2019 Green Building Policy

POLICY STATEMENT:

Green building is a practice that brings environmental and economic benefits to present and future generations. A green building ensures that sustainable standards are adhered to throughout the design and construction processes to lessen the impacts of the building on the local and global environment, resulting in lower operational costs and a healthy indoor environment for building occupants. The standards of the 2019 City of Alexandria Green Building Policy provided herein establish minimum green building practices for new private development and furthers the City's commitment to lead by example through new development and renovation of its own public buildings. In addition to instituting standards to achieve an overall improvement in building performance, this Green Building Policy includes a cuttingedge, directed-use approach that targets the reduction of energy use and mitigating greenhouse gas emissions, increased water efficiency and improved indoor environmental quality in both new private and public buildings. As a result, implementation of this Green Building Policy will contribute to reduced greenhouse gas emissions, conservation of potable water and improved human health in the City of Alexandria.

DEVELOPMENT STANDARDS:

New private development, new public development (City-owned buildings, including Alexandria City Public Schools) and major renovations that require a Development Site Plan (DSP) or a Development Special Use Permit (DSUP) are subject to comply with the Green Building Policy. The Green Building Policy is in effect as of March 2, 2020 for DSP and DSUP applications submitted on or after this date.

The 2019 Green Building Policy identifies: 1) the pathways to achieve the City's green building performance standards, including certification through three nationally recognized green building rating systems, 2) a minimum level of green building certification for both private and public developments, and 3) priority "Performance Points" within each rating system that a project is expected to achieve.

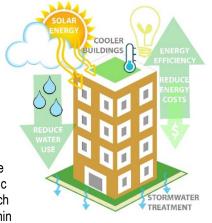
RATING SYSTEMS & MINIMUM LEVEL OF CERTIFICATION:

LEED, Green Globes, and EarthCraft are the standard third-party green building rating systems accepted under the Green Building Policy. The minimum level of certification for each rating system is provided on the following pages for both public and private development. The latest version of each rating system at the time of the first Final Site Plan submission shall apply.

In addition to the LEED, Green Globes or EarthCraft green building rating systems, projects may choose an alternative path for certification through an independent, third-party certifier. The independent, third-party certifier must verify that the performance standards of the Green Building Policy are met.

PERFORMANCE POINTS:

Performance Points are defined as specific minimum credit points each project must achieve within



the minimum level of certification for the selected green building rating system. Performance Points are identified within the areas of energy use reduction and greenhouse gas emission reductions, water efficiency, and indoor environmental quality. Projects that use LEED should refer to the LEED Credit Library for the specific criteria of each point. Those who utilize Green Globes or EarthCraft must comply with the Performance Point overlay criteria in Appendix A and Appendix B of this Policy, respectively. To maintain alignment with the intent of this Policy, Performance Points may be adjusted over time to correspond with updates to the rating systems, revisions to the building code, and/or updates to state, federal, or other City policies.

In addition to the minimum level of certification and the designated Performance Points, public development will meet the following criteria unless it is technically infeasible, not cost effective, or situationally inappropriate:

STORMWATER	100% of the required stormwater treatment through green infrastructure.
NET ZERO ENERGY	An energy-efficient building where, on a source energy basis, the actual annual delivered energy is less than or equal to the on-site renewable exported energy.

PUBLIC BUILDING RENOVATIONS:

For renovations of City-owned buildings that do not require a DSP or DSUP, the City will apply LEED Interior Design and Construction (ID+C) and LEED Operations and Maintenance (O&M) rating systems as a guideline for interior design and construction projects and targeted renovations of individual building systems (e.g.; HVAC, roof, windows, plumbing, etc.). Actual third-party certification may be used when technically and financially feasible.

FLEXIBILITY:

Flexibility from the Green Building Policy will be considered on a case-by-case basis. If flexibility is requested, the Director of Planning and Zoning will consider the project size, proposed use and the alternate green building practices the applicant proposes to incorporate into the project to determine if the request is justified. The City will use the data collected from this process over time to establish consistent criteria and thresholds for alternatives to compliance with the Green Building Policy.

	2019 GREEN BUILDING POLICY Leadership in Energy and Environmental Design (LEED)												
	MINIMUM LEVEL		PERFORMANCE POINTS										
RATING SYSTEM	OF CERTIFICATION		ENERGY USE REDUCTION				WATER	EFFICIENCY	INDOOR ENVIRONMENTAL QUALITY				
3131211	Private	Public	POINTS		CREDIT	POII	VTS	CREDIT	POINTS		CREDIT		
	Tilvate		Private	Public	CHEDIT	Private	Public	Public	Private	Public	CHEDII		
	Silver		5	7	Optimize Energy Performance				1	1	Low-Emitting Materials		
LEED LEED			2	3	Renewable Energy Production	4	Indoor Water Use Reduction	1	1	Construction Indoor Air Quality Management Plan			
BUILDING		Silver	Gold	Gold	1	1 Advanced Energy Metering ²			1	1	Thermal Comfort		
DESIGN AND CONSTRUCTION (BD+C)			Outton	2	Enhanced	1	1	Outdoor Water Use Reduction	Optional	2	Daylight		
						Optional	3	Commissioning				Optional	1

NOTES: 1) Refer to LEED Credit Library for point criteria.
2) Applies to non-residential projects only (excludes hotels).

					2019 GREEN BUILDING POLIC	Y Greer	n Globes	·)					
	MINIMU	M LEVEL		PERFORMANCE POINTS									
RATING OF CERTIFICATION		ENERGY USE REDUCTION				WATER EFFICIENCY				INDOOR ENVIRONMENTAL QUALITY			
JIJILII	Private	Public	POINTS CREDIT		POINTS		CREDIT	POINTS		CREDIT			
	Tivate	1 ublic	Private	Public	CHEDII	Private	Public	CILDII	Private	Public	CNEDII		
			60	68	3.3.1.1 Assessing Energy Performance (Path A, B, or C)	24 24	3.4.1.1 Indoor Water	11	11	3.7.1.1 Ventilation Air Quality			
			9	9	3.3.9.1.1 On-site Renewable Energy Feasibility Study		Consumption	8	8	3.7.1.2 Air Exchange			
			23	23	-AND- 3.3.9.1.2 On- or Off-site Renewable Energy	6	6	3.2.4.1 Landscape and Irrigation Plan (LIP) by Certified Professional	10	10	3.7.2.1 Volatile Organic Compounds		
CDEEN					-OR-			3.2.4.1.1 Soil Type, Drainage and Light Conditions					
GREEN			18	18	3.3.9.2.1 Off-site Renewable Energy -OR-	3	3						
GLOBES			32	32	3.3.9.1.2 (Partial) and 3.3.9.2.1 (Partial)	2	2	3.2.4.3.2 Native/Non-					
					COMMISSIONING			invasive Plant Material	5	5	3.1.2.4 IAQ During		
	2	3	Optional	4	3.1.3.2.1.1 HVAC and Refrigeration Systems	3	3	3.2.4.3.3 Turfgrass			Construction		
GREEN GLOBES*	Green	Green	Optional	3	3.1.3.2.1.5 Plumbing			Minimalized					
BUILDING CERTIFICATION	Globes	Globes	Optional Optional	1	3.1.3.2.1.6 Electrical 3.1.3.2.1.7 Lighting	4	4	3.4.8.2.2 Drip/low Volume	Optional	3	3.1.2.4.2 IAQ of Occupied Areas During		
NEW			Optional Optional	1	3.1.3.2.1.8 Building Automation 3.1.3.3.1 Training Requirements	1	1	Irrigation ³	2-12	2-12	Construction 3.7.4 Thermal Comfort		
CONSTRUCTION			Optional	6	3.1.3.4.1 Operations and Maintenance Manuals			3.4.8.2.3					
(NC)			METERING, MEASUREMENT AND VERIFICATION ²		1	1	WaterSense/SWAT/Smart Control System ³	Optional	8	3.3.5.4 Daylighting			
			1	1	3.3.3.1.1.1 Electricity	0.5	0.5	3.4.8.2.4 Regulation of Precipitation Rate on Sprinkler ³	Optional	7	2.7.2.4.4 Davidahtin		
			1	1	3.3.3.1.1.2 Heating Fuels						3.7.3.1.1 Daylighting		
			1	1	3.3.3.1.1.4 Other, with description (as applicable)	0.5	0.5	3.4.8.2.5 Swing Joints/Flex	Optional	2	3.1.2.4.1 IAQ During Construction Indoor Air		
			0.5 - 3	0.5 - 3	3.3.3.1.2 Sub-metering (as applicable)	3.0	5.5	Pipes on Irrigation Heads ³	- Paoriai	_	Quality Test Pathway		

NOTES: 1) Refer to Appendix A: "City of Alexandria, VA Performance Design Targets – Directed Use Criteria ("Performance Points") for Green Globes" for Performance Point criteria.

²⁾ Applies to non-residential projects only (excludes hotels).3) Credit is only applicable if an automated irrigation system is installed.

					2019 GREEN BUIL	DING POL	.ICY Ea	arthCraft Multifamily						
	MINIMU	IM LEVEL		PERFORMANCE POINTS										
RATING System	OF CERTIFICATION		ENERGY USE REDUCTION			WATER EFFICIENCY				INDOOR ENVIRONMENTAL QUALITY				
SISIEIT	Private	Public	POIN Private	NTS Public	CREDIT	POI Private	POINTS CREDIT		POII Private	NTS Public	CREDIT			
					IN 1.1 Solar, Micro-hydro,			INDOOR WATER USE						
		fold N/A	N/A			2-5	N/A	Wind Electric IN 1.2 Solar-ready Design IN 1.3 Solar Electric System or IN 1.5 Common Areas Solar Electric Use	9-14	N/A	WE 1.2 Water Treatment WE 1.3 Water Softeners WE 1.4 Storage WE 1.5.1 WaterSense Toilet WE 1.5.2 WaterSense Urinal WE 1.5.3 WaterSense Lavatory Faucet WE 1.5.4 WaterSense Showerhead WE 1.6 Toilet < 1.1 gallon/flush	4	N/A	IAQ 2.7 VOC Materials and IAQ 2.12 Zero Carpet in Units
EARTHCRAFT	Gold			1-2 N/A	N/A	EO 3.4 Light Commercial Community Center (as applicable) or EO 3.5 Light Commercial Ready Spaces (as applicable)	5-10	N/A	-OR- WE 1.2 Water Treatment WE 1.3 Water Softeners WE 1.5.1 WaterSense Toilet WE 1.5.2 WaterSense Urinal WE 1.5.3 WaterSense Lavatory Faucet WE 1.5.4 WaterSense Showerhead 40% Reduction from Baseline	2	N/A	BE 3.15 Insulation BE 3.16 Walls BE 3.17 Exterior Insulation BE 3.18 Ceilings		
MIJI TIFAMII Y	Gold			COMMISSIONING				OUTDOOR WATER USE		IN/A	BE 3.19 Attic Kneewalls			
			Optional N/A	N/A	EO 2.3 Pre-occupancy Briefing			WE 2.4 Turf <40% WE 2.5 Vegetate 4:1 Slopes			or BE 3.20 Insulate Roofline			
(ECMF)			Optional	N/A	EO 2.4 Post-occupancy Briefing	4-9	N/A	WE 2.7 Drought Tolerant/Native Plants WE 2.8 Guidebook and WE 2.6 Irrigation ²						
		Optional N/A	-OR-											
			·		Maintenance Guidelines for Staff	3	N/A	WE 2.10.1 Greywater Irrigation ²						
			Optional	N/A	High-rise Addendum 1ETERING		-OR-			N/A	IAQ 2.9 Pre-occupancy Flush			
			Optional	N/A	IN 1.7 12 Months Post- Construction Energy Monitoring	3	N/A	WE 2.10.2 Rainwater Irrigation ²						

NOTES: 1) Refer to Appendix B-1: "City of Alexandria, VA Performance Design Targets – Directed Use Criteria ("Performance Points") for Earthcraft Multifamily (ECMF)" for Performance Point criteria.

2) Credit is only applicable if an automated irrigation system is installed.

	2019 GREEN BUILDING POLICY EarthCraft Light Commercial													
	MINIMU	M LEVEL		PERFORMANCE POINTS										
RATING System	OF CERTIFICATION		ENERGY USE REDUCTION			WATER EFFICIENCY			INDOOR ENVIRONMENTAL QUALITY					
SISTEIT	Private	te Public	POIN	1	CREDIT		NTS	CREDIT	POINTS		CREDIT			
	1111440	T dbiic	Private	Public	CHEST	Private	Public	CHESTI	Private	Public	CILDII			
	Certified					1	1	BE 1A Envelope Air Tightness Test			INDOOR WATER USE	2	2	IEQ 5 Certified Flooring IEQ 6 Composite Wood or
EARTHCRAFT			1	1	ES 5 High Performance Duct System			WE 1A High Efficiency Toilets WE 1B Pint Flush or Waterless Urinals WE 1C Automatic Faucets, and/or WE 1D High Efficiency Showerheads	2	2	IEQ 7 Product Transparency			
		ied Gold			-AND-		3 3 WE Urin		1	1	IEQ 1 Decoupled			
			1	1	IN 1 Renewable Energy Installation	3					Ventilation IEQ 2 (DCV)			
				1	-OR-						IEQ 3 Air Filtration Media or			
LIGHT			2	2	IN 2 Renewable Energy Procurement						IEQ 4 Radon Exposure Prevention			
COMMERCIAL			COMMISSIONING								BE 7 Daylighting Design			
(ECLC) ²			Optional	3	EO 1 Building Systems Commissioning		(OUTDOOR WATER USE	Optional	1	Strategies			
,			METERING					WE 2 Landscape Plan WE 3 Efficient Irrigation System			IEO P3 Minimizo Indoor			
			PR ⁴	PR ⁴	EO R1 Utility Tracking	3	3	and/or No Irrigation and/or WE 4 Non-potable Water Source Used for Irrigation ³	PR ⁴	PR ⁴	IEQ R3 Minimize Indoor Air Contamination			

NOTES: 1) Refer to Appendix B-2: "City of Alexandria, VA Performance Design Targets – Directed Use Criteria ("Performance Points") for Earthcraft Light Commercial (ECLC)" for Performance Point

²⁾ Applicable to commercial buildings, schools and public facilities up to 80,000 square feet.
3) Credit is only applicable if an automated irrigation system is installed.
4) PR = Program Requirement; no points assigned.

APPENDIX A: CITY OF ALEXANDRIA, VA PERFORMANCE DESIGN TARGETS – DIRECTED USE CRITERIA ("PERFORMANCE POINTS") FOR **GREEN GLOBES FOR NEW CONSTRUCTION (NC)**.

For additional information, refer to the Green Globes for New Construction Technical Reference Manual v1.50.

As part of achieving a minimum certification of Two Green Globes for private projects, or Three Green Globes for public projects in the City of Alexandria, VA, Green Globes projects must fulfill the following Green Globes criteria:

ENERGY

Energy Reduction for Private Projects

Green Globes Criteria: 3.3.1.1: All private projects must achieve a minimum of 60 points under Pathways A, B, or C, identified in criteria 3.3.1.1 for an EUI > 30% (60 points)

Energy Reduction for Public Projects

Criteria 3.3.1.1: All projects must achieve a minimum of 68 points under Pathways A, B, or C, identified in criteria 3.3.1.1 for an EUI \geq 35% (68 points)

Renewable Energy for Private Projects

3.3.9.1.1.: Perform feasibility study under criteria 3.3.9.1.1 to determine whether 5% onsite renewable energy equipment or 40% off-site renewable energy equipment is achievable for the project (9 points)

Per the result of the feasibility study, achieve these criteria by following one of the three paths below:

<u>PATH 1:</u> Criteria 3.3.9.1.2: Installation of 5% or greater **on-site** renewable energy; or installation of 40% or greater **off-site** renewable energy. (23 points)

OR

<u>PATH 2</u>: Criteria 3.3.9.2.1: Procurement of RECs and/or offsets for 200% of building energy for a minimum of three years (18 points)

OR

<u>PATH 3:</u> Achieve Criteria 3.3.9.1.2 for installation of either 2% on-site or 20% off-site renewable energy equipment (14 points) **AND** achieve 3.3.9.2.1 for procurement of RECs and/or offsets for 100% of building energy for minimum of three years (18 points).

Renewable Energy for <u>Public Projects</u>

3.3.9.1.1.: Perform feasibility study under criteria 3.3.9.1.1 to determine whether a minimum of 10% onsite renewable energy equipment or 60% off-site renewable energy equipment is achievable for the project (9 points)

Per the result of the feasibility study, achieve these criteria by following one of the three paths below:

<u>PATH 1:</u> Criteria 3.3.9.1.2: Installation of 10% or greater **on-site** renewable energy; or installation of 60% or greater **off-site** renewable energy (23 points)

OR

<u>PATH 2:</u> Criteria 3.3.9.2.1: Procurement of RECs and/or offsets for 200% of building energy for a minimum of six years (18 points)

OR

<u>PATH 3:</u> In cases where the onsite/offsite renewable energy goals may be partially achieved, Criteria 3.3.9.1.2 for installation of either a minimum of 5% on-site or 30% off-site renewable energy equipment (14 points) **AND** achieve 3.3.9.2.1 for procurement of RECs and/or offsets for 100% of building energy for minimum of six years (18 points).

Commissioning for <u>Public Projects</u> (Optional for Private Projects)

The City of Alexandria recommends that all private projects attempt to include Commissioning whenever possible, although it is not required for private projects. Public projects must fulfill commissioning criteria related to mechanical systems, plumbing, and electrical, specifically by utilizing the following Green Globes Criteria:

- 3.1.3.2.1.1., HVAC and refrigeration systems (4 points)
- 3.1.3.2.1.5., Plumbing (3 points)
- 3.1.3.2.1.6., Electrical (1 point)
- 3.1.3.2.1.7., Lighting (1 point)
- 3.1.3.2.1.8., Building automation (1 point)
- 3.1.3.3.1., Training requirements (1 point)
- 3.1.3.4.1., Operations and Maintenance manuals (6 points)

Total points: (17 points)

Advanced Energy Metering for Public and Private Projects*

All applicable points in the following Green Globes Criteria related to whole building/significant use metering must be fulfilled (as applicable to the building's systems):

- 3.3.3.1.1.1., Electricity (1 point)
- 3.3.3.1.1.2., Heating Fuels (1 point)
- 3.3.3.1.1.3., Steam (1 point)
- 3.3.3.1.1.4., Other, with description (1 point)

Total possible points for this section: (4 points)

And, for the following end uses making up over 10% of the building load, as applicable to the building:

- 3.3.3.1.2.1., Sub-metering on lighting and lighting controls by floors or zones (0.5 points)
- 3.3.3.1.2.2., Sub-metering on plug loads by floor or zones (0.5 points)
- 3.3.3.1.2.3., Sub-metering on major electric HVAC equipment (0.5 points)
- 3.3.3.1.2.4., Sub-metering on chilled water generation (0.5 points)
- 3.3.3.1.2.5., Sub-metering for onsite renewable energy generation (0.5 points)

3.3.3.1.2.6., Sub-metering for heating water or steam generation (0.5 points)

Total possible points for this section: (3 points)

*Applies to non-residential projects only, excluding hotel projects. Such projects are excluded from being required to comply with these criteria, although the City of Alexandria urges projects to consider compliance with these criteria, where possible.

WATER EFFICIENCY

Indoor Water Use for Public and Private Projects

The following Green Globes Criteria must be fulfilled:

3.4.1.1, Projected water consumption determined to be less than the baseline by a minimum of 40% (24 points)

Outdoor Water Use for Public and Private Projects

The following Green Globes Criteria must be fulfilled through a project achievements in both landscaping (Site), and irrigation systems (Water) performance:

- 3.2.4.1., Landscape Irrigation Plan (LIP) by Landscape Architect (6 points)
- 3.2.4.1.1., LIP for soil type, drainage and light (3 points)
- 3.2.4.3.2., Native/Non-invasive plants (2 points)
- 3.2.4.3.3., Turf grass minimalized (3 points); and
- -The following criteria and points are only applicable if an automated irrigation system is installed-
- 3.4.8.2.2., Drip/low volume irrigation (1 point)
- 3.4.8.2.3., Watersense/SWAT/Smart Control system (1 point)
- 3.4.8.2.4., Regulation of precipitation rate on sprinkler systems (0.5 point)
- 3.4.8.2.5., Swing joints/Flex pipes on irrigation heads (0.5 point)

INDOOR ENVIRONMENTAL QUALITY

Indoor Environmental Quality for <u>Public and Private Projects</u>

The following Green Globes Criteria must be fulfilled:

- 3.1.2.4 IAQ During Construction (5 points maximum)
- 3.3.5.4 Daylighting (8 points) (public buildings only)
- 3.7.3.1.1 Daylighting (7 points) (public buildings only)
- 3.7.1.1 Ventilation Air Quantity (11 points)
- 3.7.1.2 Air Exchange (8 points)
- 3.7.2.1 Volatile Organic Compounds (10 points)
- 3.7.4 Thermal Comfort (up to 12 points depending on building use/purpose)

Indoor Air Quality for <u>Public Projects</u>

- 3.1.2.4.1 IAQ During Construction: Indoor Air Quality Test pathway (2 points)
- 3.1.2.4.2 IAQ of Occupied Areas During Construction (3 points)

APPENDIX B-1: CITY OF ALEXANDRIA, VA PERFORMANCE DESIGN TARGETS ("PERFORMANCE POINTS") – DIRECTED USE CRITERIA FOR **EARTHCRAFT MULTIFAMILY (ECMF)**.

For additional information, refer to the **EarthCraft Multifamily Technical Guidelines**.

The EarthCraft Multifamily rating system is not applicable to public projects. For private projects, as part of achieving the minimum certification requirements for EarthCraft Gold, the following must also be completed projects in the City of Alexandria:

ENERGY:

Renewable Energy

Achieve one of the four paths below:

IN 1.1: Solar, micro-hydro, or wind electric system (4 points)

OR

IN 1.2: Solar-ready design (2 points)

OR

IN 1.3: Solar electric system (5 points)

OR

IN 1.5: Common areas use solar electric system (4 points)

Community Buildings/Commercial Spaces (as applicable for mixed-use developments with ground floor commercial use and multifamily units above).

Achieve one of the two following credits:

EO 3.4: EarthCraft Light Commercial for community center (2 points)

OR

EO 3.5: EarthCraft Light Commercial ready spaces (1 point)

Commissioning (optional)

Achieve the following credits.

- EO 2.3: Provide pre-occupancy briefing for tenant (2 points)
- EO 2.4: Project participates in post-occupancy debriefing (2 points)
- EO 2.5: Environmental management and building maintenance guidelines for staff (2 points)

Achieve all applicable items on the High Rise Addendum (applicable for low-, mid-, and high-rise projects)

Advanced Metering (optional)

Achieve the following credit.

IN 1.7: Developer contracts for at least 12 months post-construction energy monitoring (6 points)

WATER EFFICIENCY

Indoor Water Use

Achieve one of the two paths below.

- PATH 1: Earn a minimum of 9 points and up to 14 points from any combination of the following credits:
- WE 1.2: Water treatment system NSF certified (2 points)
- WE 1.3: Water softeners certified to NSF/ANSI Standard 44 (2 points)
- WE 1.4: Store < .5 gallons of water between water heater and furthest fixture (2 points)
- WE 1.5.1: WaterSense toilet (2 points); WE 1.5.2: WaterSense urinal (1 point)
- WE 1.5.3: WaterSense lavatory faucet (1 point);
- WE 1.5.4: WaterSense showerhead (2 points) and
- WE 1.6: Toilet < 1.1 gallon/flush (2 points)

OR

- PATH 2: Earn a minimum of 5 points and up to 10 points from any combination of the following credits:
- WE 1.2: Water treatment system NSF certified (2 points)
- WE 1.3: Water softeners certified to NSF/ANSI Standard 44 (2 points)
- WE 1.5.1: WaterSense toilet (2 points)
- WE 1.5.2: WaterSense urinal (1 point);
- WE 1.5.3: WaterSense lavatory faucet (1 point)
- WE 1.5.4: WaterSense showerhead (2 points); and demonstrate a 40% reduction from the baseline through the Indoor Water Use Calculator

Outdoor Water Use

Achieve one of the three paths below.

- PATH 1: Earn a minimum of 4 points and up to 9 points from any combination of the following credits:
- WE 2.4: Turf <40% of landscaped area (2 points);
- WE 2.5: Vegetate slopes exceeding 4:1 (1 point);
- WE 2.7: Drought-tolerant/native landscaping turf and plants (1 point);
- WE 2.8: Xeriscape guidebook given to property manager or owners (1 point); and
- WE 2.6: Irrigation (4 points) (WE 2.6 is only applicable if automated irrigation is installed)

OR

<u>PATH 2:</u> WE 2.10.1: Greywater irrigation system (3 points) (only applicable if automated irrigation is installed)

PATH 3: WE 2.10.2: Rainwater irrigation system (3 points) (only applicable if automated irrigation is installed)

INDOOR ENVIRONMENTAL QUALITY

Achieve the following:

Earn a total of 4 points between IAQ 2.7: Certified low or no VOC materials and IAQ 2.12: No carpet in all units

AND

Earn a total of 2 points from any combination of the following credits:

BE 3.15: Insulate with foam insulation

BE 3.16: Walls

BE 3.17: Continuous exterior insulation

BE 3.18: Ceilings

BE 3.19: Attic kneewalls, and/or

BE 3.20: Insulate roofline

AND

Achieve IAQ 2.9: Pre-occupancy flush (1 point)

APPENDIX B-2: CITY OF ALEXANDRIA, VA PERFORMANCE DESIGN TARGETS ("PERFORMANCE POINTS") – DIRECTED USE CRITERIA FOR **EARTHCRAFT LIGHT COMMERICAL (ECLC) v2.1.**

For additional information, refer to the EarthCraft Light Commercial Technical Guidelines.

As part of achieving the minimum certification requirements for EarthCraft Light Commercial (ECLC) Certified for private developments and ECLC Gold for public developments, the following must also be completed for projects in the City of Alexandria:

ENERGY:

Energy for <u>Private Projects</u>:

Achieve the following credits:

BE 1A: Measured ELR75 is 0.30 or better (1 point)

AND

ES 5: High Performance Duct System (1 point)

AND

IN 1: Renewable Energy Installation of 5% or greater on-site renewable energy; or installation of 40% or greater offsite renewable energy. (1 point)

OR

IN 2: Renewable Energy Procurement of RECs and/or offsets for 200% of building energy for a minimum of three years (2 points)

Energy for Public Projects:

Achieve the following credits:

BE 1A: Measured ELR₇₅ is 0.30 or better (1 point)

AND

ES 5: High Performance Duct System (1 point)

AND

IN 1: Renewable Energy Installation of 10% or greater **on-site** renewable energy; or installation of 60% or greater **off-site** renewable energy. (1 point)

OR

IN 2: Renewable Energy Procurement of RECs and/or offsets for 200% of building energy for a minimum of six years (2 points)

Commissioning for **Public Projects** (Optional for Private Projects)

Achieve the following credit:

EO 1: Building Systems Commissioning (3 points)

WATER USE:

Indoor Water Use

Earn a total of 3 points from any combination of the following credits:

WE 1A: High Efficiency Toilets

WE 1B: Pint Flush or Waterless Urinals WE 1C: Automatic Faucets and/or WE 1D: High Efficiency Showerheads

Outdoor Water Use

Earn a total of 3 points from any combination of the following credits:

- WE 2: Xeriscape Landscape Plan
- WE 3: Efficient Irrigation System or No Irrigation System and/or
- WE 4: Non -Potable Water Source Used for Irrigation (WE 4 is only applicable if an automated irrigation system is installed)

INDOOR ENVIRONMENTAL QUALITY

Achieve 4 points from the following credits:

Earn a total of 1 point from any combination of the following credits:

- IEQ 1: Decoupled Ventilation
- IEQ 2: Demand Control Ventilation (DCV)
- IEQ 3: Air Filtration Media: MERV 11 or Higher or
- IEQ 4: Radon Exposure Prevention

AND

Earn a total of 2 points from any combination of the following credits:

- **IEQ 5: Certified Flooring**
- IEQ 6: Composite Wood Contains No Added Urea-Formaldehyde or
- IEQ 7: Product Transparency Label Material Selection

AND

Earn 1 point from BE 7: Daylighting Design Strategies