# NAYLOR PLASTICS

Made in the UK

Excellent Construction Products



**Naylor** 

Plastics Product Guide

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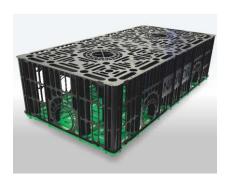






# Introduction to Naylor

Now exceeding 125 years in manufacturing, Naylor Plastics have an enduring reputation throughout the UK for producing high quality plastic pipe systems, together with associated products for building, construction, utility and general infrastructure markets.



























# Sustainability

- Use of Recycled Material



Naylor is one of the UK's large user of recycled HDPE: recycled/reprocessed materials are incorporated into our products where possible and technically permissible without compromising quality:

- inbound materials are subject to stringent quality to ensure that the quality of finished goods is not compromised
- internal mixing and blending procedures are controlled and maintained

Source materials are primarily:

- Post industrial produced as an industrial byproduct or waste
- Reprocessed waste any scrap product produced by our operations is granulated and the resultant material reused

| Use of recycled material: | MetroDrain   | N-Drain      |
|---------------------------|--------------|--------------|
|                           | ,            |              |
| DN 150                    | <b>√</b>     | <b>√</b>     |
| DN 225                    | $\checkmark$ | $\checkmark$ |
| DN 300                    | <b>√</b>     | <b>√</b>     |
| DN 375                    | $\checkmark$ | $\checkmark$ |
| DN 450                    | <b>√</b>     | <b>√</b>     |
| DN 600                    | $\checkmark$ | $\checkmark$ |
| DN 750                    | <b>√</b>     |              |
| DN 900                    | $\checkmark$ |              |
| DN 1050                   | <b>√</b>     |              |







Premium Drainage System

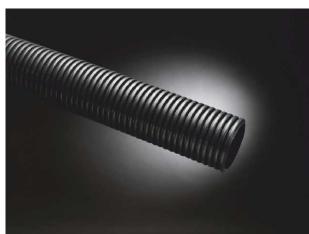


# Why Naylor MetroDrain?

A range of High Density Polyethelene high performance twin wall pipes designed for use with all non-pressure, surface and sub-surface storm water drainage applications.

- Smooth bore for superior hydraulic flow
- Corrugated outer wall for additional strength
- Available in filter, perforated or half perforated configurations
- SN6
- HAPAS approved by British Board of Agrément approved
- Less brittle, less vulnerable to crack propagation
- Use of recycled materials
- Up to 6% of the weight of traditional concrete product
- Lightweight product easier transport, handling & installation
- Recognised alternative to concrete and clayware pipes
- High strength and durability
- Excellent resistance to differential ground settlement
- Minimal jointing compared with traditional materials
- Easily cut to required lengths





| Nominal<br>ID (mm) | Pipe                 | Pipe Stiffness<br>(ISO9969) |
|--------------------|----------------------|-----------------------------|
| 100                | N-Drain              | SN4                         |
| 150                | MetroDrain & N-Drain | SN6 & SN4                   |
| 225                | MetroDrain & N-Drain | SN6 & SN4                   |
| 300                | MetroDrain & N-Drain | SN6 & SN4                   |
| 375                | MetroDrain & N-Drain | SN6 & SN4                   |
| 450                | MetroDrain & N-Drain | SN6 & SN4                   |
| 600                | MetroDrain & N-Drain | SN6 & SN4                   |
| 750                | MetroDrain           | SN6                         |
| 900                | MetroDrain           | SN6                         |
| 1050               | MetroDrain           | SN6*                        |

\*not covered by BBA















# Applications



The MetroDrain Premium Drainage system has been specified and installed on many civil engineering and construction projects.

## **Highway Drainage**

Naylor MetroDrain is suitable for the collection and disposal of surface and sub-surface storm water. The product meets the specific requirements of the Highways Agency Manual of Contract Documents for Highway Works and is an approved alternative to the products in Table 5/1 of the Specification for Highway Works.

MetroDrain products can be adopted under the Highways Act (1980).

#### **Building Drainage**

The Naylor MetroDrain Premium Drainage System is suitable for non-adopted surface water drains.

BBA Certificate No: 09/H145

# 

MetroDrain



N-Drain















# Environmental

MetroDrain is ideally suited for use in environmental systems:

- Pump and sampling chambers
- Catchpits
- Soakaways
- Stormwater attenuation
- Manholes

## **Applications**

- Agricultural (N-Drain)
- Highways
- CIR Infastructure
- Rail
- Sports Facilities/Stadiums
- Landfill
- Ports (Sea and Air)

HDPE Premium Twin Wall Carrier/Filter Drainage System











# **MetroDrain Pipes**

## Unperforated/plain ended

|            | · · · · · · · · · · · · · · · · · · · |            |              |                 |       |               |  |  |
|------------|---------------------------------------|------------|--------------|-----------------|-------|---------------|--|--|
| ID<br>(mm) | Nom OD<br>(mm)                        | Length (m) | Pack<br>Qty. | Nom Wt.<br>kg/m | Code  | Certification |  |  |
| 100*       | 117                                   | 6          | 85           | 0.63            | 71107 | -             |  |  |
| 150        | 173                                   | 6          | 33           | 1.4             | 71302 | BBA           |  |  |
| 225        | 265                                   | 6          | 14           | 3               | 71303 | BBA           |  |  |
| 300        | 353                                   | 6          | 9            | 5               | 71304 | BBA           |  |  |
| 375        | 432                                   | 6          | 5            | 7.4             | 71305 | BBA           |  |  |
| 450        | 518                                   | 6          | 4            | 10.8            | 71306 | BBA           |  |  |
| 600        | 692                                   | 6          | 28/Load      | 18.6            | 71307 | BBA           |  |  |
| 750        | 860                                   | 6          | 18/load      | 27.5            | 71358 | BBA           |  |  |
| 900        | 1034                                  | 6          | 8/load       | 40              | 71359 | BBA           |  |  |
| 1050       | 1189                                  | 6          | 8/load       | 52              | 71360 | -             |  |  |

| Unperto | orated/so | cketed |
|---------|-----------|--------|
| ==0     |           |        |

| 750  | 918‡  | 6 | 18/load | 28 | 71311 | BBA |
|------|-------|---|---------|----|-------|-----|
| 900  | 1093‡ | 6 | 8/load  | 40 | 71321 | BBA |
| 1050 | 1255‡ | 6 | 8/load  | 52 | 71328 | -   |

‡Nominal OD including socket

#### Perforated/plain ended

| ID<br>(mm) | Nom OD<br>(mm) | Length<br>(m) | Pack<br>Qty. | Nom Wt.<br>kg/m | Code  | Certification |
|------------|----------------|---------------|--------------|-----------------|-------|---------------|
| 100*       | 117            | 6             | 85           | 0.63            | 71108 | -             |
| 150        | 173            | 6             | 33           | 1.4             | 71312 | BBA           |
| 225        | 265            | 6             | 14           | 3               | 71313 | BBA           |
| 300        | 353            | 6             | 9            | 5               | 71314 | BBA           |
| 375        | 432            | 6             | 5            | 7.4             | 71315 | BBA           |
| 450        | 518            | 6             | 4            | 10.8            | 71316 | BBA           |
| 600        | 692            | 6             | 28/Load      | 18.6            | 71317 | BBA           |
| 750        | 860            | 6             | 18/load      | 27.5            | 71361 | BBA           |
| 900        | 1034           | 6             | 8/load       | 40              | 71137 | BBA           |
| 1050       | 1189           | 6             | 8/load       | 52              | 71166 | -             |

## Perforated/socketed

| 750  | 918‡  | 6 | 18/load | 28 | 71319 | BBA |
|------|-------|---|---------|----|-------|-----|
| 900  | 1093‡ | 6 | 8/load  | 40 | 71320 | BBA |
| 1050 | 1255‡ | 6 | 8/load  | 52 | 71329 | -   |

‡Nominal OD including socket

#### Half Perforated/plain ended

| Tidil I dilata, piani dilada |                |            |              |                 |       |               |  |  |
|------------------------------|----------------|------------|--------------|-----------------|-------|---------------|--|--|
| ID<br>(mm)                   | Nom OD<br>(mm) | Length (m) | Pack<br>Qty. | Nom Wt.<br>kg/m | Code  | Certification |  |  |
| 100*                         | 117            | 6          | 85           | 0.63            | -     | -             |  |  |
| 150                          | 173            | 6          | 33           | 1.4             | 71322 | BBA           |  |  |
| 225                          | 265            | 6          | 14           | 3               | 71323 | BBA           |  |  |
| 300                          | 353            | 6          | 9            | 5               | 71324 | BBA           |  |  |
| 375                          | 432            | 6          | 5            | 7.4             | 71375 | BBA           |  |  |
| 450                          | 518            | 6          | 4            | 10.8            | 71376 | BBA           |  |  |
| 600                          | 692            | 6          | 28/Load      | 18.6            | 71377 | BBA           |  |  |
| 750†                         | 860            | 6          | 18/load      | 27.5            | 71126 | BBA           |  |  |
| 900†                         | 1034           | 6          | 8/load       | 40              | 71155 | BBA           |  |  |
| 1050†                        | 1189           | 6          | 8/load       | 52              | 71183 | -             |  |  |

# Half Perforated/socketed

| Tian I dildiated Cooketed |       |   |         |    |       |     |  |  |
|---------------------------|-------|---|---------|----|-------|-----|--|--|
| 750                       | 918‡  | 6 | 18/load | 28 | 71318 | BBA |  |  |
| 900                       | 1093‡ | 6 | 8/load  | 40 | 71327 | BBA |  |  |
| 1050                      | 1255± | 6 | 8/load  | 52 | 71330 | -   |  |  |

‡Nominal OD including socket

HDPE Agricultural Twin Wall Carrier/Filter Drainage System

# **N-Drain Pipes**

## Unperforated/plain ended

| ID<br>(mm) | Nom OD<br>(mm) | Length<br>(m) | Pack<br>Qty. | Nom Wt.<br>kg/m | Code  |
|------------|----------------|---------------|--------------|-----------------|-------|
| 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 |

#### Perforated/plain ended

| ID<br>(mm) | Nom OD<br>(mm) | Length<br>(m) | Pack<br>Qty. | Nom Wt.<br>kg/m | Code  |
|------------|----------------|---------------|--------------|-----------------|-------|
| 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 |
| 450        | 521            | 6             | 4            | 9.1             | 71120 |
| 600        | 695            | 6             | 28/Load      | 17.05           | 71121 |

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

For N-Drain couplings, sealing rings and fittings see MetroDrain range

HDPE Premium Twin Wall Carrier/Filter Drainage System

















| MetroDrai  | nBends |       |               |
|------------|--------|-------|---------------|
| ID<br>(mm) | Bend°  | Code  | Certification |
| 100*       | 111/4  | 71401 | -             |
| 100*       | 221/2  | 71402 | -             |
| 100*       | 45     | 71403 | -             |
| 100*       | 90     | 71404 | -             |
| 150        | 111/4  | 71502 | BBA           |
| 150        | 22½    | 71512 | BBA           |
| 150        | 45     | 71522 | BBA           |
| 150        | 90     | 71532 | BBA           |
| 225        | 111/4  | 71503 | BBA           |
| 225        | 22½    | 71513 | BBA           |
| 225        | 45     | 71523 | BBA           |
| 225        | 90     | 71533 | BBA           |
| 300        | 111/4  | 71504 | BBA           |
| 300        | 22½    | 71514 | BBA           |
| 300        | 45     | 71524 | BBA           |
| 300        | 90     | 71534 | BBA           |
| 375        | 111/4  | 71505 | BBA           |
| 375        | 221/2  | 71515 | BBA           |
| 375        | 45     | 71525 | BBA           |
| 375        | 90     | 71535 | BBA           |
| 450        | 111/4  | 71506 | BBA           |
| 450        | 221/2  | 71516 | BBA           |
| 450        | 45     | 71526 | BBA           |
| 450        | 90     | 71536 | BBA           |
| 600        | 111/4  | 71507 | BBA           |
| 600        | 221/2  | 71517 | BBA           |
| 600        | 45     | 71527 | BBA           |
| 600        | 90     | 71537 | BBA           |
| †750       | 1111/4 | 71508 |               |
| †750       | 221/2  | 71518 |               |
| †750       | 45     | 71528 |               |
| †750       | 90     | 71538 |               |
| †900       | 111/4  | 71509 |               |
| †900       | 221/2  | 71519 |               |
| †900       | 45     | 71529 |               |
| †900       | 90     | 71539 |               |
| †1050      | 111/4  | 71510 |               |
| †1050      | 221/2  | 71520 |               |
| †1050      | 45     | 71530 |               |
| †1050      | 90     | 71540 |               |

† Plain ended. Requires sealing rings on all sealed systems.

## **MetroDrain Junctions**

#### 90° Junctions/socketed

| ID<br>(mm) | Description | Code  | Certification |
|------------|-------------|-------|---------------|
| 100 x 100  | Т           | 71406 | -             |
| 150 x 150  | T           | 71606 | BBA           |
| 225 x 150  | Т           | 71614 | BBA           |
| 225 x 225  | T           | 71616 | BBA           |
| 300 x 150  | T           | 71624 | BBA           |
| 300 x 225  | T           | 71626 | BBA           |
| 300 x 300  | T           | 71628 | BBA           |
| 375 x 150  | Т           | 71634 | BBA           |
| 375 x 225  | T           | 71636 | BBA           |
| 375 x 300  | T           | 71638 | BBA           |
| 375 x 375  | T           | 71640 | BBA           |
| 450 x 150  | T           | 71644 | BBA           |
| 450 x 225  | T           | 71646 | BBA           |
| 450 x 300  | T           | 71648 | BBA           |
| 450 x 375  | T           | 71650 | BBA           |
| 450 x 450  | T           | 71652 | BBA           |
| 600 x 150  | T           | 71664 | BBA           |
| 600 x 225  | T           | 71666 | BBA           |
| 600 x 300  | T           | 71668 | BBA           |
| 600 x 375  | T           | 71670 | BBA           |
| 600 x 450  | Т           | 71672 | BBA           |
| 600 x 600  | Т           | 71674 | BBA           |

Junctions continued in next column
Requires sealing rings on all sealed systems. 100\* is N-Drain only.

## **MetroDrain Junctions** continued

# 90° Junctions/plain ended\*

| ID<br>(mm)  |   |       | Certification |
|-------------|---|-------|---------------|
| 750 x 150   | Т | 71834 | n/a           |
| 750 x 225   | T | 71836 | n/a           |
| 750 x 300   | T | 71838 | n/a           |
| 750 x 375   | T | 71840 | n/a           |
| 750 x 450   | T | 71842 | n/a           |
| 750 x 600   | T | 71844 | n/a           |
| 750 x 750   | T | 71846 | n/a           |
| 900 x 150   | T | 71854 | n/a           |
| 900 x 225   | T | 71856 | n/a           |
| 900 x 300   | T | 71858 | n/a           |
| 900 x 375   | T | 71860 | n/a           |
| 900 x 450   | T | 71862 | n/a           |
| 900 x 600   | T | 71864 | n/a           |
| 900 x 750   | T | 71866 | n/a           |
| 900 x 900   | T | 71868 | n/a           |
| 1050 x 150  | T | 71884 | n/a           |
| 1050 x 225  | T | 71886 | n/a           |
| 1050 x 300  | T | 71888 | n/a           |
| 1050 x 375  | T | 71890 | n/a           |
| 1050 x 450  | T | 71892 | n/a           |
| 1050 x 600  | T | 71894 | n/a           |
| 1050 x 750  | T | 71896 | n/a           |
| 1050 x 900  | T | 71898 | n/a           |
| 1050 x 1050 | T | 71900 | n/a           |

Requires sealing rings on all sealed systems/couplers.

## **MetroDrain Junctions**

#### 45° Junctions/socketed

| ID<br>(mm)                | Description | Code  | Certification |  |  |
|---------------------------|-------------|-------|---------------|--|--|
| 100 x 100*                | Υ           | -     | -             |  |  |
| 150 x 150                 | Y           | 71605 | BBA           |  |  |
| 225 x 150                 | Y           | 71613 | BBA           |  |  |
| 225 x 225                 | Y           | 71615 | BBA           |  |  |
| 300 x 150                 | Y           | 71623 | BBA           |  |  |
| 300 x 225                 | Y           | 71625 | BBA           |  |  |
| 300 x 300                 | Y           | 71627 | BBA           |  |  |
| 375 x 150*                | Y           | 71633 | BBA           |  |  |
| 375 x 225*                | Y           | 71635 | BBA           |  |  |
| 375 x 300*                | Y           | 71637 | BBA           |  |  |
| 375 x 375*                | Y           | 71639 | BBA           |  |  |
| 450 x 150*                | Υ           | 71643 | BBA           |  |  |
| 450 x 225*                | Υ           | 71645 | BBA           |  |  |
| 450 x 300*                | Υ           | 71647 | BBA           |  |  |
| 450 x 375*                | Y           | 71649 | BBA           |  |  |
| 450 x 450*                | Y           | 71651 | BBA           |  |  |
| 600 x 150*                | Y           | 71663 | BBA           |  |  |
| 600 x 225*                | Υ           | 71665 | BBA           |  |  |
| 600 x 300*                | Υ           | 71667 | BBA           |  |  |
| 600 x 375*                | Υ           | 71669 | BBA           |  |  |
| 600 x 450*                | Y           | 71671 | BBA           |  |  |
| 600 x 600*                | Y           | 71673 | BBA           |  |  |
| 45° Junctions/plain ended |             |       |               |  |  |

| 45° Junctions/plain ended |   |       |     |  |  |
|---------------------------|---|-------|-----|--|--|
| 750 x 150                 | Υ | 71833 | n/a |  |  |
| 750 x 225                 | Y | 71835 | n/a |  |  |
| 750 x 300                 | Y | 71837 | n/a |  |  |
| 750 x 375                 | Y | 71839 | n/a |  |  |
| 750 x 450                 | Y | 71841 | n/a |  |  |
| 750 x 600                 | Y | 71843 | n/a |  |  |
| 750 x 750                 | Y | 71845 | n/a |  |  |
| 900 x 150                 | Y | 71853 | n/a |  |  |
| 900 x 225                 | Y | 71855 | n/a |  |  |
| 900 x 300                 | Y | 71857 | n/a |  |  |
| 900 x 375                 | Y | 71859 | n/a |  |  |
| 900 x 450                 | Y | 71861 | n/a |  |  |
| 900 x 600                 | Υ | 71863 | n/a |  |  |
|                           |   |       |     |  |  |

Junctions continued in next column
Requires sealing rings on all sealed systems/couplers. 100\* is N-Drain only.

HDPE Premium Twin Wall Carrier/Filter Drainage System













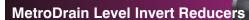


# MetroDrain Junctions continued

45° Junctions/plain ended

| ID<br>(mm)  | Description | Code  | Certification |
|-------------|-------------|-------|---------------|
| 900 x 750   | Υ           | 71865 | n/a           |
| 900 x 900   | Y           | 71867 | n/a           |
| 1050 x 150  | Y           | 71883 | n/a           |
| 1050 x 225  | Y           | 71885 | n/a           |
| 1050 x 300  | Y           | 71887 | n/a           |
| 1050 x 375  | Y           | 71889 | n/a           |
| 1050 x 450  | Y           | 71891 | n/a           |
| 1050 x 600  | Y           | 71893 | n/a           |
| 1050 x 750  | Y           | 71895 | n/a           |
| 1050 x 900  | Y           | 71897 | n/a           |
| 1050 x 1050 | Υ           | 71899 | n/a           |
|             |             |       |               |

Requires sealing rings on all sealed systems.



| $^{\circ}$ | _ | $\sim$ | ١, | _ | te | ~ |
|------------|---|--------|----|---|----|---|
| ~          | n | C      | κ  | e | Te |   |
|            |   |        |    |   |    |   |

|            | <del>-</del> |
|------------|--------------|
| ID (mm)    | Code         |
| 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        |
| 1050 x 375 | 71775        |
| 1050 x 450 | 71776        |
| 1050 x 600 | 71777        |
| 1050 x 750 | 71778        |
| 1050 x 900 | 71779        |
| B          |              |

Requires sealing rings on all sealed systems.

# **MetroDrain Couplings**

| ID<br>(mm) | Pallet<br>Qty. | Dimension mm<br>A | Code  | Certification |
|------------|----------------|-------------------|-------|---------------|
| 100*       | 400            | -                 | 71085 | -             |
| 150        | 200            | 176               | 71332 | BBA           |
| 225        | 96             | 284               | 71333 | BBA           |
| 300        | 45             | 353               | 71334 | BBA           |
| 375        | 25             | 330               | 71335 | BBA           |
| 450        | 20             | 396               | 71336 | BBA           |
| 600        | 12             | 485               | 71337 | BBA           |
| 750        | 2              | 700               | 71045 | BBA           |
| 900        | 2              | 800               | 71047 | Pending       |
| 1050       | 2              | 900               | 71050 | _             |

One coupling and two seals are required per joint if coupling used. 100\* is N-Drain Couplings only

# MetroDrain Sealing Rings



| ID<br>(mm) | Material | Pack<br>Qty. | Code  | Certification |
|------------|----------|--------------|-------|---------------|
| 100*       | EPDM     | 1            | 71001 | -             |
| 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 100\* is N-Drain Sealing Rings only

# Lubricant



| Size (Kg) | Code  |
|-----------|-------|
| 1.0       | 50001 |
| 2.5       | 50002 |

 DN Pipe Size
 100 | 150 | 225 | 300 | 375 | 450 | 600 | 750 | 900 | 1050

 Average No. of Joints per Kg.
 100 | 50 | 30 | 24 | 15 | 10 | 8 | 5 | 3 | 2

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

# Gullies/Accessories

















## **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<br>Qty. | DN<br>Internal<br>(Nominal) | Internal<br>Depth<br>(Nominal) | DN<br>Outlet<br>(Nominal) | Code  |
|--------------|-----------------------------|--------------------------------|---------------------------|-------|
| 20           | 450                         | 900                            | 178                       | 67003 |
| 20           | 450                         | 900                            | 160                       | 67004 |
| 20           | 450                         | 750                            | 160                       | 67005 |
| 20           | 450                         | 750                            | 178                       | 67009 |
| 30           | 375                         | 750                            | 178                       | 67002 |



# Yard Gully

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

| Pack<br>Qty. | Dia.<br>(mm) | H<br>(mm) | DN  | Code  |
|--------------|--------------|-----------|-----|-------|
| 30           | 300          | 600       | 110 | 67006 |



#### Gully **Connection Pipe** Pallet Dia. (mm) Length (m) Code Qty. 160 67011 178 67008

Single wall Supplied in coils.

# **Outlet Adaptor**

| OD (mm)     | Code  | Box Qty. |
|-------------|-------|----------|
| 160/178*    | 67012 | 20       |
| *Beversible |       |          |

178mm OD 178mm OD 178mm OD 160mm OD 160mm OD 160mm OD 160mm OD 178mm OD 150mm ID 150mm ID 150mm ID 150mm ID Iwinwali
Ultra-Rib
Clayware
Quantum
PVC-u
Land Drain
Gully Connection Pipe
Gully Connection Pipe 160mm Outlet Connects to 160mm OD 160mm OD 160mm OD 160mm OD Quantum PVC-u 150mm ID 178mm Outlet Connects to Land Drain Gully Connection Pipe

#### **Adaptor Coupling**

| OD (mm) | Code  | Box Qty. |
|---------|-------|----------|
| 178/172 | 71700 | _        |









# Naylor MetroDuct



# Introduction

Naylor offer 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.



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









































# NJUG Colour Coding

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

|           | 200                            |  |
|-----------|--------------------------------|--|
| 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             |  |

Above 150mm manufactured in accordance to BS EN 61386

# MetroDuct - Twin Wall - Electric Blac

## **Heavy Duty HDPE Twin Wall Ducting**

printed - Electric Cable Duct

| ID/OD<br>(mm) | Length (m) | Pack<br>Qty. | Code  | Certification |
|---------------|------------|--------------|-------|---------------|
| 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           |
| 100/120       | 3          | 85           | 29208 | BBA           |
| 125/145       | 3          | 72           | 29273 | BBA           |
| 150/178       | 3          | 33           | 29275 | BBA           |
| 100/120       | 2          | 85           | 29347 | BBA           |
| 125/145       | 2          | 72           | 29199 | BBA           |
| 150/178       | 2          | 33           | 29209 | BBA           |

# MetroDuct - Twin Wall Split Duct

C/W Dowels or ties as appropriate.

| ID/OD<br>(mm) | Length (m) | Pack<br>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.

# MetroDuct - Twin Wall - Unmarked

#### **HDPE Twinwall Ducting**

| ID/OD<br>(mm) | Length (m) | Pack<br>Qty. | Code  | Certification |
|---------------|------------|--------------|-------|---------------|
| 94/110*       | 6          | 100          | 29450 | BBA           |
| 100/120*      | 6          | 85           | 29451 | BBA           |
| 125/145*      | 6          | 72           | 29452 | BBA           |
| 137/160*      | 6          | 33           | 29453 | BBA           |
| 150/178*      | 6          | 33           | 29454 | BBA           |

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

# MetroDuct Sealed System

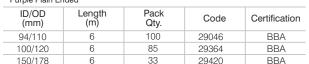
Motorway Communications/Power Black Plain Ended

| ID/OD<br>(mm) | Length (m) | Pack<br>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.

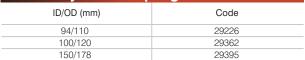
# **MetroDuct Sealed System**

# Motorway Communications Purple Plain Ended



For sealed system 2 sealing rings required per 6m length

# MetroDuct Sealed System Couplings



## **MetroDuct Twin Wall Coiled Ducting**

#### **HDPE/MDPE Twinwall Ducting**

Printed - Flectric Cable Duct

|               |               |        |                |       | V             |
|---------------|---------------|--------|----------------|-------|---------------|
| ID/OD<br>(mm) | Length<br>(m) | Colour | Pallet<br>Qty. | Code  | Certification |
| 32/40         | 50            | Black  | -              | 29020 | BS            |
| 40/50         | 50            | Black  | -              | 29265 | BS            |
| 50/63         | 50            | Black  | 8              | 29113 | BS            |
| 75/90         | 50            | Black  | -              | 29266 | 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.

# **Class 2 Twin Wall Cable Duct**

Fully compliant with ENATS 12/24 Issue 2007/8

| runy compilant with Liver of 12/24 13546 2501/6 |            |           |       |               |  |
|---|------------|-----------|-------|---------------|--|
| ID/OD<br>(mm)                                   | Length (m) | Pack Qty. | Code  | Certification |  |
| 100/120   | 6          | 85        | 29516 | ENATS 12/24   |  |
| 100/120   | 3          | 85        | 29513 | ENATS 12/24   |  |
| 100/120   | 2          | 85        | 29512 | ENATS 12/24   |  |
| 100/120   | 1          | 85        | 29511 | ENATS 12/24   |  |
| 125/145   | 6          | 72        | 29616 | ENATS 12/24   |  |
| 125/145   | 3          | 72        | 29613 | ENATS 12/24   |  |
| 125/145   | 2          | 72        | 29612 | ENATS 12/24   |  |
| 125/145   | 1          | 72        | 29611 | ENATS 12/24   |  |
| 150/178   | 6          | 33        | 29716 | ENATS 12/24   |  |
| 150/178   | 3          | 33        | 29713 | ENATS 12/24   |  |
| 150/178   | 2          | 33        | 29712 | ENATS 12/24   |  |
| 150/178   | 1          | 33        | 25711 | ENATS 12/24   |  |

Supplied with one coupling per length.

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

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

















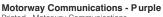
## **MetroDuct Twin Wall**

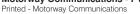
Motorway Communication - Purple Printed - Motorway Communications

| ID/OD<br>(mm) | Length<br>(m) | Pack Qty. | Code  | Certification |
|---------------|---------------|-----------|-------|---------------|
| 94/110        | 6             | 100       | 29043 | BBA           |
| 100/120       | 6             | 85        | 29200 | BBA           |
| 137/160       | 6             | 33        | 29249 | BBA           |
| 150/178       | 6             | 33        | 29059 | BBA           |

Supplied with one coupling per length.

# **MetroDuct Twin Wall Coiled Ducting**





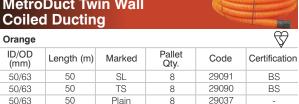
|               |                         |  |   | V  |
|---------------|-------------------------|--|---|--|
| ID/OD<br>(mm) | Length (m)              | Pallet<br>Qty.   | Code  | Certification  |
| 50/63         | 50                      | 8  | 29279   | BS   |
| 94/110        | 50                      | 5  | 29280   | BS   |
| 137/160*      | 50                      | 4  | 29019   | BS   |
|               | (mm)<br>50/63<br>94/110 | (mm)         Length (m)           50/63         50           94/110         50 | (mm)         Length (m)         Qty.           50/63         50         8           94/110         50         5 | (mm)         Length (m)         Qty.         Code           50/63         50         8         29279           94/110         50         5         29280 |

## **MetroDuct Twin Wall**

# Street Lighting/Traffic Signal or Plain -

| ID/OD<br>(mm) | Length<br>(m) | Marked | Pack<br>Qty. | Code  | Certification |
|---------------|---------------|--------|--------------|-------|---------------|
| 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           |

# **MetroDuct Twin Wall**



| 50/63    | 50 | TS    | 8 | 29090 | BS |
|----------|----|-------|---|-------|----|
| 50/63    | 50 | Plain | 8 | 29037 | -  |
| 94/110   | 50 | SL    | 5 | 29089 | BS |
| 94/110   | 50 | TS    | 5 | 29088 | BS |
| 94/110   | 50 | Plain | 5 | 29047 | -  |
| 137/160* | 50 | SL    | 4 | 29135 | BS |
| 137/160* | 50 | TS    | 4 | 29348 | BS |

29124

Plain

137/160\* 50

## **Metro Twin Wall Utility Ducting**

#### Yellow

| ID/OD<br>(mm) | Length (m) | Pack Qty. | Code  | Certification |
|---------------|------------|-----------|-------|---------------|
| 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 | BBA           |
| 300/353+      | 6          | 9         | 29412 | BBA           |
| 450/518       | 6          | 4         | 29437 | -             |

| Blue          | Blue       |           |       |               |  |  |
|---------------|------------|-----------|-------|---------------|--|--|
| ID/OD<br>(mm) | Length (m) | Pack Qty. | Code  | Certification |  |  |
| 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 | BBA           |  |  |
| 300/353+      | 6          | 9         | 29414 | BBA           |  |  |
| 450/518       | 6          | 4         | 29434 | -             |  |  |

| Green - CCTV Printed |            |           |       |               |  |  |
|----------------------|------------|-----------|-------|---------------|--|--|
| ID/OD<br>(mm)        | Length (m) | Pack Qty. | Code  | Certification |  |  |
| 94/110               | 6          | 100       | 29281 | BBA           |  |  |
| 100/120*             | 6          | 85        | 29351 | BBA           |  |  |
| 137/160*             | 6          | 33        | 29250 | BBA           |  |  |
| 150/178              | 6          | 33        | 29359 | BBA           |  |  |

#### **Grey - Telecommunications**

| ID/OD<br>(mm) | Length (m) | Pack Qty. | Code  | Certification |  |
|---------------|------------|-----------|-------|---------------|--|
| 94/110*       | 6          | 100       | 29238 | BBA           |  |
| 150/178*      | 6          | 33        | 29396 | BBA           |  |

| Red - unprinte |            |           |       |               |
|----------------|------------|-----------|-------|---------------|
| ID/OD<br>(mm)  | Length (m) | Pack Qty. | Code  | Certification |
| 94/110*        | 6          | 100       | 20170 | RRΔ           |

Supplied with one coupling per length.

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

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



















## MetroCoil Single Wall **Ducting**

Yellow Perforated Gas Duct Pipe Kitemarked to BS4962

|            | *          |                |       |               |
|------------|------------|----------------|-------|---------------|
| OD<br>(mm) | Length (m) | Pallet<br>Qty. | Code  | Certification |
| 60         | 50         | 8              | 68075 | BS            |
| 60         | 150        | 5              | 68074 | BS            |
| 80         | 25         | 9              | 68073 | BS            |
| 80         | 50         | 7              | 68072 | BS            |
| 80         | 100        | 4              | 68071 | BS            |
| 100        | 25         | 7              | 68070 | BS            |
| 100        | 50         | 6              | 68069 | BS            |
| 100        | 100        | 4              | 68068 | BS            |
| 160        | 50         | 4              | 68066 | BS            |

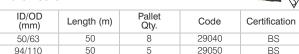






# **MetroDuct Twin Wall Utility Ducting**

Yellow Coils





#### Blue

|               |            | 21) Mary (man) |       |               |
|---------------|------------|----------------|-------|---------------|
| ID/OD<br>(mm) | Length (m) | Pallet<br>Qty. | Code  | Certification |
| 40/50         | 50         | -              | 29026 | BS            |
| 50/63         | 50         | 8              | 29039 | BS            |
| 94/110        | 50         | 5              | 29049 | BS            |



| Green         |            | A              |       |               |
|---------------|------------|----------------|-------|---------------|
| ID/OD<br>(mm) | Length (m) | Pallet<br>Qty. | Code  | Certification |
| 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.

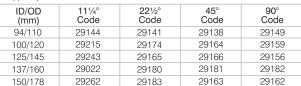
# **Sealing Rings** Black as standard

| Diameter (mm) | Code  |
|---------------|-------|
| 110           | 29107 |
| 120           | 29115 |
| 160           | 29106 |
| 178           | 29117 |

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

# **Twin Wall Bends**

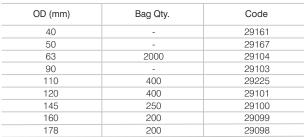
Supplied plain ended. Black as standard.



Order couplings separately.

# Couplings

Black as standard



















# MetroCoil Single Wall Ducting

Street Lighting Scotland - Purple

|            |            | _      |        |
|------------|------------|--------|--------|
| OD<br>(mm) | Length (m) | Colour | Code   |
| 35         | 25         | Purple | M68027 |
| 63         | 100        | Purple | M68006 |
| 105        | 40         | Purple | M68001 |
| 163        | 30         | Purple | M68110 |

# MetroSmooth Duct

#### Street Lighting/Traffic Signal

| ID/OD<br>(mm) | Description     | WT<br>(mm) | Pack<br>Qty | Code  |
|---------------|-----------------|------------|-------------|-------|
| 53/63*        | Street Lighting | 5          | 288         | 38028 |
| 97/107        | Street Lighting | 5          | 76          | 38091 |
| 53/63*        | Traffic Signal  | 5          | 288         | 38059 |
| 97/107        | Traffic Signal  | 5          | 76          | 38030 |

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

# **MetroSmooth Couplings**

| ID/OD (mm) | Code  |
|------------|-------|
| 53/63      | 38007 |
| 97/107     | 38042 |

| MetroSmooth        |   |
|--------------------|---|
| Electric Cable Duc | t |

| ID/OD<br>(mm) | WT<br>(mm) | Length<br>(m) | Code  |
|---------------|------------|---------------|-------|
| 32/37         | 2.5        | 25            | 38020 |
| 32/37         | 2.5        | 50            | 38023 |
| 32/37         | 2.5        | 100           | 38024 |
| 38/44         | 3          | 25            | 38021 |
| 38/44         | 3          | 50            | 38025 |
| 38/44         | 3          | 100           | 38026 |
| 50/60         | 5          | 25            | 38033 |
| 50/60         | 5          | 50            | 38034 |
|               |            |               |       |

HDPE Smooth internal and external. Colour Black.
Coils supplied plain ended and couplers can be made to special order and a minimum order quantity applies.

# **General Purpose Duct**

| Dia<br>(in) | Nom Dia<br>(mm) | Pack<br>Qty | Code  |
|-------------|-----------------|-------------|-------|
| 2           | 54              | 369         | 30052 |
| 3           | 88.9            | 125         | 30053 |
| 4           | 114             | 76          | 30054 |
| 6           | 168             | 39          | 30055 |
| 8           | 200             | 25          | 30056 |
|             |                 |             |       |

6 Metre lengths.

Lightweight applications only. Check suitability before installation. NB. Requires adequate protection during installation.

#### **General Purpose Duct Bends** Bag Qty 11¼° Code 90° Code 22½° Code Dia Code (in) (mm) 54 36054 36058 36071 36073 88.9 36053 36057 36078 36074 114 10 36052 36056 36079 36075 168 36051 36055 36080 36076 8 200 36081 36077

Supplied into stock in bag quantities only.

# General Purpose

| ICCIOI 3  |                               |  |
|-----------|-------------------------------|--|
| Dia. (mm) | Bag<br>Qty                    | Code   |
| 54        | 100                           | 36050  |
| 88.9      | 50                            | 36049  |
| 114       | 50                            | 36048  |
| 168       | 25                            | 36047  |
| 200       | 1                             | 36046  |
|           | Dia. (mm)  54  88.9  114  168 | Dia. (mm)         Bag Oty           54         100           88.9         50           114         50           168         25 |

Supplied into stock in bag quantities only.

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

# MetroDuct Accessories







29126

29168

29191















| End Caps      |       |
|---------------|-------|
| Diameter (mm) | Code  |
| 63            | 29131 |
| 90*           | 29130 |
| 110           | 29129 |
| 120           | 29128 |
| 145           | 29127 |

<sup>178</sup> \*Subject to minimum order quantity and lead time.

160

| Lubricant | UNIVERSAL JOINT S<br>LUBRICANY |
|-----------|--------------------------------|
| 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.

# **Sitework Equipment** Draw Cord Description Code 220 Metre Coil 29264

500 Metre Drum Nominal 5kN Breaking Strength. 6mm cord.



365m Rolls.

# **MetroCoil Fittings**

| Junction Boxes - Scotland |        |        |  |
|---------------------------|--------|--------|--|
| OD (mm)                   | Colour | Code   |  |
| 105                       | Black  | M68132 |  |

#### Connectors - Scotland OD (mm) Colour Code 63 Black M29343 105 M29345 Black

| Reducers - Scotland |        |       |
|---------------------|--------|-------|
| OD (mm)             | Colour | Code  |
| 105x63              | Black  | 68008 |

# Metro Access Chambers



Naylor offer a complete range of chambers suitable for multiple applications, from light duty pedestrian to heavy duty trafficked environments.

Naylor access chambers are available in a range of load ratings making them suitable for a wide variety of industrial applications, in market sectors such as:

# Market sectors

- Building
- Construction
- Highways
- Water
- Rail
- Traffic Signal & Street Lighting
- Ministry of Defence
- Agriculture
- Sports Specialist
- Bespoke



















# Metro Access Chambers



- Metro Access Chamber Light duty applications
- Metro Genus Access Chamber Heavy duty suitable for trafficked D400 applications

Naylor Range of Metro Access Chambers for multiple market sectors and applications



















# Metro Access Chamber

NAYLOR
PLASTICS
Made in the UIX
Excellent Construction Products

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

| Metro A                 | .ccess Ch               | nambers         |                |       |
|-------------------------|-------------------------|-----------------|----------------|-------|
| Clear Opening<br>(W) mm | Clear Opening<br>(L) mm | Depth<br>(D) mm | Pallet<br>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 |
|                         |                         |                 |                |       |

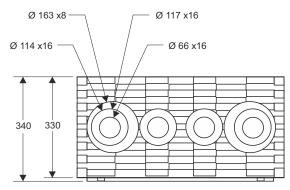
Larger sizes are available upon request. Supplied fully assembled or flat packed.

# **Features**

- Panels 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 trepanned 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
- Chamber system used by many Local Authorities



Please refer to Technical Document for Installation Details











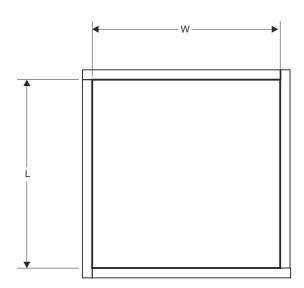






# **Access Plate Packaging Details**

| Plate Size mm | Pallet Qty. | Code  |
|---------------|-------------|-------|
| 300           | 600         | 69220 |
| 450           | 400         | 69221 |
| 600           | 200         | 69222 |
| 900           | 200         | 69229 |
| 1200          | 150         | 69230 |



# Metro Genus Access Chamber



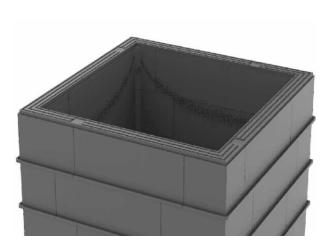
The Naylor Metro Genus access chamber has been designed to suit vertical loading environments up to and including D400, for a wide variety of underground chamber applications.

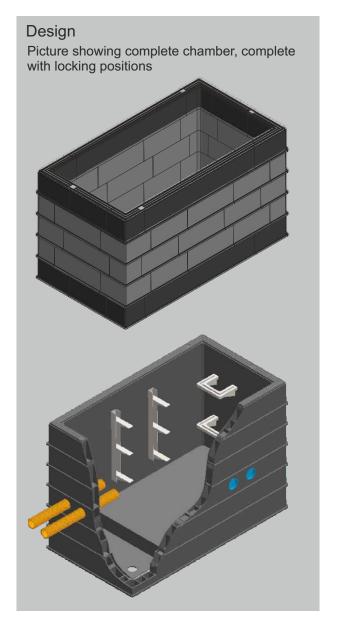
Naylor Metro Genus is a structured wall design and is available as pre-assembled riser to suit UK's generic chamber sizes starting from 300x300mm clear opening.

Constituent parts are manufactured from both Polypropylene (PP), and Glass Reinforced Polyester, which are fully interchangeable and quick to install regardless of chamber size with only 4 connector pegs required per chamber ring and no bolting required during the installation process.

# **Applications**

- Highways
- Water Valve, metering & power supplies
- Ministry of Defence
- Power & Energy
- Bespoke Multiple ducting
- Building & Civil projects



















# Metro Genus Access Chamber



# Features & Benefits

- Sizes available from 300x300mm upwards possible
- Lightweight
- Easy and quick to install versus traditional build
- Structured wall light weight design parts manufactured in both PP & GRP

- Flanges located on each chamber ring increases lateral load resistance
- Ribs to top surface of chamber ring wall provide a key for bedding material, prior to cover & frame installation
- PP and GRP Interchangeable

## **MetroGenus**

| Product<br>Code | Description                       | Size (mm)   |
|-----------------|-----------------------------------|-------------|
| *69257          | Metro Genus Access Box - PP Ring  | 300 x 300   |
| *69258          | Metro Genus Access Box - PP Ring  | 300 x 450   |
| 69241           | Metro Genus Access Box - PP Ring  | 450 x 450   |
| 69242           | Metro Genus Access Box - PP Ring  | 600 x 450   |
| 69243           | Metro Genus Access Box - PP Ring  | 600 x 600   |
| 69244           | Metro Genus Access Box - PP Ring  | 675 x 675   |
| 69245           | Metro Genus Access Box - PP Ring  | 750 x 600   |
| 69246           | Metro Genus Access Box - PP Ring  | 750 x 675   |
| 69273           | Metro Genus Access Box - PP Ring  | 750 x 750   |
| 69264           | Metro Genus Access Box - PP Ring  | 900 x 450   |
| 69247           | Metro Genus Access Box - PP Ring  | 900 x 600   |
| 69266           | Metro Genus Access Box - PP Ring  | 900 x 900   |
| 69248           | Metro Genus Access Box - PP Ring  | 1000 x 1000 |
| 69249           | Metro Genus Access Box - PP Ring  | 1200 x 600  |
| 69250           | Metro Genus Access Box - PP Ring  | 1200 x 675  |
| 69267           | Metro Genus Access Box - PP Ring  | 1200 x 900  |
| 69251           | Metro Genus Access Box - PP Ring  | 1200 x 1200 |
| 69268           | Metro Genus Access Box - PP Ring  | 1300 x 600  |
| 69252           | Metro Genus Access Box - PP Ring  | 1300 x 850  |
| 69274           | Metro Genus Access Box - PP Ring  | 1500 x 750  |
| 69253           | Metro Genus Access Box - GRP Ring | 1000 x 1000 |
| 69254           | Metro Genus Access Box - GRP Ring | 1200 x 600  |
| 69255           | Metro Genus Access Box - GRP Ring | 1300 x 850  |
| 69270           | Metro Genus Access Box - GRP Ring | 1500 x 750  |
| 69256           | Metro Genus Access Box - GRP Ring | 1500 x 1500 |

















# Covers and Frames

Composite and Galvanised



# 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
- Used by many Local Authorities
- Stocked as standard

|                    | 444   |
|--------------------|-------|
| 0                  |       |
| tro Covers & Frame | S     |
| osite - Anti Slip  |       |
| Dimension (mm)     | Code  |
| 300x300            | 69128 |
| 300x450            | 69129 |
| 450x450            | 69127 |
| 450x600            | 69126 |
|                    | 69125 |

# Market sectors

- Building
- Construction
- Highways
- Water
- Rail
- Traffic Signal & Street Lighting
- Ministry of Defence
- Agriculture















# Land Drainage











Unperforated - Black



**Agri-Drain Land Drainage** 



# Kitemarked Land Drainage

# Perforated - Black

| i cilorateu - Black   |            |        |                |       |
|-----------------------|------------|--------|----------------|-------|
| External<br>Dia. (mm) | Length (m) | Colour | Pallet<br>Qty. | Code  |
| 60*                   | 50         | Black  | 8              | 68202 |
| 60*                   | 150        | Black  | 5              | 68204 |
| 80*                   | 25         | Black  | 9              | 68301 |
| 80*                   | 50         | Black  | 7              | 68302 |
| 80*                   | 100        | Black  | 4              | 68303 |
| 100*                  | 25         | Black  | 7              | 68401 |
| 100*                  | 50         | Black  | 6              | 68402 |
| 100*                  | 100        | Black  | 4              | 68403 |

Black

Manufactured in 100% recycled HDPE Kitemarked to BS 4962

50

## **Unperforated - Black**

160\*

| External<br>Dia. (mm) | Length (m) | Colour | Pallet<br>Qty. | Code  |
|-----------------------|------------|--------|----------------|-------|
| 60*                   | 150        | Black  | 5              | 68214 |
| 80*                   | 100        | Black  | 4              | 68313 |
| 100*                  | 100        | Black  | 4              | 68413 |
| 160*                  | 50         | Black  | 4              | 68512 |

Manufactured in HDPE. \*Marked Naylor BS 4962

#### Manufactured in 100% recycled HDPE Manufactured in accordance with BS 49626. †Scotland only.

#### Pallet Qty. External Dia. (mm) Length (m) Colour 60 Black 8 68042 68043 Black 80 50 Black 68053 80 100 Black 68049 100 25 68050 Black 6 100 50 Black 68044 100 100 Black 68045 160 50 Black 68009 160† 35 Black

# **Land Drainage Universal Fittings**

| Gariotiono |                          |           |       |  |  |
|------------|--------------------------|-----------|-------|--|--|
|            | Description              | Pack Qty. | Code  |  |  |
|            | 60/80/100 Multi Junction | 50        | 68064 |  |  |
|            | 60/160 Multi Junction    | 10        | 68061 |  |  |

# Agri-Drain Land Drainage



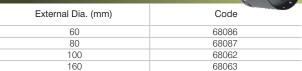
68502

#### Perforated - Black

| External<br>Dia. (mm) | Length (m) | Colour | Pallet<br>Qty. | Code  |
|-----------------------|------------|--------|----------------|-------|
| 60                    | 50         | Black  | 8              | 68032 |
| 60                    | 150        | Black  | 5              | 68033 |
| 80                    | 25         | Black  | 9              | 68034 |
| 80                    | 50         | Black  | 7              | 68035 |
| 80                    | 100        | Black  | 4              | 68036 |
| 100                   | 25         | Black  | 7              | 68037 |
| 100                   | 50         | Black  | 6              | 68038 |
| 100                   | 100        | Black  | 4              | 68039 |
| 160                   | 50         | Black  | 4              | 68007 |
| 160†                  | 35         | Black  | -              | 68094 |

Manufactured in 100% recycled HDPE Manufactured in accordance with BS 4962. †Scotland only.

# Land Drainage Connectors



# Land Drainage End Caps



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

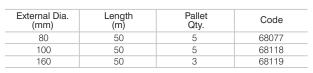
# Wrapped Land Drainage

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

## **Land Drainage**

## **Agri-Wrapped Land Drainage**

Available in 80 and 100mm diameters in 50m lengths



# Crop Conditioning





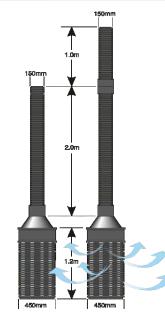
# NaylorCOOL™

NaylorCOOL<sup>™</sup> is a modern, lightweight, robust and cost effective way of conditioning your on-floor stored crops. Manufactured from high density polyethylene, this high strength twinwall system has slots that allow airflow in line with DEFRA guidelines, eliminating moulds and bugs from your crops.

Reversible fans easily fitted to the top of the extension pipes.

## Sold in packs of 4.

| Description                         | Code  |
|-------------------------------------|-------|
| Crop Conditioning Unit              | 74108 |
| 150mm x 1m Crop Unit Extension Pipe | 74105 |



# Optional Extras

Optional Extras
Base Plate/Foot:
600x600mm for improved stability.

Crop Sock: Geotextile sock for perforated base unit to stop ingress of crop, ideal for use with oilseed rape.

For more info on the NaylorCOOL system, please contact our sales office on 01226 790591

# Naylor Environmental

Sustainable Drainage Systems (SuDS)



Hard and soft SuDS solutions for the construction and building industry

Naylor's Environmental division addresses the growing need for environmental products and SuDS solutions that have a sustainable element to them, using recycled materials where possible and all offering an improvement to the surrounding built environment. These include products for both soft & hard SuDS:





**HGVGrid** (75mm) Heavy Duty System

# Naylor Grass & Gravel Reinforcement Grids

Naylor's range of grids cover all aspects of creating Soft SuDS solutions to allow vehicular use of grass & gravel areas whilst still achieving a porous surface allowing natural drainage into the ground below in accordance with government guidelines.

Ideal for use in Park & Ride schemes, general & overflow parking areas and even HGV use dependant on the system chosen.

- AdPave 40mm grid for use up to heavy duty subject to restricted depth
- HGVGrid (75mm) for HGV loadings such as truck stops & turning areas



## **AdPave**

(40mm) General Duty system

Naylor Aquavoid-Metro - Surface water attenuation and infiltration crates



The Naylor Aquavoid-Metro® storage crates provides an economic, versatile storage system for most uses. The standard Aquavoid-Metro® (400kN/m2)

Control Units to provide maintenance and inspection and can also be used to create silt routes through the system. The Aquavoid-Metro<sup>®</sup> is supported by Vortex Flow Controls, geotextiles and geomembranes.

- Stormwater Storage Crates to cater for both infiltration and attenuation:
- Vortex Flow Controls To control the flow of stormwater





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, require little to no maintenance and are high strength and long lasting. Suitable for land drainage, water treatment, ground stabilisation, retention/detention, or permeable paving, Enviroflow™ has a solution for you.

Enviroflow, a non-clogging fully recycled high strength land drainage and filtration solution that is easy to install and handle and requires little to no maintenance.

# Naylor TechTurf™ Advanced grass reinforcement

Naylor's TechTurf™ is ideal for those needing a hardwearing grassed surfacing for their Soft SuDS solution without the visual aspect of a plastic grid. The TechTurf™ has been

and Filtration units



extensively tested and proven to be ideal for use in sports and amenity areas; access routes; airports and equestrian environments.

Different depths are available to suit the use (pedestrian vehicular or HGV use) and the system includes a reinforced rootzone and turf to complete the look.

- TechTurf<sup>™</sup>, a reinforced root-zone grass system that creates a free draining natural grass surface with no visible grid structure, capable of taking vehicular traffic.
- Naylor's range of easily installed grass reinforcement rolls offer a convenient alternative to grid and rootzone reinforcement. The rolls of plastic mesh are simply rolled out and pinned into position and the grass allowed to grow through to create a loadbearing surface.



The Naylor Smart Sponge® 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 Smart Sponge<sup>®</sup> is NOT a spill kit, Smart Sponge<sup>®</sup> applications are able to remove up to 95% of all oil contaminants present in stormwater run-off. The Smart Sponge<sup>®</sup> technology remains buoyant in calm or agitated water, allowing it to remain in place until fully saturated and resulting in no wasted product.
- Smart Sponge<sup>®</sup>, an innovative way of addressing hydrocarbon pollution. Also available as Plus to treat pathogens or as HM for Heavy Metals.

## **Geotextiles & Membranes**

Our range of Geotextiles & membranes compliment our Aquavoid & Grid solutions.

GeoGrids of various grades for ground reinforcement and stabilisation.

Grass Protection, for overlaying grassed areas to allow vehicular loads.

Naylorweb, for embankment stabilisation and tree root protection.

# Environmenta

# Naylor Environmental for Hard and Soft SuDs Solutions



# Naylor Grass & Gravel Reinforcement Grids



Size: 40mm (500 x 500 x 40mm)
Use: Heavy Duty
Strength 3.600kN/m2
Applications: Park & Ride, general
car parks, SuDs schemes & gravel
areas.
4 Grids/m²

| Product No. | Description           | Pallet |
|-------------|-----------------------|--------|
| 65101       | AdPave 40mm deep grid | 120    |



Size: 75mm (600 x 600 x 75mm) Use: HGV Duty Strength: 10,000 kN/m² Applications: Emergency access routes, turning areas, laybys and Truck Stops. 2.77 Grids/m²

| Product No. | Description            | Pallet |
|-------------|------------------------|--------|
| 65132       | HGVGrid 75mm deep grid | 180    |



White Demarcation Blocks 4 No to form a "Tee", 12 per parking bay 130 to form a disabled logo

| Product No. | Description                 | Pallet |
|-------------|-----------------------------|--------|
| 65120       | AdPave White Markers - 40mm | 100    |

# Naylor TechTurf™ Advanced grass reinforcement



Size: 100mm depth c/w Classic Turf Use: Heavy pedestrian Suitable for: Walkways, parks and heavily used pedestrian routes

| Product No. | Description                        |
|-------------|------------------------------------|
| 65400       | TechTurf™ 100mm - Heavy pedestrian |



Size: 150mm depth c/w Classic Turf Use: Vehicular Suitable for: Car parks, sports and amenity surfaces, equestrian landing areas.

| Product No. | Description                     |
|-------------|---------------------------------|
| 65401       | TechTurf™ 150mm - Vehicular use |



Size: 200mm depth c/w Classic Turf Use: Heavy Vehicular Suitable for: Emergency access routes, airport taxiways and emergency run off areas

| Product No. | Description                        |
|-------------|------------------------------------|
| 65402       | TechTurf™ 200mm - Emergency access |

| Naylo     | or grass reinfor                 | cement rolls                               |
|-----------|----------------------------------|--|
| Prod. No. | Description                      | Suitability                                |
| 65550     | Turfguard 450g<br>(2m x 30m)     | Lawn protection,<br>light pedestrian       |
| 65551     | Turfguard 650g<br>(2m x 30m)     | Lawn protection, regular pedestrian        |
| 65554     | Grassroute 1000g<br>(2m x 20m)   | Overflow car parks, temporary access       |
| 65555     | Grassroute 1400g<br>(2m x 20m)   | Light commercial, caravans and 4 x 4s      |
| 65556     | Grassroute 1800g<br>(2m x 20m)   | Occasional HGV's & fire access routes      |
| 65558     | Grasstrack HD<br>(1.9m x 20m)    | Construction plant, car park & wheelchairs |
| 65560     | Trackguard Panels (2.05m x 1.2m) | Re-usable grass protection for HGVs        |



# Naylor Enviroflow™ Drainage and Filtration units



Size: 4mm (1000 x 220 x 48mm) Use: Land & bunker drainage Suitable for: Golf courses, sports arenas

| Product No. | Description           | Pallet |
|-------------|-----------------------|--------|
| 65300       | Enviroflow Plank 4mm  | 152    |
| 65302       | Enviroflow Filter box | 1      |

#### **Enviroflow**™

Filter box



# Naylor Aquavoid-Metro <sup>™</sup> - Surface water attenuation and infiltration crates



| 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 m <sup>3</sup>                   |
| Capacity of crates                 | 0.2063 m³ (void ratio 95.5%)           |
| Volume of bases                    | 0.0144 m³                              |
| Capacity of bases                  | 0.0138 m³ (void ratio 95.5 %)          |
| Weights                            | Crate 9.0 kg, Base 2.0 kg              |
| Short Term<br>Compressive Strength | 400 kN/m² Vertical<br>85 kN/m² Lateral |
| Maximum Cover                      | 2.5m                                   |
| Minimum Cover                      | 0.4m landscape, 0.6m Cars, 0.8m HGV    |

| Product No. | Description | Qty |
|-------------|-------------|-----|
| 65230       | Crates      | 1   |
| 65231       | Bases       | 1   |
| 65233       | Clips       | 100 |

# **Accessories**

# Geotextiles, Geomembranes, Flange Adapters and Top Hats

| Product No. | Description             |
|-------------|-------------------------|
| 65510       | GT1900 non-woven 180g   |
| 65514       | GT1200 non-woven 100g   |
| 65520       | 1.0mm HDPE geomembrane  |
| 65522       | 0.75mm HDPE geomembrane |
| 65527       | 150mm Flange Adapter    |
| 65528       | 225mm Flange Adapter    |
| 65529       | 300mm Flange Adapter    |

# Naylor Vortex Flow Controls Surface water applications



To control the flow by diverting excess water into the Naylor Aquavoid attenuation system.
Required:
Outfow in I/s and head height.

| Product No. | Description         | Pallet |
|-------------|---------------------|--------|
| 65220       | Vortex Flow Control | 1      |

# Naylor Smart Sponge®

For more specialist applications we also offer: Smart Sponge<sup>®</sup> Plus - Pathogen removal Smart Sponge<sup>®</sup> HM - Heavy Metal polishing We have created a range of products to take advantage of Smart Sponge





| Product No. | Description          | Box |
|-------------|----------------------|-----|
| 66500       | Smart Gully Adapters | 12  |
| 66100       | Ultra Urban Filters  | 1   |
| 66300       | Passive Skimmers     | 40  |
| 66200       | Line Skimmers        | 4   |
| 66402       | Smart Filters        | 1   |
| 66400       | Smart Brakes         | 1   |
| 66404       | Smart Stops          | 1   |
| 66600       | Smart Paks           | 4   |

# 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:-

Part Loads: £50.00 / hour and part thereof Full Loads: £100.00 / hour and part thereof

Please see our website for a copy of our Terms & Conditions





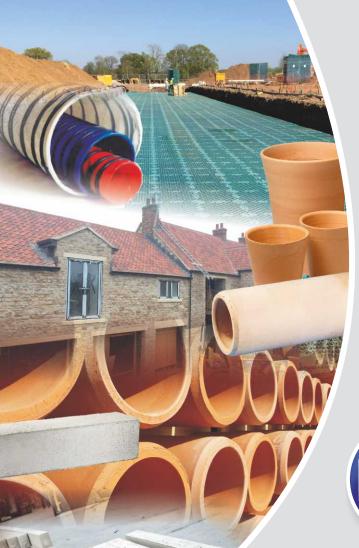














Vitrified clay drainage systems for open cut and trenchless installation.

Telephone: 01226 790591 Email: sales@naylor.co.uk Web: www.naylor.co.uk



#### **Environmental**

Hard and soft SuDs solutions for the construction and building industry. Telephone: 01226 794135

Email: environmental@naylor.co.uk

Web: www.naylor.co.uk



## **Ventilation Ducting**

For exhaust or reversible systems.

Telephone: 01709 872574

Email: specialistplastics@naylor.co.uk

Web: www.naylor.co.uk



#### **Concrete Lintels**

Prestressed concrete lintels and precast concrete

products.

Telephone: 01226 320810 Email: lintels@naylor.co.uk Web: www.naylor.co.uk



Precast concrete structures for wall units, panels and holding tanks.

Telephone: 01226 320810

Email: whitesconcrete@naylor.co.uk

Web: www.naylor.co.uk



## **Yorkshire Flowerpots**

Frostproof British made flowerpots. Telephone: 01226 794059

Email: info@naylor.co.uk

Web: www.yorkshireflowerpots.co.uk



**NAYLOR DRAINAGE** LIMITED

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OFF SEA ROAD, METHIL, LEVEN FIFE, KY8 3DE SCOTLAND

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TELEPHONE: 01592 717900 FACSIMILE: 01592 717906 EMAIL: SALES@NAYLOR.CO.UK WEB: WWW.NAYLOR.CO.UK





HDPE premium twin wall carrier/filter drainage system.



#### N-Drain™

HDPE agricultural twin wall carrier/filter drainage system.



## **Fabrications**

Bespoke comprehensive fabrication service.



#### **Land Drainage**

Singlewall corrugated land drainage pipe.



## MetroDuct™

HDPE twin wall cable ducting.



## **MetroBox**

Range of access chambers.



## **Environmental**

Hard and soft SuDs solutions.

Naylor Industries plc more than 100 years of production and supply to the **Construction Industry** 

- Vitrified clay pipe systems for trench and trenchless installation
- Thermachem Chemical Drainage and Industrial Ceramics
- Band-Seal couplings for the repair of and connections into existing pipelines
- Plastic Land Drainage, Twinwall Ducting Systems and Access Boxes
- Yorkshire Flowerpots, a range of frostproof plant pots
- Concrete Pre-stressed lintels and pre-cast panels, retaing walls and tanks
- Specialist Plastics Bespoke extrusion of tubes and profiles for a variety of applications and Industries



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