

ARMOUR GROUP HOLDINGS IPTE LTD

"ARMOUR GROUP HOLDINGS PTE LTD IS A MAJOR DISTRIBUTOR OF AIR-CONDITIONING MATERIALS IN ASIA. THE MANAGEMENT HAS MORE THAN 35 YEARS OF VALUABLE EXPERIENCE IN THE HVACR INDUSTRY."



quality and our team of engineers & researchers are constantly seeking improvements to meet market expectations. Progressively, we built up the reliability of our trademark "Armour" and in the recent years, had successfully done so with the launch of Armour Refrigerant Aluminium Tube, Armour Flexible Duct and Armour Refrigerant Copper Tube.

These products are widely installed for applications in pharmaceutical, clean room, marine offshore, residential, commercial development and most often selected for its superior quality and the ability of these materials to work

tirelessly in a challenging environment.

WHY BUY ARMOUR REFRIGERANT ALUMINIUM TUBE

Flexibility & Strength

- Offers more flexibility and does not kink easily
- Higher wall thickness (G18) provides better tensile strength Able to withstand burst pressure of more than 1000psi without sign of leakage

- Lightweight & Durable Requires lesser strength to bend
- Manufactured up to 1.5mm wall thickness providing superior rigidity

Using the same set of bending tools as copper

- Brazing & Repair Fast & secured joints in less than 15s, 4 times faster than to braze copper No additional flux is required
- Armour Braze Rods allows up to 45-50 joints per rod (50cm rod) Uses the same method to braze copper
- No argon gas, wire spool, gloves, shield or electricity required Joints are stronger than main material

Swaging & Expanding 30% expansion from original OD

- Using the same set of swaging tools as copper
- **Burst Pressure**
- Quatest (Vietnam) tested to meet ASTM B280-02 (9.4 Mpa), ASTM E 1251-99, TCVN 1832:2008 (18Mpa) PSB TUV (Singapore) tested to meet ASTM B75 @ 1000PSI

Thermal Conductivity

• Lower than copper by almost 50% which means lesser rate of condensation

Certificates & Assurance

ASTM B491/B491M: 2006 - Standard Specification for Aluminium and Aluminium - Allov Extruded Rounnd Tubes for General-Purpose Applications.

(Test Standard scope includes refrigeration sevices, gas lines, oil lines and instrument lines) Test Report Reference : 7191017704-MECI1/01-TXM ~ 7191017704-CHMI1-02-MCY

(Hydrostatic test was done up to 1000 psi) Test Report Reference: 79191806-MEC10 CR1-CYW

Adopted ASTM B75: 2002 - Standard Specification for Seamless Copper tube

Adopted BS EN 248: 2002 for Corrosion Resistance Testing Test Report Reference: 7191007742-CHM11-PGK(MEC) ISO 9227: 2006 - Corrosion test in artificial atmospheres -- Salt spray test



Test Report Reference : 7191007742-CHMII-PGK(MEC)



Length & Packaging

- Design to 50 metres length per coil Lesser joint, lesser tendency of leakage
- Longer length, lesser wastage

Corrosion Resitsancy

- 48 hours salt water test before shipment
- Corrosion rate is very much lesser than copper Oxidisation rate is also lower making pipes clean and bright when exposed

Aluminium Tube Size Weight per carton (kg) Carton Armour Burst Length (m) Thickness Dimensions Pressure Diameter Number (inches-mm) (mm) (cm) (IZq) AAC0635100 1/4" - 6.35 1.0 27 x 9 x 27 50 2.4 3900 50 3.8 AAC0952100 3/8" - 9.52 1.0 2400 34 x 11 x 34 AAC1270120 1/2" - 12.70 1.2 47 x 12 x 47 50 6.3 2000 AAC1588120 50 8.2 5/8" - 15.88 1.2 56 x 12 x 56 1800 AAC1905150 3/4" - 19.05 1.5 67 x 12 x 67 50 12.0 1700

ARMOURFLEX pre-insulated Aluminium Tube is carefully designed using high quality materials that is best suited for split air-conditioning installation .



Superior Quality & Performance The development of Armourflex, the first

pre-insulated aluminium tube, revolutionized the market for air conditioning industry in the 21st century. It brought an end to the lengthy process of inserting insulation, glueing and taping at site saving up to 60% of time for insulation.

Insulation: Outer layer of insulation is manufactured with cross linking technology that enables the product to offer excellent thermal resistance.

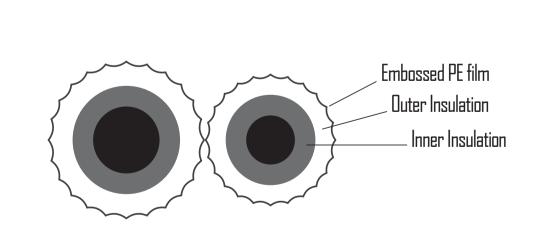
100% Leak free test

Installers are backed with confidence as

Armourflex adopts stringent process in quality checks. All tubes are pre-pumped with nitrogen gas and when cut, an oozing sound of gas signals that the leak are

- Characteristic
- > R410A compliant
- > Easy to install > Bends easily without kinking
- > Attractive
- > No powder > No glue

> Convenient packaging



Pair Coil Specifications

Armour Item Number	Outer Diameter OD (inches)	OD x Wall Thickness (mm)	Carton Dimensions (cm)	Length (m)	Coils per carton	Weight per carton (kg)	Color code
AAPC06350952T10	1/4" - 3/8"	6.35 x 1.0 9.52 x 1.0	73 x 15 x 73	20	1	5.5	100%
AAPC06351270T10	1/4" - 1/2"	6.35 x 1.0 12.70 x 1.2	73 x 15 x 73	20	1	6.4	100° LEAK FREE
AAPC06351588T10	1/4" - 5/8"	6.35 x 1.0 15.88 x 1.2	76 x 17 x 76	20	1	7.0	100%
AAPC09521588T10	3/8" - 5/8"	9.52 x 1.0 15.88 x 1.2	76 x 17 x 76	20	1	7.8	100%
AAPC09521905T10	3/8" - 3/4"	9.52 x 1.0 19.05 x 1.5	76 x 17 x 76	20	1	9.8	100%
AAPC12701905T10	1/2" - 3/4"	12.70 x 1.2 19.05 x 1.5	76 x 17 x 76	20	1	10.2	100% LEAK FREE



All information and product details contained within this document are provided as a guide only. Armour Group does not warrant that the information is accurate or without errors or omissions. Armour Group reserves the right to correct any errors or misprints. Installation shall be conducted by a fully licensed or suitably qualified air conditioning installer. +/- in O.D. Thickness and length shall be allowable.