THE HARRY AND JEANETTE WEINBERG COMMONS
MISSION-DRIVEN DEVELOPMENT TO REINTEGRATE EXISTING COMMUNITIES
BRINGING LOW-ENERGY BUILDINGS TO THE MASSES IS NOT BUSINESS AS USUAL

1. IMPLEMENT PASSIVE HOUSE STRATEGIES AND MEASURES

2. ASSEMBLE A TEAM THAT IS COMMITTED

3. RECOGNIZE THE EXISTING LIMITATIONS OF RETROFIT

4. ADAPT TO GIVEN CONDITIONS

5. KEEP THE RESIDENT NEEDS AS PRIORITY
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5. KEEP RESIDENT NEEDS AS PRIORITY
REPEATABLE
REPEATABLE + INTEGRATED DESIGN + CONSTRUCTION MEASURES

• PROVIDE ROBUST, ABOVE CODE, ENVELOPE W/ MINIMAL THERMAL BRIDGES

  o CODE COMPLIANT WALL R-VALUE:
    R-20

  o WEINBERG COMMONS WALL R-VALUE:
    R-39
REPEATABLE + INTEGRATED DESIGN + CONSTRUCTION MEASURES
REPEATABLE + INTEGRATED DESIGN + CONSTRUCTION MEASURES

- PROVIDE ROBUST, ABOVE CODE, ENVELOPE W/ MINIMAL THERMAL BRIDGES

- AIRTIGHTNESS THAT IS 5X THE STANDARD THRESHOLD
  - CODE COMPLIANT AIRTIGHTNESS: 3.0 ACH\textsubscript{50}
  - WEINBERG COMMONS AIRTIGHTNESS: 0.58 ACH\textsubscript{50}
REPEATABLE + INTEGRATED DESIGN + CONSTRUCTION MEASURES
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- PROVIDE ROBUST, ABOVE CODE, ENVELOPE W/ MINIMAL THERMAL BRIDGES

- AIRTIGHTNESS THAT IS 5X THE STANDARD THRESHOLD

- FOR THE “HOLES” IN THE ENVELOPE, INSERT HIGH PERFORMANCE SYSTEMS
  - SPECIFICATION: TRIPLE-PANED GLASS W/ COMPRESSION-SEALED SASHES AND DOORS
REPEATABLE + INTEGRATED DESIGN + CONSTRUCTION MEASURES
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- AIRTIGHTNESS THAT IS 5X THE STANDARD THRESHOLD

- FOR THE “HOLES” IN THE ENVELOPE, INSERT HIGH PERFORMANCE SYSTEMS

- MANAGE SOLAR GAIN WITH WINDOW "APERTURES"
  - SITE-SPECIFIC ANGLES TO OPTIMIZE SHADE AND SUN FOR YEAR-ROUND COMFORT
REPEATABLE + INTEGRATED DESIGN + CONSTRUCTION MEASURES
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- PROVIDE ROBUST, **ABOVE CODE**, ENVELOPE W/ MINIMAL THERMAL BRIDGES

- AIRTIGHTNESS THAT IS 5X THE STANDARD THRESHOLD

- FOR THE “HOLES” IN THE ENVELOPE, INSERT HIGH PERFORMANCE SYSTEMS

- MANAGE SOLAR GAIN WITH WINDOW "APERTURES"

- INSTALL A RESILIENT SKIN (RAINSCREEN)
REACHABLE
SIMPLE + REACHABLE
HIGH PERFORMANCE

- ENERGY RECOVERY VENTILATOR (ERV)
- GROUND LOOP HEAT EXCHANGER
- HIGH EFFICIENCY HEATING AND COOLING (VRF)
- DRAIN WATER HEAT RECOVERY
- SOLAR THERMAL COLLECTOR FOR DOMESTIC HOT WATER
- ON-SITE PHOTOVOLTAIC ARRAY

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ENVIRONMENTAL AND ENERGY STUDY INSTITUTE | SUSTAINABLE AFFORDABLE HOUSING
SIMPLE + REACHABLE
HIGH PERFORMANCE

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