



Court Square

PROJECT SPECIFICS:

- Winner of NYSERDA's Buildings of Excellence Award – Rnd 2; Incentive awarded: \$1M
- 45-01 23rd Street Court Sq Long Island City NY
- High-rise tall new construction building with commercial, marketrate rentals and condominiums
- 351,000 sqft

KEY TERMS:

New construction; NYSERDA BOE; LL97; Building Simulation; Energy analysis; GHG emission reduction; ERM Analysis; Central heat pump water heating, Purchase of RECs, VRF (heat recovery), Induction cooktop, HP clothes dryer, Smart building controls, ERV 'Court Square - Sustainable Luxury Re-Imagined'



Sustainability and energy efficiency targets:

- LEED-Homes v4 MFMR Gold rating
- 52% improvement in site energy compared against ASHRAE 90.1-2013
- 41% reduction in GHG emissions
- Purchase RECs to be carbon neutral
- LL97 analysis and compliance
- Passive survivability and Climate resiliency





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EMISSION REDUCTION MEASURES STUDIED:

- All-electric heat pumps boilers vs. condensing gas boilers
- Hybrid heat pumps in dwelling units vs. water source heat pumps
- Air-source heat recovery VRF splits for the offices vs. condenser water/hot water piping stubs
- Improved SHGC values at the façade
- 30% lighting power density reduction in apartments and front of house spaces.

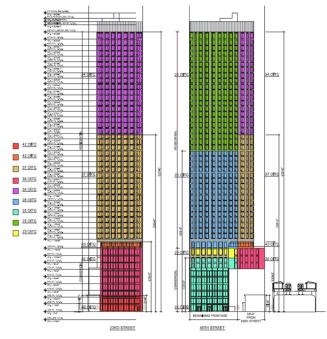




Figure 1 View Glass SHGC Values vs. Tint Levels

