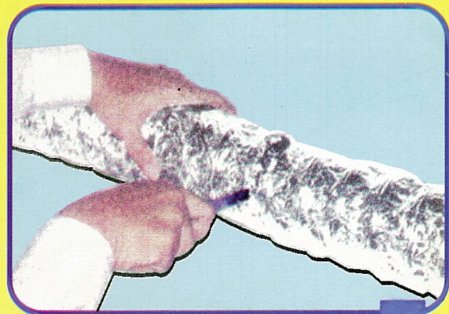


INSTRUCTION



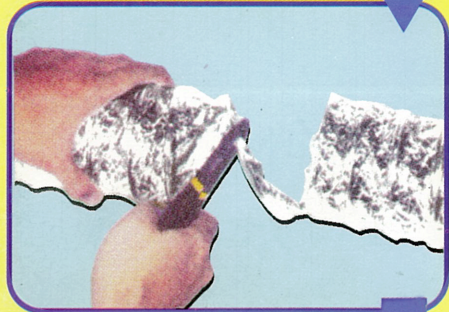
1 Cut foil with knife.



1 Cut jacket fiberglass and inner care with knife.



2 Cut noise of inner care with pliers.



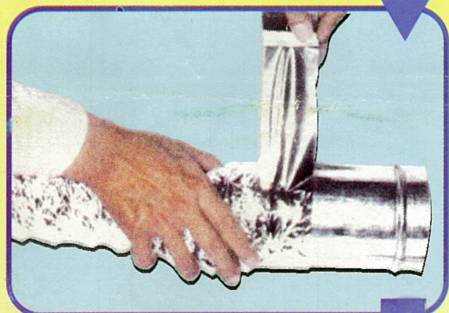
2 Cut noise with pliers.



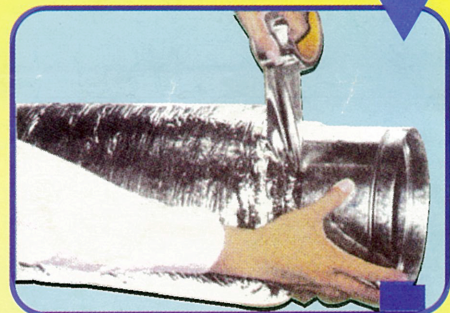
2 Cut noise of inner care with pliers.



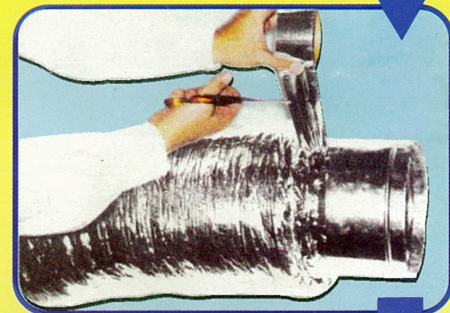
3 Pull back fiberglass insulation leaving outer jacket.



3 Connect duct to spigot and tape.



3 Connect inner with spigot and tape.



4 Taped inner care and outer jacket to spigot.



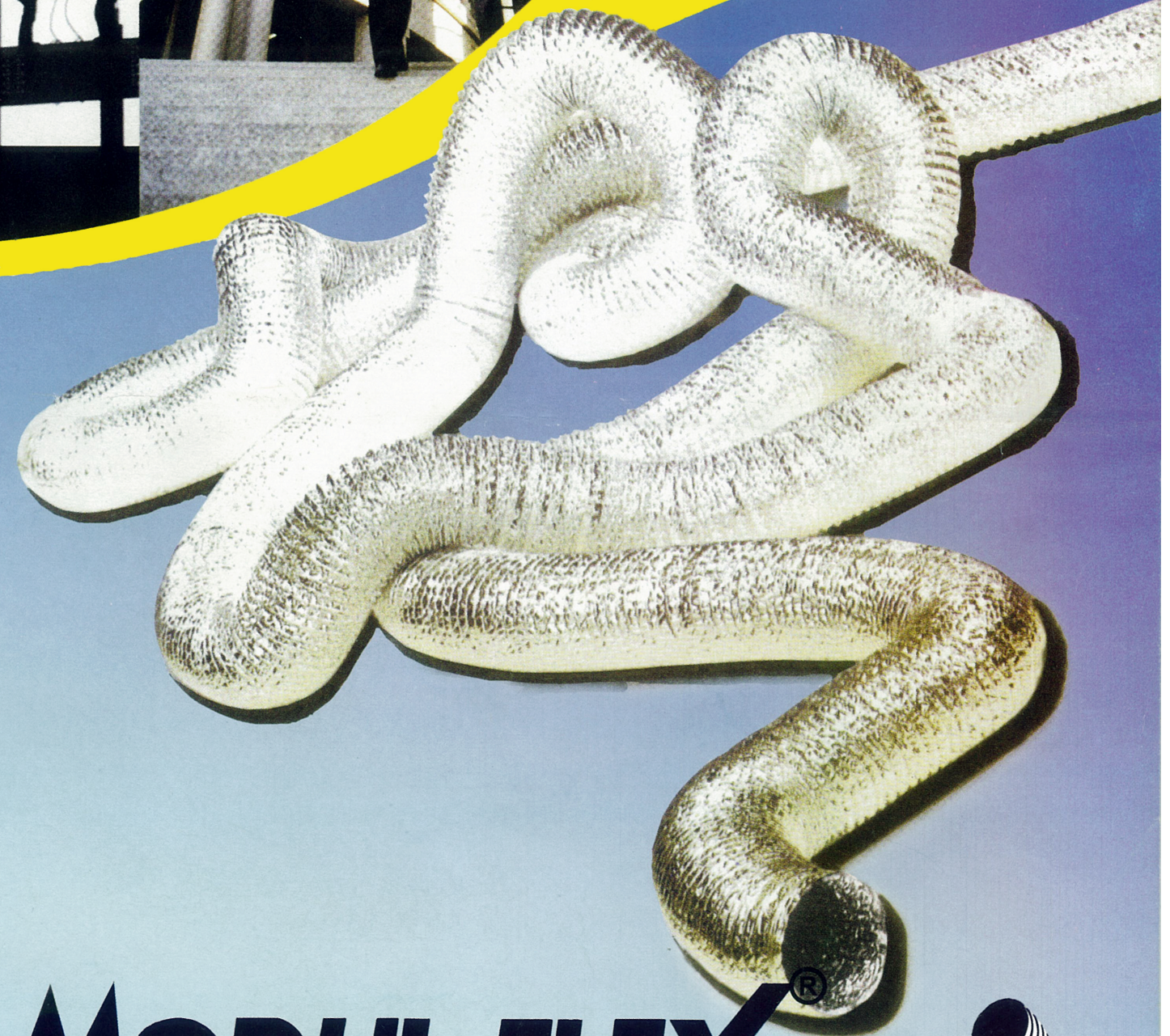
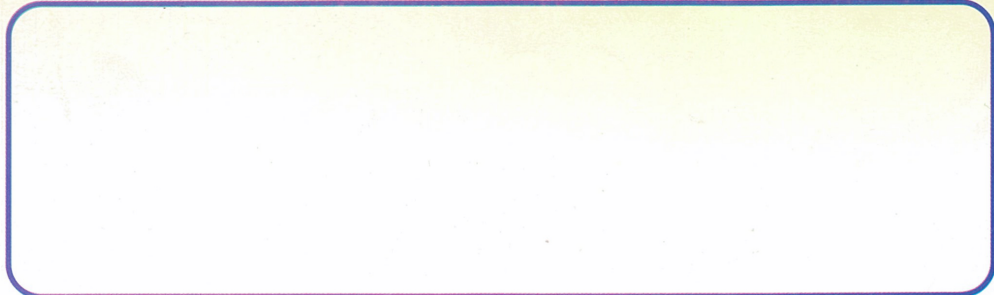
4 Fasten with clamp.



4 Put insulation and jacket over taped inner care and clamp.



5 Fasten with clamp.



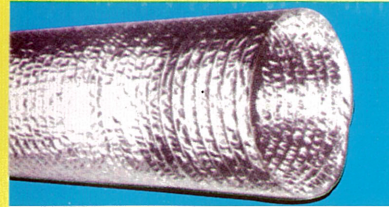
MODUL-FLEX

INTERNATIONAL



MADE IN INDONESIA
 UNDER LICENCE OF MODULFLEX INTERNATIONAL B.V. EUROPE

TYPE 10 A-1

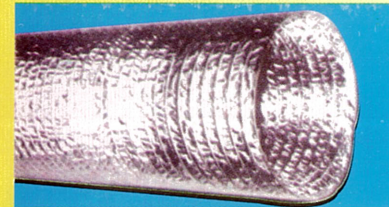


Fully flexible, lightweight aluminium laminated duct, suitable for low / medium pressure air conditioning and ventilation systems. Easy to install over either oval or round connections. At high temperature, or in the case of fire, no toxic or gas emission. The tough standard one layer aluminium laminated construction encapsulates a high tensile steel wire helix

TECHNICAL DATA

Diameter Range	:	4" - 12"
Temperature Range	:	-30°C - + 120°C
Air Velocity	:	Max. 22 m/Sec.
Working Pressure	:	200 mm W.G. (Max)
Standard Length	:	10 Metres
Wire Spacing	:	37 mm

TYPE 10 A-2



Fully flexible, lightweight aluminium laminated duct, suitable for low/medium pressure air conditioning and ventilation systems. Easy to install over either oval or round connections. At high temperature, or in the case of fire, no toxic or gas emission. The tough standard two layers aluminium construction encapsulates a high tensile steel wire helix

TECHNICAL DATA

Diameter Range	:	4" - 20"
Temperature Range	:	-30°C - + 120°C
Air Velocity	:	Max. 28 m/Sec.
Working Pressure	:	250 mm W.G. (Max)
Standard Length	:	10 Metres
Wire Spacing	:	25 mm

TYPE T 10A INSULATED 16 Kg & 24 Kg



Thermal insulated duct, using standard 10 A-2 type product as inner core, fiberglass insulation and fiberglass grid reinforced aluminium foil. At high temperature or in case of fire, this duct will not generate any toxic fumes or gases. No PVC nor neoprene components are used.

TECHNICAL DATA

Diameter Range	:	4" - 20"
Temperature Range	:	-30°C - + 120°C
Fiberglass Thickness	:	25 mm
Fiberglass Density	:	16 kg/m ³ & 24 kg/m ³
Air Velocity	:	Max. 30 m/Sec.
Working Pressure	:	300 mm W.G. (Max)
Standard Length	:	10 Metres

TYPE ACCOUSTIC A 10A INSULATED 16 Kg & 24 Kg



Accoustical, factory insulated duct with special sound absorbing inner liner. The air stream is completely separated from the Fiberglass insulation by the sealed liner and thus the possibility of fiberglass particle erosion is fully eliminated. The duct is completely encased with a tough, durable reinforced aluminium outer jacket.

TECHNICAL DATA

Diameter Range	:	4" - 20"
Temperature Range	:	-30°C - + 120°C
Fiberglass Thickness	:	25 mm
Fiberglass Density	:	16 kg/m ³ & 24 kg/m ³
Air Velocity	:	Max. 30 m/Sec.
Working Pressure	:	300 mm W.G. (Max)
Standard Length	:	10 Metres

SILENCER TYPE SA



This type of silencer uses perforated aluminium foil which encapsulates the helical spring wire as the inner core, fiberglass insulation and helical spring wire supported aluminium foil for the outer duct which gives a good sound absorption.

TECHNICAL DATA

Diameter Range	:	4" - 20"
Temperature Range	:	-30°C - + 120°C
Fiberglass Thickness	:	25 mm
Fiberglass Density	:	16 kg/m ³ & 24 kg/m ³
Air Velocity	:	Max. 30 m/Sec.
Working Pressure	:	300 mm W.G. (Max)
Standard Length	:	0,5 Metre & 1,0 Metre

GENERAL

The application of Accoustic flexible Ducting and associated 'break-out' noise needs to be considered at the H.V.A.C design stage, as the absorption Coefficient of the insulation/Outer Jacket may allow a certain amount of noise emission into the surrounding air space. Therefore, Acoustic Flexible Ducting should be installed wherever possible over a Sound Absorbing Ceiling (Acoustic Ceiling) or in an area of the buiding which will not be sensitive to 'break-out' noise.

INSERTION LOSS (in dB), calculated per 3 Metres length of A 10A TYPE Acoustic Duct, through the Octave Band Frequencies 63 to 4000 Hz.

Freq. in Hz.	63*	125	250	500	1000	2000	4000
Ø 100 mm	9	18	26	30	31	26	22
Ø 125 mm	13	19	28	32	33	28	25
Ø 160 mm	7	13	30	36	34	30	29
Ø 250 mm	11	23	30	30	28	30	26

* Sound Testing Tolerance ± 2dB.

SA TYPE SILENCER

INSERTION LOSS (in dB), calculated per 500 mm length of SA TYPE SILENCER through the Octave Band Frequencies 63 to 4000 Hz.

Freq. in Hz.	125	250	500	1000	2000	4000
Ø 100 mm	0	5	10	20	18	10
Ø 125 mm	0	5	10	21	24	14
Ø 160 mm	2	3	8	16	25	14
Ø 200 mm	2	3	8	13	9	8
Ø 250 mm	1	3	7	13	10	7

A 10A TYPE FLEXIBLE ACOUSTIC DUCTING

INSERTION LOSS (in dB), calculated per 1 Metre length of A 10A TYPE Acoustic Duct, through the Octave Band Frequencies 63 to 4000 Hz.

Freq. in Hz.	63*	125	250	500	1000	2000	4000
Ø 100 mm	6	10	22	28	30	24	40
Ø 125 mm	8	16	22	28	31	26	19
Ø 160 mm	8	17	18	25	25	25	17
Ø 250 mm	12	13	22	17	20	20	14

* Sound Testing Tolerance ± 2dB.

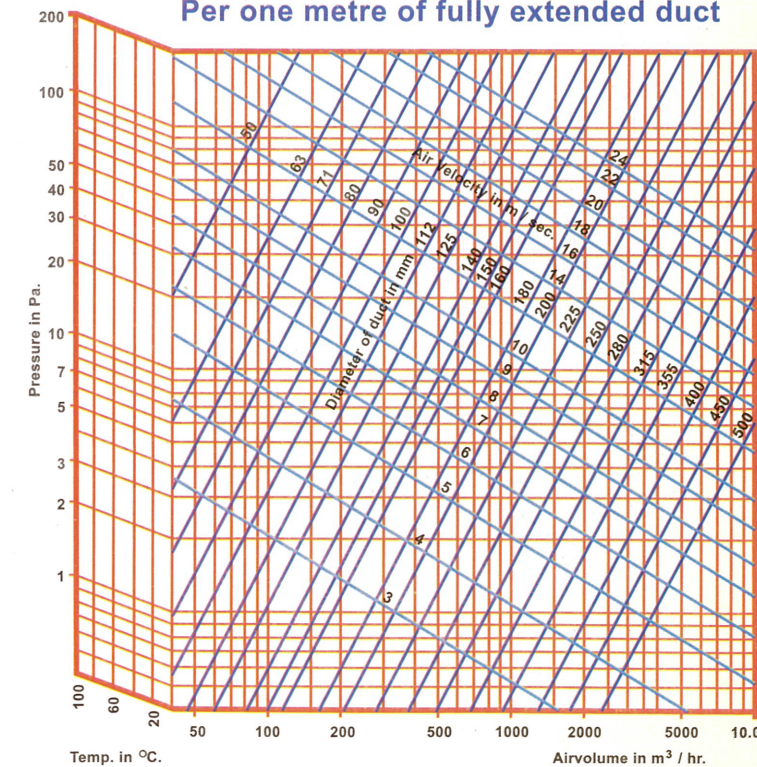
Test Result of 'BREAK-OUT' NOISE (in dB), calculated per 1 Metre length of A 10A TYPE Acoustic Duct, through the Octave Band Frequencies 63 to 4000 Hz.

Freq. in Hz.	63*	125	250	500	1000	2000	4000
Ø 100 mm	4	13	5	6	9	10	11
Ø 125 mm	5	15	5	7	9	11	13
Ø 160 mm	8	18	8	9	9	10	14
Ø 250 mm	5	5	6	7	8	9	14

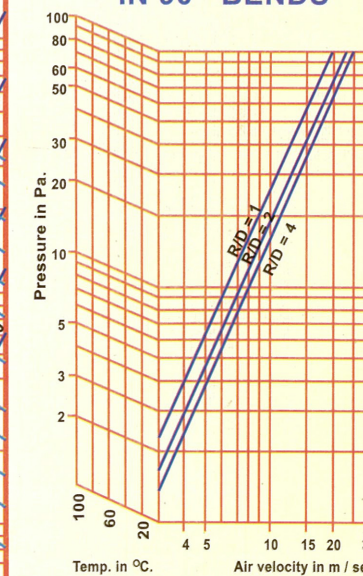
INSERTION LOSS (in dB), calculated per 1000 mm length of SA TYPE SILENCER through the Octave Band Frequencies 63 to 4000 Hz.

Freq. in Hz.	125	250	500	1000	2000	4000
Ø 100 mm	5	11	18	28	25	17
Ø 125 mm	3	6	18	30	26	19
Ø 160 mm	4	6	13	25	29	30
Ø 200 mm	4	6	14	25	17	14
Ø 250 mm	2	5	11	23	18	13

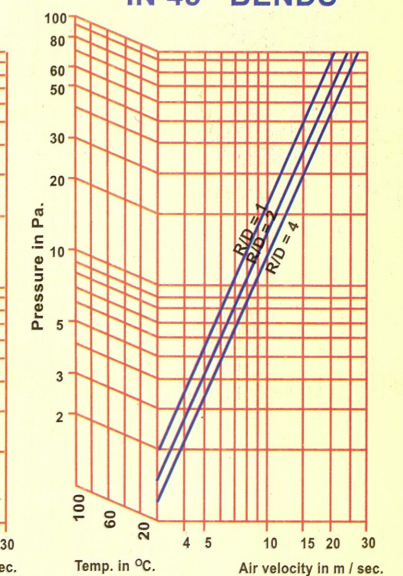
PRESSURE LOSS DIAGRAM Per one metre of fully extended duct



PRESSURE LOSS IN 90° BENDS



PRESSURE LOSS IN 45° BENDS



USA	:	UL - 181 Class - 1
UK	:	BS - 476 Class - 1
Netherlands	:	NEN - 3883 TNO Class - 1
France	:	CSTB Class - M1
Smoke Generation Number	:	14

- ▶ These modulflex products conform with the following test requirements for air duct.
- ▶ Technical data is purely informational. When in doubt, ask for confirmation of values. All technical specifications are subject to change without any prior notice. Please ask for our detailed literature on any specific product retaining your interest.