

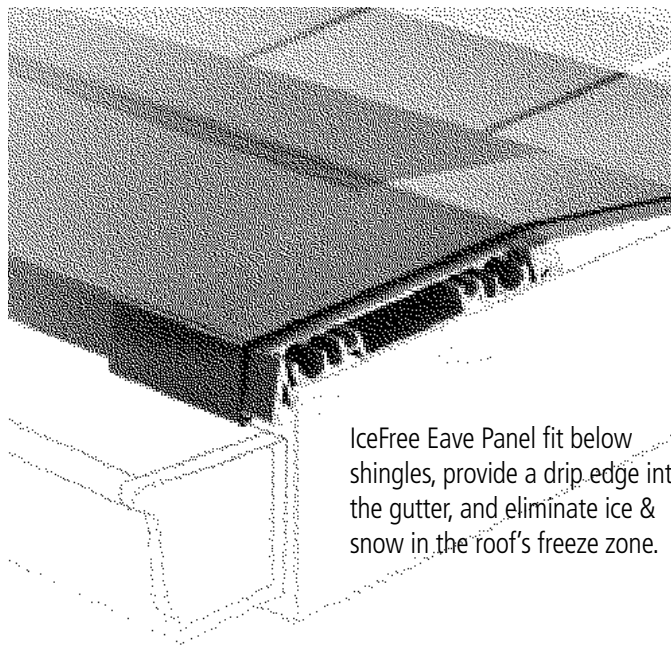
- **Material** ♻ Recycled Aluminum Alloy 6063 Temper - T5
- **Sizes.** Sold in 5' panel extrusions.
 - ▶ IceFree 8" Eave Panel (for eaves up to 12" deep)
 - ▶ IceFree 12" Eave Panel (for eaves up to 18" deep)
 - ▶ IceFree 18" Eave Panel (for eaves up to 24" deep)
 - ▶ IceFree Valley Panel *for valleys, chimneys, crickets etc*
 - ▶ IceFree Utility Panel *a larger version of the valley panel*
- **Components** Aluminum Alloy Snap Loc Top, Aluminum Alloy Base Panel, Aluminum Alloy Transition Panel
- **Colors** 7 Standard Powder Coating Colors are available
- **Heat Source** the 8" Eave, 12" Eave, Valley, Utility Panel Systems utilize 2 feet of Heat Trace per foot of panel. The 18" Eave Panel System will utilize three feet of cable per foot. Products are designed for 11mm or 14 mm commercial grade heat cables, mineral insulated (MI) cable or 3/8" Radiant PEX tubing *Recommended Commercial Grade-Self Regulating Heat Cable.□
- **Optional Items** Ambient and/or Moisture Sensor Controllers, Self regulating heat trace for gutters and downspouts
- **Electrical Requirements** N.E.C. 426-28 requires 30 mA Ground Fault circuit protection for snow and ice melting applications

Specifications

IceFree Eave Panel's simple integrated drip edge and color-matched cover is designed to eliminate icicles, ice dams, and snow at the roof's edge. Engineered Roof Deicing innovative roof snow and ice elimination systems are attractive and cost effective. They ensure that the building's owner will not have the frustration, property damage, and costs associated with water damage, caused by the inability of the buildings' roof to properly drain water during winter months. Engineered Roof Deicing's revolutionary roof de-icing systems will extend your roof life and reduce the destructive situations that snow and ice can inflict on any roof.

Mounting

Eave panels are installed with sealant & roofing screws. Screws and sealant may be replaced by 3M VHB Adhesive Tape, TAM-PRO Flashing Cement or Rainbuster 14000 Silicone. The lip of the eave panel fits below the shingles, cedar shake, corrugated metal roof panels, or slate roof panels, facilitation proper moisture drainage off the roof structure.



Aluminum Extrusion Profiles (5' lengths)

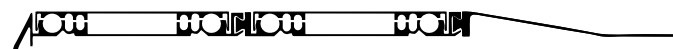
IceFree 8" Eave Panel *for eaves up to 12" deep*



IceFree 12" Eave Panel *for eaves up to 18" deep*



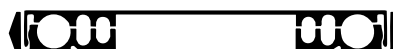
IceFree 18" Eave Panel *for eaves up to 24" deep*



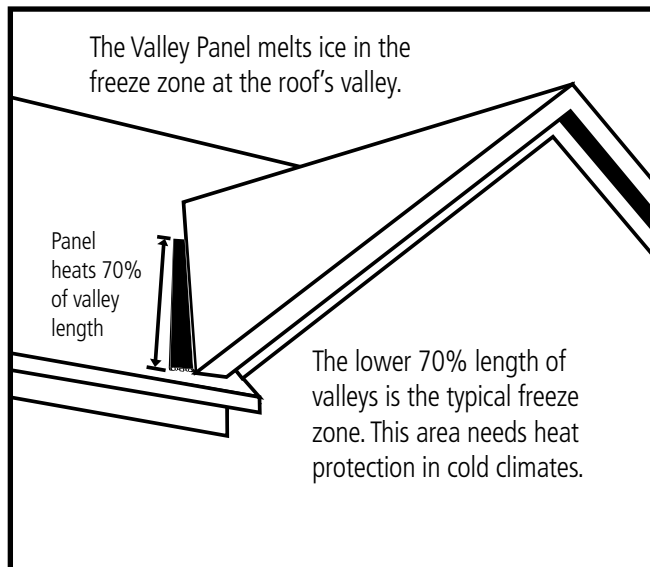
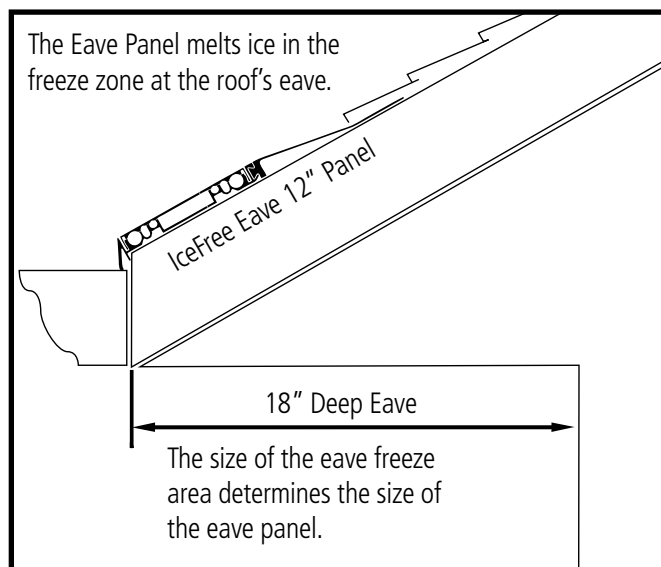
IceFree Valley Panel *for Valleys*



IceFree Utility Panel *for Chimneys, Valleys & Below Stairs*



Selecting a panel length



- ▶ IceFree 8" Eave Panel (for eaves up to 12" deep)
- ▶ IceFree 12" Eave Panel (for eaves up to 18" deep)
- ▶ IceFree 18" Eave Panel (for eaves up to 24" deep)
- ▶ IceFree Valley Panel (for valleys, chimneys, crickets etc)
- ▶ IceFree Utility Panel (a larger version of the valley panel)

Number of feet of heat cable allowed per circuit breaker

The 8" Eave, 12" Eave, Valley, Utility Panel Systems utilize 2 feet of Heat Trace per foot of panel. The 18" Eave Panel System will utilize three feet of cable per foot. Pay strict attention to the ambient start up temperature, circuit size and load requirement.

	Start-up temperature	15 A Circuit Breaker	20 A Circuit Breaker	30 A Circuit Breaker	40 A* Circuit Breaker
@ 120 volts	32°F (0°C)	100' (30)	135' (41)	200' (61m)	—
	20°F (-7°C)	95' (29m)	125' (38m)	185' (56m)	200' (61m)*
	0°F (-18°C)	80' (24m)	100' (30m)	155' (47m)	200' (61m)*
@ 208 volts	32°F (0°C)	190' (58)	250' (76)	380' (116m)	—
	20°F (-7°C)	180' (55m)	235' (72m)	355' (108m)	380' (116m)*
	0°F (-18°C)	145' (44m)	195' (59m)	290' (88m)	380' (116m)*
@ 240 volts	32°F (0°C)	200' (61m)	265' (81m)	400' (122m)	—
	20°F (-7°C)	190' (58m)	250' (76m)	370' (113m)	400' (122m)*
	0°F (-18°C)	155' (47m)	205' (62m)	305' (93m)	400' (122m)*
@ 277 volts	32°F (0°C)	215' (66m)	290' (88m)	415' (126m)	—
	20°F (-7°C)	200' (61m)	265' (81m)	400' (122m)	415' (126m)*
	0°F (-18°C)	165' (50m)	225' (69m)	330' (101m)	415' (126m)*

* Only FTC-P power connection kits may be used with 40-A circuits.

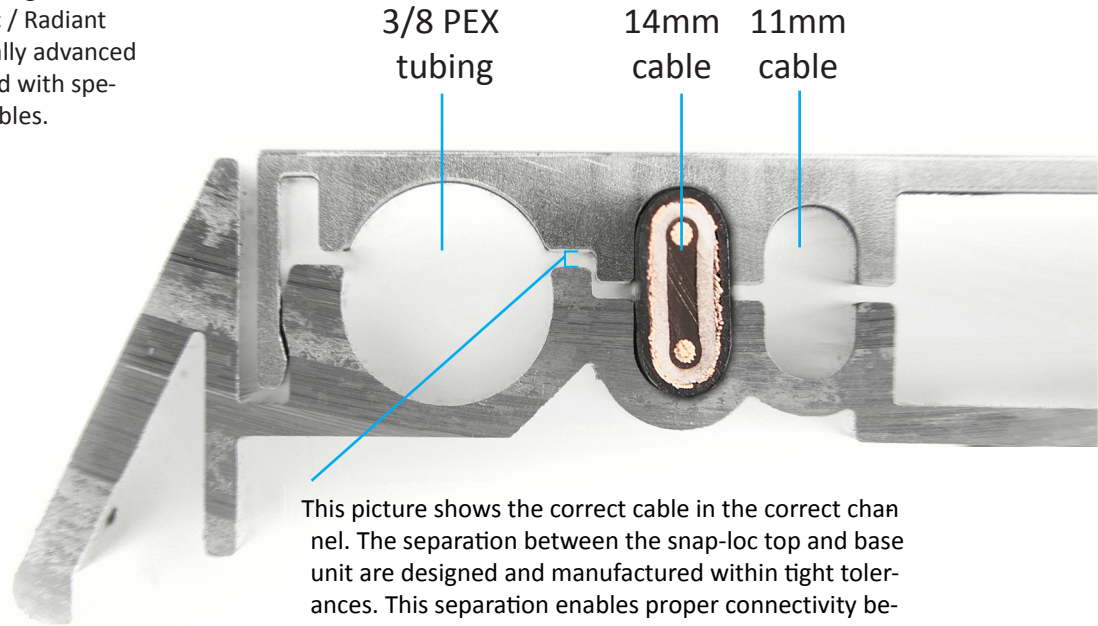
Bus Wires 16 AWG nickel-plated copper
Braid/Outer

How to select the correct heat channel

All of our products can incorporate different types of heat sources, such as, 11-14 mm self regulating heat cable, Mineral Insulated Cable and Hydronic / Radiant Tubing. Engineered Roof De-icing's technically advanced aluminum alloy extrusions are manufactured with specific sized channels for specific sized heat cables.

Note: All products manufactured by Engineered Roof Deicing incorporate the same or similar superior internal configuration as the systems shown here. The same installation parameters with regards to channels vs. heat source apply to all of the other panel system products manufactured and sold by Engineered Roof Deicing.

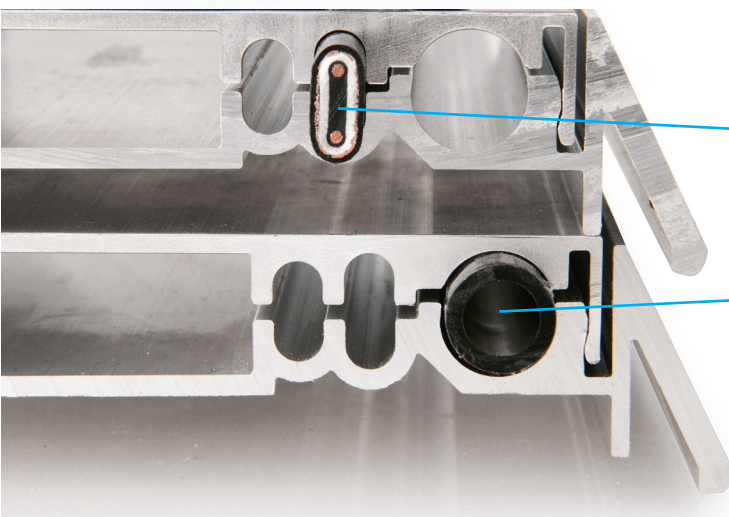
If multiple sized channels are available, only fill one size on each side of the panel with the correct cable or tubing.



This picture shows the correct cable in the correct channel. The separation between the snap-loc top and base unit are designed and manufactured within tight tolerances. This separation enables proper connectivity between the thermal panels and the heat source, enabling direct heat transfer or direct thermal conductivity to occur between the heat source and the base and top aluminum alloy panels.



Many quality self regulating cables are designed to be installed within the smaller of the two channels. This channel, or slot, is sized for approximately 11mm heat cable.

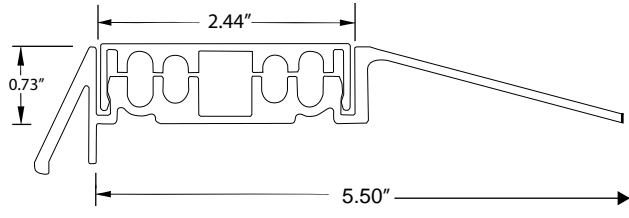


Many quality self regulating cables are designed to be installed within the larger of the two channels or slots. space is sized for approximately 14mm heating cables.

3/8" Oxygen Barrier Tubing or PEX tubing is designed to be installed within the round channel, slot or hole. This .5 inch hole can accommodate other heat sources as becomes necessary.

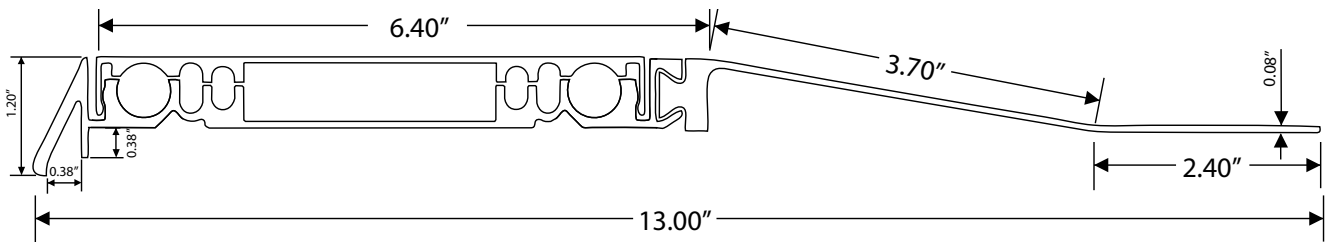
Drawings

8" Eave Panel for eaves up to 12" deep

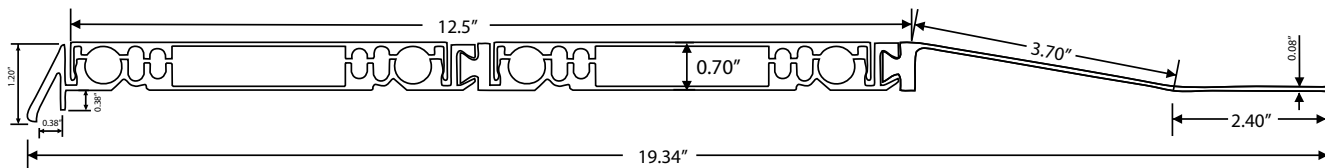


On 8" IceFree Eave Panel the cladding ONLY will extend under the shingle

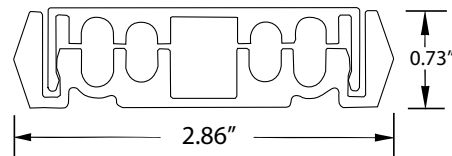
12" Eave Panel for eaves up to 18" deep



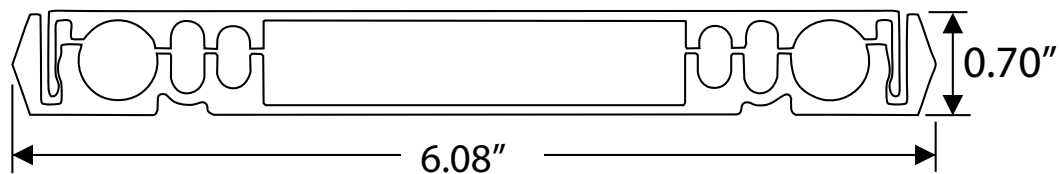
18" Eave Panel for eaves up to 24" deep



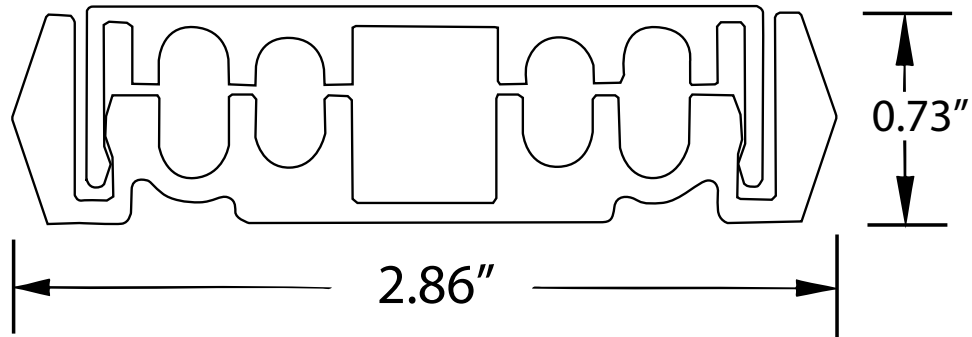
3" Valley Panel for Valleys



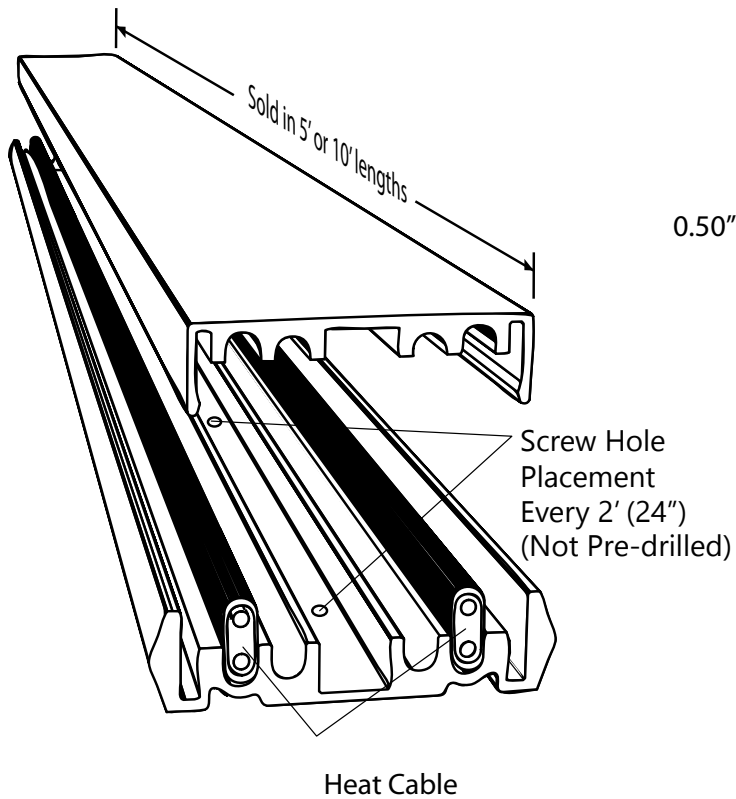
6" Utility Panel for valleys, chimneys, crickets etc



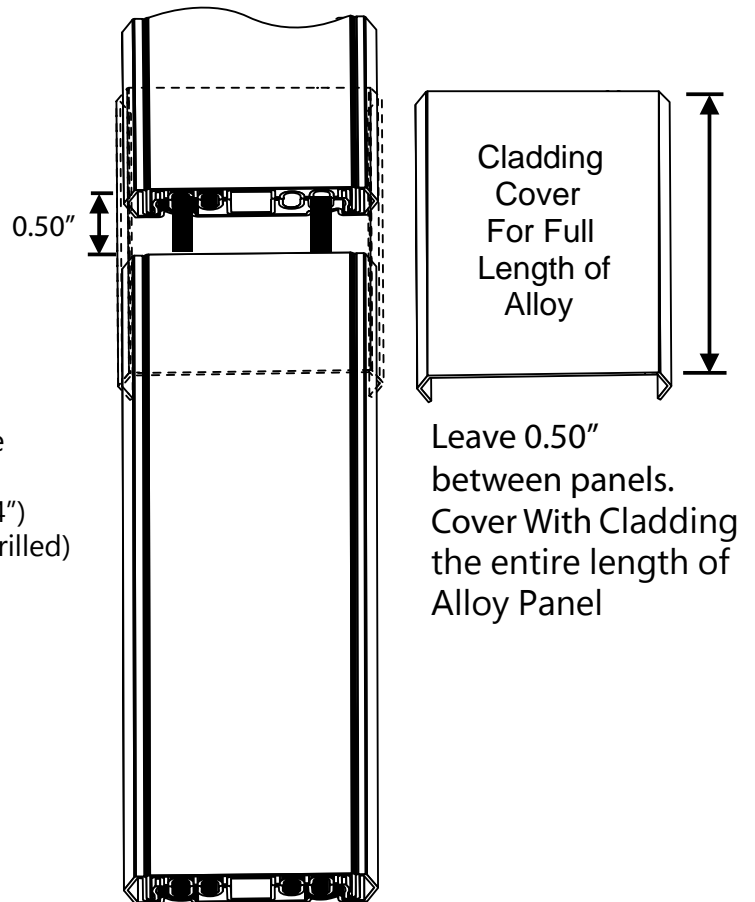
3" Valley Panel *for valleys, chimneys, crickets etc*



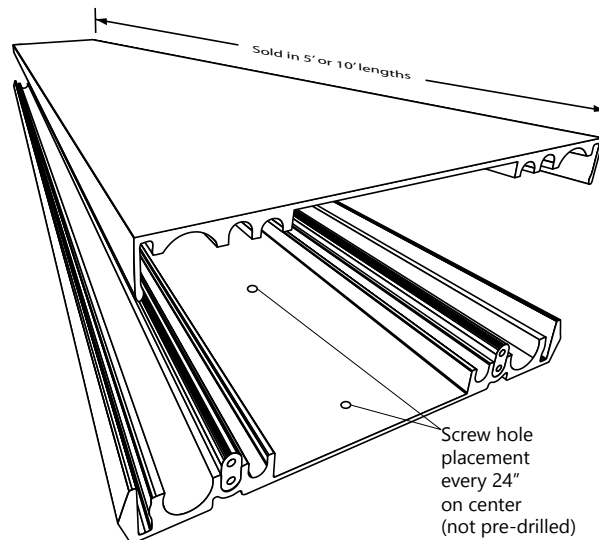
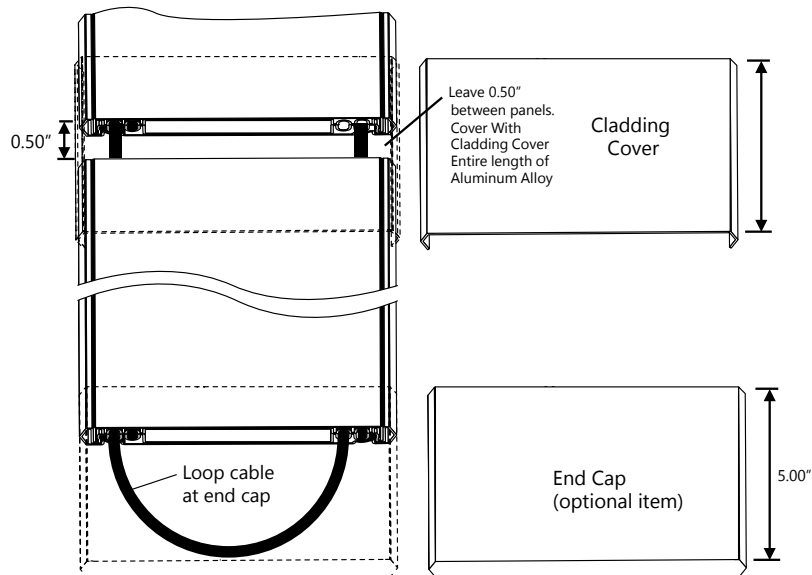
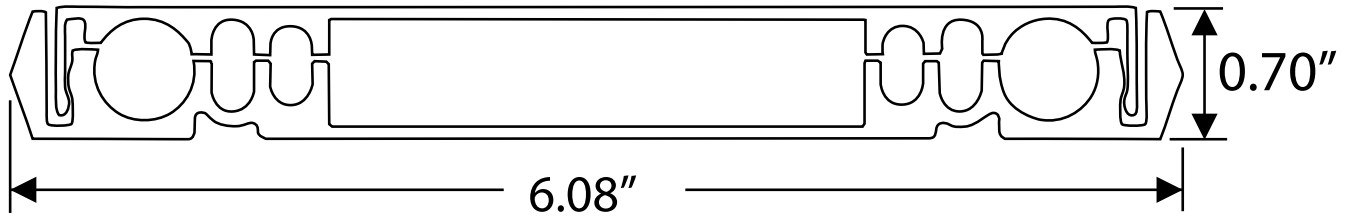
Panel Mounting



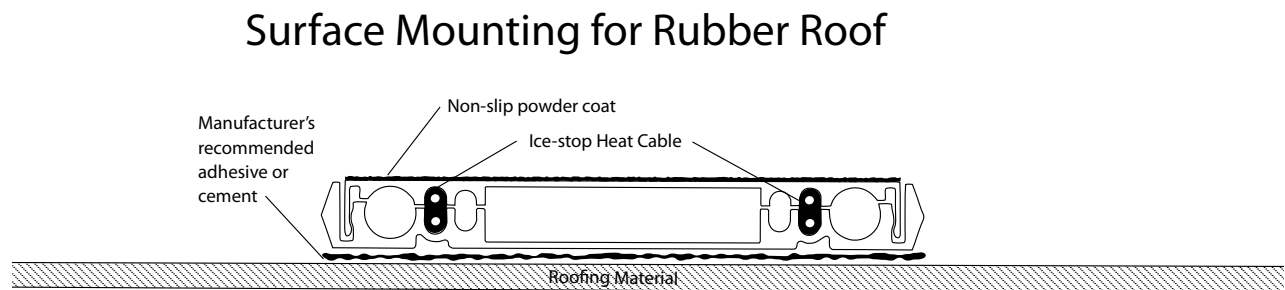
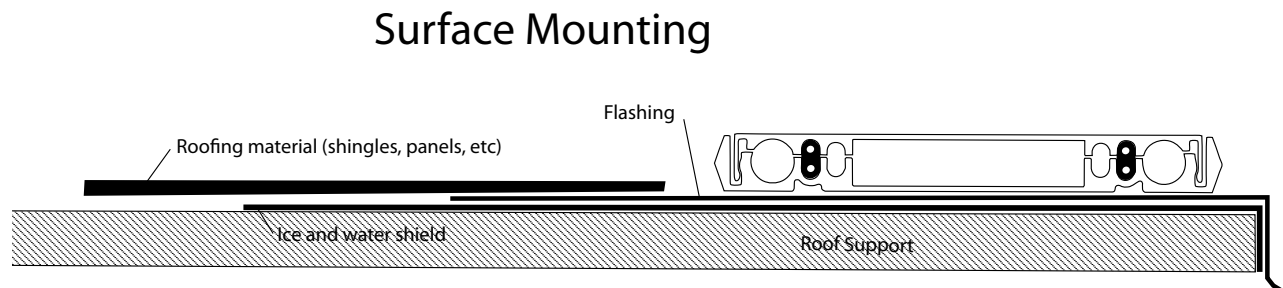
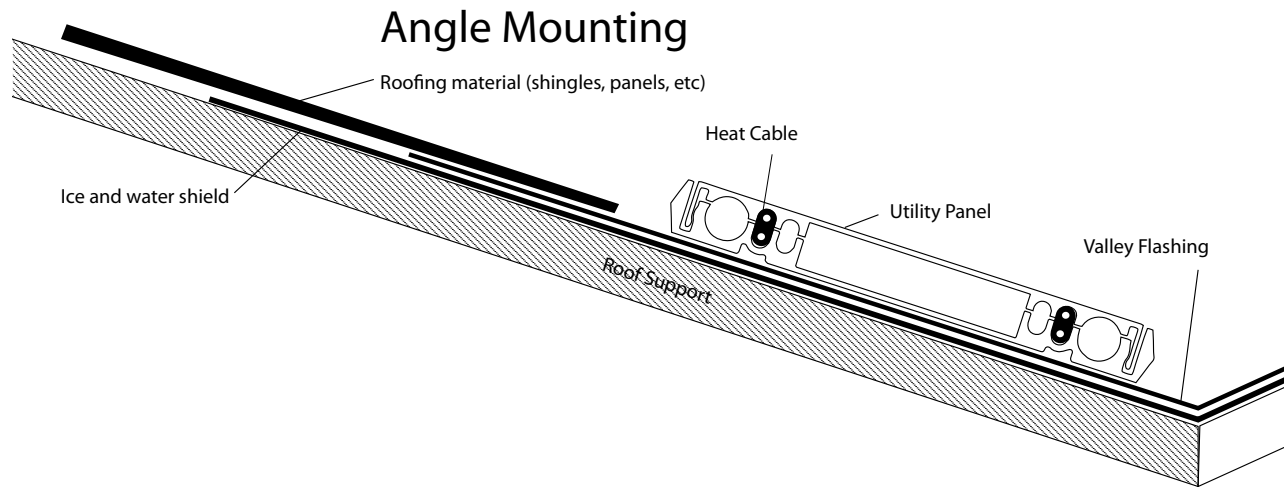
Panel Mating



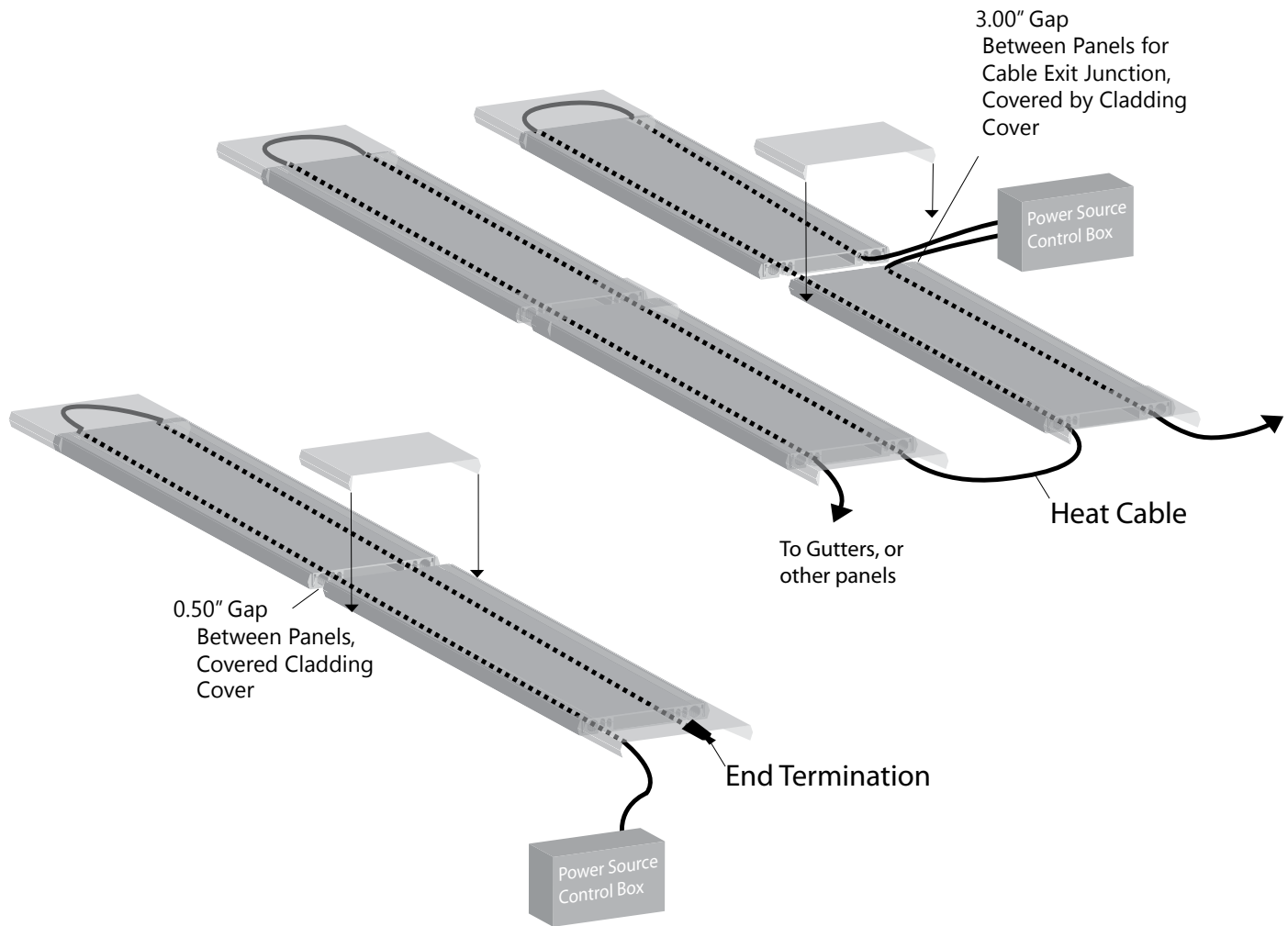
6" Utility Panel *for valleys, chimneys, crickets etc*



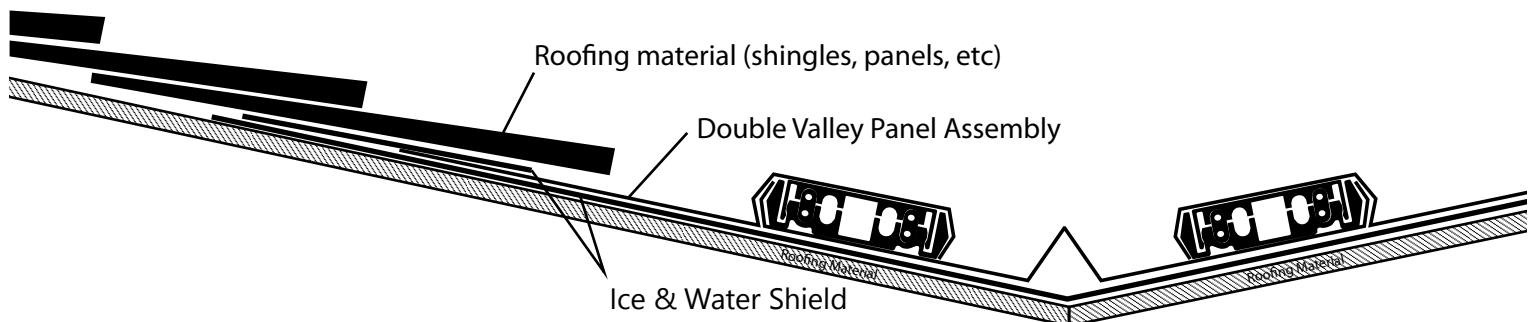
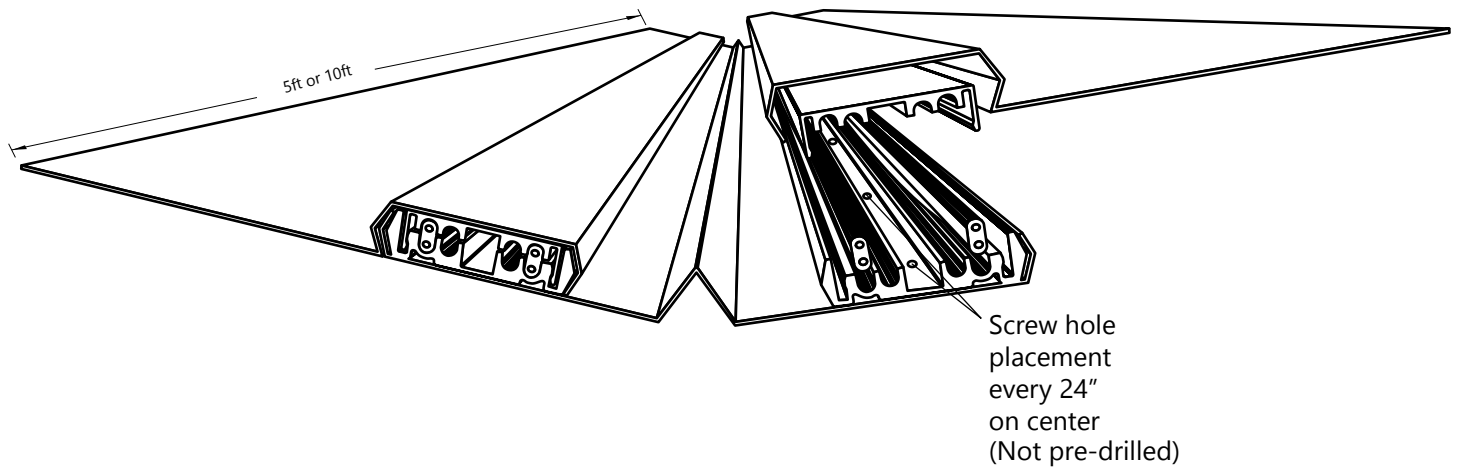
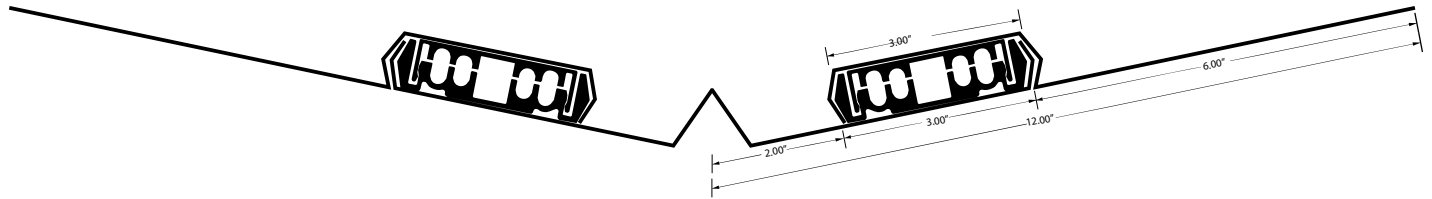
Placement of Ice & Water Shield, Flashing and Roofing Materials



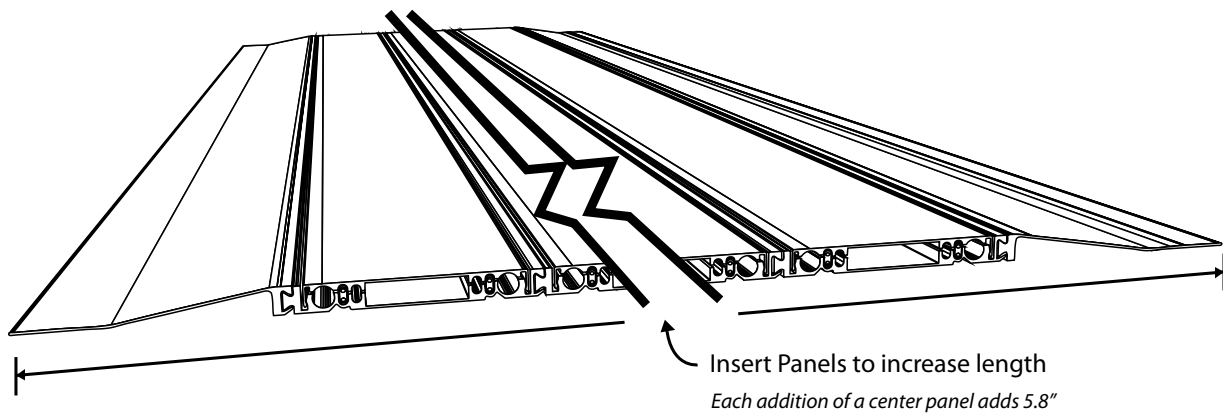
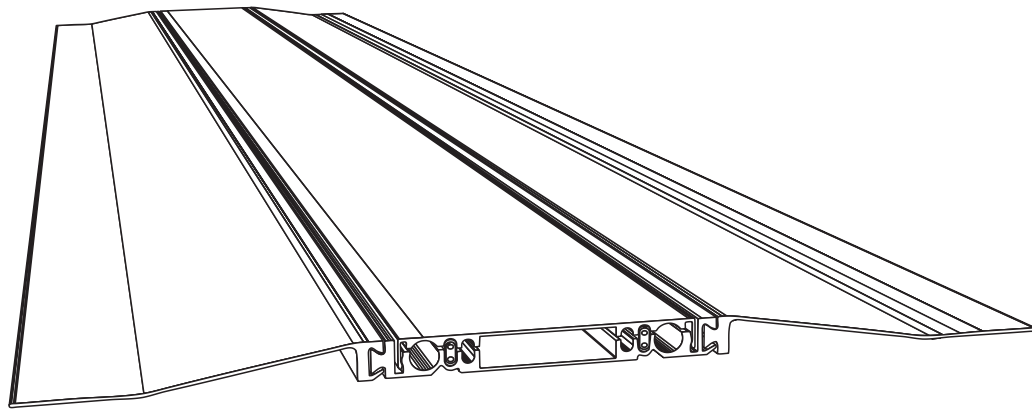
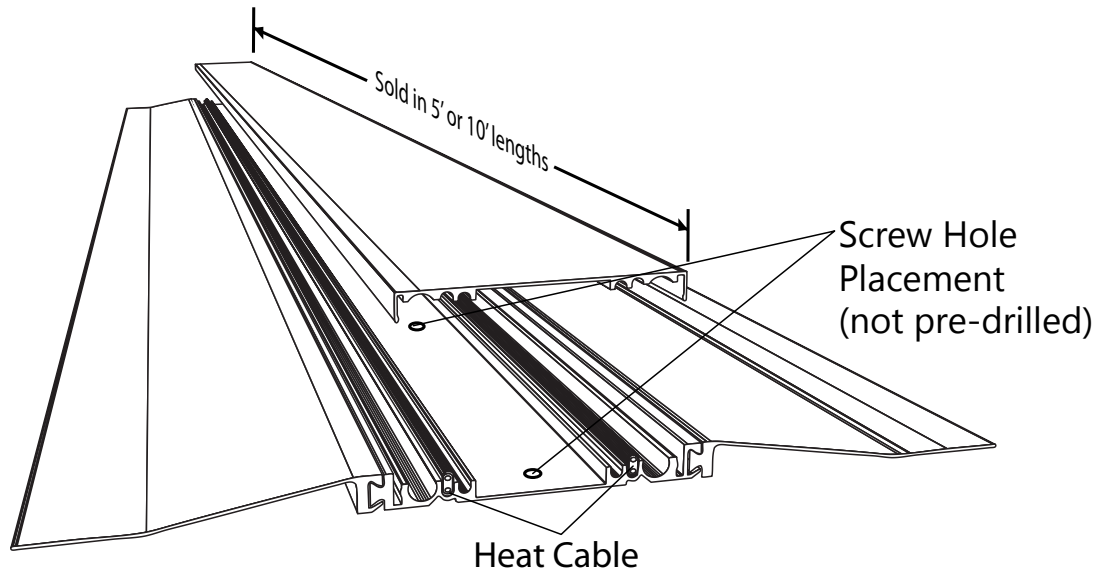
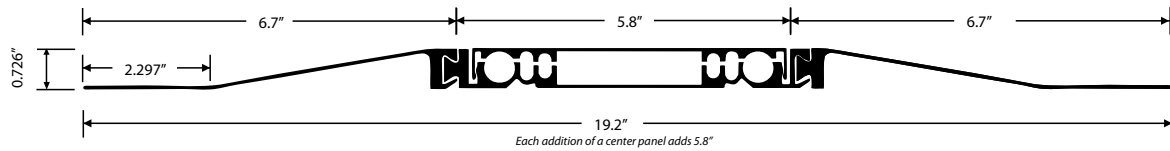
Example Cable Run for Utility Panels



Double-Valley Panel

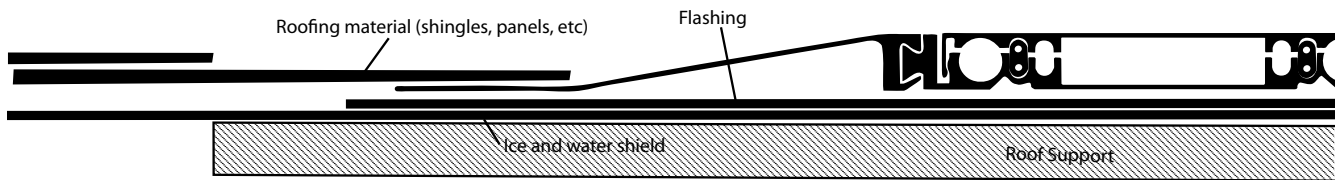


Flat Roof Panel



Flat Roof Panel Installation

Surface Mounting



Surface Mounting for Rubber Roof

