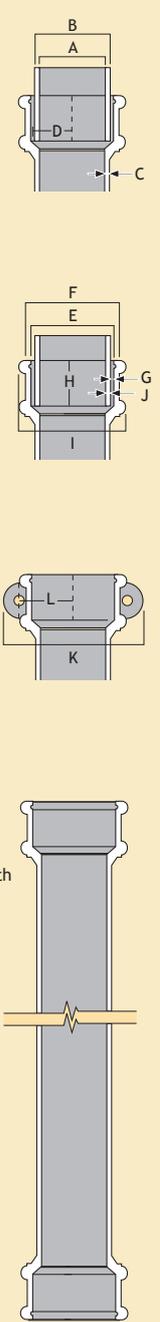


Harmer LCC Pipes

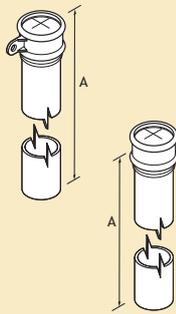
Pipe Diameters, Lengths and Weights: Manufacturing Dimensions

		100	88	76	63	50	
 <p>Single Socket</p> <p>Double Socket (1830mm pipe length only)</p>	Pipe diameter	100	88	76	63	50	
	A Internal diameter	100	85	76	60	50	
	B External diameter	114	100	88	76	63	
	C Thickness	6	6	6	6	6	
	D Diameter over spigot bead	104	111	98	85	69	
	Socket						
	E Internal diameter	127	114	100	88	73	
	F External diameter	136	130	117	104	88	
	G Thickness	6	6	6	6	6	
	H Internal depth	76	76	69	69	63	
	I External diameter over spigot bead	133	146	139	114	100	
	J Caulking clearance	6	6	6	6	6	
	Ears						
	K Length of flange overall	212	193	177	161	146	
L Centre to centre of holes	180	161	146	130	114		
Pipe length and weight							
1830 (6') overall length of pipe	1830	1830	1830	1830	1830		
Effective length of pipe	1725	1725	1730	1730	1737		
Weight of 6' pipe without ears	21.7 kg	19.0 kg	16.7 kg	14.0 kg	11.0 kg		
Weight of 6' pipe with ears	22.2 kg	19.5 kg	17.2 kg	14.5 kg	12.0 kg		
1219 (4') overall length of pipe	1219	1219	1219	1219	1219		
Effective length of pipe	1125	1125	1130	1130	1137		
Weight of 6' pipe without ears	14.5 kg	12.7 kg	11.2 kg	9.5 kg	8 kg		
Weight of 6' pipe with ears	14.8 kg	13 kg	11.5 kg	10 kg	8.5 kg		
914 (3') overall length of pipe	914	914	914	914	914		
Effective length of pipe	725	725	730	730	737		
Weight of 6' pipe without ears	10.8 kg	9.5 kg	8.3 kg	7 kg	5.7 kg		
Weight of 6' pipe with ears	11.3 kg	10 kg	8.8 kg	7.5 kg	6.2 kg		
610 (2') overall length of pipe	610	610	610	610	610		
Effective length of pipe	525	525	530	530	537		
Weight of 6' pipe without ears	7.3 kg	6.8 kg	5.5 kg	4.7 kg	4 kg		
Weight of 6' pipe with ears	7.8 kg	6.8 kg	6 kg	5.2 kg	4.5 kg		
Double socket pipe, 1830 (6') overall pipe length only							
Effective length of pipe	1650	1650	1663	1663	1669		
Weight of 6' pipe without ears	23.7 kg	20.5 kg	18.2 kg	15.3 kg	12.5 kg		
Weight of 6' pipe with ears	24.2 kg	21 kg	18.7 kg	15.8 kg	13 kg		
Note: Double socket pipes are subject to availability							

Note: All dimensions are given in millimetres. An imperial to metric conversion table is given on page 165.

Harmer LCC Pipes

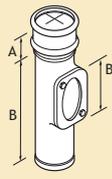
Pipes - With and Without Ears



Pipe Size	A	Product Code
50 dia	610mm	L20/2FT
50 dia	914mm	L20/3FT
50 dia	1219mm	L20/4FT
50 dia	1830mm	L20/6FT
63 dia	610mm	L25/2FT
63 dia	914mm	L25/3FT
63 dia	1219mm	L25/4FT
63 dia	1830mm	L25/6FT
75 dia	610mm	L30/2FT
75 dia	914mm	L30/3FT
75 dia	1219mm	L30/4FT
75 dia	1830mm	L30/6FT
87 dia	610mm	L35/2FT
87 dia	914mm	L35/3FT
87 dia	1219mm	L35/4FT
87 dia	1830mm	L35/6FT
100 dia	610mm	L40/2FT
100 dia	914mm	L40/3FT
100 dia	1219mm	L40/4FT
100 dia	1830mm	L40/6FT

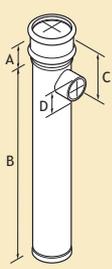
Notes: 1. Pipes without Ears. If pipes without ears are required, add suffix NE to the order code.
 2. Double Collared Pipes. If double collared pipes are required with ears, add suffix DCE to the order code. Add suffix DC if no ears required. Only available in 6ft lengths.
 3. Pipe nails are available to order.
 4. When specifying loose couplings, slip couplings and access pipes with ears, quote the full product code suffixed with /E.

Access Pipes



Pipe Size	A	B	C	Product Code
50 dia	63	234	63	L20/AP
63 dia	69	245	76	L25/AP
75 dia	69	266	88	L30/AP
87 dia	76	273	95	L35/AP
100 dia	76	285	100	L40/AP

Boss Pipes



Pipe Size	A	B	C	Inlet Pipe Size (D)	Product Code
75 dia	76	381	139	38	L30/BP/150
87 dia	76	381	139	38	L35/BP/150
100 dia	76	381	139	31	L40/BP/125
100 dia	76	381	139	38	L40/BP/150
100 dia	76	381	139	50	L40/BP/200

Note: All dimensions are given in millimetres. An imperial to metric conversion table is given on page 165.

Harmer LCC Fittings

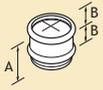
Screw To Wall Cast Iron Holderbats

	Pipe Size	Product Code
	50 dia	L20/HB/ST
	63 dia	L25/HB/ST
	75 dia	L30/HB/ST
	88 dia	L35/HB/ST
	100 dia	L40/HB/ST
Note: Cast iron bobbins are available spacing from 13mm to 50mm in 6mm increments.		

Built-in Holderbats

	Pipe Size	Product Code
	50 dia	L20/HB/BI
	63 dia	L25/HB/BI
	75 dia	L30/HB/BI
	88 dia	L35/HB/BI
	100 dia	L40/HB/BI
Note: Cast bins are available spacing from 13mm to 50mm in 6mm increments.		

Loose Couplings

	Pipe Size	A	B	Product Code
	50 dia	45	95	L20/SOC
	63 dia	45	95	L25/SOC
	75 dia	38	90	L30/SOC
	87 dia	38	86	L35/SOC
	100 dia	35	80	L40/SOC

Slip Couplings

	Pipe Size	A	Product Code
	50 dia	95	L20/SOC/S
	63 dia	95	L25/SOC/S
	75 dia	89	L30/SOC/S
	87 dia	95	L35/SOC/S
	100 dia	79	L40/SOC/S

Note: When specifying fittings with ears, quote the full product code suffixed with /E.

Harmer LCC Fittings

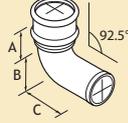
Blank End

	Pipe Size	A	Product Code
	75 dia	76	L30/BE
	87 dia	76	L35/BE
	100 dia	70	L40/BE

Socket Reducer

	Pipe Size	A	B	Product Code
	75 dia	51	76	L30/SR/20
	87 dia	76	76	L40/SR/20
	100 dia	51	70	L40/SR/30

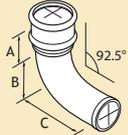
92.5° Bends

	Pipe Size	A	B	C	Product Code
	50 dia	152	139	88	L20/B/92
	63 dia	165	155	95	L25/B/92
	75 dia	174	161	104	L30/B/92
	87 dia	187	177	111	L35/B/92
	100 dia	193	180	117	L40/B/92

92.5° Bends with heel access

	Pipe Size	A	B	C	D	Product Code
	50 dia	152	139	88	63	L20/B/92
	63 dia	165	155	95	76	L25/B/92
	75 dia	174	161	104	88	L30/B/92
	87 dia	187	177	111	95	L35/B/92
	100 dia	193	180	117	100	L40/B/92

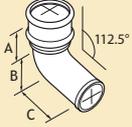
92.5° Long Radius Bends

	Pipe Size	A	B	C	Product Code
	100 dia	298	304	222	L40/BLR

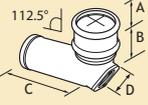
Note: If bends with ears are required, add LE to the order code for left hand side and RE for right hand side bend.

Harmer LCC Fittings

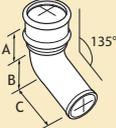
112.5° Bends

	Pipe Size	A	B	C	Product Code
	50 dia	152	139	88	L20/B/112
	63 dia	165	155	95	L25/B/112
	75 dia	174	161	104	L30/B/112
	87 dia	184	177	111	L35/B/112
	100 dia	193	180	120	L40/B/112

112.5° Bends with heel access

	Pipe Size	A	B	C	D	Product Code
	50 dia	152	139	88	63	L20/B/112H
	63 dia	165	155	95	66	L25/B/112H
	75 dia	174	161	104	73	L30/B/112H
	87 dia	184	177	111	95	L35/B/112H
	100 dia	193	180	120	100	L40/B/112H

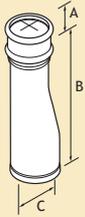
135° Bends

	Pipe Size	A	B	C	Product Code
	50 dia	127	142	88	L20/B/135
	63 dia	136	158	95	L25/B/135
	75 dia	142	161	104	L30/B/135
	87 dia	171	161	111	L35/B/135
	100 dia	177	165	120	L40/B/135

135° Bends with heel access

	Pipe Size	A	B	C	D	Product Code
	50 dia	127	142	88	63	L20/B/135H
	63 dia	136	158	95	66	L25/B/135H
	75 dia	142	161	104	73	L30/B/135H
	87 dia	171	161	111	95	L35/B/135H
	100 dia	177	165	120	100	L40/B/135H

Diminishing Pieces

	Pipe Size	A	B	C	Product Code
	75 dia	69	304	50	L25/B/92AR
	100 dia	76	304	50	L25/B/92AL
	100 dia	76	304	75	L35/B/92AL

Note: If bends with ears are required, add LE to the order code for left hand side and RE for right hand side bend.

Harmer LCC Fittings

112.5° Swan Necks

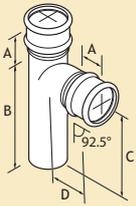


Pipe Size	A	B	Offset	Product Code
50 dia	63	241	75	L20/OF/03
50 dia	63	257	112	L20/OF/04
50 dia	63	273	150	L20/OF/06
50 dia	63	304	237	L20/OF/09
50 dia	63	336	300	L20/OF/12
50 dia	63	361	375	L20/OF/15
50 dia	63	400	475	L20/OF/18
50 dia	63	431	554	L20/OF/21
50 dia	63	463	600	L20/OF/24
63 dia	69	257	75	L25/OF/03
63 dia	69	273	112	L25/OF/04
63 dia	69	288	150	L25/OF/06
63 dia	69	320	237	L25/OF/09
63 dia	69	352	300	L25/OF/12
63 dia	69	384	375	L25/OF/15
63 dia	69	415	475	L25/OF/18
63 dia	69	447	554	L25/OF/21
63 dia	69	479	600	L25/OF/24
75 dia	69	266	75	L30/OF/03
75 dia	69	282	112	L30/OF/04
75 dia	69	298	150	L30/OF/06
75 dia	69	330	237	L30/OF/09
75 dia	69	361	300	L30/OF/12
75 dia	69	393	375	L30/OF/15
75 dia	69	425	475	L30/OF/18
75 dia	69	457	554	L30/OF/21
75 dia	69	488	600	L30/OF/24
87 dia	76	282	75	L35/OF/03
87 dia	76	298	112	L35/OF/04
87 dia	76	314	150	L35/OF/06
87 dia	76	346	237	L35/OF/09
87 dia	76	377	300	L35/OF/12
87 dia	76	409	375	L35/OF/15
87 dia	76	441	475	L35/OF/18
87 dia	76	473	554	L35/OF/21
87 dia	76	504	600	L35/OF/24
100 dia	76	288	75	L40/OF/03
100 dia	76	307	112	L40/OF/04
100 dia	76	323	150	L40/OF/06
100 dia	76	355	237	L40/OF/09
100 dia	76	387	300	L40/OF/12
100 dia	76	419	375	L40/OF/15
100 dia	76	450	475	L40/OF/18
100 dia	76	482	554	L40/OF/21
100 dia	76	514	600	L40/OF/24

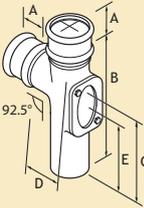
Note: If swan necks with ears are required, add LE to the order code for left hand side and RE for right hand side bend.

Harmer LCC Fittings

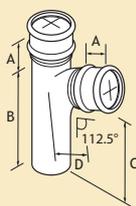
92.5° Equal Single Branches

	Pipe Size	A	B	C	D	Product Code
	50 dia	63	234	177	88	L20/BR/9
63 dia	69	260	196	95	L25/BR/9	
75 dia	69	285	212	111	L30/BR/9	
87 dia	76	304	225	117	L35/BR/9	
100 dia	76	330	214	130	L40/BR/9	

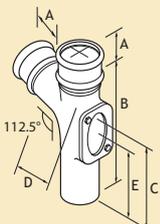
92.5° Equal Single Branches with access

	Pipe Size	A	B	C	D	E	Product Code
	50 dia	63	234	177	88	146	L20/BRA/9
63 dia	69	260	196	95	161	L25/BRA/9	
75 dia	69	285	212	111	177	L30/BRA/9	
87 dia	76	304	225	117	190	L35/BRA/9	
100 dia	76	330	214	130	206	L40/BRA/9	

112.5° Equal Single Branches

	Pipe Size	A	B	C	D	Product Code
	50 dia	63	234	155	79	L20/BR/11
63 dia	69	260	174	85	L25/BR/11	
75 dia	69	285	184	100	L30/BR/11	
87 dia	76	304	120	107	L35/BR/11	
100 dia	76	330	184	146	L40/BR/11	

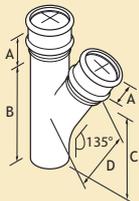
112.5° Equal Single Branches with access

	Pipe Size	A	B	C	D	E	Product Code
	50 dia	63	234	155	88	146	L20/BRA/9
63 dia	69	260	174	95	161	L25/BRA/9	
75 dia	69	285	184	111	177	L30/BRA/9	
87 dia	76	304	120	117	190	L35/BRA/9	
100 dia	76	330	184	130	206	L40/BRA/9	

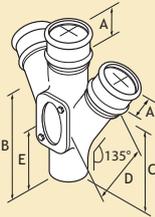
Note: When specifying fittings with ears, quote the full product code suffixed with /E.

Harmer LCC Fittings

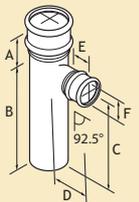
135° Equal Single Branches

	Pipe Size	A	B	C	D	Product Code
	50 dia	63	234	120	114	L20/BR/13
63 dia	69	260	130	130	L25/BR/13	
75 dia	69	285	133	152	L30/BR/13	
87 dia	76	304	146	158	L35/BR/13	
100 dia	76	330	146	184	L40/BR/13	

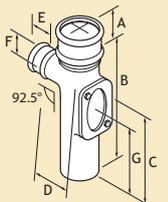
135° Equal Single Branches with Access

	Pipe Size	A	B	C	D	E	Product Code
	50 dia	63	234	120	114	146	L20/BRA/9
63 dia	69	260	130	130	161	L25/BRA/9	
75 dia	69	285	133	152	177	L30/BRA/9	
87 dia	76	304	146	158	190	L35/BRA/9	
100 dia	76	330	146	184	206	L40/BRA/9	

92.5° Unequal Single Branches

	Pipe Size	A	B	C	D	E	F	Product Code
	63 dia	69	260	196	95	63	50	L25/BRU/95
75 dia	69	260	196	100	63	50	L30/BRU/95	
75 dia	69	273	206	104	69	63	L30/BRU/96	
87 dia	76	266	206	107	63	50	L35/BRU/95	
87 dia	76	285	209	111	69	63	L35/BRU/96	
87 dia	76	292	215	117	69	75	L35/BRU/97	
100 dia	76	279	219	114	63	50	L40/BRU/95	
100 dia	76	285	209	117	69	63	L40/BRU/96	
100 dia	76	292	215	123	69	75	L40/BRU/97	
100 dia	76	304	209	123	76	88	L40/BRU/98	

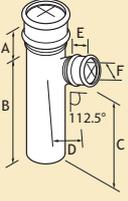
92.5° Unequal Single Branches with Access

	Pipe Size	A	B	C	D	E	F	G	Product Code
	63 dia	69	260	196	95	63	50	165	L25/BRU/95
75 dia	69	260	196	100	63	50	165	L30/BRU/95	
75 dia	69	273	206	104	69	63	170	L30/BRU/96	
87 dia	76	266	206	107	63	50	165	L35/BRU/95	
87 dia	76	285	209	111	69	63	176	L35/BRU/96	
87 dia	76	292	215	117	69	75	187	L35/BRU/97	
100 dia	76	279	219	114	63	50	177	L40/BRU/95	
100 dia	76	285	209	117	69	63	180	L40/BRU/96	
100 dia	76	292	215	123	69	75	182	L40/BRU/97	
100 dia	76	304	209	123	76	88	178	L40/BRU/98	

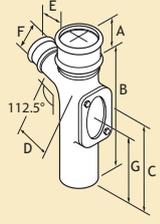
Note: When specifying fittings with ears, quote the full product code suffixed with /E.

Harmer LCC Fittings

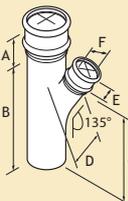
112.5° Unequal Single Branches

	Pipe Size	A	B	C	D	E	F	Product Code
	63 dia	69	276	187	104	63	50	L25/BRU/115
	75 dia	69	260	174	92	63	50	L30/BRU/115
	75 dia	69	276	187	104	69	63	L30/BRU/116
	87 dia	76	263	180	98	63	50	L35/BRU/115
	87 dia	76	288	184	111	69	76	L35/BRU/117
	100 dia	76	279	190	104	63	50	L35/BRU/115
	100 dia	76	288	184	114	69	76	L40/BRU/117
	100 dia	76	304	193	111	76	88	L40/BRU/118

112.5° Unequal Single Branches with Access

	Pipe Size	A	B	C	D	E	F	G	Product Code
	63 dia	69	276	187	104	63	50	165	L25/BRUA/115
	75 dia	69	260	174	92	63	50	165	L30/BRUA/115
	75 dia	69	276	187	104	69	63	165	L30/BRUA/116
	87 dia	76	263	180	98	63	50	165	L35/BRUA/115
	87 dia	76	288	184	111	69	75	184	L35/BRUA/117
	100 dia	76	279	190	104	63	50	174	L35/BRUA/115
	100 dia	76	288	184	114	69	75	180	L40/BRUA/117
	100 dia	76	304	193	111	76	88	177	L40/BRUA/118

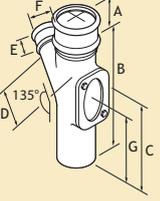
135° Unequal Single Branches

	Pipe Size	A	B	C	D	E	F	Product Code
	63 dia	69	260	130	133	63	50	L25/BRU/135
	75 dia	69	260	130	133	63	50	L30/BRU/135
	75 dia	69	280	130	133	69	63	L30/BRU/136
	87 dia	76	266	133	146	63	50	L35/BRU/135
	87 dia	76	292	133	161	69	75	L35/BRU/137
	100 dia	76	279	139	152	63	50	L35/BRU/135
	100 dia	76	292	127	171	69	75	L40/BRU/137
	100 dia	76	304	127	177	76	88	L40/BRU/138

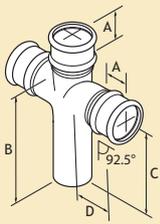
Note: When specifying fittings with ears, quote the full product code suffixed with /E.

Harmer LCC Fittings

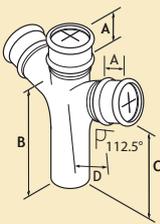
135° Unequal Single Branches with Access

	Pipe Size	A	B	C	D	E	F	G	Product Code
	63 dia	69	260	130	133	63	50	165	L25/BRUA/135
	75 dia	69	260	130	133	63	50	165	L30/BRUA/135
	75 dia	69	280	130	133	69	63	165	L30/BRUA/136
	87 dia	76	266	133	146	63	50	165	L35/BRUA/135
	87 dia	76	292	133	161	69	75	184	L35/BRUA/137
	100 dia	76	279	139	152	63	50	174	L35/BRUA/135
	100 dia	76	292	127	171	69	75	180	L40/BRUA/137
	100 dia	76	304	127	177	76	88	177	L40/BRUA/138

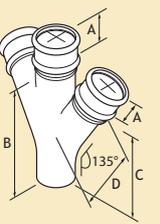
92.5° Equal Double Branches

	Pipe Size	A	B	C	D	Product Code
	50 dia	63	234	177	88	L20/BRD/9
	63 dia	69	260	196	95	L25/BRD/9
	75 dia	69	285	212	111	L30/BRD/9
	87 dia	76	304	225	117	L35/BRD/9
	100 dia	76	330	241	130	L40/BRD/9

112.5° Equal Double Branches

	Pipe Size	A	B	C	D	Product Code
	50 dia	63	234	155	79	L20/BRD/11
	63 dia	69	260	174	85	L25/BRD/11
	75 dia	69	285	184	98	L30/BRD/11
	87 dia	76	304	193	111	L35/BRD/11
	100 dia	76	330	209	120	L40/BRD/11

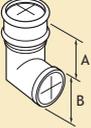
135° Equal Double Branches

	Pipe Size	A	B	C	D	Product Code
	50 dia	63	234	120	114	L20/BRD/13
	63 dia	69	260	130	130	L25/BRD/13
	75 dia	69	285	136	149	L30/BRD/13
	87 dia	76	304	146	158	L35/BRD/13
	100 dia	76	330	146	184	L40/BRD/13

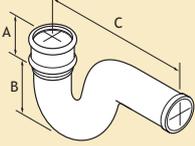
Note: When specifying fittings with ears, quote the full product code suffixed with /E.

Harmer LCC Fittings

Shoes

	Pipe Size	A	B	Product Code
	50 dia	63	127	L20/SH
	63 dia	69	149	L25/SH
	75 dia	69	177	L30/SH
	87 dia	76	200	L35/SH
	100 dia	76	228	L40/SH

P Traps

	Pipe Size	A	B	C	Product Code
	50 dia	76	136	343	L40/PT

Pipe Fixings

	Type	Size	Notes	Product Code
	3" Pipe Nail	M8 x 75mm	Bright zinc plated mild steel	NAIL30
	4" Pipe Nail	M8 x 100mm	Bright zinc plated mild steel	NAIL40
	3" Coach Screw	M8 x 75mm	Hardened steel zinc plated	COACH30
	4" Coach Screw	M8 x 100mm	Hardened steel zinc plated	COACH40
	Coach Screw Cap	M8 dia	Black plastic	COACHCAP
	Marine Sealant	310ml Cartridge	Geocel black silicone rubber	MS991563
Caulking Foam 13mm	M13 dia x 10 metre	Polyethylene backer rod	BF991413	

Note: When specifying fittings with ears, quote the full product code suffixed with /E.