Section # & Req.ID	Footing / Foundation Inspection	Complies?	Comments/Assumptions
C303.2.1 [FO6][1]	Exterior insulation protected against damage, sunlight, moisture, wind, landscaping and equipment maintenance activities.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C403.2.4.5, C403.2.4.6 [FO9][3]	Snow/ice melting system sensors for future connection to controls. Freeze protection systems have automatic controls installed.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	**Exception:** Requirement does not apply.

Additional Comments/Assumptions:

COM*check* Software Version 4.1.5.0

Mechanical Compliance Certificate

Project Information

Energy Code: 2015 IECC
Project Title: Whitsett Shell
Location: Whitsett, North Carolina
Climate Zone: 4a
Project Type: New Construction

Construction Site:
6405 Burlington Rd
Whitsett, NC 27377

Owner/Agent:
Capital Growth Buchalter
361 Summit Blvd, Suite 110
Birmingham, AL 35243
(205) 263-4589

Designer/Contractor:
GPD Engineering and Architecture
Professional Corporation - 52715
520 South Main St.
Suite 2531
Akron, OH 44311
330-572-2100

Additional Efficiency Package(s)

Reduced interior lighting power. Requirements are implicitly enforced within interior lighting allowance calculations.

Mechanical Systems List

Quantity System Type & Description

1 HVAC System 1 (Single Zone):
Heating: 1 each - Central Furnace, Gas, Capacity = 250 kBtu/h
Proposed Efficiency = 80.00% Et, Required Efficiency: 80.00 % Et
Cooling: 1 each - Single Package DX Unit, Capacity = 117 kBtu/h, Air-Cooled Condenser, Air Economizer
Proposed Efficiency = 12.40 EER, Required Efficiency: 11.00 EER + 12.6 IEER
Fan System: RTU-1 -- Compliance (Motor nameplate HP method) : Passes

Fans:
FAN 1 Supply, Constant Volume, 4000 CFM, 3.0 motor nameplate hp, 1.0 fan efficiency grade

1 HVAC System 2 (Single Zone):
Heating: 1 each - Central Furnace, Gas, Capacity = 250 kBtu/h
Proposed Efficiency = 80.00% Et, Required Efficiency: 80.00 % Et
Cooling: 1 each - Single Package DX Unit, Capacity = 117 kBtu/h, Air-Cooled Condenser, Air Economizer
Proposed Efficiency = 12.40 EER, Required Efficiency: 11.00 EER + 12.6 IEER
Fan System: RTU-2 -- Compliance (Motor nameplate HP method) : Passes

Fans:
FAN 2 Supply, Constant Volume, 4000 CFM, 3.0 motor nameplate hp, 1.0 fan efficiency grade

Mechanical Compliance Statement

Compliance Statement: The proposed mechanical design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed mechanical systems have been designed to meet the 2015 IECC requirements in COM*check* Version 4.1.5.0 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Name - Title _____ Signature _____ Date _____

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U-Factor(a)
Exterior Wall: Wood-Framed, 16" o.c., [Bldg. Use 1 - Retail]	417	19.0	0.0	0.067	0.064
Door 3: Glass (> 50% glazing):Metal Frame, Entrance Door, Perf. Specs.: Product ID Kawneer Trifab 451T, SHGC 0.25, PF 0.35, [Bldg. Use 1 - Retail] (b)	21	---	---	0.300	0.770
Window 2: Metal Frame Curtain Wall/Storefront, Perf. Specs.: Product ID Kawneer Trifab 451T, SHGC 0.25, PF 0.35, [Bldg. Use 1 - Retail] (b)	223	---	---	0.300	0.380
WEST					
Exterior Wall - DT Bump: Wood-Framed, 16" o.c., [Bldg. Use 1 - Retail]	173	19.0	0.0	0.067	0.064
Window 5 DT Window: Metal Frame:Fixed, Perf. Specs.: Product ID READY ACCESS 600 SERIES, SHGC 0.20, PF 0.57, [Bldg. Use 1 - Retail] (b)	20	---	---	0.730	0.380
Window 5: Metal Frame Curtain Wall/Storefront, Perf. Specs.: Product ID Kawneer Trifab 451T, SHGC 0.25, PF 0.57, [Bldg. Use 1 - Retail] (b)	36	---	---	0.300	0.380
Exterior Wall - DT: Wood-Framed, 16" o.c., [Bldg. Use 1 - Retail]	1027	19.0	0.0	0.067	0.064

(a) Budget U-factors are used for software baseline calculations ONLY, and are not code requirements.
(b) Fenestration product performance must be certified in accordance with NFRC and requires supporting documentation.

Envelope PASSES: Design 10% better than code

Envelope Compliance Statement

Compliance Statement: The proposed envelope design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed envelope systems have been designed to meet the 2015 IECC requirements in COM*check* Version 4.1.5.0 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Name - Title _____ Signature _____ Date _____

COM*check* Software Version 4.1.5.0

Inspection Checklist

Energy Code: 2015 IECC

Requirements: 65.0% were addressed directly in the COM*check* software

Text in the "Comments/Assumptions" column is provided by the user in the COMcheck Requirements screen. For each requirement, the user certifies that a code requirement will be met and how that is documented, or that an exception is being claimed. Where compliance is itemized in a separate table, a reference to that table is provided.

Section # & Req.ID	Plan Review	Complies?	Comments/Assumptions
C103.2 [PR1][1]	Plans and/or specifications provide all information with which compliance can be determined for the building envelope and document where exceptions to the standard are claimed.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C103.2 [PR2][1]	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the mechanical systems and equipment and document where exceptions to the standard are claimed. Load calculations per acceptable engineering standards and handbooks.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	Requirement will be met.
C402.4.1 [PR10][1]	The vertical fenestration area <= 30 percent of the gross above-grade wall area.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C402.4.1 [PR11][1]	The skylight area <= 3 percent of the gross roof area.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C402.4.2 [PR14][1]	In enclosed spaces > 2,500 ft2 directly under a roof with ceiling heights >15 ft. and used as an office, lobby, atrium, concourse, corridor, storage, gymnasium/exercise center, convention center, automotive service, manufacturing, non-refrigerated warehouse, retail store, distribution/sorting area, transportation, or workshop, the following requirements apply: (a) the daylight zone under skylights is >= half the floor area; (b) the skylight area to daylight zone is >= 3 percent with a skylight VT >= 0.40; or a minimum skylight effective aperture >= 1 percent.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
C406 [PR9][1]	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the additional energy efficiency package options.	☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	

Additional Comments/Assumptions:

COM*check* Software Version 4.1.5.0

Envelope Compliance Certificate

Project Information

Energy Code: 2015 IECC
Project Title: Whitsett Shell
Location: Whitsett, North Carolina
Climate Zone: 4a
Project Type: New Construction
Vertical Glazing / Wall Area: 18%

Construction Site:
6405 Burlington Rd
Whitsett, NC 27377

Owner/Agent:
Capital Growth Buchalter
361 Summit Blvd, Suite 110
Birmingham, AL 35243
(205) 263-4589

Designer/Contractor:
GPD Engineering and Architecture
Professional Corporation - 52715
520 South Main St.
Suite 2531
Akron, OH 44311
330-572-2100

Additional Efficiency Package(s)

Reduced interior lighting power. Requirements are implicitly enforced within interior lighting allowance calculations.

Building Area	Floor Area
1-Retail : Nonresidential	2485

Envelope Assemblies

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U-Factor(a)
Roof 1: Insulation Entirely Above Deck: High Albedo Roof Required, [Bldg. Use 1 - Retail]	2338	---	30.0	0.032	0.032
NORTH					
Exterior Wall - BOH: Wood-Framed, 16" o.c., [Bldg. Use 1 - Retail]	417	19.0	0.0	0.067	0.064
Service Door: Insulated Metal, Swinging, [Bldg. Use 1 - Retail]	28	---	---	0.700	0.610
Exterior Wall - DT Bump Side 1: Wood-Framed, 16" o.c., [Bldg. Use 1 - Retail]	72	19.0	0.0	0.067	0.064
Window 4: Metal Frame Curtain Wall/Storefront, Perf. Specs.: Product ID Kawneer Trifab 451T, SHGC 0.25, PF 0.57, [Bldg. Use 1 - Retail] (b)	8	---	---	0.300	0.380
EAST					
Exterior Wall 1 - Main Entry: Wood-Framed, 16" o.c., [Bldg. Use 1 - Retail]	1244	19.0	0.0	0.067	0.064
Window 1: Metal Frame Curtain Wall/Storefront, Perf. Specs.: Product ID Kawneer Trifab 451T, SHGC 0.25, PF 0.35, [Bldg. Use 1 - Retail] (b)	246	---	---	0.300	0.380
Window 1 copy 1: Metal Frame Curtain Wall/Storefront, Perf. Specs.: Product ID Kawneer Trifab 451T, SHGC 0.25, PF 0.35, [Bldg. Use 1 - Retail] (b)	31	---	---	0.300	0.380
Entrance Door: Glass (> 50% glazing):Metal Frame, Entrance Door, Perf. Specs.: Product ID Kawneer Trifab 451T, SHGC 0.25, PF 0.35, [Bldg. Use 1 - Retail] (b)	42	---	---	0.300	0.770
SOUTH					
Exterior Wall - DT Bump Side 2: Wood-Framed, 16" o.c., [Bldg. Use 1 - Retail]	72	19.0	0.0	0.067	0.064

GPD Engineering and Architecture
Professional Corporation - 52715
520 S. MAIN ST., SUITE 2531
AKRON, OH 44311
PHONE: 330.572.2100
FAX: 330.572.2101

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REV.	DESCRIPTION	DATE

WHITSETT
6405 BURLINGTON RD
WHITSETT, NC 27377

COMCheck

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

PROJECT MANAGER	DESIGNER
AK	DB

JOB NO.
2020379.16

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