



COMcheck Software Version 4.0.7.0

# Interior Lighting Compliance Certificate

### Project Information

Energy Code: 2015 IECC  
Project Title: Tropical Smoothie Cafe  
Project Type: Alteration

Construction Site: 9222 POTRANCO ROAD, SAN ANTONIO, TX 78251  
Owner/Agent:  
Designer/Contractor:

### Allowed Interior Lighting Power

A Area Category	B Floor Area (ft <sup>2</sup> )	C Allowed Watts / ft <sup>2</sup>	D Allowed Watts (B X C)
1-Dining, Bar, Lounge, Leisure	1887	1.01	1704
Total Allowed Watts =			1704

### Proposed Interior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixtures	D Fixture Watt.	E (C X D)
Dining, Bar, Lounge, Leisure (1887 sq ft.)				
LED 1: GR. Recess LED, Other:	1	8	12	96
Track lighting 1: TL-12 TRACK LIGHT: Wattage based on current limiting device capacity	0	0	120	120
LED 4: WS. WALL SCENE, Other:	1	3	9	27
LED 3: PL. PENDANT LIGHT, Other:	1	11	24	264
LED 2: 2xT, 2 X 4 LED TROFFER, Other:	1	12	44	528
Track lighting 2: TL-12 TRACK LIGHT: Wattage based on current limiting device capacity	0	0	120	120
Track lighting 3: TL-13 TRACK LIGHT: Wattage based on current limiting device capacity	0	0	120	120
Track lighting 4: TL-13 TRACK LIGHT: Wattage based on current limiting device capacity	0	0	120	120
Track lighting 5: TL-4 TRACK LIGHT: Wattage based on current limiting device capacity	0	0	60	60
Track lighting 6: TL-4 TRACK LIGHT: Wattage based on current limiting device capacity	0	0	60	60
Track lighting 7: TL-4 TRACK LIGHT: Wattage based on current limiting device capacity	0	0	60	60
Track lighting 8: TL-4 TRACK LIGHT: Wattage based on current limiting device capacity	0	0	60	60
Track lighting 9: TL-4 TRACK LIGHT: Wattage based on current limiting device capacity	0	0	60	60
Total Proposed Watts =				1695

### Interior Lighting PASSES

#### Interior Lighting Compliance Statement

Compliance Statement: The proposed interior lighting alteration project 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 4.0.7.0 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

FAISAL ELHALIS - ELECTRICAL DESIGNER  
Name - Title: *Faisal Elhalis* Signature: *Faisal Elhalis* Date: 10/27/17

Project Title: Tropical Smoothie Cafe Report date: 10/27/17  
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Section #	Req. ID	Requirement	Complies?	Comments/Assumptions
C405.2.1	[EL15] <sup>1</sup>	Lighting controls installed to uniformly reduce the lighting load by at least 50%.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C405.2.1	[EL18] <sup>1</sup>	Occupancy sensors installed in required spaces.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C405.2.1	[EL23] <sup>2</sup>	Independent lighting controls installed per approved lighting plans and all manual controls readily accessible and visible to occupants.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C405.2.2	[EL22] <sup>2</sup>	Automatic controls to shut off all building lighting installed in all buildings.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C405.2.3	[EL16] <sup>2</sup>	Daylight zones provided with individual controls that control the lights independent of general area lighting.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C405.2.3	[EL20] <sup>3</sup>	Primary sidelighted areas are equipped with required lighting controls.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C405.2.3	[EL20] <sup>3</sup>	Enclosed spaces with daylight area under skylights and rooftop monitors are equipped with required lighting controls.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C405.2.4	[EL4] <sup>1</sup>	Separate lighting control devices for specific uses installed per approved lighting plans.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C405.2.4	[EL0] <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.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C405.3	[EL6] <sup>1</sup>	Exit signs do not exceed 5 watts per face.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.

#### Additional Comments/Assumptions:

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

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## GENERAL NOTES

- ALL WORK TO BE IN ACCORDANCE WITH THE NEC AND ALL APPLICABLE RULES, REGULATIONS AND ORDINANCES.
- ALL MATERIAL SHALL BE NEW, FREE OF DEFECTS, OF THE QUALITY SPECIFIED AND CONFORM TO NFPA, NEMA, UL AND ANSI STANDARDS IN EVERY CASE WHERE SUCH A STANDARD HAS BEEN ESTABLISHED FOR THE PARTICULAR TYPE OF MATERIAL.
- COORDINATE ALL REQUIREMENTS PRIOR TO SUBMITTING BID AND COMMENCING WORK.
  - VERIFY ALL LANDLORD REQUIREMENTS PRIOR TO SUBMITTING BID AND INCLUDE ALL REQUIRED WORK THEREIN.
  - CONTRACTOR SHALL FIELD VERIFY ALL CONDITIONS AND COORDINATE WITH LANDLORD AND LOCAL UTILITY COMPANIES PRIOR TO SUBMITTING BIDS. VERIFY SCOPE OF WORK WITH LANDLORD'S ELECTRICIAN.
  - VERIFY WATER HEATER AND RTU LOADS DURING BID PROCESS.
  - ALL CONTRACTORS SHALL VERIFY ALL EQUIPMENT REQUIREMENTS PRIOR TO COMMENCING WITH THE WORK.
  - FIELD VERIFY PHYSICAL SPACE ALLOCATIONS FOR NEW EQUIPMENT.
  - IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY EXACT LOCATION OF ALL LIGHTING FIXTURES IN MECHANICAL, ELECTRICAL, AND OTHER EQUIPMENT ROOMS WHERE CONDUITS, DUCT WORK, PIPING, ETC., ARE PRESENT TO AVOID CONFLICT AND ENABLE PROPER ILLUMINATION DISTRIBUTION.
- CLAIMS FOR ADDITIONAL COSTS DUE TO LANDLORD REQUIREMENTS ESTABLISHED ON THE DRAWINGS, IN THE SPECIFICATIONS OR IN THE LANDLORD DESIGN CRITERIA, INCLUDED IN THE PROJECT MANUAL WILL NOT BE ACCEPTED. CLAIMS FOR ADDITIONAL COSTS DUE TO LANDLORD REQUIREMENTS ESTABLISHED AFTER AWARD OF CONTRACT SHALL BE NEGOTIATED AS A CHANGE ORDER.
- ELECTRICAL CONTRACTOR TO PROVIDE LOCK OUT AND TAG OUT SYSTEM ONCE BUILDING BECOMES ENERGIZED AND SHALL BE RESPONSIBLE FOR MAINTAINING "SAFE WORK" ENVIRONMENT.
- PROVIDE PROPER GROUNDING FOR ALL EQUIPMENT, RACEWAYS ETC. AS PER NEC.
- PROVIDE DISCONNECTS, FUSES, OVERLOAD PROTECTION AND PROPER CONTROL & POWER WIRING FOR OTHER EQUIPMENT SUCH AS HVAC, MECHANICAL AND ANY OTHER SPECIAL EQUIPMENT THAT MAY BE USED FOR THIS PROJECT. VERIFY THE ROUGH-IN DETAILS, ACTUAL LOCATIONS, WIRE SIZES AND ANY OTHER DETAILS WITH THE RESPONSIBLE TRADES AND FOLLOW THE ACTUAL INSTALLATION INSTRUCTIONS FOR THE EQUIPMENT BEING INSTALLED. COORDINATE WITH THE OTHER TRADES.
- ELECTRICAL CONTRACTOR SHALL SECURE KITCHEN EQUIPMENT SPECIFICATION SHEETS PRIOR TO ROUGH-IN AND INSTALL EQUIPMENT IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS, INCLUDING WIRE SIZE AND ELECTRIC LOAD.
- RECEPTACLES SHALL BE COMMERCIAL GRADE, RATED FOR 125-VOLT, 20-AMPERES, NEMA 5-20R.
  - PROVIDE GROUND FAULT INTERRUPTER (GFI) TYPE RECEPTACLES LOCATED IN BATHROOMS, COMMERCIAL AND INSTITUTIONAL KITCHENS, OUTDOORS, AND ROOF TOPS OF ANY OCCUPANCY.
  - ALL RECEPTACLES IN PREP AREA SHALL BE MOUNTED AT 48" AFF UNLESS OTHERWISE NOTED. CONFIRM OUTLET LOCATIONS IN SALES AREA WITH EQUIPMENT SUPPLIER AND CASEWORK FABRICATOR.
  - RECEPTACLES SHALL BE BLACK WITH STAINLESS STEEL COVER PLATES.
  - RECEPTACLES IN PUBLIC AREAS SHALL BE THE TAMPER PROOF TYPE.
- ALL DISCONNECTS, FIXTURES, AND OTHER ELECTRICAL COMPONENTS THAT ARE SUBJECT TO THE OUT SIDE WEATHER ELEMENTS MUST HAVE THE WEATHERPROOF ENCLOSURES.
- ALL WIRE TO BE COPPER THW, THWN, THHN, OR XHHW, #12 AWG MINIMUM. ALL CONDUITS TO BE EITHER RIGID STEEL OR EMT AS ALLOWED BY CODE. ALL EMT, FLEX CONDUITS, MC CABLES, AND NON-METALLIC CONDUITS MUST HAVE GROUND WIRE PER NEC. THIS IS A NON-RESIDENTIAL JOB, THEREFORE TYPE NM (ROMEX) OR SIMILAR WIRING METHODS SHALL NOT BE USED.
  - ALUMINUM CONDUCTORS ARE NOT PERMITTED UNLESS NOTED OTHERWISE FOR A SPECIFIC USE.
  - FOR HOMERUNS OVER 80 FEET, USE ONE SIZE LARGER WIRE. FOR HOMERUNS OVER 135 FEET, USE TWO SIZE LARGER WIRE.
  - SEAL CONDUITS THAT PASS FROM ONE ENVIRONMENT TO ANOTHER OR SUBJECT TO DIFFERENT TEMPERATURES AS REQUIRED BY NEC 300.7(A).
- PANELBOARDS SHALL BE NEW WITH RATINGS AS SHOWN IN PANEL SCHEDULES. TYPE LISTED IS TO ESTABLISH A LEVEL OF QUALITY. APPROVED MANUFACTURERS INCLUDE SQUARE D, SIEMENS, CUTLER HAMMER, AND GE. PROVIDE COPPER GROUND BUS AND FULLY RATED NEUTRAL. PROVIDE TYPED PANEL DIRECTORY FOR EACH PANEL.
  - CIRCUIT BREAKERS SHALL BE THE BOLT-ON TYPE.
  - ALL BREAKERS THAT ARE TO BE USED TO SUPPLY LIGHTING LOADS MUST BE RATED FOR SWITCHING DUTY. PROVIDE LOCK-ON DEVICES FOR THE NIGHT LIGHT CIRCUIT AND OTHER CIRCUITS THAT MAY BE SO DIRECTED BY THE ARCHITECT.
  - ELECTRIC CONTRACTOR SHALL FURNISH AND INSTALL SHUNT TRIP BREAKERS ON ALL ELECTRIC APPLIANCES AND RECEPTACLES UNDER EXHAUST HOOD.
- PANELS AND DISCONNECTS SHALL BE LABELED WITH PHENOLIC PLASTIC PLATES.
- THE LIGHT FIXTURE SCHEDULE INDICATES GENERAL DESCRIPTION OF LIGHTING FIXTURES AND MANUFACTURERS CATALOG NUMBERS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE CORRECT CEILING CONFIGURATION AND PROVIDE THE FIXTURES WITH ALL NECESSARY TRIMS AND MOUNTING HARDWARE SO THAT BOTH THE CEILING SYSTEM AND THE FIXTURE CONSTRUCTION MATCHES. VERIFY THE RECESSED FIXTURES TO ASCERTAIN THAT THEY WILL MATCH WITH THE CEILING OR WALL DETAILS ALL FIXTURES TO BE MOUNTED IN A NEAT, EYE-PLEASING MANNER. HEIGHTS AND LOCATIONS THAT ARE SUBJECT TO THE FINAL CONFIRMATION BY THE OWNER OR ARCHITECT IN THE FIELD.
  - NO LIGHT FIXTURE SUBSTITUTIONS SHALL BE APPROVED WITHOUT WRITTEN PERMISSION FROM THE ARCHITECT, ENGINEER, OR THE CITY.
  - ALL FLUORESCENT LIGHTING FIXTURES MUST BE EQUIPPED WITH ELECTRONIC BALLASTS.
  - FLUORESCENT FIXTURES THAT UTILIZE DOUBLE-ENDED LAMPS AND CONTAIN BALLAST(S) THAT CAN BE SERVICED IN PLACE SHALL HAVE A DISCONNECTING MEANS EITHER INTERNAL OR EXTERNAL TO EACH LUMINARIES (FIXTURE) WITH THE LINE SIDE TERMINALS OF THE DISCONNECTING MEANS GUARDED PER NEC 410.130. WHERE LUMINAIRE IS CONNECTED TO A MULTI-WIRE BRANCH CIRCUIT, THE DISCONNECTING MEANS SHALL SIMULTANEOUSLY BREAK ALL THE SUPPLY CONDUCTORS TO THE BALLAST, INCLUDING THE GROUNDED CONDUCTOR.
- A JUNCTION BOX MUST BE PROVIDED WITH ALL EXIT LIGHTS CONNECTED TO MORE THAN ONE SET OF CONDUCTORS UNLESS THE EXIT LIGHT FIXTURE IS FURNISHED WITH AN APPROVED OUTLET BOX FOR THROUGH WIRING.
- IN THE FOOD SERVICE AND KITCHEN AREAS THE CONTRACTOR SHALL PROVIDE SAFETY-TYPE LAMPS, FIXTURES OR OTHER GLASS SUSPENDED OVER EXPOSED FOOD IN ANY STEP OF PREPARATION OR OTHERWISE PROTECT AGAINST FOOD CONTAMINATION IN CASE OF GLASS BREAKAGE.
- PROVIDE A PHOTOCELL TO CONTROL EXTERIOR SIGNS SO THEY AUTOMATICALLY TURN ON WHEN DARK, ALONG WITH A TIMER THAT WILL SHUT OFF AUTOMATICALLY AT 2AM. TIME CLOCK SHALL BE 365 DAY PROGRAMMABLE.
- ALL FIRE ALARM SYSTEM MODIFICATIONS MUST BE PERFORMED BY OWNER

## ELECTRICAL SYMBOLS LEGEND

SYMBOL	DESCRIPTION	ABBREVIATIONS
	HOMERUN - TEXT DESIGNATES PANEL AND CIRCUIT NUMBERS. CONDUCTORS SHALL BE #12 AWG IN A 3/4" CONDUIT UNLESS NOTED OTHERWISE. LONG HASH MARKS INDICATE NEUTRAL CONDUCTORS, SHORT HASH MARKS INDICATE NUMBER OF PHASE CONDUCTORS. NO HASH MARKS INDICATE 3P12 IN A 3/4" C. PROVIDE A CODE-SIZED GROUND IN EACH CONDUIT.	A AMPERES AFC AVAILABLE FAULT CURRENT AFF ABOVE FINISHED FLOOR AIC AMPERE INTERRUPTING CURRENT AL ALUMINUM C CONDUIT CB CIRCUIT BREAKER CBCB CIRCUIT BREAKER INTERRUPTING CURRENT CU COPPER EC ELECTRICAL CONTRACTOR EX EXISTING F FUSE G GROUND GFI GROUND FAULT INTERRUPTER
	UNDER-SLAB ELECTRICAL CONDUIT	
	SWITCH, MOUNT AT 48" AFF X REPRESENTS IDENTIFIERS AS FOLLOWS: 3 3-WAY SWITCH M MOTOR RATED SWITCH	
	WALL MOUNT OCCUPANCY SENSOR, PASSIVE IR MOUNT AT 48" AFF	
	TIME CLOCK	HD HEAVY DUTY H HOT HT HEIGHT
	DAYLIGHT SENSOR	
	JUNCTION BOX	INC INCANDESCENT
	DUPLEX RECEPTACLE, MOUNT AT 18" AFF UNO X REPRESENTS IDENTIFIERS AS FOLLOWS: NONE NONE 44" MTC HT OTHER THAN STANDARD WP WEATHERPROOF OUTLET IG ISOLATED GROUND	LTS LIGHTS KW KILOWATT KVA KILOVOLT-AMPERE MCB MAIN CIRCUIT BREAKER MLO MAIN LUG ONLY MSB MAIN SWITCHBOARD MFR MANUFACTURER MTG MOUNTING
	DUPLEX RECEPTACLE FOR SHOW WINDOW PER NEC 210.62, INSTALL IN CEILING SO FACEPLATE IS FLUSH WITH FINISHED CEILING	
	GROUND FAULT CIRCUIT INTERRUPTER (GFCI) RECEPTACLE, MOUNT AT 18" AFF UNO	N NEUTRAL N1 NEMA 1 N3R NEMA 3R NF NON-FUSED
	SPECIAL APPLICATION RECEPTACLE	
	20" WIDE PANELBOARD	PH # PHASE P POLE
	DISCONNECT SWITCH D-A 30A/240V, 2P, F, NEMA-1	SES SERVICE ENTRANCE SECTION
	MOTOR EF EXHAUST FAN, 120/1", FRACTIONAL	TMB TELEPHONE MOUNTING BOARD UNO UNLESS NOTED OTHERWISE
	TELEPHONE OUTLET, MOUNT AT 54" AFF W WALL MOUNT TELEPHONE	V VOLT VA VOLT-AMPS
	DATA OUTLET, MOUNT AT 18" AFF	W WIRE WP WEATHERPROOF
	TELEPHONE/DATA OUTLET, MOUNT AT 18" AFF	
	TELEVISION OUTLET, MOUNT AT 72" AFF	

NOTE: MOUNTING HEIGHTS INDICATED ARE TYPICAL UNLESS NOTED OTHERWISE.

## ADDITIONAL NOTES FOR GENERAL CONTRACTOR

- IT IS THE RESPONSIBILITY OF THE GC TO FIELD VERIFY EXISTING CONDITIONS DURING THE BID PROCESS AND COORDINATE THE SCOPE OF WORK WITH THE LANDLORD.
- GC SHALL REVIEW ALL ELECTRICAL SPECIFICATIONS AND EQUIPMENT SHEETS FOR REQUIRED ELECTRICAL NEEDS. PRIOR TO CONSTRUCTION, CONSULT DESIGNER AND TENANT FOR POSSIBLE SUB PANEL MAY BE NEEDED.
- GC SHALL OBTAIN AND VERIFY ELECTRICAL LOADS OF WATER HEATER AND ROOF-TOP UNIT(S) DURING THE BID PROCESS.
- GC TO OBTAIN SHOP DRAWINGS OF WALK-IN COOLER AND/OR FREEZER AND CONFIRM ELECTRICAL REQUIREMENTS.

## OCCUPANCY SENSOR SCHEDULE

SYMBOL	DESCRIPTION	MANUFACTURER	CATALOG NO.
	WALL MOUNT OCCUPANCY SENSOR	LEVITON HUBBELL	RLVSW-4LW AD 1277W1
	CEILING MOUNT DAYLIGHT SENSOR PROVIDE POWER PACK/CONTROLLER	LEVITON HUBBELL	PCC10-W NXDS

NOTE: PROVIDE POWER PACK AND/OR ROOM CONTROLLER AS REQUIRED TO INTERFACE DEVICES

## ELECTRICAL DRAWING INDEX

E1	SYMBOLS LEGEND AND NOTES
E2	LIGHTING AND ROOF FLOOR PLANS
E3	POWER FLOOR PLAN AND ONE-LINE

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9222 POTRANCO ROAD  
SAN ANTONIO, TX 78251  
(STORE TX-074)

tropical CAFE  
SMOOTHIE  
eat better. feel better.

TSC: TX-074

### REVISION

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DATE: 10/27/2017

REVIEW SET  
NOT FOR  
PERMIT

SYMBOL LEGEND  
AND NOTES

E1