## Sustainable and Wellness Design Strategies

# WE THINK GLOBALLY & ACT LOCALLY TO CONTRIBUTE SUSTAINABLY TO THE OVERALL WELL-BEING OF HUMANITY

Our design stories are for the present and future, created with a keen sense of responsibility. In everything we do, our intention is to support our clients in leading sustainable practices for the ultimate well-being of the places and communities where our designs are found. These values pervade our work globally so people can continue to experience memorable moments in perpetuity.

Our holistic design approach connects people, environment, well-being, and profit.

### Design Strategies

#### CLIMATE & SITE RESPONSIVE DESIGN CULTURAL/HERITAGE

Protect ecologically sensitive ecosystems and protect wild areas beyond property borders

Minimize building footprint and driveway impact

Optimize solar orientation for passive heating/cooling strategies

Analyze micro-climate of the site to identify features impacting energy design

Benefit from surrounding vegetation when positioning building to increase shading and reduce cooling load

Analyze wind for natural ventilation

Restore native ecosystems, encourage safe and appropriate interaction with wildlife.

Install utility and infrastructure in common corridors to minimize site disruption, improve efficiency and reduce impervious surfaces

#### OLIORAL/IILKIIAGL

Ensure protection and preservation of all cultural and heritage sites

Ensure that all local cultural sensitivities have been considered and respected

Provide educational opportunities for local communities

Celebrate cultural traditions throughout the design

#### HIGH PERFORMACE BUILDING

Air/watertight building envelope

Select high performance glazing, low-e and shading devices to reduce solar heat gain

Understand heat and energy transfer

Create optimal day lighting through building orientation, form, and geometry

Provide thermal control without excess space conditioning costs

Maximize effectiveness of ventilation and Indoor Air Quality

Specify high-efficiency equipment

Ensure window to wall ratios greater than 40% have external shading or adjustable opacity glazing to control heat and glare

Incorporate automated monitors and controls for energy, water, waste, temperature, moisture, and ventilation

Incorporate light colored roofs to reflect sunlight, absorb less heat and reduce cooling energy demand

Incorporate solar water heating

Identify high R-value levels of insulation throughout building

Select high efficiency HVAC systems

Specify automated appliances for lighting, computer and cooling units programmed to shut down when not in use

Incorporate green roofs, trees, vegetation, and light reflective surfaces incorporated to reduce heat island effect

#### **DURABILITY**

Based on the relationship between embodied energy (that energy used to create, market, install and dispose or recover a material or building) and operational energy (that energy the building uses during its operation).

Control heat / air / radiation / moisture though smart design options, specifications and workmanship

High quality Products and Quality Management

#### **PROTECT & CONSERVE WATER:**

Conserve water through high efficiency flush toilets (1.6 GPM per flush) and low-flow showerheads (2 GPM) that conserve potable water

Recycle greywater from sinks, washing machines and surface areas (driveways, parking areas, decks, porches) etc. for use in irrigation limiting the use of potable water

Utilize rainwater harvesting methods such as gutters and downspouts for collection to cisterns

Design roads, driveways, parking areas and general site formation to minimize erosion from storm-water runoff

Employ a diverse variety of native plants for landscaping to reduce irrigation requirements

Design and install energy-efficient hot water distribution system

## GENERATE RENEWABLE ENERGY ON SITE

Based on caring for the environment, lowering utility costs and reducing/offset carbon footprint.

Solar panels producing hot water, photovoltaic panels producing electricity

Develop water harvesting systems focused on management / conservation / replenishment

Produce wind power, geothermal and / or off - grid back up

## WASTE REDUCTION & ON-SITE FOOD PRODUCTION

Recycle food waste to regenerate soil or biogas production

Implement permaculture design practices to grow food onsite

Implement effective recycling and waste management practices, including composting

Design / designate areas to locate recycling bins

#### **MATERIALS & RESOURCES**

Provide an area for storage and collection of recyclable materials

Maintain existing buildings and structures, where possible

Reuse building materials where possible, incorporate salvaged materials into the design

Maximize the use of recycled, repurposed, rapidly renewable, organic materials in the design

Maximize the use of materials sourced and manufactured in the region

Specify building materials are low emitting or do not emit pollutants (low or no VOC's, no CFCs)

Ensure no Isocyanate based polyurethane or urea formaldehyde products are used in interior finishes

Select sound absorbing material when designing acoustics to ensure privacy and comfort

Maximize the use of rapidly renewable materials, such as bamboo and coconut, in the design

Ensure that all wood comes from FSC certified sustainable sources and avoid use of products treated with toxic chemicals

## TRANSPORTATION & CONNECTIVITY

Integrate surrounded region

Enable transit connectivity including community services and facilities

Provide Open space, diversity of garden uses and pedestrian areas

Provide bike paths

## TRANSPORTATION & CONNECTIVITY

Create designs that enhance all dimensions of wellness (mental, Physical, Emotional, Environmental, Financial and Social)

Incorporate biophilic strategies that stimulate the senses. Sight, smell, touch and sound

Offer programming that improves human potential and allow guests to focus on feeling whole – present in mind, nourished in body and revitalized in spirit

Maximize the use of gardens and open space to invite guest to reconnect with the natural surroundings.

Provide experiential F&B, farm to table experiences and promote fruit and vegetables consumption