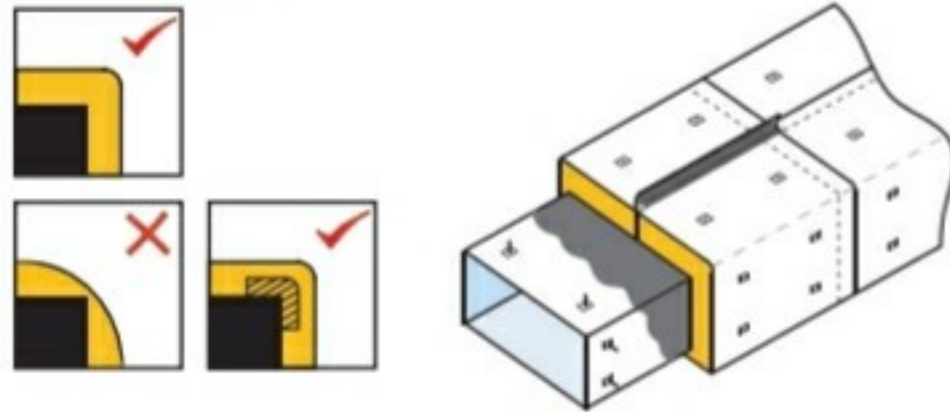


# Micro Duct Wrap

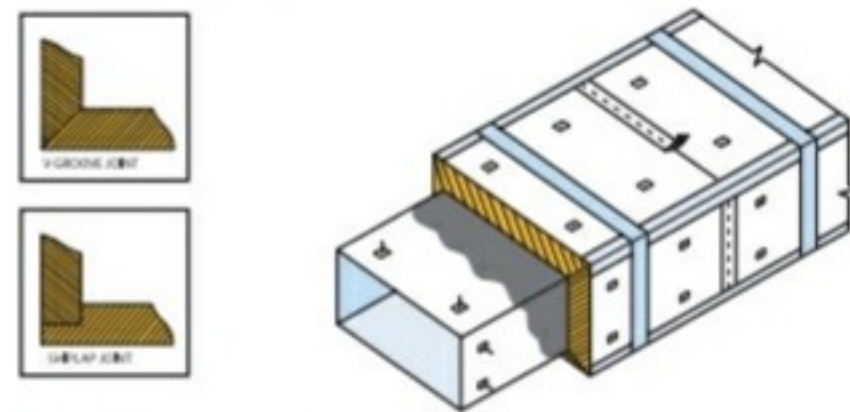
Micro Duct Wrap

## Installation Method

### Blanket Type



### Board Type

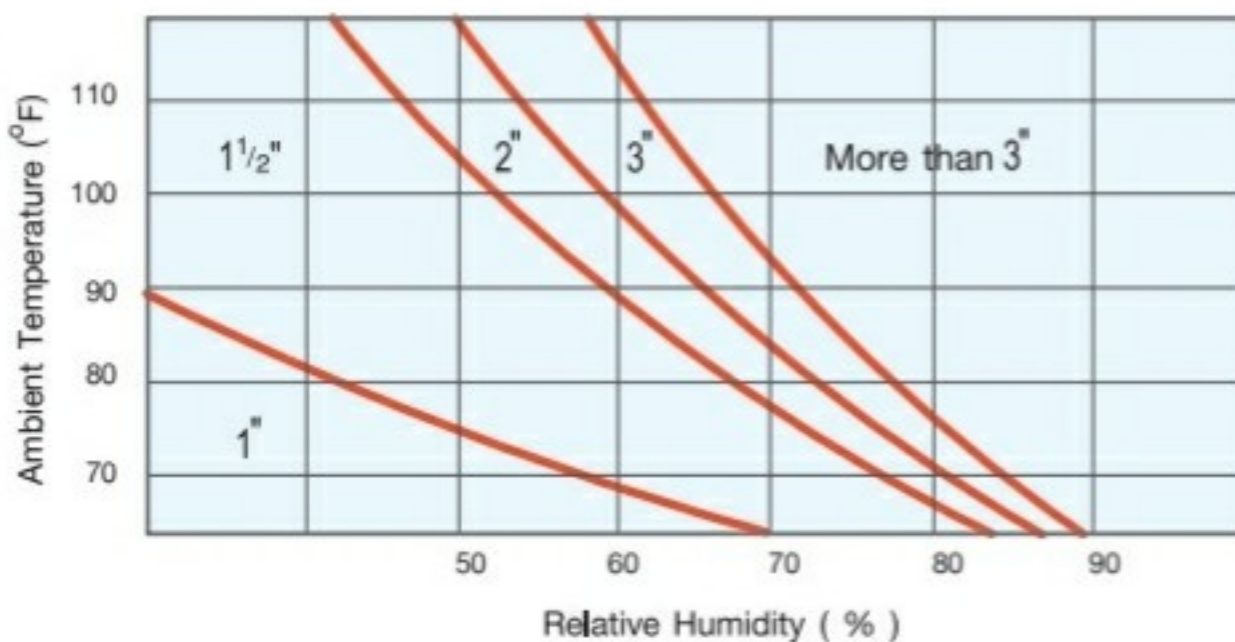


## Installation Consideration

For installation of blanket type insulation, it is important to maintain and control the insulation thickness at the surface to be insulated as recommended by design engineer, more importantly at the corners of rectangular duct.

## Insulation Tips

Layer Microfiber Insulation to the required thickness ensuring that all joints are tightly butted, facing are lapped to close gaps of bypasses that can prevent sites from air infiltration or condensation (during cooling). This condition will make good shape, energy saving for a long time comfort.



## Thickness Guidelines

The appropriate thickness will depend on weather and climate / environmental condition at the area, hot or cold, dry or wet to determine moisture conditions, which can be calculated before installation.

## Water Resistant

**Micro Duct Wrap** has constantly improved the quality and developed performance of glasswool insulation material, we have special formula (exclusive for Microfiber) to penetrate water and moisture into our products which make all Microfiber Products are Non Water Absorption, durable and long-time performance products.



## Product Specification Size

| Density (Kg/m <sup>3</sup> ) | Thickness (mm.) | Size Blanket (m x m) | Size Boards (m x m) | R-Value (m <sup>2</sup> .K/W) |        |        |
|------------------------------|-----------------|----------------------|---------------------|-------------------------------|--------|--------|
|                              |                 |                      |                     | 25 mm.                        | 38 mm. | 50 mm. |
| 16                           | 25              | 1.22 x 30.50         | -                   | 0.658                         | -      | -      |
| 16                           | 50              | 1.22 x 15.25         | -                   | -                             | -      | 1.316  |
| 24                           | 25              | 1.22 x 30.50         | -                   | 0.714                         | -      | -      |
| 24                           | 38 , 50         | 1.22 x 15.25         | -                   | -                             | 1.086  | 1.429  |
| 32                           | 25 , 38* , 50   | 1.22 x 15.25         | 1.22 x 2.44         | 0.758                         | 1.152  | 1.515  |
| 48                           | 25 , 38* , 50   | 1.22 x 7.50          | 1.22 x 2.44         | 0.781                         | 1.188  | 1.563  |

• Other special facings are available upon request

## Duct Sealing Procedure

- Ensure clean surface of the air duct, seal the air leakage. Cut the blanket against a firm straight to air hose and insulate the edges leaving 2 inch to fully cover the surface.
- Continue sealing and insulating all of the surface area and ensure from the start to the end points of the slit are taped to assure an air-tight with aluminium foil duct tape.
- In the case of air ducts are 24 inches in width or more, then specific spindle pin should be provided and tightly butted, but not more than 18 inches in length.
- Always apply aluminum duct foil tape for closure of the rips / tears or air leakage area to minimize energy losses in ducts.

| Glasswool Thickness | Thickness after sealed | Square Duct | Rectangular Duct |
|---------------------|------------------------|-------------|------------------|
| 1"                  | 3/4"                   | P + 6"      | P + 5"           |
| 1 1/2"              | 1 1/8"                 | P + 8"      | P + 7"           |
| 2"                  | 1 1/2"                 | P + 10"     | P + 8"           |
| 2 1/2"              | 1 7/8"                 | P + 14 1/2" | P + 11 1/2"      |
| 3"                  | 2 1/4"                 | P + 18 1/2" | P + 14 1/2"      |

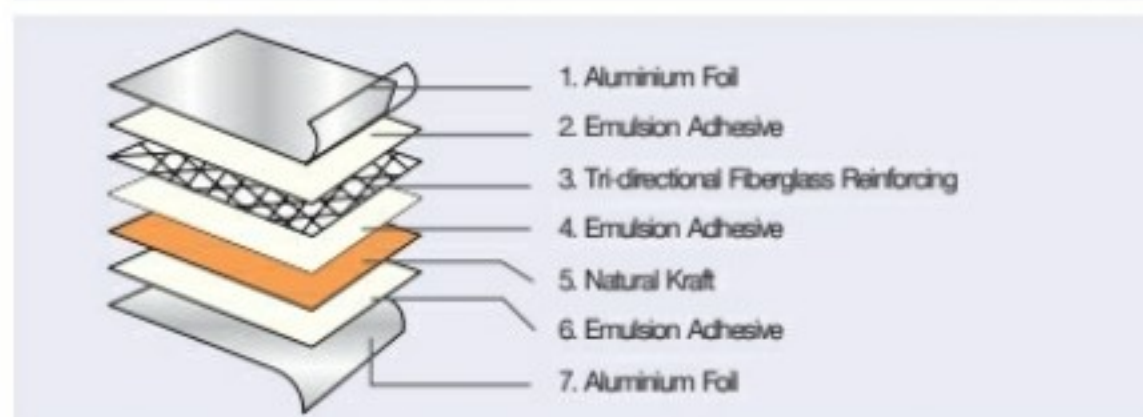
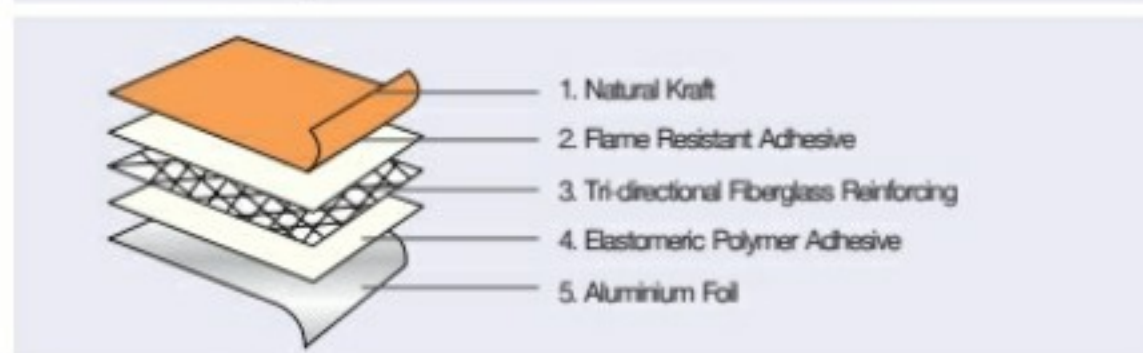
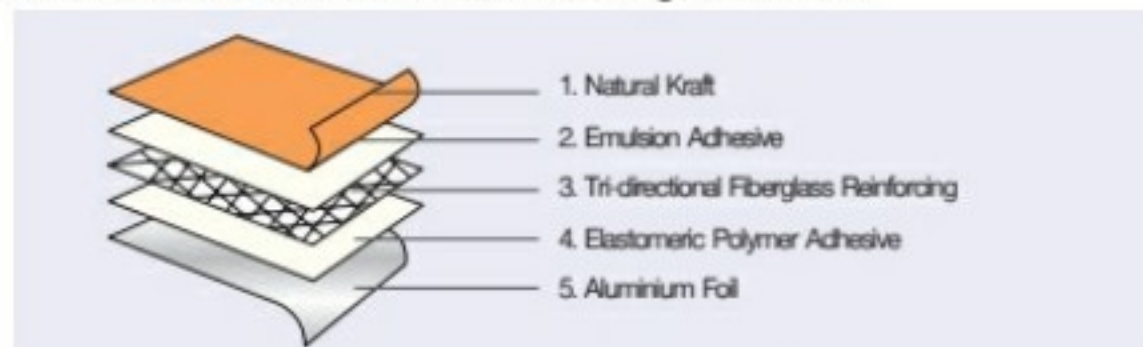
P = The line around the duct installed.

# Micro Duct Wrap

Micro Duct Wrap

## Product Description

**Micro Duct Wrap** is an excellent thermal insulation material for optimal acoustic performance, which are energy saving and environment friendly. Our glasswool products have moisture absorption and also water proofing performance. For Air Conditioning Systems, both blanket and board are available. Our glasswool is manufactured in compliance with TIS 486, 487, ASTM, NFPA 90 A, Australian Standards and Green Building Standards.



## Benefits

- Excellent thermal properties
- Sound proof and acoustic absorption control.
- Lightweight, easy to fabricate.
- Prevent condensation and waterproofing performance.
- Durable and long-time
- Incombustible and fire resistant.
- Moisture resistant.
- Best value for money

### FL

Micro Duct Wrap is used for ducting system laminated with 5 layers Non-Flammable Aluminum Foil facing which have passed the tests of ASTM E84 and BS 476 Class O standards.



### FR

Micro Duct Wrap is used for ducting system laminated with Non-flammable Aluminum Foil 5 layers facing manufactured from the factory which have passed the tests of UL723, ASTM E84, ULC-S102M and FM Approved.



### FSF

Micro Duct Wrap is used for ducting system laminated with Double-sided Aluminum Foil 7 layers facing which have passed the tests of UL723, ASTM E84, and BS 476 Class O



### FRD 524

Micro Duct Wrap is used for ducting system laminated with Double-sided Aluminum Foil using Albar-Layer-Bonding Technology. High resistant to water and moisture with 6 layers which have passed the tests of UL 723, ASTM E84, BS 476 Class O and Australian Standards.



## Application

**Micro Duct Wrap** is a light weight duct insulation with excellent thermal performance, consistently maintain both cold and hot flow in all duct types and prevent condensation which are widely used for commercial buildings, industrial and accommodation markets, available for hot or cold duct to get Indoor Air Quality (IAQ). They are incombustible and fire resistant with service temperature 4 – 121°C.

## Facing Lamination

**Micro Duct Wrap** is a high grade heat resisting material laminated with Aluminum Foil (Tri-direction Fiberglass). Our Glasswool laminated with high quality fire retardant aluminium foil is easily fabricated on any surfaces where temperature control is essential as requested by building designer

| Property  | Test Method                  | Specification           |                      |                      |                      |
|---|------------------------------|-------------------------|----------------------|----------------------|----------------------|
| Thermal conductivity<br>Btu.in/ft <sup>2</sup> .h.°F<br>W/m.K | ASTM C518                    | 16 Kg/m <sup>3</sup>    | 24 Kg/m <sup>3</sup> | 32 Kg/m <sup>3</sup> | 48 Kg/m <sup>3</sup> |
|   |                              | 0.264                   | 0.243                | 0.229                | 0.222                |
|   |                              | 0.038                   | 0.035                | 0.033                | 0.032                |
| Temperature range   | ASTM C411                    | Up to 232 °C (450 °F)   |                      |                      |                      |
| Moisture absorption   | ASTM C1104                   | < 1.0% at 49 °C, 95% RH |                      |                      |                      |
| Corrosivity   | ASTM C665                    | Does not accelerate     |                      |                      |                      |
| Mold resistance   | ASTM C665                    | No growth               |                      |                      |                      |
| Surface burning characteristics<br><br><br><br><br>Fire Test  | ASTM E84                     | Flame spread            | < 25                 |                      |                      |
|   |                              | Smoke developed         | < 50                 |                      |                      |
|   | BS 476 Part 6,7<br>AS 1530-3 | Class                   | 0                    |                      |                      |
|   |                              | Ignitability Index      | 0                    |                      |                      |
|   |                              | Spread of Flame Index   | 0                    |                      |                      |
|   |                              | Heat Evolved Index      | 0                    |                      |                      |
|   |                              | Smoke Developed Index   | 1                    |                      |                      |