HepSure



flexible connection solutions



Introduction to HepSure™

Hepworth has long been one of the strongest brands in the drainage market, synonymous with innovation and a dominant position in multi-material pipe manufacturing.

For over 20 years Hepworth have also been involved in the design and supply of flexible couplings, a natural partner to it's vast range of pipe systems.

Most recently the company has invested in a dedicated in-house manufacturing area which has facilitated the launch of the HepSure™ brand and a more comprehensive product and service package.

HepSure[™] offers a wide range of couplings for different applications as well as the facility to offer first-rate service and special couplings for unique requirements.

Additionally, all HepSure™ couplings utilise a higher grade of steel than most alternative products ensuring the highest



Hepsure TM flexible connection solutions

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Standard Couplings (QSC) Up to 620mm Diameter





HepSure™ Standard Couplings are primarily used in sewer, drain and other non-pressure applications giving a leak proof seal on virtually any pipe material and diameter.

The outer clamps provide a leak proof seal on any pipe material whether the surface is rough or smooth. The centre band provides shear resistance in applications where pipes are subject to earth

On pipes where outside diameters differ dramatically, HepSure™ bushes can be used to increase the diameter of the smaller pipe prior to connection with a standard coupling. Where the difference exceeds 12mm a bush should always be used, if a suitable adaptor is not available.



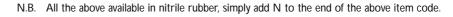
- Public sewers HepSure[™] couplings comply with both BSEN295 and WIS 4-41-01 which are required as part of Sewers For Adoption and Sewers For Scotland.
- As an alternative to a traditional coupling for plain ended pipes.
- Where a post connection is required into an existing drain or sewer.
- For insertion of a new pipe in order to replace a damaged section of existing sewer or drain.
- Where the pipe to be replaced is a different diameter and material to that of the replacement pipe.
- Where pipes of differing material and diameter require connection e.g. joining plot drainage to a private shared sewer.
- Where pipes have been cut or short lengths of pipe require jointing.







Item Code	Description	Size(mm	1)		
		From	То	Width	Thickness
QSC115	100-115 STANDARD COUPLING	100	115	120	7
QSC120	110-121 STANDARD COUPLING	110	121	120	7
QSC125	110-125 STANDARD COUPLING	110	125	120	7
MRC1	120-137 STANDARD COUPLING	120	137	120	7
QSC150	125-150 STANDARD COUPLING	125	150	120	7
QSC165	140-165 STANDARD COUPLING	140	165	120	7
QSC175	150-175 STANDARD COUPLING	150	175	120	7
QSC180	160-182 STANDARD COUPLING	160	180	120	7
MRC2	175-200 STANDARD COUPLING	175	200	150	7.5
QSC215	190-215 STANDARD COUPLING	190	215	150	7.5
QSC225	200-225 STANDARD COUPLING	200	225	150	7.5
QSC250	225-250 STANDARD COUPLING	225	250	150	7.5
QSC265	240-265 STANDARD COUPLING	240	265	150	7.5
QSC275	250-275 STANDARD COUPLING	250	275	150	7.5
MRC3	265-290 STANDARD COUPLING	265	290	150	7.5
QSC310	285-310 STANDARD COUPLING	285	310	190	9
QSC320	295-320 STANDARD COUP <mark>LING</mark>	295	320	190	9
QSC335	305-335 STANDARD COUPLING	305	335	190	9
QSC345	315-345 STANDARD COUPLING	315	345	190	9
QSC360	340-360 STANDARD COUPLING	340	360	190	9
MRC4	355-385 STANDARD COUPLING	355	385	190	9
QSC410	385-412 STANDARD COUPLING	385	410	190	9
QSC425	400-425 STANDARD COUPLING	400	425	190	9
QSC430	405-430 STANDARD COUPLING	405	430	190	9
QSC445	420-445 STANDARD COUPLING	420	445	190	9
QSC465	435-465 STANDARD COUPLING	435	465	190	9
QSC490	465-490 STANDARD COUPLING	465	490	190	9
MRC5	480-510 STANDARD COUPLING	480	510	190	9
QSC525	495-525 STANDARD COUPLING	495	525	190	9
QSC540	510-540 STANDARD COUPLING	510	540	190	9
QSC550	520-550 STANDARD COUPLING	520	550	190	9
MRC6_	530-560 STANDARD COUPLING	530	560	190	9
QSC580	555-580 STANDARD COUPLING	555	580	190	9 ////
QSC600	570-600 STANDARD COUPLING	570	600	190///	9
QSC620	590-620 STANDARD COUPLING	590	620	190	9







Standard Couplings (QLC) 601-2100mm Diameter



Description

Larger HepSure™ Standard Couplings are made to order dependent on site specific requirements and will suit any pipe diameter up to 2100mm. These are primarily used where a connection or repair needs to be effected quickly and can thus be delivered subject to our delivery packages stated on page 13.

 $HepSure^{TM}$ couplings use multiple clamps rather than bolts on similar couplings to ensure even pressure around the entire coupling.



Item Code	Description	Size(mm))		
		From	To	Width	Thickness
QLC600	601-699 STANDARD COUPLING	601	699	190	9
QLC700	700-799 STANDARD COUPLING	700	799	190	9
QLC800	800-899 STANDARD COUPLING	800	899	190	9
QLC900	900-999 STANDARD COUPLING	900	999	190	9
QLC1000	1000-1099 STANDARD COUPLING	1000	1099	190	9
QLC1100	1100-1199 STANDARD COUPLING	1100	1199	190	9
QLC1200	1200-1299 STANDARD COUPLING	1200	1299	190	9
QLC1300	1300-1399 STANDARD COUPLING	1300	1399	190	9
QLC1400	1400-1499 STANDARD COUPLING	1400	1499	190	9
QLC1500	1500-1599 STANDARD COUPLING	1500	1599	190	9
QLC1600	1600-1699 STANDARD COUPLING	1600	1699	190	9
QLC1700	1700-1799 STANDARD COUPLING	1700	1799	190	9
QLC1800	1800-1899 STANDARD COUPLING	1800	1899	190	9
QLC1900	1900-1999 STANDARD COUPLING	1900	1999	190	9
QLC2000	2000-2099 STANDARD COUPLING	2000	2099	190	9



N.B. All the above are available in nitrile rubber, simply add N to the end of the above item code. Above size ranges are for ordering purposes only, QLC couplings are manufactured to order.





Thickness

Adaptor Couplings (QAC) 35-420mm Diameter



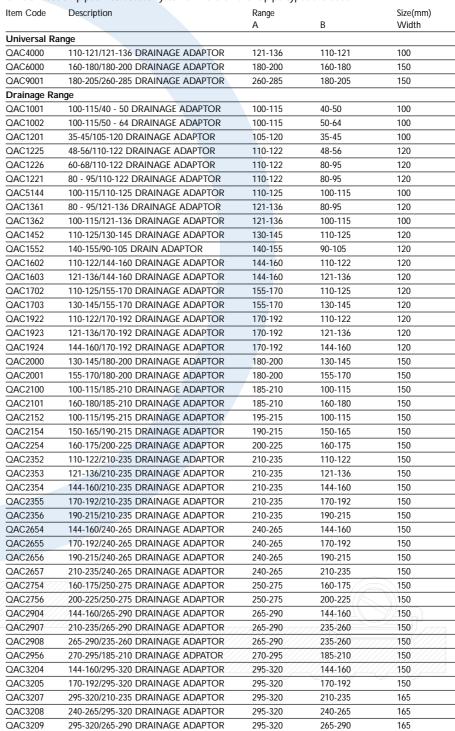


HepSure™ Adaptor Couplings were developed to accommodate vastly differing pipe diameters and materials throughout Europe. The growth of new materials in the pipe market combined with the ever increasing use of brownfield sites (which require connection to more traditional materials) means there are now more diverse diameters than ever which require connection.

The couplings are sealed by two stainless steel clamping bands which clamp to the OD of either pipe whilst the elastomeric sleeve is stepped to allow optimal flow.

Uses

- Connection of pipes of vastly differing diameters and materials without the need for a separate bush.
- Connection of laterals to sewers.
- Connection pipes into access systems where different pipe types are used.









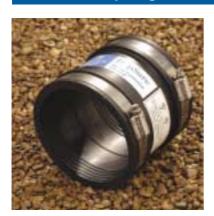


Adaptor Couplings (QAC) 35-420mm Diameter (cont.)

Item Code	Description	Range		Size(mm)
		Α	В	Width
QAC3351	180-205/310-335 DRAINAGE ADAPTOR	310-335	180-205	165
QAC3600	335-360/295-320 DRAINAGE ADAPTOR	335-360	295-320	185
QAC3608	240-265/335-360 DRAINAGE ADAPTOR	335-360	240-265	165
QAC3609	335-360/265-290 DRAINAGE ADAPTOR	335-360	265-290	165
QAC3850	360-385/300-325 DRAINAGE ADAPTOR	360-385	300-325	185
QAC3858	240-265/360-385 DRAINAGE ADAPTOR	360-385	240-265	165
QAC3859	265-290/360-385 DRAINAGE ADAPTOR	360-385	265-290	165
QAC4208	240-265/395-420 DRAINAGE ADAPTOR	395-420	240-265	165
QAC4209	260-295/395-420 DRAINAGE ADAPTOR	395-420	265-290	165

 $\ensuremath{\mathsf{N.B.}}$. All the above are available in nitrile rubber, simply add $\ensuremath{\mathsf{N}}$ to the end of the above item code

Drain Couplings (QFDC) 50-275mm Diameter



Description

Drain Couplings are essentially the same elastomeric sleeve as the Standard Couplings but without the added reinforcement of the central shear band.

Whilst HepSure[™] would always recommend the use of a standard coupling, drain couplings can be used where the joint will not be subjected to heavy earth loadings, unstable ground or trafficking. All of these could cause the joint to step if a shear band is not used.

Uses

- As an alternative to a traditional coupling for plain ended pipes.
- For insertion of new pipe in order to replace a damaged section of existing sewer or drain.
- Where the pipe to be replaced is a different diameter and material to that of the replacement pipe
- Where pipes have been cut or short lengths of pipe require jointing.
- For use in vertical drainage applications where the pipes jointed are not subject to any loading.





Item Code	Description	Size(mm))		
		From	To	Width	Thickness
QFDC65	DRAIN COUPLING 50-65MM	50	65	90	7
QFDC95	DRAIN COUPLING 80- 95MM	80	95	100	7
QFDC115	DRAIN COUPLING 100-115MM	100	115	120	7
QFDC125	DRAIN COUPLING 110-125MM	110	125	120	7
QFDC135	DRAIN COUPLING 120-135MM	120	135	120	7
QFDC150	DRAIN COUPLING 125-150MM	125	150	120	7
QFDC165	DRAIN COUPLING 140-165MM	140	165	120	7
QFDC175	DRAIN COUPLING 150-175MM	150	175	120	7
QFDC185	DRAIN COUPLING 170-185MM	170	185	120	7
QFDC195	DRAIN COUPLING 180-195MM	180	195	120	7
QFDC215	DRAIN COUPLING 190-215MM	190	215	150	7.5
QFDC225	DRAIN COUPLING 200-225MM	200	225	150	7.5
QFDC250	DRAIN COUPLING 225-250MM	225	250	150	7.5
QFDC275	DRAIN COUPLING 260-275MM	260	275	150	7.5

N.B. All the above are available in nitrile rubber, simply add N to the end of the above item code.



Extra Wide Couplings (QSC-W/QLC-W) 200-2100mm Diameter



Description

HepSure™ Extra Wide Couplings are primarily used for the jointing of pipes with diameters larger than 1000mm but will suit to fit pipes between 200 and 225mm.

The increased width (300mm versus between 100-190mm for a standard coupling) gives several benefits including increased tolerance where larger pipes have been cut as well as allowing for increased movement in the joint due to the depths these pipes are installed at.

Extra wide couplings are made to order as per larger standard couplings.

Why use extra wide couplings?

- There is a greater tolerance on the quality of the cut on larger pipes. Pipe ends do not need to be perfectly square to make a connection thereby lessening the burden of pipe cutting.
- The increased width provides a more reliable seal on larger diameter pipes.
- The effect of any pipe movement is negated due to the extra width.
- Greater angular deflection can be accommodated at the joint.

All the above provide extra peace of mind for the installer and client where larger diameter pipes are being connected.

Item Code	Description	Size(mm))		
		From	To	Width	Thickness
QSC225W	200-225 Extra Wide Coupling	200	225	300	9
QSC290W	265-290 Extra Wide Coupling	265	290	300	9
QSC310W	285-310 Extra Wide Coupling	285	310	300	9
QSC320W	295-320 Extra Wide Coupling	29 5	320	300	9
QSC335W	305-335 Extra Wide Coupling	305	335	300	9
QSC345W	315-345 Extra Wide Coupling	315	345	300	9
QSC360W	340-360 Extra Wide Coupling	340	360	300	9
QSC385W	355-385 Extra Wide Coupling	355	385	300	9
QSC410W	385-410 Extra Wide Coupling	385	410	300	9
QSC425W	400-425 Extra Wide Coupling	400	425	300	9
QSC430W	405-430 Extra Wide Coupling	405	430	300	9
QSC445W	420-445 Extra Wide Coupling	420	445	300	9
QSC465W	435-465 Extra Wide Coupling	435	465	300	9
QSC490W	465-490 Extra Wide Coupling	465	490	300	9
QSC510W	480-510 Extra Wide Coupling	480	510	300	9
QSC525W	495-525 Extra Wide Coupling	495	525	300	9
QSC540W	510-540 Extra Wide Coupling	510	540	300	9
QSC550W	520-550 Extra Wide Coupling	<mark>52</mark> 0	550	300	9
QSC560W	530-560 Extra Wide Coupling	530	560	300	9
QSC580W	555-580 Extra Wide Coupling	555	580	300	9
QSC600W	570-600 Extra Wide Coupling	570	600	300	9
QSC620W	590-620 Extra Wide Coupli <mark>ng</mark>	590	620	300	9
QLC600W	600-699 Extra Wide Coupling	600	699	300	9
QLC700W	700-799 Extra Wide Coupling	700	799	300	9
QLC800W	800-899 Extra Wide Coupling	800	899	300	9
QLC900W	900-999 Extra Wide Coupling	900	999	300	9
QLC1000W	1000-1099 Extra Wide Coupling	1000	1099	300	9
QLC1100W	1100-1199 Extra Wide Coupling	1100	1199	300	9
QLC1200W	1200-1299 Extra Wide Coupling	1200	1299	300	9
QLC1300W	1300-1399 Extra Wide Coupling	1300	1399	300	9
QLC1400W	1400-1499 Extra Wide Coupling	1400	1499	300	9
QLC1500W	1500-1599 Extra Wide Coupling	1500	1599	300	9
QLC1600W	1600-1699 Extra Wide Coupling	1600	1699	300	9
QLC1700W	1700-1799 Extra Wide Coupling	1700	1799	300	9
QLC1800W	1800-1899 Extra Wide Coupling	1800	1899	300	9
QLC1900W	1900-1999 Extra Wide Coupling	1900	1999	300	9
QLC2000W	2000-2099 Extra Wide Coupling	2000	2099	300	9



Fabricated and Moulded Bushes (QBC) 11-2100mm Diameter



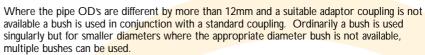
HepSure™ Bushes are used in conjunction with Standard Couplings where the two pipes being connected differ in diameter.

The bush is effectively an elastomeric sleeve which is slipped over the smaller pipe to create a larger diameter which then allows for use of a suitable standard coupling.

The majority of bushes are fabricated specially to meet site specific requirements but a smaller range of moulded products are available for more commonly found diameters.



Description











Item Code	Description	Size I.D.		Size(mm)
		From	To	Nom OD
Moulded Bu	<mark>shes – 11-33</mark> 5mm dia			
QBC19/17	11-16 ADAPTOR BUSH MOULDED 55	11	16	55
QBC <mark>17/21</mark>	15-20 ADAPTOR BUSH MOULDED 55	15	20	55
QBC14/26	20-25 ADAPTOR BUSH MOULDED 55	20	25	55
QBC09/37	30-37 ADAPTOR BUSH MOULDED 55	30	37	55
QBC06/43	35-40 ADAPTOR BUSH MOULDED 55	35	40	55
QBC23/65	55-65 ADAPTOR BUSH MOULDED 110	55	65	110
QBC27/65	55-65 ADAPTOR BUSH MOULDED 120	55	65	120
QBC17/76	65-76 ADAPTOR BUSH MOULDED 110	65	76	110
QBC08/95	85-95 ADAPTOR BUSH MOULDED 110	85	95	110
QBC12/95	85-95 ADAPTOR BUSH MOULDED 120	85	95	120
QBC06/102	92-102 ADAPTOR BUSH MOULDED 115	92	102	115
QBC08/105	95-105 ADAPTOR BUSH MOULDED 120	95	105	120
QBC20/105	95-105 ADAPTOR BUSH MOULDED 145	95	105	145
QBC08/115	102-115 ADAPTOR BUSH MOULDED 130	105	115	130
QBC15/115	122-132 ADAPTOR BUSH MOULDED 145	105	115	145
QBC07/132	122-132 ADAPTOR BUSH MOULDED 145	122	132	145
QBC19/132	122-132 ADAPTOR BUSH MOULDED 170	122	132	170
QBC13/145	135-145 ADAPTOR BUSH MOULDED 170	135	145	170
QBC16/164	154-164 ADAPTOR BUSH MOULDED 196	154	164	196
QBC26/168	158-168 ADAPTOR BUSH MOULDED 220	158	168	220
QBC08/170	160-170 ADAPTOR BUSH MOULDED 185	160	170	185
QBC08/180	170-180 ADAPTOR BUSH MOULDED 196	170	180	196
QBC08/200	190-200 ADAPTOR BUSH MOULDED 215	190	200	215
QBC33/205	195-205 ADAPTOR BUSH MOULDED 270	195	205	270
QBC08/265	255-265 ADAPTOR BUSH MOULDED 280	255	265	280
QBC2 <mark>0/335</mark>	325-335 ADAPTOR BUSH MOULDED 380	325	335	380

N.B. All the above available in nitrile rubber, simply add N to the end of the above item code.

Code	Description	Size I.D.		Size(mm)
		From	То	Nom OD
Fabricated	Bushes – 135mm-2100mm dia			
QBC0802	200-299 ADAPTOR BUSH 8MM THICKNESS	200	299	8
QBC0803	300-399 ADAPTOR BUSH 8MM THICKNESS	300	399	8
QBC0804	400-499 ADAPTOR BUSH 8MM THICKNESS	400	499	8
QBC0805	500-599 ADAPTOR BUSH 8MM THICKNESS	500	599	8
QBC0806	600-699 ADAPTOR BUSH 8MM THICKNESS	600	699	8
QBC0807	700-799 ADAPTOR BUSH 8MM THICKNESS	700	799	8
QBC0808	800-899 ADAPTOR BUSH 8MM THICKNESS	800	899	8
QBC0809	900-999 ADAPTOR BUSH 8MM THICKNESS	900	999	8
QBC0810	1000-1099 ADAPTOR BUSH 8MM THICKNESS	1000	1099	8
QBC0811	1100-1199 ADAPTOR BUSH 8MM THICKNESS	1100	1199	8
QBC0812	1200-1299 ADAPTOR BUSH 8MM THICKNESS	1200	1299	8
QBC0813	1300-1399 ADAPTOR BUSH 8MM THICKNESS	1300	1399	8
QBC0814	1400-1999 ADAPTOR BUSH 8MM THICKNESS	1400	1499	8
QBC1602	200-299 ADAPTOR BUSH 16MM THICKNESS	200	299	16
QBC1603	300-399 ADAPTOR BUSH 16MM THICKNESS	300	399	16
QBC1604	400-499 ADAPTOR BUSH 16MM THICKNESS	400	499	16

Fabricated and Moulded Bushes (QBC) 11-2100mm Diameter (cont.)











Code	Description	Size I.D.		Size(mm)
		From	То	Nom OD
QBC1605	500-599 ADAPTOR BUSH 16MM THICKNESS	500	599	16
QBC1606	600-699 ADAPTOR BUSH 16MM THICKNESS	600	699	16
QBC1607	700-799 ADAPTOR BUSH 16MM THICKNESS	700	799	16
QBC1608	800-899 ADAPTOR BUSH 16MM THICKNESS	800	899	16
QBC1609	900-999 ADAPTOR BUSH 16MM THICKNESS	900	999	16
QBC1610	1000-1099 ADAPTOR BUSH 16MM THICKNESS	1000	1099	16
QBC1611	1100-1199 ADAPTOR BUSH 16MM THICKNESS	1100	1199	16
QBC1612	1200-1299 ADAPTOR BUSH 16MM THICKNESS	1200	1299	16
QBC1613	1300-1399 ADAPTOR BUSH 16MM THICKNESS	1300	1399	16
QBC1614	1400-1999 ADAPTOR BUSH 16MM THICKNESS	1400	1499	16
QBC2402	200-299 ADAPTOR BUSH 24MM THICK	200	299	24
QBC2403	300-399 ADAPTOR BUSH 24MM THICK	300	399	24
QBC2404	400-49 <mark>9 Adaptor Bush 24mm</mark> Thick	400	499	24
QBC2405	500-599 ADAP <mark>TOR BUSH 24MM</mark> THICK	500	599	24
QBC2406	600-699 ADAPT <mark>OR BUSH 24MM TH</mark> ICK	600	699	24
QBC2407	700-799 ADAPTOR BUSH 24MM THICK	700	799	24
QBC2408	800-899 ADAPTOR BUSH 24MM THICK	800	899	24
QBC2409	900-999 ADAPTOR BUSH 24MM THICK	900	999	24
QBC2410	1000-1099 ADAPTOR BUSH 24MM THICK	1000	1099	24
QBC2411	1100-1199 ADAPTOR BUSH 24MM THICK	1100	1199	24
QBC2412	1200-1299 ADAPTOR BUSH 24MM THICK	1200	1299	24
QBC2413	1300-1399 ADAPTOR BUSH 24MM THICK	1300	1399	24
QBC2414	1400-1999 ADAPTOR BUSH 24MM THICK	1400	1499	24
QBC3203	300-399 ADAPTOR BUSH 32MM THI <mark>CK</mark>	300	399	32
QBC3204	400-499 ADAPTOR BUSH 32MM THICK	400	499	32
QBC3205	500-599 ADAPTOR BUSH 32MM THICK	500	599	32
QBC3206	600-699 ADAPTOR BUSH 32MM THICK	600	699	32
QBC3207	700-799 ADAPTOR BUSH 32MM THICK	700	799	32
QBC3208	800-899 ADAPTOR BUSH 32MM THICK	800	899	32
QBC3209	900-999 ADAPTOR BUSH 32MM THICK	900	999	32
QBC3210	1000-1099 ADAPTOR BUSH 32MM THICK	1000	1099	32
QBC3211	1100-1199 ADAPTOR BUSH 32MM THICK	1100	1199	32
QBC3212	1200-1299 ADAPTOR BUSH 32MM THICK	1200	1299	32
QBC3213	1300-1399 ADAPTOR BUSH 32MM THICK	1300	1399	32
QBC3214	1400-1999 ADAPTOR BUSH 32MM THICK	1400	1499	32

N.B. All the above are available in nitrile rubber, simply add N to the end of the above item code. These items codes are only for order processing purposes. To order a bush you will need to follow the guide below.

Step by Step – Fabricated Bushes

- 1. Provide us with the OD of the two pipes you are connecting.
- 2. If there is no adaptor or standard coupling, find the coupling which will fit the larger of the two OD's.
- 3. Take the bottom tolerance of the coupling and subtract the OD of the smallest pipe.
- 4. Divide this number by two to get the appropriate thickness of bush you require. If the correct thickness isn't available, take the next one up.
- To check you have the correct thickness double the thickness and add it on to the small pipe OD to ensure it is larger than the bottom tolerance of the coupling.
- 6. We will then work out the relevant diameter of coupling required and transact your order.

For example:-

Connecting a 286mm OD Pipe (e.g. concrete) to a 250mm OD Pipe (e.g. PVC-U):-

- 1. OD's are 286 and 250
- 2. To fit a 286mm pipe, use a QSC310 285mm-310mm.
- 3. 286-250=36mm
- 4. 36 divide by 2 = 18mm. Next largest bush = 24mm.
- 5. 250mm + 48mm = 298mm which now fits the same coupling.

Step by Step - Moulded Bushes

- 1. Provide us with the OD of the two pipes you are connecting.
- 2. Choose a coupling to fit the largest pipe.
- 3. Choose the moulded bush that the smaller pipe will fit into and ensure the OD of the bush fits within the coupling on the largest pipe.

For example:-

Connecting a 68mm PVCu Pipe to a 110mm PVCu Pipe

- 1. Use a QSC115 100-115mm to fit the larger pipe.
- 2. Use a QBC17/76 with an internal ID of 65-76mm to fit over the smaller pipe.

The two pipe OD's are now both within the tolerance of the coupling.

Wraparound Couplings (QWRC) 300-2100mm Diameter













Description

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Where very localised damage has occurred or a pipe may have been cracked, HepSure™ Wraparound Couplings are the quickest and most efficient way to create a reliable watertight seal.

The elastomeric strip is simply passed around the pipe, followed by the centre band and the outer clips to cover the damaged area of the pipe.

The strip is held in place by a special jointing system to enable easy installation.

The HepSure™ Wraparound Coupling utilises a unique jointing feature removing the need for a separate clip to hold the coupling in place.

Full installation instructions are supplied with each coupling to ensure correct positioning of worm drives.

Item Code	Description	Size(mm)	Size(mm)		
		From	To	Width	Thickness
QWRC300	300-399 Wraparound Coupling	300	399	190	9
QWRC400	400-499 Wraparound Coupling	400	499	190	9
QWRC500	500-599 Wraparound Coupling	500	599	190	9
QWRC600	600-699 Wraparound Coupling	600	699	190	9
QWRC700	700-799 Wraparound Coupling	700	799	190	9
QWRC800	800-899 Wraparound Coupling	800	899	190	9
QWRC900	900-999 Wraparound Coupling	900	999	190	9
QWRC1000	1000-1099 Wraparound Coupling	1000	1099	190	9
QWRC1100	1100-1199 Wraparound Coupling	1100	1199	190	9
QWRC1200	1200-1299 Wraparound Coupling	1200	1299	190	9
QWRC1300	1300-1399 Wraparound Coupling	1300	1399	190	9
QWRC1400	1400-1499 Wraparound Coupling	1400	1499	190	9
QWRC1500	1500-1599 Wraparound Coupling	1500	1599	190	9
QWRC1600	1600-1699 Wraparound Coupling	1600	1699	190	9
QWRC1700	1700-1799 Wraparound Coupling	1700	1799	190	9
QWRC1800	1800-1899 Wraparound Coupling	1800	1899	190	9
QWRC1900	1900-1999 Wraparound Coupling	1900	1999	190	9
QWRC2000	2000-2099 Wraparound Coupling	2000	2099	190	9

N.B. All the above are available in nitrile rubber, simply add N to the end of the above item code. Above size ranges are for ordering purposes only, QWRC couplings are manufactured to

Please Note:

Product available Autumn 2004, check for availablity.

Standards Conformance









WIS4-41-01

Hepworth Standards Conformance

All Hepworth Building Products sites operate a Quality Management System which complies with the requirements of **BS EN ISO9001:2000**, Certificate No. FM 01415.

Added to this, Hepworth Building Products operate an Environmental Management System which complies with the requirements of **BS EN ISO 140001:1996**, Certificate No. EMS 71221.

HepSure[™] Standards

The rubber used in the elastomeric sleeves in HepSure™ Couplings conforms with the requirements of **BS EN681 Part1:1996**, "Specifications for elastomeric joint rings for pipework and pipelines" – drainage.

The following ranges of HepSure™ Couplings are manufactured under licence to the requirements of **BS EN295 1995**, "Vitrified clay pipes and fittings and pipe joints for drains and sewers" – Part 4 "Requirements for special fittings, adaptors and compatible accessories", Licence No. KM14092:-

- Type 2B Standard Couplings (QSC / QLC)
- Type 1 Drain Couplings (QFDC)
- Adaptor Couplings (QAC)
- Bushes (QBC)
- Extra Wide Couplings (QSC-W and QLC-W)

The following products are also kitemarked and comply with the requirements of Water Industry Specification (WIS) 4-41-01, "Specification for flexible couplings for gravity sewerage and drainage pipes", Licence No. KM75372:-

Standard Couplings and Bushes (Up to 600mm diameter only)

Materials



Elastomeric Sleeves

HepSure™ Couplings utilise two types of synthetic elastomers. All adaptor couplings, moulded bushes and couplings up to 300mm diameter are Styrene Butadiene (SBR), couplings above 300mm and fabricated bushes are Ethylene Propylene Diene Monomer (EPDM).

Both these elastomers are used commonly in drainage products as they give excellent resistance to sewage and drainage effluents. Where extra protection is required, products are available in Nitrile rubber which is commonly used in ground and waste where oils, greases, fats and hydrocarbons may be present.

All rubbers used in HepSure™ products conform to **BS EN681-1** "Elastomeric joint rings for pipework and pipelines – drainage".

Clamping Bands and Shear Rings

The metal components of HepSure™ are manufactured from Stainless Steel, a type of steel containing chromium, which does not chemically react with air or water and does not change its colour. Whereas 1.4301 (304) stainless has been known to give only a satisfactory performance in soil (this grade can be prone to pitting in areas where the groundwater contains chlorides or industrial / colliery spoil areas), HepSure™ products use 1.4401 (316) steel to **BS EN10088-2:1995**, as standard thus ensuring a high corrosion resistance on all couplings.

Performance



Pressure Resistance

HepSure™ Couplings are designed to withstand the following pressures when correctly installed:-

Range	Pressure	
Standard Couplings (with or without bushes) QSC	1.0 bar	
Standard Couplings (with or without bushes) QLC	0.5 bar	
Extra Wide Couplings (QSCW/QLCW)	0.5 bar	
Wraparound Couplings (QWRC)	0.5 bar	
Drain Couplings (QFDC)	0.5 bar	
Adaptor Couplings (QAC)	0.5 bar	

Air and Water Testing

HepSure™ Couplings are designed to withstand air and water tests as specified in **BS EN1610** "Construction and testing of Drains and Sewers". These tests are required as part of Sewers For Adoption (5th Edition) and Approved Document H of the Building Regulations: April 2002.

100 Year Design Life



Product Design Life

When installed correctly, HepSure™ Couplings have a design life of 100 years. They are suitable for use above and below ground without additional protection due to the high quality of materials used in their construction. Because HepSure™ only use 1.44 01 (316) stainless steel there is no need for special couplings to be used even if the ground is contaminated due to chloride or in areas where industrial spill or colliery spill is present.

Ordering and Delivery

Ordering

In order that your enquiry is dealt with swiftly, it is essential that we know the outside diameters and material type of the pipes you are trying to joint. This will enable us to ensure the most appropriate coupling or combination of coupling and bush is offered to you.

Couplings up to 300m in diameter are available from stock whilst modern manufacturing equipment allows HepSure™ to deal with larger couplings to suit your requirements.

HepSure™ Couplings are also available from many local and national builders merchants nationwide.

Delivery Options

Hepworth's position as a multi-material drainage manufacturer allows merchants and contractors the best choice in service requirements for flexible couplings.

Whether you are a customer (be it merchant or contractor) who only requires HepSure™ product or a customer who buys a mix of drainage products from the Hepworth range there is a service package to suit.

HepSure[™] Only Orders

Order before 10am

- Delivery guaranteed next day
- Orders less than £100 at list = £13.15. Orders £100 or above, carriage paid*
- If required before noon = £16 carriage charge irrespective of order value*

Order after 10am

- Delivery guaranteed within 48 hours but we will endeavour to ship in 24 hours.
- Orders less than £100 at list = £13.15. Orders £100 or above, carriage paid.*

Mixed Orders (i.e. BGP / Clay / Universals plus HepSure™)

- HepSure™ orders placed with other Drainage products are subject to the standard three-day delivery service. Cut-off time for these orders is 5pm daily.
- If a shorter lead-time is required please contact the sales office for further information.
 Subject to availability.

Price Lists

For a Hepworth price list please call 0870 443 8000

Please Note

* These charges are subject to change without prior notification.



Insertion of a junction or repair of existing pipeline using Standard or Extra Wide Couplings

- 1. Cut section from pipeline using pipe cutter or relevant saw and remove.
- 2. This should be about 20mm longer than the junction or short pipe length to be installed.
- 3. Loosen clamps on coupling and slide onto each end of existing pipeline (lubricant not required), then position new junction or short pipe length.
- 4. Place pencil mark half a coupling width from each joint.
- 5. Using these pencil marks, centre a coupling over one joint at a time.
- **6.** Tighten the worm drive units in sequence across the width of the coupling to recommended torque. If a central shear ring is on the coupling, this should be tightened first.
- 7. To complete, carefully place bedding material under the pipe.



















- 1. Slide the bush over the end of the smaller pipe. Loosen the clips on the coupling and place on the end of the larger pipe.
- 2. If required a second bush can be placed over the first to obtain the necessary thickness.
- 3. Push pipes together and slide the coupling over the bush until the ends are level (lubricant not required).
- 4. Tighten the central shear ring then clamps to recommended torque.
- 5. To complete, carefully place bedding material under the pipe.













- 1. Position the rubber strip over the damaged area with the joint near the crown (top) of pipe and away from the point of maximum damage.
- 2. Clip the two ends together using the joint on the rubber.
- 3. Attach shear band and lightly tighten the worm drives. The drives should be a 180deg to the joint..
- 4. Attach the clamping bands as above, positioning one of the worm drives at 90deg to the joint.
- 5. Tighten the clamping bands to recommended torque and then shear band.
- 6. To complete, carefully place bedding material under the pipe.













Installing Drain Couplings

- 1. Slide the coupling fully onto pipe A, position pipe B.
- 2. Mark smaller pipe with a pencil, half a coupling width from the joint.
- 3. Insert smaller pipe up to the mark.
- 4. Tighten clamps to recommended torque and place bedding material under pipe.





Installing Adaptor Couplings

- 1. Slide coupling fully onto larger pipe.
- 2. Mark smaller pipe with a pencil, half a coupling width from the joint.
- 3. Insert smaller pipe up to the mark.
- 4. Tighten clamps to recommended torque and place bedding material under pipe.



Clamp System



Clamp System

 $HepSure^{TM}$ Couplings work by a relatively simple system of applying pressure to the elastomeric sleeve through the use of tension clamps.

All HepSure™ couplings utilize worm drives and clips rather than the bolt type systems used on some other manufacturers larger couplings for the reasons stated below.

Two types of clamp are used dependent on the application:-

All couplings up to 1000mm

These use heavy duty "Hi-Torque" worm drive clamps. Diameters below 200mm use single worm drives, diameters from 200mm to 600mm use double worm drives and diameters above 1000mm use quadruple worm drives. This allows the radial sealing force generated by the torque in the worm drive to be more equally spread around the circumference, ensuring good sealing performance all round.

The use of worm drive systems ensure that the tension band clamp is in intimate contact with rubber at all points around the circumference.

Adaptors

Adaptors up to 200mm use single medium duty worm drive units. Larger diameters use double heavy duty "Hi-Torque" units.

Recommended Torque for HepSure Flexible Couplings







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	Nomi	Nominal Sizes (DIN)	(NO)						imperiai sizes	sez			
Pipe Classification	40	20	99	70	75	80	. 85	100	2 2	2.5	3 3.5		4
Cast Iron BS416 (Soil)		63			68			114	93/65	73 8	89 99.2	.2 114	
Cast Iron BS437 (Drain)		99			92			119			92	1.	
Cast Iron SMU/Ensign/SML		09		80				112					
Cast (Spun) Iron BS1211 (A,B)	55.9	69.1	82.3			95.5	1	121.9					
Cast (Spun) Iron BS1211 (C,D)	55.9	69.1	82.3			95.5	_	121.9					
Copper		54.1		8.99	76.3			108.3	9	66.8 7	79.9	10	106.3
Galvanised Steel BS3868		60.2	76			88.7	-	113.9					
PVCu							82.8	110					
muPVC		54.3											
ABS	42.9	55.9											
Polypropylene	41/42.75	5 54.1											
Aluminium		63			9/			102					

Pipe Table for nominal OD's of Pipes from DN100-DN600

Pipe Table for nominal OD's of Pipes from DIVI 00-DIV		Pipes	Irom		10-PI	0091																		
	Nomi	Nominal Sizes (DN)	(DN)														Imperial Sizes	Sizes						
Pipe Classification	100	125	150	175	180	200	225	250	300	350	360	375 40	400 45	450 5	9 009	009	3 5	7	80	6	10	12	15	18
*HepSleve / HepSeal / Densleeve / Denseal 130-133	enseal 130-133		186-190)			269-278		364-380		7	451 480	480-492 542-544 602-610	-544 602		716 9	98 156	6 213	3 238	268	295	356	445	533
SuperSleve / SuperSeal	122		178				263		357															
Concrete			200				286-305		375-425		45	457-520	525	525-590 6	681 7	9/1								
Asbestos Cement L	125		182	208		232	260	288						5	547									
Asbestos Cement M									339		7	423 43	437 48	484 5	551									
Asbestos Cement H									246		7	429 4	440 49	490 5	226									
PVCu	110		160			200		250	315			4	400 45	450 5	200 6	930								
Ultra-Rib			170		200		250		332		400													
Quantum Highway / Sewer			160				250		330															
Ridgidrain	118		178				266		354		7	435 46	460 5	514 5	571 6	675								
Polysewer / Ridgisewer			160				250		330			4	457 5	511 5	9 899	672								
ABS	114.3		168.3	200		219.1		280	315							. 30	89 140	0	219		273	323		
Ductile Iron BSEN598	118		170			222		274	326	378		4.	429	5	560		148	8						
Cast Iron SMU/Ensign/SML	112	137	162			212		276.5	328.5															
Cast Iron BS437 (Drain)	114		173				256																	
Cast Iron BS416 (Soil)	119																							
Cast (Spun) Iron BS1211 (A,B)	121.9	149.9	177.3	204.7		232.2	259.1	286	333.8	386.6												333.8	413	492.3
Cast (Spun) Iron BS1211 (C,D)	121.9	149.9	177.3	204.7		232.2	259.1	286	345.4	399.3												345.4	426.2	453.1
Grey Iron BS4622	118		170			222		274	326			4.	429 48	480 5	532									
Stainless Steel	110		160																					
Pitch Fibre	125		181	238																				
Polyethylene	111	126	161		181	201	226	251	317	357		4	402 45	453 5	503									
Twinwall - PP/PE	119	150	178			235	268		355		7	429 45	455 5	514 5	572 6	683								
Corrugated PVCu	110		170				250																	

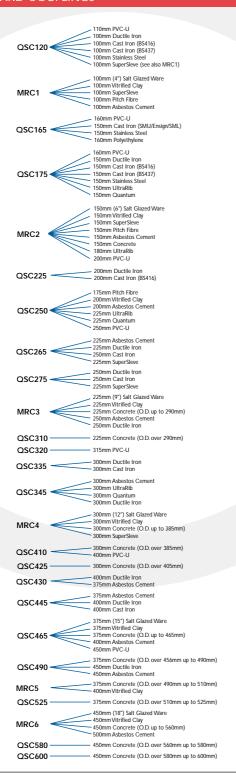
Application Schedule

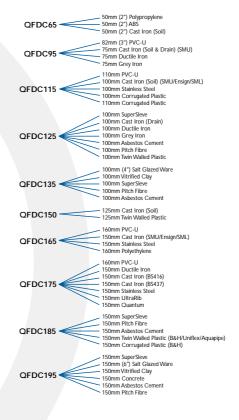


STANDARD COUPLINGS



DRAIN COUPLINGS



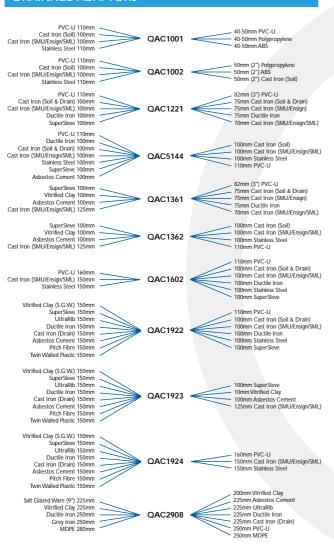


Application Schedule

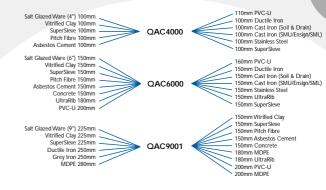




DRAINAGE ADAPTORS



UNIVERSAL ADAPTORS



Advisory Services

Technical Advisory Service

This service covers all aspects of Hepworth products from design through to maintenance.

- Hydraulic and structural design
- Quantity take offs and material scheduling

For any advice or assistance on these matters contact the Technical Advisory Service on:

Tel: 0870 443 5551 Fax: 0870 443 5552

Email For Customer Service

customerservices@hepworthdrainage.co.uk

Literature

For details of other products in the Hepworth Drainage range, please telephone the Literature Service Hotline on:

Tel: 0870 443 6000 Fax: 0870 443 8000

Availability

The Hepworth Drainage range is available through a nationwide network of builders merchants or direct from Hepworth. For further details please telephone our order enquiry hotlines on:

Tel: 0870 443 6000 Fax: 0870 443 8000

Connection Chart

Standard, Adaptor and Drain Couplings

	4"/100mm HepSleve/Denseal	4"/100mm SuperSleve	6"/150mm HepSleve/Denseal	6"/150mm SuperSleve	9"/225mm HepSeal/HepSleve Densleeve/Denseal	12"/300mm HepSeal/HepSleve Densleeve/Denseal	110mm PlastiDrain/PVC-U BSEN1401	160mm PlastiDrain/PVC-U BSEN1401	200mm SewerDrain/PVC-U BSEN1401	250mm SewerDrain/PVC-U BSEN1401	315mm SewerDrain/PVC-U BSEN1401	150mm UltraRib	225mm UltraRib	300mm UltraRib	150mm Twinwall (e.g. Polysewer/Quantum)	225mm Twinwall (e.g. Polysewer/Quantum)	300mm Twinwall (e.g. Polysewer/Quantum)
4"/100mm HepSleve/Denseal	MRC1 QFDC135	MRC1					QAC4000										
4"/100mm SuperSleve	MRC1 QFDC135	QSC120					QAC4000										
6"/150mm HepSleve/Denseal	QAC1923	QAC1922	MRC2 QFDC195	MRC2													
6"/150mm SuperSleve	QAC1923	QAC1922	MRC2 QFDC195	MRC2			QAC1922	QAC6000									
9"/225mm HepSeal/HepSleve Densleeve/Denseal			QAC9001		OSC290												
12"/300mm HepSeal/HepSleve Densleeve/Denseal					QAC3859	QSC385											
110mm PlastiDrain/PVC-U BSEN1401	QAC4000		QAC1922				QSC115 QFDC115										
160mm PlastiDrain/PVC-U BSEN1401			QAC6000		QAC2904		QAC1602	QSC165 QFDC165									
200mm SewerDrain/PVC-U BSEN1401	QAC2000		MRC2		QAC9001 QAC2956			QAC2001	QSC215 QFDC215								
250mm SewerDrain/PVC-U BSEN1401			QAC2655		QAC2908	QAC3858		QAC2654	QAC2656	QSC250							
315mm SewerDrain/PVC-U BSEN1401			QAC3205		QAC3209	QAC3850		QAC3204		QAC3208	QSC320						
150mm UltraRib	QAC1703						QAC1702	QSC175 QFDC175	QAC6000	QAC2655	QAC3205	QSC175 QFDC175					
225mm UltraRib			QAC2655			QAC3858		QAC2654	QAC2656	QAC250	QAC3208	QAC2655	QSC250				
300mm UltraRib					QAC3609				QAC3351					QSC335			
150mm Twinwall (e.g. Polysewer/Quantum)	QAC1603				OAC2904							QSC175 QFDC175			QSC165 QFDC165		
225mm Twinwall (e.g. Polysewer/Quantum)			QAC2655			QAC3858		QAC2654	QAC2656	QSC250	QAC3208	QAC2655	QSC250		QAC2654	QSC250	
300mm Twinwall (e.g. Polysewer/Quantum)			QAC3351		QAC3609				QAC3351					QSC335		QAC3608	Q\$C335

Your Local HepSure™ Stockist



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Our policy is one of constant development. Whilst this publication is accurate at the date of printing, specification/approvals may be changed in the interest of continued improvements.

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