## Interior Architecture Ohio University College of Fine Arts School of Art + Design

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## Codes Checklist For Interiors Projects

Interior design projects are affected by, and required to meet the requirements of, building codes.

The following items are typically required items for an interior design project. Special projects may involve other code required components.

Identify the Following Aspects Of The Existing Building/Project Site
Building's Construction Type (Section 602 of IBC Code) (Type I, II, III, IV, or V)
Number of stories of the building
Does the building have a Sprinkler system: Yes No
What is the total Gross square feet of the existing building per floor
What is the Net square feet of existing building per floor
Building floor to floor height(s):
<u>Design Project Estimates</u> (At this point in time you are projecting forward, imagining, what your project will be, or wil consist of)
Total Gross square footage of projected project:
% Gross Area Assumed for Circulation:
(Depends upon the kind of design/character that will be create: there are standard reference points to begin with)
Circulation in actual square feet total
Square feet gross area available after circulation is allowed for

**Occupancy Loads, Occupancy Types and Exiting** 

Space Type (list the different kinds of spaces within the project)	Occupancy Category Section 302.1 lists the code classification of these.	Square feet (from your bubble diagram estimates)		Load Factor Code Table 1004.1.2		Max # of occupants that will be allowed by code	Notes
			÷		=		
			÷		=		
			÷		=		
			÷		=		
			÷		=		

Project Total # Occupants:	
	<del></del>
Total number of required (by code) exits (Tables 1018.1 & 1018.2)	

**Egress:** How occupants move through, and out of, an interior, especially in the event of a fire.

#### Some relevant terms:

*Exit access* = Rooms, spaces, aisles, hallways, unprotected corridors.

Based upon the total number of occupants and the type of occupancy

*Exit* = provides a protected path of egress from the exit access (for instance, a room) and the exit discharge. (Example: a fire-protected common hallway)

Exit discharge = portion of the egress between the termination of an exit and a public way. (Most of the time a public way is outside the building). (An exterior emergency staircase is an example of an exit discharge.) A lobby can be an exit discharge if it is visible, sprinklered, and separated by firewalls from the previous areas.

**Exit locations:** Draw an outline of the building's footprint. 'Half diagonal' rule: Show drawing calculation for minimum distance that two exits can be placed apart from each other. Also show the third exit which must be placed as remotely as possible from the other two.

[draw building footprint here and show minimum distance]

Exits (stairs or doors leading directly to the outside) are required to be a minimum distance apart based upon the occupancy type and the occupant load (number of people)

Faress	Width	(Code table	1005 1)
Lui 533	vviatii	(Code lable	1005.11

What is the minimum allowed/required width for corridors and stairs?

This is determined by the type of occupancy (what is the function of the space) and the number of occupants in the space(s).

#### Corridors on first floor

Total occupancy load (# of people on all floors that will use this corridor to get out.*)		Width factor "other egress components"= corridors		Minimum width (may be superseded by other codes)	Minimum corridor width to be used
	Χ		=		

Stairs leading from upper floors to first floor (if applicable)

Total occupancy load (# of people) for upper floors		Width factor Stairways = stairs		Minimum width (may be superseded by other codes)	Minimum corridor width to be used
	Х		=		

<sup>\*</sup>If you have two different occupancy types (for example office, and assembly) on one floor:

- Add up all the office space square footages, then divide by the load factor of 100 (from table 10A) to get the occupancy load.
- Do the same for the assembly spaces, dividing by its assembly load factor.
- Add the 2 occupancy load numbers together to get the total floor occupancy load.

**Exit access travel distance** = the total maximum allowed distance to travel (walk) through interior spaces to get to an exit (for example, a fire-protected hallway) from any point in that occupancy (table 1015.1): An exit path **may not go through a room** en route to the exit stair or exit door.

Maximum travel distance in your project for Occupancy Type 1: =  Total max distance allowed by code:
Maximum travel distance in your project for Occupancy Type 2: =  Total max distance allowed by code:
Maximum travel distance in your project for Occupancy Type 3: =  Total max distance allowed by code:

•	Required separation of diffe	rent occupancies in hours (	(for hour ratings	of walls) between
	Occupancy 1	and Occupancy 2	2=	:

#### Code Table 302.3.2

•	Minimum corridor width for 2 passing wheelchairs per ADA
•	Minimum door opening width per ADA \
•	Doors, when fully open, will not protrude into the <u>required corridor width</u> more than
•	Doors shall have push/pull flat, unobstructed wall space next to the latch side of minimum 24" (18" in special exception cases as outlined in ADA p. 11.67)
•	Dead end corridor maximum length =
•	No object may protrude from vertical plane more than* between* and* Above Finished Floor (AFF)
•	ADA required wheelchair turning radius ="
•	Major corridors are required to be a minimum of wide.
•	Corridors associated with other areas and secondary corridors are ADA minimum of" wide.
•	Means of egress doors must swing in direction of exit travel. – True Statement <i>Exceptions:</i> Doors leading to areas of occupancy for 50 or less persons.
FI	oor Level Changes
•	Given the project type and size, elevators must be a minimum size of" wide x" deep
R	amps
•	Minimum width of a ramp ="
•	Maximum Slope & Rise of a ramp = 1:12 Maximum incline
•	Maximum length of a ramp before a landing must occur:'
•	Handrails are necessary on both sides if a ramp is longer than"
•	Handrails must extend minimum of" beyond stair or ramp end.
•	Handrails must be between and AFF.

St	airs
•	Minimum riser height allowed by code ="
•	Maximum riser height allowed by code ="
•	Minimum tread depth allowed by code =
•	A flight of stairs shall not have a vertical rise greater than 12 feet (3658 mm) between floor levels or landings.
•	Project floor to floor height:' = A specific number of risers required for stair:(calculate a possible legal stair riser and tread size given the building floor to floor height)
•	Landings on a stairway are a minimum of" clear at bottom and top.  Landings on a stairway are at least" x" at a direction change in the stairway
•	Minimum headroom (clearance above a person's head) within a stairwell =

# Plumbing Table 403.1

Project Space Type	Occupancy category	Occ. load	Water closets	Urinals	Lavatories	Quantity Accessible/ ADA	Water Fountains	Other
			М		М			
			F					
					F			
			М		М			
			F		F			
			М		М			
			F		F			

- Walls with plumbing/drainage will typically need to be 10" in total thickness to allow space inside the wall construction to contain vertical and/or horizontal running pipes.
- Consideration is given, as possible, to grouping plumbing within floor plates as well as across floors for economy. True Statement
- · Water fountains conform to ADA for approach and height.

### **Fire Suppression**

• Fire hose cabinets
Every point on a floor must lie within reach of a 30' stream from the end of a 100' fire hose.

A typical recessed wall cabinet for a wet standpipe hose and fire extinguisher is 2'9" wide and 2'9" tall. (note this with an arrow and label in your plan views.)

## Flame Spread Rating Requirements of Finishes Code Table 803.5

Record the strictest flame spread rating that occurs over all the listed occupancies.

Space type	Vertical exit (stairs) and exit passageways (fire protected corridors)	Other corridors and hallways	Rooms & enclosed spaces
Occupancy 1			
Occupancy 2			
Occupancy 3			

#### Other

- Existing structural columns generally must remain in their current location and size.
- Walls respect window openings: no wall abruptly ends at a window opening. Structure is
  designed with sensitivity to window placement both in and outside the building. Interior
  walls/partitions that end into the building perimeter/exterior wall need to end at solid walls,
  NOT into windows.
- All transaction counters are required by ADA to have an accessible portion that is minimum 36" in length and maximum 34" in height for accessibility.