

## CODE ANALYSIS - TYPICAL NEW DECA COMMISSARY FACILITY

#### **JUNE 2022**

CODE ANALYZED : UNIFIED FACILITIES CRITERIA, UFC 1-200-01, 8 October 2019

<u>NO.</u>	ITEM	SUMMARY OF REQUIREMENTS	REFERENCE	PAGE
1	STRUCTURE OF ANALYSIS	UFC 1-200-01 REFERENCES OTHER UFC AND MODEL MODELS CODES. UFC AND MODEL CODES ( THAT ARE PERTINENT TO THIS REVIEW) ARE LISTED BELOW:	UFC 1-200-01 1-6	5
		<ul> <li>- UFC 3-600-01 08 AUGUST 2016 with Change 4 - 7 February 2020</li> <li>- IBC 2018 CODE AND COMMENTARY (Referenced herein as IBC)</li> <li>- NFPA 101, 2018 (Referenced herein as NFPA)</li> <li>- ABA ACCESSIBILITY STANDARDS FOR DEPARTMENT OF DEFENSE FACILITIES - 2015 (Reference herein as ADA/ABA)</li> <li>- ADDITIONAL UFC'S, REFERENCED CODES AND STANDARDS AS LISTED IN APPENDIX A</li> </ul>		
		CONCLUSIONS AND DESIGN NOTES ARE SHOWN IN BOLD AND ITALICIZED RED COLOR FONT		
2	ABSENCE OF CRITERIA	WHEN A SPECIFIC APPLICATION IS NOT COVERED BY THE CRITERIA SPECIFIED IN THE UFC, FOLLOW NATIONAL BUILDING CODES, RECOGNIZED INDUSTRY STANDARDS, AND STANDARD ENGINEERING PRACTICES. IN THE ABSENCE OF SUCH TECHNICAL INFORMATION, CONTACT THE DOD COMPONENT AUTHORITY HAVING JURISDICTION (AHJ)	UFC 3-600-01 1- 4.2.6	3
2.1	CONFLICTS IN CRITERIA	IF CONFLICT EXISTS BETWEEN THE UFC'S AND ANY OTHER DoD DOCUMENT, REFERENCED CODE, STANDARD OR PUBLICATION, PLEASE SEE UFC HIERARCHY	UFC 1-200-01 1- 3.4	2
2.2	ANTITERRORISM STANDARDS	ANTITERRORISM REQUIREMENTS MUST NOT PRECLUDE ANY FIRE PROTECTION REQUIREMENTS	UFC 3-600-01 1- 4.4	3
2.3	DESIGN ANALYSIS	FIRE PROTECTION DESIGN ANALYSIS IS REQUIRED	UFC 3-600-01 1- 7.2	4



NO.	ITEM	SUMMARY OF REQUIREMENTS	REFERENCE	PAGE
2.4	BASIC CRITERIA	EXTERIOR FIRE RESISTANCE REQUIREMENTS, ALLOWABLE FLOOR AREA, BUILDING HEIGHT LIMITATIONS, AND SEPARATION DISTANCE REQUIREMENTS SHALL CONFORM TO IBC; NFPA 101 SHALL BE USED FOR INTERIOR FIRE RESISTANCE, SAFETY TO LIFE, MEANS OF EGRESS, AND OCCUPANT LOADS	UFC 3-600-01 3-2 and 3-3	24
3	USE AND OCCUPANCY CLASSIFICATION	USE CHAPTER 3 OF IBC AND UFC 3-600-01. IF ANY CONFLICTS OCCUR, THE REQUIREMENTS OF UFC 3-600-01 TAKE PRECEDENCE	UFC 1-200-01 2-3	16
3.1	"CONSTRUCTION" OCCUPANCY CLASSIFICATION	STRUCTURES OR PORTIONS OF STRUCTURES SHALL BE CLASSIFIED WITH RESPECT TO OCCUPANCY GROUPS LISTED BELOW. STRUCTURES WITH MULTIPLE OCCUPANCIES OR USES SHALL COMPLY WITH SECTION 508	IBC 302.1	45
		THE FOLLOWING OCCUPANCIES ARE PART OF A TYPICAL COMMISSARY:		
		GROUP "M" - MERCANTILE (SALES AREAS) display and sales of merchandise i.e. markets	IBC 309	52
		GROUP "B" - BUSINESS (OFFICE AREAS) office including storage of records	IBC 304	46
		GROUP "S-1" - STORAGE (MODERATE HAZARD) storage of bags, cardboard and cardboard boxes, grains, soaps, sugar, tobacco	IBC 311.2	53
		GROUP "S-2" - STORAGE (LOW HAZARD) storage of non-combustible materials as products on wood pallets or in paper cartons, I.e. food products, fresh fruits & vegetables, etc. NO REASON TO INCLUDE THIS USE SINCE MORE RESTRICTIVE USE "S-1" IS ALREADY INCLUDED	IBC 311.3	54
		GROUP " F-1 " - FACTORY (MODERATE HAZARD) food processing areas Meat, Produce, and Bakery/Deli	IBC 306.2	47
3.2	MIXED OCCUPANCIES	EACH PORTION OF A BUILDING SHALL BE INDIVIDUALLY CLASSIFIED IN ACCORDANCE WITH SECTION 302.1	IBC 508.1	113
		WHERE A BUILDING CONTAINS MORE THAN ONE OCCUPANCY GROUP, THE BUILDING OR PORTION THEREOF SHALL COMPLY WITH SECTIONS 508.2 (ACCESSORY OCCUPANCIES), 508.3 (NONSEPARATED OCCUPANCIES), 508.4 (SEPARATED OCCUPANCIES) OR A COMBINATION OF THESE SECTIONS.		



CODE ANALYZED :

## DEFENSE COMMISSARY AGENCY DIRECTORATE OF PERFORMANCE AND POLICY FACILITIES PROGRAMMING AND PLANNING DIVISION Fort Lee, Virginia FACILITIES CONSTRUCTION AND SUSTAINMENT DIVISION Lackland AFB, Texas

UFC 1-200-01, 8 OCTOBER 2019

		0101-200-01, 0 0010BEN 2013		
NO.	ITEM	SUMMARY OF REQUIREMENTS	REFERENCE	PAGE
		DeCA COMMISSARY FACILITIES ARE TYPICALLY MIXED USE OCCUPANCIES		
3.3	ACCESSORY OCCUPANCIES	ACCESSORY OCCUPANCIES ARE THOSE OCCUPANCIES SUBSIDIARY TO THE MAIN OCCUPANCY OF THE BUILDING OR PORTION THEREOF. AGGREGATE ACCESSORY OCCUPANCIES SHALL NOT OCCUPY MORE THAN 10 PERCENT OF THE AREA OF THE STORY IN WHICH THEY ARE LOCATED AND SHALL NOT EXCEED VALUES IN TABLE 503	IBC 508.2	114
		GROUP "F-1" FACTORY - MODERATE HAZARD (FOOD PROCESSING ) AREAS ARE TYPICALLY LESS THAN 10% OF FLOOR AREA - SO CONSIDERED ACCESSORY USE . IF GREATER THAN 10% OF FLOOR AREA THEN ADD TO MAIN USE		
3.4	INCIDENTAL USE AREAS	PROTECTION FROM ANY AREA HAVING A DEGREE OF HAZARD GREATER THAN THAT NORMAL TO THE GENERAL OCCUPANCY OF THE BUILDING OR STRUCTURE MUST BE PROTECTED USING A SPRINKLER SYSTEM IN THE SPACE, SEPARATING THE SPACE WITH 1-HOUR BARRIERS, OR BOTH IF THE HAZARD IS SEVERE NFPA DOES NOT IDENTIFY EXAMPLES OF THESE SPACES, PLEASE SEE IBC 509 FOR EXAMPLES OF SPACES THAT SHOULD HAVE EXTRA PROTECTION:	NFPA 101 8.7	105
		COMMON COMMISSARY INCIDENTAL USE AREAS :		
		FURNACE ROOM WHERE LARGEST PIECE OF EQUIPMENT IS OVER 400,000 BTU PER HOUR INPUT - REQUIRES ONE HOUR SEPARATION OR PROVIDE AUTOMATIC FIRE-EXTINGUISHING SYSTEM	IBC 509	116
		ROOMS WITH BOILERS OVER 15 PSI AND 10 HORSEPOWER - REQUIRES ONE HOUR SEPARATION OR PROVIDE AUTOMATIC FIRE-EXTINGUISHING SYSTEM	IBC 509	116
		REFRIGERANT MACHINERY ROOMS - REQUIRES ONE HOUR SEPARATION OR PROVIDE AUTOMATIC SPRINKLER SYSTEM	IBC 509	116

DeCA COMMISSARY CONSTRUCTION IS REQUIRED TO BE FIRE SPRINKLERED - SO NO FIRE RATING REQUIRED



## CODE ANALYZED : UFC 1-200-01, 8 OCTOBER 2019

IBC CHAPTER 9.

NO.	ITEM	SUMMARY OF REQUIREMENTS	REFERENCE	PAGE
		IN NEW CONSTRUCTION WHERE PROTECTION IS PROVIDED WITH AN AUTOMATIC FIRE-EXTINGUISHING SYSTEM WITHOUT A FIRE BARRIER, THE SPACE SHALL BE SEPARATED BY SMOKE BARRIERS UNLESS THE SEPARATED SPACE IS A MERCANTILE GENERAL STORAGE OR STOCKROOM. THE WALLS SHALL EXTEND FROM THE FLOOR TO THE UNDERSIDE OF THE FIRE-RESISTANCE-RATED FLOOR/CEILING ASSEMBLY OR TO THE UNDERSIDE OF THE FLOOR OR ROOF DECK ABOVE. DOORS SHALL BE SELF- CLOSING OR AUTOMATIC CLOSING UPON DETECTION OF SMOKE. DOORS SHALL NOT HAVE AIR TRANSFER OPENINGS AND SHALL NOT BE UNDERCUT IN EXCESS OF CLEARANCE PERMITTED IN ACCORDANCE WITH NFPA 80.	NFPA 101 8.7.1.2(1), 8.4 IBC 509.4.2	105 100 115
		SMOKE PARTITIONS (AND ASSOCIATED DOORS) ARE REQUIRED AT INCIDENTAL USE AREAS, LISTED ABOVE, WHERE FIRE SPRINKLERS ARE PROVIDED		
3.5	SEPARATED OCCUPANCIES	INDIVIDUAL OCCUPANCIES SHALL BE SEPARATED FROM ADJACENT OCCUPANCIES IN ACCORDANCE WITH TABLE 508.4	IBC 508.4.4	114
		NO SEPARATION REQUIRED BETWEEN M, B, AND S-1 MAIN OCCUPANCIES (F-1 OCCUPANCY AS WELL IF OVER 10% OF FLOOR AREA, AND THEREFORE A MAIN OCCUPANCY)	Table 508.4	115
		A TYPICAL COMMISSARY WOULD MEET SEPARATED OCCUPANCY CODE CRITERIA BUT SUGGEST CLASSIFYING AS A NONSEPARATED OCCUPANCY TO CLARIFY THAT NO SEPARATION BETWEEN USES ARE REQUIRED		
3.6	NONSEPARATED OCCUPANCIES	EACH PORTION OF THE BUILDING SHALL BE INDIVIDUALLY CLASSIFIED AS TO USE. THE REQUIRED TYPE OF CONSTRUCTION FOR THE BUILDING SHALL BE DETERMINED BY APPLYING THE HEIGHT AND AREA LIMITATIONS FOR EACH OF THE APPLICABLE OCCUPANCIES TO THE ENTIRE BUILDING. THE MOST RESTRICTIVE TYPE OF CONSTRUCTION, SO DETERMINED, SHALL APPLY TO THE ENTIRE BUILDING, ALONG WITH MOST RESTRICTIVE EXITING AND FIRE PROTECTION REQUIREMENTS. OTHER CODE REQUIREMENTS SHALL APPLY TO EACH PORTION OF THE BUILDING BASED ON THE USE OF THAT SPACE. FIRE SEPARATIONS ARE NOT REQUIRED BETWEEN USES, EXCEPT AS REQUIRED BY OTHER PROVISIONS.	IBC 508.3	114
		REMINDER : PER UFC 1-200-01 - FOLLOW NFPA 101 FOR EXITING IN LIEU OF IBC CHAPTER 10 AND USE UFC 3-600-01, IN LIEU OF		



NO.

## DEFENSE COMMISSARY AGENCY DIRECTORATE OF PERFORMANCE AND POLICY FACILITIES PROGRAMMING AND PLANNING DIVISION Fort Lee, Virginia FACILITIES CONSTRUCTION AND SUSTAINMENT DIVISION Lackland AFB, Texas

REFERENCE

PAGE

 CODE ANALYZED :
 UFC 1-200-01, 8 OCTOBER 2019

 ITEM
 SUMMARY OF REQUIREMENTS

 SUGGESTED OCCUPANCY CLASSIFICATION :
 NON-SEPARATED, MIXED OCCUPANCY GROUPS "M"

 MERCANTILE, "B" BUSINESS, AND "S-1" STORAGE (MODERATE

 HAZARD) WITH "F-1" ACCESSORY USE (IF F-1 AREA IS OVER 10%

 BLDG AREA - THEN ADD TO MAIN USE). PER IBC TABLE 508.4 AND

THESE USES.

4 SPECIAL USE UFC 3-600-01( FIRE PROTECTION ENGINEERING) IN LIEU UFC 1-200-01 2-4 16 DETAILED OF IBC CHAPTER 4 REQUIREMENTS BASED ON USE MOST OF IBC CHAPTER 4 ITEMS DO NOT PERTAIN TO DECA AND OCCUPANCY COMMISSARIES, WITH THE EXCEPTION OF SECTION 413 COMBUSTIBLE STORAGE. THERE IS NO DIRECT CORRELATION

NFPA 101 6.1.14.1.3, NO SEPARATIONS ARE REQUIRED BETWEEN

4.1 COMBUSTIBLE LIMITATIONS ON COMBUSTIBLE STORAGE : STORAGE ALL STORAGE SHALL COMPLY WITH UFC 3-600-01 AND NFPA 13. HIGH PILED STOCK OR RACK STORAGE (HIGHER THAN 12'-0" FOR ORDINARY COMBUSTIBLES AND 6'-0" FOR PLASTICS) IN EXCESS OF 500SQFT SHALL COMPLY WITH ADDITIONAL REQUIREMENTS IN NFPA 1 - FIRE CODE

OF THIS SECTION IN UFC 3-600-01 . SEE BELOW.

DeCA DESIGN CRITERIA DOES NOT ALLOW STORAGE IN EXCESS OF 12' HIGH - SO PROVIDE PAINTED WALL SIGNS ON EACH WALL ( OF HIGH CEILING STORAGE ROOMS AND RECEIVING AREA ), AND AT 50' MAX. SPACING ON LONG WALLS, PROHIBITING STORAGE ABOVE 12' HEIGHT

5 GENERAL USE CHAPTER 5 OF IBC. NOTE THAT THE BUILDING AREA UFC 1-200-01 2-5 16 FOR FUNDING AND PLANNING PURPOSES IS CALCULATED **BUILDING HEIGHT** DIFFERENTLY THAT THE METHOD DEFINED IN IBC CHAPTER AND AREAS 5. THIS ANALYSIS TAKES THE POSITION THAT THERE WILL BE TWO DIFFERENT "BUILDING AREAS": - ONE AREA IS THE "GROSS BUILDING AREA" USED ONLY FOR DECA PLANNING PURPOSES (SEE DEFINITION BELOW). - THE OTHER AREA IS THE "BUILDING AREA" AS DEFINED IN IBC AND IS USED FOR ALL CODE RELATED CALCULATIONS (SEE DEFINITION BELOW) 5.1A DECA GROSS GROSS BUILDING AREA: (USED ONLY FOR DECA PLANNING UFC 3-101-01 2-4 BUII DING AREA PURPOSES) . INCLUDES: AREA WITHIN EXTERIOR FACES OF 2.2 EXTERIOR WALLS; AREA OF MEZZANINES; AREA OF EXTERIOR SPACES THAT ARE UNDER ROOF I.E. ENTRY CANOPIES, LOADING PLATFORMS, COVERED WALKS, ETC. ( FIGURED AT ONE-HALF ACTUAL AREA).

NOTE: THIS AREA MAY BE LARGER THAN THE IBC BUILDING AREA



NO.	ITEM	SUMMARY OF REQUIREMENTS	REFERENCE	PAGE
5.1B	IBC GROSS FLOOR AREA	THE AREA WITHIN THE <u>INTERIOR</u> FACE OF EXTERIOR WALLS, EXCLUSIVE OF VENT SHAFTS AND COURTS. MEZZANINES AND ROOF-COVERED EXTERIOR AREAS TYPICALLY DO NOT ADD TO THIS NUMBER ( SEE CODE EXCEPTIONS ) BUILDING AREAS NOTED IN ANALYSIS BELOW REFER TO THE IBC BUILDING AREA	IBC 202 DEFINITIONS	26
5.2	HEIGHT AND AREA LIMITATIONS	THE BUILDING HEIGHT AND AREA SHALL NOT EXCEED THE LIMITS SPECIFIED IN TABLE 504.3, TABLE 504.4, AND 506.2.	IBC 503	103-111
		NEW FACILITIES ARE REQUIRED TO BE SPRINKLERED NON- COMBUSTIBLE CONSTRUCTION - SO CALCULATIONS BELOW ASSUME A TYPE II B CONSTRUCTION, SPRINKLERED, ONE-STORY		
		GROUP "M" - MERCANTILE (MAIN USE GROUP) 3 STORIES OR 75 FEET AND 50,000 SF		
		GROUP "B" - BUSINESS (MAIN USE GROUP) 4 STORIES OR 75 FEET AND 92,000 SF		
		GROUP "S-1" - STORAGE (MAIN USE GROUP) 3 STORIES OR 75 FEET AND 70,000 SF		
		GROUP "F-1" - FACTORY (ACCESSORY USE) 3 STORIES OR 75 FEET AND 62,000 SF		
		IAW NON-SEPARATED OCCUPANCY REQUIREMENTS, NOTED ABOVE, BUILDING MUST MEET MOST STRINGENT REQUIREMENTS OF HEIGHT AND AREA OF ALL THE <u>MAIN</u> OCCUPANCIES.		
		TABULAR MAXIMUM AREA, HEIGHT & STORY LIMITS: MAX. AREA: 50,000 SF MAX HEIGHT: 75' HEIGHT MAX. STORIES : 3 STORIES		
		SEE AREA, HEIGHT AND STORY MODIFICATIONS AS IDENTIFIED BELOW:		
5.4	AREA MODIFICATIONS	AREA LIMITS OF TABLE 506.2 SHALL BE PERMITTED TO BE INCREASED DUE TO FRONTAGE (If) IN ACCORDANCE WITH EQUATION 5-1 : Aa = At + (NS x If)	IBC 506.2.1	108



	CODE ANALYZED :	UFC 1-200-01, 8 OCTOBER 2019		
NO.	ITEM	SUMMARY OF REQUIREMENTS	REFERENCE	PAGE
		Aa = ALLOWABLE AREA At = AREA OF MOST RESTRICTIVE OCCUPANCY (USING NS, S1, OR SM) = MERCANTILE = 50,000 SF		
		NS = TABULAR AREA OF OCCUPANCY USING NONSPRINKLERED VALUE, REGARDLESS OF WHETHER BUILDING IS SPRINKLERED OR NOT If = INCREASE DUE TO BUILDING FRONTAGE		
		If = [ F / P - 0.25 ] x W / 30 (Equation 5-5)	IBC 506.3	108
		F = BUILDING FRONTAGE THAT FRONTS ON PUBLIC WAY (IN FEET) P = TOTAL BUILDING PERIMETER (IN FEET) W = WIDTH OF PUBLIC WAY (IN FEET) (MAY NEED TO AVERAGE) - PER 506.2.1		
		NOTE : DESIGNER MUST USE FORMULAS 5-5 AND 5-1 TO DETERMINE ACTUAL ALLOWABLE AREA. MAXIMUM AREA ALLOWED IS 59,375 S.F. WHICH IS FOR A SPRINKLERED BUILDING WITH A 30' WIDE (MINIMUM) PUBLIC WAY ALL AROUND BUILDING. THIS MAXIMUM AREA WILL BE SIGNIFICANTLY REDUCED IF BUILDING IS NOT SPRINKLERED (THOUGH SPRINKLERS ARE REQUIRED BY CURRENT UFC) AND IF BUILDING IS NOT SURROUNDED BY 30' WIDE PUBLIC WAY. COMMISSARY AREA REQUIREMENTS ARE TYPICALLY LARGER THAN AREA ALLOWED HERE . IF SO, MUST LOOK TO CLASSIFY COMMISSARY AS AN "UNLIMITED AREA" BUILDING.		
5.5	UNLIMITED AREA BUILDING	1-STORY BUILDINGS ALLOWED TO BE UNLIMITED IN AREA IF EQUIPPED WITH AUTO SPRINKLER AND PER IBC 507.4 AND INCLUDING A 60' CLEAR, OPEN AREA AROUND BUILDING	IBC 507.4	112
		2-STORY BUILDINGS ALLOWED TO BE UNLIMITED IN AREA IF EQUIPPED WITH AUTO SPRINKLER AND PER IBC 507.45 INCLUDING A 60' CLEAR, OPEN AREA AROUND BUILDING	IBC 507.5	112
		REQUIRED 60' OPEN SPACE MAY BE REDUCED TO 40' FOR UP TO 75% OF BUILDING PERIMETER IF PROVIDE 3 HOUR CONSTRUCTION AND OPENING PROTECTION AT CONSTRUCTION FACING THE REDUCED SPACE	IBC 507.2.1	112
		SEPARATION BETWEEN BUILDINGS : USE IBC TO DETERMINE REQUIRED SEPARATION DISTANCES	UFC 3-600-01	77

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	CODE ANALYZED :	UFC 1-200-01, 8 OCTOBER 2019		
<u>NO.</u>	ITEM	SUMMARY OF REQUIREMENTS TYPICAL DeCA COMMISSARY FACILITIES ARE UNLIMITED AREA BUILDINGS DUE TO ATFP SETBACK DISTANCES AND	REFERENCE	PAGE
		OPERATIONS. IF SITE CANNOT ACCOMMODATE 60' OPEN AREA REQUIREMENTS (OR 60' ON ONE SIDE AND 40' ON THREE SIDES PER IBC 507.52.1) AS REQUIRED FOR UNLIMITED AREA BUILDING, THEN BUILDING IS NON-COMPLIANT AND DESIGNER MUST RECEIVE WRITTEN APPROVAL OF NON-COMPLIANCE FROM AHJ (AUTHORITY HAVING JURISDICTION)		
5.6	MEZZANINES	SHALL BE CONSIDERED A PORTION OF THE STORY BELOW. SUCH MEZZANINES SHALL NOT CONTRIBUTE TO EITHER THE BUILDING AREA OR THE NUMBER OF STORIES	IBC 505.2	105
5.61	AREA LIMITS	AGGREGATE AREA OF MEZZANINE(S) SHALL NOT EXCEED ONE-HALF OF THE ROOM OR SPACE IN WHICH THEY ARE LOCATED IF EQUIPPED THROUGHOUT WITH APPROVED SPRINKLER SYSTEM AND EMERGENCY VOICE/ALARM COMMUNICATION SYSTEM (ONE-THIRD ROOM AREA IF NO APPROVED SPRINKLER OR COMMUNICATION SYSTEMS)	IBC 505.2.1	105
		DECA COMMISSARY SPRINKLERS AND COMMUNICATIONS SYSTEMS TYPICALLY MEET SPRINKLER & COMMUNICATIONS REQUIREMENTS.		
		DESIGNER MUST DETERMINE IF AN AREA IS A "MEZZANINE" OR A "SECOND FLOOR". ALL STAIRS FROM A SECOND FLOOR TYPICALLY REQUIRE A 1-HR RATED EXIT ENCLOSURE - TO THE EXTERIOR.		
5.62	ENCLOSURE REQ'S	MEZZANINE SHALL BE OPEN AND UNOBSTRUCTED TO THE ROOM IN WHICH SUCH MEZZANINE IS LOCATED EXCEPT FOR WALLS NOT MORE THAN 42" HIGH, COLUMNS AND POSTS. EXCEPTIONS: 1. MEZZANINE AREA ENCLOSED BY AN OCCUPANT LOAD OF NOT MORE THAN 10.	IBC 505.2.3	105
		USING EXCEPTION NO. 1, AREA OF ENCLOSED MECHANICAL EQUIPMENT MEZZANINE CANNOT EXCEED 3.000 S.F. (STORAGE AREA OCCUPANT LOAD OF 1/300)		
		2. AREA OF ENCLOSED MEZZANINE SPACE DOES NOT EXCEED 10% OF THE TOTAL MEZZANINE AREA		
		EXCEPTION 3, BELOW, ADDRESS EXITING FROM A MEZZANINE. USE NFPA 101 FOR EXITING REQUIREMENTS.		



NO.	ITEM	SUMMARY OF REQUIREMENTS	REFERENCE	PAGE
		3. A MEZZANINE WITH 2 OR MORE MEANS OF EGRESS MAY BE ENCLOSED, PROVIDED AT LEAST ONE OF THE MEANS OF EGRESS PROVIDES DIRECT ACCESS FROM THE ENCLOSED AREA TO AN EXIT AT THE MEZZANINE LEVEL. (THE EXIT MUST BE CONTINUOUS TO THE EXTERIOR) TYPICALLY, SMALL AND OPEN MEZZANINE STAIRS DO NOT NEED TO BE RATED OR ENCLOSED. THIS EXCEPTION ALLOWS FOR LARGER, ENCLOSED MEZZANINES BUT REQUIRES AT LEAST ONE, OF THE 2 (OR MORE), REQUIRED STAIRS BE A 1-HOUR EXIT STAIR (ENCLOSURE) WITH CONTINUOUS ENCLOSED RATED ACCESS TO THE BUILDING EXIT.	NFPA 101 8.6.10.3.2	105
5.63	MEZZANINE MEANS OF EGRESS	MOST SIZABLE AND ENCLOSED MEZZANINES WILL REQUIRE TWO INDEPENDENT MEANS OF EGRESS AS NOTED IN NO. 3 ABOVE. ONE EXIT IS ALLOWED FOR FOLLOWING CONDITIONS:		
		REQUIRED FROM MEZZANINE UNLESS MEZZANINE IS OPEN (NOT ENCLOSED) AS NOTED ABOVE.		
		1. OCCUPANT LOAD IS NO MORE THAN 49 (50 OR MORE OCCUPANTS FROM ANY SPACE REQUIRES AT LEAST 2 EXITS) AND		
		2. COMMON PATH (FROM FURTHEST CORNER OF MEZZANINE TO BOTTOM OF STAIRS) OF TRAVEL DOES NOT EXCEED BUILDING TRAVEL DISTANCE (TYPICALLY 100') AND 3. PER IBC SECTIONS 1015.3, 1015.4 & 1015.5	NFPA 101 38.2.4.5 7.4.1.1(2)	358 83
6	TYPES OF CONSTRUCTION	USE CHAPTER 6 OF IBC AND UFC 3-600-01. IF CONFLICT OCCURS BETWEEN IBC CHAPTER 6 AND UFC 3-600-01, THE REQUIREMENTS OF UFC 3-600-01 TAKE PRECEDENCE	UFC 1-200-01 2-6	16
6.1	CONSTRUCTION CLASSIFICATION	TYPICAL COMMISSARY CLASSIFIED AS TYPE II B UNPROTECTED NON-COMBUSTIBLE CONSTRUCTION	IBC 602.2	119
6.2	FIRE-RESISTIVE RATINGS (BUILDING)	0 HOUR FIRE RESISTANCE RATING REQUIRED FOR STRUCTURAL FRAME, BEARING WALLS, FLOOR, & ROOF - EXCEPT SEE FOOTNOTES F&G WHICH REFERENCE TABLE 602 FOR EXTERIOR WALL RATINGS DUE TO FIRE SEPARATION	IBC Table 601 TYPE IIB	119
		EXTERIOR WALLS :	IBC Table 602	120
		2 HOUR RATING IF < 5' FIRE SEPARATION DISTANCE 1 HOUR RATING IF ≥ 5' ≤ 10' FIRE SEPARATION DISTANCE 0 HOUR RATING IF > 10' FIRE SEPARATION DISTANCE		



NO.	ITEM	SUMMARY OF REQUIREMENTS	REFERENCE	PAGE
		INTERIOR LOAD-BEARING PARTITIONS: 0 HOUR	IBC Table 601 TYPE IIB	119
		TYP. INTERIOR NON-LOAD BEARING PARTITIONS : 0 HOUR FOLLOW IBC TABLE 601 FOR OVERALL FIRE RATINGS OF	IBC Table 601 TYPE IIB	119
		INTERIOR NON-BEARING PARTITIONS - WHICH IS 0 - HOUR. UFC 3- 600-01 2-1.2 NOTES TO FOLLOW NFPA 101 REQUIREMENTS FOR INTERIOR NON-BEARING PARTITIONS FOR ITEMS REGARDING EGRESS AND SAFETY. SEE SECTION 7.4 OF THIS ANALYSIS FOR ADDITIONAL INFO.	UFC 3-600-01 3-2.1.2	24
6.3	COMBUSTIBLE MATERIALS	ALLOWABLE COMBUSTIBLE MATERIALS IN TYPE I AND II CONSTRUCTION. SOME TYPICAL APPLICATIONS (OF THE MANY LISTED) ARE NOTED BELOW:	IBC 603.1	120
		1. FIRE-RETARDANT TREATED (FRT) WOOD ALLOWED IN : - NONBEARING PARTITIONS (LESS THAN 2 HR RATING)	IBC 603.1.1.1.1	120
		- NON-BEARING EXTERIOR WALLS WITH NO FIRE RATING		
		NOTE: UFC 3-101-01 SECTION 4-6 REQUIRES GLASS MAT GYPSUM SHEATHING FOR INTERIOR SIDE OF EXTERIOR WALLS - TO PREVENT FOOD SOURCE FOR MOLD.		
		- FRT PLYWOOD MUST NOT BE USED IN ANY PART OF THE ROOF OR ROOFING SYSTEM.	UFC 3-600-01 23-1	126
		"ROOFING SYSTEM" INCLUDES UNDERLAYMENTS WHICH SUPPORT ROOFING PRODUCTS. THE UNDERLAYMENT OF ANY SURFACE COVERED BY SINGLE-PLY ROOFING MEMBRANE IS PART OF ROOFING SYSTEM. BACKSIDE OF PARAPET WALLS ARE PART OF THE ROOF SYSTEM WHEN COVERED WITH SINGLE-PLY ROOFING MEMBRANE. THEREFORE, NO FRT PLYWOOD (NOR ANY PLYWOOD DUE TO COMBUSTIBILITY) SHALL BE ALLOWED FOR ROOFING-COVERED PARAPET CONSTRUCTION (EXCEPT FOR NAILERS, BLOCKING AS NOTED IN CODE).		
		2. THERMAL AND ACOUSTICAL INSULATION (OTHER THAN FOAM PLASTIC) IN NON-COMBUSTIBLE BUILDINGS SHALL HAVE A FLAME SPREAD (FS) INDEX OF NOT MORE THAN 25.	IBC 603.1.2	120
		IBC AND UFC NOTE FLAME SPREAD AND SMOKE DEVELOPMENT RATINGS IN SEVERAL AREAS. SEE INFO IN 7.7 ( OF THIS ANALYSIS) FOR COMPLETE ANALYSIS OF INSULATION RATINGS.		
		3. FOAM PLASTIC IN ACCORDANCE WITH CHAPTER 26.	IBC 603.1.3	121



NO.	ITEM	SUMMARY OF REQUIREMENTS	REFERENCE	PAGE
		3. ROOF COVERINGS: NO FLAME OR SMOKE LIMITATIONS FOR INSULATION INSTALLED ABOVE ROOF DECKS WHERE ENTIRE ROOF CONSTRUCTION ASSEMBLY, INCLUDING THE INSULATION, IS UL LISTED AS FIRE CLASSIFIED, OR FM APPROVED CLASS 1 ROOF DECK CONSTRUCTION OR EQUAL LISTING OR CLASSIFICATION BY A NRTL (NATIONALLY RECOGNIZED TESTING LAB). UFC 3-600-01 2-8.1 REQUIRES ROOF COVERINGS TO BE NRTL LISTED AND REQUIRES USE OF CLASS A OR B ROOFS (CLASS C ALLOWABLE ONLY FOR BUILDING UNDER 8,000 S.F.)	UFC 3-600-01 8- 3.2.2	81
		4. INTERIOR FLOOR FINISH AND FLOOR COVERING MATERIALS INSTALLED PER SECTION 804	IBC 603.1.5	121
		5. INTERIOR FINISH, TRIM, AND MILLWORK SUCH AS DOORS, DOOR FRAMES, WINDOW SASHES, AND FRAMES	IBC 603.1.6	121
		6. BLOCKING SUCH AS FOR HANDRAILS, MILLWORK, CABINETS, AND WINDOW & DOOR FRAMES	IBC 603.1.14	121
		7. WALL CONSTRUCTION OF FREEZERS AND COOLERS OF LESS THAT 1,000 SQFT IN SIZE, LINED ON BOTH SIDES WITH NONCOMBUSTIBLE MATERIALS AND THE BUILDING IS PROTECTED THROUGHOUT BY AN AUTOMATIC SPRINKLER SYSTEM	IBC 603.1.26	121
		COOLERS AND FREEZERS LESS THAN 1,000 SQFT MAY HAVE COMBUSTIBLE INSULATION, OF ANY MATERIAL ALLOWED BY THE CODE, BETWEEN THE SHEET METAL PANELS. FOR COOLERS AND FREEZERS 1,000 SQFT OR LARGER, NOTE 3 OF SECTION 603.1 ALLOWS FOR FOAM PLASTIC INSULATION, THAT COMPLIES WITH THE REQUIREMENTS LISTED IN CHAPTER 26 OF THE CODE, BETWEEN THE SHEET METAL PANELS.		
7	FIRE-RESISTANT RATED CONSTRUCTION	USE CHAPTER 7 OF IBC AND UFC 3-600-01. IF ANY CONFLICT OCCURS BETWEEN CHAPTER 7 AND UFC 3-600-01, THE REQUIREMENTS OF UFC TAKE PRECEDENCE.	UFC 1-200-01 2-7	17
7.1	PROJECTIONS	CORNICES, EAVE OVERHANGS AND SIMILAR ARCHITECTURAL APPENDAGES EXTENDING BEYOND THE FLOOR AREA IN TYPE II CONSTRUCTION SHALL BE OF NONCOMBUSTIBLE MATERIALS	IBC 705.2 & 705.2.1	126
		ENTRY/EXIT CANOPIES AND DOCK CANOPIES NEED TO BE OF NON-COMBUSTIBLE CONSTRUCTION		
7.2	PARAPETS	PARAPETS NOT REQUIRED BY ANY OF THE EXCEPTIONS 1. 0 HR. RATED WALLS OR 3. NONCOMBUSTIBLE CONSTRUCTION	IBC 705.11	129



NO.	ITEM	SUMMARY OF REQUIREMENTS	REFERENCE	PAGE
7.3	FIRE WALLS	NOT TYPICAL ON DeCA COMMISSARIES UNLESS BUILDING IS DIRECTLY ATTACHED TO ANOTHER	IBC 706	130
7.4	FIRE BARRIERS	NON-LOAD BEARING PARTITIONS TO BE PER NFPA 101	UFC 3-600-01 7-1	79
7.4.1	FOR BUILDINGS WITH A SECOND FLOOR (DOES NOT APPLY TO ELEVATORS AND SHAFTS SERVING MEZZANINES)	1-HOUR RATED FIRE BARRIERS AROUND THRU-FLOOR SHAFTS AND ELEVATOR HOISTWAYS: (WHEN CONNECTING LESS THAN 4 STORIES)	NFPA 101 8.6.5	103
		STAIRS SERVING AS AN EXIT SHALL BE ENCLOSED PER NFPA 7.1.3.2, EXIT ACCESS STAIRS PER 8.6	NFPA 7.2.2.5.1	67
		STAIRS: WHERE SEPARATION IS REQUIRED, SEPARATION SHALL HAVE A MINIMUM 1-HOUR FIRE RESISTANCE RATING WHERE CONNECTING 3 STORIES OR LESS	NFPA 101 7.1.3.2.1 (1)	52
		SEPARATION SHALL BE SUPPORTED BY CONSTRUCTION OF NOT LESS THAN 1-HOUR COLUMNS AND FLOORS, THAT SUPPORT THE 1-HOUR SEPARATION WALLS, NEED TO BE 1-HOUR PROTECTED THEMSELVES. THIS OFTEN MEANS FIR RATING THE STRUCTURAL BAY THAT SUPPORTS THE FIRE SEPARATION WALLS	NFPA 101 7.1.3.2.1 (2)	52
		STAIRWELLS AND SHAFTS AT OPEN MEZZANINES TYPICALLY DO NOT NEED TO BE RATED. STAIRWELLS AT <u>ENCLOSED</u> MEZZANINES MAY NEED TO BE RATED AND, IF SO, WOULD NEED TO FOLLOW REQUIREMENTS FOR STAIRWELL NOTED ABOVE.		
7.4.2	TYPICAL FIRE BARRIERS	TYP. NON-LOAD BEARING PARTITIONS: 0 HOUR		
		DECA COMMISSARIES ARE TYPICALLY NON-SEPARATED OCCUPANCY USES TYPICALLY DO NOT REQUIRE INTERIOR RATED SEPARATIONS BETWEEN USES. IF BUILDING IS CLASSIFIED AS SEPARATED USE, THEN MUST FOLLOW AREA SEPARATION REQUIREMENTS.		
		EXIT ACCESS CORRIDORS: 0 HOUR	NFPA 101 7.1.3.1 (2)	52
		-SECTION 7.1.3.1 REQUIRES 1- HOUR RATING UNLESS OTHERWISE PROVIDED IN CHAPTERS 11-43.	· /	
		CHAPTERS 11-43 DO CONTAIN CODE TO ELIMINATE THE 1-HOUR RATING - SEE BELOW:		



	CODE ANALYZED :	UFC 1-200-01, 8 OCTOBER 2019		
NO.	ITEM	SUMMARY OF REQUIREMENTS	REFERENCE	PAGE
		<ul> <li>"MINIMUM 1-HOUR FIRE RESISTANCE RATING UNLESS ONE OF THE FOLLOWING CONDITIONS EXIST:</li> <li>(1) EXITS ARE AVAILABLE FROM OPEN AREA</li> <li>(2) SPACE OCCUPIED BY A SINGLE TENANT</li> <li>(3) COMPLIANT AUTO SPRINKLER SYSTEM</li> </ul>	NFPA 101 36.3.6.1 (2) OR (3)	344
		TYPICAL DECA COMMISSARIES WOULD MEET EITHER (2) OR (3) AND THEREFORE DROPS THE 1-HOUR EXIT ACCESS CORRIDOR RATING TO O HOUR. THIS EXCEPTION (OR SIMILAR) IS PRESENT IN THE OTHER MAIN OCCUPANCIES - (MERCANTILE AND STORAGE).		
7.5	OPENING PROTECTIVES	OPENINGS IN FIRE BARRIERS AROUND 1-HOUR STAIR AND SHAFTS SHALL BE 1-HOUR RATED	IBC TABLE 716.1(2)	146
		OPENINGS IN OTHER 1-HOUR FIRE BARRIERS SHALL BE 3/4- HOUR RATED	IBC TABLE 716.1(2)	146
7.6	CONCEALED SPACES	FIREBLOCKING AND DRAFTSTOPPING NOT REQUIRED IN NONCOMBUSTIBLE COMMISSARIES.		
		IN <u>COMBUSTIBLE</u> CONSTRUCTION, FIREBLOCKING SHALL BE	IBC 718.2	155
		IN <u>COMBUSTIBLE</u> CONSTRUCTION, DRAFTSTOPPING SHALL BE DECA COMMISSARY CONSTRUCTION IS TYPICALLY NON- COMBUSTIBLE CONSTRUCTION SO FIREBLOCKING AND DRAFTSTOPPING REQUIREMENTS OF THESE SECTIONS TYPICALLY DO NOT APPLY.	IBC 718.3	156
		COMBUSTIBLE MATERIALS NOT PERMITTED IN CONCEALED SPACES WITH THE FOLLOWING EXCEPTIONS:	IBC 718.5	156
		1. COMBUSTIBLE MATERIALS IN ACCORDANCE WITH SECTION 603 (COMBUSTIBLE MATERIALS IN TYPE 1 & 2 CONSTRUCTION). THIS INCLUDES THERMAL INSULATION NOTED BELOW		
		2. CLASS A INTERIOR FINISHES (PER SECTION 803)		
		3. SOME MECHANICAL AND PIPING MATERIALS - SEE 718.5		
		COMBUSTIBLE MATERIAL MAY NOT BE LOCATED WITHIN PLENUM SPACES	UFC 3-600-01 28- 1.2	127
7.7	INSULATING MATERIALS	SMOKE DEVELOPMENT AND FLAME SPREAD RATINGS : USE ASTM E84 OR UL 723	IBC 720.1	157



	CODE ANALYZED :	UFC 1-200-01, 8 OCTOBER 2019		
NO.	ITEM	SUMMARY OF REQUIREMENTS	REFERENCE	PAGE
		MAX. FLAME SPREAD AND SMOKE DEVELOPMENT RATINGS:		
		1. EXPOSED INSULATION - NOT IN A CONCEALED SPACE - MAX. FLAME SPREAD : 75 - MAX. SMOKE DEVELOPMENT : 150	UFC 3-600-1 8-3.1.1	81
		2. INSULATION <u>NOT</u> WITHIN NONCOMBUSTIBLE ASSEMBLY: EXPOSED INSULATION IN A CONCEALED SPACE: - MAX. FLAME SPREAD : 25 - MAX. SMOKE DEVELOPMENT : 50	UFC 3-600-01 8- 3.1.2	81
		UFC 3-600-01, SECTION 8-3.1, NOTES A MAXIMUM FLAME SPREAD OF NOT MORE THAN 75 AND SMOKE DEVELOPMENT OF 150. THESE UFC RATINGS ARE A GUIDELINE FOR ALL INSULATION LOCATIONS IN ALL BUILDING TYPES WHICH FALL UNDER THIS UFC. HOWEVER, DESIGNERS NEED TO EXAMINE AND FOLLOW RATINGS FOR SPECIFIC INSULATION TYPES AND LOCATIONS WITHIN THE TYPICAL NON-COMBUSTIBLE DECA COMMISSARY FACILITY IF THEY ARE MORE RESTRICTIVE.		
		TO MEET THE 25 SD RATING, FACED FIBERGLASS BATT INSULATION WILL NEED TO BE TYPE FSK. AN ALTERNATIVE TO USING FSK FACED INSULATION IS TO PROVIDE FULL-HEIGHT GWB, ON INSIDE FACE OF EXTERIOR WALLS THUS "ENCLOSING" THE INSULATION WITHIN A WALL ASSEMBLY AND THUS MEETING THE IBG EXCEPTION NOTED BELOW.		
		- DOES NOT APPLY TO MASONRY CAVITY WALL INSULATION PER UFC 3-600-01 8-3.2.2 (d) WHERE MASONRY SEPARATES INSULATION FROM INTERIOR OF BUILDING - DOES NOT APPLY TO INSULATION WITHIN HOLLOW METAL DOORS PER UFC 3-600-01 8-3.2.2 (f)		
		ROOF INSULATION : INSULATION INSTALLED ABOVE ROOF DECKS WHERE THE ENTIRE ROOF CONSTRUCTION ASSEMBLY, INCLUDING THE INSULATION, IS UL-LISTED AS FIRE CLASSIFIED, OR FM- APPROVED FOR CLASS I ROOF DECK CONSTRUCTION OR EQUAL LISTING OR CLASSIFICATION BY AN NRTL.	UFC 3-600-01 8-3.2.2 (b)	82
		COMMISSARY ROOF INSULATION IS TYPICALLY PART OF A CLASS "A" ROOFING SYSTEM AND THEREFORE COMPLIES		



#### CODE ANALYZED :

#### UFC 1-200-01, 8 OCTOBER 2019

NO.	ITEM	SUMMARY OF REQUIREMENTS	REFERENCE	PAGE
8	INTERIOR FINISHES	USE UFC 3-600-01 IN LIEU OF IBC CHAPTER 8 IN CONJUNCTION AND COORDINATION WITH UFC 3-120-10 INTERIOR DESIGN	UFC 1-200-01 2-8	17
		UFC 3-120-10 INTERIOR DESIGN REQUIREMENTS DO NOT FOCUS ON LIFE SAFETY ISSUES SUCH AS EGRESS AND FIRE HAZARD REQUIREMENTS, AND AS SUCH, ARE NOT PART OF THIS ANALYSIS.		
		CEILING, WALL AND FLOOR FINISHES TO CONFORM TO NFPA 101	UFC 3-600-01 3- 3.1.1	24
8.1	CLASSIFICATION RATINGS	INTERIOR CEILING, WALL AND FLOOR FINISHES SHALL COMPLY WITH NFPA SECTION 10	NFPA 101 36.3.3.1	344
8.2	WALLS AND CEILING FINISHES	WALL AND CEILING INTERIOR FINISHES SHALL BE TESTED IN ACCORDANCE WITH ASTM E 84, OR ANSI/UL 723 AND BE CLASSIFIED AS FOLLOWS: CLASS A: FLAME SPREAD 0-25 ; SMOKE DEV. 0-450 CLASS B: FLAME SPREAD 26-75 ; SMOKE DEV. 0-450 CLASS C: FLAME SPREAD 76-200 ; SMOKE DEV. 0-450	NFPA 101 10.2.3.3	113
		CLASS A FINISHES MAY BE USED WHEREVER CLASS B OR C FINISHES ARE ALLOWED. CLASS B FINISHES MAY BE USED WHEREVER CLASS C FINISHES ARE ALLOWED.	NFPA 101 10.2.3.3.3	113
8.3	FLOOR FINISHES	FLOOR FINISHES (OTHER THAN CARPET) SHALL BE TESTED IN ACCORDANCE WITH NFPA 253 OR ASTM E 648, OR ANSI/UL 723 AND BE CLASSIFIED BASED ON THEIR CRITICAL RADIANT FLUX VALUES: CLASS 1 : CRF 0.45 W/CM*CM OR GREATER CLASS 2 : CRF 0.22 W/CM*CM UP TO .45 W/CM*CM	NFPA 10.2.7.4	116
		CARPET AND CARPET-LIKE FINISHES SHALL COMPLY WITH ASTM D 2859.	NFPA 10.2.7.1	116
		INTERIOR FLOOR FINISHES SHALL COMPLY WITH 10.2.7.1 (CARPET) OR 10.2.7.2 (MATERIALS OTHER THAN CARPET)	NFPA 101 36.3.3.3.3	344
		0.1 W / cm (squared) MIN. RADIANT FLUX REQUIRED FOR FLOORING OTHER THAN CARPET	NFPA 101 10.2.7.2	116
		SEE ADDITIONAL SECTIONS FOR FINISHES IN RATED EXIT ENCLOSURES		
		SEE TABLE A.10.2.2 FOR THE COLLECTED REQUIREMENTS BY OCCUPANCY		
8.4	TRIM AND INCIDENTAL FINISH	CLASS "C" WALL AND CEILING TRIM AND INCIDENTAL FINISHES (BULLETIN BOARDS, PAPER, ETC) ALLOWED IF THEY TOTAL LESS THAN 10% OF AGGREGATE WALL AND CEILING AREA AND CLASS "A" OR "B" IS REQUIRED	NFPA 101 10.2.5.1	116



NO.	ITEM	SUMMARY OF REQUIREMENTS	REFERENCE	PAGE
		BULLETIN BOARDS, POSTERS, AND PAPER ATTACHED DIRECTLY TO THE WALL ARE ALLOWED IF THEY TOTAL LESS THAN 20% OF THE WALL AREA TO WHICH THEY ARE ATTACHED.	NFPA 101 10.2.5.3	116
9	FIRE PROTECTION SYSTEMS	USE UFC 3-600-01 IN LIEU OF IBC CHAPTER 9.	UFC 1-200-01 2-9	17
		COMPLETE AUTOMATIC SPRINKLER PROTECTION MUST BE PROVIDED IN BUILDINGS OF TYPE II CONSTRUCTION OVER 15,000 SQFT.	UFC 3-600-01 9- 7.2.1.1	96
		COMMISSARIES LARGER THAN 8,000 SQFT AND PART OF ANOTHER FACILITY MUST MEET UFC 3-600-01 9-7.2.	UFC 3-600-01 4- 7.1	30
		COMMISSARIES THAT ARE STAND-ALONE AND GREATER THAN 8,000 SQFT MUST HAVE SPRINKLER PROTECTION REGARDLESS OF CONSTRUCTION TYPE	UFC 3-600-01 4- 7.2	30
		FLEXIBLE SPRINKLER CONNECTIONS INTENDED FOR DIRECT CONNECTION TO SPRINKLERS MUST BE APPROVED BY THE AHJ.	UFC 3-600-01 9- 7.6.8	100
10	MEANS OF EGRESS	USE UFC 3-600-01 AND ABA IN LIEU OF IBC CHAPTER 10. WHEN ABA REFERENCES CHAPTER 10, USE THE 2018 IBC FOR THAT REFERENCE ONLY.	UFC 1-200-01 2-10	17
		UFC REQUIRES COMPLIANCE WITH NFPA 101, FOR EXISTING, EXCEPT AS MODIFIED BY UFC 3-600-01	UFC 3-600-01 10- 1.1	120
10.1	LIFE SAFETY CLASSIFICATION OF OCCUPANCY	CLASSIFICATION : Multiple occupancy - Mixed occupancy	NFPA 101 6.1.14.1.3	49
		MAIN OCCUPANCY GROUPS:		
		MERCANTILE (SALES AREA)	NFPA 101 6.1.10.1 &	99
		<ul> <li>MERCANTILE SUB CLASSIFICATION:</li> <li>MORE THAN 30,000 S.F OF MERCANTILE = CLASS 'A'</li> <li>MORE THAN 3,000 S.F UP TO 30,000 S.F OF MERCANTILE = CLASS 'B'</li> <li>3000 S.F. OR LESS OF MERCANTILE = CLASS 'C'</li> </ul>	36.1.2.2.1	340
		<b>BUSINESS</b> (OFFICE AREAS) - OFFICE, STORAGE, AND SERVICE FACILITIES INCIDENTAL TO THE SALE OF MERCHANDISE AND LOCATED IN THE SAME BUILDING ARE PERMITTED TO BE CONSIDERED PART OF THE MERCANTILE OCCUPANCY.	NFPA 101 A6.1.10.1	406



NO.	ITEM	SUMMARY OF REQUIREMENTS	REFERENCE	PAGE
		<b>STORAGE</b> : STORAGE AND RECEIVING AREAS - OFFICE, STORAGE, AND SERVICE FACILITIES INCIDENTAL TO THE SALE OF MERCHANDISE AND LOCATED IN THE SAME BUILDING ARE PERMITTED TO BE CONSIDERED PART OF THE MERCANTILE OCCUPANCY.	NFPA 101 A6.1.10.1	406
		INDUSTRIAL (BAKERY/DELI, MEAT & PRODUCE WORK ROOMS) - OFFICE, STORAGE, AND SERVICE FACILITIES INCIDENTAL TO THE SALE OF MERCHANDISE AND LOCATED IN THE SAME BUILDING ARE PERMITTED TO BE CONSIDERED PART OF THE MERCANTILE OCCUPANCY.	NFPA 101 A6.1.10.1	406
10.2	LIFE SAFETY - MIXED OCCUPANCIES	WHERE INCIDENTAL TO ANOTHER OCCUPANCY, AREAS USED AS FOLLOWS SHALL BE PERMITTED TO BE CONSIDERED PART OF THE PREDOMINANT OCCUPANCY AND SHALL BE SUBJECT TO THE PROVISIONS OF THE CODE THAT APPLY TO THE PREDOMINANT OCCUPANCY: 1 - MERCANTILE, BUSINESS, OR STORAGE USE	NFPA 101 6.1.14.1.3	49
		DECA COMMISSARIES ARE TYPICALLY CLASSIFIED AS MULTIPLE OCCUPANCY, CLASS "A" MERCANTILE, BUSINESS AND ORDINARY HAZARD STORAGE. (INDUSTRIAL IS TYPICALLY AN ACCESSORY USE, AND THEREFORE NOT A MAIN USE - SO INDUSTRIAL EGRESS REQ'S NOT APPLICABLE FOR ENTIRE BUILDING ASSESSMENT)		
10.3	CLASSIFICATION OF HAZARD OF CONTENT	ORDINARY HAZARD	NFPA 101 6.2.2.3	52
10.4	OCCUPANT LOAD	FOLLOW TABLE 7.3.1.2	NFPA 101 Table 7.3.1.2	81
		MERCANTILE SALES AREA ON STREET LEVEL		
		BUSINESS (OFFICES)		
		CONCENTRATED BUSINESS		
		STORAGE (STORAGE & RECEIVING) 300 SF/PERSON		
		INDUSTRIAL (WORK ROOMS/KITCHENS) 100 SF/PERSON		
10.5	MINIMUM NO. OF MEANS OF EGRESS - BUILDING	NOT LESS THAN 2 SEPARATE EXITS SHALL BE PROVIDED ON EVERY STORY - SEE MECHANICAL ROOM EXCEPTION BELOW (10.7)	NFPA 101 36.2.4.1 (2)	342



NO.	ITEM	SUMMARY OF REQUIREMENTS	REFERENCE	PAGE
		EXCEPTION : STORIES USED EXCLUSIVELY FOR MECHANICAL EQUIPMENT, FURNACES, OR BOILERS SHALL BE PERMITTED TO HAVE A SINGLE MEANS OF EGRESS WHERE THE TRAVEL DISTANCE TO AN EXIT ON THAT STORY IS NOT IN EXCESS OF THE COMMON PATH OF TRAVEL . STAIRS BETWEEN <u>STORIES</u> NEED TO BE RATED EXIT ENCLOSURES SO COMMON PATH OF TRAVEL WOULD BE FROM	NFPA 101 7.13.2	91
		MOST REMOTE POINT TO THE SECOND STORY DOOR INTO THE STAIR ENCLOSURE . THIS VARIES FROM A MECHANICAL <u>MEZZANINE</u> IN THAT A SINGLE EXIT STAIR ON A MEZZANINE IS NOT TYPICALLY RATED - SO COMMON PATH OF TRAVEL (FROM A SINGLE EXIT MEZZANINE) WOULD BE FROM MOST REMOTE POINT TO BOTTOM OF STAIR.		
		3 EXITS (MINIMUM) REQUIRED FOR OCCUPANCY LOAD OF 500 - 1000	NFPA 101 7.4.1.2	83
		4 EXITS (MINIMUM) REQUIRED FOR OCCUPANCY LOAD OF 1000+		
10.6	MINIMUM NO. OF MEANS OF EGRESS - MEZZANINE	A SINGLE MEANS OF EGRESS IS ALLOWED FROM A MEZZANINE PROVIDED THE COMMON PATH OF TRAVEL (TO AN EXIT) DOES NOT EXCEED MAX. COMMON PATH (TYPICALLY 100' W/ SPRINKLERS)	NFPA 101 36.2.4.5	342
		COMMON PATH OF TRAVEL (TYPICALLY 100') FOR A MEZZANINE WOULD INCLUDE THE LENGTH OF TRAVEL DOWN THE STAIRS AND TO A POINT WHERE THERE ARE TWO DIRECTIONS TO EXIT. IF THE STAIRS ARE A RATED EXIT ENCLOSURE, THAN COMMON PATH WOULD BE MEASURED TO THE ENTRANCE TO THE STAIR (EXIT) ENCLOSURE.		
10.7	EGRESS FROM SPECIAL USE ROOMS	MECHANICAL EQUIPMENT ROOMS, BOILER ROOMS AND FURNACE ROOMS	NFPA 101 7.13	91
		COMMON PATH OF TRAVEL NOT EXCEEDING 100' FOR NEW BUILDINGS WITH AN APPROVED , SUPERVISED AUTO SPRINKLER	NFPA 101 7.13.1 (1)	91
		NOTE: THE IBC DENOTES SPECIAL SECOND MEANS OF EGRESS REQUIREMENTS FOR BOILER, FURNACE, REFRIGERATION MACHINERY ROOMS, AND REFRIGERATED SPACES. HOWEVER, PER UFC, THE IBC MEANS OF EGRESS CODE IS NORMALLY SUPERSEDED WITH THE NFPA MEANS OF EGRESS CODE WHICH HAS NO SIMILAR REQUIREMENTS. AHJ MAY STILL ENFORCE THE IBC AS IT IS MORE RESTRICTIVE.	1006.2.2	261
		WHERE MORE THAN ONE EXIT, EXIT ACCESS, OR EXIT DISCHARGE IS REQUIRED FROM A BUILDING OR PORTION THEREOF, THEY MUST BE REMOTELY LOCATED TO MINIMIZE THE POSSIBILITY THE MORE THAN ONE HAS THE POTENTIAL TO BE BLOCKED BY ANY ONE EMERGENCY CONDITION.	NFPA 101 7.5.1.3.1	84



CODE ANALYZED : UFC 1-200-

NO.	ITEM	SUMMARY OF REQUIREMENTS	REFERENCE	PAGE
10.8	ARRANGEMENT OF MEANS OF EGRESS	IN BUILDINGS PROTECTED THROUGHOUT BY AN APPROVED, SUPERVISED AUTOMATIC SPRINKLER SYSTEM, THE MINIMUM SEPARATION DISTANCE BETWEEN TWO EXITS SHALL BE NOT LESS THAN ONE-THIRD THE DIAGONAL OF THE BUILDING OR AREA SERVED	NFPA 101 7.5.1.3.3	84
		WHERE MORE THAN TWO EXITS, EXIT ACCRESS, OR EXIT DISCHARGES ARE REQUIRED, AT LEAST TWO OF THEM SHALL BE ARRANGED TO COMPLY WITH THE MINIMUM SEPARATION DISTANCE REQUIREMENT.	NFPA 101 7.5.1.3.6	84
10.9	DEAD END CORRIDORS	DEAD ENDS CORRIDORS SHALL NOT EXCEED 50 FEET WITH APPROVED, SUPERVISED AUTO. SPRINKLER SYSTEM. (MERCANTILE IS MOST RESTRICTIVE OF USES).	NFPA 101 36.2.5.2.1	342
10.10	COMMON PATH OF TRAVEL	COMMON PATH OF TRAVEL SHALL NOT EXCEED 100 FEET WITH APPROVED, SUPERVISED AUTO. SPRINKLER SYSTEM (MERCANTILE IS MOST RESTRICTIVE OF USES).	NFPA 101 36.2.5.3 (2)	342
10.11	TRAVEL DISTANCE	TRAVEL DISTANCE SHALL NOT EXCEED 250' IN ORDINARY HAZARD, MERCANTILE OCCUPANCIES WITH AN APPROVED, SUPERVISED AUTO. SPRINKLER SYSTEM. (MERCANTILE IS MOST RESTRICTIVE OF USES).	NFPA 101 36.2.6.2	343
10.12	EGRESS CAPACITY AND WIDTH	LEVEL COMPONENTS AND RAMPS = .2" / OCCUPANT STAIRWAYS = .3" / OCCUPANT	NFPA 101 Table 7.3.3.1	82
		EXIT ACCESS WIDTH IN NEW BUILDINGS: GREATER OF 36" - OR AS NEEDED TO SERVE OCCUPANT COUNT	NFPA 101 7.3.4.1	82
		MINIMUM WIDTHS NOTED SHALL NOT BE ASSUMED FOR ANY OR EVERY CIRCUMSTANCE. MINIMUM REQUIRED WIDTHS ARE OFTEN INCREASED TO ACCOMMODATE ACTUAL OCCUPANT LOADS OR BY OTHER PARTS OF CODE.		
10.13	MERCANTILE SPECIFIC EGRESS REQUIREMENTS	IN CLASS A MERCANTILE (OVER 30,000 SQFT) NOT LESS THAN ONE AISLE WITH A 60" MINIMUM CLEAR WIDTH SHALL LEAD FROM THE BACK OF THE STORE DIRECTLY TO AN EXIT.	NFPA 101 36.2.5.6	343



NO.	ITEM	SUMMARY OF REQUIREMENTS	REFERENCE	PAGE
		FRONT WALL EXITING: IF THE ONLY MEANS OF CUSTOMER ENTRANCE IS THROUGH ONE EXTERIOR WALL OF THE BUILDING, A MINIMUM OF ONE-HALF OF THE REQUIRED EGRESS WIDTH FROM STREET FLOOR SHALL BE LOCATED IN SUCH WALL.	NFPA 101 36.2.5.7	343
		A/E MUST PROVIDE EXIT WIDTHS, IN THE FRONT ENTRANCE WALL, THAT WILL ACCOMMODATE AT LEAST ONE-HALF OF THE MAXIMUM OCCUPANT LOAD. VERIFY THE MAIN CUSTOMER ENTRANCE IS THROUGH THE SAME WALL AS THE MAIN EXITS.		
		EXITING THRU CHECKSTANDS: NOT LESS THAN ONE-HALF OF THE <u>REQUIRED</u> EXITS SHALL BE LOCATED SO AS TO BE REACHED WITHOUT PASSING THROUGH CHECKOUT STANDS.	NFPA 101 36.2.5.8	343
		AISLES USED TO SATISFY THE ABOVE REQUIREMENT WOULD BE SUBJECT TO THE CODE BELOW.		
		REQUIRED AISLES SHALL NOT BE LESS THAN 36" IN WIDTH	NFPA 101 36.2.5.5	343
		WHERE WHEELED CARTS OR BUGGIES ARE USED BY CUSTOMERS, ADEQUATE PROVISION SHALL BE MADE FOR THE TRANSIT AND PARKING OF SUCH CARTS TO MINIMIZE THE POSSIBILITY THAT THEY MIGHT OBSTRUCT MEANS OF EGRESS	NFPA 101 36.2.5.10	343
		CART CORRALS WITH PERIMETER RAILINGS AND ADEQUATE PARKING AREAS (FOR POWERED CARTS) ARE TYPICALLY PROVIDED TO COMPLY WITH THIS		



CODE ANALYZED :

## DEFENSE COMMISSARY AGENCY DIRECTORATE OF PERFORMANCE AND POLICY FACILITIES PROGRAMMING AND PLANNING DIVISION Fort Lee, Virginia FACILITIES CONSTRUCTION AND SUSTAINMENT DIVISION Lackland AFB, Texas

UFC 1-200-01, 8 OCTOBER 2019

#### SUMMARY OF REQUIREMENTS REFERENCE NO. ITEM PAGE EXIT ACCESS THROUGH STOREROOMS IS ACCEPTABLE IN **NFPA 101** 343 CLASS "A" MERCANTILE WITH APPROVED AUTOMATIC FIRE 36.2.5.11 SPRINKLER SYSTEM IF: (1) NOT MORE THAN 50% OF EXIT ACCESS SHALL BE PROVIDED THROUGH STOREROOM. (2) THE STOREROOM SHALL NOT BE SUBJECT TO LOCKING. (3) THE MAIN AISLE THROUGH STOREROOM SHALL NOT BE LESS THAN 44 INCHES WIDE. (4) THE PATH OF TRAVEL THROUGH THE STOREROOM, DEFINED, DIRECT AND CONTINUOUSLY MAINTAINED IN AN UNOBSTRUCTED CONDITION. TYPICAL COMMISSARY EXITING IS NO LONGER DESIGNED TO EXIT MERCANTILE PATRONS THROUGH STOREROOM / RECEIVING AREAS ALTHOUGH THIS IS AN OPTION. THE PREVIOUS REQUIREMENT FOR "FIXED BARRIERS" HAS BEEN REMOVED FROM THIS NFPA CODE HOWEVER THE WORD "DEFINED" STILL LEAVES ROOM FOR INTERPRETATION BY THE AHJ - AND AHJ REQUIREMENTS HAVE VARIED GREATLY. FIXED RAILS ACROSS THE STOREROOM FLOOR. FOR EXAMPLE, WOULD NOT BE CONDUCIVE TO RECEIVING AREA TRAFFIC FLOW A/E WILL PREPARE OCCUPANCY / EGRESS PLANS WITH WRITTEN CALCULATIONS/SUMMARIES AND TO GRAPHICALLY DEMONSTRATE COMPLIANCE WITH EGRESS AND TRAVEL DISTANCE REQUIREMENTS 10.14 ILLUMINATION OF EGRESS ILLUMINATION SHALL BE ILLUMINATED IN NFPA 101 36.2.8 343 ACCORDANCE WITH SECTION 7.8 MEANS OF EGRESS 10.15 EMERGENCY CLASS "A" MERCANTILE OCCUPANCIES SHALL HAVE NFPA 101 36.2.9 343 EMERGENCY LIGHTING IN ACCORDANCE WITH SECTION 7.9 LIGHTING OF MEANS OF EGRESS 10.16 MARKING OF WHERE AN EXIT IS NOT IMMEDIATELY APPARENT FROM ALL NFPA 101 36.2.10 343 MEANS OF PORTIONS OF THE SALES AREA, MEANS OF EGRESS SHALL HAVE SIGNS IN ACCORDANCE WITH SECTION 7.10 EGRESS SECTION 7.10 OUTLINES REQUIREMENTS FOR EXIT SIGNS. PROVIDE THE FOLLOWING ITEMS IN ADDITION TO EXIT SIGNS. IN NEW BUILDINGS, TACTILE SIGNAGE SHALL BE LOCATED NFPA 101 7.10.1.3 88 AT EACH EXIT DOOR REQUIRING AN EXIT SIGN AND SHALL

READ "EXIT" AND SHALL COMPLY WITH ICC/ANSI A117.1



NO.	ITEM	SUMMARY OF REQUIREMENTS	REFERENCE	PAGE
0.17	DOORS AS PART	SWINGING DOORS :	NFPA 101	55
	OF MEANS OF EGRESS	EGRESS CAPACITY SHALL BE MEASURED BETWEEN THE FACE OF THE DOOR (WHEN OPENED 90 DEGREES) AND THE STOP ON THE OPPOSITE JAMB.	7.2.1.2.1.1	
		MINIMUM DOOR <u>OPENING</u> IS 32" (ALSO MINIMUM FOR ADA)	NFPA 101	55
		2'-10" WIDE DOOR IS LIKELY MIN. WIDTH ALLOWED.	7.2.1.2.3	00
		<b>POWERED SLIDING DOORS:</b> HORIZONTAL-SLIDING DOORS COMPLYING WITH ALL REQUIREMENTS OF 7.2.1.9 SHALL BE PERMITTED.	NFPA 101 7.2.1.9	60
		CURRENT SPECIFIED SLIDING DOORS ARE LISTED TO BE NFPA 101 COMPLIANT		
		LOCKS : LOCKS COMPLYING WITH 7.2.1.5.5 SHALL BE PERMITTED	NFPA 101	341
		ONLY ON PRINCIPLE ENTRANCE/EXIT DOORS.	36.2.2.2.2	041
		SEE APPENDIX A FOR DEFINITION OF PRINCIPLE ENTRANCE - SUMMARIZE - TYPICALLYONLY AUTO-SLIDING DOORS FOR NORMAL CUSTOMER ENTRANCE AND EXIT QUALIFY FOR PRINCIPLE ENTRY/EXIT, THEREFORE, PROVIDE PANIC OR FIRE EXIT HARDWARE ON TYP. EXIT DOORS THAT DO <u>NOT</u> REQUIRE A KEY TO UNLOCK.		
		AUTO-SLIDING DOORS MAY BE KEY LOCKED PROVIDED ALL THE FOLLOWING: 1- A READILY VISIBLE, DURABLE SIGN IN LETTERS NOT LESS THAN 1 INCH HIGH ON A CONTRASTING BACKGROUND IS LOCATED ADJACENT TO OR ON THE DOOR "THIS DOOR TO REMAIN UNLOCKED WHEN THE BUILDING IS OCCUPIED" 2- THE LOCKING DEVICE IS OF A TYPE THAT IS READILY DISTINGUISHABLE AS LOCKED 3- A KEY IS IMMEDIATELY AVAILABLE TO ANY OCCUPANT INSIDE THE BUILDING WHEN IT IS LOCKED	NFPA 101 7.2.1.5.5.1	57
		REQUIREMENTS 2 & 3 ABOVE (7.2.1.5.5.1) ARE NOT DIFFICULT TO ACHIEVE IN A COMMISSARY. TO SATISFY REQUIREMENTS, TYPICAL HARDWARE FOR AUTO SLIDING DOOR LOCKS INCLUDE A THUMB TURN ON THE INTERIOR SIDE (KEYED LOCK ON OUTSIDE) ALONG WITH A SIGN THAT MEETS ITEM 1 ABOVE (7.2.1.5.5.1). THESE DOORS ARE ONLY LOCKED WHEN STORE IS CLOSED AND THE RELATIVELY FEW EMPLOYEES WORKING THEN KNOW TO OPERATE THE THUMB-TURN . ALSO, BECAUSE THE OCCUPANT LOAD (OF EMPLOYEES - WHEN STORE IS CLOSED) IS VERY LOW, THEY CAN LEGALLY EXIT THROUGH OTHER DOORS.		
		DELAYED-EGRESS LOCKS ARE PERMITTED ON EXIT DOORS PROVIDED THEY MEET PROVISIONS OF NEPA 101 7.2.1.6.1.1	NFPA 101 36.2.2.2.5 &	341



	CODE ANALYZED :	UFC 1-200-01, 8 OCTOBER 2019		
NO.	ITEM	SUMMARY OF REQUIREMENTS	REFERENCE	PAGE
		DOORS FROM THE SALES AREA, WHICH LEAD DIRECTLY TO THE EXTERIOR ARE ALLOWED TO BE PROVIDED WITH DELAYED EGRESS SYSTEMS		
		ACCESS-CONTROLLED EGRESS DOORS ARE PERMITTED ON EXIT MAN DOORS PROVIDED THEY MEET PROVISIONS OF NFPA 7.2.1.6.2	NFPA 101 36.2.2.2.6 & 7.2.1.6.2	341 59
		<b>POWERED DOORS :</b> WHERE MEANS OF EGRESS DOORS ARE OPERATED BY POWER, THE DESIGN SHALL BE SUCH THAT, IN THE EVENT OF POWER FAILURE, THE DOORS OPEN MANUALLY TO ALLOW EGRESS TRAVEL	NFPA 101 7.2.1.9.1	60
		DOOR ASSEMBLY MUST SWING-OUT WHEN PUSHED TO PROVIDE FULL EGRESS WIDTH. DOORS MUST MEET ATFP AND LIFE SAFETY CODE.	7.2.1.9.1.5	60
		A READILY VISIBLE, DURABLE SIGN IN LETTERS NOT LESS THAN 1" HIGH ON CONTRASTING BACKGROUND SHALL BE LOCATED ON THE EGRESS SIDE OF EACH DOOR "IN EMERGENCY, PUSH TO OPEN"	NFPA 101 7.2.1.9.1.6	60
11	ACCESSIBILITY	USE THE ABA ACCESSIBILITY STANDARD FOR DEPARTMENT OF DEFENSE FACILITIES AS ADOPTED BY THE DEPUTY SECRETARY OF DEFENSE MEMORANDUM DATED OCTOBER 31, 2008, IN LIEU OF IBC CHAPTER 11. REFERENCED AS (ADA/ABA)	UFC 1-200-01 2-11	17
11.1	APPLICATION	ALL AREAS OF NEWLY DESIGNED AND CONSTRUCTED BUILDINGS AND FACILITIES, AND ALTERED PORTIONS OF EXISTING BUILDINGS SHALL COMPLY WITH THESE REQUIREMENTS.	ADA/ABA F201.1	
		EACH ADDITION TO AN EXISTING BUILDING SHALL COMPLY WITH REQUIREMENTS FOR NEW CONSTRUCTION	ADA/ABA F202.2	
		ALTERATIONS SHALL COMPLY EXCEPT:	ADA/ABA F202.4	
		1. AN EXISTING CIRCULATION ROUTE - TO AN ALTERED AN AREA OR SPACE, WHICH IS NOT A PRIMARY FUNCTION AREA OR SPACE - MAY NOT BE REQUIRED TO BE MADE ACCESSIBLE. (SEE 202.4 FOR ADD'L INFO)		
		2. IN ALTERATIONS WHERE COMPLIANCE WITH APPLICABLE REQUIREMENTS IS TECHNICALLY INFEASIBLE (SEE DEFINITIONS), THE ALTERATION SHALL COMPLY WITH THE REQUIREMENTS TO THE MAXIMUM EXTENT FEASIBLE.		
		NOTE: SEVERAL REQUIRED UPGRADES TO EXISTING FACILITIES WITHIN A BUILDING WITH A NEW ADDITION	ADA/ABA F202.2.1 - 5	



NO.	ITEM	SUMMARY OF REQUIREMENTS	REFERENCE	PAGE
11.2	EXEMPT SPACES	ACCESSIBLE EXEMPT SPACES: - MACHINERY SPACES FREQUENTED ONLY BY SERVICE PERSONNEL - INCLUDING ELEVATOR ROOMS AND PITS, MECHANICAL, ELECTRICAL AND COMMUNICATION EQUIPMENT ROOMS, WATER PUMP ROOMS.	ADA/ABA F203.6	
		- LIMITED ACCESS SPACES ACCESSED BY LADDERS, CRAWL SPACES OR VERY NARROW PASSAGEWAYS,	ADA/ABA F203.5	
11.3	ACCESSIBLE ROUTES	EACH SITE ARRIVAL POINT MUST BE CONNECTED BY AN ACCESSIBLE ROUTE TO THE ACCESSIBLE ENTRANCE(S) SERVED.	ADA/ABA F206.2.1	
		AT LEAST ONE ACCESSIBLE ROUTE SHALL CONNECT ACCESSIBLE BUILDINGS OR ELEMENTS THAT ARE ON THE SAME SITE UNLESS THE ONLY MEANS OF ACCESS BETWEEN THEM IS A VEHICULAR WAY WITH NO PEDESTRIAN ACCESS.	ADA/ABA F206.2.2	
		ACCESSIBLE ROUTE (SUCH AS ELEVATOR) REQUIRED TO EVERY STORY AND MEZZANINE UNLESS THE SECOND LEVEL HAS AN OCCUPANT LOAD OF FIVE OR FEWER (ALSO SEE F203.5 & 6 EXEMPTIONS)	ADA/ABA F206.2.3	
		ACCESSIBLE ROUTE REQUIRED BETWEEN ACCESSIBLE ENTRANCE AND ALL ACCESSIBLE AREAS	ADA/ABA F206.2.4	
		ACCESSIBLE ROUTES SHALL COINCIDE OR BE LOCATED WITHIN THE SAME AREA AS GENERAL CIRCULATION PATHS. WHERE CIRCULATION PATHS ARE INTERIOR, SO SHALL BE ACCESSIBLE ROUTES.	ADA/ABA F206.3	
		AT LEAST 60% OF ALL PUBLIC ENTRANCES SHALL BE ACCESSIBLE	ADA/ABA F206.4.1	
11.4	ACCESSIBLE PARKING SPACES	PARKING LOT IS NOW REFERENCED AS 'FACILITY' WHICH INDICATES BOTH PARKING LOTS AND PARKING STRUCTURES.	ADA/ABA F208.2 ADVISORY	
		WHERE MORE THAN ONE PARKING FACILITY (LOT) EXISTS ON A SITE, CALCULATE MINIMUM NUMBER OF SPACES WITHIN EACH FACILITY BASED ON PARKING TOTAL OF CARS WITHIN EACH FACILITY - NOT BASED ON TOTAL NUMBER OF SPACES FROM ALL FACILITIES ON A SITE	ADA/ABA F208.2 ADVISORY	



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NO.	ITEM	SUMMARY OF REQUIREMENT	S	REFERENCE	PAGE
		TOTAL PARKING SPACES	MINIMUM REQUIRED	ADA/ABA F208.2	
		1 - 25	1		
		26 - 50 51 75	2		
		51 - 75 76 - 100	3 4		
		76 - 100 101 - 150	5		
		151 - 200	6		
		201 - 300	7		
		301 - 400	8		
		401 - 500	9		
		501 - 1,000	2% OF TOTAL		
		1001 AND OVER	20, PLUS 1 FOR EACH		
			100, OR FRACTION		
			THEREOF, OVER 1000		
		PROVIDE A MINIMUM OF 1 AC SPACE PER 502 AND NOT LES PARKING SPACE FOR EVERY ACCESSIBLE PARKING SPACE	S THAN ONE ACCESSIBLE VAN 6 (OR FRACTION OF)	ADA/ABA F208.2.4	
		STANDARD ACCESSIBLE PARI MINIMUM 8' WIDE STALL WITH LENGTH) ACCESS AISLE WHIC DISCOURAGE PARKING (CROS CONNECTED TO ACCESSIBLE PARKING STALLS SHALL BE P	A MINIMUM 5' WIDE (FULL CH IS MARKED TO SS STRIPE) AND IS ROUTE. TWO ADJACENT	ADA/ABA 502.2 & 502.3	
			16' WIDE VAN SPACE	ADA/ABA 502.2 & 502.3	
		ACCESSIBLE PARKING SHALL AND ON THE SHORTEST ROU ENTRANCE. WHERE THERE IS ACCESSIBLE ENTRANCE, ACC DISPERSED IN DIFFERENT LO SHORTEST ROUTES TO EACH SEE ADVISORY F208.3.1	MORE THAN ONE ESSIBLE STALLS MAY BE TS AND LOCATED ON	ADA/ABA F2083.1	
1.5	PASSENGER LOADING ZONE	MINIMUM 8' WIDE X 20' LONG Y	/EHICULAR PULL-UP SPACE	ADA/ABA 503.2	
		ADJACENT TO PULL-UP SPAC AISLE X LENGTH OF PULL-UP, PASSENGERS. ACCESS AISLE AT SAME LEVEL AS PULL-UP A DISCOURAGE PARKING.	FOR LOADING OF SHALL BE SLOPED < = 1:48,		
		DeCA COMMISSARY FACILITIES BOLLARDS BETWEEN PULL-UP S BOLLARDS PREVENT PARKING I ROOM BETWEEN BOLLARDS TO	SPACE AND ACCESS AISLE. N AISLE WHILE STILL ALLOWING		



CODE ANALYZED :

## UFC 1-200-01, 8 OCTOBER 2019

NO.	ITEM	SUMMARY OF REQUIREMENTS	REFERENCE	PAGE
11.6	GENERAL ACCESSIBILITY REQUIREMENTS	STAIRWAYS: - 7" MAXIMUM RISER, 11" MAXIMUM TREAD DEPTH - OPEN RISERS ARE NOT PERMITTED - STAIR TREADS AND LANDINGS SUBJECT TO WET CONDITIONS SHALL BE DESIGNED TO PREVENT THE	ADA/ABA 504.2 ADA/ABA 504.3 ADA/ABA 504.7	
		ACCUMULATION OF WATER HANDRAILS : - PROVIDE ON BOTH SIDES OF STAIRS AND RAMPS. - 34-38" ABOVE NOSINGS, RAMPS AND LANDINGS - EXTENSIONS: SLOPING HANDRAILS, AT STAIRS, SHALL EXTEND AT LEAST THE DISTANCE OF 1 TREAD DEPTH AT BOTTOM OF STAIR AND EXTEND 1'-0" HORIZ. AT TOP OF STAIR. HANDRAILS AT RAMPS SHALL EXTEND 1'-0" HORIZ. AT TOP AND BOTTOM OF RAMP	ADA/ABA 505.2 ADA/ABA 505.4 ADA/ABA 505.10.1- 3	
		STAIR WIDTH (ALLOWS 4 1/2" HANDRAIL PROJECTION) : - 36" WIDE STAIR (OCCUPANT LOAD LESS THAN 50) - 44" (UP TO OCCUPANT LOAD OF 2,000)	NFPA 101 7.2.2.2.1.2 (A) 7.2.2.2.1.2 (B)	64
11.7	PLUMBING FACILITIES	TOTAL NUMBERS OF REQUIRED PLUMBING FIXTURES ARE DETERMINED BY OTHER UFC REQUIREMENTS I.E. 3-420-01. THE INFORMATION BELOW ADDRESSES ONLY THE ACCESSIBILITY REQUIREMENTS OF PLUMBING FIXTURES AND ROOMS.		
		DRINKING FOUNTAINS: SHALL COMPLY WITH SECTION 602:		
		- NO FEWER THAN 2 DRINKING FOUNTAINS SHALL BE PROVIDED. ONE GENERAL UNIT SHALL COMPLY WITH 602.1 - 6 AND THE OTHER UNIT SHALL COMPLY WITH 602.7 (STANDING PERSONS) - EXCEPTION: MAY PROVIDE A COMBINATION UNIT THAT	ADA/ABA F211.2	
		COMPLIES WITH BOTH 602.1-6 AND WITH 602.7. - WHERE 3 OR MORE DRINKING FOUNTAINS PROVIDED, PROVIDE 1/2 OF TOTAL (+/5) SHALL BE OF EACH TYPE	ADA/ABA F211.3	
		SINKS: SHALL COMPLY WITH SECTION 606 : WHERE SINKS ARE PROVIDED IN ACCESSIBLE ROOMS, AT LEAST 5% AND AT LEAST ONE SINK, SHALL BE ACCESSIBLE.	ADA/ABA F212.3 ADA/ABA F212.1	
		-EXCEPTION: MOP AND SERVICE SINKS : NO ACCESSIBLE FLOOR SPACE REQ'D	ADA/ABA F212.3	



CODE ANALYZED :

## DEFENSE COMMISSARY AGENCY DIRECTORATE OF PERFORMANCE AND POLICY FACILITIES PROGRAMMING AND PLANNING DIVISION Fort Lee, Virginia FACILITIES CONSTRUCTION AND SUSTAINMENT DIVISION Lackland AFB, Texas

UFC 1-200-01, 8 OCTOBER 2019

#### SUMMARY OF REQUIREMENTS REFERENCE NO. ITEM PAGE ADA/ABA 606.2 - SIDE APPROACH TO KITCHEN-TYPE SINK IS ALLOWED FOR A SINK WHEN NO COOK TOP OR RANGE IS PROVIDED WITHIN THE SAME ROOM (I.E. BREAK ROOMS). THE CODE NOTES ONLY SINKS HERE - SO CANNOT USE THIS SECTION FOR SIDE APPROACHES TO LAVATORIES - WHICH **REQUIRE FRONT APPROACHES**. TOILET ROOMS : EACH TOILET ROOM SHALL COMPLY WITH ADA/ABA F213.2 SECTION 603: EXCEPTION: - ALTERING AN EXISTING TOILET ROOM SHALL NOT BE REQUIRED, WHERE TECHNICALLY INFEASIBLE, AND WHERE A NEW, SINGLE, UNISEX TOILET ROOM IS PROVIDED IN THE SAME AREA. FOR ALTERATIONS : IT WOULD SEEM, THOUGH NOT STATED, ADDITIONAL, SEPARATE MALE AND FEMALE TOILET ROOMS, IN THE SAME AREA. WOULD ALSO ALLOW EXISTING ROOMS TO REMAIN ADVISORY F213.2 NOTES BENEFIT OF PROVIDING UNISEX, F213.2 ADVISORY SINGLE USER TOILET ROOMS IN ADDITION TO ACCESSIBLE SINGLE-SEX TOILET ROOMS. - PROVIDE COMPLIANT TURNING SPACE ADA/ABA 603.2.1 - REQUIRED FIXTURE CLEARANCES ARE ALLOWED TO ADA/ABA 603.2.2 **OVERLAP TURNING SPACE** - DOOR SWING MAY OVERLAP TURNING SPACE, BUT NOT ADA/ABA 603.2.3 FIXTURE CLEARANCES - A MINIMUM OF ONE TOILET, TOILET STALL (IF PROVIDED), ADA/ABA LAVATORY, URINAL (IF PROVIDED), AND MIRROR SHALL F213.3.1 - .5 MEET ADA/ABA REQUIREMENTS. FIXTURES AND STALLS SHALL COMPLY WITH SECTIONS 603-ADA/ABA F213.3.1-606 7 ACCESSIBLE TOILET STALL MINIMUM SIZE: 56" DEEP X 60" ADA/ABA 604.8.1.1 MINIMUM - WITH COMPLIANT WALL-HUNG TOILET. OUT-SWINGING DOOR AND PROPER TOE CLEARANCES. (SEE 604.8.1.4 FOR TOE CLEARANCES) - IF 6 OR MORE TOILETS AND URINALS (COMBINED) IN A ADA/ABA F213.3.1 ROOM, THEN ONE STALL (IN ADDITION TO THE ACCESSIBLE STALL) MUST BE AN "AMBULATORY ACCESSIBLE TOILET STALL" AND MEET 604.8.2 (60" DEEP MINIMUM X 35-37 " WIDE)



NO.	ITEM	SUMMARY OF REQUIREMENTS	REFERENCE	PAGE
11.8	OTHER FACILITIES	LOCKER ROOMS : - SHALL HAVE COMPLIANT TURNING SPACE WITHIN THE ROOM - REQUIRES A BENCH, PER 903, WHERE LOCKERS ARE PROVIDED. BENCH REQUIRES A BACK UNLESS BENCH IS PLACED AGAINST WALL AND SECURED IN-PLACE PER 903.4.	ADA/ABA 803	
		WHERE LOCKERS ARE PROVIDED, PROVIDE AT LEAST 5%, AND NO FEWER THAN ONE OF EACH TYPE, THAT COMPLIES WITH SECTION 811	ADA/ABA F225.2.1	
11.9	FIRE ALARM SYSTEMS	PERMANENTLY INSTALLED AUDIBLE AND VISIBLE ALARMS COMPLYING WITH NFPA 72 ( <del>2002</del> LATEST EDITION) WITH EXCEPTIONS.	ADA/ABA 702	
11.10	WORK SURFACES	5% OF PERMANENT WORK SURFACES NEED TO BE ACCESSIBLE PER 902 <i>(I. E., COUNTERS IN ROOM 4)</i> - EXCEPTIONS : SALES COUNTERS AND SERVICE COUNTERS		
11.10	SALES AND SERVICE COUNTERS	PROVIDE AT LEAST ONE ACCESSIBLE COUNTER AREA : FRONT APPROACH : 30" WIDE X 36" MAX. HIGH COUNTER SIDE APPROACH : 36" LONG X 36" MAX. HIGH COUNTER	ADA/ABA 904.4.1 & 904.4.2	
11.11	CHECK-WRITING COUNTERS	WHERE PROVIDED, CHECK WRITING COUNTERS MUST FOLLOW SECTION 902.3 AND BE 28"-34" IN HEIGHT	ADA/ABA 904.3.3	
11.12	CHECK-OUT AISLES, QUEUES	ALL SHALL COMPLY WITH 904 - (ON AN ACCESSIBLE ROUTE )	ADA/ABA F227.1	
		$\begin{array}{llllllllllllllllllllllllllllllllllll$	ADA/ABA F227.2	
12	INTERIOR ENVIRONMENT	USE IBC CHAPTER 12. (AND MINOR REVISIONS, NOTED, THAT ARE NOT A PART OF THIS CODE ANALYSIS)	UFC 1-200-01 2-12	17
		MUCH OF IBC CHAPTER 12 REQUIREMENTS CONCERN RESIDENTIAL REQUIREMENTS AS WELL AS BASIC MECHANICAL VENTILATION AND LIGHTING OF SPACES - WHICH IS NOT PART OF THIS CODE ANALYSIS AND IS PART OF THE MECHANICAL CODE ANALYSIS. REMAINING REQUIREMENTS ARE AS FOLLOWS :		



NO.	ITEM	SUMMARY OF REQUIREMENTS	REFERENCE	PAGE
12.1	FLOORS	TOILET ROOM FLOORS SHALL HAVE A SMOOTH, HARD, NON- ABSORBENT SURFACE THAT EXTENDS WITH A 4" MINIMUM HIGH WALL BASE	IBC 1209.2.1	325
12.2	WALLS	WALLS WITHIN 2 FEET OF URINALS AND TOILETS SHALL HAVE A SMOOTH, HARD, NON-ABSORBENT SURFACE TO A HEIGHT OF 4 FEET ABOVE THE FLOOR AND WALL MATERIALS SHALL BE OF A MATERIAL THAT IS NOT ADVERSELY AFFECTED BY MOISTURE	IBC 1209.2.2	325
12.3	PRIVACY	TOILET COMPARTMENTS ARE REQUIRED FOR EACH TOILET (EXCEPT IN A SINGLE TOILET ROOM WITH LOCKABLE DOOR)	IBC 1209.3.1	326
		URINAL SCREENS REQUIRED PER IBC 1209.3.2	IBC 1209.3.2	326
13	ENERGY	USE UFC 3-400-01 IN LIEU OF IBC CHAPTER 13	UFC 1-200-01 2-13	18
	EFFICIENCY	NOT PART OF THIS CODE REVIEW		
14	EXTERIOR WALLS	USE IBC CHAPTER 14. ALSO, UFC 3-101-01 (ARCHITECTURE) NOTES SOME PERTINENT REQUIREMENTS	UFC 1-200-01 2-14	18
		MOST CHAPTER 14 REQUIREMENTS ARTICULATE REQUIREMENTS FOR GOOD AND ACCEPTABLE PRACTICES FOR EXTERIOR WALLS - WHICH ARE TYPICALLY SPECIFIED AND DETAILED WITH EVERY DECA FACILITY. THEREFORE, REQUIREMENTS OF THIS SECTION ARE NOT REPRODUCED AS PART OF THIS ANALYSIS.		
15	ROOFING: ROOF ASSEMBLIES AND ROOFTOP	USE IBC CHAPTER 15 AND UFC 3-101-01 (ARCHITECTURE) AND UFC 3-101-01 (ROOFING)	UFC 1-200-01 2-15	19
	STRUCTURES	UFC 3-101-01 (ARCHITECTURE) NOTES LITTLE REGARDING ROOFS. IBC CHAPTER 15 NOTES MANY REQUIREMENTS FOR GOOD AND ACCEPTABLE PRACTICES - WHICH ARE TYPICALLY SPECIFIED AND DETAILED WITH EVERY DECA FACILITY. THEREFORE, MANY IBC ROOFING REQUIREMENTS ARE NOT REPRODUCED AS PART OF THIS ANALYSIS WITH THE FOLLOWING EXCEPTIONS:	IBC 1209.3.1 IBC 1209.3.2 UFC 1-200-01 2-13 UFC 1-200-01 2-14	



CODE ANALYZED :

## **DEFENSE COMMISSARY AGENCY DIRECTORATE OF PERFORMANCE AND POLICY** FACILITIES PROGRAMMING AND PLANNING DIVISION Fort Lee, Virginia FACILITIES CONSTRUCTION AND SUSTAINMENT DIVISION Lackland AFB, Texas

UFC 1-200-01, 8 OCTOBER 2019

	00027447421220	0FC 1-200-01, 8 OCTOBER 2019		
NO.	ITEM	SUMMARY OF REQUIREMENTS	REFERENCE	PAGE
15.1	LOW-SLOPE ROOFING	BUILT-UP, MODIFIED-BITUMEN, AND SINGLE-PLY ROOF SYSTEMS SHALL BE TESTED IN ACCORDANCE WITH FM4474 UL 580 OR UL 1879	IBC 1504.3.1	342
		ADDITIONALLY, UFC 3-600-01 15-1 REQUIRES ROOF COVERINGS TO BE NRTL LISTED AND REQUIRES USE OF CLASS A OR B ROOFS (CLASS C ALLOWABLE ONLY FOR BUILDING UNDER 8,000 S.F.)		
		DECA COMMISSARY'S STANDARD LOW-SLOPE ROOFING CRITERIA SPECIFIES A FULLY ADHERED, SINGLE-PLY MEMBRANE ROOFING. MOST APPLICABLE CHAPTER 15 CODE REQUIREMENTS WOULD BE ADDRESSED BY TYPICAL DECA COMMISSARY ROOF SPECIFICATIONS		
		UFC 3-110-03 ( ROOFING ) NOTES ADDITIONAL REQUIREMENTS FOR LOW-SLOPE ROOFING	UFC 3-110-03 CHAPTER 2	9
		DECA COMMISSARY'S STANDARD LOW-SLOPE ROOFING CRITERIA SPECIFIES A FULLY ADHERED, SINGLE-PLY MEMBRANE ROOFING WHICH IS COMPLIANT WITH THIS SECTION.		
		UFC 3-110-03 (ROOFING) NOTES "MINIMUM ROOF SLOPE FOR CONSTRUCTION OF NEW BUILDINGS IS 1/2 : 12 TO ACHIEVE POSITIVE DRAINAGE"	UFC 3-110-03 2- 3.1	9
		UFC 3-110-03 (ROOFING) NOTES SLOPE OF TAPERED INSULATION CRICKETS AND SADDLES SHALL BE TWICE THAT OF THE MAIN SLOPE.	UFC 3-110-03 2- 5.2.7	14
15.2	HIGH-SLOPE ROOFING	ROOF SYSTEMS SHALL BE TESTED IN ACCORDANCE WITH FM4474, UL 580, OR ASTM E 1592	IBC 1504.3.2	342
		UFC 3-110-03 (ROOFING) NOTES ADDITIONAL REQUIREMENTS FOR STANDING SEAM ROOFING	UFC 3-110-03 CHAPTER 5	33
15.3	METAL FASCIAS AND COPINGS	LOW-SLOPE ROOF SYSTEM METAL EDGE SECUREMENT , EXCEPT GUTTERS, SHALL BE ANSI/SPRI ES-1, -03 TESTED	IBC 1504.5	342
		FIELD-FORMED FASCIAS AND COPINGS WOULD BE ACCEPTABLE BUT RECEIVING ACCEPTABLE ANSI/SPRI TESTING DATA HAS BEEN PROBLEMATIC TO THIS POINT. DECA COMMISSARY CRITERIA NOW SPECIFIES PREMANUFACTURED FASCIAS AND COPINGS THAT ARE ANSI/SPRI TESTED.		
15.4	ROOF COVERINGS	TYPES AND REQUIREMENTS :		
		ASPHALT SHINGLE ROOF - FOLLOW 1507.2 CLAY TILE ROOFING - FOLLOW 1507.3 METAL PANEL ROOFING - FOLLOW 1507.4 - 3:12 MINIMUM SLOPE UNLESS PROVIDE LAPS AND SEAM	IBC 1507.2 IBC 1507.3 IBC 1507.4 IBC 1507.4.2	345 347 348 348

SEALANT, THEN OK DOWN TO 1/2:12



NO.	ITEM	SUMMARY OF REQUIREMENTS	REFERENCE	PAGE
15.5	ROOF INSULATION	THERMAL INSULATION PERMITTED PROVIDED IT IS COVERED WITH AN APPROVED ROOF COVERING AND PASSES THE TESTS OF NFPA 276 OR UL 1256 WHEN TESTED AS AN ASSEMBLY.	IBC 1508.1	356
		POLYISOCYANURATE ROOF BOARD INSULATION SHALL MEET ASTM C 1289, TYPE I OR II	IBC TABLE 1508.2	356
15.6	REROOFING	SHALL COMPLY WITH SECTION 1511 - FOR NEW ROOFING EXCEPT THAT ROOF SLOPES TYPICALLY FOLLOW EXISTING.	IBC 1511.1	356
16	STRUCTURAL DESIGN	USE IBC CHAPTER 16 AS MODIFIED BY UFC 3-301-01. USE IBC CHAPTER 16 AND UFC 3-310-04 FOR SEISMIC DESIGN OF BUILDINGS. IBC CHAPTER 16 DESCRIBES MINIMUM STRUCTURAL LOADING, AS WELL AS LOAD COMBINATIONS AND PERMITTED DESIGN METHODOLOGIES.	UFC 1-200-01 2-16	19
	FALL PROTECTION	FALL PROTECTION TO BE DESIGNED PER UFC 3-101-01. ANCHORAGE MUST MEET IBC 1607.10.4 AS MODIFIED BY UFC 3-301-01.	UFC 1-200-01 2-16	19
17	STRUCTURAL TESTS AND INSPECTIONS	USE IBC CHAPTER 17 AS MODIFIED BY UFC 3-220-01, UFC 3- 301-01, AND UFC 3-600-01. USE DEFINITIONS FROM UFC 1- 200-01 IN LIEU OF IBC/ASCE 7 FOR "AHJ" AND "BUILDING OFFICIAL"	UFC 1-200-01 2-17	19
		REPLACE IBC 2018 1704.2 - THE CONTRACTOR MUST EMPLOY ONE OR MORE APPROVED AGENCIES TO PERFORM INSPECTIONS DURING CONSTRUCTION ON THE TYPES OF WORK LISTED UNDER SECTION 1705. THESE INSPECTIONS ARE IN ADDITION TO THE INSPECTIONS DEFINED IN SECTION 110. THE INSPECTING AGENCY MUST PROVIDE REPORTS OF THE SPECIAL INSPECTIONS DIRECTLY TO THE GOVERNMENT.	UFC 1-200-01 2-17	20



CODE ANALYZED :

#### UFC 1-200-01, 8 OCTOBER 2019

NO.	ITEM	SUMMARY OF REQUIREMENTS	REFERENCE	PAGE
18	SOILS AND FOUNDATIONS	USE IBC CHAPTER 18, AS MODIFIED BY UFC 3-201-01, UFC 3- 220-01, AND UFC 3-301-01	UFC 1-200-01 2-18	20
		ADD TO IBC 1804.4 - ENSURE THAT THE GRADING AND ASSOCIATED STORM WATER RUNOFF DO NOT ADVERSELY AFFECT SURROUNDING SITES. ESTABLISH FINISHED FLOOR ELEVATIONS 6" (150MM) MINIMUM ABOVE FINSHED GRADE AT THE PERIMETER OF THE BUILDING AND PROVIDE SITE GRADING PER UFC 3-201-01. COMPLY WITH UFC 3-600-01 FOR DESIGN OF ENTRANCES AND EXITS FROM BUILDINGS.		
		DELETE IBC 1804.4 EXCEPTION 1.		
		REPLACE IBC 1804.4 EXCEPTION 2: IMPERVIOUS SURFACES ARE PERMITTED TO SLOPE LESS THAN 2% WHERE SURFACE IS A DOOR LANDING OR RAMP REQUIRED TO COMPLY WITH UFC 3-600-01.		
19	CONCRETE	USE IBC CHAPTER 19 AS MODIFIED BY UFC 1-200-02 AND UFC 3-301-01.	UFC 1-200-01 2-19	21
20	ALUMINUM	USE IBC CHAPTER 20, EXCEPT FOR HVAC SYSTEMS. USE UFC 3-410-01.	UFC 1-200-01 2-20	21
		THIS SECTION MAINLY ADDRESSES ALUMINUM FOR STRUCTURAL USE .		
21	MASONRY	USE IBC CHAPTER 21 AS MODIFIED BY UFC 3-301-01	UFC 1-200-01 2-21	21
21.1	MATERIALS	LOAD-BEARING CMU SHALL CONFORM TO ASTM C90 -HOLLOW, CLAY FACE BRICK SHALL CONFORM TO ASTM C652 -SOLID, CLAY FACE BRICK SHALL CONFORM TO ASTM C216 LOAD-BEARING MASONRY MOVED TO CHAPTER 18	IBC 1807.1.6.3(5) IBC 1807.1.6.3(6)	435 435
		-TYPICAL MORTAR FOR USE IN MASONRY CONSTRUCTION SHALL CONFORM TO ASTM C 270.	IBC 2103.2	467
22	STEEL	USE IBC CHAPTER 22 AS MODIFIED BY UFC 3-301-01	UFC 1-200-01 2-22	21
23	WOOD	USE IBC CHAPTER 23, AS MODIFIED BY UFC 3-301-01.	UFC 1-200-01 2-23	21
		THIS SECTION MAINLY ADDRESSES WOOD FOR STRUCTURAL USE WHICH IS NOT TYPICAL FOR DECA COMMISSARIES WHICH ARE NON-COMBUSTIBLE CONSTRUCTION.		
		COMPOSITE WOOD (eg PLYWOOD) MUST BE MOISTURE RESISTANT OR EXTERIOR GLUE GRADE	UFC 1-200-01 2- 23.1	21



CODE ANALYZED :

## DEFENSE COMMISSARY AGENCY DIRECTORATE OF PERFORMANCE AND POLICY FACILITIES PROGRAMMING AND PLANNING DIVISION Fort Lee, Virginia FACILITIES CONSTRUCTION AND SUSTAINMENT DIVISION Lackland AFB, Texas

UFC 1-200-01, 8 OCTOBER 2019

	00027447421220.	OFC 1-200-01, 8 OCTOBER 2019		
NO.	ITEM	SUMMARY OF REQUIREMENTS	REFERENCE	PAGE
		FIRE-RESISTANT-TREATED PLYWOOD SHALL NOT BE USED IN ANY PART OF THE ROOF SYSTEM	UFC 1-200-01 2- 23.2.1	21
		FIRE-RETARDANT-TREATED WOOD SHALL HAVE A FLAME SPREAD OF 25 OR LESS PER ASTM E 84 OR UL 723 AND SHALL BE IDENTIFIED PER SECTION 2303.2.4	IBC 2303.2	475
24	GLASS AND GLAZING	USE IBC CHAPTER 24 AS MODIFIED BY UFC 4-010-01	UFC 1-200-01 2-24	21
24.1	SAFETY GLAZING	THE FOLLOWING GLAZED AREAS SHALL BE CONSIDERED HAZARDOUS LOCATIONS REQUIRING SAFETY GLAZING MATERIALS:	IBC 2406.4	558
		<ol> <li>GLAZING IN ALL FIXED AND OPERABLE PANELS OF DOORS</li> <li>WINDOW GLAZING ADJACENT TO DOORS: WITHIN 24" HORIZONTAL OF A DOOR JAMB AND WHERE BOTTOM OF THE PANE IS LESS THAN 60" ABOVE FLOOR. (CURTAIN WALLS AND STOREFRONT ADJACENT TO DOORS).</li> <li>WINDOW GLAZING IN A PANE &gt; 9 SQFT <u>AND</u> EXPOSED BOTTOM EDGE &lt; 18 " AFF <u>AND</u> EXPOSED TOP EDGE &gt; 36" <u>AND</u> WITHIN 36" HORIZONTALLY TO A WALKING SURFACE.</li> <li>GLAZING IN GUARDS AND RAILINGS</li> <li>GLAZING LESS THAN 60" ABOVE WALKING SURFACE IN SHOWER AND TOILET ROOMS. (NOTE MIRROR EXCEPTION 2406.1).</li> <li>GLAZING ADJACENT TO STAIRWAYS AND RAMPS</li> <li>GLAZING ADJACENT TO BOTTOM STAIRWAY LANDING</li> <li>FIRE DEPARTMENT ACCESS PANELS</li> </ol>		
		TEXT OF THE IBC. THE FIRST 2 ARE TYPICAL SAFETY GLAZING LOCATIONS IN DECA COMMISSARY FACILITIES. THE 3rd LOCATION CAN BE ELIMINATED BY SIMPLY ADDING A HORIZONTAL RAIL ON THE ACCESS SIDE 34" AND 38"AFF CAPABLE OF WITHSTANDING 50 POUNDS PER LINEAR FOOT WITHOUT CONTACTING THE GLAZING AND HAS A CROSS SECTIONAL HEIGHT OF 1 1/2" MINIMUM - WHICH IS TYPICAL IN MOST DECA COMMISSARY CURTAIN WALL & STOREFRONT DESIGNS.		
		SAFETY GLAZING SHALL PASS THE IMPACT TEST REQUIREMENTS OF SECTION 2406.2	IBC 2406.1.1	558
		GLAZING SHALL BE TESTED IN ACCORDANCE WITH CPSC 16 CFR PART 1201 OR ANSI Z97.1 AS APPROPRIATE, AND SHALL COMPLY WITH TABLE 2406.2 (1) OR (2)	IBC 2406.2	558
		GENERALLY ALL GLASS IS CATEGORY II/A EXCEPT : - WINDOWS LESS THAN 9 SQ. FT IN AREA THAT ARE NOT WITHIN 24" HORIZ. OF A DOOR JAMB. - WINDOWS IN DOORS LESS THAN 9 SQ. FT OR WHICH DO NOT LET PASSAGE OF A 3" DIAMETER SPHERE.	IBC TABLE 2406.2 (1) OR 2406.2 (2)	559



CODE ANALYZED :

## DEFENSE COMMISSARY AGENCY DIRECTORATE OF PERFORMANCE AND POLICY FACILITIES PROGRAMMING AND PLANNING DIVISION Fort Lee, Virginia FACILITIES CONSTRUCTION AND SUSTAINMENT DIVISION Lackland AFB, Texas

UFC 1-200-01, 8 OCTOBER 2019

#### SUMMARY OF REQUIREMENTS REFERENCE NO. ITEM PAGE SAFETY GLAZING MUST BE IDENTIFIED BY A IBC 2406.3 558 MANUFACTURER'S MARK PER 2406.2, PLEASE NOTE EXCEPTIONS AND IBC 2406.3.1 CURRENT UFC BLAST REQUIREMENTS REQUIRE LAMINATED GLASS FOR MANY AREAS WHICH WILL TYPICALLY SATISFY SAFETY GLAZING REQUIREMENTS WALL-MOUNTED MIRRORS ARE EXEMPT FROM SAFETY IBC 2406.1 558 GLAZING 25 **GYPSUM BOARD USE IBC CHAPTER 25** UFC 1-200-01 2-25 22 AND PLASTER - MOST CHAPTER 25 REQUIREMENTS ARTICULATE ASTM STANDARDS AND OTHER REQUIREMENTS FOR GOOD AND ACCEPTABLE PRACTICES - WHICH ARE TYPICALLY SPECIFIED AND DETAILED WITH EVERY DECA FACILITY, AND THEREFORE NOT PART OF THIS CODE ANALYSIS WITH THE FOLLOWING EXCEPTIONS: USE IBC 1210.2 FOR WALLS AT PUBLIC TOILETS AND IBC 2509.1 566 SHOWERS DO NOT USE MOISTURE RESISTANT GWB IN AREAS WHERE IBC 2509.3 566 THERE WILL BE DIRECT EXPOSURE TO WATER OR IN AREAS WITH HIGH HUMIDITY 26 PLASTIC USE IBC CHAPTER 26 AS MODIFIED BY UFC 3-600-01 UFC 1-200-01 2-26 22 - MOST CHAPTER 26 REQUIREMENTS ARTICULATE **REQUIREMENTS OF PRODUCTS WHICH ARE NOT FOUND IN** TYPICAL DECA COMMISSARY AND IS THEREFORE NOT PART OF THIS CODE ANALYSIS, WITH THE FOLLOWING EXCEPTIONS: NOTE : THIS IBC SECTION MATCHES ENCOMPASSES THE RIGID 26.1 FOAM PLASTIC INSULATION TYPICALLY USED WITHIN COMMISSARY ROOFING. INSULATION MASONRY CAVITY WALLS, AS WELL AS THE INSULATION MATERIAL WITHIN COOLER AND FREEZER WALL PANELS. PACKAGING CONTAINING FOAM PLASTIC INSULATION IBC 2603.2 569 DELIVERED TO THE JOB SITE SHALL MEET 2603.2 FOR LABELING REQUIREMENTS TO DETERMINE CODE COMPLIANCE FLAME SPREAD AND SMOKE DEVELOPMENT RATINGS NOTED IN IBC 2603.3 569 SECTION 2606.3 ARE OVERALL MAX. REQUIREMENTS - SPECIFIC, MORE STRINGENT, REQUIREMENTS ARE COVERED IN PREVIOUS CODE SECTIONS FOAM PLASTIC INSULATION SHALL BE SEPARATED FROM IBC 2603.4 569 THE INTERIOR OF THE BUILDING BY A "THERMAL BARRIER" WHICH IS MINIMUM OF 1/2" GWB WHEN INSTALLED IN COMPLIANCE WITH IBC 2603.4



NO.	ITEM	SUMMARY OF REQUIREMENTS	REFERENCE	PAGE
		EXCEPTIONS: - FOAM PLASTIC WITHIN A MASONRY CAVITY WALL WHERE THERE IS AT LEAST A 1" MASONRY COVERAGE SEPARATING THE INSULATION FROM THE BUILDINGS INTERIOR.	IBC 2603.4.1.1	569
		<ul> <li>FOAM PLASTIC COOLER / FREEZER WALLS OF 10" THICKNESS OR LESS THAT MEETS ALL THE FOLLOWING :</li> <li>1. HAVE A FLAME SPREAD OF 25 OR LESS AND A SMOKE- DEVELOPED INDEX OF NOT MORE THAN 450 WHERE TESTED IN A MINIMUM 4" THICKNESS.</li> <li>2. HAVE FLASH IGNITION AND SELF-IGNITION TEMPS. OF NOT LESS THAN 600 AND 800 DEGREES F., RESPECTIVELY.</li> <li>3. HAVE A COVERING OF NOT LESS THAN .032-INCH ALUMINUM OR CORROSION-RESISTANT STEEL HAVING A BASE METAL THICKNESS OF NOT LESS THAN 0.0160 INCHES.</li> <li>4. A SPRINKLER SYSTEM SHALL BE INSTALLED WITHIN THE COOLER OR FREEZER AS WELL AS THE AREA OF THE BUILDING IN WHICH IT IS LOCATED SHALL BE SPRINKLERED.</li> </ul>	IBC 2603.4.1.2	570
		TYPICAL COMMISSARY COOLER AND FREEZER ROOMS WOULD FALL UNDER THIS EXCEPTION- SO THE ADDITIONAL, SIMILAR EXCEPTIONS ARE NOT NOTED HEREIN		
		- FOAM PLASTIC THAT IS PART OF A CLASS A, B, OR C ROOF- COVERING ASSEMBLY (NOTE THAT A CLASS "C" ROOF COVERING IS NOT ALLOWED)	IBC 2603.4.1.5	570
		- METAL-FACED, NON-FIRE RATED DOORS WHERE FOAM PLASTIC IS NOT MORE THAN 75/450	IBC 2603.4.1.7	570
26.2	FOAM PLASTIC FINISH AND TRIM	FOAM PLASTIC INSTALLED AS INTERIOR FINISH OR TRIM MUST MEET SECTIONS 2604.2.1 - 4 WHICH INCLUDES DENSITY, THICKNESS, AREA LIMITATION AND FLAME SPREAD.	IBC 2604.2	575



CODE ANALYZED :

#### UFC 1-200-01, 8 OCTOBER 2019

NO.	ITEM	SUMMARY OF REQUIREMENTS	REFERENCE	PAGE
27	ELECTRICAL	USE IBC CHAPTER 27, WHICH REFERENCES NFPA 70 NATIONAL ELECTRICAL CODE, AS MODIFIED BY UFC 3-501-01 AND THE FOLLOWING: 1. USE UFC 3-520-01 FOR INTERIOR ELECTRICAL SYSTEMS CRITERIA. 2. USE UFC 3-530-01 FOR INTERIOR AND EXTERIOR LIGHTING AND CONTROLS CRITERIA.	UFC 1-200-01 2-27	22
		<ol> <li>USE UFC 3-540-01 FOR ENGINE DRIVEN GENERATOR CRITERIA</li> <li>USE UFC 3-550-01 FOR EXTERIOR POWER DISTRIBUTION SYSTEMS CRITERIA.</li> <li>USE UFC 3-560-01 FOR ELECTRICAL SAFETY AND</li> </ol>	UFC 1-200-01 2-29 2	
		ELECTRICAL O & M CRITERIA. 6. USE UFC 3-580-01 FOR BUILDING TELECOMMUNICATIONS CRITERIA. 7. USE 3-600-01 FOR FIRE PROTECTION CRITERIA		
		<ol> <li>8. USE UFC 4-021-01 FOR MASS NOTIFICATION SYSTEMS CRITERIA.</li> <li>9. USE NFPA 1 FIRE CODE IN LIEU OF IFC WHEN REFERENCED BY IBC 2702</li> </ol>		
28	MECHANICAL SYSTEMS	USE IBC CHAPTER 28, WHICH REFERENCES THE IMC, AS MODIFIED BY UFC 3-401-01 FOR MECHANICAL CRITERIA. USE 3-600-01 FOR FIRE PROTECTION FEATURES FOR MECHANICAL SYSTEMS. USE NATIONAL FUEL GAS CODE (NFPA 54, ANSI Z223.1), IN LIEU OF THE INTERNATIONAL FUEL GAS CODE, FOR THE DESIGN AND INSTALLATION OF FUEL GAS PIPING SYSTEMS.	UFC 1-200-01 2-28	23
29	PLUMBING SYSTEMS	USE IBC CHAPTER 29 AS MODIFIED BY UFC 3-420-01	UFC 1-200-01 2-29	9 23
		IBC CHAPTER 29 IS A COPY FROM IPC TABLE 403.1 WHICH IS DIRECTLY REFERENCED BY UFC MODIFICATIONS		
29.1	MINIMUM NUMBER	NUMBER OF WATER CLOSET, LAVATORIES AND DRINKING FOUNTAIN (SEE BELOW FOR SERVICE SINKS) FIXTURES SHALL BE BASED ON OCCUPANT LOAD FOR EACH OCCUPANCY TYPE. OCCUPANT LOAD SHALL BE DETERMINED FROM NFPA 101 TABLE 7.3.1.2 (SECTION 10.4 OF THIS ANALYSIS). FOR MULTIPLE OCCUPANCIES, CALCULATE MIN. FIXTURE COUNTS FOR EACH OCCUPANCY AND THEN ADD COUNTS TOGETHER TO ACHIEVE ONE TOTAL FIXTURE COUNT. (ROUND THIS NUMBER UP TO A WHOLE NUMBER IF FRACTIONAL). <i>IBC COMMENTARY, SAMPLE PROBLEM 1 EXPLAINS A SAMPLE OF</i> <i>THIS CONDITION.</i>	IBC 2902.1.1	587
		UFC 3-420-01 NOTES SIGNIFICANT REVISIONS, IN PLUMBING FIXTURE COUNTS, FROM THE IBC/IPC TABLES. FURTHER, ARMY REQUIREMENTS DIFFER FROM USE GROUP REQUIREMENTS BY NOTING "EMPLOYEES" AS A BASIS FOR FIXTURE COUNT.		



CODE ANALYZED :

## DEFENSE COMMISSARY AGENCY DIRECTORATE OF PERFORMANCE AND POLICY FACILITIES PROGRAMMING AND PLANNING DIVISION Fort Lee, Virginia FACILITIES CONSTRUCTION AND SUSTAINMENT DIVISION Lackland AFB, Texas

UFC 1-200-01, 8 OCTOBER 2019

SUMMARY OF REQUIREMENTS REFERENCE NO. ITEM PAGE UFC 3-420-01 APPENDIX "A" NOTES SPECIFIC FIXTURE APPEND. A A-4 COUNT REQUIREMENTS FOR BUSINESS, FACTORY AND CH. 4, D & E WAREHOUSE (STORAGE) USE GROUPS IN NAVY/AIR FORCE FACILITIES AND NOTES SPECIFIC FIXTURE COUNT REQUIREMENTS FOR "EMPLOYEES" IN ARMY FACILITIES. DESIGNER SHOULD NOTE THAT NEITHER MERCANTILE OCCUPANTS (WHICH ARE NOT EMPLOYEES) NOR MERCANTILE USE GROUP IS LISTED AS PART OF EITHER THE PREVIOUSLY NOTED SPECIFIC ARMY/NAVY/AIR FORCE REQUIREMENTS - SO MINIMUM PLUMBING FIXTURES. FOR MERCANTILE AREAS. SHALL BE BASED ONLY ON IBC/IPC CODES WHICH USE NFPA OCCUPANT LOADS. TOTAL MERCANTILE OCCUPANT LOAD SHALL BE APPLIED TO TYPICAL IBC/IPC REQUIREMENTS. SEE IBC/IPC TABLE BELOW FOR MERCANTILE USE AREAS. TO DETERMINE OCCUPANT LOAD OF EACH SEX. THE TOTAL IBC 2902.1.1 587 (MERCANTILE) OCCUPANT LOAD (FROM NFPA) SHALL BE DIVIDED IN HALF - AND THEN APPLIED TO TABLE - FOR EACH SEX. (USE THE FULL OCCUPANT LOAD FOR DRINKING FOUNTAINS). 29.1A FIXTURE COUNTS IBC TABLE 2902.1 587 FOR MERCANTILE WATER CLOSET LAVATORY DRINKING FOUNTAIN (IPC TABLE 403.1) AREAS / OCCUPANT / OCCUPANT / OCCUPANT MALE & FEMALE MALE & FEMALE 1 / 500 1 / 750 1/1.000 - SERVICE SINKS: ONE PER FLOOR ONE PER FLOOR IS THE MINIMUM REQUIREMENT (WHICH IS ALSO THE REQUIREMENT NOTED IN ADDITIONAL NAVY/AIR FORCE REQUIREMENTS). HOWEVER TYPICAL DECA FACILITIES PROVIDE MORE THAN THIS. DESIGNER SHOULD CALCULATE FIXTURE COUNTS (FOR MERCANTILE AREAS) FROM ABOVE FRACTIONAL COUNTS DO NOT NEED TO BE ROUNDED YET AS THIS IS ONLY A SUBTOTAL FIXTURE COUNT FOR MERCANTILE AREAS WHICH WILL BE ADDED TO THE SUBTOTAL FIXTURE COUNT FOR THE BUSINESS/FACTORY/STORAGE (EMPLOYEE) AREAS BELOW. 29.1B FIXTURE COUNTS UFC 3-420-01 NOTES FIXTURE COUNT REQUIREMENTS FOR FOR NON-SPECIFIC USE AREAS - FOR NAVY / AIR FORCE FACILITIES AND FOR ARMY FACILITIES MERCANTILE AREAS FOR BUSINESS (OFFICE) ; FACTORY / WAREHOUSES APPEND. A NAVY / AIR FORCE A-4 FACILITIES PROVIDE FIXTURES (BOTH MALE AND FEMALE) AT THE CH. 4, D FOLLOWING RATES:



NO.	ITEM	SUMMARY OF REQUIREMENTS	REFERENCE	PAGE
		THE AREAS NOTED ABOVE ARE EFFECTIVELY ALL THE NON- MERCANTILE AREAS. USE THE MAXIMUM OCCUPANT LOAD (FROM NFPA) FOR THE BUSINESS, FACTORY, AND STORAGE (WAREHOUSE) USES AND APPLY TO THE FIXTURE REQUIREMENTS AS NOTED BELOW. THE REQUIREMENT ABOVE NOTES THAT THE RESULTANT FIXTURE COUNTS WILL BE FOR BOTH MALES AND FEMALES (NOT APPLICABLE FOR DRINKING FOUNTAINS AND SERVICE SINKS)		
		- <u>WATER CLOSETS</u> : 1 FIXTURE PER 20 OCCUPANTS UP TO 100 OCC; THEN 1 FIXTURE PER 40 OCCUPANTS. - <u>LAVATORIES</u> : 1 FIXTURE PER 20 OCCUPANTS UP TO 100 OCC; THEN 1 FIXTURE PER 45 OCCUPANTS. - <u>DRINKING FOUNTAINS</u> : 1 FIXTURE PER 75 OCCUPANTS.	FOOTNOTE J	A-4
		- <u>URINALS</u> : URINALS MAY BE SUBSTITUTED FOR NO MORE THAN ONE-THIRD OF THE WATER CLOSETS REQUIRED, ONE FOR ONE.	FOOTNOTE H	A-4
		DESIGNER SHOULD CALCULATE FIXTURE COUNTS (FOR THESE NON-MERCANTILE AREAS) FROM ABOVE AND ADD TO THE FIXTURE COUNTS FROM THE MERCANTILE AREAS. FRACTIONAL NUMBERS SHALL BE ROUNDED UP TO NEXT WHOLE NUMBER, THIS IS THE TOTAL FIXTURE COUNT.		
	ARMY FACILITIES	UFC 3-420-01 NOTES SPECIFIC FIXTURE COUNT REQUIREMENTS FOR "EMPLOYEES" - FOR ARMY FACILITIES		
		FIXTURE ALLOWANCES. TOILET FACILITIES WILL BE PROVIDED FOR <u>EMPLOYEES</u> AS FOLLOWS:	APPEND. A CH. 4, E. 403.1	A-4
		IF THE ACTUAL EMPLOYEE COUNT IS KNOWN, THEN THIS NUMBER MAY BE APPLIED TO THE ARMY FIXTURE REQUIREMENTS BELOW. HOWEVER, THE EMPLOYEE COUNT IS OFTEN NOT KNOWN, DURING THE DESIGN PHASE, SO DESIGNER MAY ASSESS SUBSTITUTING THE ACTUAL EMPLOYEE COUNT WITH THE MAXIMUM OCCUPANCY LOAD OF THE BUSINESS/FACTORY/STORAGE AREAS - AS THESE AREAS ARE BASICALLY THE SAME AS THE EMPLOYEE AREAS. AS SUCH, THE MAXIMUM OCCUPANCY LOAD OF THESE AREAS WOULD ALSO BE THE MAXIMUM EMPLOYEE COUNT (AS EMPLOYEE COUNT CANNOT EXCEED MAX. OCCUPANT LOAD). THE MAXIMUM EMPLOYEE COUNT WILL OBVIOUSLY BE HIGHER THAN THE ACTUAL EMPLOYEE COUNT, SO THE DESIGNER MAY WANT TO ASSES THE LIKELY DIFFERENCE IN FIXTURE COUNTS.		
		WATER CLOSETS IN SEPARATE TOILET ROOMS FOR EACH SEX WILL BE PROVIDED IN ALL PLACES OF EMPLOYMENT ACCORDING TO TABLE 403-1.	APPEND. A CH. 4, E. 403.1.1	A-4
		THE REQUIREMENT ABOVE NOTES THAT THE RESULTANT FIXTURE COUNTS WILL BE FOR BOTH MALES AND FEMALES		



NO.	ITEM	SUMMARY OF REQUIREMENTS	REFERENCE	PAGE
		- <u>WATER CLOSETS</u> : 1 FIXTURE UP TO 15 OCCUPANTS. 2 FIXTURES FROM 16 - 35 OCCUPANTS. 3 FIXTURES FROM 36 - 55 OCCUPANTS 4 FIXTURES FROM 56 - 80 OCCUPANTS 5 FIXTURES FROM 81 - 110 OCCUPANTS 6 FIXTURES FROM 111-150 OCCUPANTS <u>6 FIXTURES FROM 151 - AND OVER</u> ONE ADDITIONAL FIXTURE FOR EACH ADDITIONAL 40 OCCUPANTS	APPEND. A CH. 4, E. Table 403-1	A-5
		LAVATORIES WILL BE MADE AVAILABLE IN ALL PLACES OF EMPLOYMENT ACCORDING TO THE REQUIREMENTS FOR LAVATORIES AS SPECIFIED IN TABLE 403-2.	APPEND. A CH. 4, E. 403.1.2	A-5
		- LAVATORIES: 1 FIXTURE UP TO 15 OCCUPANTS. 2 FIXTURES FROM 16 - 35 OCCUPANTS. 3 FIXTURES FROM 36 - 55 OCCUPANTS 4 FIXTURES FROM 56 - 80 OCCUPANTS 5 FIXTURES FROM 81 - 110 OCCUPANTS 6 FIXTURES FROM 111 - 150 ONE ADDITIONAL FIXTURE FROM 151 AND OVER FOR EACH ADDITIONAL 45 OCCUPANTS	APPEND. A CH. 4, E. Table 403-2	A-5
		- <u>DRINKING FOUNTAINS</u> : 1 FIXTURE PER 75 OCCUPANTS - <u>URINALS</u> : THERE IS NO SPECIFIC REQUIREMENT NOTED HERE SO REFER BACK TO IBC/IPC WHICH ALLOWS A 1 FOR 1 REPLACEMENT OF WC'S UP TO 50% TOTAL	APPEND. A CH. 4, E. 403.1.3	A-6
		SECTION 403.3 NOTES TO USE TABLE 403-5 TO DETERMINE MINIMUM FIXTURE COUNTS FOR TOILET FACILITIES IN FACILITIES WITH PERSONS OTHER THAN EMPLOYEES. HOWEVER NO MERCANTILE-TYPE USE (OR EVEN SIMILAR) IS LISTED SO IBC/IPC MERCANTILE REQUIREMENTS WOULD STILL BE USED.	APPEND. A CH. 4, E. Table 403-5	A-7
		DESIGNER SHOULD CALCULATE FIXTURE COUNTS (FOR THESE NON-MERCANTILE AREAS) FROM ABOVE AND ADD TO THE FIXTURE COUNTS FROM THE MERCANTILE AREAS. FRACTIONAL NUMBERS SHALL BE ROUNDED UP TO NEXT WHOLE NUMBER, THIS IS THE TOTAL FIXTURE COUNT.		
29.2	FAMILY OR ASSISTED-USE TOILET ROOMS	FIXTURES (ONE WC AND ONE LAV) WITHIN EACH FAMILY RESTROOM MAY BE USED TO SATISFY ONE WC AND ONE LAV REQUIRED FIXTURE COUNT - FOR EITHER MALE OR FEMALE. WHERE MULTIPLE FAMILY RESTROOMS EXIST, ONE WC AND LAV CAN APPLY FOR EACH ROOM.	IBC 2902.1.2	587



NO.	ITEM	SUMMARY OF REQUIREMENTS	REFERENCE	PAGE
30	ELEVATOR AND CONVEYING SYSTEMS	USE IBC CHAPTER 30 AS MODIFIED BY UFC 3-490-06 AND UFC 3-600-01.	UFC 1-200-01 2-30	23
		IF THERE ARE CONFLICTS BETWEEN CHAPTER 30 AND UFC 3-600-01, UFC 3-600-01 SHALL TAKE PRECEDENCE.		
30.1	GENERAL REQUIREMENTS	PASSENGER ELEVATORS SHALL CONFORM TO ASME A17.1/CSA B44	IBC 3001.3	591
		EMERGENCY 2-WAY COMMUNICATION - A SYSTEM THAT IS ACCESSIBLE TO THE DEAF, HARD OF HEARING, AND SPEECH IMPAIRED MUST BE PROVIDED THAT ALSO INCLUDES A VOICE-ONLY OPTION FOR HEARING INDIVIDUALS.	IBC 3001.2	591
		PASSENGER ELEVATORS, INCLUDING "FREIGHT" ELEVATORS THAT ALLOW PASSENGERS TO RIDE, AND LOCATED ON AN ACCESSIBLE ROUTE SHALL BE ACCESSIBLE AND COMPLY WITH CHAPTER 30	IBC 1109.7	316
		ACCESSIBLE ELEVATORS SHALL CONFORM TO SECTION 407 AND ASME A17.1	ABA 407.1	
		ABA SECTION 407 LISTS EXTENSIVE REQUIREMENTS FOR ELEVATOR SIZE, SIGNALING, SIGNAGE, AND OPERATIONS. DESIGNERS SHOULD SEEK ADA AND ASME COMPLIANCE BY THE ELEVATOR MANUFACTURER.		
30.2	FIRE-RATING	WHERE HOISTWAY FIRE-RATING IS REQUIRED, HOISTWAY ENCLOSURE SHALL BE A SHAFT ENCLOSURE AND SHALL FOLLOW REQ'S OF IBC CHAPTER 7 SEE SECTION 7 OF THIS ANALYSIS ABOVE FOR ADDITIONAL INFORMATION	IBC 3002.1	591
30.4	ELEVATOR AND STAIRS	AN ELEVATOR CANNOT BE IN THE SAME ENCLOSURE AS A STAIR, IF EITHER IS REQUIRED TO HAVE FIRE-RATED CONSTRUCTION.	IBC 3002.7	592
30.5	SECONDARY POWER	IF STANDBY POWER FOR THE ELEVATORS IS REQUIRED, AND THE BUILDING HAS ONLY ONE ELEVATOR, THE ELEVATOR SHALL AUTOMATICALLY TRANSFER TO STANDBY POWER WITHIN 60 SECONDS AFTER NORMAL POWER FAILURE	IBC 3003.1.2	592
30.6	EMERGENCY OPERATIONS	ELEVATORS SHALL BE EQUIPPED WITH PHASE 1 (EMERGENCY RECALL) AND PHASE II (IN-CAR OPERATION) OPERATIONS IN ACCORDANCE WITH ASME A17.1/CSA B44	IBC 3003.2	592



NO.	ITEM	SUMMARY OF REQUIREMENTS	REFERENCE	PAGE
30.7	MACHINE ROOMS	IF THE HOISTWAY REQUIRES FIRE-RATED CONSTRUCTION, FIRE RESISTANCE OF THE MACHINE ROOM SHALL BE	IBC 3005.4	593
		EQUAL TO THE RATING OF HOISTWAY. OPENINGS SHALL BE PROTECTED WITH SIMILAR RATING. THIS APPLIES TO THE ROOM THE ELEVATOR CONTROLLER IS IN FOR MACHINE ROOM-LESS MODELS.	UFC 3-600-01 4-12.2.1	35
		AS NOTED IN SECTION 7 OF THIS ANALYSIS, FIRE RESISTANCE RATING FOR ELEVATORS IS GENERALLY 1- HOUR (SEE EXCEPTIONS) WHICH MEANS MACHINE ROOM AND OPENING PROTECTION SHALL BE 1-HOUR RATED.		
		- ELEVATORS CONNECTING 4 OR MORE STORIES SHALL BE AT LEAST 2-HOUR, 3 OR LESS SHALL BE 1-HOUR. ELEVATORS CONNECTING A FIRST FLOOR TO A MEZZANINE DO NOT REQUIRE A RATING.		<del>33</del>
		PROVIDE SPRINKLERS AT THE TOP OF THE HOISTWAY WHEN ELEVATOR MACHINERY IS LOCATED WITHIN THE SHAFT.	UFC 3-600-01 4- 12.4.3.1	36
31	SPECIAL CONSTRUCTION	USE IBC CHAPTER 31.	UFC 1-200-01 2-31	23
		MOST ITEMS IN CHAPTER 31 DO NOT PERTAIN TO TYPICAL COMMISSARIES SO ARE NOT PART OF THIS ANALYSIS		
31.1	AWNINGS & CANOPIES	AWNINGS AND CANOPIES SHALL BE DESIGNED TO WITHSTAND WIND LOADS AND LIVE LOADS	IBC 3105.3	586
		COVERINGS SHALL MEET NFPA 701 OR HAVE A FLAME SPREAD INDEX OF 25 OR LESS PER ASTM E 84 OR UL 723.	IBC 3105.4	586
32	ENCROACHMENT INTO THE PUBLIC RIGHT-OF-WAY	USE IBC CHAPTER 32. MILITARY CRITERIA TAKES PRECEDENCE OVER THE PROVISIONS IN CHAPTER 32.	UFC 1-200-01 2-32	24
		LOCAL OR BASE REGULATIONS OFTEN SET OR MODIFY THESE REQUIREMENTS		
33	SAFEGUARDS DURING CONSTRUCTION	USE IBC CHAPTER 33 AND UFC 3-600-01. IF ANY CONFLICT OCCURS BETWEEN IBC CHAPTER 33 AND UFC 3-600-01, THE REQUIREMENTS OF UFC 3-600-01 TAKE PRECEDENCE.	UFC 1-200-01 2-33	24
34	EXISITING BUILDINGS	USE UFC 1-200-01 CHAPTER 3	UFC 1-200-01 2-33	24
35	REFERENCE STANDARDS	USE IBC CHAPTER 35, EXCEPT AS MODIFIED BY UFC 1-200- 01 PARAGRAPH 1-6.2	UFC 1-200-01 2-35	24
36	APPENDICES	DO NOT USE IBC APPENDICES	UFC 1-200-01 2-36	24