



CPT GROUP



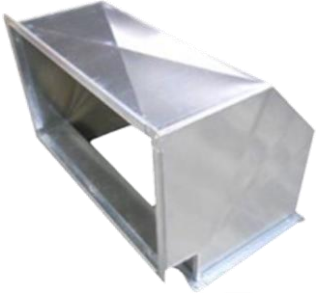
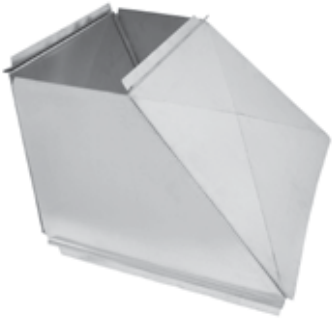
الكندية للقوى الكمبرائية المتطورة

The leading Manufacturer for air Duct and Accessories in the Middle East

CANADA DUCT Ltd.



We Build Tomorrow's World.



Canada Duct is The Middle East's leading for Sheet Metal Manufacturer and Accessories with annual capacity of 2000 ton using the state of the art and latest technology Duct Fabrication lines. The Ducts are fabricated to DW 144, SMACNA and ASHRAE standards or as per consultant's specification.

- Canada Duct is in fabrication of wide range of duct product:

- GI Rectangular Ducting.
- GI Round Ducting.
- Pre - Insulated foam duct
- Aluminum Ducting.
- Stainless Steel Ducting.
- Black Steel Ducting.
- Volume Control Dampers.
- Fire Dampers.
- Air Filters.
- Access Doors.
- VAV units.
- Sound Attenuators.
- Back Draft Dampers.
- Metal Cladding (AL & SS).



Canada Duct is ideally suited for fast track project with extensive manufacturing facility using state of art and latest model machines which provide dimensional accuracy , consistency and high production capacity for Automated Seam Locking , CNC profile cutting and Duct fabrication.

Rectangle Duct

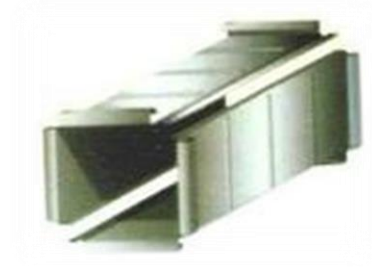
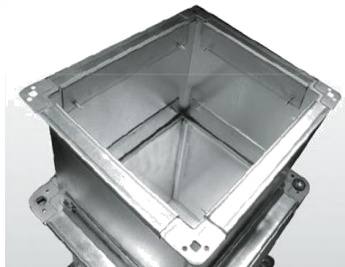
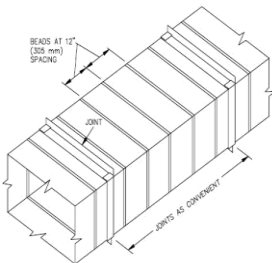
- Rectangular and square duct may be the best solution for any application:
 - Able to accommodate any transition and fitting with ease.
 - Pittsburgh, similar seams allow for assembly without welding.
 - Multiple Connections: Slip & Drive, Duct Mate, TDC or Welded.
 - Highest air carrying capacity for any given width and height of application.
 - Automated Design-to-Coil-Line AutoCAD eliminates labor intensive manual drafting.
 - Often the best choice where physical space limitations are a prime consideration.

Rectangular Duct Techniques

Slip & Drive Technique

Slip on Flange Technique

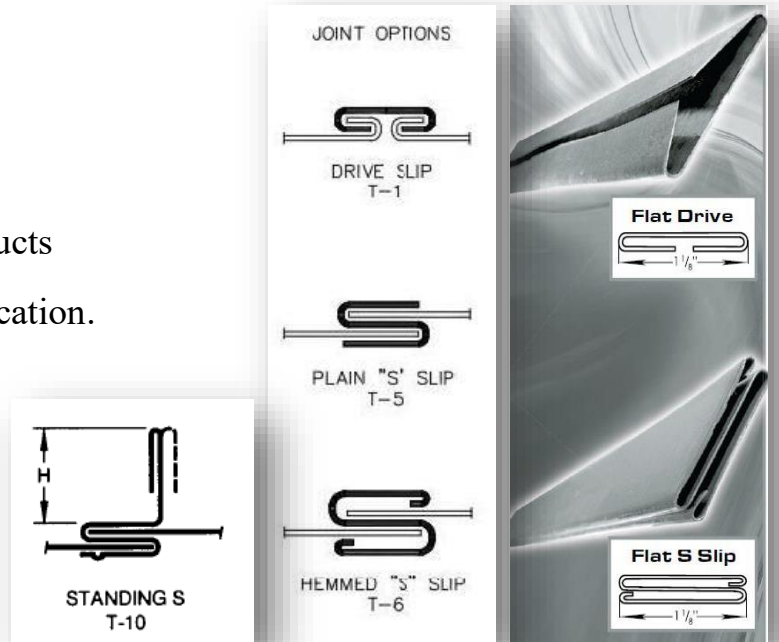
Flanged (T.D.C) Technique



Rectangle Ducts

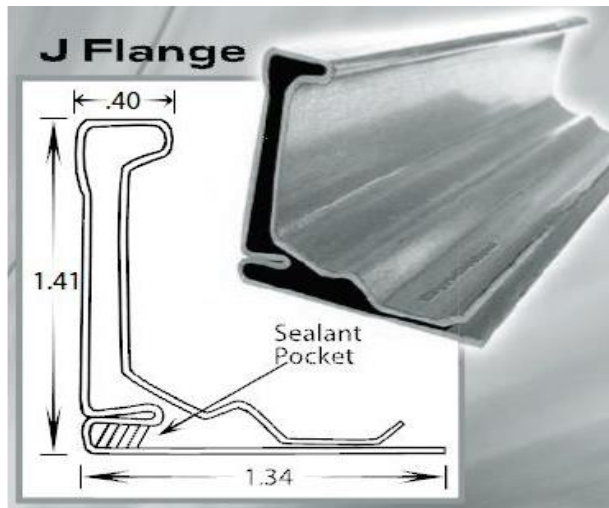
Slip & Drive Technique:

- Duct length: 1.22m.
- Recommended for the small sizes of ducts from 0- 18 inch or according to specification.



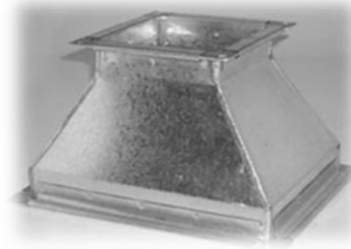
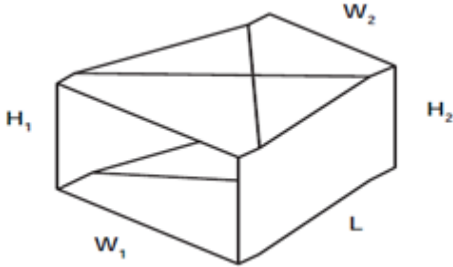
Slip on flange Technique:

- In this technique imported flanges profile A35, are installed in the formed duct.
- Duct length: 1.25m.



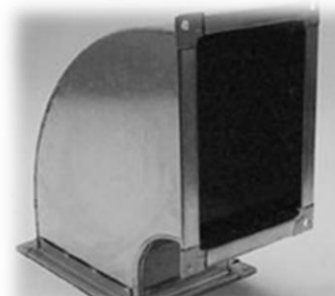
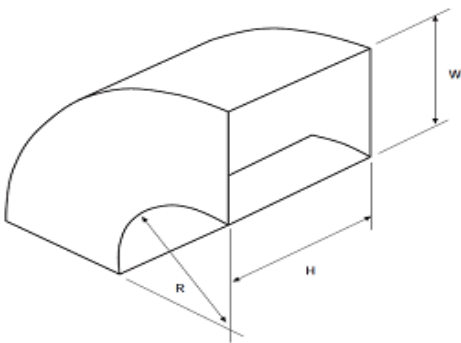
Rectangle Duct Fitting

➤ Reducer



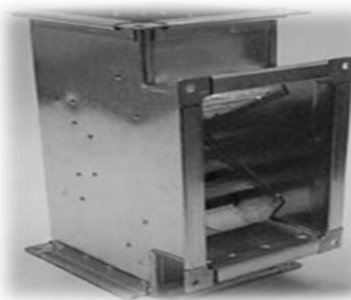
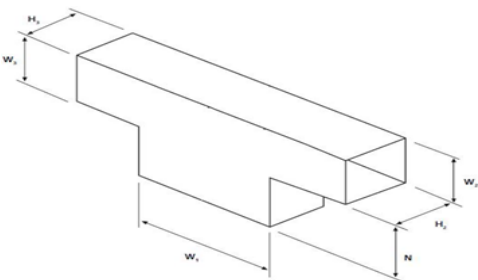
Order reducer $W_1 \times H_1 / W_2 \times H_2$ with length L

➤ Radius Bend



Ordering Radius bend $W \times H$ with radius or throat R

➤ Tee

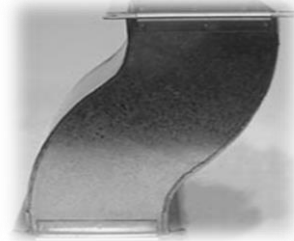
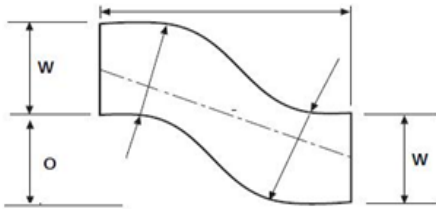


• **Ordering** Tee $(W_2 \times H_2) (W_3 \times H_3) / (W_1 \times H_1)$ with throat N

Rectangle Duct Fitting

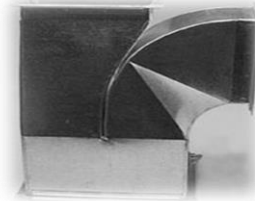
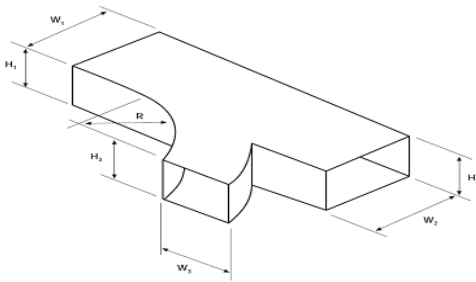
الهندسة القوية للمروية المتطورة

➤ Offset (S shape)



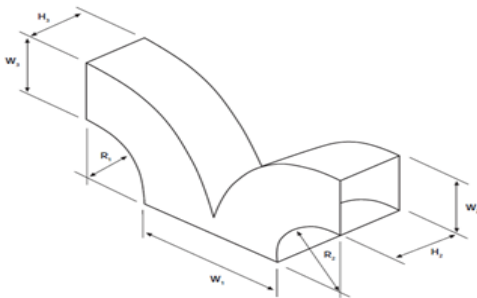
Order off W x H x O x L

➤ R-fitting or parallel flow branch



Ordering RF (W2 x H2) (W3 x H3) / (W1 x H1) with radius R

➤ Split bend

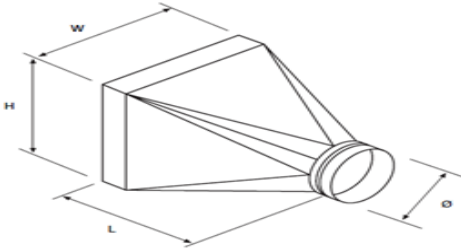


Ordering SB (W2 x H2) (W3 x H3) / (W1 x H1) with radius R1 and R2

Rectangle Duct Fitting

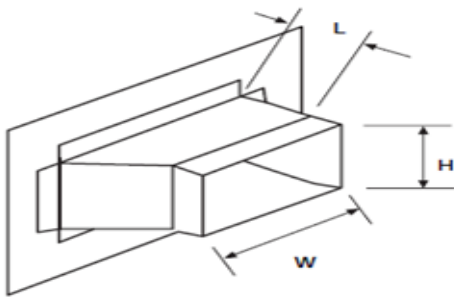
الكندية للقوى الكهربائية المتطورة

➤ **Transition, rectangular to round**



Order Trans (W x H) / Ø with length L

➤ **Take off 45°**

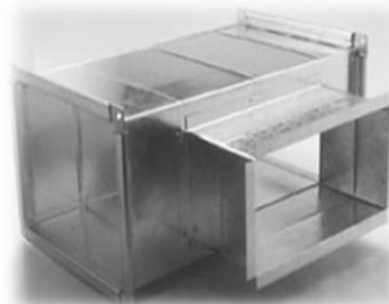
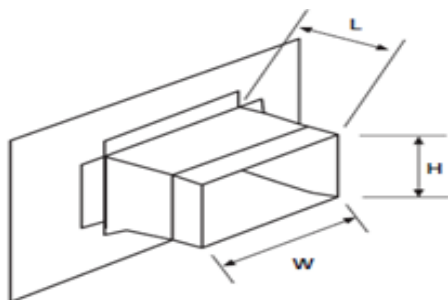


Message



Order TO 45° (W x H) with length L

➤ **Take off 90°**



Ordering SB TO 90° (W x H) with length L

Accessories for Connecting Ducts & Installation

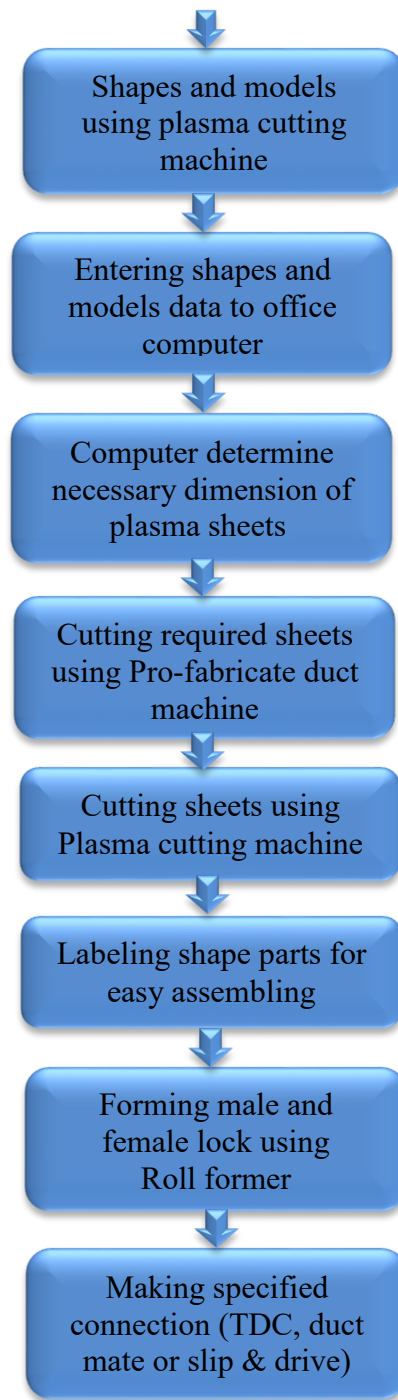
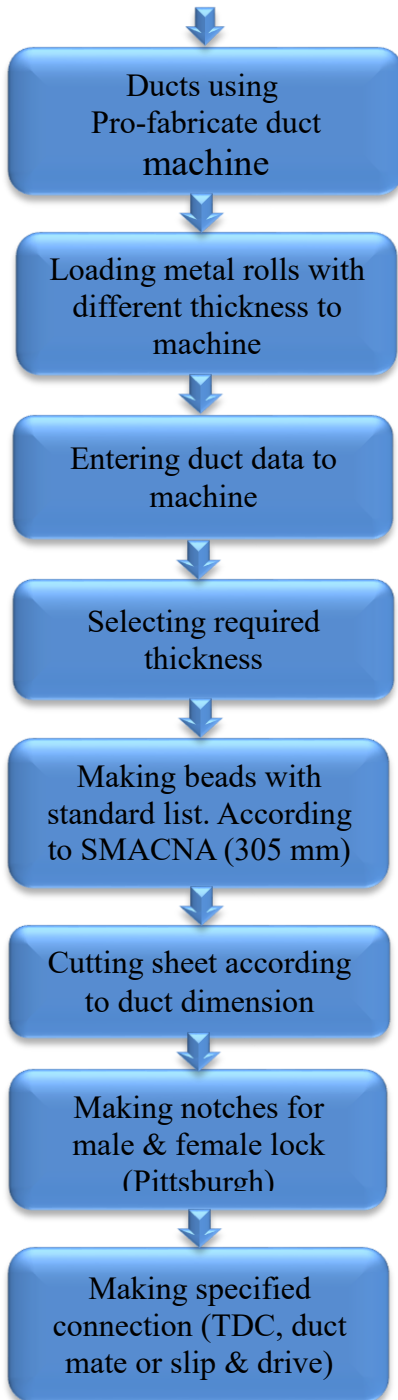
• Corners:

- corners are manufactured from 11-gauge steel for use with Flange.
- corners are manufactured from 16-gauge steel.
- (TDC) corners are for use in corner insertion machines and are manufactured from 16-gauge steel.



Fabrication Procedure

Getting duct bill of material



Fabrication Procedure



Bending the sheet metal
according to duct



Collect formed sheets to
get the required shape

Check the dimension
(Quality control)



Connect male to female
lock



Adding corners using
corner cadet machine



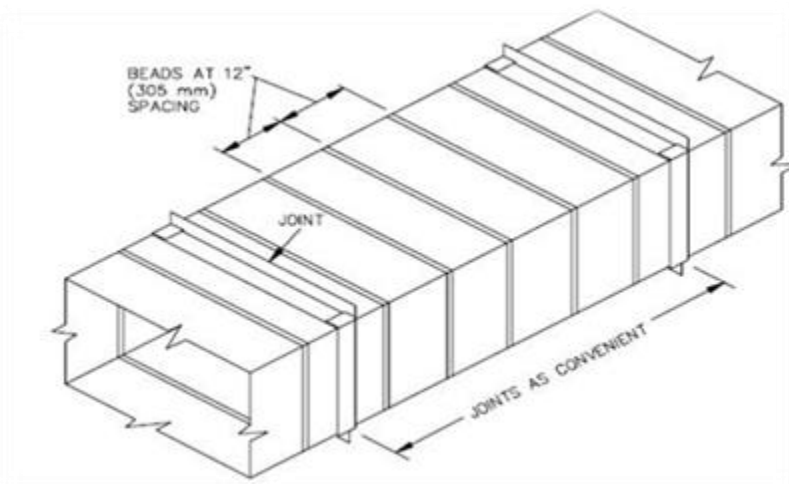
Recheck the dimension
(Quality control)



Rectangle Duct Specification and Ordering

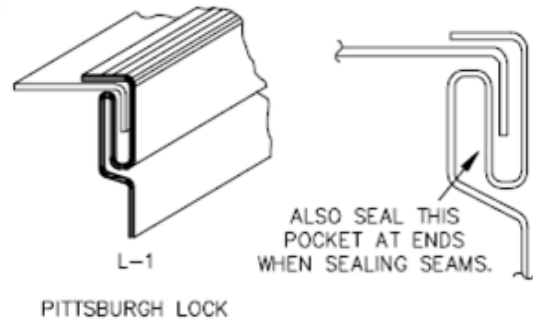
- Straight ducts**

All straight ducts are beaded at equal spacing (305mm) according to SMACNA



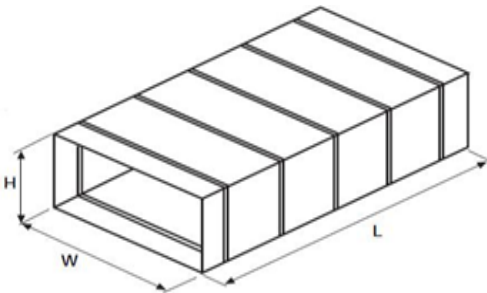
- Longitudinal Seam (Pittsburg lock)**

This type consists of male side (9mm) & female side (35mm)

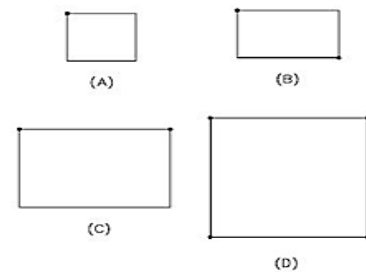


- Ordering**

Duct W x H x L



SEAM LOCATIONS



NUMBER OF SEAMS AND LOCATION VARIES WITH JOINT TYPE, SHEET ROCK AND ASSEMBLY PLANS.

* Seam numbers and locations vary according to joint type and size.

Round Duct:

- Sizes: 80mm dia. to 1400mm dia.
- Single wall construction
- Double wall in 1", 2" fully insulated (available upon request)
- Material:
 - Galvanized sheet metal (275 or 330 gm /m²).
 - Thickness 0.6mm to 1.25mm.
 - Perforated Galvanized sheet (available upon request).



Fittings:

Elbows	Reducers
Off-sets	Tees
Cross Tees	Laterals
Saddle Taps	Y-branches
End Caps	Square to Round
Custom Fittings Available	Canvas Connections



Round Ducts

Miscellaneous Items:

Volume Damper



Application : dampers are used in branch ducts where some balancing of individual outlets may be required.

Grill Box



Raw or Flange out connections

Register Boot



Application: register boots provide a transition from round duct to a rectangular opening for a floor or ceiling register.

Insulated Linear Plenum



Application: plenums are used for supply and exhaust of air from the duct system through diffusers and grilles for proper air distribution.

الكندية للقوى الكهربائية المتطورة

Hinged and Cammed Models:

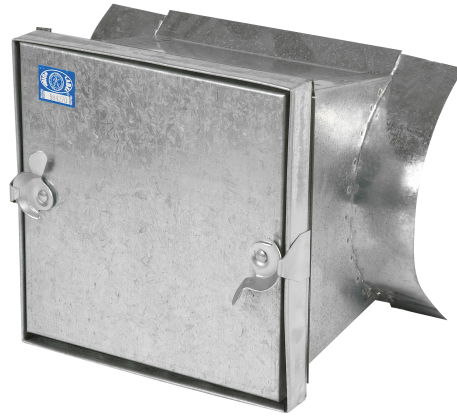
- Double gasket
- Insulated
- Competitively priced
- Precision designed and manufactured
- Available in specialty metals

Description:

Low pressure access door for rectangular duct.

Basic use:

To provide easy access into air ducts and units for low pressure applications.



Features:

- Insulated
- Double gasket
- Meets SMACNA (chapter 6) requirements for low pressure doors
- Press-On frames are available for metal ductwork only

Technical Specification:

- Door :
Consists of two, 24 gauge galvanized steel panels mechanically locked together.
- Insulation:
High density fiberglass insulation.
- Frame can be either “ press-on or dovetail frame” :

Standard Construction

Frame: 4-1/2" deep, 18ga. Formed Galv. Steel.

Blades: 6" wide, 16ga. Formed Aluminum.

Bearing: Bronze Oilite.

Linkage: Concealed in frame.

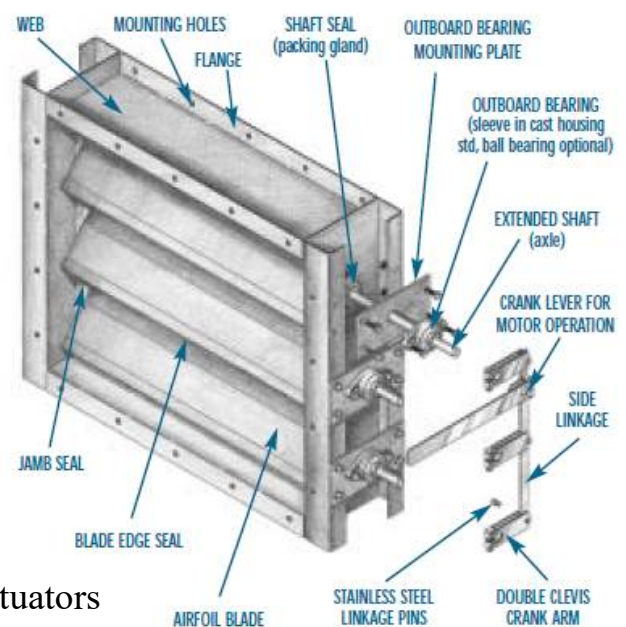
Axles: Ø1/2" plated steel.

Control Shaft: Ø1/2" x 6" long shaft supplied with all single section dampers for field mounted actuators. Factory-installed jackshaft supplied with all multiple section dampers.



Options:

- Compression Jamb Seals (stainless steel).
- Header Plates (end flange).
- Hand Quadrant.
- Standoff Bracket 2".
- Factory Installed Pneumatic or Electric Actuators (Belimo Actuator according to the size Will be attach the actuator specification separately).
- Chain Operator.
- Position Switch.



الكندية للقوى الكهربائية المتطورة

(Extract from BS.EN10142: 1991) Coating mass (Weight)

Coating Designation	Minimum coating mass (including both sides)		Suggested Applications (Provided by British Steel PLC)
	Triple spot test	Single spot test	
Zinc coatings (Z)	g/m ²	g/m ²	Light - for use where corrosion conditions are not severe and/or where forming operations preclude heavier coating.
Z100 Z200	100 200	85 170	
Z275	275	235	Standard
Z350 Z450 Z600	350 450 600	300 385 510	Heavy Duty - for longer life relative to standard and light coatings
Zinc-Iron alloy coatings (ZF)			Iron-zinc alloys - alloyed coating of iron and zinc for easy painting and particularly resistance welding.
ZF100 Zf180	100 180	85 150	

Note 1. The mass of zinc is not always equally distributed on both surfaces of the sheet. However, it can normally be expected that not less than 40% of the specified minimum coating mass, as determined by the single spot test, will be found on each surface.

Galvanized Thicknesses

Galvanized Steel *			
Standard Thickness		Birmingham Gage	
inch	mm	BG	inch
.0197	0.5	26	.0196
.0236	0.6	24	.0248
.0276	0.7		
.0315	0.8	22	.0312
.0354	0.9		
.0394	1.0	20	.0392
.0472	1.2	18	.0495
.0630	1.6	16	.0625
.0787	2.0	14	.0785
.0984	2.5	12	.0991

Weight of Galvanized Steel

Thickness	Weight per Square meter
mm	Kg
0.5	3.9213
0.6	4.7056
0.7	5.4898
0.8	6.2741
0.9	7.0584
1.0	7.8426
1.2	9.4111
1.6	12.5481
2.0	15.6852
2.5	19.6064