### Project Information

2015 IECC Energy Code: Project Title: Torian Plum Boiler Room Project Type: Addition

Construction Site: Owner/Agent: Designer/Contractor: Mark Stratman MEP Engineering Inc. 6402 S. Troy Circle Suite 100 Centennial, CO 80111

# Allowed Interior Lighting Power

A Area Category	B Floor Area (ft2)	C Allowed Watts / ft2	D Allowed Watt (B X C)
1-Boiler Room (Common Space Types:Workshop)	214	1.59	340
		Total Allowed Watts	s = 340

720-541-6355

MStratman@mep-eng.com

Report date: 04/16/18

# Proposed Interior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixtures	D Fixture Watt.	(C X D
1-Boiler Room (Common Space Types:Workshop)				
C: C: Other:	1	3	34	102
å en		Total Promo	and Watte -	102

### terior Lighting PASSES: Design 70% better than code

# Interior Lighting Compliance Statement

Project Title: Torian Plum Boiler Room

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 2015 IECC requirements in COMcheck Version 4.0.7.1 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Mark Stratman - MEP Engineering, Inc.	Mark Stratman	04/16/2018
Name - Title	Signature	Da:e

Data filename: S:\Projects\2017\17109\2. Design\ComCheck\17109 Lighting COMcheck.cck

# COMcheck Software Version 4.0.7.1

Energy Code: 2015 IECC

Requirements: 6.0% were addressed directly in the COMcheck 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 s itemized in a separate table, a reference to that table is provided.

Section # & Req.ID	Plan Review	Complies?	Comments/Assumptions
C103.2 [PR4] <sup>1</sup>	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the interior lighting and electrical systems and equipment and document where exceptions to the standard are claimed. Information provided should include interior lighting power calculations, wattage of bulbs and ballasts, transformers and control devices.	□Complies □Does Not □Not Observable □Not Applicable	
C406 [PR9] <sup>1</sup>	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	Requirement will be met.

Additional	Comments	Accum	nti
Addicional	Comments	ASSUIII	PLI

# & Req.ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
C405.2.1 [EL15] <sup>1</sup>	Lighting controls installed to uniformly reduce the lighting load by at least 50%.	□Complies □Does Not □Not Observable □Not Applicable	
C405.2.1 [EL18] <sup>1</sup>	Occupancy sensors installed in required spaces.	□Complies □Does Not □Not Observable □Not Applicable	
C405.2.1 C405.2.2 3 [EL23] <sup>2</sup>	Independent lighting controls installed per approved lighting plans and all manual controls readily accessible and visible to occupants.	□Complies □Does Not □Not Observable □Not Applicable	
C405.2.2 1 [EL22] <sup>2</sup>	Automatic controls to shut offall building lighting installed in all buildings.	□Complies □Does Not □Not Observable □Not Applicable	
C405.2.3 [EL16] <sup>2</sup>	Daylight zones provided with individual controls that control the lights independent of general area lighting.	□Complies □Does Not □Not Observable □Not Applicable	
C405.2.3 C405.2.3 1, C405.2.3 2 [EL20] <sup>1</sup>	Primary sidelighted areas are equipped with required lighting controls.	□Complies □Does Not □Not Observable □Not Applicable	
C405.2.3 C405.2.3 1, C405.2.3 3 [EL21] <sup>1</sup>	Enclosed spaces with daylight area under skylights and rooftop monitors are equipped with required lighting controls.	□Complies □Does Not □Not Observable □Not Applicable	
C405.2.4 [EL4] <sup>1</sup>	Separate lighting control devices for specific uses installed per approved lighting plans.	□Complies □Does Not □Not Observable □Not Applicable	
C405.2.4 [EL8] <sup>1</sup>	Additional interior lighting power allowed for special functions per the approved lighting plans and is automatically controlled and separated from general lighting.	□Complies □Does Not □Not Observable □Not Applicable	
C405.3 [EL6] <sup>1</sup>	Exit signs do not exceed 5 watts per face.	□Complies □Does Not □Not Observable □Not Applicable	

### Additional Comments/Assumptions:

C405.2.1 [EL15] <sup>1</sup>		□Complies □Does Not	
	50%.	□Not Observable □Not Applicable	
C405.2.1 [EL18] <sup>1</sup>	Occupancy sensors installed in required spaces.	□Complies □Does Not	
		□Not Observable □Not Applicable	
C405.2.1 C405.2.2 3 [EL23] <sup>2</sup>	Independent lighting controls installed per approved lighting plans and all manual controls readily accessible and visible to occupants.	□Complies □Does Not □Not Observable □Not Applicable	
C405.2.2 1	building lighting installed in al	Complies Does Not	
[EL22] <sup>2</sup>	buildings.	□Not Observable □Not Applicable	
C405.2.3 [EL16] <sup>2</sup>	individual controls that contro the	Complies Does Not	
	lights independent of general area lighting.	□Not Observable □Not Applicable	
C405.2.3 C405.2.3	Primary sidelighted areas are equipped with required lighting	□Complies □Does Not	
1, C405.2.3 2 [EL20] <sup>1</sup>	controls.	□Not Observable □Not Applicable	
C405.2.3 C405.2.3		□Complies □Does Not	
1, C405.2.3 3 [EL21] <sup>1</sup>	are equipped with required lighting controls.	□Not Observable □Not Applicable	
C405.2.4 [EL4] <sup>1</sup>	Separate lighting control devices for specific uses installed per approved	□Complies □Does Not	
[224]	lighting plans.	□Not Observable □Not Applicable	
C405.2.4 [EL8] <sup>1</sup>	allowed for special functions per the	□Complies □Does Not	
	approved lighting plans and is automatically controlled and separated from general lighting.	□Not Observable □Not Applicable	
C405.3 [EL6] <sup>1</sup>	Exit signs do not exceed 5 watts per	□Complies □Does Not	
		□Not Observable □Not Applicable	

Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
C303.3, C408.2.5 2 [FI17] <sup>3</sup>	Furnished O&M instructions for systems and equipment to the building owner or designated representative.	□Complies □Does Not □Not Observable □Not Applicable	
C405.4.1 [FI18] <sup>1</sup>	Interior installed lamp and fixture lighting power is consistent with what is shown on the approved lighting plans, demonstrating proposed watts are less than or equal to allowed watts.	□Complies □Does Not □Not Observable □Not Applicable	See the Interior Lighting fixture schedule for values.
C408.2.5 <b>1</b> [FI16] <sup>3</sup>	Furnished as-built drawings for electric power systems within 90 days of system acceptance.	□Complies □Does Not □Not Observable □Not Applicable	
C408.3 [FI33] <sup>1</sup>	Lighting systems have been tested to ensure proper calibration, adjustment, programming, and operation.	□Complies □Does Not □Not Observable □Not Applicable	

NOTE: INTERIOR COMCHECK PAGE #5 IS BLANK

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PLANNERS &

LANDSCAPE ARCHITECTS 303.628.0003

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CLIENT CENTRIC CONSULTING

6402 S. Troy Circle, Suite 100 (W) 303.936.16 Centennial, CO 80111 (F) 303.934.32 info@mep-eng.com www.mep-eng.co

Comments/Assumptions

	1 High Impact (Tier 1)	2	Medium Impact (Tier 2)	3 Low Impact (Ti	er 3)		
Project Title:	Torian Plum Boiler Room				Report date:	04/16	/18
Data filename:	S:\Projects\2017\17109\2. Design\0	como	Check\17109 Lighting COMcl	neck.cck	Page	2 of	5

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

Requirement will be met

is being claimed. Where compliance s itemized in a separate table, a reference to that table is provided.

Complies

Does Not

Complies?

■Not Observable

COMcheck Software Version 4.0.7.1

**Inspection Checklist** 

Requirements: 5.0% were addressed directly in the COMcheck software

Energy Code: 2015 IECC

Plan Review

calculations provide all information

determined for the exterior lighting

and document where exceptions to

the standard are claimed. Information provided should include exterior

lighting power calculations, wattage of bulbs and ballasts, transformers and

and electrical systems and equipment Not Applicable

calculations provide all information Does Not

with which compliance can be determined for the additional energy efficiency package options.

with which compliance can be

C103.2 Plans, specifications, and/or

control devices.

Plans, specifications, and/or

with which compliance can be

efficiency package options. Additional Comments/Assumptions:

& Req.ID

						_		
	1 High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)			
Project Title:	Torian Plum Boiler Room				Rep	ort date:	04/16	/18
Data filename:	S:\Projects\2017\17109\2. Design\C	omo	heck\17109 Lighting COMcl	heck.	cck	Page	3 of	5

	1 High Impact (Tier 1)	2 Medium Impact (Tier 2)	3	Low Impact (Tier 3)		
Project Title:	Torian Plum Boiler Room			Report date: 04/	16/1	8
Data filename:	S:\Projects\2017\17109\2. Design\0	ComCheck\17109 Lighting COMc	heck.	cck Page 4	of	5

# COMcheck Software Version 4.0.7.1 **Exterior Lighting Compliance Certificate**

# Project Information

f	
Energy Code:	2015 IECC
Project Title:	Torian Plum Plaza
Project Tyre:	New Construction
Exterior Lighting Zone	3 (Other)

Construction Site: Owner/Agent: Torrian Plum Plaza - Steamboat

Designer/Contractor: Mark Stratman MEP Engineering Inc. 6402 S. Troy Circle Suite 100 Centennial, CO 80111 720-541-6355

MStratman@mep-eng.com

Total Allowed Supplemental Watts (b) = 750

B C D E

# Allowed Exterior Lighting Power

A Area/Surface Category	B Quantity	C Allowed Watts / Unit	D Tradable Wattage	E Allowed Watts (B X C)
Plaza (Plaza area)	12285 ft2	0.16	Yes	1966
		Total Tradab	ole Watts (a) =	1966
		Total All	owed Watts =	1966

(a) Wattage tradeoffs are only allowed between tradable areas/surfaces. (b) A supplemental allowance equal to 750 watts may be applied toward compliance of both non-tradable and tradable areas/surfaces.

# Proposed Exterior Lighting Power

Fixture ID: Description / Lamp / Wattage Per Lamp / Ballast	Lamps/ Fixture	# of Fixtures	Fixture Watt.	(C X D)
laza ( Plaza area 12285 ft2): Tradable Wattage				
A: A: Other:	1	8	27	216
B: B: Other:	1	3	4	13
	Total Tra	dable Propos	ed Watts =	229

### xterior Lighting PASSES: Design 92% 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 2015 IECC requirements in COMcheck Version 4.0.7.1 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Mark Stratman - MEP Engineering, Inc. Mark Stratman 04/16/2018 Name - Title

Project Title:	Torian Plum Plaza	Re
Data filename:	S:\Projects\2017\17109\2, Design\ComCheck\17109 Plaza Lighting COMcheck.cck	

# Report date: 04/17/18

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1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Project Title: Torian Plum Plaza Data filename: S:\Projects\2017\17109\2. Design\ComCheck\17109 Plaza Lighting COMcheck.cck



Project Title: Torian Plum Plaza

### Rough-In Electrical Inspection Complies? Comments/Assumptions C405.2.5 Automatic lighting controls for exterior Complies Does Not daylight controlled, set based on ☐Not Observable business operation time-of-day, or ☐Not Applicable reduce connected lighting > 30%. Additional Comments/Assumptions

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Data filename: S:\Projects\2017\17109\2. Design\ComCheck\17109 Plaza Lighting COMcheck.cck

Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
C405.5.1 [FI19] <sup>1</sup>	Exterior lighting power is consistent with what is shown on the approved	□Complies □Does Not	Seethe Exterior Lighting fixture schedule for values.
lighting plans, demonstrating proposed watts are less than or equal to allowed watts.	□Not Observable □Not Applicable		

Additional Comments/Assumptions:

Project Title: Torian Plum Plaza

Report date: 04/17/18

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NOTE: EXTERIOR COMCHECK PAGE #5 IS BLANK

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Data filename: S:\Projects\2017\17109\2. Design\ComCheck\17109 Plaza Lighting COMcheck.cck

10.22.17 MTS Drawn By **DGM** Reviewed by\_ 17109 Revisions BLDG DEPT #1 BLDG DEPT #2

100% Construction Documents

ELECTRICAL COMCHECK Sheet Number

Report date: 04/17/18

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