

PROPOSED OCCUPANCY :

GROUPS "B", "S-1 & S-2"

1ST FLR:

GROUP "B" MOTOR VEHICLE SHOWROOM / SALES / CARWASH

19,887 SF

1ST FLR:

GROUP "S-1" MOTOR VEHICLE REPAIR GARAGE /SERVICE DRIVES

42,678 SF

TOTAL

GROUND FLOOR FLOOR PRINT GROSS AREA FOR THIS PROJECT:

62,565 SF

2ND FLR:

GROUP "S-2" EMPLOYEE PARKING GARAGE

52,927 SF

3RD FLR:

GROUP "S-2" INVENTORY PARKING GARAGE

53,860 SF

4TH FLR:

GROUP "S-2" INVENTORY PARKING GARAGE

52,909 SF

TOTAL GROSS AREA FOR THIS PROJECT:

222,104 SF

PARTS MEZZANINE:

GROUP "S-1" PARTS STORAGE

1,026 SF

GROSS BUILDING SF AREA :

222,104 GSF

TOTAL NUMBER OF OCCUPANTS BY AREA:

GROUND FLOOR:

GROUP "B": BUSINESS AREA

@ 1 / 100 GROSS = 19,887 SF/100

GROUP "S-1": PARTS STORAGE / SERVICE GARAGE / MECH,

199 OCCUPANTS

@ 1 / 300 GROSS= 43,701 SF /300 =

2ND FLOOR OPEN PARKING GARAGE:

146 OCCUPANTS

GROUP "S-2": 2ND FLOOR EMPLOYEE & INVENTORY GARAGE PARKING

@ 1 / 200 GROSS 49,152 SF PARKING TIER/ 200

246 OCCUPANTS

3RD & 4TH FLOOR OPEN PARKING GARAGE:

GROUP "S-2": 3RD AND 4TH FLOOR INVENTORY GARAGE PARKING

49,152 SF PARKING TIER/ 4 FLOOR FOR INVENTORY PARKING ONLY

TOTAL OCCUPANTS :

591 OCC

NOTE: Ground Floor 345 occupants will be used for plumbing fixture calculations. Upper floors are parking stalls for employee and inventory parking only.

PROJECT TYPE:

NEW AUTOMOTIVE DEALERSHIP AND SERVICE

CURRENT APPLICABLE CODE(S): 6TH EDITION

2017 FLORIDA BUILDING CODE

PALM BEACH COUNTY WITH ALL STATE & LOCAL AMENDMENTS

FLORIDA ACCESSIBILITY CODE 2017

FLORIDA ENERGY CONSERVATION 2017

FLORIDA FUEL GAS CODE 2017

FLORIDA MECHANICAL CODE 2017

FLORIDA PLUMBING CODE 2017

FLORIDA TEST PROTOCOLS CODE 2017

NATIONAL ELECTRICAL CODE 12th ed 2014

FLORIDA FIRE PREVENTION CODE 6TH ED

NFPA CHAPTER 38 NEW BUSINESS & 42 STORAGE OCCUPANCIES

BLDG OCCUPANCY:

GROUP B: OFFICE / STORAGE

GROUP S-1: AUTO SERVICE / PARTS DEPT

GROUP S-2: OPEN AIR PARKING GARAGE

PARKING GARAGE IS NOT OPEN TO THE PUBLIC AND SHALL COMPLY WITH FBC SECTION 406 MOTOR-VEHICLE-RELATED OCCUPANCIES OPEN AIR

TYPE OF CONSTRUCTION:

TYPE II B WITH ALLOWABLE AREA INCREASES (100% FULLY FIRE SPRINKLER)

FIRE SPRINKLERS DRAWINGS PROVIDED BY SUMNER FIRE SPRINKLERS

FIRE ALARM PROVIDED

FIRE SEPARATIONS PROVIDED TO MEET CODE

NUMBER OF STORES: TOTAL = 4 STORES

ALLOWABLE BUILDING HEIGHT ABOVE GRADE. * FBC TABLE 504.3	
GROUP "S2" / SPRINKLER SYS. / TYPE I/II/3	75' FBC ALLOWED 19' PROPOSED
GROUP "S2" / SPRINKLER SYS. / TYPE I/II/3	75' FBC ALLOWED 19' PROPOSED
GROUP "S-1" / SPRINKLER SYS. / TYPE I/II/3	75' FBC ALLOWED 19' PROPOSED
LESS THAN 48 PER ZONING MAXIMUM HEIGHT ALLOWANCE.	
GROUP "S-2" / SPRINKLER SYS. / TYPE I/II/3	75' FBC ALLOWED 47-65' PROPOSED
LESS THAN 48 PER ZONING MAXIMUM HEIGHT ALLOWANCE.	
ALLOWABLE NUMBER OF STORES HEIGHT	
GROUP "B" / SPRINKLER SYS. / TYPE I/II/3	4 STORES ALLOWED = 1 STORY PROPOSED
GROUP "S-1" / SPRINKLER SYS. / TYPE I/II/3	4 STORES ALLOWED = 1 STORY PROPOSED
GROUP "S-2" / SPRINKLER SYS. / TYPE I/II/3	4 STORES ALLOWED = 4 STORY PROPOSED
* (S-2 ALSO COMPATIBLE WITH TABLE 406.5.4 RAMP ACCESS 2 TIERS)	

ALLOWABLE BUILDING AREA	FBC TABLE 506.2
<p>Group "B", SPRINKLER SYS. / TYPE IIA3 / SM = 69,000 SF ALLOWED 19,897 SF ACTUAL</p> <p>Group "B", SPRINKLER SYS. / TYPE IIA3 / SM = 76,000 SF ALLOWED PER FLOOR</p> <p>2ND FLOOR PARKING GARAGE</p> <p>2ND AND LOADING PARKING TIER = 49,110 SF ACTUAL PARKING AREA</p> <p>3RD FLOOR PARKING TIER = 49,110 SF ACTUAL PARKING AREA</p> <p>3RD FLOOR PARKING TIER = 49,110 SF ACTUAL PARKING AREA</p> <p>ALSO COMPLIES WITH TABLE 406.5.4 &lt; 50,000 SF AREA PER TIER ALLOWED )</p> <p>ALLOWABLE BUILDING AREA INCREASE FOR THE GROUND FLOOR WITH MOST RESTRICTIVE USE "B" PER FBC 506.2 SINGLE OCCUPANCY, MULTISTORY BUILDINGS</p>	
$A_0 = A_1 + (NS \times I_f) \times S_d$	
$A_0 = 52,500 + (17,500 \times .75) \times 4 = 210,000 \text{ sf}$	
GROUND FLOOR ACTUAL SF = 52,863 SF < 210,000 SF ALLOWED	
REQUIRED FIRE ASSEMBLIES: CONSTRUCTION TYPE IIA-B	

FIRE ALARM PROVIDED:		YES	
FBC TABLE 607(FIRE RESISTANCE RATING REQUIREMENTS BUILDING ELEMENTS (HOURS))			
STRUCTURAL ELEMENTS	FIRE RATING REQUIRED	FIRE RATING PROVIDED	
STRUCTURAL FRAME (INCL. COLUMNS, GIRDERS, TRUSSES)	0	0	
BEARING WALLS:			
EXTERIOR	0	0	
INTERIOR	0	0	
NON-BEARING EXTERIOR WALLS AND PARTITIONS	0	0	
NON-BEARING INTERIOR WALLS AND PARTITIONS	0	0	
FLOOR CONSTRUCTION:			
BETWEEN 1ST AND 2ND:	2	2 HR REFER HORIZONTAL SEP. BELOW	
BETWEEN UPPER FLOORS:	0	0 HR FOR OPEN GARAGE < 50,000 SF	
ROOF CONSTRUCTION:			
Roof, Separation of Occupancies (WALLS (FBC 308.4))	0	0	
GROUP B and GROUP S-1	2 HR. SEPARATION	1 HR. SEPARATION w/ SPRINKLERS	
GROUP S-1 and GROUP S-2	2 HR. SEPARATION	Non Applicable	
GROUP S-1 and GROUP S-2	2 HR. SEPARATION	Non Applicable	
HORIZONTAL SEPARATION BETWEEN FLOORS:			
GROUP B and GROUP S-2	2 HR. SEPARATION	2 HR. SEPARATION 4.5" concrete floor	
GROUP S-1 and GROUP S-2	2 HR. SEPARATION	2 HR. SEPARATION 4.5" concrete floor	
GROUP S-2 and GROUP S-2	0 HR. SEPARATION	0 HR. SEPARATION	
FBC SECTION 722 CALICULATED FIRE RESISTANCE			
TABLE 722.2.2.1 MIN. SLAB THICKNESS OF 4.6" CARBONATE CONCRETE YIELDS 2-HR RATING			
A TOTAL THICKNESS OF 4.6" CARBONATE CONCRETE SLAB IS PROVIDED BETWEEN GROUND FLOOR AND 2ND FLOOR PARKING GARAGE TO COMPLY WITH 2-HR OCCUPANCY SEPARATION.			

Ground Floor: Life Safety Plan - Over All View-Refer Quadrants for Enlarged Areas

03