

Technical Notes

Hot-Rod

Alpha® developed a revolutionary way to improve the efficiency of fabricators. For years, slab fabricators have employed labor-intensive procedures for creating channels in the underside of countertops to accommodate stainless steel reinforcing rods at sink and cooktop cutouts. Alpha® recognized the opportunity for improvement and developed the Alpha® Hot-Rod. With this blade attached to the Alpha® AWS-110 or AWS-125 Wet Stone Cutter, a fabricator can accomplish the task in one easy pass. The Hot-Rod for Granite blades were created with diamond grits and matrix best suited for all categories of granite, including hard red granites, to assure a long cutting life. With a 3" diameter, the blade allows for easy use and better leverage when cutting 1/4" deep channels, by allowing for better positioning of the stone cutter's handle. This blade is now available in three thicknesses: 1/4" for standard rods, 1/8" for thinner rods and 3/8" for threaded rods. The Hot-Rod for Marble applies the same technology but is designed for softer stones such as marble. This blade is available in 1/4" for standard and 1/8" for thinner rods. For efficient creation of channels for reinforcing rods, attach this unique blade to our AWS-110 or AWS-125 for a smooth, dust-free operation. Used in this manner, productivity will increase significantly. Although Alpha® recommends wet cutting, these blades may be used wet or dry.

Sections:

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Part No.	Size	Maximum RPM	Arbor	Recommended For	For Use On
HR03A+	3"	14,500	7/8", 20mm	1/4" Rod	Granite
HT03A+	3"	14,500	7/8", 20mm	1/8" Rod	Granite
HW03A+	3"	14,500	7/8"	3/8" Threaded Rod	Granite
HM03A+	3"	14,500	7/8", 20mm	1/4" Rod	Marble
HS03A+	3"	14,500	7/8", 20mm	1/8" Rod	Marble

How to Use

Mount the Alpha® Hot-Rod blade onto the Alpha® AWS-110/AWS-125 Wet Stone Cutter, making sure the directional rotation marked on the blade matches the spindle rotation of the power tool.

Attach the Guide Ruler accessory of the Alpha® AWS-110 Stone Cutter so the ruler guide is following the edge of stone as a guide. Using the Guide Ruler will assure your channel is cut straight to allow the reinforcement rod to fit easily.

Adjust the depth of the cut so the Hot-Rod blade cuts deep enough so the reinforcement rod is below the surface of the material. The rod should be lower than the surface of the material to allow the adhesive to cover the rod to prevent oxidation.

Using a lumber crayon, draw a line on the material so you know the length needed for the reinforcement rod.

Plunge the blade into the material until the base of the Stone Cutter makes full contact with the material. Once the Alpha® Hot-Rod blade is fully plunged into the material, push the blade through the material to the desired length required to install the reinforcement rod. (NOTE: To start plunge cutting, we suggest resting the edge of the base plate of the Stone Cutter onto the material before plunging into the material. Doing so will give you better stability during your plunge cut).

(Consult the power tool operation manual for proper installation instructions for mounting blades).

Frequently Asked Questions (FAQs)

On what materials can the Alpha® Hot-Rod blades be used?

Alpha® designed two versions of the Alpha® Hot-Rod blade, Granite and Marble Series. Alpha® Hot-Rod for Granite blade must only be used for granite applications and Alpha® Hot-Rod for Marble blade must only be used for marble applications.

Will the Alpha® Hot-Rod for Granite blade work on all granites?

Yes. The Alpha® Hot-Rod blade for granite was created with diamond grits and matrix best suited for all categories of granite, including hard red granites.

In which thicknesses are the Alpha® Hot-Rod for Granite blades?

Alpha® offers Hot-Rod blades for granite that are available in three thicknesses: 1/4" for standard rods, 1/8" for thinner rods and 3/8" for threaded rods.

In which thicknesses are the Alpha® Hot-Rod for Marble blade offered?

Alpha® offers Hot-Rod blades for Marble that are available in two thicknesses: 1/4" for standard rods and 1/8" for thinner rods.

Alpha® Hot-Rod blades are dry blades, can they be used wet?

Yes. Wet cutting will generally increase the life of the blade and help keep harmful dust (Silica) out of the air. We recommend wet cutting using the Alpha® AWS-110/AWS-125 Wet Stone Cutters.

What is the arbor size for Alpha® Hot-Rod blades?

See chart on Page 1.

What is the actual size of the Alpha® Hot-Rod blades?

These blades are 3" diameter. Utilizing a 3" blade will give the operator better leverage when cutting the 1/4" deep channels and will provide better positioning of the stone cutters handle.

Which Alpha® Stone Cutter should I use; AWS-110 or AWS-125?

Both stone cutters are well suited for channel cutting applications using the Alpha® Hot-Rod blades. However, the AWS-125 stone cutter is more designed for the fabricator. The Alpha® AWS-125 has a side handle attachment for better stability. The Alpha® AWS-125 also accepts the Alpha® Contour Blade for sink bowl cut-outs.

Can I use the Alpha® Hot-Rod Blade on an angle grinder?

No. The Alpha® Hot-Rod blades are designed to be used on the Alpha® AWS-110/AWS-125 Wet Stone Cutters.

Our shop uses a Tuck Point blade for this application now; what benefits will be gained by switching to the Alpha® Hot-Rod?

Tuck point blades are primarily designed for the removal of soft mortar between bricks. Mortars are very soft and abrasive, tuck point blades are usually made with a hard bond matrix to keep the diamonds in place longer. When used on hard materials, such as granite, tuck point blades tend to glaze quickly, need frequent dressing and have a shorter life. The Hot-Rod for Granite is specifically designed for harder materials and has a softer matrix for a long life of cutting granite. Similarly, the Hot-Rod for Marble is specifically designed for a long life of cutting marble.

The peripheral edge of the blade is rounding after significant use, but there is still plenty of life. Will this affect the depth and shape of the slot?

The rounding of the peripheral edge is normal; simply adjust the depth of cut to compensate the rounding areas in the channel. Near the end of its life, it may be necessary to make a second pass to widen the slot.

Are there any other uses for the Alpha® Hot-Rod blades?

Alpha® Hot-Rod blades may be used in any application that calls for scoring the surface of granite or marble. For example, creating non-skid grooves in granite or marble steps.

Helpful Hints

- Use of water will prolong the life of your dry cutting blade as well as keep harmful dust (Silica) out of the air.
- Use the Guide Ruler accessory on the Alpha® AWS-110/AWS-125 for creating perfect straight cuts.
- Be sure to dry the slot thoroughly before inserting the reinforcing rods, otherwise, it may cause a problem with the adhesive setting correctly.
- Use flanges and adapters which are specifically made for your power tool.

Reference

For more product information, visit us on the web at www.alpha-tools.com.