

Standard and Mini Split Line Sets For HVACR Applications

Job Name	Contractor	
Job Location	Wholesaler	
Engineer	Linesets, Inc. Rep	

Product Description: Linesets, Inc. Standard and Mini Split Line Sets are available in either an elastomeric, polyethylene or EPDM insulation for use in HVACR applications. All line sets will be manufactured in the United States.

Material: Linesets, Inc. Standard and Mini Split Line Sets copper tube shall be made from C12200 grade of copper. Insulation is choice of elastomeric, polyethylene or EPDM material. All insulation have a UV retardant added but it is recommended to cover or apply a coating for long term exposure.

Key Specifications: Linesets, Inc. Standard and Mini Split Lines Sets are made to meet the requirements of ASTM B1003 and can be used with synthetic refrigerants and sub-critical CO2 systems.

Installation: Installations and insulation material shall comply with the latest applicable building codes for the local jurisdiction.





Standard and Mini Split Line Sets Copper Tube Data

Standard Line Sets with Elastomeric Insulation

HRF	Copper Tube Sizes			Insulation		
Max	Liquid Line	Suction Line	Lengths	Thickness	Optional Finishes	
50	1/4" - 1/2"	3/8" - 1-1/8"	10' - 50' using 5' intervals; 60' & 100' (other lengths are available upon customer request)	3/8" - 1-1/2"	Flare nuts, 90-degree bends, custom connections, thermostat wire and taping	

Mini Split Line Sets with Elastomeric Insulation

HBF Copper Tube Sizes			Insulation		
Max	Liquid Line	Suction Line	Lengths	Thickness	Optional Finishes
50	1/4" - 3/8"	3/8" - 7/8"	15' - 50' using 5' intervals; 100' (other lengths are available upon customer request)	3/8" - 1-1/2"	Insulated liquid and suction lines and twin tube system, flare nuts, 90-degree bends, custom connections, mini-split wire or control cable and taping

Line Sets with White Insulation

HRF Max	Copper Tube Sizes	Lengths	Insulation Thickness
50	1/4" - 7/8"	35', 50', 100', 164' (other lengths are available upon customer request)	1/2" - 3/4"

Line Sets with EPDM Insulation

HRF Max	Copper Tube Sizes	Lengths	Insulation Thickness	Optional Finish
50	1/4" - 1 - 1/8"	10' - 50' using 5' intervals (other lengths are available upon customer request)	1-1/2"	Flare nuts, 90 dergree bends,custom connections, thermostat wire and taping



Standard and Mini Split Line Sets Elastomeric Insulation Data

Insulation:

"R" Values

Pipe Insulation Size	Nom. 3/8"	Nom. 1/2"	Nom. 3/4"	Nom. 1"	Nom. 1-1/2"
1/4"	2.7	3.6	5.6	8.5	14.6
3/8"	2.5	3.2	5.4	8.5	14.6
1/2"	2.4	3.2	5.2	7.9	13.5
5/8"	2.3	3.2	5.2	6.7	12.8
3/4"	2.2	3.1	5.1	6.5	12.1
7/8"	2.2	3.1	5.0	6.5	11.6
1-1/8"	2.1	3	5.4	6.8	10.8

Specification Compliance:

- ASTM C 534, Type II –
 Sheet Grade 1
- ASTM C 1534
- ASTM E 84, NFPA 255, U L 723
- CAN/ULC S102
- NFPA 90A, 90B
- ASTM G21/C1338
- ASTM G22

- ASTM D 1056, 2B1
- MIL-P-15280J, FORM S
- MIL-C-3133C (MIL STD 670B),
- Grade SBE 3
- MEA 107-89M
- UL 181
- UL 94 5V-A, V-0, File E 55798
- City of Los Angeles RR 7642

Physical Properties:

Specifications	Values	Test Method
Thermal Conductivity,		
Btu ● in./h ● ft2 ● °F (W/mK)		
75°F Mean Temperature (24°C)	0.25 (0.036)	
90°F Mean Temperature (32°C)	0.256 (0.037)	ASTM C 177 or C 518
Water Vapor Permeability,		
Perm-in. [Kg/(s•m•Pa)]	0.05 (0.725 x 10–13)	ASTM E 96, Procedure A
Flame Spread and Smoke		
Developed Index through		ASTM E 84
1" (25mm)*	25/50*	CAN/ULC S102
Mold Growth	UL181	Meets requirements
Fungi Resistance	ASTM G21/C1338	Meets requirements
Bacterial Resistance	ASTM G22	Meets requirements
Water Absorption, % by Volume	180/220°F (82/105°C)	ASTM C 209
Upper Use Limit	220°F (105°C)	-
Lower Use Limit	-297°F (-183°C)	-
Ozone Resistance	GOOD	_



Standard and Mini Split Line Sets Polyethylene Insulation Data

Insulation: Wall thickness is 1/2" - 3/4" and product is made according to ASTM C 1427-07 (insulation material for use on typical commercial system non-cross-linked)

"R" Value: 1/2" Wall = R3 3/4" Wall = R5

Specification Compliance:

Description	Specifications	Notes
Water Vapor Permeability	ASTM E96-00	r =4*10-5 [mg/(h*m*Pa)]
Working Temperature	ASTM C 1427-07	Type I (tubular), Grade I
Surface Burning Characteristics	ASTM E84 (25/50)	Flame & Spread Index Less Than 25 & Smoke Development Index less than 50
ASTM C 335-95		"k" at 104°F (average temperature) = 0.263468 (Btu in.)/sq.ft. °F h)
Thermal Conductivity	ISO EN 8497	"λ" at 40 °C (average temperature) = 0.038 W/(m*K)

WARNING: This product includes polyethylene (PE) foam insulation. Although this product meets ASTM E84 25/50 flame/smoke index, PE foam insulation may nonetheless be highly flammable when ignited. To reduce the risk of fire spread, property damage, or personal injury, great caution should be exercised when using this product in proximity to any ignition sources or open flames.



Standard and Mini Split Line Sets EPDM Insulation Data

Insulation:

"R" Values

Pipe Size	Insulation Wall
	1-1/2"
1/4"	13.7
3/8"	13.7
1/2"	12.7
5/8"	12.0
3/4"	11.3
7/8"	10.8
1-1/8"	10.1

Specification Compliance:

- ASTM C 534, Type II Sheet Grade 1
- ASTM C 1534
- ASTM E 84, NFPA 255, U L 723
- CAN/ULC S102
- NFPA 90A, 90B
- ASTM G21/C1338
- ASTM G22

Physical Properties:

- ASTM D 1056, 2B1
- MIL-P-15280J, FORM S
- MIL-C-3133C (MIL STD 670B),
- Grade SBE 3
- MEA 107-89M
- UL 181
- UL 94 5V-A, V-0, File E 55798
- City of Los Angeles RR 7642

Specifications	Values	Test Method
Thermal Conductivity, Btu • in./h • ft2 • °F (W/mK) 75°F Mean Temperature (24°C) 90°F Mean Temperature (32°C)	0.25 (0.036) 0.256 (0.037)	ASTM C 177 or C 518
Water Vapor Permeability, Perm-in. [Kg/(s∙m•Pa)]	0.05 (0.725 x 10–13)	ASTM E 96, Procedure A
Flame Spread and Smoke Developed Index through 1" (25mm)*	25/50*	ASTM E 84 CAN/ULC S102
Mold Growth Fungi Resistance Bacterial Resistance	UL181 ASTM G21/C1338 ASTM G22	Meets requirements Meets requirements Meets requirements
Water Absorption, % by Volume	180/220°F (82/105°C)	ASTM C 209
Upper Use Limit	220°F (105°C)	_
Lower Use Limit	-297°F (-183°C)	-
Ozone Resistance	GOOD	-