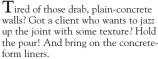
Make a Good Impression With Concrete-Form Liners

by John D. Wagner



A form liner is a plastic or rubberbased pattern mold that gives a textured finish to poured concrete. A number of concrete supply companies, including Symons, Fitzgerald, and Greenstreak Plastics, offer form liners. You can pick either from the stock liner patterns, or you can have a custom design produced.

There are three different kinds of form liners, which vary in reusability and price. Thermoformed plastic is the cheapest, and it is best for small projects. A textured pattern is made when thermoformed plastic is softened with heat around a pattern mold. When it cools, it retains the mold's shape. It's a one-time-use item. But it costs only about \$1.50 a square foot.

The next step-up in quality is a thermosetting plastic, which is made with resin materials. This process is done in a factory because it takes a lot of time. (Glass-fiber reinforced polyester plastic and fiberglass are common examples of thermosetting plastics). Thermosetting plastic has good reusability — you get about 25 pours out of one form — but it is limited to certain textures. It costs about \$7.50 a square foot.

Finally, there is elastomer plastic. This is mixed as a liquid and poured into a mold. The mixture develops into a solid, rubbery material. The elastomer-plastic forms offer good pattern reproduction and high reusability — you get between 40 and 100 pours out of one form, depending

on what type of elastomer you use. It costs about \$10 a square foot.

Impact resistance for form liners varies widely. With the cheaper, fragile form liners, you have to be especially careful during the pour. The available textures range from the mundane to the exotic (see photos). Wood patterns are available, as are rib and fractured patterns. Of course, custom designs open up a great deal of options.

Techniques

When you are setting up the liners for a pour, it's hard to match up the patterns at the liner joints. But you can build in a fudge factor. Add a "rustication strip" to your forms; that is, where the liners meet, and add a strip of wood to the forms to pour a groove in the concrete wall. This conceals the form-liner joints.

Form liners are easily modified, and you attach them to forms with adhesives, staples, nails, or screws, depending on the form liner material and the particular application.

Before you pour, there are a few things to consider. First, it's good to do a small test pour to see how the form will come out. Second, make sure you use the correct chemical form release. It must be compatible with both the form liner material and the concrete. (A spray application is preferred.) Of course, you have to choose a concrete that is consistent with the design strength requirements. When you do pour, you have to control the concrete to avoid horizontal flow lines and to reduce the surface defects caused by separation of the mix.



With some types of concrete-form liners, you can custom design your own pattern. This Winona, Minnesota river-wall features a concrete-formed scene of geese flying over a lily pond.



Form liners are available in 35 stock patterns, such as the one shown. Some liners have limited reusability, others can be used as many as 100 times.



Form liners vary in price from the one-time-use thermoformed plastic liner at \$1.50 a square foot, to the highly reusable elastomer at \$10 a square foot. Custom designs like this can be as interesting as they are expensive.