

Ice Shield PRO — Installation Quick Checklist

A step-by-step reference for licensed electricians and qualified installers. Follow each item in sequence before mounting cable, applying power, or closing junction boxes. All steps must be completed in order — skipping ahead risks code violations, cable damage, or unsafe installations.

Preparation

Before any physical work begins, confirm roof measurements, circuit capacity, layout routing, and code compliance. The following checklist covers every required verification from site assessment through junction box rough-in.

1	Measure & Calculate Cable Length Measure total roof edge footage and gutter length, then provide these measurements to us. Receive a free SmartPlan within one business day — we'll handle all the calculations and design work for you.
2	Confirm Circuit & GFEP Capacity Verify dedicated supply voltage (120V or 208V/240V/277V) and breaker amperage. Install a dedicated 30-mA Ground Fault Equipment Protection (GFEP) circuit breaker per NEC Article 426 / CEC Section 62. Do not use standard 5-mA personnel GFCI receptacles or breakers — inductive inrush will cause nuisance tripping.
3	Inspect Cable & Assemble Required Kits Unspool and visually inspect cable jacket and outer braid for cuts, abrasions, or kinks. Confirm all certified accessories are on site: ET-PWR-KIT (Power Connection Kit), ET-END-KIT (End Seal Kit), ET-CL-AL-P25 (Aluminum Roof & Gutter Clips), ET-VHB-PAD-P25 (Double-Sided Mounting Tape Pads) or approved roofing adhesive, and a certified NEMA 3R / 4 / 4X weatherproof junction box.
4	Pre-Installation Megohmmeter Test Test insulation resistance with a 2,500V DC megohmmeter (500V DC minimum) between the two bus wires (twisted together) and the metallic grounding braid. Minimum acceptable reading is 20 MΩ , regardless of cable length. Record this initial reading on the warranty log sheet before cutting or installing .
5	Clean Roof, Gutters & Downspouts Thoroughly clear roof edges, gutters, valleys, and downspouts of all leaves, pine needles, dirt, and combustible debris. Inspect gutter transitions and downspout entries for sharp sheet metal burrs; smooth edges or install edge guards to prevent mechanical cable damage.
6	Mount Weatherproof Junction Box & Shut Off Power Mount a certified outdoor weatherproof junction box (NEMA 3, 3S, 4, 4X, 6, or 6P) in a protected location above the maximum expected snow/water line. Run supply power wiring from the subpanel to the box. De-energize and lock out the breaker at the main panel before proceeding to physical roof work.

 **Critical Safety Rules: Never twist or cross bus wires** — they must never touch at the cut end (dead short). **Minimum install temp:** 0°F (-18°C) for cable; 40°F (4°C) for tape pads. **No embedding** in insulation or roofing materials; never exceed **150°F (65°C)** maximum exposure. **Minimum bend radius: 1.1 inches (28 mm)** at all times.