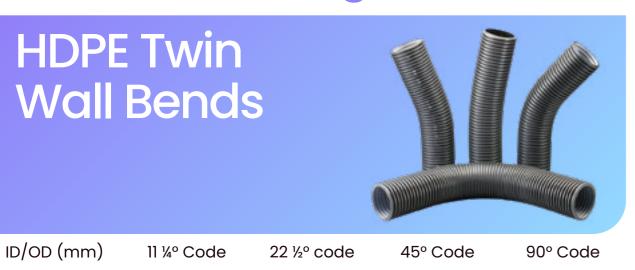
- \* Subject to minimum order quantity and lead time.
- + Please Note: Pipe supplied plain ended order couplings separately.





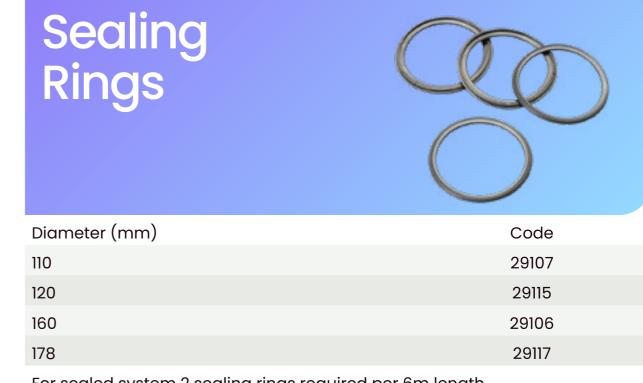
\* Subject to minimum order quantity and lead time.

#### **MetroDuct Fittings**



ID/OD (mm)	11 ¼° Code	22 ½° code	45° Code	90° Code	
Supplied plain	ended.				
94/110	29144	29141	29138	29149	
100/120	29215	29174	29164	29159	
125/145	29243	29165	29166	29156	
137/160	29022	29180	29181	29182	
150/178	29262	29183	29163	29162	
Order couplings separately.					

#### Couplings ID (mm) Weight Bag Qty Code 63 29104 0.04kg 0.10kg 90 29103 0.17kg 110 29225 0.18kg 120 29101 0.27kg 145 29100 0.23kg 160 29099 0.26kg 178 29098 266 29415 353 29416



For sealed system 2 sealing rings required per 6m length.

#### PVC Duct

Class 1 & 2 uPVC Duct



#### Class 1 uPVC



Fully compliant with ENATS 12/24 Certificate No. A3002

OD (mm)	Length (m)	Black RAL 7021	Red RAL 3020	Pack Qty
88.9mm	3	30131	30130	138
88.9mm	6	30133	30132	138
110mm	3	30111	30110	90
110mm	6	30112	30113	90
160mm	3	30161	30160	39
160mm	6	30163	30162	39

Supplied with blown socket

#### Class 2 uPVC



Fully compliant with ENATS 12/24 Certificate No. T5952

OD (mm)	Length (m)	Black RAL 7021	Red RAL 3020	Pack Qty
38mm	3	30071	30070	780
96.5mm	6	30098	30099	115
96.5mm	3	30091	30090	115
110mm	6	30083	30081	90
110mm	3	30082	30080	90
160mm	6	30266	30265	39
160mm	3	30261	30260	39

Supplied with blown socket

### Smooth Duct



ID/OD (mm)	Length (m)	Weight (kg/m)	Pack Qty	Code
53/63*	6	5	288	38028
97/107	6	5	76	38091
53/63*	6	5	288	38059
97/107	6	5	76	38030

Supplied with a coupler. Extra couplings to be ordered separately.



ID/OD (mm)	Length (m)	Weight (kg/m)	Pack Qty	Code
32/37	25	2.5	15	38020
32/37	50	2.5	8	38023
32/37	100	2.5	5	38024
38/44	25	3	15	38021
38/44	50	3	8	38025
38/44	100	3	5	38026
50/60	25	5	12	38033
50/60	50	5	8	38034

PE Smooth internal and external. Colour Black.

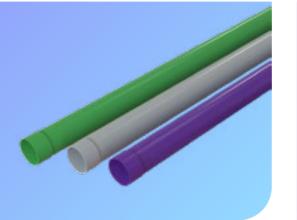
Coils supplied plain ended and couplers can be made to special order and a minimum order quantity applies.



<sup>\*</sup>Subject to minimum order quantity and lead time.

# uPVC Telecoms Duct

#### uPVC Telecoms Duct



OD (mm)	Length (m)	Pack Qty	Grey Code (RAL 7046)	Green Code (RAL 6024)	Purple Code (RAL 4001)
54	3	369	30202	30203	30204
96.5	6	115	30095	30096	30097
96.5	3	115	30092	30093	30094
110	6	90	30085	30087	30089
110	3	90	30084	30086	30088
160	6	39	30267	30268	30269
160	3	39	30262	30263	30264

#### uPVC Telecoms Duct Bends



OD (mm)	Angle (°)	Radius (m)	Pack Qty	Grey Code	Green Code	Purple Code
54	11.25	0.35	60	36401	36405	36409
54	22.5	0.35	60	36402	36406	36410
54	45	0.35	75	36403	36407	36411
54	90	0.35	15	36404	36408	36412
96.5	11.25	0.7	15	36609	36613	36617
96.5	22.5	0.7	15	36610	36614	36618
96.5	45	0.35	15	36611	36615	36619
96.5	90	0.427	10	36612	36616	36620
110	11.25	1.2	10	36118	36122	36126
110	22.5	1.2	50	36119	36123	36127
110	45	1.2	50	36120	36124	36128
110	90	1.2	50	36121	36125	36129
160	11.25	1.2	30	36179	36183	36187
160	22.5	1.2	30	36180	36184	36188
160	45	1.2	30	36181	36185	36189
160	90	1.2	25	36182	36186	36190

#### Double Socket Couplers



ID (mm)	Length (mm)	Colour	Code
54	100	Grey	36400
96.5	200	Grey	36600
96.5	200	Green	36621
110	200	Black	36100
160	300	Black	36700

#### End Caps (PE)



ID (mm)	Length (mm)	Colour	Code
56	28.4	Yellow	36430
96.5	36	Yellow	36630
110	39	Yellow	36230
160	40	Yellow	36170



### General Purpose Duct



		3. <del>-</del>	
OD (mm)	Length (m)	Pack Qty	Code
54	6	369	30052
88.9	6	125	30053
114	6	76	30054
168	6	39	30055
200	6	25	30056

#### General Purpose Duct Bends



OD(mm)	Pack Qty	11 ¼° Code	22 ½° code	45° Code	90° Code
54	50	36054	36058	36071	36073
88.9	15	36053	36057	36078	36074
114	10	36052	36056	36079	36075
168	2	36051	36055	36080	36076
200	1	-	_	36081	36077

#### General Purpose Duct Connectors



Diameter (in)	Pack Qty	Code
2	100	36050
3	50	36049
4	50	36048
6	25	36047
8	1	36046

Supplied into stock in bag quantities only.

# HDPE Single Wall Ducting

#### HDPE Single Wall Ducting



OD (mm)	Length (m)	Colour	Code	Cert.
Street Lightin	g Scotland - Purple			
35	25	Purple	M68027	BS
63	100	Purple	M68006	BS
105	40	Purple	M68001	BS

#### HDPE Single Wall Ducting



Yellow Perforated Gas pipe -Kitemarked to BS4962

Length (m)	Pack Qty	Code	Cert.
50	8	68075	BS
150	5	68074	BS
25	9	68073	BS
50	7	68072	BS
100	4	68071	BS
25	7	68070	BS
50	6	68069	BS
100	4	68068	BS
50	4	68066	BS
	50 150 25 50 100 25 50 100	50 8 150 5 25 9 50 7 100 4 25 7 50 6 100 4	50       8       68075         150       5       68074         25       9       68073         50       7       68072         100       4       68071         25       7       68070         50       6       68069         100       4       68068



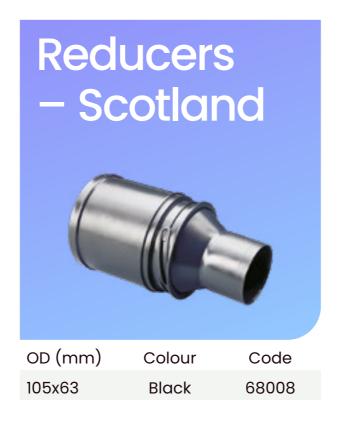
#### Twin Wall Split Duct

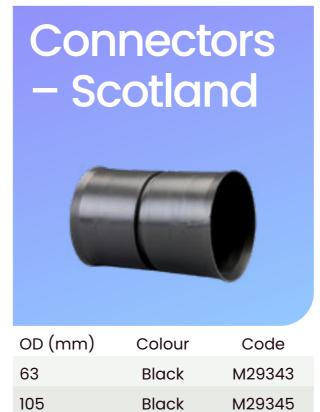


ID/OD (mm)	Length (m)	Pack Qty	Code
94/110	1	100	29285
100/120	1	85	29080
125/145	1	72	29210
150/178	1	33	29121
94/110	3	100	29070
100/120	3	85	29081
125/145	3	72	29242
150/178	3	33	29223

Made to order, subject to a lead time.

#### Duct Accessories







29131

29130

29129

29128

29127

29126

29168

63

90\*

110

120

145

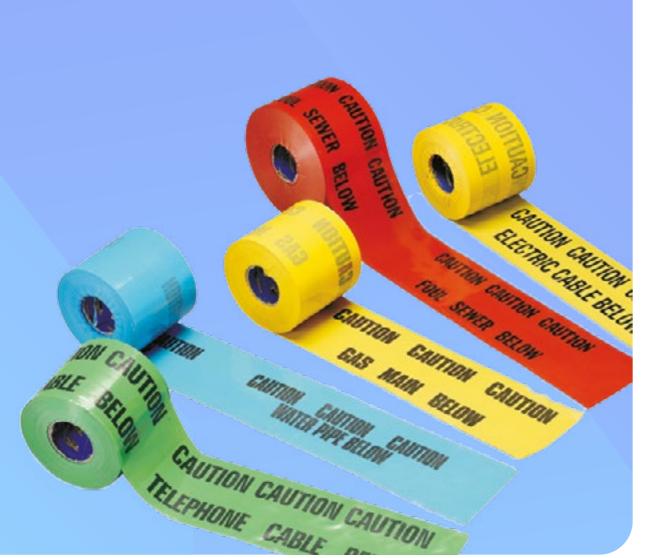
160

178

Size (Kg)	Code	
220 Metre Coil	29264	
500 Metre Drum	29191	
Nominal 5kN Breaking Strength		

**Draw Cord** 

Nominal 5kN Breaking Strength. 6mm cord.









Description	Size	Code
4 Way	110	29230
4 Way	120	29375
4 Way	150 (178)	29399
6 Way	110	29228
6 Way	150 (178)	29231
8 Way	150 (178)	29235



\*Subject to minimum order quantity and lead time

Service	Colour	Code
Electric Cable	Yellow	34036
Water Main	Blue	34037
Gas Main	Yellow	34038
Telephone Cable	Green	34039
Foul Sewer	Red	34040
Street Lighting	Yellow	34041

	(Fig. 1)				
ervice	Colour	Code	Size (I	Kg)	Code
lectric	Yellow	34036	1.0		50001
Cable			2.5		50002
Vater Iain	Blue	34037	Suitable for all types of pugravity pipe systems. We de		•
as Main	Yellow	34038	•	ormance of the	
elephone Cable	Green	34039	produ used.	bricant is not	
oul Sewer	Red	34040			
treet ighting	Yellow	34041			

Lubricant UNIVERSAL JOINT LUBRICANT Size (Kg) Code

1.0	50001
2.5	50002
Suitable for all types gravity pipe systems	•
augrantee the perfo	

365m Rolls.

#### Access Chamber



Clear opening Width (mm)	Clear opening Lengh (mm)	Depth (mm)	Pallet Qty	Code
300	300	330	18	69224
300	450	330	18	69225
450	450	330	24	69226
450	600	330	18	69227
600	600	330	13	69228

Supplied fully assembled or flat packed.

The Naylor Modular Access Chambers systems are an easy to assemble, ecofriendly system, which can either be supplied flat packed or pre-assembled depending on the customer's preference

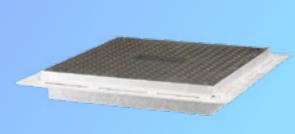
#### **Features**

- Panels are quick and easy to assemble
- Interlock design at each corner
- Panels available from 300, 450 & 600mm
- Panels are 330mm deep, with locking features
- Panels are pre-sized to take pipe from 63mm to 160mm
- · Wide flange design, enables covers to fit onto top chamber ring

#### Benefits

- Manufactured from recycled Polypropylene
- External wall patterned, such that concrete surround will flow into voids
- Composite covers & frames available
- Adaptors available to suit 178mm pipe

#### Covers & Frames



Dimensions (mm)	Code
300x300	69128
300x450	69129
450x450	69127
450x600	69126
600x600	69125

#### **Features and Benefits**

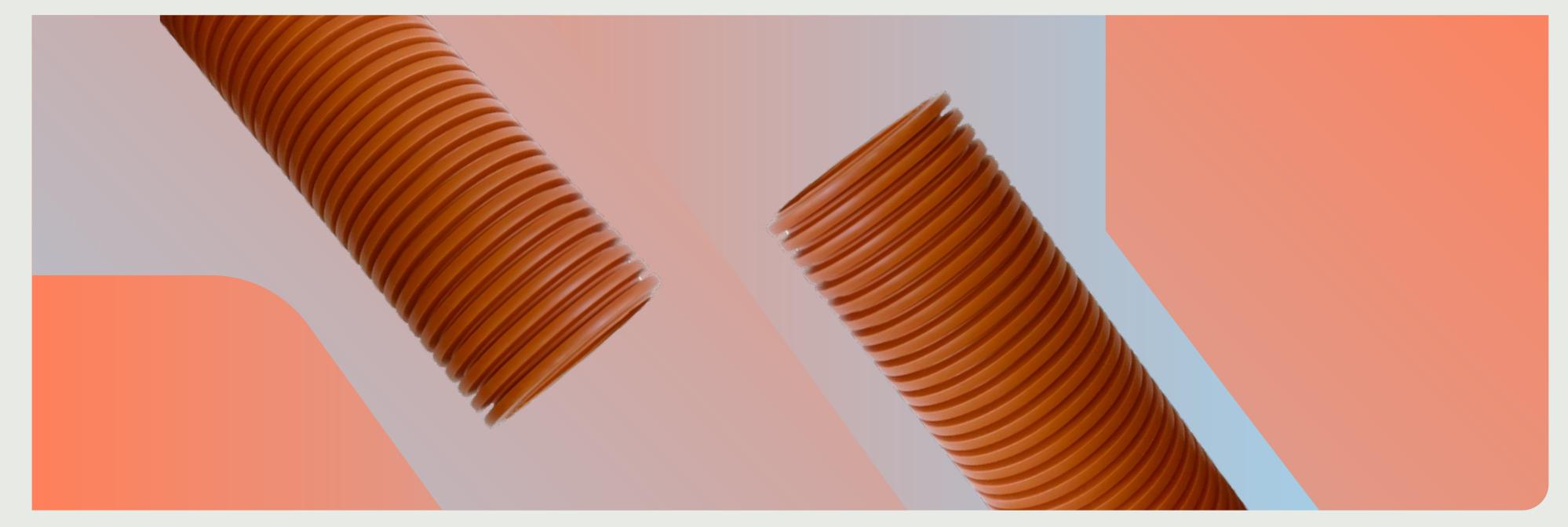
- Composite covers available with an integral anti-skid pattern on the surface, load rated to BS EN124 Class B125
- Composite Covers are black in colour and marked 'Naylor Drainage' with the legend 'Traffic Signals' or 'Street Lighting' where applicable
- Composite covers have integral lifting keyholes and locking features available as standard. A wide external frame flange enables easy fit onto Naylor Access Chambers
- A deep seated galvanised frame ensures flush fit to Naylor Access Chambers
- Covers available in all sizes to fit Naylor Metro Access Chambers



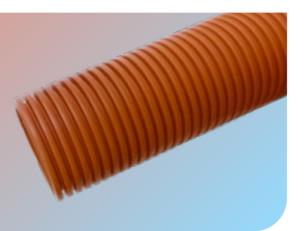
# seller

Naylor's new MetroSewer range has been designed to ensure complete peace of mind in sewer applications that need to meet the rigorous testing requirements of the water industry.

Made from durable, high quality twin wall polypropylene, MetroSewer products are designed for adoptable sewer applications and meet the requirements of both EN 13476-3 (piping systems for non-pressure underground drainage and sewerage) and WIS 4-35-01 (specification for thermoplastics structured wall pipes – supplementary test requirements).



#### Twin Wall Plain Ended Pipe



Length (m)	Material	Pack Qty	Code
3	PP	33	73101
6	PP	33	73104
3	PP	14	73102
6	PP	14	73105
3	PP	9	73103
6	PP	9	73106
	3 6 3 6 3	3 PP 6 PP 3 PP 6 PP 3 PP	3 PP 33 6 PP 33 3 PP 14 6 PP 14 3 PP 9

#### Couplings



ID (mm)	Length (mm)	Material	Pack Qty	Code
150mm	176mm	HDPE	10	73121
225mm	284mm	HDPE	1	73122
300mm	353mm	HDPE	1	73123

#### Junctions



ID (mm)	Product Range	Angle	Material	Code
150mm	Equal Junction	45	PP	73401
150mm	Equal Junction	90	PP	73402
225mm	<b>Equal Junction</b>	45	PP	73405
225mm	Unequal Junction	45	PP	73403
300mm	Equal Junction	45	PP	73411
300mm	Unequal Junction	45	PP	73407
300mm	Unequal Junction	45	PP	73409

#### Bends



ID (mm)	Product Range	Angle	Material	Code
150mm	Double-Socket	15	PP	73115
150mm	Double-Socket	30	PP	73130
150mm	Double-Socket	45	PP	73145
150mm	Double-Socket	90	PP	73190
225mm	Double-Socket	15	PP	73125
225mm	Double-Socket	30	PP	73230
225mm	Double-Socket	45	PP	73245
225mm	Double-Socket	90	PP	73290
300mm	Double-Socket	15	PP	73315
300mm	Double-Socket	30	PP	73330
300mm	Double-Socket	45	PP	73345
300mm	Double-Socket	90	PP	73390

#### Invert Level Reducers



ID (mm)	OD (MM)	Product Range	Material	Pack Qty	Code
150mm	110mm	Spigot	PP	10	73501
150mm	160mm	Spigot	PP	10	73502
225mm	150mm	Double- Socketed	PP	1	73503
300mm	225mm	Double- Socketed	PP	1	73504

#### Socket Plug

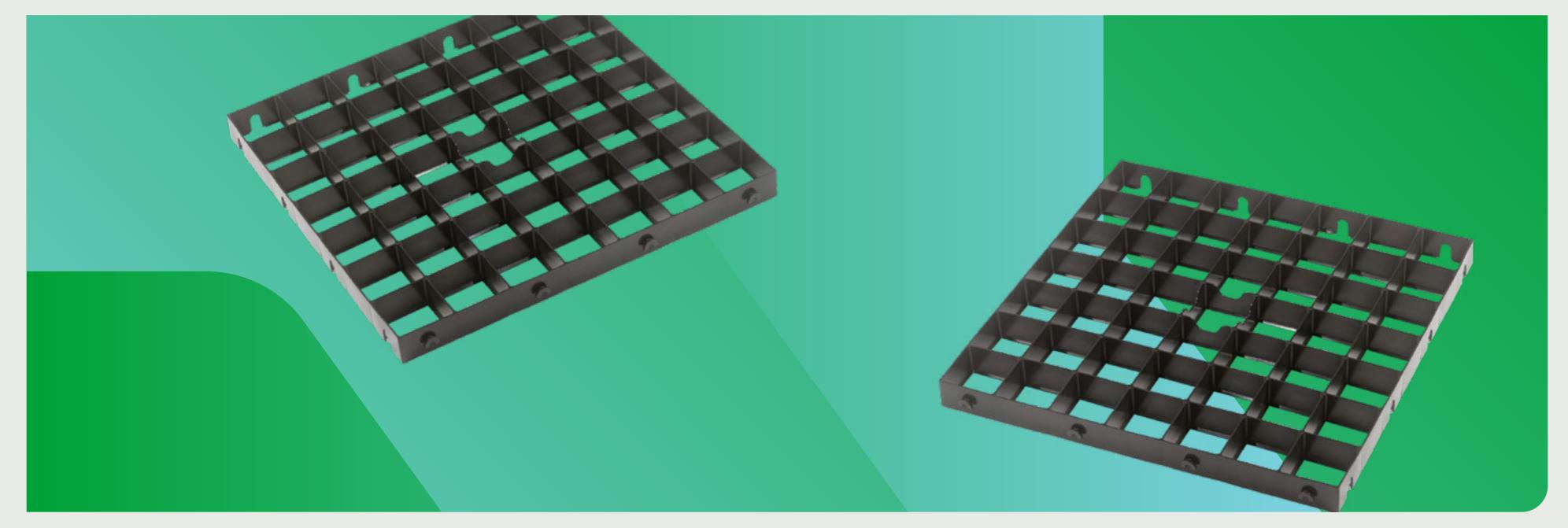


ID (mm)	Material	Pack Qty	Code
150mm	HDPE	10	73601
225mm	HDPE	1	73602

# SCOMM

We designed our environmental and sustainable urban drainage solutions (SuDS) to mimic the way that water drains in the natural world, so that water run-off can more effectively be managed in different commercial and domestic spaces.

Our storm systems comprise: AquaVoid, a surface water attenuation and infiltration crate; EnviroFlow, a drainage and filtration unit; SmartSponge, a hydrocarbon removal system, and GroundGrid, a cellular paving system.



# AquaVoid

Manufactured from recycled polypropylene, AquaVoid is efficient at dealing with stormwater at or near its source. We can also make it without a geomembrane, so the system can be used as a soakaway.

The AquaVoid system is made with an interlocking modular cell design which sits on a purpose-designed baseplate. This can be stacked to create different void sizes. A geotextile removes debris from stormwater while a geomembrane enables water storage, when required.

With a 400kN/m2 vertical loading, Aquavoid Metro can be used below service areas, car parks and landscaped areas.

Nominal crate size 1.2m (L) x 0.6m (W) x 0.3m (H)

Nominal base size 1.2m (L) x 0.6m (W) x 0.02m (H)

Coverage Rate 4.63 crates / m3

Volume of crates 0.216 m3

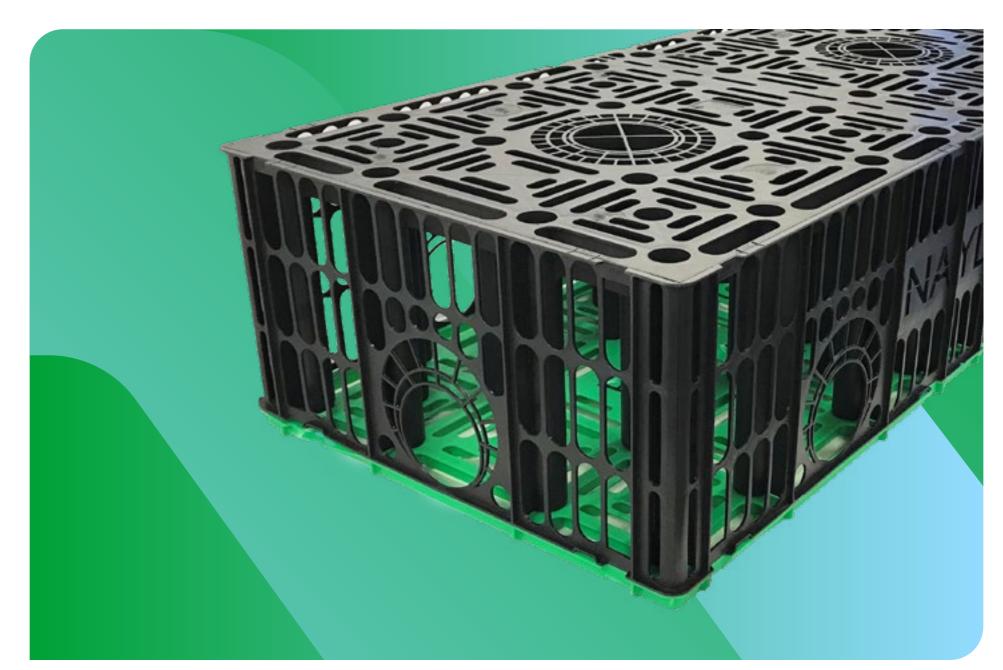
Capacity of crates 0.2063 m3 (void ratio 95.5%)

Weight 10.5 kg

Short Term Compressive Strength 400 kN/m2 Vertical 83 kN/m2 Lateral

Maximum Cover 2.5m

Minimum Cover 0.5m landscape, 0.6m Cars, 0.8m HGV







# EnviroFlow

The Naylor EnviroFlow provides a unique solution for land drainage, ground stabilisation, green infrastructure and filtration solutions that are proven to be technically superior to traditional systems.

Made from 100% recycled thermo-plastics, EnviroFlow's products are permanent solutions that do not clog, are easy to install and handle and are high strength and long lasting.

EnviroFlow is a filtration and ground stabilisation solution designed for land drainage. It uses advanced capillary action to redirect stormwater in any direction without clogging.

Provided in planks measuring 1m x 220mm x 45mm thickness, the system can be used independently as permeable block 'paving' or as part of a green roof drainage system. It can also be used on embankments for ground stabilisation.

EnviroFlow is easy install, requires minimal maintenance, and benefits from high strength and durability.







# SmartSponge

SmartSponge is an innovative way of addressing hydrocarbon pollution. It removes and holds polluting hydrocarbons and oil derivatives that live within surface water run-off. Turning water contaminants into a solid waste and minimising disposal costs, it can be provided as a block for drainage gullies or in mesh bags.

The Naylor SmartSponge is a unique hydrocarbon (oils) removal system designed to remove the oil and permanently bond it into the molecular structure of the material so it cannot be removed under any circumstances.

The subsequent waste material can be recycled via a waste to energy facility.

The SmartSponge is NOT a spill kit, Smart Sponge applications are able
to remove up to 95% of all oil contaminants present in stormwater run-off.
The SmartSponge technology remains buoyant in calm or agitated water,
allowing it to remain in place until fully saturated and resulting in no wasted
product.

#### Applications include:

- Highways
- Car parks and truck stops
- Airport tarmac drains
- Commercial fuel distributor facilities
- Commercial and/or residential developments



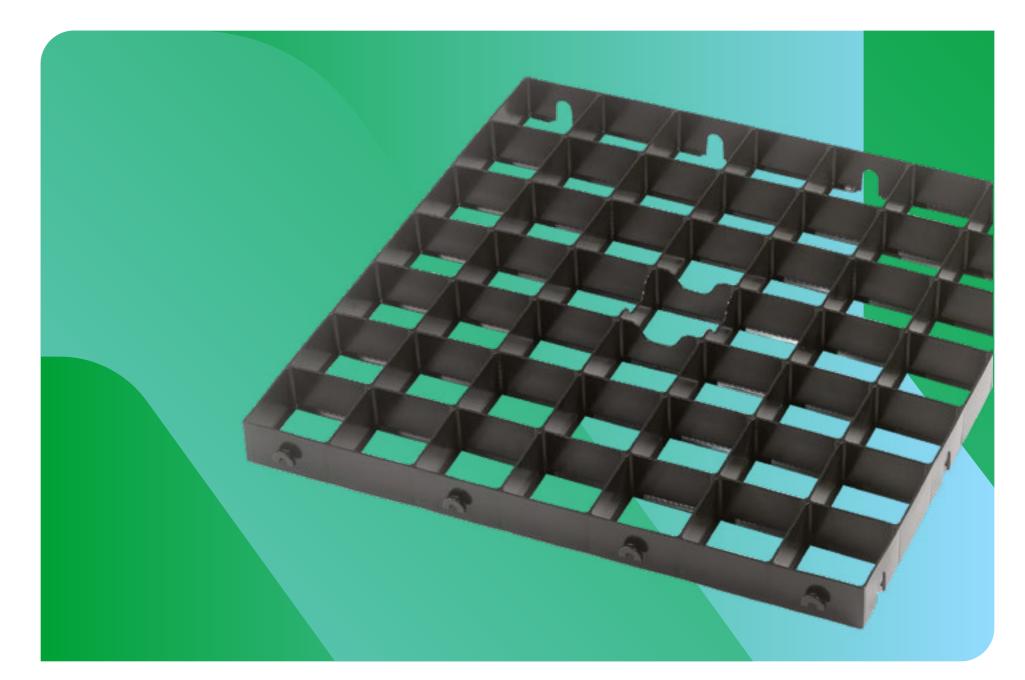


# GroundGrid & GroundGrid Plus

GroundGrid is a modular cellular paving system made from 100% recycled plastic. It can be used to create an exceptionally durable, permanently porous, high load bearing structure when filled with either grass or gravel.

Our GroundGrid range comprises GroundGrid for domestic applications and axle weights of upto 30 tonnes, and GroundGrid Plus which is used in heavier duty applications such as commercial car parks and HGV loadings and access areas, and which can withstand axle loads of upto 60 tonnes.

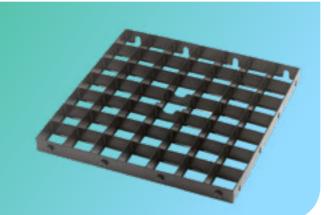
When filled with decorative gravel, the structural 'cells' in the pavers create an attractive and exceptionally hard-wearing surface and eliminate the problem of gravel 'migration'. The cells can also be filled with soil and seeded to create a natural grass surface with the strength to handle both pedestrian and vehicle traffic.







#### GroundGrid



#### Description

Naylor Product Code 65110

Unfilled Load Bearing Capacity (Tonnes/m²) 150

Filled Load Bearing Capacity (Tonnes/m²) 800

Nominal Installed Size (mm)

Nominal Cell Size (mm)

Grids/m²

Infill Volume/m²

Weight (kg) 0.7 (2.98 kg/m²)

Infiltration (mm/hr) >5000
Colour Black

Material Recycled HDPE/PP

Chemical Resistance Excellent
UV Resistance High
End Life Recyclable

Connection Type Side lugs and slots

Demarcation Block Compatibility
Country Of Manufacture

Pallet Details 120/pallet (27.8m²) 1 x 1 x 1.2m (110kg)

481x481x40

66x66

0.034m<sup>3</sup>

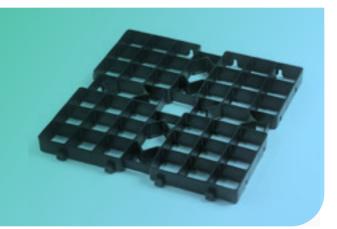
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**V** 

UK

Full Load Details 48 pallets/load (1,340m²)

#### **GroundGrid Plus**



#### Description

Full Load Details

Naylor Product Code 65111PLUS

Unfilled Load Bearing Capacity (Tonnes/m²) 320

Filled Load Bearing Capacity (Tonnes/m²) 1000

 Nominal Installed Size (mm)
 500x500x40

 Nominal Cell Size (mm)
 68x68

 Grids/m²
 4

 Infill Volume/m²
 0.035m³

 Weight (kg)
 1.2 (4.8 kg/m²)

Infiltration (mm/hr) >5000
Colour Black

Material Recycled HDPE/PP

Chemical Resistance Excellent

UV Resistance High

End Life Recyclable

Connection Type Side lugs and slots

Demarcation Block Compatibility
Country Of Manufacture

Pallet Details 120/pallet (30m²) 1 x 1 x 1.2m (170kg)

48 pallets/load (1440m²)

**V** 

UK



#### Deliveries

#### **Delivery Times**

All standard deliveries are made between the hours of 8am and 4pm unless advised at the time of order.

Timed and out of hours deliveries are available for an extra charge.

#### **Delivery Discrepancies**

Claims for transit damage or shortage cannot be accepted unless advised within 72 hours of unloading by email to queries@ naylor.co.uk

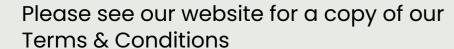
Claims reported after 72 hours will not be accepted.

#### Vehicle Waiting Time

It is a condition of every delivery that when the vehicle reaches its destination, the customer shall unload promptly.

In the event of delays, a waiting time charge will apply as per our standard terms and conditions.

If a vehicle is waiting in excess of 1 hour for the customer to commence unloading, the following charges will be added to the invoice.





#### Contact



England

help@naylor.co.uk 0330 0563355 Clough Green, Cawthorne, Barnsley, South Yorkshire, S75 4AD England

www.naylor.co.uk

Scotland

scotland@naylor.co.uk 01592 717900 Off Sea Road, Methil, Leven, Fife, KY8 3DE Scotland

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