



EN1: Energy Cost Budget Worksheet

Must be typewritten.

Do Not Submit Separately.
Must be incorporated in the drawing set.

1 Location Information Required for all applications.

House No(s) 401	Street Name 9TH AVENUE
Borough MANHATTAN	Block 00729 Lot 00060 BIN 1800650 CB No. 104
Work on Floor(s) 001 to 069, SC1, CEL, ROF	Apt/Condo No(s)

2 Applicant Information Required for all applications.

Last Name Tuluca	First Name Adrian	Middle Initial N
Business Name Vidaris, Inc.	Business Telephone (212) 689-5389	
Business Address 360 Park Avenue South	Business Fax (212) 689-6449	
City New York	State NY	Zip 10010
E-Mail atuluca@vidaris.com	Mobile Telephone (203) 921-6892	
	License Number 019062	


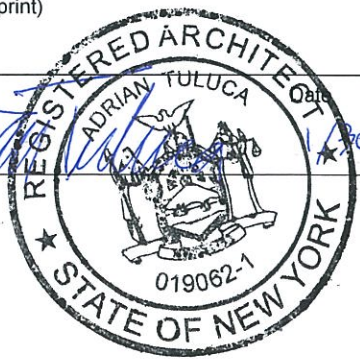
Energy Model Inputs		
NYS approved energy model software:		
Envelope	Proposed Design Input	Budget (Standard Design) Input
Above-grade wall U-factor	U-0.179 (curtain wall); U-0.128 (mass wall)	U-0.064 (steel frame); U-0.104 (mass wall)
Below-grade wall U-factor	C-0.550	C-1.140
Roof construction U-factor	U-0.036 (Tower); U-0.025 (Plaza)	U-0.048
Exterior floor U-factor	N/A	N/A
Slab-on-grade construction (yes/no)	Yes	Yes
Window-to-gross wall ratio	67%	40%
Average fenestration assembly U-factor	U-0.45	U-0.50
Average fenestration assembly SHGC	0.29	0.40
Fixed shading devices (yes/no)	no	no
Automated movable shading devices (yes/no)	no	no
Lighting		
Average ambient lighting power density (W/SF)	0.41 (excl. tenant area)	0.93 (excl. tenant area)
Lighting occupant sensor controls (yes/no)	yes	yes (conf. office < 250 sf)
Automatic daylighting controls (yes/no)	no	no
Exterior lighting power (tradable surfaces) (kW)	8 kW	8 kW
Exterior lighting power (non-tradable surfaces) (kW)	0	0
Heating, Ventilating & Air Conditioning		
Refrigeration equipment type	Water cooled DX units with water side economizer (0.85 kW/ton; 3 gpm/ton; variable flow); Five 60 ton chillers for EMR; 250 ton absorption chiller using heat recovered from cogen.	Water cooled centrifugal chillers (0.576 kW/ton at ARI conditions)
Heating equipment type	Purchased Steam	Purchased Steam
Demand controlled ventilation (yes/no)	No	No
Economizer type (air or water)	Yes; water side economizer	Yes; air side enthalpy economizer
Domestic hot water heating source	Electric	Electric

Unregulated Energy	Proposed Design Input	Budget (Standard Design) Input
Average Receptacle equipment power density (W/SF)	1.20	1.20
Average Unregulated lighting power density (W/SF)	1.05 (for tenant area)	1.05 (for tenant area)
Other process loads	0	0

Energy Cost Budget Conformance	Proposed Design Output	Budget (Standard Design) Output
Annual Regulated Energy Cost (\$)	4,837,925	5,462,609
Annual Regulated Energy Use (BTU/GSF)	83,011 (Site); 152,857 (Source)	66,339 (Site); 164,786 (Source)
Annual Regulated Energy Cost Per Sq. Ft. (\$/GSF)	2.61	2.95

Energy Model Output Breakdown		
Energy Use Breakdown	Proposed Design Output (% BTU/yr)	Budget (Standard Design) Output (% BTU/yr)
Heating	19.75 (Site); 12.86 (Source)	33.12 (Site); 16.42 (Source)
Cooling	9.54 (Site); 11.40 (Source)	7.81 (Site); 9.76 (Source)
Heat rejection	0.48 (Site); 0.51 (Source)	3.77 (Site); 4.72 (Source)
Fans	12.23 (Site); 14.08 (Source)	8.83 (Site); 11.04 (Source)
Pumps	5.88 (Site); 6.84 (Source)	1.55 (Site); 1.94 (Source)
Lighting	23.57 (Site); 24.95 (Source)	22.87 (Site); 28.57 (Source)
Unregulated loads (e.g., plug loads, elevators, escalators, kitchen, process equipment, exterior lighting)	28.55 (Site); 29.36 (Source)	22.05 (Site); 27.55 (Source)
Total	100%	100%

Falsification of any statement is a misdemeanor under § 26-124 of the NYC Administrative Building Code and is punishable by a fine or imprisonment, or both. It is unlawful to give to a city employee, or for a city employee to accept, any benefit, monetary or otherwise, either as a gratuity for properly performing the job or in exchange for special consideration. Violation is punishable by imprisonment or fine or both.

Name (please print)	Adrian Tuluca
Signature	
	
P.E. / R.A. Seal (apply seal, then sign and date over seal)	