

BUILDING ENERGY ANALYSIS REPORT

PROJECT:

First Bank Bixby Knolls
4040 Atlantic Avenue
Long Beach, CA 90807

Project Designer:

Report Prepared by:

Mohamad Nohayli

Job Number:

Date:

5/30/2023

The EnergyPro computer program has been used to perform the calculations summarized in this compliance report. This program has approval and is authorized by the California Energy Commission for use with both the Residential and Nonresidential 2022 Building Energy Efficiency Standards.

This program developed by EnergySoft, LLC – www.energysoft.com.

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Electrical Power Distribution

CERTIFICATE OF COMPLIANCE		NRCC-ELC-E	
<i>This document is used to demonstrate compliance with mandatory requirements in 130.5, for electrical systems in newly constructed nonresidential and hotel/motel occupancies and 160.6 and 160.9 for electrical systems in newly constructed multifamily occupancies. Additions and alterations to electrical service systems in nonresidential and hotel/motel occupancies will also use this document to demonstrate compliance per 141.0(a) or 141.0(b)2P for alterations. For multifamily addition or alterations compliance will be documented per 180.1(a) or 180.2 (b)4Bvii</i>			
Project Name:		First Bank Bixby Knolls	Report Page: (Page 1 of 4)
Project Address:		4040 Atantic Avenue	Date Prepared: 5/30/2023

A. GENERAL INFORMATION					
01	Project Location (city)	Long Beach	02	Climate Zone	8
			03	Occupancy Types Within Project:	All Other OccupanciesConvention CenterOfficeSupport AreasWarehouse

B. PROJECT SCOPE						
<i>This table includes electrical systems that are within the scope of the permit application.</i>						
01	02	03	04	05	06	07
Electrical Service Designation/ Description	Scope of Work ¹	Rating ² (kVA)	Utility Provided Metering System Exception to 130.5(a)/ 160.6(a) ³	System subject to CA Elec Code Article 517 Exception to 130.5(a)and (b)	Demand Response Controls	Provides power to dwelling units/common living areas only in multifamily occupancy
Main	Add/Alt to feeders and branch circuits only	50	<input type="checkbox"/>	<input type="checkbox"/>	Where required, demand response controls must be specified which are capable of receiving and automatically responding to at least one standards based messaging protocol which enables demand response after receiving a demand response signal. Sections 120.2/ 160.3, 130.1/ 160.5, and 130.3/ 160.5, and mechanical, indoor lighting, and sign lighting Certificate of Compliance documents will indicate when demand response controls are required.	<input type="checkbox"/>
¹ FOOTNOTES: Adding only new feeders and branch circuits triggers Voltage Drop 130.5(c)/160.6(c), no other requirements from 130.5/160.6 are required. ² If common use areas in a multifamily are submetered, rating is for submeter size serving common use areas. ³ Applicable if the utility company is providing a metering system that indicates instantaneous kW demand and kWh for a utility-defined period.						

CERTIFICATE OF COMPLIANCE			NRCC-ELC-E		
Project Name:		First Bank Bixby Knolls	Report Page:		(Page 2 of 4)
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C. COMPLIANCE RESULTS								
Results in this table are automatically calculated from data input and calculations in Tables F through J. Note: If any cell on this table says "COMPLIES with Exceptional Conditions" refer to Table D. Exceptional Conditions for guidance or see applicable Table referenced below.								
01	AND	02	AND	03	AND	04	05	06
Service Electrical Metering 130.5(a)/ 160.6(a) (See Table F)		Separation for Monitoring 130.5(b)/ 160.6(b) (See Table G)		Voltage Drop 130.5(c)/ 160.6(c) (See Table H)		Controlled Receptacles 130.5(d)/ 160.6(d) (See Table I)	Electric Ready 160.9 (See Table J)	Compliance Results
Yes		Yes		Yes		Yes	Yes	COMPLIES

D. EXCEPTIONAL CONDITIONS
This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.

E. ADDITIONAL REMARKS
This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.

F. SERVICE ELECTRICAL METERING
This section does not apply to this project.

G. SEPARATION OF ELECTRICAL CIRCUITS FOR ENERGY MONITORING
This section does not apply to this project.

H. VOLTAGE DROP					
This table includes entirely new or complete replacement electrical power distribution systems, or alterations that add, modify or replace both feeders and branch circuits to demonstrate compliance with 130.5(c)/ 160.6(c). For alterations, only the altered circuits must demonstrate compliance per 141.0(b)2Piii/ 180.2(b)4Bviic.					
01	02	03	04	05	
Electrical Service Designation/Description	Combined Voltage Drop on Installed Feeder/Branch Circuit Conductors Compliance Method	Location of Voltage Drop Calculations ¹	Sheet Number for Voltage Drop Calculations in Construction Documents	Field Inspector	
				Pass	Fail

CERTIFICATE OF COMPLIANCE		NRCC-ELC-E
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H. VOLTAGE DROP								
Main	<input checked="" type="checkbox"/>	Voltage drop less than 5%	<input type="checkbox"/>	Permitted by CA Elec Code (Exception to 130.5(c))*	Attached		<input type="checkbox"/>	<input type="checkbox"/>
* NOTES: If "Permitted by CA Elec Code *" is selected under Compliance Method above, please indicate where the exception applies in the space provided below.								
¹ FOOTNOTES: Voltage drop calculations may be attached to the permit application outside the construction documents if allowed by the Authority Having Jurisdiction. Select "attached" if applicable. If calculations will be the responsibility of the installing contractor, select "Contractor Responsible".								

I. CIRCUIT CONTROLS FOR 120-VOLT RECEPTACLES AND CONTROLLED RECEPTACLES
This section does not apply to this project.

J. ELECTRIC READY BUILDINGS
This section does not apply to this project.

K. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION
Form/Title
NRCI-ELC-E - Must be submitted for all buildings

Electrical Power Distribution

CERTIFICATE OF COMPLIANCE		NRCC-ELC-E	
Project Name:	First Bank Bixby Knolls	Report Page:	(Page 4 of 4)
Project Address:	4040 Atantic Avenue	Date Prepared:	5/30/2023

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT	
I certify that this Certificate of Compliance documentation is accurate and complete.	
Documentation Author Name: Mohamad Nohayli	Documentation Author Signature: Mohamad Nohayli
Company:	Signature Date: 2023-05-30
Address:	CEA/ HERS Certification Identification (if applicable):
City/State/Zip:	Phone:
RESPONSIBLE PERSON'S DECLARATION STATEMENT	
I certify the following under penalty of perjury, under the laws of the State of California:	
<ol style="list-style-type: none">1. The information provided on this Certificate of Compliance is true and correct.2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer)3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.	
Responsible Designer Name:	Responsible Designer Signature:
Company:	Date Signed: 2023-05-30
Address:	License:
City/State/Zip:	Phone:

Registration Number:

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

Generated Date/Time:

Report Version: 2022.0.000
Schema Version: rev 20220101

Documentation Software: EnergyPro

Compliance ID:
EnergyPro-50207-0523-0482
Report Generated: 2023-05-30 12:45:21

Envelope Component Approach

CERTIFICATE OF COMPLIANCE		NRCC-ENV-E
<i>This document is used to demonstrate compliance with mandatory requirements in 110.8(g) and 120.7(b)/ 160.1 for newly constructed nonresidential, hotel/ motel, multifamily and mixed-use buildings, and 141.0(b)1/ 180.2 for alterations, related to roof, wall and floor assemblies. It is also used to demonstrate compliance with prescriptive requirements in 140.3/ 170.2 for newly constructed buildings, and 141.0/ 180.1/ 180.2 for additions and alterations, related to roof, wall, floor, door, fenestration and daylighting requirements.</i>		
Project Name:	First Bank Bixby Knolls	Report Page: (Page 1 of 7)
Project Address:	4040 Atantic Avenue	Date Prepared: 5/30/2023

A. GENERAL INFORMATION

01	Project Location (city)	Long Beach	05	# of Stories (Habitable Above Grade)	1
02	Zipcode	90807	06	Total Conditioned Floor Area (ft ²)	3251
03	Climate Zone	8	07	Total Unconditioned Floor Area (ft ²)	0
04	Occupancy Types Within Project: (select all that apply): If one occupancy constitutes >= 80% of the conditioned floor area, the entire building envelope may be designed to comply with the provisions of that occupancy per 100.0(f).		08	<input type="checkbox"/> Project includes unconditioned enclosed space(s) > 5,000 ft ² under a roof with a ceiling height of at least 15 ft. ¹	

• Convention Center • Office • Support Areas • Warehouse • All Other Occupancies

¹ FOOTNOTE: Enclosed spaces > 5,000 ft² directly under roof with ceiling height > 15 ft in climate zones 2 through 15 are required to meet the minimum daylighting requirements defined in 140.3(c)/ 170.2(b). Compliance with 140.3(c)/ 170.2(b) is documented in Table L. This is the only prescriptive requirement which applies to unconditioned spaces.

B. PROJECT SCOPE

This table specifies project envelope components within the permit application demonstrating compliance using the prescriptive paths outlined in 140.3/ 170.2 and 141.0(a)1/ 180.1 and 141.0(b)1 and 2/ 180.2 for additions and alterations.

My project consists of (check all that apply)			Component Types					
01			02					
<input type="checkbox"/>	New Construction or Newly Conditioned Space		<input type="checkbox"/>	Roof	<input type="checkbox"/>	Walls	<input type="checkbox"/>	Exterior Opaque Doors
<input type="checkbox"/>	One or more enclosed spaces > 5,000 ft ² directly under roof with ceiling height > 15ft		<input type="checkbox"/>	Roof	<input type="checkbox"/>	Floors	<input type="checkbox"/>	Fenestration/ Glazed Doors ¹
<input type="checkbox"/>	Addition of conditioned space		<input type="checkbox"/>	Roof	<input type="checkbox"/>	Walls	<input type="checkbox"/>	Exterior Opaque Doors
<input type="checkbox"/>	One or more enclosed spaces > 5,000 ft ² directly under roof with ceiling height > 15ft		<input type="checkbox"/>	Roof	<input type="checkbox"/>	Floors	<input type="checkbox"/>	Fenestration/ Glazed Doors ¹
<input type="checkbox"/>	Addition is <=700 ft ²							
<input type="checkbox"/>	Addition is >700 ft ²							
<input checked="" type="checkbox"/>	Alteration of conditioned space		<input type="checkbox"/>	Roof Assembly	<input checked="" type="checkbox"/>	Walls		Exterior Opaque Doors NA. for Alts.
<input type="checkbox"/>	One or more enclosed spaces > 5,000 ft ² directly under roof with ceiling height > 15ft and lighting system installed for the first time		<input type="checkbox"/>	Roofing Material ²	<input type="checkbox"/>	Floors	<input checked="" type="checkbox"/>	Fenestration

Registration Number:

Generated Date/Time:

Documentation Software: EnergyPro

Envelope Component Approach

CERTIFICATE OF COMPLIANCE			NRCC-ENV-E		
Project Name:		First Bank Bixby Knolls	Report Page:		(Page 2 of 7)
Project Address:		4040 Atantic Avenue	Date Prepared:		5/30/2023

B. PROJECT SCOPE					
¹ FOOTNOTE: Doors that are more than 25% glass in area are considered Glazed Doors and should be documented on table K with fenestration.					
² Roof recovers and replacements must also check "Roof Assembly" box and document compliance with insulation requirements in Table F. Roof recoats may document compliance with roof material only in Table G.					

C. COMPLIANCE RESULTS							
Results in this table are automatically calculated from data input and calculations in Tables F through L. Note: If any cell on this table says "COMPLIES with Exceptional Conditions" refer to Table D. Exceptional Conditions for guidance or see the applicable table referenced below.							
Opaque Envelope Components					Fenestration	Daylighting Spaces > 5,000ft²	Compliance Results
Roof Assembly	Roofing Materials	Walls	Floors	Doors			
01	02	03	04	05	06	07	08
(See Table F)	(See Table G)	(See Table H)	(See Table I)	(See Table J)	(See Table K)	(See Table L)	COMPLIES
Yes	Yes	Yes			Yes		

D. EXCEPTIONAL CONDITIONS					
This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.					

E. ADDITIONAL REMARKS					
This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.					

F. ROOF ASSEMBLY SCHEDULE					
This section does not apply to this project.					

G. RATED ROOFING MATERIAL (COOL ROOF)					
This section does not apply to this project.					

Envelope Component Approach

CERTIFICATE OF COMPLIANCE			NRCC-ENV-E
Project Name:	First Bank Bixby Knolls	Report Page:	(Page 3 of 7)
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H. WALL ASSEMBLY SCHEDULE

This table demonstrates compliance with prescriptive wall assembly requirements in 140.3(a)/ 170.2(a) for new constructions, 141.0(a)/ 180.1 for additions and 141.0(b)1B/ 180.2 for alterations.

01	Indicate wall types included in the project: ¹	<input type="checkbox"/>	Framed	<input type="checkbox"/>	Mass (new only)	<input type="checkbox"/>	Concrete Sandwich Panel (new only)	<input type="checkbox"/>	SIPS	<input type="checkbox"/>	ICF (new only)
		<input type="checkbox"/>	Metal Panels	<input type="checkbox"/>	Metal Building	<input type="checkbox"/>	Spandrel/ Curtain Wall	<input type="checkbox"/>	Straw Bale	<input type="checkbox"/>	Log Home (new only)

¹ FOOTNOTES: Wall types indicated above as "(new only)" do not have Title 24, Part 6 requirements for alterations. New construction and additions do have requirements and should be clicked above and compliance demonstrated within this table.

I. FLOOR ASSEMBLY SCHEDULE
This section does not apply to this project.

J. EXTERIOR DOOR SCHEDULE
This section does not apply to this project.

K. FENESTRATION AND GLAZED DOOR SCHEDULE

This table demonstrates compliance with prescriptive fenestration requirements in 140.3(a)5/ 170.2(a)3 for new constructions, 141.0(a)/ 180.1 for additions, or 141.0(b)2A/ 180.2 for alterations. Exterior doors that are more than 25% glass in area are considered Glazed Doors and should be documented on this table with fenestration.

01	Indicate fenestration types included in the project: ¹	<input checked="" type="checkbox"/>	Vertical (alterations)	<input type="checkbox"/>	Vertical (new)	<input type="checkbox"/>	Skylights	<input type="checkbox"/>	Glazed Doors (new only)
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¹ FOOTNOTES: Fenestration types indicated above as "(new only)" do not have Title 24, Part 6 requirements for alterations. New construction and additions do have requirements and should be clicked above and compliance demonstrated within this table.

Vertical Fenestration And Glazed Doors- U-factor, Solar Heat Gain Coefficient (RSHGC/ SHGC), Visible Transmittance (VT)		
01	<input checked="" type="checkbox"/>	Calculate Area-Weighted Average U-factor for Vertical Fenestration and Glazed Doors ¹
02	<input checked="" type="checkbox"/>	Calculate Area-Weighted Average (R)SHGC for Vertical Fenestration and Glazed Doors ¹
03	<input checked="" type="checkbox"/>	Calculate Area-Weighted Average VT for Vertical Fenestration and Glazed Doors ¹

Envelope Component Approach

CERTIFICATE OF COMPLIANCE			NRCC-ENV-E		
Project Name:		First Bank Bixby Knolls	Report Page:		(Page 4 of 7)
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K. FENESTRATION AND GLAZED DOOR SCHEDULE

Vertical Fenestration And Glazed Doors- U-factor, Solar Heat Gain Coefficient (RSHGC/ SHGC), Visible Transmittance (VT)

04	05	06	07	08	09		10	11	12	13
Tag/Plan Detail ID	Fenestration Type	Occupancy & Status	U-factor/ (R)SHGC Compliance Method	VT Compliance Method	Calculation Method for Performance Values per Design ²		Product Performance Unit	Required Product Performance	Product Performance per Design	Area ft ²
W5	Fixed window	Nonresidential/ Relocatable 1 CZ: : New	Table 140.3-B/C/D	Table 140.3-B/C/D	§110.6 Defaults		U-factor (max)	1.04	1.04	40
					<input type="checkbox"/>	Overhang/ Slats used for RSHGC	(R)SHGC (max)	0.76	0.76	
							VT (min)	0.91	0.912	
W8	Fixed window	Nonresidential/ Relocatable 1 CZ: : New	Table 140.3-B/C/D	Table 140.3-B/C/D	§110.6 Defaults		U-factor (max)	1.04	1.04	10
					<input type="checkbox"/>	Overhang/ Slats used for RSHGC	(R)SHGC (max)	0.76	0.76	
							VT (min)	0.91	0.912	
W8	Fixed window	Nonresidential/ Relocatable 1 CZ: : New	Table 140.3-B/C/D	Table 140.3-B/C/D	§110.6 Defaults		U-factor (max)	1.04	1.04	10
					<input type="checkbox"/>	Overhang/ Slats used for RSHGC	(R)SHGC (max)	0.76	0.76	
							VT (min)	0.91	0.912	
W7	Fixed window	Nonresidential/ Relocatable 1 CZ: : New	Table 140.3-B/C/D	Table 140.3-B/C/D	§110.6 Defaults		U-factor (max)	1.04	1.04	100
					<input type="checkbox"/>	Overhang/ Slats used for RSHGC	(R)SHGC (max)	0.76	0.76	
							VT (min)	0.91	0.912	
W6	Fixed window	Nonresidential/ Relocatable 1 CZ: : New	Table 140.3-B/C/D	Table 140.3-B/C/D	§110.6 Defaults		U-factor (max)	1.04	1.04	100
					<input type="checkbox"/>	Overhang/ Slats used for RSHGC	(R)SHGC (max)	0.76	0.76	
							VT (min)	0.91	0.912	
W4	Fixed window	Nonresidential/ Relocatable 1 CZ: : New	Table 140.3-B/C/D	Table 140.3-B/C/D	§110.6 Defaults		U-factor (max)	1.04	1.04	100
					<input type="checkbox"/>	Overhang/ Slats used for RSHGC	(R)SHGC (max)	0.76	0.76	
							VT (min)	0.91	0.912	

Registration Number:

Generated Date/Time:

Documentation Software: EnergyPro

Envelope Component Approach

CERTIFICATE OF COMPLIANCE			NRCC-ENV-E		
Project Name:		First Bank Bixby Knolls	Report Page:		(Page 5 of 7)
Project Address:		4040 Atantic Avenue	Date Prepared:		5/30/2023

K. FENESTRATION AND GLAZED DOOR SCHEDULE										
Vertical Fenestration And Glazed Doors- U-factor, Solar Heat Gain Coefficient (RSHGC/ SHGC), Visible Transmittance (VT)										
04	05	06	07	08	09		10	11	12	13
Tag/Plan Detail ID	Fenestration Type	Occupancy & Status	U-factor/ (R)SHGC Compliance Method	VT Compliance Method	Calculation Method for Performance Values per Design ²		Product Performance Unit	Required Product Performance	Product Performance per Design	Area ft ²
W1	Fixed window	Nonresidential/ Relocatable 1 CZ: : New	Table 140.3-B/C/D	Table 140.3-B/C/D	§110.6 Defaults		U-factor (max)	1.04	1.04	110
					<input type="checkbox"/>	Overhang/ Slats used for RSHGC	(R)SHGC (max)	0.76	0.76	
							VT (min)	0.91	0.912	
W2	Fixed window	Nonresidential/ Relocatable 1 CZ: : New	Table 140.3-B/C/D	Table 140.3-B/C/D	§110.6 Defaults		U-factor (max)	1.04	1.04	50
					<input type="checkbox"/>	Overhang/ Slats used for RSHGC	(R)SHGC (max)	0.76	0.76	
							VT (min)	0.91	0.912	
W3	Fixed window	Nonresidential/ Relocatable 1 CZ: : New	Table 140.3-B/C/D	Table 140.3-B/C/D	§110.6 Defaults		U-factor (max)	1.04	1.04	100
					<input type="checkbox"/>	Overhang/ Slats used for RSHGC	(R)SHGC (max)	0.76	0.76	
							VT (min)	0.91	0.912	
W9	Fixed window	Nonresidential/ Relocatable 1 CZ: : New	Table 140.3-B/C/D	Table 140.3-B/C/D	§110.6 Defaults		U-factor (max)	1.04	1.04	300
					<input type="checkbox"/>	Overhang/ Slats used for RSHGC	(R)SHGC (max)	0.76	0.76	
							VT (min)	0.91	0.912	

¹FOOTNOTES: If any individual fenestration product is non-compliant, products may show compliance using an area-weighted calculation. Chromogenic glazing is not included in area-weighted calculations. Area-weighted calculation shown in separate area-weighted table below.

²The NA6 Default Calculation can only be used for alterations or dwelling units in buildings with <= 3 habitable stories. Alterations are limited to 200ft² of site built glazing and dwelling units are limited to 250ft² or 5% of conditioned floor area. If the fenestration does not meet these conditions, the only options for determining fenestration values are NFRC Certification or the Default Tables in 110.6.

³ Overhangs must extend past the left and right window the same distance as the depth of the overhang or greater to show an affect on the RSHGC. If an overhang does not meet this requirement, the affect of the overhang will be ignored.

⁴Projecting includes casement and awning windows.

Envelope Component Approach

CERTIFICATE OF COMPLIANCE			NRCC-ENV-E	
Project Name:	First Bank Bixby Knolls	Report Page:	(Page 6 of 7)	
Project Address:	4040 Atantic Avenue	Date Prepared:	5/30/2023	

K. FENESTRATION AND GLAZED DOOR SCHEDULE				
Area-Weighted Average U-factor, SHGC, VT Compliance Calculation for Vertical Fenestration And Glazed Doors				
01	02	03	04	05
Product Performance Unit	Total Area of Fenestration (ft²)	Area-weighted Calculation for Fenestration		Compliance Results Using Area-Weighted Calculation Option
		Required	Designed	
U-Factor	920	0	0	COMPLIES
(R)SHGC	920	0	0	COMPLIES
VT	920	0	0	COMPLIES

L. DAYLIGHT IN LARGE ENCLOSED SPACES
<i>This section does not apply to this project.</i>

M. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION
Form/Title
NRCI-ENV-01-E - Must be submitted for all buildings

N. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE	
Form/Title	Systems/Spaces To Be Field Verified
NRCA-ENV-02-F must be submitted for all new, added or altered fenestration.	

O. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION
<i>There are no forms required for this project.</i>

Envelope Component Approach

CERTIFICATE OF COMPLIANCE		NRCC-ENV-E	
Project Name:	First Bank Bixby Knolls	Report Page:	(Page 7 of 7)
Project Address:	4040 Atantic Avenue	Date Prepared:	5/30/2023

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: Mohamad Nohayli	Documentation Author Signature: Mohamad Nohayli
Company:	Signature Date: 2023-05-30
Address:	CEA/ HERS Certification Identification (if applicable):
City/State/Zip:	Phone:

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:

1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer)
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Designer Name:	Responsible Designer Signature:
Company:	Date Signed: 2023-05-30
Address:	License:
City/State/Zip:	Phone:

Indoor Lighting

CERTIFICATE OF COMPLIANCE		NRCC-LTI-E	
This document is used to demonstrate compliance with requirements in 110.9, 110.12(c), 130.0, 130.1, 140.6 and 141.0(b)2 for indoor lighting scopes using the prescriptive path for nonresidential and hotel/motel occupancies. It is also used to document compliance with requirements in 160.5, 170.2(e) and 180.2(b)4 for indoor lighting scopes using the prescriptive path for multifamily occupancies. Multifamily includes dormitory and senior living facilities.			
Project Name:		First Bank Bixby Knolls	Report Page: (Page 1 of 9)
Project Address:		4040 Atantic Avenue	Date Prepared: 5/30/2023

A. GENERAL INFORMATION					
01	Project Location (city)	Long Beach	04	Total Conditioned Floor Area (ft²)	3,251
02	Climate Zone	8	05	Total Unconditioned Floor Area (ft²)	0
03	Occupancy Types Within Project (select all that apply):		06	# of Stories (Habitable Above Grade)	1
• Convention Center • Office • Support Areas • Warehouse • All Other Occupancies					

B. PROJECT SCOPE					
This table includes any lighting systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive path outlined in 140.6 / 170.2(e) or 141.0(b)2 / 180.2(b)4 for alterations.					
Scope of Work		Conditioned Spaces		Unconditioned Spaces	
01		02	03	04	05
My Project Consists of (check all that apply):		Calculation Method	Area (ft²)	Calculation Method	Area (ft²)
<input type="checkbox"/> New Lighting System					
<input type="checkbox"/> New Lighting System - Parking Garage					
<input checked="" type="checkbox"/> Altered Lighting System		Area Category Method	3251	Area Category Method	0
Total Area of Work (ft²)		3251		0	

Indoor Lighting

CERTIFICATE OF COMPLIANCE			NRCC-LTI-E		
Project Name:		First Bank Bixby Knolls	Report Page:		(Page 2 of 9)
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C. COMPLIANCE RESULTS												
If any cell on this table says "DOES NOT COMPLY" or "COMPLIES with Exceptional Conditions" refer to Table D. for guidance.												
Lighting in conditioned and unconditioned spaces must not be combined for compliance per 140.6(b)1 / 170.2(e)	Allowed Lighting Power per 140.6(b) / 170.2(e) (Watts)						≥	Adjusted Lighting Power per 140.6(a) / 170.2(e) (Watts)				Compliance Results
	01	02	03	04	=	05		06	07	=	08	09
	Complete Building 140.6(c)1	Area Category 140.6(c)2 / 170.2(e)4	Area Category Additional 140.6(c)2G / 170.2(e)4Av (+)	Tailored 140.6(c)3 / 170.2(e)4B (+)		Total Allowed (Watts)		Total Designed (Watts)	Adjustments		Total Adjusted (Watts) *Includes Adjustments	05 must be >= 08 140.6 / 170.2(e)
									PAF Lighting Control Credits 140.6(a)2 / 170.2(e)1B (-)			
(See Table I)	(See Table I)	(See Table J)	(See Table K)	(See Table F)	(See Table P)							
Conditioned		2,136.6	0		=	2,137	≥	2,113	0	=	2113	COMPLIES
Unconditioned					=		≥			=		
Controls Compliance (See Table H for Details)												COMPLIES
Rated Power Reduction Compliance (See Table Q for Details)												

D. EXCEPTIONAL CONDITIONS
This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.

E. ADDITIONAL REMARKS
This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.

Indoor Lighting

CERTIFICATE OF COMPLIANCE			NRCC-LTI-E		
Project Name:		First Bank Bixby Knolls	Report Page:		(Page 3 of 9)
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F. INDOOR LIGHTING FIXTURE SCHEDULE										
This table includes all planned permanent and portable lighting other than dwelling unit/ hotel/ motel room lighting. Multifamily dwelling unit and hotel/motel room lighting is documented in Table T. If using Table T to document lighting in multifamily common use areas providing shared provisions for living, eating, cooking or sanitation, those luminaires are not included here.										
Designed Wattage: Conditioned Spaces										
01	02	03	04	05	06	07	08	09	10	
Name or Item Tag	Complete Luminaire Description	Modular (Track) Fixture	Small Aperture & Color Change ¹	Watts per luminaire ²	How is Wattage determined	Total Number of Luminaires	Excluded per 140.6(a)3 / 170.2(e)2C	Design Watts	Field Inspector	
									Pass	Fail
A	A(N) LED 2 x 4	No	NA	32	Mfr. Spec	29	No	928	<input type="checkbox"/>	<input type="checkbox"/>
B	B(E) - Can Light Fluorescent	No	NA	20	Mfr. Spec	8	No	160	<input type="checkbox"/>	<input type="checkbox"/>
BE	B(E) - Can Light Fluorescent	No	NA	20	Mfr. Spec	3	No	60	<input type="checkbox"/>	<input type="checkbox"/>
BN	B(N) - Can light LED	No	NA	17.5	Mfr. Spec	14	No	245	<input type="checkbox"/>	<input type="checkbox"/>
C	C - Ceiling Surface 4 Feet	No	NA	60	Mfr. Spec	12	No	720	<input type="checkbox"/>	<input type="checkbox"/>
Total Designed Watts: CONDITIONED SPACES								2,113		

¹FOOTNOTE: Design Watts for small aperture and color changing luminaires which qualify per 140.6(a)4B / 170.2(e)2D is adjusted to be 75% /80% of their rated wattage. Table F automatically makes this adjustment, the permit applicant should enter full rated wattage in column 05.

²Authority Having Jurisdiction may ask for Luminaire cut sheets to confirm wattage used for compliance per 130.0(c) / 160.5(b). Wattage used must be the maximum rated for the luminaire, not the lamp.

G. MODULAR LIGHTING SYSTEMS
This section does not apply to this project.

H. INDOOR LIGHTING CONTROLS (Not including PAFs)		
This table includes lighting controls for conditioned and unconditioned spaces.		
Building Level Controls		
01	02	03
Mandatory Demand Response 110.12(c)	Shut-off controls 130.1(c) / 160.5(b)4C	Field Inspector
		Pass Fail

Indoor Lighting

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H. INDOOR LIGHTING CONTROLS (Not including PAFs)

NA < 4,000W subject to multilevel				Whole Building Auto Time Switch				<input type="checkbox"/>	<input type="checkbox"/>
Area Level Controls									
04	05	06	07	08	09	10	11	12	
Area Description	Complete Building or Area Category Primary Function Area	Manual Area Controls 130.1(a) / 160.5(b)4A	Multi-Level Controls 130.1(b) / 160.5(b)4B	Shut-Off Controls 130.1(c) // 160.5(b)4C	Primary/Sky lit Daylighting 130.1(d) / 160.5(b)4D	Secondary Daylighting 130.1(d) / 160.5(b)4D	Interlocked Systems 140.6(a)1/ 170.2(e)2A	Field Inspector	
								Pass	Fail
Meeting Room	Convention, Conference, Multipurpose and Meeting Center	Readily Accessible	Dimmer	Occupancy Sensor	NA: General Ltg < 120W	NA: General Ltg < 120W	No	<input type="checkbox"/>	<input type="checkbox"/>
Breakroom	Lounge	Readily Accessible	NA: General Ltg <= 0.5W/SF	Occupancy Sensor	NA: General Ltg < 120W	NA: General Ltg < 120W	No	<input type="checkbox"/>	<input type="checkbox"/>
Store Room	Commercial Industrial Storage Area	Readily Accessible	NA: General Ltg <= 0.5W/SF	Occupancy Sensor	NA: General Ltg < 120W	NA: General Ltg < 120W	No	<input type="checkbox"/>	<input type="checkbox"/>
Partner Office 03	Office (<=250 square feet)	Readily Accessible	Dimmer	Occupancy Sensor	NA: General Ltg < 120W	NA: General Ltg < 120W	No	<input type="checkbox"/>	<input type="checkbox"/>
Partner Office 02	Office (<=250 square feet)	Readily Accessible	NA: General Ltg <= 0.5W/SF	Occupancy Sensor	NA: General Ltg < 120W	NA: General Ltg < 120W	No	<input type="checkbox"/>	<input type="checkbox"/>
Partner Office 01	Office (<=250 square feet)	Readily Accessible	NA: General Ltg <= 0.5W/SF	Occupancy Sensor	NA: General Ltg < 120W	NA: General Ltg < 120W	No	<input type="checkbox"/>	<input type="checkbox"/>
Manager Office	Office (<=250 square feet)	Readily Accessible	NA: General Ltg <= 0.5W/SF	Occupancy Sensor	NA: General Ltg < 120W	NA: General Ltg < 120W	No	<input type="checkbox"/>	<input type="checkbox"/>
Partner Office 04	Office (<=250 square feet)	Readily Accessible	NA: General Ltg <= 0.5W/SF	Occupancy Sensor	NA: General Ltg < 120W	NA: General Ltg < 120W	No	<input type="checkbox"/>	<input type="checkbox"/>
Work Room	Office (<=250 square feet)	Readily Accessible	NA: General Ltg <= 0.5W/SF	Occupancy Sensor	NA: General Ltg < 120W	NA: General Ltg < 120W	No	<input type="checkbox"/>	<input type="checkbox"/>
Lobby	Main Entry Lobby	Readily Accessible	Dimmer	Occupancy Sensor	Included	Included	No	<input type="checkbox"/>	<input type="checkbox"/>

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Indoor Lighting

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H. INDOOR LIGHTING CONTROLS (Not including PAFs)									
Utility Room	Electrical Mechancial Telephone Room	Readily Accessible	NA: General Ltg <= 0.5W/SF	Occupancy Sensor	NA: General Ltg < 120W	NA: General Ltg < 120W	No	<input type="checkbox"/>	<input type="checkbox"/>
Women's Toilet	Restroom	Readily Accessible	NA: Restrooms	Occupancy Sensor	NA: General Ltg < 120W	NA: General Ltg < 120W	No	<input type="checkbox"/>	<input type="checkbox"/>
Men's Toilet	Restroom	Readily Accessible	NA: Restrooms	Occupancy Sensor	NA: General Ltg < 120W	NA: General Ltg < 120W	No	<input type="checkbox"/>	<input type="checkbox"/>
					13				
					Plan Sheet Showing Daylit Zones:				

I. LIGHTING POWER ALLOWANCE: COMPLETE BUILDING OR AREA CATEGORY METHODS						
Each area complying using the Complete Building or Area Category Methods per 140.6(b) are included in this table. Column 06 indicates if additional lighting power allowances per 140.6(c) or adjustments per 140.6(a) are being used .						
Conditioned Spaces						
01	02	03	04	05	06	
Area Description	Complete Building or Area Category Primary Function Area	Allowed Density (W/ft²)	Area (ft²)	Allowed Wattage (Watts)	Additional Allowance / Adjustment	
					Area Category	PAF
Meeting Room	Convention, Conference, Multipurpose and Meeting Center	0.75	120	90	No	No
Breakroom	Lounge	0.55	284	156.2	No	No
Store Room	Commercial Industrial Warehouse	0.4	84	33.6	No	No
Partner Office 03	Office (<=250 square feet)	0.65	126	81.9	No	No
Partner Office 02	Office (<=250 square feet)	0.65	151	98.2	No	No
Partner Office 01	Office (<=250 square feet)	0.65	133	86.4	No	No
Manager Office	Office (<=250 square feet)	0.65	141	91.6	No	No
Partner Office 04	Office (<=250 square feet)	0.65	137	89	No	No
Work Room	Office (<=250 square feet)	0.65	154	100.1	No	No
Lobby	Main Entry Lobby	0.7	1,603	1,122.1	No	No
Utility Room	Electrical Mechancial Telephone Room	0.4	77	30.8	No	No

Indoor Lighting

CERTIFICATE OF COMPLIANCE			NRCC-LTI-E		
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Project Address:		4040 Atantic Avenue	Date Prepared:		5/30/2023

I. LIGHTING POWER ALLOWANCE: COMPLETE BUILDING OR AREA CATEGORY METHODS						
Women's Toilet	Restroom	0.65	132	85.8	No	No
Men's Toilet	Restroom	0.65	109	70.9	No	No
TOTALS:			3,251	2,136.6	See Tables J, or P for detail	

J. ADDITIONAL ALLOWANCE: AREA CATEGORY METHOD QUALIFYING LIGHTING SYSTEM
<i>This section does not apply to this project.</i>

K. TAILORED METHOD GENERAL LIGHTING POWER ALLOWANCE
<i>This section does not apply to this project.</i>

L. ADDITIONAL LIGHTING ALLOWANCE: TAILORED WALL DISPLAY
<i>This section does not apply to this project.</i>

M. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK LIGHTING
<i>This section does not apply to this project.</i>

N. ADDITIONAL LIGHTING ALLOWANCE: TAILORED DECORATIVE /SPECIAL EFFECTS
<i>This section does not apply to this project.</i>

O. ADDITIONAL LIGHTING ALLOWANCE: TAILORED VERY VALUABLE MERCHANDISE
<i>This section does not apply to this project.</i>

P. POWER ADJUSTMENT: LIGHTING CONTROL CREDIT (POWER ADJUSTMENT FACTOR (PAF))
<i>This section does not apply to this project.</i>

Indoor Lighting

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Q. RATED POWER REDUCTION COMPLIANCE FOR ONE-FOR-ONE ALTERATIONS
<i>This section does not apply to this project.</i>

R. 80% LIGHTING POWER FOR ALL ALTERATIONS - CONTROLS EXCEPTIONS
<i>This section does not apply to this project.</i>

S. DAYLIGHT DESIGN POWER ADJUSTMENT FACTOR (PAF)
<i>This section does not apply to this project.</i>

T. DWELLING UNIT LIGHTING
<i>This section does not apply to this project.</i>

U. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION
Form/Title
NRCI-LTI-E - Must be submitted for all buildings

Indoor Lighting

CERTIFICATE OF COMPLIANCE		NRCC-LTI-E	
Project Name:	First Bank Bixby Knolls	Report Page:	(Page 8 of 9)
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V. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE	
Form/Title	Systems/Spaces To Be Field Verified
NRCA-LTI-02-A - Must be submitted for occupancy sensors and automatic time switch controls.	Whole Building Time Switch; Meeting Room; Breakroom; Store Room; Partner Office 03; Partner Office 02; Partner Office 01; Manager Office; Partner Office 04; Work Room; Lobby; Utility Room; Women's Toilet; Men's Toilet;
NRCA-LTI-03-A - Must be submitted for automatic daylight controls.	Lobby;

Indoor Lighting

CERTIFICATE OF COMPLIANCE		NRCC-LTI-E	
Project Name:	First Bank Bixby Knolls	Report Page:	(Page 9 of 9)
Project Address:	4040 Atantic Avenue	Date Prepared:	5/30/2023

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: Mohamad Nohayli	Documentation Author Signature: Mohamad Nohayli
Company:	Signature Date: 2023-05-30
Address:	CEA/ HERS Certification Identification (if applicable):
City/State/Zip:	Phone:

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:

1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer)
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Designer Name:	Responsible Designer Signature:
Company:	Date Signed: 2023-05-30
Address:	License:
City/State/Zip:	Phone: 479-313-2632

Mechanical Systems

CERTIFICATE OF COMPLIANCE		NRCC-MCH-E	
This document is used to demonstrate compliance for mechanical systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive path outlined in 140.4, or 141.0(b)2 for alterations.			
Project Name:		First Bank Bixby Knolls	Report Page: (Page 1 of 9)
Project Address:		4040 Atantic Avenue	Date Prepared: 5/30/2023

A. GENERAL INFORMATION					
01	Project Location (city)	Long Beach	04	Total Conditioned Floor Area	3251
02	Climate Zone	8	05	Total Unconditioned Floor Area	0
03	Occupancy Types Within Project:		06	# of Stories (Habitable Above Grade)	1
• Convention Center • Office • Support Areas • Warehouse • All Other Occupancies					

B. PROJECT SCOPE					
This table Includes mechanical systems or components that are within the scope of the permit application and are demonstrating compliance using the prescriptive path outlined in 140.4, 170.2(b) or 141.0(b)2 and 180.2(b)2 for alterations.					
01		02		03	
Air System(s)		Wet System Components		Dry System Components	
<input checked="" type="checkbox"/>	Heating Air System	<input type="checkbox"/>	Water Economizer	<input type="checkbox"/>	Air Economizer
<input checked="" type="checkbox"/>	Cooling Air System	<input type="checkbox"/>	Pumps	<input type="checkbox"/>	Electric Resistance Heat
Mechanical Controls		<input type="checkbox"/>	System Piping	<input type="checkbox"/>	Fan Systems
<input checked="" type="checkbox"/>	Mechanical Controls (existing to remain, altered or new)	<input type="checkbox"/>	Cooling Towers	<input type="checkbox"/>	Ductwork (existing to remain, altered or new)
		<input type="checkbox"/>	Chillers	<input checked="" type="checkbox"/>	Ventilation
		<input type="checkbox"/>	Boilers	<input type="checkbox"/>	Zonal Systems/ Terminal Boxes

Mechanical Systems

CERTIFICATE OF COMPLIANCE				NRCC-MCH-E	
Project Name:		First Bank Bixby Knolls	Report Page:		(Page 2 of 9)
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C. COMPLIANCE RESULTS															
Table C will indicate if the project data input into the compliance document is compliant with mechanical requirements. This table is not editable by the user. If this table says "DOES NOT COMPLY" or "COMPLIES with Exceptional Conditions" refer to Table D., or the table indicated as not compliant for guidance.															
01	AND	02	AND	03	AND	04	AND	05	AND	06	AND	07	AND	08	09
System Summary 110.1, 110.2, 140.4, 170.2(c)		Pumps 140.4(k), 170.2(c)4I		Fans/ Economizers 140.4(c), 140.4(e), 170.2(c)		System Controls 110.2, 120.2, 140.4(f), 170.2(c)		Ventilation 120.1, 160.2		Terminal Box Controls 140.4(d), 170.2(c)4B		Distribution 120.3, 140.4(l), 160.2, 160.3		Cooling Towers 110.2(e)2	Compliance Results
(See Table F)		(See Table G)		(See Table H)		(See Table I)		(See Table J)		(See Table K)		(See Table L)		(See Table M)	
	AND		AND		AND	Yes	AND	Yes	AND		AND		AND		COMPLIES
Mandatory Measures Compliance (See Table Q for Details)										COMPLIES					

D. EXCEPTIONAL CONDITIONS
This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.

E. ADDITIONAL REMARKS
This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.

F. HVAC SYSTEM SUMMARY (DRY & WET SYSTEMS)					
Space Conditioning System Information					
01	02	03	04	05	06
System Name	Quantity	System Serving	System Status	Space Type	Utilizing Recovered Heat

Mechanical Systems

CERTIFICATE OF COMPLIANCE				NRCC-MCH-E			
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F. HVAC SYSTEM SUMMARY (DRY & WET SYSTEMS)										
Dry System Equipment Sizing (includes air conditioners, condensers, heat pumps, VRF, furnaces and unit heaters and DOAS systems)										
01	02	03	04	05	06	07	08	09	10	11
Name or Item Tag	Equipment Category per Tables 110.2, 140.4(a)2 and 170.2(c)3a ⁱⁱ	Equipment Type per Tables 110.2 and Title 20	Smallest Size Available ¹ 140.4(a) and 170.2(c)1	Equipment Sizing per Mechanical Schedule (kBtu/h) 140.4(a&b), 170.2(c)1 & 170.2(c)2						
				Heating Output ^{2,3}			Cooling Output ^{2,3}		Load Calculations ^{3,4}	
				Per Design (kBtu/h)	Rated (kBtu/h)	Supp. Heating Output (kBtu/h)	Sensible Per Design (kBtu/h)	Rated (kBtu/h)	Total Heating Load (kBtu/h)	Total Sensible Cooling Load (kBtu/h)

¹FOOTNOTES: Equipment shall be the smallest size, within the available options of the desired equipment line, necessary to meet the design heating and cooling loads of the building per 140.4(a) and 170.2(c)1. Healthcare facilities are excepted.

²It is common practice to show rated output capacity on the equipment schedule. Sensible cooling output comes from specification sheet tables.

³If equipment is heating only, leave cooling output and load blank. If equipment is cooling only, leave heating output and load blank.

⁴Authority Having Jurisdiction may ask for load calculations used for compliance per 140.4(b) and 170.2(c).

G. PUMPS
This section does not apply to this project.

H. FAN SYSTEMS & AIR ECONOMIZERS
This section does not apply to this project.

Mechanical Systems

CERTIFICATE OF COMPLIANCE			NRCC-MCH-E		
Project Name:		First Bank Bixby Knolls	Report Page:		(Page 4 of 9)
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I. SYSTEM CONTROLS								
This table is used to demonstrate compliance with mandatory controls in 110.2 and 120.2 and prescriptive controls in 140.4(f) and (n), 170.2(c)4D 170.2(c)4L or requirements in 141.0(b)2E 180.2(b)2 for altered space conditioning systems.								
01	02	03	04	05	06	07	08	09
System Name	System Zoning	Conditioned Floor Area Being Served (ft²)	Thermostats 110.2(b) & (c) ¹ , 120.2(a) 160.3(a)2A or 141.0(b)2E & 180.2(b)2	Shut-Off Controls 120.2(e) & 160.3(a)2D	Isolation Zone Controls 120.2(g) & 160.3(a)2F	Demand Response 110.12 120.2(b) & 160.3(a)2B	Supply Air Temp. Reset 140.4(f) & 170.2(c)4D	Window Interlocks per 140.4(n) & 170.2(c)4D

¹FOOTNOTES: Gravity gas wall heaters, gravity floor heaters, gravity room heaters, non-central electric heaters, fireplaces or decorative gas appliances, wood stoves are not required to have setback thermostats.

J. VENTILATION AND INDOOR AIR QUALITY

This table is used to demonstrate compliance with mandatory ventilation requirements in 120.1 120.2(e)3B 140.4(p) and 140.4(q) for all nonresidential and hotel/motel and d:t24refnolink/]160.2, 160.3(a)3D, 170.2(a)4N, 170.2(a)4O for high-rise residential occupancies. For alterations, only ventilation systems being altered within the scope of the permit application need to be documented in this table. In lieu of this table, the required outdoor ventilation rates and airflows may be shown on the plans or the calculations can be presented in a spreadsheet.

01	<input type="checkbox"/>	Check the box if the project is showing ventilation calculations on the plans, or attaching the calculations instead of completing this table.
02	<input checked="" type="checkbox"/>	Check this box if the project included Nonresidential, Hotel/Motel Spaces or Multifamily Common Use Spaces
	<input type="checkbox"/>	
03	<input type="checkbox"/>	Check the box if the project is using natural ventilation in any nonresidential or hotel/motel spaces to meet required ventilation rates per 120.1(c)2.

Nonresidential and Hotel/ Motel Multifamily Common Use Ventilation Systems

04		05		06		07		
System Name	FAU Existing	System Design OA CFM Airflow ¹	0	System Design Transfer Air CFM	0	Air Filtration per 120.1(c) 141.0(b)2 and 160.2(c)21 ²		
						Provided		
08	09	10	11	12	13	14	15	16

Mechanical Systems

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J. VENTILATION AND INDOOR AIR QUALITY

Space Name or Item Tag	Mechanical Ventilation Required per 120.1(c)3 ³ & 160.2(c)3					Exh. Vent per 120.1(c)4 & 160.2(c)4		DCV or Sensor Controls per 120.1(d)3, 120.1(d)5, and 120.1(e)3 ⁶ 160.2(c)5D 160.2(c)5E 160.2(c)5D	
	Occupancy Type ⁴	Conditioned Floor Area (ft ²)	# of Shower heads/ toilets	# of people ⁵	Required Min OA CFM	Required Min CFM	Provided per Design CFM		
Meeting Room	Conference/ meeting	120			60	0	0	DCV	NA: Not required per §120.1(d)3
								Occ Sensor	NA: Not required space type
Breakroom	Break room	284			142	0	0	DCV	NA: Not required per §120.1(d)3
								Occ Sensor	NA: Not required space type
Store Room	Warehouse	84			12.6	0	0	DCV	NA: Not required per §120.1(d)3
								Occ Sensor	NA: Not required space type
Partner Office 03	Office space	126			18.9	0	0	DCV	NA: Not required per §120.1(d)3
								Occ Sensor	NA: Not required space type
Partner Office 02	Office space	151			22.6	0	0	DCV	NA: Not required per §120.1(d)3
								Occ Sensor	NA: Not required space type
Partner Office 01	Office space	133			20	0	0	DCV	NA: Not required per §120.1(d)3
								Occ Sensor	NA: Not required space type

Registration Number:

Generated Date/Time:

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Mechanical Systems

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J. VENTILATION AND INDOOR AIR QUALITY									
Manager Office	Office space	141			21.2	0	0	DCV	NA: Not required per §120.1(d)3
								Occ Sensor	NA: Not required space type
Partner Office 04	Office space	137			20.6	0	0	DCV	NA: Not required per §120.1(d)3
								Occ Sensor	NA: Not required space type
Work Room	Office space	154			23.1	0	0	DCV	NA: Not required per §120.1(d)3
								Occ Sensor	NA: Not required space type
Lobby	Lobbies	1603			240.4	0	0	DCV	NA: Not required per §120.1(d)3
								Occ Sensor	NA: Not required space type
Utility Room	All others	77			11.5	0	0	DCV	NA: Not required per §120.1(d)3
								Occ Sensor	NA: Not required space type
Women's Toilet	Toilet, public	132			0	0	0	DCV	NA: Not required per §120.1(d)3
								Occ Sensor	NA: Not required space type
Men's Toilet	Toilet, public	109			0	0	0	DCV	NA: Not required per §120.1(d)3
								Occ Sensor	NA: Not required space type
17	Total System Required Min OA CFM				593	18	Ventilation for this System Complies?		Yes

¹ FOOTNOTES: System CFM should include both mechanical and natural ventilation for the zone/system

Registration Number:

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CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

 Report Version: 2022.0.000
 Schema Version: rev 20220101

 Compliance ID: EnergyPro-50207-0523-0485
 Report Generated: 2023-05-30 12:45:21

Mechanical Systems

CERTIFICATE OF COMPLIANCE			NRCC-MCH-E		
Project Name:		First Bank Bixby Knolls	Report Page:		(Page 7 of 9)
Project Address:		4040 Atantic Avenue	Date Prepared:		5/30/2023

J. VENTILATION AND INDOOR AIR QUALITY

² Air filtration requirements apply to the following three system types per 120.1(c)1A: space conditioning systems utilizing ducts to supply air to occupiable space; supply-only ventilation systems providing outside air to occupiable space; supply side of balanced ventilation systems including heat recovery and energy recovery ventilation systems providing outside air to occupiable space.

³ Uniform Mechanical Code may have more stringent ventilation requirements; the most stringent code requirement takes precedence.

⁴ See Standards Tables 120.1-A and 120.1-B.

⁵ For lecture halls with fixed seating, the expected number of occupants shall be determined in accordance with the California Building Code.

⁶ 120.2(e)3 requires systems serving rooms that are required by 130.1(c) to have lighting occupancy sensing controls to also have occupancy sensing zone controls for ventilation. Examples of spaces which require lighting occupancy sensors include offices 250ft² or smaller, multipurpose rooms less than 1,000 ft², classrooms, conference rooms, restrooms, aisles and open areas in warehouses, library book stack aisles, corridors, stairwells, parking garages, and loading and unloading zones, unless excepted by 130.1(c).

Multifamily Dwelling Unit Ventilation Systems								
<input type="checkbox"/>	Check the box if the system is using continuous ventilation to meet the ventilation requirements per 160.2(b)2Aivb2							
19	20	21	22	23	24	25	26	27
Space Name or Item Tag	Mechanical Ventilation Required per 120.1(b) & 160.2(b)2				Ventilation per Design		Local Exhaust	Air Filtration per 120.1(c) & 160.2(b)1
	Conditioned Floor Area (ft²)	# of Bedrooms	# of Dwelling Units	Required Min OA CFM¹	Supply Air CFM	Exhaust CFM		
28	Is this a balanced system⁴				29	Meeting Outside Air Requirements?		

¹ FOOTNOTES: Uniform Mechanical Code may have more stringent ventilation requirements; the most stringent code requirement takes precedence.

² Kitchen range hood will be verified per NA7.18.1 to confirm model is rated by HVI or AHAM.

³ Air filtration requirements apply to the following three system types per 120.1(c)1A: space conditioning systems utilizing ducts to supply air to occupiable space; supply-only ventilation systems providing outside air to occupiable space; supply side of balanced ventilation systems including heat recovery and energy recovery ventilation systems providing outside air to occupiable space.

⁴ A balanced ventilation system provides ventilation airflow to each dwelling-unit at a rate equal to or greater than the required minimum rate, but not more than twenty percent.

K. TERMINAL BOX CONTROLS

This section does not apply to this project.

Mechanical Systems

CERTIFICATE OF COMPLIANCE		NRCC-MCH-E	
Project Name:	First Bank Bixby Knolls	Report Page:	(Page 8 of 9)
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L. DISTRIBUTION (DUCTWORK and PIPING)
<i>This section does not apply to this project.</i>

M. COOLING TOWERS
<i>This section does not apply to this project.</i>

N. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION
Form/Title
NRCI-MCH-01-E - Must be submitted for all buildings

O. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE
<i>There are no NRCA forms required for this project.</i>

P. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION
<i>There are no NRCV forms required for this project.</i>

Q. MANDATORY MEASURES DOCUMENTATION LOCATION		
<i>This table is used to indicate where mandatory measures are documented in the plan set or construction documentation.</i>		
01	02	
Compliance with Mandatory Measures documented through MCH Mandatory Measures Note Block	Yes	Plan sheet or construction document location
		M-Sheets

Mechanical Systems

CERTIFICATE OF COMPLIANCE		NRCC-MCH-E	
Project Name:	First Bank Bixby Knolls	Report Page:	(Page 9 of 9)
Project Address:	4040 Atantic Avenue	Date Prepared:	5/30/2023

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT**I certify that this Certificate of Compliance documentation is accurate and complete.**

Documentation Author Name: Mohamad Nohayli	Documentation Author Signature: Mohamad Nohayli
Company: InnoDez, Inc.	Signature Date: 2023-05-30
Address:	CEA/ HERS Certification Identification (if applicable):
City/State/Zip:	Phone:

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:

1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer)
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Designer Name: Syed P. Alam	Responsible Designer Signature: Syed P. Alam
Company: Innodez Inc.	Date Signed: 2023-05-30
Address: 726 Foxbrough	License: 27087
City/State/Zip: Pleasanton CA 94566	Phone:

Domestic Water Heating System

CERTIFICATE OF COMPLIANCE		NRCC-PLB-E	
<i>This document is used to demonstrate compliance for nonresidential occupancies with requirements in 110.1, 110.3, 120.3, and 140.5, and with requirements in 141.0 for additions and alterations, for domestic water heating scopes using the prescriptive path. For high-rise residential and hotel/motel occupancies compliance is demonstrated with requirements in 110.1, 110.3, 160.4 and 170.2(d), and with requirements 180.1 for additions and 180.2 for alterations.</i>			
Project Name:		First Bank Bixby Knolls	Report Page: (Page 1 of 3)
Project Address:		4040 Atantic Avenue	Date Prepared: 5/30/2023

A. GENERAL INFORMATION					
01	Project Location (city)	Long Beach	02	Climate Zone	8
03	Occupancy Types Within Project (select all that apply):				
• Convention Center • Office • Support Areas • Warehouse • All Other Occupancies					

B. PROJECT SCOPE					
<i>This table includes domestic water heating systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive paths outlined in 140./170.2(d) and 141.0(a)/ 180.1, or 141.0(b)2N / 180.2 for additions or alterations. Solar water heating systems are documented on the NRCC-SAB compliance document. Combined hydronic water heating systems are documented on the NRCC-MCH compliance document.</i>					
01		02		03	
My project consists of (check all that apply):		System Type ^{1,2}		System Components	
<input type="checkbox"/> New system (DHW system being installed for the first time in newly constructed building)				<input type="checkbox"/> Equipment	<input type="checkbox"/> Distribution <input type="checkbox"/> Controls
<input type="checkbox"/> System Alteration (equipment, distribution or controls)				<input type="checkbox"/> Equipment	<input type="checkbox"/> Distribution <input type="checkbox"/> Controls
¹ FOOTNOTES: Point of use water heaters, or other non-central systems used to serve nonresidential spaces, are considered individual systems.					
² Dwelling units refers to hotel/motel guest rooms and units in a multifamily residential occupancy.					
³ DHW systems serving 2 or more dwelling units are considered "Central Systems" for multifamily occupancies					

C. COMPLIANCE RESULTS			
<i>Table C will indicate if the project data input into the compliance document is compliant with water heating requirements. If this table says "DOES NOT COMPLY" or "COMPLIES with Exceptional Conditions" refer to Table D. or the table indicated as not compliant for guidance.</i>			
01	02	03	04
Domestic Hot Water Equipment	Distribution Systems	Controls	Compliance Results
Table F	Table G	Table H	
Yes	Yes	Yes	
COMPLIES			

D. EXCEPTIONAL CONDITIONS	
<i>This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.</i>	

Domestic Water Heating System

CERTIFICATE OF COMPLIANCE		NRCC-PLB-E	
Project Name:	First Bank Bixby Knolls	Report Page:	(Page 2 of 3)
Project Address:	4040 Atantic Avenue	Date Prepared:	5/30/2023

E. ADDITIONAL REMARKS
<i>This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.</i>

F. DOMESTIC HOT WATER EQUIPMENT
<i>This section does not apply to this project.</i>

G. DOMESTIC HOT WATER DISTRIBUTION SYSTEM
<i>This section does not apply to this project.</i>

H. DOMESTIC HOT WATER CONTROLS
<i>This section does not apply to this project.</i>

I. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION
Form/Title
NRCI-PLB-E - Must be submitted for all buildings

J. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE
<i>There are no forms required for this project.</i>

K. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION
<i>There are no forms required for this project.</i>

Domestic Water Heating System

CERTIFICATE OF COMPLIANCE		NRCC-PLB-E	
Project Name:	First Bank Bixby Knolls	Report Page:	(Page 3 of 3)
Project Address:	4040 Atantic Avenue	Date Prepared:	5/30/2023

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name:	Documentation Author Signature: Mohamad Nohayli
Company:	Signature Date: 2023-05-30
Address:	CEA/ HERS Certification Identification (if applicable):
City/State/Zip:	Phone:

RESPONSIBLE PERSON'S DECLARATION STATEMENT

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Responsible Designer Name:	Responsible Designer Signature:
Company:	Date Signed: 2023-05-30
Address:	License:
City/State/Zip:	Phone:

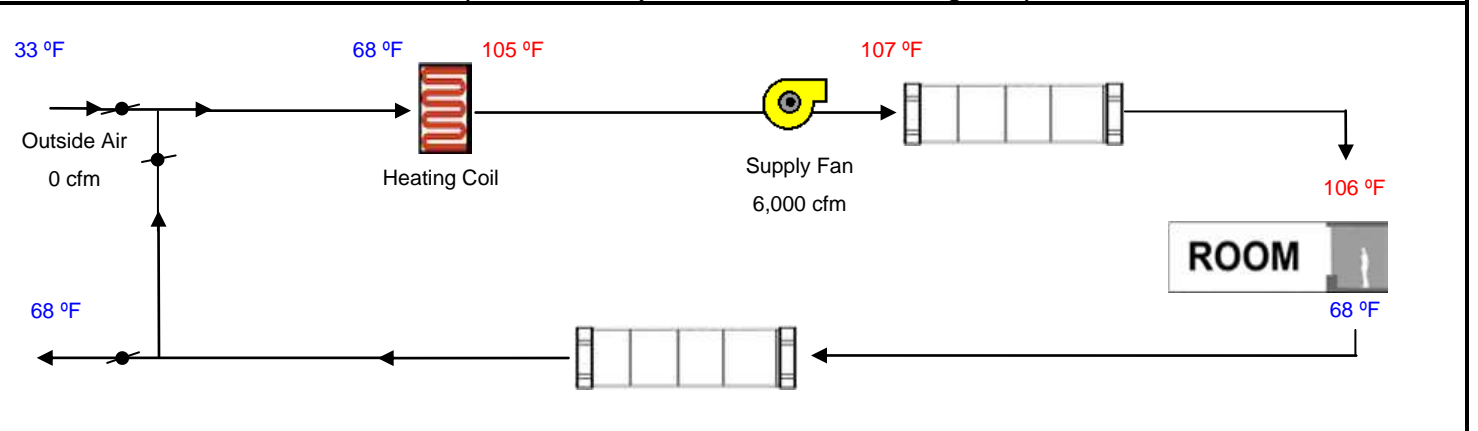
HVAC SYSTEM HEATING AND COOLING LOADS SUMMARY

Project Name First Bank Bixby Knolls	Date 5/30/2023
System Name FAU Existing	Floor Area 3,251

ENGINEERING CHECKS		SYSTEM LOAD				
Number of Systems	2	Total Room Loads Return Vented Lighting Return Air Ducts Return Fan Ventilation Supply Fan Supply Air Ducts TOTAL SYSTEM LOAD	COIL COOLING PEAK			COIL HTG. PEAK
Heating System			CFM	Sensible	Latent	CFM
Output per System	120,000		5,322	100,002	1,513	1,097
Total Output (Btuh)	240,000			0		45,522
Output (Btuh/sqft)	73.8			5,000		2,276
Cooling System				0		0
Output per System	75,000		0	0	0	0
Total Output (Btuh)	150,000			11,731		-11,731
Total Output (Tons)	12.5			5,000		2,276
Total Output (Btuh/sqft)	46.1					
Total Output (sqft/Ton)	260.1			121,733	1,513	38,343

Air System		HVAC EQUIPMENT SELECTION				
CFM per System	3,000	High Efficiency Fau				
Airflow (cfm)	6,000		142,042	0		240,000
Airflow (cfm/sqft)	1.85					
Airflow (cfm/Ton)	480.0					
Outside Air (%)	0.0%	Total Adjusted System Output (Adjusted for Peak Design conditions)		142,042	0	240,000
Outside Air (cfm/sqft)	0.00	TIME OF SYSTEM PEAK		Jul 5 PM		Jan 1 AM

HEATING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Heating Peak)



COOLING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Cooling Peak)

