

**CC** CHONG CHEONG  
FOUNDRY WORKS PTE LTD

## CROSS-LINKING FUSION BONDED EPOXY



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ISO 9001



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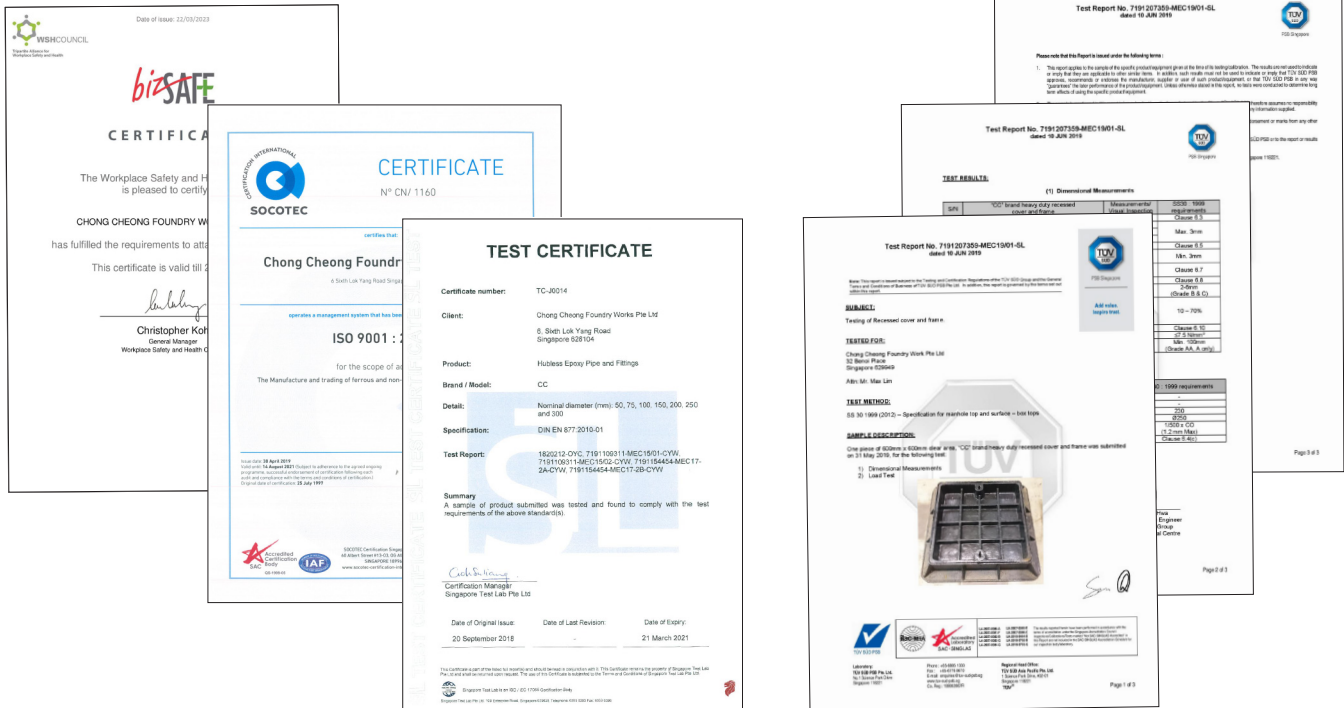
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**08**

Our Products

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# QUALITY ASSURANCE



- Our CC Brand Cross linking fusion bonded epoxy coated Hubless pipes & fittings are manufactured & tested with strict quality control to meet requirements of EN 877.
- High grade & quality of cast irons are used in all the castings & manufacturing of our CC Brand pipes & fittings.
- Performance, application & integrity of epoxy used for coating our pipes & fittings meet to the stringent tests as complying with EN 877 inclusive of chemical resistance & hot water test.
- Good grade austenitic steel (stainless steel) are used for all our couplings.
- Elastomeric gasket used in the production of our couplings are of EPDM and comply with SS270 & ASTM C564-12.

# BENEFITS OF **CC** CAST IRON PIPE SYSTEM

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## PERFORMANCE AT HIGH TEMPERATURES:

- High temperature resisting properties.
- Heat resistant & does not support combustion.
- High melting points to 1000°C.
- It does not give off black smoke or gases when heated up.
- It does not promote the propagation of fire from one floor to another.
- Very low coefficient of expansion & hence, great for resisting thermal expansion.



## ENVIRONMENT FRIENDLY:

- Cast iron pipes & fittings can be 100% recycled. They can be re-melted & formed into products again & again.
- Thus, cast iron pipes & fittings are good for minimizing environmental impact & support & can maximize sustainability.



## DURABILITY & RELIABILITY:

- Cast iron have good corrosion resisting properties & is further enhanced by our cross linking fusion bonded epoxy coating in all our products and effectively provides the protection needed.
- High impact strength gives the cast iron pipes good compressive strength and crushing strength.
- High diametral stiffness of cast iron pipe gives them good laying properties over a wide span of area. Promotes smooth laminar flow.



## QUIET OPERATION:

- Gray cast iron have dense graphite structure and are inherently known to possess high sound absorbing qualities.
- It contains & minimizes noise propagation created by fluid flowing in the piping system.
- Highly suitable for **HOTELS, CONDOMINIUMS & HEALTH CARE FACILITIES & HOSPITALS** that require a quiet environment.

## PROJECT REFERENCE

Some of our CC epoxy pipes and fittings are seen in these project references:



LTA Changi Mega Depot T301



Outram Community Hospital  
Ministry of Health



Police Divisional HQ @ Woodlands  
Ministry of Home Affairs



Woodlands Health Campus  
Ministry of Health



Nexus International School



South Beach Residences

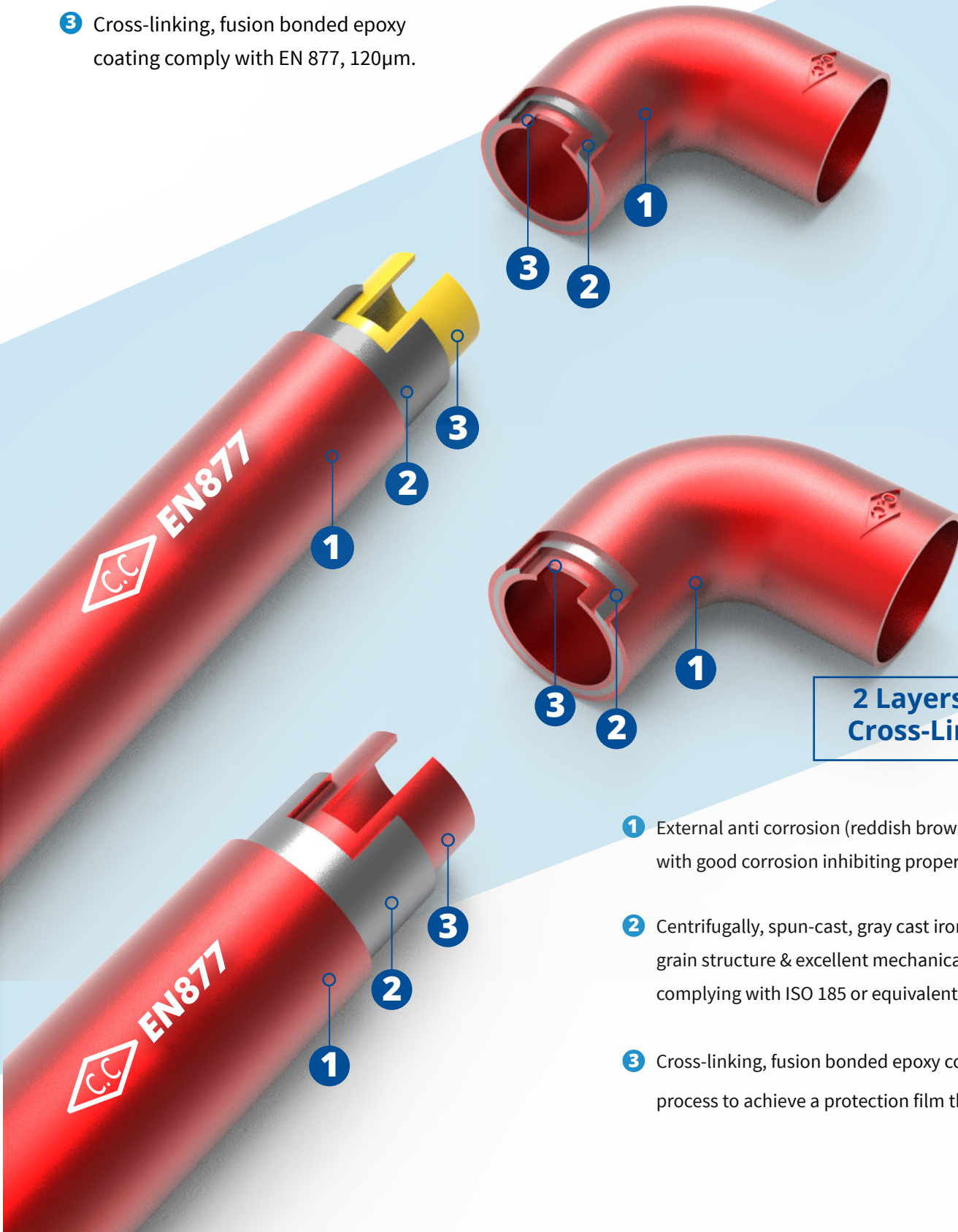
The epoxy coating provides a reinforced protection on the pipes and fittings. This enhanced protection are suitable for use in commercial applications where durability and reliability is required.



New National Cancer Centre  
Ministry of Health

## 120-MICRON Cross-Linking Coating

- 1 External anti corrosion (reddish brown) protective coating with good corrosion inhibiting properties.
- 2 Centrifugally, spun-cast, gray cast iron pipe with fine grain structure & excellent mechanical properties complying with ISO 185 or equivalent.
- 3 Cross-linking, fusion bonded epoxy coating complying with EN 877, 120µm.



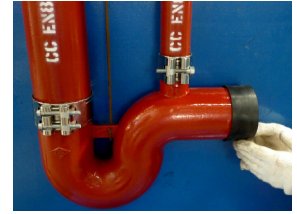
## 2 Layers 240-MICRON Cross-Linking Coating

- 1 External anti corrosion (reddish brown) protective coating with good corrosion inhibiting properties.
- 2 Centrifugally, spun-cast, gray cast iron pipe with fine grain structure & excellent mechanical properties complying with ISO 185 or equivalent.
- 3 Cross-linking, fusion bonded epoxy coating, two layered process to achieve a protection film thickness of 240µm.

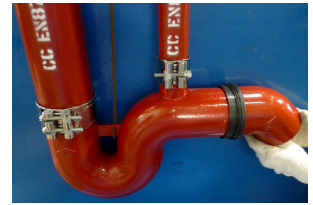
## TYPE E &amp; TYPE F



- 1** Remove the rubber sleeve from the coupling. Push the rubber sleeve onto the pipe end so that the central inner sealing ring rest on the edge end of the pipe or fitting to be connected.



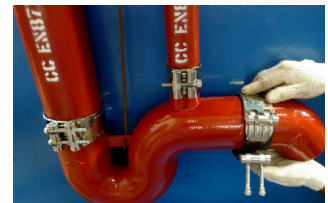
- 2** Roll the upper half of the rubber sleeve back over to receive the fitting or pipe end to be connected.



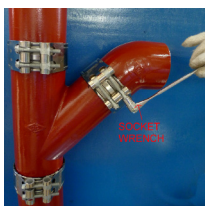
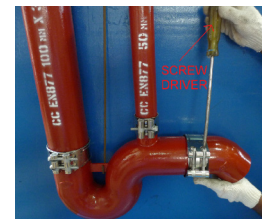
- 3** Place the fitting or the pipe end to the inner sealing ring and fold back the rubber sleeve.



- 4** Open stainless steel sleeve and locate over the rubber sleeve. Close the bolts over the stainless steel sleeve centrally over the rubber sleeve.



- 5** Tighten the bolts on the stainless steel sleeve with a screw driver. Tighten the two bolts evenly to ensure the coupling is gripping to form a positive seal between the two joining components.

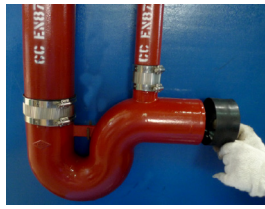


- 6** Use a torque wrench to complete the installation ensuring even distribution of tightening load on the two bolts for a positive watertight joint.





**TYPE A**



**1**

Remove the rubber sleeve collar from the coupling and push the rubber sleeve onto the pipe end so that the inner sealing ring rest on the edge end of the pipe or fitting to be connected.



**2**

Roll the upper half of the rubber sleeve back over to receive the other end of the pipe or fitting.



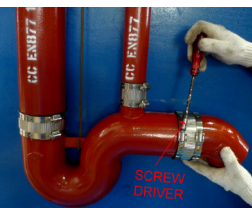
**3**

Insert the fitting or end of the pipe towards the inner sealing ring and fold back the rubber sleeve over the connecting pipe or fitting.



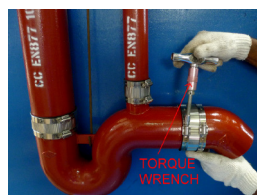
**4**

Open up the stainless steel band and slide the stainless steel sleeve over the rubber sleeve.



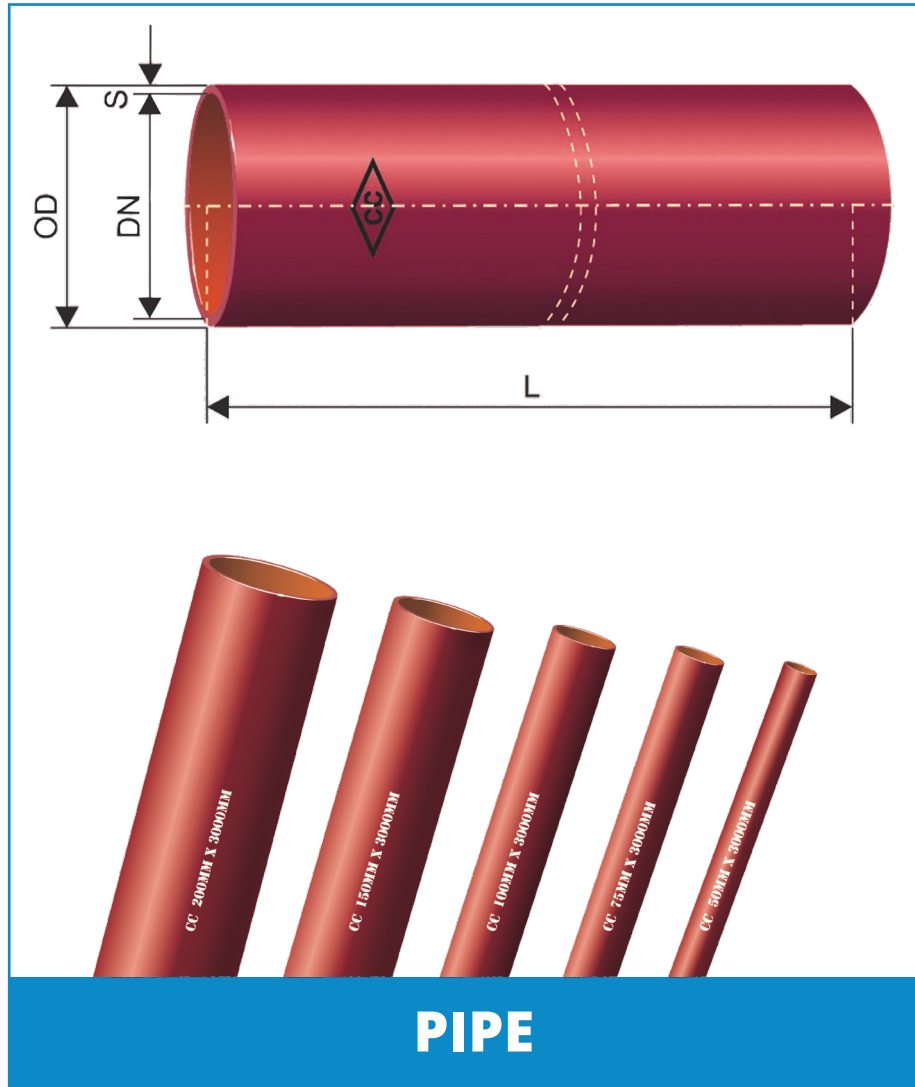
**5**

Tighten the two bolts on the stainless steel sleeve with a screw driver evenly, ensuring the stainless steel shield closes evenly over the rubber sleeve.

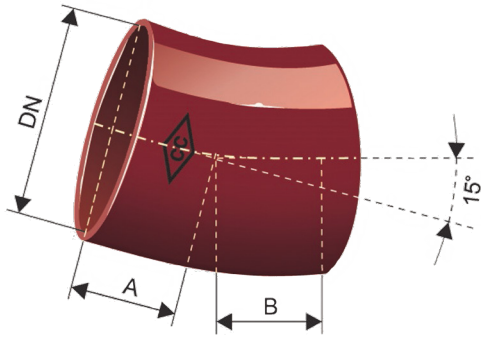


**6**

Use a torque wrench to complete the installation ensuring even distribution of tightening load on the two bolts for a positive watertight joint.

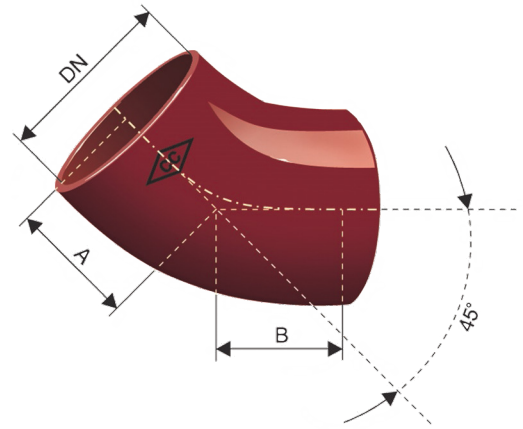


DN	OD max	OD min	S nominal	S min	L	Weight
	mm	mm	mm	mm	mm	Kg/Length
50	60.0	57.0	3.5	3.0	3000	13.0
75	85.0	82.0	3.5	3.0	3000	19.2
100	112.0	109.0	3.5	3.0	3000	25.2
150	162.0	158.0	4.0	3.5	3000	42.8
200	212.0	208.0	5.0	4.0	3000	70.0
250	276.5	271.5	5.5	4.5	3000	99.80
300	328.5	323.5	6.0	5.0	3000	129.70



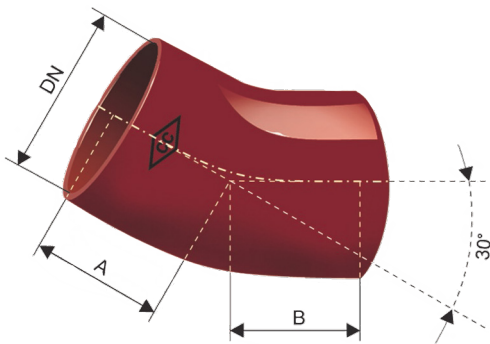
**15° Bend**

DN	A	B	Weight
	mm	mm	Kg/Piece
50	40	40	0.4
75	50	50	0.6
100	50	50	1.0
150	65	65	2.0
200	80	80	4.0



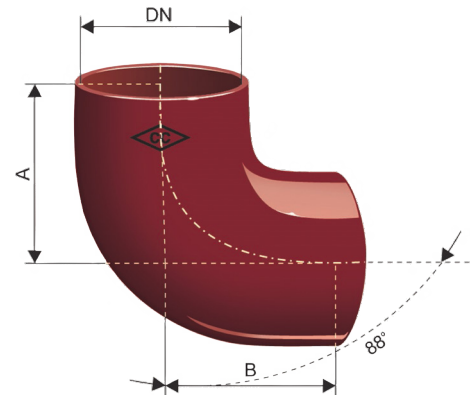
**30° Bend**

DN	A	B	Weight
	mm	mm	Kg/Piece
50	40	45	0.5
75	60	60	0.7
100	60	60	1.3
150	80	85	2.1
200	95	95	4.3



**45° Bend**

DN	A	B	Weight
	mm	mm	Kg/Piece
50	50	50	0.5
75	60	60	1.0
100	70	70	1.6
150	90	90	2.5
200	110	110	6.2
250	130	130	10.3
300	155	155	19.0



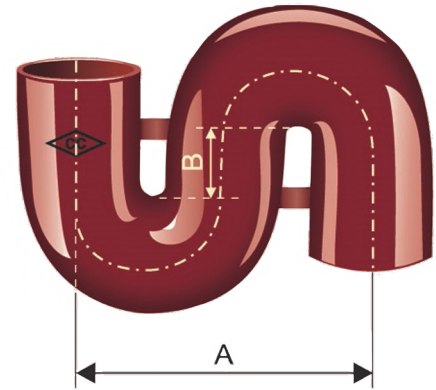
**90° Bend**

DN	A	B	Weight
	mm	mm	Kg/Piece
50	75	75	0.7
75	95	95	1.4
100	110	110	2.1
150	145	145	5.5
200	180	180	8.8
250	220	220	19.2
300	260	260	29.0



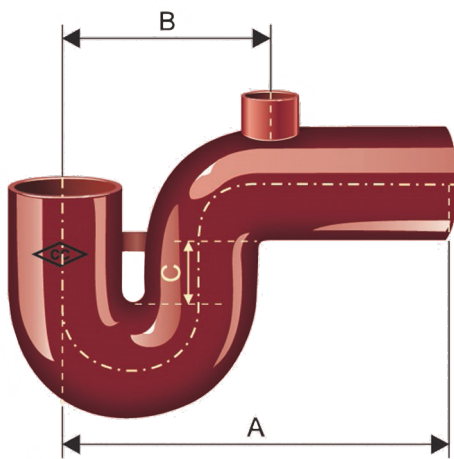
**S-Trap**  
(100mm X 100mm X 50mm)

A	B	C	Weight
mm	mm	mm	Kg/Piece
303	228	65	9.2



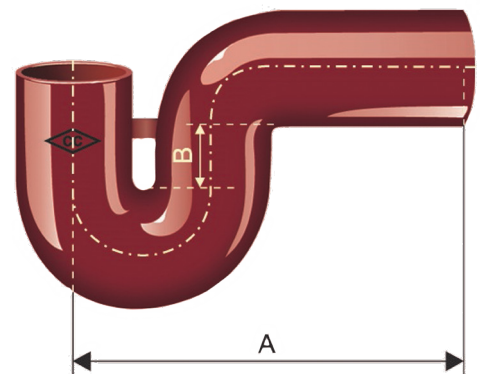
**S-Trap**  
(100mm X 100mm)

A	B	Weight
mm	mm	Kg/Piece
303	65	8.8



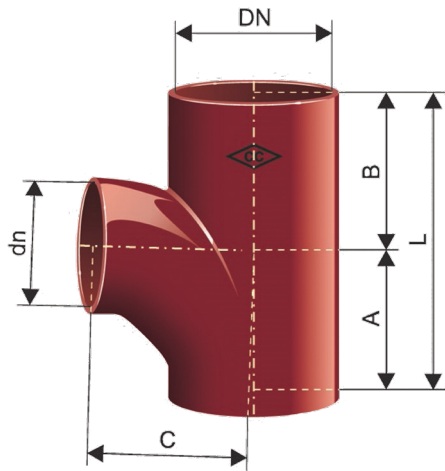
**P-Trap**  
(100mm X 100mm X 50mm)

A	B	C	Weight
mm	mm	mm	Kg/Piece
355	223	65	8.2



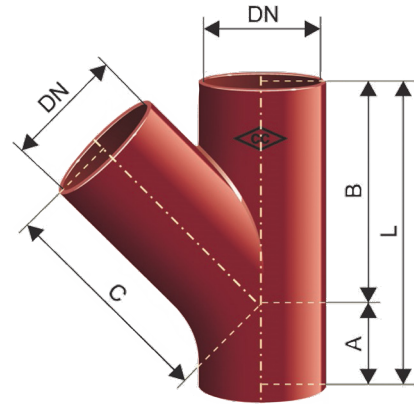
**P-Trap**  
(100mm X 100mm)

A	B	Weight
mm	mm	Kg/Piece
355	65	8.0



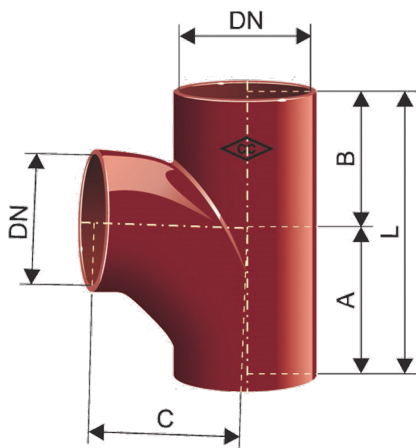
**Equal Branch Tee 88°**

DN	A	B	L	C	Weight
	mm	mm	mm	mm	Kg/Piece
50	79	66	145	80	0.9
75	95	85	180	90	1.9
100	115	105	220	120	2.9
150	158	142	300	155	7.5
200	202	178	280	195	12.8
250	244	226	470	244	24.5
300	300	265	548	283	43.0



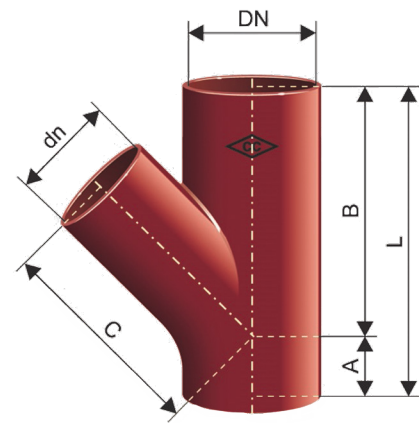
**Equal Branch Tee 45° (Y-Tee)**

DN	A	B	L	C	Weight
	mm	mm	mm	mm	Kg/Piece
50	50	135	185	135	1.4
75	65	160	225	160	2.4
100	70	205	275	205	4.2
150	90	265	355	265	9.4
200	115	340	455	340	17.2
250	130	430	560	430	29.9



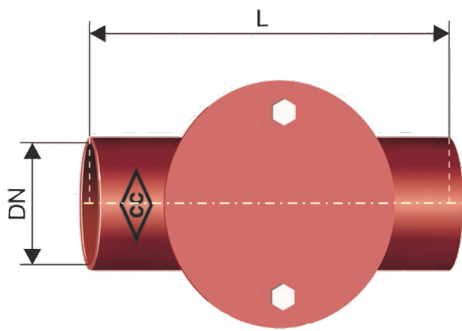
**Unequal Branch Tee 88°**

DN	dn	A	B	L	C	Weight
	mm	mm	mm	mm	mm	Kg/Piece
75	50	95	85	180	90	1.60
100	50	94	76	170	105	2.10
100	75	105	90	195	110	2.60
150	50	100	100	200	140	4.40
150	75	115	100	215	140	4.55
150	100	130	115	245	145	5.50
200	100	144	126	270	175	8.00
200	150	173	152	325	185	10.80
250	100	165	147	312	210	18.20
250	150	191	171	364	228	20.20
250	200	224	196	420	245	17.28
300	100	184	164	348	252	19.25
300	150	212	192	404	258	22.05
300	200	235	220	455	265	27.10
300	250	273	253	526	271	38.00



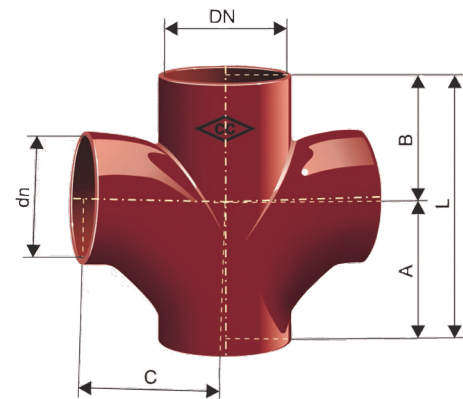
**Unequal Branch Tee 45° (Y-Tee)**

DN	dn	A	B	L	C	Weight
	mm	mm	mm	mm	mm	Kg/Piece
75	50	50	140	190	140	1.8
100	50	35	165	200	165	2.5
100	75	55	175	230	175	3.3
150	100	55	240	295	240	6.8
200	100	40	265	305	265	10.0
200	150	75	300	375	300	13.3
250	100	15	310	325	310	15.4
250	150	55	350	405	350	20.2
250	200	90	385	475	385	25.1
300	150	35	380	415	380	26.9
300	200	70	415	435	440	34.0



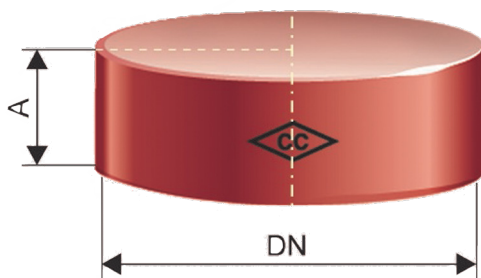
### Short Pipe with Access Door

DN	L	Weight
	mm	Kg/Piece
75	220	4.0
100	260	4.0
150	300	8.7
200	320	10.5
250	330	14.9



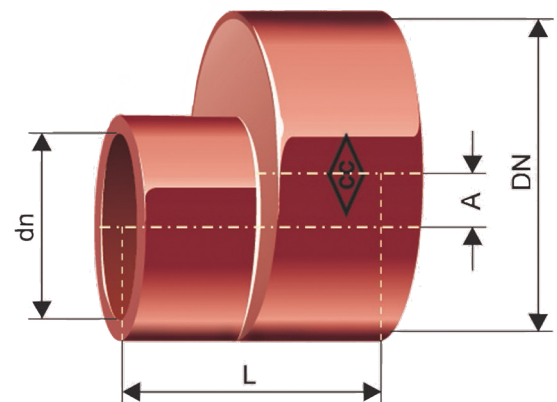
### Cross Tee 88°

DN	dn	A	B	L	C	Weight
	mm	mm	mm	mm	mm	Kg/Piece
100	50	100	80	180	105	2.5
100	75	102	88	190	107	2.8
100	100	120	110	230	120	3.2
150	100	130	115	245	145	7.1



### End Caps

DN	L	Weight
	mm	Kg/Piece
50	30	0.2
75	35	0.3
100	40	0.8
150	50	1.7
200	60	3.1
250	70	6.0
300	80	9.5



### Reducer

DN	dn	A	L	Weight
	mm	mm	mm	Kg/Piece
75	50	12.5	80	0.7
100	50	25	80	0.9
100	75	13.5	90	1.1
150	100	25	105	2.2
200	100	50	115	4.1
200	150	25	125	4.3
250	100	75	125	5.7
250	150	57	140	6.8
250	200	32	145	7.0
300	150	83	150	10.7
300	200	58	160	11.4

# Type - "A"

Stainless Steel Clip and Rubber Sleeve for connecting of Hubless Pipes & Fittings



Type "A" Coupling Install Torque:

Item	Install Torque
Nm	
HCA50	8
HCA75	8
HCA100	8
HCA125	8
HCA150	8
HCA200	8
HCA250	8

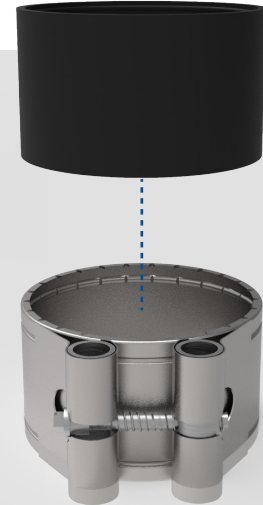
<p>Stainless Steel Corrugated Shield and Band coupled with Rubber sleeve is designed to permit normal expansion, contraction and deflection of the drainage, waste, vent or sewer line.</p>	
<p>Stainless Steel Clip – SS 300 Series Rubber Sleeve – To ASTM C 564 or SS270</p>	<p>Sizes (mm): 50, 75, 100, 150, 200, 250, 300</p>

## Type - "E" & "F"

Stainless Steel Clip and Rubber Sleeve for connecting of Hubless Pipes & Fittings Bolted Type

### Type "E"

One Bolt Type  
"E" Sizes (mm):  
50, 75



### Type "F"

Two Bolt Type  
"F" Sizes (mm):  
100, 150, 200,  
250



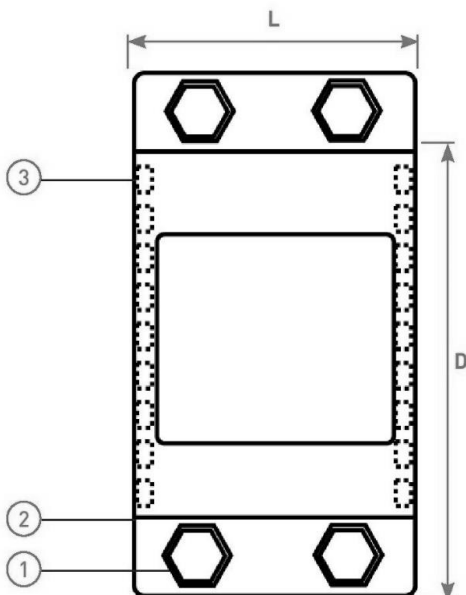
Stainless Steel Shield coupled with Rubber sleeve and high tensile bolts is designed to permit normal expansion, contraction and deflection of the drainage, waste, vent or sewer line.

Stainless Steel Shield - SS 300 Series  
Rubber Sleeve - To ASTM C 564 or SS270



# Grip Collar

Heavy Duty Grip Collar for Tightening Gaps of Iron Pipes and Fittings



### Component List:

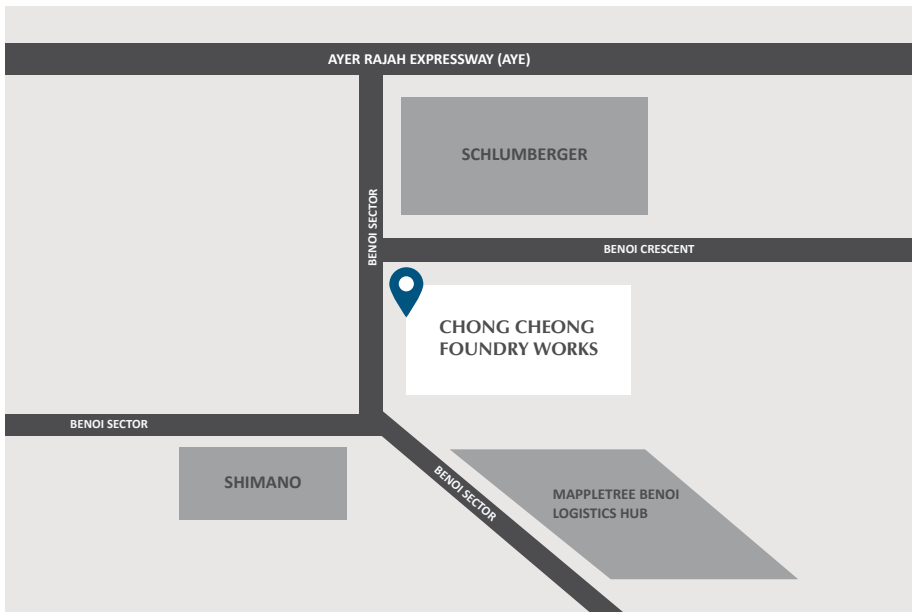
S/No.	Name	Material
1	Head Screw (Hexagon Shape)	GS Galvanized
2	Metal Collar	GS Galvanized
3	Claw Insert	GS Galvanized

### Dimensions:

Product ID	Size	L	D	Bolt	Pressure BAR
	mm	mm	mm		Min.
HCAGC50	50	69	73	M8	2
HCAGC75	75	71	94	M8	2
HCAGC100	100	87	126	M10	2
HCAGC150	150	98	179	M10	2
HCAGC200	200	111	229	M12	2







## Contact Us

Please feel free to contact us via e-mail or phone. We will be glad to answer your questions, concerns and/or feedback.

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