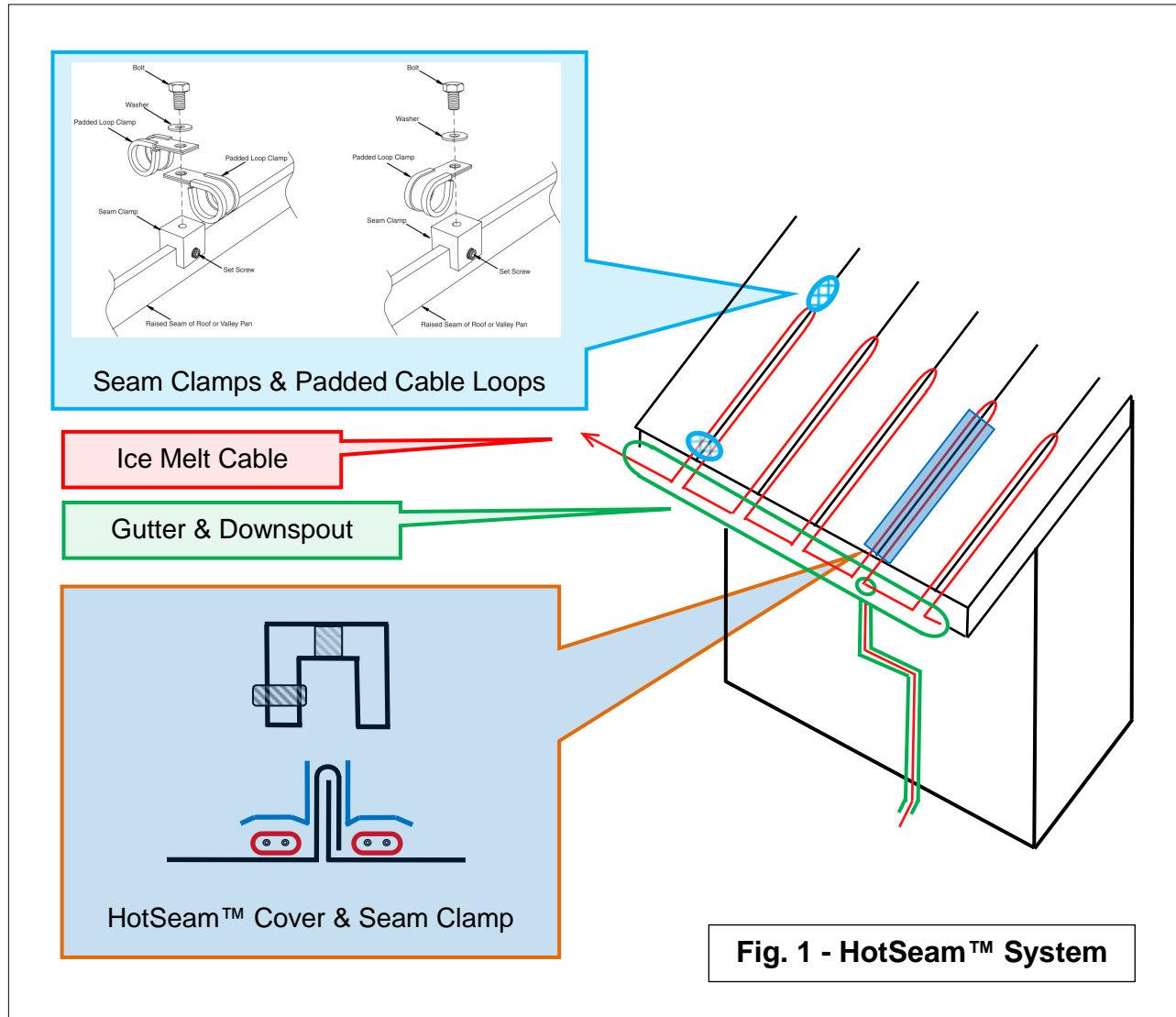


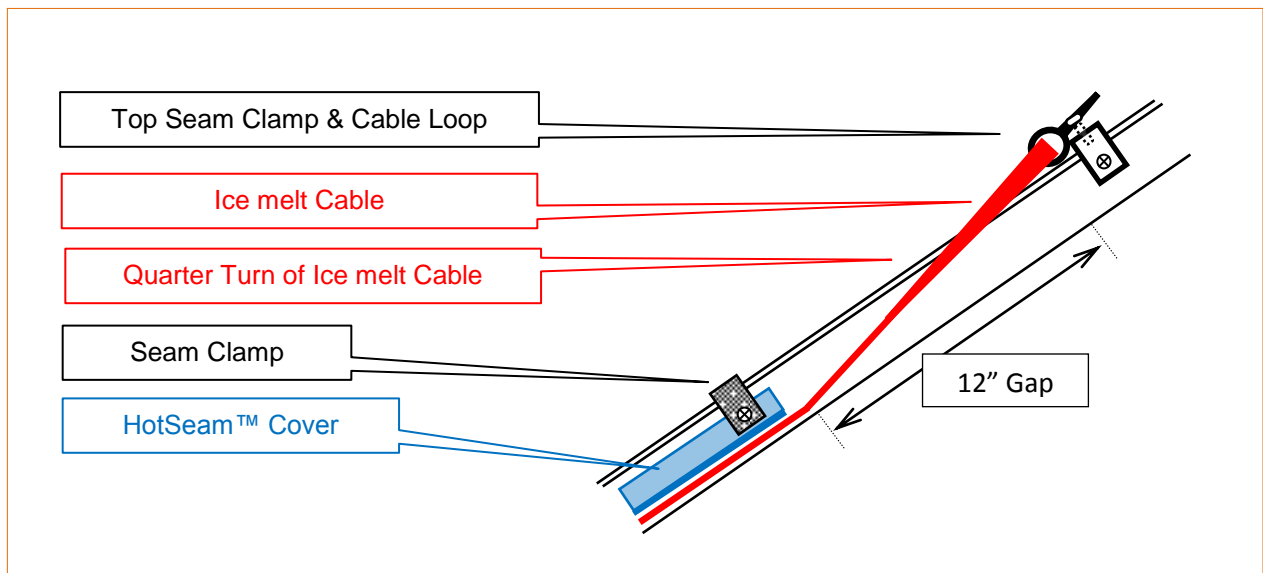
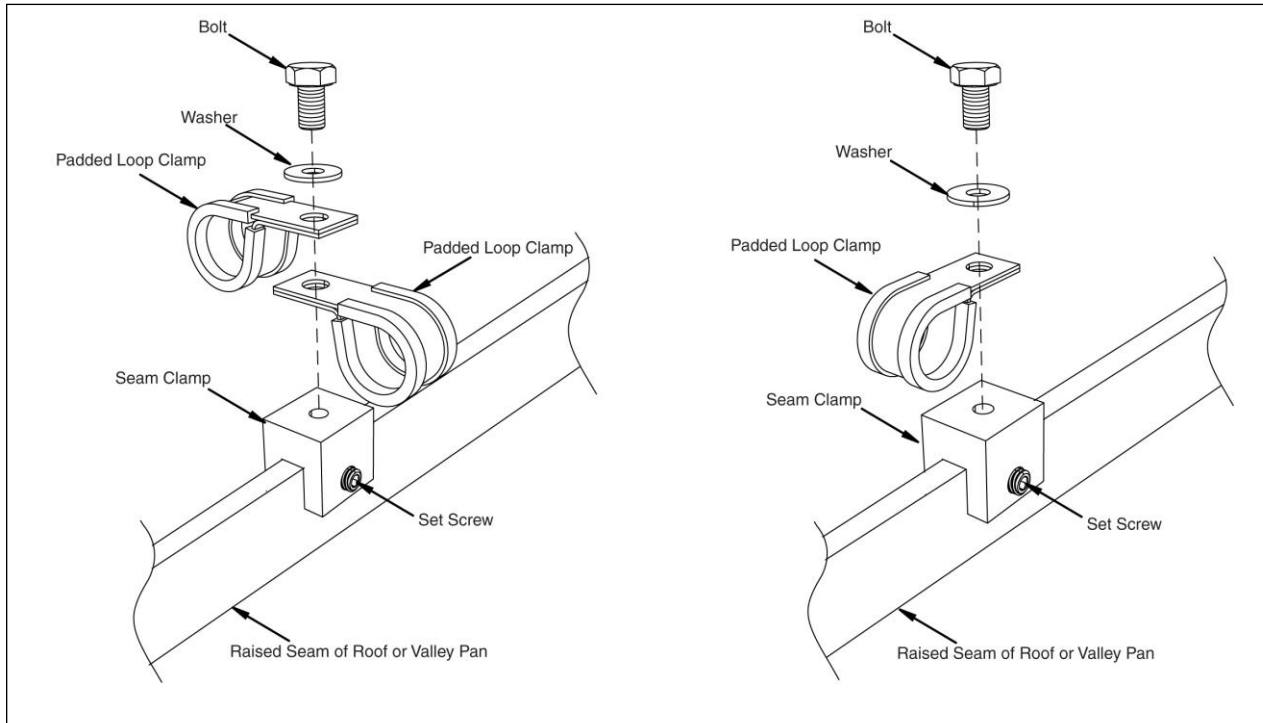
HotSeam™ System – Design Guide
Order Entry Information & Engineering Specifications
 Hot Edge, Inc. www.HotEdge.com

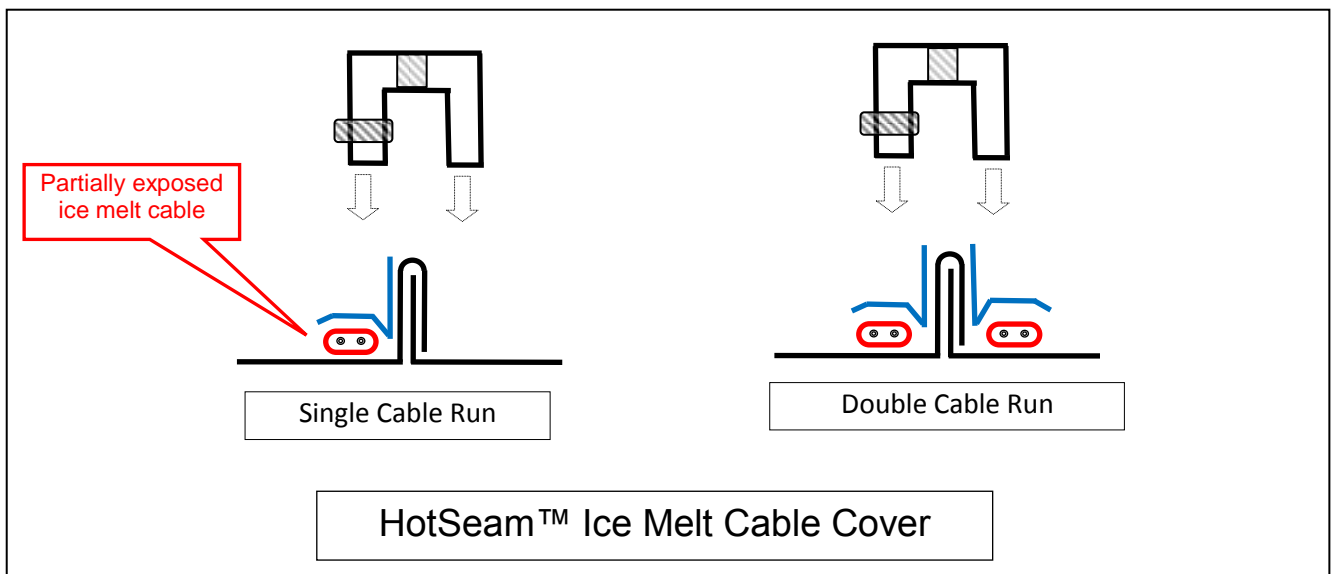
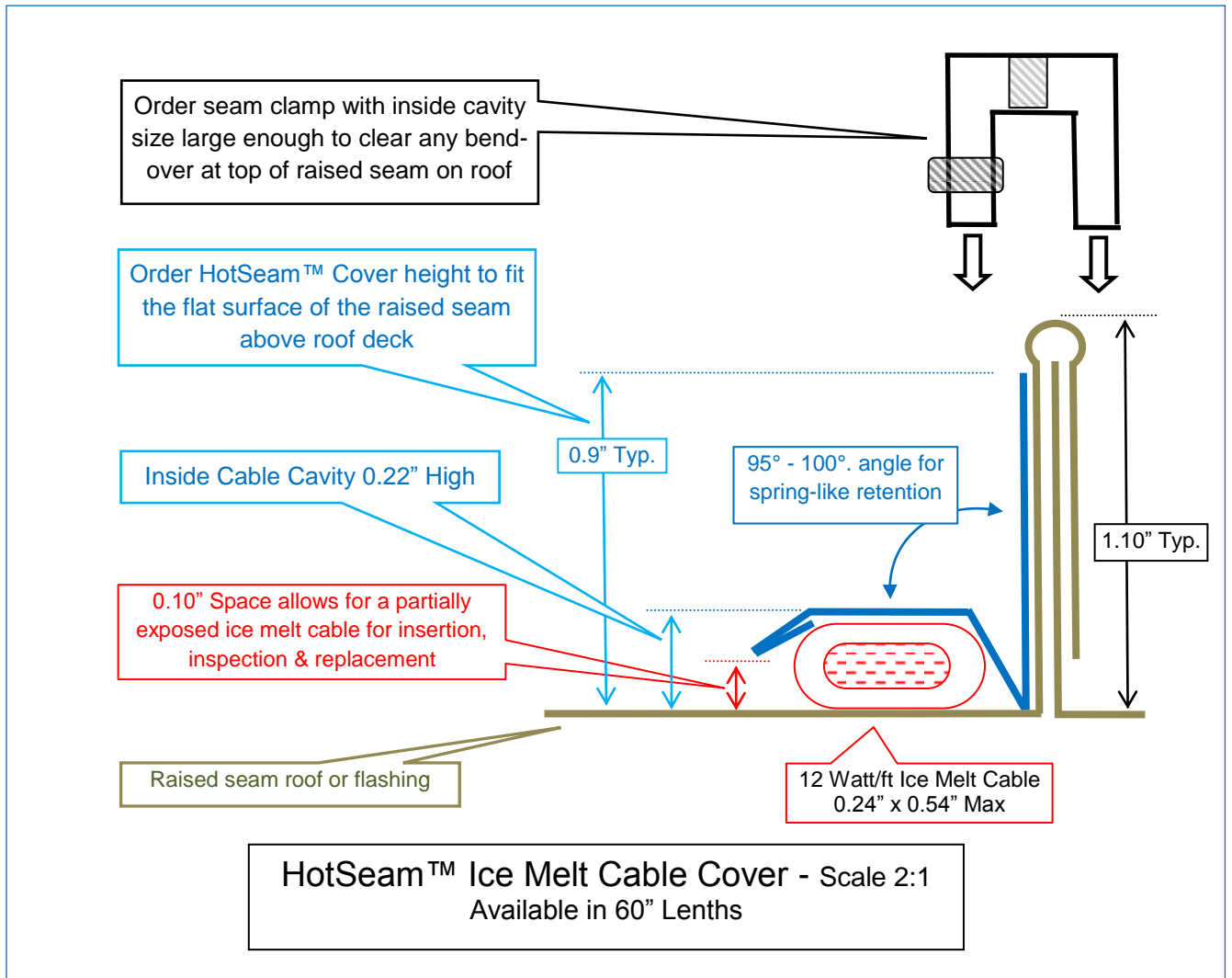


HotSeam™ System – Part of the HotEdge™ Ice Melt System

The HotSeam™ System provides a seam clamp and a padded cable loop assembly that securely attaches vertical ice melt cable runs to most raised seam roofs or raised seam flashings. The HotSeam™ Cover holds the ice melt cable against the roof surface and provides an attractive street view appearance. Optional flashings with raised seams are available for most applications.

HotSeam™ System - Components





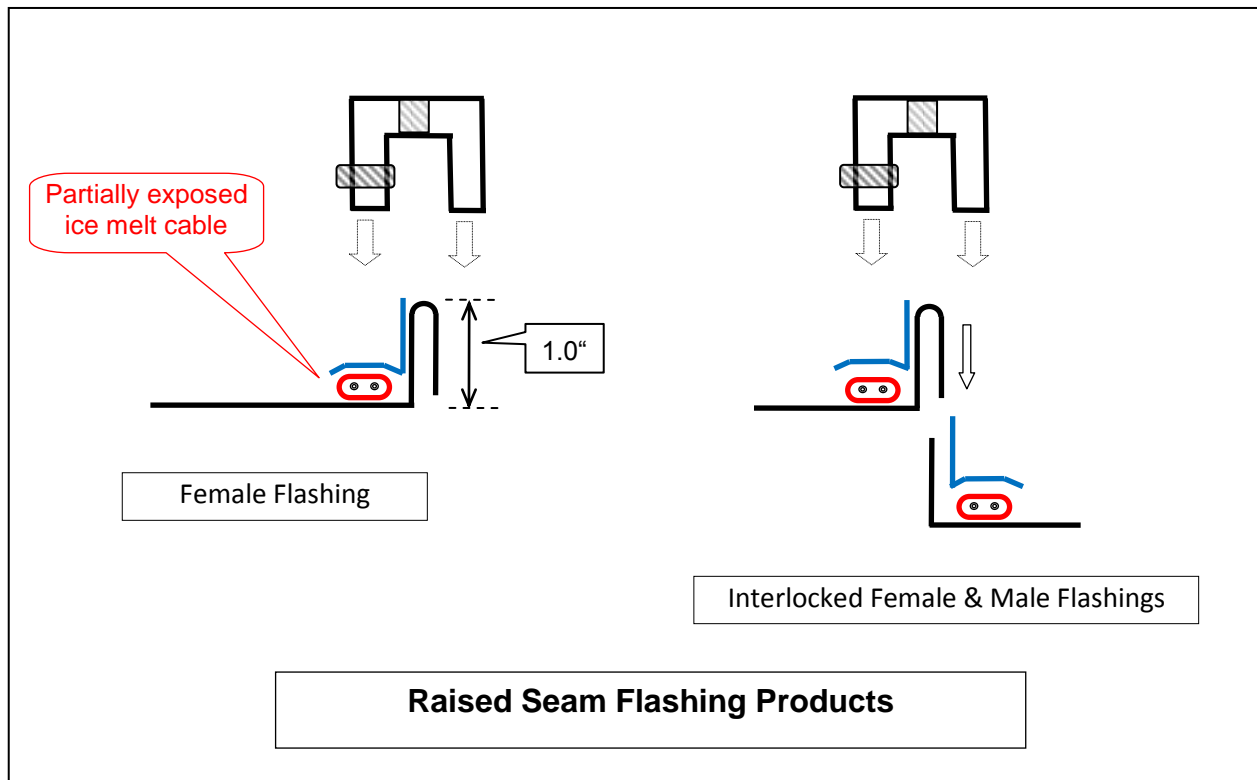
Raised Seam Flashing Products

For non-metal roofs, the optional Raised Seam Flashing Products (below) are used in valleys or next to vertical walls to provide raised seam attachment points.

The standard Female Raised Seam Flashing provides a one inch raised seam and is about five inches wide and slides under the adjacent shingle. It can be trimmed at the job site to minimize interference with existing nail or screw fasteners. It can be attached like a normal flashing with nails or screws sealed with roofer's caulk. For metal roof surfaces, special glue is available from the factory.

For shingled or dimensional roofs the optional Male and Female Raised Seam Flashings are used to create a double sided raised seam.

For a double run of ice melt cable, a double run of flashing is required. The Male Raised Seam Flashing interlocks with the female flashing and slides under the shingles on the other side of the valley. In all cases the ice melt cable needs to be held down by the HotSeam Cover and the cable must be in contact with a lower metal surface formed by the flashing.



HotSeam™ Cover – Harmonized Part Number Nomenclature

HSMC 080 — S - HAGR — 060 — 095 — Rev8

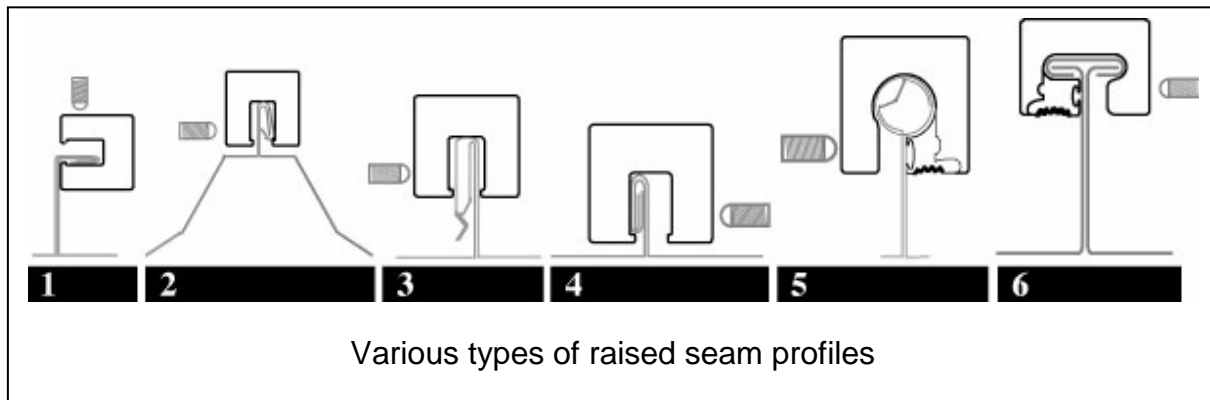
HotSeam™ Cover Products	Material & Color	Length	Options
<p>HSMC 050 = HotSeam™ 0.50" High HSMC 060 = HotSeam™ 0.60" High HSMC 070 = HotSeam™ 0.70" High HSMC 080 = HotSeam™ 0.80" High HSMC 090 = HotSeam™ 0.90" High</p> <p>HSMC 100 = HotSeam™ 1.00" High HSMC 110 = HotSeam™ 1.10" High HSMC 120 = HotSeam™ 1.20" High HSMC 130 = HotSeam™ 1.30" High HSMC 140 = HotSeam™ 1.40" High HSMC 150 = HotSeam™ 1.50" High HSMC 160 = HotSeam™ 1.60" High HSMC 170 = HotSeam™ 1.70" High HSMC 180 = HotSeam™ 1.80" High HSMC 190 = HotSeam™ 1.90" High</p> <p>HSMC 200 = HotSeam™ 2.00" High HSMC 210 = HotSeam™ 2.10" High HSMC 220 = HotSeam™ 2.20" High HSMC 230 = HotSeam™ 2.30" High HSMC 240 = HotSeam™ 2.40" High HSMC 250 = HotSeam™ 2.50" High HSMC 260 = HotSeam™ 2.60" High</p> <p>The height may be trimmed at the time of installation.</p> <p>Seam Clamps & Padded Cable Loops HSPL = Padded cable loops HSxx-xx = Seam clamps as determined by sales staff. See Seam Clamp Selection Guide at the end of this document.</p> <p>Raised Seam Flashing Products HSMF = Female raised seam HSMM = Male raised seam (Select Material & Color and Length per next columns.)</p>	<p>Material C= Copper, 0.021", 16oz., ½ Hard</p> <p>S= Painted Galvanized Steel, 0.019"</p> <p>A = Kynar Painted Aluminum, 0.032"</p> <p style="text-align: center;">+</p> <p>Color NAT = Natural Copper (For copper material)</p> <p>ALMD= Almond CLRD = Colonial Red HMGR = Hemlock Green SLBL = Slate Blue BNWH = Bone White COPE = Copper Penny MNBN = Mansard Brown SLGR = Slate Gray MABL = Matte Black DKBZ = Dark Bronze MDBZ = Medium Bronze CLGR = Classic Green HAGR = Hartford Green SRTN = Sierra Tan</p>	<p>060= 60" (Note: 060 can be shipped UPS)</p>	<p>095 = 95° bend for 5° spring-like tension on cable for steel HotSeam™ Cover</p> <p>100 = 100° bend for 10° spring-like tension on cable for copper HotSeam™ Cover.</p> <p>VFH = Vertical Flange Hem. Normally a hem at the top of the vertical flange makes the flange too thick for most clamps.</p> <p>BTP= Build to Print (Special Order Only)</p>

Seam Clamp Selection Guide

The contractor must provide the Hot Edge Inc. sales department with a detailed drawing of the standing seam profile of the structure's roof for the proper selection of the seam clamp. Ask for a sample.

When the HotSeam™ Cover is used, the cavity in the seam clamp needs to be large enough to accommodate the roof seam and two to four layers of the HotSeam™ Cover's vertical flange. In a typical installation, the five foot HotSeam™ Cover sections can be over lapped and run up the roof on both sides of the roof seam if the clamp jaw is wide enough. This allows one seam clamp to hold the over lapping Covers every five feet. Additional clamps may be added on 2.5 foot centers.

In all cases, the top seam clamp needs a top threaded hole to retain the padded ice melt cable loop and bolt. This assembly must also be secure enough to resist the lateral downward force of sliding ice and snow. Allow extra ice melt cable length to cross seam-to-seam in the bottom of the gutter. **Never cross the ice melt cable seam-to-seam in the mid-roof area.**



Measure carefully

The profile of the raised seam needs to be measured with a digital caliper to a tolerance of $\pm 0.05"$ and sent as a drawing to the sales department to select the correct seam clamp. The drawing should include the following information:

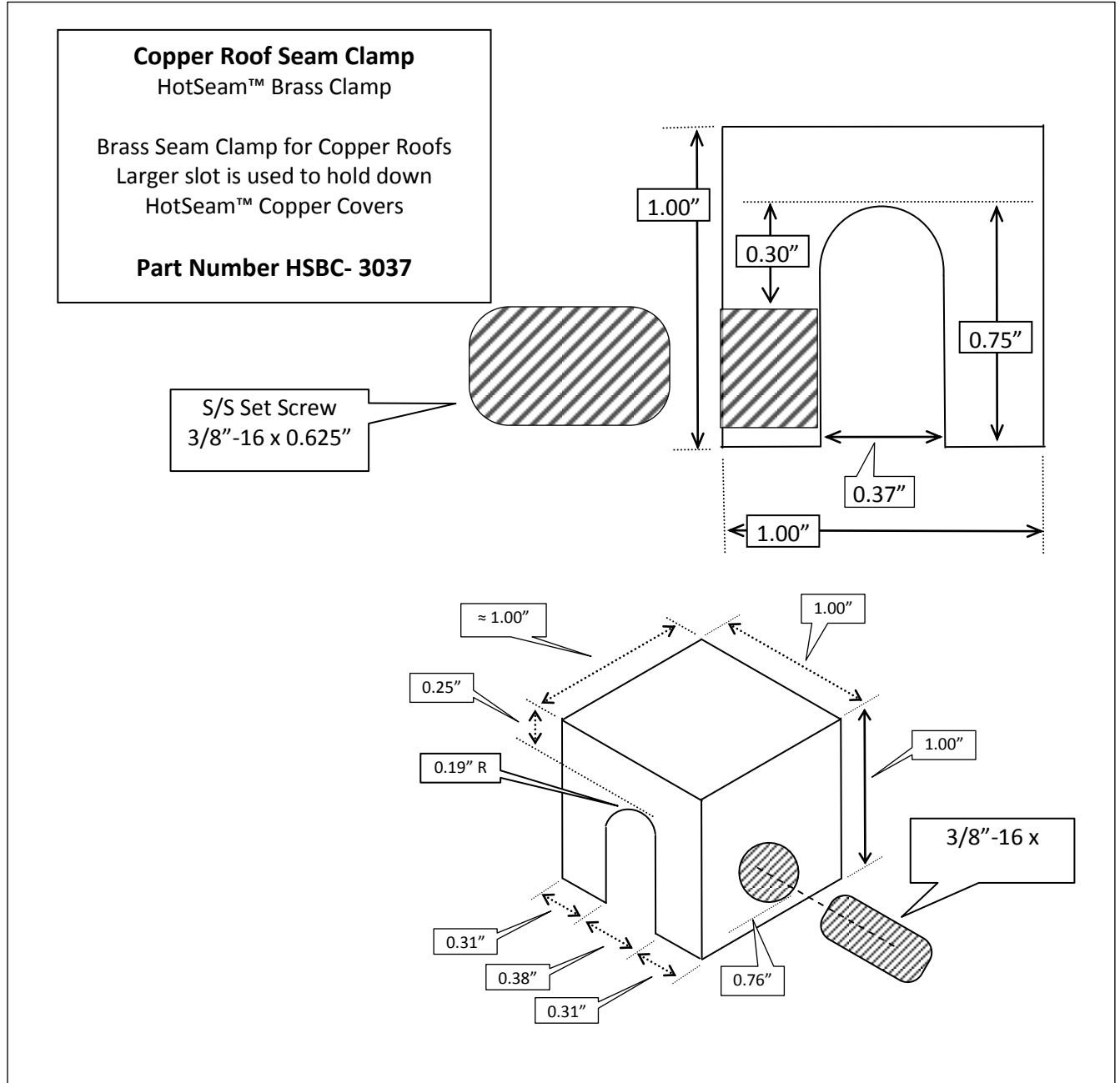
- 1) Total height of the raised seam above the roof surface
- 2) Height of the thinner flat vertical surface below any top bend or increase in thickness
- 3) Thickness of this thinner flat vertical surface
- 4) Height and width of the bend over at the top of the raised seam with drawn details as to the cross sectional configuration. Variations include a simple bend over, roll top, "T" top or upside down "L" top as shown above. All of these profiles require a different type of seam clamp.
- 5) Define type of roof material: Copper, steel or aluminum require a specific clamp material to minimize galvanic corrosion
- 6) For a very wide fold over raised seam top (Fig 1, above), consult factory. It may be possible to make a special order HotSeam™ Cover with a right angle bend at the top of the vertical flange that will fit under the top of the raised seam.

Open vs. Covered Configuration

The HotSeam™ System always requires a top clamp and padded cable loop to retain the ice melt cable. Below the top clamp, single or double cable loops with clamps or the HotSeam™ Cover can be used.

The attractive Cover hides and presses the cable against the metal roof or flashing surface. This configuration has a pleasing street appearance and can completely heat the surface which will clear large amounts of snow and ice falling from much larger roofs above.

Standard Clamps - Selection Guide



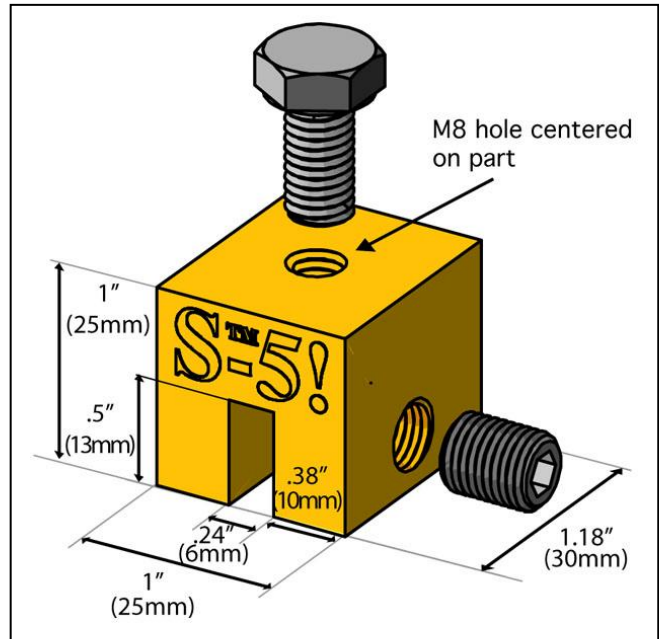
Copper Roof Seam Clamp

HotSeam™ Brass Clamp

Brass Seam Clamp for Copper Roofs

Note smaller slot and top threaded hole. Top hole is used to mount Padded Cable Loop

Part Number HSBC- B Mini

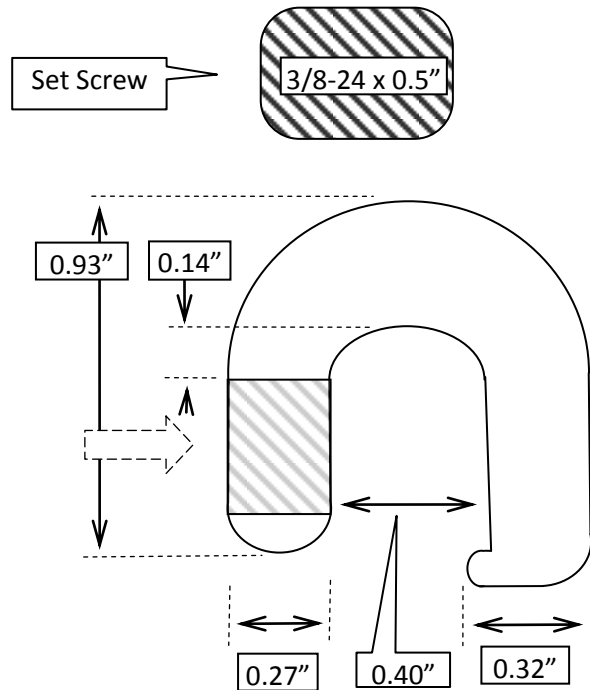


Steel & Aluminum Roof Seam Clamp

HotSeam™ Aluminum Alloy Clamp

Part Number HSAC- WindClamp

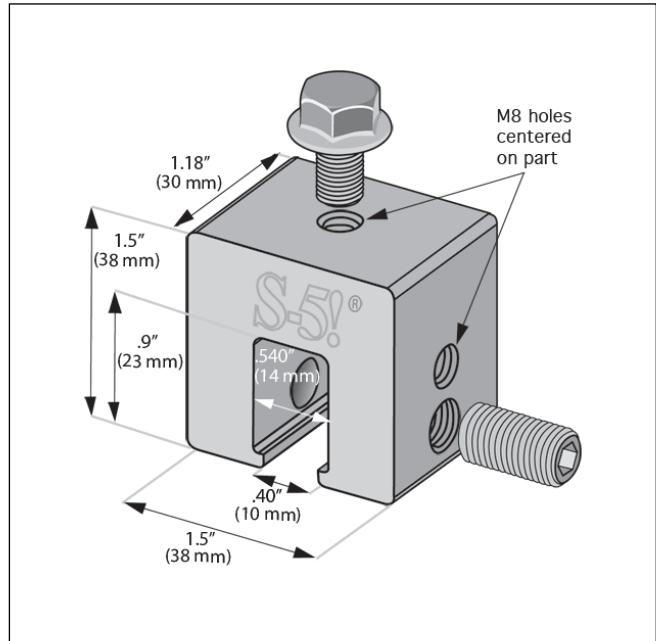
Design Note: Ensure the 0.14" x 0.40" spacing above the set screw is large enough to accommodate the roof seam fold-over. Ask sales staff for a sample.



**Steel & Aluminum Roof
Seam Clamp**

HotSeam™ Aluminum Alloy Clamp

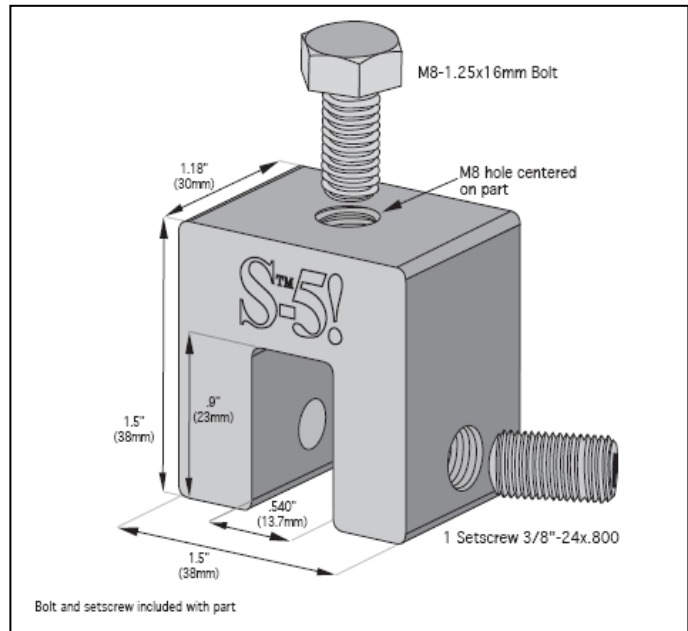
Part Number HSAC- U Mini



**Steel & Aluminum Roof
Seam Clamp**

HotSeam™ Aluminum Alloy Clamp

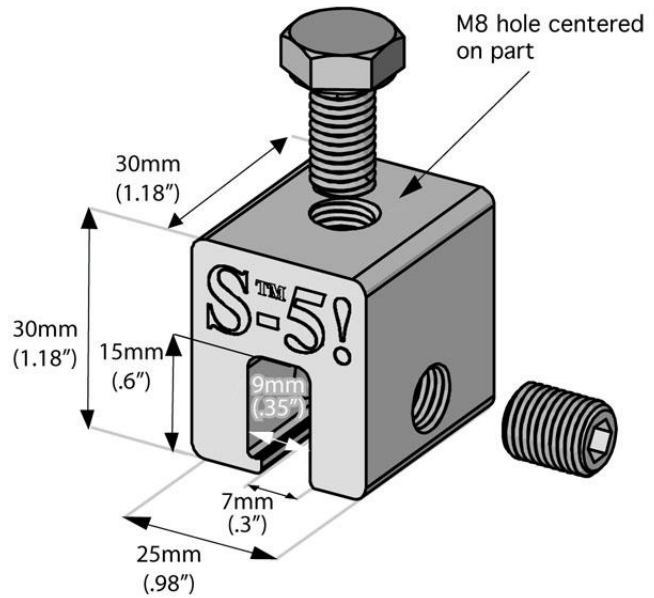
Part Number HSAC- S Mini



**Steel & Aluminum Roof
Seam Clamp**

HotSeam™ Aluminum Alloy Clamp

Part Number HSAC- E Mini

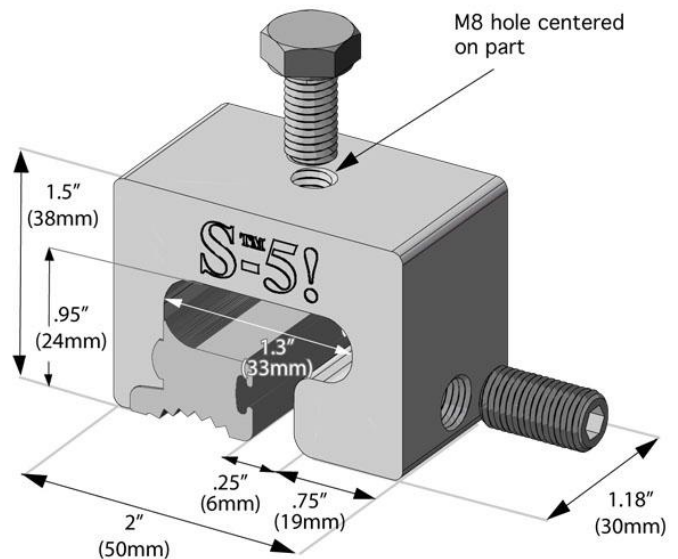


**Steel & Aluminum Roof
Seam Clamp**

HotSeam™ Aluminum Alloy Clamp
For T-Shaped Roof Seams

Part Number HSAC- T Mini

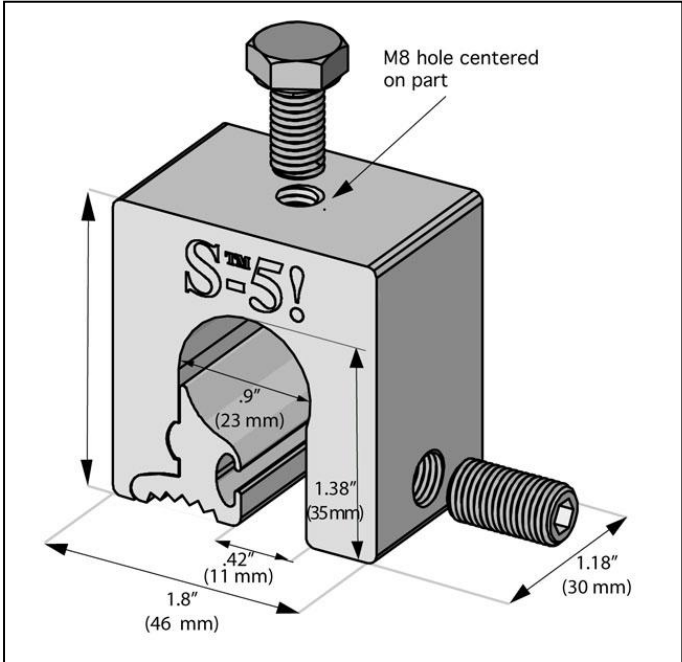
Design Note: Ensure the 0.25" wide opening is large enough to accommodate the roof metal thickness plus the thickness of the HotSeam™ Covers. Ask sales staff for a sample.



**Steel & Aluminum Roof
Seam Clamp**

HotSeam™ Aluminum Alloy Clamp

Part Number HSAC- Z Mini

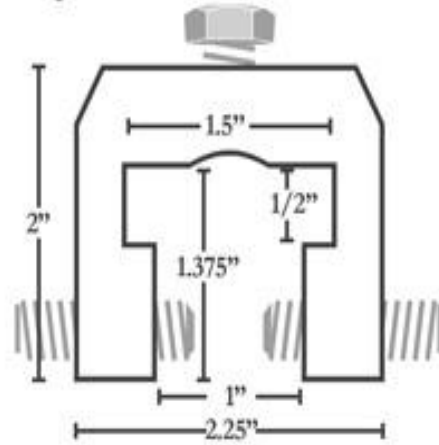


**Steel & Aluminum Roof
Seam Clamp**

HotSeam™ Aluminum Alloy Clamp
Used for large folded-over L-type or
T-type raised seams.

Part Number HSAC- RTC

RoofClamp™ RCT



The HotEdge™ Rail Roof Edge Ice Melt System

The UL Listed, HotEdge™ Rail roof edge ice melt system creates a three-sided raceway that holds a single run of self-regulating ice melt cable firmly against the bottom of the metal drip edge of most structures. This patent pending open raceway design conforms to the NEC (National Electrical Code) Article 426 and provides access for insertion, inspection and replacement of the ice melt cable. The heat generated by the ice melt cable is directly conducted to the top of metal drip edge. This helps prevent icicles and ice dams from forming in this critical area. The snow and ice melt water is not permitted to re-freeze at the drip edge and it can be safely drained away from the structure.

Some roofs will require the addition of a metal drip edge or a metal slip sheet (snow slide) that can be heated. Warning: In all cases, a metal drip edge must be present for the HotEdge Ice Melt System to operate safely and successfully. Hot Edge Inc. manufactures the HotSheet™ and the HotShingle™ products for this purpose.

Additional products are offered (e.g. HotValley and HotFlashing) to maintain a heated drain path for the ice melt water until it can be safely drained away from the foundation of the structure.

The ice melt cable manufacturer's installation instructions are provided with the cable. These procedures must be followed. Installation personnel must be skilled in the art and be aware of the dangers inherent in this type of construction work. This product is designed to be part of a complete roof structure. Only experienced professional contractors should install this product.

Consult with a licensed electrical contractor for the electrical system layout, junction box placement, maximum cable run lengths and power feed requirements with EDP breakers as defined by the National Electrical Code (NEC), local building codes and the ice melt cable manufacturer.

Completely read and understand these documents before starting the project.

Warning

Low cost, constant current ice melt cable must not be used. Only safety agency Listed, self regulating ice and snow melt cable for structures that are provided with the system can be used.

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