Town of Davie Office of Community Development

http://www.davie-fl.gov/Pages/daviefl_housingCDv/index 954.797.1173 Suite D

Programs we have to offer:

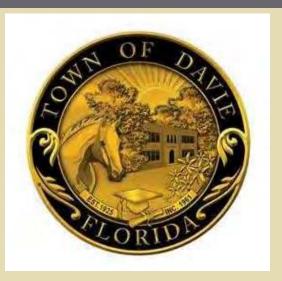
- <u>Purchase Assistance</u>
 Program
- <u>Home Repair &</u> <u>Hardening Program</u>
- Barrier Free Programs
- Affordable Housing
 Development Assistance
- Community
 Development Block
 Grant Programs
- <u>Social Service Referral</u> <u>Program</u>

- <u>Target Area</u> <u>Improvement Program</u>
- <u>Neighborhood</u>
 <u>Revitalization Program</u>
- <u>Community Outreach</u> <u>Programs</u>

Overall Goals

- Upgrade the Existing Housing Stock
- Expand Affordable Rental & Homeownership Opportunities
- Improve & Expand the Infrastructure and Public Facilities
- Promote Self Sufficiency and economic Independence
- Enhance the Quality of Life for Residents of Targeted Neighborhoods which Exhibit Blighting Conditions

List of Available Services



TOWN OF DAVIE NEIGHBORHOOD SERVICE CENTER

4700 SW 64TH AVENUE DAVIE, FL 33314



4700 SW 64TH AVE., DAVIE, FL 33314



Want to help your Broward neighborhood Go Solar?

Your neighborhood organization is invited to

grow solar adoption with the

BROWARD SOLAR CO-OP

- Send an email to your neighborhood
- Post on social media (NextDoor, Facebook, etc.)
- Share the next solar information session
- Place doorhangers around your neighborhood
 - A solar ambassador can provide materials such as doorhangers and yard signs (no contact)
 - Translation and interpretation available upon request

Solar United Neighbors, a vendor-neutral nonprofit helping neighbors go solar, together.

Learn more and sign-up to become a member for free at www.solarunitedneighbors.org/Broward
Questions? Email us at FLteam@solarunitedneighbors.org



Help spread the word about solar!

Sample Email

Solar United Neighbors of Florida to launched the <u>Broward Solar Co-op</u>. Solar United Neighbors brings homeowners together into a group, or co-op. They provide unbiased, installer-neutral support through each stage of the process of going solar. Their experienced team ensures you understand how solar works, how it can be financed, and how it can be installed on your home.

Co-ops take advantage of the group's bulk-purchasing power to get discounted pricing and a quality installation. Co-op volunteers choose an installer on behalf of the entire group through an open and competitive bidding process. The selected installer provides everyone in the group with a personalized proposal for their consideration; there is no obligation to install. Join the Broward Solar Co-op today at: http://solarunitedneighbors.org/Broward.

Sample Social Media Post

Go solar as a group with the Broward Solar Co-op! With the help and expertise of <u>@SolarUnitedNeighborsofFlorida</u>, Co-op members use their bulk-purchasing power to get discounted pricing and a quality installation. No cost to join and no obligation to install. Learn more and become a member today at <u>SolarUnitedNeighbors.org/Broward</u>.

Sample NextDoor Post

Hey neighbors, let's go solar as a group with the Broward Solar Co-op! With the help and expertise of Solar United Neighbors of Florida, Co-op members use their bulk-purchasing power to get discounted pricing and a quality installation. No cost to join and no obligation to install. Learn more and become a member today at <u>SolarUnitedNeighbors.org/Broward</u>.

Solar United Neighbors, a vendor-neutral nonprofit helping neighbors go solar, together.

Learn more and sign-up to become a member for free at http://www.solarunitedneighbors.org/Broward
Questions? Email us at FLTeam@solarunitedneighbors.org



Hope Outreach Center Inc.

www.hopeoutreachfl.org 954.321.0909 Suite A

Helping Youth Succeed

- LEAPS Program Afterschool/Homework
 Assistance Program
- <u>Back-To-School Drive</u> Helping children be prepared for their all important 1st days of school.
- Camp Scholarships

Emergency Services

- Food Pantry
- Partial Financial Assistance
- <u>Counseling</u> -Individual and Family Strengthening
- <u>Education & Support</u>
 Financial, Nutrition, and
 Parenting support +

 Women's Support Group
- Employment Assistance Partnered with Employ Florida
 Marketplace & Work Force One
 Employment Solutions
- Adopt-A-Family Holiday Drive

Senior Services

- Home Evaluations
- Holiday Meals
- <u>Transportation</u> Whether it is for a Doctor visit,
 Grocery store trip, Getting
 your hair done, or a simple
 Park/Mall visit just to get out.



Crisis Housing Solutions

www.crisishousingsolutions.org 954.587.0160 Suite C

Foreclosure Prevention Services

- Review of loan documents
- Comprehensive financial assessments
- Household budgeting
- Ongoing contact with client & lender
- Specifically developing an action plan acceptable to the lender and sustainable by the client

Florida Hardest Hit Fund (HHF) Program

- Assistance to qualified unemployed or under-employed Florida homeowners having difficulty paying their mortgages.
- Applicants may apply online at <u>www.FLHardestHitHelp.org</u> and use Referral Code 43099 or call CHS directly.

First-Time Homebuyer Assistance

 Offer workshops & one-on-one counseling for low-income individuals & families that will assist them in the preparation of a home loan application package with a high likelihood of approval.

Community Stabilization Initiative

- Helps stabilize & revitalize neighborhoods adversely affected by foreclosures.
- Use homes to provide a source of affordable housing for low to moderate income families.
- Make a difference in the lives of families receiving program homes.



EASE Foundation

www.easefoundation.org 954.797.1077 Suite B

Emergency Assistance

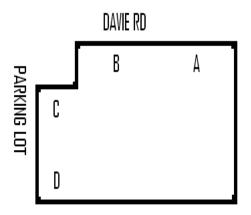
 Providing aid to those qualified residents, on a one time basis, who are in need of temporary emergency assistance.

Food Pantry

Referral & Information

Our clients need to be employed or have an income from social security, disability, retirement, unemployment compensation or workman's compensation or anything to show fiscal responsibility.

SUITE INDEX FOR NSC











RESOLUTION R-2007-182

A RESOLUTION OF THE TOWN OF DAVIE, FLORIDA, ENCOURAGING CONSTRUCTING, AND OPERATING FACILITIES TO MINIMIZE ENVIRONMENTAL IMPACTS BY INCORPORATING THE USE OF RESOURCES AND ENERGY EFFICIENT MATERIALS, RENEWABLE RESOURCES, ALTERNATIVE ENERGY SOURCES, WATER CONSERVATION, WASTE REDUCTION, POLLUTION PREVENTION AND OTHER STRATEGIC ACTIONS TO PROMOTE SUSTAINABILITY AND GREEN BUILDING DESIGN.

WHEREAS, Sustainability means satisfying our present needs without compromising the ability of future generations to meet their needs; and

WHEREAS, the Town is committed to lead by demonstrating sustainable stewardship that will yield cost savings to taxpayers by reducing Town operating costs, providing healthy work environments for Town staff and visitors, protecting, conserving, and enhancing the Town's resources, and establishing community standards of sustainable living practices; and

WHEREAS, the Town is committed to designing, constructing, and operating Town facilities to minimize environmental impacts by incorporating the use of resources and efficient materials, renewable resources, alternative energy sources, water conservation, waste reduction, pollution prevention; and

WHEREAS, environmentally preferred products are generally produced and disposed of in ways that have less negative impact on human health and the environment because they consume fewer natural resources and less energy, generate less waste, and release pollutants; and

WHEREAS, this resolution will establish the Town as a leader in Florida in setting policies, guidelines, goals and strategic actions that will result in:

- · a more sustainable community
- the use of renewable resources
- energy, water and cost savings through the construction, operation and maintenance of high performance buildings and landscapes
- the procurement of environmentally preferred products, materials and services
- increased recycling and materials reuse
- historical preservation
- waste reduction of the source
- healthier and more productive work environments
- less local and global adverse environmental impacts.
- reduced Town liability
- minimized future disposal infrastructure needs
- adoption of Environmental Landscape Management (ELM) practices

WHEREAS, an Ordinance is necessary to accomplish the proper purpose of protecting said community from poor development practices in the future.

NOW, THEREFORE, BE IT RESOLVED BY THE TOWN COUNCIL OF THE TOWN OF DAVIE, FLORIDA:

That the Town Administrator may direct Town staff to develop policies, guidelines, and strategic actions for sustainable building practices for Town facilities. The Town administrator may charge Town staff with oversecing the development and application of the guidelines to all facilities; and

BE IT FURTHER RESOLVED:

<u>SECTION 1.</u> That the Town Administrator may direct Town staff to develop polices, guidelines, and strategic actions for Environmentally Preferred Procurement (EPP) practices for the Town; and

<u>SECTION 2.</u> That the Town Administrator may direct Town staff to provide on-going training and educational opportunities for affected staff to further sustainable stewardship, and that the Town Administrator may direct staff to develop, promote, and implemented sustainable stewardship education programs within the community, and establish marketing partnerships to advance these principles; and

<u>SECTION 3.</u> That the Town shall be guided by established energy efficiency standards providing for an integrated whole building design approach to ensure the best processes are implemented through every phase of design, construction and renovation so that buildings realize substantial economic and environmental benefits through their entire life cycle; and

<u>SECTION 4.</u> That the Town Council directs staff to explore incentives to encourage use of the LEED rating system by private developers of residential and commercial construction and landscaping projects within the Town; and

<u>SECTION 5.</u> That LEED registration and certification through the United States Green Building Council are encouraged but not required under this Article; and

<u>SECTION 6.</u> That all non-covered projects, in the public and private sector, are encouraged to use their best efforts to incorporate as many green building measures as feasible from the LEED Rating System and to peruse LEED registration and certification.

SECTION 7. This resolution shall take effect immediately upon its passage and adoption.

PASSED AND ADOPTED THIS $= 18^{18}$

DAY OF

,2007

MAYOR/COUNCILMEMBER

ATTEST:

TOWN CLERK

Darbara McRancil

APPROVED THIS 18 DAY OF July ,2007

TOWN OF DAVIE TOWN COUNCIL AGENDA REPORT

TO: Mayor and Councilmembers

FROM/PHONE: Mark Kutney, AICP, Development Services Director 954-797-1101

PREPARED BY: Prepared by: Michael Mungal, E.I.T., Engineer II 954-797-1117

SUBJECT: Resolution

AFFECTED DISTRICT: Townwide

ITEM REQUEST: Schedule for Council Meeting

TITLE OF AGENDA ITEM: A RESOLUTION OF THE TOWN OF DAVIE, FLORIDA, ENCOURAGING CONSTRUCTING, AND OPERATING FACILITIES TO MINIMIZE ENVIRONMENTAL IMPACTS BY INCORPORATING THE USE OF RESOURCES AND ENERGY EFFICIENT MATERIALS, RENEWABLE RESOURCES, ALTERNATIVE ENERGY SOURCES, WATER CONSERVATION, WASTE REDUCTION, POLLUTION PREVENTION AND OTHER STRATEGIC ACTIONS TO PROMOTE SUSTAINABILITY AND GREEN BUILDING DESIGN,

REPORT IN BRIEF: The Town Council has requested Town Staff prepare a resolution that demonstrates the Towns commitment to establish and implement policies, guidelines, goals and strategic actions to promote sustainability and preserve and improve the Town's natural and built environment, protecting the health of its residents and visitors.

PREVIOUS ACTIONS: None

CONCURRENCES: None

FISCAL IMPACT: not applicable

Has request been budgeted? n/a

If yes, expected cost: \$

Account Name:

If no, amount needed: \$

What account will funds be appropriated from:

Additional Comments:

RECOMMENDATION(S): recommends that the resolution be adopted by Town Council and that staff bring back an ordinance that will promote green building practices townwide.

Attachment(s): Resolution

Broward County Property Assessed Clean Energy (PACE) Program Performance of Indicators for Properties within the Town of Davie(3)

		Applications	Projects Completed(Energy	Renewable	Hurricane		Energy Savings Potential
Year	Quarter	Submitted	2)	Efficiency	Energy	Protection	Total Financed	(kWh)(3)
2017	Q1	181	54	11	2	45	\$1,373,033	19,744
2017	Q2	183	68	10	3	59	\$1,401,132	71,008
2017	Q3	195	56	12	0	44	\$1,271,352	76,338
2017	Q4	127	50	10	1	43	\$1,169,601	28,727
2018	Q1	165	58	8	3	48	\$1,131,422	41,908
2018	Q2	64	47	18	1	31	\$1,358,320	56,988
2018	Q3	129	47	17	1	32	\$1,074,491	449,249
2018	Q4	109	52	24	4	66	\$1,470,551	58,610
2019	Q1	119	48	11	7	63	\$1,469,387	113,735
2019	Q2	130	38	12	0	56	\$1,576,842	352,485
2019	Q3	158	61	23	3	60	\$5,062,929	32,024
2019	Q4	96	61	17	5	75	\$1,648,099	47,194
2020	Q1	206	62	6	9	66	\$1,630,322	1,678,157
2020	Q2	198	45	8	4	51	\$1,335,029	25,389
2020	Q3	166	53	18	3	67	\$1,679,383	65,075
2020	Q4	122	106	20	6	78	1,776,347	2,981,432
TOTALS		2348	906	225	52	884	\$26,428,240	6,098,063

Notes

⁽¹⁾ Source: Broward County Environmental Protection and Growth Management Department

⁽²⁾ Number of Projects Completed may have included multiple installed measures.

⁽³⁾ Estimated Energy Savings (kWh) only includes estimated potential savings from HVAC, windows and solar projects.

PERMIT APPLICATION INFO	RMATION:		
Name:			
Company:			
Address:			
City / Zip:			
Phone:			
Fax:			
E-mail:			



SUSTAINABILITY PRINCIPLES:

The Town of Davie Green Energy & Environmental Committee has developed a South Florida Sustainability Guide for new construction and major renovation of commercial, residential, and industrial buildings. The checklist is designed to promote the utilization of environmentally friendly and energy efficient principles and methods consistent with programs such as the U.S. Green Building Council Leadership in Energy and Environmental Design (LEED) and the Florida Green Building Coalition. It is best completed by the homeowner and/or contractor, architect and project team working together to set achievable goals.

<u>Community/Neighborhood</u> – use of compact building design; energy efficient street lighting; fuel efficient automobiles/transit; connectivity, density	
<u>Lot Choice</u> – priority uses of small properties in urban areas; use of "greyfield" and "brownfield" lands that can be cleaned; use of lands close to sewer and power lines, mass transit and green space	
<u>Site Choice</u> – re-create or preserve wildlife habitat or shelter; replant or donate vegetation; use cleared materials for mulch or landscaping or stabilizing soil; save or reuse topsoil; encourage biodiversity	
<u>Water Efficiency/Conservation</u> – use of very efficient clothes washers; low-flow toilets or waterless urinals; use of reclaimed water; innovative irrigation or drought tolerant plants; use of rain gardens, bioswales and cisterns; Florida-friendly native plants	
<u>Energy Efficiency/Conservation</u> – use of light colored exterior walls; buildings shaded on the east and west by trees; property sized air-conditioners; use of ceiling fans; energy efficient appliances and indoor lighting; efficient well-pumping; use of alternate electrical grids and/or use of wind/solar/natural gas energy	
<u>Materials</u> – use of building materials with recycled content; eco-friendly insulation; lumber from sustainable sources; locally produced materials.	
<u>Health</u> – use of detached garage; carbon monoxide alarm; central dehumidification systems; energy efficient bathroom exhaust fans with timer; humidistat; whole house filtration.	



M	IEASURE	S	ELI	ECT
SIT	E DEVELOPMENT			
1.	Site located in Traditional Neighborhood Development (TND) or small lot cluster development			
2.	Build with density / compact development (at least 6 units per acre)			
3.	Develop shared community: resources, facilities, services			
4.	Build on an infill site			
5.	Site within 1/4 mile to mass transit, basic community resources			
6.	Site within 1/2 mile of existing infrastructure			
7.	Site within 1/2 mile of public open / green space			
8.	Brownfield site, utilize on-site remediation			
9.	Greyfield site			
10.	Avoid prime farmland, wetlands, near water bodies, endangered species habitat			
11.	Site building to maximize natural features to shade, cool; block / control wind, rain / flooding			
12.	Orient the building to use cross ventilation			
13.	Avoid siting livestock barns, sheds near water bodies and wetlands			
14.	Refer to climate change inundation maps			
LAN	IDSCAPING			
1.	*Protect / amend native soil use organic compost, fertilizers, pest control			
2.	*Retain existing viable native trees			
3.	*Plant / retain deciduous trees on south, shade trees on east and west			
4.	*No irrigation, practice xeriscaping			
5.	*Use native adaptive non-invasive, salt tolerant / high wind resistant / food producing			
	plants/trees, encourage biodiversity			
6.	*No / minimize turf, < 20% of landscape			
7.	*No wetland mitigation			
8.	*Reuse / mill cleared non-toxic, non-invasive materials, trees for mulch / landscape			
9.	On-site water catchment (rain barrels, underground cisterns) / wet retention / dry detention			
10.	*Direct filtered rooftop runoff (i.e. gutters) to planted nonedible areas, catchement systems			
11.	If irrigation is required by code, install high-efficiency micro drip irrigation system			
	with water sensor, timer			
12.	Plant edible landscape / food garden. Test soil for nutrients, contaminants			
13.	Use aquaponics / hydroponics			
14.	Mulch applied 3-4 inches deep around plants, use non-cypress; recommend			
	melalueca, eucalyptus, pine bark and needles			
15.	Consider designations: NatureScape Broward, National Wildlife Certified Yard,			
	Florida Friendly Landscape Designation			
16.	*Plants / turf minimum 2' from foundation			
17.	*Meet or exceed Florida Water Star standards			
18.	*Shade / minimize hardscape to reduce heat island effect			
	* Designates a low or no cost item			

N	EASURE	SELECT
LAN	IDSCAPING CONTINUED	
19.	*Maintain pervious surface areas, permeable concrete walkways, open grid pavement driveway	
20.	Reuse materials or use recycled content materials for landscape areas	
21.	*Sprinkler heads discouraged, if used minimize overspray, check valves installed	
22.	*Sprinklers & emitters minimum 2' from foundation, water should not hit building	
23.	*Swimming Pool/Spa: Consider no swimming pool / spa	
24.	*Swimming Pool/Spa: Sanitation salt system/ no chlorine use	
25.	Swimming Pool/Spa: Solar pool heating system	
26.	Swimming Pool/Spa: Pool pump: variable or dual speed or dedicated PV	
27.	Swimming Pool/Spa: Pool cover	
28.	*Waterfront: Use native aquatic vegetation / no turf along shoreline	
29.	*Waterfront: Use terraces, swales or berms to slow storm water	
30.	Rainwater harvesting: if use for vegetable garden, avoid collection from asphalt / tar roof, heavy	
	wildlife / vegetation area, divert first 10 mins./1" of rainfall, add carbon filter	

^{*} Designates a low or no cost item



MEASURE		
	LDING ENVELOPE	SELECT
DES	GIGN CONTRACTOR OF THE CONTRACTOR OF T	
1.	* Site building (as per Zoning Code) to minimum setback from street	
2.	* Build smaller home, < 2,000 ft. for 3/2	
3.	* Efficient envelope volume, minimize building footprint	
4.	* Perimeter based on 2 foot dimensions or materials standard units	
5.	* Reduce (WFR) Wall to Floor Ratio - recommend .1535 (GSF bldg. to vertical Sq. Ft. façade)	
6.	* Interior floor plan based on 2 foot dimensions or materials standard units	
7.	Detached garage / Carport	
8.	Attached garage with air barrier between garage and living space (including attic)	
9.	Roofed / screened porch, min 100 sq.ft. with 3 sides open, orient to the street	
10.	3 in 12 <= roof slope <= 6 in 12	
11.	* Plan for east through south to west (90° to 270°) roof area for solar use	
12.	* Exterior walls / roof to be light colored	
13.	Large overhangs (eave and gable) 3' minimum	
14.	Consider cupola for passive stack ventilation	
15.	* Passive solar day lighting, avoid direct south, west exposure	
16.	Daylighting to penetrate to 75% building interior, use: windows, skylights, clerestories.	
	solar tubes and light shelves	
17.	Shade windows with eaves, sunshades, canopies, green screens, deciduous trees	
18.	* Reuse/salvage/recycle original materials; reuse / maintain existing walls, floors, beams,	
	columns, roof	
19.	Finished floor level at least 12 inches above 100 year flood plain; consider using 500 year	
	flood plain if higher	
20.	Garage / Carport and driveway sloped to drain away from building	
21.	Garage / Carport floor at least 4 inches lower than living floor	
22.	Plan for future renovations, deconstruction. Include Universal Design, flexibily to meet	
	present and future occupants	
FOL	JNDATION	
1.	* Use recycled content aluminum forms / reuse form boards	
2.	Use recycled content aggregate	
3.	Concrete with fly ash or blast furnace slag (avoid if organic gardening)	
4.	Insulate solid concrete foundation / slab for heating and air conditioning purposes	
5.	Drainage tile on and around top of footing	
6.	Drainage board for below grade walls	
7.	* Bottom of slab at least 8 inches above graded gravel bed for proper drainage	
8.	* Seal all slab penetrations / install galvanized steel mesh barrier termite control system around	
	pipes that penetrate the slab	
9.	* Protect exposed foundation / insulation with moisture resistant, pest-proof cover	
	* Designates a low or no cost item	

M	EASURE	SELECT
FOL	INDATION CONTINUED	
10.	* Capillary break between foundation and framing	
11.	* Avoid chemical soil treatment, use alternative Florida Building Code approved method of	
	foundation protection	
12.	Downspouts discharge minimum 3 feet from foundation	
13.	Condensate lines discharge minimum 3 feet from foundation, 5 feet or > from dryer vent	
14.	Consider: slab designed for future additions	

^{*} Designates a low or no cost item



IV	IEASURE	SELECT
ENE	ERGY	
HV	AC	
1.	Conduct energy audit of new / remodeling structure (HERS index <85)	
2.	* HVAC automated controls integrated with lighting, occupancy, security	
3.	* Proper sizing of HVAC system	
4.	Install above required code SEER 13, recommend minimum 16	
5.	Install new or replace old ductwork within conditioned space	
6.	Install attic ventilation systems when not using spray insulation	
7.	Install solar attic fan, whole house fan	
8.	* Consider natural vs. mechanical ventilation; (i.e. building orientation, operable windows,	
	fans, cupola, wind chimneys, material selections)	
9.	* Install air conditioning with natural refrigerants / no HCFC	
10.	Shade exterior condenser unit; pad elevation = buliding slab elevation	
11.	Test for radon, if positive install radon / soil gas vent system	
12.	* No air handler/return ducts in garage or unsealed garage attic	
13.	Whole house positive filtration, air admittance vents	
14.	Central dehumidification system	
15.	Cross ventilation and ceiling fans	
16.	* Protect and seal all ducts during construction	
17.	Duct work smoke tested allowing leaks to be sealed prior to drywall	
18.	Clean all ducts, change filter(s) before occupancy	
19.	Install high-efficiency particulate air (HEPA) filter MERV 8 or higher	
	HVAC checkup every two years	
20.	* HVAC filter easily accessible, change monthly or more if high usage during construction	
21.	Eliminate wood burning fireplaces; retrofit with EPA certified wood stove / inserts.	
	Install / replace dampers, install airtight doors on fireplace	
22.	Direct vent, sealed combustion fireplace w/ electronic ignition, factory installed	
23.	Install separate garage exhaust fan on motion sensor and timer	
24.	Use duct mastic on all ductwork joints	
25.	Recycled content air conditioner condenser pad	
	* Written plan for exhaust and intake vents	
26.	* Replacing condensing unit check for thermostatic expansion valve (TXV)	
REI	NEWABLE ENERGY	SELECT
1.	Install Photovoltaic (PV) Panels	
2.	Install Solar Thermal Panels	
3.	Consider wind, hydro, hydrogen power	
4.	Consider biodigester for reduction of waste (horse manure, livestock etc.), energy production,	
	fresh water, compost	

^{*} Designates a low or no cost item



M	EASURE	SELECT
	RGY	
ELE	CTRICAL	
1.	* Install programmable thermostat (78° or higher summer, 62° or lower winter)	
2.	* Install surge suppression / lightening protection system	
3.	* Replace incandescents with LED bulbs, max. 100W fixtures,	
	or compact fluorescent lightbulbs (CFLs) or standard fluorescent bulbs (LED's Preferred)	
4.	Exterior building & street lighting energy efficient, avoid light pollution - fixture type (i.e. no globe)	
5.	Install insulation-compatible (IC) , sealed recessed lighting fixtures	
6.	Install high quality solar power (PV) walkway lights with motion sensor	
7.	Energy Star Advanced Lighting Package	
8.	Install lighting controls include multiple settings, dimmer; occupancy sensor	
9.	Install automatic systems coordinate HVAC, lighting due to use and occupancy:	
	systems integration - access control / security camera systems and lighting control /	
	energy management / HVAC controls	
10.	* Security systems to be incorporated at pre-design	
11.	Install high-efficiency ceiling fans, switch fan rotation summer and winter settings	
12.	Energy Star bath fans with timer and humidistat	
13.	* Avoid vampire usage, use power strips. Unplug appliances, electronics etc. when not in use	
14.	Install carbon monoxide alarm, fire and smoke detector. Monoxide for gas appliances,	
	inside garages, and near generators.	
15.	* Wire / pre-wire for present / future photovoltaic (PV) installation	
16.	* Wire / pre-wire 220/240V 40-amp dedicated circuit for home charger electric vehicle	
APF	PLIANCES	
1.	Install ENERGY STAR® Appliances: washer, dryer, refrigerator, dishwasher, water cooler	
2.	Energy-efficient oven / range, clothes dryer	
3.	* Install washer & dryer outside conditioned space, consider outside clothes line	
4.	Laundry rooms inside conditioned space must have window or other make-up air source	
5.	* User-friendly (lever style) clothes washer water shutoff	
6.	Install horizontal axis washing machine, consider all-in-one washer/dryer	
7.	Use armored / PEX or metal (except copper) hoses from service to all fixtures / appliances	

^{*} Designates a low or no cost item



M	EASURE	SELECT
WA.	rer	
PLU	MBING	
1.	Install solar hot water system or pre-plumb for future system	
2.	* Insulate all hot water pipes	
3.	* Compact hot water distribution	
4.	Low flow faucets and shower heads / install flow reducers in existing	
5.	All showers equipped with one shower head	
6.	* Install water shut-off valve in shower	
7.	Install ultra-low-flush or dual-flush toilets (1.28 gpf or less)	
8.	No garbage disposal	
9.	Install tankless water heater	
10.	* Install timers on water heater tanks	
11.	* Install sealed water heater / install heater jacket	
12.	Install on-demand hot water circulation pump	
13.	Automatic in home water sensor / shut off system installed	
14.	* Rainwater harvesting for interior and exterior non-potable uses	
15.	Water shut-off nozzles for all garden hoses	
16.	Install a greywater system with meter	
17.	Vanity water collection for toilet flushing	
18.	* Reclaimed water: Meter on system, volume based pricing arrangement	
19.	Reclaimed water: Air conditioner, mechanical condensate re-use	
	(not suitable for edible landscaping)	
20.	Install chlorine filter on shower heads, consider whole-house water filtration system	
21.	Consider running hot water line in unconditioned attic, in building's south face	
	or under driveway	
22.	Consider running cold water line under slab and/or in building north face	

^{*} Designates a low or no cost item



N	MEASURE	S	ELI	ECT
HE	ALTH			
IND	OOR AIR QUALITY / FINISHES			
1.	Integrated pest management system, no chemicals (interior and exterior)			
2.	Low dust collecting, durable, low maintenance window coverings			
3.	No-VOC water based paints, stains, adhesives, sealants, and finishes			
4.	Choose fragrance free cleaning products; healthier and safer;			
	could potentially mask harmful, odors that could alert a problem			
5.	No use of urea-formaldehyde particleboard			
6.	Substitute particleboard with formaldehyde-free medium density fiberboard (MDF)			
7.	Install whole house vacuum system			
8.	* Cleanable mat or grate at entrance areas			
9.	* Light colored interior and exterior walls, ceilings, flooring			
WA	STE REDUCTION			
1.	Install built-In recycling / compost center			
2.	* Reduce consumption, avoid over packing, reuse / recycle			
3.	* Encourage buy back from the supplier			
4.	Use nontoxic, environmentally safe, biodegradable cleaning products			
TR	ANSPORTATION			
1.	Buy fuel-efficient vehicle, refer to Department of Energy fuel-efficient list			
2.	Buy hybrid, electric, alternative fuel (i.e. solar, hydrogen water, air) vehicles			
3.	* Follow no idling policy			
4.	* Support mass transit - bus, train, trolley			
5.	* Find alternative modes; walk, bicycle			
6.	* Join a carpool / vanpool			
ОТІ	HER			
1.	Comply with Fortified for Safer Living standards			
2.	As required by code, barrier free entrance, universally designed living area			
3.	Engineered/alternative material for outdoor living			
4.	Safe room			
5.	Exterior structures and equipment properly anchored			
6.	* Utilize rebate programs and financial incentives			
7.	* Use reusable tote bags, not plastic or paper. Avoid cross contamination, especially raw meat;			
	wash reusable tote bags			
8.	* For garbage, use bags designed to decompose in a landfill			
9.	* Verify landfill allows for these bags to decompose properly			
10.	* Encourage pre-design charette including all stakeholders			
11.	Building department officials; reviewers, inspectors required to attend LEED Green Associate			
12.	Class, minimum one LEED AP on staff (recommended speciality BD&C or EB O&M)			
13.	Develop and implement green educational program and outreach			
	* Designates a low or no cost item			

MEASURE	SELECT
OTHER CONTINUED	
14. * Buy locally produced foods and goods	
15. * Compost organic waste for gardens	
16. * Consider making cleaning products from baking soda, vinegar, and borax (no bleach)	
17. * Utilize recycling / rebate programs	

^{*} Designates a low or no cost item

Additional Resources

U.S. Green Building Council LEED Rating System

http://www.usgbc.org/leed#rating

LEED for New Construction & Major Renovations

http://www.usgbc.org/resources/leed-new-construction-v2009-current-version

LEED for Existing Buildings: Operations & Maintenance

http://www.usgbc.org/articles/getting-know-leed-building-operations-and-maintenance-om

LEED for Commercial Interiors

http://www.usgbc.org/cert-guide/commercial

LEED for Core and Shell

http://www.usgbc.org/discoverleed/certification/bd-c-core-and-shell/

LEED for Schools

http://www.usgbc.org/resources/leed-schoolsnew-construction-v2009-current-version

LEED for Retail

http://www.usgbc.org/resources/leed-retail-new-construction-v2009-current-version

LEED for Healthcare

http://www.usgbc.org/resources/leed-2009-health-care-current-version

LEED for Homes

http://www.usgbc.org/resources/leed-v4-homes-and-multifamily-midrise-current-version

LEED for Neighborhood Development

http://www.usgbc.org/guide/nd

Florida Green Building Coalition Certifications

http://www.floridagreenbuilding.org/homes

http://floridagreenbuilding.org/commercial

http://floridagreenbuilding.org/hi-rise-residential

http://floridagreenbuilding.org/land-development

StopWaste.org Green Building Guidelines

http://www.stopwaste.org/about/about-stopwaste/our-green-building

Living Building Challenge

https://ilbi.org/lbc