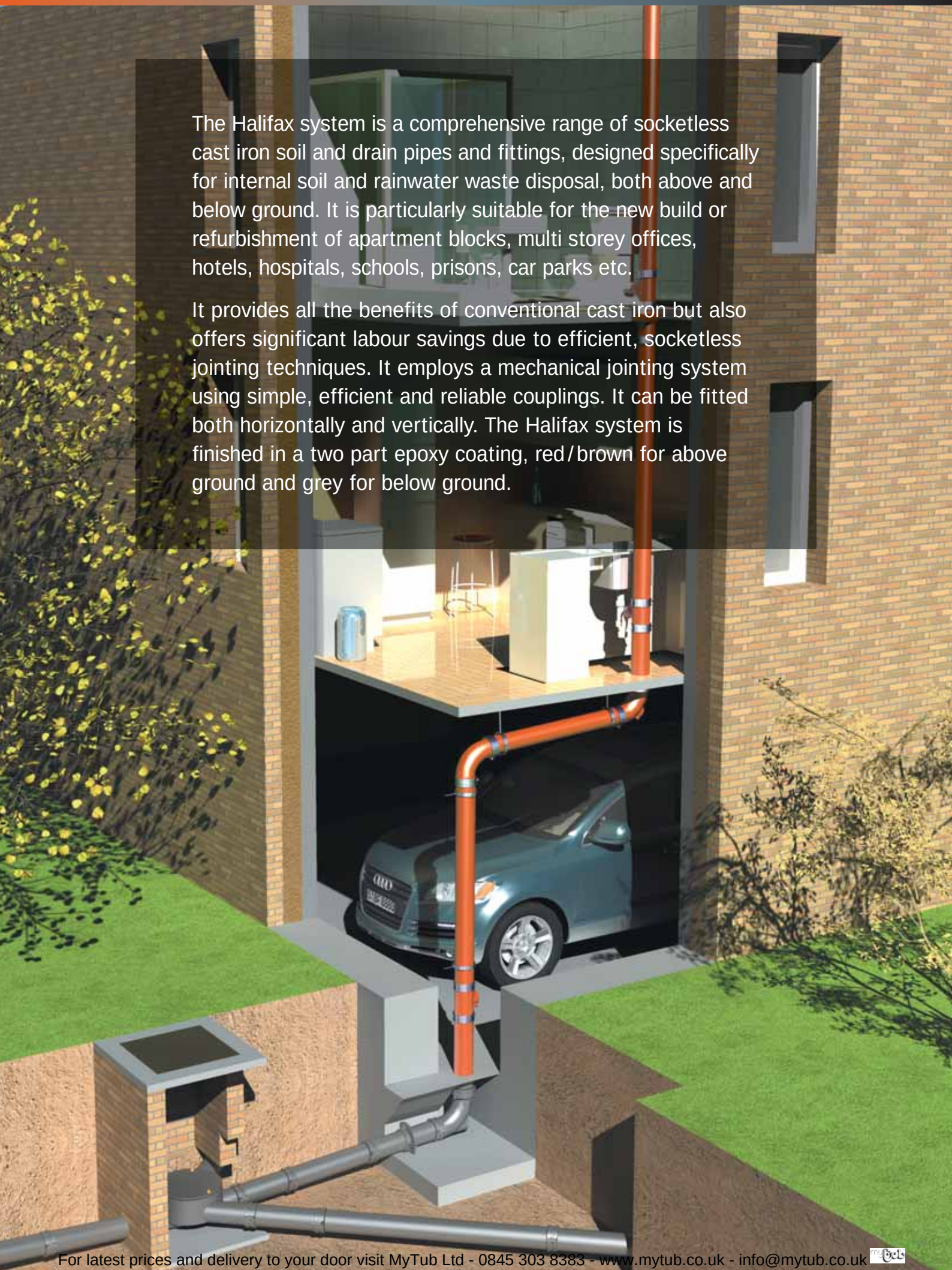
The Halifax System



The Halifax system is a comprehensive range of socketless cast iron soil and drain pipes and fittings, designed specifically for internal soil and rainwater waste disposal, both above and below ground. It is particularly suitable for the new build or refurbishment of apartment blocks, multi storey offices, hotels, hospitals, schools, prisons, car parks etc.

It provides all the benefits of conventional cast iron but also offers significant labour savings due to efficient, socketless jointing techniques. It employs a mechanical jointing system using simple, efficient and reliable couplings. It can be fitted both horizontally and vertically. The Halifax system is finished in a two part epoxy coating, red/brown for above ground and grey for below ground.

Hargreaves Foundry has built its business on the basis of friendly, flexible and prompt service. We distribute exclusively through merchants to customers throughout the UK, Ireland and the Channel Isles and also into Europe, Russia, the Middle East and Australia.

We have invested heavily in warehousing and stock so that we can deliver complete orders on time and within deadlines agreed by customers.

Hargreaves Foundry UK operations and production are all on one site. This includes the sales office, pattern making and foundry, warehouse, fabrication and paint shop. One person will manage your order throughout each stage of the process, ensuring quality standards and delivery deadlines are met in full. This individual will be accountable to you.

In addition to this we have technical sales staff who can provide advice, information and quotes, who will be happy to visit office or site, are familiar with the needs of both specifiers and contractors and have experience working in partnership as part of a project team.

Please contact us if you require any further information. All telephone calls are answered promptly by an individual, not a robot, (between 7:30 am and 5:00 pm Monday to Friday). A specialist will advise, agree a course of action or confirm an order in less than 24 hours.

The product range has been manufactured to comply with BS EN 877. The above ground system, up to 200 mm diameter has been tested and approved by the British Board of Agrément (BBA), Certificate No. 06/4401for pipes and fittings. Max couplings have BBA approval Certificate No. 01/3873.

Contents - Above and Below Ground

Cast iron is particularly well suited for all drainage systems as it offers many benefits, both for above and below ground installation, which include:

Strength and durability - cast iron is able to withstand the rigours of on site handling, mechanical de-blocking and vandalism and requires less embedment than other materials for below ground installations.

Long life - when correctly installed cast iron drainage systems will last the life of the building, whether domestic, public, industrial or commercial.

Low maintenance - cast iron requires little ongoing maintenance, annual inspections are recommended but remedial action is rarely required.

Sustainability - in addition to lasting the life of a building and requiring minimal maintenance, cast iron is also 100% recyclable and can therefore be used again after the building has gone.

Value for money - owing to its longevity, durability and low maintenance, coupled with its fire resistance and low noise operation, the cost benefits of cast iron are significant.

Fire resistance and safety - the melting point of cast iron is considerably higher than PVCu or PE and in the event of fire will not emit toxic fumes or drop burning globules of material from one compartment to another.

Quality assurance and approvals

Halifax soil system for above ground use has been tested and approved by the British Board of Agrément.

BAA Certificate No. 06/4401 details pipes and fittings. Max Couplings have approval by the BBA Certificate No. 01/3873.

Applicable standards

BS EN 877:1999 - European Standard for cast iron pipework. This covers above ground soil, waste, rainwater and buried drainage systems and performance requirements in the various applications

ISO 6594 - International Standard for socketless drainage systems in cast iron

BS EN 681 / ISO 4633 - Specification for elastomeric seals for joints in pipework and pipelines.

Codes of practice

BS EN 12056 - Code of practice for gravity drainage systems inside buildings - sanitary pipework and drainage of roofs.

BS EN 752-1 - Code of practice for drain and sewer systems outside buildings.

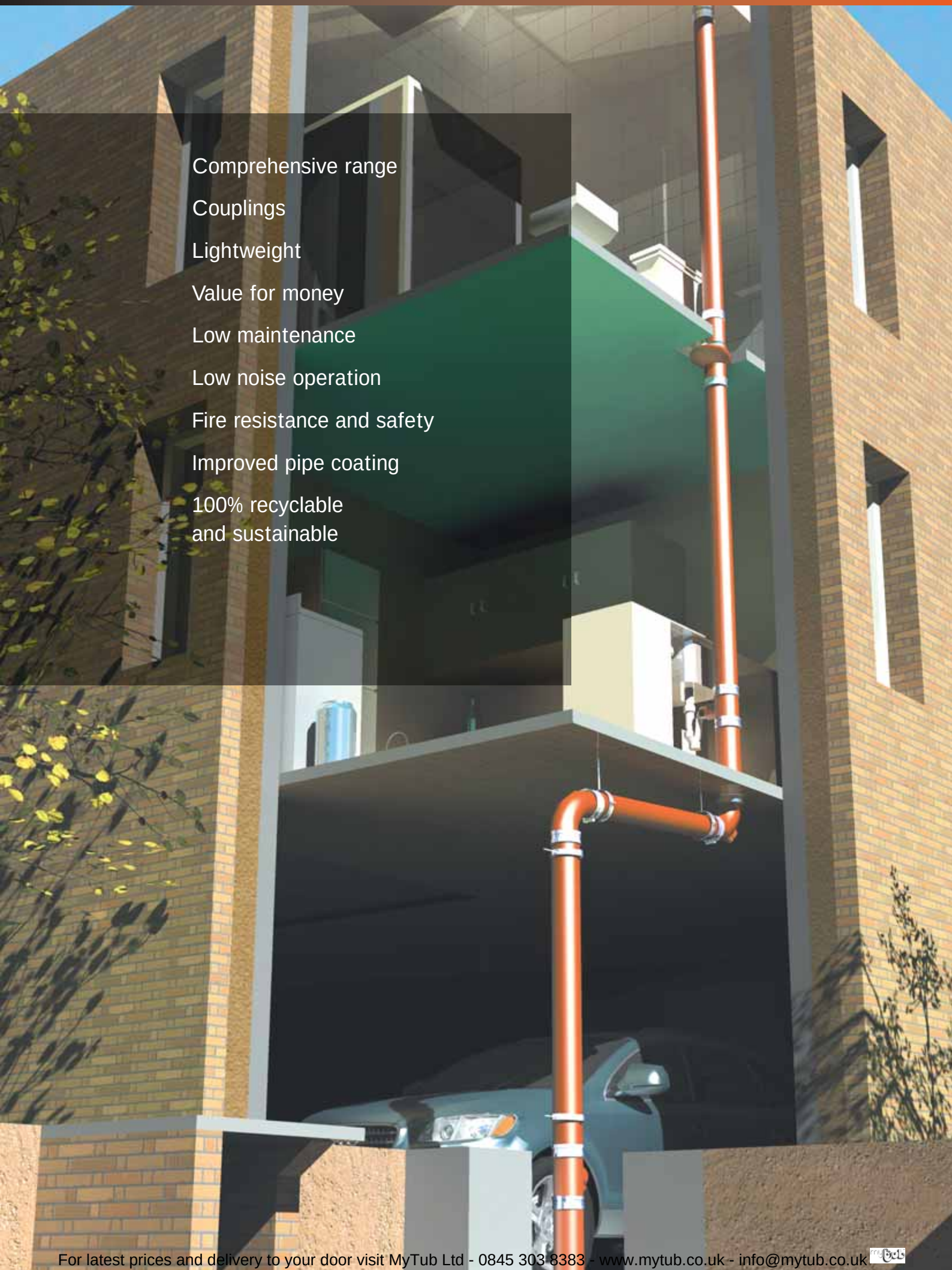
Materials

Pipes and fittings are manufactured in grey cast iron which exceeds the requirements of BS EN 1561 Grade EN-JL 1020, ISO 185 Grade 15.

Halifax ductile cast iron couplings are manufactured in accordance with BS EN 1563, ISO 1083 with minimum tensile strength of 420N/mm2

The Max and Connect couplings are manufactured in stabilized chrome steel 1.4510/11

All couplings are supplied with EPDM rubber sealing rings which are suitable for most applications but where aggressive waste liquids are to be discharged please check with our technical department as to their suitability. Nitrile rubber will be considered upon request



Comprehensive range

Couplings

Lightweight

Value for money

Low maintenance

Low noise operation

Fire resistance and safety

Improved pipe coating

100% recyclable
and sustainable

Comprehensive range

The Halifax system complies with British and European Standard BS EN 877 and provides a complete system of pipes and fittings for the conveyance of waste water and rainwater through a building and as far as the sewer.

Couplings

The Max and Connect couplings share a similar single screw design for above ground applications. Both couplings provide the quickest jointing method available on the market today for BS EN 877 above ground systems. Also for installations requiring cast iron couplings to match the pipework, the Halifax ductile cast iron coupling is available.

Lightweight

Compared to traditional rainwater and soil products (BS460 and BS416) the Halifax system is lighter and easier to handle but still retains all the inherent qualities of cast iron including strength and longevity.

Value for money

The Halifax system compares favourably with other materials, including PVC-u solvent weld systems, on labour rates. It can also provide cost savings when intumescent fire collars, sound insulation, expansion joints and extra brackets are required for PVC to satisfy the building requirements. Also, in normal circumstances, cast iron will last the life of the building.

Low maintenance

The combination of great strength and improved surface coatings on the Halifax Soil and Drain System delivers a fit and forget solution in most installations. This is especially important when pipework is concealed and inaccessible and where maintenance would be disruptive to occupants of the building.

Low noise operation

A factor often overlooked is the excessive noise created by waste water running through pipework manufactured from materials with a much lower density than cast iron. Whilst never welcome, this is especially inappropriate for hospitals, hotels, office and apartment blocks.

Fire resistance and safety

The Halifax system can withstand higher temperatures than PVC or HDPE and in the event of fire will not drop burning globules from one compartment to another. Building regulations therefore require intumescent fire collars to be fitted to PVCu pipework - cast iron has no such requirement.

Improved pipe coating

The Halifax system pipes are lined internally with a two part epoxy finish which provides improved performance when exposed to aggressive substances. Fittings are also epoxy coated and provide a similar level of performance.

100% recyclable and sustainable

Cast iron will not only last the life of the building but is strong enough to withstand on site handling, mechanical deblocking and vandalism. It also reduces the use of natural resources by utilising almost 100% scrap and recycled metal in the manufacturing process. Finally when a building reaches the end of its lifespan, all the cast iron can be recycled to make new products.

Features for Max coupling 1 (50-150mm) and Connect coupling 2 (200-300mm)

- Manufactured from stabilized chrome steel 1.4510/11
- Thickness of chrome steel 0.6mm
- MAX 50mm - 150mm: M8 x 55 socket cap screw and 2 M8 nuts (6mm allen drive)
- Connect 200mm - 300mm: M10 x 55 socket cap screw and 2 M10 nuts (8mm allen drive)
- Quick fixing
- Closing device and locking screw zinc plated yellow
- Closure ring EPDM
- For use u.t.i. 0.5 bar internal pressure
- Coupling suitable for re-use
- Coupling conforms to the requirements of BS EN 877

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Features for Ductile iron coupling 3

- Two piece coupling manufactured from ductile iron BS EN 1563
- Zinc plated socket cap locking screw and nut M8 x 40 for 50 - 100mm and M8 x 55 for 150 - 200mm (6mm Allen drive)
- 2 locking screws on 50 - 100mm and 4 locking screws on 150mm & 200mm dia's
- EPDM sealing ring
- For use u.t.i. 0.5 bar internal pressure
- Above ground soil couplings coated in 2 part epoxy finish red-brown colour

Note: For details of high performance couplings please refer to page 11.

jointing method for max and connect couplings

Step 1

Max and Connect pipe coupling supplied complete with EPDM gasket and electrical continuity grips.

Step 2

Push the coupling onto the end of the pipe or fitting up to the gasket's central register.

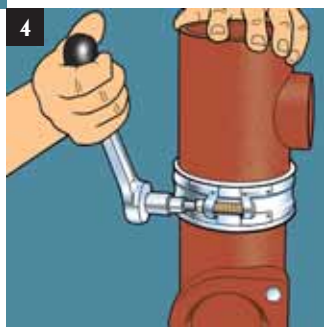
Step 3

Push the next pipe or fitting into the coupling making sure that the cut pipes are square.

Step 4

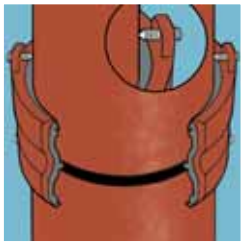
Tighten the set srew using:
6mm allen key /socket adaptor (50 - 150mm) HSD003
8mm allen key/socket adaptor (200 - 300mm) HSD004

(For manufacturer's recommended torque settings please see page 12.)



Electrical continuity

The Max, Connect and Ductile couplings (above ground) all provide electrical continuity as standard. Providing they are installed as recommended in our instructions the couplings will meet current legislation.



Ductile.

Connect

Max

Step 1

Check the components - 2 part coupling and EPDM gasket, x 2 M8 bolts and nuts (up to 100 mm diameter pipes, x 4 M8 nuts and bolts for 150mm diameter and above). Make sure the 4 grub screws for electrical continuity are present.

Step 2

Fit the gasket to the lower pipe first, line up the upper pipe and fit carefully into place. Make sure the two pipes are square and parallel and line up correctly with the gasket.

Step 3

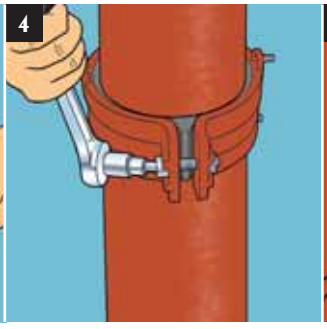
Line up the two parts of the coupling ensuring they fit correctly over the gasket. At this point check that the two grub screws for electrical continuity are not proud of the inside of the coupling.

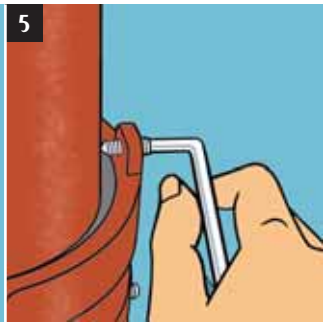
Step 4

Bolt the two parts of the coupling together and gradually tighten, ensuring an equal distance is maintained during assembly. Do not over tighten or tighten only one side at a time. (Optimum torque setting for Ductile Iron Couplings = 15Nm.)

Step 5

Adjust the grub screws until each is lightly touching the pipe then give them a final half turn. This normally will be adequate to allow metal to metal contact and provide electrical continuity - do not over tighten.





Tools

Description	Product Code
1. ½ inch drive ratchet spanner	HSD001
2. 13mm socket	HSD002
3. 6mm Allen socket adaptor	HSD003
4. 8mm Allen socket adaptor	HSD004
5. 3mm A/F short arm Hex Wrench	HSD005

1 The Halifax bismat bracket

Can be used for vertical and horizontal operations for pipe sizes 50mm - 200mm dia. Supplied Zinc plated and rubber lined only.

This patented bracket features:

- Unique automatic locking system
- Captivated combi slot locking screw
- M8/M10 tapped bosses on 50mm-100mm dia
- M10 tapped boss on 150mm-200mm dia
- Ageing resistant EPDM rubber lining

2 The Halifax heavy duty bossed bracket

Available in a Zinc plated finish unlined as standard for pipe sizes 50mm-300mm dia. Also available rubber lined.

This bracket features:

- 2 No M8 locking screws on sizes 50mm - 100mm
- 2 No M10 locking screws on sizes 150mm - 200mm
- 2 No M12 locking screws on sizes 250mm - 300mm
- M8/10 tapped boss on size 50mm
- M10/12 tapped boss on sizes 70mm-200mm
- M16 tapped boss on sizes 250mm-300mm
- Can be fixed both horizontal and vertical

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3 The Halifax galvanized steel pipe clamp

Two part clamp: one side hinged, the other side with locking screw. For pipe sizes 50mm - 300mm dia

This clamp features:

- Especially developed for cast iron drainage pipe
- Hinged
- Hot dipped galv
- Resistance welded connecting nut M10 on sizes 50mm-200mm
- 12.5mm hole for 12mm threaded rod on sizes 250mm-300mm
- Can be fixed both vertical or horizontal

4 The Halifax split band clip

Two part band: zinc plated as standard supplied with locking nuts and bolts for pipe sizes 50mm - 300mm dia

This bracket features:

- Zinc plated as standard
- Can be fixed both vertical or horizontal
- Supplied completed with nuts and bolts

1 Halifax grip

Universal safety connection ring to be fixed around the Max or Connect coupling:

- High tensile strength
- For pipe use up to 3 bar pressure
- Improves the axial load of a high pressure drain
- Made of zinc plated steel 1.0332
- Up to DN100: 2 clamp parts and 4 hexagon head screws with retaining washer
- From DN150: 3 clamp parts and 6 hexagon head screws with anti loss washer
- Hexagon head screws DIN EN 24017 (DIN 933) zinc plated
- CO2 welded nuts
- Clamp parts packed separately with pre-assembled screws

2 Halifax high performance coupling

Fully re-usable axial restraint pipe coupling system for use in high risk areas e.g. computer rooms etc;

- WRAS approved
- 6 Bar pressure
- Casing 304 stainless steel, no spot welding
- 2 locking screws on all sizes, alloy steel zinc, PTFE coated
- EPDM gasket with stainless steel anchor teeth

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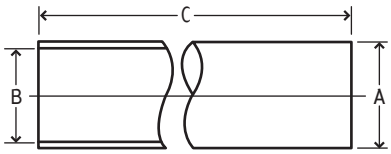
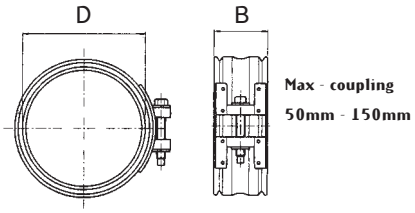
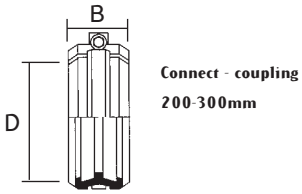


double spigot pipe

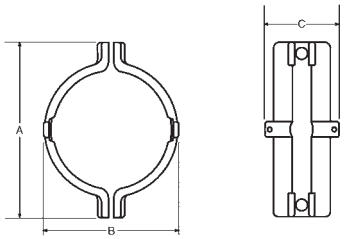
Product Code	Dia	A Max (O/dia)	B Min (I/dia)	Length C (mm)	Nom (Wt kg)
HS2001	50	60	47.5	3000	15.7
HS3001	70	80	68.25	3000	19.4
HS4001	100	112	97.5	3000	29.7
HS6001	150	162	146.25	3000	45.2
HS8001	200	212.5	195	3000	71.2
HS10001	250	276.5	243.75	3000	99.8
HS12001	300	328.5	292.5	3000	129.7





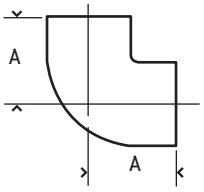
stabilised chrome steel coupling

Product Code	Dia	D	B	Maximum Torque (Nm)
HS2002	50	63	48	20
HS3002	70	84	48	20
HS4002	100	114	48	20
HS6002	150	164	55	20
HS8002	200	214	68	30
HS10002	250	278	75	30
HS12002	300	330	75	30



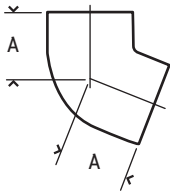
ductile iron coupling

Product Code	Dia	A	B	C	Nominal (Wt/kg)
HS2012	50	117	79	69	0.7
HS3012	70	137	100	73	0.8
HS4012	100	172	132	73	1.1
HS6012	150	223	180	95	2.0
HS8012	200	283	240	95	3.3



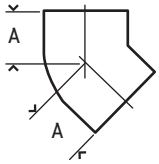
88 deg short radius bend

Product Code	Dia	A	Nominal (Wt/kg)
HS2003	50	75	0.8
HS3003	70	90	1.3
HS4003	100	110	2.5
HS6003	150	145	5.1
HS8003	200	180	9.0
HS10003	250	220	17.3
HS12003	300	260	27.3



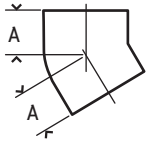
69 deg short radius bend

Product Code	Dia	A	Nominal (Wt/kg)
HS2004	50	65	0.8
HS3004	70	75	1.1
HS4004	100	90	2.0
HS6004	150	120	4.6



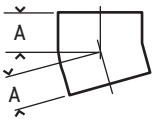
45 deg short radius bend

Product Code	Dia	A	Nominal (Wt/kg)
HS2005	50	50	0.6
HS3005	70	60	0.9
HS4005	100	70	1.6
HS6005	150	90	3.6
HS8005	200	110	6.4
HS10005	250	130	11.0
HS12005	300	150	18.5



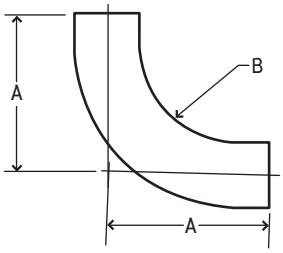
30 deg short radius bend

Product Code	Dia	A	Nominal (Wt/kg)
HS2006	50	45	0.5
HS3006	70	50	0.8
HS4006	100	60	1.4
HS6006	150	80	3.2



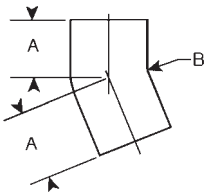
15 deg short radius bend

Product Code	Dia	A	Nominal (Wt/kg)
HS2007	50	40	0.4
HS3007	70	45	0.6
HS4007	100	50	1.2
HS6007	150	65	2.5



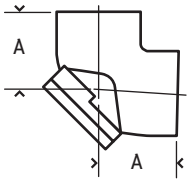
88 deg long radius bend

Product Code	Dia	A	B	Nominal (Wt/kg)
HS4008	100	269	180	5.3
HS6008	150	274	150	10.7



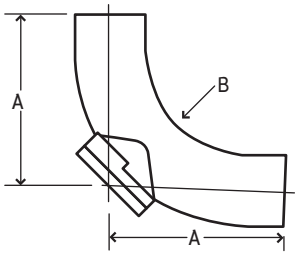
22 deg long radius bend

Product Code	Dia	A	B	Nominal (Wt/kg)
HS4009	100	90	180	2.2



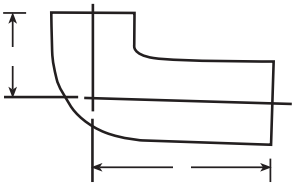
88 deg short radius bend - back door

Product Code	Dia	A	Nominal (Wt/kg)
HS3010	70	90	2.5
HS4010	100	110	3.8



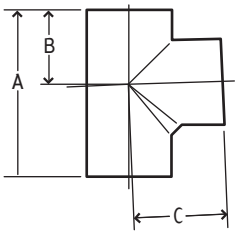
88 deg long radius bend - back door

Product Code	Dia	A	B	Nominal (Wt/kg)
HS4011	100	269	180	7.3
HS6011	150	274	150	12.7



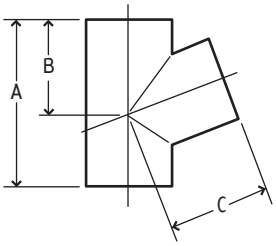
88 deg bend - long tail

Product Code	Dia	A	B	Nominal (Wt/kg)
HS4013	100	110	250	4.0



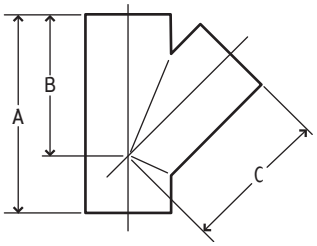
88 deg single equal and unequal branch

Product Code	Dia	A	B	C	Nominal (Wt/kg)
HS2020	50x50	145	66	80	1.1
HS3020	70x50	155	72	90	1.5
HS3021	70x70	180	83	95	1.8
HS4020	100x50	170	76	105	2.2
HS4021	100x70	190	88	110	2.5
HS4022	100x100	220	105	115	3.4
HS6020	150x100	245	115	145	5.1
HS6021	150x150	300	142	155	7.4
HS8020	200x200	380	180	200	14.0
HS10020	250x250	468	228	243	23.5
HS12020	300x300	530	265	265	35.0



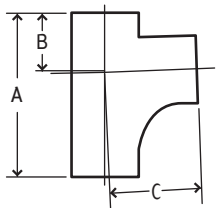
69 deg single equal and unequal branch

Product Code	Dia	A	B	C	Nominal (Wt/kg)
HS2023	50x50	135	80	80	1.1
HS3023	70x50	145	90	90	1.4
HS3024	70x70	170	100	100	1.8
HS4023	100x50	155	100	110	2.1
HS4024	100x70	180	100	120	2.6
HS4025	100x100	215	130	130	3.4
HS6023	150x100	235	150	155	4.9



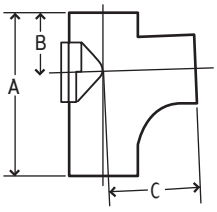
45 deg single equal and unequal branch

Product Code	Dia	A	B	C	Nominal (Wt/kg)
HS2026	50x50	160	115	120	1.3
HS3026	70x50	170	130	130	1.8
HS3027	70x70	200	145	150	2.2
HS4026	100x50	180	150	150	2.4
HS4027	100x70	215	170	170	3.1
HS4028	100x100	260	190	190	4.3
HS6026	150x100	280	225	225	5.8
HS6027	150x150	355	265	265	10.2
HS6028	150x70	235	205	205	4.9
HS8026	200x100	300	260	260	9.1
HS8027	200x150	375	300	300	13.2
HS8028	200x200	455	340	340	16.8
HS10028	250x250	560	430	430	32.0
HS12028	300x300	665	520	520	54.0



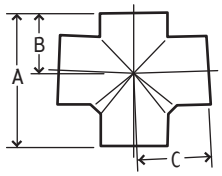
88 deg single branch - radius curve

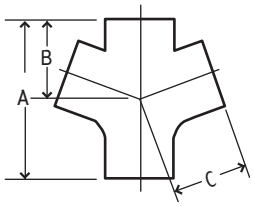
Product Code	Dia	A	B	C	Nominal (Wt/kg)
HS4030	100x100	260	102	150	4.1
HS6030	150x100	305	115	202	6.5
HS6031	150x150	400	135	260	11.7

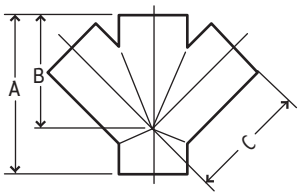


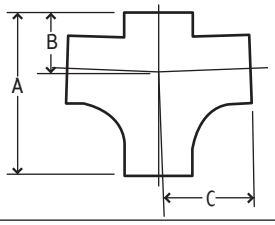
88 deg single branch - radius curve with access

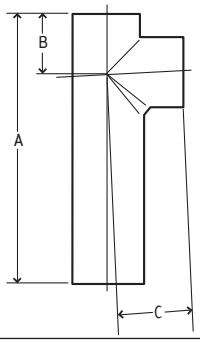
Product Code	Dia	A	B	C	Nominal (Wt/kg)
HS4032	100x100	270	102	150	5.4
HS6032	150x100	300	115	202	9.5
HS6033	150x150	400	140	260	14.2

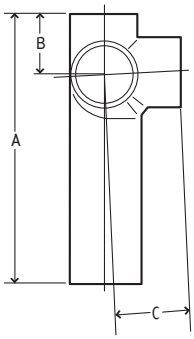


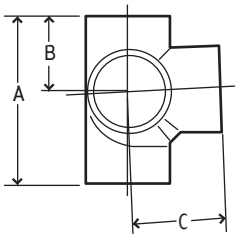












88 deg double branch

Product Code	Dia	A	B	C	Nominal (Wt/kg)
HS4034	100x100	220	105	115	3.8

69 deg double branch

Product Code	Dia	A	B	C	Nominal (Wt/kg)
HS4035	100x100	215	130	130	4.1

45 deg double branch

Product Code	Dia	A	B	C	Nominal (Wt/kg)
HS4036	100x100	260	190	190	5.7
HS6036	150x100	280	225	225	6.5
HS6037	150x150	355	265	265	11.7
HS8036	200x200	455	340	340	21.0

88 deg double branch - radius curve

Product Code	Dia	A	B	C	Nominal (Wt/kg)
HS4038	100x100	270	102	150	5.3
HS6038	150x100	300	115	200	8.2

88 deg single branch - long tail

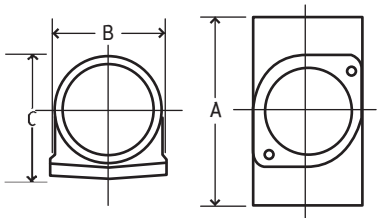
Product Code	Dia	A	B	C	Nominal (Wt/kg)
HS4040	100x100	430	105	115	5.2

88 deg corner branch - long tail

Product Code	Dia	A	B	C	Nominal (Wt/kg)
HS4041	100x100	430	105	115	7.0

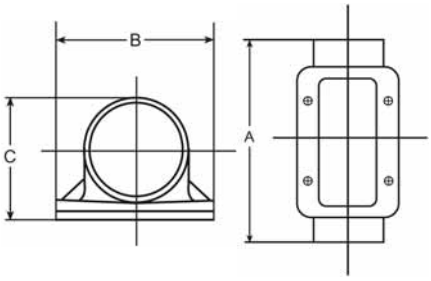
88 deg corner branch - short tail

Product Code	Dia	A	B	C	Nominal (Wt/kg)
HS4042	100x100	220	105	115	3.5



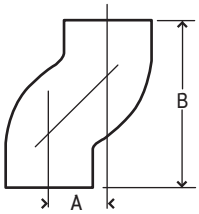
access pipe - round door

Product Code	Dia	A	B	C	Nominal (Wt/kg)
HS2043	50	170	80	76	1.7
HS3043	70	205	98	92	2.5
HS4043	100	250	118	130	4.3
HS6043	150	280	172	180	7.9



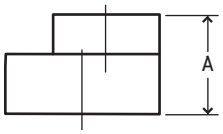
access pipe - rectangular door

Product Code	Dia	A	B	C	Nominal (Wt/kg)
HS4049	100	320	160	129	7.2
HS6049	150	395	215	184	13.5
HS8049	200	465	260	232	22.0
HS10049	250	535	335	300	37.5
HS12049	300	605	385	350	50.0



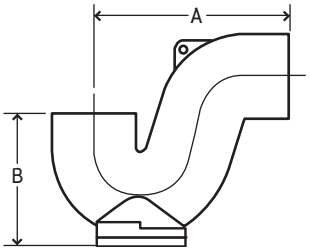
offset

Product Code	Dia	A	B	Nominal (Wt/kg)
HS4044	100	75	215	2.6
HS2045	50	130	230	1.4
HS3045	70	130	250	2.3
HS4045	100	130	270	3.8



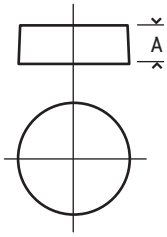
pipe taper

Product Code	Dia	A	Nominal (Wt/kg)
HS3046	70x50	78	0.6
HS4046	100x50	80	0.9
HS4047	100x70	88	1.1
HS6046	150x50	102	2.5
HS6047	150x70	100	2.7
HS6048	150x100	102	2.4
HS8046	200x100	115	4.0
HS8047	200x150	125	4.0
HS10046	250x100	125	5.5
HS10047	250x150	130	6.3
HS10048	250x200	140	6.5
HS12046	300x150	146	9.9
HS12047	300x200	160	10.1
HS12048	300x250	172	12.2



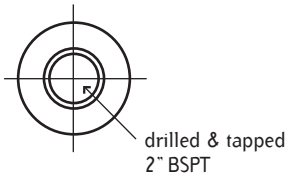
trap - with bottom access

Product Code	Dia	A	B	Nominal (Wt/kg)
HS2050	50	160	115	2.3
HS3050	70	200	140	3.6
HS4050	100	255	175	6.8
HS6050	150	350	245	15.8



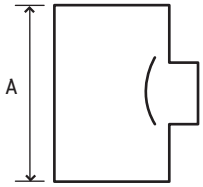
blank end

Product Code	Dia	A	Nominal (Wt/kg)
HS2051	50	30	0.2
HS3051	70	35	0.4
HS4051	100	40	0.8
HS6051	150	50	1.6
HS8051	200	60	2.9
HS10051	250	70	5.7
HS12051	300	80	10.1



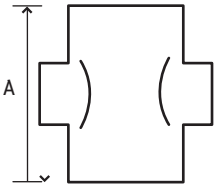
blank end - drilled and tapped

Product Code	Dia	A	Nominal (Wt/kg)
HS4052	100	40	0.7
HS6052	150	50	1.5



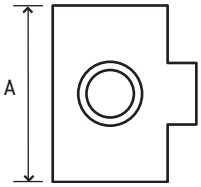
88 deg boss pipe (single boss)

Product Code	Dia	A	Nominal (Wt/kg)
HS3053	70	148	1.6
HS4053	100	155	2.1
HS6053	150	175	3.6



88 deg boss pipe (double boss opposed)

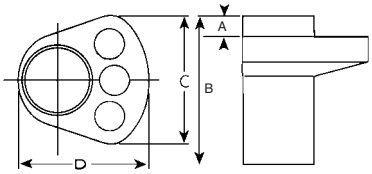
Product Code	Dia	A	Nominal (Wt/kg)
HS4054	100	155	2.2



88 deg boss pipe (double boss @ 90 deg)

Product Code	Dia	A	Nominal (Wt/kg)
HS4055	100	155	2.2

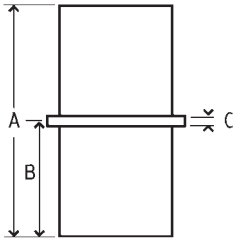
Note: all bosses drilled & tapped 2" BSPT



manifold connector

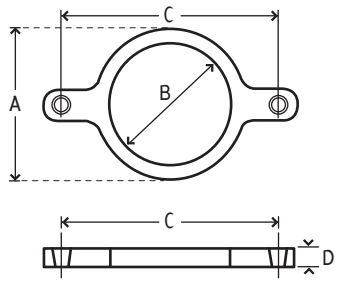
Product Code	Dia	A	B	C	D	Nominal (Wt/kg)
HS4058	100	42	396	218	190	6.2

Note: Fitted with 3 rubber plugs suitable for pushfit connection to 32mm/40mm dia plastic/copper waste.



stack support pipe

Product Code	Dia	A	B	C	Nominal (Wt/kg)
HS3056	70	210	105	8	1.8
HS4056	100	210	105	8	2.8
HS6056	150	210	105	8	4.3
HS8056	200	210	105	8	7.2
HS10056	250	280	140	8	12.5
HS12056	300	280	140	8	16.9

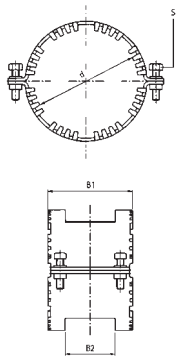


stack support pipe bracket

Product Code	Dia	A	B	C	D	Nominal (Wt/kg)
HS3057	70	106	85	170	20	1.0
HS4057	100	145	117	214	20	1.4
HS6057	150	195	167	255	20	1.8
HS8057	200	245	218	310	20	2.2
HS10057	250	311	283	394	40	6.0
HS12057	300	364	336	448	40	12.0

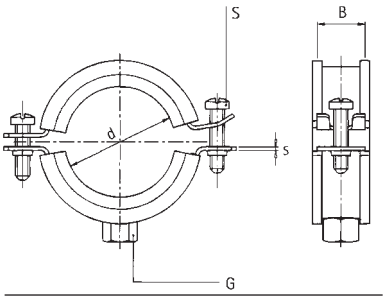
Note: Supplied with sound deadening rubber seal.

To order the Halifax cantilever bracket for wall mounting please contact the sales team.



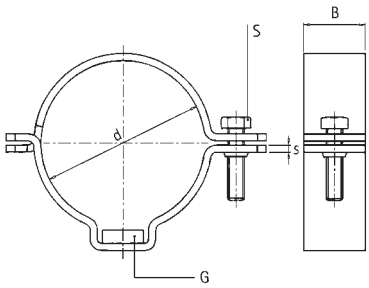
Halifax Grip

Product Code	Dia (mm)	S (mm)	d (mm)	B1 (mm)	B2 (mm)
HS2060	50	M8 x 30	60	71	50
HS3060	70	M8 x 30	80	81	57
HS4060	100	M8 x 30	112	90	57
HS6060	150	M10 x 30	162	90	67
HS8060	200	M10 x 30	212	103	80



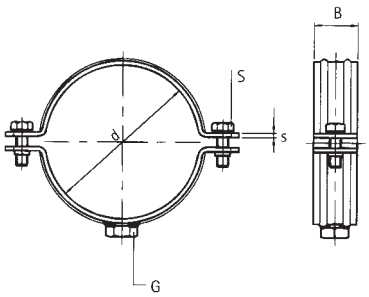
Halifax bismat bracket

Product Code	Dia	d	G (dia)	S (Dia x L)	B x s (mm)	Safe Load (N)
HS2061	50	57-64	M8/M10	M6 x 25	23 x 2.0	1490
HS3061	70	75-80	M8/M10	M6 x 25	25 x 2.0	1490
HS4061	100	108-114	M8/M10	M6 x 25	25 x 2.5	2170
HS6061	150	159-168	M10	M8 x 35	25 x 3.0	2170
HS8061	200	210-219	M10	M8 x 35	25 x 3.0	2170



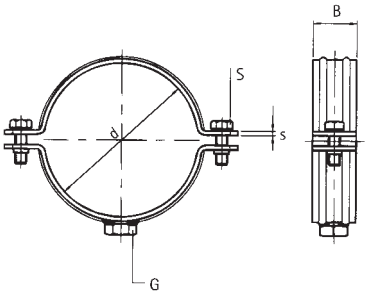
Halifax galvanised steel clamp

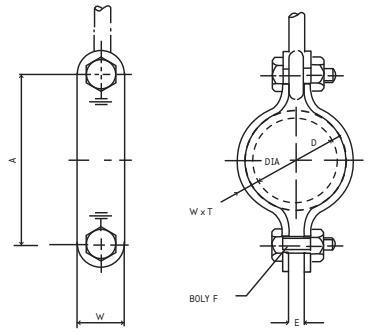
Product Code	Dia	d (mm)	G (dia)	S (Dia x L)	B x s (mm)	Safe Load(N)
HS2062	50	59-63	M10	M8 x 35	30 x 3.0	5700
HS3062	70	79-83	M10	M8 x 35	30 x 3.0	5700
HS4062	100	110-112	M10	M8 x 35	30 x 3.0	5700
HS6062	150	159-163	M10	M8 x 35	30 x 3.0	5700
HS8062	200	210-214	M10	M8 x 35	30 x 3.0	5700
HS10062	250	274	12.5mm	M8 x 35	30 x 6.0	5700
HS12062	300	326	12.5mm	M8 x 35	30 x 6.0	5700

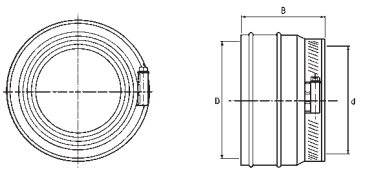


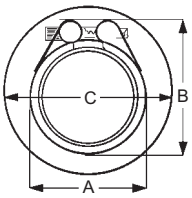
Halifax heavy duty bossed bracket unlined

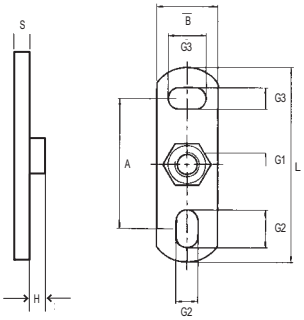
Product Code	Dia	G	d	S (Dia x L)	B x s (mm)	Safe (Load(N))
HS2063	50	M8/M10	59-65	M8 x 25	30 x 2.5	5590
HS3063	70	M10/M12	79-85	M8 x 25	30 x 3.0	5700
HS4063	100	M10/M12	108-116	M8 x 25	30 x 3.0	5700
HS6063	150	M10/M12	159-169	M10 x 35	38 x 4.0	5700
HS8063	200	M10/M12	208-218	M10 x 35	38 x 4.0	5700
HS10063	250	M16	267-279	M12 x 35	38 x 4.0	5700
HS10063	300	M16	315-325	M12 x 35	48 x 4.0	5700

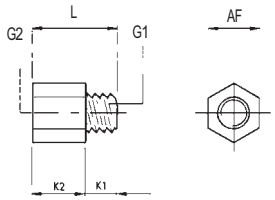












Halifax heavy duty bossed bracket lined

Product Code	Dia	G	d	S (Dia x L)	B x s (mm)	Safe (Load(N))
HS2064	50	M8/M10	57-64	M8 x 25	30 x 2.5	5590
HS3064	70	M10/M12	79-85	M8 x 25	30 x 3.0	5700
HS4064	100	M10/M12	108-114	M8 x 25	30 x 3.0	5700
HS6064	150	M10/M12	159-168	M10 x 35	38 x 4.0	5700
HS8064	200	M10/M12	210-219	M10 x 35	38 x 4.0	5700
HS10064	250	M16	265-275	M12 x 35	38 x 4.0	5700
HS12064	300	M16	315-325	M12 x 35	48 x 4.0	5700

Halifax split band clip

Product Code	NB	A	WxT	D (mm)	E	Bolt F
HS2065	50	114	30 x 3mm	55-63	10	M10 x 30
HS3065	70	116	30 x 3mm	78-83	10	M10 x 30
HS4065	100	176	40 x 3mm	110-112	12	M10 x 30
HS6065	150	226	40 x 3mm	160-163	12	M12 x 40
HS8065	200	297	50 x 3mm	210-214	16	M16 x 50
HS10065	250	371	50 x 6mm	273	16	M16 x 50
HS12065	300	420	50 x 10mm	324	20	M20 x 80

Halifax fix connector

Product Code	Dia	D (mm)	d (mm)	B (mm)
HS2068	50	40-56	58	63
HS3068	70	56-75	78	77
HS4068	100	104-110	110	95

Halifax High Performance Coupling

Product Code	Dia (mm)	Bolt Size	A (mm)	B (mm)	C (mm)	Width (mm)	Nominal Wt/Kg
HS2069	50	M8	82	95	136	85	0.87
HS3069	70	M10	105	122	149	85	1.00
HS4069	100	M10	132	149	180	85	1.5
HS6069	150	M12	183	210	249	110	3.2
HS8069	200	M16	247	277	320	120	6.9
HS10069	250	M16	301	331	370	120	7.7
HS12069	300	M16	354	384	415	120	9.5

wall plate: type 670

Product Code	G1	H (mm)	A (mm)	B x s (mm)	L (mm)	G2 (mm)	G3 (mm)	Safe Load (N)
HSD6702	M10	10	50	25 x 3.0	80	15 x 8.5	15 x 8.5	2500

thread adaptor

Product Code	G1 (male)	G2 (female)	K1 (mm)	K2 (mm)	L (mm)	AF (mm)
HSD10/12	M10	M12	10	15	25	17

pipework support

Horizontal pipework support

BS EN 12056 Code of Practice stipulates that the distance between pipe supports should not exceed 3 metres. We would however, recommend two brackets per 3 metre pipe length, the first being positioned within 500mm of coupling joint and the next to be approximately 1.5m spacing. This will aid installation and provide greater rigidity. See image 1

The pipe should also be supported at every change of direction or branch connection and in some cases it may be necessary to provide a lateral brace at 12m intervals. The max length of threaded rod for a single drop bracket should be 750mm; for longer drops it is recommended two drop rods are utilized with a split band clip. See Image 2

Vertical pipework support

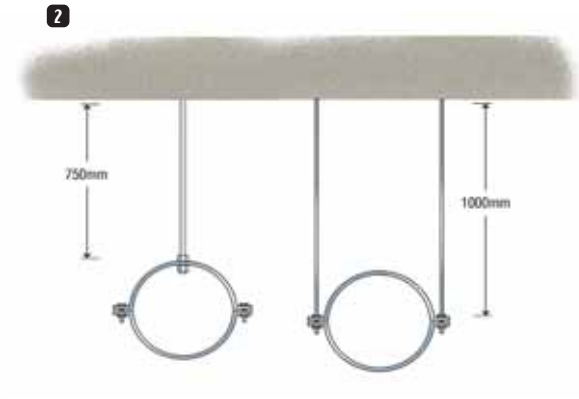
For vertical soil and rainwater stacks load bearing brackets should be provided every 3m maximum at each floor level. These brackets should be securely fixed and tightened as the installation proceeds so as to adequately support the pipework and prevent unnecessary load at the base of the stack. Where fittings are installed within the vertical stack it is recommended that additional brackets are provided to ensure alignment of the pipework. See image 3

Stack support

For all buildings with a tall pipe stack there is a requirement for extra support (every fifth floor from the base where average floor height is 2.5 metres). The Halifax cantilever bracket fixes to the building fabric, supporting a pipe support bracket and stack support pipe which couples to the pipe stack. The weight of the stack is transferred to the building fabric. This additional support is not simply good practice, but an additional requirement. See image 4

(Note: to order the Halifax cantilever bracket please contact the sales team.)

2



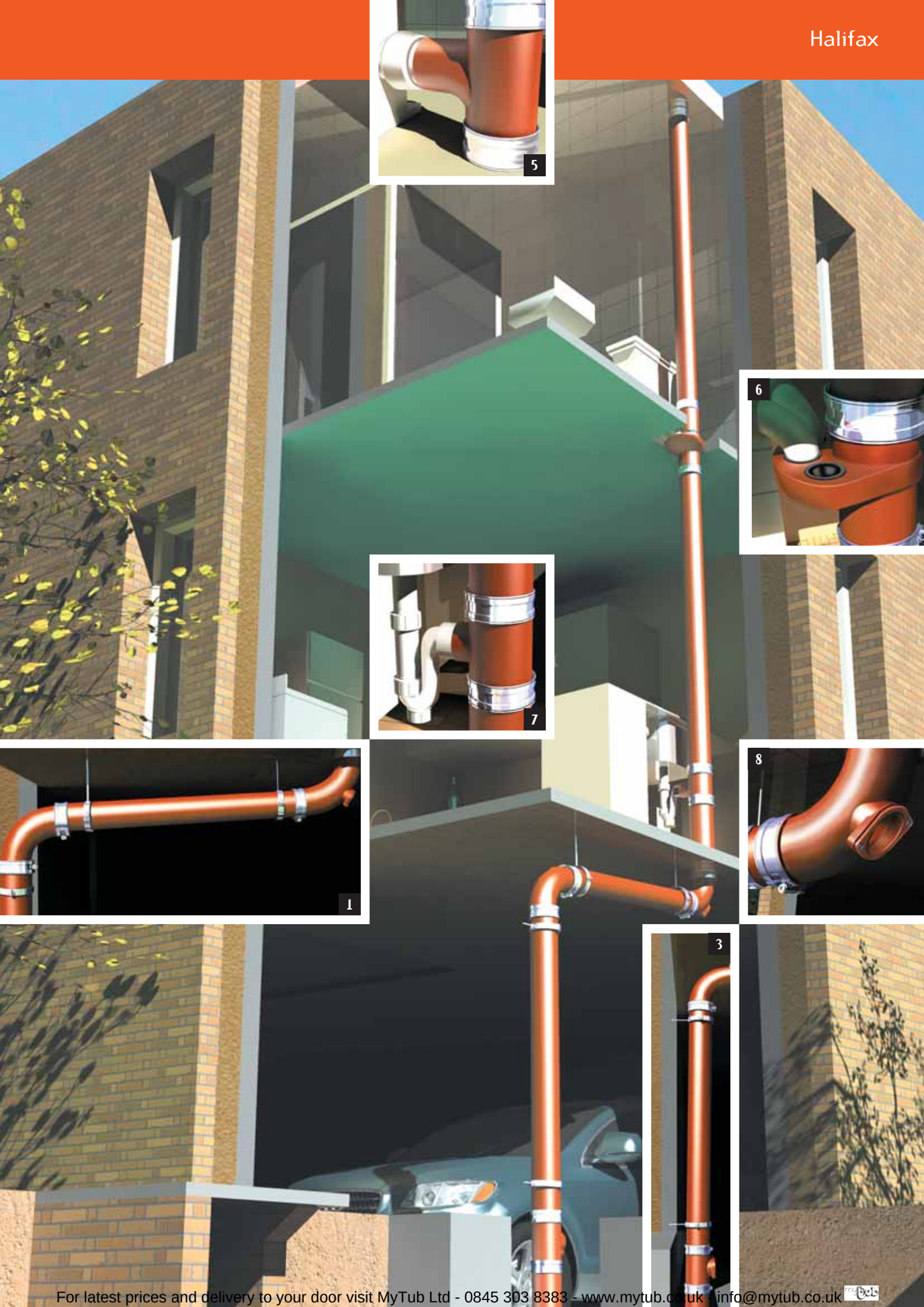
4

(Zinc plated cantilever brackets supplied separately)

Image key: waste connections and access

5 Multikwik or similar WC connector
6 Halifax Manifold Connector
7 Boss Pipe
8 Access Door

For soil and waste stacks the code of practice recommends that access is provided at changes in direction of 90 degrees for cleaning and clearing purposes.
(13mm socket - for access door bolts HSD002)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Halifax soil to below ground clayware

Halifax can be connected to a clay or earthenware socket using a traditional cement joint. When connecting to Supersleve use the appropriate adaptor coupling by Hepworth

PVC above ground soil systems

100mm & 150mm Halifax to PVC may be connected by utilising either our HS4002 & HS6002couplings or the new ductile iron couplings HS4012 & HS6012.

Conventional C.I. soil/drain

To connect Halifax into a conventional soil or drain socket use a traditional caulked joint.

Halifax manifold connector

This multi-waste connector allows up to 3 waste pipes from various appliances e.g. sinks, basins and showers to be connected at a single internal point above finished floor level.

The rubber grommets in the manifold connector can accept 32 & 40mm plastic or 35 and 42mm copper.
See Image 'Halifax Manifold Connector' 1

Sanitary ware / waste connections

The Halifax system accepts Multikwik and similar WC connectors and the Boss pipe accepts both plastic and copper standard connections.
See images Multikwik 2 and Boss pipe 3

Roof outlets / floor drains

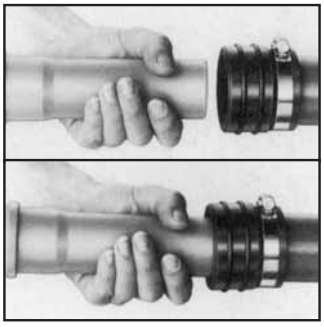
In most cases our standard couplings will connect directly onto the majority of products available on the market, but if in doubt, contact us to check on compatibility.

1 Halifax fix

Reducing connector for jointing pipes of unequal diameter or dissimilar material:

- Manufactured to DIN 4060 for use up to 0.5 Bar internal pressure
- No noise transmission from pipe to pipe
- Supplied with protective cap and two closure seals
- Closure ring in EPDM rubber
- Hose clip made of stainless steel 1.4016
- Slotted hexagon head locking screw
- Lubricant should be used during assembly.

1



2

2 Halifax soil boss pipes

Halifax boss pipes in dia's 70 to 150mm with 2 inch BSPT to accept male iron waste adaptors to plastic or copper.

- Cast iron fittings manufactured to BS EN 877
- 2 inch BSPT thread
- Single bossed pipe
- Double bossed at 90 degrees and double bossed opposed pipes

Halifax soil blank end

- Available in various diameters drilled and tapped 2 inch BSPT for connection to branches or pipe ends.

Cutting pipes

Halifax pipes can be easily cut by using a powered disc cutting tool, but please ensure the correct grade of cutting disc is employed suitable for cast iron. Always follow Health & Safety guidelines as recommended by the tool manufacturer.

Flow capacities

Maximum flow capacity of Halifax pipes running 1/4 full in a vertical installation and running full at various gradients (litres/second).

Flow Capacities

Size	Vertical	1:40	1:60	1:80	1:100
50	1.2	1.46	1.19	1.03	0.92
70	2.7	4.29	3.5	3.03	2.71
100	7.2	9.24	7.55	6.54	5.55
150	21.7	27.3	22.3	19.3	17.2
200	43.7	58.7	47.9	41.5	37.1
250	79.3	106	86.9	75.2	76.3
300	129	173	141	122	109

It is recommended that 100mm pipes have a minimum fall of 1:40 and 150mm pipes have minimum fall of 1:60.

Weights and masses

European Standard BS EN 877 states that the nominal masses of finished products shall be given in the manufacturers catalogues when measured in accordance with the table below.

The masses of the finished products shall be checked by weighing to an accuracy of within:

Weights and Masses

0.01kg	for masses up to 1kg
0.1kg	for masses greater than 1kg up to 20kg
0.5kg	for masses greater than 20kg up to 100kg
1.0kg	for masses greater than 100kg

Above ground soil and rainwater system

Pipes

External: Two part epoxy coating (red-brown colour) with an average dry wall thickness of 40 microns

Internal: Two part epoxy coating (yellow ochre colour) with average dry wall thickness of 130microns

Fittings

External: Two part epoxy coating (red-brown colour) with an average dry wall thickness of 70 microns

Internal: Two part epoxy coating (red-brown colour) with average dry wall thickness of 70microns

Pipe Weights and Dimensional Tolerances

Nominal	Outside		Weight kg/m	
Bore mm	Dia. mm	Tolerance	Empty	Full
50mm	58	+2 / -1	5.2	7.3
70mm	78	+2 / -1	6.4	10.4
100mm	110	+2 / -1	9.8	19.1
150mm	160	+2 / -2	15.0	33.2
200mm	210	+2 / -2	23.7	55.2
250mm	274	+2.5 / -2.5	33.3	87.7
300mm	326	+2.5 / -2.5	43.2	120.8

Internal coatings

Our coatings have been successfully tested for resistance to attack by salt spray, waste water, hot water cycling and solutions of acid at PH2 and alkalis at PH12 and conform to BS EN 877 1999.

Our internal quality control procedures ensure the integrity of the coating is maintained through process monitoring and final inspection of coating thickness and adhesion.

Halifax above ground soil, waste and rainwater pipework

Cast iron soil pipes and fittings to product standard BS EN 877 and BBA accredited are to be supplied by Hargreaves Foundry Drainage Ltd of Water Lane, South Parade, Halifax, W. Yorkshire HX3 9HG.

a) Soil, waste and rainwater pipework in nominal diameters 50mm to 300mm shall be installed using cast iron socketless pipes and fittings conforming to product standard BS EN 877 - 1999.

b) The system shall be installed in accordance with manufacturer's recommendations and BS EN 12056 code of practice plus relevant Building Regulations.

c) Pipes and fittings to be jointed by Ductile Iron Couplings with zinc plated set screws and nuts and synthetic EPDM gasket. Earth continuity shall also be incorporated.

Or

d) Pipes and fittings to be jointed by stabilised chrome steel Couplings with single locking zinc plated set screw and EPDM gasket. Earth continuity shall also be incorporated.

e) Finishes. Pipes externally finished with a two part epoxy coating, red-brown colour and average dry thickness 40 microns. Internally coated with two part epoxy yellow ochre finish and an average dry thickness of 130 microns. Fittings protected with a two part epoxy coating, red-brown colour and average dry thickness of 70 microns.

f) Pipes to be cut on site shall be cut square with clean edges and no burrs to ensure full entry depth into couplings.

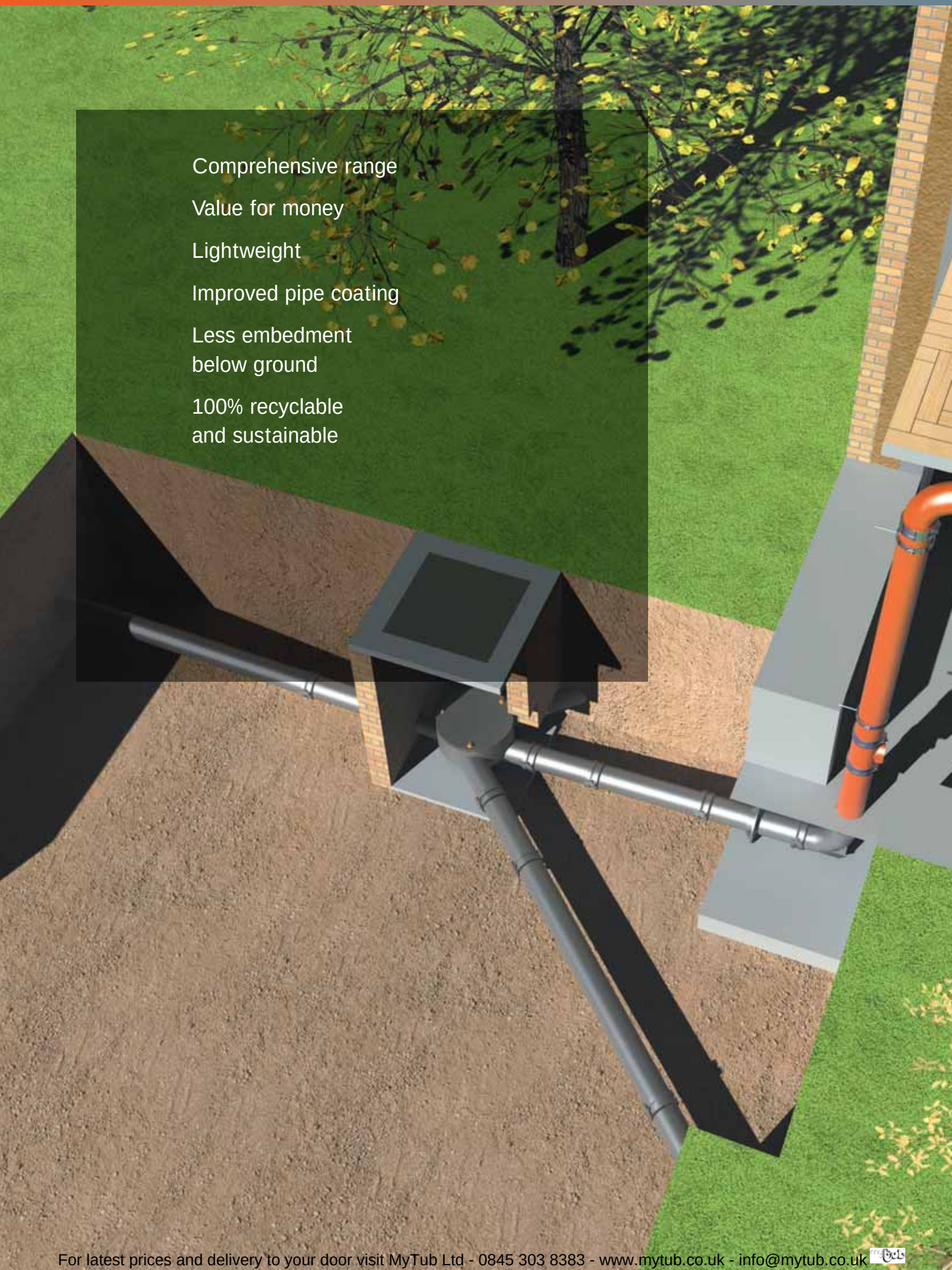
g) Waste and ventilating pipework u.t.i. 50mm diameter shall be connected using boss pipes or blank ends drilled and tapped 2" BSPT.

Or

h) Waste and ventilating pipework u.t.i. 50mm diameter shall be connected using a 'Halifax fix' connector or u.t.i. 42mm diameter shall be connected using manifold connector.

i) Pipework shall be installed true to line and following manufacturer's recommended method. Halifax support brackets as series HS061, HS062 or HS063 shall be used or alternatives as suggested by manufacturer.

Available as a Word document download from the website



Comprehensive range

Value for money

Lightweight

Improved pipe coating

Less embedment below ground

100% recyclable and sustainable

Comprehensive range

The Halifax system complies with European Standard BS EN 877 and provides a complete system of pipes and fittings for the conveyance of waste water and rainwater through a building and as far as the sewer.

Value for money

The Halifax system compares favourably with other systems on labour rates. Also the longevity and durability of cast iron means long life and value. Witness the amount of Victorian cast iron pipework still in use - and that was before we'd developed our coating systems.

Lightweight

Compared to BS 437 cast iron drainage systems the Halifax system is lighter and easier to handle, but still retains all the inherent qualities of cast iron including strength and longevity.

Improved pipe coating

The Halifax system pipes are lined internally with a two part epoxy finish which provides improved performance when exposed to aggressive substances. Fittings are also epoxy coated and provide a similar level of performance.

Less embedment below ground

In ground conditions subject to movement or additional loading cast iron is the ideal choice. Other materials will probably require extra protection in the form of concrete surround or cover, whereas in most cases cast iron has the inherent strength to withstand such conditions, saving time and money on site.

100% recyclable and sustainable

Cast iron will not only last the life of the building but is strong enough to withstand on site handling and mechanical deblocking. It also reduces the use of natural resources by utilising almost 100% scrap and recycled metal in the manufacturing process. Finally when a drainage system reaches the end of its lifespan, all the cast iron can be recycled to make new products.

1 CV coupling

- Made of stainless steel 1.4301 (AISI-nr 304)
- Stainless Steel locking screw M8 x 50 slotted hexagon head
- 2 locking screws on 100mm & 150mm and 4 locking screws on 200, 250 & 300mm dia's
- Closure ring made of EPDM rubber
- For use up to 0.5 bar internal pressure

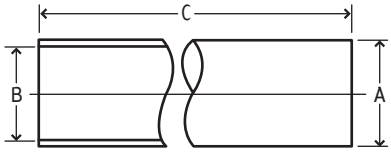
2 Ductile coupling

- Two piece manufactured from ductile iron BS EN 1563
- Stainless Steel locking screw M8 x 40 for 100mm or M8 x 50 for 150mm + 200 mm (6mm allen drive)
- 2 locking screws on 100mm and 4 locking screws on 150mm & 200mm dia's
- EPDM sealing ring/gasket
- For use u.t.i 0.5 bar internal pressure
- Below ground drain couplings coated in 2 part epoxy grey finish

For jointing instructions please see page 9.
Please note: references to electrical continuity do not apply to jointing ductile couplings below ground, and grub screws are not supplied.

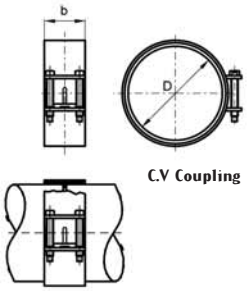
1

2



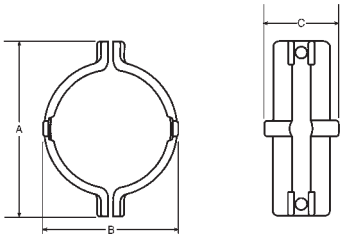
double spigot pipe

Product Code	Dia	A Max (O/dia)	B Min (I/dia)	Length C (mm)	Nom (Wt kg)
HD4001	100	112	97.5	3000	29.7
HD6001	150	162	146.25	3000	45.2
HD8001	200	212.5	195	3000	71.2
HD10001	250	276.5	243.75	3000	99.8
HD12001	300	328.5	292.5	3000	129.7



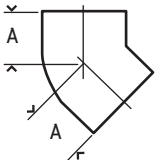
stainless steel coupling

Product Code	Dia	D	B	Max Torque (Nm)
HD4002	100	114	54	8
HD6002	150	164	65	8
HD8002	200	214	78	8
HD10002	250	278	78	15
HD12002	300	330	78	15



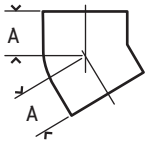
ductile iron coupling

Product Code	Dia	A	B	C	Nominal (Wt/kg)
HD4012	100	172	132	73	1.1
HD6012	150	223	180	95	2.0
HD8012	200	283	240	95	3.3



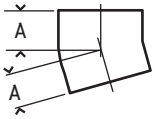
45 deg short radius bend

Product Code	Dia	A	Nominal (Wt/kg)
HD4005	100	70	1.6
HD6005	150	90	3.6
HD8005	200	110	6.4
HD10005	250	130	11.0
HD12005	300	150	18.5



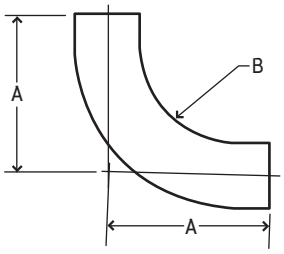
30 deg short radius bend

Product Code	Dia	A	Nominal (Wt/kg)
HD4006	100	60	1.4
HD6006	150	80	3.2



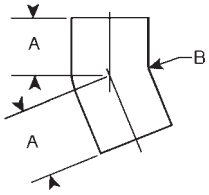
15 deg short radius bend

Product Code	Dia	A	Nominal (Wt/kg)
HD4007	100	50	1.2
HD6007	150	65	2.5



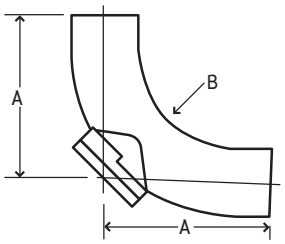
88 deg long radius bend

Product Code	Dia	A	B	Nominal (Wt/kg)
HD4008	100	269	180	5.3
HD6008	150	274	150	10.7



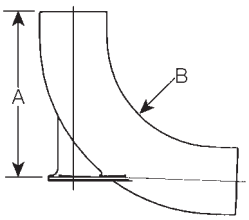
22 deg long radius bend

Product Code	Dia	A	B	Nominal (Wt/kg)
HD4009	100	90	180	2.2



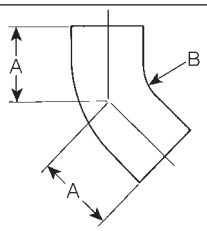
88 deg long radius bend - back door

Product Code	Dia	A	B	Nominal (Wt/kg)
HD4011	100	269	180	7.3
HD6011	150	274	150	12.7



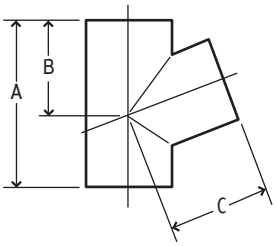
88 deg long radius bend - heel rest

Product Code	Dia	A	B	Nominal (Wt/kg)
HD4014	100	269	180	5.5
HD6014	150	274	150	11.4



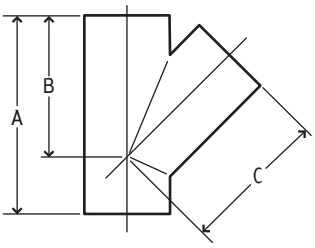
45 deg medium radius bend

Product Code	Dia	A	B	Nominal (Wt/kg)
HD4015	100	135	150	3.5
HD6015	150	145	150	6.2



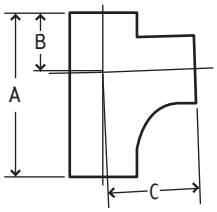
69 deg single equal and unequal branch

Product Code	Dia	A	B	C	Nominal (Wt/kg)
HD4025	100x100	215	130	130	3.4
HD6023	150x100	235	150	155	4.9



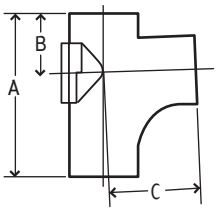
45 deg single equal and unequal branch

Product Code	Dia	A	B	C	Nominal (Wt/kg)
HD4028	100x100	260	190	190	4.3
HD6026	150x100	280	225	225	5.8
HD6027	150x150	355	265	265	10.2
HD8026	200x100	300	260	260	9.1
HD8027	200x150	375	300	300	13.2
HD8028	200x200	455	340	340	16.8
HD10028	250x250	560	430	430	32.0
HD12028	300x300	665	520	520	54.0



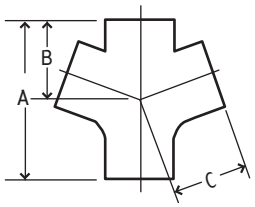
88 deg single branch - radius curve

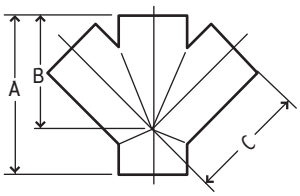
Product Code	Dia	A	B	C	Nominal (Wt/kg)
HD4030	100x100	260	102	150	4.1
HD6030	150x100	305	115	202	6.5
HD6031	150x150	400	135	260	11.7

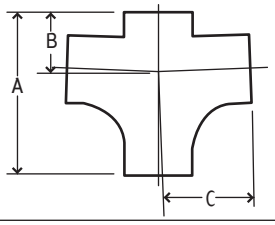


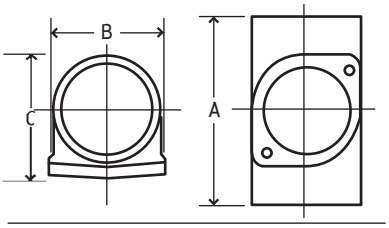
88 deg single branch - radius curve - with access

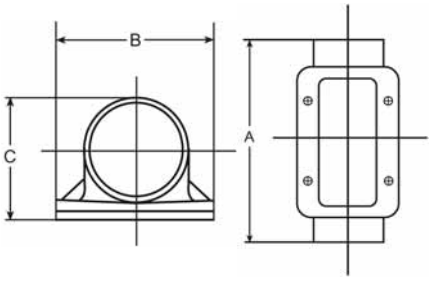
Product Code	Dia	A	B	C	Nominal (Wt/kg)
HD4032	100x100	270	102	150	5.4
HD6032	150x100	300	115	202	9.5
HD6033	150x150	400	140	260	14.2

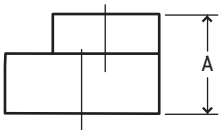


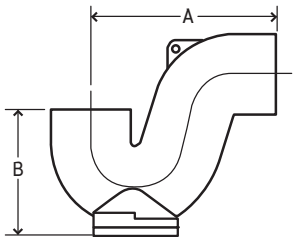












69 deg double branch

Product Code	Dia	A	B	C	Nominal (Wt/kg)
HD4035	100x100	215	130	130	4.1

45 deg double branch

Product Code	Dia	A	B	C	Nominal (Wt/kg)
HD4036	100x100	260	190	190	5.7
HD6036	150x100	280	225	225	6.5
HD6037	150x150	355	265	265	11.7
HD8036	200x200	455	340	340	21.0

88 deg double branch - radius curve

Product Code	Dia	A	B	C	Nominal (Wt/kg)
HD4038	100x100	270	102	150	5.3
HD6038	150x100	300	115	200	8.2

access pipe - round door

Product Code	Dia	A	B	C	Nominal (Wt/kg)
HD4043	100	250	118	130	4.3
HD6043	150	280	172	180	7.9

access pipe - rectangular door

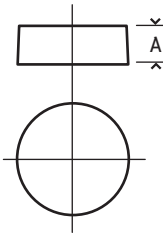
Product Code	Dia	A	B	C	Nominal (Wt/kg)
HD4049	100	320	160	129	7.2
HD6049	150	395	215	184	13.5
HD8049	200	465	260	232	22.0
HD10049	250	535	335	300	37.5
HD12049	300	605	385	350	50.0

pipe taper

Product Code	Dia	A	Nominal (Wt/kg)
HD6048	150x100	102	2.4
HD8046	200x100	115	4.0
HD8047	200x150	125	4.0
HD10046	250x100	125	5.5
HD10047	250x150	130	6.3
HD10048	250x200	140	6.5
HD12046	300x150	146	9.9
HD12047	300x200	160	10.1
HD12048	300x250	172	12.2

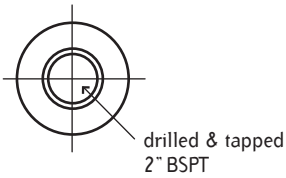
trap - with bottom access

Product Code	Dia	A	B	Nominal (Wt/kg)
HD4050	100	255	175	6.8
HD6050	150	350	245	15.8



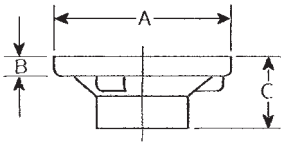
blank end

Product Code	Dia	A	Nominal (Wt/kg)
HD4051	100	40	0.8
HD6051	150	50	1.6
HD8051	200	60	2.9
HD10051	250	70	5.7
HD12051	300	80	10.1



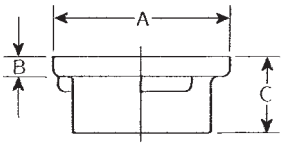
blank end - drilled and tapped

Product Code	Dia	A	Nominal (Wt/kg)
HD4052	100	40	0.7
HD6052	150	50	1.5



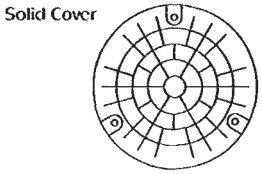
bellmouth gully inlet

Product Code	Dia	A	B	C	Nominal (Wt/kg)
HD4070	100	215	25	85	2.4



gully inlet

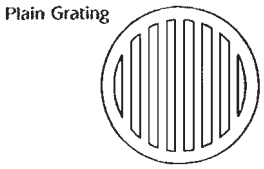
Product Code	Dia	A	B	C	Nominal (Wt/kg)
HD6071	150	215	22	95	2.9



solid cover

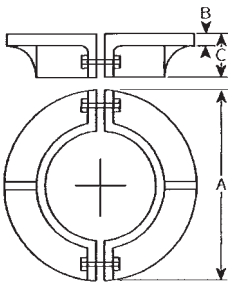
Product Code	Dia	Nominal (Wt/kg)
HD8076	200	2.0

Supplied with rubber seal + screws fitted



plain grating

Product Code	Dia	Nominal (Wt/kg)
HD8077	200	1.8

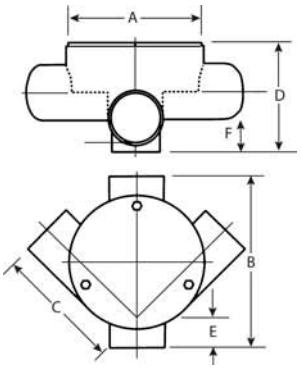


puddle flange

Product Code	Dia	A	B	C	Nominal (Wt/kg)
HD4078	100	220	12	50	4.0
HD6078	150	275	12	65	6.0
HD8078	200	315	12	70	7.0
HD10078	250	405	12	70	11.0
HD12078	300	450	12	80	13.0

Bolt on flange is supplied in two halves with stainless steel nuts and bolts.

Designed to be bedded on "Denso" tape or similar wrapped around the pipe to provide a water tight seal.



inspection chamber

Product Code	Dia	A	B	C	D	E	F	Nominal (Wt/kg)
HD4480	100x100	275	375	290	240	72	66	15.9
HD6680	150x150	275	415	317	310	126	92	19.4

Supplied with 275mm diameter removeable cover for ease of maintenance.

Trench preparation

Halifax drainage may be laid directly into an accurately trimmed trench allowing 50mm clearance beneath each coupling joint. The bottom of the trench should be flat to provide continuous support. Where accurate trimming cannot be achieved due to the subsoil condition, it will be necessary to excavate an additional 100mm to allow a granular bed to be laid whilst still maintaining the 50mm clearance beneath each joint.

Bedding in concrete

When a concrete bed is required prepare the trench as above to provide 100mm of concrete under the pipe but support the pipe on a compressible material (expanded polystyrene) either side of each joint. If the pipework is being surrounded in concrete provision should be made for a flexible joint, within the concrete, at 5m intervals and placed next to a pipe joint. This should be made of suitable compressible material and cover the full cross sectional area of the concrete. It is recommended that inspection and testing of the pipework is completed in sections prior to haunching and surrounding with concrete.

Settlement

Pipework leaving buildings and manholes which may be subject to settlement should incorporate a minimum of two joints close to the point of exit at a maximum of 600mm apart. This will provide a short length of pipe to act as a "rocker pipe" and in areas where large settlement is expected more than one may be required. See the image Underground pipe. See image 1

Depth of pipework

Halifax drainage can be installed under buildings without additional protection, but when laid under roads with less than 1.2m cover and in areas which are subject to special loadings it is recommended that extra protection be considered.

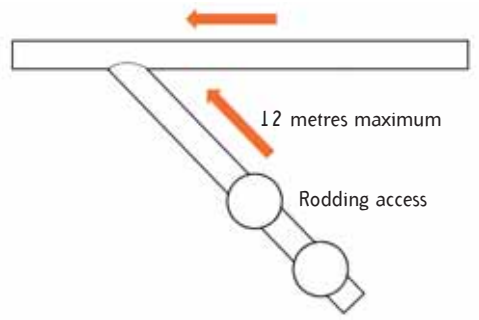
Pipefalls

The pipework gradient should provide a self-cleaning action under normal discharge conditions. For flows of less than 1 litre/sec. gradients of 1 in 40 for 100mm pipe and 1 in 60 for 150mm pipe are usually satisfactory; but in any case the gradients should not be less than 1 in 80 for 100mm pipe and 1 in 150 for 150mm pipe.

Provision for access

Access is required on drainage pipelines to enable the rodding and clearing of any debris and may be provided by manholes, chambers, access fittings or rodding eyes/roddable gullies - the latter allowing downstream access only.

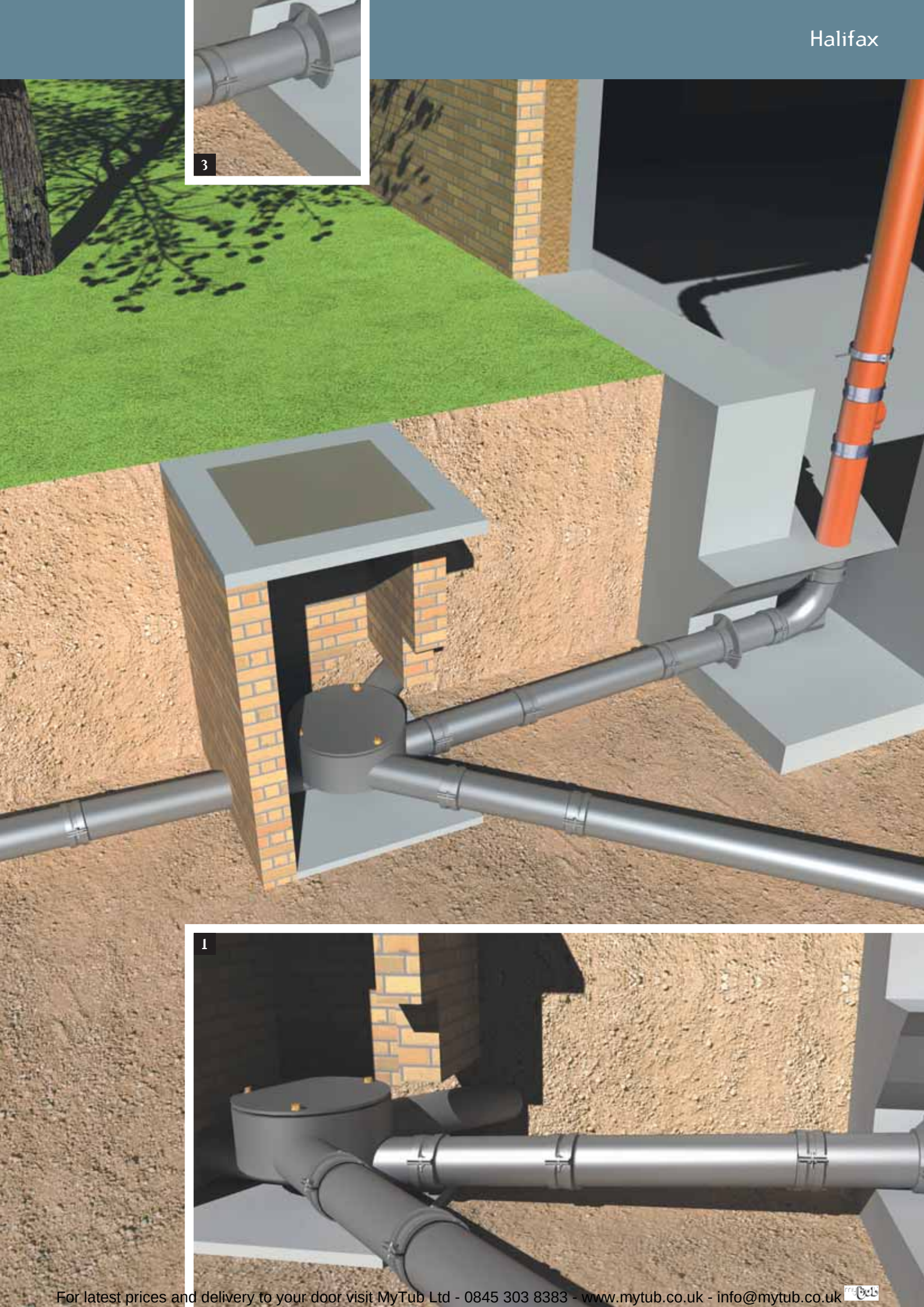
As a general guide, no part of a drain should be further from a manhole than 45 metres and the distance between manholes should not exceed 90 metres. Where one drain connects with another drain without provision of access in the form of a manhole or inspection chamber, access should be provided on the branch drain within 12 metres of the junction. Where the drainage pipeline changes direction either vertically or horizontally; it is recommended an access fitting be incorporated in the design. See below image 2



Puddle flanges

In basement areas where pipes pass through external walls it may be necessary to install a puddle flange. For locations which are below the water table or in areas liable to flooding, puddle flanges will reduce the risk of water entering the building See the image Puddle flange for a typical build in detail. Denso tape or similar should be wrapped around the pipe before bolting on the two piece puddle flange; this will ensure a water tight seal is achieved. See image 3

When pipes are installed through pipe sleeves which have been cast into the concrete wall section, it will be necessary to seal the gap between the sleeve and pipe passing through it with a mastic/ sealant.



Halifax drain to below ground clay

For connections to Supersleve or similar use an adaptor coupling manufactured by clay manufacturer or a proprietary flexible coupling such as "Flexseal" which are available in a variety of sizes to suit.

PVC below ground drainage

100mm and 150mm Halifax to PVC can be connected by using our HD4012 and HD6012 ductile iron couplings.

Connection to BS437 cast iron drain

We recommend "Flexseal" or other similar couplings to connect to cast iron pipes with a larger outside diameter.

Cutting pipes

Halifax pipes can be easily cut by using a powered disc cutting tool, but please ensure the correct grade of cutting disc is employed suitable for cast iron. Always follow Health & Safety guidelines as recommended by the tool manufacturer.

Flow capacities

Maximum flow capacity of Halifax pipes running 1/4 full in a vertical installation and running full at various gradients (litres/second).

Flow Capacities					
Size	Vertical	1:40	1:60	1:80	1:100
50	1.2	1.46	1.19	1.03	0.92
70	2.7	4.29	3.5	3.03	2.71
100	7.2	9.24	7.55	6.54	5.55
150	21.7	27.3	22.3	19.3	17.2
200	43.7	58.7	47.9	41.5	37.1
250	79.3	106	86.9	75.2	76.3
300	129	173	141	122	109

It is recommended that 100mm pipes have a minimum fall of 1:40 and 150mm pipes have minimum fall of 1:60.

Below ground drain system

Pipes

External: Two part epoxy grey coating with an average dry thickness of 170 microns

Internal: Two part epoxy coating (yellow ochre) with average dry thickness of 130 microns.

Fittings

Two part epoxy grey coating with an average thickness of 150 microns.

Weights and masses

European Standard BS EN 877 states that the nominal masses of finished products shall be given in the manufacturers catalogues when measured in accordance with the table below.

The masses of the finished products shall be checked by weighing to an accuracy of within:

Weights and Masses	
0.01kg	for masses up to 1kg
0.1kg	for masses greater than 1kg up to 20kg
0.5kg	for masses greater than 20kg up to 100kg
1.0kg	for masses greater than 100kg

Pipe Weights and Dimensional Tolerances				
Nominal	Outside		Weight kg/m	
Bore mm	Dia. mm	Tolerance	Empty	Full
100mm	110	+2 /-1	9.8	19.1
150mm	160	+2 /-2	15.0	33.2
200mm	210	+2 /-2	23.7	55.2
250mm	274	+2.5 /-2.5	33.3	87.7
300mm	326	+2.5 /-2.5	43.2	120.8

Halifax below ground foul and stormwater pipework

Cast iron drain pipes and fittings to product standard BS EN 877 are to be supplied by:
Hargreaves Foundry Drainage Ltd of Water Lane, South Parade, Halifax, W. Yorkshire HX3 9HG.

a) Foul and stormwater pipework in nominal diameters 100mm to 300mm shall be installed using cast iron socketless pipes and fittings conforming to product standard BS EN 877 - 1999.

b) The system shall be installed in accordance with manufacturer's recommendations and BS EN 12056 & BS EN 752-1 code of practice plus relevant Building Regulations.

c) Pipes and fittings to be jointed by Ductile Iron
Couplings with stainless steel set screws and nuts and synthetic EPDM gasket.

Or

d) Pipes and fittings to be jointed by Stainless Steel Couplings with twin locking stainless steel set screws and synthetic EPDM gasket.

Finishes

e) Pipes are finished with a two part epoxy grey coating with average dry thickness of 170 microns. Pipes internally coated with a two part epoxy coating, yellow ochre colour, average dry thickness of 130 microns. Fittings normally protected internally and externally with a two part epoxy resin with an average thickness of 150 microns.

f) Pipes to be cut on site shall be cut square with clean edges and no burrs to ensure full entry depth into couplings.

g) Junctions in pipelines should utilise manufacturer's inspection chambers or branch type fittings as recommended.

h) Pipework shall be installed true to line and following manufacturer's recommended method. Buried pipework laid to fall and supported as manufacturer's guidelines and relevant code of practice.

Available as a Word document download from the website

Hargreaves Foundry Castings

Hargreaves have been iron founders for over 100 years. During the past 25 years the company has developed from a general iron founder into a supplier of quality castings worldwide.

We manufacture and market our own branded, drainage products for the construction industry, our Premier ranges for above ground, and the new Halifax Socketless Soil and Drain system for above and below ground use (as shown in this catalogue).

From our own foundry and on site pattern shop we manufacture bespoke architectural castings, public and private art commissions and cast iron products for the engineering and machine tool industries.

At our Yorkshire base we have fabrication, finishing and paint shop facilities and over 55,000 sq. feet of on site warehousing and storage.

In addition to manufacturing castings in our own foundry, Hargreaves offers a casting supply service from our offices in China and Russia and foundries in India. We employ Chinese and Russian nationals to source foundries best suited for specific types of castings and capable of meeting recognised international standards. Our relationships with overseas suppliers are based on partnership, the transfer of knowledge and shared experience to ensure we meet these recognised standards. We also maintain ethical trading and environmental policies*. Our home based staff have the supply chain management skills to ensure a reliable progression from order through to delivery. Through these combined resources we now supply castings in iron or steel to the UK and world wide destinations.

Whether a casting is manufactured in Yorkshire, China, Russia, or India our customers are still dealing with Hargreaves Foundry and can expect delivery of products with professionalism, quality assurance, attention to detail and complete accountability.

*Copies of our Environmental and Ethical Trading policies are available on request.

Premier Rainwater

Premier Rainwater (BS460) and Traditional Soil (BS416) cast iron systems for use externally above ground.

Halifax System

HF Halifax Socketless Soil and Drain (BS EN 877) above and below ground cast iron drainage systems.

Architectural & Art

Bespoke iron castings for new build, conservation and heritage projects. Art castings for public and private commissions.

Engineering

Castings for machine tools, pumps, valves and other engineering castings projects where grey iron is required.

Castings Supply

As well as engineering castings we also have other products in cast iron and cast steel.

Telephone: 01422 330607 Fax: 01422 320349
Email: info@hargreavesfoundry.co.uk www.hargreavesfoundry.co.uk

Production by Bulletpoint Design 08701 221 220

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