

# Oregon Caves



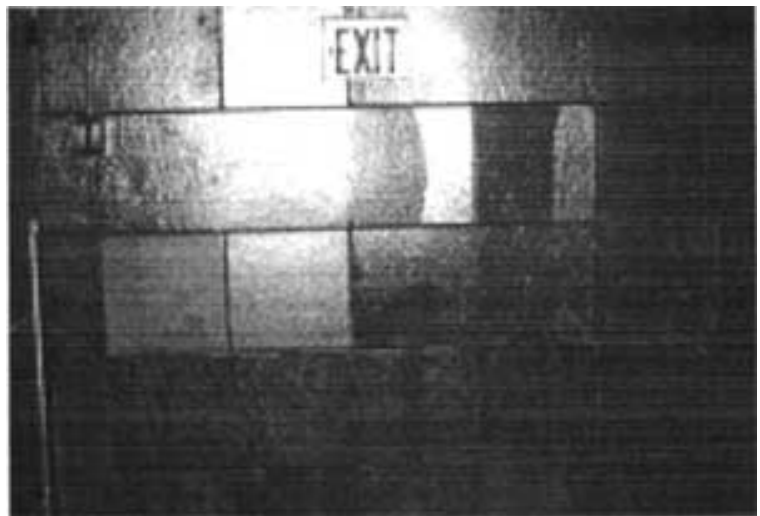
## Historic Structures Report

### PART V

#### Interior Assessment and Recommendations

##### Fiberboard Wall and Ceiling Finishes

The Chateau's wall and ceiling finishes are fairly uniform above the second level. The dining room and lounge area, main lobby and office, main staircase, and all of the guest rooms are clad with a fiberboard product. The board was sold under the trade name of "Nu-Wood" by a manufacturer in Kloquet, Minnesota. The product was relatively new to the west coast when the Chateau was completed, according to then Manager George Sabin. The product is sometimes referred to as Celotex, which was actually a name brand fiberboard of the era and not the product used in the building.



Typical interior hallway. Note the mismatched replacements.

The fiberboard panels used in the Chateau vary in size, but there are two main sheet sizes within the building. The walls and some ceilings are finished with 4-foot by 10-foot panels, cut down to fit as required. This allows all of the wall panels to span from floor to ceiling in the guest rooms, as well as from the wood wainscot to the ceiling in the lobby and dining rooms. The second size of panels is 16" wide by four feet long, used strictly on ceilings in the lobby, dining room, and some of the guest rooms. These sizes allowed the 1/2" thick panels to be conveniently nailed to wall studs and floor joists, both spaced at 16" on center.

The Nu-Wood panels feature varied incised designs. The large wall sheets in the guest rooms are slightly beveled around all four edges, with a 3/16" wide by 1/8" deep bevel. The smaller ceiling panels are divided into three sections by v-shaped grooves running

across the width of the panel, 3/8" wide by 1/8" deep. The sheets are laid parallel to the direction of the joists, and nailed only at the outer edges. The large wall sheets in the dining room and lobby have reveals running longitudinally, but they are 1/4" wide and 3/16" deep. These are randomly spaced across the width of the panel to simulate the appearance of random width vertical board siding.

The panels are strictly an interior finish product. They are extremely susceptible to water damage and staining, which mars the appearance of the panels and causes them to disintegrate, as with many fiberboard products. The panels have also been subjected to impact damage in various locations throughout the building. The Nu-Wood was originally installed without a protective coating of any kind. In 1989 a fire retardant glaze was applied to the panels to increase their fire rating.



Water damage at the lobby ceiling.

The product, manufactured by the American Vamag Company is known as "Albert DS". On unfinished surfaces it is to be used with an undercoat, manufactured by the same company.



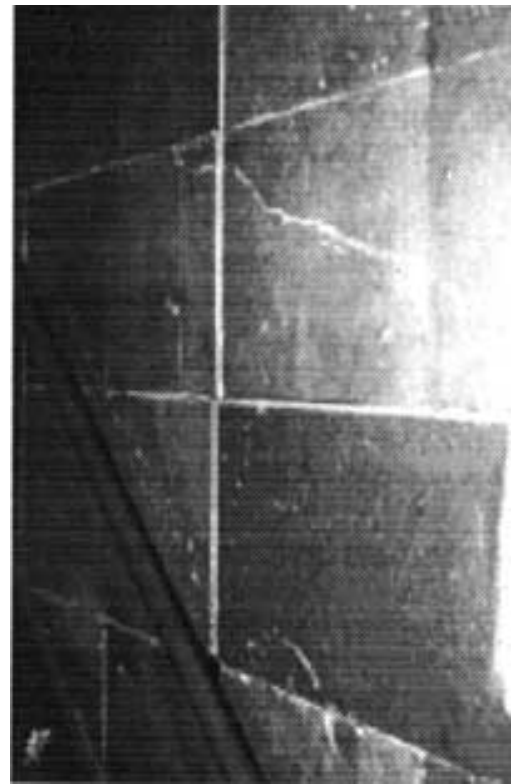
Glaze slopped onto door trim.

The fire retardant glaze significantly altered the appearance of the panels, darkening their color and producing a shiny surface. The glaze is showing defects unassociated with the other damage to the panels. When applied, the glaze provides a thick coating, resulting in an increase in the fire rating of one hour. It should be applied in a number of coats, building up to the appropriate thickness. How the current glaze was

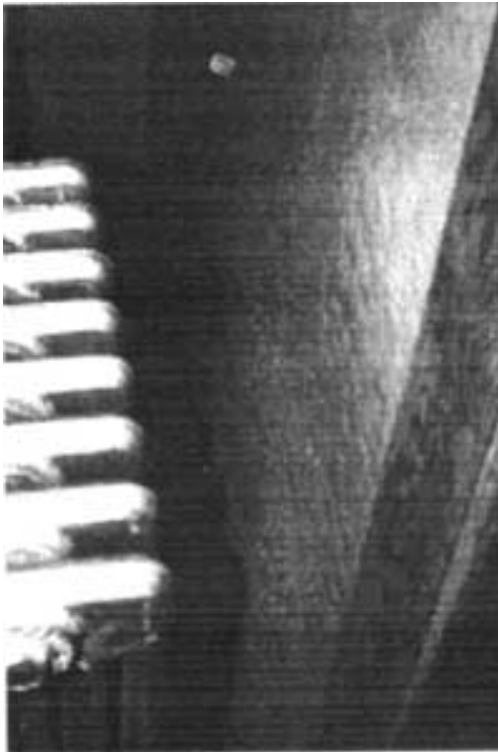
applied exactly is uncertain, but it was applied with either a brush or roller. Careless application has resulted in the glaze slopping over onto interior trim, especially at the heads of doors and windows.

The thickness of the glaze and method of application has resulted in an uneven and bumpy appearance in many parts of the building. This is especially apparent in the guest rooms, which have only one central light fixture. The thick glaze has also developed a network of cracks in certain areas, similar to the crazing found in terra cotta glazes. Behind the radiators and above the electric baseboard heaters, the glaze has clouded over, most likely due to excessive heat.

In addition to the problems with the fire retardant glaze, the fiberboard panels have suffered impact and abrasion damage. In the guest rooms, the impact damage can often be attributed to door knobs, as many of the stops are missing. In hallways and utility or linen closets, the damage is typically caused by housekeeping carts, rollaway beds, and other typical hotel equipment. Some of these areas have been patched with a replacement piece of Nu-Wood, either surrounded by small pieces of wood trim or left with the joints exposed. Many others, especially impact damage from door knobs, have been patched with wood putty. To make repairs in the public areas of the building, the concessionaire has removed panels from areas only open to employees, such as the office behind the front desk. The walk in freezer in the kitchen was placed in an opening historically used as an access to the coffee shop, and panels from the ceiling above the freezer have all been taken and placed in locations throughout the building to repair damage.



Abrasion damage at the stair.



Glaze damage behind radiator.

The panels also show signs of water damage, especially in areas under bathrooms on the floors above. When a leak develops, often the only way the concessionaire becomes aware is from water damage to the Nu-Wood panels. This damage is permanent and irreversible, unless the panel is painted over once it has dried. The areas under the window sills, particularly on the 6th floor on the west side of the building also show signs of water damage. A recent article in the APT Bulletin (Vol. 28 #2-3) notes that "the best conservation technique is careful maintenance...finishes must be maintained, and problems must be addressed immediately. Once the boards are warped or deeply stained, the likelihood of successful repair seems remote." (Page 67)

The 16" x 48" ceiling panels are placed either parallel or perpendicular to the damage joists and rafters above. Those that are placed perpendicular are experiencing sagging, as they are typically nailed only at the ends, with possibly one nail at each intersecting rafter or joist. This problem is apparent at the sixth floor, and at other locations in the lower guest rooms. The panels are attached with 4-penny finish nails without heads, and these have pulled through the panel itself in some of these locations, leaving the Nu-Wood to span 48" without intermediate support.

A few areas of the fiberboard have been painted to cover earlier damage with a color closely resembling the color of the glaze coating. Many of the sink surrounds, especially on the sixth floor, that still employ Nu-Wood have been painted white to avoid water damage. Room 214 is also painted entirely white due to a concession manager's cats that wreaked havoc on the historic wall surfaces.

### **Recommendations for Treatment: Fiberboard Finishes**

The appearance of the fiberboard is currently not historic, even though the majority of the historic fabric is in place. The alteration was a life safety issue, but has become an aesthetic issue and a debate over the treatment of the historic fabric. A balance must be found between the preservation of the historic fabric and the realistic aesthetic concerns of the concessionaire. The interior appearance has a potentially direct effect on the occupancy rate of the hotel. The following recommendations are made:



Painted sink surround, 6th floor.

- Re-attach all sagging and loose historic Nu-Wood using small (4d) finish nails to replicate the original installation.
- If replacement becomes necessary, remove pieces from the non-public areas of the building that have already been stripped of some of their historic fabric to supply the public portions of the building.
- When replacement supplies are exhausted, replace the historic Nu-Wood with a compatible modern fiberboard product. Replacement in kind is not an option for the Chateau, as Nu-Wood has not been commercially available for some time. It has been out of production for at least 35 years, as replacement pieces for flood damaged areas could not be fabricated from the original product. The replacement material should match the historic in texture, color, composition, and detailing. The beveled edges and v-grooves must be cut into new replacement pieces to match the historic appearance of the panels.
- One possibility should be considered if new material is to be introduced into the building. Historic fabric from one room may be sufficient to repair many areas of the building, if used and appropriated carefully. Removing all of the historic fabric from one room and replacing it with new material should be considered, as the new room would have a consistency in finish that may not be possible with piecemeal replacement. The historic fabric in other areas of the building could be retained

under this option, and one room's historic fabric would be affected, instead of many areas of the building.

- The use of paint to hide water damage has been employed in some areas of the building. Unattractive portions of the building may be painted to hide this staining. Natural divisions should be maintained between painted and unpainted wall surfaces. For example, where the walls have already been painted, one entire wall plane is painted up to a corner or projecting element. This strategy has been employed in the dining room and many of the guest rooms. This strategy would conserve the historic fabric, but not the historic appearance (which has been significantly altered by the application of the glaze). A matte finish paint should be used if the fiberboard surfaces are painted, in keeping with the historic character of the fiberboard.
- It must be remembered that the Chateau is a National Historic Landmark sited on National Park Service property. Any alteration to the historic fiberboard wall finishes must undergo a Section 106 review to determine the impact on the historic resource. Cooperation will be required between the concessionaire, NPS, and State Historic Preservation Office to mediate some course of action. Work affecting the historic fabric must not be performed without the guidance and approval of the NPS and SHPO.

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