The Wonderful World of Plaster

When Disneyland brings you its ‘Wonderful World of Color,’ it’s actually lath and plaster.

Amazing ornamental plastering... one never ceases to marvel at the wonderful creations that can be achieved by skilled union journeymen plasterers. No matter whether a person has been affiliated with the plastering industry for a year or a lifetime, the thrill is always there... to see how almost everything from rocks, boulders, and trees to marble, wood, brick, and even straw can be perfectly duplicated in plaster.

No better example of this art can be found than at Disneyland, Anaheim, California.

Few people realize everything they see at Disneyland is the dramatic result of lath and plaster. The towering replica of the great Swiss Matterhorn mountain... the gigantic Swiss Family Robinson tree, Big Thunder Railroad, Pinocchio and Snow White Village, Cinderella’s castle—all are plaster creations.

The latest creation to spring from the Disney drawing board is Splash Mountain, now virtually completed and scheduled to open in early summer 1989. Splash Mountain is a lo-minute ride aboard an eight-passenger “log” through swamps, caves, and backwoods bayous, before culminating in a 52½-foot plunge into a briar patch pond.
As Disneyland’s largest single attraction (occupying approximately 2½ acres of land), Splash Mountain will combine music, water, sudden falls, snapping alligators, harmonizing vultures, angry bees, and a 6-foot-tall Br’er Bear. It will bring to life the classic Disney animated film, “Song of the South,” in what will be the highest and longest (more than ½-mile) flume ride ever built.

Actual full-size construction of Splash Mountain began in January 1988. But many prior months were involved in pre-planning sketches, drawings, and precise mock-ups of the project. The initial model was made at 1/8-inch scale; then ¼-inch; and finally, the entire model was reproduced in Styrofoam at one-inch scale, cut up into specific numbered sections and assembled.

Action then moved to a large parking lot. A full-size, square-foot scale pattern was marked out on the ground. Vertical and horizontal sections were drawn up, and the framing of the Mountain’s rocks began with 1½ x 1½-inch angle iron-and #3 rebar. Craftsmen doing this work were given the same identical section taken from the 1” scale model to follow for accuracy.

Plaster sculpturing—

Finished cage in foreground awaits transfer to Splash Mountain job site for welding to the steel structure skeleton. Plaster sculptured section in background will not be used. It was made only for testing and experimental purposes, one of the many trial runs necessary before final construction decisions could be made.
Looking down from the top of the flume ride at Splash Mountain.

After the general outline of each square was formed by the rebar, the squares were stacked like toy blocks. Vertical rebar was put in, tying different blocks together, and then the galvanized metal lath was attached. The completed cages were next moved to another area before being transported to the Splash Mountain job site and welded to the main steel structure skeleton.

The project started to take shape in April when many of the 720 cages were welded into position. Plastering of the interior and its cages began in May by the Bolster Company, Baldwin Park, CA.

The contractors applied two, and sometimes three, scratch coats before the browning procedure was started. Thickness of the plaster ranged from one to three inches when completed.

The finishing plaster sculpture work was performed by local union plasterers who created rocks, boulders, stone overhangs, trees, tree stumps, giant mushrooms, rock arches, meandering tree roots and branches, and tree houses.

When it opens, Splash Mountain will not only thrill Disneyland visitors, but also stand as a tribute to the flexibility and artistry of plaster.

Plaster sculptured tree trunks were often used to disguise machinery and electronic components necessary to operate the many intricate animation and sound systems in the Splash Mountain ride.

Giant mushrooms and overhead rock formations are typical examples of how plaster was utilized on the interior of Splash Mountain.