**Strategic Approach:**

- **Type of Project:**
  Two Story Townhome
- **Location/Climate:** Atlanta, GA, CZ 3A
- **Design Strategy:**
  Open layout with emphasis on scalability by including a rear apartment that can be converted to family room later.
- **Technical Strategy**
  - Enclosure: 2x6 framing, Rigid insulation sheathing, No Attic, Self-shading facade
  - HVAC: Split system heat pump, Spot and integrated ERV
  - IAQ: zero VOC paint, CARB-II materials, No carpets
- **Construction Cost Strategy:** Used a custom computational optimization script to find balance between performance and cost.

**Technical Specifications:**

- Wall R-Value: **R-21+6.6**
- Ceiling R-Value: **R-38**
- Slab Perimeter: **R-10**
- Window R-Value: **R-3.3**
- Window SHGC: 0.27
- Heat Pump HSPF: 9
- Heat Pump SEER: 16.0
- Water Heater EF: 2.4

**Key Statistics:**

- **Location:** Atlanta, GA
- **2009 IECC Climate Zone:** 3A
- **Square Feet:** 2,390
- **Number of Stories:** 2
- **Number of Bedrooms:** 3
- **Number of Bathrooms:** 2.5
- **Estimated Construction Cost:** $230,000
- **HERS Index Score:** -12
- **Estimated Monthly Utilities:** $14 (water included)