Show me the money – how to make passive projects pencil

Steve Bluestone

sb@bluestoneorg.com           steve@icfpanels.com
steve@helixrebar.com          sb@passivedwellings.com
“When you cease to make a contribution, you begin to die.”

Eleanor Roosevelt
Insulated Concrete Forms (ICFs)

The (almost) perfect wall.
Beach Green North - $220 / SF all in
66’ – 7”
R-value = 32
R-value = 24
STATE OF NEW YORK
DEPARTMENT OF STATE
ONE COLUMBIA PLAZA
99 WASHINGTON AVENUE
ALBANY, NY 12231-0001
WWW.DOS.NY.GOV

STATED OF NEW YORK: DEPARTMENT OF STATE

In the Matter of the Petition of:
Banta Homes Corp.
For a Variance to the New York State Uniform Fire Prevention & Building Code

PETITION NO. 2015-0395

Upon the application of Banta Homes Corp., filed pursuant to 19 NYCRR 1223 on June 23, 2015, and upon all other papers in this matter, the Department makes the following determination:

NATURE OF GRIEVANCE AND RELIEF SOUGHT

The petition pertains to the construction of a new mixed-use building, R2, multiple dwelling, and ID, mercantile, occupied 16 stories in height, of type IB construction, and having a gross area of approximately 256,000 square feet, located at 42 West Broad Street, City of Mount Vernon, County of Westchester, State of New York.

Relief is requested from:

- 19 NYCRR, Part 1223, The Mechanical Code of New York State, Section 501.2.1, which requires that the termination point of exhaust outlets and ducts discharging to the outdoors shall be located with the following minimum distances:
  1. For ducts conveying explosive or flammable vapors, fumes or dusts: 30 feet from property line; 10 feet from operable openings into buildings; 6 feet from exterior walls and roofs; 30 feet from combustible walls and operative openings into buildings which are in the direction of the exhaust discharge, 10 feet above adjoining grade.
  2. For other product-conveying outlets: 10 feet from the property lines; 3 feet from exterior walls and roofs: 10 feet from operable openings into buildings: 10 feet above adjoining grade.
  3. For environmental air duct exhaust: 3 feet from property lines; 3 feet from operable openings into buildings for all occupancies other than Group U, and 10 feet from mechanical air intakes.
  4. For specific systems: For clothes dryer exhaust, see Section 504.4, for kitchen hoods, see Section 506.3; for dust, stock and conveying systems, see Section 511.2: and for substation soil exhaust systems, see Section 512.4.

[Petitioner requests that the termination point of exhaust outlets be less than the required distance from mechanical air intakes.]
## AIR-COoled HEAT PUMP CONDENSING UNIT SCHEDULE

<table>
<thead>
<tr>
<th>UNIT NO.</th>
<th>SERVICE</th>
<th>MODEL NO.</th>
<th>CAPACITY</th>
<th>COOLING</th>
<th>HEATING</th>
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### NOTES:
1. SELECTION BASED ON EQUIPMENT MANUFACTURED BY DAIKIN.
2. RATINGS BASED ON 95 DEG.F AMBIENT TEMPERATURE FOR COOLING.
3. RATINGS BASED ON 10 DEG.F AMBIENT TEMPERATURE FOR HEATING.
4. PROVIDE REFRIGERANT PIPING, COMPONENTS AND SPECIALTIES, SIZED & INSTALLED AS PER THE MFR'S RECOMMENDATIONS.
5. PROVIDE MFR'S INTELLIGENT TOUCH CONTROLLER WITH TENANT BILLING.

### ACCESSORIES:
1. LOW AMBIENT HEATING & COOLING
2. POWER DISCONNECT SWITCH
3. SYSTEM SHALL PROVIDE HEATING & COOLING
4. UNIT SHALL HAVE INVERTER
5. CONDENSER COIL GUARD
6. ROOF SUPPORT RAILS WITH E-CLIPS
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<th>UNIT NO.</th>
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<th>HEATING</th>
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6. LOW AMBIENT
7. POWER DISCOUNT
8. SYSTEM SHALL
9. UNIT SHALL HAVE
10. CONDENSER CO
11. ROOF SUPPORT
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**ACCESSORIES:**
1. LOW AMBIENT
2. POWER DISCONNECT
3. SYSTEM SHALS
4. UNIT SHALL HAVE
5. CONDenser CO
Yellow line – water/sewer cost 2014

Blue line – water/sewer cost 2015

Start of building-wide retrofit of all plumbing fixtures

ROI in less than 8 months.

1 month
• 60% reduction in water/sewer costs
• 20% reduction in energy costs for heating water
• Prolonged equipment lifespan (boilers, pumps, pipes)
• Lowered demand on central water supply and waste systems
• Reduced combined sewage outflow (CSO’s) during storms
42 Broad Street
Mount Vernon, NY

Tree of Life
Jamaica, NY

25 story tower
Waterloo, Canada
Questions?

sb@bluestoneorg.com              steve@icfpanels.com

steve@helixrebar.com            sb@passivedwellings.com