

*California Historical Building Code
To the Rescue:
Practical Applications*

*Milford Wayne Donaldson, FAIA
California State Historic Preservation Officer*

Keeping Time III

*Tuolumne County Community Development Department
Tuolumne County Historic Preservation Review Committee*

*Sonora, California
June 18, 2010*



Intent of the State Historical Building Code 2001

“The Intent of SHBC is to save California’s architectural heritage by recognizing the unique construction problems inherent in historical buildings and by providing a code to deal with these problems.”

Intent of the California Historical Building Code 2007

“The Intent of CHBC is to facilitate the preservation and continuing use of qualified historical buildings or properties while providing reasonable safety for the building occupants and access for people with disabilities.”

Joy Riding, California Alligator Farm,
Los Angeles, California.





California Historical Building Code

- SB 927, Mills, the California State Historical Building Code, January 1, 1973
- The Regulations are unique in that they are performance-oriented rather than prescriptive.
- All building Departments of every city and county SHALL adopt this code.
- Regulations have same authority as state law.
- Liability is the same as for prevailing law.
- CHBC consists of three parts.
 - Administrative statues as a state wide preservation program.
 - Code Regulations
 - Case appeals to State Historical Building Safety Board.



CHBC Table of Contents

- Administration
- Definitions
- Use and Occupancy
- Fire Protection
- Means of Egress
- Alternative Accessibility Provision
- Alternative Structural Regulations
- Archaic Materials and Methods of Construction
- Mechanical, Plumbing, and Electrical Requirements
- Historic Districts, Sites, and Open Spaces





State Historical Building Safety Board Representation

- Division of the State Architect
- Occupational Safety and Health Standards Board
- Office of the State Fire Marshal
- Office of the Statewide Health Planning and Development
- **State Historical Resources Commission**
- Department of Housing and Community Development
- Department of Parks and Recreation
- Department of Rehabilitation
- Department of Transportation
- American Institute of Architects/California Council
- California Chapter, American Planning Association
- Seismic Safety Commission
- California Building Contractors
- California Building Officials
- League of California Cities
- California State Association of Counties
- California Council, American Society of Landscape Architects
- Structural Engineers Association of California
- California Preservation Foundation
- Civil Engineers and Land Surveyors of California



Definition of a Qualified Historical Building or Structure

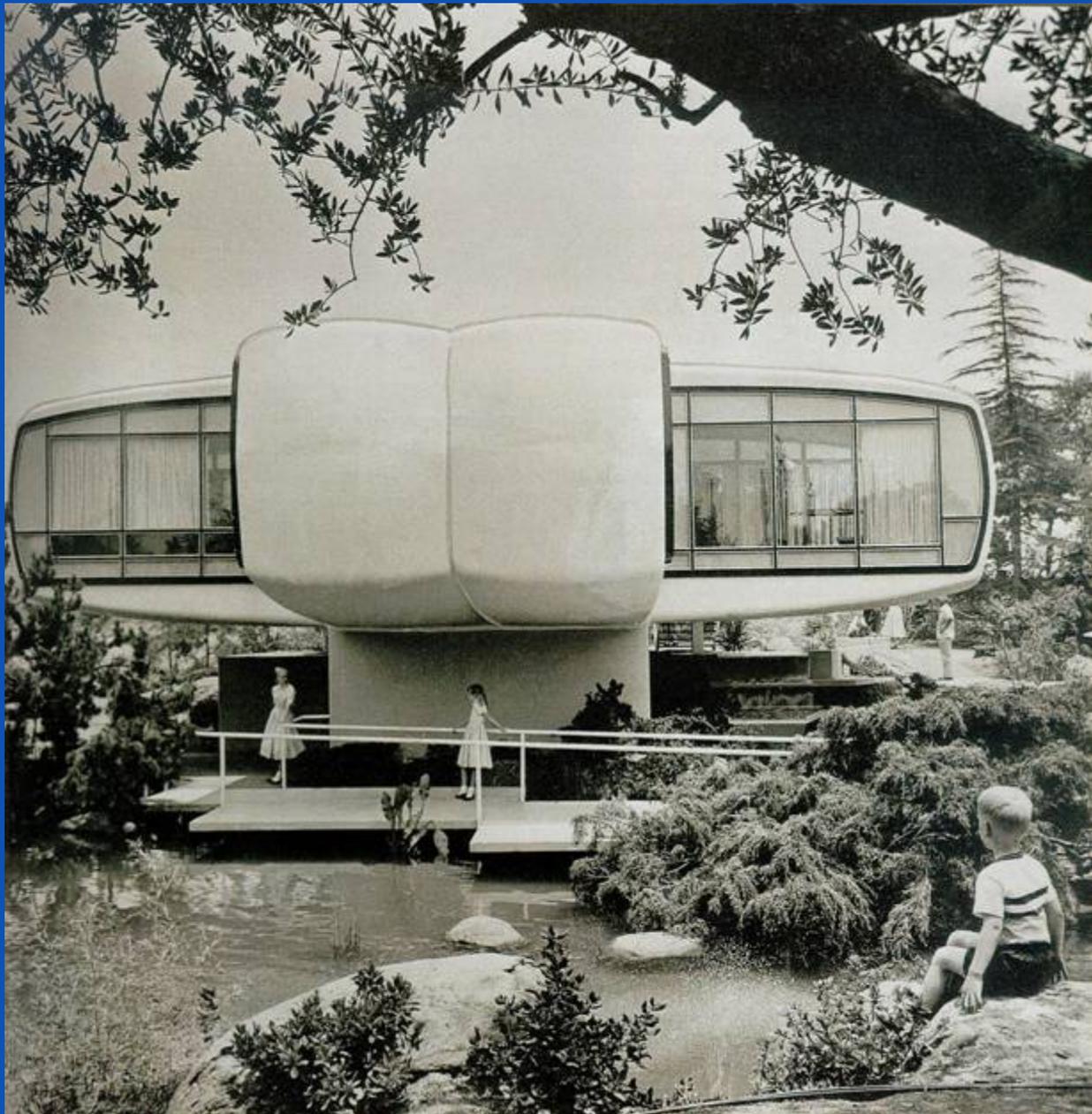
“ . . . Any building, site, structure, object, place, location, district or collection of structures, and their associated sties, deemed of importance to the history, architecture, or culture of an area by an appropriate local, state or federal governmental jurisdiction. This shall include historical buildings or properties on, or determined eligible for, national, state or local historical registers or inventories, such as the National Register of Historic Places, California Register of Historical Resources, State Historical Landmarks, State Points of Historical Interest, and city or county registers, inventories, or surveys of historical or architecturally significant sites, places of landmarks.”





140A:—Roller Coaster, Mission Beach, San Diego, Calif.









Hangar 1 Moffett Field





Basic Alternative Code Comparisons

2006 IEBC

- Model code, needs to be adopted
- Revised on a three year cycle
- Performance compliance numerical sliding scale
- Appeals made to Historic Building Safety Board
- Concept of limiting work area
- Historic building must be listed or eligible for NRHP or State Register
- Five construction classifications
- Relies more heavily on active protection
- Historic report mandatory
- Focuses on buildings & structures

2007 CHBC

- State wide mandatory code
- Revised only three times since 1997
- Performance oriented code, no rating system
- Appeals made to State Historical Building Safety Board
- Portions of a historic building can comply
- National, State, Local registers, eligible resources, inventories and surveys
- Construction classifications follow regular code reference and NPS treatments
- Active and Passive Protection based upon threat and performance standards
- Structural evaluation may be required
- Allows use of CHBC for any qualified resource including sites, objects and features including relocated resources

Purpose, Intent, and Scope

- Provide alternative regulations to facilitate access.
- These alternative regulations apply only to qualified historic resources.
- Regulations require enforcing agencies to accept equivalent alternatives.
- To preserve the integrity of qualified historic buildings while providing access.



Basic Provisions

- Regular code for persons with disabilities shall be applied unless strict compliance will threaten or destroy the historical significance or character-defining features.
- Alternative provisions applied on an item-by-item or case-by-case basis.
- Each alternative should attempt to provide the greatest accessibility standard.
- Documentation is to be provided stating the reasons.
- Documentation shall be maintained as part of the public record.
 - Local Building and Safety Department
 - Local Accessibility Advocate Group
 - State Historical Building Safety Board records.
- Equivalent provisions are permitted.









WINTER 2007

LIVING TODAY...
THE MID-CENTURY MODERN WAY

CA MODERN

Serving California's Eichlers | Cliff Mays
Strengs | Palm Springs Classics & Beyond

P12 | Modern kitchen makeovers
that bring back the joy of cooking

P4 | Ranchos of Long Beach:
once shunned, now on the rise

P18 | Today's modern prefabs:
are they prefabulous or a fad?

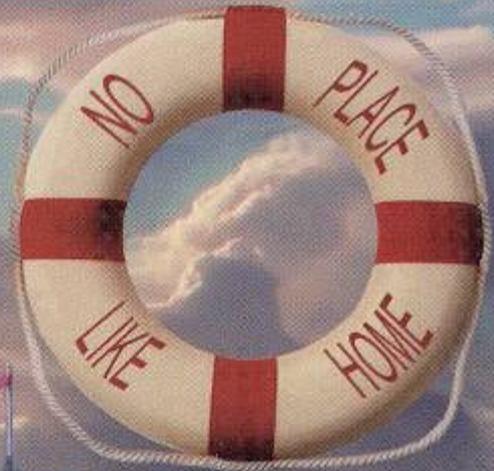
P24 | Quirkiest Alexanders of all
found in exotic desert hideaway

Futuro comes alive!

It came from beyond the past...
California its final destination

EICHLER
NETWORK

Be it ever so humble...



Encinitas, California

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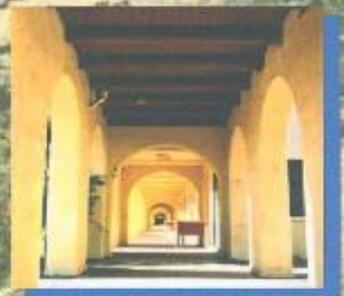




NAVAL TRAINING CENTER

SAN DIEGO

*Guidelines for the Treatment of
Historic Properties*





USS *Recruit*, NTS San Diego

Fire Sprinkler System

- Change in occupancy shall not mandate conformance with new construction requirements of the regular code.
- Change does not create a fire hazard or threat to life-safety of occupants or fire fighting personnel.
- Occupancy separation of more than one-hour can be reduced to one-hour with fire sprinkler system installed.
- Fire access egress from a corridor shall be 29 inches minimum clear opening and not more than 30 inches above floor.
- Existing door openings, corridor, and stairway widths of less than specified may be permitted if there is sufficient width and height for person to pass.
- Alternate corridor exiting from upper floors, down to the basement corridor and out to a public right-of-way has been approved.

Fifth Street, San Diego, Cal.



Preferred Alternatives

- Toilet Rooms
 - In lieu of separate gender, a unisex toilet facility may be designated.
- Exterior and Interior Ramps
 - Lift or a ramp no greater than 1:10 slope.
 - Horizontal distances not to exceed 12 feet.
 - Signs to be posted upper and lower levels noting steepness.
 - Ramps can be 1:6 slope for horizontal distance not to exceed 13 inches with signs.
 - Access provided by experiences, services, functions, materials and resources. Methods can vary, such as maps, plans, videos, virtual reality. This alternative shall be documented.



Preferred Alternatives

- Entry Considerations
 - Access to any entrance used by the general public.
 - Access no further than 200 feet from primary entrance.
 - Access at any entrance but open and unlocked with directional signs, but within 200 feet.
- Doors
 - Single-leaf door provides minimum 30 inches clear opening.
 - Single-leaf door provides minimum 29-1/2 inches clear opening
 - Double door, one leaf provides minimum 29-1/2 inches clear opening.
 - Double doors operable with a power assist device, minimum 29-1/2 inches clear opening.
- Power - Assisted Doors
 - Equivalent alternative to level landings, strike side clearance and door-opening forces.



Windows/Glazing

- Existing light and ventilation systems can remain if there is no safety hazard.
- Windows in habitable rooms shall have 6 percent of floor area (versus UBC).
- Windows in sleeping rooms shall be operable.
- Dwelling occupancies need not have electrical lighting.
- For fire escapes, all openings within 10 feet shall be protected by three-fourths-hour fire assemblies.
- Glazing subject to human impact may include alternate methods
 - Additional glazing panels
 - Protective film
 - Protective guards or systems
 - Devices or signs
- Historic interior glazing materials required to be one-hour may be approved
 - Automatic fire sprinkler
 - Approved smoke seals
- Historic windows at exterior walls requiring opening protection may be approved
 - Automatic sprinklers under roof line
 - At least one sprinkler head at each opening



GENERAL NOTES:

1. ALL BRICK SURFACES SHALL BE CLEANED AND FINISHED WITH CLEAR GLOSS POLYURETHANE GLAZING.
2. DAMAGED BRICK & JOINT POINTS TO BE REPLACED WITH NEW MATERIALS TO MATCH EXISTING. SEE ARCHITECT'S CONTRACTOR TO COORDINATE RESTORATION CONSTRUCTION WITH NEIGHBORING BUILDINGS.

KEY NOTES:

1. SYSTEMS SHALL REMAIN BY DESIGN UNLESS TO BE REMOVED (TYPE).
2. EXISTING METAL CORNICES SHALL BE ALL DETERMINED AREA AND FINISH. REMOVE UNDESIRABLE.
3. NEW BRICK METAL CORNICE.
4. SYSTEMS KNOWN TO BE REMOVED PER EGRESS AND FINISHES.
5. NEW TRANSPARENT GLASS TO REPLACE EXISTING.
6. NEW TRANSPARENT GLASS AND FRAME ELEMENTS TO BE REPLACED AS NECESSARY.

7. NEW BRICK RESTORATION DESIGN.
8. EXISTING PLASTER REMOVE TOTAL, EXCEPT ALL DETERMINED AND LOCATED AREAS TO BE REFINISHED (TYPE).
9. NEW CHIMNEY CASING, DETAILING TO MATCH EXISTING.
10. EXISTING FIRE ESCAPE TO REMAIN (TYPE) TO BE FULLY INSULATED AND FINISHED BY STRUCTURAL ENGINEER.
11. NEW FIRE ESCAPE METAL SHALL BE NEW BRICK METAL FINISH. REMOVE EXISTING ACCESSORY JOINT LIGHTING AND PROVIDE APPROPRIATE JOINT LIGHTING.

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WEST ELEVATION

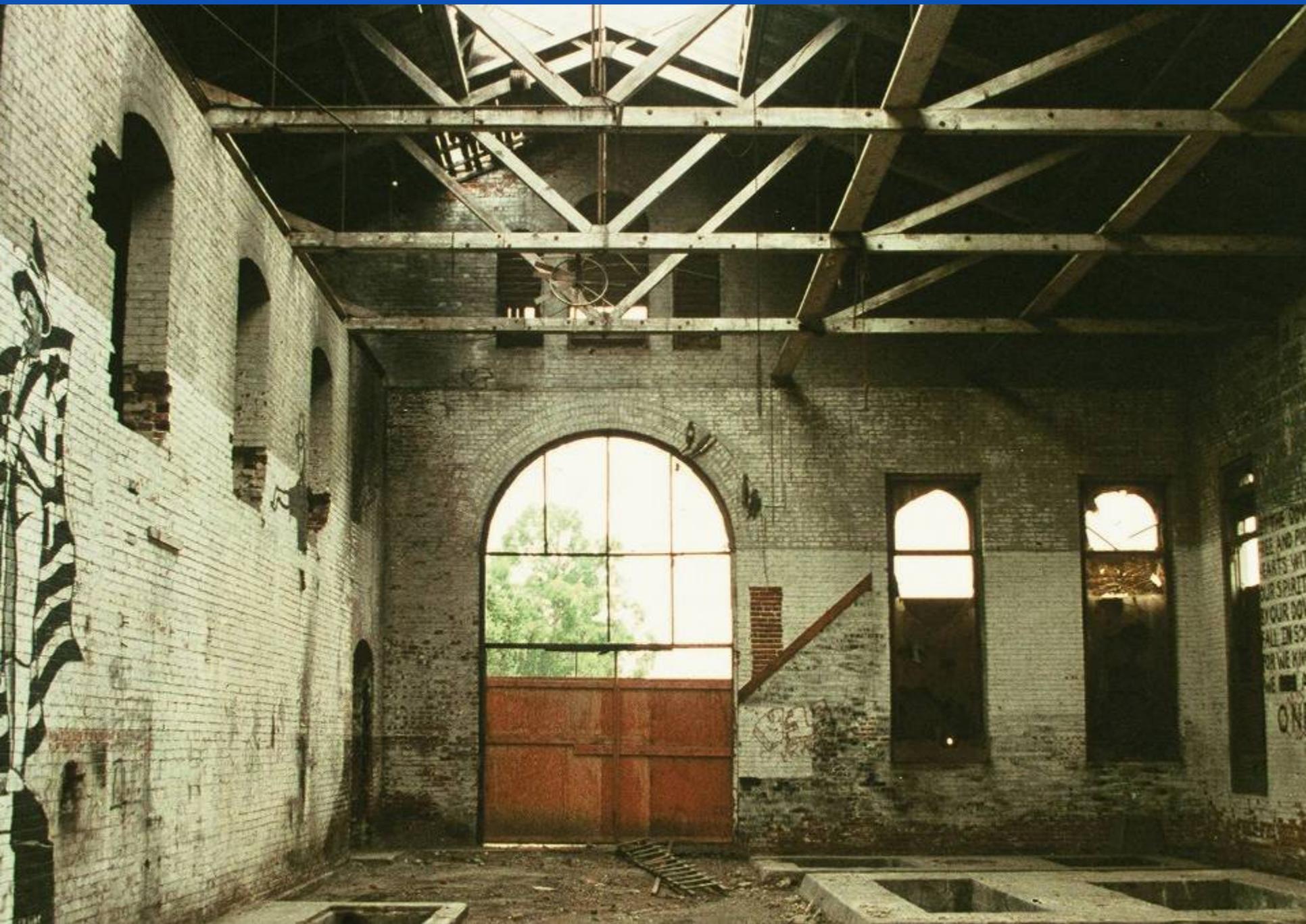
1/4" = 1'-0"





Change of Occupancy

- Change in occupancy shall not mandate conformance with new construction requirements of the regular code.
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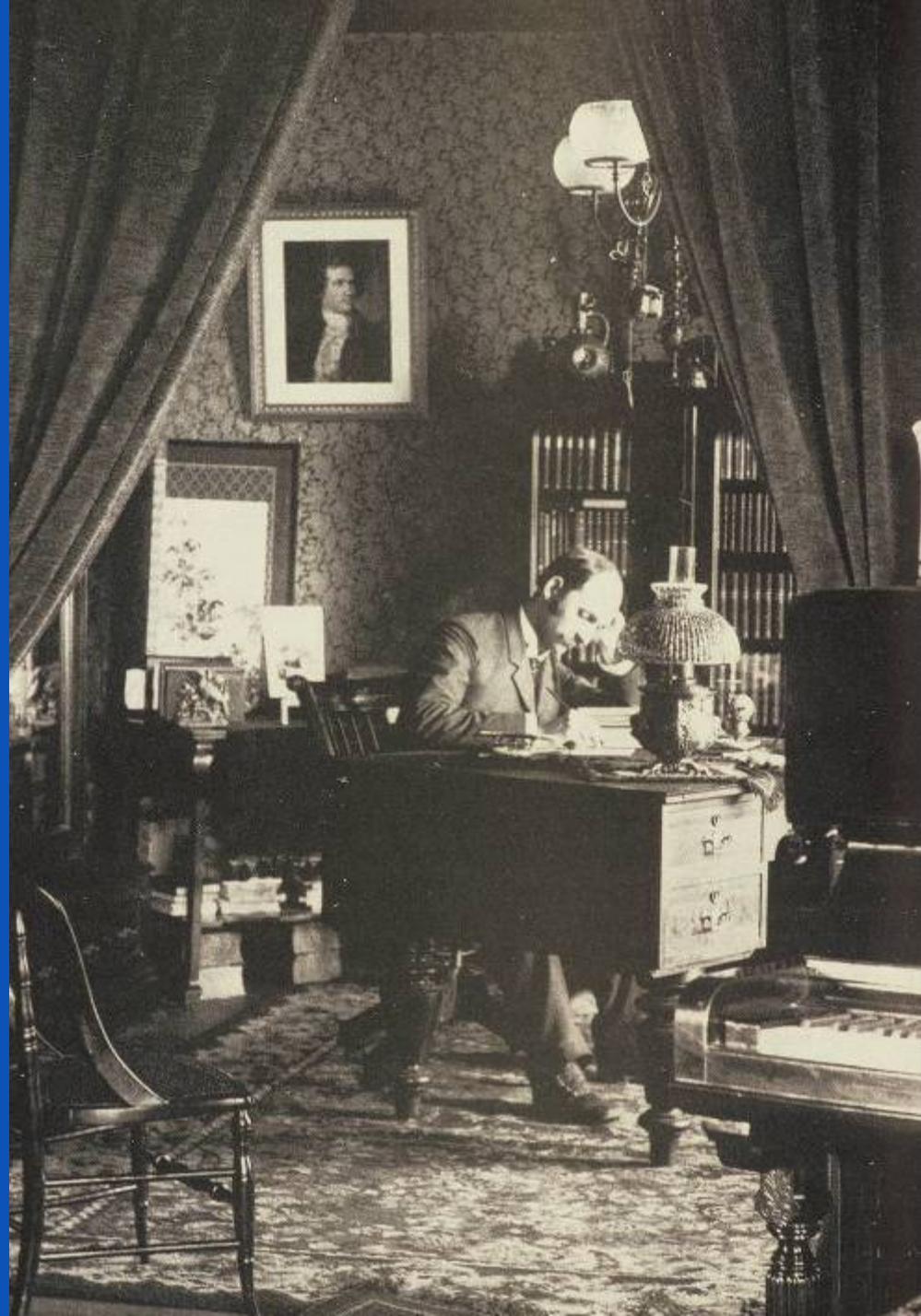






Windows/Glazing

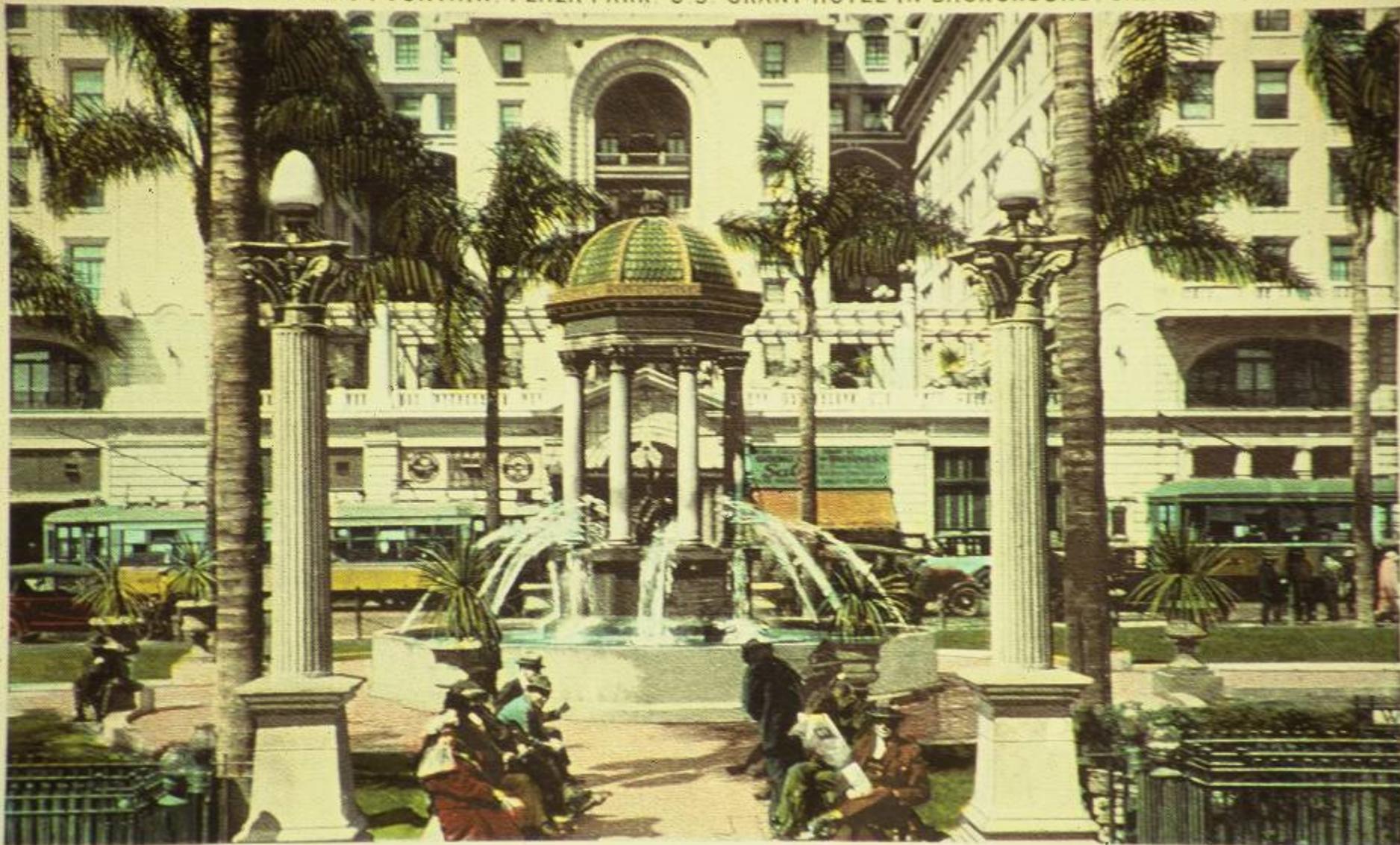
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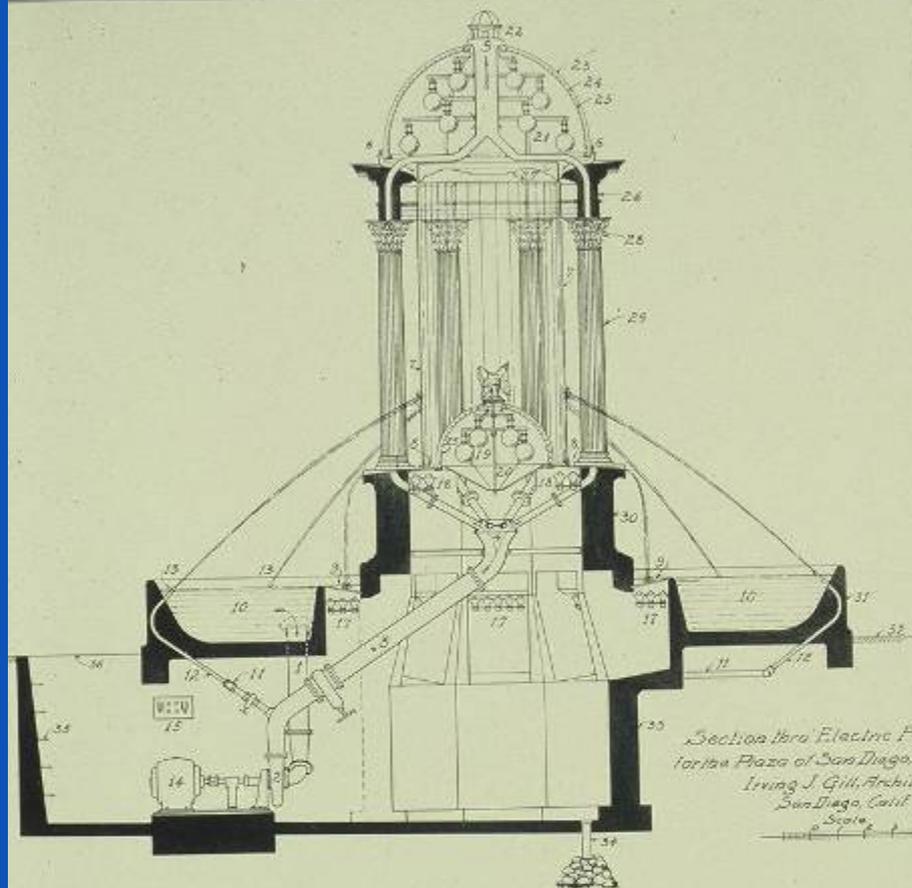






4577. ELECTRIC FOUNTAIN, PLAZA PARK, U.S. GRANT HOTEL IN BACKGROUND, SAN DIEGO, CALIF.





Section thro Electric Fountain
for the Plaza of San Diego, California.
Living J. Gill, Architect
San Diego, Calif
Scale
1/4" = 1'

Index.

- | | |
|--|---|
| <ul style="list-style-type: none"> 1. Suction Pipe 2. Centrifugal Pump 3. Delivery Pipes 4. Distributor with 7 Outlets 5. Bronze Overflow 6. Bronze Water Catch 7. Circular Water sheet 8. Glass Plates 9. Glass Plates 10. Water in Basin 11. Distributing Pipe for Side Streams 12. 8 Delivery Pipes 13. 8 Nozels 14. Electric Motor 15. Switch Board 16. Flasher 17. 8 Light Boxes, a 15-40 Watt Tungsten Lamps with Holophane Reflectors 18. 34-40 Watt Lamps with H. Reflectors 19. Center Dome w 12-500 Watt Tungst. Lamps 20. Reflector | <ul style="list-style-type: none"> 21. Upper Dome w 46-500 Watt Tungst Lamps 22. Bronze Lantern 23. Bronze Ribs 24. Bronze Grille over Glass 25. Prismatic Glass 26. Marble Entablature 27. Copper Ceiling 28. Bronze Capitals 29. 8 Fluted Marble Columns 30. Granite Base 31. Composition Stone Basin 32. Red Tile 33. Concrete Foundation 34. Drain 35. Iron Steps 36. Gaswalk Door 37. Water Supply 38. Drain of Basin 39. Overflow 40. Pipe to Sewer |
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SUPPLY CO.

WESTERN METAL SUPPLY CO.

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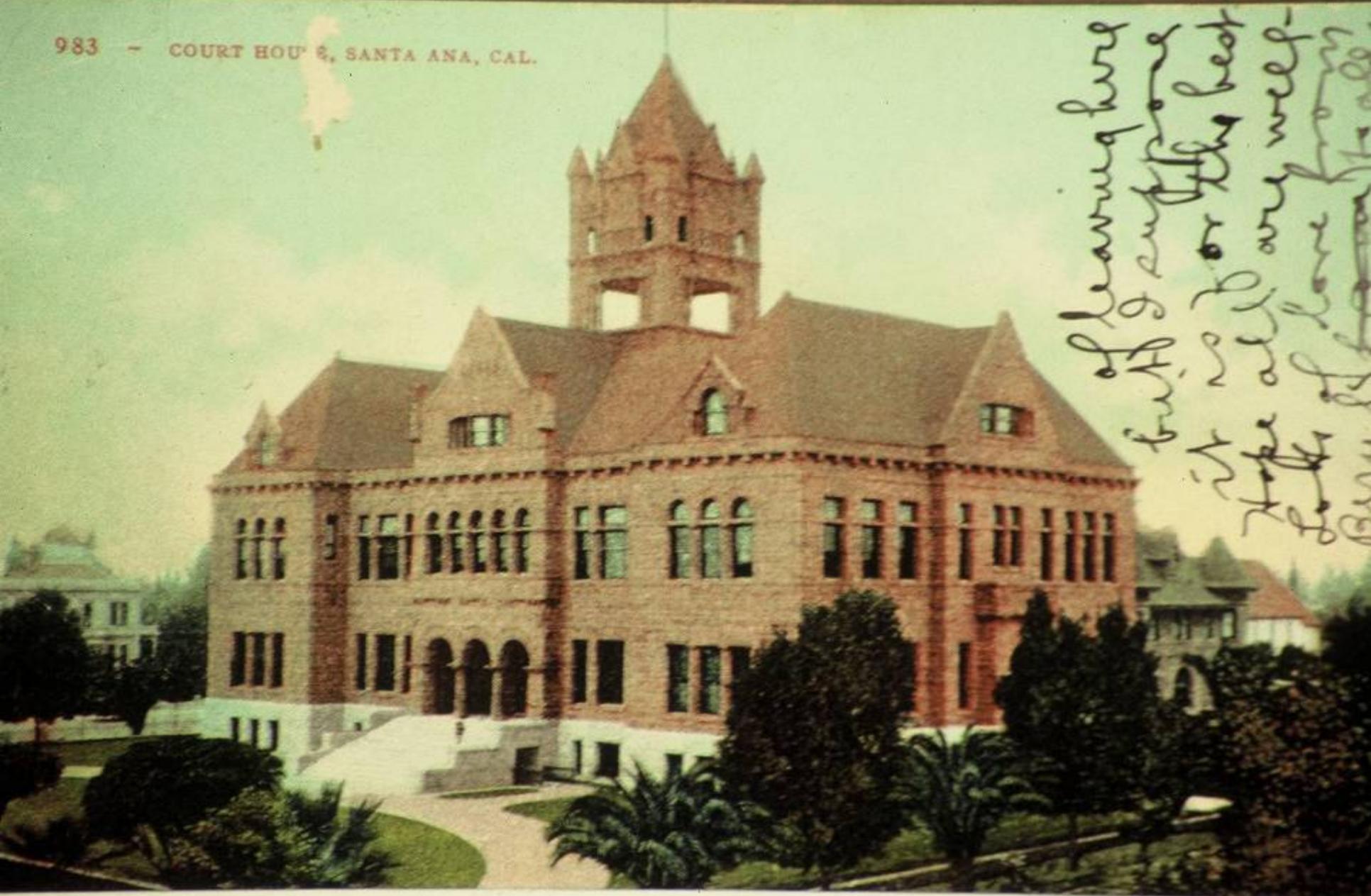








983 - COURT HOUSE, SANTA ANA, CAL.



of leaving here
but I suppose
it is for the best
Hope all are well -
Lots of love from
Benny

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Corridors

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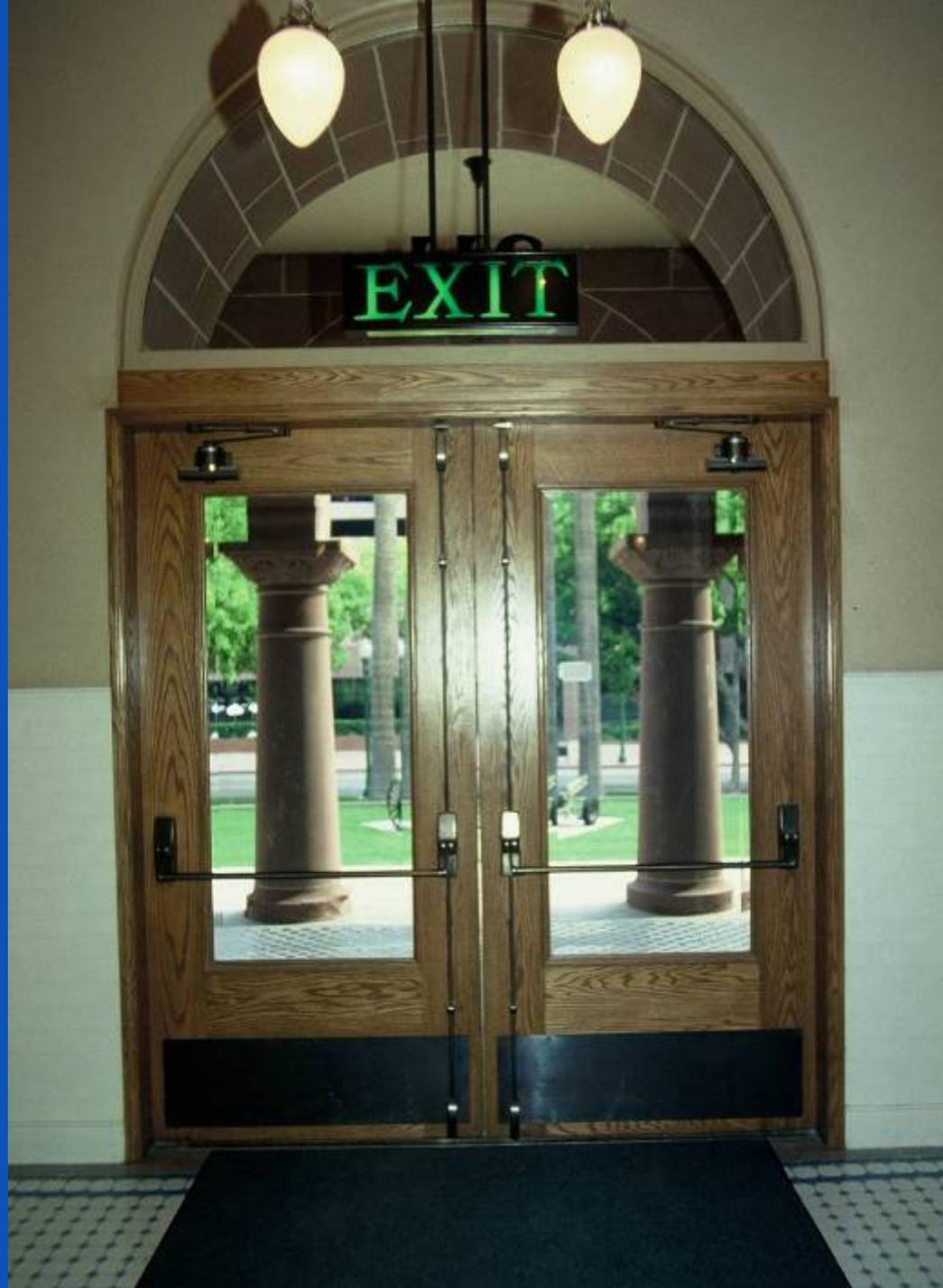


Doors

- At occupancy separation doors to be equipped with automatic-closing devices.
- For fire exiting, the front or main exit door(s) need not be re-hung to swing in the direction of exit travel, provided other exiting means serve occupant load.
- Existing historic doors within corridors requiring one-hour fire resistive corridors need not be fire-resistive when one of the following is provided
 - Automatic sprinkler system
 - Approved life-safety evaluation
 - Other alternative measures (smoke seals, door closures, closed transoms, etc.)

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Exceptions

- If no equivalent facilitation in this code can be provided than an exception may be provided with the following conditions:
 - Exceptions only on an item-by-item or case-by-case basis.
 - Interpretive exhibits of the exempted historical aspects are provided in an accessible public location (including persons with hearing and sight impairment).
 - Equal services are provided.
 - Enforcement official shall document.



No 232



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