Ryerson University – Harvest Home

Strategic Approach:
- Type of Project: Three Story Townhome
- Location/Climate: Denver, CO, CZ 5
- Design Strategy:
  To design an affordable Passive House which is flexible and maximizes daylighting to create a comfortable environment. Secondary objectives included Net-Zero Energy ready and locally materials.
- Technical Strategy
  - Super Insulated, airtight envelope with minimal thermal bridging
  - Envelope durability and constructability
  - High performance windows with controlled solar gains.
  - Balanced Mechanical ventilation
- Construction Cost Strategy:
  Compact efficient layout with conventional framing. Reduced heating and cooling system.

Technical Specifications:
Wall R-Value: R-44
Ceiling R-Value: R-56
Foundation R-Value: R-48
Window R-Value: R-6
Window SHGC: .50
Heat Pump HSPF: 8.9
Heat Pump SEER: 18.0
Water Heater EF: 2.40

Key Statistics:
Location: Denver, Colorado
2009 IECC Climate Zone: 5
Square Feet: 1,275
Number of Stories: 3
Number of Bedrooms: 2
Number of Bathrooms: 2
Estimated Construction Cost: $181,345