

# Green Building Techniques for High- Density Apartment Buildings:

The Solaire, 20 River Terrace  
NY, NY

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# The Solaire

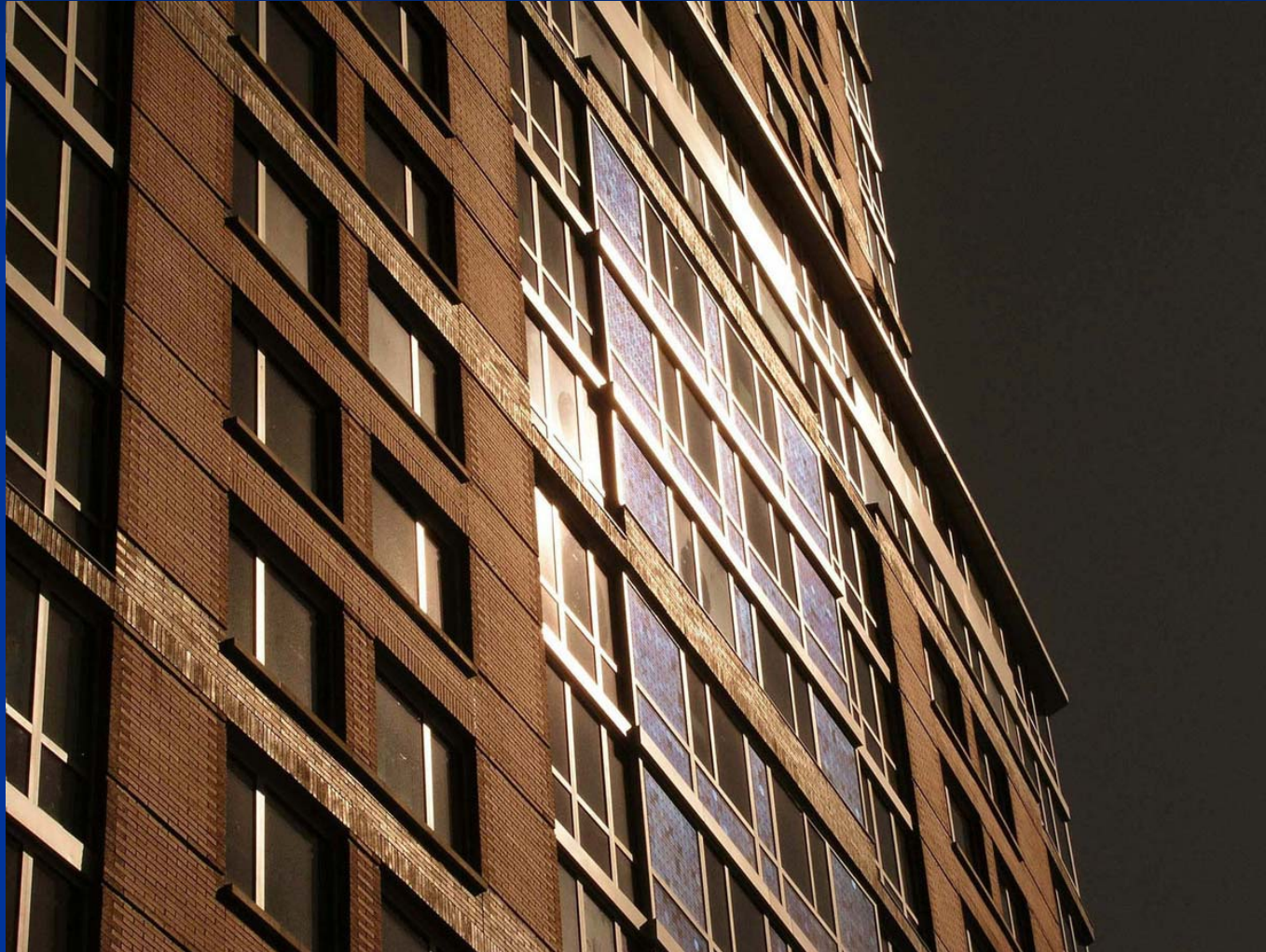
- Battery Park City
- 193 unit residential structure on .38 acre
- Gold LEED
- Building techniques follows numerous sets of guidelines.



# Energy Conservation

- Designed to consume 35% less energy
- Reduces peak demand by 65%
- Photovoltaic Cells
- Central HVAC System
- Gas-Powered Chiller System
- Energy-efficient light fixtures
- Occupancy Sensors
- Decreases dependence on polluting NYC power grid

# Energy Conservation 2



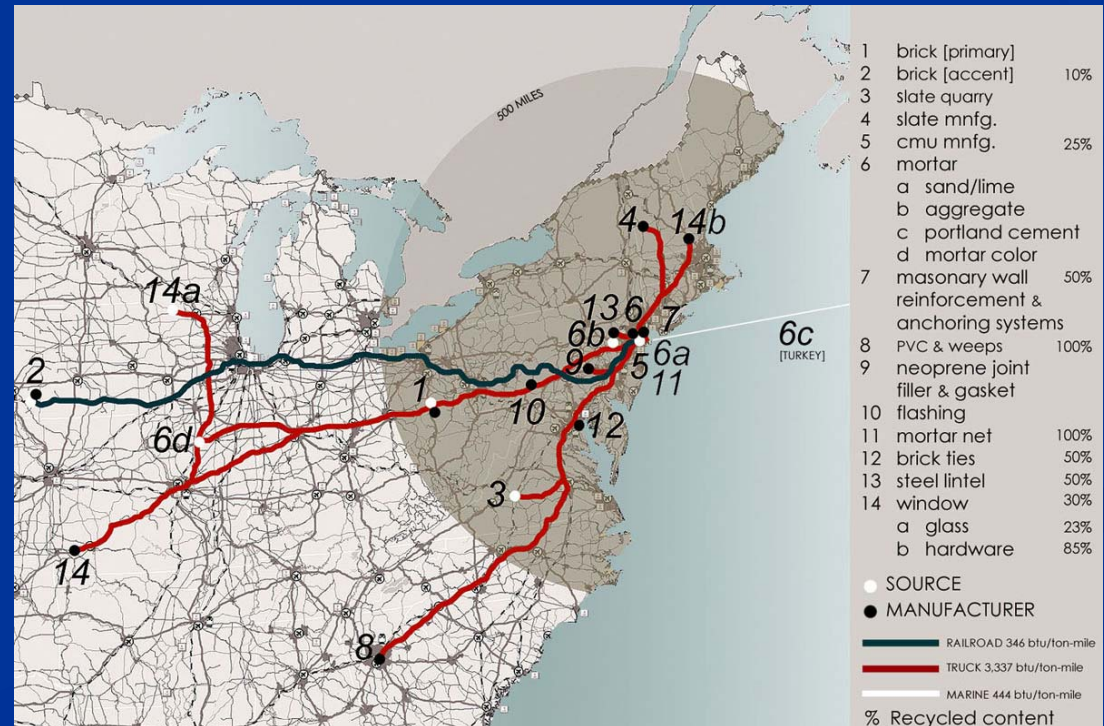
# Water Management

- Stormwater Retention System
- Vegetated Roof
- Greywater System
- Conservation Efforts



# Regional Materials

- 66% of total Materials from within 500 miles for LEED points
- Transportation of Materials
- Foreign Materials



# Recycled and Reuse of Materials

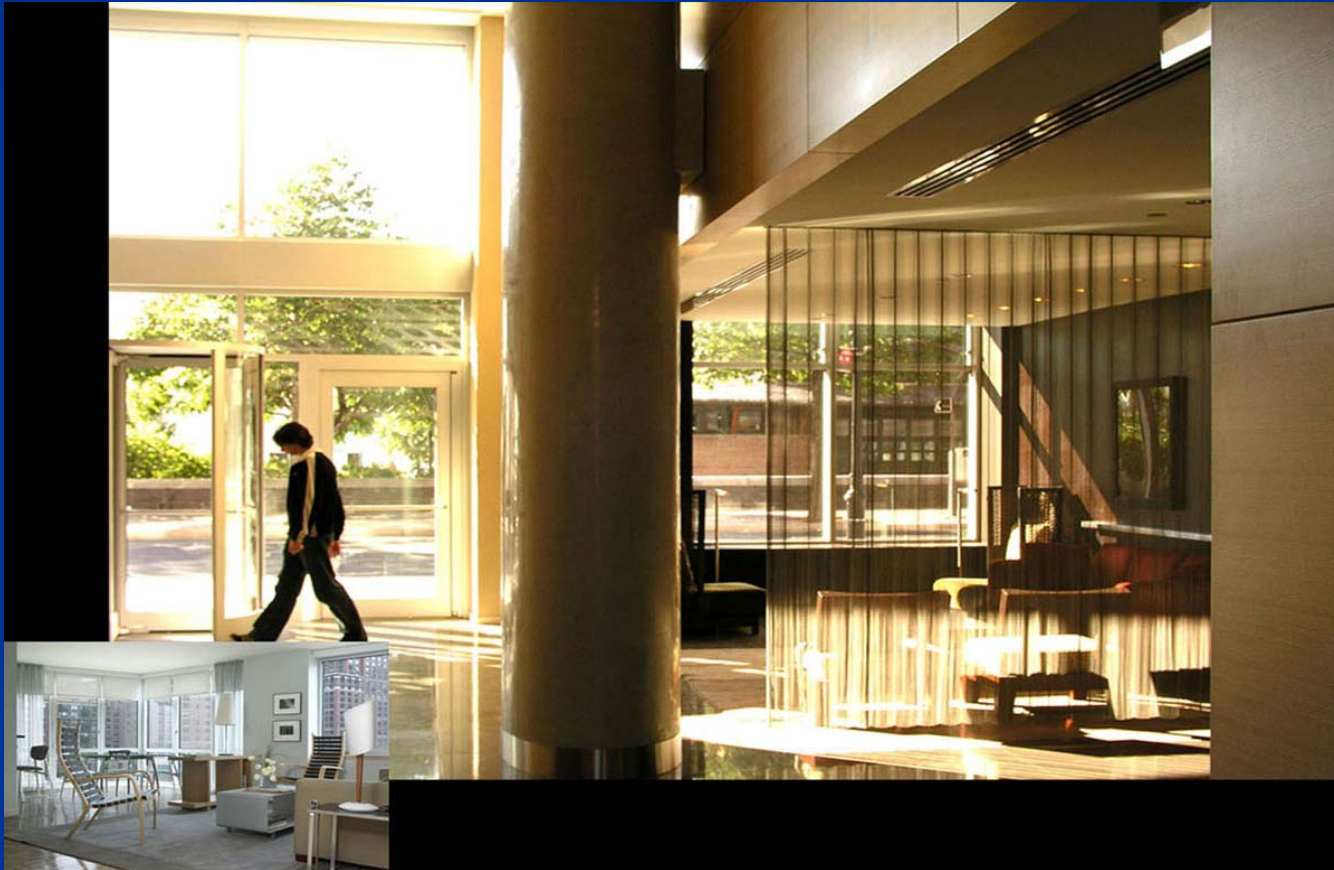
- 19% of the building materials are made of recycled content
- Photovoltaic cells made of 100% recycled material
- Only formaldehyde and VOC-free materials
- Green Materials:
  - Slate roof shingles
  - Cork flooring
  - Mineral wool insulation
- 93% of construction waste sold for reuse or recycled

# Cost and Financing

- Higher up-front cost of green materials and techniques
  - Pays off in life of building, energy efficiency, and water conservation
- Major financing tools were loans and long-term financing
- Ground lease from BPCA
- NY State Green Building Tax Credit
- NY State Housing Authority
- NY State Energy Research and Development Authority

# Summary

- Extremely successful example of green building techniques



# Sources

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