

INSULATED COPPER LINE SETS

Blueridge insulated copper line sets

Documented copper, two-layer insulation and factory-fitted flare nuts. Every spec is published and tested.



MINI-SPLIT LINE SETS · SIX SIZES · 15 TO 100 FT

Alpine Home Air Products · alpinehomeair.com · (800) 865-5931

A line set spends its whole life outdoors.

It carries pressurized refrigerant through sun, rain and freeze-thaw for as long as the system runs. If it fails, the repair costs far more than the line set did.

WHERE GENERIC KIT LINE SETS FAIL

COPPER

Kinks and cracked flares

Thin or hard tube kinks when bent and splits when flared. Kinks restrict flow; cracked flares leak. Both usually show up after the wall is closed.

INSULATION

Foam breaks down in sun

Uncovered white foam chinks and falls away. The suction line then sweats, efficiency drops and the copper is exposed.

CONNECTIONS

Leaks at the flare nut

Inconsistent tube and soft nuts make a good flare hard to get. A slow leak means a service call, a vacuum and a recharge.

HOW BLUERIDGE LINE SETS ADDRESS EACH ONE

Copper

Soft annealed, phosphorus-deoxidized copper. 0.028" wall (± 0.004 "), OD held to ± 0.001 ". Bends without kinking, flares without cracking.

Insulation

Closed-cell crosslinked foam inside a black UV-stabilized cover. Third-party UV tested.

Connections

Factory-fitted brass flare nuts in standard wrench sizes, on seamless tube with a consistent wall.

Blueridge copper, by the numbers

Seamless refined copper with published chemistry, temper and wall thickness.

CHEMISTRY	TEMPER	WALL THICKNESS
>99.90% Copper, phosphorus-deoxidized P 0.015–0.040%. Same chemistry as refrigeration-grade ACR tube.	Soft Annealed, O temper Elongation >40%, grain 0.025–0.060 mm.	0.028" 0.71 mm, ±0.004" On 1/4"–5/8" tube; 0.033" on 3/4". OD ±0.001".



Factory-fitted brass flare nut; foam core visible at the cut end.

On the job

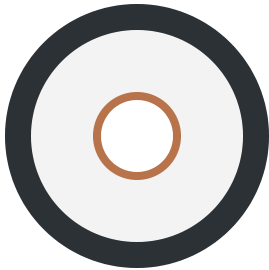
A consistent wall and soft temper give a clean 45° flare on the first try that seats squarely and holds torque.

Generic kit line sets that list a wall thickness usually list 0.024". Most list nothing.

Solid copper, not clad

Blueridge tube is seamless copper end to end. Some generic kits are sold as "copper-aluminum," which doesn't braze, flare or age like solid copper.

Blueridge insulation: two layers, built for outdoors



2.5 mm outer cover

Black UV-stabilized polyethylene

7.0 mm foam core

Water-crosslinked closed-cell PE, 30× expansion

Seamless copper tube

0.028" wall, soft annealed

Cross-section, not to scale. 3/8" (9.5 mm) total insulation on mini-split sets.



Cut end showing the black cover, foam core and copper.

Total thickness	3/8" (9.5 mm) through 3/4" suction · 1/2" (12.7 mm) on 7/8" suction
Thermal conductivity	0.035 W/m·K
Water absorption	<2.0 g/100 cm ²
Radial shrinkage	<7% at 120°C
Tensile strength	≥14 N/cm ²
Flame rating	UL 94 HF-1
UV weathering	SGS QUV test (ISO 4892-3, UVA-340): no chalking, cracking or embrittlement

Closed-cell foam doesn't soak up water, so the suction line stays dry. Crosslinking keeps the foam from shrinking away from the copper in heat. The black cover shields the foam from sunlight — the protection uncovered white foam on generic kits doesn't have.

Blueridge line sets vs. generic kit line sets

What we publish for Blueridge line sets, next to what a typical bundled or marketplace kit publishes.

	BLUERIDGE LINE SET	GENERIC KIT LINE SET
Copper chemistry	>99.90% Cu, phosphorus-deoxidized	"Pure copper," no chemistry listed. Some are copper-aluminum
Temper	Soft annealed, >40% elongation	Not listed
Wall thickness	0.028" $\pm$ 0.004" (1/4"-5/8"); OD $\pm$ 0.001"	0.024" if listed; usually not
Insulation	7 mm crosslinked foam + 2.5 mm black UV cover	Single layer of white foam, no UV protection listed
Insulation data	0.035 W/m·K · <2 g/100 cm ² · <7% shrinkage · UL 94 HF-1	None listed
UV testing	Third-party QUV test (ISO 4892-3), passed	None listed
Flare nuts	Brass, standard sizes, fits any brand	Included; inconsistent tube can make re-flaring hard
Packaging	Boxed individually, coiled, taped, barcoded	Often bagged or loose; kinks on arrival are common
Support	Alpine Premium Guarantee, easy returns, live tech support	Varies; often no technical support

Ready to install. Backed by Alpine.

Connections

Brass flare nuts come fitted on both lines. Standard hex sizes take standard wrenches and connect to any brand of indoor or outdoor unit.

TUBE	NUT WRENCH
1/4"	17 mm
3/8"	22 mm
1/2"	24 mm
5/8"	27 mm
3/4"	32 mm
7/8"	36 mm

Sizes

Mini-split line sets, flared both ends, both lines insulated.

LL × SL	15	25	35	50	65	100
1/4" × 3/8"	•	•	•	•	•	–
1/4" × 1/2"	•	•	•	•	•	–
1/4" × 5/8"	•	•	•	•	•	–
3/8" × 5/8"	•	•	•	•	•	•
3/8" × 3/4"	•	•	•	•	•	–
3/8" × 7/8"	–	•	•	–	•	–

Lengths in feet. 3/8" insulation through 3/4" suction; 3/8" × 7/8" sets have 1/2" insulation.



Each Blueridge line set is coiled, taped, boxed and barcode-labeled, so it arrives clean and kink-free.

FROM ALPINE HOME AIR

Premium Guarantee and easy returns

Live tech support: (800) 865-5931

Full spec sheet and third-party test report on request