TAWREED

TAWREED TRADING & CONTRACTING · DUCT FACTORY IN QATAR SINCE 2012

TECHNICAL DATA SHEET // FLEXIBLE DUCTS

Flexible Air Duct – Insulated & Uninsulated

دكت مرن – معزول وغير معزول

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01 Introduction & construction

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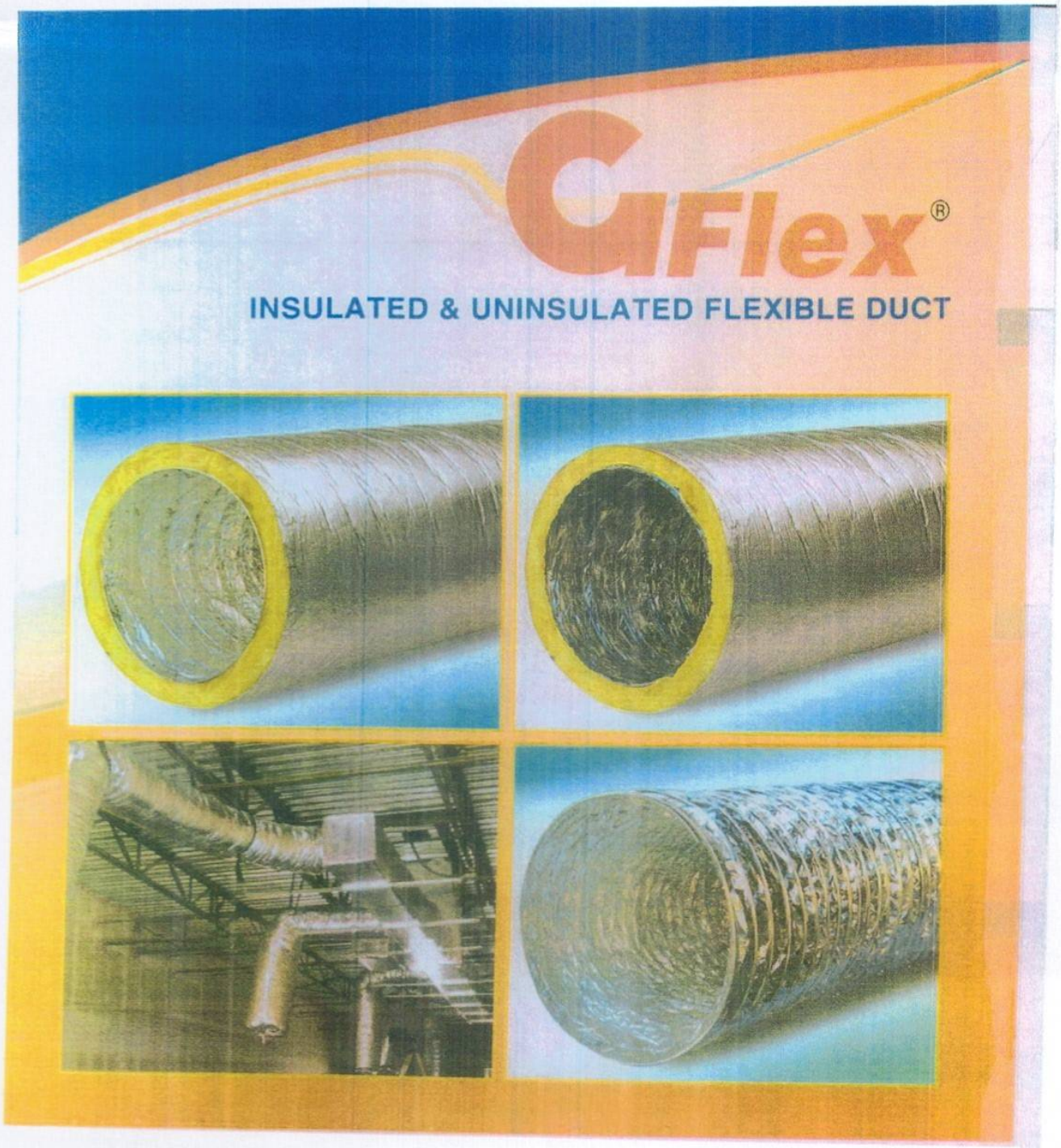
DOCUMENT

7 pages, extracted from:
Technical Submittal - WellWall Phenolic Pre-Insulated Duct, p. 80–85
Revision 01 · October 2026

CONTACT · REQUEST A QUOTE

Phone / WhatsApp: +974 7097 0111 Email: hvac@tawreed.ltd
Factory: Zone 91, Street 3138, Building 66, Birkat Al Awamer, Qatar
Web: tawreed.ltd Hours: Sat–Thu, 9am–5pm

Data supplied for submittal and specification purposes. Values are nominal; confirm project-specific requirements with Tawreed before ordering.


GFlex®
INSULATED & UNINSULATED FLEXIBLE DUCT

INTRODUCTION

Gflex® is a very strong fully flexiible, compressible light weight duct which is widely used in Air Conditioning and Ventilation Systems for Commercial, Industrial and Residential applications. Gflex® is extremely durable and will maintain dimensional stability when fully extended. Highly efficient when correctly installed. Attention is drawn to the requirement that flexible duct must always be fully extended and bends made with adequate radius to prevent corrugation of the interior with consequent excessive resistance to airflow.

APPLICATIONS AND BENEFITS

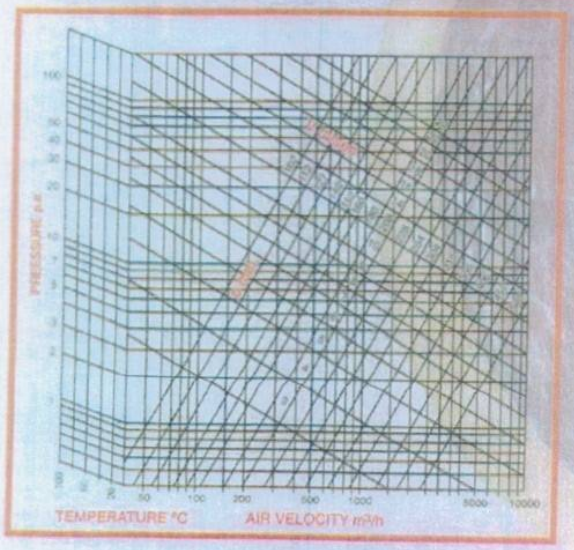
- Economical solution to connecting equipment in air conditioning and ventilation systems, across a broad spectrum of applications such as residential, commercial and industrial projects.
- Available bare or pre-insulated with fiberglass insulation.
- Offers a high degree of flexibility, which allows it to be easily connected to any desired position.
- A quick and economical means of correcting misalignment between system components.

FEATURES AND CHARACTERISTICS

- Tear and puncture resistant construction.
- Gflex® offers a smooth inner core when correctly installed which provides low friction loss.
- Highly resistant to corrosion and micro organisms.
- Able to withstand medium air pressure.
- Low operating cost.
- Compressed ducts reduces freight and storage costs.
- No air leakage.
- Spring steel wire helix assures dimensional stability,resists mechanical abuse and provides more efficient air distribution.



PRESSURE LOSS DIAGRAM



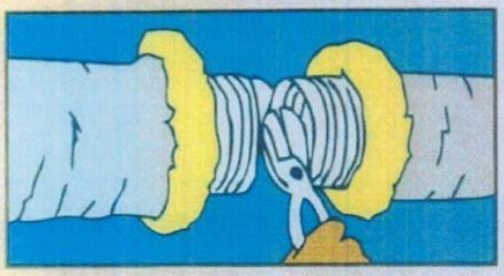
GFlex® - INSULATED AND NON-INSULATED PRODUCTS & PERFORMANCE DATA



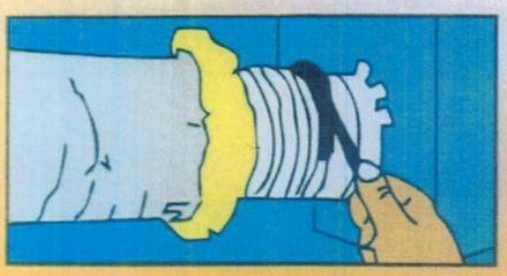
SPECIFICATION	MODELS			
	INSULATED	INSULATED	UNINSULATED	UNINSULATED
	GD11	GD12	GD13	GD14
Inner Core	Double laminated polyester film, with black pigmented adhesive, permanently bonded to corrosion resistant steel wire helix	Triple laminated aluminum foil, polyester and metallized polyester film, permanently bonded to corrosion resistant steel wire helix.	Triple laminated aluminum foil, polyester and metallized polyester film, permanently bonded to corrosion resistant steel wire helix.	Double laminated metallized film, permanently bonded to corrosion resistant steel wire.
Outer Core	Strong vapour barrier made from metallized polyester film laminate	Strong vapour barrier made from metallized polyester film laminate	-	-
Insulation thickness	25 mm / 38 mm	25 mm / 38 mm		
Density	16 kg/m³ / 24 kgm³	16 kg/m³ / 24 kgm³		
R value	4.2	4.2		
Maximum Positive pressure	10" w.g. - 4" to 16" 6" w.g. - 18" to 20"	10" w.g. - 4" to 16" 6" w.g. - 16" to 20"	10" w.g. - 3" to 10" 6" w.g. - 16" to 22"	10" w.g. - 3" to 10" 6" w.g. - 16" to 22"
Maximum Negative pressure	¾" w.g. All Diameters	¾" w.g. All Diameters	1" w.g. All Diameters	1" w.g. All Diameters
Maximum Velocity	5000 fpm	5000 fpm	5000 fpm	5000 fpm
Operating Temperature	-20°F - 250°F	-20°F - 250°F	-20°F - 250°F	-20°F - 250°F
Standard Length	25 feet	25 feet	25 feet	25 feet
Diameter	4" to 20"	4" to 20"	4" to 20"	4" to 20"

INSTALLATION INSTRUCTION

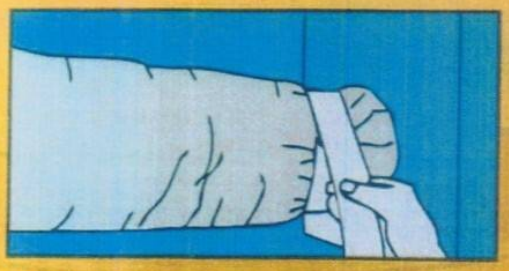
CONNECTIONS



Cut completely around and through the duct with knife or scissors. Cut the wire with cutters. Fold back the jacket and insulation.

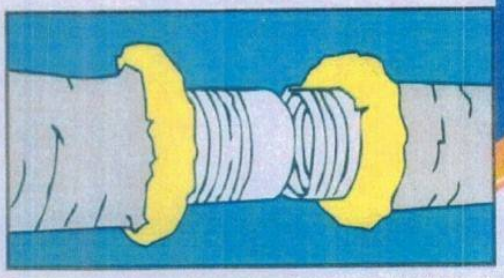


Slide at least 1" (25mm) of core over fitting and past the bead. Seal core to cover with 2 wraps of duct tape. Secure the connection with clamp placed over the core and tape and past the bead.

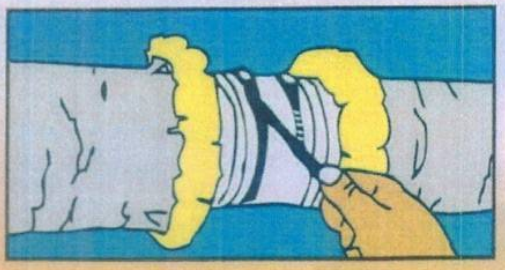


Pull jacket and insulation back over the core. Use atleast 2 wraps of duct tap to tape the jacket. You may use a clamp along with or instead of the duct tape.

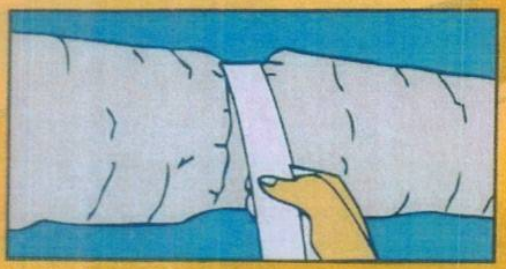
SPLICES



Fold back jacket and insulation from core. Butt 2 cores together on a standard 4" (100mm) length metel sleeve.



Use atleast 2 wraps of duct tape to tape the jacket. Secure the connection with clamp placed over the core and tape and past the bead.



Pull jacket and insulation back over the core. Use atleast 2 wraps of duct tap to tape the jacket.

Precautions during installation:

GFlex® insulated ducts use fibreglass insulation which is classified as a possible cancer hazard by inhalation. In addition fibreglass insulation may cause temporary irritation to the eyes and skin. Kindly ensure that protective clothing, face mask and gloves are used while handling or installing the flexible ducts. Wash hands properly with soap and water after use.

TEST CERTIFICATE

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	6" w.g. - 18" to 20"	6" w.g. - 16" to 20"	6" w.g. - 16" to 22"	6" w.g. - 16" to 22"
Maximum Negative pressure	3/4" w.g. All Diameters	3/4" w.g. All Diameters	1" w.g. All Diameters	1" w.g. All Diameters
Maximum Velocity	5000 fpm	5000 fpm	5000 fpm	5000 fpm
Operating Temperature	-20ºF - 250ºF	-20ºF - 250ºF	-20ºF - 250ºF	-20ºF - 250ºF
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