

Soil Moisture Irrigation Schedule Worksheet

	Project Address Address		Date Auditor Station/Zone
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Plant Water Requirement	Value	Units	Source
A. Reference Period Month		month	calendar
B. Reference Period Days		number of days	calendar
C. Reference Evapotranspiration [ET _O]		in.	historical data or local source
D. Landscape Coefficient [K _L]		number	(K _T or K _P) × K _d × K _{mc}
1) Turf or Plant Factor [K _T or K _P]			landscape coefficient factor chart
2) Vegetation Density Factor [K _d]			landscape coefficient factor chart
3) Microclimate Factor [K _{mc}]			landscape coefficient factor chart
E. Landscape Evapotranspiration [ET _L]		in.	ET _O × K _L
F. Average Daily Evapotranspiration [Daily ET _L]		in.	ET _L ÷ Ref Days

Sprinkler Performance	Value	Units	Source
G. Precipitation Rate [PR]		in./hr.	audit or calculation
H. Distribution Uniformity [DU _{LQ}]		decimal	audit
I. Scheduling Multiplier [SM]		number	scheduling multiplier chart

Soil Properties	Value	Units	Source
J. Soil Texture Category		texture category	soil texture chart
K. Available Water [AW]		in./in.	soil texture chart
L. Root Zone Depth [RZ]		in.	measurement or target
M. Plant Available Water [PAW]		in.	AW × RZ
N. Management Allowed Depletion [MAD]		decimal	management decision
O. Allowable Depletion [AD]		in.	PAW × MAD

Scheduling Parameters	Value	Units	Source
P. Irrigation interval [I]		days between	AD ÷ Daily ET _L [round down]
Q. Water to Apply [WTA]		in.	Daily ET _L × I
R. Lower Boundary [RT _{LOWER}]		mins.	(WTA ÷ PR) × 60 [round down]
S. Upper Boundary [RT _{UPPER}]		mins.	RT _{Lower} × SM [round up]
T. Selected Run Time [Selected RT]		mins.	management decision
U. Determine Cycle Starts		cycles	management decision
Ua. By Observed Time to Runoff	Ua.	cycles	(Selected RT ÷ runoff mins) [round up]
Ub. By Site Conditions	Ub.	cycles	based on site conditions
1) Soil Category			site conditions chart
2) Slope			site conditions chart
3) Compaction			site conditions chart
4) Sprinkler type			site conditions chart

Scheduling Summary	Value	Units	Source
V. Water To be Applied		in.	WTA
Interval		days between	I
Cycle Starts Per Day		cycles	determined cycle starts
Minutes Per Cycle		mins.	Selected RT ÷ cycles [round]