

POINT PINOS LIGHTHOUSE  
FRONT DOOR

Door is situated in porch, which was an addition to original building and faces the ocean.

CONSTRUCTION

- Door is of conventional stile & rail construction and is built from whole heart clear redwood: size = 7'4" x 3'0" x 1 3/4"
- One (1) inset flat panel at bottom and one (1) glass light at top measuring 25 3/4" x 43 1/4"
- Glass top is redwood measuring 5/8" x 3/8" with 1/8 round over detail on one edge.
- Panel stop is 3/8" redwood quarter round.
- Bottom panel is 15 3/4" thick and constructed of more than one piece.

CONDITION

- Overall condition of door is very poor.
- All glue joints on stiles/rails are broken, and joints are separated by as much as 1/2".
- Door shows signs of sagging on leading edge and is thus out of square.
- Someone previously attempted to "shore things up," by nailing the stile & rail joints back together using mild steel nails. The voids were filled with some form of bondo/filler. Over time the nails have deteriorated and "exploded" causing the surrounding material to become friable.
- On bottom of exterior middle rail, there are signs of rot and missing material. This void has again been filled with bondo/filler.
- Panel is separated in two (2) places.
- Some rot was found on bottom of both stiles and bottom rail.
- All detachable glass/panel stops show signs of rot.
- Door is fitted with 4" x 4" brass hinges with steel pins. Pins have oxidized badly enough to seize in hinges and due to continued operation have broken the hinges.

LOCKS

- Door is fitted with full mortise keyed set in brass.
- Interior and exterior escutcheons are both steel and badly rotten (oxidized).
- 1/4" operating shaft is completely locked in mechanism and the steel pulls (knobs) are both rotted out.

ACTION

Tue, Feb 6<sup>th</sup>, 2007

- Front door removed and hollow core temporary replacement installed.
- Operating shaft in full mortise lock set so badly oxidized in mechanism, had to cut shaft on both sides of door and drill the remaining "stub" off in order to remove lock.

### BOTTOM PANEL

- Two (2) lateral separations full width of panel glued back together with Gorilla Glue.

### MIDDLE RAIL

- All rot cut out, full width of rail and 1/1/8" Dutchman, (whole heart, clear, kiln dried redwood) gorilla glued in place.

### NAIL HOLES

- All old oxidized metal removed and friable material surrounding holes removed. Holes then "pour filled" with slurry mix of rock hard putty.

### STILE/RAIL JOINTS

- All stile and rail joints routed out back to solid material and whole heart, clear, kiln dried Dutchmen installed. All glued with Gorilla Glue and nailed with stainless steel brad nails.
- All stile and rail glue joints drilled with 3/32" holes and pressure injected with Titebond II Aliphatic Glue 3/32" holes plugged with birch dowel rod.

### LOCKSET HOLES

- After discussion with other renovation specialists, and Museum Director, Paul Finnegan, it was decided to dispense with the full mortise lockset, and "Dutchman" (plug) all voids in both faces, and leading edge of the door. Two main reasons were:  
(1) The door is only opened from the inside and generally remains open during Lighthouse operating (open to visitors) hours.  
(2) To try and preserve the integrity of that area of the door by preventing any further water intrusion either from rain or the constant fog in the immediate vicinity.
- All lockset/deadbolt holes/ mortises filled with "Dutchmen"/plugs. All glued with Gorilla Glue.

### GLASS AND PANEL STOPS

- All glass and panel stops removed and new ones milled by Knapp Mill & Cabinet.
- Any other voids/nail holes filled with high quality exterior vinyl spackling paste.
- After three days glue drying time, door taken to paint stripper on Thursday, February 17<sup>th</sup>, 2007.
- Door back from stripper on February 22<sup>nd</sup>, 2007.
- Door re-spackled and sanded.
- FEBRUARY 24<sup>TH</sup>, 2007: Three (3) heavy coats linseed oil and turpentine. Door given three days drying time.
- Inside panel stop/trim installed using Titebond II Aliphatic Glue and nailed with stainless steel brad nails.

### DOOR GLASS AND STOPS

- After deliberation, it was decided on grounds of safety to replace glass with 1/8" tempered safety glass.
- Glass is set in door with linseed oil wood sash putty and stops (interior) nailed in with no glue.

### PAINT SCHEDULE

- Door has had one (1) coat oil based primer and two (2) coats exterior semi gloss acrylic water based finish paint. N.B. exterior face has actually received three finish coats.
- Door re-hung on March 28<sup>th</sup>, 2007. New aluminum "saddle" type threshold, aluminum door bottom (shoe) and rigid jamb style balloon weather stripping installed at same time.

### DOOR CASTING

- When the porch was built (in 19??) the door casing/jamb, was not sealed to the sub-floor. Furthermore, there is a redwood plinth block type base on the top tread of stairs that returns into the door casing. Where the return "butts" to the casing, it was never sealed properly.
- Due to water intrusion for all this time, the jamb stock was rotted on both lower ends of the stiles.
- On removal of plinth block return pieces, and first 7" or so of jamb stock, it was found that the under floor framing, and porch sub floor were badly rotted out, and very damp.

### ACTION

- Jamb stock removed until good sound material discovered (around 7" on each side).
- Because there was not enough funding to continue with a satisfactory repair to the under floor structure, I was told to basically do what I could and "close it up."
- I am extremely disturbed that I was not allowed to affect a true repair to the compromised sub-structure.
- After clearing away as much of the accessible decayed material as possible, I flooded the voids with copper green preservative.
- After a brief drying period, whole heart, clear kiln dried redwood "Dutchmen" were gorilla glued into the voids and fixed with stainless steel brad nails.

### JAMB STOCK

- New jamb stock pieces were milled on site.
- Outside members = 1 5/16" x 4 5/8" whole heart, clear, kiln dried redwood.
- Middle members = 1 7/8" x 4 1/8" western red cedar.
- Inside members = 3/16" x 4" redwood
- All members gorilla glued to themselves and to existing jamb stock and new floor Dutchmen, and nailed with stainless steel 2" finish nails.

### LOCK KEEPS

- Over the years, the lock keeps have been changed and jamb broken in the area.
- All old material cut out and redwood Dutchmen installed.

### NEW LOCK

- A surface mount solid brass lockset, identical to that utilized on the adjacent inside door was renovated and installed using a period porcelain pull (knob).
- The pull (knob) matches the adjacent door, and also the ones I used on the back door.

### PAINT SCHEDULE

- As per everything else, linseed oil, a turpentine oil based primer, and two (2) finish coats, on all new repair components, and top of step of stairs.

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### SYNOPSIS

- On re-installation of door, it was decided to use a slightly taller profile threshold as the bottom of the door was so uneven with regard to parallel with the floor.
- All new members (repair) caulked to substructure to avoid any further water intrusion.

### RECOMMENDATIONS

- The substructure framing, and sub floor assembly in the immediate vicinity of the bottom of the door casing stiles, is clearly compromised.
- As I was not allowed to explore the damage any further than the localized areas I had opened up, it would only be guessing as to how far the damage extends.
- As before mentioned, I was extremely unhappy about covering the problem up without proper remedial treatment. The decision was not mine and I feel am exonerated should any further problems arise.