

STATE HISTORICAL BUILDING CODE

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Executive Director

State Historic Building Safety Board



State Historical Building Safety Board

- Board Members:
State Agencies,
Architects, Engineers,
Contractors, Building
Officials, and Planners
- Statutory Authority to
Interpret the SHBC and
Authority to serve as a
final appeal body in
SHBC disputes
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What does the SHBSBoard do?

- Consultations with other agencies and individuals
- Reviews some State projects
- Renders Interpretations
- Serves as an Appeal body



Background on the State Historical Building Code

- 1979 - Created as a set of guidelines to assist in the preservation of Historic Buildings
- 1984 - Legislation made the SHBC mandatory building regulations.
- 1984 - 2011 unchanged



FINALLY, a new State Historic Building Code

- Revised Edition of the SHBC adopted by BSC 7/21/98
- California Building Code, Chapter 34
- Published as a part of the California Building Code (Part 8, Title 24)



Another Update is in Progress

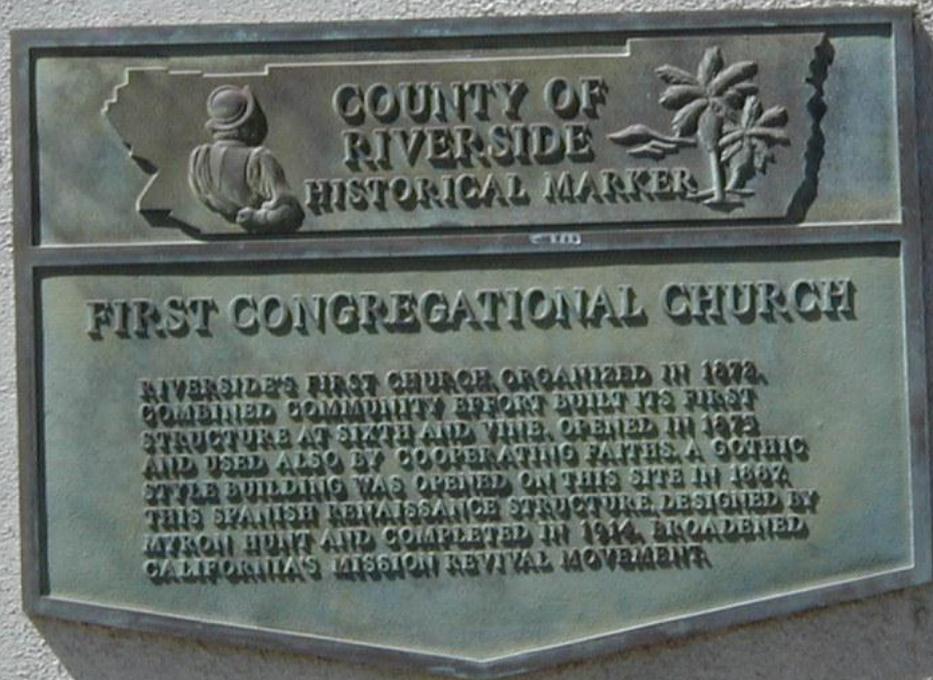
- Most of the proposed changes are editorial in nature and will not substantially change the intent of the code.
 - Chapters 8-7 & 8-8
- Some substantive changes were made in the Disable Access provisions in order to align with the ADA requirements.

A few facts about the State Historic Building Code

- Performance based as opposed to a prescriptive approach as in the regular code
- Applies to all Qualified Historical Buildings
- Applies to State as well as local buildings and other historic features
- Ultimate interpretation authority resides with the SHBSB

QUALIFIED HISTORIC BUILDING





COUNTY OF
RIVERSIDE
HISTORICAL MARKER

FIRST CONGREGATIONAL CHURCH

RIVERSIDE'S FIRST CHURCH ORGANIZED IN 1872. COMBINED COMMUNITY EFFORT BUILT ITS FIRST STRUCTURE AT SIXTH AND VINE. OPENED IN 1873 AND USED ALSO BY COOPERATING FATHERS. A GOTHIC STYLE BUILDING WAS OPENED ON THIS SITE IN 1887. THIS SPANISH RENAISSANCE STRUCTURE, DESIGNED BY LYRON HUNT AND COMPLETED IN 1914, BROADENED CALIFORNIA'S MISSION REVIVAL MOVEMENT.







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DEMOLITION

- GENERALLY SPEAKING, DEMOLITION OF A QUALIFIED HISTORIC BUILDING SHOULD BE AVOIDED, IF POSSIBLE.
- AFTER EARTHQUAKES ??
 - Public Resource Code 5028
- CEQA
- PUBLIC SAFETY AND IMMEDIATE THREAT



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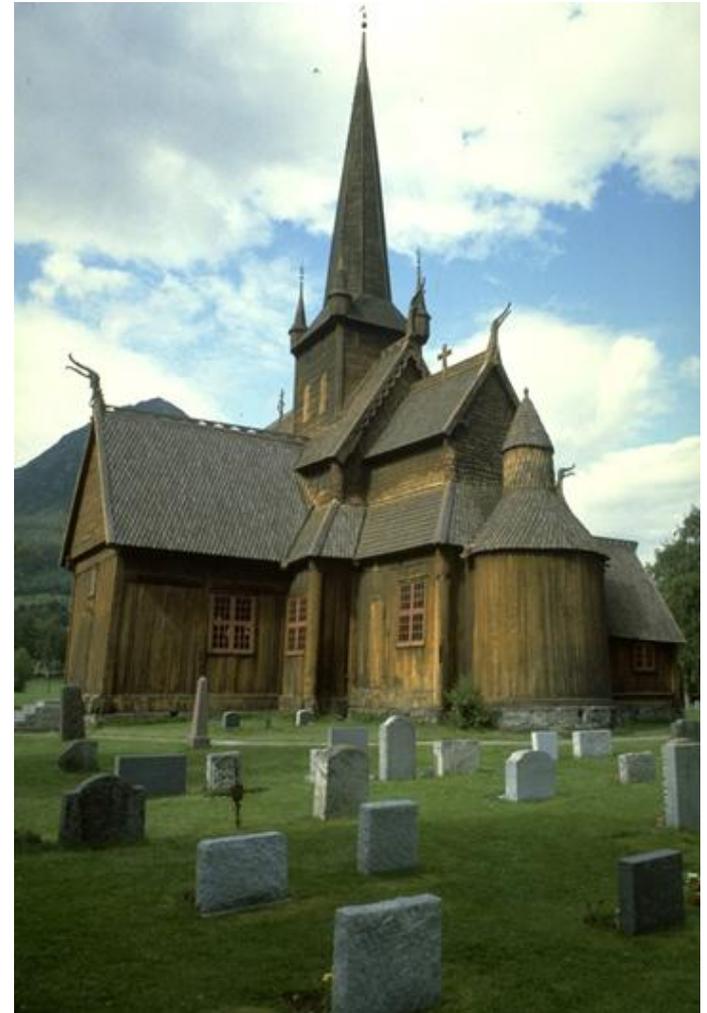


A few more facts about the SHBC . . .

- Generally , does not require historical buildings to meet the same safety standards as new buildings
- Does not allow unacceptable levels of hazard to exist in historic buildings
- Recognizes the benefits of fire sprinklers and other modern technologies in reducing the level of risk

Chapter 1: Administration

- What's the Purpose?
- Additions
- Relocation
- Continued Use
- Unsafe Buildings
- When to apply the code?
- Alternatives to the code.
- SHBSB Appeals and Rulings



CHAPTER 2: DEFINITIONS

- Distinct Hazard - (immediate danger)
- Fire Hazard - (greater than normal)
- Imminent Threat - (immediate peril)
- Qualified Historical Building or Property -
(officially adopted)
- Regular Code - (nonhistorical codes)
aka: Prevailing Code
- Historic Fabric

CHAPTER 3: USE AND OCCUPANCY

- Existing Use: (shall be allowed to continue)
- Change in Occupancy: (new hazards?)
- Occupancy Separations: (1 hour max)
- Max. Floor Area: (single vs. multi-floor)
- Max. Height: (historical design)
- Light and Ventilation: (safety hazard?)

ADAPTIVE REUSE









CHAPTER 3: CONTINUED . . .

RESIDENTIAL OCCUPANCIES



- Habitation vs. Non . . .
- Exit Ladder
- Room Dimensions
- Light & Ventilation
- Alteration & Repair

REHABS



HOUSE MOVES





BEFORE



**FOUNDATION UPGRADED TO
CURRENT CODE**

AFTER



MOVE-ON



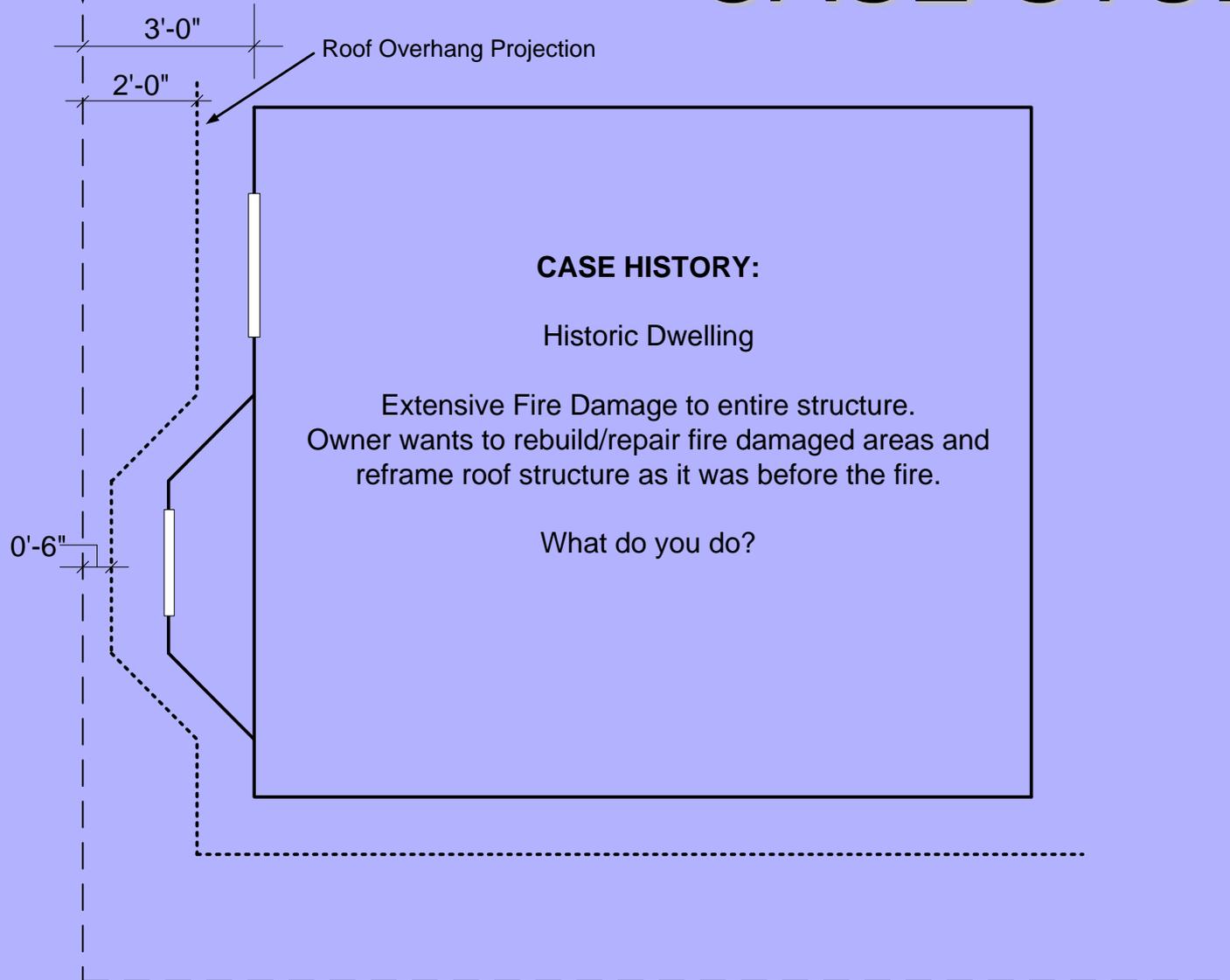
CHAPTER 4 - FIRE PROTECTION

- **Fire-resistive Construction**
 - exterior wall & openings
 - 1-hour construction
 - wood lath & plaster
 - glazing
 - interior finishes
 - vertical shafts
- **Roof Coverings**
- **Fire Alarm Systems**
- **Automatic Fire Extinguishing Systems**



CASE STUDY

Property Line



STREET



EXTERIOR OPENING PROTECTION

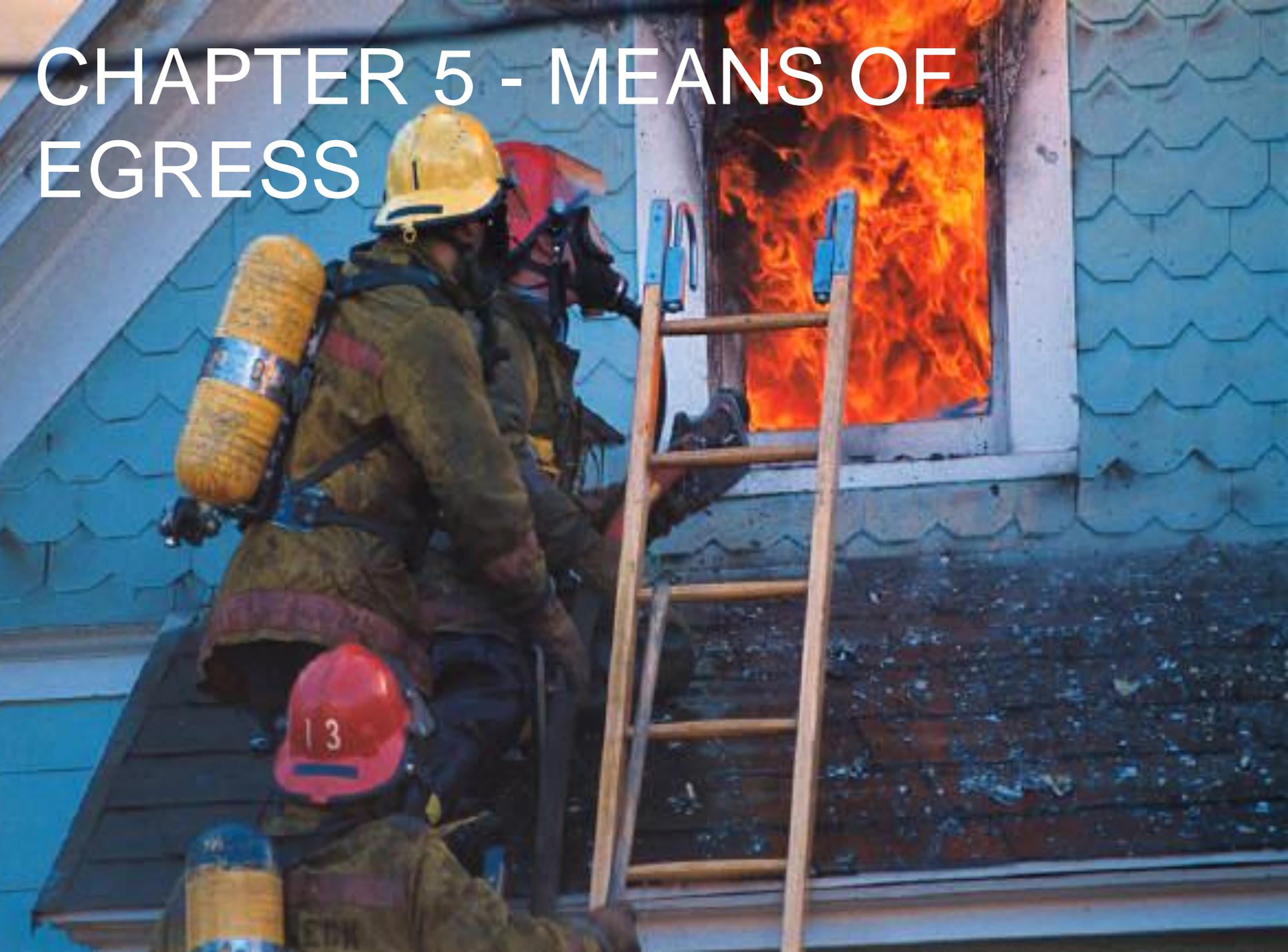
EXTERIOR SPRINKLERS



FIRE SPRINKLERS



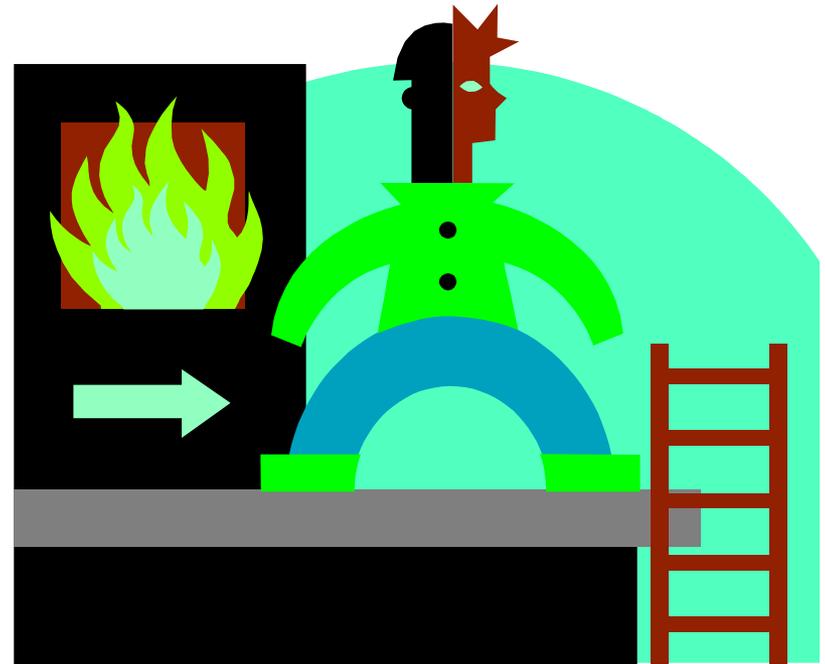
CHAPTER 5 - MEANS OF EGRESS



Chapter 5

MEANS OF EGRESS (Exits)

- Must comply with the Regular Code, except
 - New Fire Escapes & Escape Ladders
 - Existing Previously Approved Escapes
 - Reasonable Exceptions (*Examples*)
 - Escape or Rescue Windows & Doors



FIRE ESCAPE





FIRE ESCAPE

GUARDRAILS



STAIRWAYS AND RAILINGS

WARNING

The staircase and internal railing in the Rotunda is a historical feature of the National Historic Landmark Mission Inn. The height of this railing does not comply with current safety codes. Alternative access to each floor of the Rotunda is provided by the Rotunda elevator.



STAIRWAYS AND RAILINGS





HISTORIC HANDRAILS

CHAPTER 6 - ACCESSIBILITY



- Threaten or Destroy
- Alternative Provisions
- Preferred Alternative
- Equivalent Facilitation
- Exceptions



STEPS AT SIDEWALK





STEEP RAMPS

DUE TO THE HISTORICAL NATURE OF THIS FACILITY, THIS RAMP IS STEEPER THAN NORMAL. IF YOU NEED ASSISTANCE, PUSH BUTTON BELOW.

ASSISTANCE CALL BUTTON



IF ATTENDANT DOES NOT RESPOND, PLEASE GO TO THE FRONT DESK TO SUMMON ASSISTANCE.

CALL BUTTONS



WAY-FINDING SIGNAGE





**PROTECTING HISTORIC
FABRIC**



RAMP VS. LIFT

HISTORIC ENTRANCE VS. RAMPS





**MONUMENT STEPS AT
ENTRY**



REAR ENTRY



VALET PARKING

ELEVATOR ADDITION



CHAPTER 7 - STRUCTURAL REGS



- Special Occupancies
 - Need to comply with Regular Code
- Voluntary or Partial Upgrades
- Structural Survey
- Additions / Alterations
- Gravity Loads
- Lateral Loads

GRAVITY AND LATERAL LOADS



DETERIORATION



DETERIORATION



REPOINTING THE MASONRY



CHAPTER 8 - ARCHAIC MATERIALS & METHODS



- Strength of Materials
 - Method and Material thoroughly investigated
 - Testing shall be performed
 - Concurrence by the B.O.
- Nonstructural Materials
- Reconstructed Masonry Walls
- Adobe
- Wood
 - Grade Stamp
 - Square Nails
- Veneers
 - anchorage
 - corrosion
- Glass & Glazing
- Tables for Strengths
 - Good Condition
 - No Impact Tools

ADOBE



REPLICATION



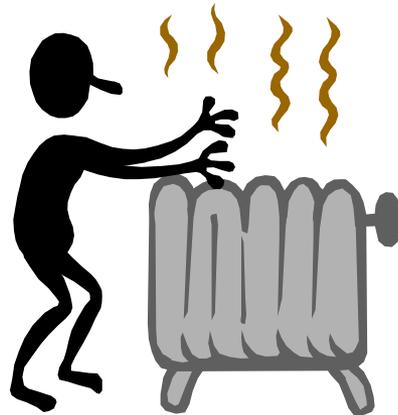


HISTORIC MATERIALS

CHAPTER 9 - MECH, PLUMB & ELEC

- To be used in combination with the regular code to provide a reasonable level of protection from hazards.
- No person to allow any safety hazard to exist
- Existing systems which constitute safety hazards when operational may remain in place if completely and permanently rendered inoperative.
- Safety hazards created by inoperative systems shall not be permitted.
- Exempted from compliance with energy standards. Except that new appliances must comply.

MECHANICAL



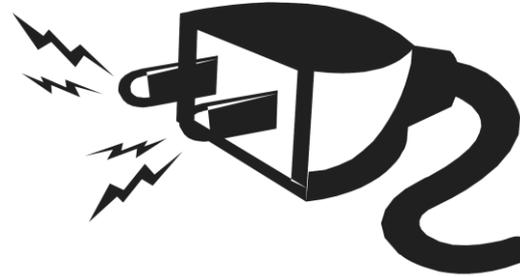
- Existing systems
- Residential Heating
- Combustion Air
- Venting of Appliances
- Ducts
- Grease Hoods and Vents
- Water Heaters

PLUMBING



- New nonhistorical mat'ls - regular code
 - Adequate drainage and vent systems
 - Vent terminations
 - Traps
 - Water Distribution
 - Sewage
 - Fuel-gas piping
- Residential
 - Alternative sewage disposal
 - Toilet locations
 - Kitchen sink
 - Hand washing facilities
 - Hot and Cold water
 - 1" Air gap/overflow

ELECTRICAL



- Existing non-compliant systems may remain and be extended, if safe
- Non-grounding outlets may remain in use
- Grounding type outlets must be grounded or GFCI protected
- Spacing and other distance requirements do not apply if impracticable
- Electrical Load Calcs
 - Actual loads
 - Electrical Bills for a 1 year period

CHAPTER 10 - Historic Districts, Sites & Open Spaces



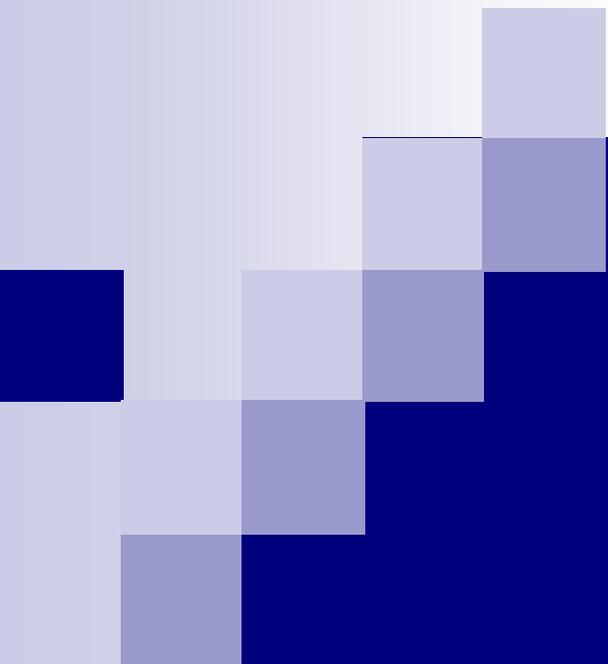
- Protects more than the Buildings
- The SHBC applies to everything on the site that contributes to the Historic Importance
- Allows for alternative standards

NOT JUST BUILDINGS



OTHER RELATED TOPICS

- Seismic Upgrades vs. Handicapped Upgrades
- National Historic Preservation Act Section 106
- Secretary of the Interior's Standards for the Rehabilitation of Historic Properties



THE END