



TCR 28 – Irrigation Controls

Resolution Summary:

Requirements, answer options and scores have changed for efficient irrigation controls.

Effective date:

April 23, 2019

Applicable to the following property types:

Office (02.04.01)

Universal (02.04.03)

Light Industrial / Open Air Retail (02.04.03)

Enclosed Shopping Centre (02.04.02)

New question wording (changes are indicated in red):



02.04.01	Which type of water efficient controls are used for irrigation?			
Explanation & Evaluation	<p>Description: Water-efficient irrigation controls reduce water consumption.</p> <p>Requirements: Indicate which type of irrigation control is in place at the building and used to irrigate 80% or more of the landscape.</p> <p>Additional Information: Select all that apply. Select Not Applicable if there is no irrigation at the building.</p> <ul style="list-style-type: none"> • Drip irrigation: Water lines with low flow, dripping applicators spread throughout the irrigated area to more conservatively distribute water. • Root-fed irrigation: Applicators are below ground and close to the roots zone of plants. • Soil moisture sensors: Moisture sensors are placed in the soil of the irrigated area and communicate with an automatic scheduling system to adjust scheduling based on the real-time moisture levels of the irrigated area. • Rain sensors: Precipitation sensors placed in the irrigated area communicate with an automatic scheduling system to adjust scheduling based on previous rainfall on the irrigated area. • Weather-based controllers: Can be either a Smart or Central Controller. Must be WaterSense approved <ul style="list-style-type: none"> ○ A smart controller automatically adjusts the irrigation schedule/program after receiving the appropriate inputs. Most smart controllers use Historical Evapotranspiration (ET) data and have an onsite weather station/pod that is used to make a daily adjustment to the Historical ET value. Typically, this weather device measures solar radiation, temperature, humidity and rainfall. ○ A central controller is a subscription-based smart controller that receives a wireless weather signal from a local network of weather stations or sources that feed information to a central hub, this hub then feeds the changing weather patterns to the individual smart controller on an hourly or daily basis. • Pressure regulated head: A pressure regulated sprinkler head can be used for all rotor, spray and rotary nozzles. It regulates the pressure of flowing water to a predetermined pressure. It reduces water waste by dispersing larger water droplets that are more resistant to wind and eliminates high pressure misting and fogging. • Smart scheduling: Manual scheduling based on an interaction of factors to maximize the efficiency of water use in irrigating plants. Considers the following: timing (to reduce evapotranspiration, best at night or away from peak sun and heat loads); flow rate and distribution of irrigation system; slope; soil type and infiltration rate of area being irrigated; plant type (watering needs and root depth); seasonal changes in watering needs; and predicted and actual rainfall. 			
Scoring		Yes	No	N/A
	Drip irrigation	3/6	0/6	0/0
	Root-fed irrigation	3/6	0/6	0/0
	Soil moisture sensors	3/6	0/6	0/0
	Rain sensors	3/6	0/6	0/0
	Weather-based controllers	3/6	0/6	0/0
	Pressure regulated head	3/6	0/6	0/0
	Smart scheduling	3/6	0/6	0/0