

2009 APPENDIX B
BUILDING CODE SUMMARY
FOR ALL COMMERCIAL PROJECTS
(EXCEPT 1 AND 2- FAMILY DWELLINGS AND TOWNHOUSES)
(Reproduce the following data on the building plans sheet 1 or 2)

Name of Project: Petco Animal Supply Store
Address: 213 Crossroads Boulevard, Cary, NC 27518
Proposed Use: Retail Store
Owner/Authorized Agent: Daniel Franco Phone #: 305-412-8187
Owned by: City / County Private State
Code Enforcement Jurisdiction: City, Cary County

LEAD DESIGN PROFESSIONAL:

Designer	FIRM	NAME	LICENSE #	TELEPHONE #	E-MAIL
Architectural	SBLM Architects	Philip Magnuson	8279	305-412-9187	pmagnuson@sblm.com
Civil					
Electrical	Acertus Consulting	Randall Nelson	032801	913-322-5150	randynelson@acertusgroup.com
Fire Alarm					
Plumbing	Acertus Consulting	Randall Nelson	032801	913-322-5150	randynelson@acertusgroup.com
Mechanical					
Sprinkler-Standpipe					
Structural	Bowman Engineering	Larry Bowman	024328	770-297-0075	bowman@bowman.com
Retaining Walls >5' High					
Other					

Scope of work: Tenant upfit for existing mercantile space to include existing storefront to be reworked for new entry doors, new facade remodel at front to provide more prototypical pediment at signage area, interior upfit work - all to include Architectural, Structural, and MEP drawings.

2009 EDITION OF NC CODE FOR: New Construction Addition Upfit
EXISTING: Reconstruction Alteration Repair
CONSTRUCTED ORIGINAL USE RENOVATED CURRENT USE

2009 NC REHAB CODE Information: Scope of work / work area must be listed and delineated on the plans. Check all that apply: Repair Alteration Renovation Reconstruction Change of use Addition
 Last known legal occupancy Historic Property: Yes No
Original Building construction Date: _____
Justifications for using the REHAB code: _____

Reviewers Notes for Field Inspector:

BUILDING DATA

Construction Type: I-A I-B II-A II-B III-A III-B
 I-V I-V-A I-V-B
Mixed Construction No Yes Types _____
Sprinklers: No Yes Class I II III Wet Dry
Standpipes: No Yes
Fire District: No Yes
Building Height: Feet: 37 Number of Stories: 1
Mezzanine: No Yes
Gross Building Area:
Floor Existing (sq. ft.) New (sq. ft.) Sub-Total
6th Floor - - -
5th Floor - - -
4th Floor - - -
3rd Floor - - -
2nd Floor - - -
Mezzanine - - -
1st Floor 13,500 SF 13,500 SF
Basement - - -
Total 13,500 SF 13,500 SF

ALLOWABLE AREA

Primary Occupancy: Assembly A-1 A-2 A-3 A-4 A-5
 Business Educational Factory Industrial F-1 Moderate F-2 Low
Hazardous H-1 Detonable H-2 Deflagrable H-3 Combust H-4 Health H-5 HPM
Institutional I-1 I-2 I-3 I-4
I-3 Use Condition 1 2 3 4
 Mercantile Residential R-1 R-2 R-3 R-4
Storage S-1 Moderate S-2 Low High-Piled
 Utility and Miscellaneous Parking Garage Open Enclosed Repair

Secondary Occupancy: NA
Special Uses: 402 403 404 405 406 407 408 409 410 411 412
 413 414 415 416 417 418 420 421 422 423
Special Provisions: 509.2 509.3 509.4 509.5 509.6 509.7 509.8
Mixed Occupancy: No Yes Separation Hr. Exemption
 Incidental Use Separation (508.2)
This separation is not exempt as a Non-Separated Use (see exceptions).
 Non-Separated Use (508.2)
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.
 Separated Use (508.3.3) - See below for area calculations
For each story, the area of occupancy shall be such that the sum of the ratios of the actual floor area of each use divided by the allowable floor area for each use shall not exceed 1.

Actual Area of Occupancy A + Actual Area of Occupancy B
Allowable Area of Occupancy A + Allowable Area of Occupancy B ≤ 1

Story No.	Description and Use	(A) Building Area Per Story (Actual)	(B) Table 508.3.2 Area	(C) Area For Frontage Enclosures	(D) Area For Sprinkler Increase 2	(E) Allowable Area or Unlimited 3	(F) Maximum Building Area 4
1	Retail Store	13,500	12,500	-	37,500	50,000	50,000

- Frontage area increases from Section 508.2 are computed thus:
 - Perimeter which fronts a public way or open space having 20 feet minimum width = _____ (F)
 - Total Building Perimeter = _____ (P)
 - Ratio (F/P) = _____ (F/P)
 - W = Minimum width of public way = _____ (W)
 - Percent of frontage increase $I_1 = 100 [F/P - 0.25] \times W/30 = _____\%$
- The sprinkler increase per section 508.3 is as follows:
 - Multi-story building $I_2 = 200$ percent
 - Single story building $I_2 = 300$ percent
- Unlimited area applicable under conditions of Sections Group B, F, M, S, A-3, A-4 (507); Group A motion picture (507.10); covered mall buildings (402.6); and H-2 aircraft paint hangers (507.8).
- Maximum Building Area = total number of stories in the building x E (506.4).
- The maximum area of open parking garages must comply with 406.3.5. The maximum area of air traffic control towers must comply with 412.1.2.

ALLOWABLE HEIGHT

Type of Construction	Allowable (Table 503)	Increase for Sprinklers	Shown on Plans	Code Reference
Type II-B	28 Feet	300%	Type II-B	
Building Height in Feet	28 Feet	Feet=H+20' = 48 Feet	37 Feet	
Building Height in Stories	1 Story	Stories+1= 2 Stories	1 Story	

FIRE PROTECTION REQUIREMENTS

Life Safety Plan #, if Provided: _____

Building Element	Fire Separation (Facts)	Rating Provided (LW, K, C, R, Reduction)	Details and Sheet #	Design # for Rated Assembly	Design # for Rated Penetration	Design # for Rated Joints
Structural Frame, including columns, girders, trusses						
Bearing Walls						
Exterior						
North						
East						
West						
South						
Interior						
Nonbearing Walls and partitions						
Exterior Walls						
North						
East						
West						
South						
Interior walls and partitions						
Floor Construction including supporting beams and joists						
Roof Construction including supporting beams and joists						
Shafts Enclosures - Exit						
Shafts Enclosures - Other						
Corridor Separation						
Occupancy Separation						
Party / Fire Wall Separation						
Smoke Barrier Separation						
Tenant Separation						
Incidental Use Separation						

LIFE SAFETY SYSTEM REQUIREMENTS:

Emergency Lighting: No Yes
Exit Signs: No Yes
Fire Alarm: No Yes
Smoke Detection Systems: No Yes (Duct Smoke Detectors)
Panic Hardware: No Yes

EXIT REQUIREMENTS:

NUMBER AND ARRANGEMENT OF EXITS

Floor, Room, or Space Designation	Minimum Number of Exits		Travel Distance		Arrangement Means of Egress 1,3 (Section 1015.2)	
	Required	Shown on Plans	Allowable Travel Distance (Table 1004.2.4)	Actual Travel Distance Shown on Plans	Required Distance Between Exit Doors	Actual Distance Shown on Plans
First Floor	2	2	250	163'-11"	55'-9"	106'-1"

- Corridor dead ends (Section 1017.3)
- Buildings with single exits (Table 1019.2). Spaces with one means of egress (Table 1015.1)
- Common Path of Travel (Section 1014.3)

EXIT WIDTH

Use Group or Space Description	(a) Area sq. ft.	(b) Area per Occupant (Table 1004.1.1)	(c) Calculated Occupant Load (a ÷ b)	Exit Width (in) 2,3,4,5,6					
				Egress Width per Occupant (Table 1005.1)		Required Width (Section 1005.1) (a/c) x 1.1		Actual Width Shown on Plans	
				Stair	Level	Stair	Level	Stair	Level
Retail and Grooming	12,798	30	427	NA	.15	NA	64.05"	NA	117.75"
Stock	702	300	3	NA	.15	NA	.45"	NA	33.75"

- See Table 1004.1.1 to determine whether net or gross area is applicable. See definition "Area, Gross" and "Area, Net" (Section 1002)
- Minimum stairway width (Section 1009.1); min. corridor width (Section 1017.2); min. door width (Section 1008.1)
- Minimum width of exit passageway (Section 1021.2)
- See Section 1004.5 for converging exits.
- The loss of one means of egress shall not reduce the available capacity to less than 50 percent of the total required (Section 1005.1)
- Assembly occupancies (Section 1008)

SCHEDULE OF SPECIAL INSPECTION SERVICES

No Special Inspections required for this project Special inspections required

The following sheets comprise the required schedule of special inspections for this project. The construction divisions which require special inspections for this project are as follows:

- | | | |
|-------------|--|--|
| Fabricators | <input type="checkbox"/> IT - 1 Verification of Soils | <input type="checkbox"/> IT - 10 Inspection of Structural Steel |
| | <input type="checkbox"/> IT - 2 Excavation and Fill | <input type="checkbox"/> IT - 11 Structural Masonry |
| | <input type="checkbox"/> IT - 3 Piling and Drilling Piers | <input type="checkbox"/> IT - 12 Welding |
| | <input type="checkbox"/> IT - 4 Modular Retaining Walls | <input type="checkbox"/> IT - 13 High Strength Bolts & Steel Framing Insp. |
| | <input type="checkbox"/> IT - 5 Reinforced Concrete | <input type="checkbox"/> IT - 14 Sprayed Fire-Resistance Materials |
| | <input type="checkbox"/> IT - 6 Post Tension Slab | <input type="checkbox"/> IT - 15 Exterior Insulation and Finish system |
| | <input type="checkbox"/> IT - 7 Pre-cast Concrete Erection | <input type="checkbox"/> IT - 16 Seismic Control |
| | <input type="checkbox"/> IT - 8 Pre-stressed Concrete | <input type="checkbox"/> IT - 17 Smoke Control |
| | <input type="checkbox"/> IT - 9 Inspection of Pre-Cast Fabricators | <input type="checkbox"/> IT - 18 Detention Basin |
| | | <input type="checkbox"/> IT - 19 Special Cases* |

Check the above boxes for the special inspection required for this project and list below specific inspections required under Chapter 17.

STRUCTURAL DESIGN

DESIGN LOADS
Importance Factors: Wind (I_w) 1.0 (Occupancy Category II)
Snow (I_s) _____
Seismic (I_e) 1.0 (Occupancy Category II)
Live Loads: Roof 20 psf
Mezzanine _____ psf
Floor _____ psf
Ground Snow Load: 15 psf
Wind Load: Basic Wind Speed 100 mph (ASCE 7-98)
Exposure Category B
Wind Base Shears (for MWFRS) $V_x = _____ V_y = _____$

SEISMIC DESIGN CATEGORY A B C D

Provide the following Seismic Design Parameters:
Occupancy Category (T1604.5) _____
Spectral Response Acceleration $S_s = _____ \% S_1 = _____ \% S_2 = _____ \% S_3 = _____ \% S_4 = _____ \% S_5 = _____ \% S_6 = _____ \% S_7 = _____ \% S_8 = _____ \% S_9 = _____ \% S_{10} = _____ \% S_{11} = _____ \% S_{12} = _____ \% S_{13} = _____ \% S_{14} = _____ \% S_{15} = _____ \% S_{16} = _____ \% S_{17} = _____ \% S_{18} = _____ \% S_{19} = _____ \% S_{20} = _____ \% S_{21} = _____ \% S_{22} = _____ \% S_{23} = _____ \% S_{24} = _____ \% S_{25} = _____ \% S_{26} = _____ \% S_{27} = _____ \% S_{28} = _____ \% S_{29} = _____ \% S_{30} = _____ \% S_{31} = _____ \% S_{32} = _____ \% S_{33} = _____ \% S_{34} = _____ \% S_{35} = _____ \% S_{36} = _____ \% S_{37} = _____ \% S_{38} = _____ \% S_{39} = _____ \% S_{40} = _____ \% S_{41} = _____ \% S_{42} = _____ \% S_{43} = _____ \% S_{44} = _____ \% S_{45} = _____ \% S_{46} = _____ \% S_{47} = _____ \% S_{48} = _____ \% S_{49} = _____ \% S_{50} = _____ \% S_{51} = _____ \% S_{52} = _____ \% S_{53} = _____ \% S_{54} = _____ \% S_{55} = 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