

BUILDING OFFICIAL JURISDICTION : CITY OF OAKWOOD

APPLICABLE BUILDING CODE : OHIO BUILDING CODE, 2002

PROJECT DESCRIPTION: ADDITION TO AND RENOVATION OF THE EXISTING MUNICIPAL BUILDING  
 30 PARK AVE.  
 OAKWOOD, OH 45419

CHAPTER 3 : USE AND OCCUPANCY

INCIDENTAL USE AREAS:

TABLE 302.1.1

ROOM OR AREA	SEPARATION
BOILERS OVER 15 PSI OR 10 HP	1 HR OR AUTOMATIC FIRE-EXT. SYSTEM*
AUTOMOTIVE PARKING GARAGES	2HR; OR 1 HR AND AUTOMATIC FIRE-EXT. SYSTEM
LAUNDRY ROOMS OVER 100 SF	1 HR OR AUTOMATIC FIRE-EXT. SYSTEM*
STORAGE ROOMS OVER 100 SF	1 HR OR AUTOMATIC FIRE-EXT. SYSTEM*

\*302.1.1.1

WHERE TABLE 302.1.1 PERMITS AN AUTOMATIC FIRE-EXTINGUISHING SYSTEM WITHOUT A FIRE BARRIER, THE INCIDENTAL USE AREA SHALL BE SEPARATED BY CONSTRUCTION CAPABLE OF RESISTING THE PASSAGE OF SMOKE.

CLASSIFICATION OF OCCUPANCIES SECTIONS 303 THRU 312

MIXED-USE, NONSEPARATED	NET SF	BASEMENT NET SF	1ST FLR NET SF	2ND FLR NET SF
B, BUSINESS: CIVIC ADMIN., POLICE AND FIRE STATIONS	18,786	3,786	15,000	
A-3, ASSEMBLY: COUNCIL/ COURTROOM, TRAINING ROOM	2,247		1,234	1,013
R-2, RESIDENTIAL: FIREFIGHTER CREW QUARTERS	4,039			4,039
S-2, STORAGE: GARAGES AND STORAGE ROOMS	10,144	4,978	4,673	493
<b>TOTAL NET SQUARE FOOTAGE</b>	<b>35,216</b>	<b>8,764</b>	<b>20,907</b>	<b>5,545</b>

CHAPTER 5 : GENERAL BUILDING HEIGHTS AND AREAS

AREA MODIFICATIONS TO TABLE 503

TABLE 503	% ALLOWABLE TABULAR AREA (TABLE 503)	100
	% INCREASE FOR FRONTAGE (506.2)	42
	% INCREASE FOR AUTOMATIC SPRINKLERS (506.3)	200
	<b>TOTAL</b>	<b>342</b>
	CONVERSION FACTOR	3.42

TABULAR AREA, TYPE III-B, A-3 OCCUPANCY: (MOST RESTRICTIVE)	9,500 SF
ALLOWABLE AREA PER FLOOR 3.42 (9,500) =	32,490 SF
MAXIMUM FLOOR AREA (ALL STORIES EXCLUDING BASEMENT)	97,470 SF
TOTAL ACTUAL FLOOR AREA (INCLUDING BASEMENT)	35,216 NET SF 37,792 GROSS SF
ACTUAL BUILDING HEIGHT	25 FT - 2 STORIES
ALLOWABLE BUILDING HEIGHT	75 FT - 3 STORIES

CHAPTER 6 : TYPES OF CONSTRUCTION

ACTUAL BUILDING AREA, FIRST FLOOR, GROSS SF	21,969 SF
ADJUSTED BUILDING AREA (21,969 SF / 3.42) =	6,424 SF

CONSTRUCTION CLASSIFICATION : TYPE III B

FIRE RESISTANCE RATINGS (TABLE 601)

STRUCTURAL FRAME	0 HOURS
BEARING WALLS	
INTERIOR	0 HOURS
EXTERIOR	2 HOURS
NON-BEARING WALLS	
INTERIOR	0 HOURS
EXTERIOR	0 HOURS
FLOOR CONSTRUCTION	0 HOURS
ROOF CONSTRUCTION	0 HOURS

CHAPTER 7 : FIRE-RESISTANCE-RATED CONSTRUCTION

707.4	SHAFT ENCLOSURE FIRE RESISTANCE OR RATING OF FLOOR/CEILING ASSEMBLY BUT NOT MORE THAN 2 HOURS	1 HOUR
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CHAPTER 8 : INTERIOR FINISHES

TABLE 803.4

USE B-BUSINESS

	BUSINESS	A-3	R-2	S-2
INTERIOR WALL AND CEILING FINISHES:				
VERTICAL EXITS AND EXIT PASSAGEWAYS:	CLASS B	CLASS B	CLASS C	CLASS C
EXIT ACCESS CORRIDORS:	CLASS C	CLASS B	CLASS C	CLASS C
ROOMS AND ENCLOSED SPACES:	CLASS C	CLASS C	CLASS C	CLASS C
INTERIOR FLOOR FINISHES:				
VERTICAL EXITS AND EXIT PASSAGEWAYS:	CLASS II	CLASS II	CLASS II	CLASS II
EXIT ACCESS CORRIDORS:	CLASS II	CLASS II	CLASS II	CLASS II

CHAPTER 9 : FIRE PROTECTION SYSTEMS

903.3.1.1 SPRINKLERS INSTALLED THROUGHOUT IN ACCORDANCE WITH NFPA 13

906 FIRE EXTINGUISHERS AS REQUIRED BY INTERNATIONAL FIRE CODE

CHAPTER 10 : MEANS OF EGRESS

OCCUPANCY	FLOOR AREA(SF) PER OCCUPANT
BUSINESS AREAS	100 GROSS
ASSEMBLY- CHAIRS, NOT FIXED	7 NET
ASSEMBLY- CHAIRS & TABLES	15 NET
RESIDENTIAL AREAS	200 GROSS
DORMITORY	50 GROSS
LOCKER AND EXERCISE ROOMS	50 GROSS
STORAGE AND MECHANICAL ROOMS	300 GROSS
GARAGE AREAS, EQUIPMENT ROOMS	300 GROSS

**BASEMENT**

BUSINESS AREAS	293 / 100	3
STORAGE AND MECHANICAL (INC. INCIDENTAL B AREA)	7,309 / 300	25
LOCKER AND EXERCISE ROOMS	1,132 / 50	23
<b>TOTAL AREA AND OCCUPANTS</b>	<b>8,764 SF</b>	<b>51 OCCUPANTS</b>

**FIRST FLOOR**

BUSINESS AREAS	14,795 / 100	148
ASSEMBLY- CHAIRS, NOT FIXED	1,234 / 7	176
GARAGE AREAS, EQUIPMENT ROOMS	4,673 / 300	16
STORAGE AND MECHANICAL ROOMS (INCIDENTAL B AREA)	215 / 300	1
<b>TOTAL AREA AND OCCUPANTS</b>	<b>20,907 SF</b>	<b>341 OCCUPANTS</b>

**SECOND FLOOR**

RESIDENTIAL AREAS	2,693 / 200	14
DORMITORY	795 / 50	16 (ACTUAL = 7)
LOCKER AND EXERCISE ROOMS	561 / 50	12
STORAGE AND MECHANICAL ROOMS	493 / 300	2
ASSEMBLY- CHAIRS AND TABLES	1,013 / 15	68
<b>TOTAL AREA AND OCCUPANTS</b>	<b>5,545 SF</b>	<b>112 OCCUPANTS</b>

TABLE 1003.2.3 EGRESS WIDTH PER OCCUPANT SERVED (INCHES/OCCUPANT)

		BASEMENT	FIRST FLOOR	SECOND FLOOR
STAIRWAYS:	OCCS * .20	51" .20 = 10.2"	NA	112" .20 = 22.4"
OTHER:	OCCS * .15	51" .15 = 7.65"	341" .15 = 51.15"	112" .15 = 16.8"

**BASEMENT STAIRWAYS, STAIR 2 AND STAIR 3:**

EXIT CAPACITY PER STAIR = 51 / 2 = 26 MAX/STAIR 26 X 2 = 5.2" MIN. WIDTH PER STAIR

**SECOND FLOOR STAIRWAYS, STAIR 1 & STAIR 4:**

EXIT CAPACITY PER STAIR = 112 / 2 = 56 MAX/STAIR 56 X 2 = 11.2" MIN. WIDTH PER STAIR

1003.3.1.1 MINIMUM CLEAR WIDTH OF EGRESS DOORS = 32"

1003.3.3.1 MINIMUM CLEAR WIDTH OF STAIRWAYS: = 44"

TABLE 1004.2.1 SPACES WITH ONLY ONE MEANS OF EGRESS

**EXIT CAPACITY FOR AREA SERVED ONLY BY STAIR 3:**

2,222 SF STORAGE OR MECHANICAL AT 300 SF/OCCUPANT = 8 OCCUPANTS

294 SF BUSINESS AREA AT 100 SF/OCCUPANT = 3 OCCUPANTS

**TOTAL OCCUPANT LOAD SERVED ONLY BY STAIR 3: 11 OCCUPANTS**

MAX. TRAVEL DISTANCE IN AREA SERVED ONLY BY STAIR 3: 100 FT

ACTUAL MAXIMUM TRAVEL DISTANCE: 78 FT

AREA SERVED ONLY BY STAIR 3 IS UNDER MAX 30 OCCUPANTS AND LESS THAN 100' MAX TRAVEL DISTANCE REQUIRED BY USE GROUP S (MOST RESTRICTIVE) TWO EXITS NOT REQUIRED FROM BASEMENT AREA SERVED ONLY BY STAIR 3.

TABLE 1004.2.4 EXIT ACCESS TRAVEL DISTANCE

	BUSINESS	A-3	R-2	S-2
MAXIMUM ALLOWABLE TRAVEL WITH SPRINKLER SYSTEM	300 FT	250 FT	250 FT	250 FT
MAXIMUM ACTUAL TRAVEL DISTANCE	160 FT	40 FT	128 FT	112 FT

1004.3.1.1 PUBLIC AREAS GROUP B

MINIMUM CLEAR AISLE 36" WIDE WITH FURNITURE ONE SIDE

MINIMUM CLEAR AISLE 44" WIDE WITH FURNITURE BOTH SIDE

1004.3.2.2 MINIMUM EGRESS CORRIDOR WIDTH = 44"

TABLE 1004.3.2.1

CORRIDOR FIRE RESISTANCE RATING 0 HOURS

1004.3.2.3 DEAD END CORRIDORS SHALL NOT EXCEED 50 FEET WHEN FULLY SPRINKLERED PER 903.3.1.1

1005.1

APPEALING THE REQUIREMENTS OF THIS SECTION FOR THE PORTION OF THE EXIT ACCESS FROM STAIR #3 TO THE EXIT DISCHARGE DUE TO:

- LOW EGRESS/ OCCUPANT LOAD TO THIS EXIT DISCHARGE
- THE BUILDING IS FULLY SUPPRESSED
- ADDITIONAL GRADE LEVEL EXITS ARE PROVIDED THROUGHOUT THE FIRST FLOOR

1005.2.1, 1005.2.2 NUMBER OF EXITS

LOCATION	REQUIRED	SHOWN
BASEMENT	2	2
FIRST FLOOR	2	9
SECOND FLOOR	2	3

CHAPTER 11 : ACCESSIBILITY





1101.2 DESIGNED IN ACCORDANCE WITH ANSI A117.1

TABLE 1106.1

REQUIRED ACCESSIBLE PARKING SPACES




TOTAL SPACES	ACCESSIBLE SPACES REQUIRED	ACCESSIBLE SPACES PROVIDED
50	2	4

## FIRE SEPARATION LEGEND

	ONE-HOUR FIRE-PARTITION - SEE A600 FOR PARTITION TYPES SEE DOOR SCHEDULE FOR FIRE RATING AT DOORS.
	TWO-HOUR FIRE-RATED EXTERIOR BEARING WALL CONFORMING TO UL1418 (AT STEEL STUDS) OR UL 1905 (AT CMU) SEE DOOR SCHEDULE FOR FIRE RATING AT DOORS.
	SMOKE PARTITION
	ONE-HOUR RATED CEILING ASSEMBLY

## USE GROUP LEGEND

NOTE: ALL AREAS ARE B UNLESS OTHERWISE NOTED

	A3
	R2
	S2

### GROSS SQUARE FOOTAGE:

	BASEMENT	1ST FLR	2ND FLR	TOTAL
EXISTING BUILDING	3,364	7,784	1,920	13,068
NEW CONSTRUCTION	5,598	14,185	4,941	26,644
	8,962	21,969	6,861	37,792 SF