

ASSET
International



EFFAST



“ The home of all plastic products needed in the world of civil engineering ”

Rouden Pipetek Ltd is the home of all plastic products needed in the world of civil engineering, ground work and earth based projects.

We are specialist suppliers to professional civil engineering companies, groundwork contractors utilities, agriculture and beyond.

Over the years we have been supplying total solutions in water management systems and are the UK's number one specialist distributor in our market.

We are proud of our long history of supplying high quality products, offering a fantastic service at the best price.

Our knowledge is second to none and we are able to understand, advise and meet each of our clients' specific needs for their particular projects.

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DOMESTIC FOUL DRAINAGE SYSTEMS



Plain Ended Pipe		Pack Quantity
260UFC430	110mm 3m	57
260UFC460	110mm 6m	57
260UFC660	160mm 6m	46



Single Socket Pipe		Pack Quantity
260UFC462	110mm 6m	57
260UFC662	160mm 6m	46



Couplers		Bag Quantity
960UR401	110mm Double Socket Coupler (Remove Centre Stop for use as slip coupler)	10
960UG601	160mm Double Socket Coupler (Remove Centre Stop for use as slip coupler)	10



Reducer		Bag Quantity
960UG621	160mm Spigot x 110mm Socket	10



87.5° Single Socket Bend		Bag Quantity
960UR412	110mm Socket/Spigot Short Radius Swept Bend	10
960UR612	160mm Socket/Spigot Short Radius Swept Bend	5



45° Single Socket Bend		Bag Quantity
960UR404	110mm Socket/Spigot Short Radius Swept Bend	10
960UR604	160mm Socket/Spigot Short Radius Swept Bend	10



30° Single Socket Bend		Bag Quantity
960UR468	110mm Socket/Spigot Short Radius Swept Bend	10
960UR668	160mm Socket/Spigot Short Radius Swept Bend	10



15° Single Socket Bend		Bag Quantity
960UR410	110mm Socket/Spigot Short Radius Swept Bend	10
960UR610	160mm Socket/Spigot Short Radius Swept Bend	10



87.5° Double Socket Bend		Bag Quantity
960UR411	110mm Socket/Socket Short Radius Swept Bend	10
960UR611	160mm Socket/Socket Short Radius Swept Bend	5



45° Double Socket Bend		Bag Quantity
960UR403	110mm Socket/Socket Short Radius Swept Bend	10
960UR603	160mm Socket/Socket Short Radius Swept Bend	10

30° Double Socket Bend		Bag Quantity
960UR467	110mm Socket/Socket Short Radius Swept Bend	10
960UR667	160mm Socket/Socket Short Radius Swept Bend	10



15° Double Socket Bend		Bag Quantity
960UR409	110mm Socket/Socket Short Radius Swept Bend	10
960UR609	160mm Socket/Socket Short Radius Swept Bend	10



87.5° Rest Bend (Long Radius)		Bag Quantity
960UG483	110mm Double Socket (for foot of Soil Stack)	10



45° Rodding Eye Terminal		Bag Quantity
960UG422S	110mm Sealed Oval Top/Spigot Tail	20
960UG622S	160mm Sealed Oval Top/Spigot Tail	8



Equal Junctions		Bag Quantity
960UR424	110mm 87.5° Double Socket/Spigot	10
960UR406	110mm 45° Double Socket/Spigot	10
960UG624	160mm 87.5° Double Socket/Spigot	5
960UR606	160mm 45° Double Socket/Spigot	5
960UR423	110mm 87.5° Triple Socket	10
960UR405	110mm 45° Triple Socket	10
960UG623	160mm 87.5° Triple Socket	5
960UR605	160mm 45° Triple Socket	5



Unequal Junctions		Bag Quantity
960UG644	160mm 87.5° Double Socket (160 x 160 x 110mm)	5
960UR636	160mm 45° Double Socket (160 x 160 x 110mm)	5
960UG643	160mm 87.5° Triple Socket (160 x 160 x 110mm)	5
960UR635	160mm 45° Triple Socket (160 x 160 x 110mm)	5



Bottle Gullies		Bag Quantity
960UG425	110mm Plain (Rodddable) inc. round PP grid	5
960UG427	110mm Back Inlet (Rodddable) inc. round PP grid	5



Universal Gully Trap		Bag Quantity
960UG413	110mm Socket/Spigot 45°	10





Hopper & Ancillaries		Bag Quantity
960UG414	110mm Solvent Socket inc. Square PP grid	30
960UG415	Spare Square PP grid (Black) 150mm x 150mm	100



110mm Shallow Access Chamber		Bag Quantity
960UG437	320mm Chamber Base with 2 x side branch inlets	48
960UG438	320mm Side Riser (135mm)	81
960UG502	320mm Square PVC Cover and Frame [C]	5
260URP720	Rec Pavior Cover PP Frame and Tray 390 x 390	1



110mm & 160mm Inspection Chambers		Bag Quantity
960UG440	110mm Chamber Base with 4 side branch inlets	20
960UG431	460mm Side Riser (215mm)	20/40
960UG488	460mm Riser Sealing Ring	50
960UG670	160mm Chamber Base with 4 side branch inlets	24
260UG444	Cast Iron Cover & PP Frame [A]	1
960UG512	Square PP Cover & Frame [A+]	1
960UG511	Round Solid Top PP Cover & Frame [A+]	1
280KD3240S	Square Ductile Iron Cover & Frame (B125)	1
260UDC750	Round Ductile Iron Cover & Frame (B125)	1
260URP760	Rec Pavior Cover PP Frame and Galv Tray 540 x 540	1

Underground Ancillaries		Box Quantity
960SG500	Joint Lubricant 500ml Bottle	12
960LUBX1	Joint Lubricant 1kg Tub	12
960LUBX2.5	Joint Lubricant 2.5kg Tub	4



Flexible Couplings		Box Quantity
360NAC1212	Universal Adaptor Coupling 121-136/110-121	20
360NAC1804	Universal Adaptor Coupling 180-200/160-180	10
360NAC1704	Drainage Adaptor Coupling 170-192/110-122	10
360NPC115	Drain Coupling 100-115	20
360NSC200	Standard Coupling 175-200	10



TWINWALL DRAINAGE









Twinwall Drainage is made from HDPE plastic and is manufactured by twin extrusion process in which the two layers are simultaneously extruded one inside the other and heat welded together in one continuous step.

The outer wall is corrugated providing excellent structural strength which reduces the possibility of on-site damage. The inner wall has a smooth seamless finish to assist hydraulic flow. The design unlike traditional single-wall pipe prevents silt accumulation.










Benefits:

- Lightweight and available in long lengths (6m) making it quick and easy to install.
- Ease of installation and the elimination of wastage reduce labour and plant costs.
- Fewer joints and longer lengths assist flow.
- Resistant to most naturally occurring chemicals and is therefore suitable for use on the majority of soil conditions.
- Can be installed in depths from 0.5 to 10m
- Available in sizes 100-3000mm

TWINWALL FITTINGS

Nominal size 150mm	Product Description	Weight (kg)
     	150mm 15° Double Socket Bend	1.4
	150mm 30° Double Socket Bend	1.5
	150mm 45° Double Socket Bend	1.8
	150mm 90° Double Socket Bend	2.0
	150mm x 150mm x 150mm 90° Triple Socket Branch	2.5
	150mm x 150mm x 150mm 45° Triple Socket Branch	2.8

Nominal size 225mm	Product Description	Weight (kg)
       	225mm 15° Double Socket Bend	3.5
	225mm 30° Double Socket Bend	4.0
	225mm 45° Double Socket Bend	4.5
	225mm 90° Double Socket Bend	5.0
	225mm x 150mm x 45° Triple Socket Branch	6.2
	225mm x 225mm x 45° Triple Socket Branch	7.0
	225mm x 150mm x 90° Triple Socket Branch	6.2
	225mm x 225mm x 90° Triple Socket Branch	6.5

Nominal size 300mm	Product Description	Weight (kg)
         	300mm 15° Double Socket Bend	6.0
	300mm 30° Double Socket Bend	6.5
	300mm 45° Double Socket Bend	7.0
	300mm 90° Double Socket Bend	8.3
	300mm x 150mm x 45° Triple Socket Branch	9.5
	300mm x 225mm x 45° Triple Socket Branch	10.5
	300mm x 300mm x 45° Triple Socket Branch	13.0
	300mm x 150mm x 90° Triple Socket Branch	8.0
	300mm x 225mm x 90° Triple Socket Branch	10.0
	300mm x 300mm x 90° Triple Socket Branch	11.0

RIGISTORM - XL



Ridgistorm-XL is our **most advanced HDPE**

large-diameter modular plastic pipe solution.

Suitable for surface water, sewerage and combined sewer applications, it is also a crucial component in SUDS and storm water management solutions.

A range of pipe diameters are available, with sizes, **from 750mm up to 3000mm** on offer

and the system also comes with multiple jointing options that give you extra flexibility in selecting the product for your specific project needs.

It can also be cut and welded into complex shapes, so an engineered modularised system can be pre-fabricated off-site.

It's high performance polymers and strong joints combine to make it a pipe that will last for at least a lifetime.

01403 275276

www.rouden.co.uk

TWIN WALL DUCTING



Twin wall ducting offers the advantage of a lightweight flexible product combined with high strength and durability. Produced to the standard BS EN500.86.2.4 and suits NJUG recommendations.

Manufactured in polythene, the pipe is supplied in either 6 metre lengths or 50 metre coils. The external corrugated profile gives the product added strength and the internal bore is smooth to prevent cables from snagging.



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Perforated Gas Coiled Ducting
Kitemarked to BS 4962
Unprinted
Yellow

ID/OD (mm)	Length (m)
60	50
60	150
80	25
80	50
80	100
100	25
100	50
100	100



Twinwall Utility Coiled Ducting
Printed - CCTV
Green

ID/OD (mm)	Length (m)
50/63	50
94/110	50



Twinwall Bends

Black

ID/OD (mm)
94/110
100/120
125/145
137/160
150/178



Marker Tape

365m Rolls

Printed as Service

Service	Colour
Electric Cable	Yellow
Water Main	Blue
Gas Main	Yellow
Telephone Cable	Green
Foul Sewer	Red
Street Lighting	Yellow



Couplings

Black as standard

OD (mm)	Code	OD (mm)
40	29161	120
50	29167	145
63	29104	160
90	29103	178
110	29225	225
		300



Sealing Rings

For a sealed system, 2 sealing required per 6m length

Black as standard

DIA (mm)	Code	DIA (mm)
63	29114	145
110	29107	160
120	29115	178



Duct Spacer

Sizes relate to outside diameters

Description	Size (mm)
4 Way	110*
4 Way	120*



Coilable Electric Cable PE Duct

HDPE Smooth internal and external.
25, 50 or 100m Coils.
Printed - Electric
Black

ID/OD (mm)	Description	Wall (mm)	Length (m)
32/37	Elec Cable Duct	2.5	25
32/37	Elec Cable Duct	2.5	50
32/37	Elec Cable Duct	2.5	100
38/44	Elec Cable Duct	3	25
38/44	Elec Cable Duct	3	50
38/44	Elec Cable Duct	3	100
50/60	Elec Cable Duct	5	25
50/60	Elec Cable Duct	5	50



Draw Cord

Nominal 5Kn Breaking Strength.
6mm Cord.

Description
220 Metre Coil
500 Metre Drum



Heavy Duty High Density Polyethylene Twinwall Ducting
Printed - Electric Cable Duct
Black

ID/OD (mm)	Length (m)	Pack Qty
94/110	6	100
100/120	6	85
125/145	6	72
137/160	6	33
150/178	6	33
100/120	3	85
125/145	3	72
150/178	3	33
100/120	2	85
125/145	2	72
150/178	2	33



C/W Dowels and ties as appropriate

ID/OD (mm)	Length (m)	Pack Qty
94/110	1	100
100/120	1	85
125/145	1	72
150/178	1	33
94/110	3	100
100/120	3	85
125/145	3	72
150/178	3	33



High Density Polyethylene Twinwall Ducting
Unprinted
Black

ID/OD (mm)	Length (m)	Pack Qty
94/110	6	100
100/120	6	85
125/145	6	72
137/160	6	33
150/178	6	33



Twinwall Ducting
Printed - Street Lighting,
Traffic Signal or Unprinted
Orange

ID/OD (mm)	Length (m)	Pack Qty
50/63	6	158
94/110	6	100
100/120	6	85
137/160	6	33
150/178	6	33



Twinwall Coiled Ducting
Printed - Street Lighting,
Traffic Signal or Unprinted
Orange

ID/OD (mm)	Length (m)
50/63	50
94/110	50
137/160	50



Twinwall Utility Ducting
Gas Pipes
Unprinted
Yellow

ID/OD (mm)	Length (m)	Pack Qty
94/110	6	100
100/120*	6	85
137/160	6	33
150/178	6	33
225/266+	6	14
300/353+	6	9



HDPE/LDPE Twinwall Coiled Ducting
Printed - Electric Cable Duct
Black

ID/OD (mm)	Length (m)	Colour
32/40	50	Black
40/50	50	Black
50/63	50	Black
75/90	50	Black
94/110	50	Black
137/160	25	Black
137/160	50	Black



Twinwall Ducting
Printed - Motorway Communications
Purple

ID/OD (mm)	Length (m)	Pack Qty
94/110	6	100
100/120	6	85
137/160	6	33
150/178	6	33



Twinwall Coiled Ducting
Printed - Motorway Communications
Purple

ID/OD (mm)	Length (m)	Colour
50/63	50	Purple
94/110	50	Purple
137/160	50	Purple



Twinwall Utility Ducting
Water Pipes
Unprinted
Blue

ID/OD (mm)	Length (m)	Pack Qty
94/110	6	100
100/120*	6	85
137/160	6	33
150/178	6	33
225/266+	6	14
300/353+	6	9



Twinwall Utility Ducting
Printed - CCTV
Green

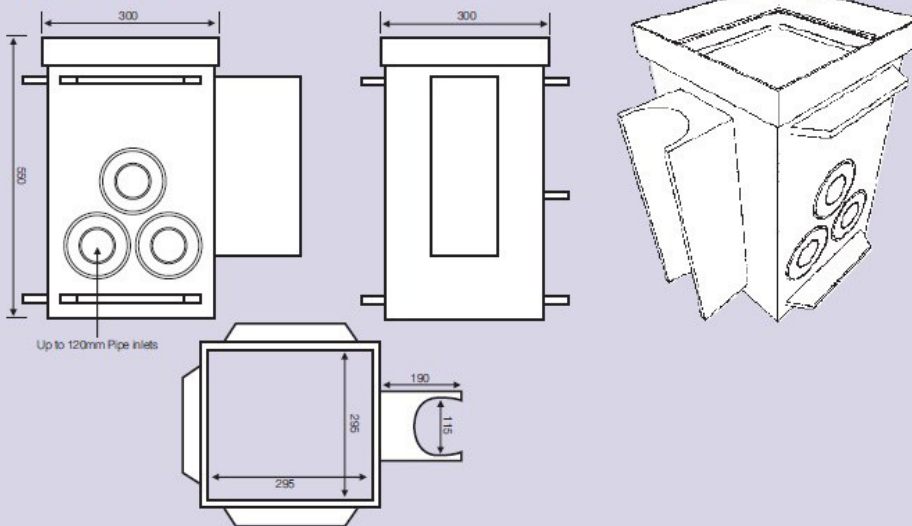
ID/OD (mm)	Length (m)	Pack Qty
94/110	6	100
100/120*	6	85
137/160	6	33
150/178	6	33



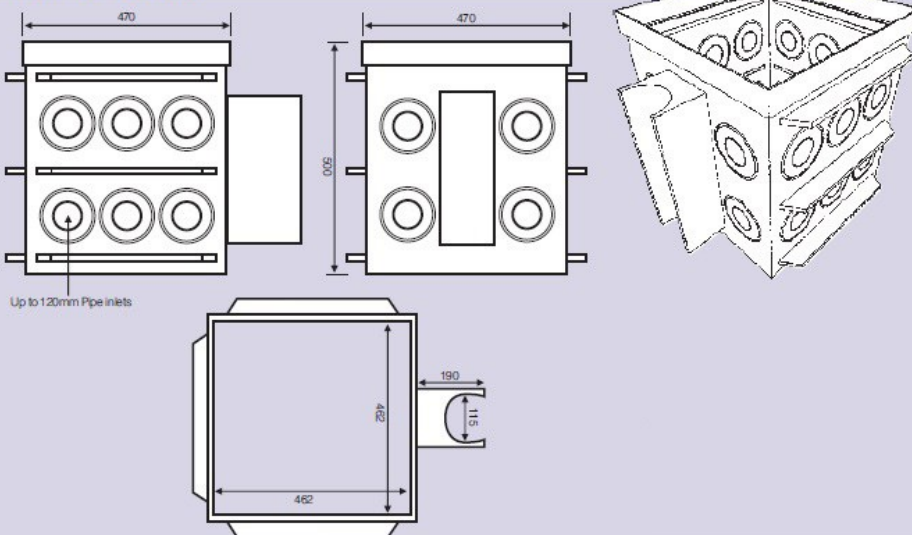
ACCESS CHAMBERS POLE BOXES COVERS AND FRAMES

Dimension	Item	Code	Pack Size	Colour
300 x 300 x 335	PAC6	69121	42	Black
300 x 450 x 335	PAC3	69124	35	Black
450 x 450 x 335	PAC1	69012	28	Black
450 x 600 x 335	PAC5	69123	24	Black
600 x 600 x 335	PAC12	69122	13	Black
450 x 900 x 250	PAC4	69036	18	Black

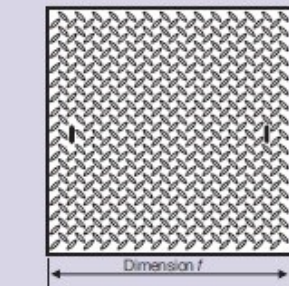
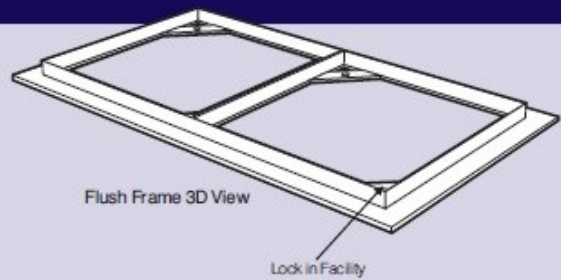
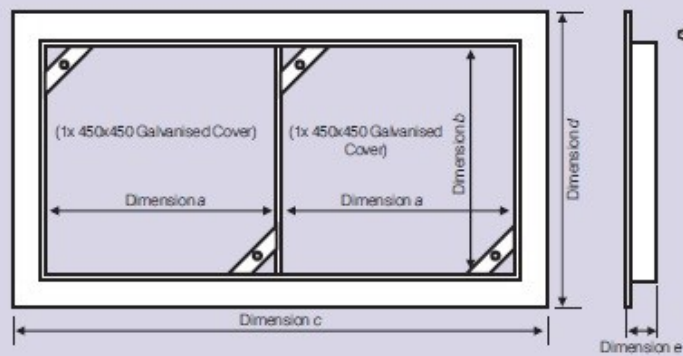
Pole Box - Square



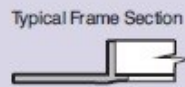
Pole Box - Square



Galvanised Cover and Flush Frame - Rectangle



Galvanised Cover - Square



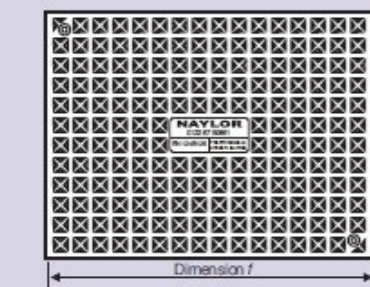
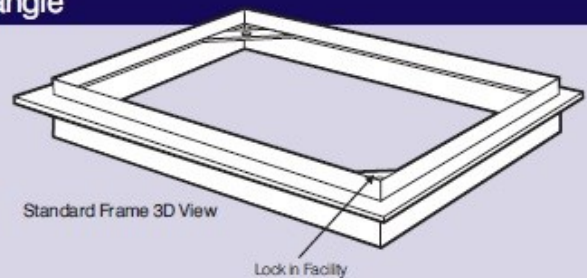
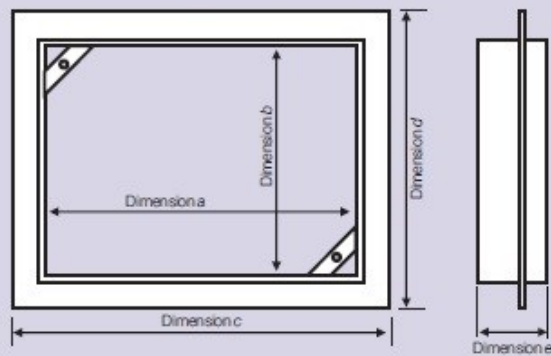
Nominal dimensions (mm) 900 x 450

Code	69069
dimension a	450
dimension b	450
dimension c	1020
dimension d	570
dimension e	40
dimension f	468
dimension g	30
dimension h	470

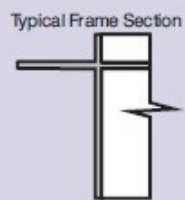
measurements in mm



Composite Cover and Standard Frame - Rectangle



Composite Cover - Rectangle



Nominal dimensions (mm) 300 x 450

Nominal dimensions (mm) 450 x 600

Code	69129	69126
dimension a	450	600
dimension b	300	450
dimension c	550	720
dimension d	400	570
dimension e	80	80
dimension f	468	615
dimension g	30	30
dimension h	317	465

measurements in mm

ATTENUATION

STORMWATER MANAGEMENT SYSTEMS

The tried and tested Polystorm range is designed to provide attenuation or soakaway at a variety of depths and to accommodate a wide range of traffic loadings, from pedestrianised areas to large HGV parks.

When combined with Permavoid, our latest shallow geocellular system, it creates an even wider choice of options for the management of surface water.



Polystorm Lite



Polystorm



Polystorm-R



Polystorm Xtra

Polystorm Lite

Polystorm Lite has been specifically designed for non-trafficked applications. With a 20 tonne per square metre compressive strength it will, however, take general maintenance vehicles such as grass cutters. Polystorm Lite is typically used in landscaped areas, pedestrianised areas or public open spaces such as playgrounds.

Polystorm

The standard Polystorm cell has a 40 tonnes per square metre compressive strength and is ideally suited for attenuation or soakaway under trafficked and loaded areas such as housing developments, car parks and commercial developments.

Polystorm-R

For trafficked and loaded applications with a compressive strength of 61 tonnes per square metre and the added benefit of a higher recycled material content.

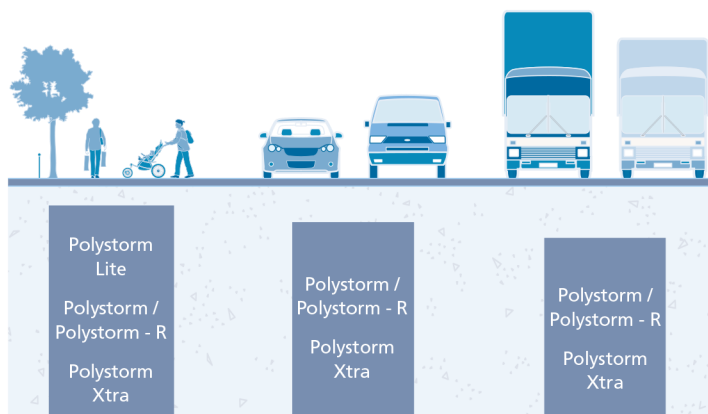
Polystorm Xtra

Designed for use in deeper burial depths and heavily trafficked applications, Polystorm Xtra has a compressive strength of 80 tonnes per square metre, making it suitable for use in very heavily trafficked areas like lorry parks and industrial access roads.

Non-Trafficked

Trafficked

Heavy Trafficked



Polystorm Loads vs Depth

The illustration on the left shows how typical loading and depth combinations can be accommodated by different Polystorm systems.

Note: For illustrative purposes only.

METER CABINETS & DUCTING

Description
Mitras Recessed Electricity Meter Box
Mitras Mk3 Surface Mounted Electricity Meter Box
1.7m x 38mm Electric Hockey Stick – White
1.7m x 38mm Electric Hockey Stick - Black
32mm x 100m Coil HDPE Electric Duct (Single Phase)
50mm x 50m Coil HDPE Electric Duct (Three Phase)
32mm Black Electric Duct Coupling
50mm Black Electric Duct Coupling
125mm x 6m Length Twinwall Electric Duct (Road Crossing)

*Other meter boxes available upon request



STAKKAbox™ Quad for BT Openreach

The modern alternative to brick built chambers on new sites

STAKKAbox™ Quad (formerly Quadbox) is a range of modular and structural preformed access chambers, supplied by CUBIS Industries. Quad is the only modular access chamber approved for use on BT Openreach networks and is available in the 102, 104 and 106 sizes,

The system provides contractors with a means of constructing access chambers quickly and inexpensively, whilst offering improved build quality, reduced defects and enhanced site safety performance.

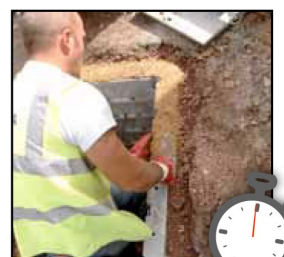
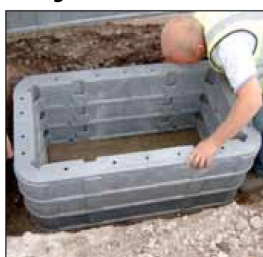
Supplied in 150mm deep twinwall rings, STAKKAbox™ chambers are built by stacking sections to required depth. Each section weighs under 25kg, making it suitable for a single person to lift under manual handling guidelines.

The Quad system is moulded in HDPE and possesses excellent strength to weight properties. Each section is ribbed internally to improve loading performance.

Using the Quad system, complete chambers can be constructed from excavation to reinstatement in **less than one hour**.



Key benefits



Simple Installation

Lightweight 150mm deep sections are stacked on top of a concrete or Type 1 base to build the chamber to the desired depth. There is no requirement for lifting plant or skilled box builders.

Improved build quality

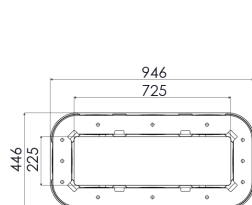
No condemnation of boxes
Brick built boxes regularly produce variable build quality standards resulting in frequent rejection by Openreach inspectors. The use of STAKKAbox™ Quad eliminates this variability and offers a consistent installation every time.

Easy to overbuild

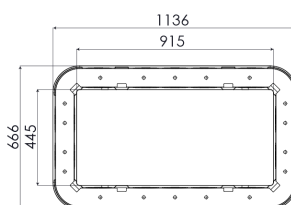
Quad can be used to insert chambers over an existing network or for replacing chambers that have been damaged or need to be enlarged. Where required, rings can be cut to bridge over or around existing telecoms networks or other obstacles.

Fast Reinstatement

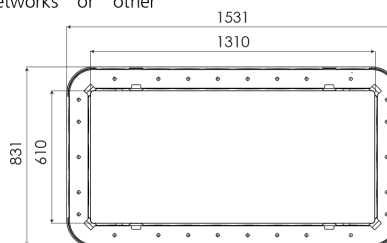
Complete chambers can be constructed from excavation to reinstatement in less than one hour. This fast-track construction method saves time and money for the installer and reduces public liability risk.



JMF 102 - 725mm x 225mm

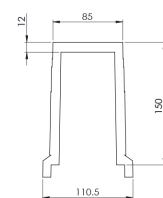


JMF 104 - 915mm x 445mm



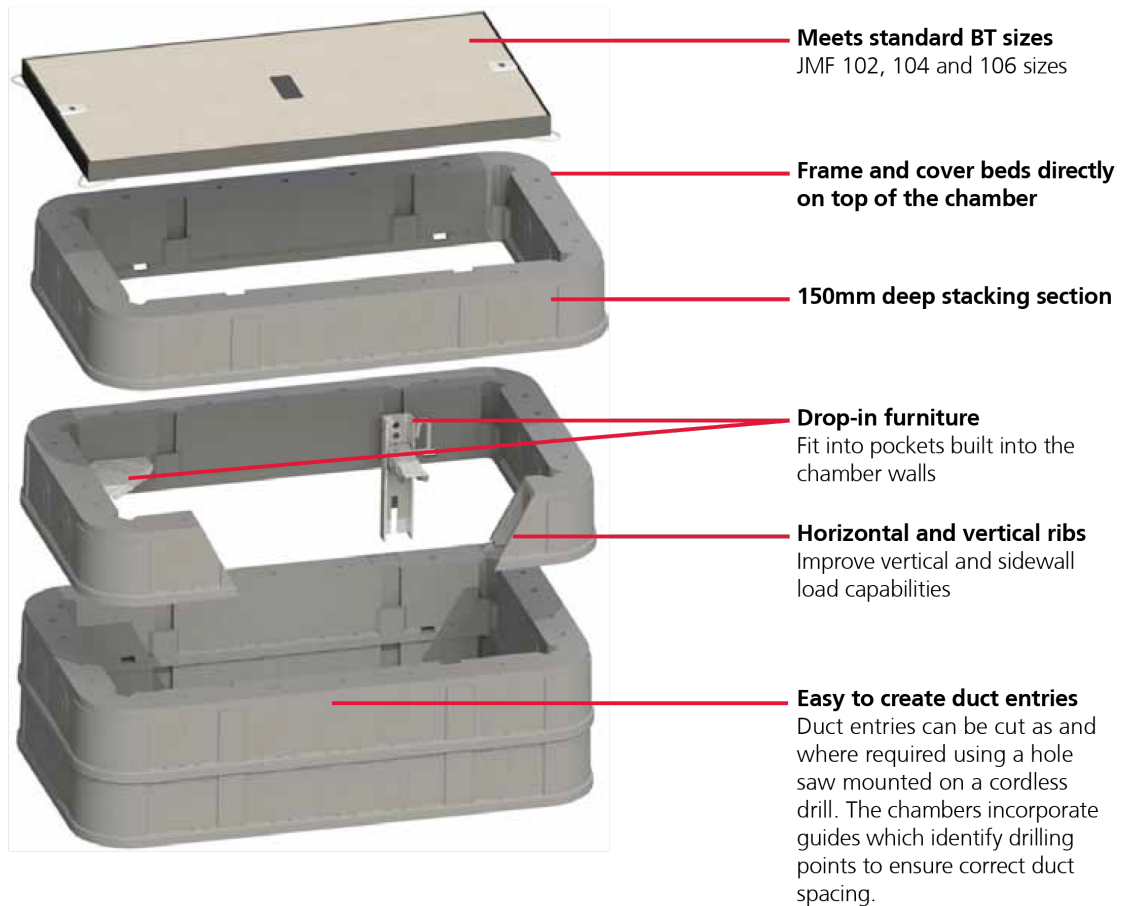
JMF 106 - 1310mm x 610mm

BT Code	Internal Dimensions	Depth per section	Typical depth of chamber	Weight per section	CUBIS Product Code	Pallet qty
JMF 102	725mm x 225mm	150mm	600mm	6.64kg	CPQBQ2-07250255-000000000	42
JMF 104	915mm x 445mm	150mm	600mm	13.62kg	CPQBQ4-09150445-000000000	32
JMF 106	1310mm x 610mm	150mm	750mm	18.79kg	CPQBQ6-13100610-000000000	17



Cross section of single section

Product Design & Features



Access Covers

CUBIS Industries manufacture a range of access covers that suitable for use with the STAKKAbox™ Quad system. Please contact us for more information or availability.



Concrete Infill (B125)

- Covers lift and slide out for one-person operation.
- No inherent scrap value.
- Can be locked
- Kitemarked by BSI
- The only approved Concrete Infill cover for BT, Virgin Media and other network operators.



Recessed (B125)

- 86mm deep to suit 60mm block
- Can be filled with any type of material
- Tapered cover sides and centralised lifting keyholes for single-person lift out.
- Can be locked
- Kitemarked by BSI
- The only approved Recessed cover for BT, Virgin Media and other network operators.

Accessories



Drop-in Step



Drop-in Wall Bracket

Note - picture shows bearer and locking pin

Which accessories do I need?

Based on chambers that are built to standard depth

BT Code	Drop-in Wall Bracket and Bearers	Drop in Step
JMF 102	✓	
JMF 104	✓	
JMF 106	✓	✓

SEWAGE AND ENVIRONMENTAL CONTROL



- **Septic Tanks**
- **Cesspools**
- **Small BioDisc treatment plant**
- **Large BioDisc treatment plant**
- **Grease Traps**
- **Forecourt Enviroceptors**
- **Light Liquid separators**
- **Fuel storage tanks**
- **Silage effluent tanks**
- **Petrol/Oil Separators: Forecourt,**
full retention and bypass

CHANNEL DRAINAGE

MEADRAIN™ CAST IRON EDGE POLYMER CONCRETE

Manufactured from high strength polymer concrete with the upper cast-iron edge integrally bonded within the channel to guarantee maximum load bearing capability, the EN range of heavy duty channels meet the requirements for all areas on which heavy loads have to be moved, particularly where truck and fork-lift traffic dominates.

Cast and ductile iron grating options available to suit loadings up to and including class F900.

Gratings are secured by the revolutionary PROFIX® 4-point spring steel integral locking system which automatically secures the grating in the channel whilst enabling straightforward removal for cleaning and maintenance.

The channels, available in the following range of sizes, have the capacity to quickly and efficiently drain sealed surfaces while ensuring ground water is not contaminated.

TECHNICAL DETAILS:

	Supreme EN 1000	Supreme EN 1500	Supreme EN 2000	Supreme EN 3000
	Channel sections for a linear fall (base fall 0.5%) and no fall. Also with integral outlet connector.	Channel sections for no fall or a stepped fall. Also with integral outlet connector.	Channel sections for no fall or a stepped fall. Also with integral outlet connector.	Channel sections for no fall or a stepped fall. Connection option for a vertical outlet every half metre. Channel sections with pre-formed knockouts for corner, T and cross connections.
OPENING WIDTH:	100 mm	150 mm	200 mm	300 mm
OVERALL WIDTH:	140 mm	190 mm	240 mm	354 mm
HEIGHT:	150 - 250 mm	220 - 320 mm	280 - 380 mm	390 - 490 mm



MEADRAIN™ ACCESSORIES

END CAPS

With/without outlet connection. The end caps have a durable edge protection made from cast iron or galvanized steel.

They are available with or without outlets.



SILT BOXES

The inlet box fits exactly within the channel width and is equipped with a sediment bucket which protects the underground pipeline against blockages.



GULLY'S

The alternative to the silt box is equipped with cast iron edge protection as well as a sediment bucket (depending upon channel, steel or galvanized), which protects the underground pipeline effectively against blockages.



GRATING OPTIONS

GALVANISED STEEL

- Available in standard slot, slim slot, mesh and perforated types
- A15 to C250 loading class
- Slim slot (6 mm slot) available in A15, standard slotted up to C250
- To suit a 100 mm, 150 mm and 200 mm wide channel from stock
- Clipfix, Starfix and Bolt & bar locking available



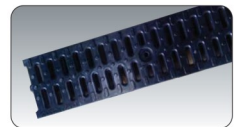
DUCTILE IRON

- Available in standard slot, slim slot, wave and solid top types
- B125 to F900 loading class
- Slim slot (6 mm slot) available in C250, D400 and E600 loading class
- To suit a 100 mm, 150 mm, 200 mm and 300 mm wide channel from stock
- Clipfix, Starfix, Profix and 4 bolt locking available



COMPOSITE

- Available in slim slot (6 mm slot)
- C250 loading
- To suit a 100 mm wide channel from stock
- Lightweight and durable non metallic material
- Reduced risk of theft
- Bolt & Bar locking available



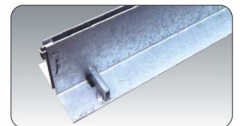
STAINLESS STEEL

- Available in standard slot, mesh and perforated types
- A15 - C250 loading
- To suit a 100 mm wide channel (other widths available to manufacture)
- Grades 304 and 316 available
- Clipfix and Bolt & Bar locking available



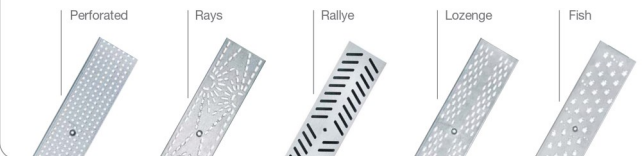
TOPSLOT GRATING

- Available in galvanised and stainless steel
- To suit a 100 mm wide channel (see page 7, MEA TOPSLOT for wider versions)
- C250 loading (see page 7, MEA TOPSLOT for heavier duty versions)
- Both centred and asymmetrical topslot
- 100 mm up stand to suit up to 80 mm block paving



ANTI THEFT LOCKING IS AVAILABLE

DECORATIVE GRATINGS



MANHOLE COVERS, GULLY GRATES, ACCESS COVERS AND PAVIOR COVERS

Manufactured from cast iron, ductile iron, galvanised steel, stainless steel, aluminium, GRP or composite material our comprehensive range is available in a variety of sizes and types to suit most applications.

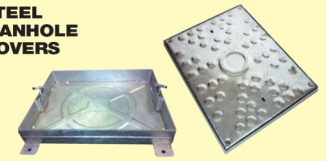
All manhole covers & frames are manufactured to a clear opening size (this is the size of the hole which the cover & frame is to span). We stock various opening sizes and weight loading covers and gratings. We can also offer a design and quotation service for a non-standard items which can be made to specification.



COMPOSITE MANHOLE COVERS



STEEL MANHOLE COVERS



DUCTILE IRON MANHOLE COVERS



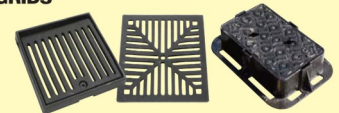
LIFTING KEYS



GULLY GRATES



GRIDS

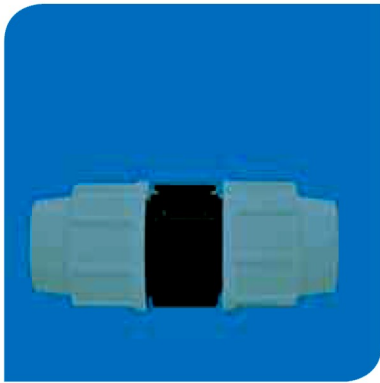


MANHOLE, GULLY GRATES AND PAVIOR COVERS

MDPE/HPPE/GAS/BARRIER SYSTEMS

	PE80 BLACK 50M LENGTHS	SDR 11		
		SIZE	CODE	
		20mm	50559306	
		25mm	50559307	
		32mm	50559308	
		50mm	50559310	
		63mm	50559311	
	PE80 BLUE 50M LENGTHS	SDR 11		
		SIZE	CODE	
		20mm	51559306	
		25mm	51559307	
		32mm	51559308	
		50mm	51559310	
		63mm	51559311	
	PE80 YELLOW 6M LENGTHS	SDR11		SDR 17.6
		SIZE	CODE	SIZE
		90mm	52512313	90mm
		125mm	52512315	125mm
		180mm	52512318	140mm
		250mm	52512321	180mm
		315mm	52512323	250mm
		355mm	52512324	315mm
		SDR13.6		355mm
		SIZE	CODE	400mm
		63mm	52576311	450mm
		75mm	52576312	500mm
				560mm
				52511328
	PROTECTA-LINE PIPE 50M LENGTHS	SIZE	CODE	
		25mm	44659307	
		32mm	44659308	
		63mm	44659311	
		90mm	44659313	
		110mm	44659314	
		125mm	44659315	
		180mm	44659318	

FITTINGS & ACCESSORIES FOR PE PIPE



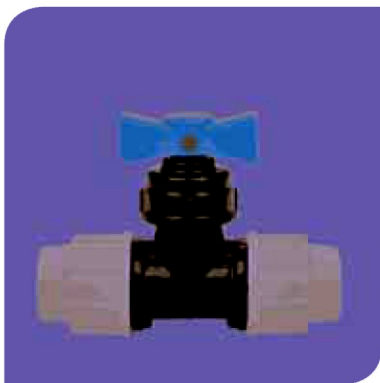
mechanical



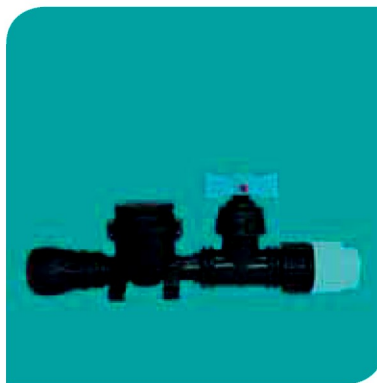
pushfit



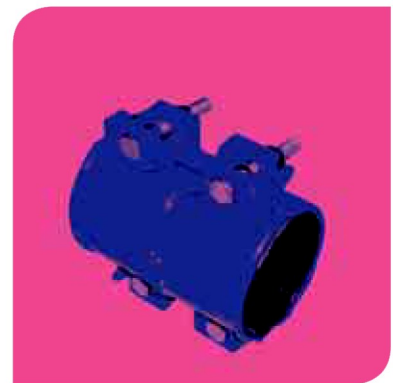
electrofusion



valves



metering



repair clamps



threaded



tools/accessories



specialist tooling

MATERIALS & APPLICATIONS

PVCu



Most Widely Used Plastic Material
Large Choice of Fittings
Excellent Chemical Resistance
Rigid Construction

Typical Applications

Industrial Process Systems
Water Treatment and Chemical Dosing
Food & Beverage
Swimming Pools and Spas
Cold Water Supply

ABS



Wide Temperature Range
High Impact Strength
Abrasion Resistance
Non Toxic

Chilled Water
Boosted Cold Water
Plant Rooms
Chemical & Pharmaceutical

Polypropylene



High Impact Strength
Good Thermal and Electrical Insulator
Excellent Chemical Resistance
High Temperatures (<110°C)

Chemical Process Systems
Metal Finishing
Chemical Dosing

PE100



Large Size Range
High Impact Strength
Excellent Abrasion Resistance
UV Resistant
Flexible

Above and Below Ground Water Supply
Power Generation
Attenuation

Applications Guide	ABS	PVCu	PP-H (pipe)	PE100
Acids and Alkalis	✓	✓	✓	✓
A/C and Refrigeration	✓		✓	✓
Biotechnology	✓	✓	✓	
Boosted Cold Water	✓		✓	✓
Condensate	✓			
Chemical Dosing	✓	✓	✓	✓
Chemical Drainage			✓	✓
Chilled Water	✓		✓	✓
Compressed Air			✓	
De-Mineralised Water	✓	✓	✓	
Effluent Treatment	✓		✓	✓
Electro Plating	✓	✓	✓	
Film Processing	✓	✓	✓	
Food Processing & Beverages	✓			✓
Gas			✓	

Applications Guide	ABS	PVCu	PP-H (pipe)	PE100
Glycol Systems	✓			
Hot Cold Water		✓	✓	
Hot Corrosive Materials			✓	
Hot Water			✓	
Irrigation	✓	✓		✓
Marine / Brine	✓			✓
Pharmaceutical	✓	✓	✓	
Potable Water	✓	✓		✓
Pulp and Paper	✓		✓	
Semi Conductor	✓	✓	✓	
Slurries	✓			✓
Sprinklers			✓	
Swimming Pools	✓	✓		
Water & Sewage Treatments	✓	✓	✓	✓
Water Industry	✓	✓		✓

FLEXIBLE COUPLINGS

Standard Couplings

These couplings comply with the requirements of WIS 4-41-01 and are specifically designed for jointing pipes in sewerage, drainage and similar non-pressure applications where resistance to shear loads is required.

- On public sewers where couplings complying with WIS 4-41-01 are specified
- Repair and maintenance of existing pipelines
- Connections between pipes of different materials or sizes (Bushes may be required in these circumstances)
- Making connections by the insertion of new junctions into an existing pipeline
- Reconnection of laterals on renovated sewers
- Introducing rocker or hinge pipes outside manholes or structures
- Jointing short or cut lengths of pipe

Reference	Min OD (mm)	Max OD (mm)	Width (mm)	Box Qty
NSC 115	100	115	120	20
NSC 121	105	121	120	20
NSC 125	110	125	120	20
NSC 137	120	137	120	20
NSC 142	125	142	120	12
NSC 150	130	150	150	12
NSC 165	140	165	150	12
NSC 175	150	175	150	10
NSC 182	160	182	150	10
NSC 200	175	200	150	10
NSC 215	190	215	150	8
NSC 225	200	225	150	6
NSC 250	225	250	150	6
NSC 275	250	275	150	6
NSC 290	265	290	150	5
NSC 310	285	310	190	3
NSC 320	300	320	190	3
NSC 335	305	335	190	3
NSC 345	315	345	190	4
NSC 365	340	365	190	4
NSC 385	355	385	190	4
NSC 412	385	412	190	2
NSC 425	400	425	190	2
NSC 430	405	430	190	2
NSC 445	420	445	190	2
NSC 465	435	465	190	2
NSC 475	445	475	190	2
NSC 495	465	495	190	2
NSC 510	480	510	190	2
NSC 525	495	525	190	2
NSC 540	510	540	190	2
NSC 550	520	550	190	2
NSC 560	530	560	190	2
NSC 580	555	580	190	2
NSC 600	570	600	190	2
NSC 620	590	620	190	2

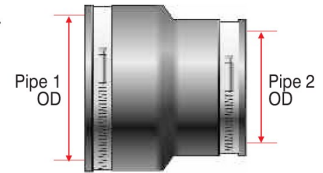
316 Stainless Steel bands are available on all of the above



Adaptor Couplings



Provide an inexpensive method of directly jointing pipes of differing outside diameters, without the need to use bushes. The most common application is for connecting PVC-u pipes to a variety of other pipe materials including vitrified clay. These couplings are also suitable for connecting other types of pipes including cast iron and metal pipes (up to a maximum outside diameter of 420mm).



Universal Adaptors

Reference	Pipe 1 OD (mm)	Pipe 2 OD (mm)	Width (mm)
NAC 1212	121/137	to 110/121	100
NAC 1804	180/200	to 160/180	150
NAC 2601	260/285	to 180/205	150

Drainage Adaptors

Reference	Pipe 1 OD (mm)	Pipe 2 OD (mm)	Width (mm)
NAC 1000	97/102	to 86/91	70
NAC 1001	100/115	to 40/50	102
NAC 1002	100/115	to 50/64	102
NAC 1003	100/115	to 75/90	95
NAC 1101	110/122	to 80/95	120
NAC 1004	115/122	to 61/68	90
NAC 1102	110/125	to 100/115	120
NAC 1211	121/136	to 80/95	120
NAC 1213	121/136	to 100/115	90
NAC 1221	122/137	to 75/90	100
NAC 1302	130/145	to 110/125	120
NAC 1371	137/152	to 100/115	120
NAC 1442	144/160	to 110/122	120
NAC 1443	144/160	to 121/136	120
NAC 1531	153/168	to 100/115	150
NAC 1553	155/170	to 130/145	120
NAC 1552	155/176	to 110/125	120
NAC 1661	166/181	to 100/115	150
NAC 1662	166/181	to 110/125	150
NAC 1704	170/192	to 110/122	120
NAC 1705	170/192	to 121/136	120
NAC 1706	170/192	to 144/160	120
NAC 1831	183/198	to 100/115	155
NAC 1801	180/198	to 122/137	150
NAC 1800	180/200	to 130/145	150
NAC 1802	180/200	to 110/121	150
NAC 1803	180/200	to 155/170	150
NAC 1901	190/206	to 100/115	150
NAC 1903	190/206	to 138/153	150
NAC 1852	185/212	to 100/115	150

316 Stainless Steel bands are available on all of the above

GEOTECHNICAL PRODUCTS

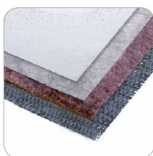
An unrivalled selection of geotechnical products, available throughout the UK.

We now stock a complete range of geo synthetic materials for separation, filtration, drainage, erosion control, ground reinforcement and other related geotechnical applications.



Geogrids

A comprehensive range of geogrids, both biaxial and uniaxial, available in polypropylene or polyester.



Geotextiles

Both woven and non-woven geotextiles.



Ground Reinforcement

A wide choice of reinforcement grass protection systems.



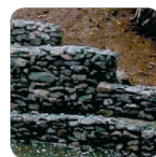
Erosion Control

A full range of both biodegradable and non-biodegradable.



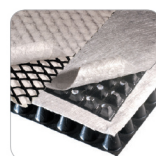
Cellular Confinement System

Erosion control for slopes, embankments and riverbanks.



Gabions

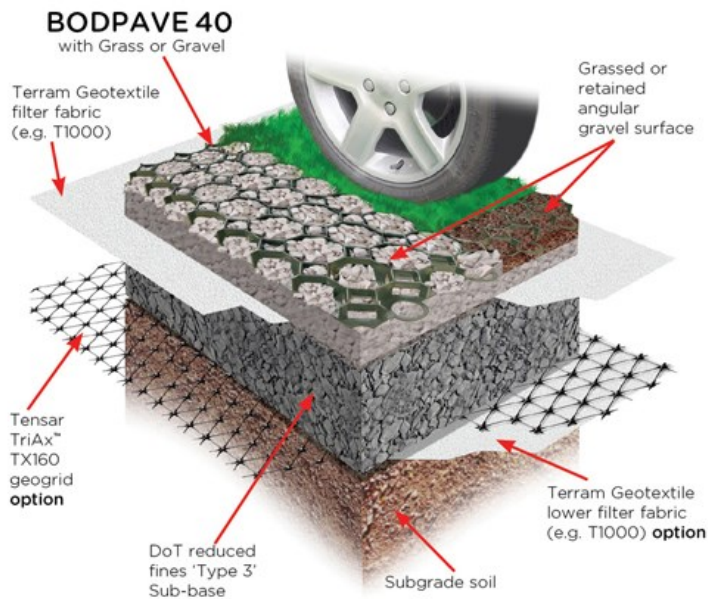
Gabions and mattresses now available.



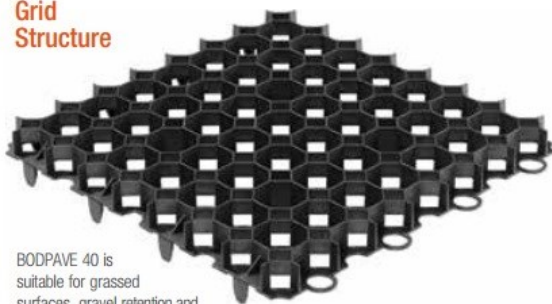
Geocomposites

Drainage and venting layers available.

BODPAVE® RANGE



Grid Structure



BODPAVE 40 is suitable for grassed surfaces, gravel retention and SUDS source control applications.

The BODPAVE range ground pavers are a strong interlocking plastic grid paving system for reinforcing grassed areas for overspill car parks, driveways, pathways, emergency access routes and lawns.

Bodpave® is manufactured from 100% recycled polyethylene and is UV stabilised.

Laid Paver Size	Pavers per sqm	Cell Size	Weight	Load Bearing Capacity	Colour	Part No.
500mm x 500mm x 40mm	4 (1m ²)	60mm Hexagonal (Internal)	4.8kg/m ²	150 tonne/m ² (Crush resistance)	Green	113804
500mm x 500mm x 40mm	4 (1m ²)	60mm Hexagonal (Internal)	4.8kg/m ²	150 tonne/m ² (Crush resistance)	Black	151516

BODPAVE® RANGE

Bodpave™ 40 Porous Pavers

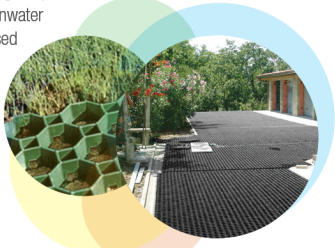


Permanent grassed or gravel car parks, fire access routes, cycle paths, driveways, access roads and other trafficked areas where a structurally-sound, well drained base is present or will be installed.

BODPAVE 40 porous grass pavers are an interlocking cellular paving grid system for grass and ground reinforcement applications where there is regular pedestrian or vehicle use.

BODPAVE 40 permeable paving grids allow full rainwater penetration and are manufactured from UV stabilised 100% recycled HDPE, in black or green.

BODPAVE 40 pavers are strong, chemically inert & non-toxic, enabling them to provide a durable, safe & sustainable eco-friendly surface for trafficked areas.



Bodpave 40 product details

PAVER SIZE (mm)	QUANTITY (per m²)	WEIGHT (Nominal)	COLOUR	LOAD BEARING CAPACITY	MATERIAL
500 x 500 x 40	4 Grids	4.8kg/m²	Black/Green	150tonnes/m²	100% Recycled Polyethylene

**Available in various roll sizes and Weights*

Bodpave™ 85 Porous Pavers



Permanent grassed or gravel car and coach parking, fire access routes, helipads, taxiways, cycle paths, driveways, access roads and other trafficked areas where a structurally-sound, well drained base is present or will be installed.

BODPAVE 85 is an interlocking cellular porous paving system for ground reinforcement which can be installed with either a grass or gravel filled surface. The design of BODPAVE 85 pavers allows them to positively interlock with each other and resist shear. Once filled, they provide a high level of loadbearing performance.

They are laid on a free-draining base and can be filled with either gravel for immediate frequent/intensive use, or with a seeded sand/soil to establish a grassed surface for occasional consecutive use.



Bodpave 85 product details

PAVER SIZE (mm)	NOMINAL CELL SIZE (mm)	QUANTITY (per m²)	WEIGHT (Nominal)	COLOUR	LOAD BEARING CAPACITY	MATERIAL
500 x 500 x 40	400	4 Grids	6.24kg/m²	Black/Green	400tonnes/m²	100% Recycled Polyethylene

Moorland Mesh



Moorland Mesh is a specifically designed product which has been developed to allow access over peat bogs and moorland areas. Once natural vegetation has grown through, the mesh becomes unobtrusive and requires no regular maintenance.

Application

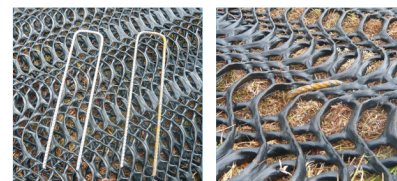
With over 500 km of tracks on the moorlands of the North Pennines, and in conjunction with The Moorland Association and Natural England, Avintiv have developed a heavy duty polyethylene mesh which is suitable for use on blanket peat applications.

The oscillated mesh structure reinforces naturally vegetated areas, gives greater traction, and provides a good alternative to heavily engineered stone roads. The mesh has been developed in 2.5m widths to accommodate agricultural vehicles with the sole purpose of resolving the current issues surrounding the construction of moorland tracks.



Installation

Moorland Mesh is simple to install. The sward grows through the mesh apertures and knits with the natural vegetation to create a strong, discreetly reinforced surface which is capable of withstanding vehicle loads



The Moorland Mesh is laid over the track area and pinned very tightly to the ground

Features

- High level of reinforcement suitable for permanent applications can accommodate shallow slopes
- Fast and cost-effective installation
- No excavation or soil removal is normally required
- Higher slip-resistance than standard mesh products
- Provides an alternative for heavily engineered stone roads.



The natural vegetation intertwines with the mesh

GRASS PROTECTA

Permanent grassed overflow car parks, residential parking, access routes, holiday park areas, verges and wheelchair access routes on firm, well-drained ground.

GRASSPROTECTA heavy-duty polyethylene mesh reinforces grassed surfaces prone to wear and smearing e.g. permanent car parking and heavily-used pedestrian areas. The oscillated mesh structure provides greater traction and significantly higher slip resistance when compared with standard mesh alternatives. GRASSPROTECTA mesh is available in two thicknesses: 14mm and 11mm.

Benefits

- High level of reinforcement – up to 8t per static axle load on firm ground
- Suitable for permanent applications
- Can accommodate shallow slopes
- Fast and cost-effective installation
- No excavation or soil removal is normally required
- Higher slip-resistance than standard mesh product

GRASSPROTECTA mesh is simple to install. The sward grows through the mesh apertures and knits with the filaments to create a strong, discreetly reinforced surface which is capable of withstanding vehicle loads, limiting damage and helping to reduce compaction by reducing direct contact with the soil surface. The grass can be mown, rolled and fertilised as normal during this period and the mesh soon becomes unobtrusive.

GRASSPROTECTA mesh can also be installed onto newly-landscaped areas and seeded as required. It is strongly advised that newly-installed areas remain untrafficked until the sward and the mesh have knitted - normally after a few weeks during the growing season, increasing to a few months out of season. Immediate use may restrict growth and limit the effectiveness of the installation.

Applications

The Standard (11mm) grade is suitable for:

- Light-usage, overflow car parks
- Wheelchair (DDA) access routes
- Golf-buggy paths
- Heavily-pedestrianised paths

The Heavy (14mm) grade is suitable for:

- Overflow car parks
- Light-aircraft taxiways
- Caravan sites and other holiday areas
- Some equestrian surfaces
- Verge stabilisation



Grassprotecta product details

SIZE (m)	GRADE	COLOUR	MESH APERTURE (Diamond/Oval)	SLIP RISK PTV VALUE	WEIGHT	THICKNESS	MATERIAL
2 x 20	Standard	Green/Black	3:1 Ratio	.40 (Low)	1.2kg/m ²	11mm	Recycled/Virgin HDPE blend
2 x 20	Heavy	Green/Black	3:1 Ratio	.40 (Low)	2kg/m ²	14mm	Recycled/Virgin HDPE blend

Fixing Pins & Pegs

Steel U-pins or plastic pegs to secure GRASSPROTECTA to the ground. Yellow marker pegs are available if required.



Fixing pin & peg product details

PRODUCT	SIZE	OUTER	MATERIAL
U-Pins	170 x 70 x 6 dia.	50 Pack	Steel
Black Pegs	140 long	100 Pack	Recycled HDPE

Tree root protection system

Creating Green Infrastructure

Technical

Data Sheet

Rouden TRP

Rouden TRP tree root protection system is a 3 dimensional cellular confinement system used to construct vehicular access roads, parking areas etc around the RPA of existing trees. The system is manufactured in accordance with the original U.S. Army Engineers Corps specification and conforms to the requirements of BS5837 and APN12. The system is available in five depths 50mm, 75mm, 100mm, 150mm and 200mm.

Product Specifications

PROPERTY	TEST METHOD		UNIT	VALUE				
Density	ASTM D1505		gr/cm³	0.950±0.015				
Wall thickness (textured)	ASTM D5199		mm	min 1.25±0.15 min 1.25±0.15				
Carbon black content - (For black only).			%	2.0±0.5				
Durability To be covered within 1 month after installation.	Durability assessment report 338/2005			Predicted to be durable for a minimum of 25 years in natural soils with 4 <ph< p=""><9 and soil temperature ≤ 25°C.</ph<>				
Unit Height			mm	50	75	100	150	200
Seam Tensile Peel strength	ASTM 4437		N/cm	>750	>1130	>1500	>2250	>3000
Minimum Strength Value	EN ISO 13426-1	Method A: Tensile Shear Test	kN/junction	0.90	1.35	1.80	2.70	3.60
			kN/m	3.60	5.40	7.20	10.80	14.40
	EN ISO 13426-1	Method B: Tensile Shear Test	kN/junction	0.75	1.13	1.50	2.25	3.00
			kN/m	3.00	4.50	6.00	9.00	12.00
Cell Walls				Textured and perforated (11% ± 2%)				
No. of cells			#/m²	34.3				
Diagonal Length			cm	24.2				
Cell Wall Length			cm	356				
Cell Area			cm²	292				
Expanded Unit Width			m	2.42				
Expanded Unit Length *			m	8.0				
Coverage *			m²	21.0			10.5	
Unit Weight *			kg	11.8	17.7	23.5	17.7	23.5

* Other length and coverage available upon request. (Length, width and coverage dimensions are for square cells)

Applications

- Tree root protection

Benefits

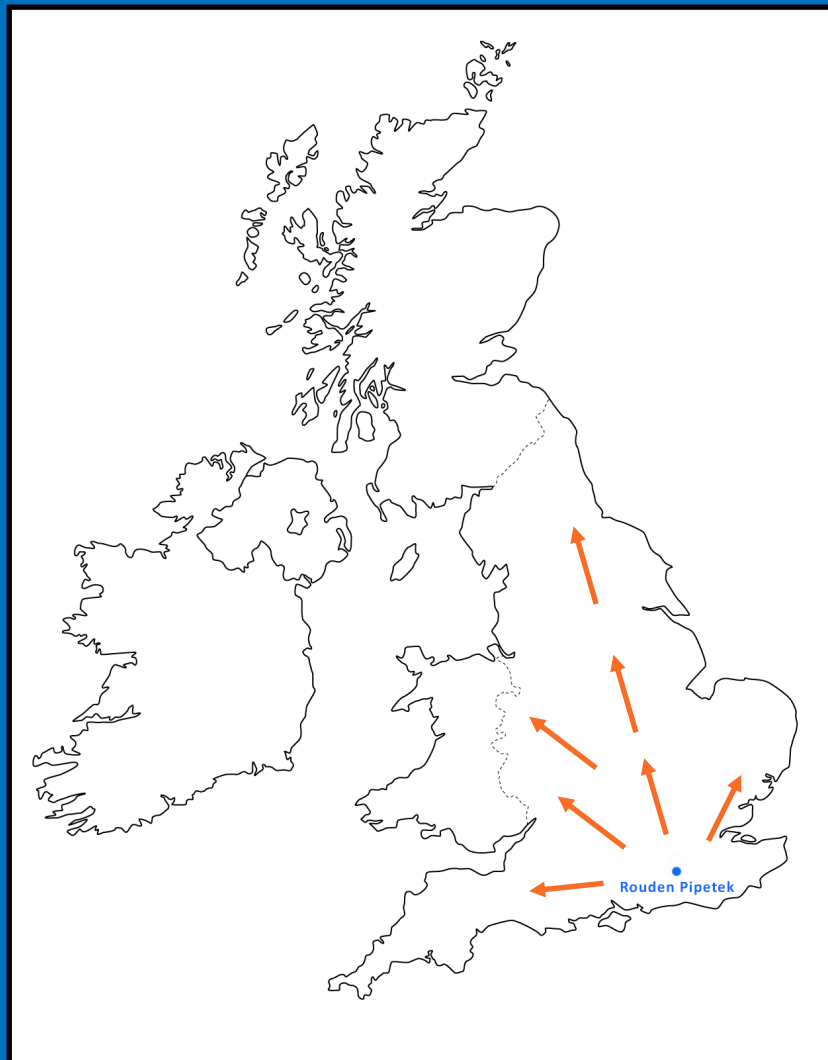
- No dig solution
- Reduces compaction of subsoil around tree roots
- Reduces subbase thickness
- Allows clean angular stone to be used within the cell
- Dissipates vertical loads
- Allows air and moisture transfer
- Can support any type of vehicle loading



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