

**REACHING FOR THE STARS –
FILLING SECOND STORIES ON MAIN
STREET**

CHERRY/SEE/REAMES, ARCHITECTS, PC

A Quick Look at 2nd Floor Requirements in Historic Building

- We'll discuss only 2 story buildings (codes are different for higher structures)
- Type of occupancy (by function) matters
- Numbers of occupants matters
- Historic buildings can get exceptions....it depends....
- Talk with your building official and the SHPO early and often

Basic Principles

- Buildings need to be safe for the people that use them.
- Buildings need to be available to everybody, regardless of physical or mental abilities.
- Codes are developed to accomplish the above principles.
- From an economic standpoint, an owner wants as many people as possible to use all floors of the building.

Occupant Load Varies with Function

<u>Function of Space</u>	<u>Floor Area in SF/Occupant</u>
• Assembly w/o fixed seats	7
• Business areas	100
• Day Care	50
• Educational CR	20
• Mercantile (grade floor)	30
(upper floors)	60
• Residential	200

Example of a 2000 sf 2nd Floor

<u>Function of Space</u>	<u>SF/Occupant</u>	<u>Occupants</u>
• Assembly w/o fixed seats	7	288
• Business areas	100	20
• Day Care	50	40
• Educational CR	20	100
• Mercantile (grade floor)	30	67
(upper floors)	60	34
• Residential	200	10

Does This 2 Story Rehab Require a 2nd Exit Stair?

- Yes, if 2nd floor has more than 49 occupants AND the functions are: Assembly, Business, Classrooms, Fabrication (non-hazardous), Mercantile (Retail), and a few others

Does it Require a 3rd Exit Stair?

Yes, if it had an Occupant loads of 501 to 1,000.

There are exceptions. Ex. Big breaks if building is sprinkled.

Does This Building Reutilization Require an Elevator?

- An elevator will make your 2nd story space more attractive to tenants and customers.
- “Alterations: Elevator exemption:elevators are not required to be installed during alterations in facilities under three stories or with fewer than 3,000 sf per floor, unless it is a shopping center; professional office of a health care provider.....”

Section III-6-3000, “ADA Title III Technical Assistance Manual.”

www.ada.gov/rechingout/title313.html.

- “3411.9 Historic buildings
Where compliance with the requirements for accessible routes, entrances or toilet facilities would threaten or destroy the historic significance of the building or facility, as determined by the applicable governing authority, the alternative requirements of (it lists sections) for that element shall be permitted.”

- 2009 International Building Code,
chapter on existing structures

Considerations for Exceptions to Accessibility and Safety Codes

Exceptions can be granted for eligible and registered historic building renovations by building officials.

- Will the alteration for accessibility damage the historic significance?
- Can alternative methods be used to achieve accessibility and safety?
- How many occupants are impacted?
- Are equal accommodations offered on the ground floor? (especially useful for offices)
- Is it “technically infeasible” to install an elevator?
- Can a LULA elevator be used?
- Can't make building less safe nor less accessible. Duh!

PROJECT PROCESS

PRE-DESIGN PROCESS

WHAT ARE THE
OPTIONS FOR
BUILDING USE?

WHAT IS THE
ZONING?
(ASK THE BLDG.
PERMIT OFFICE)

WHAT WILL THE
LOCAL MARKET
SUPPORT?
(STUDY YOUR COM-
MUNITY; TALK TO
REALTORS)

IS THE PROPOSED
FUNCTION A CHANGE OF
OCCUPANCY?
(KICKS OFF SOME CODE
REQUIREMENTS)

HIRE A
PRESERVATION
ARCHITECT

DISCUSS OPTIONS
TO REFINE LIST OF
FUNCTIONS

ARCH. DOES CODE
ANALYSIS TO REFINE LIST
FURTHER BASED ON
EXISTING BUILDING

ARCH. DETERMINES IF
CODE EXCEPTIONS ARE
NEEDED FOR CERTAIN
FUNCTIONS

WHAT ARE THE
CHARACTER
DEFINING
FEATURES?
(ASK THE SHPO)

MEET W/
BUILDING
OFFICIAL

IS THE CODE OFFICIAL
COMFORTABLE WITH
PROPOSED CODE
EXCEPTIONS?
DOCUMENT OUTCOME.

FINALIZE FUNCTIONS TO BE
DESIGNED IN THE
RENOVATION

DESIGN PROCESS

TYPICAL
PRESERVATION
ARCHITECTURE
DESIGN
PROCESS

Schematic Design
Design Development
Construction Documents
Bidding or Negotiation
Construction

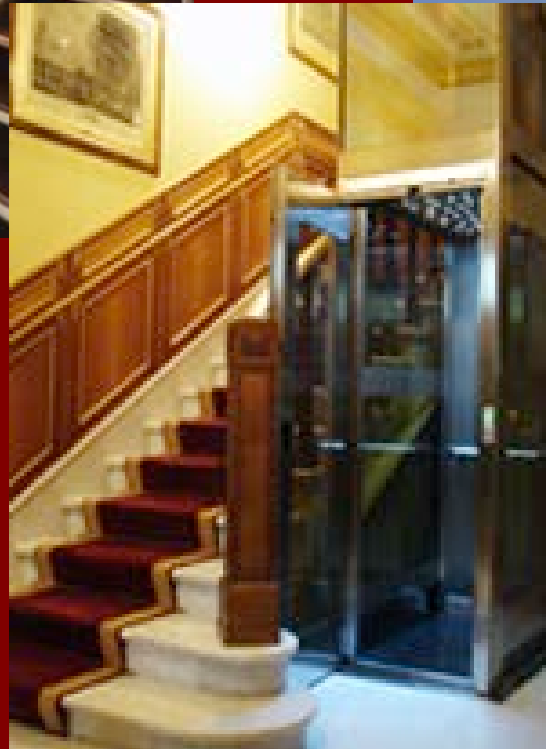
Area of Refuge

- “An area where persons unable to use stairways can remain temporarily to await instructions or assistance during emergency evacuation.” Section 1002, Definitions, 2009 IBC.
- Fire-rated walls, floors, & roof, plus telephone
- Discuss with Building Official

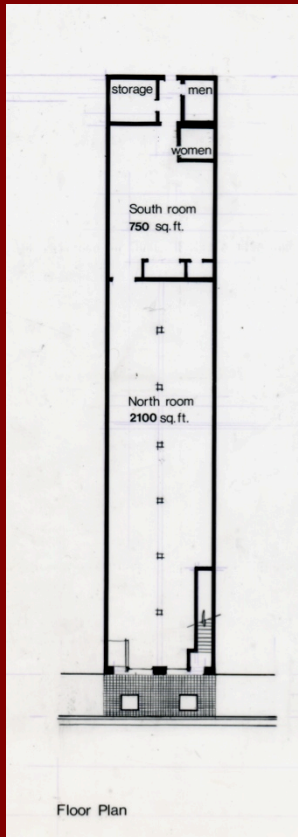
Limited Use/Limited Application (LULA) Elevators

- 25 feet maximum travel
- 18 square feet maximum car size
- 35 feet per minute maximum speed
- 1400 lb. maximum load capacity

- Lula Elevators
 - Lula Nationwide Lifts: lula-elevators.com
 - Garaventalift: garaventalift.com
 - Able Access Lifts, Inc: www.ableaccesslifts.com



HOPE BUILDING RENOVATION ALBUQUERQUE, NM



HOPE BUILDING RENOVATION ALBUQUERQUE, NM



**TAICHERT BUILDING
LAS VEGAS, NM**



**OLD AIR TERMINAL
ALBUQUERQUE, NM**



**CORONADO SCHOOL
ALBUQUERQUE, NM**



**CHRISTINA KENT DAY CARE
ALBUQUERQUE, NM**