# knauf



Stretch-Outs				
Labeled Thickness	Installed Compressed Thickness	Round	Square	Rectangular
1 <sup>1</sup> /2" (38 mm)	1 <sup>1</sup> /8" (29 mm)	P+9 <sup>1</sup> / <sub>2</sub> " (241 mm)	P+8" (203 mm)	P+7" (178 mm)
2" (51 mm)	1 <sup>1</sup> /2" (38 mm)	P+12" (305 mm)	P+10" (254 mm)	P+8" (203 mm)
2 <sup>3</sup> /16" (56 mm)	1⁵/ଃ" (42 mm)	P+13" (330 mm)	P+11" (279 mm)	P+81/2" (216 mm)
2 <sup>1</sup> /2" (64 mm)	1 <sup>7</sup> /8" (48 mm)	P+14 <sup>1</sup> /2" (368 mm)	P+121/2" (318 mm)	P+9 <sup>1</sup> /2" (241 mm)
3" (76 mm)	21/4" (57 mm)	P+17" (432 mm)	P+14 <sup>1</sup> /2" (368 mm)	P+11 <sup>1</sup> /2" (292 mm)

P = Perimeter of duct to be installed.

Forms Available/R-Values@75°F Mean Temperature						
Density	Thickness	Width	Length	Facing	Out-Of Package R-Value	In- stalled R-Value
	1½" (38 mm)	48" (1219 mm)	100' (30.48 m)	FSK, PSK, unfaced	5.1	4.2
.75 PCF (12 kg/m³)	2" (51 mm)		75' (22.86 m)		6.8	5.6
	2³/16" (56 mm)		75' (22.86 m)		7.4	6.0
	21⁄2" (64 mm)		75' (22.86 m)		8.5	7.0
	3" (76 mm)		50' (15.24 m)		10.2	8.4
1.0 PCF	11/2" (38 mm)	48"	100' (30.48 m)		5.6	4.5
(16 kg/m3)	2" (51 mm)	(1219 mm)	75' (22.86 m)		7.4	6.0
1.5 PCF	1½" (38 mm)	48"	75' (22.86 m)		6.1	4.8
(24 kg/m3)	2" (51 mm)	(1219 mm) 50' (15.24 m)		8.2	6.4	

#### (TAPPI Test T803) (Beach Units)

• FSK and PSK: 25

#### Application & Specification Guidelines Storage

#### Protect stored insulation from water damage, construction damage and other abuse.

• If stored outside, proper protection from weather conditions should be provided.

#### Preparation

 Install Knauf Insulation Friendly Feel<sup>®</sup> Duct Wrap over clean, dry sheet metal ducts. All sheet metal joints and seams must be sealed to prevent air leakage from the duct.

#### Application

- Install Knauf Insulation Friendly Feel® Duct Wrap with facing to the outside to obtain specified R-value using a maximum of 25% compression.
- Butt all insulation joints firmly together. Longitudinal seam of the vapor retarder must be overlapped a minimum of 2" (51 mm). A 2" (51 mm) tab is provided for the circumferential seam and must be overlapped.
- Where vapor retarder performance is necessary, all penetrations, joints, seams and damage to the facing should be sealed with an FSK, PSK or foil tape or glass fabric and mastic prior to system startup.
- Pressure sensitive tapes should be a minimum 3" (76 mm) wide and be applied with moving pressure using an appropriate sealing tool. Staples should be outward clinch and placed approximately 6" (152 mm) on center.
- Closure systems should have a 25/50
  F.H.C. per UL 723.
- For rectangular ducts over 24" (610 mm) wide, secure the insulation to the bottom side of the duct with mechanical fasten-

For more information call (800) 825-4434, ext. 8283

or visit us online at www.knaufinsulation.us



## Air Handling Systems

## Microlite<sup>®</sup> XG<sup>™</sup>

Formaldehyde-free<sup>™</sup> Fiber Glass Duct Wrap Insulation

### **Duct Wrap Insulation**

#### **Description**

Microlite XG Formaldehyde-free<sup>™</sup> duct wrap insulation is a light weight, highly resilient, blanket-type thermal and acoustical insulation made of glass fibers, bonded with a white, Formaldehyde-free<sup>™</sup> resin.

#### **Available Forms**

Microlite XG Formaldehyde-free<sup>™</sup> insulation is available in a variety of densities, thicknesses, widths and roll lengths. It is supplied with an FSK vapor barrier facing to meet installed performance requirements, with a 2-inch (51 mm) stapling tab.

#### Uses

Microlite XG is recommended as thermal insulation for the exterior of HVAC systems or other spaces or surfaces where temperature control is required.

#### **Guide Specifications**

Insulation for Metal Ducts. All ducts shall be insulated on the outside with a formaldehyde-free, flexible glass fiber blanket. Microlite® XG<sup>™</sup> Formaldehyde-free™ Fiber Glass Duct Wrap Insulation with a minimum installed R-Value\* of \_\_\_\_\_, and a Type\_\_\_\_\_ facing. Insulation shall be furnished with a factory-applied facing with a composite UL rating of 25/50.

\* The minimum insulation installed R-Value should be determined in accordance to the duct operating and ambient conditions.

#### **Specification Compliance**

ASTM C 553* Type II Type III * <i>Replaces HH-I-558B, F</i>	orm B, Type I, Class 6.	Туре 75, 100 & 150 Туре 150	
ASTM C 1290 ASTM C 1139 <sup>†</sup>		Type 75, 100 & 150	
Туре II	Grade 1 Type 75 Faced Grade 2 Type 100 Faced Grade 3 Type 150 Faced		
<sup>†</sup> Replaces MIL-I-22023D			
ASTM E 84 ASTM C 1136 <del>▲</del>	FHC 25/50 Type II	FSK Facing FSK Facing	
▲ Replaces HH-B-100B,	Type II		
Canada:	CGSB 51-GP-11M CAN/ULC S102-M8	8	

NYC MEA 40-75-M

#### **Physical Properties**

Temperature (maximum)	
Faced	250°F (121°C)
Water vapor sorption	<0.2% by volume
Alkalinity	<0.6% expressed as Na <sub>2</sub> O
Corrosivity (with steel,	Does not accelerate
copper or aluminum)	
Capillarity	Negligible (after 24 hours)
Shrinkage	None
Fungi & bacteria	Does not breed or promote
resistance	



Operating Temperature Limits: 40°F to 250°F (4°C to 121°C) Faced

#### Underwriters Laboratories Surface Burning Characteristics

All products meet the Surface Burning Characteristics and limited combustibility requirements of NFPA 90A and 90B Standards and FHA, as tested by UL. Faced materials are tested as composite products (insulation, adhesive and facing).

ASTM E 84 Surface Burning Characteristics 25/50 (FHC) Tested Following ASTM E 2231 Sample Mounting Standard.

ASTM C 411 Hot Surface Performance @ Minimum 250°F (121°C) as Required by NFPA 90A & 90B and IIC Building Codes.

UL Guide No. 40 U8.3. Card R3711.

Fire Hazard Classification 25/50. (UL labels supplied on packages when requested on order.)

#### **Facing Information**

FSK Aluminum Foil

Reinforced with fiber glass scrim laminated to UL rated kraft. Permeance: .02 perms

(Per ASTM E 96, Procedure A for facing material prior to lamination. After lamination, permeance values may be higher.)

#### **Standard Thickness and Packaging**

	100′ Roll (31 m)	75′ Roll (23 m)	50′ Roll (15 m)	
Гуре	Thickness, i	n (mm)		
75	1½ (38)	2, 2.3 (51, 59)	3 (76)	
100	1½ (38)	2 (51)	-	
150	-	1½ (38)	2 (51)	

Note: Additional thicknesses, widths and other lengths available on special order. Contact Regional Sales Office for availability.