

ENERGY ANALYSIS FOR ALTERATION
(CLIMATE ZONE 4A)

ITEM DESCRIPTION	PROPOSED DESIGN VALUE	CODE PRESCRIPTIVE ECCCNYS-2010
LOAD CALCULATIONS	ASHRAE/ACCA STANDARD 183	ASHRAE/ACCA STANDARD 183
HEATING & COOLING EQUIPMENT CAPACITY DOES NOT EXCEED CALCULATED LOADS	YES	YES
MINIMUM ONE TEMPERATURE CONTROL DEVICE PER SYSTEM	1 PER SYSTEM	MIN. 1 PER SYSTEM
AUTOMATIC TEMPERATURE CONTROLS WITH UNOCCUPIED SETBACK DOWN TO 55°F AND OR UP TO 85°F.	YES	YES
MINIMUM DUCT INSULATION	R-5 UNCONDITIONED R-8 EXTERIOR	R-5 UNCONDITIONED R-8 EXTERIOR
DUCTS SEAMS SEALED UL181A OR UL181B TAPES AND MASTICS	YES	YES
MECHANICAL FASTENERS AND SEALANTS ON DUCT CONNECTIONS TO EQUIPMENT	YES	YES
PIPE INSULATION	< 1-1/2" HOT WATER PIPING: 1-1/2" INSULATION THICKNESS	< 1-1/2" HOT WATER PIPING: 1-1/2" INSULATION THICKNESS
OPERATIONS & MAINTENANCE MANUALS PROVIDED TO OWNER AT COMPLETION	YES	YES
BALANCING DEVICES PROVIDED IN ACCORDANCE WITH MECHANICAL CODE	YES	YES
TO THE BEST OF MY KNOWLEDGE, BELIEF AND PROFESSIONAL JUDGMENT, THESE PLANS AND SPECIFICATIONS ARE IN COMPLIANCE WITH THE ENERGY CONSERVATION CONSTRUCTION CODE OF NEW YORK STATE, AS ADOPTED BY NEW YORK CITY.		
NAME _____		
SIGNATURE _____ DATE _____		SEAL _____

ENERGY ANALYSIS FOR ALTERATION

ITEM DESCRIPTION	PROPOSED DESIGN VALUE	CODE PRESCRIPTIVE VALUE (ECCCNYS-2010 SECTION 504)
MINIMUM EQUIPMENT EFFICIENCY SERVICE WATER HEATING EQUIPMENT	NOT APPLICABLE	0.97 – 0.00132*VOLUME (TABLE 504.2)
HOT WATER SYSTEM CONTROLS	HEAT TRACE	AUTO OR MANUAL SHUT-OFF (SECTION 504.6)
HEAT TRAPS	NOT APPLICABLE	SUPPLIED FOR NON-CIRCULATING SYSTEMS (SECTION 504.4)
TEMPERATURE CONTROLS	NOT APPLICABLE	110°F DWELLING UNITS 90°F OTHER OCCUPANCIES (SECTION 504.3)
PIPE INSULATION	R VALUE OF 0.27	1" THICKNESS MIN. 0.27 BTU/IN-HR-FT ² -degF (SECTION 504.5)
TO THE BEST OF MY KNOWLEDGE, BELIEF AND PROFESSIONAL JUDGMENT, THESE PLANS AND SPECIFICATIONS ARE IN COMPLIANCE WITH THE ENERGY CONSERVATION CONSTRUCTION CODE OF NEW YORK STATE, AS ADOPTED BY NEW YORK CITY.		
NAME _____		
SIGNATURE _____ DATE _____		SEAL _____

REQUIRED PROGRESS INSPECTIONS
FOR ENERGY CODE COMPLIANCE

INSPECTION INTERVAL	INSPECTION INTERVAL	REFERENCE STANDARD	CODE REFERENCES (ECCCNYS-2010)
SERVICE WATER HEATING EQUIPMENT PERFORMANCE: EQUIPMENT EFFICIENCIES AND OTHER PERFORMANCE FACTORS OF ALL MAJOR EQUIPMENT UNITS, AS DETERMINED BY THE APPLICANT OF RECORD, AND NO LESS THAN 15% OF MINOR EQUIPMENT UNITS.	NOT APPLICABLE	APPROVED CONSTRUCTION DOCUMENTS	504.2, TABLE 504.2; ASHRAE 90.1 – 7.4.2, TABLE 7.8
SERVICE HOT WATER SYSTEM CONTROLS: NO LESS THAN 20% OF EACH TYPE OF REQUIRED CONTROLS SHALL BE VERIFIED BY VISUAL INSPECTION AND TESTED FOR FUNCTIONALITY AND PROPER OPERATION.	AFTER INSTALLATION AND PRIOR TO FINAL INSPECTION	APPROVED CONSTRUCTION DOCUMENTS INCLUDING CONTOL SYSTEM NARRATIVES	504.3, 504.6; ASHRAE 90.1 – 7.4.4, APPENDIX E; 1RCNY 5000-01(G)(2)
PIPING INSULATION: VERIFY PROPER INSULATION PLACEMENT AND VALUES	AFTER INSTALLATION AND PRIOR TO CLOSURE OF SHAFTS, WALLS, CEILINGS	APPROVED CONSTRUCTION DOCUMENTS	504.5 ASHRAE 90.1 – 7.4.3, TABLES 6.8.2, 6.8.3



COMcheck Software Version 3.8.2
Interior Lighting Compliance
Certificate

2010 New York Energy Conservation Construction Code

Section 1: Project Information

Project Type: **New Construction**
Project Title: _____
Construction Site: _____ Owner/Agent: _____ Designer/Contractor: _____

Section 2: Interior Lighting and Power Calculation

A Area Category	B Floor Area (ft ²)	C Allowed Watts / ft ²	D Allowed Watts (B x C)
Hospital	3604	1.2	4325
		Total Allowed Watts =	4325

Section 3: Interior Lighting Fixture Schedule

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixtures	D Fixture Watt.	E (C X D)
Hospital (3604 sq.ft.)				
Compact Fluorescent 1: A: B1X4 40W / Electronic	2	24	80	1920
Compact Fluorescent 4: A1: Other / Electronic	1	28	55	1540
Compact Fluorescent 2: B: Twin Tube 13W / Electronic	2	11	26	286
Compact Fluorescent 3: B1: Triple 4-pin 32W / Electronic	1	5	26	130
Linear Fluorescent 1: C: 60" T8 40W / Electronic	2	3	80	240
Linear Fluorescent 2: D: 48" T8 32W / Electronic	1	3	64	192
Linear Fluorescent 3: E: Undercabinet Light / 22" T5 14W / Electronic	1	63	14	Exempt
Exemption:Furniture-mounted Supplemental Task Lighting				
Incandescent 1: X: Exit Light / Other	1	3	5	Exempt
Exemption:Exit Signs, Safety or Emergency Lighting				
		Total Proposed Watts =	4308	

Section 4: Requirements Checklist

- Lighting Wattage:**
☒ 1. Total proposed watts must be less than or equal to total allowed watts.
- | | | |
|---------------|----------------|----------|
| Allowed Watts | Proposed Watts | Complies |
| 4325 | 4308 | YES |
- Exterior Lighting:**
☐ 2. Comply with Sections 401.3.1 and 401.3.1.1 of 90.1-1989 Code and attach documentation.
- Controls, Switching, and Wiring:**
☐ 3. Master switch at entry to hotel/motel guest room.
☒ 4. Minimum of one manual control for each space with no task activity (i.e. storage). Multiple manual controls, occupancy sensor, automatic timer, or dimmer in other spaces.
- Exemptions: _____

Project Title: _____
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- ☐ Lighting for emergency or exit egress or intended for continuous operation.
☐ 5. Photoelectric/astronomical time switch on exterior lights.
- Exceptions:
☐ Lighting intended for 24 hour use.
- ☐ 6. Tandem wired one-lamp and three-lamp ballasted luminaires (No single-lamp ballasts).
- Exceptions:
☐ Luminaires with three lamp ballasts (or electronic high-frequency single-lamp ballasts).

Interior Lighting PASSES: Design 0.4% better than code.

Section 5: Compliance Statement

Compliance Statement: The proposed lighting design represented in this document is consistent with the building plans, specifications and other calculations submitted with this permit application. The proposed lighting system has been designed to meet the 2010 New York Energy Conservation Construction Code requirements in COMcheck Version 3.8.2 and to comply with the mandatory requirements in the Requirements Checklist.

Name - Title: **Bruce Lilker PE** Signature: _____ Date: **NOV - 1 2011**



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Report date: 11/01/11
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PROGRESS INSPECTIONS FOR ENERGY CODE COMPLIANCE - COMMERCIAL BUILDINGS

INSPECTION/TEST	INSPECTION DESCRIPTION	INSPECTION INTERVAL	REFERENCE STANDARD	CODE REFERENCES
ELECTRICAL POWER AND LIGHTING SYSTEMS				
LIGHTING CONTROLS	NOT LESS THAN 15% OF EACH TYPE OF REQUIRED LIGHTING CONTROLS, INCLUDING MANUAL INTERIOR LIGHTING CONTROLS, LIGHT-REDUCTION CONTROLS, AUTOMATIC LIGHTING SHUT-OFF, EXTERIOR BUILDING LIGHTING CONTROLS AND EXTERIOR GROUNDS LIGHTING CONTROLS, SHALL BE VERIFIED BY VISUAL INSPECTION AND TESTED FOR FUNCTIONALITY AND PROPER OPERATION.	PRIOR TO FINAL INSPECTION	APPROVED CONSTRUCTION DOCUMENTS, INCLUDING CONTROL SYSTEM NARRATIVES	ECCNYS – 805.2; ASHRAE 90.1 – 9.1, 9.4.1; 1RCNY 5000-01(G)(3)
EXIT SIGNS	INSTALLED EXIT SIGNS SHALL BE VISUALLY INSPECTED TO VERIFY THAT THE LABEL INDICATES THAT THEY DO NOT EXCEED MAXIMUM PERMITTED WATTAGE.	PRIOR TO FINAL INSPECTION	APPROVED CONSTRUCTION DOCUMENTS	ECCNYS – 805.4; ASHRAE 90.1 – 9.4.3
INTERIOR LIGHTING POWER	INSTALLED LIGHTING SHALL BE VERIFIED FOR COMPLIANCE WITH THE LIGHTING POWER ALLOWANCE BY VISUAL INSPECTION OF FIXTURES, LAMPS, BALLASTS AND RELEVANT TRANSFORMERS.	PRIOR TO FINAL INSPECTION	APPROVED CONSTRUCTION DOCUMENTS	ECCNYS – 805.5; ASHRAE 90.1 – 9.1.3, 9.1.4, 9.2.1, 9.5, 9.6; 1RCNY 5000-01(I)

REQUIRED PROGRESS INSPECTIONS
FOR ENERGY CODE COMPLIANCE

PROGRESS INSPECTION	INSPECTION INTERVAL	CODE REFERENCES ECCCNYS-2010
HVAC SYSTEM CONTROLS: NO LESS THAN 20% OF EACH TYPE OF REQUIRED CONTROLS SHALL BE VERIFIED BY VISUAL INSPECTION AND TESTED FOR FUNCTIONALITY AND PROPER OPERATION.	AFTER INSTALLATION AND PRIOR TO FINAL INSPECTION (SEASONAL PRIOR TO FINAL C.O.)	503.2.4, 503.2.5, 503.2.6, 503.2.10, 503.2.11, 503.3.1, 503.4.1, 503.4.2, 503.4.3, 503.4.4, 503.4.5, 503.4.7;
DUCT, PLENUM AND PIPING INSULATION: VERIFY PROPER INSULATION PLACEMENT AND VALUES	AFTER INSTALLATION AND PRIOR TO CLOSURE OF SHAFTS, WALLS, CEILINGS	503.2.7, 503.2.8
DUCT AND PLENUM SEALING: JOINTS, LONGITUDINAL AND TRANSVERSE SEAMS AND CONNECTIONS IN DUCTWORK PROPERLY SEALED	AFTER INSTALLATION AND PRIOR TO CLOSURE OF SHAFTS, WALLS, CEILINGS	503.2.7
MAINTENANCE INFORMATION MAINTENANCE MANUALS FOR EQUIPMENT AND SYSTEMS SHALL BE REVIEWED BEFORE SUCH MANUALS ARE PROVIDED TO THE OWNER. LABELS FOR EQUIPMENT OR SYSTEMS SHALL BE INSPECTED FOR COMPLIANCE.	PRIOR TO FINAL INSPECTION	303.3; 503.2.9.3

ENERGY COMPLIANCE DRAWING INDEX

DRAWING NO.	DRAWING TITLE
EN-001.00	ENERGY COMPLIANCE COVER SHEET
EN-002.00	ENERGY COMPLIANCE DETAILS & SYMBOL LIST
EN-101.00	SECOND FLOOR LIGHTING PLAN

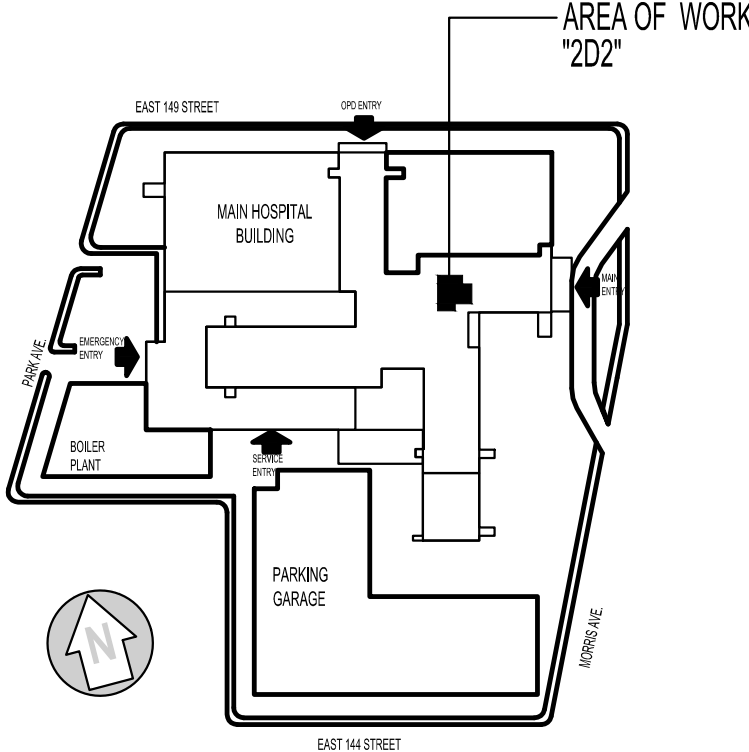
THIS PLAN IS APPROVED ONLY FOR WORK INDICATED ON THE APPLICATION SPECIFICATION SHEET. ALL OTHER MATTERS SHOWN ARE NOT TO BE RELIED UPON, OR TO BE CONSIDERED AS EITHER BEING APPROVED OR IN ACCORDANCE WITH APPLICABLE CODES.

DOB EMPLOYEE STAMPS AND SIGNATURES.

DOB BSCAN STICKER:

REVISION DATE 06-25-2012
REASON FOR ISSUE ISSUED TO DOB

KEY PLAN :



CLIENT: **HHC** NEW YORK CITY HEALTH AND HOSPITALS CORPORATION

CLIENT: **LINCOLN MEDICAL AND MENTAL HEALTH CENTER**
234 East 149th Street, Bronx, New York 10451

ARCHITECT: **M J C L Architects, PLLC**
1416 Avenue M, Brooklyn, NY 11230
Tel.: (718) 339-3390 Fax: (718) 339-3642

ENVIRONMENTAL ENGINEERING CONSULTANT: **Lilker Associates Consulting Engineers, PC**
1001 Avenue of the Americas, New York, NY 10018
tel 212.695.1000 fax 212.695.1299 www.lilker.com

PROJECT: **NEW CLINIC RENOVATION AT SECOND FLOOR**
234 East 149 Street Bronx, NY 10451

DRAWING: **ENERGY COMPLIANCE COVER SHEET**

SCALE: **NONE**
DRAWN BY: **JD**
CHECKED BY: **FM**
DATE: **09-06-2011**
JOB #: **21115.00**
DRAWING #: **EN-001.00**
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