

Technical Notes

Vetro

The Alpha® Vetro Blade is designed for high-speed wet cutting of glass. Equipped with a smooth continuous diamond rim and bond hardness best suited for glass and hard vitreous materials to provide cuts with minimal chipping. The Alpha® Vetro is an excellent choice for plunge cutting, trimming near the edges of glass and for cutting an internal radius. The Alpha® Vetro must be used wet and when the 4-3/8" size is used on the AWS-110 Wet Stone Cutter it provides a portable dust-free solution to cutting thick glass. Since the quality of the cut is high, providing straight and true cuts with minimal chipping even near the edges of glass, waste is kept to a minimum creating a cutting solution that is quite cost-effective. The Alpha® Vetro is the ideal blade for the glass contractor looking for a high-speed, portable, long-lasting cutting solution.

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| Part No. | Size | Maximum RPM | Arbor |
|----------|--------|-------------|-------|
| WG0438 | 4-3/8" | 13,200 | 20mm |
| WG0700 | 7" | 8,400 | 5/8" |
| WG0800 | 8" | 7,400 | 5/8" |
| WG1000 | 10" | 5,900 | 5/8" |

How to Use

Choose the proper power tool best suited for the application and diameter of the blade. Alpha® Vetro blades are WET USE only.

Use the Alpha® AWS-110 Wet Stone Cutter with the 4-3/8" Alpha® Vetro blade.

Make sure that the blade's directional arrows match the spindle rotation of your power tool.

Adjust the depth of your cut; generally, if the blade is 1/8" below the material you are cutting, this is sufficient.

Slowly push the blade into the material maintaining a consistent slow traverse speed until you cut through the entire piece of material. A slow consistent pushing motion will allow the diamonds, within the blade's cutting edge, to cut the material easily and minimize chipping on the edge.

Frequently Asked Questions (FAQs)

Can the Alpha® Vetro blade cut tempered glass?

No. Tempered glass will shatter as soon as the blade cuts the material and we do not recommend cutting.

Can I cut Onyx using the Alpha® Vetro blade?

Yes. This blade is also highly recommended for cutting Onyx since the fine diamonds within the blade's matrix will minimize the amount of chipping.

Can I use this blade for dry application?

No. Wet cutting diamond blades must be used with water to prevent excessive heat build up during cutting. Using water on the blade also reduces dust and helps enhance the cutting performance and life. A continuous water flow is critical. Using "wet" blades without water even for a few seconds will cause excessive heat and blade damage.

The speed of my cut is slowing down. What can I do to improve it?

The diamonds are rounding over or glazing causing the blade to lose its cutting ability. You need to re-dress the blade using a soft abrasive material such as a dressing stone or a concrete block.

What tools can I use the Alpha® Vetro blades on?

The Alpha® Vetro blades must be used WET. Therefore, we recommend using the following:

- 4-3/8" blade is designed for hand-cutting application using the Alpha® AWS-110 Wet Stone Cutter.
- 7" blade is designed for tub saws/tile saws.
- 8" blade is designed for tub saws/tile saws.
- 10" blade is designed for tub saws/tile saws.

Will the 4-3/8" Alpha® Vetro blade fit onto the Alpha® AWS-125 Wet Stone Cutter?

No. The arbor flange size of the Alpha® AWS-125 Wet Stone Cutter is 7/8"; therefore, the 20mm arbor of the 4-3/8" Alpha® Vetro blade will not fit onto the flange. The 4-3/8" Alpha® Vetro will fit onto the Alpha® AWS-110 Wet Stone Cutter since this tool's arbor flange is 20mm.

Can the Alpha® Vetro blade cut Safety Glass (Laminated Glass)?

Yes. Alpha® Vetro blades cut safety glass (laminated glass). There are many different types and thicknesses but you can cut all if used with water. This could be a typical application for shower door installers who need to trim a little bit at the job site.

What materials can I cut with the Alpha® Vetro blade?

The Alpha® Vetro blade is primarily designed for glass cutting application.

Which way do I install the blade on my tool?

Blade directional arrows are printed on the front of the blade. Install the blade so that the rotation of the blade will follow this direction. If the front of the blade is no longer legible, a directional arrow is embossed into the back of the blade. As a last resort, examine the diamonds. The bond tail behind each diamond should be pointing the opposite direction of blade rotation. If the blade is installed incorrectly, the bond tails will reverse direction, which may cause some premature wear.

What's the best way to cut glass tile with coating material for tile saw application?

We recommend that you place the coating material face up when cutting; tile saws have downward cutting action and cutting with the coating material face up will eliminate chipping or tearing of the coating material.

Does Alpha® offer a Vetro blade designed for portable rail-saws?

Yes. Alpha® specifically designed a 10" Vetro blade for use on portable rail saws. The part number of this blade is: WG1001.

Helpful Hints

- Do not force the blade to cut; allow the diamonds time to cut through the material. Slower cutting helps eliminate chipping on the cut edge.
- Wet cutting is required.
- Review operations manual of the power tool to assure proper usage.
- Placing a piece of thin Styrofoam or 1/8" plywood under the glass can provide a cushion which can be helpful in eliminating chipping.
- Use Alpha® PVA (Red & Blue) to ease and polish the edge of glass tiles.
- Use the Alpha® Corner Nippers and Alpha® Corner Rulers for other glass applications.
- Take appropriate steps to assure personal safety when performing any cutting application.

Reference

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