# A better way to transfer air

# CD1000 CENTURY DUCTS SERIES

**Products from CMS Group of Companies** 





CMS provides a comprehensive range of customer-driven products and services in fabrication and supply of GI ducts. We have successfully maintained lead in HVAC field by keeping abreast with modern technology and latest expertise by possessing latest machines and engaging qualified professionals. Members of our dedicated staff are highly skilled and motivated and work round the clock in close-knit teams, producing a large volume of daily output.

Each piece of duct-works is thoroughly checked at every stage of production, ensuring strict adherence to quality standards. Only then the product with appropriate markings is loaded and dispatched from the factory. CMS factory is equipped to operate with a blend of fully and semi automated machinery. This enables us to handle both large-scale and minor jobs with equal efficiency. Specialized personnel well trained in 'quality standards' coupled with its stringent protocol ensures consistency in Quality Control and Quality Assurance.

We stock exclusive quality material conforming to ASTM A653 in Lock-forming Quality, Un-Oiled, Chromated, Regular Spangle, Zinc Coating Z27 / G90 / G275 (275gms/sqmt). Apart from fabrication in Galvanized Iron which is our forte, we also undertake fabrication work in other sheet metals such as Mild Steel, Black/Carbon Steel, Stainless Steel and Aluminum. Prompt deliveries of ducts to work sites are ensured by efficient planning and swift execution of orders by our fabrication team.

What has primarily helped us stay ahead of others in HVAC field is the quality of our products and excellence in our service.

### We also manufacture

Air Filters • Grilles & Diffusers • Flanging Systems • Variable Air Volume
 Sound Attenuators • Volume Control Dampers • Non Return Dampers • Access Doors
 • Vanes & Rails (double skinned) • Sand Trap Louvers • Flexible Ducting • Aluminium Tapes

# **Duct Works**

Ducts are used in Heating, Ventilation & Air Conditioning (HVAC) to deliver the supply air and transit the return air and remove the exhaust air. As such, air ducts form a medium through which a conditioned air is transferred to an ambient space therein achieving acceptable indoor air quality and ensuring suitable thermal comfort.



### **Rectangular GI Duct**

It is manufactured to meet the most stringent HVAC/Industrial specifications and quality standards. Rectangular GI Ducts are fabricated out of hot dipped galvanized steel sheet of lock forming quality as standard duct material.



### **Mild Steel Ducting**

Fabricated from high quality Mild Steel and invariably coated in Red Oxide paint MS ducts are largely used in kitchen exhaust applications owing to its inherently fire resistant characteristic which can be further enhanced by externally applying a flexible fabric bonded both physically and mechanically into the duct work. MS Duct is normally fabricated in 1, 1.2 or 1.5mm thick sheet. MS Angles are fitted at all Transverse Joints. Self flange construction is available as an option.



### **Aluminum Ducting**

This lightweight malleable and corrosion resistant metal in Plain type (Matt finish/Reflector) air duct is widely used in areas such as swimming pool, clean rooms for sensitive industrial applications etc. Stucco embossed type which is relatively dent and scratch resistant is largely used as cladding on exposed Rectangular or Spiral GI ductworks.



### **Stainless Steel Ducting**

These are useful for businesses and large manufacturing companies which calls for its specialized use in voluminous and industrialized applications. Use of stainless steel ductwork for any specialist application is recommended for its strength and rigidity which is similar to a galvanized iron duct. Its appearance though is much sleeker than the one in an aluminum duct it stands way out for its corrosion resistant characteristic. For SS Ducts stainless steel sheets are available in two qualities i.e. Grade 316 & Grade 304.



### **SPIRO® Spiral Ducting**

These ducts are made out of high quality GI sheets manufactured by metal industry's leading steel manufacturers and use of high quality GI sheets ensures rigidity. Spiral duct is attractive and is frequently specified by architects because of its superior aesthetic appeal; it can be finished to blend in with or stand out in an indoor ambience

## **Duct Construction Table**

Constructional Requirements- Rectangular Ducts Pressure: Low Pressure - 500Pa





Max. Duct Size (Longer Side) mm	Sheet Thickness in mm	Longitudinal Connection	Maximum Spacing in mm	Sheet	Transverse Joints
0 - 450	0.56	Grooved / Pittsburgh Seam	1200(4′)	*SS	Opposite Sides Flat Hemmed S Cleat and Drive Cleat.
451 - 750	0.56	Grooved / Pittsburgh Seam	1200(4′)	*SS	Reinforcement Class D Standing S cleat and Drive cleat.
751 - 1000	0.70	Grooved / Pittsburgh Seam	1200(4′)	*SS	20 mm Flange - EXCEL Slide On Flanges on all Four Sides with 20mm Corners, and 1 pc of 20mm Cleat per side.
1001 - 1200	0.90	Grooved / Pittsburgh Seam	1200(4′)	*SS	20 mm Flange - EXCEL Slide On Flanges on all Four Sides with 20mm Corners, and 1 pc of 20mm Cleat per side.
1201 - 1400	0.90	Grooved / Pittsburgh Seam	1200(4') (Stiffener 20mm EXCEL Flange at 600mm center)	*SS	20 mm Flange - EXCEL Slide On Flanges on all Four Sides with 20mm Corners, and 1 pc of 20mm Cleat per side. Reinforcement Stiffener 20mm EXCEL Flange at 600mm center.
1401 - 2000	0.90	Grooved / Pittsburgh Seam	1200(4') (Stiffener 30mm EXCEL Flange at 600mm center)	*\$\$	30 mm Flange - EXCEL Slide On Flanges on all Four Sides with 30mm Corners, and 1 pc of 30mm Cleat per side. Reinforcement Stiffener 30mm EXCEL Flange at 600mm center.
2001 - 2400	1.0	Grooved / Pittsburgh Seam	1200(4') (Stiffener 40mm EXCEL Flange at 600mm center)	*SS	40 mm Flange - EXCEL Slide On Flanges on all Four Sides with 40mm Corners, and 2 pcs of 40mm G-Clamp per side. Reinforcement Stiffener 40mm EXCEL Flange at 600mm center.
2401 - 2700	1.20	Grooved / Pittsburgh Seam	1200(4') (Stiffener 40mm EXCEL Flange at 600mm center)	*SS	40 mm Flange - EXCEL Slide On Flanges on all Four Sides with 40mm Corners, and 2 pcs 40mm G-Clamp per side. Reinforcement Stiffener 40mm EXCEL Flange at 600mm center.

Standard: DW144

Max. Duct Size (Longer Side)mm	Sheet Thickness in mm	Longitudinal Connection	Maximum Spacing in mm	Sheet	Transverse Joints
0 - 400	0.60	Grooved / Pittsburgh Seam	1200(4′)	*SS	Opposite Sides Flat Hemmed S Cleat and Drive Cleat.
401 - 600	0.80	Grooved / Pittsburgh Seam	1200(4')	*SS	20 mm Flange - EXCEL Slide On Flanges on all Four Sides with 20mm Corners, and 1 pc of 20mm Cleat per side.
601 - 1000	0.80	Grooved / Pittsburgh Seam	1200(4′)	*SS	20 mm Flange - EXCEL Slide On Flanges on all Four Sides with 20mm Corners, and 1 pc of 20mm Cleat per side.
1001 - 1400	1.0	Grooved / Pittsburgh Seam	1200(4') (Stiffener 20mm EXCEL Flange at 600mm center)	*SS	20 mm Flange - EXCEL Slide On Flanges on all Four Sides with 20mm Corners, and 1 pc of 20mm Cleat per side. Reinforcement Stiffener 20mm EXCEL Flange at 600mm center.
1401 - 2000	1.0	Grooved / Pittsburgh Seam	1200(4') (Stiffener 30mm EXCEL Flange at 600mm center)	*SS	30 mm Flange - EXCEL Slide On Flanges on all Four Sides with 30mm Corners, and 1 pc of 30mm Cleat per side. Reinforcement Stiffener 30mm EXCEL Flange at 600mm center.
2001 - 2500	1.0	Grooved / Pittsburgh Seam	1200(4') (Stiffener 40mm EXCEL Flange at 600mm center)	*\$\$	40 mm Flange - EXCEL Slide On Flanges on all Four Sides with 40mm Corners, and 2 pcs of 40mm G-Clamp per side. Reinforcement Stiffener 40mm EXCEL Flange at 600mm center.
2501 - 3000	1.20	Grooved / Pittsburgh Seam	1200(4') (Stiffener 40mm EXCEL Flange at 600mm center)	*SS	40 mm Flange - EXCEL Slide On Flanges on all Four Sides with 40mm Corners, and 2 pcs of 40mm G-Clamp per side. Reinforcement Stiffener 40mm EXCEL Flange at 600mm center.

<sup>\*</sup>SS: Stiffened Sheet by means of "Z" Pleating/Profile @ 150mm pitch



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