INSTALLATION MANUAL: LG S12ET (3.5kW Split System)

Model Series: S12ET / DUALCOOL Standard Plus (R32)

Capacity: 12,000 BTU / 3.5 kW

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1. Safety Precautions & Tools

[!WARNING]

This product contains R32 Refrigerant. Installation must be performed by a certified F-Gas technician. Failure to comply with safety regulations may result in fire, explosion, or electric shock.

Required Tools:

- Vacuum pump and Manifold gauge (R32 compatible).
- Flare tool and Torque wrench.
- Digital Multi-meter.
- Level and Hole core drill (65mm).

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2. Product Specifications

Component	Specification
Refrigerant Type	R32
Cooling Capacity	3.5 kW (Nominal)

Liquid / Gas Pipe	6.35mm (1/4") / 9.52mm (3/8")
Max Pipe Length	15 Meters
Max Elevation	7 Meters
Power Supply	220-240V, 50Hz, 1 Phase

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3. Installation Clearances

Indoor Unit (S12ET.NSJ)

- Ceiling: Minimum 200 mm (8 inches) clearance.
- Side Walls: Minimum 100 mm (4 inches) from left and right.
- Floor: Minimum 2.3 meters (7.5 feet) height recommended.
- Obstacles: Ensure no obstructions in front of the air outlet.

Outdoor Unit (S12ET.UA3)

- Back/Side: Minimum 300 mm (12 inches) clearance for air intake.
- Front: Minimum 700 mm (28 inches) clear space for air discharge.
- Mounting: Install on a solid, level surface to minimize vibration. Use rubber vibration pads.

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4. Refrigerant Piping & Wiring

4.1 Piping Connection

1. Flare Connection: Align the center of the pipes and sufficiently tighten the flare nut by hand.
2. Torque: Tighten with a torque wrench (Liquid: 18 N·m | Gas: 42 N·m).
3. Vacuum: Perform vacuuming for at least 15 minutes or until the gauge reaches -0.1 MPa (-76 cmHg).

4.2 Electrical Wiring

- Indoor to Outdoor: 4-core cable (including ground).
- Main Power: Dedicated 16A Circuit Breaker recommended.

- Terminals: Ensure the colors match at both the indoor and outdoor terminal blocks (1, 2, 3, L/N).

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5. Final Checklist & Commissioning

- [ ] Drainage: Pour water into the indoor drain pan; ensure it flows out freely.
- [ ] Leak Test: Check flare connections with soapy water or electronic leak detector.
- [ ] Test Run: Run in Cooling Mode for 15-20 minutes.
- [ ] Temperature: Check the delta (difference) between air intake and outlet (>8°)