

Upstairs Downtown

Building Assessment/ Upper floor

- What does the space want to be?
- What was the last known legal use?
 - If you are not changing use (or Occupancy type) the work may be able to be completed under a repair permit.
- What is the square footage of the space?
 - The number of required exits is determined by the occupancy load, which is the square footage divided by the allowable square footage per occupant (residential is 200sq ft per occupant). For example, a second floor is allowed to have one exit as long as the occupancy load is not above 10.
- How many exits does the space have?
 - Typical Main Street buildings only have one exit to the ground floor; the IBC allows this if there are no more than 4 units per floor and common path of travel within the unit to the exit does not exceed 50 ft.
- What is the distance of the common path of egress?
- How many stories? There are tougher restrictions on three story buildings with regards to means of egress.
- How many windows, what is the size of each and where are they located?
 - The floor plan will likely be determined by the location of the windows. IBC requires that habitable spaces must have an exterior glazing area of not less than 8% of the floor area and a minimum ventilation area of not less than 4% of the floor area. Habitable spaces are defined as “space in a structure for living sleeping, eating or cooking.” Hallways, bathrooms, closets and utility space are not considered habitable.
- What is the fire rating of the corridor?

A major issue with upper floor redevelopment

- The IBC requires a 2-hour fire rating for the separation of occupancy types (commercial at ground floor, residential above). To meet this requirement 2 layers of 5/8” dry wall can be installed on the ceiling of the first floor space. This becomes a much larger issue if the first floor has a tin ceiling. Several code officials have allowed intumescent paint, which when heated by a fire expands to give the ceiling a 2-hour fire rating. This acceptance is case by case, determined by the local code official.

Each municipality or in some cases counties adopt their own building code, if no building code has been adopted it is up to the code official (or sometimes Fire Marshall) to determine which code to use. The most common building codes are:



International Building Code 2003 (IBC)

- This has a special supplement **The International Existing Building Code (IEBC)** that deals specifically with existing buildings and the type rehabilitation, something no other code has addressed in the past.

National Fire Protection Association Life Safety Code (NFPA 101)

- This code is primarily focused towards new residential construction, when applying to existing buildings it leaves a lot of interpretation up to the local code official.

Chapter 1 A-1-4.4 states

“In Existing buildings, it is not always practical to strictly apply the provisions of this Code. Physical limitations may require disproportionate effort or expense with little increase in life safety. In such cases, the authority having jurisdiction should be satisfied that reasonable life safety is ensured. ”

“In existing building it is intended that any condition that represents a serious threat to life be mitigated by application of appropriate safeguards. It is not intended to require modifications for condition that do not represent a significant threat to life, even though such conditions are not literally in compliance with the Code.”

General rules of thumb

- Parking
 - Some cities have ordinances requiring off-street parking be provided by the building owner. If this is not the case the owner still needs to consider providing parking because it can be a marketing issue. In some cases the owner can set up an agreement with the city or a local business to share parking spaces during off business hours.
- Number of bedrooms
 - In almost every case two bedrooms are more marketable. We have seen instances where a one bedroom is created (meeting all of the light and air requirements) and a second bedroom or “media room” has been created using borrowed light walls, which do not extend to the ceiling (in historic spaces the ceilings are often 12’ tall, so the walls surrounding this room could be 8’ tall).
- Number of sq ft per unit
 - This is often determined by your market, or by the building itself (what can be readily achieved in the existing space).

