

## Plasterers Work Perfection at the Washington State Capitol

**Application/Building Type:**

Government Buildings

**Project Name:**

Washington State Legislative Building

**Location:**

Tacoma, Washington

**Architect:**

Einhorn Yaffee Prescott Architecture & Engineering P.C.

**Contractor:**

D.L. Henricksen Company Inc.

**Featured Products:**

RED TOP® Gypsum Plaster

RED TOP® Keenes Cement / Ivory Lime

USG Accelerators



usg.com

“The schedule is demanding. The work is complex. I’ve got five ornamental crews and six plaster crews working nearly’ round the clock,” said Inmon, plastering superintendent at D.L. Henricksen Company Inc., Tacoma, Wash. “But this is the chance of a lifetime. It’s fantastic to be working on this project.”

*“We’re keeping the historical perspective of the building intact by using traditional materials and substituting modern materials when they provide a specific benefit.”*

**Historical High Hopes**

D.L. Henricksen has the \$6.5 million plaster contract for the \$118 million renovation of the Washington State Legislative Building.

Prompted by a 2001 earthquake and a need to modernize, the Capitol project, strictly speaking, is “a rehabilitation.” Repairs and upgrades are being completed in accordance with the Secretary of the Interior’s “Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings.” The state of Washington commissioned a “historic structure report” from a private consulting firm and included on the architectural team Einhorn Yaffee Prescott Architecture & Engineering P.C., an Albany, N.Y., firm specializing in historic rehabilitations.

It all means that Inmon and D.L. Henricksen crews must blend plastering patches seamlessly with the original walls. That’s proving to be no easy feat, since the original plasterwork, said Inmon, “has 100 different grades of sand that we’re trying to match.”

Furthermore, detailed ornamental cornices must be fabricated the old-fashioned way—molded on site with casting and pottery plaster and fastened to walls using hemp ties. Strict historic guidelines even require that materials no longer used—lime plaster with horse hair, for example—be worked as they were in 1922 when construction of the legislative building began.

“We’re keeping the historical perspective of the building intact by using traditional materials and substituting modern materials when they provide a specific benefit,” said Mark Fowler, architectural consultant, Northwest Wall and Ceiling Bureau, Seattle. “The lime putty they brought in says on the bucket, ‘For the repair of historic masonry buildings—pre-1872.’ Now that’s getting ‘historical.’”

The work of Fowler and Northwest Wall and Ceiling Bureau’s Executive Director Robert Drury has been invaluable. With a mix of both old and new plaster systems already in place, the Northwest Wall and Ceiling Bureau’s experts helped identify existing systems and substrates and write submittals and procedures.

“They’ve been on the project since day one, even back as far as the [2001] earthquake days,” said Steve Henricksen, chief operations officer, D.L. Henricksen. “We know our trade well, but they give reassurance to the owners by providing technical information that matches what we tell them.”

Henricksen said he also couldn't have done without the help of Rik Master and others with the Architectural Services group at United States Gypsum Company, the Chicago-based manufacturer of most of the plaster products used. Members of the USG Architectural Services team traveled to the site, analyzed existing systems, made recommendations and submitted specifications input even before landing the project.

"The technical issues on this job are immense," said Kevin Moyer, USG plaster business manager. "The building has been through several earthquakes and several additions, changes and modifications throughout its history, so blending the plasterwork seamlessly is a challenge. With our technical expertise and depth of product offerings, we are finding a better way to meet the project challenges."

### **Tight Time Frame**

The expectations would also have to be met quickly. Legislators planned to return to the Capitol for a January 2005 session.

D.L. Henricksen began its ornamental work in September of 2003, and the full-scale plastering commenced in January 2004. D.L. Henricksen crews completed the interior of the Capitol dome, the main legislative chambers, the governor's offices and the lieutenant governor's offices. The final veneer plastering on various first-floor suspended ceilings—being lowered a few inches before adding back cornices—was completed in August 2004. Project completion was scheduled for the end of October, with owner move-in targeted for early November 2004.

To meet the deadlines, Inmon ran his lathers, plasterers and laborers—approximately 40 persons total—at breakneck speed: five 10-hour days, plus an eight-hour Saturday. In total, D.L. Henricksen crews applied more than 100,000 square feet of plaster and at least 7,000 lineal feet of decorative plaster ornamentation.