



RotaStar

Electrical Panel & Air Distribution Xperts

INTRODUCTION

ABOUT US:

RotaStar is an emerging ducting Manufacturing Company aimed to be one of the leading MANUFACTURERS in the Industry.

Growing with a fast pace, under the leadership and expertise of a team of professionals from the Industry.

We at RotaStar understand that quality is of utmost importance and we keep thriving to attain top most quality standard Panel. We are determined to maintain the quality of our panels with ensuring quality at every step of our manufacturing process. Our experts have a keen eye on Quality Control and Quality Assurance by inculcating the SIX SIGMA concept to ensure that quality is never compromised.



Mission & Vision



“To be the leader, go to solution for all Electrical Panel and Air Distribution needs of the industry”



“ RotaStar will sustain timely delivery and adhere to quality standard equivalent to high manufacturing standards of the industry”

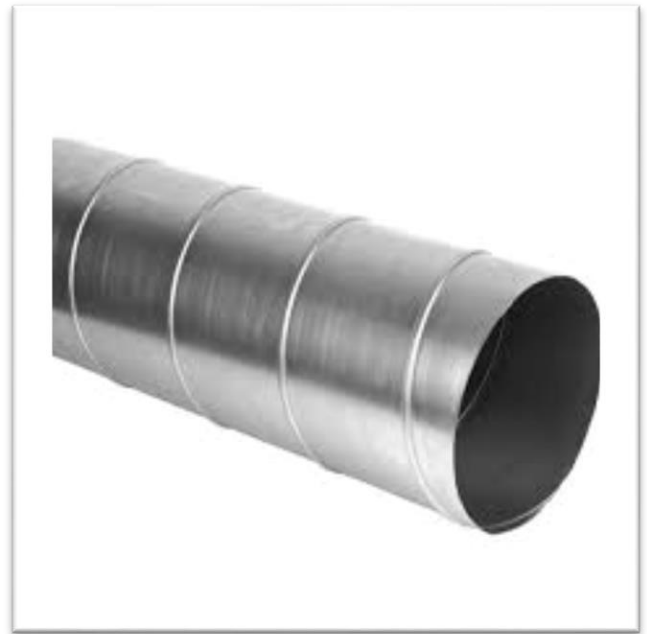
OUR PRODUCTS

Round Ducts:

Round ducts are a common component in HVAC (Heating, Ventilation, and Air Conditioning) systems.

Shape and Structure: Round ducts are cylindrical and typically made from metal, fiberglass, or flexible materials. Their shape allows for smooth air flow, minimizing resistance and reducing energy consumption.

Installation: They are usually installed using various methods such as duct tape, mastic sealant, or metal connectors. Insulation can be added to prevent heat loss or gain.



Advantages:

Efficiency: The smooth interior surface of round ducts reduces friction and pressure loss, enhancing airflow efficiency.

Strength: Metal round ducts are durable and resistant to damage.

Flexibility in Design: They can be easily bent and shaped to fit different spaces without significant loss of efficiency.

Types:

Rigid Metal Ducts: Made from galvanized steel, aluminum, or other metals, these are common in commercial and residential HVAC systems.

Flexible Ducts: Made from a metal coil and covered with a flexible insulation material, these are easier to install in tight spaces.

Rectangular Ducts:

Rectangular ducts are another common type of duct used in HVAC systems. Here's an overview of their characteristics, advantages, and applications:

Shape and Structure:

Rectangular ducts are typically made from sheet metal, such as galvanized steel, aluminum, or stainless steel.

They have a rectangular cross-section, which makes them different from round ducts.



Advantages

Space Utilization:

The rectangular shape allows for better utilization of space, especially in tight or confined areas. They can be easily fitted along walls, ceilings, or floors.

Installation:

Easier to connect to rectangular grilles, registers, and diffusers.

Easier to manufacture and install in sections, which can be joined together on-site.

Flow Dynamics:

Can handle high volumes of air efficiently.

The larger cross-sectional area compared to round ducts can make them more suitable for high-capacity HVAC systems.

Applications

Commercial Buildings: Often used in large commercial buildings due to their ability to handle large air volumes and their ease of installation in tight spaces.

Residential Buildings: Used in residential settings where space constraints or specific design requirements necessitate their use.

Sizing and Design

Airflow Considerations: Proper sizing is essential to ensure efficient airflow and reduce noise. Oversized or undersized ducts can lead to issues such as reduced efficiency or increased noise.

Pressure Loss: Rectangular ducts tend to have higher pressure losses compared to round ducts due to their corners and edges, which can create turbulence. This needs to be considered in the design phase.

Supports and Hangers: Due to their shape and potential weight, rectangular ducts require adequate supports and hangers to prevent sagging and maintain structural integrity.

Oval Ducts:

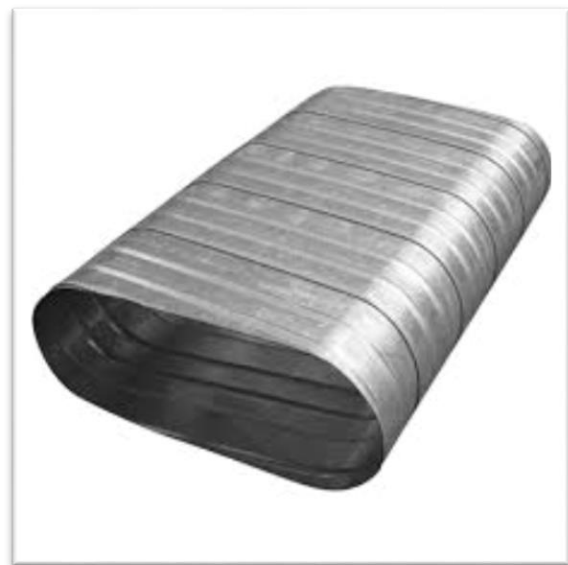
Oval ducting is a type of HVAC duct that combines features of both round and rectangular ducts. It is designed to provide efficient airflow while fitting into spaces where round ducts might not be practical.

Shape and Structure:

- Oval ducts have an elliptical or oval cross-section.
- They are typically made from sheet metal, such as galvanized steel or aluminium.

Types:

- **Flat Oval Ducts:** These are flattened versions of round ducts, providing a lower profile while maintaining good airflow characteristics.
- **Regular Oval Ducts:** These have a more pronounced elliptical shape.



Advantages

Space Efficiency:

- Oval ducts are designed to fit into spaces where round ducts would be too tall or wide, and rectangular ducts might be inefficient or impractical.
- They offer a lower profile, making them suitable for tight spaces such as ceiling voids or narrow wall cavities.

Aerodynamics:

- The shape of oval ducts allows for efficient airflow with reduced pressure drop compared to rectangular ducts.
- They provide better airflow characteristics than rectangular ducts due to fewer corners and less turbulence.

Strength and Durability:

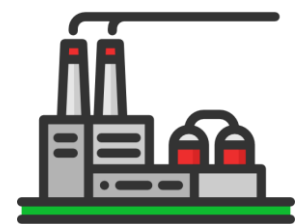
- Oval ducts retain the strength of round ducts and can withstand higher pressures without deforming.

INDUSTRY APPLICATION

Real Estate / Developers



**Industries such as
Manufacturing Plants**



Commercial



IMAGE GALLERY



CONTACT US:

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