



1 FIRST FLOOR CODE PLAN
 1/8" = 1'-0"

CHAPTER 10 - MEANS OF EGRESS

1002.1 'DEFINITIONS'
 'EXIT' THAT PORTION OF A MEANS OF EGRESS SYSTEM WHICH IS SEPARATED FROM OTHER INTERIOR SPACES OF A BUILDING OR STRUCTURE BY FIRE-RESISTANCE-RATED CONSTRUCTION AND OPENING PROTECTIVES AS REQUIRED TO PROVIDE A PROTECTED PATH OF EGRESS TRAVEL BETWEEN THE EXIT ACCESS AND THE EXIT DISCHARGE. EXITS INCLUDE EXTERIOR EXIT DOORS AT GROUND LEVEL, EXIT ENCLOSURES, EXIT PASSAGEWAYS, EXTERIOR EXIT STAIRS, EXTERIOR EXIT RAMPS AND HORIZONTAL EXITS.
 'FLOOR AREA, GROSS' THE FLOOR AREA WITHIN THE INSIDE PERIMETER OF THE EXTERIOR WALLS OF THE BUILDING UNDER CONSIDERATION, EXCLUSIVE OF VENT SHAFTS AND COURTS, WITHOUT DEDUCTION FOR CORRIDORS, STAIRWAYS, CLOSETS, THE THICKNESS OF INTERIOR WALLS, COLUMNS OR OTHER FEATURES.

TABLE 1004.1.1 'MAXIMUM FLOOR AREA ALLOWANCES PER OCCUPANT'
 BUSINESS AREAS = 100 GROSS

TABLE 1005.1 'EGRESS WIDTH PER OCCUPANT SERVED - STAIRWAYS'
 (MODIFIED BY VILLAGE OF MOUNT PROSPECT)
 WITH SPRINKLER SYSTEM = 0.30 INCHES PER OCCUPANT

TABLE 1005.1 'EGRESS WIDTH PER OCCUPANT SERVED - OTHER EGRESS COMPONENTS'
 (MODIFIED BY VILLAGE OF MOUNT PROSPECT)
 WITH SPRINKLER SYSTEM = 0.20 INCHES PER OCCUPANT

CALCULATIONS:
FIRST FLOOR: 4,983 S.F.
 BUSINESS 4,983 S.F. / 100 GROSS = 50 OCCUPANTS
 OTHER EGRESS COMPONENTS 50 x .02 = 10" CLEAR EGRESS WIDTH REQUIRED
SECOND FLOOR: 12,442 S.F.
 BUSINESS 12,442 S.F. / 100 GROSS = 125 OCCUPANTS
 OTHER EGRESS COMPONENTS 125 x .02 = 25" CLEAR EGRESS WIDTH REQUIRED
 STAIRWAYS 125 x .3 = 37.5' STAIRS = 19" CLEAR EGRESS WIDTH REQUIRED (EXISTING WIDTH = 48")

BASED ON OCCUPANCY CALCULATIONS USING CODE PROVIDED SQUARE FOOTAGES, THE BUILDING IS ONLY REQUIRED TO PROVIDE THE CODE MINIMUM 44" CLEAR EGRESS WIDTH AND 36" CLEAR DOORWAYS AND MEETS THE REQUIREMENTS OF CHAPTER 10.

1016.1 'EXIT ACCESS TRAVEL DISTANCE'
 EXITS SHALL BE SO LOCATED THAT THE MAXIMUM LENGTH OF EXIT ACCESS TRAVEL, MEASURED FROM THE MOST REMOTE POINT TO THE ENTRANCE TO AN EXIT ALONG THE NATURAL AND UNOBSTRUCTED PATH OF EGRESS TRAVEL, SHALL NOT EXCEED THE DISTANCES GIVEN IN TABLE 1016.1.

TABLE 1016.1 'EXIT ACCESS TRAVEL DISTANCE'
 B 300 W/ SPRINKLER SYSTEM

MAX. EXIT ACCESS TRAVEL DISTANCE IS 300'. THIS BUILDING MEETS THE REQUIREMENTS OF 1016, SEE CODE PLANS.

1017.1 'CONSTRUCTION'
 CORRIDORS SHALL BE FIRE-RESISTANCE RATED IN ACCORDANCE WITH TABLE 1017.1. THE CORRIDOR WALLS REQUIRED TO BE FIRE-RESISTANCE RATED SHALL COMPLY WITH SECTION 708 FOR FIRE PARTITIONS.

TABLE 1017.1 'CORRIDOR FIRE-RESISTANCE RATING'
 B 0 HOUR RATING W/ SPRINKLER SYSTEM

THEREFORE THE CORRIDOR WALLS TO NOT NEED TO BE RATED.

1019.1 EXCEPTION 9 'ENCLOSURES REQUIRED'
 IN OTHER THAN OCCUPANCY GROUPS H AND I, INTERIOR EGRESS STAIRWAYS SERVING ONLY THE FIRST AND SECOND STORIES OF A BUILDING EQUIPPED THROUGHOUT WITH AN AUTOMATIC SPRINKLER SYSTEM IN ACCORDANCE WITH SECTION 903.3.1.1 ARE NOT REQUIRED TO BE ENCLOSED, PROVIDED AT LEAST TWO MEANS OF EGRESS ARE PROVIDED FROM BOTH FLOORS SERVED BY THE UNENCLOSED STAIRWAYS. SUCH INTERCONNECTED STORIES SHALL NOT BE OPEN TO OTHER STORIES.

THEREFORE THE STAIRS ARE NOT REQUIRED TO BE ENCLOSED OR RATED BY THE BUILDING CODE. HOWEVER, SINCE WE ARE ADDING AN AREA OF RESCUE ASSISTANCE WITHIN EACH STAIR THE ILLINOIS ACCESSIBILITY CODE REQUIRES THE STAIRS TO BE 1 HOUR RATED. THE EXISTING STAIR WALLS AND DOORS ARE CURRENTLY 1 HOUR RATED AND WILL THEREFORE COMPLY WITH THE CODE.

APPLICABLE CODES

- 2006 INTERNATIONAL BUILDING CODE W/ VILLAGE OF MOUNT PROSPECT AMENDMENTS
- 2006 INTERNATIONAL FIRE CODE W/ VILLAGE OF MOUNT PROSPECT AMENDMENTS
- 2006 INTERNATIONAL MECHANICAL CODE W/ VILLAGE OF MOUNT PROSPECT AMENDMENTS
- 2006 INTERNATIONAL FUEL GAS CODE W/ VILLAGE OF MOUNT PROSPECT AMENDMENTS
- 2005 NATIONAL ELECTRICAL CODE W/ VILLAGE OF MOUNT PROSPECT AMENDMENTS
- 2004 ILLINOIS STATE PLUMBING CODE W/ VILLAGE OF MOUNT PROSPECT AMENDMENTS
- 2009 INTERNATIONAL ENERGY CONSERVATION CODE
- 1991 AMERICANS WITH DISABILITIES ACT OF 1991 (ADA)
- 1997 ILLINOIS ACCESSIBILITY CODE

CHAPTER 3 - USE AND OCCUPANCY CLASSIFICATION

- MIXED-USE NON-SEPARATED
- B BUSINESS (OFFICE BUILDING)
- S-2 STORAGE (OPEN PARKING GARAGE)

CHAPTER 4 - SPECIAL DETAILED REQUIREMENTS BASED ON USE AND OCCUPANCY

SECTION 406.2.7 'MIXED SEPARATION'
 PARKING GARAGES SHALL BE SEPARATED FROM OTHER OCCUPANCIES IN ACCORDANCE WITH SECTION 508.3.
 SECTION 406.3.3 'CONSTRUCTION'
 OPEN PARKING GARAGES SHALL BE OF TYPE I, II OR IV CONSTRUCTION.
 SECTION 406.3.4 'USES'
 MIXED USES SHALL BE ALLOWED IN THE SAME BUILDING AS AN OPEN PARKING GARAGE SUBJECT TO THE PROVISIONS OF SECTIONS 508.3, 402.7.1, 406.3.13, 509.3, 509.4 AND 509.7.

THE EXISTING OPEN PARKING GARAGE IS ALLOWED BY CODE AND MEETS THE REQUIREMENTS OF CHAPTER 4. SEE CHAPTER 5 FOR THE MIXED USE NON-SEPARATED REQUIREMENTS.

CHAPTER 5 - GENERAL BUILDING HEIGHTS AND AREAS

THE EXTENT OF THIS PROJECT IS AN EXISTING TWO-STORY BUILDING CONSTRUCTED WITH UNPROTECTED STEEL COLUMNS, JOISTS, BEAMS, AND ROOF DECK, THEREFORE THE CONSTRUCTION CLASSIFICATION FOR THE BUILDING IS TYPE II-B.
 TABLE 603 'ALLOWABLE HEIGHT AND BUILDING AREAS': USE GROUP B, TYPE IIB CONSTRUCTION IS THE MOST RESTRICTIVE (USE GROUP S-2 IS 4 STORIES AND 26,000 S.F.)
 USE GROUP B: 4 STORIES, 23,000 S.F. ALLOWED

THE FOOTPRINT OF THE TWO STORY EXISTING BUILDING IS APPROX. 12,891 S.F. THEREFORE THE BUILDING MEETS THE REQUIREMENTS OF CHAPTER 5.

SECTION 508.3.2 'NONSEPARATED OCCUPANCIES'
 BUILDINGS OR PORTIONS OF BUILDING THAT COMPLY WITH THE PROVISIONS OF THIS SECTION SHALL QUALIFY AS NONSEPARATED OCCUPANCIES.
 SECTION 508.3.2.1 'OCCUPANCY CLASSIFICATION'
 NONSEPARATED OCCUPANCIES SHALL BE INDIVIDUALLY CLASSIFIED IN ACCORDANCE WITH SECTION 302.1. CODE REQUIREMENTS SHALL APPLY TO EACH PORTION OF THE BUILDING BASED ON THE OCCUPANCY CLASSIFICATION OF THAT SPACE EXCEPT THAT THE MOST RESTRICTIVE APPLICATION PROVISIONS OF SECTION 403 AND CHAPTER 9 SHALL APPLY TO THE ENTIRE BUILDING OR PORTION THEREOF.

SECTION 508.3.2.3 'SEPARATION'
 NO SEPARATION IS REQUIRED BETWEEN OCCUPANCIES.
 SINCE THE MOST RESTRICTIVE HEIGHT & AREA AND CONSTRUCTION TYPE HAS BEEN USED FOR THE ENTIRE BUILDING, NO USE GROUP SEPARATIONS ARE REQUIRED.

CHAPTER 6 - TYPES OF CONSTRUCTION

SECTION 602.2 'TYPES I AND II'
 TYPES I AND II CONSTRUCTION ARE THOSE TYPES OF CONSTRUCTION IN WHICH THE BUILDING ELEMENTS LISTED IN TABLE 601 ARE OF NONCOMBUSTIBLE MATERIALS.

BUILDING ELEMENTS	INCLUDING COLUMNS, GIRDERS, TRUSSES	0 HOURS / NONCOMBUSTIBLE
STRUCTURAL FRAME	EXTERIOR (>30')	0 HOURS / NONCOMBUSTIBLE
BEARING WALLS	INTERIOR	0 HOURS / NONCOMBUSTIBLE
NONBEARING WALLS	EXTERIOR (>30')	0 HOURS / NONCOMBUSTIBLE
	INTERIOR	0 HOURS / NONCOMBUSTIBLE
FLOOR CONSTRUCTION	INCLUDING SUPPORTING BEAMS AND JOIST	0 HOURS / NONCOMBUSTIBLE
ROOF CONSTRUCTION	INCLUDING SUPPORTING BEAMS AND JOIST	0 HOURS / NONCOMBUSTIBLE

THIS BUILDING IS CLASSIFIED AS TYPE II-B.

CHAPTER 8 - INTERIOR FINISHES

803.1 'GENERAL' - STATES INTERIOR WALL AND CEILING FINISHES SHALL BE CLASSIFIED IN ACCORDANCE WITH ASTM E84. INTERIOR FINISH MATERIAL SHALL BE GROUPED IN THE FOLLOWING CLASSES IN ACCORDANCE WITH THEIR FLAME SPREAD AND SMOKE DEVELOPED RATINGS:
 CLASS A: FLAME SPREAD 0 - 25, SMOKED DEVELOPED 0 - 450
 CLASS B: FLAME SPREAD 26-75, SMOKED DEVELOPED 0 - 450
 CLASS C: FLAME SPREAD 76-200, SMOKED DEVELOPED 0-450
 803.3 'STABILITY' - REQUIRES INTERIOR FINISH MATERIAL TO BE APPLIED OR FASTENED IN SUCH A MANNER THAT THE MATERIALS WILL NOT BECOME DETACHED WHEN SUBJECTED TO ROOM TEMPERATURES OF 200 DEGREES FAHRENHEIT FOR NOT LESS THAN 30 MINUTES.

803.4.4 'MATERIALS' - REQUIRES INTERIOR OR CEILING FINISHES THAT ARE NOT MORE THAN 0.25 INCHES THICK TO APPLIED DIRECTLY TO A NONCOMBUSTIBLE BACKING, WITH THE EXCEPTION OF CLASS A MATERIALS AND MATERIALS WHERE QUALIFYING TEST WERE MADE WITH THE MATERIAL SUSPENDED OR FURRED OUT FROM A NONCOMBUSTIBLE BACKING.

803.5 'INTERIOR FINISH REQUIREMENTS BASED ON GROUP' - STATES INTERIOR WALL AND CEILING FINISH SHALL HAVE A FLAME SPREAD RATING NOT GREATER THAN THAT SPECIFIED IN TABLE 803.5 FOR THE GROUP AND LOCATION SPECIFIED. TABLE 803.5 REQUIRES THE FOLLOWING IN A SPRINKLERED ASSEMBLY:

SPRINKLERED CATEGORY	GROUP B
VERTICAL EXITS AND EXIT PASSAGEWAYS	B
EXIT ACCESS CORRIDORS AND OTHER EXIT WAYS	C
ROOMS OR ENCLOSED SPACES	C

STATE OF ILLINOIS PLUMBING CODE

SECTION 890.810, TABLE B 'MINIMUM NUMBER OF REQUIRED PLUMBING FIXTURES': OFFICE BUILDINGS/PUBLIC BUILDINGS

LOCATION	EMPLOYEE COUNT	FIXTURES REQUIRED	FIXTURES PROVIDED
ENTIRE BUILDING	175 PEOPLE (88M & 88W)	5 WC 81-110P (MEN & WOMEN) 4 LAV 61-90P (MEN & WOMEN)	1 WC (M & W); 1 LAV (M & W) - FIRST FLOOR 4 WC (W), 3 WC & 1 URINAL (M); 3 LAV (M & W) - SECOND FLOOR
		1 DRINKING FOUNTAIN PER 75P	2 DRINKING FOUNTAINS - FIRST FLOOR 2 DRINKING FOUNTAINS - SECOND FLOOR
		1 SERVICE SINK PER FLOOR	1 SERVICE SINK PER FLOOR

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PROJECT NO.: 65511098
 DRAWN BY: CTS
 CHECKED BY: WHB
 DATE: 10.31.11
 SHEET NO.: A0.1