# FOR CONSTRUCTION BY THE CITY OF SPRINGFIELD, MO



**Project Information** 

# COMcheck Software Version 4.1.5. BUILDING OFFICIAL

# REVIEWED FOR COMPLIANCE WITH THE CITY CODE, ADOPTED Envelope Compliance Certification de AND DESIGN

STANDARDS. THIS REVIEW AND APPROVAL DOES NOT RELIEVE THE DEVELOPER OR HIS AGENTS OF ANY RESPONSIBILITY FOR COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS, OR ADDRESS OR OVERRULE THE REQUIREMENTS OF OTHER

90.1 (2007) Standajurisdictions or AGENCIES, UNLESS SPECIFICALLY NOTED

**Energy Code:** Project Title: Location: Climate Zone:

Project Type: Vertical Glazing / Wall Area:

3720 W SUNSHINE ST

SPRINGFIELD, MO 65807

Construction Site:

OTHERWISE.
Springfield, Missouri mi R Penin **New Construction** 

19%

SIGNATURE

Owner/Agent:

Amy Switzer McDonald's Nashvije Field Office 110 N Carpenter St Chicago, IL 60607 913-660-2205

Amy.Switzer@us.mcd.com

Designer/Contractor:

Bob Kenipkes Taylor/Ken II kes Alchitects

210 Central Ave. Suite 3A Hot Springs, AR 71901 501-624-5679 bob@taylorkempkes.com

**Building Area** Floor Area

1-Dining: Cafeteria/Fast Food : Nonresidential 4303

#### **Envelope Assemblies**

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U- Factor <sub>(a)</sub>
Roof 1: Insulation Entirely Above Deck, [Bldg. Use 1 - Dining: Cafeteria/Fast Food]	5218		25.0	0.039	0.048
Floor 1: Slab-On-Grade:Unheated, Horizontal with vertical 2 ft., [Bldg. Use 1 - Dining: Cafeteria/Fast Food] (c)	283		10.0	0.700	0.700
NORTH					
Exterior Wall 4: Wood-Framed, 16" o.c., [Bldg. Use 1 - Dining: Cafeteria/Fast Food]	528	19.0	10.0	0.038	0.089
Window 4: Metal Frame, Perf. Specs.: Product ID N/A, SHGC 0.40, [Bldg. Use 1 - Dining: Cafeteria/Fast Food] (b)	10			0.800	0.550
Door 3: Insulated Metal, Swinging, [Bldg. Use 1 - Dining: Cafeteria/Fast Food]	23			0.340	0.700
EAST					
Exterior Wall 2: Wood-Framed, 16" o.c., [Bldg. Use 1 - Dining: Cafeteria/Fast Food]	1192	19.0	10.0	0.038	0.089
Window 2: Metal Frame, Perf. Specs.: Product ID N/A, SHGC 0.40, [Bldg. Use 1 - Dining: Cafeteria/Fast Food] (b)	280			0.800	0.550
Door 2: Insulated Metal, Swinging, [Bldg. Use 1 - Dining: Cafeteria/Fast Food]	85			0.340	0.700
SOUTH					
Exterior Wall 1: Wood-Framed, 16" o.c., [Bldg. Use 1 - Dining: Cafeteria/Fast Food]	528	19.0	10.0	0.038	0.089
Window 1: Metal Frame Curtain Wall/Storefront, Perf. Specs.: Product ID N/A, SHGC 0.40, [Bldg. Use 1 - Dining: Cafeteria/Fast Food] (b)	276			0.800	0.500

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#### Assembly

## FOR CONSTRUCTION BY THE CITY OF SPRINGFIELD. MO

CapityII DIRIPOTOFF CONTROL

THE DEVELOPER OR HIS AGENTS OF ANY RESPONSIBILITY FOR

COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS, OR ADDRESS OF OVERRULE THE REQUIREMENTS OF OTHER JRISDICTIONS OR AGENCIES, UNLESS SPECIFICALLY NOTED

Door 1: Glass (> 50% glazing): Metal Frame, Entrance Door, Perf. Specs.: Product ID N/A, SHGC 0.40, [Bldg. Use 1 - Dining: Cafeteria/Fast Food] (b)

#### WEST

Exterior Wall 3: Wood-Framed, 16" o.c., [Bldg. Use 1 - Dining: Cafeteria/Fast Foodl

Window 3: Metal Frame with Thermal Break, Perf. Specs.: Product ID N/A, SHGC 0.40, [Bldg. Use 1 - Dining: Cafeteria/Fast Food] (b)

(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 NERC and requires porting documentation (c) Slab-On-Grade proposed and budget U-factors shown in table are F-factors.

#### Envelope PASSES: Design 4% better than code

#### **Envelope Compliance Statement**

Compliance Statement: The proposed envelope design represe ted in this locar lent is consist and vita the building plans, specifications, and other calculations submitted with this permit application. The proposed envelope systems have been designed to meet the 90.1 (2007) Standard requirements in COMcheck Version 4.1.5.5 and to comply with any applicable

mandatory requirements listed in the Inspection Checklist

Project Title:

Springfield, MO

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# FOR CONSTRUCTION BY THE CITY OF SPRINGFIELD, MO



**Project Information** 

Energy Code:

Project Title: Location:

# **COM**check Software Version 4.1.5. BUILDING OFFICIAL

# REVIEWED FOR COMPLIANCE WITH THE CITY CODE, ADOPTED Mechanical Compliances Continues Continues

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STANDARDS. THIS REVIEW AND APPROVAL DOES NOT RELIEVE THE DEVELOPER OR HIS AGENTS OF ANY RESPONSIBILITY FOR COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS, OR ADDRESS OR OVERRULE THE REQUIREMENTS OF OTHER

90.1 (2007) Standajปหเร**DICTIONS OR AGENCIES, UNLESS SPECIFICALLY NOTED** 

OTHERWISE.
Springfield, Missouri

Climate Zone:

New Construction Project Type:

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Construction Site:

3720 W SUNSHINE ST SPRINGFIELD, MO 65807 Owner/Agent: **SIGNATURE** 

Amy Switzer

McDonald's Nashville F 110 N Carpenter S

Chicago, IL 60607 913-660-2205

Amy.Switzer@us.mcd.com

Designer/Contractor:

**Bob Kempkes** 

Taylor/Kempkes 216 Certral Ave Suite 3A

Hot Springs, AR 71901

501-624-5679

bob@taylorkempkes.com

#### **Mechanical Systems List**

#### **Quantity System Type & Description**

HVAC System 1 (RTU-1) (Single Zone):

Heating: 1 each - Other, Gas, Capacity = 250 kBtu/h

No minimum efficiency requirement applies

Cooling: 1 each - Single Package DX Unit, Capacity = 258 kBtu/h, Air-Cooled Condenser

Proposed Efficiency = 9.80 EER, Required Efficiency: 9.80 EER + 9.5 IPLV

Fan System: FAN SYSTEM 1 | Kitchen -- Compliance (Motor nameplate HP method): Passes

Fans:

FAN 1 (RTU1) Supply, Constant Volume, 7200 CFM, 5.0 motor nameplate hp

FAN 2 (EF1) Exhaust, Constant Volume, 1350 CFM, 1.0 motor nameplate hp

FAN 3 (EF2) Exhaust, Constant Volume, 575 CFM, 1.0 motor nameplate hp

FAN 4 (EF3) Exhaust, Constant Volume, 480 CFM, 1.0 motor nameplate hp

HVAC System 2 (RTU-2) (Single Zone): 1

Heating: 1 each - Other, Gas, Capacity = 60 kBtu/h

No minimum efficiency requirement applies

Cooling: 1 each - Single Package DX Unit, Capacity = 53 kBtu/h, Air-Cooled Condenser

Proposed Efficiency = 17.50 SEER, Required Efficiency: 13.00 SEER

Fan System: FAN SYSTEM 2 | Support Areas -- Compliance (Motor nameplate HP method): Passes

Fans:

FAN 5 (RTU2) Supply, Constant Volume, 1600 CFM, 0.8 motor nameplate hp FAN 6 (TF1) Relief, Constant Volume, 100 CFM, 0.1 motor nameplate hp

1 HVAC System 3 (RTU-3) (Single Zone):

Heating: 1 each - Other, Gas, Capacity = 250 kBtu/h

No minimum efficiency requirement applies

Cooling: 1 each - Single Package DX Unit, Capacity = 159 kBtu/h, Air-Cooled Condenser

Proposed Efficiency = 10.80 EER, Required Efficiency: 10.80 EER

Fan System: FAN SYSTEM 3 | Dining & Restrooms -- Compliance (Motor nameplate HP method): Passes

Fans:

FAN 7 (EF4) Exhaust, Constant Volume, 400 CFM, 0.3 motor nameplate ho FAN 8 (EF5) Exhaust, Constant Volume, 75 CFM, 0.1 motor nameplate hp FAN 9 (RTU3) Supply, Constant Volume, 4800 CFM, 3.0 motor nameplate hp

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#### **Quantity System Type & Description**

#### **BUILDING OFFICIAL**

Water Heater 1 (WH-1):

REVIEWED FOR COMPLIANCE WITH THE CITY CODE, ADOPTED Gas Storage Water Heater, Capacity: 100 gallons, Input Rating: 199 kBtu/h w/ Circulation Pump Proposed Efficiency: 98.00 % Et, Required Efficiency: 80.00 % Et

STANDARDS. THIS REVIEW AND APPROVAL DOES NOT RELIEVE

THE DEVELOPER OR HIS AGENTS OF ANY RESPONSIBILITY FOR

#### **Mechanical Compliance Statement**

COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS, OR

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 90.1 (2007) Standard requirements in CIRISDICTION 18 CENTRIFIC AND LESS IS RECIPIOLABLY NOTED mandatory requirements listed in the Inspection Checklist. OTHERWISE.

Name - Title

Signature

Date 04/25/23

**SIGNATURE** 

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Project Title: Springfield, MO Report date: 02/08/23

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# FOR CONSTRUCTION BY THE CITY OF SPRINGFIELD, MO



**Project Information** 

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# Interior Lighting Compliance Conti

REVIEWED FOR COMPLIANCE WITH THE CITY CODE, ADOPTED

STANDARDS. THIS REVIEW AND APPROVAL DOES NOT RELIEVE THE DEVELOPER OR HIS AGENTS OF ANY RESPONSIBILITY FOR COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS, OR ADDRESS OR OVERRULE THE REQUIREMENTS OF OTHER

90.1 (2007) Standajปหเร**DICTIONS OR AGENCIES, UNLESS SPECIFICALLY NOTED** 

OTHERWISE. **New Construction** 

Energy Code: Project Title: Springfield, MO Project Type:

Construction Site: 3720 W SUNSHINE ST SPRINGFIELD, MO 65807

Designer/Contractor: Owner/Agent: Amy Switzer

McDonald's Nashvi 110 N Carpenter

Chicago, IL 60607 913-660-2205 Amy.Switzer@us.ricd.com 04/25/23

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**Bob Kempkes** Taylor/Kempkes Archite 210 Central Ave.

Suite 3A

Hot Springs (AR //1901) 501,624-53 (9 bob@taylorkempkes.com

#### **Allowed Interior Lighting Power**

Α	В	С	D
Area Category	Floor Area (ft2)	Allowed Watts / ft2	Allowed Watts (B X C)
1-Dining: Cafeteria/Fast Food	4303	1.40	6024
		Total Allowed Watts	s = 6024

#### **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-Dining: Cafeteria/Fast Food				
LED 1: L2R: 6" LED DOWNLIGHT: Other:	1	39	16	624
LED 2: F2: 2x4 LED LAY IN: Other:	3	30	44	1320
LED 4: F14A: LED PENDANT: Other:	2	3	8	24
LED 5: L2: LED PENDANT: Other:	1	11	14	154
LED 6: L4: LED DIRECTIONAL; DOWNLIGHT: Other:	1	9	7	63
		Total Propos	ed Watts =	2185

## Interior Lighting PASSES: Design 64% 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 90.1 (2007) Standard requirements in COMcheck Version 4.1.5.1 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Name - Title	Signature	Date

Project Title: Springfield, MO Report date: 02/07/23

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## FOR CONSTRUCTION BY THE CITY OF SPRINGFIELD, MO



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# REVIEWED FOR COMPLIANCE WITH THE CITY CODE, ADOPTED Exterior Lighting Compliance Cort

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90.1 (2007) Standajปหเร**DICTIONS OR AGENCIES, UNLESS SPECIFICALLY NOTED** Springfield, MO

OTHERWISE. **New Construction** 

**Project Information** 

Energy Code: Project Title: Project Type:

Construction Site: 3720 W SUNSHINE ST SPRINGFIELD, MO 65807 Owner/Agent: Amy Switzer

McDonald's Nashvil 110 N Carpenter

Chicago, IL 60607 913-660-2205

Amy.Switzer@us.rncd.cor

04/25/23 Designer/Contractor: **Bob Kempkes** 

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Taylor/Kempkes Archite 210 Central Ave.

Suite 3A

Hot Springs (AR //1901) 501,624-53 (9 bob@taylorkempkes.com

#### **Allowed Exterior Lighting Power**

A Area/Surface Category	B Quantity	C Allowed Watts / Unit	D Tradable Wattage	E Allowed Watts (B X C)
DT WINDOWS (Drive-up window)	3 window(s)	400	No	1200
FACADE (Illuminated area of wall or surface)	4302 ft2	0.2	No	860
CUSTOMER ENTRANCE (Main entry/exit)	6 ft of door	30	Yes	180
		Total Tradable Watts (a) =		180
		Total All	owed Watts =	2240
	Total Alle	112		

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

#### **Proposed Exterior Lighting Power**

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixtures	D Fixture Watt.	E (C X D)
DT WINDOWS ( Drive-up window 3 window(s)): Non-tradable Wattage				
LED 1: F12G: DOWNLIGHT: Other:	1	6	12	72
FACADE ( Illuminated area of wall or surface 4302 ft2): Non-tradable Wattage				
LED 3: S1H/S1W: SCONCE: Other:	1	14	14	196
LED 4: SLED2-HE: ACCENT LIGHT: Other:	1	7	10	70
LED 5: SLED3-HE: ACCENT LIGHT: Other:	1	2	14	28
LED 6: SLED4-HE: ACCENT LIGHT: Other:	1	2	19	38
LED 7: FL1: FLOOD LIGHT: Other:	1	4	16	64
CUSTOMER ENTRANCE (Main entry/exit 6 ft of door width): Tradable Wattage				
LED 2: F12G: DOWNLIGHT: Other:	1	4	12	48
	Total Tra	dable Propos	sed Watts =	48

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<sup>(</sup>b) A supplemental allowance equal to 112 watts may be applied toward compliance of both non-tradable and tradable areas/surfaces.

FOR CONSTRUCTION BY THE CITY OF SPRINGFIELD, MO

Exterior Lighting PASSES: Design 84% better than code

**BUILDING OFFICIAL** 

**Exterior Lighting Compliance Statement** 

Name - Title

REVIEWED FOR COMPLIANCE WITH THE CITY CODE, ADOPTED

Compliance Statement: The proposed exterior lighting design represented in this document is considered with the building plans, specifications, and other calculations submitted with this perifications. THE PROVENDENT OF THE PROVENDENT WITH THE PROVENDENT OF THE PROVENDENT OF THE PROVENDENT WITH THE PROVINCE WITH THE

COMPLIANCE WITH ALL APPLICABLE REQUIREMENT
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JURISDICTIONS OR AGENCIES, UNLESS SPECIFICALLY NOTES

OTHERWISE.

Kirni R Penin

04/25/23

SIGNATURE

DATE

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Project Title: Springfield, MO Report date: 02/07/23

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