



NORTH AMERICAN WALL AND CEILING
PROFESSIONALS ASSOCIATION

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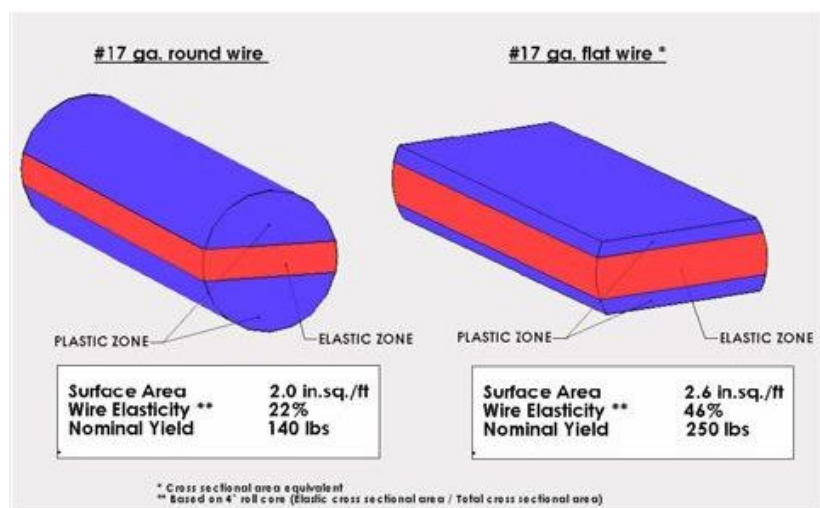
Structa Wire™ - A New Look at Lath

Portland cement plaster, commonly known as stucco, is almost a perfect product for wall surfacing. It is relatively easy to install and when it dries, stucco becomes a hard surface requiring little maintenance and is nearly impervious to the elements. But stucco must be applied while soft and to keep the wet, cementitious material in place, in most cases, you must apply it to lath.

The lath and plaster process is as old as time. The earliest form of manufactured lath was made by arranging thin strips of wood side by side. In the 1920's someone got the idea to use metal screen in place of wood. The next innovation was diamond lath. Diamond lath is made by cutting little nicks in a regular pattern into a thin sheet of metal. When the sheet is stretched apart, little diamond shaped holes appear. This mesh is attached to a wall and stucco is troweled over it. While some contractors were discovering diamond lath, other contractors were finding you could do almost the same thing with woven wire. For the next 30 years, diamond lath and woven wire dominated the trade. By the 1960's, welded wire had become an alternative and all three methods were accepted in building codes across the country.

Welded wire was never as popular as diamond lath because for one thing, it couldn't be easily supplied in rolls. Oh, you could buy it in a roll but when it came time to use, you couldn't keep it unrolled. The wire had a memory and every time it was rolled out, it wanted to snap back into its original position. For the lather trying to install a piece of this to a wall, it could be really annoying.

In the late 1990's, Abe Sacks, who made a name for himself as one of the largest nail manufacturers in North America, turned his attention to welded wire lath. He wanted to produce it in rolls that could be unrolled and stay that way. He assigned his key employees to the mystery and allocated up to 20% of their time to research, a practice the company still follows today. The solution, when they discovered it,



seemed too simple. They took round wire and flattened it slightly into an elliptical shape. And they didn't have to do it with all the wires, just the ones that ran lengthwise. Now instead of acting like a spring, the wires acted more like a tape measure. When released, it wanted to unroll but only in the right direction.

The other thing Abe's employees did was add bumps or "furrs" to the inside of the mesh. There are 28 in a one foot square. This allows the wire to sit out from the shear wall and weather barrier of the building suspended by the furs. Just like suspending rebar in a poured concrete driveway to prevent cracking, Abe's wire did the same thing for stucco on walls. By keeping the wire suspended evenly over the wall surface, it was easier to apply an even coating of stucco and more importantly, the moisture resistant, building paper was forced to lay flat, speeding uniform drying and further inhibiting cracking. Abe Sacks patented his next generation refinements and trademarked his product as Structa Wire™.

From a few rolls in early 1999 to the sale of more than 1.5 million square yards in 2007, Structa Wire is now used throughout the U.S. and in Canada. And yet Structa Wire is still met with resistance by architects and builders - but only those who haven't employed it. The reasons aren't clear. It could be just the usual resistance to something new. Or perhaps a bad experience with inferior wire that won't stay unrolled has caused some contractors to shy away from all welded wire.



There is ample documented proof now that the product performs to or exceeds building standards. According to ICC ES test reports, Structa Wire's 1.14 lb/yd² Twin Trac product does the same job as code approved, 2.5 lb/yd² expanded metal lath. Remarkably, this means that Structa Wire can do the same job with less than half the volume of material as its mesh counterpart! Superior engineering, not overall weight, provides superior reinforcing value. This also qualifies Structa Wire as a solid "green" alternative. Installers appreciate Structa Wire; it cuts cleanly and easily unlike the sharp, jagged edges that result from cutting diamond mesh. There are other reasons why using Structa Wire makes sense but the most compelling argument is that this improved technology doesn't cost any more than traditional materials.

Structa Wire appears to be a product whose time has arrived.