Project

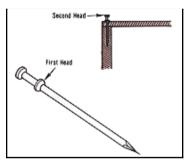
Cast Concrete Projects

QUIKRETE® Fiber-Reinforced Concrete, because of its high strength and smooth surface finish, is the best choice for the cast projects that follow. In addition QUIKRETE® Sand Mix and QUIKWALL™ Surface Bonding Cement are flexible enough to be used in a variety of cast projects. For even greater sculpturability with thin projects, QUIKRETE® Quick-Setting Cement is ideal. Its fast setting time allows it to be removed from the form and either carved with a utility knife or worked in some other fashion.

While 2 x 4s are most commonly used to build forms for concrete slabs and walls, cast projects use a wide range of form materials. In addition to QUIKTUBETM building forms, tin cans, buckets, cardboard boxes, mailing tubes, and automobile tires can be used to create useful indoor and outdoor accessories. You can also create interesting effects depending on the specific form material you use. For example, unplaned or unsawed lumber leaves a wood grain effect on the concrete, while lining the form with heavy kraft paper or plastic produces a smooth finish.

For Best Results

- Use double-headed nails when building temporary wood forms. Drive the nails to the first head only, leaving the second head exposed for easy removal.
- When working with any type of wood form, apply a thin
 coating of engine oil to the form before pouring the
 concrete. This will allow the concrete to set more easily,
 while reducing the chance of damaging the concrete when it
 is removed from the form.
- Always give a cast project plenty of time to cure before attempting to remove it.
- When removing a cast project from a form, do so very carefully. Place it in the shade on a platform that allows for air space underneath the project. Cover with burlap or a thick layer of newspaper and keep this covering wet for at least one week.



 As an added touch, cast projects can be painted, stained, or coated with plastic, aluminum, or steel for a metallic effect.

Bookends

Here's a project that's great for the scout in your family or anyone else - sturdy concrete bookends.

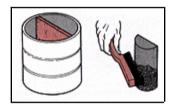
Required Tools & Materials

- QUIKRETE® Fiber-Reinforced Concrete, QUIKRETE® Sand Mix.
- QUIKWALL® Surface Bonding Cement, or QUIKRETE® Quick-

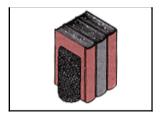
- Setting Cement
- QUIKRETE® Deco Pebbles (optional)
- Coffee tin
- Felt
- Wood divider
- Trowel

Step by Step

- **1.** Place a tight-fitting wood divider into a 2- or 3-lb. coffee tin as shown.
- **2.** Pour the QUIKRETE® Fiber-Reinforced Concrete, QUIKRETE® Sand Mix, QUIKWALL® Surface Bonding Cement, or QUIKRETE® Quick-Setting Cement into the tin, filling it completely.
- 3. Use a trowel to smooth and level the surface of the concrete.
- 4. When the concrete has cured completely, cut away the tin.
- **5.** If QUIKRETE® Deco Pebbles or other aggregates were used in the concrete, scrub and buff the surface of the bookends to bring out the decorative effect.



6. Finally, glue a piece of heavy felt to the bottom of each bookend to avoid scratching shelves and furniture.



Anchors

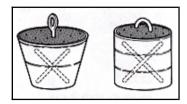
An anchor was never this easy to make: just follow these step-by-step directions.

Required Tools & Materials

- QUIKRETE® Fiber-Reinforced Concrete, QUIKRETE® Sand Mix, or QUIKWALL® Surface Bonding Cement
- QUIK-TUBE™ form
- Anchor bolt
- Rebar
- Trowel

Step by Step

1. A QUIK-TUBE™ building form is perfect for this project. An old bucket, a large can, or a similar container can also be used.



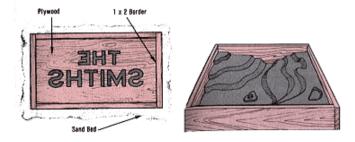
- **2.** Pour QUIKRETE® Fiber-Reinforced Concrete, QUIKRETE® Sand Mix, or QUIKWALL® Surface Bonding Cement into the form, filling it completely. After about 20 to 30 minutes, place an anchor bolt and rebar in the concrete as shown. Trowel the surface smooth.
- **3.** Do not attempt to use the anchor until the concrete has cured completely. If a QUIK-TUBE™ form was used, cut and peel it away. If a different container was used, it will remain as part of the anchor.
- **4.** If additional weight is needed, make several anchors and join them with chain.

Decorative Plaques

Decorative plaques with raised or recessed surfaces are as functional as they are attractive. They are great for flower bed edging or garden accents. When used as edging, partially bury the plaques to secure them; no separate footer or anchoring is required.

Required Tools & Materials

- QUIKRETE® Fiber-Reinforced Concrete, QUIKRETE® Sand Mix, or QUIKWALL® Surface Bonding Cement, or QUIKRETE® Quick-Setting Concrete
- QUIKRETE® Play Sand®
- Plywood
- 1 x 2 wood strips
- Saw (keyhole, saber, or jigsaw)
- Trowel



The mold shown is a direct relief mold made of damp or oiled QUIKRETE® Play Sand on a sheet of plywood. It forms a negative image of the final textured surface of the plaque. The sides of the mold are made of 1 x 2 pieces of wood, and the sand is placed inside and shaped using a variety of sculpting tools.

Strips of wood or rigid foam can also be placed in the mold to create recessed shapes or lettering. For raised or embossed shapes, openings must be cut in the base of the mod with a saw. To create a level surface for the embossed areas, place the mold on a plywood sheet or a screeded and compacted bed of sand.

Place the QUIKRETE® Fiber-Reinforced Concrete, QUIKRETE® Sand Mix, or QUIKWALL® Surface Bonding Cement, or QUIKRETE® Quick-Setting Concrete in the mold. Be careful not to disturb the sand or move the rigid foam or wood strips. Smooth the surface of the concrete so that it is level with the upper edges of the sides. Let the concrete set at least 1 full day, then carefully remove the mold. Let the plaque cure for 5 to 7 days.

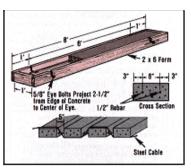
Boat Launching Ramps

Cast concrete planks make an economical and movable boat launching ramp.

Required Tools & Materials

- QUIKRETE® Fiber-Reinforced Concrete, QUIKRETE® Sand Mix, or QUIKWALL® Surface Bonding Cement
- 2 x 6 wood,
- Rebar
- Eye bolts
- Steel cable
- Trowel
- Broom

After constructing the forms, cut notches as shown for the eye bolts. Pour the QUIKRETE® Fiber-Reinforced Concrete, QUIKRETE® Sand Mix, or QUIKWALL® Surface Bonding Cement, wait about 20 to 30 minutes, then place the rebar and eye bolts in position. Smooth the concrete with a trowel and apply a broomed finish to provide good traction for backing vehicles into



the water. Use steel cable to link the finished planks together; this technique will enable them to fit the existing contours of the lake shore or river bank.

Chimney Caps

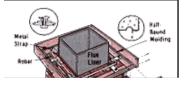
This cast concrete cap will protect your chimney by preventing water from running down next to the flue liner or puddling and freezing on top of the chimney.

Required Tools & Materials

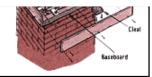
- QUIKRETE® Fiber-Reinforced Concrete, QUIKRETE® Sand Mix, or QUIKWALL® Surface Bonding Cement
- 2 x 8 wood
- Cleats
- Half-round molding
- Nails
- Metal straps
- Nuts and bolts
- Rebar
- Tape
- Buckets
- Trowel
- Wooden float
- Edging tool
- Plastic sheeting

Step by Step

- 1. When building the formwork, the inside opening should be sized to the outside dimensions of the chimney walls. Construct the formwork on the ground; it can be hoisted up to the roof when it is completed.
- **2.** Secure cleats across the butted corner joints of the form to increase the strength at these points. Lengths of half-round molding, mitered at the corners,



and tacked in place inside the form, will provide a drip edge along the base of the cap.



- **3.** Hold the form in position on the chimney by bolting metal straps to the base board pieces and overlapping the straps onto the top of the chimney. Install the bolts form the underside, with the securing nut located inside the form.
- **4.** To prevent wet concrete from clogging the nut and bolt threads, size the bolt length carefully so that they do not protrude from the nuts. Also, seal the tops of all nuts with tape before placing the concrete.
- **5.** When choosing the strap material, determine if the straps will be a permanent part of the cap or whether they will be pried out after the formwork is removed. If you plan to leave them in place permanently, be sure to use a metal that will not eventually rust and stain the chimney.
- **6.** When the form is securely in place on the chimney, install rebar over the straps as shown.
- **7.** Mix the QUIKRETE® Fiber-Reinforced Concrete, QUIKRETE® Sand Mix, or QUIKWALL® Surface Bonding Cement. Do the mixing on the ground and pass the concrete up to the roof 1 bucket at a time.
- **8.** Layer the concrete evenly on all sides of the flue to help stabilize the form. Loading one side of the form while the opposite side is empty will cause it to tip forward.
- **9.** When the form is completely full, let the concrete stiffen slightly before beginning to build up the drainage slope away from the flue line. Use a wooden float to build up the slope, working from the outside edge of the form to the flue wall. Also, form a small radius curve along the edges of the form using an edging tool.
- **10.** Wet down the surfaces of the cap and cover it with plastic sheeting to prevent water loss.
- **11.** The formwork can be carefully removed with 1 or 2 days. Curing will take approximately 5 to 7 days.

Downspout Splash Guards

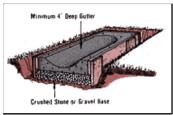
A concrete downspout splash guard is durable, long-lasting, and easy to build with these step-by-step directions.

Required Tools & Materials

- QUIKRETE® Fiber-Reinforced Concrete, QUIKRETE® Sand Mix,
- QUIKWALL® Surface Bonding Cement, or QUIKRETE® Quick-
- Setting Cement
- Crushed stone or gravel
- 1 x 4 forming lumber
- Stakes
- Nails
- Shovel
- Trowel

Step by Step

- **1.** Dig a trench the required length; it should be approximately 12" wide and 6" deep.
- **2.** Use 1 x 4 lumber to build the forms. Stake and nail boards firmly in place, then apply a thin coating of engine oil to the form.
- 3. Pour QUIKRETE®
 Fiber-Reinforced Concrete,
 QUIKRETE® Sand Mix,
 QUIKWALL® Surface Bonding
 Cement, or QUIKRETE®
 Quick-Setting Cement into the form.
 Use a trowel to shape the gutter as shown; it should be at least 4" deep at its deepest point. Allow at least 1 week curing time before using.



4. Be certain to always slope the gutter away from the downspout in order to maintain proper drainage.

Garden Edging / Curbing

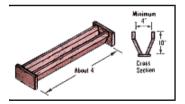
To accentuate your home's exterior, try this project - garden edging/curbing.

Required Tools & Materials

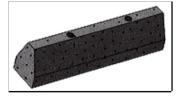
- QUIKRETE® Fiber-Reinforced Concrete, QUIKRETE® Sand Mix, or QUIKWALL® Surface Bonding Cement
- 1 x 2 lumber
- Trowel

Step by Step

- **1.** Construct a V-shaped form from 1 x 2s; a good workable length is 4', although this can vary.
- **2.** As shown in the cross section, the form should be approximately 10" high and at least 4" wide at its widest point, which will eventually be the base of the edging. Making the base any narrower will cause the edging/curbing to be too unstable.



- **3.** Apply a thin coating of engine oil to the form. Pour QUIKRETE® Fiber-Reinforced Concrete, QUIKRETE® Sand Mix, or QUIKWALL® Surface Bonding Cement into the form, filling it completely. Trowel the surface smooth, then allow at least 48 hours curing time before removing it from the form.
- **4.** If you want to stake the edging/curbing into the ground, simply cast the project with holes in the center as shown.



The QUIKRETE® Companies