

IRRIGATION SYSTEM INSTALLATION
FOR UNIT LANDSCAPE AREA ONLY
EXTERIOR MODIFICATION APPLICATION

An automatic sprinkler system will help maintain a healthy beautiful landscape. It is the most convenient and efficient way to ensure your landscape area gets the water it needs without over or under watering, and it will conserve water.

System design and installation are critical factors that will affect your system's performance and longevity. Should you choose to install a system you **shall** hire a professional to design and install your sprinkler system.

You should consider rain shut-off and moisture sensing devices that can help with water and cost savings.

STOP! Make sure you know where all gas lines, power lines and cable TV lines are before you start to dig. Make sure your contractor calls OUPS.

Call 8-1-1 or 1-800-362-2764 before you dig: It's the law!

By law, everyone **MUST** contact the Ohio Utilities Protection Service (OUPS) 8-1-1 or 1-800-362-2764, at least 48 hours but no more than 10 working days (excluding weekends and legal holidays) before beginning ANY digging project.

Source Rain Bird Irrigations systems

SIRRGATION SYSTEM GUIDELINES

SECTION 1: GENERAL A. Description

1. Purpose: To establish guidelines for design and installation of cost effective, reliable irrigation systems for landscape areas to promote efficient water use and protect natural resources.

2. Definition: Irrigation systems are those that apply and control water application to landscape areas.

Sprinkler Systems: apply water evenly over lawn areas using a systems of controllers, sprinkler heads etc.

Drip Systems: apply water at a slow application rate to plant materials. Such systems include: single-port emitters, multi- port emitters, and in-line emitters.

3. Scope: These guidelines apply to all drip and regular irrigation systems used on landscaped areas.

6. Construction Permits: Construction permits may be required for installation. Permits specifically cover installation of backflow preventers and standard voltage electrical work. Specific local requirements must be verified before installation.

7. Testing and Inspection Certifications: Testing certifications per building code for backflow preventers and standard voltage electrical work shall be obtained.

B. Materials and Equipment Warranties

1. Installation: The contractor should assume full responsibility for the proper installation of the system. Irrigation system components should be specified and installed only within the capabilities and limitations stated by the manufacturer, these guidelines, and any applicable local codes.

2. Guarantees: The contractor should guarantee construction for one year from date of completion.

3. Claims: The contractor should satisfy any guarantee claims within 15 days of receipt of the claim.

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SECTION 2: MATERIALS

A. Irrigation Controllers.

1. All irrigation controllers shall be UL listed and properly grounded according to manufacturers' recommendations and local electric codes. - Proper installation and grounding are essential to avoid electrocution.
2. The controller housing or enclosure should protect the controller from the environment in which it is installed. - Weather exposure shortens controller life.
3. The controller should be capable of separate watering programs for each significantly different hydrozone. - Different plant types require irrigation at different intervals.
4. The irrigation controller should include running increments of minutes and hours. - Most drip systems require a cycle time of at least one hour. - Repeating cycles may serve as an alternative to longer run times.
5. Controllers used in areas where run-off can be a problem should be capable of implementing a minimum of three start times per day. - Repeating cycle's decreases run-off.
6. Additional equipment such as rain switches and soil moisture sensors can provide additional water savings.
7. Electronic controllers should be installed at least 12 feet from motors, air conditioners, or other electrical equipment that emit electromagnetic frequencies (EMFs). - EMFs can cause the controller to malfunction.

B. 110 Volt Primary Wiring

1. All primary wiring should be UL listed #12 gauge with #10 gauge ground. - #12 gauge wire provides durability. Larger ground wire provides more safety for the user and the equipment.
2. All primary wiring installed below ground shall be installed in conduit per electrical code. - Conduit helps prevent the wire from being accidentally severed.
3. All primary wiring installed above ground shall be installed in gray schedule 40, PVC electrical conduit, flexible metallic conduit, or electrical metallic conduit. - 110 volt wiring must not be exposed to the elements or the user.
4. The controller should be connected to a dedicated electrical breaker. - Controllers on separate breakers have less chance of power failures.

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C. Guidelines for Landscape Irrigation Systems

1. All low voltage wire that is directly buried must be UL listed, direct burial wire. #16 gauge or thicker wire should be used, based on the length of the run electrical demand. Wire sizing should be based on electrical demand and length of run. #18 gauge wire is acceptable for residential installations where multi-strand wire cable is used and all valves are within 150 feet of the controller. - Smaller gauge, poorly insulated wire allows unidentifiable current leakage and early failure.
2. Connections are to be made waterproof with devices specifically designed for direct burial. Splices should be placed in a valve box. - Poor splices are the cause of most troubleshooting expense.
3. Use expansion coils at wire connections. - Expansion coils allow for extra wire to make repairs.
4. Leave slack in wires at turns. - Wires expand and contract with temperature. Extra wire in the corners keeps wire from fatiguing.

D. Irrigation Points of Connection

1. Water Source
 - a. Where possible, the point of connection should be before the water line enters the building.
 - b. The tap should be sized to meet the water demand of the irrigation system.
 - c. Tap size should be at least $\frac{3}{4}$ " for residential installations.
 - d. The water supply should not be down-stream from any soft-water system.
2. Pipe Between Point of Connection and Backflow Preventer
 - a. Type K copper pipe or schedule 40 PVC pipe should be used below ground between the point of connection and the backflow preventer. - Galvanized pipe eventually corrodes and can clog emitters.
 - b. Pipes of dissimilar metals should be connected with a dielectric fitting. - Galvanized pipe will quickly deteriorate if connected to copper pipe.
 - c. A manual shut-off valve should be installed between the potable water supply and the backflow prevention unit. A ball valve is recommended. - A manual shut-off allows installation and repair without interrupting flow to the house. - A manual shut-off allows for winterizing the downstream components of the point of connection. - Ball valves must be opened and closed slowly.

Backflow Prevention Assemblies. Provide backflow prevention assemblies at all connections with potable water supplies according to county, municipal, or other applicable codes. It is the responsibility of the designer to specify the assembly according to all applicable regulations. It is the contractor's responsibility to see that the assembly is installed properly and that it passes inspection.

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APPLICATION.

As the owner(s) of the unit identified below I/we propose to install an approved irrigation system **for unit mulched landscape areas only**. The system to be installed will be consistent with the systems in place within the Estates at Tremont Club and/or the designated below. All systems are to be designed and installed by qualified irrigation or Landscape Company

I/We understand all cost associated with the installation and maintenance of an irrigation system shall be the individual unit owners. ETC will assume no responsibility to maintain these systems and offers no assurances they will perform properly.

For record purposes only ETC require that this application be completed and submitted to the ETC Board through the Grounds and Building Committee (G&BC). No work is to begin until this application has been signed by the Chair of the Building and Grounds Committee.

There is no fee for this application.

Upon completion of installation contact the G&BC chair to have inspected

Please print

Unit Owner Name (s) _____

Unit Address: _____

Daytime Phone: _____

Date of Application: _____

System proposed to be installed:

Name of System _____ and

Name of Company to install system _____

Date Application Received: _____

Application approved Yes No _____ Date _____

Building and Grounds Committee Chairperson

Inspection Date: _____ Installation Satisfactory _____

Initials ETC B&GC Chair

Mail or Drop this form to:

Estates at Tremont Club
Grounds and Building Committee Chair
c/o Susan Dahlen
4800 Tremont Club Drive
Hilliard, OH 43026

This exterior modification policy was adopted by the ETC Board on 7/22/2015