

APPENDIX K

TOHO EFFICIENCY PROGRAM CHECKLIST AND AFFIDAVIT

Toho Efficiency Program

Program and Checklist Description



This program for all new residential and commercial construction provides water-efficient options for buildings and landscapes. This will also include common areas and multi-family units. The below requirements must be met and validated by a Toho Efficiency Program inspector through use of this document/checklist.

Questions? Call TWA Water Conservation Coordinator at 407-944-5121 or email: rtilley@tohowater.com

- Variances may be allowed based on technological upgrades to irrigation systems.
- All submittals must have TWA project # and name prior to any review.
- All submittals should include all attachments, plans, and pdfs delivered electronically at one time or TWA will not accept.

General Information			
Builder Information		House Information	
Name		Owner name	
Company		Address	
Address		City/county	
City/county		Owner phone	
Phone		Owner email	
Fax		Number of occupants	
Email			

Required Submissions			
	Yes	No	NA
Certificate of occupancy			
Landscape drawing (to scale not hand drawings)			
Irrigation drawing (to scale not hand drawings)			
Landscape affidavit			
Irrigation affidavit (if there is a permanent in ground irrigation system)			
Schedule of indoor fixtures and appliances, including performance specifications (PDF Submittal)			

Landscape				
		Yes	No	NA
LC 1	No invasive exotic plant species are in the landscaped area.			
LC 2	Root balls are at least 2.5 feet on center from the foundation of structure.			
LC 3	100% of plant selections are compatible with site-specific conditions such as sunlight, soil types and salinity. Landscape beds should be planted for 60% coverage at maturity.			
LC 4	A minimum of 100% of plants are grouped with similar moisture and maintenance requirements.			
LC 5	Trees will provide shade to 30% of the total landscaped area at maturity. Include table showing the shade calculation meets the criteria.			
LC 6	Organic mulch is used and applied to a depth of 2 to 4 inches, leaving a 2-inch space around base of plant.			
LC 7	All plants are installed according to the <i>Florida Friendly Best Management Practices for Protection of Water Resources</i> by the Green Industries. The landscape installer must attest to this in an affidavit.			

Irrigation				
General Design		Yes	No	NA
IRC 1	High-volume irrigation does not irrigate more than 60% of the total landscaped area. Include table showing the irrigation meets this criteria.			
IRC 2	If irrigation is used for landscaped beds, micro irrigation is used and is correctly installed.			
IRC 3	Irrigation zones for turf grass and landscaped beds are separate.			
IRC 4	Irrigated areas less than four feet wide are irrigated with correctly designed and installed micro irrigation.			
IRC 5	Sprinklers and emitters are located at a minimum of two feet from structures.			
IRC 6	Irrigation system is free from leaks.			
IRC 7	Sprinklers in low-lying areas have check valves.			
Distribution Uniformity		Yes	No	NA
IRC 8	Sprinklers rise above turf grass height: <ul style="list-style-type: none"> • A minimum of 6-inch pop-up for spray heads and 4-inch pop-up for rotor heads for St. Augustine, Zoysia and Bahiagrasses • A minimum of 4-inch pop-up for spray and rotor heads for Centipede, Bermuda and Seashore Paspalum grasses 			
IRC 9	Application occurs in proper spray patterns, minimizing overspray on impervious surfaces.			

Irrigation				
IRC 10	Pipes are sized to prevent velocities greater than five feet/second.			
IRC 11	Precipitation rates for all sprinklers within a zone are matched.			
IRC 12	All sprinkler heads with spray nozzles (non-rotary) are pressure-regulated at the body.			
IRC 13	Head spacing does not exceed 50% of the nozzle throw diameter.			
Scheduling		Yes	No	NA
IRC 14	A device with rain shut-off capabilities is installed in an operable location and is functioning.			
IRC 15	Each of the following items has been provided to the homeowner: <ul style="list-style-type: none"> • Controller handbook/operating instructions • As-built zone diagram, including location and size of components, and soil moisture sensor probe location if applicable • Precipitation rates for each zone • Schedule run times, winter and summer 			
IRC 16	If the home is owner-occupied, the homeowner has been trained in how to change the controller schedule for maintenance and for changes in local water rules.			

Indoor				
		Yes	No	NA
INC 1	All fixture and appliance water supply connections are reinforced.			
INC 2	A quarter turn or push-pull valve is used for all fixture and appliance supply lines.			
INC 3	All toilets are high-efficiency (1.28 gallons/flush with a UNAR MaP rating above 350 grams/flush). WaterSense®-labeled toilets comply.			
INC 4	Single showerhead with flow rate of 2 gallons/minute or less, or WaterSense®-labeled.			
INC 5	All lavatory sink faucets have flow rates of 1.5 gallons/minute or less, or WaterSense®-labeled.			
INC 6	If the applicant chooses to install clothes washers and dishwashers, they must meet current ENERGY STAR performance criteria.			

Criteria Met by Applicant		
	Yes	No
Landscape		
Irrigation		
Indoor		

Toho Efficiency Program

Irrigation Affidavit

If a permanent in ground irrigation system has been installed, it will be installed per the design drawings and in accordance with the irrigation criteria. The irrigation system installer must attest and confirm by signing this document that the following items will be successfully completed. In the event that the installer does not conform to the design drawings and irrigation criteria then the developer will be held accountable for any and all changes to bring the system into accordance of the submitted plans.

Item	Completed
Sprinklers in low-lying areas (heads that are lower than the valve box) have check valves.	
Pipes have been sized to prevent velocities greater than 5 feet per second.	
Precipitation rates for all sprinklers within a zone are matched.	
A device with rain shut-off scheduling capabilities has been installed in an operable location and is functioning.	
Each of the following items has been provided to the homeowner: <ul style="list-style-type: none"> • Controller handbook/operating instructions • As-built zone diagram, including location and size of components, and soil moisture sensor probe location if applicable • Precipitation rates for each zone • Schedule run times, winter and summer 	
If the home is owner-occupied, the homeowner has been trained in how to change the controller schedule for maintenance and for changes in local water rules.	

I hereby attest that all of the above items will be completed by the undersigned or under the supervision of the undersigned person.

Signature:	Date:
Company Name:	Phone:
Project Address:	

Toho Efficiency Program

Landscape Affidavit

Landscape materials must be installed in accordance with the *Florida Friendly Best Management Practices for Protection of Water Resources by the Green Industries*. The landscape installer must attest and confirm by signing this document that the following practices will be followed.

Practice	Completed
Organic mulch was used and applied to a depth of 2 to 4 inches, leaving a 2-inch space around the base of plant.	
Site evaluation was conducted.	
Right plant, right place — plants were selected with attributes specific to site conditions.	
Plants were chosen that will not outgrow their allotted space.	
Soil was properly prepared before planting to ensure establishment.	
If compacted, soil was tilled.	
LP 6 (if selected), organic soil amendments have been added into the top 8 inches of soil.	
When planting trees and shrubs, each root ball was inspected and all soil removed from above the topmost root.	
When planting trees and shrubs, each planting hole was properly prepared.	

I hereby attest that all of the above items will be completed by the undersigned or under the supervision of the undersigned person. In the event that the undersigned does not conform to the submitted landscape plans then the developer will be held accountable for bringing the design into accordance of the submitted landscape plans.

Signature:	Date:
Company Name:	Phone:
Project Address:	