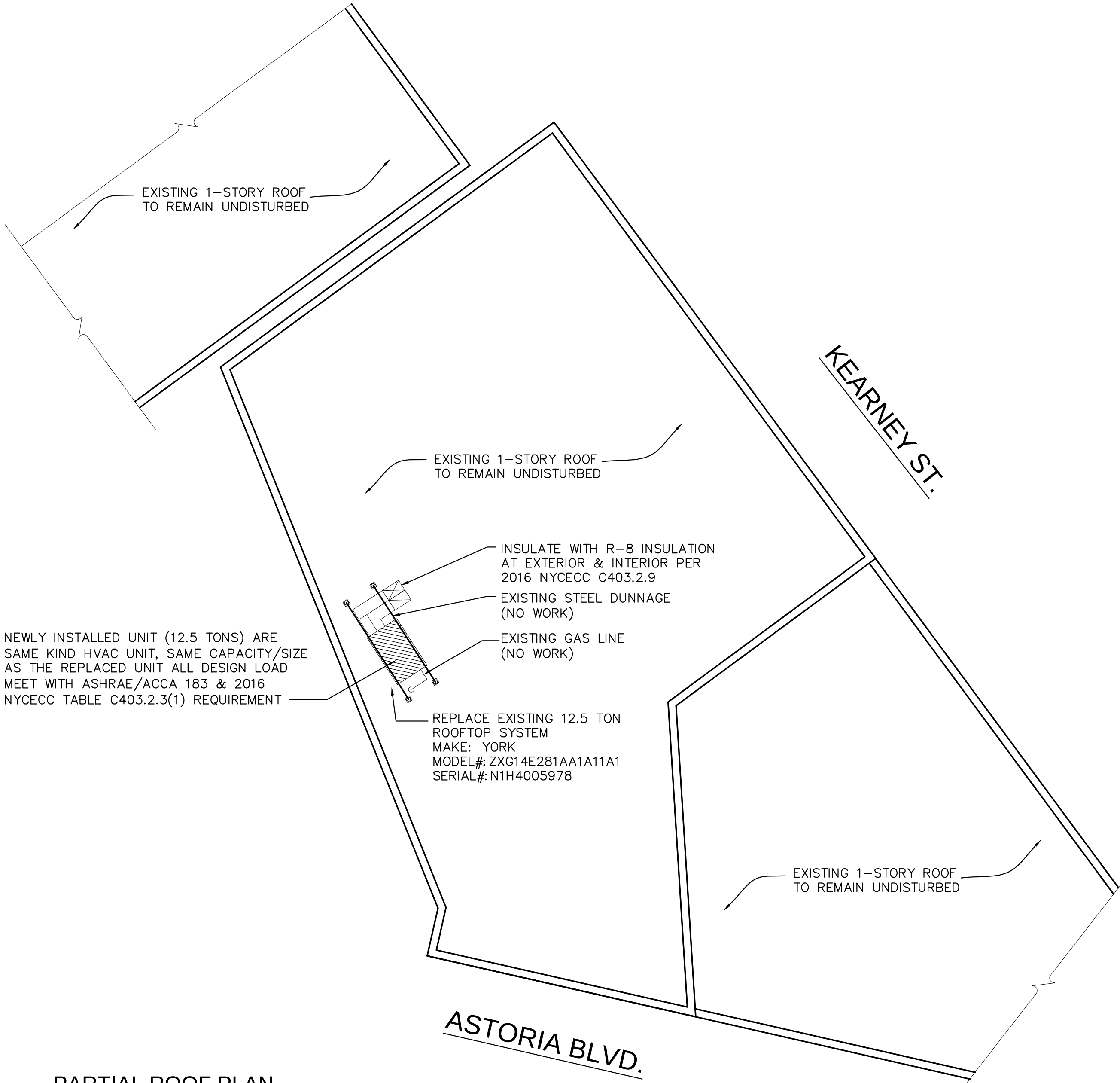




PARTIAL ROOF PLAN
SCALE: 3/32"=1'-0"

HVAC 12.5 TONS UNIT SPEC.

1068152-YTG-I-1214

ZX14 Physical Data

Component	Models		
	ZXG14	ZXE14	
Nominal Tonnage	12.5	12.5	
Gross Capacity @ AHRI A point (Btu)	145000	145000	
AHRI net capacity (Btu)	135000	135000	
EER	10.8	11.0	
IEER	11	11.2	
IEER IntelliSpeed	12.75	13	
Nominal CFM	4000	4000	
System power (KW)	10.8	10.8	
Refrigerant type	R-410A	R-410A	
Refrigerant charge (lb-oz)			
System 1	6-8	6-8	
System 2	6-12	6-12	
Heating Option	D	E	F
Heating model	Low	Med	High
1st. Stage Heat input (K Btu)	125	176	200
2nd. Stage Heat input (K Btu)	180	220	250
1st. Stage Heat output (K Btu)	100	141	160
2nd. Stage Heat output (K Btu)	144	176	200
SEER %	80	80	-
Steady state efficiency (%)	80	80	-
No. stages	2	2	2
Temperature Rise Range (°F)	21-36	26-43	30-49
Gas Limit Setting (°F)	150	140	160
Gas piping connection (in.)	3/4	3/4	3/4
Length	87.2	87.2	
Width	61.7	61.7	
Height	55.26	55.26	
OPERATING WT. (lbs.)	1047	941	
Type	Scroll	Scroll	
Quantity	2	2	
Unit Capacity Steps (%)	50/100	50/100	
Face area (Sq. Ft.)	24.9	24.9	
Rows	1	1	
Fins per inch	21	21	
Tube diameter (in./MM)	1.26/32	1.26/32	
Circuitry Type	2-pass Microchannel	2-pass Microchannel	
Face area (Sq. Ft.)	11.1	11.1	
Rows	4	4	
Fins per inch	15	15	
Tube diameter	0.375	0.375	
Circuitry Type	Interwined	Interwined	
Refrigerant control	TXV	TXV	

28 Johnson Controls Unitary Products

TRANE CONDENSER UNIT SCHEDULE

UNIT NO.	LOCATION	FAN DATA				ELECTRICAL DATA				COOLING COIL DATA COOLING CAPACITY (MBH)	MIN. EFF. EER	PROVIDED EER RATING VALUE	HEATING DATA		AFUE MIN. EFFICIENCY <225,000 BTU/H = 80%	MAX FUSE BREAKER (AMPS)	WEIGHT (LB) SHIP/OP.
		CFM	E.S.P.	RPM	WATTS	VOLTS	PHASE	HZ	MCA	FLA			TYPE	TOTAL (MBH) INPUT OUTPUT			
RTU-1	ROOFTOP	4,000	-	1,750	-	208V	3	60	31	65	135	W/ GAS HEAT 10.8	W/ GAS HEAT 10.8	GAS HEATING 125/180 100/144	80%	70	1,052 / 1,047 EA.

RTU-1 :
MODEL NO. : ZXG14E281AA1A11A1
SERIAL NO. : N1H4005978

REMARKS:
UNITS TO EQUIP WITH ADD ON ECONOMIZER, POWER EXHAUST AND ALL REQUIRED ACCESSORIES; UNIT ARE EXEMPTED FROM ENERGY RECOVERY REQUIREMENT FOR OPERATING MORE THAN 8,000 HRS/YEAR

PROFESSIONAL STATEMENT OF ENERGY CODE

TO THE BEST OF MY KNOWLEDGE, BELIEF AND PROFESSIONAL JUDGEMENT, THESE PLANS AND SPECIFICATIONS ARE IN COMPLIANCE WITH NEW YORK CITY ENERGY CONSERVATION 2016 CHAPTER C4 CODE

HEATING & COOLING LOAD CAL. NOTE

SIZING OF THE EQUIPMENT (HEATING/ COOLING LOAD CALCULATION) IS DONE IN ACCORDANCE WITH ASHRAE/ACCA183

DUCTWORK INSULATION & SEALING

G.C. TO VERIFY ALL PACKAGE UNIT SUPPLY AND RETURN AIR DUCTS TO BE INSULATED WITH MIN. R-6 INSULATION AT ALL EXTERIOR (BETWEEN THE CONDENSER UNIT AND ROOF) AND PROVIDE MIN. OF R-8 AT INTERIOR UNCONDITIONED SPACE WITHIN BUILDING AS PER 2016 NYC ECC C403.2.9 & DUCTWORK CONSTRUCTION PER NYC MECHANICAL CODE. MODIFY AND REPAIR AS REQUIRED SECTION TO MEET REQUIREMENT.

THERMOSTATIC CONTROLS / NARRATIVE

- REPLACE EXISTING/INSTALL THERMOSTAT WITH NEW THERMOSTAT AT EXISTING LOCATION, G.C. TO VERIFY THE EXISTING THERMOSTATIC CONTROL LOCATION ARE ONLY RESPONDING TO TEMPERATURE WITHIN UNIT'S DESIGNATED ZONE PER C403.2.4.1.
- PRESET THERMOSTAT WITH DEADBAND FUNCTION OF 5°F FOR HEATING & COOLING PER C403.2.4.1.2.
- VERIFY WITH OWNER ON OPERATION TIME AND PRESET THERMOSTAT TO OPERATE AT SET TEMPERATURE(PER SUMMER AND WINTER TEMPERATURE) 30 MIN. BEFORE STORE OPEN AND SHUTDOWN UNIT DURING OFF HOUR WITH PRESET FOR HEATING SYSTEM TO OPERATE IF ROOF TEMPERATURE IS BELOW 45 DEGREE PER C403.2.4.2.

SYSTEM COMMISSIONING

THE BUILDING SYSTEM WILL NOT BE COMMISSIONING BY DESIGN PROFESSIONAL PER C408.2 EXCEPTION WITH UNIT(S) LESS THAN 480,000BTU/H COOLING & 600,000 BTU/H HEATING.

G.C. NOTES

G.C. TO PROVIDE OWNER/MANAGEMER (1) SET OF OPERATING & MAINTENANCE MANUAL

ENERGY ANALYSIS

ENERGY ANALYSIS FOR ALTERATION - CLIMATE ZONE 4
BUILDING DESIGN FOR COMMERCIAL BUILDINGS AS PER 2016 NYC ECC CHAPTER C4

ITEM DESCRIPTION	PROPOSED DESIGN VALUE	CODE PRESCRIBED VALUE AND CITATION
HVAC SYSTEMS	(1) 12.5 TONS YORK UNIT MODEL ZXG14E281AA1A11A1 COOLING : 10.8 EER; O.K.	TABLE C403.2.3(1) >= 135,000 & <240,000 BTU/H UNIT: MIN.: 10.8 EER OR 12.2 IEER
	12.5 TONS PROVIDED MIN. EFFICIENCY = 80%	GAS FIRED WARM AIR FURNACES <225,000 BTU/H MIN. EFFICIENCY = 80% PER TABLE 403.2.3(4)

HVAC UNIT TO HAVE INDIVIDUAL ECONOMIZER PERC403.2.4.7 REQUIREMENT WITH FAULT DETECTION AND DIAGNOSTIC .

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Architectural Design & Planning

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E-mail: cherico@ckingarch.com

REV. NO	REV. DATE	DESCRIPTION
1	10.06.2016	ISSUED FOR DOB FILING

All ideas, designs, arrangements and plans indicated or represented by this drawing are owned by and the property of Cherico King Architect, PC, and were created, evolved, and developed for use on, and in connection with the specified project. None of such ideas, designs, arrangements, or reproduction of plans shall be used by or disclosed to any person, firm, or corporation for any purpose whatsoever without the express written permission of Cherico King Architect, PC. Written dimensions on these drawings shall have precedence over scaled dimensions. Contractors shall verify and be responsible for all dimensions and conditions on the job, and this office must be notified of any variation from the dimensions and conditions shown by these drawings.

Applicant of record has not been retained for supervision of construction and Special/Progress inspection.

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 either being approved or in accordance with applicable codes.

PROJECT ADDRESS

100-09 Astoria Blvd.
East Elmhurst, NY 11369

DRAWING TITLE

ENERGY ANALYSIS &
PARTIAL ROOF PLAN

SEAL & SIGNATURE

PROJECT No.
CK_16-069
DRAWN BY
E.C.
CHECKED BY
C.K.
DATE:
10.06.2016

DOB APPROVAL & DATE

DRAWING NUMBER

EN-010.00

Sheet 2 of 2