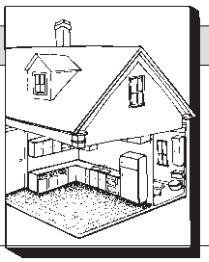

Rating Tubs & Spas

by Lynn Comesky

For a lot of years, clients didn't have to spend much time choosing between bathtub materials—if they wanted quality, they chose cast iron. Plain and simple. But at the time, bathtubs didn't massage you from nose to toes with jets of hot water, nor did they answer the door, the phone, and requests for the time.

Today's "tubs" include ordinary bathtubs, "jetted" or "whirlpool" tubs, and spas (typically, the heated water is maintained in this latter category). Not surprisingly, the number of materials has kept pace with the increase in tub types. Although there are lots of issues (read *problems*) with designing for and installing some of these new tubs and spas, in this column I'm going to confine myself to the choice of materials themselves.

To some degree, it depends on who is doing the choosing: the supplier, the installer, or the homeowner. The supplier and particularly the installer prefer the lightest material possible (read *anything but* cast iron). On the other hand, they need a product that won't be easily damaged or scratched (we're moving back towards cast iron again). But there are lots of other questions that need to be asked:

- How easy/expensive is the material to repair?
- How does the tub feel in place? Substantial or not? Warm or cold?
- What reputation does the material have? Top of the line, or less expensive substitute?
- How easy/difficult is the material to maintain?
- And last, but not least, what does the material cost relative to the alternatives?

Of course, the seller should provide the answers to these questions to the buyer, but it isn't always in the seller's interest to do so. And the homeowner isn't always well enough informed to ask.

Basic Categories

Tub materials can be divided into three general categories: wood, metal, and plastic. In each category, there are old standbys and some newcomers which deserve some attention.

The beauty of wood continues to be that scratches and dents don't show, but I won't spend much time on it because the choices are limited. Redwood "hot tubs" are still available, but can look pretty dated in the kind of baths we're building these days. The heartwood also contributes extractives to the water at first, leaving it dark in color and unpleasant. Kohler recently introduced its Teak Mandalay whirlpool tub; a beauty that comes in at a modest $10,000 with the obligatory extras. It's finished with a heavy urethane coating.

Heavy Metal

Besides the exotics—copper and brass—there are two metals used in bathtub construction: steel and cast iron. Both are used as a substrate for a porcelain finish; neither are used in larger spas.

Porcelain enameled steel tubs are lightweight, noisy (these two go hand-in-hand), chip easily, and feel less substantial because they move under your body weight. But they are inexpensive.

Enameled cast iron is very heavy, expensive, isn't easily molded to body contours, and is cold to the touch. But as a Kohler executive I interviewed put it, "It is still the king of tubs." It has a secure "feel," is very quiet, and doesn't scratch or chip easily.

I have a personal footnote on this last quality. About 95% of the tubs we install are cast iron. Although they are much better at resisting damage than porcelain-on-steel tubs, it seems like they aren't as scratch-resistant as older tubs. Even when treated with care, five years of use seems to take a visible toll on the finish.

A third alternative that falls somewhere in the middle is American Standard's "Americast." Introduced about a year and a half ago, it has attracted some attention because it is relatively lightweight without some of the disadvantages of porcelain enameled steel.

The Americast body is an enameling-grade steel backed by a molded polyester composite (this is the design breakthrough). This laminated sandwich weighs in at half the pounds of cast iron but with similar stiffness. American Standard claims superiority to cast iron in quietness, and boasts that the porcelain enamel finish is warmer to the touch, more slip resistant, and more durable. We have installed one Americast tub to date, and were generally impressed; the client is also still pleased. But you should drop by a showroom to form your own opinion of this new hybrid.

Plastics Graduate

The materials most suited for body-hugging tubs and spas fall under the catch-all title of *plastics*. The first spas were made with fiberglass (either sprayed or laid up by hand) and then sprayed with gel coat, which lends some luster and protection. However, a gel coat finish is relatively soft and porous, making it difficult to keep clean. Fiberglass spas and tubs are still available, and have a small but loyal following because they are easy to repair.

But the most popular material these days is acrylic. First developed in the 1930s for use in military aircraft windshields, Dupont began to produce it for the bath and spa industry in 1978. By 1983, they had introduced Lucite XL in a dozen colors and two thicknesses. Today, there are many more colors and several other suppliers (including an English import from ICI called Perspex).

Acrylic spas and tubs are made using the vacuum mold process. The sheet of acrylic is heated until it is soft, and then placed on a vacuum suction mold where it is given shape. Fiberglass is sprayed on the underside to give the tub rigidity. The thicker acrylic sheets will produce sturdier, more durable products, and quality control is just as important with acrylics as it is with enameled finishes.

Acrylic is hard, resistant to stains and chemicals, and has a superior gloss. The color goes through the material so that superficial scratches can be buffed. However, despite a new repair kit from Dupont that boasts good color matching and durability, acrylic has a reputation for being somewhat difficult to repair.

Other New Developments

Although acrylic leads the field in numbers, there are many other plastics used in constructing spas and tubs. Kohler, for one, is introducing a new material it calls Vikrel. It consists of a "perma glass" finish and a composite of fiberglass and resins as backing. A similar material is used in Chevy Lumina body panels.

Vikrel is approximately 20% lighter than acrylic, has a comparable finish, and is as easy to repair as fiberglass according to Kohler. Most important, they claim it's substantially cheaper to produce: A Vikrel tub may cost as much as 40% less than a comparable acrylic tub. I haven't seen this product or the actual pricing yet, but it sure sounds intriguing.

At the very high end, Kalista uses a proprietary process it calls Armacryl. It bonds fiberglass to a clear sheet of acrylic with a color layer in between. The clear acrylic over color provides a deeper lustre. Kalista uses extra thick acrylic in their tubs to provide greater durability.

Two thoughts on maintaining the relatively delicate finish on these fixtures: First, the opportunity to make a mistake belongs to everybody on the job site. Obviously, once the tub or spa is installed it should be masked off and covered until every last trade is out of there (the overspray from a roller can be almost as damaging as a dropped wrench).

This problem has been addressed by some spa manufacturers who use proprietary spray-on coatings to protect their tubs during transit and installation. These temporary finishes can be peeled off like a banana skin when construction is complete.

The other way finishes suffer is at the hands of the homeowner. You should be very explicit in your instructions about cleaning the tub or spa. Particularly with gel coat and the plastics, frequent cleaning with soap and water is the key. If minerals from hard water do start to build up, most manufacturers recommend a mild chemical solution that can be purchased. But abrasives should not be used, whether they claim to be "soft" or not. Keeping this rule is not quite as important with enameled tubs, but it will certainly prolong the sheen of the finish. ■

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