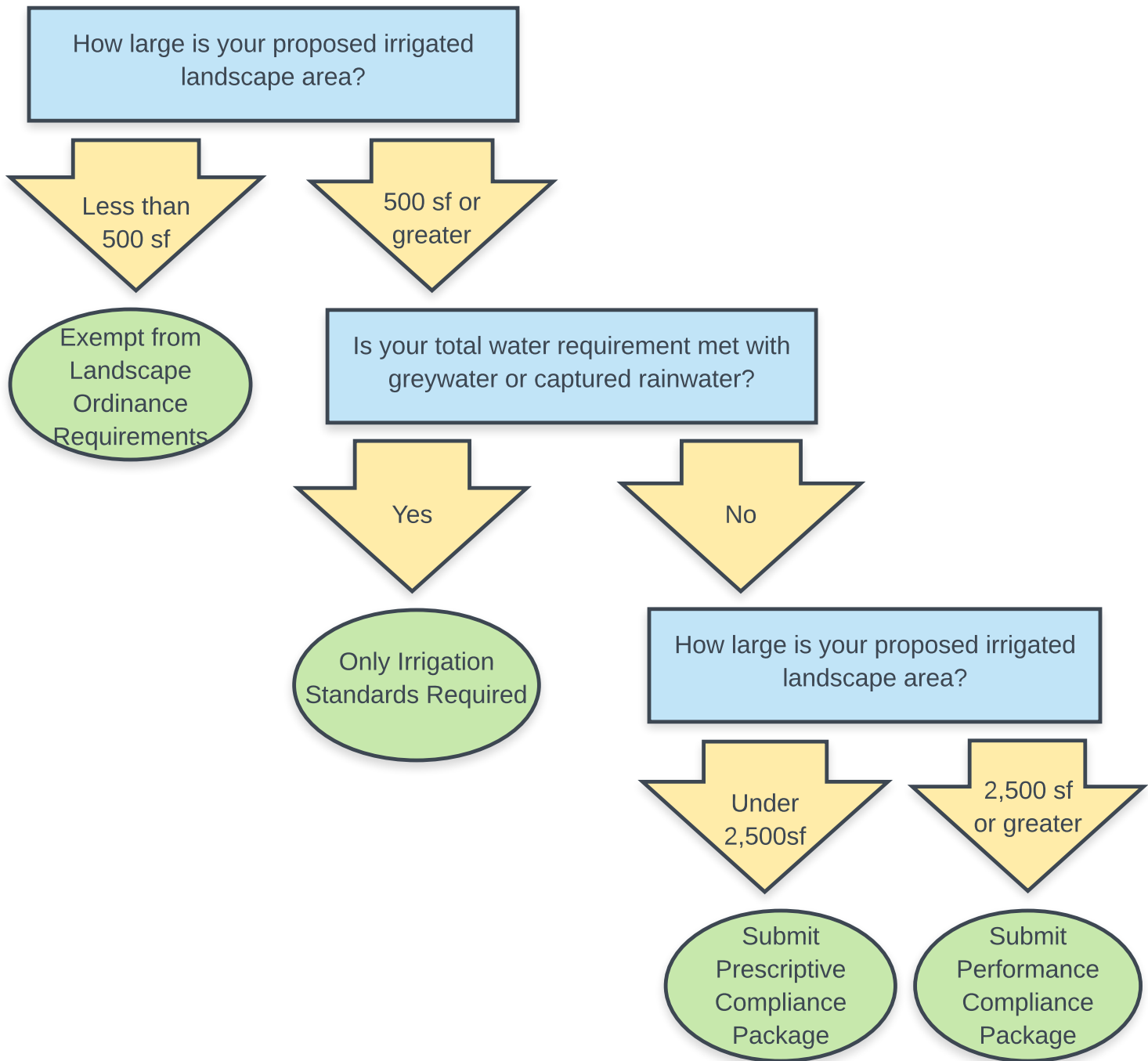




CITY OF FORTUNA  
COMMUNITY DEVELOPMENT DEPARTMENT  
BUILDING AND SAFETY DIVISION  
621 11th Street, Fortuna, California 95540  
Phone: (707)725-7600 Fax: (707)725-7610

Model Water Efficiency Landscape Ordinance  
Submission Packet





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## MODEL WATER EFFICIENCY LANDSCAPE ORDINANCE PROJECT INFORMATION

Plan Check Submittal Date:		
Project Applicant:	Phone:	
	Email:	
Property Owner:	Phone:	
	Email:	
Project Address:	APN:	
Agent:	Phone:	Email
Street Address:		
City:	State:	Zip Code:

**Project Type** (*new dwelling, commercial, or rehab*): \_\_\_\_\_

Currently, this project **does not** include irrigated landscaping, **or** the area of irrigated landscaping is **less than 500sf**. I am aware that future landscape installations may be required to comply with the Model Water Efficient Landscape Ordinance (MWELO) requirements per California Code of Regulations, Title 23, Division 2, Chapter 2.7.

This project **does** incorporate irrigated landscaping. (*Please provide the information below specific to the landscape area which will be completed as part of this project and specify the compliance method to be used*):

Total Landscape Area (sq. ft.): \_\_\_\_\_ Turf Area (sq. ft.): \_\_\_\_\_

Non-Turf Plan Area (sq. ft.): \_\_\_\_\_ Special Landscape Area (sq. ft.): \_\_\_\_\_

Water Type (*potable, recycled, well*): \_\_\_\_\_

### **Compliance Method**

- Performance (Items included in Performance Checklist is included on plans)
- Prescriptive (Items included in Prescriptive Checklist is included on plans)

### **Signature**

I certify the above information is correct and agree to comply with the requirements of the MWELO.

\_\_\_\_\_  
Signature of property owner or authorized representative

\_\_\_\_\_  
Date



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## **MODEL WATER EFFICIENCY LANDSCAPE ORDINANCE**

# **PRESCRIPTIVE COMPLIANCE**

### **Project**

Site Address: \_\_\_\_\_

Project Type (*new dwelling, commercial, or rehab*): \_\_\_\_\_

- This project **does** incorporate irrigated landscaping equal to or less than 2500 sq ft and will be using this form to identify prescriptive requirements which will be included as part of the landscape project. (*Please provide the information below specific to the landscape area and identify the location on the plans each design measure can be found using the LANDSCAPE WATER-EFFICIENCY (MWELo) APPENDIX – D CHECKLIST on page two*):

Total Landscape Area (sq. ft.): \_\_\_\_\_ Turf Area (sq. ft.): \_\_\_\_\_

Non-Turf Plan Area (sq. ft.): \_\_\_\_\_ Special Landscape Area (sq. ft.): \_\_\_\_\_

Water Type (*potable, recycled, well*): \_\_\_\_\_

### **Signature**

I certify the above information is correct and agree to comply with the requirements of the MWELo.

\_\_\_\_\_  
Signature of property owner or authorized representative

\_\_\_\_\_  
Date

*“Special Landscape Area” (SLA) means an area of the landscape dedicated solely to edible plants, areas irrigated with recycled water, water features using recycled water and areas dedicated to active play such as parks, sports fields, golf courses, and where turf provides a playing surface.*

**LANDSCAPE WATER-EFFICIENCY (MWELo) APPENDIX – D CHECKLIST**

(Can only be used when aggregate irrigated landscape areas are 2,500 square feet or less)

Landscape Parameter	Design Measures	Location on Plans
<b>Compost</b>	Incorporate compost at a rate of at least four (4) cubic yards per 1,000 sq. ft. to a depth of 6 inches into landscape area (unless contra-indicated by a soil test).	
<b>Plant Water Use</b>	<u>Residential:</u> Install climate adapted plants that require occasional, little or no summer water (average WUCOLS plant factor 0.3) for 75% of the plant area excluding edibles and areas using recycled water. <u>Non-residential:</u> Install climate adapted plants that require occasional, little or no summer water (average WUCOLS plant factor 0.3) for 100% of the plant area excluding edibles and areas using recycled water.	
<b>Mulch</b>	A minimum 3-inch layer of mulch should be applied on all exposed soil surfaces of planting areas, except in areas of turf or creeping or rooting groundcovers.	
<b>Turf</b>	Total turf area shall not exceed 25% of the landscape area. Turf is not allowed in non-residential projects.	
	Turf (if utilized) is limited to slopes not exceeding 25% and is not used in parkways less than 10 feet in width.	
	Turf, if utilized in parkways is irrigated by sub-surface irrigation or other	
<b>Irrigation System</b>	Irrigation controllers use evapotranspiration or soil moisture data and utilize a rain sensor.	
	Irrigation controller programming data will not be lost due to an interruption in the primary power source.	
	Areas less than 10 feet in any direction utilize sub-surface irrigation or other technology that prevents overspray or runoff.	
	A private landscape submeter is installed at non-residential landscape areas of 1,000 sq. ft. or more.	

**Signature**

I agree to comply with the requirements of the prescriptive compliance option of the MWELo per Appendix D.

\_\_\_\_\_  
Signature of property owner or authorized representative

\_\_\_\_\_  
Date

**Note**

For the purposes of this for irrigated landscape area includes all the planting areas, turf areas, and water features in a landscape design plan subject to the Maximum Applied Water Allowance calculation. The landscape area does not include footprints of buildings or structures, sidewalks, driveways, parking lots, decks, patios, gravel or stone walks, other pervious or non-pervious hardscapes, and other non-irrigated areas designated for non-development (e.g., open spaces and existing native vegetation).



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## **MODEL WATER EFFICIENCY LANDSCAPE ORDINANCE**

# **PLAN REQUIREMENTS**

# **PERFORMANCE COMPLIANCE**

Plan Check Submittal Date:		
Project Applicant:	Phone:	
	Email:	
Property Owner:	Phone:	
	Email:	
Project Address:	APN:	
Agent:	Phone:	Email
Street Address:		
City:	State:	Zip Code:

### **Landscape Documentation Package (Title 23, Chapter 2.7 §492.3)**

- The project's address, total landscape area, water supply type, and contacts shall be stated on the plans.
- Add, sign and date the following statement on the plans: "I agree to comply with the requirements of the water efficient landscape ordinance and submit a complete Landscape Documentation Package."
- Water Efficient Landscape Worksheet that includes a hydrozone information table and water budget calculations shall be submitted for plan check.
- A landscape design plan and irrigation design plan shall be submitted for plan check.

### **Water Efficient Landscape Worksheet (Title 23, Chapter 2.7 §492.4 and §492.13)**

- Incorporate the Water Efficient Landscape Worksheet into plans. Show that the Maximum Applied Water Allowance (MAWA) meets or exceeds the calculated Estimated Total Water Use (ETWU).
- The evapotranspiration adjustment factor (ETAF) for the landscape project shall not exceed a factor of (0.55 for residential areas) (0.45 for non-residential areas).
- The plant factor used shall be from WUCOLS or from horticultural researchers with academic institutions. WUCOLS plants database can be found online at: <http://ucanr.edu/sites/WUCOLS/>
- All water features shall be included in the high water use hydrozone. All temporary irrigated areas shall be included in the low water use hydrozone.
- All Special Landscape areas shall be identified on the plans. The ETAF for new and existing (non-rehabilitated) Special Landscape Areas shall not exceed 1.0.
- For the purpose of calculating ETWU, the irrigation efficiency is assumed to be 0.75 for overhead spray devices and 0.81 for drip system devices.

### **Landscape Design Plan (Title 23, Chapter 2.7 §492.6)**

- The landscape design plans, at a minimum, shall:
  - Delineate and label each hydrozone by number, letter, or other methods.
  - Identify each hydrozone as low, moderate, high water, or mixed water use.
  - Identify recreational areas, areas solely dedicated to edible plants, areas irrigated with recycled water, type and surface area of water features, impermeable and permeable hardscape, and any infiltration systems.
- For hydrozone with a mix of both low and moderate water use plants or both moderate and high water use plants, the higher plant factor or the plant factor based on the proportions of the respective plant water uses shall be used. Hydrozones containing a mix of low and high water use plants is not permitted.
- Turf is not allowed on slopes greater than 25% where the toe of the slope is adjacent to an impermeable hardscape.
- Add note to plans: "Recirculating water systems shall be used for water features"
- Add note to plans: "A minimum 3-inch layer of mulch shall be applied on all exposed soil surfaces of planting areas except turf areas, creeping or rooting groundcovers, or direct seeding applications where mulch is contraindicated."
- Add note to plans: "For soils less than 6% organic matter in the top 6 inches of soil, compost at a rate of a minimum of four cubic yards per 1,000 square feet of permeable area shall be incorporated to a depth of six inches into the soil".

### **Irrigation Design Plan (Title 23, Chapter 2.7 §492.7)**

- The irrigation plans, at a minimum, shall contain the following:
  - Location and size of spate water meters for landscape
  - Location, type, and size of all components of the irrigation system, including controllers, main and lateral lines, valves, sprinkler heads, moisture sensing devices, rain switches, quick couplers, pressure regulators, and backflow prevention devices.
  - Static water pressure at the point of connection the public water supply
  - Flow rate (gallons per minute), application rate (inches per hour), and design operating pressure (pressure per square inch) for each station.
- A dedicated water service meter or private submeter shall be installed for all (non-residential irrigated landscapes of at least 1,000sqft) (residential irrigated landscape areas of at least 5,000sqft.)
- Add note to plans: "Pressure regulating devices are required if water pressure is below or exceeds the recommended pressure of the specified irrigation devices."
- Manual shut-off valves shall be required, as close as possible to the point of connection of the water supply, to minimize water loss in case of an emergency or routine repair.
- Add note to plans: "Check valves or anti-drain valves are required on all sprinkler heads where low point drainage could occur."
- Areas less than 10-feet in width in any direction shall be irrigated with subsurface or drip irrigation.
- Overhead irrigation shall not be permitted within 24-inches of any non-permeable surface.

### **Required Statements and Certification (Title 23, Chapter 2.7 §492.6, §492.7 and §492.9)**

- Add the following statement on the landscape and irrigation plans: "I have complied with the criteria of the ordinance and applied them for the efficient use of water in the landscape design plans".
- The final set of landscape and irrigation plans shall bear the signature of a licensed landscape architect, licensed landscape contractor, certified irrigation designer, licensed architect, licensed engineer, licensed land surveyor, or personal property owner.
- Add note to plans: "A diagram of the irrigation plan showing hydrozones shall be kept with the irrigation controller for subsequent management purposes."
- Add note to plans: "A Certificate of Completion shall be filled out and certified by either the designer of the landscape plans, irrigation plans, or the licensed landscape contractor for the project"
- Add note to plans: "An irrigation audit report shall be completed at the time of final inspection"



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## MODEL WATER EFFICIENCY LANDSCAPE ORDINANCE

# CERTIFICATE OF COMPLETION

This certificate is filled out by the project applicant upon completion of the landscape project.

### PART 1. PROJECT INFORMATION SHEET

Plan Check Submittal Date:		
Project Applicant:	Phone:	
	Email:	
Property Owner:	Phone:	
	Email:	
Project Address:	APN:	
Agent:	Phone:	Email
Street Address:		
City:	State:	Zip Code:

### Property Owner:

“I/we certify that I/we have received copies of all the documents within the Landscape Documentation Package and the Certificate of Completion and that it is our responsibility to see that the project is maintained in accordance with the Landscape and Irrigation Maintenance Schedule.”

---

Property Owner Signature

Date

**PART 2. CERTIFICATION OF INSTALLATION**  
**ACCORDING TO THE LANDSCAPE DOCUMENTATION PACKAGE**

*“I/we certify that based upon periodic site observations, the work has been substantially completed in accordance with the ordinance and that the landscape planting and irrigation installation conform with the criteria and specifications of the approved Landscape Documentation Package.”*

Signature*		Date	
Name (print)		Telephone No.	
		Fax No.	
Title		Email Address	
License No. or Certification No.			
Company		Street Address	
City	State	Zip Code	

\*Signer of the landscape design plan, signer of the irrigation plan, or a licensed landscape contractor.

**PART 3. IRRIGATION SCHEDULING**

Attach parameters for setting the irrigation schedule on controller.

**PART 4. SCHEDULE OF LANDSCAPE AND IRRIGATION MAINTENANCE**

Attach schedule of Landscape and Irrigation Maintenance.

**PART 5. LANDSCAPE IRRIGATION AUDIT REPORT**

Attach Landscape Irrigation Audit Report.

**PART 6. SOIL MANAGEMENT REPORT**

Attach soil management report, if not previously submitted with the Landscape Documentation Package.

Attach documentation verifying implementation of recommendations from soil management report.

**For Office Use Only:**

Application/Permit No.	Received by:	Reviewed By:
	Received Date:	Approved Date:





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## MODEL WATER EFFICIENCY LANDSCAPE ORDINANCE

# LANDSCAPE CERTIFICATION

This form is required at final inspection

### Project Information:

Site Address: _____	
APN: _____	Permit Number: _____

### Section A: Landscape Designer

- I certify that I am qualified by the State of California to perform landscape design services; the landscape design and water use calculations for this project were prepared by me or under my supervision; the landscape design and water use calculations comply with the requirements of the Model Water Efficient Landscape Ordinance, and the Landscape Documentation Package is complete; **OR**
- Interior T.I., no landscape work performed (**do not need to complete sections B or C below**); **OR**
- This project is not subject to the Model Water Efficient Landscape Ordinance.

Name: \_\_\_\_\_ Relationship to Project: \_\_\_\_\_

Company Name: \_\_\_\_\_ State License #: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

### Section B: Landscape Installer

- I certify that (a) I am qualified by the State of California to provide landscape design services; the landscape project for this project was installed by me or under my supervision; (b) the landscaping for the identified property has been installed in substantial conformance with the approved Landscape Documentation Package and complies with the requirements of the Model Water Efficient Landscape Ordinance; (c) a diagram of the irrigation plan showing hydrozones is kept with the irrigation controllers; (d) the Certificate of Completion has been completed in compliance with the requirements of the Model Water Efficient Landscape Ordinance and shall be implemented.

Name: \_\_\_\_\_ Relation to Project: \_\_\_\_\_

Company Name: \_\_\_\_\_ State License #: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

### Section C: Owner/Representative

- I certify that I am the property owner or an authorized representative and have received copies of all the documents within the Landscape Documentation Package and the Certificate of Completion and that it is my responsibility to see that the project is maintained in accordance with the Landscape and Irrigation Maintenance Schedule.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**Qualified irrigation service provider:** The following individuals are authorized to provide services required by the Model Water Efficient Landscape Ordinance in the State of California: Landscape Architects, Landscape Contractors, Landscape Designers and Irrigation Consultants. Personal property owners may design and sign plans for work on any property they own. (Sections 5500.1, 5615, 5641, 5641.1, 5641.2, 5641.3, 5641.4, 5641.5, 5641.6, 6701, 7027.5 of the Business and Professions Code, Section 832.27 of Title 16 of the California Code of Regulations, and Section 6721 of the Food and Agricultural Code)

You may see below for simple footage calculations. For more complex footage calculations, it may be necessary for you to request assistance from your contractor or landscaper. In some cases, your local water agency may also be able to offer assistance to ensure accurate measurements.

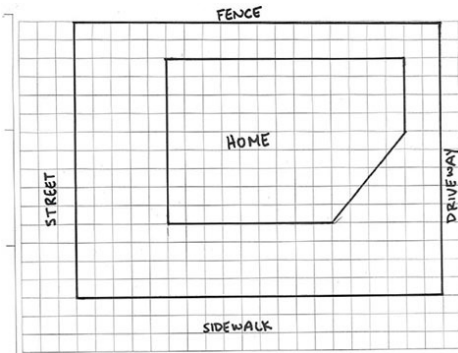
**How to measure the square footage of your project area**

To measure your project area, gather the following tools and follow the steps below. There are also online satellite imagery websites that may be able to help you measure your lawn’s square footage. If you will be using a contractor for completion of your project, ask that they measure your project area to ensure the correct amount of footage is requested in your application.

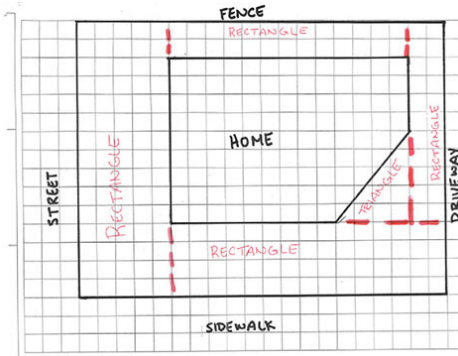
**Tools you will need:**

- Measuring tape or measuring wheel
- Graph paper (free templates available online)

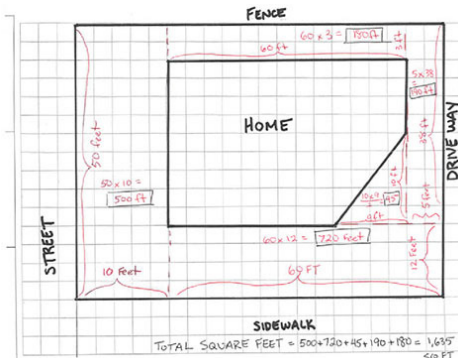
**Steps for measuring your lawn:**



1. Utilize the graph paper to make a drawing of your home and the borders of your yard. Write in any descriptions of nearby items such as driveways, fences, or sidewalks. This will help you orient yourself.



2. Divide the project area into easily measured shapes such as rectangles, squares, triangles and circles. A list of formulas to find the square feet of these shapes is included below.



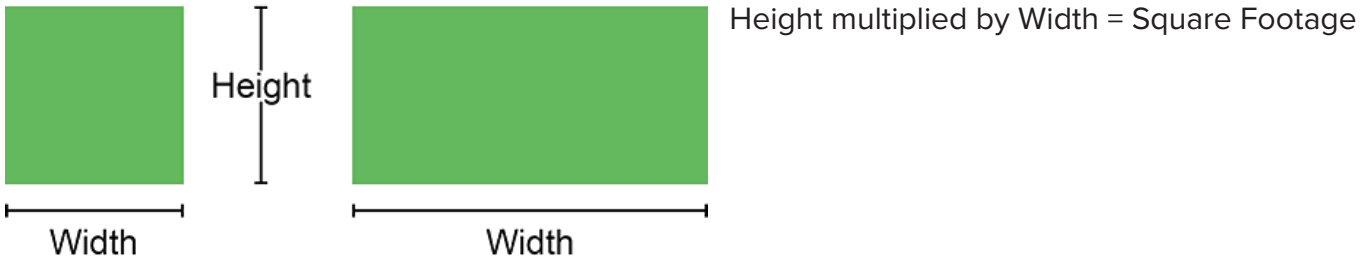
3. Take measurements to find out the square footage of each shape in your yard. Then add up the square footage of each shape for total square footage.

### Helpful formulas to find square footage

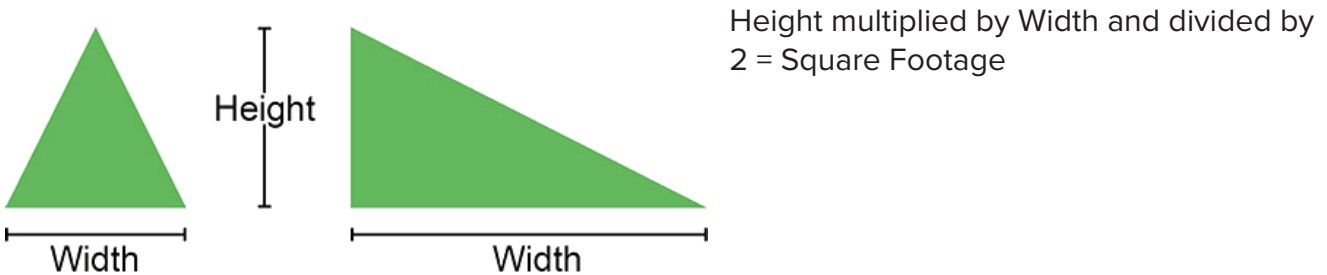
There are many online “area calculator tools” that will calculate the square footage of common shapes after you enter in the required measurements.

Squares, rectangles, and triangles will be the most common shapes in your yard. The formulas for finding their square footage are below. If you have more unusual shapes, you can find out how to calculate their square footage here on many websites.

#### Square or Rectangle



#### Triangle



**Note:** Accuracy in footage is very important. We cannot increase your footage after your project has been pre-approved, so please strive to provide as accurate information as possible in your application. Please note that the program may review your requested footage and reduce the project area if a discrepancy is noted.