

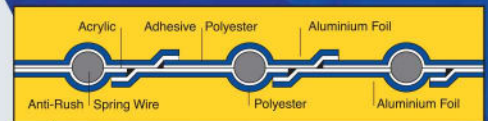
AERODUCT^{TM.}

TWO PLY DOUBLE FACING FLEXIBLE ALUMINIUM AIR DUCT

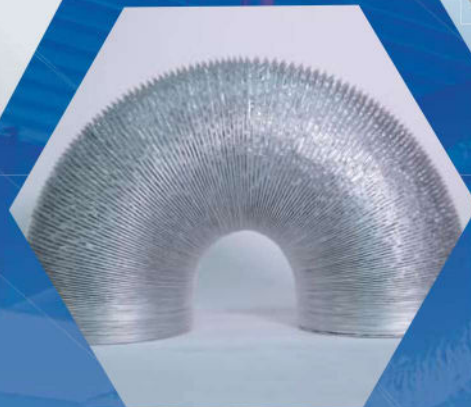
*For Quick
and Economical
Installation*



TWO PLY



MORE DURABLE!



Ideal For:

- Heating and Cooling System
- All Airconditioning and Ventilating System
- Exhausting System

AERODUCT™ is a fully flexible, compressible and extendable air duct. Made of 2 ply multi-layered Aluminium Polyester Foil bonded together by quality adhesive and reinforced with high carbon corrosion proof spring wire. Designed with only 1" spacing (25 mm) between the spring wires, Aeroduct is strong, durable and will not go out of shape even when fully extended. Aeroduct is non-flammable, more efficient and more popular when compared with other flexible ducting system especially low cost single ply-flexible air ducts.

Size Available

- Available in various I.D. ranging from 100 mm to 600 mm (4" to 24")
- Supplied in standard length of 10 meters each
- Packed individually in carton size of: 75 cm long for Aeroduct insulated with fiberglass insulation.

Characteristics

- Able to withstand high air pressure
- Strong and Durable with 2 ply double facing aluminium foil
- No problem of air leakage
- Aeroduct offers smooth inner core which provides low friction loss
- Low operating cost
- Compressible and extendable by more than 10 times its original size. No problems of shrinking when fully extended
- Non-flammable.

Applications

- Ideal for all air conditioning/ventilating systems and any other industrial or residential applications including hospital, hotel, commercial and office buildings.
- Very flexible and can be connected to whatever position required.
- Economical, quick and easy to install even in complicated unworkable areas where other ducts cannot reach.
- Available bare or pre-insulated with fiberglass of thickness 25 mm (1"), 38 mm (1½") or 50 mm (2") x Density 16 kg/m³ to 48 kg/m³.

AERODUCT IS AVAILABLE IN 4 TYPES (BARE OR PRE-INSULATED WITH FIBERGLASS)

- **Aeroduct AL7** is Two Ply **double** facing flexible Aluminium Air Duct.
- **Aeroduct AL5** is Two Ply **double** facing flexible Aluminium Air Duct.
- **Aeroduct AL5R** is Two Ply **double** facing flexible Aluminium Air Duct + scrim reinforcing.
- **Aeroduct ALP** is Two Ply **single** facing flexible Aluminium Air Duct.

All types of Aeroduct are also available in pre-insulated with fiberglass jacketed with scrim aluminium foil which can withstand dragging without tearing. Our special aluminum foil jacketing is non-flammable (UL tested). Other types of jacketing is also available.

Fiberglass insulation types available in 16 kg./m³ to 48 kg./m³ with the thickness of 25 mm. (1"), 38 mm. (1 ½") or 50 mm. (2")

AERODUCT™ PHYSICAL PROPERTIES

PHYSICAL PROPERTIES	MODEL AL7	MODEL AL5	MODEL AL5R	MODEL ALP
Total Thickness*	71 Micron	51 Micron	51 Micron	51 Micron
Inside Facing	Polyester Aluminium Foil	Polyester Aluminium Foil	Polyester Aluminium Foil	Polyester Aluminium Foil
Outside Facing	Polyester Aluminium Foil	Polyester Aluminium Foil	Polyester Aluminium Foil with scrim reinforcing	Metalized Polyester
Spacing between the Spring Wire	25.4 mm.	25.4 mm.	25.4 mm.	25.4 mm.
% Shrinkage after Fully Extended	5% max.	5% max.	5% max.	10% max.
Service Temperature	-20°C - +120°C (-4°F - +250°F)	-20°C - +120°C (-4°F - +250°F)	-20°C - +120°C (-4°F - +250°F)	-20°C - +120°C (-4°F - +250°F)
Maximum Air Pressure	750 mm. W.G. (30" W.G.)	500 mm. W.G. (20" W.G.)	500 mm. W.G. (20" W.G.)	500 mm. W.G. (20" W.G.)
Maximum Air Velocity	30 Meters/sec. (6,000 ft./min.)	20 Meters/sec. (4,000 ft./min.)	20 Meters/sec. (4,000 ft./min.)	20 Meters/sec. (4,000 ft./min.)

Note: *Total thickness is approximately calculated from the total thickness of foil and adhesive.



DECODING OF NEW CODE NUMBER

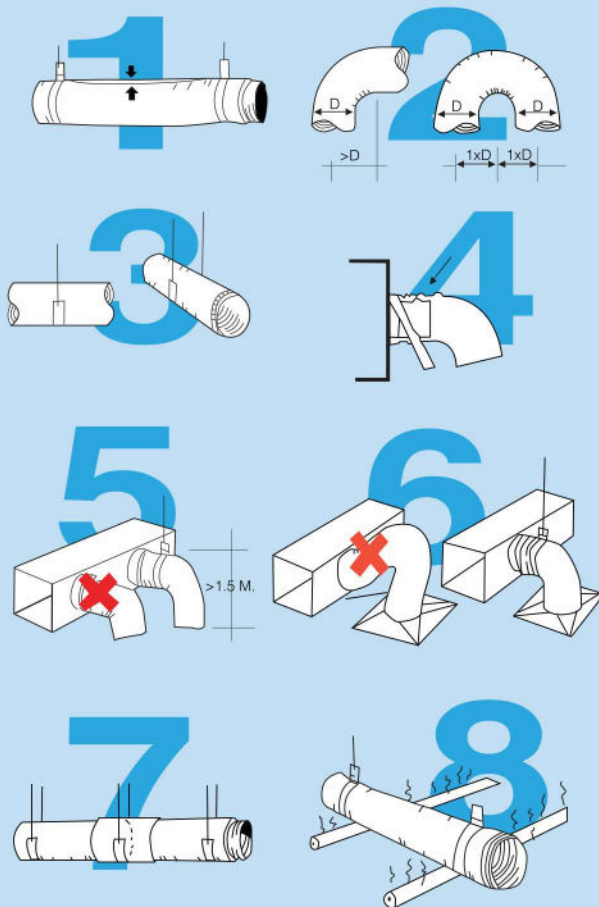
- **BARE DUCT**
 - 1 TWO PLY DOUBLE FACING OF ALUMINIUM
 - 2 71 MICRONS THICKNESS
 - 3 Ø OF BARE DUCT

1 2 3
AL 7 10

- **PRE-INSULATED**
 - 1 TWO PLY DOUBLE FACING OF ALUMINIUM
 - 2 71 MICRONS THICKNESS
 - 3 PRE-INSULATED
 - 4 FIBERGLASS DENSITY 16 kg./m³
 - 5 FIBERGLASS THICKNESS OF 25mm.
 - 6 Ø 10" FLEXIBLE DUCT

1 2 3 4 5 6
AL 7 | 16 25 10

INSTALLATION



1. Install Aeroduct as straight as possible with an allowable sag of only 50 mm. between each distance of 1 meter. (diagram 1)
2. All bends should be made as large as possible and should have a radius of not less than the diameter of the duct in use (diagram 2.1) "U" shape bends should be avoided. However, if unavoidable, make sure that the distance between the centre point of the duct is at least 2 times the diameter of the duct in use. (diagram 2.2)
3. Use metal or galvanized iron hanger that is at least 25 mm. wide and should support the flexible duct with at least half the circumference surface in contact. (diagram 3)
4. Do not connect Aeroduct to connector with sharp ends. An allowance of at least 2 rounds of flexible ducts should be provided at point of joining before wrapping the connections with 2" wide aluminium or duct tape. Clamp tightly with plastic or metal clamps followed by another layer of aluminium tape to prevent tearing. (diagram 4)
5. Extra care must be taken when making connections to fixed conventional duct. An additional hanging support is always recommended. If Aeroduct is installed vertically, the use of hanging support by wire for every distance of 1.5 meter is necessary. (diagram 5)
6. Connections to any other types of air supplying component should have as little bending as possible. Figure 6 shows a poor and correct connection arrangement. (diagram 6)
7. In the event where extreme length of Aeroduct is to be installed, round duct connectors made of galvanized sheets of at least 30 cm. long should be used to connect the duct at every distance of 10 meters. Use metal or galvanized hangers as recommended on point 1&3 to support the point where connections are made. Light railing is a good alternative hanging support when using long length of Aeroduct.
8. It must be emphasized that the flexible duct must not be in direct physical contact with any uninsulated hot or cold pipes. If in the event where such situations cannot be avoided, an additional 1" thick insulation should be wrapped around pipes that are in contact with the duct.

THE PROJECT HAVE BEEN USED AERODUCT

- Seagate Electronic Co.,Ltd.
- NMB Co.,Ltd.
- PTT Co.,Ltd. (Head Office)
- CP Magic Co.,Ltd. (Saraburi)
- Siam Cement Co.,Ltd.
- Central Department Store
- EGAT
- Wall Street Tower
- Chatrium Hotel Pathumwan
- Intercontinental Phuket Resort
- International Airport (Phuket,Trang, khonkaen, Nakornsrihammarat)
- Sinthorn Building (Expansion)
- The MRT (Orange line)
- Shangri-la Hotel
- Holiday Inn Hotel
- Michelin Factory (Rayong)
- Chang Beer Factory (Wangnoi)
- National Conference Center
- Robinson
- Terminal 21 (Rama 3)
- River Museum Bangkok (ICONSIAM)
- Silom Complex
- Grand Hyatt Erawan Hotel, Etc.

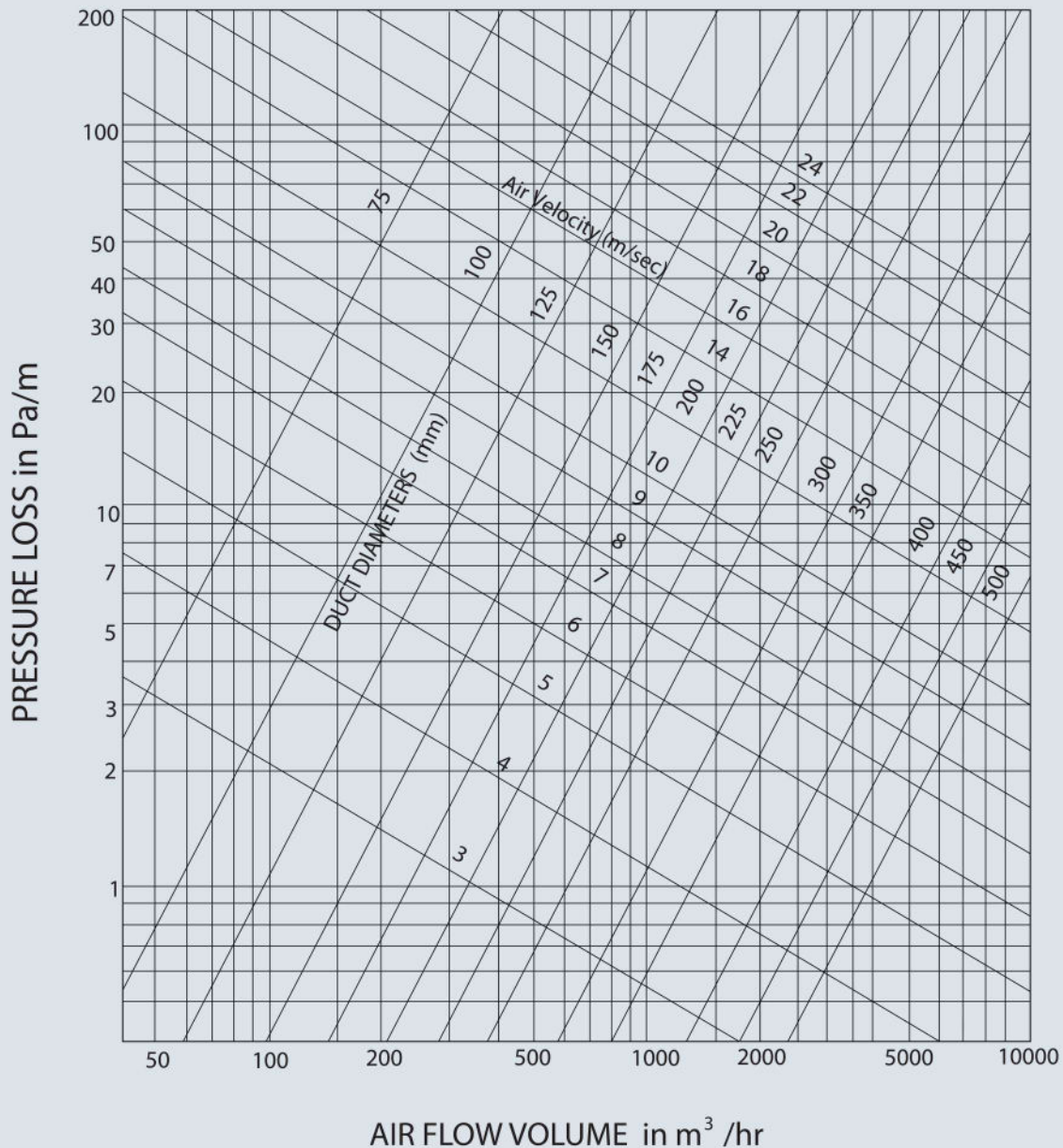


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PRESSURE LOSS DIAGRAM



บริษัท 3ที อินซูลेशन จำกัด

ที่อยู่ 20/8 หมู่ 10 ถ.กาญจนภิเษก ต.คลองข่อย
อ.ปากเกร็ด จ.นนทบุรี 11120

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