

GREEN BUILDING PRACTICES

Update: 9/14/21

Goals and Purpose:

IHT is committed to using best green building practices to decrease maintenance and energy costs in order to ensure on-going (monthly) affordability for our tenants, as well as in construction. Developing durable, thoughtful and efficient buildings is critical to our mission, our resident's needs, and making progress towards a sustainable Martha's Vineyard.

Standard Practices We Employ

Site Design & Landscaping

- Use cluster development strategies to minimize area of impact on the land.
- Preserve prime conservation (and agricultural) land in partnership with conservation organizations where possible;
- Create shared systems (wells, septic, etc.) and functions (common land, driveways, etc.);
 - Utilize state-of-the-art denitrification septic systems requiring minimal maintenance, electric usage, and no chemical additives (currently: NitROE technology);
- Design pedestrian friendly neighborhoods that limit vehicular traffic, paving, and maximize permeable surfaces;
 - Provide resident-access EV charging stations at +/- 10% of parking slots.
- Focus on properties that are accessible by public transportation whenever possible.
- Model our designs on local vernacular and neighborhood scale.
- Provide enough clear south facing roof to accommodate solar collection;
- Site houses utilizing terrain features to increase ease of physical access (see Universal Design);
- Protect existing trees, plants, and landscaping features on site from construction damage;
- Minimize grass lawns and use local drought resistant plant species well adapted to the climate;
- Avoid use of fertilizer, pesticides and chemicals that may leach into groundwater;

Building Construction

- Use of Passive House "aligned" construction methods for airtight construction efficiencies;
- Meet or exceed Energy Star II for Homes Standards with third party testing that achieves a Home Energy Rating System (HERS) Index of 40 or better, including:
 - Highest quality insulation (cellulose or Demilac foam) with third party inspection to Grade #1 insulation;
 - Airtight construction, air leakage test lesser of 0.125 ACH or 1 sq inch per 100 sf building shell area;
 - High performance triple-glazed casement windows @ U-0.20 or better ratings;
 - Insulated exterior doors @ R-2.8 or better ratings;
 - Ducted ERV's with booster controller in bathrooms @ minimum 34 CFM per unit;
 - High efficiency Air Source Heat Pumps for both HVAC and Hot Water;
 - Energy Star certified appliances, with all light fixtures to be LED.
- Use high efficiency water conservation fixtures (toilets, showers, faucets);
- No fossil fuels;
- Incorporate sun-tempering techniques (+/-10% south glass to floor area);
- Efficient use of square footage and volume of our apartments (i.e. 1-BR units @ 550-650 sf, 2-BR units @ 750-850 sf, and 3BR units @ 950-1,100 sf);
- Design good daylight and cross ventilation throughout for natural summer cooling (i.e. windows on two sides of every room whenever possible);
- Incorporate Universal Design practices ("visitability") on all first floor units;
- Use zero-maintenance exterior materials that are durable and require no paint and/or finishes;
- Avoid toxic construction materials (i.e. high VOC paints, glues, particle board, etc.);
- Incorporate materials with high recycled content, FSC certification, and/or locally sourced;
- Design and construction for moisture, mold, and mildew prevention;
- During construction, install all conduit needed for future rooftop solar panels and future radon mitigation (if it becomes needed);
- Actively recycle as much construction and demolition waste as possible.
- Supply building manuals with information on green building practices used, subcontractors, roughing photos of all walls before insulation, maintenance manuals, and warranties.