



Manufacturer of high class Rectangular and Round Ducts



# Mangla Sons Overview

As a leading name in Steel industry, M/s Mangla Sons has earned unmatched good will and trust for benchmark quality and relentless commitment as authorized distributors of TATA Steel for their flat products. The group has set an excellent service center for timely delivery, infrastructural back-up and procedural perfection. Mangla Sons has continued their tradition of brilliant performance as TATA Steel's exclusive channel partner with their state-of-the-art manufacturing practices and a dedicated team to support all operations. After scaling new heights of success and satisfaction in their earlier ventures; they are now bringing **ECODUCT™** - a high quality ducting system developed from sheet metal without LEAD so that we get the benefit of innovative technology in our buildings and life.



#### VISION

We envision better tomorrow for the people as well as the mother earth. Its our vision to give back something good to our mother nature in return of so many gifts we have got from her. We are constantly striving to develop innovative technologies that bring back the goodness of nature in our life.



#### MISSION

We aim to contribute to the present technical excellence with our committed research and development efforts. Our aim is to simplify life with ground-breaking solutions and use the benefits of technology to enrich everyones life.



#### PHILOSOPHY

We believe in giving our consumers full value for their money. Its our belief that people appreciate quality as well as timeliness; and we believe in doing our best to honour our promises and exceed our patrons expectations every time.

#### **GREEN BUILDINGS**

'Green Buildings' is a new concept that promotes natural lifestyle. It aims to shape our buildings keeping in mind the strengths of natural resources. The concept is gaining popularity because its an outcome of a design philosophy which focuses on increasing the efficiency of resource use - energy, water and materials - while reducing building impacts on human health and the environment during the building's life cycle, through better, design, construction, operation, maintenance, and removal.

Effective green buildings are more than just a random collection of environmental friendly technologies. However, they require careful, systemic attention to the full life cycle impacts of the resources embodied in the building and to the resource consumption and pollution emissions over the buildings complete life cycle. Our pioneering product, **ECODUCT**<sup>TM</sup>, will emerge as an integral part of Green Building because it not only protects the occupant's health but also improves employee's productivity. It would also reduce pollution and environmental degradation.

The future belongs to **ECODUCT**<sup>TM</sup> which would add greenery to your projects and apply cutting-edge technology for making your lifestyle nature-friendly.





# " PEOPLE WHO ARE HEALTH CONSCIOUS" MUST READ THIS

Presence of the lead in the products which is used by us is harmful for our health. Today in HVAC Industry, Ducting is the major part of projects for Carrying the Cool / Hot / Fresh air in the buildings.

Ducts which are made from G. P. Sheets used in air conditioning system contains lead in the Galvanizing. Lead is a cancer causing element and injurious to our health (studies says).

Eco-Duct<sup>™</sup> is purely made from lead free Galvano Sheets. Galvano<sup>™</sup> is the product of TATA Steel.

### That is why

Today, People are also talking about the Ducts before finalising the air conditioning system in their houses, offices & projects.

# Eco Duct Square And Rectangular



ECO DUCT - TDC Ducts are the perfect fitting with 4 bolt system. They are perfect fittings for maintaining maximum airflow through your system.



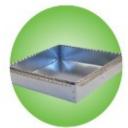
ECO DUCT - Elbows are necessary whenever duct work changes direction through a particular angle.



ECO DUCT Offset are To offset the line from straight direction.



ECO DUCT - Shoe Piece are the perfect fitting to use when you need to take off a branch from the main line.



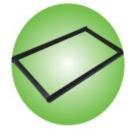
ECO DUCT - End Caps.



ECO DUCT - Straight Duct are the central distribution and collection units for an HVAC system. The supply plenum directs air from the central unit to the rooms which the system is designed to heat or cool.



ECO DUCT - Wyes are the fittings to branch off a duct from the main line, while its simple design allows fast and easy modification as your needs change.



Angle Iron frames are used to connect one duct to another duct for giving Perfect fitting.

#### **Eco Duct Round**



ECO DUCT - Round Pipe are the main line to pass the air through.



ECO DUCT - Elbows are necessary whenever ductwork changes direction and when connecting individual machines to branch lines.



ECO DUCT - Reducers are the perfect fitting to use when you need to change from one size duct to another size. They are perfect fittings for maintaining maximum airflow through your system while changing to the needed duct size.



ECO DUCT - DUCT ACCESSORIES are made of fine quality used to hang the ducts with proper threaded rods, W-brackets, anchor fasteners etc.



ECO DUCT - Saddle Taps on Round are a great way to branch a round duct run off of another round sheet metal duct run at a 45 degree angle for improved air flow and efficiency.



ECO DUCT - Square to Round are the perfect fitting to use when you need to change from round ducting to square or vice versa.



ECO DUCT -Wyes



ECO DUCT - End Caps are the perfect fitting to use when you terminate a duct run. They are perfect fittings for maintaining a professional look, especially if your duct system is exposed.



# We can shape your ideas

Available thickness in Angle Iron Notching

(Thickness 0.5, 0.6, 0.8, 1.0)

Available thickness in TDF/TDC (Thickness 0.5, 0.6, 0.8)









# Cares in and outside the air

- 1) Class I Nitrile Insulation
- 2) Class O Nitrile Insulation (Fire Resistive)
- Chemically cross linked Polyethylene formed with one side aluminum foil.
- 4) Glass Wool with aluminum foil
- 5) Glass Wool with Chicken Mesh











# Cheer your Interior with colours

Available in Lead Free Powder Coated Available in Lead Free Spray Painted















### SOLDERING

To Prevent air leakage, this is a very special job done for Pharmaceutical Companies, Food Processing Units, Milk Plants who do not want sealant in the Joints.

# **Eco-Duct™ Major Clients**



# Pharma

- · Ranbaxy Laboratories Ltd.
- · Promed Exports Pvt. Ltd.
- · Sarvotam Care Products (AMWAY)
- Surya Pharmaceuticals Limited
- Rexcin Pharma Pvt. Ltd.
- HLL Life Care Ltd.
- Dabur India Limited.
- · Procter & Gamble Home Products Ltd.
- Nitin Life Sciences Ltd.
- Immacule LifeSciences Pvt. Ltd.
- Jublient LifeSciences Ltd.
- · Fresenius Kabi Oncology Ltd.



# Hospitality

- J.W Marriott
- · North Country Mall
- Hotel Piccadilly
- . L & T MUD Mall (ELANTE MALL)
- Godrej Eternia
- Hotel Sheraton
- · Kingfisher Airlines Limited
- Reliance Hyper Mall
- · Agro Mall
- · Chandigarh Airport
- Commonwealth Games
- Hotel Ascots

# Eco-Duct™ Major Clients



### Contractors

- · Suvidha Engineers India Pvt. Ltd.
- Voltas Limited
- · Blue star Limited
- · Aircon Engineers Pvt. Ltd.
- Airways Engineers
- · Trans Tech Turnkey Pvt. Ltd.
- Blue Max Insulators.
- · Arctic Infratech Solutions Pvt. Ltd.
- · Sterling and Wilson Ltd.
- Ashrae Clean Room Presentations Pvt. Ltd.
- Amba Aircon Pvt. Ltd.
- · Euro Aircon International
- Dyna Aircon Pvt. Ltd.
- Chill Point Engineers
- Airef Engineers
- Better Comfort Systems
- Contec Projects
- Kelvolt India Pvt. Ltd.
- · Aimer Air Conditioning
- Comfort Engineers



## Others

- · P.G.I.M.E.R
- IISER ( Indian Institute of Scientific Education and Research)
- Indian School of Business
- Dayanand Medical College (DMC)
- · World Spice Nigeria
- Harley Davidson ShowRoom

#### APPRECIATION LETTER FROM CUSTOMER



# Lok Priya Buildwell Pvt. Ltd. JW Marriott Hotel

Plot No. 6, Sector 35-B, Chandigarh - 160 035 Tel.: 0172-2621102, Mob.: 96765 45537 E-mail: into Blokortvamaniot.com

April 24, 2010

ECO Duct Mangla Sons Unit - II

Sub: Lead free Ducts - A new Concept

Dear Sir

Hospitality industry is going through a very competitive phase, wherein concept of Green Building is becoming more and more popular. Those who are sensitive to their guest's environmental needs, are the ones who adopt the concept of green building and accordingly have an edge over their competitors.

We at JW Marriott have taken the responsibility to offer environment friendly hospitality to their guests. In this connection, we came across a very noble concept of 'Clean Air or Healthy Air' in the form of 'Eco-Duct'<sup>M'</sup>, ducting solution made of 'Lead-Free' galvanized product, which is an intermediary product for any air-conditioning. We had the options of using normal galvanized plain product for the air-conditioning purpose, but we chose to go with 'EcoDuct', in view of the safety and environmental advantages attached with it.

As a premium hospitality group, it is the moral responsibility of our Group to offer healthy and safe environment to our guests, by using products and services that are environment friendly and energy conserving. By the same logic, JW Marriott is using Solar Systems for their water heating requirements, to contribute their bit towards energy conservation and use of renewable energy.

for JW Marriott

Lok Priya Buildwell Pvt. Ltd.

Managing Director

#### APPRECIATION LETTER FROM CUSTOMER

#### RANBAXY

GEORAL MANUSACTURING: A 10, INDESTRIAL REDATE, PHASE-IE, S.A.S. NAGAZ - 160 691, PUNIAR, INDRA FRONE: (S1) 6172 - 2272493-54 FAX: 6172 - 509(88)

#### TO WHOMSOEVER IT MAY CONCERN

We appreciate the initiative taken by M/s Mangia Sons, to provide pre fabricated ducts in an ecologically improved way by using LEAD FREE GI SHEETS to safeguard the environment from this highly toxic element. As raw material is used is totally LEAD FREE, hence eco-friendly and gives better, healthy and fresh air to breath.

Their concern and business commitments are commendable and highly appreciable.

For Ranbaxy Laboratories Ltd.

26/04/2010

Manish Kumar

Sr. Manager - E & F P (Pharma)



# **CERTIFICATE**

#### The Certification Body of TÜV SÜD South Asia Private Limited

certifies that



Mangla Sons Private Limited Plot No. C- 85, Industrial Area, Phase -7, Mohali. Punjab - 160 055, INDIA

has established and applies a Quality Management System for

Manufacturing of Metal Fabricated HVAC ducting, shuttering plates, scaffoldings stainless steel products and other fabricated products

An audit was performed, Report No. 20060657

Proof has been furnished that the requirements according to

ISO 9001: 2008

are fulfilled. The certificate is Valid until 2016-10-04

Subject to successful completion of the Annual Audit before 2014-06-05

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Certificate Registration No. 99 100 14789

Mumbai,

Effective Date: 2013-10-05

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#### Indian Green Building Council

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Dr Prem C Jain Chairman Indian Green Building Council

#### TO WHOMSOEVER IT MAY CONCERN

This is to certify that M/s Mangla Sons Pvt Ltd. is one of the Members of Indian Green Building Council (IGBC) under the category: Mfg. / Product Suppliers for the period 1 January 2013 - 31 December 2013.

M/s Mangla Sons Pvt Ltd. membership number is "IGBC - MP - 1308".

Prem C Jain

The basic procedure of TDC duct Installation involves the following things:-

The duct will be supplied in L shapes with TDC flanges from the factory as per the terms of Supply.

# **Process 1**

# Boxing of duct

Male and female profile manual pressing to make a firm longitudinal joint called Pittsburg joint.



L Shape



L Shapes Jointing



Locking Using Lock former



Lacking Using Lock Former



Boxed UP

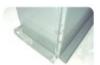
# **Process 2**

# Corner Fixing

Fixing of 4 corners at the end of a duct in TDC flanges taking care that the same are fixed in accurate location as required so that there shouldn't be any kind of loosening of the corners at the ends.



Boxed Up Duct



Corner Fixing



Comer Fixing



Comer Fixing



Comer Fixing

# **Process 3**

# Application of Gasket

Gasket is to be fixed uniformly at the flanges of the duct. It should be fixed on the adjacent to the inner side of the duct not towards the outer side. Starting and end points must be matching properly without any gap at the joint to avoid any kind of leakage in the duct.







Gasket Fixed

## **Process 4**

# **Nut Bolting**

The two duct pieces should be ready in view of proper Boxing, Corner fixed and Gasket applied. The level of both the duct pieces should be same and to be duly checked to ensure proper bolting process. Each and every point to be checked so that duct should not be loose at any point.



Boxed Up Gasket Fixed Duct



**Nut Balts Fixed** 

# **Process 5**

## Cleat Fixing

After the process of Nut bolting at the four ends of the duct in the step mentioned above, a machine rolled profile suitably designed to make a locking system in the two duct pieces at the outer side of the flanges of the duct. The rolled profile called as Cleat is of length 150 mm and is fixed uniformly at the intermediate distance of 150 mm each.



**Duct Nut Bolted Gasket Fixed** 





Cleat Fixing Stage 1



Cleat Fixed On duct



2nd Cleat Fixing maintaining proper distance



Fixing of 2nd Cleat



Duct ready cleat fixed

This process completes the process of duct boxing and the line fixed with the duct fixing accessories is ready to be installed at specified BOD at site as per the drawings.

# Why is Eco-Duct™ the right choice for you?

- Eco-Duct™ is purely made from lead free Galvano Sheets. Galvano™ is the product of TATA Steel.
- Eco-Duct™ protects you from inhaling contaminated air.
- Eco-Duct™, India's first LEAD free Ducting profiles will bring a breath of FRESH & HEALTHY air in your
- Best raw material and high-tech quality makes it the most efficient and dependable ducting system.

- The Best of Technology is there to make your life better.
- Lead is commonly used in Ducting Sheets and presence of lead oxide is injurious to health.
- Everyone is getting health conscious. The recent popularity of LEAD-free paints shows that people would opt for only LEAD-free Ducting in future.
- Lead free innovation makes it a futuristic product as everyone is becoming health conscious.

#### Features of the raw material being used in manufacturing of Eco-Duct™



Highest Corrosion Resistance



Consistent **Thickness** 



Texture & Finish



Superior Surface Uniform & Superior Zinc Adhesion



Ontimum Formability



Superior Paint Adhesion







### Mangla Sons Private Limited

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