

PHIUS Seattle 2017

Track 3: Developer's Panel

Show me the money – how to make passive projects pencil

Steve Bluestone

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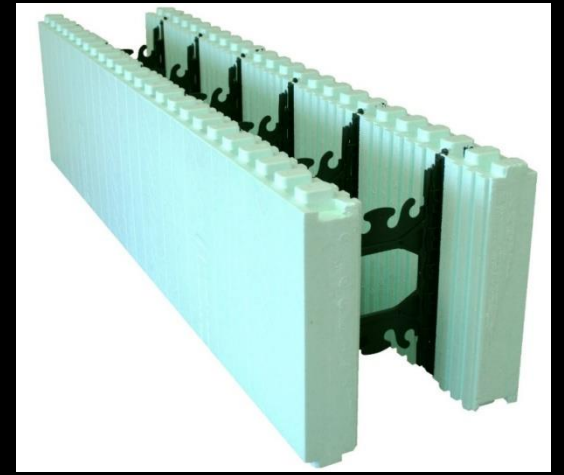
[sb@passivedwellings.com](mailto:sb@passivedwellings.com)

“When you cease to make a contribution,  
you begin to die.”

Eleanor Roosevelt

# Insulated Concrete Forms (ICFs)

The (almost) perfect wall.



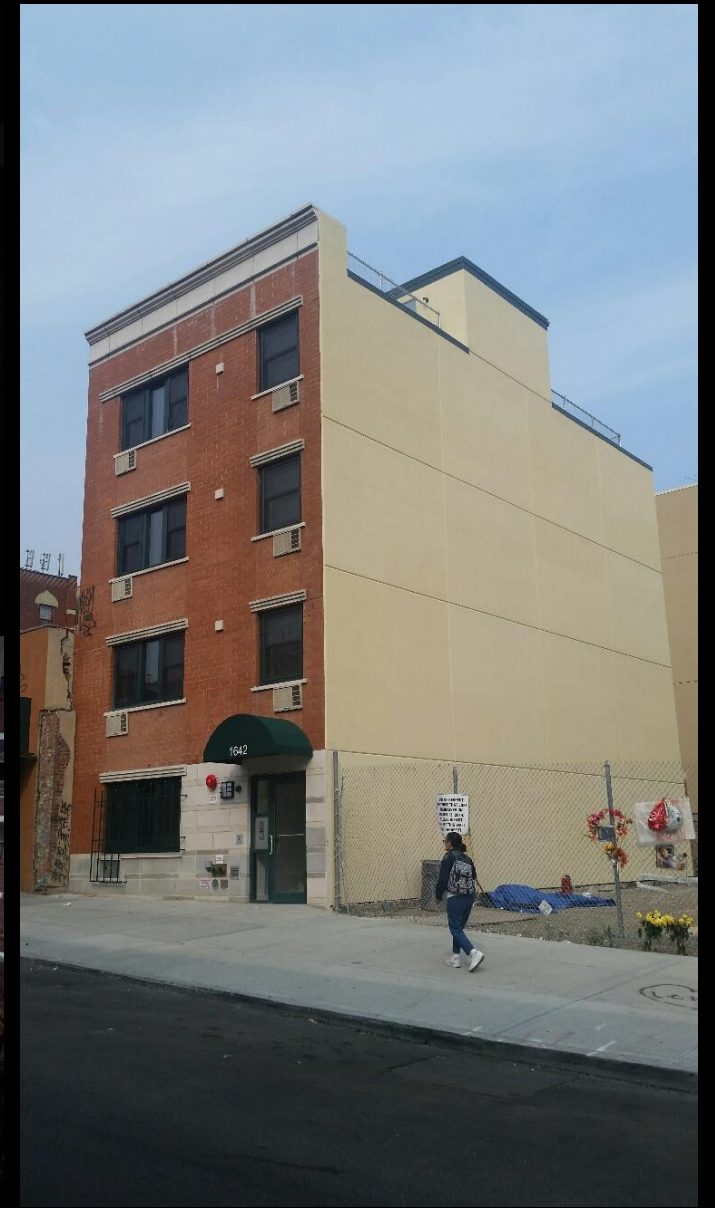
2013



March 12, 2014



Today

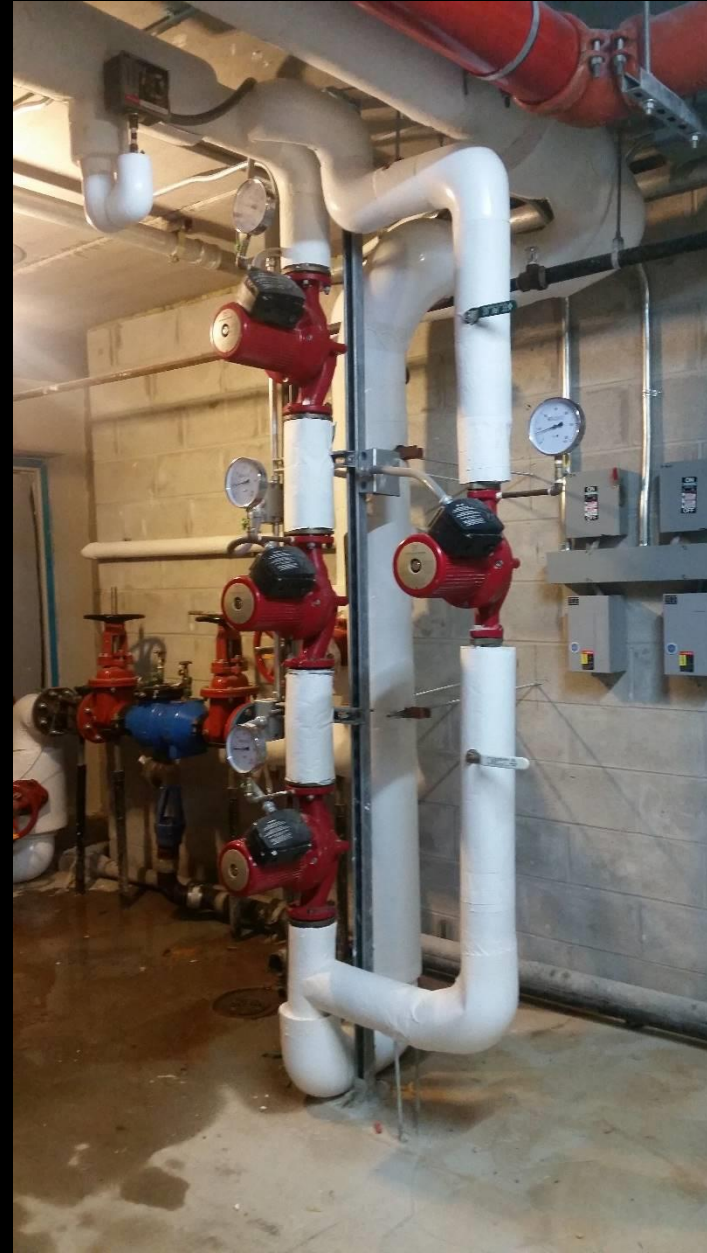




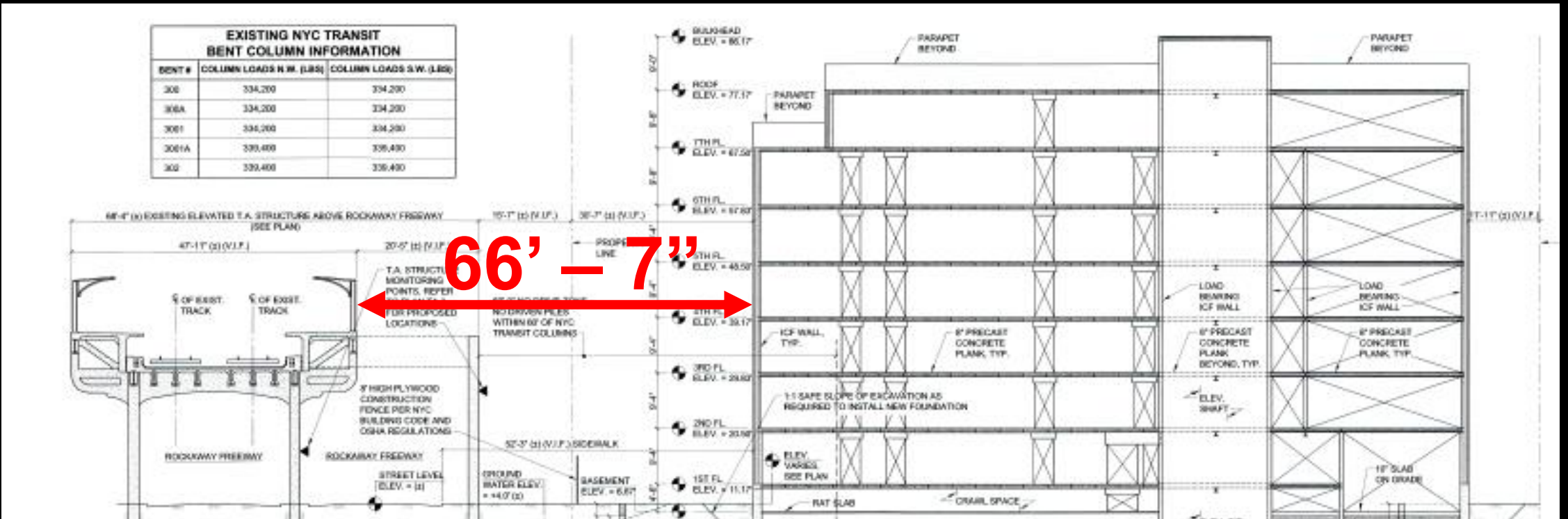
# Beach Green North - \$220 / SF all in



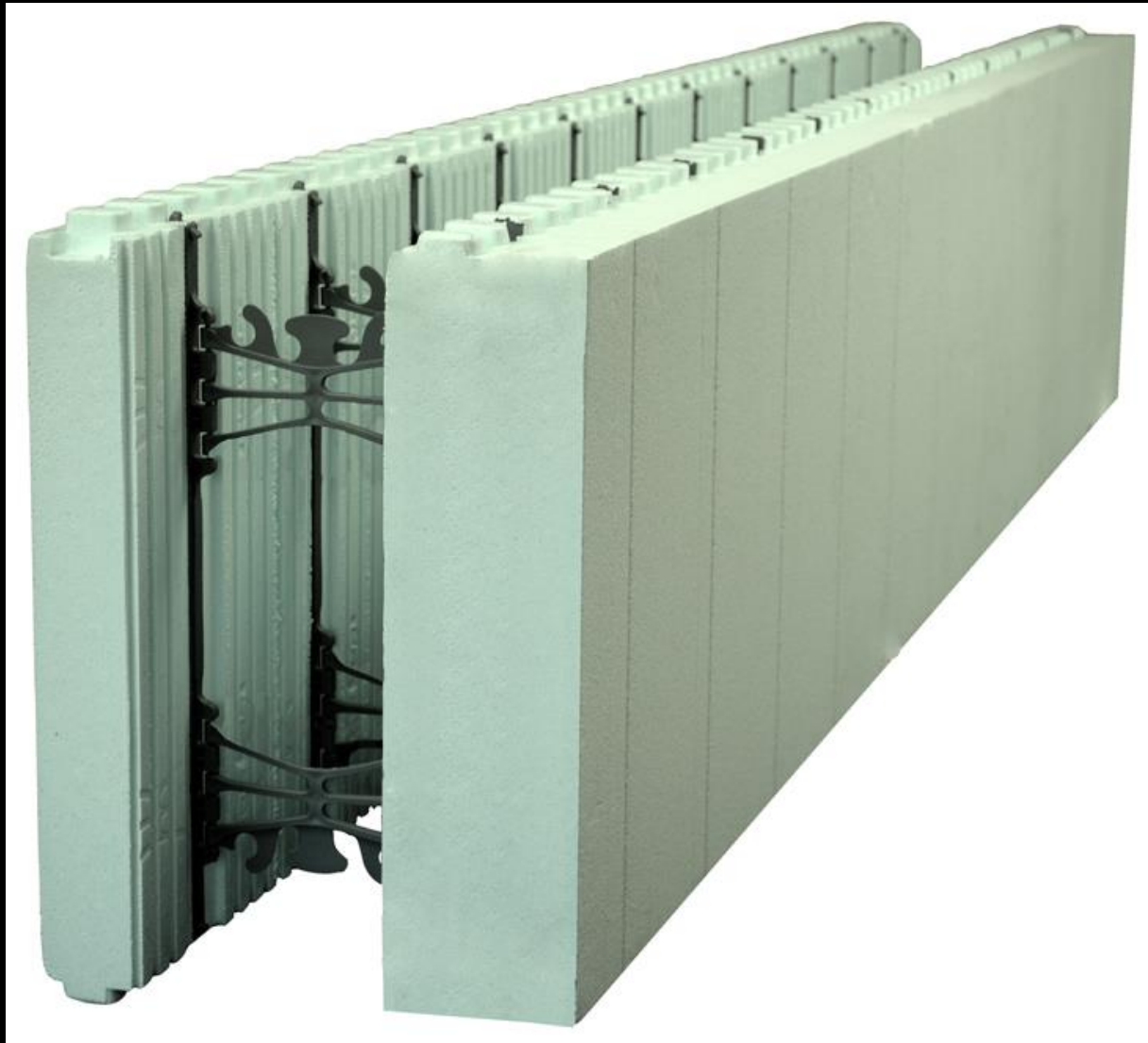




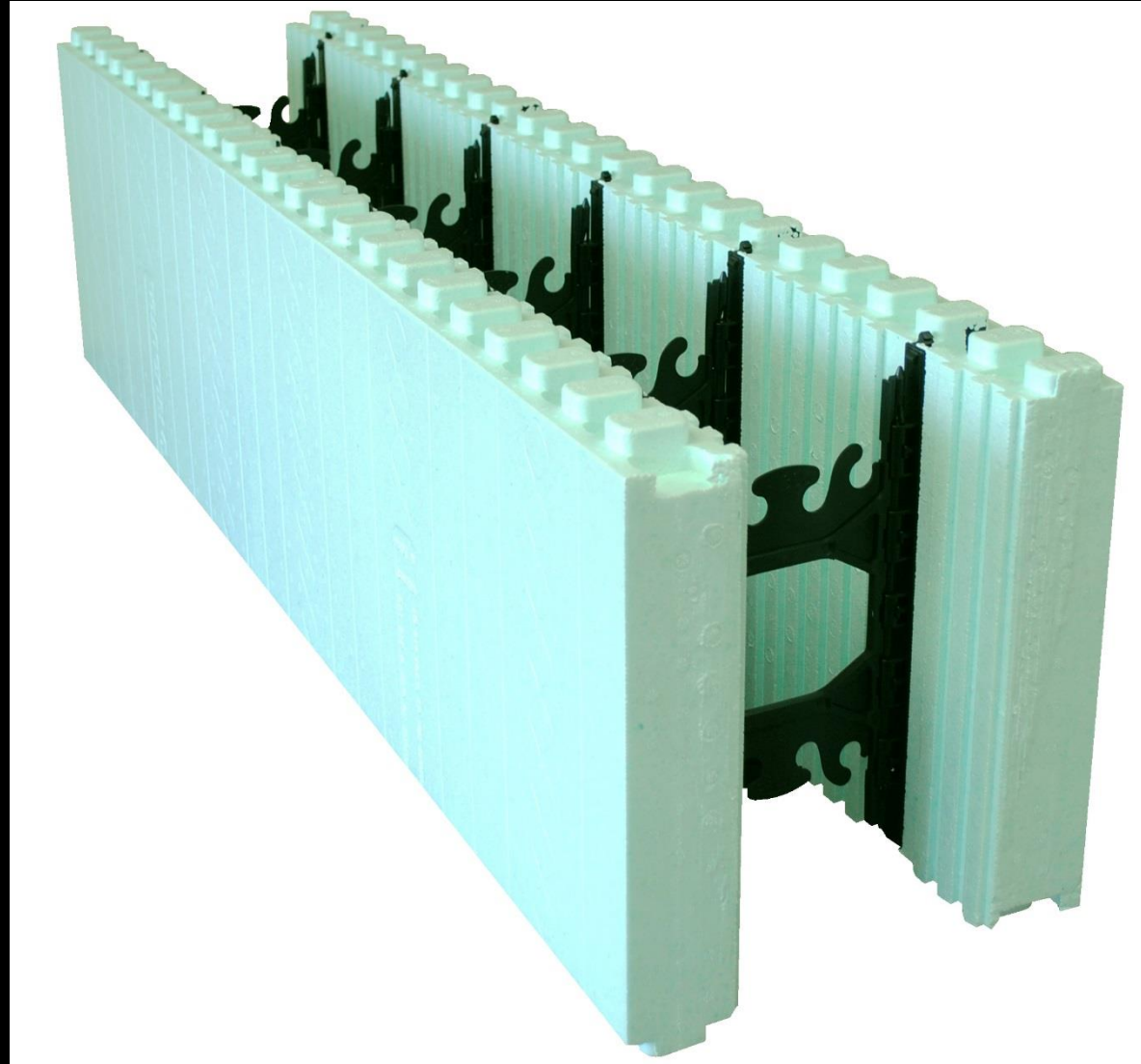




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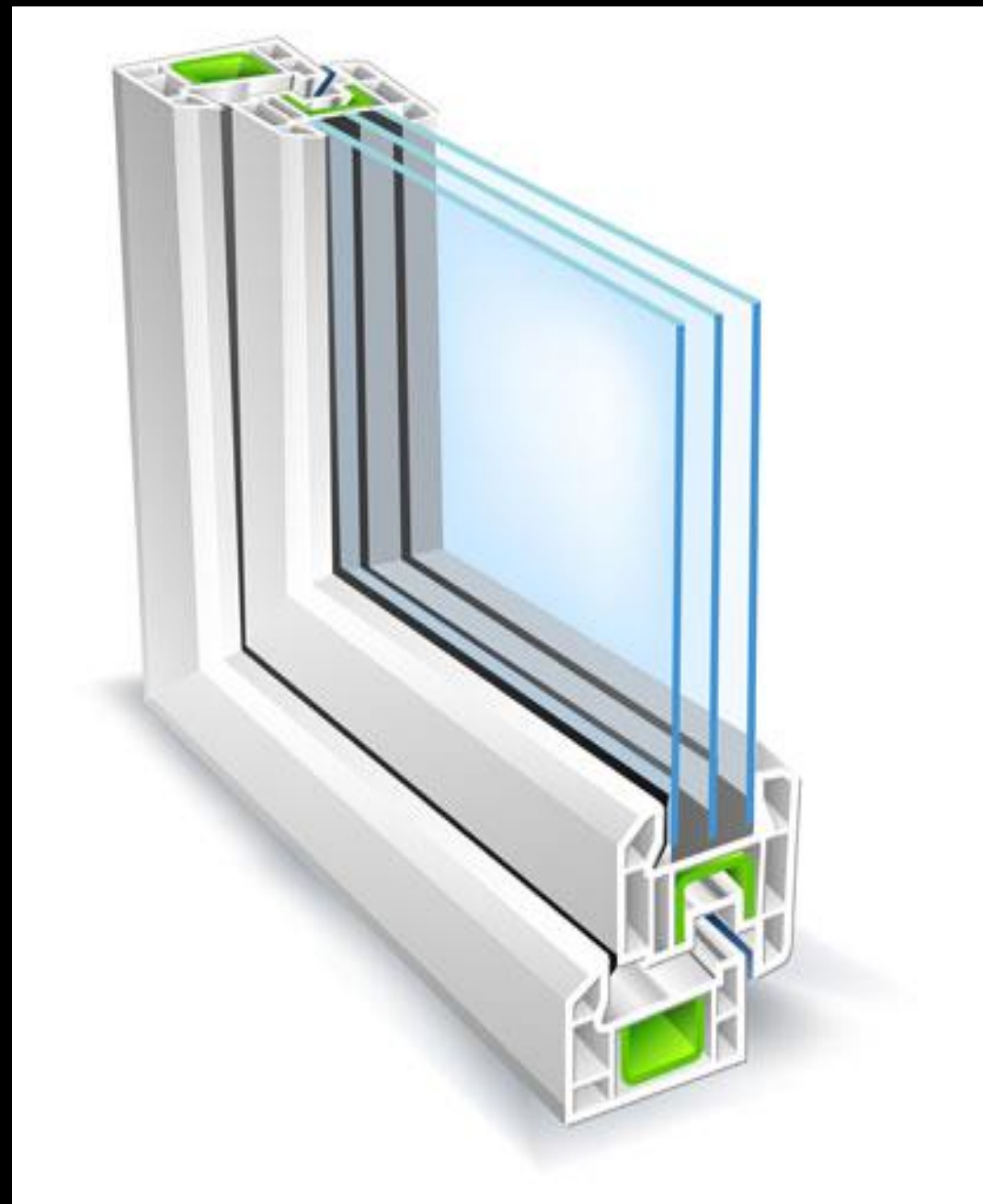
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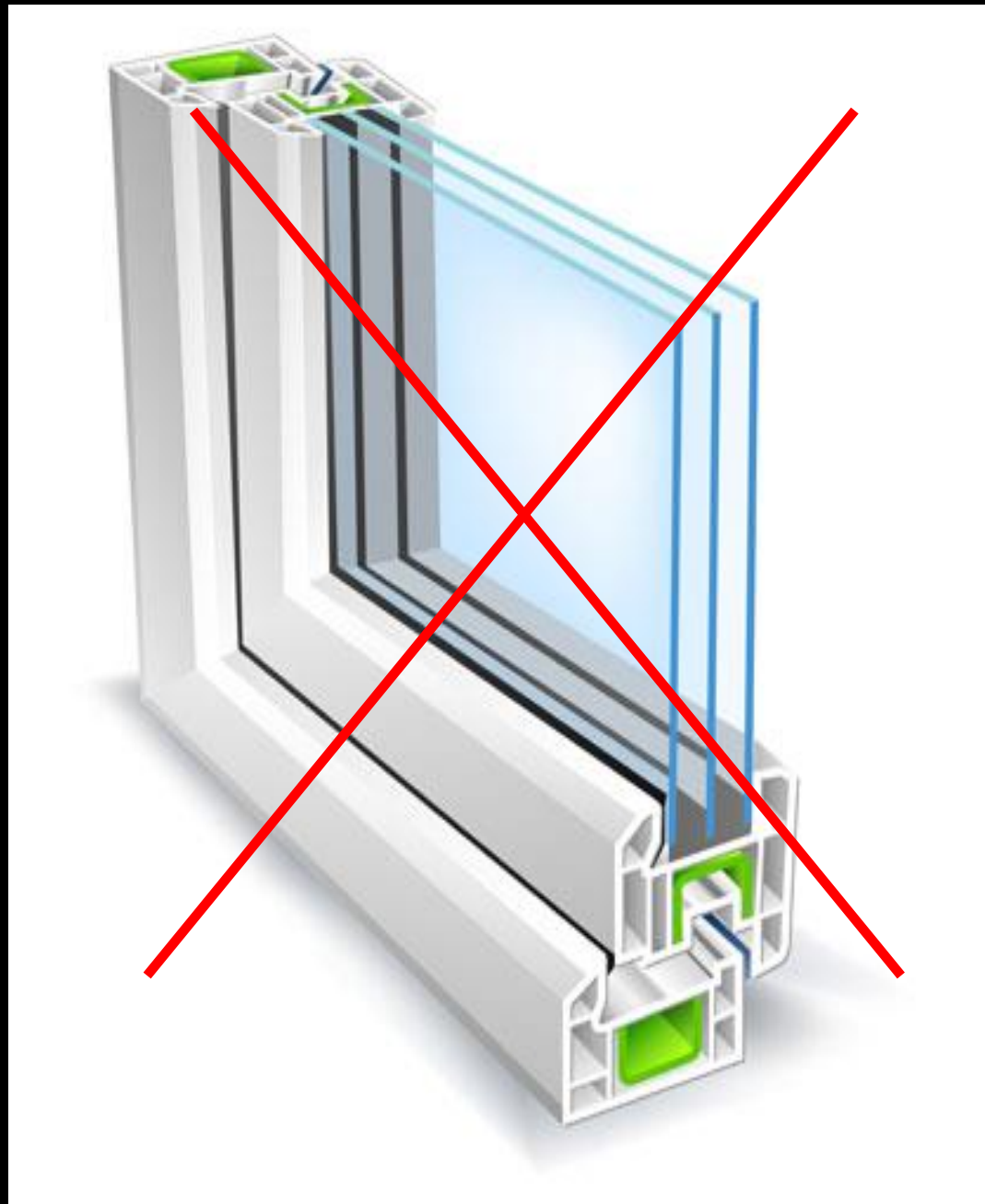




[www.icfpanels.com](http://www.icfpanels.com)

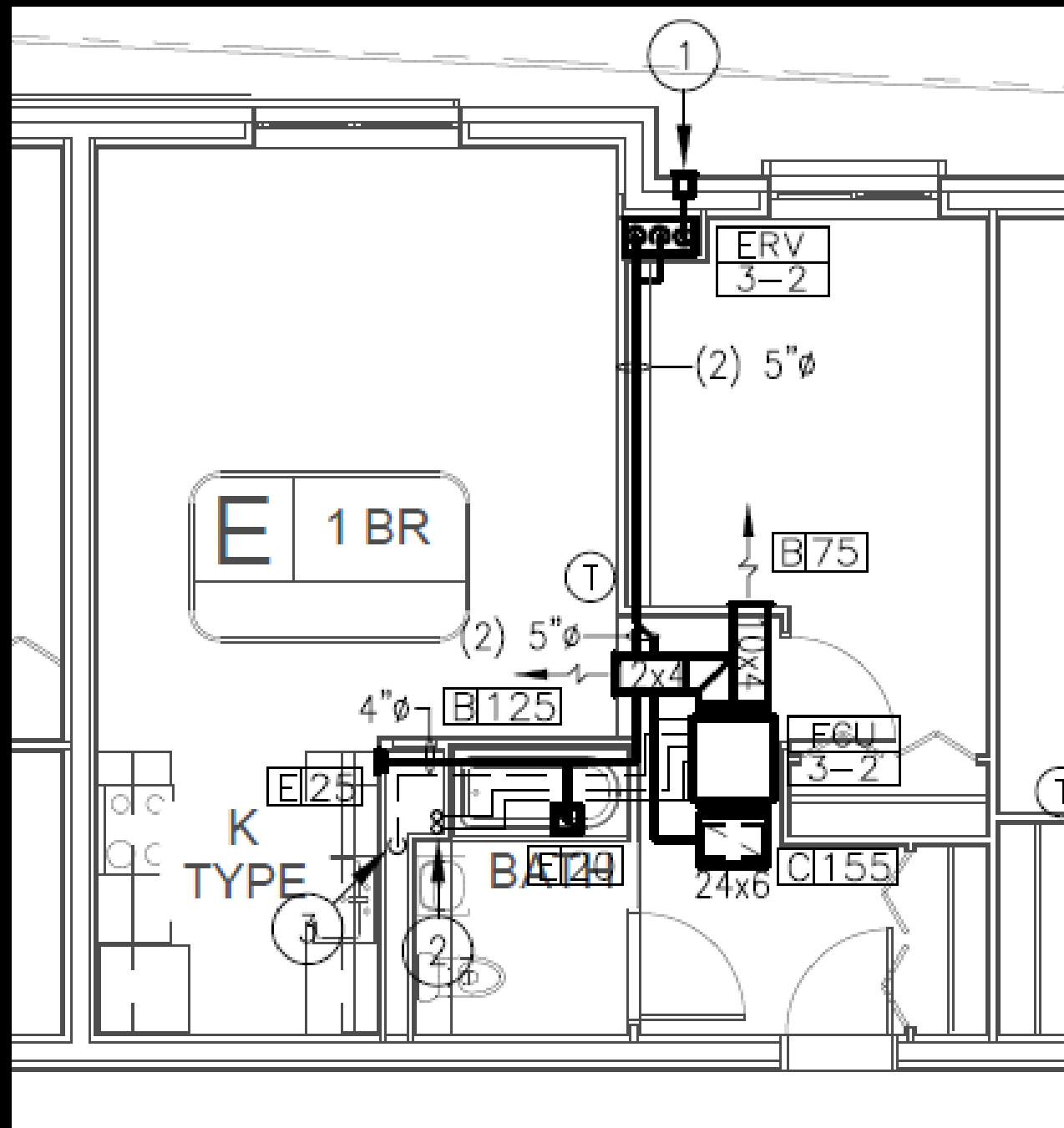


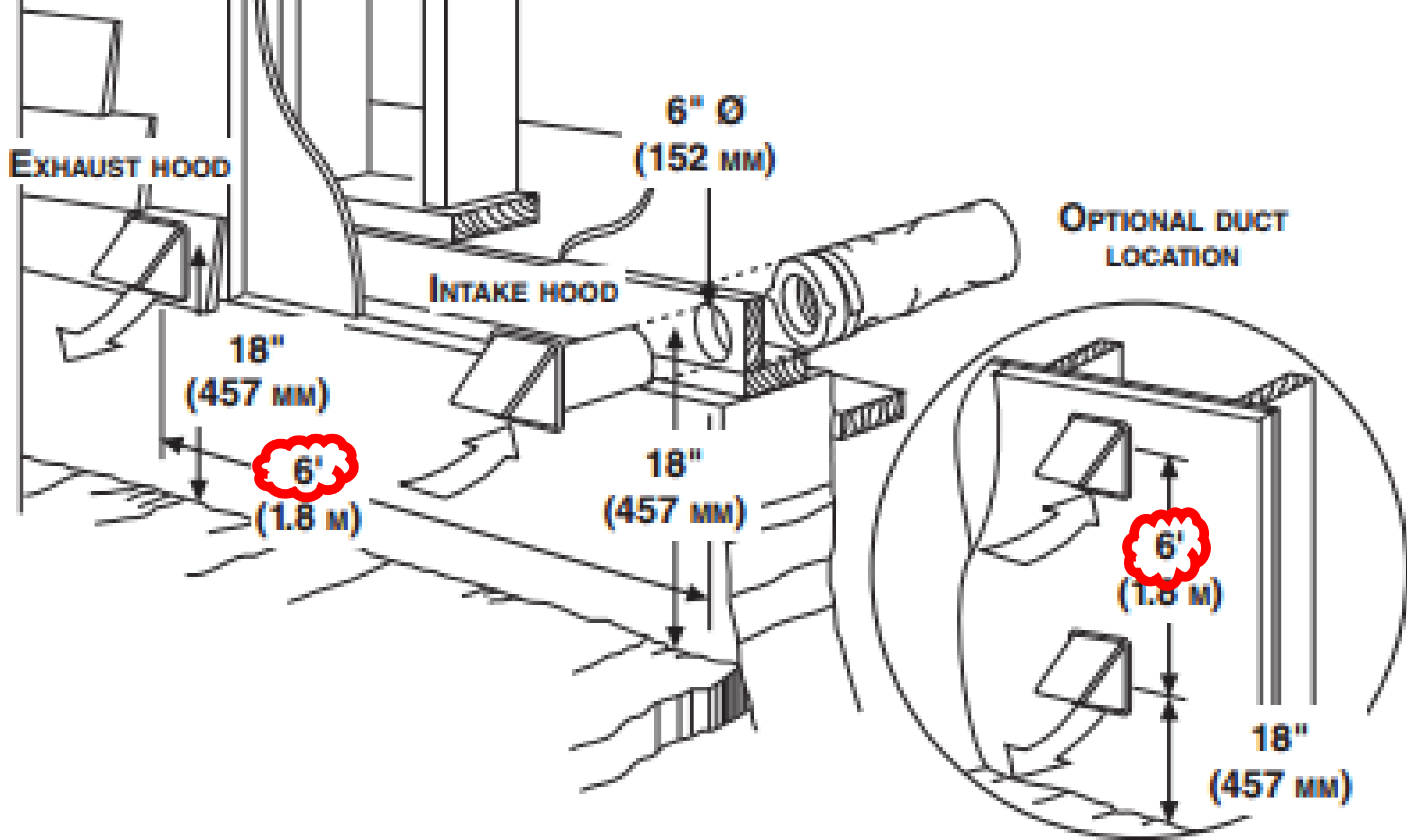














CCD1: Construction Code  
Determination Form

Must be typewritten.



**1 Location Information** Required for all requests on filed applications.

House No(s) 45-05 Street Name ROCKAWAY BEACH BOULEVARD  
Borough Queens Block 15853 Lot 48 BIN 4602735 CB No. 414

**2 Applicant Information** Required for all requests on filed applications.

Last Name LONERGAN First Name Mark Middle Initial Edward  
Business Name JOHNSON & URBAN, LLC Business Telephone 732-772-1500  
Business Address 285 HIGHWAY 34 Business Fax  
City COLTS NECK State NJ Zip 07722 Mobile Telephone  
E-Mail MLONERGAN@JOHNSONURBAN.COM License Number 092080  
License Type  P.E.  R.A.  RLA DOB PENS ID # (if available)

**3 Attendee Information** Required if different from Applicant in section 2 or no Applicant.

Relationship to the property:  Filing Representative  Attorney  Other  
Last Name CHOI First Name HACKJONG Middle Initial  
Business Name WILLIAM VITACCO ASSOCIATES, LTD Business Telephone 212-791-4578  
Business Address 299 BROADWAY, 5TH FLOOR Business Fax  
City New York State NY Zip 10007 Mobile Telephone  
E-Mail hchoi@vitacco.com License/Registration # (if P.E./R.A./R.L.A./Attorney)  
DOB PENS ID # (if available) A11829

**4 Nature of Request** Required for all requests. Only one request may be submitted per form.

Note: Do not use this form for Zoning Resolution determination requests - use ZRDF form  
Determination request issued to:  Borough Commissioner's Office  Technical Affairs  
Job associated with this request?  Yes (provide job title and examiner name below)  No  
Job Number: 420653377 Document Number: 4 Examiner: MARIA TERESA FERNANDEZ  
Has this request been previously denied?  Yes (attach all denied request form(s) and attachment(s))  No  
Indicate total number of pages submitted with this request, including attachments: (attachment may not be larger than 11" x 17")  
Construction Code (if applicable):  2014 Code  2008 Code  1988 Code  Prior to 1988 Code  
Indicate relevant code section(s), rule(s), etc: MC 501.2.1.6.2, BC 1203.1, Appendix F of ASHRAE 62.1 - 2007  
Indicate all Buildings Department officials that you have previously reviewed this issue with (if any):  
 Borough Commissioner  Code & Zoning Specialist  General Counsel's Office  
 Deputy Borough Commissioner  Chief Plan Examiner  Other:

ADMINISTRATIVE USE ONLY		
Reference #:	Appointment date:	Appointment time:
Appointment Scheduled With:		
Comments:		
Reviewed By:	Date:	Time:

REVIEWED BY  
Scott D. Fevan, RA  
  
APPROVED WITH CONDITIONS  
CCD 1 (4/2/14) Page 1 of 3  
Date: 11/05/2015

STATE OF NEW YORK  
DEPARTMENT OF STATE  
ONE COMMERCE PLAZA  
99 WASHINGTON AVENUE  
ALBANY, NY 12231-0001  
WWW.DOS.NY.GOV

ANDREW M. CUOMO  
GOVERNOR  
CESAR A. PERALES  
SECRETARY OF STATE

STATE OF NEW YORK: DEPARTMENT OF STATE

In the Matter of the Petition of: DECISION  
Banta Homes Corp.  
For a Variance to the New York State  
Uniform Fire Prevention & Building Code PETITION NO. 2015-0385

Upon the application of Banta Homes Corp., filed pursuant to 19 NYCRR 1205 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 M, mercantile occupancies, 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:

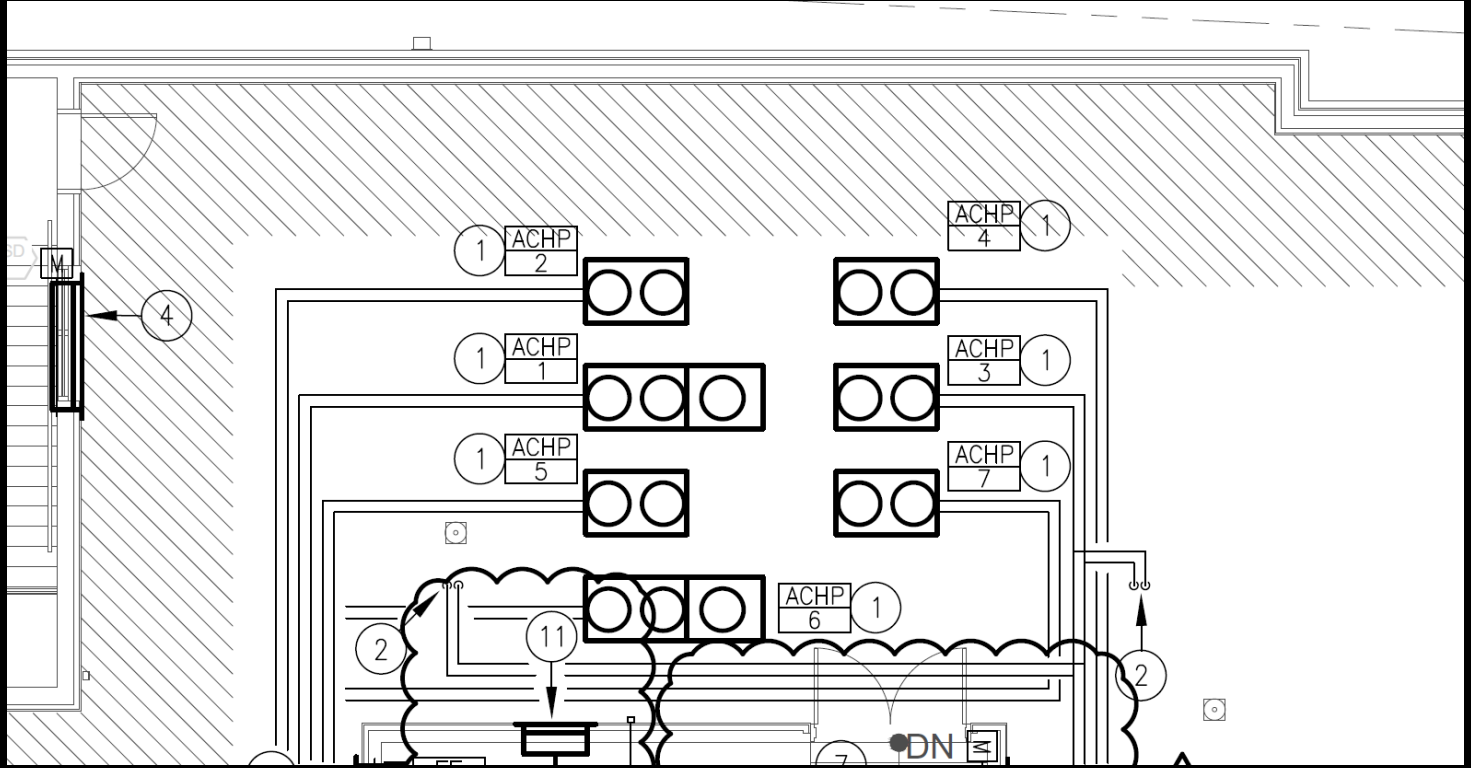
- 19 NYCRR, Part 1223, The Mechanical Code of New York State, Section 501.2.1, which requires that the termination point of exhaust outlets and ducts discharging to the outdoors shall be located with the following minimum distances:
  - For ducts conveying explosive or flammable vapors, fumes or dusts: 30 feet from property lines; 10 feet from operable openings into buildings; 6 feet from exterior walls and roofs; 30 feet from combustible walls and operable openings into buildings which are in the direction of the exhaust discharge; 10 feet above adjoining grade.
  - 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.
  - 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.
  - 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 subslab soil exhaust systems, see Section 512.4.

[The 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

UNIT NO.	SERVICE	MODEL NO.	COOLING			HEATING			ELECTRICAL C
			CAPACITY MBH	PROPOSED EFFICIENCY	CODE MIN. EFFICIENCY	CAPACITY MBH	PROPOSED EFFICIENCY	CODE MIN. EFFICIENCY	
ACHP-1	UNITS A & R	RXYQ216TTJU	206	11.7 EER	10.6 EER	231	3.65 COP	3.2 COP	208/3/60
ACHP-2	UNITS B,C & Q	RXYQ216TTJU	206	11.7 EER	10.6 EER	231	3.65 COP	3.2 COP	208/3/60
ACHP-3	UNITS P & N	RXYQ144TTJU	138	11.5 EER	10.6 EER	154	3.72 COP	3.2 COP	208/3/60
ACHP-4	UNITS D,E, & H	RXYQ192TTJU	184	12.3 EER	10.6 EER	206	3.6 COP	3.2 COP	208/3/60
ACHP-5	UNITS F & G	RXYQ168TTJU	160	10.6 EER	10.6 EER	180	3.49 COP	3.2 COP	208/3/60
ACHP-6	UNITS J & M	RXYQ216TTJU	206	11.7 EER	10.6 EER	231	3.65 COP	3.2 COP	208/3/60
ACHP-7	UNITS K & L	RXYQ144TTJU	138	11.5 EER	10.6 EER	154	3.72 COP	3.2 COP	208/3/60
ACHP-8	LOBBY	RZQ24PVJU9	24	XX EER	XXEER	27	XX COP	XX COP	208/1/60

**1,262**

**1,414**

### NOTES:

1. SELECTIONS 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
4. UNIT SHALL HAVE INVERTER
5. CONDENSER COIL GUARD.
6. ROOF SUPPORT RAILS WITH





## AIR-COOLED HEAT PUMP CONDENSING UNIT SCHEDULE

UNIT NO.	SERVICE	MODEL NO.	COOLING			HEATING		
			CAPACITY MBH	PROPOSED EFFICIENCY	CODE MIN. EFFICIENCY	CAPACITY MBH	PROPOSED EFFICIENCY	CODE MIN. EFFICIENCY
ACHP-1	UNITS A & R	RXYQ192TTJU	184	12.3 EER	10.6 EER	206	3.6 COP	3.2 COP
ACHP-2	UNITS B,C & Q	RXYQ168TTJU	160	10.6 EER	10.6 EER	180	3.49 COP	3.2 COP
ACHP-3	UNITS D,E, & H	RXYQ168TTJU	160	10.6 EER	10.6 EER	180	3.49 COP	3.2 COP
ACHP-4	UNITS F & G	RXYQ168TTJU	160	10.6 EER	10.6 EER	180	3.49 COP	3.2 COP
ACHP-5	UNITS P & N	RXYQ120TTJU	114	12.1 EER	10.6 EER	129	3.46 COP	3.2 COP
ACHP-6	UNITS J & M	RXYQ192TTJU	184	12.3 EER	10.6 EER	206	3.6 COP	3.2 COP
ACHP-7	UNITS K & L	RXYQ120TTJU	114	12.1 EER	10.6 EER	129	3.46 COP	3.2 COP
ACHP-8	LOBBY	RZQ24PVJU9	24	12.0 EER	XX EER	27	XX COP	3.38 COP

1,100 / 1,262

1,240 / 1,454

**NOTES:**

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2. RATINGS BASED ON 95 DEG.F AMBIENT TEMPERATURE FOR COOLING
3. RATINGS BASED ON 10 DEG.F AMBIENT TEMPERATURE FOR HEATING
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5. PROVIDE MFR'S INTELLIGENT TOUCH CONTROLLER WITH TENANT BILLING.

**ACCESSORIES:**

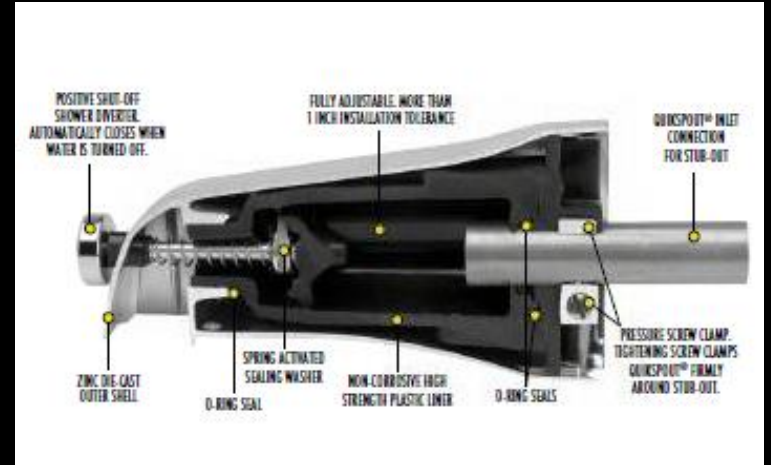
1. LOW AMBIENT
2. POWER DISCO
3. SYSTEM SHALL
4. UNIT SHALL HA
5. CONDENSER C
6. ROOF SUPPOR



**Tri-Max Aerator**  
 0.5 / 1.0 / 1.5 GPM  
 (1.8 / 3.8 / 5.7 LPM)

- Three flow rate options
- Patented FlexFlo technology
- Dual-thread connection

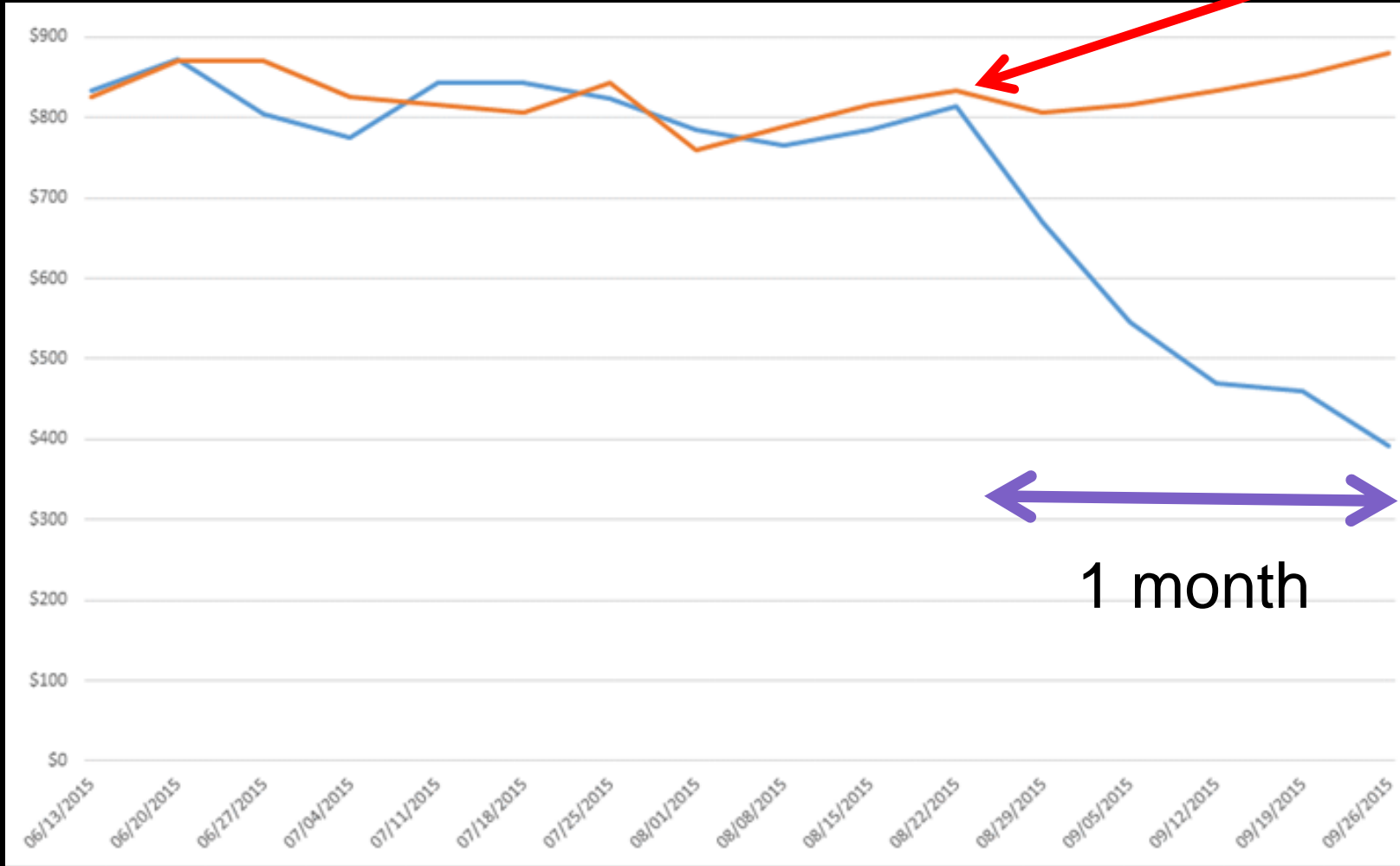




Yellow line – water/sewer cost 2014

Blue line – water/sewer cost 2015

Start of building-wide retrofit of all plumbing fixtures



ROI in less than 8 months.

- 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



United Rentals  
1-800-UR-RENTS

Rockaway Beach  
Business

60759-116  
COMMERCIAL

R-9358

THE TREASURY CO.  
SALEM



42 Broad Street  
Mount Vernon, NY



Tree of Life  
Jamaica, NY



25 story tower  
Waterloo, Canada

Questions?

[sb@bluestoneorg.com](mailto:sb@bluestoneorg.com)

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