



Interior Lighting Compliance Certificate

Project Information

Energy Code: 2020 Florida Building Code, Energy Conservation
Project Title: Courtyard Inn, Lake City, FL
Project Type: New Construction

Construction Site: Lake City, Florida
Owner/Agent:
Designer/Contractor:

Additional Efficiency Package(s)

Credits: 1.0 Required 1.0 Proposed
Reduced Lighting Power, 1.0 credit

Allowed Interior Lighting Power

A Area Category	B Floor Area (ft ²)	C Allowed Watts / ft ²	D Allowed Watts
1-Guestroom (Common Space Types:Guest Room)	49346	0.69	34049
2-Food Preparation (Common Space Types:Food Preparation)	730	0.95	694
3-Storage (Common Space Types:Storage)	2395	0.57	1365
4-Corridor (Common Space Types:Corridor/Transition <8 ft wide)	9278	0.59	5474
5-Meeting (Common Space Types:Conference/Meeting/Multipurpose)	957	0.96	919
6-Stairwell (Common Space Types:Stairwell)	2214	0.52	1151
7-Lobby (Common Space Types:Lobby - General)	1691	0.90	1522
8-Lounge (Common Space Types:Lounge/Breakroom)	2230	0.56	1249
9-Restroom (Common Space Types:Restrooms)	365	0.77	281
10-Elec./Mech./ Pool Equip. (Common Space Types:Electrical/Mechanical)	871	0.39	340
11-Fitness (Gymnasium/Fitness Center:Exercise Area)	1103	0.45	496
12-Office (Common Space Types:Office - Enclosed)	626	0.84	526
13-Laundry (Common Space Types:Laundry/Washing Area)	985	0.39	384
14-Breakroom (Common Space Types:Lounge/Breakroom)	256	0.56	143
Total Allowed Watts =			48593

Proposed Interior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixture	D Fixture Watt.	E (C X D)
<u>1-Guestroom (Common Space Types:Guest Room)</u>				
LED 1: D202: Other:	2	136	15	2040
LED 21: D198: Other:	2	136	70	9520
LED 22: R77: Other:	1	136	9	1224
LED 23: R94: Other:	1	312	12	3744
<u>2-Food Preparation (Common Space Types:Food Preparation)</u>				
LED 27: B06: Other:	1	11	64	704
LED 28: B07: Other:	1	2	50	100
<u>3-Storage (Common Space Types:Storage)</u>				

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixture	D Fixture Watt.	E (C X D)
LED 15: J05: Other:	1	24	36	864
LED 26: B01: Other:	1	2	41	82
LED 27: B10: Other:	1	1	47	47
<u>4-Corridor (Common Space Types:Corridor/Transition <8 ft wide)</u>				
LED 21: R86: Other:	1	148	12	1776
LED 28: D04: Other:	3	155	78	12090
LED 29: R90: Other:	1	22	22	484
LED 30: R87: Other:	1	47	17	799
<u>5-Meeting (Common Space Types:Conference/Meeting/Multipurpose)</u>				
LED 24: R90: Other:	1	11	22	242
LED 25: R92: Other:	1	12	32	384
<u>6-Stairwell (Common Space Types:Stairwell)</u>				
LED 29: R87: Other:	1	24	17	408
<u>7-Lobby (Common Space Types:Lobby - General)</u>				
LED 30: R90: Other:	1	6	22	132
LED 25: B11: Other:	1	6	28	168
LED 31: B12: Other:	1	3	42	126
LED 32: B13: Other:	1	2	56	112
LED 33: B14: Other:	1	8	9	72
LED 34: J11: Other:	1	36	3	108
<u>8-Lounge (Common Space Types:Lounge/Breakroom)</u>				
LED 37: R90: Other:	1	24	22	528
LED 37: J09: Other:	1	20	4	80
LED 25: R92: Other:	1	30	32	960
LED 35: B14A: Other:	1	12	9	108
LED 36: J12: Other:	1	3	16	48
LED 38: LM-406: Other:	1	3	100	300
<u>9-Restroom (Common Space Types:Restrooms)</u>				
LED 47: R70: Other:	1	7	13	91
LED 26: MIRROR: Other:	3	2	39	78
<u>10-Elec./Mech./ Pool Equip. (Common Space Types:Electrical/Mechanical)</u>				
LED 50: J05: Other:	1	12	36	432
LED 38: B10: Other:	1	47	47	2209
<u>11-Fitness (Gymnasium/Fitness Center:Exercise Area)</u>				
LED 52: K03: Other:	1	10	56	560
LED 53: R70: Other:	1	2	13	26
LED 37: R98: Other:	1	2	16	32
<u>12-Office (Common Space Types:Office - Enclosed)</u>				
LED 29: B01: Other:	1	15	41	615
<u>13-Laundry (Common Space Types:Laundry/Washing Area)</u>				
LED 27: B06: Other:	1	15	64	960
<u>14-Breakroom (Common Space Types:Lounge/Breakroom)</u>				
LED: B01: Other:	1	6	41	246
Total Proposed Watts =				42499

Interior Lighting PASSES: Design 13% better than code

Interior Lighting Compliance Statement

Compliance Statement: The proposed interior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed interior 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.

DUNG DUC VU, Ph.D, P.E, LEED AP
Name - Title

Signature

02/25/2022
Date

Project Title: Courtyard Inn, Lake City, FL
Data filename:

Report date: 02/25/22
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Exterior Lighting Compliance Certificate

Project Information

Energy Code: 2020 Florida Building Code, Energy Conservation
Project Title: Courtyard Inn, Lake Mary, FL
Project Type: New Construction
Exterior Lighting Zone: 3 (Other (LZ3))

Construction Site:
Lake City, Florida

Owner/Agent:

Designer/Contractor:

Allowed Exterior Lighting Power

A Area/Surface Category	B Quantity	C Allowed Watts /	D Tradable Wattage	E Allowed Watts (B X C)
Entry canopy (Entry canopy)	1990 ft2	0.4	Yes	796
Ooutdoor Pool/ Patio (Special feature area)	5100 ft2	0.11	Yes	561
Parking Area (Parking area)	101505 ft2	0.06	Yes	6090
Total Tradable Watts (a) =				7447
Total Allowed Watts =				7447
Total Allowed Supplemental Watts (b) =				500

(a) Wattage tradeoffs are only allowed between tradable areas/surfaces.

(b) A supplemental allowance equal to 500 watts may be applied toward compliance of both non-tradable and tradable areas/surfaces.

Proposed Exterior Lighting Power

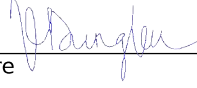
A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixture	D Fixture Watt.	E (C X D)
<u>Entry canopy (Entry canopy, 1990 ft2): Tradable Wattage</u>				
LED 6: Other:	1	12	52	624
LED 10: Other:	3	21	9	189
LED 10: Other:	1	2	18	36
LED 11: Other:	1	6	12	72
LED 11: Other:	1	4	60	240
<u>Outdoor Pool/ Patio (Special feature area, 5100 ft2): Tradable Wattage</u>				
LED 5: Other:	1	12	32	384
LED 10: Other:	1	2	20	40
<u>Parking Area (Parking area, 101505 ft2): Tradable Wattage</u>				
LED 1: SB: Other:	2	5	268	1340
LED 8: SC: Other:	3	6	402	2412
LED 10: SD: Other:	4	1	536	536
Total Tradable Proposed Watts =				5873

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.

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Name - Title

Signature



02/25/2022
Date



COMcheck Software Version COMcheckWeb

Mechanical Compliance Certificate

Project Information

Energy Code: 2020 Florida Building Code, Energy Conservation
Project Title: Courtyard Inn, Lake Mary, FL
Location: Lake City, Florida
Climate Zone: 2a
Project Type: New Construction

Construction Site: Lake City, Florida
Owner/Agent:
Designer/Contractor:

Additional Efficiency Package(s)

Credits: 1.0 Required 1.0 Proposed
Reduced Lighting Power, 1.0 credit

Mechanical Systems List

Quantity System Type & Description

- 116 PTAC 1 (Single Zone):
Packaged Terminal Heat Pump
Heating Mode: Capacity = 7 kBtu/h,
Proposed Efficiency = 4.00 COP, Required Efficiency = 3.34 COP
Cooling Mode: Capacity = 7 kBtu/h,
Proposed Efficiency = 13.00 EER, Required Efficiency: 11.90 EER
- 24 PTAC 2 (Single Zone):
Packaged Terminal Heat Pump
Heating Mode: Capacity = 8 kBtu/h,
Proposed Efficiency = 3.70 COP, Required Efficiency = 3.18 COP
Cooling Mode: Capacity = 10 kBtu/h,
Proposed Efficiency = 12.20 EER, Required Efficiency: 11.00 EER
- 7 AHU-1.1, 1.2, 1.3, 1.5, 1.7, 1.10 (Single Zone):
Split System Heat Pump
Heating Mode: Capacity = 52 kBtu/h,
Proposed Efficiency = 9.20 HSPF, Required Efficiency = 8.20 HSPF
Cooling Mode: Capacity = 54 kBtu/h, , Air Economizer
Proposed Efficiency = 16.00 SEER, Required Efficiency: 14.00 SEER
- 1 AHU-1.8 (Single Zone):
Split System Heat Pump
Heating Mode: Capacity = 46 kBtu/h,
Proposed Efficiency = 9.20 HSPF, Required Efficiency = 8.20 HSPF
Cooling Mode: Capacity = 47 kBtu/h,
Proposed Efficiency = 16.00 SEER, Required Efficiency: 14.00 SEER
- 2 AHU-1.4, 1.9 (Single Zone):
Split System Heat Pump
Heating Mode: Capacity = 24 kBtu/h,
Proposed Efficiency = 9.20 HSPF, Required Efficiency = 8.20 HSPF
Cooling Mode: Capacity = 33 kBtu/h,
Proposed Efficiency = 16.00 SEER, Required Efficiency: 14.00 SEER
- 1 FCU-1 (Single Zone):
Cooling: 1 each - Split System, Capacity = 22 kBtu/h, Air-Cooled Condenser, No Economizer, Economizer exception: None
Proposed Efficiency = 15.00 SEER, Required Efficiency: 14.00 SEER
- 1 MAU-1 (Single Zone):
Heating: 1 each - Central Furnace, Gas, Capacity = 810 kBtu/h

Quantity System Type & Description

Proposed Efficiency = 80.00% Et, Required Efficiency: 80.00 % Et
Cooling: 1 each - Single Package DX Unit, Capacity = 730 kBtu/h, Air-Cooled Condenser, Air Economizer
Proposed Efficiency = 12.10 EER, Required Efficiency: 9.80 EER + 11.4 IEER

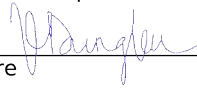
- 7 Water Heater:
Gas Storage Water Heater, Capacity: 100 gallons, Input Rating: 199 kBtu/h
Proposed Efficiency: 92.00 % Et, Required Efficiency: 80.00 % Et

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

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