

Segmental Arches Made Easy

by Dave Crosby

Laying out a segmental arch across an opening can be time-consuming if you don't already know the radius or have a fixed point to work from. You could calculate it from the height of the arch and the width of the opening, but that's not the kind of math most carpenters remember off the top of their head, and the trial-and-error method can be costly.

If you find yourself needing to lay out these arches from time to time, or if you would like to, you might want to take a look at the E-Z Arch (E-Z Components, 3838 Raymert Dr., Suite 405, Las Vegas, NV 89121; 702/893-3452). This simple invention by carpenter Anthony Astolfi, allows you to lay out arches up to 16 feet wide. It consists of two telescopic aluminum legs fastened together at one end to create an adjustable angle, and comes with two clamps.

To scribe the arch, all you need to know is the desired width of the arch and the height at the center. Set the clamps as your fixed points at the ends of the proposed arch on any flat surface and set the vertex of the E-Z Arch at the desired height by adjusting the angle of the legs and tightening the knob. Holding the edges of the tool against the fixed points and a pencil at the vertex, you scribe the arc by sliding the tool from the center to the left, and then from the center to the right. For arches over 8 feet wide, a nail at the top of the arch acts as an additional pivot point for the tool.

The telescoping legs of the E-Z Arch fold up to 1³/₄ by 51 inches. The suggested retail is \$55.

Dave Crosby is JLC's tool editor.



To scribe an arch with the E-Z Arch, first set the thumbscrew clamps at the desired width of the arch, set the vertex at the desired height, and tighten the knob.



Keeping the tool in contact with the fixed points, mark the path of the vertex in both directions.



Adjusting for height is easy. You can even scribe arches up to 16 feet wide.

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TOOLBITS

Rechargeable Headlamp

If you've ever wished for someone to hold the flashlight, check this out. The fully adjustable ML121 Headlamp runs more than 6 hours on a single 9.6- or 12-volt battery held in a beltclip. The 3-inch lamp adjusts through 90 degrees, includes a spare bulb, and can be converted to a handheld flashlight. \$46.95.

Contact: Makita USA, 14930 Northam St., La Mirada, CA 90638; 800-462-5482; www.makitatools.com.



Recip Saw Clamp

Round or square tubing, threaded rod, angle bars, and extrusions can be tough to hold still when you're cutting them with a recip saw. The Mighty-Miter attaches with an adapter to any Milwaukee Sawzall to hold $\frac{3}{16}$ - to 2-inch material for fast, square cuts. Designed for quick engagement and easy cutting of long materials on the ground, the unique clamping system requires no modification to the saw and



is said to be easily removable so the saw can be used with the standard shoe. Retail for \$95 or less.

Contact: Seatek, 392 Pacific St., Stamford, CT 06902; 203/324-0067; www.SeatekCo.com.

Angle Grinder

This new 4- $\frac{1}{2}$ - to 5-inch angle grinder features a no-load variable speed of 7,000 to 10,500 RPM with electronic speed stabilization, a wheel guard that can be turned on its collar without tools, and a safety clutch. The ergonomically designed WE14-125Plus also has a safety system which prevents the tool from starting automatically if the tool is unplugged while in use and then plugged in again. The motor has thermal overload protection, and is specially constructed to reduce the harmful effects of grinding dust and extend the life of the tool, according to the manufacturer. \$220.



Contact: Metabo, P.O. Box 2287, West Chester, PA 19380; 800/638-2264; www.metabousa.com.

Portable Vacuum

At under 10 pounds with an adjustable backpack harness system, the BackPackVac provides mobility and compact size for dry cleanup. The 7-quart-capacity vacuum cleaner has a two-stage filtration system with disposable fine dust bag and an easy-to-reach on/off switch. About \$400.

Contact: Shop-Vac, 2323 Reach Rd., Williamsport, PA 17701; 570/326-3557; www.shopvac.com.

