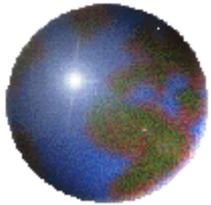
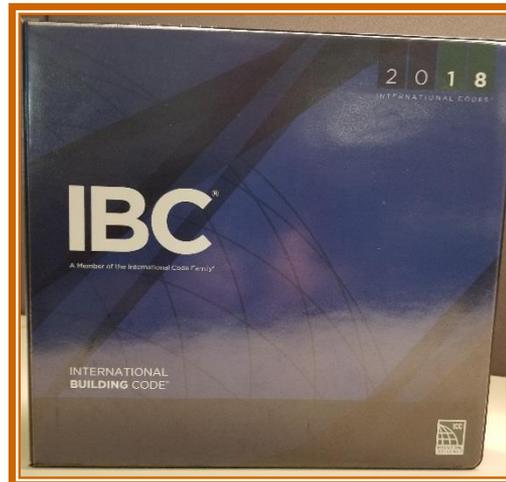


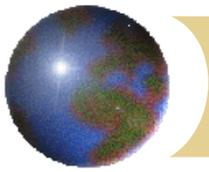


City of Yuma



The
2018 International Building Code®

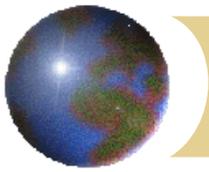




2018 International Building Code®

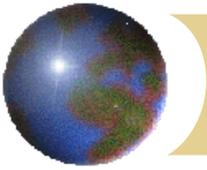


- ✚ Replaces the 2012 IBC.
- ✚ Provides consistency through coordination with the 2018 International I-Code series.



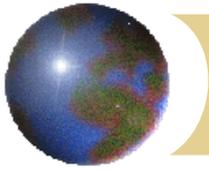
Document Availability

- ✦ A copy of the 2018 IBC is available for review at the City Clerk's office and Department of Community Development.
- ✦ The 2018 IBC is available to view for free online or purchase at www.iccsafe.org or by phone at 1-800-786-4452. Softcover: \$110.00.
- ✦ City of Yuma Amendments to the 2018 IBC are available on City of Yuma Website or from the Community Development Customer Counter at the cost of reproduction: Approx. \$6.50



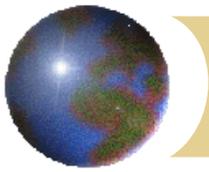
Important Dates

- ❖ 2018 IBC Code is currently in effect, as of January 5, 2019. A 90-Day Transition period is in effect until April 1, 2019, during which time either the 2012 IBC or 2018 IBC Codes may be used.
- ❖ Permit applications in process and permits already issued under the 2012 IBC will be inspected under that Code.
- ❖ Use of the 2018 IBC is mandatory for new permit applications on April 1, 2019.



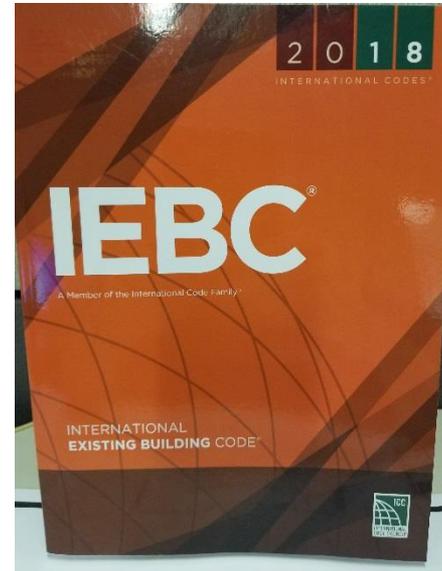
Review Objective

- ✦ Inform the construction community about the new 2018 IBC Code
- ✦ Review the code updates and important changes from the 2012 IBC Code

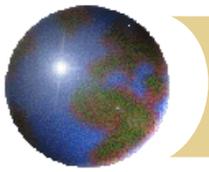


Chapter 1 Administration

Existing Buildings



- ❁ **Provisions for existing buildings are removed from the IBC and are now entirely within the 2018 International Existing Building Code (IEBC).**



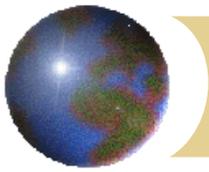
Chapter 1 Administration (cont.)

Section 109 Fees.

\$\$\$

- ❖ **Permit Valuation & Fee Table remains unchanged.**

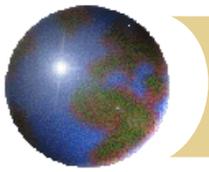




Chapter 3-Occupancy Classification and Use.

Institutional I-1 and I-2 and Residential R-4 Occupancies.

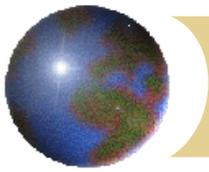
- ✦ **Subgroups for “Condition 1” and “Condition 2”, with definitions and requirements for each in Ch. 4 & 9.**



Chapter 3-Occupancy Classification and Use (cont.).

Institutional I-1 and Residential R-4 Occupancies (Assisted Living):

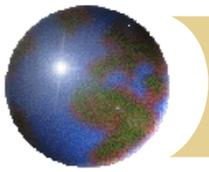
- ✦ **Condition 1: Persons receiving custodial care, and are capable of responding to an emergency situation to evacuate the building.**
- ✦ **Condition 2: Persons receiving custodial care, who require limited verbal or physical assistance while responding to an emergency situation to evacuate the building.**



Chapter 3-Occupancy Classification and Use (cont.).

Institutional I-2 (Hospitals and Nursing Homes):

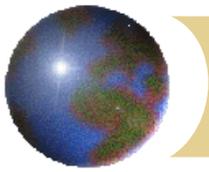
- ✿ **Condition 1: Nursing and Medical care, but no emergency care, surgery, obstetrics, etc. (such as nursing homes).**
- ✿ **Condition 2: Nursing and medical care, but could provide emergency care, surgery, obstetrics, etc. (such as hospitals).**



Chapter 3-Occupancy Classification and Use (cont.).

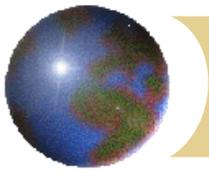
Institutional I-2 (Hospitals and Nursing Homes):

- ✿ **Condition 1: Nursing and Medical care, but no emergency care, surgery, obstetrics, etc. (such as nursing homes).**
- ✿ **Condition 2: Nursing and medical care, but could provide emergency care, surgery, obstetrics, etc. (such as hospitals).**



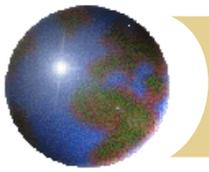
Chapter 4-Special Detailed Requirements Based on Occupancy.

- **Group I-2, Condition 2 (Hospitals). Size of smoke compartments increased to 40,000 SF.**
- **Group I-2, Condition 1 (Nursing Homes):**
 - **Domestic cooking equipment allowed in corridors, with criteria (11 requirements). Similar for I-1.**
 - **Criteria for furniture located in corridors (6 req'mt).**
- **Provisions added in Ch. 4 for Medical Gas into IBC.**



Chapter 5-General Building Heights and Areas.

- ❖ **503.1.4. Provisions added for occupied roofs.**
- ❖ **Table 504.3. Separate table added for Allowable Building Heights for each occupancy classification/type of construction.**
- ❖ **Table 504.4. Separate table added for Allowable Number of Stories, for each occupancy/type of construction, based on whether the building is sprinklered/non-sprinklered, and type of sprinkler system (where applicable).**
- ❖ **Table 506.2. Separate table added for Allowable Building Areas, based on whether building is sprinklered/non-sprinklered (no longer a formula).**

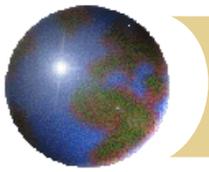


Chapter 5-General Building Heights and Areas (cont.).

Table 504.3 Allowable Building Height:

TABLE 504.3
ALLOWABLE BUILDING HEIGHT IN FEET ABOVE GRADE PLANE³

OCCUPANCY CLASSIFICATION	SEE FOOTNOTES	TYPE OF CONSTRUCTION								
		TYPE I		TYPE II		TYPE III		TYPE IV	TYPE V	
		A	B	A	B	A	B	HT	A	B
A, B, E, F, M, S, U	NS ^b	UL	160	65	55	65	55	65	50	40
	S	UL	180	85	75	85	75	85	70	60
H-1, H-2, H-3, H-5	NS ^{c, d}	UL	160	65	55	65	55	65	50	40
	S									
H-4	NS ^{c, d}	UL	160	65	55	65	55	65	50	40
	S	UL	180	85	75	85	75	85	70	60
I-1 Condition 1, I-3	NS ^{d, e}	UL	160	65	55	65	55	65	50	40
	S	UL	180	85	75	85	75	85	70	60
I-1 Condition 2, I-2	NS ^{d, e, f}	UL	160	65	55	65	55	65	50	40
	S	UL	180	85	75	85	75	85	70	60
I-4	NS ^{d, g}	UL	160	65	55	65	55	65	50	40
	S	UL	180	85	75	85	75	85	70	60
R ^h	NS ^d	UL	160	65	55	65	55	65	50	40
	S13D	60	60	60	60	60	60	60	50	40
	S13R	60	60	60	60	60	60	60	60	60
	S	UL	180	85	75	85	75	85	70	60

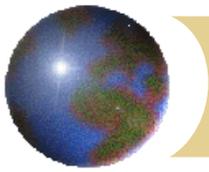


Chapter 5-General Building Heights and Areas (cont.).

Table 504.4 Allowable Number of Stories:

TABLE 504.4
ALLOWABLE NUMBER OF STORIES ABOVE GRADE PLANE^{a, b}

OCCUPANCY CLASSIFICATION	SEE FOOTNOTES	TYPE OF CONSTRUCTION								
		TYPE I		TYPE II		TYPE III		TYPE IV	TYPE V	
		A	B	A	B	A	B	HT	A	B
A-1	NS	UL	5	3	2	3	2	3	2	1
	S	UL	6	4	3	4	3	4	3	2
A-2	NS	UL	11	3	2	3	2	3	2	1
	S	UL	12	4	3	4	3	4	3	2
A-3	NS	UL	11	3	2	3	2	3	2	1
	S	UL	12	4	3	4	3	4	3	2
A-4	NS	UL	11	3	2	3	2	3	2	1
	S	UL	12	4	3	4	3	4	3	2
A-5	NS	UL	UL	UL	UL	UL	UL	UL	UL	UL
	S	UL	UL	UL	UL	UL	UL	UL	UL	UL
B	NS	UL	11	5	3	5	3	5	3	2
	S	UL	12	6	4	6	4	6	4	3
E	NS	UL	5	3	2	3	2	3	1	1
	S	UL	6	4	3	4	3	4	2	2
F-1	NS	UL	11	4	2	3	2	4	2	1
	S	UL	12	5	3	4	3	5	3	2
F-2	NS	UL	11	5	3	4	3	5	3	2

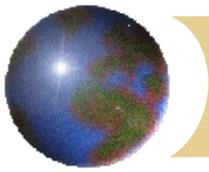


Chapter 5-General Building Heights and Areas (cont.).

Table 506.2 Allowable Area Factor in Square Feet:

TABLE 506.2
ALLOWABLE AREA FACTOR (A_i = NS, S1, S13R, S13D or SM, as applicable) IN SQUARE FEET^{a, b}

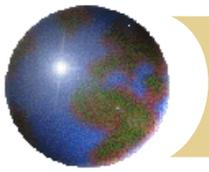
OCCUPANCY CLASSIFICATION	SEE FOOTNOTES	TYPE OF CONSTRUCTION								
		TYPE I		TYPE II		TYPE III		TYPE IV	TYPE V	
		A	B	A	B	A	B	HT	A	B
A-1	NS	UL	UL	15,500	8,500	14,000	8,500	15,000	11,500	5,500
	S1	UL	UL	62,000	34,000	56,000	34,000	60,000	46,000	22,000
	SM	UL	UL	46,500	25,500	42,000	25,500	45,000	34,500	16,500
A-2	NS	UL	UL	15,500	9,500	14,000	9,500	15,000	11,500	6,000
	S1	UL	UL	62,000	38,000	56,000	38,000	60,000	46,000	24,000
	SM	UL	UL	46,500	28,500	42,000	28,500	45,000	34,500	18,000
A-3	NS	UL	UL	15,500	9,500	14,000	9,500	15,000	11,500	6,000
	S1	UL	UL	62,000	38,000	56,000	38,000	60,000	46,000	24,000
	SM	UL	UL	46,500	28,500	42,000	28,500	45,000	34,500	18,000
A-4	NS	UL	UL	15,500	9,500	14,000	9,500	15,000	11,500	6,000
	S1	UL	UL	62,000	38,000	56,000	38,000	60,000	46,000	24,000
	SM	UL	UL	46,500	28,500	42,000	28,500	45,000	34,500	18,000
A-5	NS									
	S1	UL	UL	UL	UL	UL	UL	UL	UL	UL
	SM									
B	NS	UL	UL	37,500	23,000	28,500	19,000	36,000	18,000	9,000
	S1	UL	UL	150,000	92,000	114,000	76,000	144,000	72,000	36,000
	SM	UL	UL	112,500	69,000	85,500	57,000	108,000	54,000	27,000
	NS	UL	UL	26,500	14,500	23,500	14,500	25,500	18,500	9,500



Chapter 9-Fire Protection and Life Safety Systems.



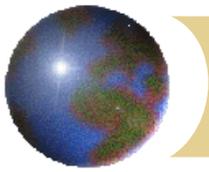
- ✦ **910.3 Smoke and heat vents. Requirement for draft curtain boards in large Group F Factory and S Storage Occupancies no longer applicable (removed from IBC).**
- ✦ **915 Carbon Monoxide (CO) Detection. Requirement for CO detectors added in Group E, I, and R Occupancies (refer to requirements and exceptions).**



Chapter 10-Means of Egress.

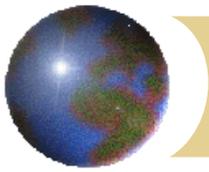


- ✦ **Chapter/Sections reformatted.**
- ✦ **Table 1004.5. Revised Occupant Load Factors (OLF) for Business (1:150) and Mercantile (1:60) – may result in reductions in # of exits, exit width, and toilet fixtures. Added OLF for Concentrated Business [call centers, trading floors, etc.] (1:50).**
- ✦ **1008 Means of egress illumination. Battery backup power required for lighting in electrical rooms and fire pump rooms. Means of egress illumination is required at exterior exit discharge from the exits to the public way or safe dispersal area (but not battery backup power).**



Chapter 10-Means of Egress (cont.).

- ❖ **1010 Doors, gates and turnstiles.**
 - **New door locking arrangements for Group E and B Educational occupancies (security concerns).**
 - **Closet doors that latch are to be openable from the inside.**
 - **New door locking arrangements in Group I-1 and I-2 occupancies for electronically monitored/recorded egress, delayed egress, electrically locked doors, and controlled egress (security and containment).**

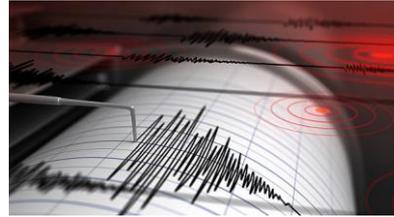


Chapter 10-Means of Egress (cont.).

- ❖ **1011.14 (et al). Alternating tread devices, Ships Ladders, and Ladders allowed for limited uses.**
- ❖ **1015 Guards. Listed fall arrest anchorage devices (design load req'mt. in Ch. 16) allowed in lieu of guards for mechanical equipment and roof hatches close to roof edges.**
- ❖ **1017.2.2. Travel distance increased to 400 feet in Groups F-1 and S-1 Occupancies, with conditions:**
 - **One story building.**
 - **Minimum 24 feet height to ceiling/roof deck.**
 - **Fire sprinklers throughout building.**

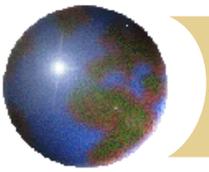


Chapter 16-Structural Design.



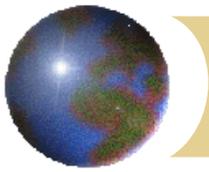
Wind and Seismic Design Forces have decreased in the 2018 IBC (ASCE 7-16)

- ❖ **Figure 1609.3(1). Basic Wind Speed in City of Yuma = 99 mph (Ultimate/Strength Level).**
- ❖ **1613.2.5. All locations in City of Yuma to be classified as Seismic Design Category (SDC) "D" (for seismic force resisting systems & detailing).**



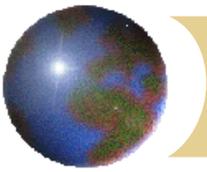
Chapter 16-Structural Design (cont.).

- ❖ **Table 1607.1 Live Loads. Live loads for balconies/decks changed to 1.5 x Live Load for occupancy served (max. 100 psf).**
- ❖ **1607.10.4 Fall arrest and lifeline anchorages. Loading requirement of 3,100# for each attached lifeline, to be applied in every direction that a fall arrest load can be applied (details needed on Plans).**



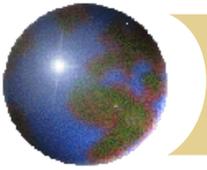
Chapter 17-Special Inspections and Tests.

- ❖ **1704.2.5.1. Criteria included to evaluate approval of fabricators, for exemption from Special Inspections for shop fabrications.**
- ❖ **1704.5. Additional submittal items during construction, Certificates of Compliance (steel joists, shop fabrications, etc.**
- ❖ **1705.2.3. Periodic Special Inspections required for steel joists (end connections and bridging).**



Chapter 23-Wood.

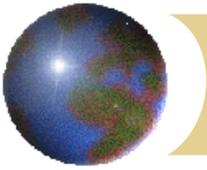
- ❖ **2303.1. New recognized materials/standards in IBC: Log Structures, Cross-Laminated Timbers, Engineered Wood Rim Board**
- ❖ **2302.2/2302.4. Fire-Retardant-Treated Wood. Coatings and surface treatments are NOT acceptable; must be pressure treated process. Each piece of lumber to be labeled.**
- ❖ **Table 2304.10.1. Added 8d Common and Ring-Shank Nails for attachment wood structural panel sheathing.**
- ❖ **2304.12.2.5/6. Added detailing reqmts. For impermeable floors/ventilation for impermeable floor balconies/decks.**



Chapter 29-Plumbing Fixtures.



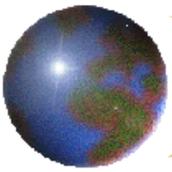
- ✦ **[P]2902.2. New exception for single unisex toilet room in Business Occupancies with an occupant load of 25 and fewer. (Offices up to 3,750 SF).**
- ✦ **[P]2902.3. Exception that public toilets not required for “quick service” facilities for pick-up/drop-off where the public access space is less than 300 SF (dry cleaners, pizza pickup, etc.).**



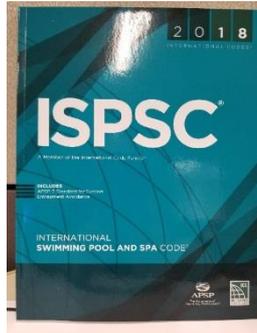
Chapter 30-Elevators



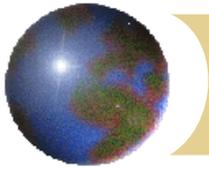
- ❖ **3002. Hoistway enclosures. Elevator hoistway venting is no longer required.**
- ❖ **3001.2. New requirements for communications systems in elevators for deaf, hearing and speech impaired persons (2010 ADA also applicable).**



Chapter 31-Special Construction.



- ❖ **3105.3. Awnings/Canopy Materials, added fire resistance listings/compliance options.**
- ❖ **3109. Requirements for Commercial Pools removed from IBC into new 2018 ISPSC Swimming Pool Code (in conjunction with APSP).**
- ❖ **Added provisions for solar energy systems and relocatable buildings.**



Review of Code updates



Questions ???

