

COMcheck Software Version COMcheckWeb
Envelope Compliance Certificate

Project Information
 Energy Code: 2020 Florida Building Code, Energy Conservation
 Project Title: Treasure Coast High School
 Location: Stuart, Florida
 Climate Zone: 2A
 Project Type: New Construction
 Vertical Glazing / Wall Area: 6%
 Permit No.: TBD

Construction Site: 1400 SE Cove Rd, Stuart, Florida 34997
 Owner/Agent: Design/Contractor: Mollie Greene, Mollie Greene Architects, PA, 610 N Main St, Grapeville, South Carolina 29601, 864-624-6330, molli@greenearchitects.com

Additional Efficiency Package(s)
 Credits: 1.0 Required, 3.0 Proposed
 Envelope Interior Lighting Controls, 1.0 credit

Building Area

Building Area	Floor Area
1 Entire school (School/University), Nonresidential	22288

Envelope Assemblies

Assembly	Area of Envelope	U-Value	Conv. R-Value	Cont. R-Value	Proposed U-Factor	Budget U-Factor
Roof: Insulated Entire Above Deck, 4-Year Aged Solar Reflectance Index = 0.65, Thermal Emittance = 0.75 (a), (b) (kg) Use 1 - Entire school	2050	—	38.0	0.028	0.039	0.039
Floor: Insulated Sub-On-Grade, (Btg) Use 1 - Entire school (c)	638	—	—	0.770	0.770	0.770
Ext. Wall: Steel Frame, 16in. o.c., (Btg) Use 1 - Entire school	1190	13.0	5.0	0.077	0.077	0.077
Door: Insulated Metal, Swinging, (Btg) Use 1 - Entire school	42	—	—	0.810	0.810	0.810
Door: Glass (over 50% glazing), Metal Frame, Entrance Door, Part. Spec. Product ID TBD, SHGC 0.25, VT 0.32, (Btg) Use 1 - Entire school (b)	42	—	—	0.810	0.810	0.810
Window: Insulated Metal, Swinging, (Btg) Use 1 - Entire school	42	—	—	0.810	0.810	0.810
Window: Metal Frame, Fixed, Part. Spec. Product ID TBD, SHGC 0.33, PF 0.33, (Btg) Use 1 - Entire school (b)	486	—	—	0.900	0.900	0.900
Window: Metal Frame, Fixed, Part. Spec. Product ID TBD, SHGC 0.33, PF 0.33, (Btg) Use 1 - Entire school (b)	72	—	—	0.900	0.900	0.900
Window: Metal Frame, Fixed, Part. Spec. Product ID TBD, SHGC 0.37, PF 0.37, (Btg) Use 1 - Entire school (b)	77	—	—	0.900	0.900	0.900
Window: Metal Frame, Fixed, Part. Spec. Product ID TBD, SHGC 0.33, PF 0.33, (Btg) Use 1 - Entire school (b)	51	—	—	0.900	0.900	0.900
Ext. Wall: Steel Frame, 16in. o.c., (Btg) Use 1 - Entire school	467	13.0	5.0	0.077	0.077	0.077
Door: Insulated Metal, Swinging, (Btg) Use 1 - Entire school	84	—	—	0.810	0.810	0.810

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Assembly	Gross Area of Envelope	Conv. R-Value	Cont. R-Value	Proposed U-Factor	Budget U-Factor
Door: Insulated Metal, Swinging, (Btg) Use 1 - Entire school	102	—	—	0.810	0.810
Window: Metal Frame, Fixed, Part. Spec. Product ID TBD, SHGC 0.33, PF 0.33, (Btg) Use 1 - Entire school (b)	214	—	—	0.900	0.900
SO(2)	4605	13.0	5.0	0.077	0.077
Ext. Wall: Steel Frame, 16in. o.c., (Btg) Use 1 - Entire school	485	—	—	0.810	0.810
Door: Insulated Metal, Swinging, (Btg) Use 1 - Entire school	42	—	—	0.810	0.810
Door: Glass (over 50% glazing), Metal Frame, Entrance Door, Part. Spec. Product ID TBD, SHGC 0.25, PF 0.32, (Btg) Use 1 - Entire school (b)	42	—	—	0.810	0.810
Window: Insulated Metal, Swinging, (Btg) Use 1 - Entire school	42	—	—	0.810	0.810
Window: Metal Frame, Fixed, Part. Spec. Product ID TBD, SHGC 0.33, PF 0.33, (Btg) Use 1 - Entire school (b)	64	—	—	0.900	0.900
Window: Metal Frame, Fixed, Part. Spec. Product ID TBD, SHGC 0.33, PF 0.33, (Btg) Use 1 - Entire school (b)	59	—	—	0.900	0.900

(a) Budget U-factors are used for software baseline calculations ONLY and are not code requirements.
 (b) Renovation product performance must be verified in accordance with IMC, and requires supporting documentation.
 (c) Slab-On-Grade prepared and budget U-factors shown in table are factors.
 (d) Slab-On-Grade prepared and budget U-factors shown in table are factors.
 (e) 10-year aged solar reflectance index >= 0.65 thermal emittance >= 0.75, 23 3-ply aged solar reflectance index >= 0.62, 10-year aged solar reflectance index >= 0.70 thermal emittance >= 0.75, 41 10-year aged solar reflectance index >= 0.62.

Notes
 (a) Budget U-factors are used for software baseline calculations ONLY and are not code requirements.
 (b) Renovation product performance must be verified in accordance with IMC, and requires supporting documentation.
 (c) Slab-On-Grade prepared and budget U-factors shown in table are factors.
 (d) Slab-On-Grade prepared and budget U-factors shown in table are factors.
 (e) 10-year aged solar reflectance index >= 0.65 thermal emittance >= 0.75, 23 3-ply aged solar reflectance index >= 0.62, 10-year aged solar reflectance index >= 0.70 thermal emittance >= 0.75, 41 10-year aged solar reflectance index >= 0.62.

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 2020 Florida Building Code, Energy Conservation requirements in COMcheck version COMcheckWeb and to comply with any applicable mandatory requirements listed in the inspection Checklist.

MOLLIE GREENE
 PROJECT ARCHITECT
 Mollie Greene Architects, PA
 Signature: _____ Date: 10/03/22

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COMcheck Software Version COMcheckWeb
Mechanical Compliance Certificate

Project Information
 Energy Code: 2020 Florida Building Code, Energy Conservation
 Project Title: Treasure Coast High School
 Location: Stuart, Florida
 Climate Zone: 2A
 Project Type: New Construction

Construction Site: 1400 SE Cove Rd, Stuart, Florida 34997
 Owner/Agent: Design/Contractor: James V. Turner Engineers, 6340 Meadows Rd, Dallas, Texas 75231, 214-750-2900

Additional Efficiency Package(s)
 Credits: 1.0 Required, 0.0 Proposed

Mechanical Systems List

Quantity System Type & Description

- HVAC System (Multi-Zone)
 Cooling: 2 each - Single Package DX Unit, Capacity = 420 MBtu/h, Air-Cooled Condenser, Air Economizer
 Proposed Efficiency = 10.10 EER, Required Efficiency = 10.00 EER
 Proposed Part Load Efficiency = 11.60 EER, Required Part Load Efficiency = 11.60 EER
- HVAC System (Multi-Zone)
 Cooling: 2 each - Single Package DX Unit, Capacity = 480 MBtu/h, Air-Cooled Condenser, Air Economizer
 Proposed Efficiency = 10.10 EER, Required Efficiency = 10.00 EER
 Proposed Part Load Efficiency = 11.60 EER, Required Part Load Efficiency = 11.60 EER
- HVAC System (Single Zone)
 Heating: 1 each - Central Furnace, Electric, Capacity = 134 MBtu/h
 No minimum efficiency requirement applies
- HVAC System (Single Zone)
 Cooling: 1 each - Central Furnace, Electric, Capacity = 323 MBtu/h, Air-Cooled Condenser, Air Economizer
 Proposed Efficiency = 11.20 EER, Required Efficiency = 10.00 EER
 Proposed Part Load Efficiency = 13.20 EER, Required Part Load Efficiency = 11.60 EER
- HVAC System (Single Zone)
 Heating: 1 each - Central Furnace, Electric, Capacity = 134 MBtu/h
 No minimum efficiency requirement applies
- HVAC System (Single Zone)
 Cooling: 1 each - Single Package DX Unit, Capacity = 240 MBtu/h, Air-Cooled Condenser, Air Economizer
 Proposed Efficiency = 11.20 EER, Required Efficiency = 10.00 EER
 Proposed Part Load Efficiency = 14.80 EER, Required Part Load Efficiency = 11.60 EER
- HVAC System (Single Zone)
 Heating: 1 each - Central Furnace, Electric, Capacity = 51 MBtu/h
 No minimum efficiency requirement applies
- HVAC System (Single Zone)
 Cooling: 1 each - Single Package DX Unit, Capacity = 48 MBtu/h, Air-Cooled Condenser, Air Economizer
 Proposed Efficiency = 14.00 SEER, Required Efficiency = 14.00 SEER
 Proposed Part Load Efficiency = 13.80 EER, Required Part Load Efficiency = 13.80 EER
- HVAC System (Single Zone)
 Heating: 1 each - Central Furnace, Electric, Capacity = 9 MBtu/h
 Proposed Efficiency = 10.00 HPF, Required Efficiency = 8.20 HPF
 Cooling: 1 each - Single Package DX Unit, Capacity = 9 MBtu/h
 Proposed Efficiency = 18.00 SEER, Required Efficiency = 18.00 SEER
 Proposed Part Load Efficiency = 13.00 EER, Required Part Load Efficiency = 13.00 EER

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Quantity System Type & Description

- Water Heater
 Electric Storage Water Heater, Capacity: 90 gallons or Circulation Pump
 Proposed Efficiency: 1.00 SL, Nth (F = 12 kW)
- Water Heater
 Electric instantaneous Water Heater, Capacity: 0 gallons
 No minimum efficiency requirement applies

Mechanical Compliance Statement
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Zachary Scroggins - E.I.T., TX
 Signature: _____ Date: 10/03/22

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Exterior Lighting Compliance Certificate

Project Information
 Energy Code: 2020 Florida Building Code, Energy Conservation
 Project Title: New Construction
 Project Type: New Construction
 Exterior Lighting Zone: 2 (Residential mixed use area (L22))

Construction Site: 1400 SE Cove Rd, Stuart, Florida 34997
 Owner/Agent: Design/Contractor: PFE, 6340 Meadows Rd, Dallas, Texas 75231, 214-750-2900

Allowed Exterior Lighting Power

Area/Surface Category	Quantity	Allowed Watts	Tradeable Watts (B X C)	D Allowed Watts	E Allowed Watts (B X C)
Parking area	2395 R2	0.04	Yes	959	959
Illuminated area of facade wall or surface	6750 R2	0.02	No	106	106
		Total Tradeable Watts (a) =		959	959
		Total Allowed Watts =		1465	1465
		Total Allowed Supplemental Watts (b) =		400	400

(a) Wattage tradeoffs are only allowed between tradeable areas/surfaces.
 (b) A supplemental allowance equal to 400 watts may be applied toward compliance of both non-tradeable and tradeable areas/surfaces.

Proposed Exterior Lighting Power

Fixture ID / Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixtures	D E	
LED S1: Other	1	4	122 488	
LED W: Other	1	2	51 102	
LED WE: Other	1	2	51 102	
		Total Tradeable Proposed Watts =		488

Exterior Lighting PASS/ES: Design 64% better than code

Exterior Lighting Compliance Statement
 Compliance Statement: The proposed exterior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed exterior lighting systems have been designed to meet the 2020 Florida Building Code, Energy Conservation requirements in COMcheck version COMcheckWeb and to comply with any applicable mandatory requirements listed in the inspection Checklist.

Steve Alanz - Electrical Designer
 Signature: _____ Date: 10/07/2022

Project Title: Treasure Coast High School
 Report date: 10/07/22
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COMcheck Software Version COMcheckWeb
Exterior Lighting Compliance Certificate

Project Information
 Energy Code: 2020 Florida Building Code, Energy Conservation
 Project Title: New Construction
 Project Type: Residential mixed use area (L22)

Construction Site: 1400 SE Cove Rd, Stuart, Florida 34997
 Owner/Agent: Design/Contractor: PFE, 6340 Meadows Rd, Dallas, Texas 75231, 214-750-2900

Allowed Exterior Lighting Power

Area/Surface Category	Quantity	Allowed Watts	Tradeable Watts (B X C)	D Allowed Watts	E Allowed Watts (B X C)
Parking area	2395 R2	0.04	Yes	959	959
Illuminated area of facade wall or surface	6750 R2	0.02	No	106	106
		Total Tradeable Watts (a) =		959	959
		Total Allowed Watts =		1465	1465
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Proposed Exterior Lighting Power

Fixture ID / Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixtures	D E	
LED S1: Other	1	4	122 488	
LED W: Other	1	2	51 102	
LED WE: Other	1	2	51 102	
		Total Tradeable Proposed Watts =		488

Exterior Lighting PASS/ES: Design 64% better than code

Exterior Lighting Compliance Statement
 Compliance Statement: The proposed exterior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed exterior lighting systems have been designed to meet the 2020 Florida Building Code, Energy Conservation requirements in COMcheck version COMcheckWeb and to comply with any applicable mandatory requirements listed in the inspection Checklist.

Steve Alanz - Electrical Designer
 Signature: _____ Date: 10/07/2022

Project Title: Treasure Coast High School
 Report date: 10/07/22
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INSULATION GENERAL NOTES

- A. ALL FIBERGLASS BATT INSULATION IN WALL CAVITY SHALL BE MINIMUM R20.
- B. ALL RIGID INSULATION ABOVE ROOFING DECK SHALL BE MINIMUM R25.

MUSSMAN ARCHITECTS
 610 N. Main Street, Suite 100, Stuart, FL 34997
 Phone: 888-624-6330, Fax: 888-624-6330, Email: molli@greenearchitects.com

TREASURE COAST CLASSICAL ACADEMY
 BUILDING
 1400 SE COVE RD
 STUART FLORIDA 34997

TCCA HIGH SCHOOL
 BUILDING
 1400 SE COVE RD
 STUART FLORIDA 34997

INSULATION GENERAL NOTES

A. ALL FIBERGLASS BATT INSULATION IN WALL CAVITY SHALL BE MINIMUM R20.
 B. ALL RIGID INSULATION ABOVE ROOFING DECK SHALL BE MINIMUM R25.

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