

Perfect Flex™

Insulated Aluminum Flexible Air Ducts

Perfect Flex insulated flexible air duct	
Duct construction	4-Ply Alum. foil/Polyester + Alum. foil/Polyester
Average thickness of duct	50 Micron for Alum. /Polyester & 78 Micron for Alum. /Alum. flexible air duct.
Temperature Range	From -30 °C to +150 °C
Available Diameter (Ø)	4", 5", 6", 8", 10", 12", 14", 16", 18" & 20 " any other diameter available with M.O.Q
Insulation	Fiber Glass
Insulation Thickness	25 mm or 50 mm
Insulation Density	16 kg/m ³ or 24 kg/m ³
Jacket	Alum. /Polyester
Air velocity	30 m/s (max.)
Operating Pressure	3000 Pa. (max.)
Standard length	10 m
Packing	Single cardboard box
Reaction to fire	Difficult to Ignite comply with : M1 (France) Class B-S1-d0 (Europe)



Perfect Flex™

Non Insulated & Insulated Aluminum Flexible Air Ducts



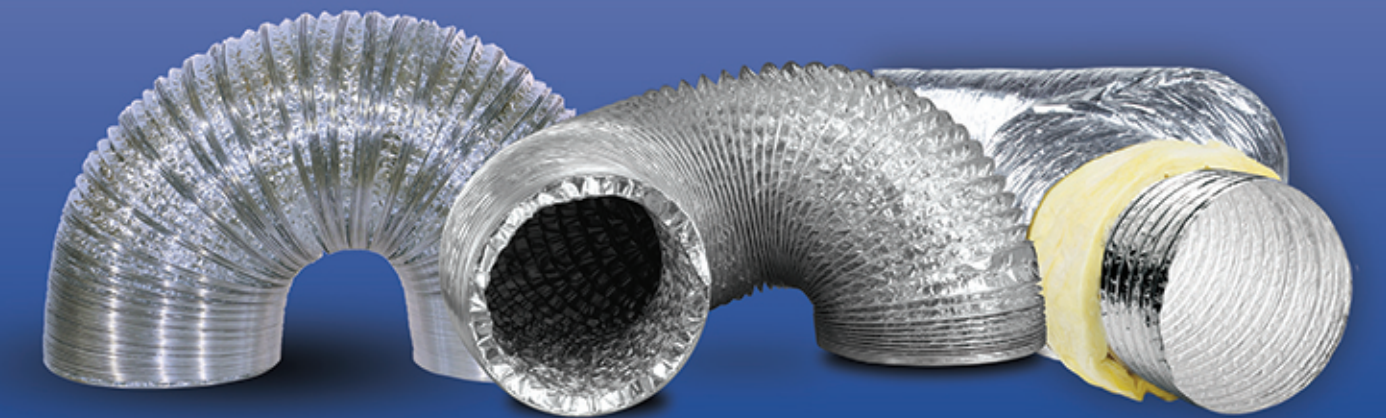
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1st Industrial Zone, Street 72, Block 13037, Obour City, Cairo, Egypt
(+202) 44891257 - 44891750 info@technometalhvac.com
www.technometalhvac.com



PERFECT FLEX

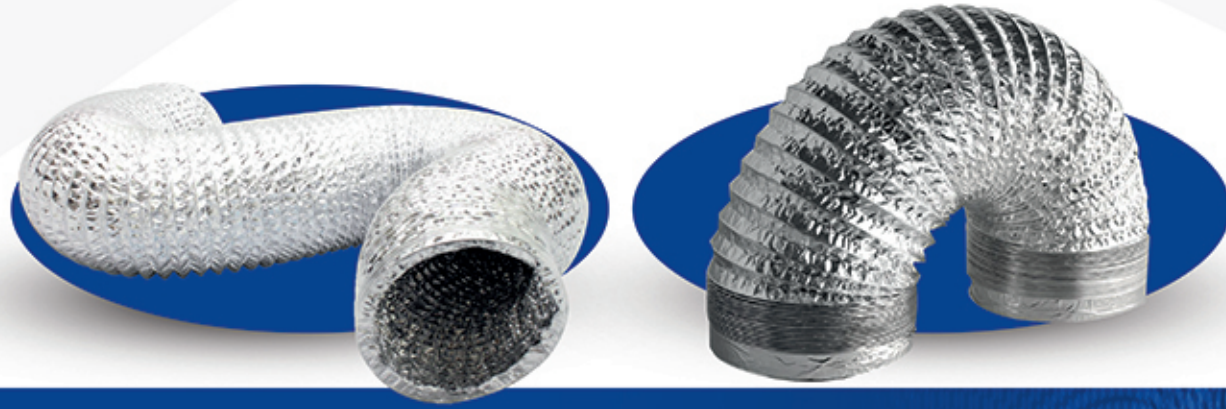
Non Insulated & Insulated Aluminum Flexible Air Ducts



TSD



Non Insulated Aluminum Flexible Air Ducts



- Perfect Flex non insulated flexible air ducts are specially produced for low and medium pressure HVAC duct works.

- Airtight Perfect Flex is produced from multi-layer of Alum. /polyester tapes strengthened with high tensile hard steel spring wire.

- The steel wire is completely encapsulated within two layers of tough polyester film securely bonded together by using water based , fire resistance adhesive , the outer and inner layer of this core flexible duct also has an aluminum foil laminated to it for added strength and fire resistance performance.

Type	Perfect Flex - Alum.-Alum.
Duct construction	4-Ply Alum. foil/Polyester + Alum. foil/Polyester
Average thickness of duct	50 Micron for Alum. /Polyester & 78 Micron for Alum. /Alum. flexible air duct.
Available Diameter (Ø)	2.5" , 3" , 4" , 5" , 6" , 8" ,10" ,12" ,14" , 16" ,18" & 20 "
Temperature Range	From -30°C to 200°C
Air velocity	30 m/s (max.)
Operating Pressure	3000 Pa. (max.)
Standard length	10 m
Packing	Single cadboard box
Reaction to fire	Difficult to ignite
Surface Burning Characteristics	All components are self-extinguishing and will not support flame. Max. Flame Spread: 25 Max. Smoke Developed: 50

TEST REPORT

Issue Date: 2022-02-28

Intertek Report No.: 220128002SHF-001

REPORT ISSUED TO
Techno Metal S.A.E.

Block 13037, Piece 54, First Industrial Zone, Obour City, Cairo, Egypt.

SECTION 1 GENERAL INFORMATION

Intertek Building & Construction (B&C) was contracted by Techno Metal S.A.E. to evaluate the performance of burning test and tension test of flexible air ducts. This evaluation began on January 28, 2022 and was completed on February 28, 2022. The test was conducted from February 17, 2022 to February 24, 2022.

The test was conducted in accordance with ANSI/UL 181-2013(R2017), Standard for Factory-Made Air Ducts and Air Connectors.

This report does not constitute certification of this product nor an opinion or endorsement by this laboratory.

SECTION 2 SUMMARY OF TEST RESULTS

The sample identified as flexible air ducts was evaluated according to the ANSI/UL 181-2013(R2017) section 11 Burning Test and section 21 Tension Test, and the results are shown in the following page.

For INTERTEK B&C:

COMPLETED BY: Lu Cheng
TITLE: Project engineer
SIGNATURE: *Lu Cheng*
DATE: 2022/2/28

REVIEWED BY: Harrison Li
TITLE: Asst. Technical Manager
SIGNATURE: *Harrison Li*
DATE: 2022/2/28



Version: 1 May 2020

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5.4 CONCLUSION

Based on above test results, the submitted sample was found to comply with the requirement of burning test.

6.4 CONCLUSION

Based on above test results, the submitted sample was found to comply with the requirement of tension test.

Insulated Aluminum Flexible Air Ducts

Perfect Flex insulated flexible air duct Thermally and acoustically insulated flexible air ducts are specifically produced for low and medium pressure heating, cooling, ventilation, exhaust and air conditioning systems , it has high elasticity and flexibility.

Airtight insulated flexible air duct Perfect Flex is produced from : multi-layer of Alum./polyester tapes strengthened with high tensile hard steel spring wire .

The steel wire is completely encapsulated within two layers of tough polyester film securely bonded together by using water based , fire resistance adhesive , the outer and inner layer of this core flexible duct also has an aluminum foil laminated to it for added strength and fire resistance performance.

The inner flexible air Duct surrounded with Fiber glass Density 16 or 24 [Kg/m3], thick 25 or 50 [mm] then covered with Aluminium Jacket .



PROPERTIES & ADVANTAGES

- Difficult to ignite
- Dampens mechanical vibration
- Excellent sound attenuation
- Minimum pressure loss
- Dust proof interior
- High Tension steel wire & High resistance to deformation
- Resistant to chemicals
- High resistance to wear and tear jacket
- Easy to store
- Easy to transport
- Low installation cost