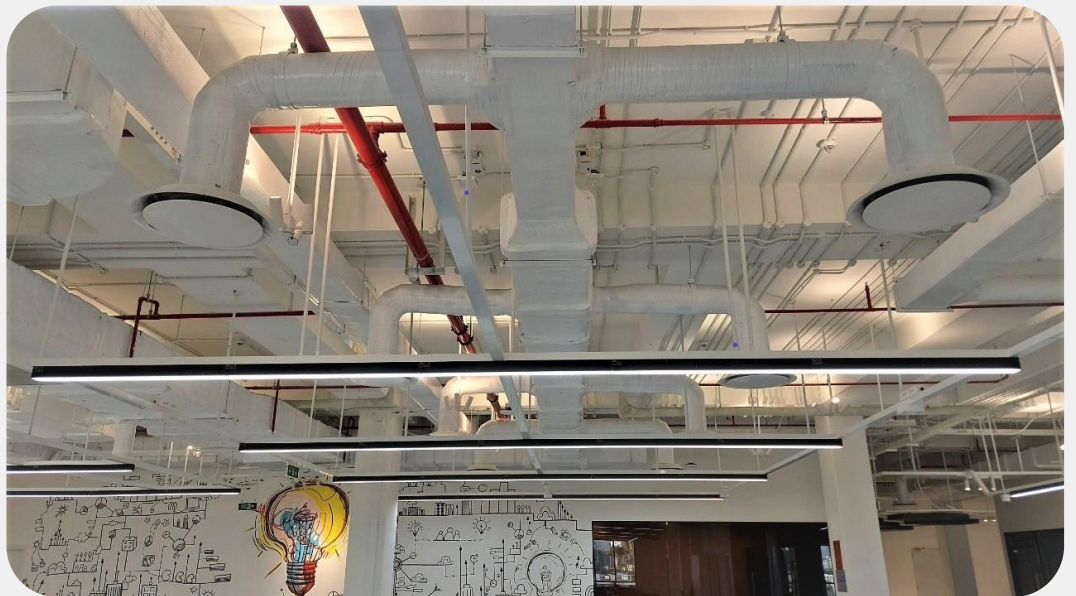


Spiral Circular Ducts Catalogue



As per SMACNA 3rd Edition-2005 & DW/144

Materials: Galvanized, Stainless Steel 316 or 304 & Aluminum







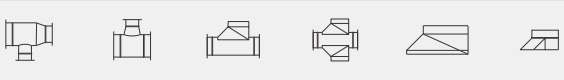
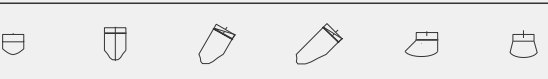
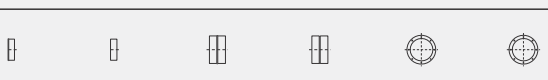

GREEN CARE SOLUTION ENGINEERING

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Factory: 117 Vo Van Bich, Hamlet 11, Tan Thanh Dong Commune, Cu Chi District, HCM City

Website: www.gcse.vn - **Email:** me-workshop@gcse.vn

Circular Ducts: Single Wall

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Green Care Standard Specs. - Spiral Tube		4
Green Care Standard Specs. - Grooved Seam		5
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Fittings	 CSDS RCLL CLL RSB BFL15° BFL22.5°	7
	 BFL30° BFL45° BFL60° BFL90°	8
	 TSB 2SB90° BFLB90° CO TCL XCL	9
	 TCL45° TCCL45° RT45° RCT45° TY45° STO	10
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	 CS B90° B60° B45° CSP CBP	12
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FABRICATION PROCEDURES

1- Straight Spiral Ducts Fabrication:

Fabrication of Spiral Circular Ducts shall be based on Drawings/Take off provided by the client, by following consequently below Procedures:

- a) The job order will be encoded into the Spiro Tubeformer Machine to produce the Straight Spiral Ducts as per diameters and lengths requested.
- b) Connectors/Joints shall be according to the project specifications (Flanges/Coupling).

2- Fittings Fabrication:

- a) Individual Duct pieces will be nested on sheets to maximize sheet usage on the CNC machines avoiding material loss.
- b) The Fabrication Data will be saved as NC program and the same will be printed out in different job orders.
- c) The Job Order for the fittings will be sent to the CNC Plasma for cutting and marking the items.
- d) From Plasma Cutting machine the individual marked pieces will be removed and taken to the assembly area to produce the fittings (Elbow, Tee, Reducer, etc..).
- e) After completion of fabrication, each item shall be cleaned properly; each item shall be labeled with following data:

- 1- Tag No.,
- 2- PO Reference,
- 3- Date,
- 4- Customer Name,
- 5- Project Name,
- 6- Job Order No.,
- 7- Type of Materials (GI, SS, Alu)
- 8- Weight, Length, Area,
- 9- Insulation Thickness & Density (if any)
- 10- Connector Dimensions
- 11- Item Type (Straight, Elbow, Tee Reducer, etc.)

- f) Quantity of items ready for delivery shall be bar coded by our software, same as mentioned in the Delivery Reports.
- g) QA/QC shall be conducted before each delivery in order to indicate the "Passed" Tag or "Rejected"

METHOD OF INSTALLATION - SPIRAL

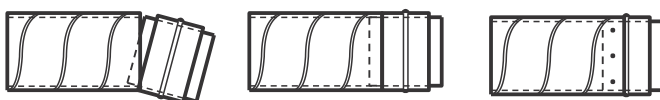
Single Wall – Slip Fit

The fittings are male sized to slip into the pipe section. A good tight fit is necessary for minimizing friction loss and good sealing. Care should be taken during handling to avoid any dents or distortions that may cause improper fit and difficult installation.

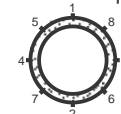
Steps to be followed:

1. Bring the bottom of the fitting collar into the Spiral Duct at a slight angle.
2. Work the rest of the Collar into the Spiral Duct.
3. Carefully work the rest of the Collar into the Spiral Duct until approximate 20mm of the collar that remains exposed between the end of the Spiral Duct and the stop bead of the fitting collar. Do not use a screwdriver or knife to help make the connection; apply pressure with the heel of your hand or with your fist to help slip the fitting into the duct.
4. Apply Duct sealer to this exposed area.
5. Push the fitting into the Spiral Duct until the stop bead meets the edge of the Spiral Duct.
6. Fasten the fitting into the Spiral Duct with screws or rivets as per the below chart. The Screws or Rivets should be evenly spaced around the perimeter of the connection, approximate 15mm back from the stop bead. Placement of the screws or rivets should be opposite to each other as demonstrated in the diagram.

Installation of Slip Joint Connector



Screw or Rivet Placement Sequence



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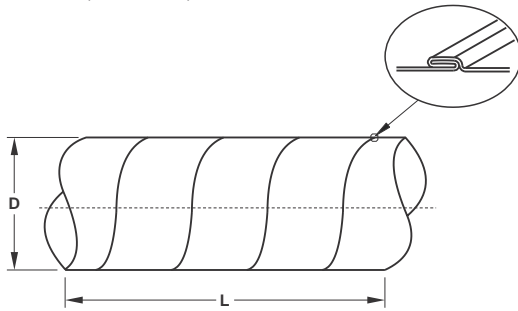
Factory: 117 Vo Van Bich, Hamlet 11, Tan Thanh Dong Commune, Cu Chi District, HCM City

Website: www.gcse.vn - **Email:** me-workshop@gcse.vn

STANDARD SPECIFICATIONS

Spiral Tube

- SR
- Standard Length: 3000mm
Custom Lengths Available
- To ± 2500 Pa (Galvanized)
- To ± 2500 Pa (Stainless Steel 304, 316)
- To ± 500 Pa (Aluminum)



Ordering example:
GI SR 200

Material Code ——— |
Dimension D ——— |

Dimensions and Wall Thickness						
Standard Diameter (mm)	Circumference πd (m)	Area $\pi d^2/4$ (m ²)	Materials Thickness (mm)			Standard Length (mm)
			GI	SS304, 316	AL	
100	0.314	0.008	0.5	0.5	1.0	3000
125	0.393	0.012	0.5	0.5	1.0	3000
140	0.440	0.015	0.5	0.5	1.0	3000
150	0.471	0.018	0.5	0.5	1.0	3000
160	0.503	0.020	0.5	0.5	1.0	3000
180	0.565	0.025	0.5	0.5	1.0	3000
200	0.628	0.031	0.5	0.5	1.0	3000
224	0.704	0.039	0.5	0.5	1.0	3000
250	0.785	0.049	0.5	0.5	1.0	3000
280	0.880	0.062	0.6	0.6	1.0	3000
300*	0.942	0.071	0.6	0.6	1.0	3000
315*	0.990	0.078	0.6	0.6	1.0	3000
355*	1.115	0.099	0.6	0.6	1.0	3000
400*	1.257	0.126	0.7	0.7	1.0	3000
450*	1.414	0.159	0.7	0.7	1.0	3000
500*	1.571	0.196	0.7	0.7	1.0	3000
550*	1.728	0.238	0.7	0.7	1.0	3000
560*	1.759	0.246	0.7	0.7	1.0	3000
600*	1.885	0.283	0.7	0.7	1.0	3000
630*	1.979	0.312	0.8	0.8	1.0	3000
650*	2.042	0.332	0.8	0.8	1.0	3000
710*	2.231	0.392	0.8	0.8	1.2	3000
750*	2.356	0.442	0.8	0.8	1.2	3000
800*	2.513	0.503	0.8	0.8	1.2	3000
850*	2.670	0.567	0.8	0.8	1.2	3000
900*	2.827	0.636	0.8	0.8	1.2	3000
950*	2.985	0.709	0.8	0.8	1.2	3000
1000*	3.142	0.785	0.8	0.8	1.5	3000
1050*	3.299	0.866	0.8	0.8	1.5	3000
1100*	3.456	0.950	0.8	0.8	1.5	3000
1120*	3.519	0.985	1.0	1.0	1.5	3000
1150*	3.613	1.039	1.0	1.0	1.5	3000
1200*	3.770	1.131	1.0	1.0	1.5	3000
1250*	3.927	1.227	1.0	1.0	1.5	3000
1300*	4.084	1.327	1.0	1.0	2.0	3000
1350*	4.241	1.431	1.0	1.0	2.0	3000
1400*	4.398	1.539	1.0	1.0	2.0	3000
1450*	4.555	1.651	1.2	1.2	2.0	3000
1500*	4.712	1.767	1.2	1.2	2.0	3000
1600*	5.027	2.011	1.2	1.2	2.0	3000
1700*	5.340	2.270	1.2	1.2	2.0	3000
1800*	5.655	2.545	1.2	1.2	2.0	3000
1900*	5.969	2.835	1.2	1.2	2.0	3000
2000*	6.283	3.142	1.2	1.2	2.0	3000
2300*	7.226	4.155	1.5			3000
2500*	7.854	4.909	2.0	N.A.	N.A.	3000

GREEN CARE SOLUTION ENGINEERING

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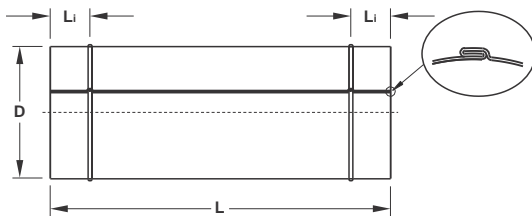
Website: www.gcse.vn - Email: me-workshop@gcse.vn

STANDARD SPECIFICATIONS

Circular Straight Duct - Grooved Seam

- CSD
- L: Standard Length 1200mm

- To ± 2500 Pa (Galvanized)
- To ± 2500 Pa (Stainless Steel 304, 316)
- To ± 500 Pa (Aluminum)



With Outturned Stiffening Corrugation

Ordering example:
GI CSD 200

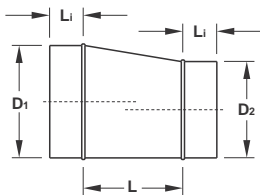
Material Code |
Dimension D |

Dimensions and Wall Thickness						
Standard Diameter (mm)	Circumference πd (m)	Area $\pi d^2/4$ (m ²)	Li nom (mm)	Materials Thickness (mm)		
				GI	SS304, 316	AL
100	0.314	0.008	50	0.6	0.6	1.0
125	0.393	0.012	50	0.6	0.6	1.0
140	0.440	0.015	50	0.6	0.6	1.0
150	0.471	0.018	50	0.6	0.6	1.0
160	0.503	0.020	50	0.6	0.6	1.0
180	0.565	0.025	50	0.6	0.6	1.0
200	0.628	0.031	50	0.6	0.6	1.0
224	0.704	0.039	50	0.6	0.6	1.0
250	0.785	0.049	50	0.6	0.6	1.0
280	0.880	0.062	50	0.7	0.7	1.0
300	0.942	0.071	50	0.7	0.7	1.0
315	0.990	0.078	50	0.7	0.7	1.0
355	1.115	0.099	50	0.7	0.7	1.0
400	1.257	0.126	50	0.8	0.8	1.0
450	1.414	0.159	50	0.8	0.8	1.2
500	1.571	0.196	50	0.8	0.8	1.2
550	1.728	0.238	50	0.8	0.8	1.2
560	1.759	0.246	50	0.8	0.8	1.2
600	1.885	0.283	50	0.8	0.8	1.2
630	1.979	0.312	50	1.0	1.0	1.2
650	2.042	0.332	50	1.0	1.0	1.2
710	2.231	0.392	50	1.0	1.0	1.5
750	2.356	0.442	50	1.0	1.0	1.5
800	2.513	0.503	50	1.0	1.0	1.5
850	2.670	0.567	50	1.0	1.0	1.5
900	2.827	0.636	50	1.0	1.0	1.5
950	2.985	0.709	50	1.0	1.0	2.0
1000	3.142	0.785	50	1.0	1.0	2.0
1050	3.299	0.866	50	1.0	1.0	2.0
1100	3.456	0.950	50	1.0	1.0	2.0
1120	3.519	0.985	50	1.2	1.2	2.0
1150	3.613	1.039	50	1.2	1.2	2.0
1200	3.770	1.131	50	1.2	1.2	2.0
1250	3.927	1.227	50	1.2	1.2	2.0
1300	4.084	1.327	50	1.2	1.2	2.0
1350	4.241	1.431	50	1.2	1.2	2.0
1400	4.398	1.539	100	1.2	1.2	2.0

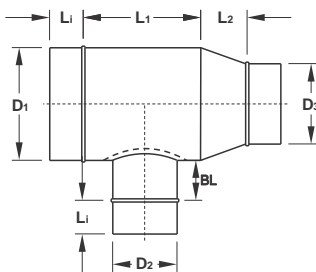
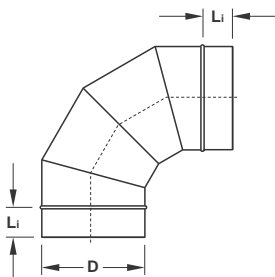
CIRCULAR FITTINGS DUCT WALL THICKNESS SCHEDULE

- Standard Seam: **Stitch Welded**
- Standard Seam for Aluminum: **CLINCH**

- To ± 2500 Pa (Galvanized)
- To ± 2500 Pa (Stainless Steel 304, 316)
- To ± 500 Pa (Aluminum)



With Outturned Stiffening Corrugation



Dimensions and Wall Thickness					
$\Phi D, D_1, D_2, D_3, D_4$ nom (mm)	Circumference πd (m)	L_i nom (mm)	Materials Thickness (mm)		
			GI	SS304, 316	AL
100	0.314	50	0.6	0.6	1.0
125	0.393	50	0.6	0.6	1.0
140	0.440	50	0.6	0.6	1.0
150	0.471	50	0.6	0.6	1.0
160	0.503	50	0.6	0.6	1.0
180	0.565	50	0.6	0.6	1.0
200	0.628	50	0.6	0.6	1.0
224	0.704	50	0.6	0.6	1.0
250	0.785	50	0.6	0.6	1.0
280	0.880	50	0.7	0.7	1.0
300	0.942	50	0.7	0.7	1.0
315	0.990	50	0.7	0.7	1.0
355	1.115	50	0.7	0.7	1.0
400	1.257	50	0.8	0.8	1.0
450	1.414	50	0.8	0.8	1.2
500	1.571	50	0.8	0.8	1.2
550	1.728	50	0.8	0.8	1.2
560	1.759	50	0.8	0.8	1.2
600	1.885	50	0.8	0.8	1.2
630	1.979	50	1.0	1.0	1.2
650	2.042	50	1.0	1.0	1.2
710	2.231	50	1.0	1.0	1.5
750	2.356	50	1.0	1.0	1.5
800	2.513	50	1.0	1.0	1.5
850	2.670	50	1.0	1.0	1.5
900	2.827	50	1.0	1.0	1.5
950	2.985	50	1.0	1.0	2.0
1000	3.142	50	1.0	1.0	2.0
1050	3.299	50	1.0	1.0	2.0
1100	3.456	50	1.0	1.0	2.0
1120	3.519	50	1.2	1.2	2.0
1150	3.613	50	1.2	1.2	2.0
1200	3.770	50	1.2	1.2	2.0
1250	3.927	50	1.2	1.2	2.0
1300	4.084	50	1.2	1.2	2.0
1350	4.241	50	1.2	1.2	2.0
1400	4.398	100	1.2	1.2	2.0

GREEN CARE SOLUTION ENGINEERING

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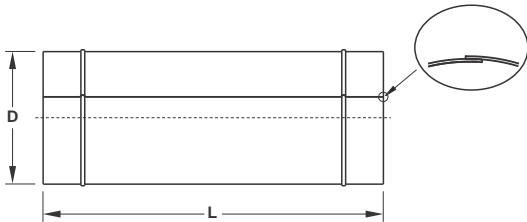
Factory: 117 Vo Van Bich, Hamlet 11, Tan Thanh Dong Commune, Cu Chi District, HCM City

Website: www.gcse.vn - Email: me-workshop@gcse.vn

FITTINGS - SINGLE WALL

Circular Straight Duct - Stitch Welded Seam

- CSDS
- L: Standard Length: 1200mm

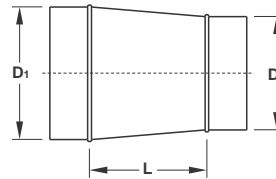


Ordering example:
GI CSDS 200
Material _____
Code _____
Dimension D _____

A

Concentric Reducer

- RCLL
- $L = D_1 - D_2$
- Minimum Length 100mm, Maximum Length 400mm

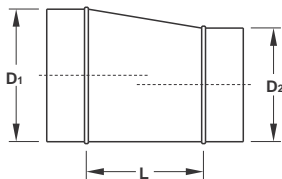


Ordering example:
GI RCLL 200 150
Material _____
Code _____
Dimension D1 _____
Dimension D2 _____

B

Eccentric Reducer

- CLL
- $L = D_1 - D_2$
- Minimum Length 100mm, Maximum Length 400mm

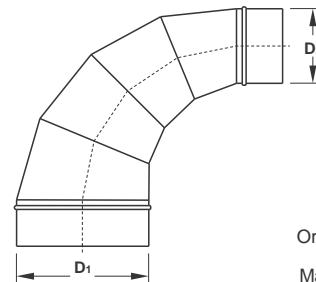


Ordering example:
GI CLL 200 150
Material _____
Code _____
Dimension D1 _____
Dimension D2 _____

C

Reducing Segmented Bend

- RSB

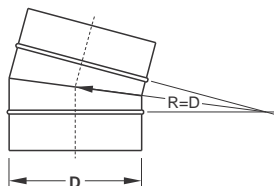


Ordering example:
GI RSB 200 150
Material _____
Code _____
Dimension D1 _____
Dimension D2 _____

D

Bend 15° - Lockseamed

- BFL15°
- Standard 2-Gore

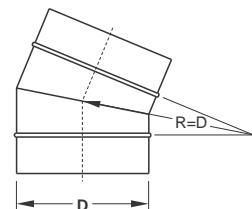


Ordering example:
GI BFL15° 200
Material _____
Code _____
Dimension D _____

E

Bend 22.5° - Lockseamed

- BFL22.5°
- Standard 2-Gore



Ordering example:
GI BFL22.5° 200
Material _____
Code _____
Dimension D _____

F

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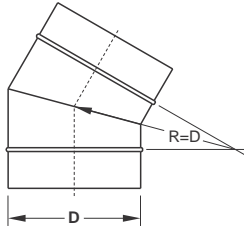
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Website: www.gcse.vn - **Email:** me-workshop@gcse.vn

FITTINGS - SINGLE WALL

Bend 30°- Lockseamed

- BFL30°
- Standard 2-Gore

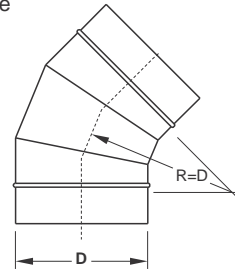


Ordering example:
GI BFL30° 200
Material
Code
Dimension D

G

Bend 45°- Lockseamed

- BFL45°
- Standard 3-Gore

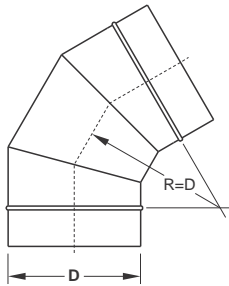


Ordering example:
GI BFL45° 200
Material
Code
Dimension D

H

Bend 60°- Lockseamed

- BFL60°
- Standard 3-Gore

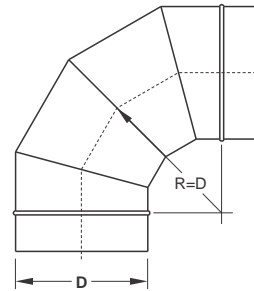


Ordering example:
GI BFL60° 200
Material
Code
Dimension D

I

Bend 90°- Lockseamed

- BFL90°
- Standard 4-Gore



Ordering example:
GI BFL90° 200
Material
Code
Dimension D

J

Mitered Elbows

Duct Velocity	R/D Ratio	Number of Mitered Pieces		
	Centerline Radius to Duct Diameter	90°	60°	45°
Up to 1000 fpm (5mps)	0.6	4	3	3
1001 to 1500 fpm (5 to 7.5mps)	1.0	4	3	3
above 1500 fpm (7.5mps)	1.5	5	4	3

GREEN CARE SOLUTION ENGINEERING

Office: J90 Road B5, An Phu Ward, Thu Duc City, Ho Chi Minh City

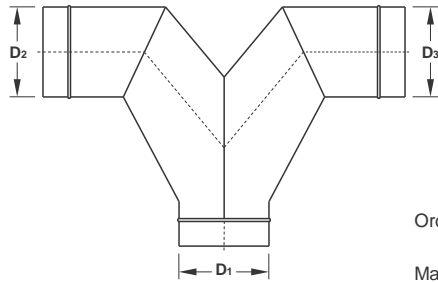
Factory: 117 Vo Van Bich, Hamlet 11, Tan Thanh Dong Commune, Cu Chi District, HCM City

Website: www.gcse.vn - **Email:** me-workshop@gcse.vn

FITTINGS - SINGLE WALL

Twin Segment Bend

• TSB

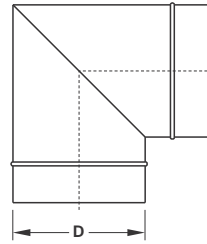


Ordering example:
GI TSB 200 150 150
Material Code _____
Dimension D₁ _____
Dimension D₂ _____
Dimension D₃ _____

K

2 Segment Bend 90°

• 2SB90°

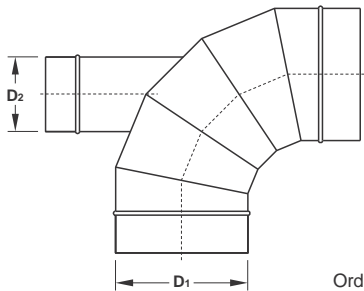


Ordering example:
GI 2SB90° 200
Material Code _____
Dimension D _____

L

Bend 90° Lockseamed with Branch

• BFLB90°

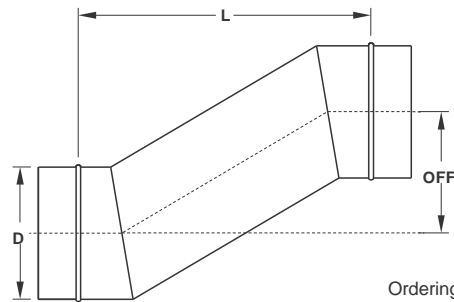


Ordering example:
GI BFLB90° 200 150
Material Code _____
Dimension D₁ _____
Dimension D₂ _____

M

Circular Offset

• CO

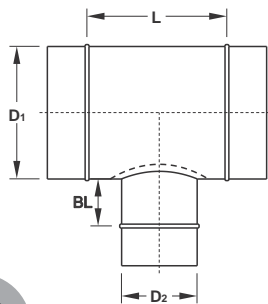


Ordering example:
GI CO 200 300 500
Material Code _____
Dimension D _____
Offset OFF _____
Length L _____

N

Centric Tee Piece

• TCL
• L = D₂ + 100mm



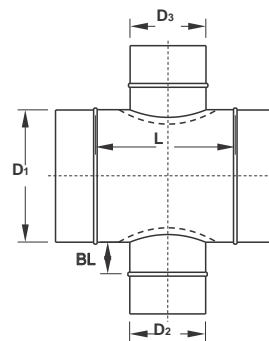
D ₂	BL
100 to 650mm	50mm
710 to 1400mm	100mm

Ordering example:
GI TCL 200 150
Material Code _____
Dimension D₁ _____
Dimension D₂ _____

O

Centric Cross Tee Piece

• XCL
• L = the longer of D₂ or D₃ + 100mm



D ₂ & D ₃	BL
100 to 650mm	50mm
710 to 1400mm	100mm

Ordering example:
GI XCL 200 100 100
Material Code _____
Dimension D₁ _____
Dimension D₂ _____
Dimension D₃ _____

P

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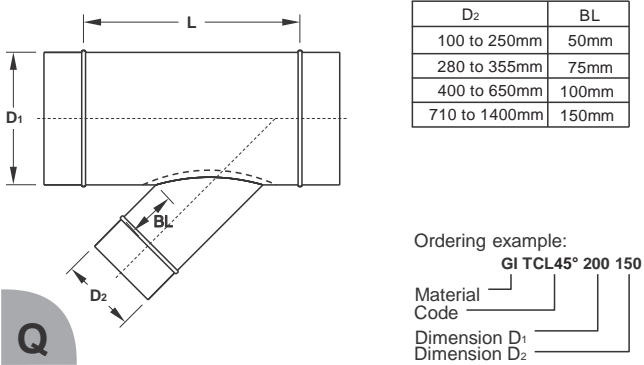
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FITTINGS - SINGLE WALL

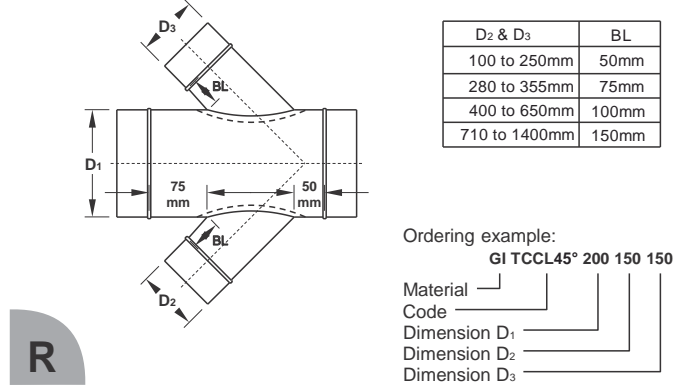
Centric Tee Piece 45°

- TCL45°
- $L = D_2 \times 1.5 + 100\text{mm}$



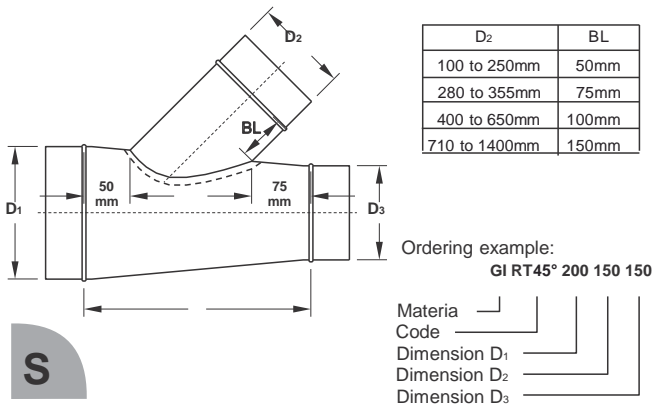
Centric Cross T- Piece 45°

- TCCL45°
- $L = \text{the longer of } D_2 \text{ or } D_3 \times 1.5 + 100\text{mm}$



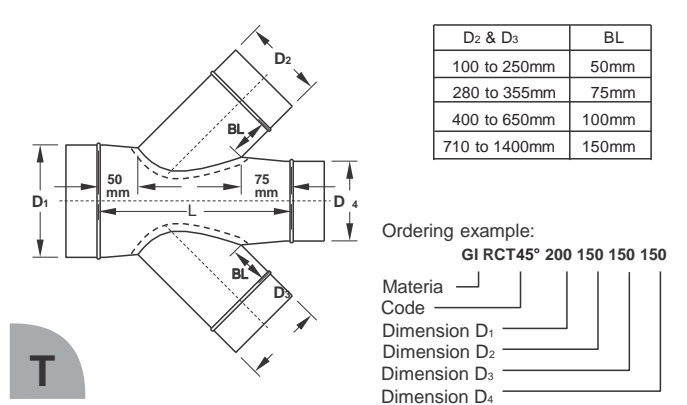
Reducing Tee 45°

- RT45°
- $L = D_2 \times 1.5 + 100\text{mm}$



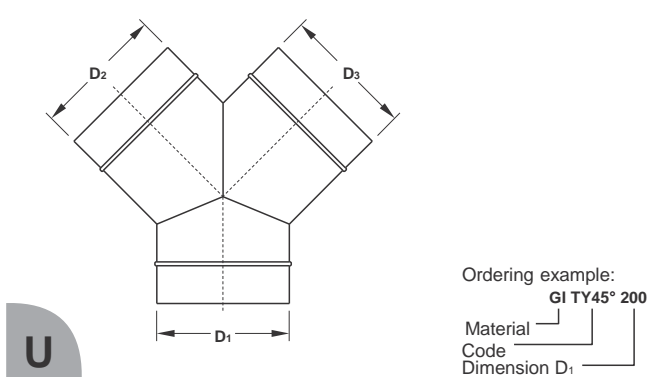
Reducing Cross Tee 45°

- RCT45°
- $L = \text{the longer of } D_2 \text{ or } D_3 \times 1.5 + 100\text{mm}$



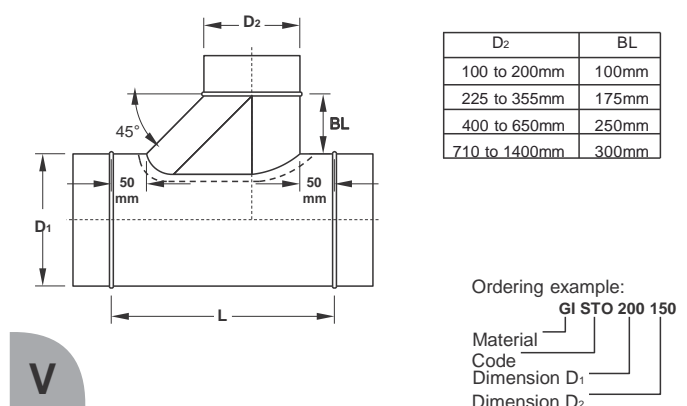
Y-Tee

- TY45°
- 30°, 45° and 60° available
- $D_1 = D_2 = D_3$



Shoe Tee - Offset

- STO
- $L = D_2 + BL + 100\text{mm}$



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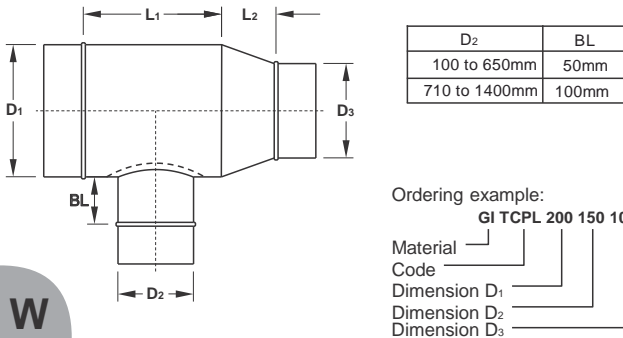
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FITTINGS - SINGLE WALL

Centric Tee Piece with Reducer

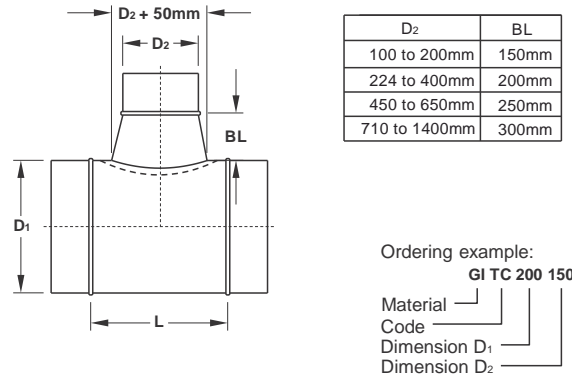
- TCPL
- $L_1 = D_2 + 150\text{mm}$
- $L_2 = D_1 - D_3$
- Minimum L_2 100mm, Maximum L_2 400mm



W

Conical Tee

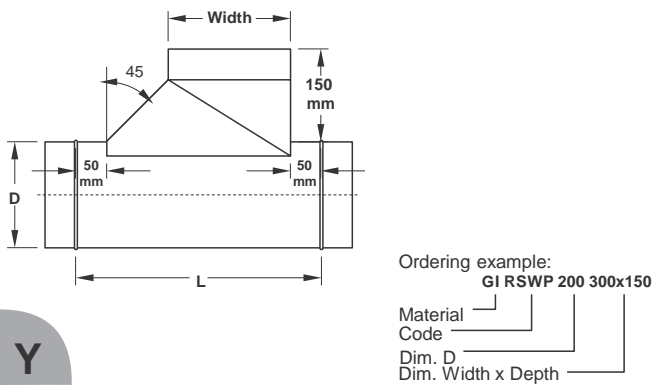
- TC
- $L = D_2 + 150\text{mm}$



X

Rectangular Shoe with Pipe

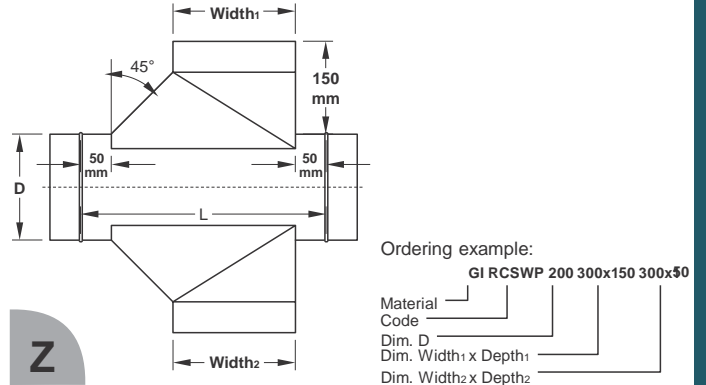
- RSWP
- $L = \text{Width} + 200\text{mm}$



Y

Rectangular Cross Shoe with Pipe

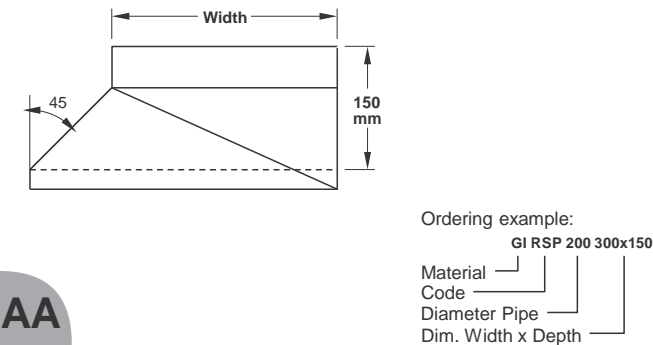
- RCSWP
- $L = \text{the longer of Width}_1 \text{ or Width}_2 + 200\text{mm}$



Z

Rectangular Shoe on Pipe

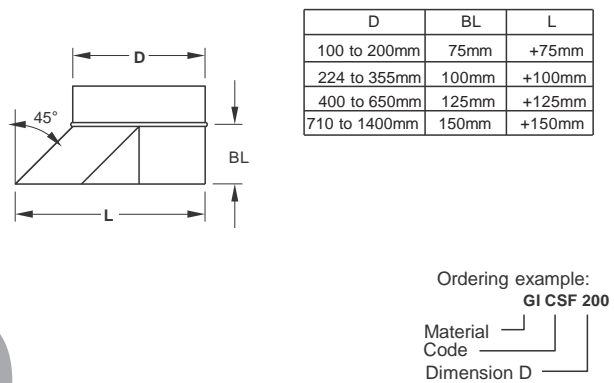
- RSP
- $L = \text{Width} + 100\text{mm}$



AA

Circular Shoe on Flat

- CSF



AB

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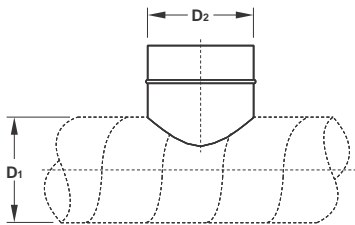
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FITTINGS - SINGLE WALL

Collar Saddle

• CS

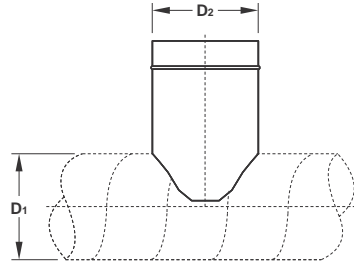


Ordering example:
GI CS 200 200
Material Code
Dimension D₂
Diameter Pipe D₁

AC

Branch 90°

• B90°

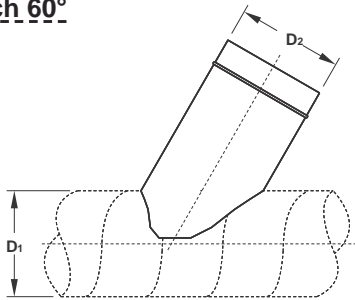


Ordering example:
GI B90° 200 200
Material Code
Dimension D₂
Diameter Pipe D₁

AD

Branch 60°

• B60°

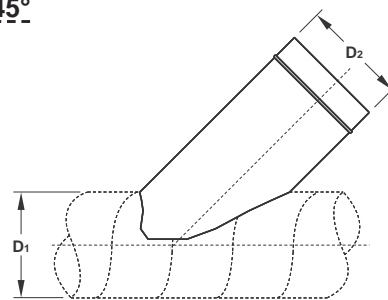


Ordering example:
GI B60° 200 200
Material Code
Dimension D₂
Diameter Pipe D₁

AE

Branch 45°

• B45°

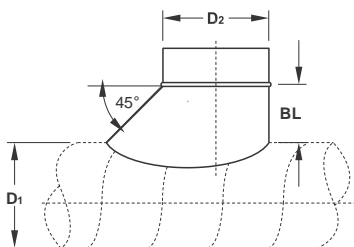


Ordering example:
GI B45° 200 200
Material Code
Dimension D₂
Diameter Pipe D₁

AF

Circular Shoe on Pipe

• CSP



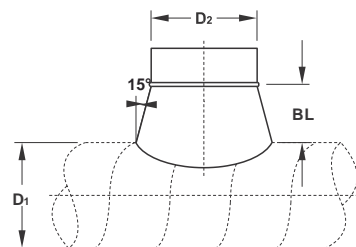
D ₂	BL
100 to 200mm	100mm
224 to 355mm	175mm
400 to 650mm	250mm
710 to 1400mm	300mm

Ordering example:
GI CSP 200 200
Material Code
Dimension D₂
Diameter Pipe D₁

AG

Conical Branch on Pipe

• CBP



D ₂	BL
100 to 200mm	150mm
224 to 400mm	200mm
450 to 650mm	250mm
710 to 1400mm	300mm

Ordering example:
GI CBP 200 200
Material Code
Dimension D₂
Diameter Pipe D₁

AH

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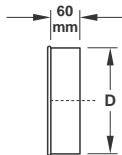
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FITTINGS - SINGLE WALL

End Cap Tube (Male)

• ECM

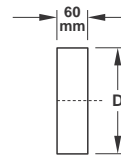


Ordering example:
GI ECM 200
Material
Code
Dimension D

AI

End Cap Fittings (Female)

• ECF

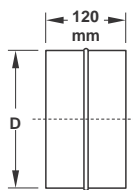


Ordering example:
GI ECF 200
Material
Code
Dimension D

AJ

Coupling Pipe

• MC

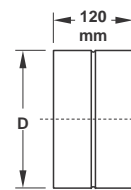


Ordering example:
GI MC 200
Material
Code
Dimension D

AK

Coupling Fitting

• FC



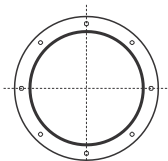
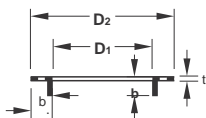
Ordering example:
GI FC 200
Material
Code
Dimension D

AL

Circular Angle Flange

• CF

• $D_2 = D_1 + b$



D ₁	Bolts		b x b x t mm
	Dim.	N	
Up to 125	M6	4	25x25x3
150 to 250	M6	6	30x30x3
280 to 355	M8	8	40x40x4
400 to 500	M8	12	40x40x4
550 to 710	M10	16	40x40x5
750 to 1400	M10	24	50x50x5

Material: Hot Dip Galvanized Steel

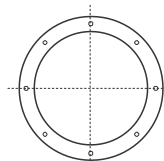
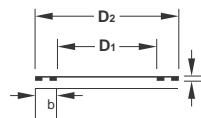
Ordering example:
GI CF 200
Material
Code
Dimension D₁

AM

Circular Flat Flange

• CFF

• $D_2 = D_1 + b$



D ₁	Bolts		b x t mm
	Dim.	N	
Up to 125	M6	4	25x3
150 to 250	M6	6	30x3
280 to 355	M8	8	40x4
400 to 500	M8	12	40x4
550 to 710	M10	16	40x5
750 to 1400	M10	24	50x5

Material: Hot Dip Galvanized Steel

Ordering example:
GI CFF 200
Material
Code
Dimension D₁

AN

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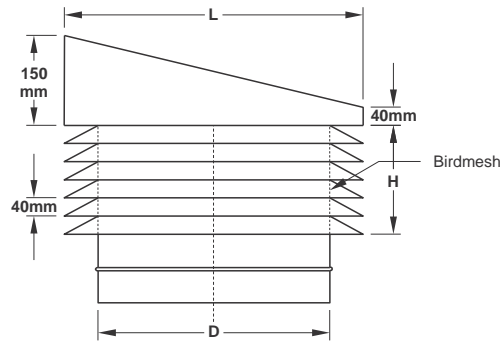
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ACCESSORIES - SINGLE WALL

Circular Rain Cap

- CRC
- $L = D + 100\text{mm}$
- $H = \text{as per Air Flow}$

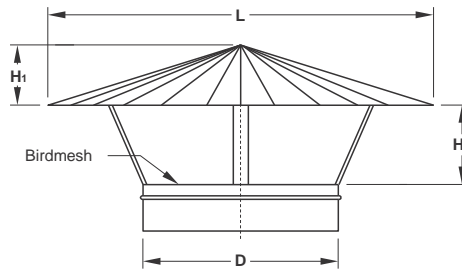


Ordering example:
GI CRC 200
Material
Code
Dimension D

AO

Rain Cowl

- RC
- $L = D + 200\text{mm}$
- $H_1 = D/4$
- $H_2 = D/2$

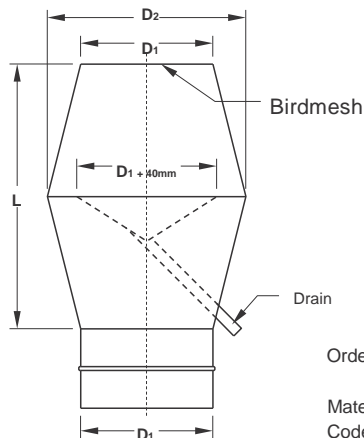


Ordering example:
GI RC 200
Material
Code
Dimension D

AP

Jet Cowl

- JC
- $L = D_1 \times 2$
- $D_2 = D_1 \times 1.5$

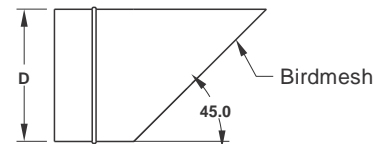


Ordering example:
GI JC 200
Material
Code
Dimension D

AQ

Side Discharge Terminal

- SDT



Ordering example:
GI SDT 200
Material
Code
Dimension D

AR

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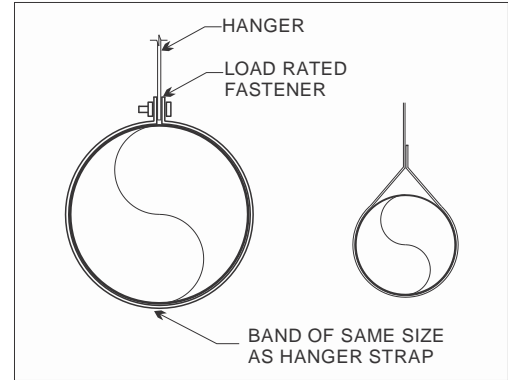
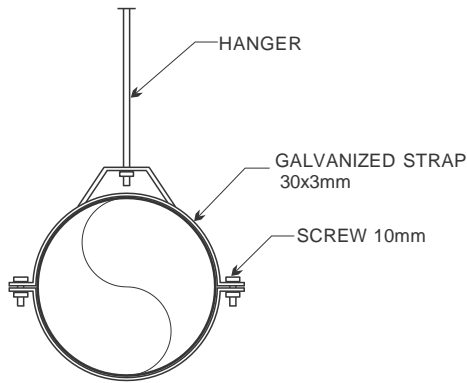
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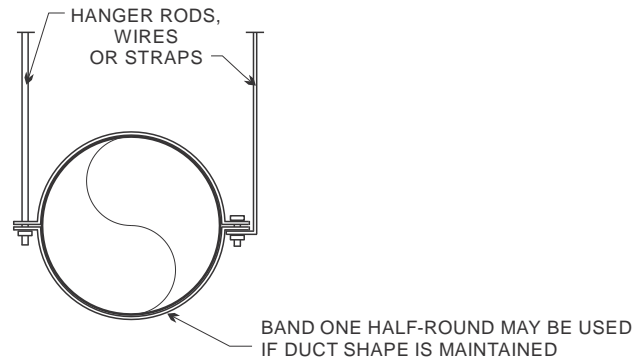
DUCT SUPPORTS

Strap Hangers for Circular Ducts



Green Care Standard 30x3mm

HANGERS MUST NOT DEFORM DUCT SHAPE



Dia.	Maximum Spacing	Wire Dia.	Rod	Strap
10 in. dn 250mm dn	12 ft 3.7m	One 12 ga One 2.75mm	1/4 in. 6.4mm	1 in. x 22ga 25.4 x 0.85mm
11-18 in. 460mm	12 ft 3.7m	Two 12 ga or One 8 ga One 4.27mm	1/4 in. 6.4mm	1 in. x 22ga 25.4 x 0.85mm
19-24 in. 610mm	12 ft 3.7m	Two 10 ga Two 3.51mm	1/4 in. 6.4mm	1 in. x 22ga 25.4 x 0.85mm
25-36 in. 900mm	12 ft 3.7m	Two 8 ga Two 2.7mm	3/8 in. 9.5mm	1 in. x 20ga 25.4 x 1.00mm
37-50 in. 1270mm	12 ft 3.7m	—————▶	Two 3/8 in. Two 9.5mm	Two 1 in. x 20ga (2) 25.4 x 1.00mm
51-60 in. 1520mm	12 ft 3.7m	—————▶	Two 3/8 in. Two 9.5mm	Two 1 in. x 18ga (2) 25.4 x 1.31mm
61-84 in. 2130mm	12 ft 3.7m	—————▶	Two 3/8 in. Two 9.5mm	Two 1 in. x 16ga (2) 25.4 x 1.61mm
85-96 in. 2400mm	12 ft 3.7m	—————▶	Two 1/2 in. Two 12mm	Two 1 1/2 in. x 16ga (2) 38 x 1.61mm

Minimum Hanger Sizes for Round Duct

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COATING MASS, GALVANIZED STEEL THICKNESSES & WEIGHT

Galvanized Steel manufactured according to Japanese industrial Standards JIS G3302

Coating Mass of Galvanized Steel		Galvanized Steel Thicknesses & Weight	
Coating Designation	Minimum Coating Mass (including both sides)	Standard Thickness	Weight per Square Meter
Zinc Coatings (Z)	g/m ²	mm	kg/m ²
Z80	80	0.58	4.50
Z120	120	0.75	5.88
Z180	180	0.95	7.45
Z275	275	1.15	9.02
Z300	300	1.48	11.61

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