2018 APPENDIX B
BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS
ELECTRICAL DESIGN
(PROVIDE ON THE ELECTRICAL SHEETS IF APPLICABLE)

ELECTRICAL SUMMARY

ELECTRICAL SYSTEM AND EQUIPMENT N/A FOR SHELL

Method of Compliance: Energy Code: ☐ Prescriptive ☐ Performance
ASHRAE 90.1: ☐ Prescriptive ☐ Performance

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 Efficiency Package Options
(When using the 2018 NCECC; not required for ASHRAE 90.1)
☐ C406.2 More Efficient Mechanical Equipment
☐ C406.3 Reduced Lighting Power Density
☐ C406.4 Enhanced Digital Lighting Controls
☐ C406.5 On-Site Renewable Energy
☐ C406.6 Dedicated Outdoor Air System
☐ C406.7 Reduced Energy Use in Service Water Heating

2018 APPENDIX B
BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS
MECHANICAL DESIGN
(PROVIDE ON THE MECHANICL SHEETS IF APPLICABLE)

MECHANICAL SUMMARY

MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT

Thermal Zone
winter dry bulb: 23 °F
summer dry bulb: 96 °F

Interior design conditions
winter dry bulb: 75.3 °F
summer dry bulb: 58.9 °F
relative humidity: 58%

Building heating load: 500 MBH

Building cooling load: 234 MBH

Mechanical Spacing Conditioning System
Unitary
description of unit: Packaged Rooftop DX
heating efficiency: 80% AFUE
cooling efficiency: 12.4 EER
size category of unit: 10 ton (TYP OF 2)
Boiler
Size category. If oversized, state reason.: N/A
Chiller
Size category. If oversized, state reason.: N/A

List equipment efficiencies: N/A

2018 APPENDIX B
BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS
STRUCTURAL DESIGN
(PROVIDE ON THE STRUCTURAL SHEETS IF APPLICABLE)

DESIGN LOADS:

Importance Factors: Snow (I_S) 1.0
Seismic (I_E) 1.0

Live Loads: Roof 20 psf
Mezzanine N/A psf
Floor 100 psf

Ground Snow Load: 15 psf

Wind Load: Ultimate Wind Speed 115 mph (ASCE-7)
Exposure Category C

SEISMIC DESIGN CATEGORY: ☐ A ☒ B ☐ C ☐ D
Provide the following Seismic Design Parameters:
Occupancy Category (Table 1604.5) ☐ I ☒ II ☐ III ☐ IV
Spectral Response Acceleration S_S 0.164 %g S_1 0.080 %g
Site Classification (ASCE 7) ☐ A ☐ B ☒ C ☐ D ☐ E ☐ F
Data Source: ☒ Field Test ☐ Presumptive ☐ Historical Data
Basic structural system ☒ 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) N/A psf
Presumptive Bearing capacity 3000 psf
Pile size, type, and capacity N/A

ENERGY SUMMARY

ENERGY REQUIREMENTS:
The following data shall be considered minimum and any special attribute required to meet the **North Carolina Energy Conservation 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.

N/A

Existing building envelope complies with code: ☐ No ☐ Yes (The remainder of this section is not applicable)

Exempt Building: ☒ No ☐ Yes (Provide Code or Statutory reference): _____

Climate Zone: ☐ 3A ☒ 4A ☐ 5A

Method of Compliance: Energy Code ☐ Performance ☐ Prescriptive
ASHRAE 90.1 ☐ Performance ☐ Prescriptive
(If "Other" specify source here) _____

THERMAL ENVELOPE (Prescriptive method only)

Roof/ceiling Assembly (each assembly)
Description of assembly: Insulation entirely above deck
U-Value of total assembly: 0.33
R-Value of insulation: R-30
Skylights in each assembly: N/A
U-Value of skylight: N/A
Total square footage of skylights in each assembly: N/A

Exterior Walls (each assembly)
Description of assembly: Wood framed @ 16" o.c.
U-Value of total assembly: 0.053
R-Value of insulation: R-19
Openings (windows or doors with glazing)
U-Value of assembly: 0.30
Solar heat gain coefficient: 0.25
Projection factor: 0.40
Door R-Values:

Walls below grade (each assembly)
Description of assembly: N/A
U-Value of total assembly:
R-Value of insulation:

Floors over unconditioned space (each assembly)
Description of assembly: N/A
U-Value of total assembly:
R-Value of insulation:

Floors slab on grade
Description of assembly: N/A for Shell
U-Value of total assembly:
R-Value of insulation:
Horizontal/Vertical requirement:
Slab Heated:

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REV.	DATE	DESCRIPTION

WHITSETT
6405 BURLINGTON RD
WHITSETT, NC 27377

APPENDIX B

	DATE
PERMIT	--/--/----
BID	--/--/----
CONSTRUCTION	--/--/----
RECORD	--/--/----

PROJECT MANAGER	DESIGNER
AK	DB

JOB NO.
2020379.16

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