

**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: Carolina Diesel Truck
Address: Progress Drive, Fuquay Varina, NC Suite #: _____
Owner or Authorized Agent: Chip LaBonte Phone: 802.651.1338
Email: clabonte@pcconstruction.com Fax: _____
Owned By: Privately City/County State
Code Enforcement Jurisdiction: City County City/County
Name of Jurisdiction: Harnett County

PROJECT SUMMARY:

Building Description: 10,084 SF type II-B construction building. Pre-engineered metal building with EIFS, metal wall and roof panels. Building includes Business and S-1 Storage occupancies.

Scope of Work: New construction of 10,084 SF pre-engineered metal building.

Code Compliance Summary: There will be no repair work on commercial trucks or buses. Maximum fire area allowed is 12,000 SF. Actual fire area is 10,084 SF.

Alternative Means of Compliance Request:

Lead Design Professional/Project Coordinator:

DESIGNER	FIRM	NAME	LICENSE	TELEPHONE
Architectural:	NA	Tony Johnson	4296	919-550-7717
Civil:	NA			
Electrical:	Kilian Engineering	Charles Leister	039786	252-438-8778
Fire Alarm:	NA			
Plumbing:	Kilian Engineering	Charles Leister	039786	252-438-8778
Mechanical:	Kilian Engineering	Charles Leister	039786	252-438-8778
Sprinkler-Standpipe:	NA			
Structural:	Tyndall Engineering and Design	Prentice Tyndall		919-773-1200
Precast:	NA			
Trusses:	NA			
Retaining Walls >5' High:	NA			
Other:				

Building Code: 2015 NC Existing Building Code
 2012 North Carolina State Building Code (NCSBC)
 2012 NC Rehab

revised 06.17.16 Building Code Summary Page 1 of 14

New Building: New Building Shell Building First Time Interior Completion
 Addition Alteration to Shell

Existing Building: Renovation Interior Completion Tenant Alteration
 Reconstruction Repair Alteration to Shell
 Change of Use Tenant Space Change of Occupancy

Note: Zoning Review May Be Required for Change of Use or Occupancy

Original Occupancy: NA

Proposed Occupancy: Business, S-1 Storage

OCCUPANCY INFORMATION

Primary Occupancies: Assembly: A-1 A-2 A-3 A-4 A-5
 Business Educational Factory-Industrial: F-1 F-2
High-Hazard: H-1 H-2 H-3 H-4 H-5
Institutional: I-1 I-2 I-3 I-4
I-3 USE CONDITION: 1 2 3 4 5
 Mercantile Residential: R-1 R-2 R-3 R-4
Storage: S-1 S-2 High-piled
S-1 SPECIAL CONDITION: Repair Garage (406.6)
S-2 SPECIAL CONDITION - Parking Garage: Open (406.3) Enclosed (406.4)
 Utility and Miscellaneous

Accessory Occupancies:

Accessory Uses (Indicate Percentages): NA

Incidental Uses: NA

Special Occupancies: 402 403 404 405 406 407 408
 409 410 411 412 413 414 415
 416 417 418 419 420 421 422
 423 424 425 426 427

Special Provisions:

Mixed Occupancy: No Yes Separation: 0

Exception: _____

Non-Separated Mixed Occupancy (508.3.2)

Separated Mixed Occupancy (508.3.3)

$\frac{\text{Actual Area of Occupancy A}}{\text{Allowable Area of Occupancy A}} + \frac{\text{Actual Area of Occupancy B}}{\text{Allowable Area of Occupancy B}} \leq 1$

revised 06.17.16 Building Code Summary Page 2 of 14

ALLOWABLE AREA AND HEIGHT CALCULATIONS

THIS SECTION FOR NEW, ADDITIONS, CHANGE OF USE, AND INTERIOR COMPLETIONS

EXTERIOR WALL	ACTUAL LENGTH	OPEN LENGTH	WIDTH OF PUBLIC WAY OR OPEN SPACE
North			
South			
East			
West			
Total	P	F	W

INCREASE FRONTAGE _____ %
SPRINKLERS _____ %

FRONTAGE INCREASE FORMULA ALLOWABLE AREA FORMULA

$$I_f = 100 \left(\frac{F}{P} - 0.25 \right) \frac{W}{30}$$

BOTH BUILDING AND TENANT MUST BE INDICATED ON CHART BELOW

STORY NO.	OCCUPANCY	(A) BLDG AREA PER STORY (ACTUAL)	(B) TABLE 503 AREA	(C) % OPEN SPACE INCREASE	(D) % SPRINKLER INCREASE	(E) ALLOWABLE FLOOR AREA OR UNLIMITED	(F) RATIO OF ACTUAL TO ALLOWABLE	(G) MAXIMUM BUILDING AREA	(H) SEPARATION RATING REQUIRED
1	Business	9,675	23,000	NA	NA	23,000	42%		0
1	S-1 Storage	9,675	17,500	NA	NA	17,500	55%	35,900	0
2	Business	409	23,000	NA	NA	23,000	2%		0
2	S-1 Storage	409	17,500	NA	NA	17,500	12%		0

Frontage area increases from Section 506.2 are computed thus:
a. Perimeter which fronts a public way or open space having 20 feet minimum width = _____ ft (F)
b. Total Building Perimeter = _____ ft (P)
c. Ratio (FP) = _____ (FP)
d. W = Minimum width of public way = _____ ft (W)
e. Percent of frontage increase $I_f = 100 \left(\frac{FP}{P} - 0.25 \right) \times \frac{W}{30} = \text{____} (\%)$

The sprinkler increase per Section 506.3 is as follows:

a. Multistory building $I_s = 300$ percent
b. Single story building $I_s = 300$ percent
c. Unlimited area applicable under conditions of Sections Group B, F, M, S, A-4 (507.1), 507.2, 507.3, 507.4, 507.7, Group A motion picture (507.10); Malls (507.11); and H-2 aircraft paint hangers (507.8).
d. Maximum Building Area = total number of stories in the building x E but not greater than 3 x E.
e. The maximum area of parking garages must comply with 406.3.5. The maximum area of air traffic control towers must comply with 412.3.2.

revised 06.17.16 Building Code Summary Page 3 of 14

ALLOWABLE HEIGHT

MOST RESTRICTIVE USE (GROUP)	ALLOWABLE HEIGHT (TABLE 503)	INCREASE FOR SPRINKLERS	SHOWN ON PLANS	CODE REFERENCE
Type of Construction	Type II-B		Type II-B	Table 601
Building Height in Feet	H = 55'-0"	H + 20 ft = NA	H = 25'-1"	Table 503
Building Height in Stories	S = 2	S + 1 = NA	S = 2	Table 503

BUILDING DATA

THIS SECTION REQUIRED FOR ALL PROJECTS

Construction Type: I-A I-B II-A II-B III-A III-B

IV-HT V-A V-B

Mixed construction: No Yes Types _____

Sprinklers: No Yes NFPA 13 NFPA 13R NFPA 13D

Partially Sprinklered Special Suppression

Standpipes: No Yes Class: I II III Wet Dry

Fire District: No Yes (Appendix D) Flood Hazard Area No Yes

Building Height: 25'-1" 2 Stories

Basement: No Yes

Mezzanine: No Yes

High Rise: No Yes Life Safety Plan Sheet # (if provided): A-03

Ground Building Area:

FLOOR	EXISTING (SQ FT)	NEW (SQ FT)	SUB-TOTAL
Basement			
Ground Floor		9,675	9,675
Mezzanine			
2 nd Floor		409	409
3 rd Floor			
4 th Floor			
TOTAL		10,084	

Area of Project Tenant/Alteration/Renovation:
Area of Construction: 11,666

revised 06.17.16 Building Code Summary Page 4 of 14

FIRE PROTECTION REQUIREMENTS

THIS SECTION REQUIRED FOR ALL PROJECTS

Life Safety Plan Sheet #, if provided: A-03

BUILDING ELEMENT	FIRE SEPARATION DISTANCE (FEET)	RATING		DETAIL # AND SHEET #	DESIGN # FOR RATED ASSEMBLY	DESIGN # FOR RATED PENETRATION	DESIGN # FOR RATED JOISTS
		REQ'D*	PROVIDED (W/... HR* REDUCTION)				
Bearing walls Exterior							
North	NA	0					
East	NA	0					
West	NA	0					
South	NA	0					
Interior Bearing Walls		0					
Nonbearing walls Exterior							
North	>30'-0"	0					
East	>30'-0"	0					
West	>30'-0"	0					
South	28'-0"	0					
Interior Non Bearing Walls		0					
Structural frame, including columns, girders, trusses		0					
Floor construction, including supporting beams and joists. List construction type.		0					
Floor Ceiling Assembly		0					
Columns Supporting Floors		0					
Roof construction, including supporting beams and joists **		0					
Roof Ceiling Assembly		0					
Columns Supporting Roof		0					
Shafts - Exit Enclosures		1		U419, A-04 & A-05			
Shafts - Other (describe)	NA						
Shafts - Other (describe)	NA						
Corridor Separation	NA						
Occupancy Separation	NA						
Party/Fire Wall Separation	NA						
Incidental Use Separation	NA						
Dwelling/Sleeping unit Separation	NA						
Smoke Barrier Separation	NA						
Tenant Separation	NA						

* Indicate section number permitting reduction
** Indicated if using Table 601 Note C exception

revised 06.17.16 Building Code Summary Page 5 of 14

PERCENTAGE OF WALL OPENING CALCULATIONS

THIS SECTION FOR ADDITIONS, NEW, AND CHANGE OF USE

Allowable openings per Table 705.8

North: >30'-0", unlimited

South: 28'-0", 70% allowable, 6% actual

East: >30'-0", unlimited

West: >30'-0", unlimited

WALL LEGENDS

THIS SECTION REQUIRED FOR ALL PROJECTS

CHECK IF THE FOLLOWING ARE PRESENT AND INDICATE BY A WALL LEGEND ON ALL PLANS

Fire Partitions 708 Fire Walls 705 Fire Barriers 706 Smoke Partitions 710

Smoke Barriers 709 Shaft Enclosure 707

LIFE SAFETY SYSTEM REQUIREMENTS

THIS SECTION REQUIRED FOR ALL PROJECTS

Emergency Lighting: No Yes

Exit Signs: No Yes

Fire Alarm: No Yes

Smoke Detection Systems: No Yes

Panic Hardware: No Yes

EXIT REQUIREMENTS

NUMBER AND ARRANGEMENT OF EXITS

THIS SECTION REQUIRED FOR ALL PROJECTS

FLOOR, ROOM AND/OR SPACE DESIGNATION	MINIMUM ² NUMBER OF EXITS	TRAVEL DISTANCE		ARRANGEMENT MEANS OF EGRESS ³ (SECTION 1015.2)	
		REQUIRED SHOWN ON PLANS	ALLOWABLE (TABLE 1015.1)	REQUIRED TRAVEL DISTANCE SHOWN ON PLANS	ACTUAL TRAVEL DISTANCE SHOWN ON PLANS
FIRST FLOOR - BUSINESS	2	2	200'-0"	59'-2"	58'-10"
FIRST FLOOR - S-1 STORAGE	2	2	200'-0"	102'-4"	75'-1"
SECOND FLOOR	1	1	75'-0"	32'-10"	NA

¹ Corridor dead ends (Section 1017.3)
² Single exits (Section 1015.1; Section 1019.2)
³ Common Path of Egress Travel (Section 1014.3)

revised 06.17.16 Building Code Summary Page 6 of 14

OCCUPANT LOAD AND EXIT WIDTH

THIS SECTION REQUIRED FOR ALL PROJECTS

USE GROUP AND/OR SPACE DESIGNATION	(a) AREA ¹ SQ. FT.	(b) AREA ¹ PER OCCUPANT	(a+b) NUMBER OF OCCUPANTS	EXIT WIDTH (in) ^{2,3,4,5}			
				EGRESS WIDTH PER OCCUPANT (TABLE 1005.1)	REQUIRED WIDTH (SECTION 1005.1) (a+b) x c	ACTUAL WIDTH SHOWN ON PLANS	LEVEL
FIRST FLOOR - BUSINESS	1,948	100	20	NA	.2	NA	64"
FIRST FLOOR - S-1 STORAGE	7,320	500	15	NA	.2	NA	64"
SECOND FLOOR - BUSINESS	409	100	3	.3	.2	48"	32"
RESTROOMS			3				
Total # of Occupants			41				

¹ See Table 1004.1.1 to determine whether net or gross area is applicable.
² Minimum stairway width (Section 1009.1); min. corridor width (Section 1017.2); min. door width (Section 1008.1.1)
³ Minimum width of exit passageway (Section 1021.2)
⁴ The loss of 1 means of egress shall not reduce the available capacity to less than 50 percent of the total required (Section 1005.1)
⁵ Assembly occupancies (Section 1025)

ASSEMBLY OCCUPANCY INFORMATION - NA

THIS SECTION FOR ASSEMBLY USE AREAS

Space Description	Area - SF	Occupant Load Factor	Occupant Load	Exit Width	Exit Quantity
TOTAL					

PLUMBING FIXTURE REQUIREMENTS

THIS SECTION REQUIRED FOR ALL PROJECTS

OCCUPANCY	WATERCLOSETS		URINALS		LAVATORIES		SHOWERS/TUBS	DRINKING FOUNTAINS	
	MALE	FEMALE	MALE	FEMALE	REGULAR	ACCESSIBLE			
BUSINESS	.4	.4			.3	.3			
S-1 STORAGE	.2	.2			.2	.2			
Total Required	1	1			1	1		1	1
Total Provided	2	1			2	1		1	1

BUILDING DRAIN SIZE	NUMBER OF BUILDING DRAINS	TOTAL FIXTURE UNIT LOAD	WATER SERVICE SIZE	NUMBER OF WATER SERVICES	TOTAL FIXTURE UNIT LOAD	NOTES

revised 06.17.16 Building Code Summary Page 7 of 14

Structural Design Loads - SEE STRUCTURAL

Structure Conforms to "Conventional Light Frame Provisions of 2308