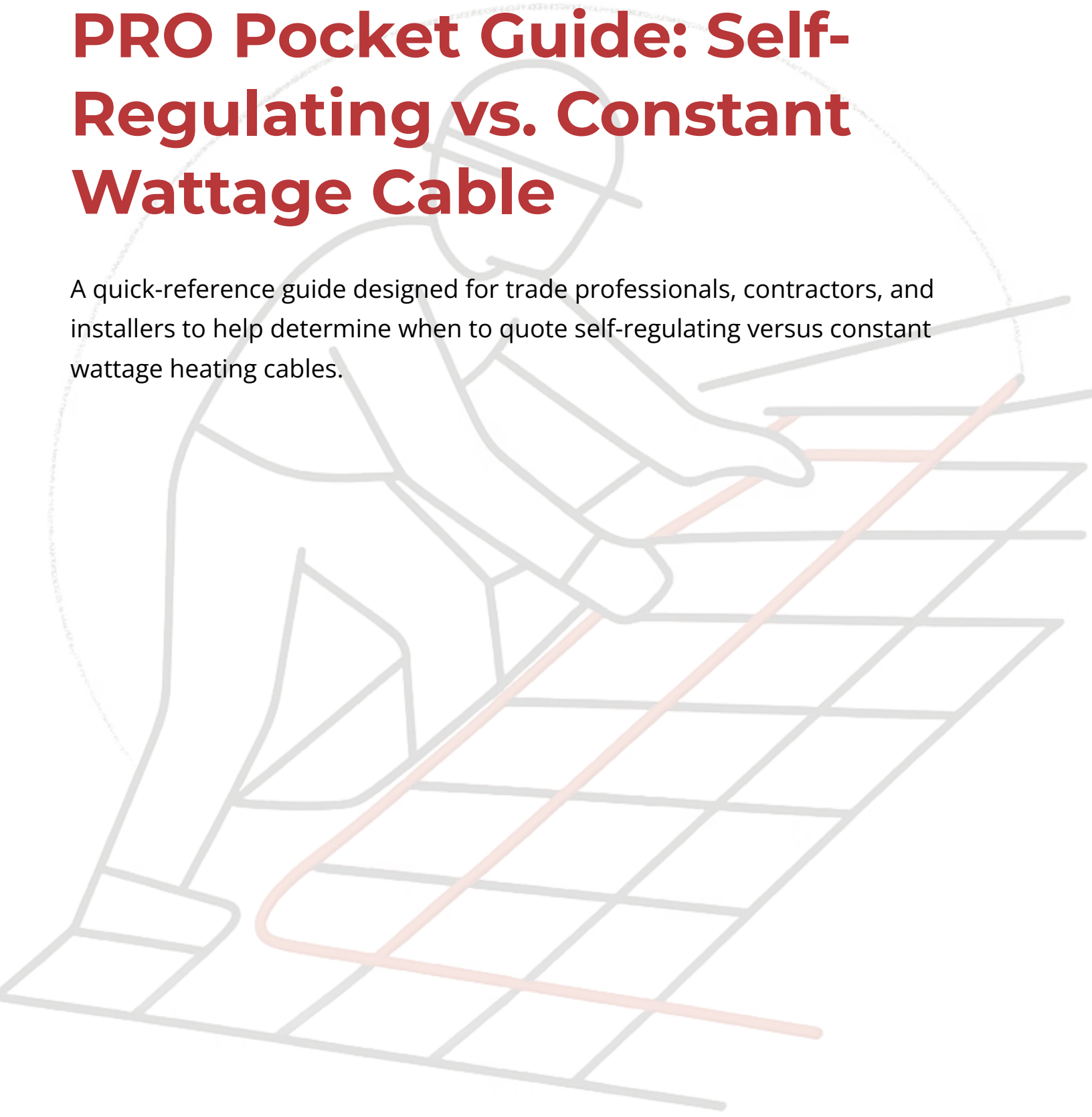


PRO Pocket Guide: Self-Regulating vs. Constant Wattage Cable

A quick-reference guide designed for trade professionals, contractors, and installers to help determine when to quote self-regulating versus constant wattage heating cables.



Two cable systems.

One for simple residential jobs, one for complex professional installs.

Ice Shield

Constant Wattage Kits



A pre-assembled, plug-and-play constant wattage cable delivering a fixed heat output of **5W/ft**. Designed for straightforward, DIY-friendly residential projects. 120V only, plug-in, asphalt shingle roofs.

- Fixed 5 Watts/foot output
- 120V plug-in only
- Pre-packaged 20–240 ft kits
- No cutting or overlapping allowed
- Low upfront cost

Ice Shield PRO

Self-Regulating Cut-to-Length Cable



A highly flexible, professional-grade cable that **adjusts heat output** based on ambient temperatures. Cut to length on-site, safely overlapped, ideal for complex rooflines, valleys, and commercial applications.

- Variable 5–10 Watts/foot output
- 120V, 208V, 240V, 277V options
- Sold in rolls — cut to exact length
- Safe to overlap without overheating
- Up to 589 ft per circuit

Side-by-Side Comparison

Feature	Ice Shield	Ice Shield PRO
Heating Technology	Constant Wattage (Fixed resistance)	Self-Regulating (Conductive polymer core)
Heat Output	Fixed at 5 W/ft	Varies with temp: 5–10 W/ft
Voltage Options	120V only	120V, 208V, 240V, 277V
Installation Type	DIY / Plug-in (3-prong plug)	Professional / Hardwired or Plug-in
On-Site Customization	Cannot be cut or shortened	Cut to exact length on-site
Overlapping Allowed?	No — will overheat and burn out	Yes — safely overlaps
Max Length per Circuit	240 ft	589 ft
Best For	Small-to-medium residential eaves, gutters, downspouts	Complex rooflines, valleys, commercial, large residential
Operating Efficiency	Lower — runs at 100% when energized	Higher — reduces power as temp rises; fully automatic

Deep Dive: Ice Shield (Constant Wattage Cable)

How It Works: Ice Shield utilizes a **constant wattage** heating element that outputs a steady **5W/ft**. It comes pre-assembled with a 6-foot cold lead and a grounded 3-prong plug.

Key Specs

- Wattage: 5 W/ft
- Voltage: 120V
- Lengths: 20 ft – 240 ft pre-packaged kits
- Controls: Manual or timer/outlet-wired

Best Applications

- Asphalt shingle residential eaves (zig-zag pattern)
- Gutters and downspouts
- DIY homeowners — affordable, easy install
- Projects limited to existing outdoor GFCI outlet

Pros

- Extremely low upfront cost
- No special tools or connection kits
- Simple plug-and-play installation

Cons

- Cannot be cut to length
- Runs at 100% power constantly
- Limited to 120V circuits only

Deep Dive: Ice Shield PRO (Self-Regulating Cable) PROFESSIONAL GRADE

How It Works: Ice Shield PRO features a conductive polymer core that sits between two parallel bus wires. As temperature drops, the core contracts — creating more electrical paths and increasing heat. As temperature rises, the core expands, reducing heat output automatically.

Key Specs

- Wattage: 5–10 W/ft (self-regulating)
- Voltage: 120V, 208V, 240V, 277V
- Rolls: 50', 100', 250', 500', 1000' spools
- Controls: Hardwired panels with ambient/moisture sensors; plug-in kit available (140 ft max at 120V)

Best Applications

- Complex roofs with valleys, dormers, varying gutters
- Commercial buildings and multi-family complexes
- High-end residential projects
- Narrow downspouts or areas requiring cable overlap

✓ Pros

- Cut to exact length — no waste
- Safe to overlap without damage
- Highly energy-efficient; fully automatic
- 240V supports up to 589 ft per circuit

⚠ Cons

- Higher upfront material cost
- Requires professional installation
- Needs specialized connection kits

Next steps

01

Get Accurate Measurements

To ensure the best installation, our WarmlyYours Specialist will provide you with the assistance you need to capture the correct measurements of the roof and gutter area you want to heat.

02

Receive Your Custom Quote & SmartPlan

Once your measurements are completed, you will be contacted to discuss your options and receive an accurate, no-obligation quote, SmartPlan, and electrical plan prepared for you by our engineers.

03

Place Your Order

The last and very important step is to place your order! After your order is received, you can expect the same attention to detail and care as you received during the ordering process.

PRO Tip:

To ensure an instant and accurate quote, please have the following information ready when you call:

- Total eave length & total gutter length
- Number of downspouts
- Available voltage (120V, 208V, 240V, or 277V)

Need Help Choosing the Right System?

Whether you are looking for a quick, cost-effective residential fix or designing a complex commercial deicing system, getting the specifications right is crucial to avoiding ice dams and system failures.

Don't guess on your next project—let our experts do the heavy lifting. Our team is dedicated to providing tailored solutions that prevent ice dams and system malfunctions, ensuring long-term performance and safety for your property.

Talk to a Roof & Gutter Deicing Specialist Today!

Call Us: 800-875-5285

Our specialists are available to assist you Monday – Friday, 8:00 AM – 5:00 PM EST.