



Pro-Duct  
Industries

# COMPANY PROFILE

(HVAC DUCTING SYSTEMS)

W W W . P R O - D U C T I N D U S T R I E S . C O M





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## **SECTION 01**

### **Company Information & Introduction to PRO-DUCT**



# Company Information

**NAME OF COMPANY**

Pro Duct Industries LLC

**ADDRESS (U.A.E. BRANCH)**

Warehouse No. 5 & 6,  
Umm Al Thoub 1, Umm Al Quwain

**TEL :** +971 6 523 28 91

**ADDRESS (K.S.A. BRANCH)**

Building No.3843, Maqdan, Al Mishael Dist. , Riyadh

**TEL :** +966 11 450 9693



# Introduction To Pro-Duct

At PRO-DUCT INDUSTRIES, we specialize in the Manufacturing of premium Duct Work & Accessories for Commercial & Residential HVAC Applications.

We are established on the basic policy of serving the market with high-quality & reliable Products using the latest Technology & qualified staff.

Meeting and understanding the customer's requirements to achieve added value is one of our major goals. Through our sophisticated facilities, we intend to distribute and supply to AC suppliers, Contractors & Private Clients. Get our highest quality HVAC ductwork, Pre-Insulated Duct, and Aluminum Cladding at the most competitive rates.

Health, Safety & Environmental Management are integral & essential parts of the way we do our business & are considered an equal part of the wider system for our way of work.

With the vision and foresight of the management and a dynamic team of well-qualified professionals.

PRO-DUCT consistently delivers projects on time and achieves clients' absolute satisfaction.

PRO-DUCT has implemented a quality management system to demonstrate its ability to provide quality products and services that meet customers' and applicable statutory and regulatory requirements. Its reputation for excellence is based on the use of the latest techniques, a strong base of resources and an indomitable spirit and desire to deliver the best.

PRO-DUCT factory is ideally located centrally, in UAE - Umm Al Quwain City & in the KSA — Al RIYADH Industrial City. We also offer a deliver services throughout all of the UAE & KSA.

Alternatively you can arrange your own transport, as all orders can be collected from our factory  
PRODUCT strength lies in the following areas:

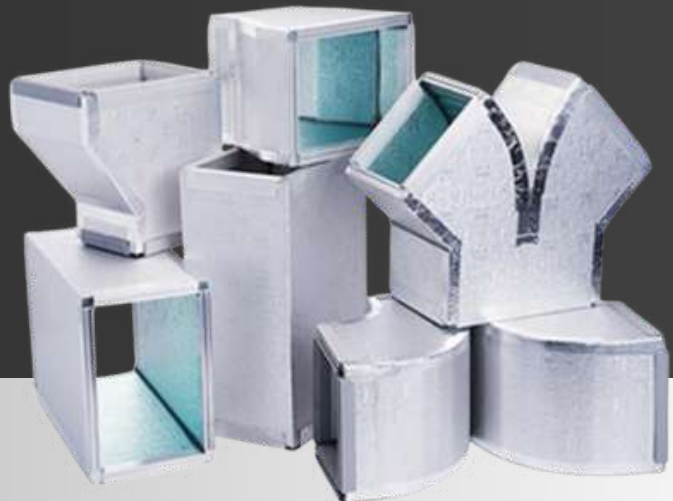
- Outstanding reputation
- Ambitious management, technical experts, design and engineering experts, skillful operators.
- Factory equipment of high standard.
- Large stocks and large warehousing facility.
- Strong financial base, and financial strength and stability.
- Commitment to our quality system.

The company's mission statement and Quality Policy explicitly says it all.

The Air-conditioning Duct factory uses the latest technology CNC machines and employs technically qualified personnel with international experience to produce high quality sheet metal ducting as per various international standards such as DW 144, SMACNA, etc.

List of products covered under our manufacturing range is as follows:

1. Rectangular Ducts & Related Accessories.
2. Spiral Ducts & Related Accessories.



## **SECTION 02**

Mission Statement , Quality Policy , Our  
Values,  
& Goals



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# Mission Statement

To consistently & effectively work towards achieving our clients' requirements by rendering quality workmanship & products under a healthy and safe work environment, employing competent resources.



# Quality Policy

PRODUCT aims to emerge as market leader in air distribution systems in the Construction industry by consistently providing high quality operational systems & services that meets client's absolute satisfaction and desired requirements.

## OBJECTIVES

**To achieve total customer satisfaction, we shall ensure:**

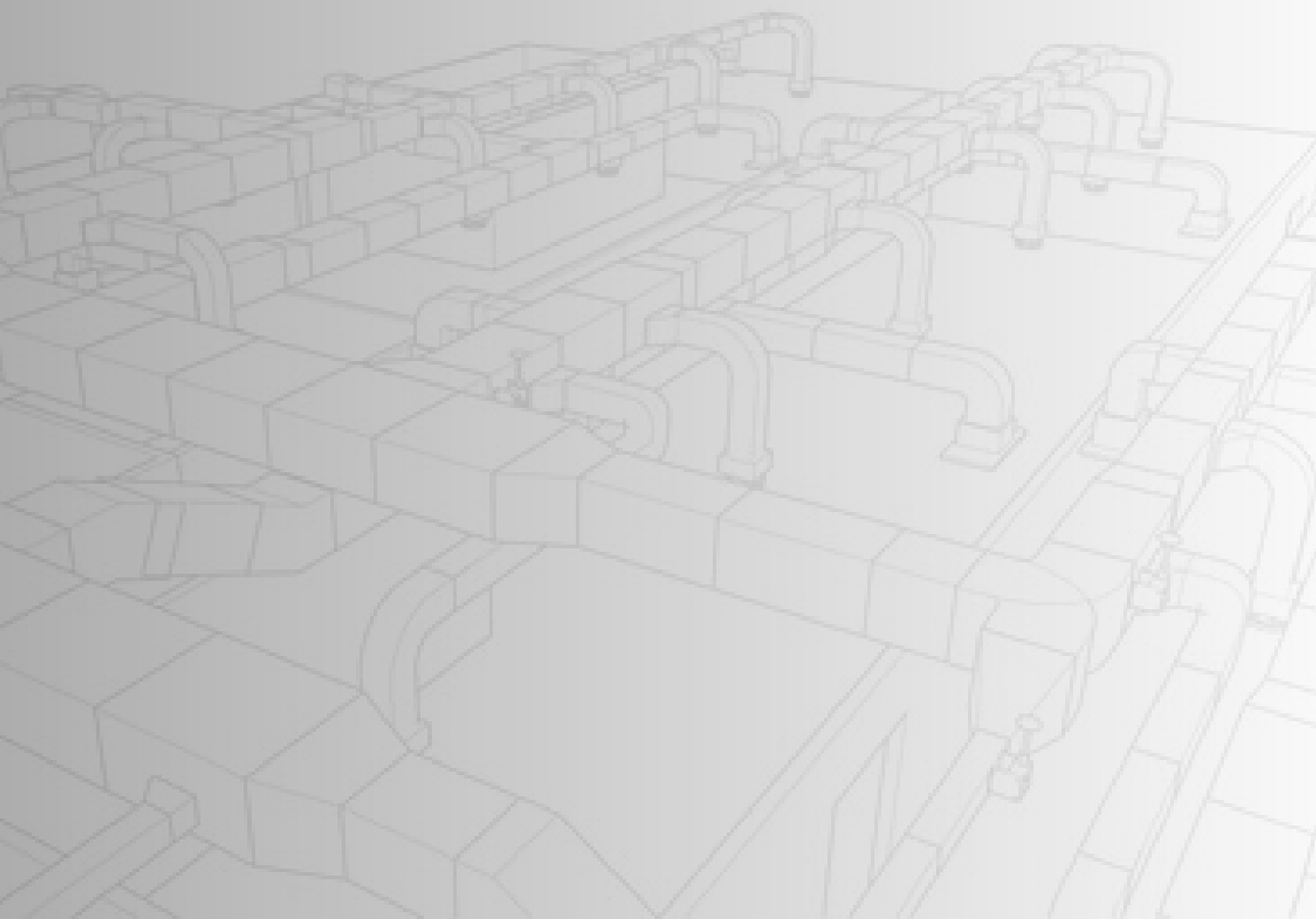
- Consistently deliver quality products, engineering and services
- Timely service delivery & quality workmanship.
- Use of competent personnel and train our work force  
Continuously for the improvement
- Healthy & safe work environment
- Complying with statutory, regulatory and other legal  
Requirements.

# Our Values

- Our Values are the core of our business philosophy which we have pursued from the beginning of the Factory. All our employees are bounded by these values.
- The Values are not new, our employees live by them every day, and based on this values, they achieve the business success in dealing with customers and suppliers. The values are absolutely business success in dealing with customers, and suppliers. The values are absolutely business relevant - and we strongly believe that customer needs want to work with a company which is perceived as reliable, excellent and innovative!
- **Innovative**  
Being Innovative to create sustainable results
- **Excellent**  
Achieving high performance and excellent results
- **Responsible**  
Committed to ethical and responsible actions
- Our employees live these three values everyday, deal with them and learn from the experiences. Values make a person charismatic. One's enthusiasm and how values are integral part of what they do every day - makes it authentic, and therefore, reliable
- We answer the world's toughest questions  
**Innovative, Excellent and responsible**

# Our Aim & Goal

- To reach out to other clients and provide them with our expertise and dedicated services to meet and exceed expectations in a technically and a manufacturing field.



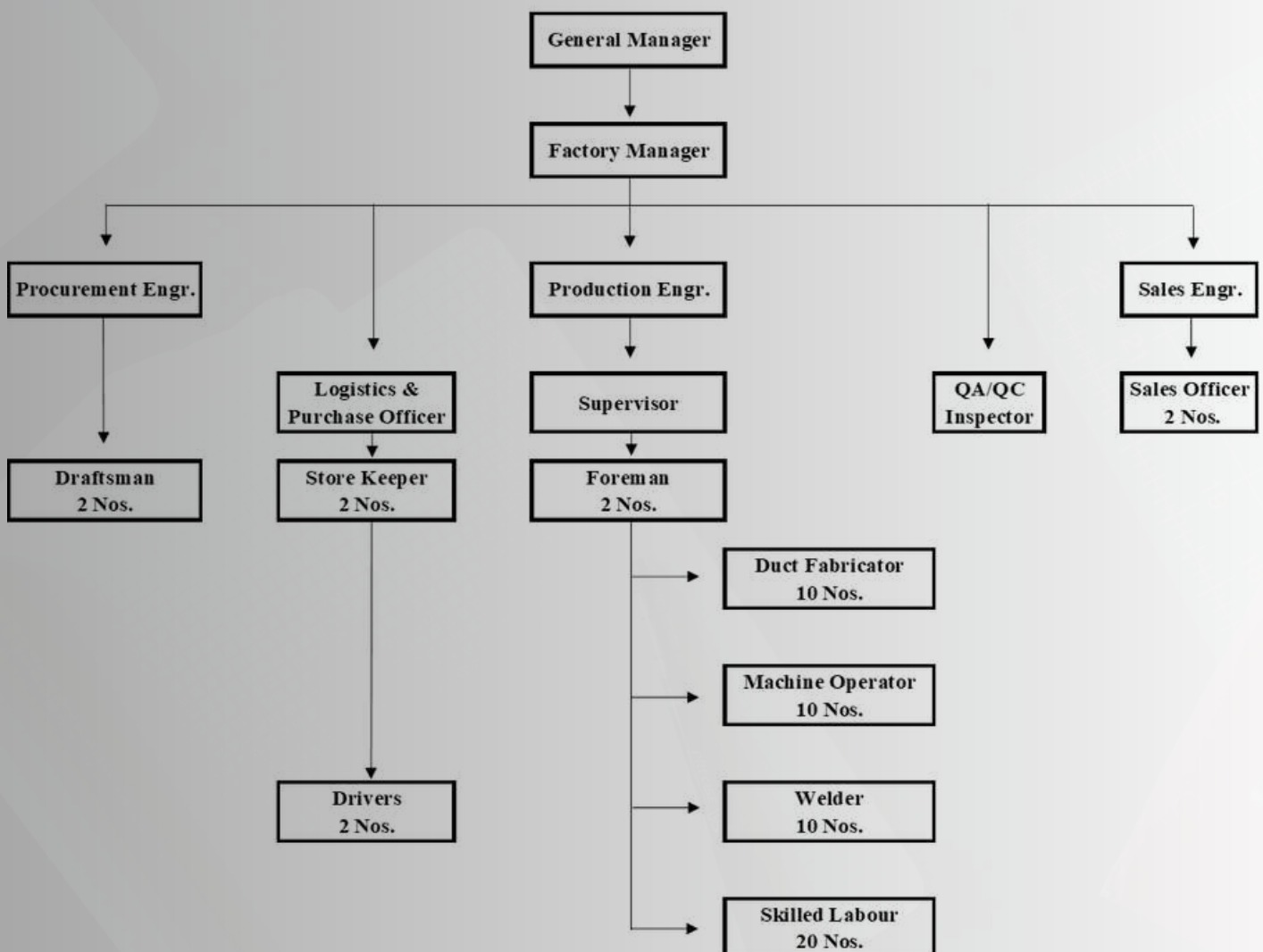
## SECTION 03

### Organization Chart & Man Power



# Organization Chart & Man Power

Organizational Chart



## **SECTION 04**

### **Machinery & Equipments**



# Machinery & equipments

**PRO-DUCT** fully equipped factory allows us to manufacture any shape ductwork. Capable of covering all our clients' requirements.

S/N	DESCRIPTION	NO. OF UNITS
1	AUTOCOIL LINE	2
2	PLASMA CNC MACHINE	3
3	ZIPPER MACHINE	2
4	SPIRAL TUBE FORMING	1
5	HYDROLIC ELBOW MAKER	2
6	SHEARING MACHINE	2
7	LOCK FORMER	5
8	GROOVING MACHINE	1
9	ROTTARY MACHINE	2
10	SPOT WELDING MACHINE	5
11	WELDING MACHINE	8
12	STAND DRILL	4
13	POWER PRESS	2
14	ROLLING MACHINE	2
15	FORKLIFT	1
16	FOLDING MACHINE	2
17	SHEET CUTTER	1
18	C-CLEAT BENDER	2
19	FLANGER SAW	2

# Machinery & equipments





## **SECTION 05**

### Method Statement Of Duct Fabrication



# Method Statement Of Duct Fabrication

## • G.I. Duct Fabrication:

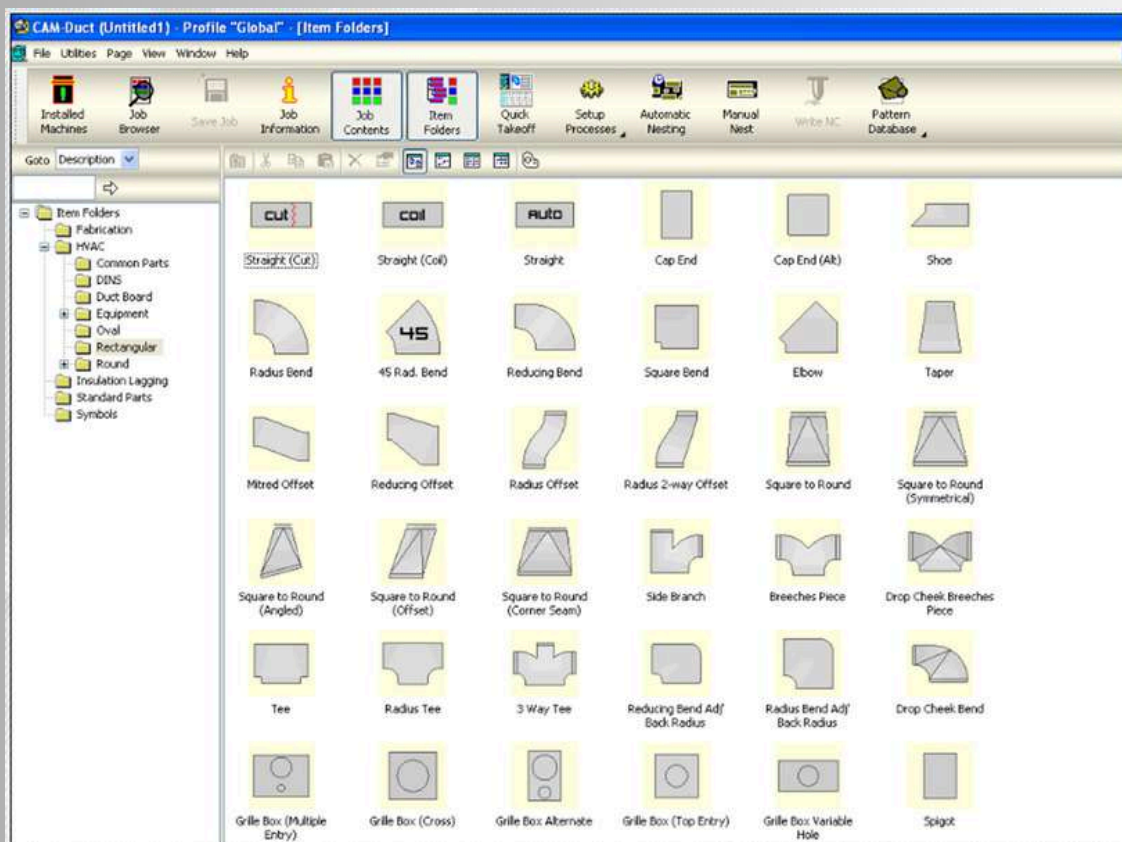
1. On receiving the approved shop drawing and specifications of the materials a sample is prepared for the approval of the consultant.
2. Upon approval of the consultant detailed shop drawings are prepared by the project for the production department.
3. A duct fabrication list is prepared along with tagged drawings indicating the tag number of each duct piece with its specifications.
4. The tag fabrication list is submitted to the project management for final approval, and for indicating delivery schedule.

The approved tag list with delivery schedule will be given to the production engineer who will assign the work to the shift supervisor.

The schedule of rectangular duct production will be as follows:

The rectangular ducts will be produced on CNC operated Auto line folding machine. The finished duct will be inspected for quality by the senior engineer who will indicate his approval by signing the production tag confirming the inspection. The production tags contains the details of each duct specifying the Project, Customer, Consultant, Equipment Reference, Duct Tag Number, Size, etc.

The duct fittings will be manufactured on CNC operated plasma Arc Cutting machines. Each element of the fittings cut on the plasma machine will have a unique label indicating the details of element number, duct number and project details. This will assist the identification during the assembly process. All the elements produced by the plasma Arc Cutting machine will be assembled by the skilled fabricators. Fixing of the transverse joints and vanes will be done at the same time.



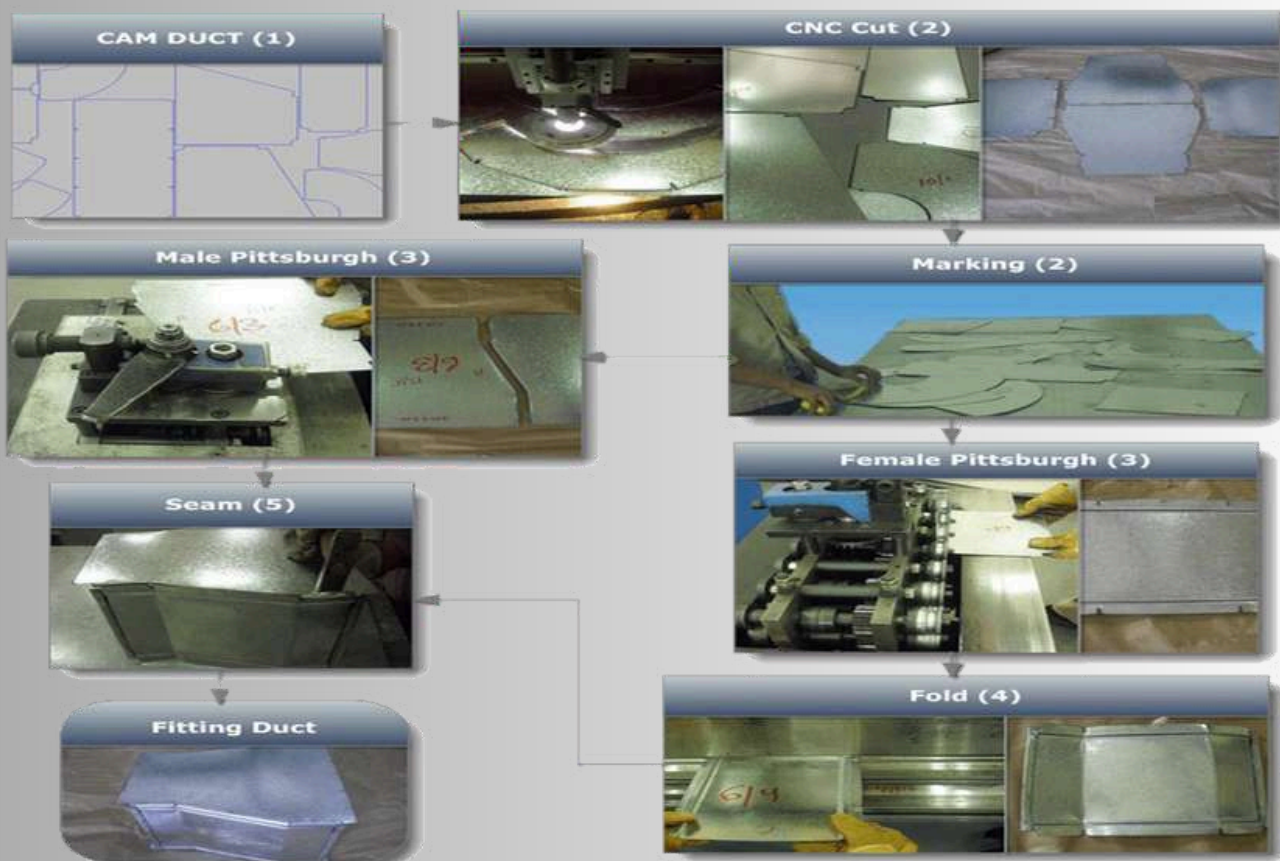
All the assembled fittings will be checked by QA/QC engineer on the shop floor. His approval will clear the fittings for delivery. He will check that there was strict adherence to the specifications entered for production.

The completed consignment of the assembled straight ducts and fitting will be handed over to the stores control.

The stores control will ensure that proper documentation is prepared for the delivery of the duct to site



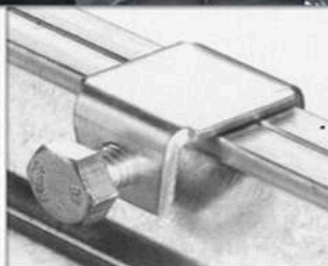
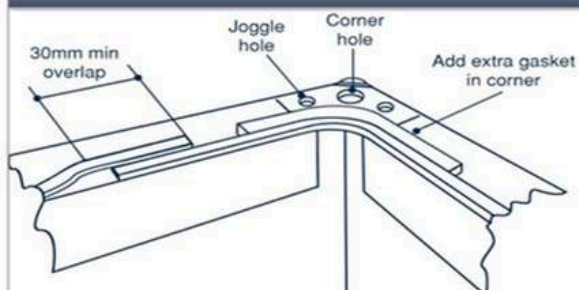




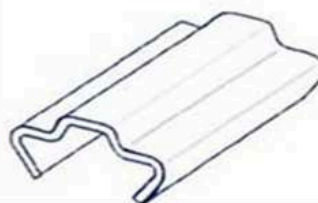
#### Fitting Duct Manufacturing Instructions

- 1- Feed the duct dimensions and specifications to CAM DUCT software then the software perform the nesting process to arrange the duct pieces into the G.I. sheet with appropriate distribution.
- 2- The CNC Plasma Cutting Machine start cut the pieces with required notches then the machine operator start writing the numbers and related information on the internal face of cut pieces then he collect the all sides for the same duct piece together.
- 3- After cutting and marking we send cut pieces to roll forming machine to make longitudinal Pittsburgh.
- 4- Then the we start bend the parts by folding machines
- 5- Finally we perform the seaming process to close the duct and this operation will be done manually.

### G.I Duct with flange Site Installation



### Clips



### G.I Duct with flange Site Installation

- ✓ Fit gasket (9 mm\* 4.5 mm) as one continuous length, To complete the seal there should be a minimum overlap of 30 mm, for high pressure of 1000 PA & above additional gasket should be applied to the four corners.
- ✓ Fit the clamps or cleats within 50 mm of the corner. Fixing should not exceed 400 mm centers.
- ✓ Assemble the ductwork by nuts & set screws fitted into the corner holes. for flange 20 mm use set screw M8\*25 mm, for flange 30 mm use set screw M10\*25 mm, for flange 40 mm use set screw M12\*25 mm.

**Cut RSA (1)**



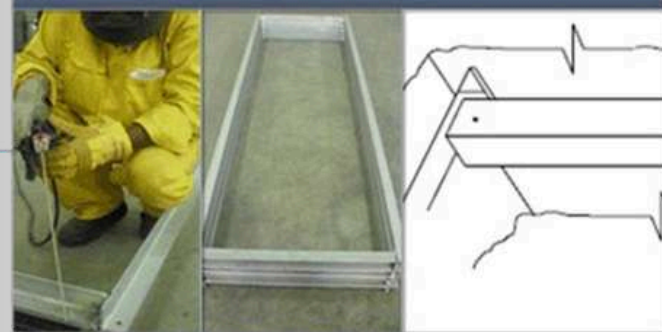
**Drill RSA (2)**



**Riveting & Frame Fixing (4)**



**Welding (3)**



**Duct with RSA**



### **Rolled Steel Angle (RSA) Manufacturing Instructions**

- 1- Cut the RSA by circular saw machine according to the duct sizes.
- 2- Drill a holes in RSA each 150 mm. by Stand drill machine.
- 3- Make the RSA Frame by welding the frame corner using arc welding technique.
- 4- Fix the RSA frame into the duct by using stainless steel rivets.



## DUCT WORK CONSTRUCTION SCHEDULE

2" W.G = 500PA, AS PER SMACNA 1995 2<sup>ND</sup>  
EDITION

MAX. DUCT DIMENSION	U.S. GAUGE	LONGITUDINAL CONNECTION	INTERMEDIATE REINFORCEMENT	TRANSVERSE CONNECTION	SPACING
0 - 300	26	PITTSBURGH (LOCK SEAM) / DOUBLE CORNER SEAM	NOT REQUIRED	HEMMED S-SLIP (GA.24) C-DRIVE (GA.24)	1200
325 - 450	24	PITTSBURGH (LOCK SEAM) / DOUBLE CORNER SEAM	NOT REQUIRED	HEMMED S-SLIP (GA.24) C-DRIVE (GA.24)	1200
451 - 750		PITTSBURGH (LOCK SEAM) / DOUBLE CORNER SEAM	NOT REQUIRED	HEMMED S-SLIP (GA.24) C-DRIVE (GA.24)	1200
751 - 1065	22	PITTSBURGH (LOCK SEAM) / DOUBLE CORNER SEAM	NOT REQUIRED	DUCTMATE TDC 35	1200
1066 - 1370		PITTSBURGH (LOCK SEAM) / DOUBLE CORNER SEAM	NOT REQUIRED	DUCTMATE TDC 35	1200
1371 - 1500	20	PITTSBURGH (LOCK SEAM)	NOT REQUIRED	DUCTMATE TDC 35	1200
1501 - 2130		PITTSBURGH (LOCK SEAM)	NOT REQUIRED	GALV. COMPANION ANGLE 40x40x4MM	1200
2131 - 2440	18	PITTSBURGH (LOCK SEAM)	NOT REQUIRED	GALV. COMPANION ANGLE 50x50x5MM	1200
2441 - 3050	18	PITTSBURGH (LOCK SEAM)	GALV. COMPANION ANGLE 50x50x5MM	GALV. COMPANION ANGLE 50x50x5MM	1200



## DUCT WORK CONSTRUCTION SCHEDULE

3" W.G = 750PA, AS PER SMACNA 1995 2<sup>ND</sup>  
EDITION

MAX. DUCT DIMENSION	U.S. GAUGE	LONGITUDINAL CONNECTION	INTERMEDIATE REINFORCEMENT	TRANSVERSE CONNECTION	SPACING
0 – 457	24	PITTSBURGH (LOCK SEAM)	NOT REQUIRED	DUCTMATE TDC 35	1200
458 – 762	24	PITTSBURGH (LOCK SEAM)	NOT REQUIRED	DUCTMATE TDC 35	1200
763 - 914	24	PITTSBURGH (LOCK SEAM)	NOT REQUIRED	DUCTMATE TDC 35	1200
915 - 1067	22	PITTSBURGH (LOCK SEAM)	NOT REQUIRED	DUCTMATE TDC 35	1200
1068 – 1219	20	PITTSBURGH (LOCK SEAM)	NOT REQUIRED	DUCTMATE TDC 35	1200
1220 - 1524	18	PITTSBURGH (LOCK SEAM)	NOT REQUIRED	GALV. COMPANION ANGLE 50x50x5MM	1200
1525-2133	18	PITTSBURGH (LOCK SEAM)	GALV. COMPANION ANGLE 50x50x5MM	GALV. COMPANION ANGLE 50x50x5MM	1200
2134-2438	18	PITTSBURGH (LOCK SEAM)	GALV. COMPANION ANGLE 50x50x5MM	GALV. COMPANION ANGLE 50x50x5MM	1200

## DUCT WORK CONSTRUCTION SCHEDULE

4" W.G = 1000PA, AS PER SMACNA 1995 2<sup>ND</sup>  
EDITION

MAX. DUCT DIMENSION	U.S. GAUGE	LONGITUDINAL CONNECTION	INTERMEDIATE REINFORCEMENT	TRANSVERSE CONNECTION	SPACING
0 – 406	24	PITTSBURGH (LOCK SEAM)	NOT REQUIRED	DUCTMATE TDC 35	1200
407 – 762	24	PITTSBURGH (LOCK SEAM)	NOT REQUIRED	DUCTMATE TDC 35	1200
763 - 914	22	PITTSBURGH (LOCK SEAM)	NOT REQUIRED	DUCTMATE TDC 35	1200
915 - 1067	20	PITTSBURGH (LOCK SEAM)	NOT REQUIRED	GALV. COMPANION ANGLE 30x30x3MM	1200
1068 – 1372	18	PITTSBURGH (LOCK SEAM)	NOT REQUIRED	GALV. COMPANION ANGLE 30x30x3MM	1200
1373 - 1829	18	PITTSBURGH (LOCK SEAM)	GALV. COMPANION ANGLE 50x50x5MM	GALV. COMPANION ANGLE 50x50x5MM	1200
1830-2438	18	PITTSBURGH (LOCK SEAM)	GALV. COMPANION ANGLE 50x50x5MM	GALV. COMPANION ANGLE 50x50x5MM	1200

## DUCT WORK CONSTRUCTION SCHEDULE- DOUBLE WALL

**2" W.G = 500PA, AS PER SMACNA 1995 2<sup>ND</sup>  
EDITION**

Max. Duct Dimensions	INNER Thickness (ga. USS)	OUTER Thickness (ga.	Max. Joint Length (mm)	Joint Type	Intermediate Reinforcement
UP TO 457	24	24	1500	DUCTMATE TDC 35MM	NONE
458-914	22	24	1500	DUCTMATE TDC 35MM	NONE
915-1524	20	24	600	DUCTMATE TDC 35MM	COMPANION ANGLE 40X40X4MM
OVER 1524	18	24	600	DUCTMATE TDC 35MM	COMPANION ANGLE 40X40X4MM

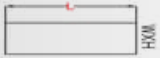



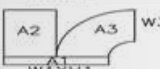



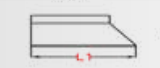

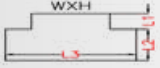
### NOTES:

1. Galvanized Steel Confirm to ASTM A 653, G90 Coating Lock forming Quality
1. Double Wall Thermal Ducts (AS PER ABOVE SCHEDULE & GAGE 24 FOR OUTER DUCT)
1. Solid galvanized steel outer shell and inner shell with insulation sandwiched between.
2. Insulation of 25MM THK. 56 KG/M3 density for indoor ducts
3. Insulation of 50MM THK. 56 KG/M3 density for outdoor ducts.
1. Ductworks will be supplied fully assembled with factory applied sealant.
1. Every piece of ductwork will be identified with cross reference tag

## DUCT WORK CONSTRUCTION SCHEDULE- Spiral Round Duct & Fittings

Duct Diameter in mm (inches)				500 Pa, (2" W.G.) Positive Pressure			1000 Pa, (4" W.G.) Positive Pressure		2500 Pa, (10" W.G.) Positive Pressure	
mm	Inches	inches	mm	Spiral Seam Gauge		Longitudinal	Spiral Seam	Longitudinal	Spiral Seam	Longitudinal
75	(3)	Thru	(8)	200	26	26	26	26	26	24
201	(9)	Thru	(14)	350	26	26	26	26	26	24
351	(15)	Thru	(26)	650	26	26	26	26	26	22
651	(27)	Thru	(36)	900	24	22	22	20	22	20
901	(37)	Thru	(50)	1250	22	20	20	20	20	20
1251	(51)	Thru	(60)	1500	20	18	18	18	18	18
1501	(61)	Thru	(84)	2100	18	16	18	16	18	16
2101	(85)	Thru	(98)	2500	18	16	16	14	16	14

### METHOD OF CALCULATION FOR RECTANGULAR DUCTWORKS

STRAIGHT DUCT	$2X(W+H+0.04)XL$	
ELBOW	$A=2(W+H+0.08)(L1+L2)$ IF MIN. W=>300 ADD CALC. FOR TURNING VANE	
OFFSET	$A=2(W+H+0.08)(L1+L2)$ $L2=W+O$	
WYE FITTING	$A=A1+A2+A3$	
R-FITTING	$A=A1+A2+A3$	
REDUCER	$A=2(W+H+0.08)L1$	
TRANSITION	$A=2(W+H+0.08)L1$	
ELBOW 45	$A=(W+H+0.08)(L1+L2)$	
TAKE OFF	$A=2(W+0.18+H)L1$	
ST DUCT W/E CAP	$A=2(W+H+0.04)L1$ $+ (W+0.1)(H+0.1)$	
TEE FITTING	$A=2(W+H+0.04)L1$ $+2(W1+H1+0.04)L2$ $+2(W2+H2+0.04)L3$	

All Kg Calculations will be as follows:-

GI Sheet Metal Thickness	Weight Kg/M2
26 Guage (0.6mm)	4.86 Kg/M2
24 Guage (0.7mm)	5.67 Kg/M2
22 Guage (0.8mm)	6.48 Kg/M2
20 Guage (1.0mm)	8.10 Kg/M2
18 Guage (1.2mm)	9.72 Kg/M2

# **SECTION 06**

## Product Range





# HVAC DUCTING SYSTEMS

WWW.PRO-DUCTINDUSTRIES.COM

## Products Catalog



**UNITED ARAB EMIRATES (U.A.E.)**

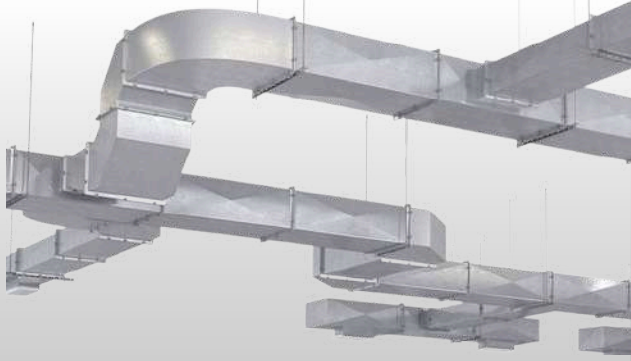
TEL : +971 6 523 2891

EMAIL : INFO@PRO-DUCTINDUSTRIES.COM

**SAUDI ARABIA (KSA)**

TEL : +966 11 450 9693

EMAIL : INFO.SA@PRO-DUCTINDUSTRIES.COM



## **WELCOME TO OUR COMPANY**

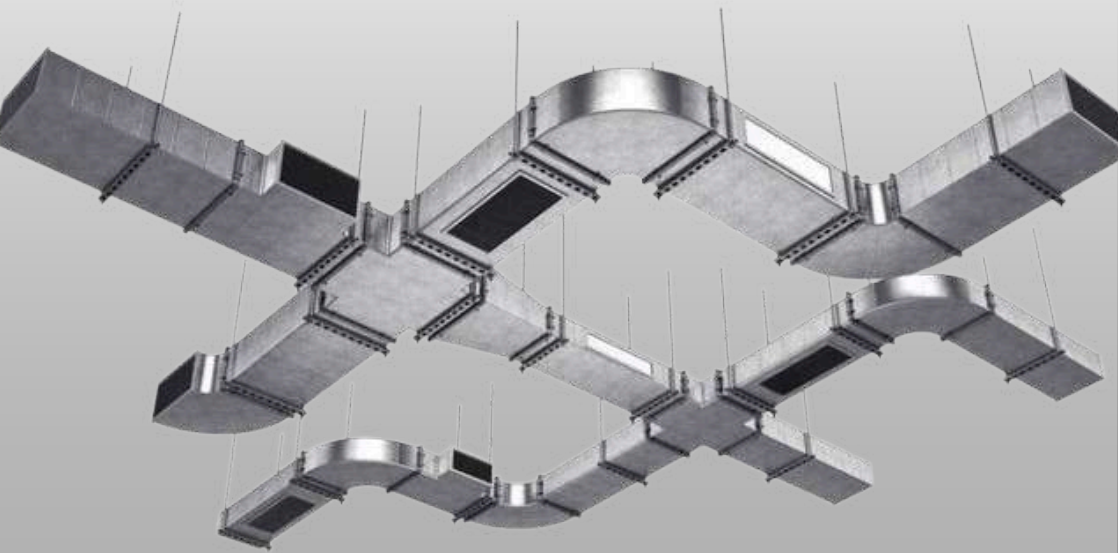
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Get our highest quality HVAC ductwork, Pre-Insulated Duct, and Aluminum Cladding at the most competitive rates.

Health, Safety & Environmental Management are integral & essential parts of the way we do our business & are considered an equal part of the wider system for our way of work.



# RECTANGULAR DUCT & FITTINGS



# STRAIGHT DUCT



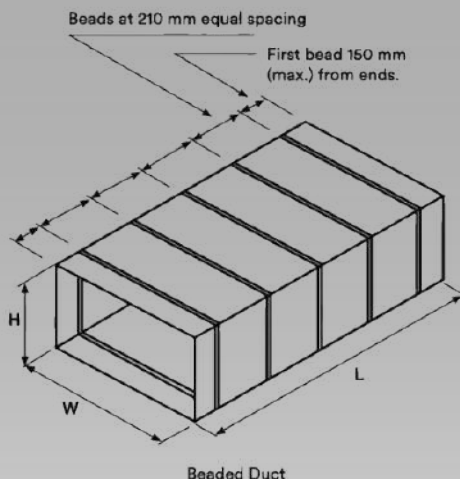
## Description

Pro-Duct's single-wall rectangular duct and fittings are factory fabricated and supplied with factory-applied sealant on all longitudinal joints for S & Drive slip ducts and additionally on transverse joints for all flanged end ducts and fittings.

Pro-Duct's rectangular ducts can be supplied in either fully assembled form or knocked down form for straight ducts (minimum requirement for assembly of straight ducts on site), while fittings will be delivered fully assembled with factory-applied sealant

## Dimensions

All straight ducts are beaded or cross broken (except if ducts are double wall, internally lined, or gauge 18 and heavier). All fittings are cross broken from size 483 mm and above, or beaded on all sizes.



# ASSEMBLY INSTRUCTIONS

## Description

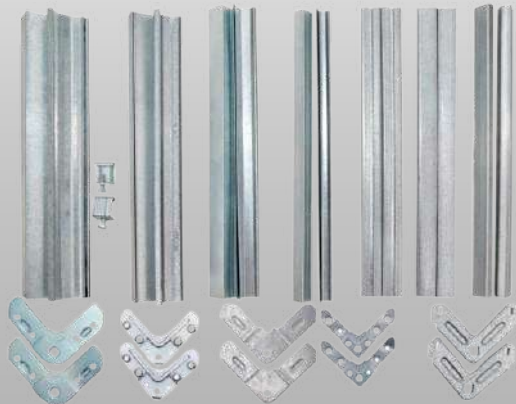
Pro-Duct's Rectangular Duct and Fittings must be assembled according to these instructions:

## Before Assembly

The duct must be free from dirt.

## Assembly of Instructions:

- Only use undamaged Pro-Duct rectangular duct and fittings.
- Apply a continuous gasket to effectively seal flanges and corners.
- Fasten the duct and fitting together with bolts and nuts at four corners.
- Mating flanges shall be locked together by duct clamps spaced at centers not exceeding 200mm.



The following number of duct clamps is recommended for the respective dimensions:

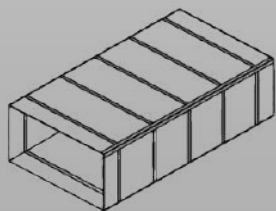
Duct Dimension mm	Number
0-200	0
250-400	1
450-600	2
650-800	3
850-1000	4
1500-1200	5
1250-1400	6
1450-1600	7
1650-1800	8
1850-2000	9
2050-2200	10

# LONGITUDINAL SEAMS

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## Double Corner Seam

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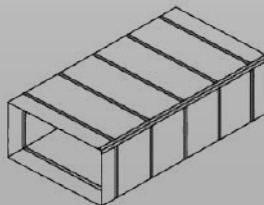
\* Up to 20 Gauge




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## Pittsburgh Lock

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\* 18 Gauge & Up

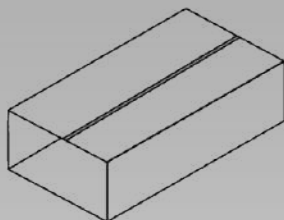



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## Grooved Seam

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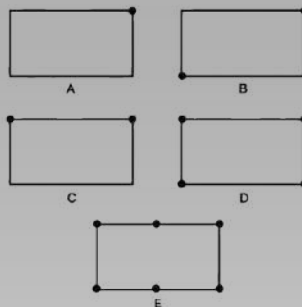
For Ducts Length  $L > 1200$  mm




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## Seam Location

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Seam Location

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

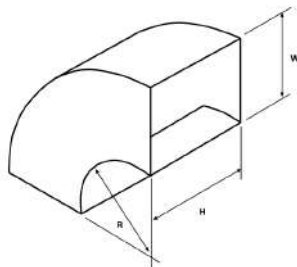
# RECTANGULAR FITTINGS

## RADIUS BEND

RADIUS BEND WITHOUT SPLITTER VANES

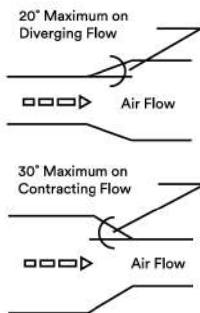
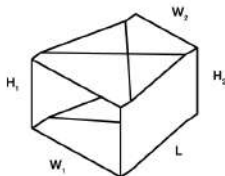


WHERE THE THROAT RADIUS IS EQUAL TO WIDTH ( $R = W$ ).



## REDUCER

REDUCER

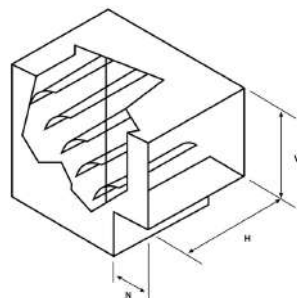


## SQUARE THROAT BEND WITH TURNING VANES

SQUARE THROAT WITH TURNING VANES



STANDARD SQUARE THROAT LENGTH (N): 100 MM

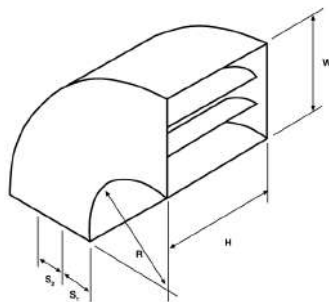


# RECTANGULAR FITTINGS

## RADIUS BEND WITH SPLITTER VANES

RADIUS BEND WITH SPLITTER VANES

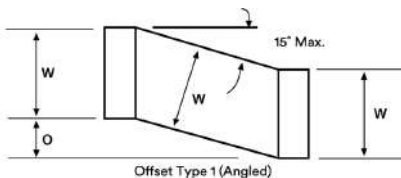
WHERE THE THROAT  
RADIUS IS LESS THAN  
THE WIDTH ( $R < W$ )



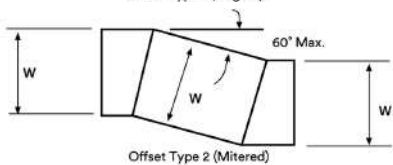
## OFFSET

OFFSET

Type 1

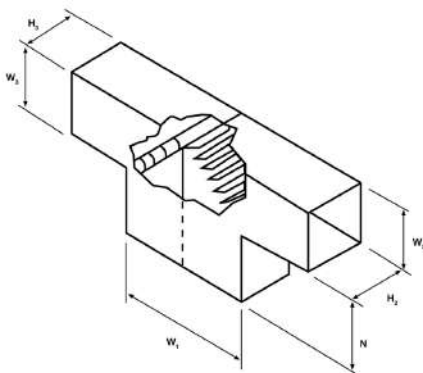


type 2



## TEE

TEE

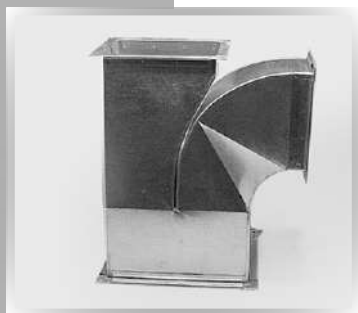
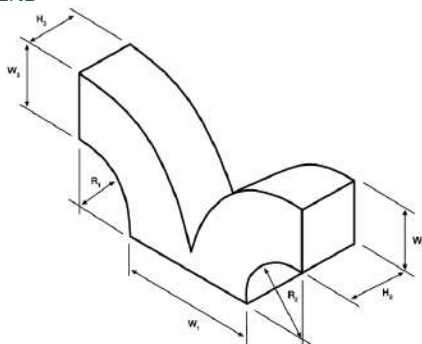


# RECTANGULAR FITTINGS



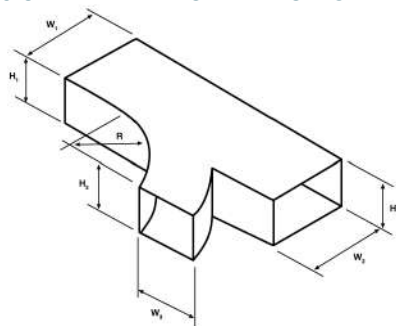
## SPLIT BEND

SPLIT BEND



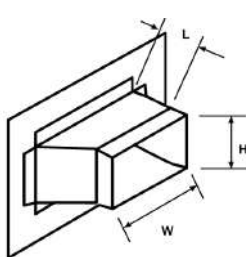
## R-FITTING

R-FITTING OR PARALLEL FLOW BRANCHES

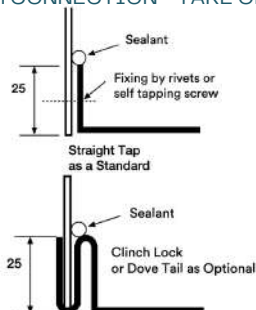


## BRANCH CONNECTION - TAKE OFF

45° RECTANGULAR BRANCH CONNECTION - TAKE OF



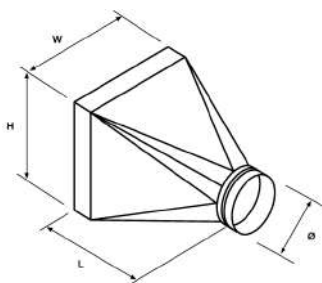
$L = \frac{1}{4} W$ , Min. 100 mm



# RECTANGULAR FITTINGS

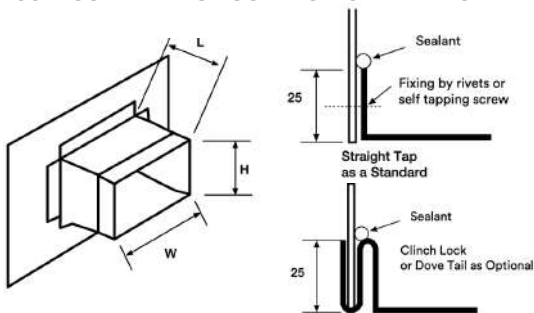
## RECTANGULAR TO ROUND TRANSITION

RECTANGULAR TO ROUND TRANSITION



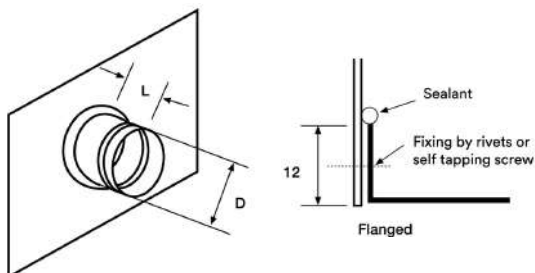
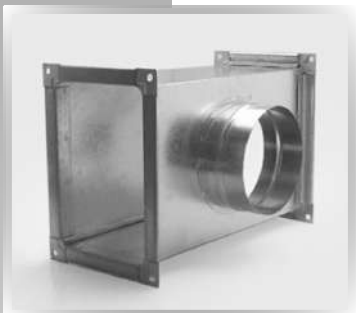
## BRANCH CONNECTION - TAKE OFF

90° ROUND BRANCH CONNECTION - TAKE OFF

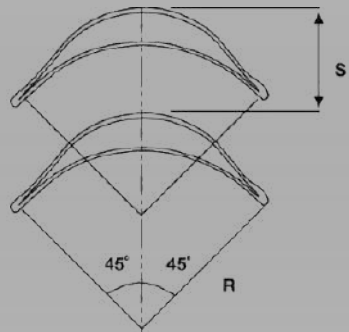
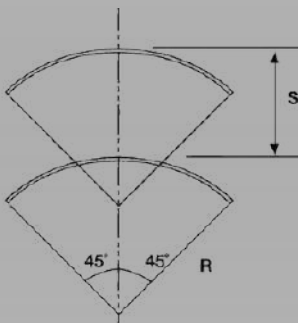
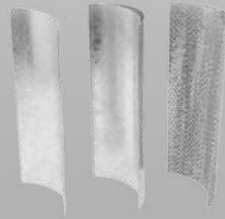
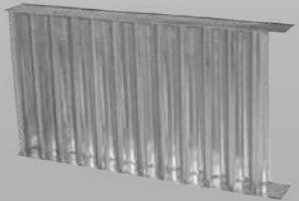


## BRANCH CONNECTION - TAKE OFF

90° ROUND BRANCH CONNECTION - TAKE OFF [FLANGED]



# TURNING VANES



Duct Size	Single Vane Schedule			
	Type	R	S	Ga
900-0	Small	50	38	24
900 Up	Large	115	83	22

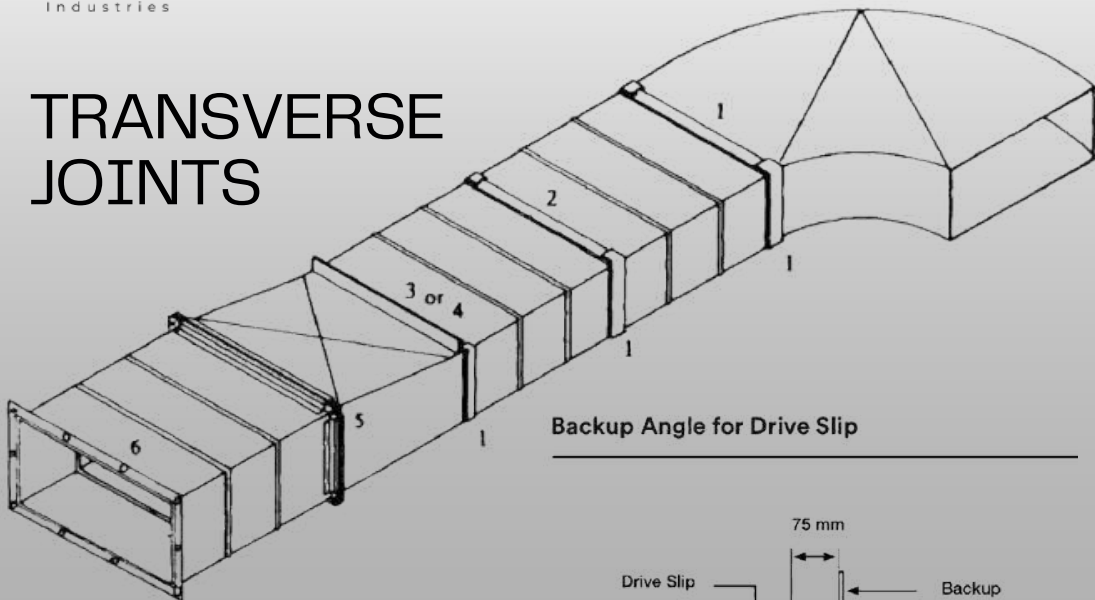
\* 1500 Up Segmented

Duct Size	Double Vane Schedule			
	Type	R	S	Ga
1000-0	Small	50	54	26
1000 Up	Large	115	83	24

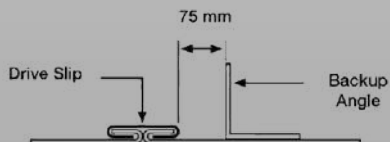
\* 1500 Up Segmented



# TRANSVERSE JOINTS



**Backup Angle for Drive Slip**



**Drive Slip & Hemmed "S" Slip**



Drive Slip

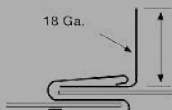
1



Hemmed "S" Slip

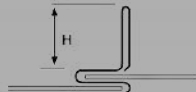
2

**Reinforced "S" Slip & Standing S**



Reinforced "S" Slip

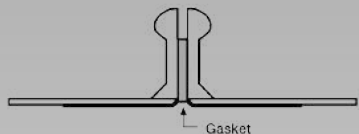
3



Standing S

4

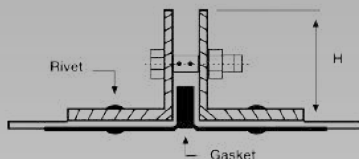
**Slide on Flange: SAF - 30**



Flange - SAF - 30

5

**Companion Angles**

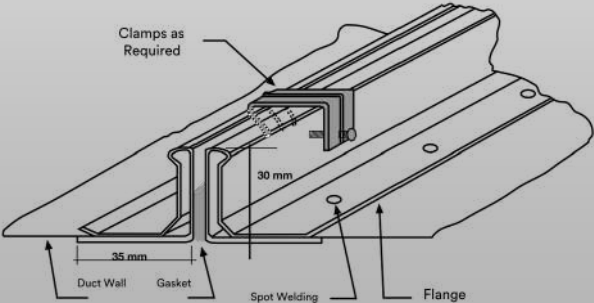


Companion Angles

6

# DUCTWORK CONSTRUCTION SCHEDULE

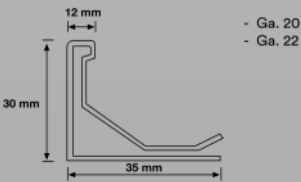
## Flange Joint System



### Slide on Flange



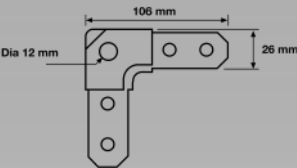
### Dimensions



### Corner Piece



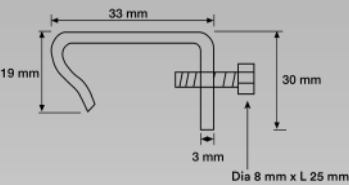
### Dimensions



### Clamp

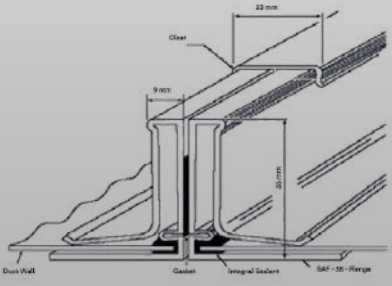


### Dimensions



# DUCTWORK CONSTRUCTION SCHEDULE

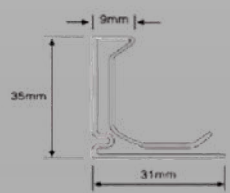
## Flange Joint System



### Slide on Flange



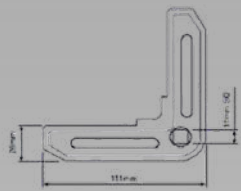
### Dimensions



### Corner Piece: SACP - 35



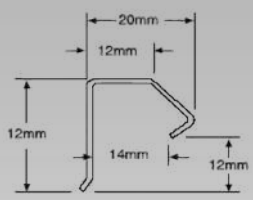
### Dimensions



### Cleat



### Dimensions





# DUCTWORK CONSTRUCTION SCHEDULE

**Table 1-1: 2” W.G. Pressure Class as per SMACNA 2005 Third Edition**

Maximum Duct Dimension	U.S. Gauge	Longitudinal Seams	Intermediate Reinforcement	Transverse Connections
0 - 457	26	Double Corner Seam	Not Required	Slide on Flange (SAF-20/25/30/35)
458 - 914	24	Double Corner Seam	Not Required	Slide on Flange (SAF-30/35)
915 - 1219	22	Double Corner Seam	Not Required	Slide on Flange (SAF-30/35)
1220 - 1524	20	Double Corner Seam	Not Required	Slide on Flange (SAF-30/35)
1525 - 1829	18	Pittsburgh Lock Seam	Not Required	Slide on Flange (SAF-40/45)
1830 - 2438	18	Pittsburgh Lock Seam	40x40x4 mm Angle @ 600 mm max. c-c	Slide on Flange (SAF-40/45)
2439 - 2743	18	Pittsburgh Lock Seam	50x50x5 mm Angle @ 600 mm max. c-c	Companion Angle 50x50x5 mm
2744 - 3048	18	Pittsburgh Lock Seam	50x50x5 mm Angle @ 600 mm max. c-c	Companion Angle 50x50x5 mm

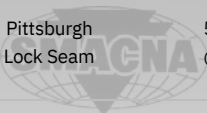




# DUCTWORK CONSTRUCTION SCHEDULE

**Table 1-2: 2” W.G. Pressure Class as per SMACNA 2005 Third Edition**

Maximum Duct Dimension	U.S. Gauge	Longitudinal Seams	Intermediate Reinforcement	Transverse Connections
0 - 305	26	Double Corner Seam	Not Required	Hemmed “S” Slip Drive Slip (24 Ga.)
306 - 457	26	Double Corner Seam	Not Required	Slide on Flange (SAF-20/25/30/35)
458 - 914	24	Double Corner Seam	Not Required	Slide on Flange (SAF-30/35)
915 - 1219	22	Double Corner Seam	Not Required	Slide on Flange (SAF-30/35)
1220 - 1524	20	Double Corner Seam	Not Required	Slide on Flange (SAF-30/35)
1525 - 1829	18	Pittsburgh Lock Seam	Not Required	Slide on Flange (SAF-40/45)
1830 - 2438	18	Pittsburgh Lock Seam	40x40x4 mm Angle @ 600 mm max. c-c	Slide on Flange (SAF-40/45)
2439 - 2743	18	Pittsburgh Lock Seam	50x50x5 mm Angle @ 600 mm max. c-c	Companion Angle 50x50x5 mm
2744-3048	18	Pittsburgh Lock Seam	50x50x5 mm Angle @ 600 mm max. c-c	Companion Angle 50x50x5 mm





# DUCTWORK CONSTRUCTION SCHEDULE

**Table 1-3: 2” W.G. Pressure Class as per SMACNA 2005 Third Edition**

Maximum Duct Dimension	U.S. Gauge	Longitudinal Seams	Intermediate Reinforcement	Transverse Connections
0 - 305	26	Double Corner Seam	Not Required	Hemmed “S” Slip Drive Slip (24 Ga.)
306 - 457	26	Double Corner Seam	Not Required	Reinforced “S” Slip with 25x25x16 Ga. Drive Slip (24 Ga.)
458 - 914	24	Double Corner Seam	Not Required	Slide on Flange (SAF-30/35)
915 - 1219	22	Double Corner Seam	Not Required	Slide on Flange (SAF-30/35)
1220 - 1524	20	Double Corner Seam	Not Required	Slide on Flange (SAF-30/35)
1525 - 1829	18	Pittsburgh Lock Seam	Not Required	Slide on Flange (SAF-40/45)
1830 - 2438	18	Pittsburgh Lock Seam	40x40x4 mm Angle @ 600 mm max. c-c	Slide on Flange (SAF-40/45)
2439 - 2743	18	Pittsburgh Lock Seam	50x50x5 mm Angle @ 600 mm max. c-c	Companion Angle 50x50x5 mm
2744-3048	18	Pittsburgh Lock Seam	50x50x5 mm Angle @ 600 mm max. c-c	Companion Angle 50x50x5 mm

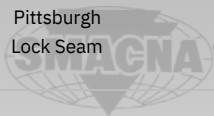




# DUCTWORK CONSTRUCTION SCHEDULE

**Table 1-4: 2” W.G. Pressure Class as per SMACNA 2005 Third Edition**

Maximum Duct Dimension	U.S. Gauge	Longitudinal Seams	Intermediate Reinforcement	Transverse Connections
0 - 457	26	Double Corner Seam	Not Required	Companion Angle 30x30x3 mm
458 - 914	24	Double Corner Seam	Not Required	Companion Angle 30x30x3 mm
915 - 1067	22	Double Corner Seam	Not Required	Companion Angle 30x30x3 mm
1068 - 1219	22	Double Corner Seam	Not Required	Companion Angle 40x40x4 mm
1220 - 1524	20	Double Corner Seam	Not Required	Companion Angle 40x40x4 mm
1525 - 2134	18	Pittsburgh Lock Seam	Not Required	Companion Angle 50x50x5 mm
2135 - 2438	18	Pittsburgh Lock Seam	Not Required	Companion Angle 50x50x5 mm
2439 - 2743	18	Pittsburgh Lock Seam	50x50x5 mm Angle @ 600 mm max. c-c	Companion Angle 50x50x5 mm
2744 - 3048	18	Pittsburgh Lock Seam	50x50x5 mm Angle @ 600 mm max. c-c	Companion Angle 50x50x5 mm





# DUCTWORK CONSTRUCTION SCHEDULE

**Table 2-1: 3” W.G. Pressure Class as per SMACNA 2005 Third Edition**

Maximum Duct Dimension	U.S. Gauge	Longitudinal Seams	Intermediate Reinforcement	Transverse Connections
0 - 457	24	Double Corner Seam	Not Required	Slide on Flange (SAF-20/25/30/35)
458 - 762	24	Double Corner Seam	Not Required	Slide on Flange (SAF-30/35)
763 - 1067	22	Double Corner Seam	Not Required	Slide on Flange (SAF-30/35)
1068 - 1219	20	Double Corner Seam	Not Required	Slide on Flange (SAF-30/35)
1220 - 1829	18	Pittsburgh Lock Seam	Not Required	Slide on Flange (SAF-40/45)
1830 - 2438	18	Pittsburgh Lock Seam	40x40x4 mm Angle @ 600 mm max. c-c	Slide on Flange (SAF-40/45)
2439 - 2743	18	Pittsburgh Lock Seam	50x50x5 mm Angle @ 600 mm max. c-c	Companion Angle 50x50x5 mm
2744 - 3048	18	Pittsburgh Lock Seam	50x50x5 mm Angle @ 600 mm max. c-c	Companion Angle 50x50x5 mm



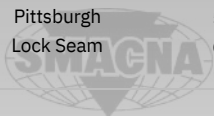




# DUCTWORK CONSTRUCTION SCHEDULE

**Table 2-2: 3” W.G. Pressure Class as per SMACNA 2005 Third Edition**

Maximum Duct Dimension	U.S. Gauge	Longitudinal Seams	Intermediate Reinforcement	Transverse Connections
0 - 305	24	Double Corner Seam	Not Required	Hemmed “S” Slip Drive Slip (24 Ga.)
306 - 457	24	Double Corner Seam	Not Required	Slide on Flange (SAF-20/25/30/35)
458 - 762	24	Double Corner Seam	Not Required	Slide on Flange (SAF-30/35)
763 - 1067	22	Double Corner Seam	Not Required	Slide on Flange (SAF-30/35)
1068 - 1219	20	Double Corner Seam	Not Required	Slide on Flange (SAF-30/35)
1220 - 1829	18	Pittsburgh Lock Seam	Not Required	Slide on Flange (SAF-40/45)
1830 - 2438	18	Pittsburgh Lock Seam	40x40x4 mm Angle @ 600 mm max. c-c	Slide on Flange (SAF-40/45)
2439 - 2743	18	Pittsburgh Lock Seam	50x50x5 mm Angle @ 600 mm max. c-c	Companion Angle 50x50x5 mm
2744 - 3048	18	Pittsburgh Lock Seam	50x50x5 mm Angle @ 600 mm max. c-c	Companion Angle 50x50x5 mm





# DUCTWORK CONSTRUCTION SCHEDULE

**Table 2-3: 3” W.G. Pressure Class as per SMACNA 2005 Third Edition**

Maximum Duct Dimension	U.S. Gauge	Longitudinal Seams	Intermediate Reinforcement	Transverse Connections
0 - 305	24	Double Corner Seam	Not Required	Hemmed “S” Slip Drive Slip (24 Ga.)
306 - 457	24	Double Corner Seam	Not Required	Reinforced “S” Slip with 25x25x16 Ga. Drive Slip (24 Ga.)
458 - 762	24	Double Corner Seam	Not Required	Slide on Flange (SAF-30/35)
763 - 1067	22	Double Corner Seam	Not Required	Slide on Flange (SAF-30/35)
1068 - 1219	20	Double Corner Seam	Not Required	Slide on Flange (SAF-30/35)
1220 - 1829	18	Pittsburgh Lock Seam	Not Required	Slide on Flange (SAF-40/45)
1830 - 2438	18	Pittsburgh Lock Seam	40x40x4 mm Angle @ 600 mm max. c-c	Slide on Flange (SAF-40/45)
2439 - 2743	18	Pittsburgh Lock Seam	50x50x5 mm Angle @ 600 mm max. c-c	Companion Angle 50x50x5 mm
2744-3048	18	Pittsburgh Lock Seam	50x50x5 mm Angle @ 600 mm max. c-c	Companion Angle 50x50x5 mm

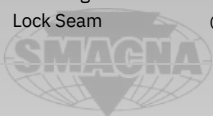




# DUCTWORK CONSTRUCTION SCHEDULE

Table 2-4: 3” W.G. Pressure Class as per SMACNA 2005 Third Edition

Maximum Duct Dimension	U.S. Gauge	Longitudinal Seams	Intermediate Reinforcement	Transverse Connections
0 - 305	24	Double Corner Seam	Not Required	Companion Angle 30x30x3 mm
306 - 762	24	Double Corner Seam	Not Required	Companion Angle 30x30x3 mm
763 - 914	22	Double Corner Seam	Not Required	Companion Angle 30x30x3 mm
915 - 1067	22	Double Corner Seam	Not Required	Companion Angle 40x40x4 mm
1068 - 1219	20	Double Corner Seam	Not Required	Companion Angle 40x40x4 mm
1220 - 1829	18	Pittsburgh Lock Seam	Not Required	Companion Angle 50x50x5 mm
1830 - 2438	18	Pittsburgh Lock Seam	50x50x5 mm Angle @ 600 mm max. c-c	Companion Angle 50x50x5 mm
2439 - 2743	18	Pittsburgh Lock Seam	50x50x5 mm Angle @ 600 mm max. c-c	Companion Angle 50x50x5 mm
2744 - 3048	18	Pittsburgh Lock Seam	50x50x5 mm Angle @ 600 mm max. c-c	Companion Angle 50x50x5 mm

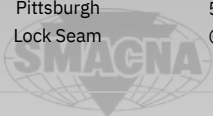




# DUCTWORK CONSTRUCTION SCHEDULE

**Table 3-1: 4” W.G. Pressure Class as per SMACNA 2005 Third Edition**

Maximum Duct Dimension	U.S. Gauge	Longitudinal Seams	Intermediate Reinforcement	Transverse Connections
0 - 457	24	Double Corner Seam	Not Required	Slide on Flange (SAF-20/25/30/35)
458 - 762	24	Double Corner Seam	Not Required	Slide on Flange (SAF-30/35)
763 - 914	22	Double Corner Seam	Not Required	Slide on Flange (SAF-30/35)
915 - 1067	20	Double Corner Seam	Not Required	Slide on Flange (SAF-30/35)
1068 - 1524	18	Pittsburgh Lock Seam	Not Required	Slide on Flange (SAF-40/45)
1525 - 2134	18	Pittsburgh Lock Seam	40x40x4 mm Angle @ 600 mm max. c-c	Slide on Flange (SAF-40/45)
2135 - 2438	18	Pittsburgh Lock Seam	50x50x5 mm Angle @ 600 mm max. c-c	Companion Angle 50x50x5 mm
2439 - 2743	18	Pittsburgh Lock Seam	50x50x5 mm Angle @ 600 mm max. c-c + 1 Tie Rod	Companion Angle 50x50x5 mm + 1 Tie Rod
2744-3048	18	Pittsburgh Lock Seam	50x50x5 mm Angle @ 600 mm max. c-c + 1 Tie Rod	Companion Angle 50x50x5 mm + 1 Tie Rod

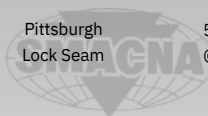




# DUCTWORK CONSTRUCTION SCHEDULE

**Table 3-2: 4" W.G. Pressure Class as per SMACNA 2005 Third Edition**

Maximum Duct Dimension	U.S. Gauge	Longitudinal Seams	Intermediate Reinforcement	Transverse Connections
0 - 203	24	Double Corner Seam	Not Required	Hemmed "S" Slip Drive Slip (24 Ga.)
204 - 457	24	Double Corner Seam	Not Required	Slide on Flange (SAF-20/25/30/35)
458 - 762	24	Double Corner Seam	Not Required	Slide on Flange (SAF-30/35)
763 - 914	22	Double Corner Seam	Not Required	Slide on Flange (SAF-30/35)
915 - 1067	20	Double Corner Seam	Not Required	Slide on Flange (SAF-30/35)
1068 - 1524	18	Pittsburgh Lock Seam	Not Required	Slide on Flange (SAF-40/45)
1525 - 2134	18	Pittsburgh Lock Seam	40x40x4 mm Angle @ 600 mm max. c-c	Slide on Flange (SAF-40/45)
2135 - 2438	18	Pittsburgh Lock Seam	50x50x5 mm Angle @ 600 mm max. c-c	Companion Angle 50x50x5 mm
2439 - 2743	18	Pittsburgh Lock Seam	50x50x5 mm Angle @ 600 mm max. c-c + 1 Tie Rod	Companion Angle 50x50x5 mm + 1 Tie Rod
2744 - 3048	18	Pittsburgh Lock Seam	50x50x5 mm Angle @ 600 mm max. c-c + 1 Tie Rod	Companion Angle 50x50x5 mm + 1 Tie Rod

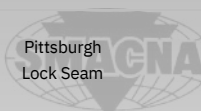




## DUCTWORK CONSTRUCTION SCHEDULE

**Table 3-3: 4" W.G. Pressure Class as per SMACNA 2005 Third Edition**

Maximum Duct Dimension	U.S. Gauge	Longitudinal Seams	Intermediate Reinforcement	Transverse Connections
0 - 305	24	Double Corner Seam	Not Required	Reinforced "S" Slip with 25x25x16 Ga. Drive Slip (24 Ga.)
306 - 457	24	Double Corner Seam	Not Required	Slide on Flange (SAF-20/25/30/35)
458 - 762	24	Double Corner Seam	Not Required	Slide on Flange (SAF-30/35)
763 - 914	22	Double Corner Seam	Not Required	Slide on Flange (SAF-30/35)
915 - 1067	20	Double Corner Seam	Not Required	Slide on Flange (SAF-30/35)
1068 - 1524	18	Pittsburgh Lock Seam	Not Required	Slide on Flange (SAF-40/45)
1525 - 2134	18	Pittsburgh Lock Seam	40x40x4 mm Angle @ 600 mm max. c-c	Slide on Flange (SAF-40/45)
2135 - 2438	18	Pittsburgh Lock Seam	50x50x5 mm Angle @ 600 mm max. c-c	Companion Angle 50x50x5 mm
2439 - 2743	18	Pittsburgh Lock Seam	50x50x5 mm Angle @ 600 mm max. c-c + 1 Tie Rod	Companion Angle 50x50x5 mm + 1 Tie Rod
2744 - 3048	18	Pittsburgh Lock Seam	50x50x5 mm Angle @ 600 mm max. c-c + 1 Tie Rod	Companion Angle 50x50x5 mm + 1 Tie Rod





# DUCTWORK CONSTRUCTION SCHEDULE

**Table 3-4: 4” W.G. Pressure Class as per SMACNA 2005 Third Edition**

Maximum Duct Dimension	U.S. Gauge	Longitudinal Seams	Intermediate Reinforcement	Transverse Connections
0 - 406	24	Double Corner Seam	Not Required	Companion Angle 30x30x3 mm
407 - 762	24	Double Corner Seam	Not Required	Companion Angle 30x30x3 mm
763 - 914	22	Double Corner Seam	Not Required	Companion Angle 40x40x4 mm
915 - 1067	20	Double Corner Seam	Not Required	Companion Angle 40x40x4 mm
1068 - 1524	18	Pittsburgh Lock Seam	Not Required	Companion Angle 50x50x5 mm
1525 - 2438	18	Pittsburgh Lock Seam	50x50x5 mm Angle @ 600 mm max. c-c	Companion Angle 50x50x5 mm
2439 - 2743	18	Pittsburgh Lock Seam	50x50x5 mm Angle @ 600 mm max. c-c + 1 Tie Rod	Companion Angle 50x50x5 mm + 1 Tie Rod
2744-3048	18	Pittsburgh Lock Seam	50x50x5 mm Angle @ 600 mm max. c-c + 1 Tie Rod	Companion Angle 50x50x5 mm + 1 Tie Rod



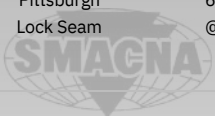




# DUCTWORK CONSTRUCTION SCHEDULE

Table 4-1: 6” W.G. Pressure Class as per SMACNA 2005 Third Edition

Maximum Duct Dimension	U.S. Gauge	Longitudinal Seams	Intermediate Reinforcement	Transverse Connections
0 - 457	24	Double Corner Seam	Not Required	Slide on Flange (SAF-20/25/30/35)
458 - 762	22	Double Corner Seam	Not Required	Slide on Flange (SAF-30/35)
763 - 914	20	Double Corner Seam	Not Required	Slide on Flange (SAF-30/35)
915 - 1219	18	Pittsburgh Lock Seam	Not Required	Slide on Flange (SAF-40/45)
1220 - 1829	18	Pittsburgh Lock Seam	40x40x4 mm Angle @ 600 mm max. c-c	Slide on Flange (SAF-40/45)
1830 - 2134	18	Pittsburgh Lock Seam	50x50x5 mm Angle @ 600 mm max. c-c	Companion Angle 50x50x5 mm
2135 - 2438	18	Pittsburgh Lock Seam	50x50x5 mm Angle @ 600 mm max. c-c + 1 Tie Rod	Companion Angle 50x50x5 mm + 1 Tie Rod
2439 - 2743	18	Pittsburgh Lock Seam	50x50x5 mm Angle @ 600 mm max. c-c + 1 Tie Rod	Companion Angle 50x50x5 mm + 1 TIE Rod
2744 - 3048	18	Pittsburgh Lock Seam	60x60x6 mm Angle @ 600 mm max. c-c + 1 Tie Rod	Companion Angle 60x60x6 mm + 1 Tie Rod

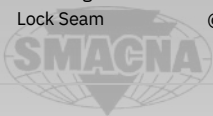




# DUCTWORK CONSTRUCTION SCHEDULE

**Table 4-2: 6” W.G. Pressure Class as per SMACNA 2005 Third Edition**

Maximum Duct Dimension	U.S. Gauge	Longitudinal Seams	Intermediate Reinforcement	Transverse Connections
0 - 559	24	Double Corner Seam	Not Required	Companion Angle 30x30x3 mm
560 - 660	22	Double Corner Seam	Not Required	Companion Angle 30x30x3 mm
661 - 762	22	Double Corner Seam	Not Required	Companion Angle 40x40x4 mm
763 - 914	20	Double Corner Seam	Not Required	Companion Angle 40x40x4 mm
915 - 1219	18	Pittsburgh Lock Seam	Not Required	Companion Angle 50x50x5 mm
1220 - 1524	18	Pittsburgh Lock Seam	50x50x5 mm Angle @ 600 mm max. c-c	Companion Angle 50x50x5 mm
1525 - 2134	18	Pittsburgh Lock Seam	50x50x5 mm Angle @ 600 mm max. c-c	Companion Angle 50x50x5 mm
2135 - 2743	18	Pittsburgh Lock Seam	50x50x5 mm Angle @ 600 mm max. c-c + 1 Tie Rod	Companion Angle 50x50x5 mm + 1 Tie Rod
2744 - 3048	18	Pittsburgh Lock Seam	60x60x6 mm Angle @ 600 mm max. c-c + 1 Tie Rod	Companion Angle 60x60x6 mm + 1 Tie Rod

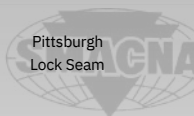




# DUCTWORK CONSTRUCTION SCHEDULE

**Table 5-1: 10" W.G. Pressure Class as per SMACNA 2005 Third Edition**

Maximum Duct Dimension	U.S. Gauge	Longitudinal Seams	Intermediate Reinforcement	Transverse Connections
0 - 305	24	Double Corner Seam	Not Required	Slide on Flange (SAF-20/25/30/35)
306 - 356	22	Double Corner Seam	Not Required	Slide on Flange (SAF-20/25/30/35)
357 - 457	20	Double Corner Seam	Not Required	Slide on Flange (SAF-30/35)
458 - 660	20	Double Corner Seam	Not Required	Slide on Flange (SAF-30/35)
661 - 711	18	Pittsburgh Lock Seam	Not Required	Slide on Flange (SAF-30/35)
712 - 1067	18	Pittsburgh Lock Seam	Not Required	Slide on Flange (SAF-40/45)
1068 - 1372	18	Pittsburgh Lock Seam	40x40x4 mm Angle @ 600 mm max. c-c	Slide on Flange (SAF-40/45)
1373 - 1524	18	Pittsburgh Lock Seam	50x50x5 mm Angle @ 600 mm max. c-c	Companion Angle 50x50x5 mm
1525 - 2134	18	Pittsburgh Lock Seam	50x50x5 mm Angle @ 600 mm max. c-c + 1 Tie Rod	Companion Angle 50x50x5 mm + 1 Tie Rod
2135 - 2743	16	Pittsburgh Lock Seam	60x60x6 mm Angle @ 600 mm max. c-c + 1 Tie Rod	Companion Angle 60x60x6 mm + 1 Tie Rod
2744 - 3048	16	Pittsburgh Lock Seam	60x60x6 mm Angle @ 600 mm max. c-c + 1 Tie Rod	Companion Angle 60x60x6 mm + 1 Tie Rod





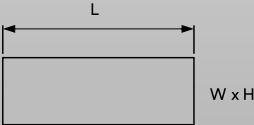
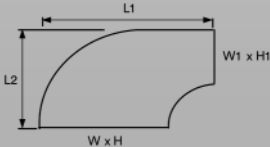
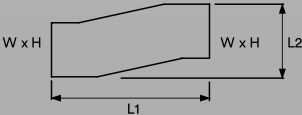
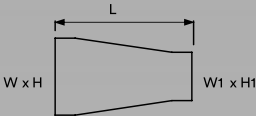
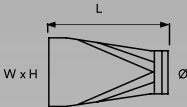
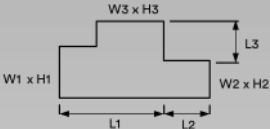
# DUCTWORK CONSTRUCTION SCHEDULE

Table 5-2: 10” W.G. Pressure Class as per SMACNA 2005 Third Edition

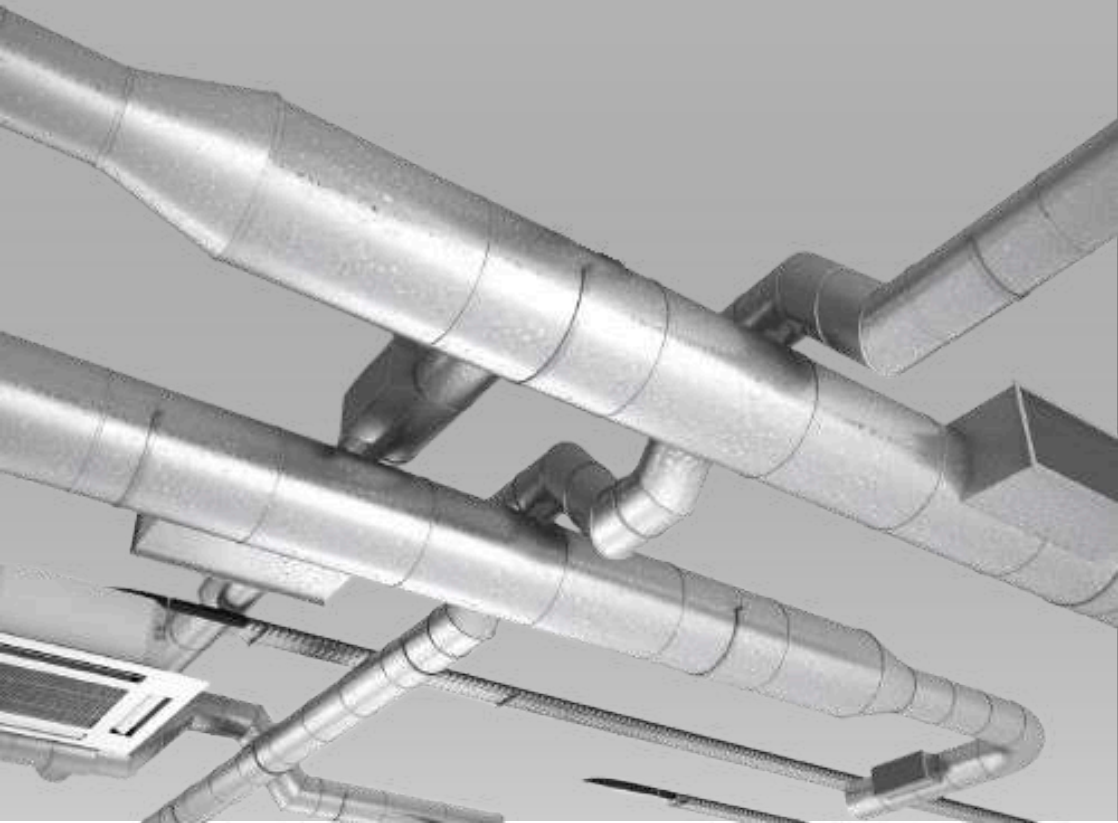
Maximum Duct Dimension	U.S. Gauge	Longitudinal Seams	Intermediate Reinforcement	Transverse Connections
0 - 305	24	Double Corner Seam	Not Required	Companion Angle 30x30x3 mm
306 - 356	22	Double Corner Seam	Not Required	Companion Angle 30x30x3 mm
357 - 508	20	Double Corner Seam	Not Required	Companion Angle 30x30x3 mm
509 - 660	20	Double Corner Seam	Not Required	Companion Angle 40x40x4 mm
661 - 711	18	Pittsburgh Lock Seam	Not Required	Companion Angle 40x40x4 mm
712 - 1067	18	Pittsburgh Lock Seam	Not Required	Companion Angle 50x50x5 mm
1068 - 1524	18	Pittsburgh Lock Seam	50x50x5 mm Angle @ 600 mm max. c-c	Companion Angle 50x50x5 mm
1525 - 2134	18	Pittsburgh Lock Seam	50x50x5 mm Angle @ 600 mm max. c-c + 1 Tie Rod	Companion Angle 50x50x5 mm + 1 Tie Rod
2135 - 3048	16	Pittsburgh Lock Seam	60x60x6 mm Angle @ 600 mm max. c-c + 1 Tie Rod	Companion Angle 60x60x6 mm + 1 Tie Rod



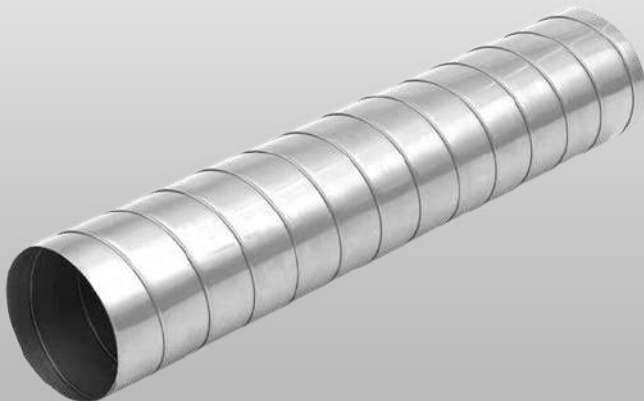
## METHOD OF SURFACE AREA CALCULATION

Description	Formula	Detail
<b>Straight Duct</b>	$A = 2 (W+H) L$	
<b>Elbow</b>	$A = 2 (W+H)(L1+L2)$	
<b>Offset</b>	$A = 2 (W+H)(L1+L2)$	
<b>Reducer</b>	$A = 2 (W+H) L$	
<b>Transition</b>	$A = 2 (W+H) L$	
<b>Tee</b>	$A = 2 (W1+H1) L1$ $+ 2 (W2+H2) L2$ $+ 2 (W3 + H3) L3$	

# ROUND DUCT & FITTINGS



# SPIRAL DUCT



## Description

Pro-Duct must be assembled according to these instructions:

### Before Assembly

The duct must be free from dirt.

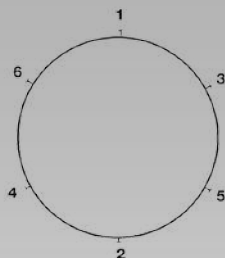
Shortening Ducts Ducts must be cut at right angles and carefully deburred. Assembly of Fittings

- Check that ducts and fittings are undamaged.
- Push the fittings into the duct right to the stop. Turning the fitting a little makes insertion easier.
- Fasten the fittings to the duct with self-tapping screws or pop rivets.

The following numbers and dimensions of steel screws and pop rivets are recommended:

Ø <sub>d</sub> mm	Min. Diameter mm	Number
63 - 125	3.2	2
140 - 250	3.2	3
280 - 630	3.2	4
710 - 1250	4.0	6
1400 - 1600	4.8	12

Distribute the screws or pop rivets evenly around the circumference. In the event of incorrect assembly, holes caused by screws or pop rivets must be sealed





# CONSTRUCTION STANDARDS

Table 1-1: Spiral Duct Wall Thickness Schedule (Positive Pressure)

Duct Diameter (mm)	+500 Pa (2” W.G.) Positive Pressure			Duct Diameter (mm)	+1000 Pa (4” W.G.) Positive Pressure			Duct Diameter (mm)	+2500 Pa (10” W.G.) Positive Pressure			Transvers Joints
	Spiral Seam		Longitudinal Seam Gauge		Spiral Seam		Longitudinal Seam Gauge		Spiral Seam		Longitudinal Seam Gauge	
	Gauge	Profile			Gauge	Profile			Gauge	Profile		
051 - 497	26	KG	24	051 - 497	26	KG	24	051 - 497	26	KG	24	Coupling
500 - 608	26	PKG	24	500 - 608	26	PKG	24	500 - 608	26	PKG	24	Coupling
623 - 900	24	PKG	22	623 - 900	24	PKG	22	623 - 900	24	PKG	22	Coupling
936 - 1000	24	PKG	20	936 - 1000	24	PKG	20	936 - 1000	24	PKG	20	Coupling
1020 - 1062	24	PKG	20	1020 - 1062	24	PKG	20	1020 - 1062	24	PKG	20	Flange @ 6m
1100 - 1250	22	PKG	20	1100 - 1250	22	PKG	20	1100 - 1250	22	PKG	20	Flange @ 6m
1300 - 1700	22	PKG	18	1300 - 1700	22	PKG	18	1300 - 1700	22	PKG	18	Flange @ 6m
1750 - 2500	18	TR	18	1750 - 2500	18	TR	18	1750 - 2500	18	TR	18	Flange @ 3m

- Round fittings shall have a wall thickness not less than specified for longitudinal seam ducts in above Table 1-1.
- Longitudinal seam ducts are continuously welded and supplied in 1 meter as standard length.
- The standard size of flange for ducts in Table 1-1 is 50x50x50mm angles.
- The above schedule meets the requirements of SMACNA HVAC Duct Construction Standards, Metal and Flexible, Third Edition 2005.

# CONSTRUCTION STANDARDS

**TABLE 1-2: SPIRAL DUCT WALL THICKNESS SCHEDULE (NEGATIVE PRESSURE)**

Duct Diameter (mm)	-500 Pa (2" W.G.) Negative Pressure			Duct Diameter (mm)	-1000 Pa (4" W.G.) Negative Pressure			Duct Diameter (mm)	-2500 Pa (10" W.G.) Negative Pressure			Transverse Joints
	Spiral Seam		Longitudinal Seam Gauge		Spiral Seam		Longitudinal Seam Gauge		Spiral Seam		Longitudinal Seam Gauge	
	Gauge	Profile			Gauge	Profile			Gauge	Profile		
051 - 305	26	KG	24	051 - 305	26	KG	24	051 - 180	26	KG	24	COUPLING
315 - 403	26	KG	24	315 - 403	24	KG	22	200 - 250	26	KG	24	COUPLING
418 - 497	24	KG	22	404 - 497	22	KG	20	280 - 305	24	KG	22	COUPLING
500 - 550	24	PKG	22	500 - 508	22	PKG	20	315 - 355	22	KG	20	COUPLING
552 - 900	24	PKG	22	518 - 1000	22	PKG	20	372 - 750	22	PKG	20	FLANGE @ 6M
936 - 1062	24	PKG	20	1020 - 1250	22	PKG	20	770 - 1000	20	PKG	20	FLANGE @ 6M
1100 - 1250	22	PKG	20	1300 - 1500	22	PKG	18	1020 - 1200	20	PKG	20	FLANGE @ 6M
1300 - 1700	22	PKG	18	1550 - 1700	20	PKG	18	1250 - 1700	20	PKG	18	FLANGE @ 6M
1750 - 1800	18	TRG	18	1750 - 1800	18	TRG	18	1750 - 1800	18	PKG	18	FLANGE @ 3M
1850 - 1900	18	TRG	18	1850 - 1900	18	TRG	18	1850 - 1900	18	TRG	18	FLANGE @ 3M
2000 - 2500	18	TRG	18	2000 - 2500	18	TRG	18	2000 - 2500	18	TRG	16	FLANGE @ 3M +1 REINF FOR 10"W.G.

- Round fittings shall have a wall thickness not less than specified for longitudinal seam ducts in above Table 1-2.
- Longitudinal seam ducts are continuously welded and supplied in 1 meter length.
- The above Schedule meets the requirements of SMACNA HVAC Duct Construction Standards Metal and Flexible, Third Edition 2005.

Consult SAFID for more details of flange transverse joints construction of ducts in above Table 1-2.

# CONSTRUCTION STANDARDS

**Table 1-3: Spiral Duct Wall Thickness Schedule (as per DW 144)**

Maximum Diameter (mm)	Spiral Duct	Longitudinal Seam Low+ Medium Pressure	Longitudinal Seam High Pressure	Fittings
205	0.6 mm	0.6 mm	0.8 mm	0.7 mm
206 - 510	0.8 mm	0.8 mm	0.8 mm	0.7 mm
511 - 630	0.8 mm	0.8 mm	1.0 mm	0.8 mm
631 - 762	0.8 mm	0.8 mm	1.0 mm	1.0 mm
763 - 913	0.8 mm	0.8 mm	1.2 mm	1.0 mm
914 - 1020	1.0 mm	1.0 mm*	1.2 mm*	1.0 mm
1021 - 1525	1.2 mm*	1.2 mm*	1.2 mm*	1.2 mm*

- Longitudinal seam ducts are continuously welded and supplied in 1 meter length.
- The above schedule meets all requirements of DW/144 specifications for sheet metal ductworks.

\*Spiral Ducts should be helically beaded (corrugated). Longitudinal ducts and fittings must be reinforced with angles. For more details on constructions schedule consult SAFID.

**Table 1-4: Spiral Duct Wall Thickness Schedule (Eurovent)**

Diameter (mm)	Operating Pressure	
	160 mm W.G. Max	250 mm W.G.Max
63 - 125	0.60	0.75
180 - 259	0.75	0.88
280 - 500	0.88	1.00
560 - 1000	1.00	1.13
1120 - 1400	1.13	1.25
1600 - 2000	1.13	-

- Circular fittings shall be one gauge heavier than the spiral ducts gauge in above Table 1-4.
- Corrugated ducts are not reflected in the above schedule.
- Longitudinal seam ducts should be one gauge heavier than spiral duct gauge and shall be continuously welded and supplied in 1 meter length.

# DIMENSIONS

Duct Diameter

Duct Diameter

SRG-A				
Ød mm	L1 m	Std/L2/M	Circumference πd / m	Area πr <sup>2</sup> / m <sup>2</sup>
80	3	6	0.251	0.005
100	3	6	0.314	0.008
125	3	6	0.393	0.012
150	3	6	0.471	0.018
180	3	6	0.566	0.025
200	3	6	0.628	0.005
225	3	6	0.707	0.025
250	3	6	0.786	0.031
315	3	6	0.990	0.078
350	3	6	1.100	0.096
400	3	6	1.257	0.126
450	3	6	1.414	0.159
500	3	6	1.571	0.196
550	3	6	1.728	0.238
600	3	6	1.885	0.283
630	3	6	1.979	0.312
650	3	6	2.042	0.332
700	3	6	2.199	0.385
750	3	6	2.356	0.442
800	3	6	2.513	0.503
850	3	6	2.670	0.567
900	3	6	2.828	0.636

SRG-A				
Ød mm	L1 m	Std/L2/M	Circumference πd / m	Area πr <sup>2</sup> / m <sup>2</sup>
950	3	6	2.985	0.709
1000	3	6	3.142	0.785
1100	3	6	3.456	0.950
1150	3	6	3.613	1.039
1200	3	6	3.770	1.131
1250	3	6	3.927	1.227
1300	3	6	4.084	1.327
1350	3	6	4.241	1.432
1400	3	6	4.398	1.540
1450	3	6	4.555	1.652
1500	3	6	4.712	1.767
1600	3	6	5.027	2.011
1700	3	6	5.3414	2.270
1800	3	6	5.655	2.545
1900	3	6	5.969	2.836
2000	3	6	6.284	3.142
2100	3	6	6.598	3.464
2200	3	6	6.912	3.464
2300	3	6	7.227	3.802
2400	3	6	7.541	4.524
2500	3	6	7.855	4.909

# DIMENSIONS

## Duct Diameter

SRG-B				
Ød mm	L1 m	Std/L2/M	Circumference $\pi d$ / m	Area $\pi r^2$ / m <sup>2</sup>
200	3	6	0.628	0.005
225	3	6	0.707	0.025
250	3	6	0.786	0.031
315	3	6	0.990	0.078
350	3	6	1.100	0.096
400	3	6	1.257	0.126
450	3	6	1.414	0.159
500	3	6	1.571	0.196
550	3	6	1.728	0.238
600	3	6	1.885	0.283
630	3	6	1.979	0.312
650	3	6	2.042	0.332
700	3	6	2.199	0.389
750	3	6	2.356	0.442
800	3	6	2.513	0.503
850	3	6	2.670	0.567
900	3	6	2.828	0.636
950	3	6	2.985	0.709
1000	3	6	3.142	0.785

## Duct Diameter

SRG-B				
Ød mm	L1 m	Std/L2/M	Circumference $\pi d$ / m	Area $\pi r^2$ / m <sup>2</sup>
1100	3	6	3.456	0.950
1150	3	6	3.613	1.039
1200	3	6	3.770	1.131
1250	3	6	3.927	1.227
1300	3	6	4.084	1.327
1350	3	6	4.241	1.431
1400	3	6	4.389	1.539
1450	3	6	4.555	1.651
1500	3	6	4.712	1.767
1600	3	6	5.027	2.011
1700	3	6	5.341	2.270
1800	3	6	5.655	2.545
1900	3	6	5.969	2.836
2000	3	6	6.284	3.142
2100	3	6	6.598	3.464
2200	3	6	6.912	3.464
2300	3	6	7.227	3.802
2400	3	6	7.541	4.524
2500	3	6	7.855	4.909

# DIMENSIONS

## Duct Diameter

SRG-C				
Ød mm	L1 m	Std/L2/M	Circumference πd / m	Area πr <sup>2</sup> / m <sup>2</sup>
315	3	6	0.990	0.078
350	3	6	1.100	0.096
400	3	6	1.257	0.126
450	3	6	1.414	0.159
500	3	6	1.571	0.196
550	3	6	1.728	0.238
600	3	6	1.885	0.283
630	3	6	1.979	0.312
650	3	6	2.042	0.332
700	3	6	2.199	0.385
750	3	6	2.356	0.442
800	3	6	2.513	0.503
850	3	6	2.670	0.567
900	3	6	2.828	0.636
950	3	6	2.985	0.709
1000	3	6	3.142	0.785
1100	3	6	3.456	0.950

## Duct Diameter

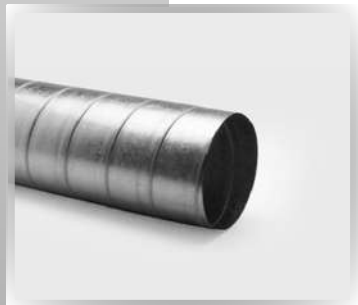
SRG-C				
Ød mm	L1 m	Std/L2/M	Circumference πd / m	Area πr <sup>2</sup> / m <sup>2</sup>
1150	3	6	3.613	1.039
1200	3	6	3.770	1.131
1250	3	6	3.927	1.227
1300	3	6	4.088	1.327
1350	3	6	4.241	1.431
1400	3	6	4.398	1.539
1500	3	6	4.712	1.767
1600	3	6	5.027	2.011
1700	3	6	5.3414	2.270
1800	3	6	5.655	2.545
1900	3	6	5.969	2.836
2000	3	6	6.284	3.142
2100	3	6	6.598	3.464
2200	3	6	6.912	3.464
2300	3	6	7.227	3.802
2400	3	6	7.541	4.524
2500	3	6	7.855	4.909

# WEIGHTS (KG/M)

Thickness Dia (mm)	Gauge	SRG-A, SRG-B, SRG-C				
		26	24	22	20	18
63		1.0				
80		1.3				
100		1.6	2.0			
112		1.8	2.3			
125		2.0	2.5			
140		2.2	2.8	3.4		
160		2.5	3.2	3.9		
180		2.8	3.7	4.4		
200		3.2	4.1	4.9	5.8	
224		3.5	4.5	5.5	6.5	
250		4.0	5.1	6.1	7.2	9.4
280		4.4	5.7	6.9	8.1	10.6
315		5.0	6.4	7.7	9.1	11.9
355		5.6	7.2	8.7	10.3	13.4
400		6.3	8.1	9.8	11.6	15.1
450		7.1	9.1	11.0	13.0	17.0
500		7.9	10.1	12.3	14.5	18.8
550		8.7	11.1	13.5	15.9	20.7
630		10.0	12.7	15.4	18.2	23.7
710				17.4	20.5	26.8
800				19.7	23.1	30.1
900				22.1	26.0	33.9
1000					28.9	37.7
1120					32.4	42.2
1250					36.2	47.1
1400						52.7
1600						60.3

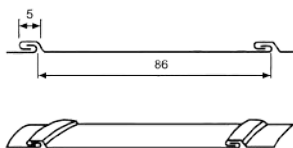


# SPIRAL STRAIGHT DUCT



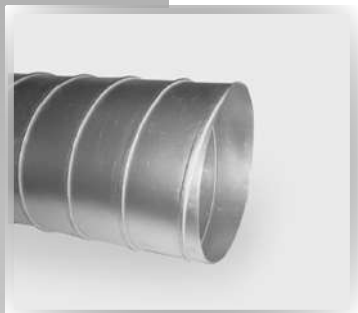
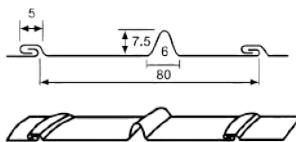
## SPIRAL DUCT

- SPIRALLY WOUND ROUND DUCT
- DIAMETER RANGE: 51 - 1600 MM
- THICKNESS RANGE: 26 - 18 GAUGE



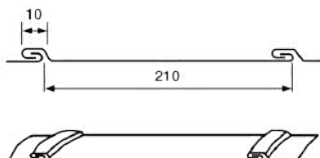
## SPIRAL DUCT

- SPIRALLY WOUND CORRUGATED ROUND DUCT
- DIAMETER RANGE: 160 - 1600 MM
- THICKNESS RANGE: 26 - 18 GAUGE



## SPIRAL DUCT

- SPIRALLY WOUND HEAVY DUTY ROUND DUCT
- DIAMETER RANGE: 315 - 3150 MM
- THICKNESS RANGE: 20 - 12 GAUGE

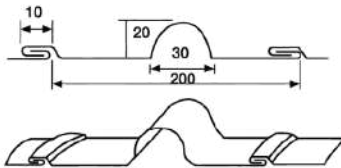


# SPIRAL STRAIGHT DUCT

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## SPIRAL DUCT

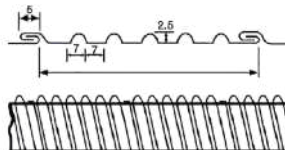
- SPIRALLY WOUND CORRUGATED HEAVY DUTY ROUND DUCT
- DIAMETER RANGE: 315 - 3150 MM
- THICKNESS RANGE: 20 - 12 GAUGE



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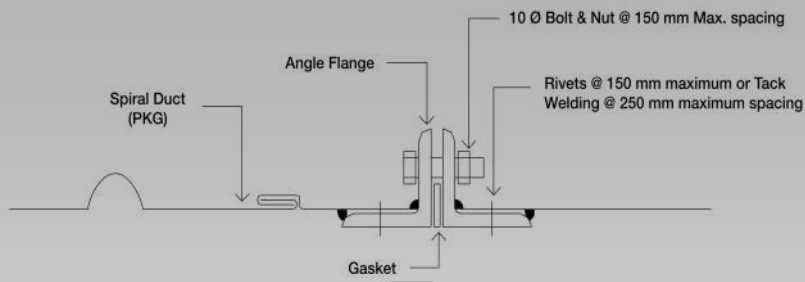
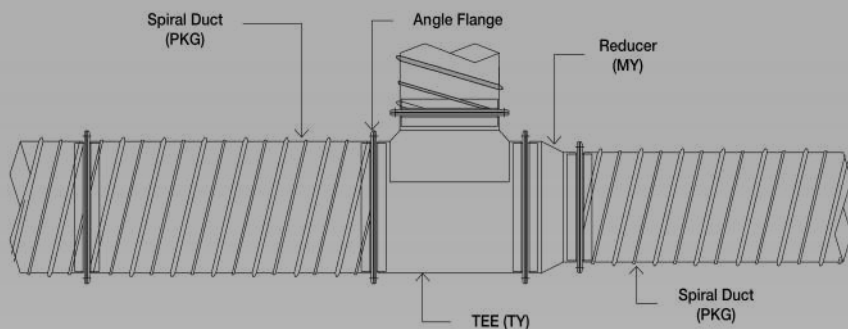
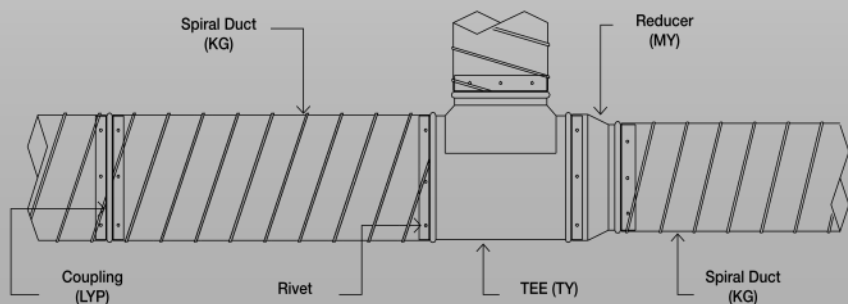
## SPIRAL DUCT

- SPIRALLY WOUND MULTI-CORRUGATED ROUND DUCT
- DIAMETER RANGE: 63 - 152 MM
- THICKNESS RANGE: 26 - 24 GAUGE



# TRANSVERSE CONNECTIONS

Table 1-6: Typical Transverse Joints

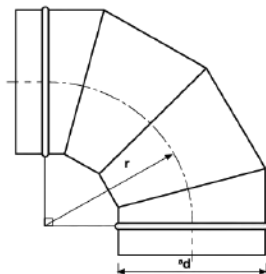




## **BEND 90° ( $r = d$ )**

- $R = D$
- 4 - GORE BEND (SEGMENTED) AS A STANDARD
- FABRICATED WITH EITHER STANDING SEAM, CONTINUOUS SEAM OR STITCH WELDING.

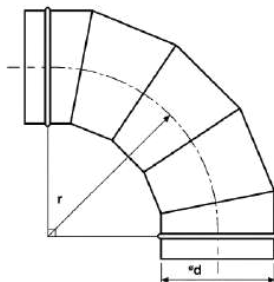
Dimensions



## **BEND 90° ( $r = 1.5 d$ )**

- $R = 1.5 D$
- 5 - GORE BEND (SEGMENTED) AS A STANDARD
- FABRICATED WITH EITHER STANDING SEAM, CONTINUOUS SEAM OR STITCH WELDING.

Dimensions



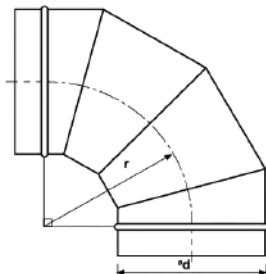
---

## BEND 45°

- $R = 1.5 D$
- 3 - GORE BEND (SEGMENTED) AS A STANDARD
- FABRICATED WITH EITHER STANDING SEAM, CONTINUOUS SEAM OR STITCH WELDING.



Dimensions



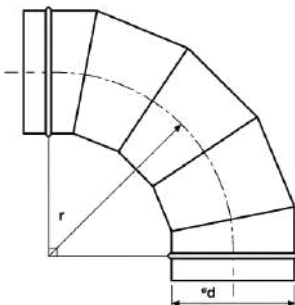

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## BEND 60°

- $R = 1.5 D$
- 4 - GORE BEND (SEGMENTED) AS A STANDARD
- FABRICATED WITH EITHER STANDING SEAM, CONTINUOUS SEAM OR STITCH WELDING.



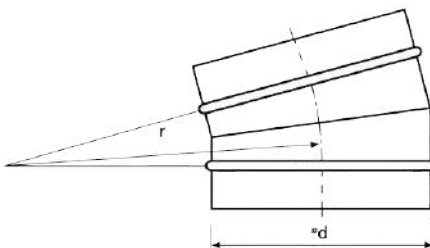
Dimensions



# ROUND FITTINGS

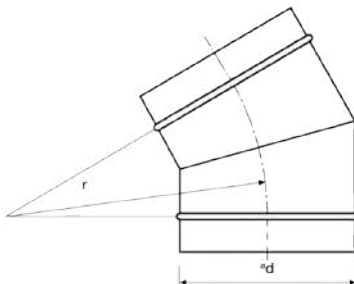
## BEND 15°

- $R = 1.5 D$
- 2 - GORE BEND (SEGMENTED) AS A STANDARD
- FABRICATED WITH EITHER STANDING SEAM, CONTINUOUS SEAM OR STITCH WELDING



## BEND 30°

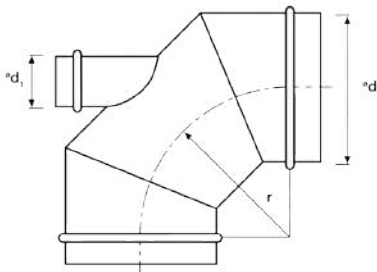
- $R = 1.5 D$
- 2 - GORE BEND (SEGMENTED) AS A STANDARD
- FABRICATED WITH EITHER STANDING SEAM, CONTINUOUS SEAM OR STITCH WELDING.



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## HEEL TAPPED BEND 90°

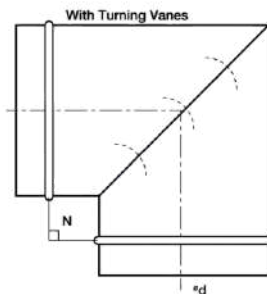
- $R = D$
- 3 - GORE BEND (SEGMENTED) AS A STANDARD
- FABRICATED WITH EITHER STANDING SEAM, CONTINUOUS SEAM OR STITCH WELDING




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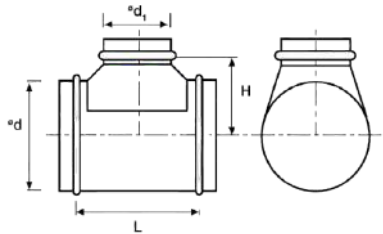
## MITERED BEND 90°

- $N=100$
- 2 - GORE BEND (SEGMENTED) AS A STANDARD
- WITH TURNING VANES
- FABRICATED WITH EITHER STANDING SEAM, CONTINUOUS SEAM OR STITCH WELDING.



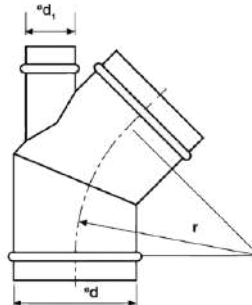
## TEE

- EQUAL TEE
- FABRICATED WITH CONTINUOUS SEAM OR STITCH WELDING.



## HEEL TAPPED BEND 45°

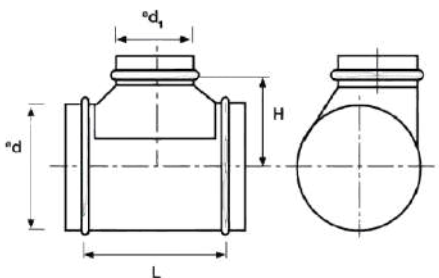
- $R = D$
- 2 - GORE BEND (SEGMENTED) AS A STANDARD
- FABRICATED WITH EITHER STANDING SEAM, CONTINUOUS SEAM OR STITCH WELDING





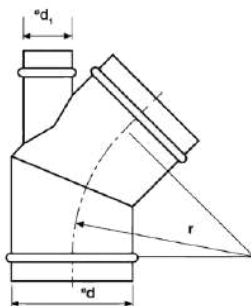
## ECCENTRIC TEE

- ECCENTRIC TEE
- FABRICATED WITH CONTINUOUS SEAM OR STITCH WELDING.



## REDUCING TEE

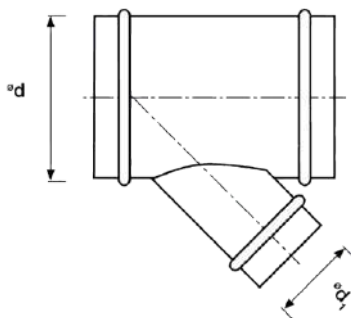
- REDUCING TEE
- FABRICATED WITH CONTINUOUS SEAM OR STITCH WELDING.



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## LATERAL TEE

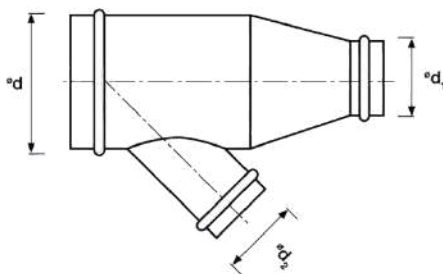
- 45° LATERAL TEE
- FABRICATED WITH CONTINUOUS SEAM OR STITCH WELDING.



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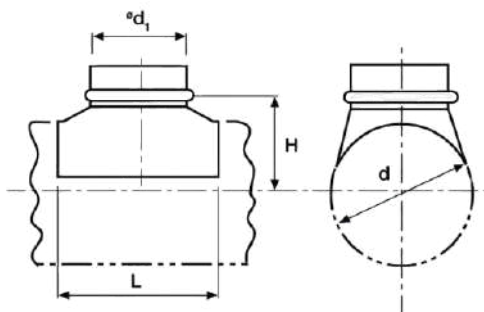
## REDUCING LATERAL TEE

- 45° REDUCING LATERAL TEE
- FABRICATED WITH CONTINUOUS SEAM OR STITCH WELDING.



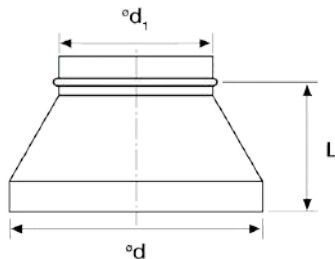
## COLLAR SADDLE

- COLLAR SADDLE
- FABRICATED WITH CONTINUOUS SEAM OR STITCH WELDING.



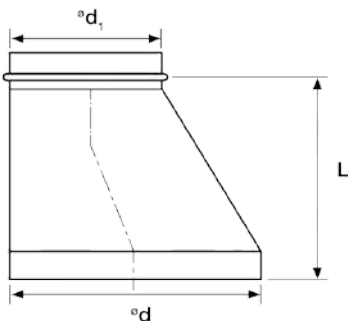
## REDUCER

- REDUCER CENTRIC = FEMALE / MALE
- $\phi D_1$  - CONNECTED STRAIGHT TO SPIRAL DUCT
- $\phi D$  - CONNECTED STRAIGHT TO FITTINGS
- FABRICATED WITH CONTINUOUS SEAM OR STITCH WELDING.



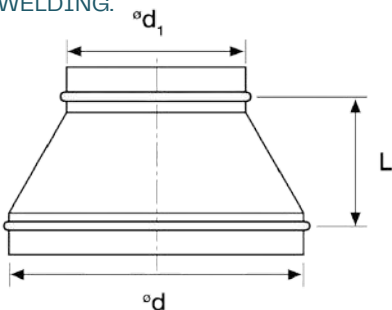
## REDUCER

- REDUCER ECCENTRIC = FEMALE / MALE
- $\varnothing D_1$  - CONNECTED STRAIGHT TO SPIRAL DUCT
- $\varnothing D$  - CONNECTED STRAIGHT TO FITTINGS
- FABRICATED WITH CONTINUOUS SEAM OR STITCH WELDING.



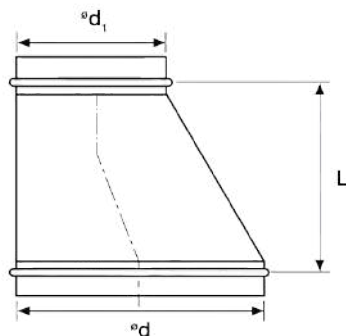
## REDUCER

- REDUCER CENTRIC = MALE / MALE
- $\varnothing D_1$  - CONNECTED STRAIGHT TO SPIRAL DUCT
- $\varnothing D$  - CONNECTED STRAIGHT TO SPIRAL DUCTS
- FABRICATED WITH CONTINUOUS SEAM OR STITCH WELDING.



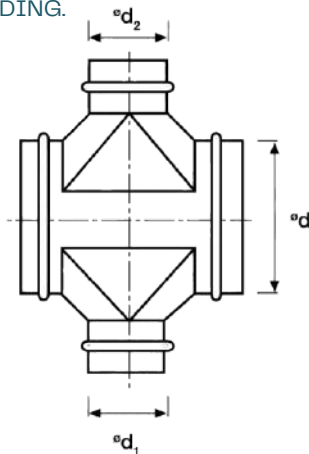
## REDUCER

- REDUCER ECCENTRIC = MALE / MALE
- $\varnothing D_1$  - CONNECTED STRAIGHT TO SPIRAL DUCT
- $\varnothing D$  - CONNECTED STRAIGHT TO SPIRAL DUCT
- FABRICATED WITH CONTINUOUS SEAM OR STITCH WELDING.



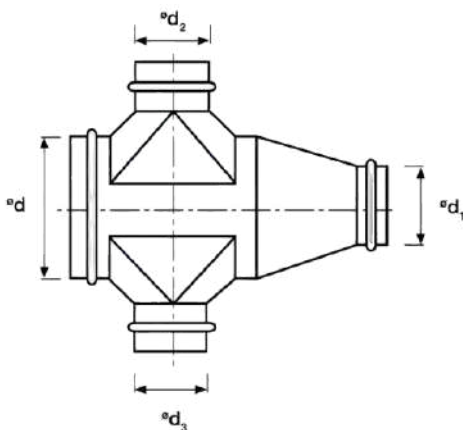
## CROSS

- CROSS
- FABRICATED WITH CONTINUOUS SEAM OR STITCH WELDING.



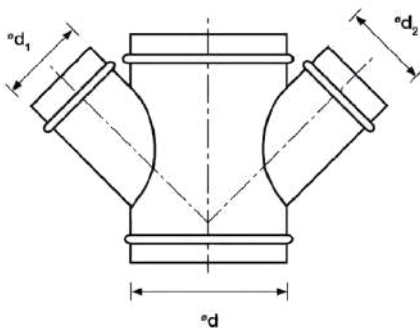
## REDUCING CROSS

- REDUCING CROSS
- FABRICATED WITH CONTINUOUS SEAM OR STITCH WELDING.



## LATERAL CROSS

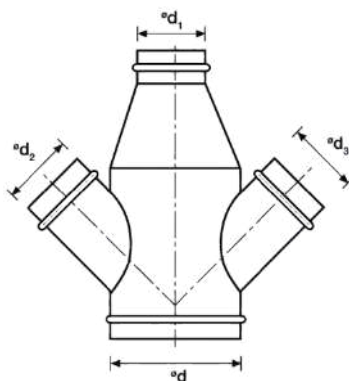
- 45° LATERAL CROSS
- FABRICATED WITH CONTINUOUS SEAM OR STITCH WELDING.



# ROUND FITTINGS

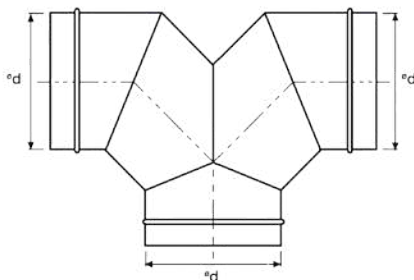
## LATERAL REDUCING CROSS

- 45° LATERAL REDUCING CROSS
- FABRICATED WITH CONTINUOUS SEAM OR STITCH WELDING.



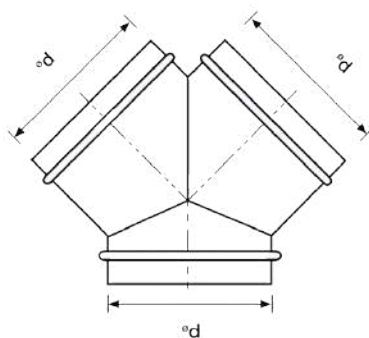
## TWINBEND

- 90° TWIN BEND
- FABRICATED WITH CONTINUOUS SEAM OR STITCH WELDING.



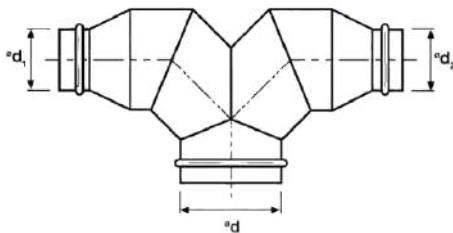
## TWINBEND

- 45° TWINBEND
- FABRICATED WITH CONTINUOUS SEAM OR STITCH WELDING.



## REDUCING TWINBEND

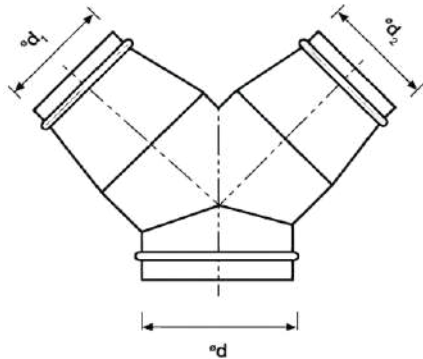
- 90° REDUCING TWINBEND
- FABRICATED WITH CONTINUOUS SEAM OR STITCH WELDING.





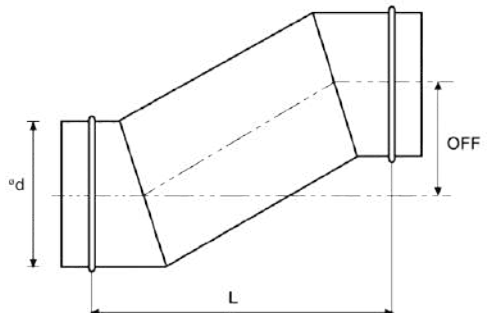
## REDUCING TWINBEND

- 45° REDUCING TWINBEND
- FABRICATED WITH CONTINUOUS SEAM OR STITCH WELDING.



## OFFSET

- OFFSET
- FABRICATED WITH CONTINUOUS SEAM OR STITCH WELDING.

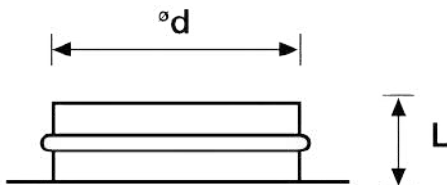


# ROUND FITTINGS

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## TAKE OFF

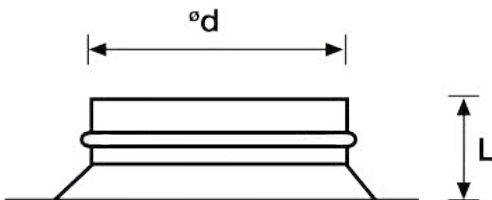
- TAKE OFF
- TO BE FIXED ON RECTANGULAR DUCT.
- FABRICATED WITH CONTINUOUS SEAM OR STITCH WELDING




---

## TAKE OFF

- TAKE OFF
- WITH RADIUS.
- TO BE FIXED ON RECTANGULAR DUCT.
- FABRICATED WITH CONTINUOUS SEAM OR STITCH WELDING.

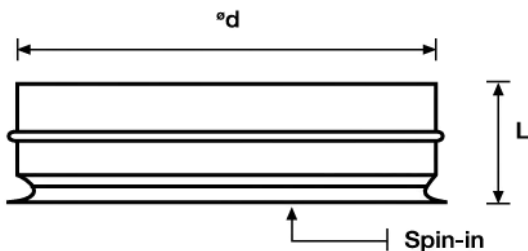


# ROUND FITTINGS

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## SPIN-IN FITTING

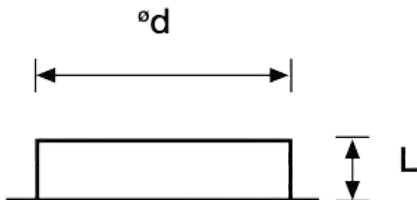
- SPIN-IN FITTING
- TO BE FIXED ON RECTANGULAR DUCT.
- FABRICATED WITH CONTINUOUS SEAM OR STITCH WELDING.




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## END CAP

- END CAP
- TO BE FIXED ON SPIRAL DUCT.
- FABRICATED WITH CONTINUOUS SEAM OR STITCH WELDING.

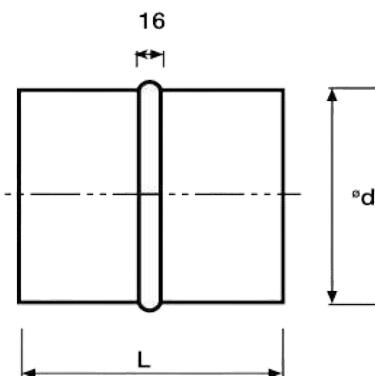


# ROUND FITTINGS

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## COUPLING

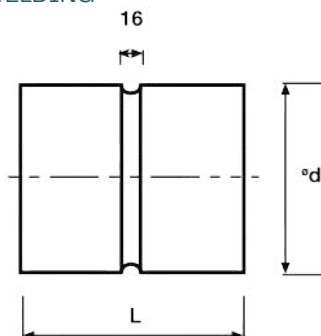
- COUPLING
- DUCT CONNECTOR
- FABRICATED WITH CONTINUOUS SEAM OR STITCH WELDING.




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## COUPLING

- COUPLING
- FITTING CONNECTOR
- FABRICATED WITH CONTINUOUS SEAM OR STITCH WELDING



# PLENUM BOXES





## PLENUM BOXES FOR SLOT DIFFUSERS

THE PLENUM BOX IS DESIGNED TO ENSURE EQUAL DISTRIBUTION OF AIR ACROSS THE SLOT DIFFUSERS. THE SUPPLY PLENUM BOX HAS ACOUSTIC LINING TO REDUCE NOISE GENERATED INSIDE THE DUCT DUE TO AIRFLOW TURBULENCE BEFORE REACHING THE DIFFUSER. THE BUILT-IN DAMPER CAN BE OPERATED FROM THE SPIGOT CONNECTION OR FROM FACE OF DIFFUSER.

### **Plenum Box:**

---

BUILT OF GALVANIZED STEEL SHEET GAUGE 24, CONFORMING TO ASTM A653, LOCK FORMING QUALITY, G90 ZINC COATING.

### **Insulation:**

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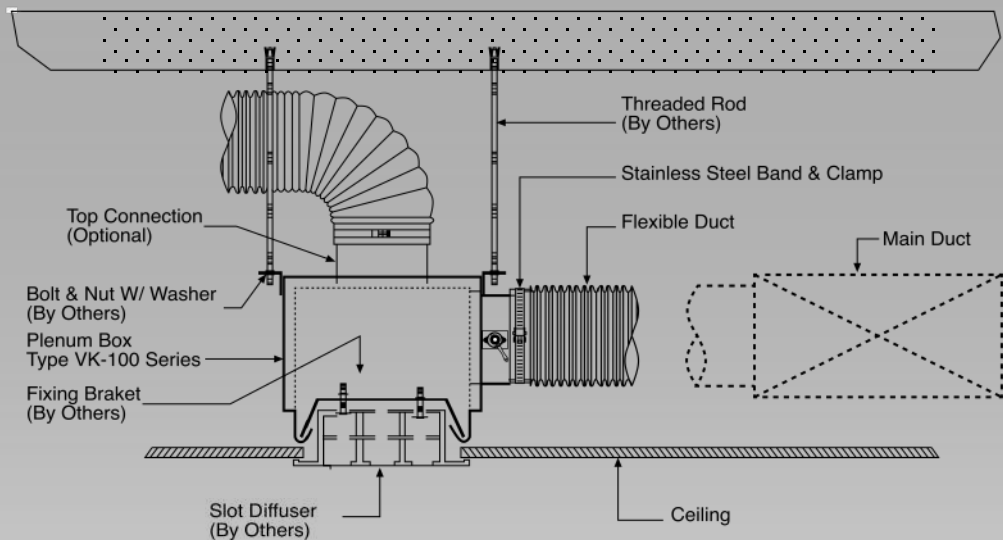
25 MM THICK ACOUSTIC LINING WITH BLACK GLASS TISSUE FACING, 48KG/M3 DENSITY. ACOUSTIC LINING IS FIXED INSIDE THE PLENUM BOX WITH NON-FLAMMABLE ADHESIVE AND MECHANICAL FASTENER (CUPPED HEAD PINS).OR BLACK RUBBER SOUND LINER 6MM FIXES WITH SPECIAL GLUE

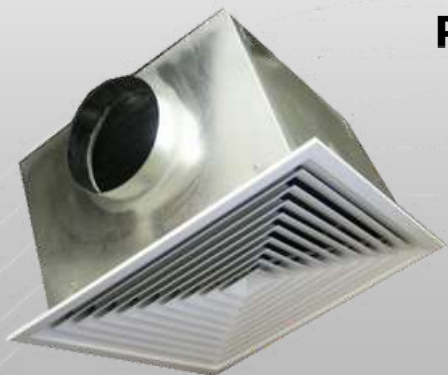
## Sizes of Plenum Box

Diffuser No. of Slots	Diffuser Size A x L (mm)	Plenum Size B x L + 6 (mm)	Spigot Inlet dia (mm)
1	40 x L	60 x L + 6	100
2	78 x L	98 x L + 6	150
3	117 x L	137 x L + 6	200
4	155 x L	175 x L + 6	250
5	193 x L	213 x L + 6	300
6	232 x L	252 x L + 6	350
7	270 x L	290 x L + 6	400
8	309 x L	328 x L + 6	450



## INSTALLATION DETAILS





## **PLENUM BOXES FOR SUPPLY DIFFUSERS**

PLENUM BOX IS DESIGNED TO ENSURE EQUAL DISTRIBUTION OF AIR ACROSS THE SUPPLY DIFFUSERS. THE SUPPLY PLENUM BOX HAS ACOUSTIC LINING TO REDUCE NOISE GENERATED INSIDE THE DUCT DUE TO AIRFLOW TURBULENCE BEFORE REACHING THE DIFFUSER. THE BUILT-IN DAMPER CAN BE OPERATED FROM THE SPIGOT CONNECTION OR FROM FACE OF DIFFUSER.

### **Plenum Box:**

---

BUILT OF GALVANIZED STEEL SHEET GAUGE 24, CONFORM TO ASTM A653, LOCK FORMING QUALITY, G90 ZINC COATING.

### **Insulation:**

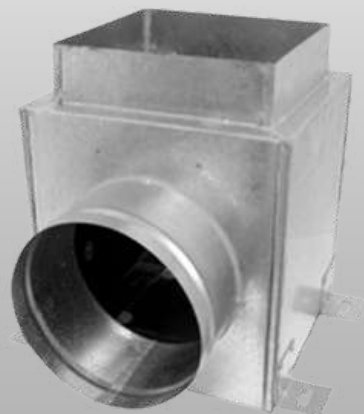
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25 MM THICK ACOUSTIC LINING WITH BLACK GLASS TISSUE FACING, 48KG/M3 DENSITY. ACOUSTIC LINING IS FIXED INSIDE THE PLENUM BOX WITH NON-FLAMMABLE ADHESIVE AND MECHANICAL FASTENER (CUPPED HEAD PINS). OR BLACK RUBBER SOUND LINER 6MM FIXES WITH SPECIAL GLUE

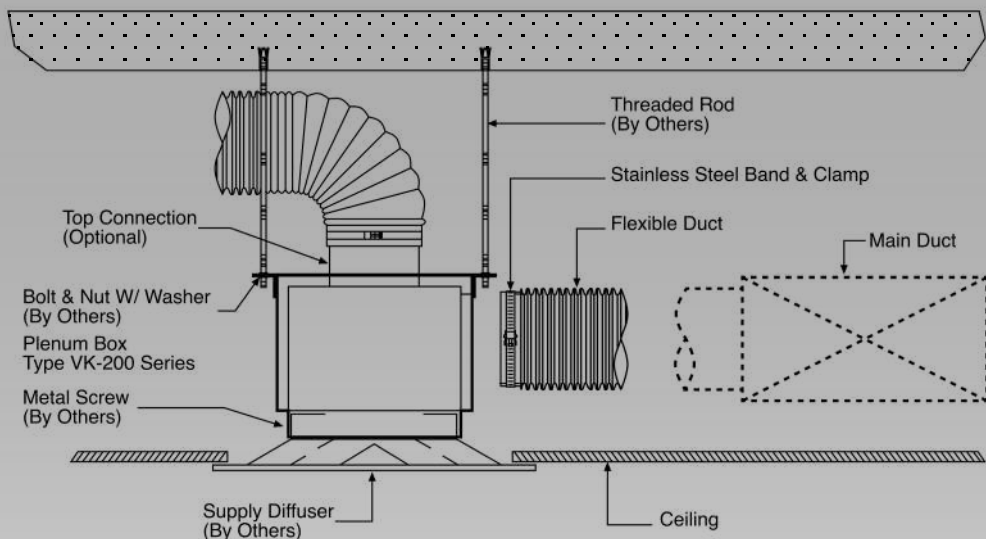


## Sizes of Plenum Box

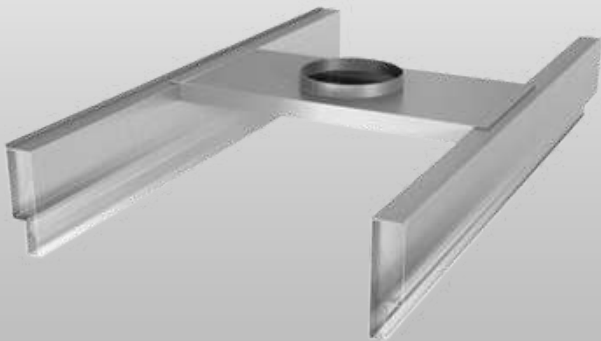
Item No.	Diffuser Size H x L (mm)	Plenum Size H+5 x L+5 (mm)	Spigot Inlet dia (mm)
1	150 x 150	155 x 155	100
2	225 x 225	230 x 230	150
3	300 x 300	305 x 305	200
4	375 x 375	380 x 380	250
5	450 x 450	455 x 455	300
6	525 x 525	530 x 530	350
7	600 x 600	605 x 605	400



## INSTALLATION DETAILS



# TROFFER DIFFUSERS



PRO-DUCT TROFFER DIFFUSERS ARE DESIGNED TO PROVIDE DOUBLE SIDE CONCEALED AIR DISTRIBUTION WHEN INSTALLED BEHIND THE AIR HANDLING LUMINAIRES (LIGHT FIXTURES). THE TROFFER DIFFUSERS ARE EQUIPPED WITH CONCEALED ADJUSTABLE AIR DEFLECTORS TO PROVIDE HORIZONTAL OR VERTICAL DISCHARGE AIR PATTERN.

PRO-DUCT TROFFER DIFFUSERS ARE COORDINATED WITH LUMINAIRE (LIGHT FIXTURE) MANUFACTURERS TO ENSURE OPTIMUM AIR DISTRIBUTION PERFORMANCE AND EASE OF INSTALLATION. VARIOUS SIZES OF SAFID TROFFER DIFFUSERS ARE AVAILABLE TO FIT WITH ANY MODEL OR STYLE OF LIGHT FIXTURE MANUFACTURERS.

PRO-DUCT TROFFER DIFFUSERS SHOULD BE LOCATED UNIFORMLY IN THE CEILING TOGETHER WITH THE LUMINAIRES IN ORDER TO HAVE A PROPER AIR DISTRIBUTION IN THE OCCUPIED AREA.

## **Casing:**

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BUILT OF GALVANIZED STEEL SHEET GAUGE 22, CONFORM TO ASTM A653, LOCK FORMING QUALITY, G90 ZINC COATING.

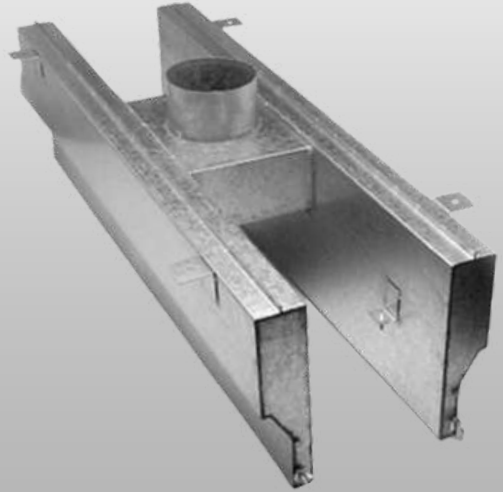
## **Insulation:**

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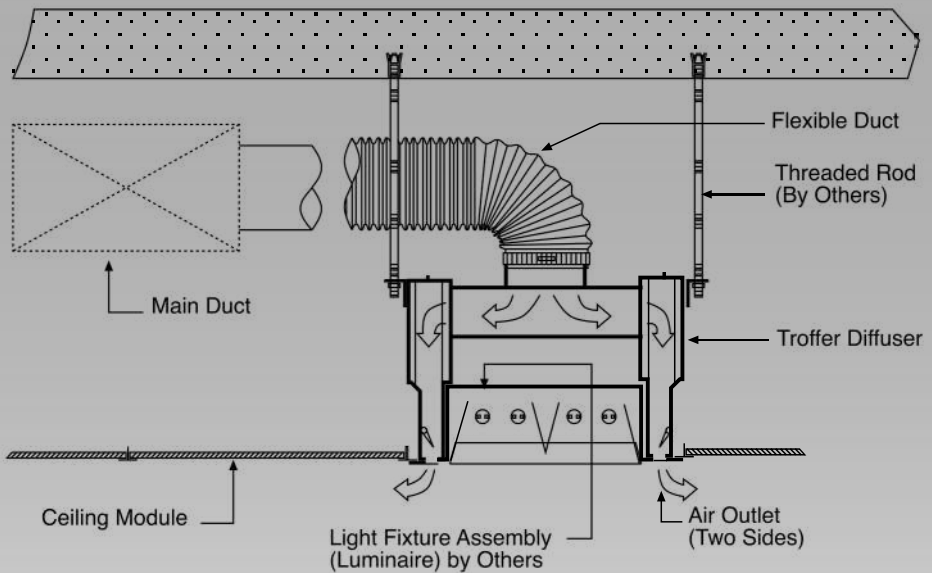
12.5MM THICK ACOUSTIC LINING WITH BLACK GLASS TISSUE FACING, 48KG/M3 DENSITY. ACOUSTIC LINING IS FIXED INSIDE THE TROFFER DIFFUSER WITH NON-FLAMMABLE ADHESIVE AND MECHANICAL FASTENER (CUPPED HEAD PINS). OR BLACK RUBBER SOUND LINER 6MM FIXES WITH SPECIAL GLUE

## Sizes of Troffer Diffuser

Item No.	Luminaire Size L x W (mm)	Troffer Size (variable) L x W (mm)	Spigot Inlet dia (mm)
1	600 x 600	600 x 600	150
2	600 x 300	600 x 300	150
3	900 x 900	900 x 900	150
4	900 x 600	900 x 600	150
5	900 x 300	900 x 300	150
6	1200 x 1200	1200 x 1200	150
7	1200 x 600	1200 x 600	150
8	1200 x 300	1200 x 300	150



## INSTALLATION DETAILS



### Use for Luminaire (Light Fixture) with Length = 600mm

	Air Flow (L/S)	15	21	23	29	34	38	42	46
Vertical Discharge	Static Pressure (Pa)	5	9	10	16	21	24	30	36
	NC Level (Noise Criteria)	19	18	19	23	26	28	30	33
	Throw (Meter)	0.3 - 0.7	0.6 - 0.9	0.6 - 1.2	0.9 - 1.5	1.2 - 1.8	1.5 - 2.0	1.8 - 2.4	2.0 - 2.7
Horizontal Discharge	Static Pressure (Pa)	20	39	44	71	93	113	140	170
	NC Level (Noise Criteria)	37	41	44	47	49	51	52	55
	Throw (Meter)	0.6 - 1.0	0.9 - 1.5	1.2 - 1.8	1.3 - 2.1	1.5 - 2.4	1.8 - 2.7	2.0 - 3.0	2.4 - 3.3

### Use for Luminaire (Light Fixture) with Length = 900mm

	Air Flow (L/S)	24	34	37	47	55	61	68	75
Vertical Discharge	Static Pressure (Pa)	5	9	10	16	21	24	30	36
	NC Level (Noise Criteria)	19	18	19	23	26	28	30	33
	Throw (Meter)	0.3 - 0.7	0.6 - 0.9	0.6 - 1.2	0.9 - 1.5	1.2 - 1.8	1.5 - 2.0	1.8 - 2.4	2.0 - 2.7
Horizontal Discharge	Static Pressure (Pa)	20	39	44	71	93	113	140	170
	NC Level (Noise Criteria)	37	41	44	47	49	51	52	55
	Throw (Meter)	0.6 - 1.0	0.9 - 1.5	1.2 - 1.8	1.3 - 2.1	1.5 - 2.4	1.8 - 2.7	2.0 - 3.0	2.4 - 3.3

### Use for Luminaire (Light Fixture) with Length = 1200mm

	Air Flow (L/S)	33	47	52	66	76	85	94	104
Vertical Discharge	Static Pressure (Pa)	5	9	10	16	21	24	30	36
	NC Level (Noise Criteria)	19	18	19	23	26	28	30	33
	Throw (Meter)	0.3 - 0.7	0.6 - 0.9	0.6 - 1.2	0.9 - 1.5	1.2 - 1.8	1.5 - 2.0	1.8 - 2.4	2.0 - 2.7
Horizontal Discharge	Static Pressure (Pa)	20	39	44	71	93	113	140	170
	NC Level (Noise Criteria)	37	41	44	47	49	51	52	55
	Throw (Meter)	0.6 - 1.0	0.9 - 1.5	1.2 - 1.8	1.3 - 2.1	1.5 - 2.4	1.8 - 2.7	2.0 - 3.0	2.4 - 3.3

• All above performance data is based on troffer diffuser with 13mm wide slot. Performance may vary with other makes and designs of air troffer.

• All above data is based on inlet size 150mm (6") although the effect on inlet size is negligible in the range of inlets offered.

• Throws vertical and horizontal distances in meters to reach terminal velocities of 0.5 m/s and 0.25 m/s.



## **SINGLE SIDED TROFFER DIFFUSER**

PRO-DUCT TROFFER DIFFUSERS ARE DESIGNED TO PROVIDE DOUBLE SIDE CONCEALED AIR DISTRIBUTION WHEN INSTALLED BEHIND THE AIR HANDLING LUMINAIRES (LIGHT FIXTURES). THE TROFFER DIFFUSERS ARE EQUIPPED WITH CONCEALED ADJUSTABLE AIR DEFLECTORS TO PROVIDE HORIZONTAL OR VERTICAL DISCHARGE AIR PATTERN.

PRO-DUCT TROFFER DIFFUSERS ARE COORDINATED WITH LUMINAIRE (LIGHT FIXTURE) MANUFACTURERS TO ENSURE OPTIMUM AIR DISTRIBUTION PERFORMANCE AND EASE OF INSTALLATION. VARIOUS SIZES OF SAFID TROFFER DIFFUSERS ARE AVAILABLE TO FIT WITH ANY MODEL OR STYLE OF LIGHT FIXTURE MANUFACTURERS.

PRO-DUCT TROFFER DIFFUSERS SHOULD BE LOCATED UNIFORMLY IN THE CEILING TOGETHER WITH THE LUMINAIRES IN ORDER TO HAVE A PROPER AIR DISTRIBUTION IN THE OCCUPIED AREA.

### **Casing:**

---

BUILT OF GALVANIZED STEEL SHEET GAUGE 22, CONFORM TO ASTM A653, LOCK FORMING QUALITY, G90 ZINC COATING.

### **Insulation:**

---

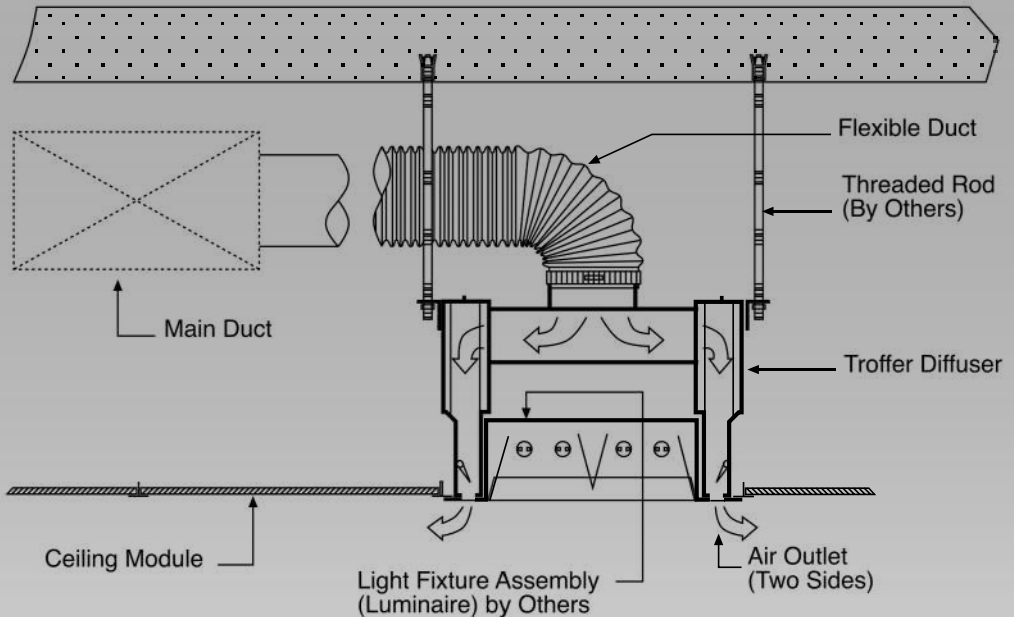
12.5MM THICK ACOUSTIC LINING WITH BLACK GLASS TISSUE FACING, 48KG/M3 DENSITY. ACOUSTIC LINING IS FIXED INSIDE THE TROFFER DIFFUSER WITH NON-FLAMMABLE ADHESIVE AND MECHANICAL FASTENER (CUPPED HEAD PINS). OR BLACK RUBBER SOUND LINER 6MM FIXES WITH SPECIAL GLUE

## Sizes of Troffer Diffuser

Item No.	Luminaire Size L x W (mm)	Troffer Size (variable) L x W (mm)	Spigot Inlet dia (mm)
1	600 x 600	600 x 600	150
2	600 x 300	600 x 300	150
3	900 x 900	900 x 900	150
4	900 x 600	900 x 600	150
5	900 x 300	900 x 300	150
6	1200 x 1200	1200 x 1200	150
7	1200 x 600	1200 x 600	150
8	1200 x 300	1200 x 300	150



## INSTALLATION DETAILS



### Use for Luminaire (Light Fixture) with Length = 600mm

	Air Flow (L/S)	7	10	12	15	17	19	21	23
Vertical Discharge	Static Pressure (Pa)	5	9	10	16	21	24	30	36
	NC Level (Noise Criteria)	19	18	19	23	26	28	30	33
	Throw (Meter)	0.3 - 0.7	0.6 - 0.9	0.6 - 1.2	0.9 - 1.5	1.2 - 1.8	1.5 - 2.0	1.8 - 2.4	2.0 - 2.7
Horizontal Discharge	Static Pressure, Pa	20	39	44	71	93	113	140	170
	NC Level (Noise Criteria)	37	41	44	47	49	51	52	55
	Throw, Meter	0.6 - 1.0	0.9 - 1.5	1.2 - 1.8	1.3 - 2.1	1.5 - 2.4	1.8 - 2.7	2.0 - 3.0	2.4 - 3.3

### Use for Luminaire (Light Fixture) with Length = 900mm

	Air Flow (L/S)	12	17	18	23	27	30	34	37
Vertical Discharge	Static Pressure (Pa)	5	9	10	16	21	24	30	36
	NC Level (Noise Criteria)	1 9	1 8	19	23	26	28	30	33
	Throw (Meter)	0 . 3	0 - . 60	0.6 - 1.0	0.9 - 1.5	1.2 - 1.8	1.5 - 2.0	1.8 - 2.4	2.0 - 2.7
Horizontal Discharge	Static Pressure (Pa)	20	39	44	71	93	113	140	170
	NC Level (Noise Criteria)	37	41	44	47	49	51	52	55
	Throw (Meter)	0.6 - 1.0	0.9 - 1.5	1.2 - 1.8	1.3 - 2.1	1.5 - 2.4	1.8 - 2.7	2.0 - 3.0	2.4 - 3.3

### Use for Luminaire (Light Fixture) with Length = 1200mm

	Air Flow (L/S)	16	23	26	33	38	43	47	52
Vertical Discharge	Static Pressure (Pa)	5	9	10	16	21	24	30	36
	NC Level (Noise Criteria)	19	18	19	23	26	28	30	33
	Throw (Meter)	0.3 - 0.7	0.6 - 0.9	0.6 - 1.2	0.9 - 1.5	1.2 - 1.8	1.5 - 2.0	1.8 - 2.4	2.0 - 2.7
Horizontal Discharge	Static Pressure (Pa)	20	39	44	71	93	113	140	170
	NC Level (Noise Criteria)	37	41	44	47	49	51	52	55
	Throw (Meter)	0.6 - 1.0	0.9 - 1.5	1.2 - 1.8	1.3 - 2.1	1.5 - 2.4	1.8 - 2.7	2.0 - 3.0	2.4 - 3.3

- All above performance data is based on troffer diffuser with 13mm wide slot. Performance may vary with other makes and designs of air troffer.
- All above data is based on inlet size 150mm (6") although the effect on inlet size is negligible in the range of inlets offered
- Throws vertical and horizontal distances in meters to reach terminal velocities of 0.5 m/s and 0.25 m/s.

# **SECTION 07**

## **License & Certificates**





# Trade License



GOVERNMENT OF UMM ALQAYWAYN

دائرة التنمية الاقتصادية  
DEPARTMENT OF ECONOMIC DEVELOPMENT

**رخصة صناعية - Lic - Ind**

بيانات الرخصة		License Details	
الاسم التجاري	برو دكت للصناعات ذ.م.م	Trade Name	PRO DUCT INDUSTRIES L.L.C
الشكل القانوني	شركة الشخص الواحد ذات مسؤولية محدودة	Legal Type	Single Person Limited Company
رقم الرخصة	LIC-IND-38201	License Number	LIC-IND-38201
تاريخ الاصدار	2/4/2024	Issue Date	2/4/2024
تاريخ الانتهاء	1/4/2026	Expiry Date	1/4/2026
رقم السجل التجاري	204112	Registration No	204112
البريد الإلكتروني	k.sharawi@hotmail.com	Email	k.sharawi@hotmail.com
رقم الهاتف المتحرك	00971567758098	Mobile Number	00971567758098

اطراف الرخصة			
الاسم	الجنسية	الصفة	الحصص
Name	Nationality	Role	Share
خالد رفوان محمد الشعراوي KHALED RADWAN MOHAMAD SHAARAWI	الأردن Jordan	مالك   مدير Owner   Manager	100%

انشطة الرخصة	
صناعة لوازم تكييف الهواء	Air Conditioners Requisites Manufacturing
صناعة مستلزمات أنظمة تكييف الهواء المركزية	Central Air Conditioning

1 of 2

**UNITED ARAB EMIRATES (U.A.E.) BRANCH**

# U.A.Q. Chamber Membership Certificate





## شهادة تسجيل العضوية Membership Certificate

License No.	38201	رقم الرخصة	Membership No.	19228	رقم العضوية
Member Since	25-03-2024	تاريخ الإنتساب	Registration No.	204112	رقم السجل التجاري
Expiry Date	01-04-2026	تاريخ الإنتهاء	Issue Date	17-03-2025	تاريخ الإصدار

Trade Name: PRO DUCT INDUSTRIES LLC

Legal Status: Single Owner Company LLC

Activity: - Air Conditioners Requisites Manufacturing - Central Air Conditioning

الإسم التجاري: برو دكت للصناعات ذ.م.م

الشكل القانوني: شركة الشخص الواحد ذ.م.م

النشاط: صناعة لوازم تكييف الهواء - صناعة مستلزمات أنظمة تكييف الهواء المركزية

### Remarks

This is a certified e-document issued without signature by the Umm Al Quwain Chamber of Commerce & Industry  
Kindly scan the barcode to verify the certificate or visit our website



### الملاحظات

هذه وثيقة الكترونية معتمدة وصادرة بدون توقيع من غرفة أم القيوين للتجارة والصناعة. لمراجعة صحة البيانات الواردة في الرخصة يرجى مسح رمز الاستجابة السريعة أو زيارة موقع الغرفة

Tel: 06 7651111 , Fax: 06 7655055 , P.O.Box: 436 , UAQ - United Arab Emirates  
E-mail: [memberscare@uaqchamber.ae](mailto:memberscare@uaqchamber.ae) , [www.uaqchamber.ae](http://www.uaqchamber.ae)  
هاتف: 067651111 , فاكس: 067655055 , ص.ب: 436 , أم القيوين - الإمارات العربية المتحدة

25317122117755

**UNITED ARAB EMIRATES (U.A.E.) BRANCH**

# VAT Certificate



الهيئة الاتحادية للضرائب  
FEDERAL TAX AUTHORITY



United Arab Emirates

شهادة التسجيل في ضريبة القيمة المضافة  
أصدرت بموجب الصلاحية الممنوحة بموجب المادة (4) من المرسوم بقانون رقم (13) لسنة 2016 بشأن إنشاء الهيئة الاتحادية للضرائب

Certificate of Registration for Value Added Tax in the United Arab Emirates  
Issued under the authority allocated by Art. 4 of the Federal Decree-Law No. 13 of 2016

The Federal Tax Authority certifies that the entity below is a registered person for Value Added Tax in the UAE	تشهد الهيئة الاتحادية للضرائب أن الجهة التالية مسجلة لضريبة القيمة المضافة في الإمارات العربية المتحدة
Tax Registration Number	104404968000003
Legal Name of Entity (Arabic)	برو دكت للصناعات ذ.م.م
Legal Name of Entity (English)	PRO DUCT INDUSTRIES L.L.C
The Registered Address and Contact Number	Ware house 5+6, Al Ittihad Street, Umm El Thoub 1, Umm Al Quwain, Umm Al Quwain +971567758098
Effective Registration Date	01/07/2024
First VAT Return Period	01/07/2024 - 30/09/2024
VAT Return due date	28/10/2024
Start and end dates of Tax periods	1st Apr to 30th Jun, 1st Jul to 30th Sep, 1st Oct to 31st Dec, 1st Jan to 31st Mar
List of Main trade license, Sole Establishments and branches licenses details under the registered taxable person:	قائمة الرخصة التجارية الرئيسية والمؤسسات الفردية والفروع المدرجة ضمن التسجيل الضريبي :
Legal Name	الاسم القانوني
License Issuing Authority	جهة الترخيص
License Number/رقم الرخصة	رقم الرخصة
يرجى التأكد من صحة تفاصيل الشهادة. يجب إبلاغ الهيئة الاتحادية للضرائب في حال تغيير الأسس التي حصلت فيها على رقم التسجيل الضريبي الخاص بك.*	
*Please check that the details on this certificate are correct. You must inform the Federal Tax Authority of any change on the basis of which you obtained your Tax Registration Number.	
Date of Issue	28/06/2024
Version Number	2024/VAT/0000545134/001

تاريخ الإصدار

رقم الإصدار



UNITED ARAB EMIRATES (U.A.E.) BRANCH

# Trade License



وزارة التجارة  
Ministry of Commerce

## شهادة السجل التجاري

شركة برو دكت إنديستريز

الرقم الوطني الموحد: 7042192679

تاريخ الإصدار: 21/10/2024

نوع الكيان: شركة ذات مسؤولية محدودة

صفات الشركة: (شخص واحد)

حالة السجل: نشط

البيانات الأساسية للسجل التجاري



7042192679



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وزارة التجارة  
Ministry of Commerce

## مستخرج سجل تجاري



الرقم الوطني الموحد: 7042192679

تاريخ قيد السجل: 21/10/2024

تاريخ التأكيد السنوي: 10/10/2026

الهاتف: 0114509693

صفات الشركة: (شخص واحد)

حالة السجل: نشط

الموقع الإلكتروني:

الاسم التجاري: شركة برو دكت إنديستريز

نوع المنشأة: شركة ذات مسؤولية محدودة

رأس المال: 50000.00 ريال سعودي

البريد الإلكتروني: waseemsh85@gmail.com

### بيانات التاجر

الاسم	رقم الهوية	الجنسية	الصفة
وسيم هشام محمد الشعراوي	1152690671	السعودية	شريك برأس المال

### بيانات المدراء

الاسم	رقم الهوية	الجنسية	الصفة
وسيم هشام محمد الشعراوي	1152690671	السعودية	لا يوجد

\* يمكنكم التحقق من صحة الوثيقة و الإطلاع علي التفاصيل من خلال مسح الرمز أعلاه

تاريخ طباعة المستخرج: 14/10/2025

2 من 1



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KINGDOM OF SAUDI ARABIA (K.S.A.) BRANCH

# Riyadh Chamber Membership Certificate

شهادة اشتراك Membership Certificate		غرفة الرياض Riyadh Chamber	
Membership No. :	1035340	1035340	رقم العضوية الموحد :
Date of Issue:	21/10/2024	2024/10/21	تاريخ الاصدار:
Membership Class :	Third	الثالثة	درجة العضوية :
Riyadh Chamber Certifies		تشهد الغرفة التجارية الصناعية بالرياض بأن	
Company Pro Duct Industries		شركة برو دكت إنديستريز	
Commercial Registration No.	1009120821	1009120821	مفيدة بالسجل التجاري / الترخيص رقم :
National Number	7042192679	7042192679	الرقم الموحد :
Certificate Expires on	10/10/2025	2025/10/10	ينتهي سريان هذه الشهادة في



- يلزم التحقق من الوثيقة عبر الرابط التالي <https://mybusiness.chamber.sa/> أو تطبيق (بوابة أعمال)
- للهواتف الذكية دون أدنى مسؤولية على الغرفة التجارية عن محتوى الوثيقة.
- تعتبر هذه الوثيقة مصدقة من غرفة الرياض ولا تحتاج إلى توقيع أو ختم.
- عند التعديل على الوثيقة أو محاولة العبث بها تعتبر لادعية وتعرض صاحبها للمساءلة القانونية.

KINGDOM OF SAUDI ARABIA (K.S.A.) BRANCH



# Zakat Registration Certificate



102240006024563

TN ٢١٦٦-٨١٨٥٢ الرقم المميز

Certificate No. ١٠٢٢٤٠٠٠٦٠٢٤٥٦٢ رقم الشهادة

Certificate date ١٤٤٧/٠٤/١٦ تاريخ الشهادة



هيئة الزكاة والضريبة والجمارك  
Zakat, Tax and Customs Authority

المملكة العربية السعودية  
Kingdom of Saudi Arabia

## شهادة تسجيل الزكاة

### Zakat Registration Certificate

The Zakat, Tax and Customs Authority certifies that the Taxpayer

شركة برو دكت إنديستريز

Entity Unified No. / ID No ٧٠٤٢١٩٢٦٧٩

Commercial Registration/License/ Contract No ٧٠٤٢١٩٢٦٧٩

تشهد هيئة الزكاة والضريبة والجمارك أن المكلف /

الرقم الموحد للمنشأة / رقم هوية

سجل تجاري / رخصة / عقد رقم

Is registered on 18/04/1446 AH corresponding to 21/10/2024 AD مسجل لديها بتاريخ ١٨/٠٤/١٤٤٦ هـ الموافق ٢١/١٠/٢٠٢٤ م

The eighteenth of Rabi' al-thani one thousand four hundred forty-six (Hijri) (الثامن عشر من ربيع الثاني ألف وأربعمائة وستة وأربعون هجري) (Hijri)

Was granted this certificate to complete all transactions. وقد منح هذتي الشهادة لإنهاء جميع معاملاته.

يمكن التحقق من صلاحية الشهادة عبر موقع الهيئة [www.zatca.gov.sa](http://www.zatca.gov.sa)

The validity of the certificate can be verified via the Authority's Website [www.zatca.gov.sa](http://www.zatca.gov.sa)

zatca.gov.sa 19993 @zatca\_sa



هذه الوثيقة مستخرجة من النظام الآلي ولا تحتاج إلى توقيع  
و لا يعتد بهذه الشهادة إلا بعد التحقق من موقع الهيئة  
[www.zatca.gov.sa](http://www.zatca.gov.sa)

KINGDOM OF SAUDI ARABIA (K.S.A.) BRANCH

# VAT Registration Certificate



TIN: 3126081853 الرقم المميز

Certificate No: 100251151969789 رقم الشهادة

Certificate date: 12/12/2024 تاريخ الشهادة



هيئة الزكاة والضريبة والجمارك  
Zakat, Tax and Customs Authority

المملكة العربية السعودية  
Kingdom of Saudi Arabia

## شهادة تسجيل في ضريبة القيمة المضافة

## VAT Registration Certificate

تشهد هيئة الزكاة والضريبة والجمارك بأن الممثل أدناه مسجل في ضريبة القيمة المضافة بتاريخ ٢٠٢٤/١٢/١٢ م  
The Zakat, Tax and Customs Authority certifies that taxpayer below is VAT registered on 12/12/2024 AD

Taxpayer Name	شركة برو دكت إنداستريز	اسم الممثل
VAT Registration Number	312608185300003	رقم التسجيل الضريبي
Effective Registration Date	2024/11/01	تاريخ نفاذ التسجيل
Taxpayer Address	الرياض، الرياض، الجيزة 13312	عنوان الممثل
CR / License	7042192679	رقم السجل التجاري
Contact / ID No		الرخصة / العقد / الهوية
Tax Period	ربع سنوي - Quarterly	الفترة الضريبية
First Filing due date	2025/01/31	تاريخ استحقاق أول إقرار ضريبي

**ملاحظة:** يمكن للممثلين مسجلين في ضريبة القيمة المضافة، لا يجوز لهم تحصيل ضريبة القيمة المضافة من عملائهم قبل تاريخ نفاذ التسجيل في الضريبة. وفي حال تبين غير ذلك ستقوم هيئة الزكاة والضريبة والجمارك بتطبيق الغرامات المستحقة.

**Note:** As a VAT registered taxpayer, you are not allowed to collect VAT from your customers prior to the effective date of the tax registration. If otherwise approved, The ZAKAT, Tax and Customs Authority will impose the applicable penalties



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هذه الوثيقة مستخدمة من النظام الآلي ولا تحتاج إلى توقيع  
ولا يعتد بهذه الشهادة إلا بعد التحقق من موقع الهيئة  
www.zatca.gov.sa

KINGDOM OF SAUDI ARABIA (K.S.A.) BRANCH

## شهادة

اسم المنشأة	شركة برو دكت إنديستريز
اسم صاحب العمل	
رقم الاشتراك	٦٥١٠١١٧٩٥
العنوان	الرياض السعودية 13312
رقم الوطني الموحد	7042192679

عدد المشتركين السعوديين	عدد المشتركين غير السعوديين	المجموع
6	11	17
سنة مشتركين	أحد عشرة مشتركاً	سبعة عشر مشتركاً
رقما		
كتابة		

تشهد المؤسسة العامة للتأمينات الاجتماعية بأن المنشأة المذكورة أعلاه قد أوفت بالتزاماتها تجاه المؤسسة وفق البيانات المقدمة منها حتى تاريخ إصدار هذه الشهادة، والتي تم منحها لتقديمه لأية جهة تطلبها، وهي صالحة لجميع الأغراض التي نصت عليها الفقرة (6) من المادة (التاسعة عشر) من نظام التأمينات الاجتماعية الصادر بالمرسوم الملكي رقم (م/33) بتاريخ 1421/9/3 هـ و المادة (العاشر) من نظام التأمينات الاجتماعية الصادر بالمرسوم الملكي رقم (م/273) وتاريخ 1445/12/26 هـ .

هذه الشهادة سارية المفعول حتى 1447/07/09 هـ.

### عام Public

الشهادة معتمدة من صاحب المصلحة ولا تحتاج لتوقيع أو ختم



تحقق من صحة وصلاحيه الشهادة عبر زيارة الرابط أدناه في الموقع الإلكتروني للمؤسسة العامة للتأمينات الاجتماعية أو عن طريق استخدام الرمز المعرف التالي

تتم هذه الشهادة من الوثائق الإلكترونية الحكومية الرسمية ويحظر نقلها أو إدخال أي تعديلات عليها سواء بالإضافة أو الحذف أو التغير في بياناتها أو غير ذلك من أنواع التلاعب. وبعد الشهادة لفترة (١٥) عاماً من تاريخ إصدارها للمصلحة العامة أمام الجهات المختصة بالإضافة إلى ما يفرضه نظام التأمينات الاجتماعية من عقوبات ولا يجوز تداول الشهادة إلا في الأغراض التي أصدرت لأجلها وفقاً لأنظمة نظام التأمينات الاجتماعية والمؤسسة العامة للتأمينات الاجتماعية غير مسؤولة عن أي عملية تزوير أو تعديل تتم على النسخ الورقية منها.

المملكة العربية السعودية - الرياض 12622 - 8308 Al Wizarat 3795  
Kingdom of Saudi Arabia, Riyadh 12622- 8308 Al Wizarat 3795

800 124 3344  
gosi.gov.sa





# ISO Certificates







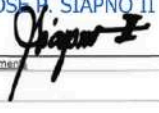


# SECTION 08

## Approvals








# Approvals

 <b>EXPO CITY DUBAI</b>		 <b>KLING CONSULT</b>		 <b>GINCO</b>	
Employer: M/S. EXPO CITY DUBAI		Engineer: M/s. Kling Consult GmbH & Co. International KG		Contractor: M/s. Ginco General Contracting L.L.C	
PROJECT : C5032 Expo Valley Villas & Townhouses, Dubai, UAE					
<b>PRE-QUALIFICATION SUBMITTAL</b>					
FOR INFORMATION AND RECORDS		<input type="checkbox"/>		FOR APPROVAL <input checked="" type="checkbox"/>	
				Transmittal No.	C5032-PRF-2RD0259-ME-0000002
				Rev.	2
				Date.	12-Jan-25
To: M/s. Kling Consult GmbH & Co. International KG		<b>Approval requested by :</b> From: CONTRACTOR REPRESENTATIVE Project Manager: <b>Mahmoud Ibrahim</b>  <b>Originator:</b> M/s. Ginco General Contracting L.L.C <b>Signature:</b> 			
<b>Details of Submittal:</b>					
Sl No	Pre-qualification no.	Rev	Pre-qualification Title	A	AN
1	C5032-PRF-2RD0259-ME-0000002	2	Pre-Qualification for G.I. Duct Fabrication (M/s. Pro-duct Industries)		<input checked="" type="checkbox"/>
<b>ENGINEER'S RESPONSE</b> (Please tick relevant box)					
<b>Engineer's Comments:</b>					
Previous comments has been addressed and found in compliance to the technical requirement for the production and delivery of both GI and pre-insulated duct work for the EXPO VALLEY Project. Contractor to arrange the factory visit with the manufacturer, prior to delivery of any product produced by Product. Submit the material for pre-insulated duct for approval. Maintain the quality of the sample duct issued for approval and incorporate sealant requirement in the full joint edge and color of the duct work. Maintain the duct profile and distance of stiffener as per the sample submitted for approval.					
<b>QA: No objection</b> 1. Contractor to arrange the factory visit with the manufacturer, prior to delivery of any product produced by Product. 2. Contractor to submit MIR for each delivery at site. Akmal Ghuman 22.01.25 					
<b>HSE: No Objection</b> 					
<b>Engineer representative:</b>					
Name: <b>JOSE P. SIAPNO II</b> Signature:  Date: <b>21.01.25</b> Ammar Alrubaie - SRE					
<b>Employer's Comments:</b>					
<b>Employer Representative:</b>					
Name: Signature: Date:					
(*A - Approved, *AN - Approved With Comments, R- *Rejected)					

# Approvals

Version 1.0

		
<b>MATERIAL SUBMITTAL</b>		
Project : Custom Joinery Factory (Technopark)		REF. No. : MAR-CJF-TEC-MEP-041 A
Client : Sobha Furniture LLC		Rev. No. : 01
Consultant : PNC Architects		Date : 06-Dec-2024
Contractor : Sobha Constructions LLC		Category : <input type="checkbox"/> Civil <input type="checkbox"/> Arch <input type="checkbox"/> ID <input checked="" type="checkbox"/> MEP
Subcontractor : Sobha Constructions LLC - MEP		Others : _____
<b>Material Description</b> ( use item only on this form )		
Material Reference : MAR-CJF-TEC-MEP-041 A		Revision No. : 01
Description : Pre-Insulated Ducts		
Area of Application : All Floors		
Drawing Ref : N/A		B.O.Q Ref. No. : N/A
Specification Ref : N/A		Standards : Project Specifications
<b>Manufacturer/Supplier</b>		
Company Name : Sheet - WTI (World Thermal Insulation Materials LLC)		
Address : UAE		
Local Agent : Pro-Duct Industries		
Submitted By : Shinoj Thomas Position : Manager - Design MEP Signature :  Date : 06-Dec-2024		
<b>Consultant's Comments</b>		
1. No objection for proposed new fabricator. 2. Duct shall have the embos logo and UL mark. 3. Tap and Sealant shall be VDO free. 4. Installation shall be as per manufacturer's recommendation.		
<input type="checkbox"/> A- Approved <input checked="" type="checkbox"/> B- Approved As Noted <input type="checkbox"/> C- Not Approved (Resubmit) <input type="checkbox"/> D- Rejected		
Name : Rahul Noori Position : Sr Mech Engineer Signature :  Date : 10-Dec-2024		
<b>Employer's Comments</b>		
<input type="checkbox"/> A- Approved <input type="checkbox"/> B- Approved As Noted <input type="checkbox"/> C- Not Approved (Resubmit) <input type="checkbox"/> D- Rejected		
Name : _____ Position : _____ Signature : _____ Date : _____		
1- Contractor to mark all relevant technical description in the literature. 2- Approval shall not relieve Contractor of his liabilities under the Contract or constitute authorization of any change to contract documents. 3- Contractor should certify that the above submitted items have been reviewed in details and are correct and in strict conformity with the contract drawings and specifications otherwise stated; also that the material sources indicated above have been reviewed in detail and will be supplied in conformity with the above and delivered same timely.		

PS/CJF/06/11

# Approvals

22/10/2025, 07:18

Print Form Details



## QUALITY PRE-QUALIFICATION SUBMITTAL

<b>Project Name</b> DXBPK   DX Parks - Athlon - Package 1 2 and 3 (DXBPK)	<b>Originator</b> GIN   GINCO General Contracting (GIN)	<b>PQ Number</b> DXBPK-BW-GIN-P1-ZZ-ZZ-PQ-HV-00002
<b>Project Stage</b> Construction	<b>Work Package</b> BW   Building Works (BW)	<b>Revision</b> C00
<b>Area</b> P1   Package 01	<b>Building ID /Type /Component ID</b> ZZ   All (ZZ)	<b>Level/ Location</b> ZZ   ZZ - Multiple Levels
<b>Discipline</b> BW MECH	<b>Sub-Discipline</b> HVAC (HV)	<b>PQ Issue Date</b> 15-Oct-2025

### PRE-QUALIFICATION DETAILS

**Name of Sub-Contractor**  
M/S PRO-DUCT INDUSTRIES LLC

**Job Description**  
DXBPK-BW-GIN-P1-ZZ-ZZ-PQ-HV-00002 PRE-QUALIFICATION OF R1 DUCT FABRICATOR (M/S PRO-DUCT INDUSTRIES LLC/NON VENDOR LIST) (P1)

**Address**  
UMM AL QUWAIN, UAE

**Commercial Register/Financial Status/Current Project**  
[DXBPK-BW-GIN-P1-ZZ-ZZ-PQ-HV-00002.pdf](#)

**Included in Vendor List**  
No

**Select Attachment Type and add files**  
Company Profile, Trade License, Organization Chart, ISO Certifications, List of current and completed projects for UAE/Region with photos, Copies of previous project Approvals

**Others (Specify)**

*Note: Checking and approval by PQC/Consultant shall not relieve the contractor of his obligation to perform the works in accordance with the contract documents, requirements of safety and local authorities regulations.*

ALD-QP-QN-PQP-FRM-00012

Rev: 00

### CSC Approver Final Response

#### Engineer Comments

Mechanical: Code-B

Contractor proposed "M/s Pro Duct Industries LLC" for R1 duct fabrication (Package1) is acceptable subject to comply with the following comments:

1. CHC machine used for R1 duct fabrication must be sourced from the approved R1 duct manufacturer "Xingpaan".
2. All materials used must be as per approved material submittal and fully comply with project specification.
3. The list of materials such as bayonet, corner cover / plate etc shall be aluminium as specified. All duct sealant and adhesives must be UL listed.
4. The contractor shall provide fabricated duct samples for each type and secure mock-up installation approval once the site is ready.
5. All acoustic duct liner materials must be delivered to the approved duct fabrication facility. The liner shall be applied at the factory under controlled conditions to ensure quality. On-site application of acoustic liners will not be permitted.
6. The contractor must justify the quality control measures for duct fabrication throughout the project. Please confirm whether representatives will be stationed at the fabrication facility to oversee and ensure compliance.
7. The contractor is responsible for ensuring timely delivery of fabricated ducts to the site, without compromising work progress or quality standards.
8. All duct materials must be fully covered during transportation and protected from environmental exposure and dust. The contractor must ensure that fabricated ducts are stored in a designated covered area on-site and not left outdoors, as this may compromise their integrity.
9. Final approval subject to satisfactory factory visit and inspection.

#### QA/QC:

- Refer to the discipline Engineer comments and comply.

#### Response

Mechanical: Code-B

Contractor proposed "M/s Pro Duct Industries LLC" for R1 duct fabrication (Package1) is acceptable subject to comply with the following comments:


1. CHC machine used for R1 duct fabrication must be sourced from the approved R1 duct manufacturer "Xingpaan".
2. All materials used must be as per approved material submittal and fully comply with project specification.
3. The list of materials such as bayonet, corner cover / plate etc shall be aluminium as specified. All duct sealant and adhesives must be UL listed.
4. The contractor shall provide fabricated duct samples for each type and secure mock-up installation approval once the site is ready.
5. All acoustic duct liner materials must be delivered to the approved duct fabrication facility. The liner shall be applied at the factory under controlled conditions to ensure quality. On-site application of acoustic liners will not be permitted.
6. The contractor must justify the quality control measures for duct fabrication throughout the project. Please confirm whether representatives will be stationed at the fabrication facility to oversee and ensure compliance.

<https://alodddiuae.aesh.com/alodddi/secure/communications/apps/print/newform.jsp>

1/2

# Approvals

22/10/2023, 07:16 Print Form Details



**QUALITY PRE-QUALIFICATION SUBMITTAL**

<b>Project Name</b> DXBPK   DX Parks - Athlon - Package 1 2 and 3 (DXBPK)	<b>Originator</b> GIN   GINCO General Contracting (GIN)	<b>PQ Number</b> DXBPK-BW-GIN-P2-ZZ-ZZ-PQ-HV-00001
<b>Project Stage</b> Construction	<b>Work Package</b> BW   Building Works (BW)	<b>Revision</b> C00
<b>Area</b> P2   Package 02	<b>Building ID /Type/Component ID</b> ZZ   All (ZZ)	<b>Level/ Location</b> ZZ   ZZ - Multiple Levels
<b>Discipline</b> BW MECH	<b>Sub-Discipline</b> HVAC (HV)	<b>PQ Issue Date</b> 19-Oct-2023

**PRE-QUALIFICATION DETAILS**

**Name of Sub-Contractor**  
M/S PRO-DUCT INDUSTRIES LLC

**Job Description**  
DXBPK-BW-GIN-P2-ZZ-ZZ-PQ-HV-00001 PRE-QUALIFICATION OF GI DUCT FABRICATION (M/S PRO-DUCT INDUSTRIES LLC /NON VENDOR (LST)/P2)

**Address**  
Umm Al Quwain, UAE

**Commercial Register/Financial Status/Current Project**  
[DXBPK-BW-GIN-P2-ZZ-ZZ-PQ-HV-00001.pdf](#)

**Included in Vendor List**  
No

**Select Attachment Type and add files**  
Company Profile, Trade License, Organization Chart, ISO Certifications, List of current and completed projects for UAE/Region with photos, Copies of previous project Approvals

**Others (Specify)**

Note: Checking and approval by PQC/Consultant shall not relieve the contractor of his obligation to perform the works in accordance with the contract documents, requirements of safety and local authorities regulations.

ALD-OP-Q6-PQP-FRM-00012 Rev: 00

**CSC Approver Final Response**

**Engineer Comments**  
Mechanical: Code-B  
Contractor proposed "M/s Pro Duct Industries LLC" for G.I duct fabrication (Package-2) is acceptable subject to comply with the following comments. This approval is conditional to meet the demand as per site requirements since the MEP Contractor proposed same specialist for both package - 1,2.  
1. The contractor shall provide fabricated duct samples for each type and secure mock-up installation approval once the site is ready.  
2. All acoustic duct liner materials must be delivered to the approved duct fabrication facility. The liner shall be applied at the factory under controlled conditions to ensure quality. On-site application of acoustic liners will not be permitted.  
3. The contractor must justify the quality control measures for duct fabrication throughout the project. Please confirm whether representatives will be stationed at the fabrication facility to oversee and ensure compliance.  
4. The contractor is responsible for ensuring timely delivery of fabricated ducts to the site, without compromising work progress or quality standards.  
5. All duct materials must be fully covered during transportation and protected from environmental exposure and dust. The contractor must ensure that fabricated ducts are stored in a designated covered area on-site and not left outdoors, as this may compromise their integrity.  
6. Final approval subject to satisfactory factory visit and inspection.

**QA/QC:**  
• Refer to the discipline Engineer comments and comply.

**Response**  
Mechanical: Code-B  
Contractor proposed "M/s Pro Duct Industries LLC" for G.I duct fabrication (Package-2) is acceptable subject to comply with the following comments. This approval is conditional to meet the demand as per site requirements since the MEP Contractor proposed same specialist for both package - 1,2.  
1. The contractor shall provide fabricated duct samples for each type and secure mock-up installation approval once the site is ready.  
2. All acoustic duct liner materials must be delivered to the approved duct fabrication facility. The liner shall be applied at the factory under controlled conditions to ensure quality. On-site application of acoustic liners will not be permitted.  
3. The contractor must justify the quality control measures for duct fabrication throughout the project. Please confirm whether representatives will be stationed at the fabrication facility to oversee and ensure compliance.  
4. The contractor is responsible for ensuring timely delivery of fabricated ducts to the site, without compromising work progress or quality standards.  
5. All duct materials must be fully covered during transportation and protected from environmental exposure and dust. The contractor must ensure that fabricated ducts are stored in a designated covered area on-site and not left outdoors, as this may compromise their integrity.  
6. Final approval subject to satisfactory factory visit and inspection.

<https://cloudoffice.asite.com/cloudoffice/new/communications/approvals/newForm.php> 1/2



# Approvals



## QUALITY PRE-QUALIFICATION SUBMITTAL

Project Name DXBOC   Dubai Oasis Community (DXBOC)	Originator GIN   GINCO General Contracting	PQ Number DXBOC-BW-GIN-P1-ZZ-ZZ-PQ-PL- 00010
Project Stage Construction	Work Package BW   Building Works (BW)	Revision C00
Area P1   Package 1	Building ID /Type/Component ID ZZ   All (ZZ)	Level/ Location ZZ   ZZ - Multiple Levels
Discipline BW PLUMBING	Sub-Discipline Plumbing (PL)	PQ Issue Date 11-Jul-2025

## PRE-QUALIFICATION DETAILS

Name of Sub-Contractor

M/s. Pro Duct Industries L.L.C

Job Description

Supply & Installation of HVAC PI DUCT Fabricator

Address

HM69+3QX - Umm Al Thuoob - Emirate of Umm Al Quwain

Commercial Register/Financial  
Status/Current Project

[DXBOC-BW-GIN-P1-ZZ-ZZ-PQ-PL-  
00010.pdf](#)

Included In Vendor List

Yes

Select Attachment Type and add files

Others (Specify)

*Note: Checking and approval by PMC/Consultant shall not relieve the contractor of his obligation to perform the works in accordance with the contract documents, requirements of safety and local authorities regulations.*

ALD-OP-QM-PQP-FRM-00012

Rev: 00

# Approvals



STUDIO I



Tilal Al Ghaf  
AMARA  
Material Submittal

## Material Submittal

Project Name	Amara Tilal Al Ghaf Community	Employer's Name	Majid Al Futtaim
Contractor's Name	United Engineering Construction LLC	Main Consultant's Name	Studio International Engineering Consultants
Contract Number		Project No.	1101
Material Submittal Ref. No.	UAE045-1101-UNEC-PK4-ME-MAT-00015	Revision No.	Date: 12-May-2025
EDMS Ref. No.	WF-000184		

Description: GI DUCT FABRICATION	Bill of Quantities (BOQ) Reference: Proposed material schedule included, Refer page- 11 to 13
	Contract Specification Reference: 2331103
Manufacturer's Name and Address: Pro Duct Industries LLC, UAE	Importer / Supplier: Nippon Steel & Sumitomo Metal Corporation (NSSMC)

TYPE: <input checked="" type="checkbox"/> Material <input type="checkbox"/> Reports <input type="checkbox"/> Documents <input type="checkbox"/> Others	
ATTACHMENT/S: <input checked="" type="checkbox"/> Catalogue <input type="checkbox"/> Samples <input type="checkbox"/> Others	COUNTRY OF ORIGIN: UAE
LOCATION OF USE: Kitchen Extract	SHORT LIST SUPPLIERS: <input type="checkbox"/> YES <input type="checkbox"/> N/A (SUBCONTRACTOR)

RELATED TO:	MEP
<input type="checkbox"/> Architectural <input type="checkbox"/> Structural <input checked="" type="checkbox"/> HVAC <input type="checkbox"/> Electrical <input type="checkbox"/> Plumbing <input type="checkbox"/> General	

We certify that the material submitted herewith has been reviewed in detail and is in compliance with the contract drawings and specifications except as otherwise stated here.	Received by: CONSULTANT STUDIO INTERNATIONAL ENGINEERING CONSULTANTS Name: Signature & Date: 12/05/2025
Issued by: SUBCONTRACTOR Carawan Electrical & Mechanical Works Name: Mr. Ramji Signature & Date: 12-05-2025	STUDIO I Project: TILAL AL GHAF Signature: Date: 12/05/2025

CONSULTANTS' COMMENT/S:	REVIEW STATUS:
<p>Mechanical.No objection for the material GI sheet AGIS and fabricator PRO DUCT subject to:</p> <ol style="list-style-type: none"> <li>1-Size and application areas should be as per approved shop drawing.</li> <li>2-Thermal insulation should be provided and Aluminum cladding for outdoor installations.</li> <li>3-Follow SMACNA standards for duct gauges.</li> <li>4-Submit MILL test certificate along with delivery.</li> <li>5-All ducts shall have factory label QA/QC stamp.</li> <li>7-Subject to fixed mock-up approval for indoor &amp; outdoor installations.</li> <li>8-Supplier/Fabricator To confirm sufficient material stock and fabrication manpower for the overall project requirement.</li> <li>9-Submit method statement of the duct installation for review and approval.</li> <li>10-Handling/Storage and installation of the material shall be in full compliance with the manufacturer's guidelines and related standards.</li> <li>11-Samples shall be provided.</li> <li>12-Two years warranty certificate shall be provided as per project specs.</li> </ol>	<input type="checkbox"/> Approved <input checked="" type="checkbox"/> Approved as Noted <input type="checkbox"/> Revise & Resubmit <input type="checkbox"/> Rejected

ENGINEER'S NAME: Wahid Ramzi	SIGNATURE:	DATE: 13/05/2025
RESIDENT ENGINEER'S: Mohammed Nadeem	SIGNATURE:	DATE: 13/05/2025
CONTRACTOR'S RECEIVED:	SIGNATURE:	DATE:

DISTRIBUTION:	<input type="checkbox"/> Hard Copy <input type="checkbox"/> Soft Copy / CD <input type="checkbox"/> Soft Copy / Email
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Material Submittal

1

Design + Engineering



# Approvals

## Pre-qualification Approval


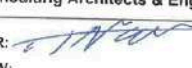

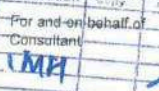


Project Name	Tial Al Ghaf Amara	Employer's Name	Majid Al Futtaim
Contractor's Name	United Engineering Construction	Main Consultant's Name	Studio International Engineering Consultants
Contract No.		Project No.	1101
Submittal Ref. No.	UAE945-1101-UNEC-PK4-ME-PRQ-00009	Rev. No.	Date: 02 June 2025
EDMS Ref. No.	WF-000484		

SUBCONTRACTOR: Pro-Duct Industries LLC	FOR: GI Duct Fabrication Prequalification
PROPOSED SUB-AGENCY:	
Issued by: (SUBCONTRACTOR) Carawan Electrical & Mechanical Works LLC	Received by: (CONSULTANT) Studio International Engineering Consultants
Name: Mr. Rami Omar Signature:  Date: 02 June 2025	Name:  Signature:  Date: 02-06-2025











CONSULTANT'S COMMENT/S:	List of Enclosures: (Thick related box)
<p>Mechanical: No objection for Pro-Duct for GI ducting fabricator subject to:</p> <ol style="list-style-type: none"> <li>1-Size and application areas should be as per approved shop drawing drawing.</li> <li>2-Follow SMACNA standards for duct gauges.</li> <li>3-Follow SMACNA standards for duct gauges.</li> <li>4-Submit MILL test certificate along with delivery.</li> <li>5-All ducts shall have factory label QA/QC stamp.</li> <li>6-Subject to fixed mock-up approval for indoor &amp; outdoor installations.</li> <li>7-Supplier/Fabricator To confirm sufficient material stock and fabrication manpower for the overall project requirement.</li> <li>8-Handling/Storage and installation of the material shall be in full compliance with the manufacturer's guidelines and related standards.</li> <li>9-GI sheet shall be as per approved material submittal.</li> <li>10-Provide samples for approval.</li> </ol>	<input checked="" type="checkbox"/> Pre-qualification <input type="checkbox"/> Copy of Trade License <input type="checkbox"/> List of Previous Projects <input type="checkbox"/> Vendors Technical Literature <input type="checkbox"/> Compliance Statement <input type="checkbox"/> Copy of Related Spec./Cont. Doc <input type="checkbox"/> Others (Specify)

REVIEW STATUS			
<input type="checkbox"/> Approved	<input checked="" type="checkbox"/> Approved as Noted	<input type="checkbox"/> Revise & Resubmit	<input type="checkbox"/> Rejected
ENGINEER'S NAME: Wahid Ramzi	SIGNATURE: 	DATE: 04-06-2025	
RESIDENT ENGINEER'S NAME: Mohammad Nadeem	SIGNATURE: 	DATE: 04-06-2025	
CONTRACTOR'S RECEIVED NAME:	SIGNATURE:	DATE:	
DISTRIBUTION:	<input type="checkbox"/> Hard Copy	<input type="checkbox"/> Soft Copy / CD	<input type="checkbox"/> Soft Copy / Email

# Approvals

				<b>MATERIAL APPROVAL REQUEST</b>	
Client	Consultant	Contractor	MEP Contractor	MAR NO.	GGC-152-MAR-HVAC-0022
CONTRACT NO.	No.1730			Revision No.	0
CONTRACT TITLE	Town House Square Development (TSQ), Plot C07 MAHA Townhouses Community			Revision Date	13-Jun-24
CONTRACTOR	M/s Genco General Contracting L.L.C			Title	PRE-QUALIFICATION FOR GI DUCT FABRICATION
MEP CONTRACTOR	M/s Carawan Electrical & Mechanical Works			Discipline	HVAC
Product Name :	PRE-QUALIFICATION FOR GI DUCT FABRICATION			SAMPLE PROVIDED	<input type="checkbox"/>
Manufacturer :	PRO-DUCT INDUSTRIES			VENDOR / BRAND:	AGIS
TO :	M/s. Arif & Bintok Consulting Architects & Engineers			FROM :	M/s. Genco General Contracting L.L.C
FOR MEP CONTRACTOR: 				Date: 13-06-2024	
CONTRACTOR'S REVIEW: Contractor has reviewed this submittal prior to submission to the Engineer.					
SIGNATURE 					
Mr. Ali Zakaria Project Manager				Date: 13-06-2024	
<b>LEAD SECTOR CONSULTANT'S COMMENTS :</b>					
<p># No objection subject to factory visit.</p> <p># Subject to sample approval</p> <p># Subject to mock up approval</p> <p># Warranties shall be as per project contract</p> <p style="text-align: right;">20/06/24</p>					
<b>SUBMITTAL STATUS</b>					
APPROVED NO COMMENTS <input type="checkbox"/>		REJECTED <input type="checkbox"/>			
APPROVED AS NOTED <input checked="" type="checkbox"/>		FOR RECORD ONLY <input type="checkbox"/>			
NOT APPROVED - RESUBMIT <input type="checkbox"/>		EMPLOYER APPROVAL REQUIRED <input type="checkbox"/>			
<b>LEAD SECTOR CONSULTANT'S SIGNATURE</b>					
For and on behalf of Consultant  Date: 20-6-24		 			





# Approvals

				MATERIAL APPROVAL REQUEST								
Client	Consultant	Contractor	MEP Contractor									
CONTRACT NO.	No.1730			MAR NO.	GGC-152-MAR-HVAC-0024							
CONTRACT TITLE	Town House Square Development (TSQ), Plot C07 MAHA Townhouses Community			Revision No.	1							
				Revision Date	15-Aug-24							
CONTRACTOR	M/s. Genco General Contracting L.L.C			Title	PhenolicPre-Insulated Ducting System- MAHA Townsquare							
MEP CONTRACTOR	M/s Carawan Electrical & Mechanical Works			Discipline	HVAC							
Product Name :	PhenolicPre-Insulated Ducting System-MAHA Townsquare			SAMPLE PROVIDED	<input type="checkbox"/>							
Manufacturer :	Pro-Duct Industries			VENDOR / BRAND:	Kingspan							
TO :	M/s. Arif & Bint oak Consulting Architects & Engineers			FROM :	M/s. Genco General Contracting L.L.C							
FOR MEP CONTRACTOR:				Date: 15-08-2024								
CONTRACTOR'S REVIEW:	Contractor has reviewed this submittal prior to submission to the Engineer.											
SIGNATURE				Date: 15-08-2024								
<b>LEAD SECTOR CONSULTANT'S COMMENTS :</b> No objection for the proposed material phenolicPre-insulated duct from kingspan: 1. Factory visit to be arranged, 2. Comply with D.M and D.C.D regulations. 3. Subject to Mock up approval 4. Subject to Sample approval 5. Submit the Method statement for installation 6. Installation of different type of ducts shall be as per IFC drawing 7. Duct shall be UL stamped.												
<b>SUBMITTAL STATUS</b> <table border="0"> <tr> <td>APPROVED NO COMMENTS <input type="checkbox"/></td> <td>REJECTED <input type="checkbox"/></td> <td rowspan="3">  </td> </tr> <tr> <td>APPROVED AS NOTED <input checked="" type="checkbox"/></td> <td>FOR RECORD ONLY <input type="checkbox"/></td> </tr> <tr> <td>NOT APPROVED - RESUBMIT <input type="checkbox"/></td> <td>EMPLOYER APPROVAL <input type="checkbox"/></td> </tr> </table>						APPROVED NO COMMENTS <input type="checkbox"/>	REJECTED <input type="checkbox"/>		APPROVED AS NOTED <input checked="" type="checkbox"/>	FOR RECORD ONLY <input type="checkbox"/>	NOT APPROVED - RESUBMIT <input type="checkbox"/>	EMPLOYER APPROVAL <input type="checkbox"/>
APPROVED NO COMMENTS <input type="checkbox"/>	REJECTED <input type="checkbox"/>											
APPROVED AS NOTED <input checked="" type="checkbox"/>	FOR RECORD ONLY <input type="checkbox"/>											
NOT APPROVED - RESUBMIT <input type="checkbox"/>	EMPLOYER APPROVAL <input type="checkbox"/>											
<b>LEAD SECTOR CONSULTANT'S SIGNATURE</b>   Date: 21.08.2024												
												



# Approvals

UT

CLIENT	LEAD CONSULTANT	MAIN CONTRACTOR	MEP CONTRACTOR
			

**MATERIAL SUBMITTAL**

Project : DHRE – 0006 (Plot 5.05) Date: 16 September 2024

City Walk Building Phase 5 Engineer Project Number: D23-38

Submittal No : CW5.5-CRC-DAE-MAT-MEC-0021 Revision: 02

TRANSMITTAL To (Contractor): Engineering Construction & Reconstruction Company Date: 16 Sept 2024

**A** From (Subcontractor): CARAWAN ELECTRICAL & MECHANICAL WORKS LLC Name/Sign: Moataz Usman  
(MEP Coordinator)

Discipline: ☐ Architectural ☐ Structural ☒ A/C ☐ Electrical ☐ Plumbing ☐ Landscaping ☐ \_\_\_\_\_

Title / Description: GI DUCT MATERIAL SUBMITTAL

Manufacturer / Supplier: NIPPON/AL GHURAIR

Spec. Section Title and Paragraph: Section 233100 Sheet Metal Ductwork and Accessories

Drawing Detail Reference DRW-505-ALL-1000 TO 1204A (AC Layout) , DRW-505-ALL-1000 TO 1204A (Ventilation Layout)

B.O.Q. Reference: Bill No 02 2/O/20 , Bill No 03 03/O/20

Area of Use: All AC and Ventilation from Basement to Roof

**Enclosures/Attachments:**

☒ Compliance Statement ☒ Manufacturer's Technical Literature ☒ Previous Test Reports/ Certificates

☒ Samples ☒ Copy of Related Specifications ☒ Authorization letter (from Manufacturer)

☒ Others; 100102 CITY WALK PHASE 5.05

☐ Submitted for review and approval ☐ Substitution involved – Substitution request attached

☒ Resubmitted for review and approval 19 SEP 2024 Resubmission-Comment reply sheet attached

☐ Submitted for information only ☐ If substitution involved submission includes point-by-point comparative data or preliminary details

☐ Complies with Contract requirements

☐ Will be available to meet construction schedule ☐ Items included in submission will be ordered immediately upon receipt of approval

☐ Engineer review time included in construction schedule

TRANSMITTAL To (Engineer): DEWAN Attn: Eng. Ayman Al Bayoumi (SRE)

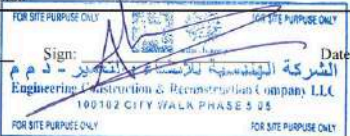
**B** From (Contractor): Engineering Construction & Reconstruction Company Date Rec'd by Contractor: \_\_\_\_\_

☐ Approved ☐ Revise / Resubmit

☒ Approved as noted ☐ Rejected / Resubmit

Other remarks on above submission \_\_\_\_\_ ☐ One copy retained by sender





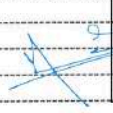
Name: Ahmed Salama Aly Sign: \_\_\_\_\_ Date Transm't'd by Contractor: \_\_\_\_\_



Page 1 of 2 Form F12.2A






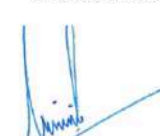

QAQC-FORM-17\_Prequalification Submittal Form\_R3

# Approvals



<b>CLIENT</b> 	<b>LEAD CONSULTANT</b> 	<b>MAIN CONTRACTOR</b> 	<b>MEP CONTRACTOR</b> 
<b>MATERIAL SUBMITTAL</b>			
<b>PROJECT:</b> DPG-0064 Villanova (PA15) La Violeta Phase 1		<b>Document No.:</b> VLV-P1-CRC-MEC-MAT-0216	
<b>CLIENT:</b> Dubai Holding Real Estate LLC			
<b>CONSULTANT:</b> DEC Dynamic Design Studio LLC			
<b>CONTRACTOR:</b> Engineering Construction & Reconstruction Company			
<b>MEP CONTRACTOR:</b> Carawan Electrical & Mechanical Works LLC		<b>Rev.:</b> 1 <b>Date:</b> 06-Mar-24	
<b>1. MATERIAL DESCRIPTION:</b> Material Submittal for AIR DUCT SYSTEM (ALTERNATIVE) for Phase 1			
<b>Area of Application :</b> Interior of Building, AC ducts of FCU			
<b>Drawing Ref. :</b>		<b>B.O.Q. Ref. No.:</b>	
<b>Specification Ref. :</b> 23 07 13		<b>Standards:</b> International	
Attach all relevant technical literature marked to identify relevant description, current Test Certificates, samples as appropriate.			
<b>2. MANUFACTURER/SUPPLIER :</b>			
<b>Company Name :</b> KINGSPAN			
<b>Address :</b>			
<b>Local Agent :</b> KINGSPAN			
<b>3. DELIVERY :</b>			
<b>Country of Origin :</b> UAE			
<input type="checkbox"/> Availability <input checked="" type="radio"/> Locally Manufactured <input type="radio"/> Overseas			
<b>Delivery :</b> Ex-works/ Total Duration		<b>Ex-stock</b>	
<b>Estimated Time of Arrival on Site</b>			
<b>Program :</b> Date Material Required on Site			
<b>Latest Date for Order</b>			
We certify that the above submitted items have been reviewed in detail and are correct and in strict conformity with the contract drawings and specifications except as otherwise stated; also that the material sources indicated above have been reviewed in detail and that they will supply the submitted items in conformity with the above and deliver same timely.			
<b>Submitted by :</b> Emad Abd Elaziz		<b>Signature:</b>	
<b>DHRE Comments:</b>		Applicable <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/>	
<b>Name &amp; Signature:</b>			
<b>Date:</b>			
<b>DEC Comments:</b>			
No objection for Proposed make PAL DUCT from KING SPAN AS a brand, Model 2014 UL-181 for internal use for A/C supply and return air duct with 5 years warranty from TOC by Manufacturer(KINGSPAN) for the panels itself(Warranty for Fabricated duct will be submitted by by fabricator, all ventilation ducts is GI as per previously approved, subject to comply with below comments: 1. Sample shall be provided for panels and all other accessories. 2. All fabricated pieces shall bear DCL and UL stamps. 3. Only factory fabricated ducts shall be used. No site fabrication allowed for pre insulated ducts. 4. All accessories shall be from same manufacturer of duct.(Duct sealant,UL tapes,..... etc) 5. Material delivery note from manufacturer to the fabricator for the panels to be attached along with the fabricated duct. 6. T/C and local authority approval. 7. Submit factory test report for the approved model for facer and panel phenolic density along with material delivery to site (only report will be accepted,letter is not accepted). 8. subject to lab test from 3rd party under supervision of Engineer and contractor (without submitting the test report from lab, the approval will consider null and void)			
<b>Name:</b> BECAL ELMELGY		<b>Date:</b> 07 MAR 2024	
<b>DEC Project Director Comments:</b>		<b>Status</b>	
		<input type="checkbox"/> A- Approved	
		<input checked="" type="checkbox"/> B- Approved with comments	
		<input type="checkbox"/> C- Revise and Resubmit	
		<input type="checkbox"/> D- Rejected	
		<input checked="" type="checkbox"/> Sample Required	
		<input checked="" type="checkbox"/> Tests Required	
		<input type="checkbox"/> Additional Information Required	
		<input type="checkbox"/> Manufacturer's Guarantee Required	
<b>Name &amp; Signature:</b> Mohamed Badawi		<b>Date:</b> 07-03-2024	
Approval of the Contractor is required for any change to Contract Documents.			



# Approvals




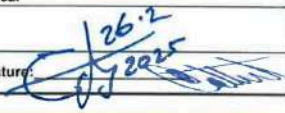
   		SUBCONTRACTOR APPROVAL	
CONTRACT NO.	148733	SCAR NO:	INVB-i118-SCAR-MEP-0014-00
CONTRACT TITLE	JEBEL ALI VILLAGE VILLAS & INFRASTRUCTURE	REVISION NO.:	00
EMPLOYER	NAKHEEL PJSC	REVISION DATE:	12-Jun-24
BUILDING CONSULTANT	ARCHGROUP CONSULTANTS INTERNATIONAL	TRADE	INFRA
INFRA CONSULTANT	PARSONS INTERNATIONAL		MEP
MEP CONSULTANT	GREEN CONCEPT ENGINEERING CONSULTANTS	DISCIPLINE	MECHANICAL
		CONTRACTOR	Innovo Build LLC
		SUBCONTRACTOR	M/s. Carawan Electrical & Mechanic
<b>DESCRIPTION &amp; SCOPE OF WORK :</b>			
Pre-Qualification for GI Duct Fabrication (M/s. Pro Duct Industries LLC)			
<b>CONTRACTOR'S ATTESTATION :</b>			
Prequalification / Submittal Comply with Approved Vendor List : <input type="checkbox"/> Yes <input checked="" type="checkbox"/> Not Applicable			
<b>CONTRACTOR'S REVIEW :</b>			
Contractor has reviewed this submission prior to submission to Consultant :			
Signature : Alaa Mamdouh			
Date : 12-Jun-24			
<b>BUILDING / INFRASTRUCTURE WORKS CONSULTANT COMMENTS :</b>			
<p>1) Conditional approval subject to comply with below comments.</p> <p>a) M/s INNOVO responsibility to ensure that all the previous comments given in other Approved PQ's for duct fabricator and project specifications are fully complied in this submissions, non compliance to any of the previous comments is purely under Innovo's responsibility to rectify without additional cost and time.</p> <p>b) Subject to deliver the complete ready to install ducts at site.</p> <p>c) Not allowed for duct site fabrications, insulations and liners.</p> <p>d) All MIR's to be submitted for every Villa's for Engineers approvals.</p> <p>e) Duct fabrications shall be as per project specifications, refer comments in duct construction schedule and given comments in Mock up .</p> <p>f) Subject to maintain the duct quality through out the delivery.</p> <p>g) Contractor to strictly maintain the Villa separation with different fabricators, not allowed to mix the ducts from different fabricators in one Villa's.</p> <p>h) Subject to factory visit.</p>			
<b>CONSULTANT (PM) COMMENTS :</b>			
<div style="border: 1px solid black; height: 100px; width: 100%;"></div>			
<b>STATUS :</b>			
<input type="checkbox"/> Approved <input checked="" type="checkbox"/> Approved As noted <input type="checkbox"/> Not Approved - Resubmit			
<b>BUILDING/ INFRA CONSULTANT</b>		<b>CONSULTANT(PM)</b>	
For and on Behalf of		For and on Behalf of	
<div style="border: 1px solid black; height: 100px; width: 100%;"></div>		<div style="border: 1px solid black; height: 100px; width: 100%; text-align: center;">  </div>	
Date: _____		Date: _____	
		<div style="border: 1px solid black; padding: 5px; text-align: center;">  </div>	
		Date: _____	
<b>Note:</b> Approval / Comments does not relieve the Contractor from his obligations under the Contract.			

# Approvals







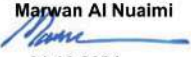

   		<b>MATERIAL APPROVAL REQUEST</b>	
CONTRACT NO.	148733	MAR NO.	INVB-i118-MAR-MEP-HVAC-0032-00
CONTRACT TITLE	JEBEL ALI VILLAGE VILLAS & INFRASTRUCTURE	REVISION NO.:	00
EMPLOYER	NAKHEEL PJSC	REVISION DATE:	31-Jul-24
BUILDING CONSULTANT	ARCHGROUP CONSULTANTS INTERNATIONAL	TRADE	INFRA
INFRA CONSULTANT	PARSONS INTERNATIONAL		MEP
MEP CONSULTANT	GREEN CONCEPT ENGINEERING CONSULTANTS	DISCIPLINE	MECHANICAL
		CONTRACTOR	Innovo Build LLC
		SUBCONTRACTOR	M/s. Carawan & M/s. MBM
Material Description:		PI Duct Fabrication	
Location of Use: For Villas			
<b>Manufacturer:</b> Kingspan Insulation LLC Address: Dubai Location: UAE Specification ref.: Section 4 B.O.Q. ref.: N/A Date Material required on site: All to be confirmed		<b>Supplier:</b> Pro Duct Industries LLC Catalogue Ref: Section 6 Address: Dubai, UAE Production Period: All to be confirmed Delivery Ex-works: All to be confirmed Total Delivery time: All to be confirmed Expected date of delivery to site: All to be confirmed	
DELIVERY METHOD <input checked="" type="checkbox"/> Overland <input type="checkbox"/> Sea Freight <input type="checkbox"/> Air Freight <input type="checkbox"/> Other			
<b>CONTRACTOR'S ATTESTATION:</b> Material / Submittal Comply with Specifications: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> Alternative <input type="checkbox"/> Material / Submittal Comply with Approved Vendor List: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> Not Applicable			
Details of Alternative: Back-up Material			
<b>Main Contractor's Statement:</b> We certify that the material submitted herewith has been reviewed in detail and is in compliance with the contract drawings and specifications except as otherwise stated hereabove.			
Main Contractor's Authorized Signature: 		31-Jul-24	
<b>BUILDING / INFRASTRUCTURE WORKS CONSULTANT COMMENTS:</b>  I) Kingspan is already approved as a brand in the project, contractor to follow the comments given in the INVB-i118-MAR-MEP-HVAC-0018.		<b>Attachments / Enclosures</b> <input checked="" type="checkbox"/> List of Materials/Equipment with offered sizes, model nos, etc. <input checked="" type="checkbox"/> List of Manufacturers <input checked="" type="checkbox"/> Specifications Copies <input checked="" type="checkbox"/> Compliance Statement <input checked="" type="checkbox"/> Drawings <input checked="" type="checkbox"/> Product Catalogue <input checked="" type="checkbox"/> Test Results / Certificates <input checked="" type="checkbox"/> Warranty <input checked="" type="checkbox"/> Introduction of Company(Supplier) <input checked="" type="checkbox"/> Trade Licenses of Supplier <input checked="" type="checkbox"/> Quality Certificates <input checked="" type="checkbox"/> ISO Certificate or BS <input checked="" type="checkbox"/> Previous Approvals Copies <input checked="" type="checkbox"/> Certificate of Origin <input checked="" type="checkbox"/> List of Previous Projects in UAE <input checked="" type="checkbox"/> Authority Approval <input checked="" type="checkbox"/> Samples <input checked="" type="checkbox"/> Others	
<b>CONSULTANT (PM) COMMENTS :</b>			
<b>STATUS :</b> <input type="checkbox"/> Approved <input checked="" type="checkbox"/> Approved with Comments <input type="checkbox"/> Not Approved - Resubmit			
<b>BUILDING/ INFRA CONSULTANT</b> For and on Behalf of  Date: _____		<b>CONSULTANT(PM)</b> For and on Behalf of  Date:  _____	
		<b>EMPLOYER</b> For and on Behalf of NAKHEEL  Date: _____	
<b>Note:</b> Approval / Comments does not relieve the Contractor from his obligations under the Contract.			



# Approvals

<b>OMNIYAT</b> THE ART OF ELEVATION							
<b>Main Works - ORLA INFINITY by Omniyat Development on Plot No. PJCRC15-16B Palm Jumeirah</b>							
EMPLOYER REPRESENTATIVE : OMNIYAT DEVELOPMENT MANAGEMENT LIMITED							
LEAD CONSULTANT: P&T ARCHITECTS & ENGINEERS LTD							
ARCHITECT OF RECORD: EGIS							
CONTRACTOR: INNOVO BUILD LLC				PLOT NO.: PJCRC15-16B			
Date :		26-Feb-2025		MS No: MS-IBL-INFINITY-MEP-M-0015-R0			
<b>MATERIAL SUBMITTAL</b>							
New Submittal :		<input checked="" type="checkbox"/>		Resubmittal :		<input type="checkbox"/>	
<b>MATERIAL DESCRIPTION :</b>							
Material Submittal for Pre-Insulated Ducting System							
AS SPECIFICATION		<input checked="" type="checkbox"/>		ALTERNATIVE		<input type="checkbox"/>	
CONTRACTOR PROPOSAL		<input checked="" type="checkbox"/>					
Location:		Supply and Return Connected to Fan Coil Units, and Terminal Units (VAVs)				Sample Attached <input checked="" type="checkbox"/>	
Drawing Ref:		HVAC SYSTEM		B.O.Q :			
Specification Ref: SECTION 23 31 00, 2.8							
(Attach all relevant technical literature marked to identify relevant descriptions, current test certificate, samples etc.)							
MANUFACTURER		SUPPLIER		APPLICATOR / INSTALLER			
Company Name:		Kingspan		Pro Duct Industries L.L.C		MENASCO MECHANICAL CONTRACTING L.L.C	
Address:		UAE		United Arab Emirates		Dubai, United Arab Emirates	
Product Name:		Pre-Insulated Ducting System		Country of Origin: UAE			
<b>SPECIFICATION COMPARISON:</b>							
Specification Requirements				CONTRACTOR Proposal			
Attached Documents: For Review <input checked="" type="checkbox"/>				For Information <input type="checkbox"/>			
Signature:							
<b>Consultant's Comments :</b>							
Refer attachment for comments and to be complied							
Status - B (RESUBMIT)							
Engineer: Shyam EGIS- Sr Mechanical Engineer				Sr. Resident Engineer:			
Date: 10.03.2025				Date: 10.03.2025			
<b>Acceptance Status:</b>							
A. CHECKED AND REVIEWED [ ] WORK MAY PROCEED		B. CHECKED AND REVIEWED SUBJECT TO MINOR REVISION [ ] AS NOTED WORK MAY PROCEED AS PER AMENDMENTS NOTED		C. REJECTED [ ] REVISE & RESUBMIT		D. FOR RECORD [ ] INFORMATION	
<b>EMPLOYER's REPRESENTATIVE COMMENT'S :</b>							
A. APPROVED [ ]		B. APPROVED WITH COMMENTS [ ]		C. REJECTED [ ]		D. FOR RECORD [ ] INFORMATION	
Reviewed by: PM				Approved by: PD			
Date:				Date: AV 13.03.2025			

# Approvals

		
<b>MUDON CENTRAL PARK PROJECT (PHASE 7 &amp; 8)</b>		
The Engineer:	U+A	
CONTRACT:	GCC Contracting (Branch of Ginco Sharjah LLC)	Package No: 23115
<b>SUB-CONTRACTOR APPROVAL REQUEST</b>		
Date :	22-10-2024	Submittal No. : 23115-PH7&8-PQ-ME-0003-R0
To The Engineer :	Mr. Marwan Al Nuaimi (Resident Engineer)	
Approval requested for : M/s Pro Duct Industries		
Prequalification for <b>PI Duct</b>		
<div style="text-align: right;"> Contractor's PM : Mr Sameh Wahib      Signature: </div>		
<b>Engineer's Comments :</b>		
<p><del>*Contractor to incorporate with the below comments and indicated in the attached comment sheet.</del></p> <p>*All ducts fabrication shall be in the factory only. Any site fabrication is not allowed.</p> <p>*All the phenolic pre-insulated ducts shall bear the DCL &amp; UL approved sticker on the fabricated duct itself.</p>		
<b>Employer's Comments</b>		
<p>we have no objection subject to comply with consultant comment and project requirement.</p> <p> Firas Alnajjar 24/10/2024</p>		
Approval Status A. Approved [ ]    B. Approved with Comments <input checked="" type="checkbox"/> C. Rejected Revise & Resubmit [ ]    D. For Information [ ]		
<b>RESIDENT ENGINEER</b> Marwan Al Nuaimi  31.10.2024	<b>PROJECT MANAGER</b>  Date :	

Distribution:

Head Office ☐




Client ☐

QS ☐

Oth ☐

23115-Mudon Central Park (Ph-7&8) UA	
<b>RECEIVED</b>	
22 Oct 2024	
By: Rahman	Time: 1:05 PM

# Approvals


		
<b>PROJECT NAME: 7600 - Umm Fannain - Sharjah</b>		
<b>Material Submittal</b>		
<b>Ref. No.</b> 7600-MAT-MEC-0011-00 <b>Rev. No.</b> 00 <b>Date:</b> 17-Aug-2024		

DOCUMENT DETAILS	LIST OF ENCLOSURE
<b>Item Description</b> GI Duct <b>Category</b> Mechanical <b>Scope of Work</b> <b>Location</b> C Store <b>Specs. Ref.</b> 15810 <b>BOQ Ref.</b> Vol IV, Mechanical Works <b>Drawing Ref.</b> <b>Material Approval Ref.</b> <b>Drawing Approval Ref.</b> <b>Previous Approval Ref.</b> <b>Manufacturer/Local Supplier Details</b> M/s Agis/Pro-Duct Industries <b>Reason for Change</b> <b>No. of Drawings/ Ref. No.</b> <b>Remarks</b>	<input checked="" type="checkbox"/> Compliance Statement <input checked="" type="checkbox"/> Company Profile <input checked="" type="checkbox"/> Trade/Commercial License <input checked="" type="checkbox"/> Technical Data Sheet <input checked="" type="checkbox"/> Test Report <input checked="" type="checkbox"/> Method Statement <input checked="" type="checkbox"/> ISO Certification <input checked="" type="checkbox"/> List of Projects Executed <input checked="" type="checkbox"/> Catalogue & Data Sheet <input checked="" type="checkbox"/> Certificate of Conformity <input checked="" type="checkbox"/> Warranty Certificate <input checked="" type="checkbox"/> Related Drawings <input checked="" type="checkbox"/> Specification Compliance <input checked="" type="checkbox"/> Test Certificate <input type="checkbox"/> Photograph of Sample <input type="checkbox"/> Sample <input checked="" type="checkbox"/> List of Proposed Items <input type="checkbox"/> Others ( )

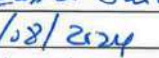
  

Main Contractor Statement: We certify that the Document submitted herewith has been reviewed in details and is in compliance with the Contract Drawings and specifications except as otherwise stated hereabove.

<b>Main Contractor/Sub-contractor:</b> Signature & Date:  17-Aug-2024	<b>Received by:</b> Date:
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**Emarat Representative's Comments**

No objection submitted to supply in the form of duct specification No Follow up MACNA standards No duct fabrication allowed over the site No submitted to sample approval and final test inspection approved. Warranties & guarantee shall be as per the approved spec.	<input type="checkbox"/> A - Approved <input checked="" type="checkbox"/> B - Approved As Noted <input type="checkbox"/> C - Revise, Resubmit <input type="checkbox"/> D - Rejected
<b>Name:</b> Ahmed Mohamed  20/08/2024	<b>Signature:</b> <b>Date:</b>

Corrections or comments made related to submittals during this review do not relieve the contractor from compliance with the contract requirements and specifications and does not constitute a departure from Contract. This check is only for review of general conformance with the design concept of the project and general compliance with the information given in the contract documents.



# Approvals


 <b>Emarat</b>	 <b>JD Gulf</b> <small>CONTRACTING LLC - U.A.E.</small>	 <b>CSR</b> <small>CAHAWAN</small>
<b>PROJECT NAME: 7610 - Wadi Ashwani - Ras Al Khaimah</b>		
<b>Material Submittal</b>		
<b>Ref. No.</b> 7610-MAT-MEC-0007-01 <b>Rev. No.</b> 01 <b>Date:</b> 18-Jul-2024		

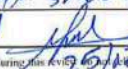
DOCUMENT DETAILS	LIST OF ENCLOSURE
<b>Item Description</b> GI Duct <b>Category</b> Mechanical <b>Scope of Work</b> <b>Location</b> C Store <b>Specs. Ref.</b> 15810 <b>BOQ Ref.</b> Vol IV, Mechanical Works <b>Drawing Ref.</b> N/A <b>Material Approval Ref.</b> <b>Drawing Approval Ref.</b> <b>Pervious Approval Ref.</b> <b>Manufacturer/Local Supplier Details</b> M/s Agis/Pro-Duct Industries <b>Reason for Change</b> <b>No. of Drawings/ Ref. No.</b> <b>Remarks</b>	<input checked="" type="checkbox"/> Compliance Statement <input checked="" type="checkbox"/> Company Profile <input checked="" type="checkbox"/> Trade/Commercial License <input checked="" type="checkbox"/> Technical Data Sheet <input checked="" type="checkbox"/> Test Report <input checked="" type="checkbox"/> Method Statement <input checked="" type="checkbox"/> ISO Certification <input checked="" type="checkbox"/> List of Projects Executed <input checked="" type="checkbox"/> Catalogue & Data Sheet <input checked="" type="checkbox"/> Certificate of Conformity <input checked="" type="checkbox"/> Warranty Certificate <input type="checkbox"/> Related Drawings <input checked="" type="checkbox"/> Specification Compliance <input checked="" type="checkbox"/> Test Certificate <input checked="" type="checkbox"/> Photograph of Sample <input type="checkbox"/> Sample <input checked="" type="checkbox"/> List of Proposed Items <input type="checkbox"/> Others ( )

Main Contractor Statement: We certify that the Document submitted herewith has been reviewed in details and is in compliance with the Contract Drawings and specifications except as otherwise stated hereabove.

<b>Main Contractor/Sub-contractor:</b> Signature & Date:  18-Jul-2024	<b>Received by:</b> Date:
---	------------------------------

<b>Emarat Representative's Comments</b> Data Submittal submitted to Compliance. On the project specifications. To follow SANS standard. No duct fabrication on the site allowed. Submitted to sample approval and final HSE inspection approval. Warranties & guarantee shall be as per the project specifications.		<input type="checkbox"/> A - Approved <input checked="" type="checkbox"/> B - Approved As Noted <input type="checkbox"/> C - Revise, Resubmit <input type="checkbox"/> D - Rejected
<b>Name:</b> Ahmed Rashed		<b>Signature:</b>  <b>Date:</b> 18-Jul-2024

Corrections or comments made related to submittals during this review do not release the contractor from compliance with the contract requirements and specifications and does not constitute a departure from Contract. This check is only for review of general conformance with the design concept of the project and general compliance with the information given in the contract documents.



## **OUR BRANCHES**

### **UNITED ARAB EMIRATES (UAE)**

Address : Umm Al Quwain, United Arab Emirates

Tel: +971 6 523 2891

E-mail: [info@pro-ductindustries.com](mailto:info@pro-ductindustries.com)

### **SAUDI ARABIA (KSA)**

Address : Riyadh, Saudi Arabia

Tel : +966 11 450 9693

E-mail : [info.sa@pro-ductindustries.com](mailto:info.sa@pro-ductindustries.com)



**[WWW.PRO-DUCTINDUSTRIES.COM](http://WWW.PRO-DUCTINDUSTRIES.COM)**