

PRINTED 6/2/2023

2018 APPENDIX B  
BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS

Name of Project: PANDA EXPRESS  
Address: 450 Kannapolis Parkway, Concord, NC Zip Code 28027  
Owner/Authorized Agent: JOE CELENTO Phone # 912-272-4811 E-Mail Joe.Celento@PandaRG.com  
Owned By: - ☐ City/County ☒ Private - ☐ State -  
Code Enforcement Jurisdiction: ☒ CITY of Concord ☐ County ☐ State

CONTACT:  
DESIGNER FIRM BDG Architects, LLP NAME Christopher Kirschner LICENSE # 10173 TELEPHONE # 813.323.9233 E-MAIL chris.kirschner@bdgllp.com  
Architectural Ingenium Enterprises, INC Jeremy Pettit 048800 813.387.0084 Ext. 102 jpettit@ingeniumteam.com  
Civil KPI Engineering, INC Luis G. Vargas Jr. PE028003 813.241.6488 luis.vargas@kpiengineering.com  
Electrical KPI ENGINEERING, INC Scott R. Nelson PED049030 813.241.6488 scott.nelson@kpiengineering.com  
Fire Alarm KPI ENGINEERING, INC Scott R. Nelson PED049030 813.241.6488 scott.nelson@kpiengineering.com  
Plumbing Mechanical KPI ENGINEERING, INC Scott R. Nelson PED049030 813.241.6488 scott.nelson@kpiengineering.com  
Sprinkler-Standpipe - - - - -  
Structural LBYD, INC JOHN D. PERDUE PE049672 941.955.4555 jperdue@lbyd.com  
Retaining Walls >5' High - - - - -  
Telecom. - - - - -  
Other - - - - -

☐ ("Other" should include firms and individuals such as truss, precast, pre-engineered, interior designers, etc.)  
☐

2018 NC BUILDING CODE: ☒ New Building ☐ Shell/Core ☐ 1st Time Interior Completions  
☐ Addition ☐ Phased Construction – Shell Core

2018 NC EXISTING BUILDING CODE: ☐ Prescriptive ☐ Alteration Level I ☐ Historic Property  
(check all that apply) ☐ Repair ☐ Alteration Level II ☐ Change of Use ☐  
☐ Chapter 14 ☐ Alteration Level III

CONSTRUCTED: (date) \_\_\_\_\_ CURRENT OCCUPANCY(S) (Ch. 3): \_\_\_\_\_  
RENOVATED: (date) \_\_\_\_\_ PROPOSED OCCUPANCY(S) (Ch. 3): \_\_\_\_\_

RISK CATEGORY (Table 1604.5): Current: \_\_\_\_\_ Proposed: II \_\_\_\_\_

BASIC BUILDING DATA  
Construction Type: ☐ I-A ☐ II-A ☐ III-A ☐ IV ☐ V-A  
(check all that apply) ☐ I-B ☐ II-B ☐ III-B ☐ V-B  
Sprinklers: ☒ No ☐ Partial ☐ NFPA 13 ☐ NFPA 13R ☐ NFPA 13D  
Standpipes: ☒ No Class ☐ I ☐ II ☐ III ☐ Wet ☐ Dry  
Primary Fire District: ☒ No ☐ Yes Flood Hazard Area: ☒ No ☐ Yes  
Special Inspections Required: ☒ No ☐ Yes

GROSS BUILDING AREA TABLE				
FLOOR	EXISTING (SQ FT)	NEW (SQ FT)	UPFIT (SQ FT)	SUB-TOTAL
	-	-	-	-
	-	-	-	-
5th Floor	-	-	-	-
4th Floor	-	-	-	-
3rd Floor	-	-	-	-
2nd Floor	-	-	-	-
1st Floor	0	2,600 SF	0	2,600 SF
TOTAL		2,600 SF		2,600 SF

ALLOWABLE AREA  
Primary Occupancy Classification(s):  
Assembly ☐ A-1 ☒ A-2 ☐ A-3 ☐ A-4 ☐ A-5  
Business ☐  
Educational ☐  
Factory ☐ F-1 Moderate ☐ F-2 Low  
Hazardous ☐ H-1 Detonate ☐ H-2 Deflagrate ☐ H-3 Combust ☐ H-4 Health ☐ H-5 HPM  
Institutional ☐ I-1 ☐ I-2 ☐ I-3 ☐ I-4  
I-1 Condition ☐ 1 ☐ 2  
I-2 Condition ☐ 1 ☐ 2  
I-3 Condition ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5  
Mercantile ☐  
Residential ☐ R-1 ☐ R-2 ☐ R-3 ☐ R-4  
Storage ☐ S-1 Moderate ☐ S-2 Low ☐ High-piled  
☐ Parking Garage ☐ Open ☐ Enclosed ☐ Repair Garage  
Utility and Miscellaneous ☐

Accessory Occupancy Classification(s): -  
Incidental Uses (Table 509): -  
This separation is not exempt as a Non-Separated Use (see exceptions).

Special Uses (Chapter 4): -  
Special Provisions: (Chapter 5): -

Mixed Occupancy: NO Separation: NA Exception: -  
Select one

Actual Area of Occupancy A + Actual Area of Occupancy B  
Allowable Area of Occupancy A Allowable Area of Occupancy B ≤ 1  
- + ..... = - ≤ 1.00

STORY NO	DESCRIPTION AND USE	(A) BLDG AREA PER STORY (UPFIT)	(B) TABLE 506.2.4 AREA	(C) AREA FOR FRONTAGE INCREASE 1.5	(D) ALLOWABLE AREA PER STORY OR UNLIMITED 2.3
1	ASSEMBLY 2-RESTAURANT	2,600 SF	6,000		6,000
	Total	2,600 SF	6,000 SF	-	6,000 SF

1 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 = \_\_\_\_\_ (F)  
b. Total Building Perimeter = \_\_\_\_\_ (P)  
c. Ratio (F/P) = \_\_\_\_\_ (F/P)  
d. W = Minimum width of public way = \_\_\_\_\_ (W)  
2 Unlimited area applicable under conditions of Section 507.  
3 Maximum Building Area = total number of stories in the building x D (maximum 3 stories) (506.2)  
4 The maximum area of open parking garages must comply with Table 406.5.4. The maximum area of air traffic control towers must comply with Table 412.3.1.  
5 Frontage increase is based on the unsprinklered area value in Table 506.2.

ALLOWABLE HEIGHT			
	ALLOWABLE	SHOWN ON PLANS	CODE REFERENCE
Building Height in Feet (Table 504.3)	40'	23'-3"	504.3
Building Height in Stories (Table 504.4)	1	1	504.4

1 Provide code reference if the "Shown on Plans" quantity is not based on Table 504.3 or 504.4.

FIRE PROTECTION REQUIREMENTS

BUILDING ELEMENT	FIRE SEPARATION DISTANCE (FEET)	RATING		DETAIL # AND SHEET #	DESIGN # FOR RATED ASSEMBLY	SHEET # FOR RATED PENETRATION	SHEET # FOR RATED JOINTS
		REQ'D	PROVIDED (W/ REDUCTION)				
Structural Frame, including columns, girders, beams	-	0	0	-	-	-	-
Bearing Walls	-	-	-	-	-	-	-
Exterior	-	-	-	-	-	-	-
North	X≥30'	0	0	-	-	-	-
East	X≥30'	0	0	-	-	-	-
West	X≥30'	0	0	-	-	-	-
South	10'<X<30'	0	0	-	-	-	-
Interior	-	-	-	-	-	-	-
Nonbearing Walls and Partitions	-	-	-	-	-	-	-
Exterior walls	>30'	0	0	-	-	-	-
North	>30'	0	0	-	-	-	-
East	>30'	0	0	-	-	-	-
West	>30'	0	0	-	-	-	-
South	>30'	0	0	-	-	-	-
Interior walls and partitions	-	-	-	-	-	-	-
Floor Construction including supporting beams and joists	-	0	0	-	-	-	-
Floor Ceiling Assembly	-	0	0	-	-	-	-
Columns Supporting Floors	-	0	0	-	-	-	-
Roof Construction, including supporting beams and joists	-	0	0	-	-	-	-
Roof Ceiling Assembly	-	0	0	-	-	-	-
Columns Supporting Roof	-	0	0	-	-	-	-
Shaft Enclosures - Exit	-	0	0	-	-	-	-
Shaft Enclosures - Other	-	0	0	-	-	-	-
Corridor Separation	-	0	0	-	-	-	-
Occupancy/Fire Barrier Separation	-	0	0	-	-	-	-
Party/Fire Wall Separation	-	0	0	-	-	-	-
Smoke Barrier Separation	-	0	0	-	-	-	-
Smoke Partition	-	0	0	-	-	-	-
Tenant/Dwelling Unit/Sleeping Unit Separation	-	0	0	-	-	-	-
Incidental Use Separation	-	0	0	-	-	-	-

\* Indicate section number permitting reduction

The NFF is 1500 gpm.

PERCENTAGE OF WALL OPENING CALCULATIONS			
FIRE SEPARATION DISTANCE (FEET) FROM PROPERTY LINES	DEGREE OF OPENINGS PROTECTION (TABLE 705.8)	ALLOWABLE AREA (%)	ACTUAL SHOWN ON PLANS (%)
North 101.27' (30' to >30')	(UP, NS)	NO LIMIT	22%
South 18' (15' to <20')	(UP, NS)	25%	3%
East 74' (30' to >30')	(UP, NS)	NO LIMIT	15%
West 118.34' (30' to >30')	(UP, NS)	NO LIMIT	11%

LIFE SAFETY SYSTEM REQUIREMENTS

Emergency Lighting: ☒ Yes ☐ No  
Exit Signs: ☒ Yes ☐ No  
Fire Alarm: ☐ Yes ☒ No  
Smoke Detection Systems: ☐ Yes ☒ No ☐ Partial: Duct Detectors  
Carbon Monoxide Detection: ☐ Yes ☒ No  
Emergency Generator: ☐ Yes ☒ No

LIFE SAFETY PLAN REQUIREMENTS

Life Safety Plan Sheet #: A-001

N/A ☐ Fire and/or smoke rated wall locations (Chapter 7)  
N/A ☐ Assumed and real property line locations (if not on the site plan)  
☒ Exterior wall opening area with respect to distance to assumed property lines (705.8)  
☒ Occupancy Use for each area as it relates to occupant load calculation (Table 1004.1.2)  
☒ Occupant loads for each area  
☒ Exit sign locations (1013)  
☒ Exit access travel distances (1017)  
☒ Common path of travel distances (Tables 1006.2.1 & 1006.3.2(1))  
N/A ☐ Dead end lengths (1020.4)  
☒ Clear exit widths for each exit door  
☒ Maximum calculated occupant load capacity each exit door can accommodate based on egress width (1005.3)  
☒ Actual occupant load for each exit door  
N/A ☐ A separate schematic plan indicating where fire rated floor/ceiling and/or roof structure is provided for purposes of occupancy separation  
☒ Location of doors with panic hardware (1010.1.10)  
N/A ☐ Location of doors with delayed egress locks and the amount of delay (1010.1.9.7)  
N/A ☐ Location of doors with electromagnetic egress locks (1010.1.9.9)  
N/A ☐ Location of doors equipped with hold-open devices  
N/A ☐ Location of emergency escape windows (1030)  
N/A ☐ The square footage of each fire area (202)  
N/A ☐ The square footage of each smoke compartment for Occupancy Classification I-2 (407.5)  
N/A ☐ Note any code exceptions or table notes that may have been utilized regarding the items above

ACCESSIBLE DWELLING UNITS (SECTION 407)

TOTAL UNITS	ACCESSIBLE UNITS REQUIRED	ACCESSIBLE UNITS PROVIDED	TYPE A UNITS REQUIRED	TYPE A UNITS PROVIDED	TYPE B UNITS REQUIRED	TYPE B UNITS PROVIDED	TOTAL ACCESSIBLE UNITS PROVIDED
-	-	-	-	-	-	-	-

ACCESSIBLE PARKING - REFER TO C0.0 (SECTION 1106)

LOT OR PARKING AREA	TOTAL # OF PARKING SPACES		# OF ACCESSIBLE SPACES PROVIDED			TOTAL # ACCESSIBLE PROVIDED
	REQUIRED	PROVIDED	REGULAR WITH 5' ACCESS AISLE	13' ACCESS AISLE	VAN SPACES WITH 5' ACCESS AISLE	
Parking	21	50	1	-	1	2
PART OF PARKING EXISTING (SHOWN ON LOT)	-	-	-	-	-	-
TOTAL	-	21	50	1	1	2

PLUMBING FIXTURE REQUIREMENTS (TABLE 2902.1)

USE		WATERCLOSETS			URINALS	LAVATORIES			SHOWERS / TUBS	DRINKING FOUNTAINS	
		MALE	FEMALE	UNISEX		MALE	FEMALE	UNISEX		REGULAR	ACCESSIBLE
BUSINESS	EXIST'G	-	-	-	-	-	-	-	-	-	-
	NEW	1	1	-	0	1	1	-	-	1*	1*
	REQ'D	1	1	-	N.R.	1	1	-	N.R.	1	-
	EXIST'G	-	-	-	-	-	-	-	-	-	-
	NEW	-	-	-	-	-	-	-	-	-	-
	REQ'D	-	-	-	-	-	-	-	-	-	-

2018 North Carolina Plumbing Code 410.4. Substitution: Where restaurants, night clubs, taverns or bars provide drinking water in a container free of charge, drinking fountains shall not be required in those establishments.

SPECIAL APPROVALS

Special approval: (Local Jurisdiction, Department of Insurance, OSC, DPI, DHHS, etc., describe below)

NONE

ENERGY SUMMARY

ENERGY REQUIREMENTS:

The following data shall be considered minimum and any special attribute required to meet the energy code shall also be provided. Each Designer shall furnish the required portions of the project information for the plan data sheet. If performance method, state the annual energy cost for the standard reference design vs annual energy cost for the proposed design.

Existing building envelope complies with code: \_\_\_\_\_

Exempt Building: No Provide code or statutory reference: \_\_\_\_\_

Climate Zone: 4A

Method of Compliance: REFER TO SHEET A-007 FOR 2018 IECC COMCHECK REPORT  
(If "Other" specify source here)

THERMAL ENVELOPE (Prescriptive method only)

Roof/ceiling Assembly (each assembly)

Description of assembly: \_\_\_\_\_  
U-Value of total assembly: \_\_\_\_\_  
R-Value of insulation: \_\_\_\_\_  
Skylights in each assembly: \_\_\_\_\_  
U-Value of skylight: \_\_\_\_\_  
total square footage of skylights in each assembly: \_\_\_\_\_

Exterior Walls (each assembly)

Description of assembly: \_\_\_\_\_  
U-Value of total assembly: \_\_\_\_\_  
R-Value of insulation: \_\_\_\_\_  
Openings (windows or doors with glazing)  
U-Value of assembly: \_\_\_\_\_  
Solar heat gain coefficient: \_\_\_\_\_  
projection factor: \_\_\_\_\_  
Door R-Values: \_\_\_\_\_

Walls below grade (each assembly)

Description of assembly: \_\_\_\_\_  
U-Value of total assembly: \_\_\_\_\_  
R-Value of insulation: \_\_\_\_\_

Floors over unconditioned space (each assembly)

Description of assembly: \_\_\_\_\_  
U-Value of total assembly: \_\_\_\_\_  
R-Value of insulation: \_\_\_\_\_

Floors slab on grade

Description of assembly: \_\_\_\_\_  
U-Value of total assembly: \_\_\_\_\_  
R-Value of insulation: \_\_\_\_\_  
Horizontal/vertical requirement: \_\_\_\_\_  
slab heated: \_\_\_\_\_

STRUCTURAL DESIGN

STRUCTURAL SUMMARY

DESIGN LOADS:

Importance Factors: Wind (IW) 1.0  
Snow (IS) 1.0  
Seismic (IE) 2.0

Live Loads: Roof 20 psf  
Mezzanine N/A psf  
Floor N/A psf

Ground Snow Load: 10 psf

Wind Load: Basic Wind Speed 115 mph (ASCE-7)  
Exposure Category B

SEISMIC DESIGN CATEGORY:

☐ A ☐ B ☒ C ☐ D

Provide the following Seismic Design Parameters:  
Risk Category (Table 1604.5) ☐ I ☒ II ☐ III ☐ IV  
Spectral Response Acceleration SS 22.1 % S1 9.8 %  
Site Classification (ASCE 7) ☐ A ☐ B ☐ C ☒ D ☐ E ☐ F  
Data Source: ☐ Field Test ☐ Presumptive ☐ Historical Data

Basic structural system (check one)

☐ Bearing Wall ☐ Dual w/Special Moment Frame  
☐ Building Frame ☐ Dual w/Intermediate R/C or Special Steel  
☒ Moment Frame ☐ Inverted Pendulum

Analysis Procedure: ☐ Simplified ☒ Equivalent Lateral Force ☐ Dynamic  
Architectural, Mechanical, Components anchored? ☐ Yes ☒ No

LATERAL DESIGN CONTROL: Earthquake ☐ Wind ☒

SOIL BEARING CAPACITIES:

Field Test (provide copy of test report) - psf  
Presumptive Bearing capacity 2000 psf  
Pile size, type, and capacity -

MECHANICAL DESIGN

MECHANICAL SUMMARY

MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT

Thermal Zone

winter dry bulb: \_\_\_\_\_  
summer dry bulb: \_\_\_\_\_

Interior design conditions

winter dry bulb: \_\_\_\_\_  
summer dry bulb: \_\_\_\_\_  
relative humidity: \_\_\_\_\_

Building heating load: \_\_\_\_\_

Building cooling load: \_\_\_\_\_

Mechanical Spacing Conditioning System

Unitary description of unit: \_\_\_\_\_  
heating efficiency: \_\_\_\_\_  
cooling efficiency: \_\_\_\_\_  
size category of unit: \_\_\_\_\_

Boiler Size category. If oversized, state reason: \_\_\_\_\_  
Chiller Size category. If oversized, state reason: \_\_\_\_\_

List equipment efficiencies:

ELECTRICAL DESIGN

ELECTRICAL SUMMARY

ELECTRICAL SYSTEM AND EQUIPMENT

Method of Compliance: \_\_\_\_\_

Lighting schedule (each fixture type)

lamp type required in fixture  
number of lamps in fixture  
ballast type used in the fixture  
number of ballasts in fixture  
total wattage per fixture  
total interior wattage specified vs. allowed (whole building or space by space)  
total exterior wattage specified vs. allowed

Additional Prescriptive Compliance

☐ 506.2.1 Most Efficient Mechanical Equipment  
☐ 506.2.2 Reduced Lighting Power Density  
☐ 506.2.3 Energy Recovery Ventilation Systems  
☐ 506.2.4 Higher Efficiency Service Water Heating  
☐ 506.2.5 On-Site Supply of Renewable Energy  
☐ 506.2.6 Automatic Daylighting Control Systems



PANDA EXPRESS, INC.  
1683 Walnut Grove Ave.  
Rosemead, California  
91770

Telephone: 626.799.9898  
Facsimile: 626.372.8288

All ideas, designs, arrangement and plans indicated or represented by this drawing are the property of Panda Express Inc. and were created for use on this specific project. None of these ideas, designs, arrangements or plans may be used by or disclosed to any person, firm, or corporation without the written permission of Panda Express Inc.

REVISIONS:

ISSUE DATE:

CHECK SET 04-20-23  
BID/PERMIT SET 06-01-23

DRAWN BY: BDG

PANDA PROJECT #: D24956

PANDA STORE #: TBD

ARCH PROJECT #: 239201



Architect of Record:  
Christopher Gary Kirschner, AIA, LEED AP  
NC License No. 10173

PANDA EXPRESS

PANDA HOME 2600  
450 Kannapolis Parkway  
Concord, NC 28027

A-006

APPENDIX B SUMMARY

PANDA HOME 2600 R3