

## Irrigation Scheduling

Let's combine all of the information we have on soil intake rates and moisture storage with a modified precipitation rate formula:

The amount of time to achieve .1" of water =  $\frac{\text{Spacing} \times \text{Spacing}}{16 \times \text{GPM} (360')}$

Generally-	Sprayheads	5 minutes
	Res. Rotors	20 minutes
(Time to	Sports Turf Rotors	15 minutes
apply .1"	Greens-Golf Rotors	11 minutes
water)	Fairways- Golf Rotors	14 minutes (double row)
	Fairways- Golf Rotors	16 minutes (single row)

We should look at replenishing the soil moisture level when 50% of the available moisture in relation to the plant root base is used.

If average evapotranspiration is .15 inches per day and turf root base is 8 inches, soil textures will vary but, unless in a fine sand medium, the soil moisture level is about 1 inch. In 3 days on average we would have used .45 inches of water. Using the above schedules we would run a sprayhead zone for 22 minutes every third day or a rotor zone for 90 minutes. Best practice would be to split the cycle and apply 2 or 3 applications in the day.

For sand the frequency would have to increase because the moisture retention is lower. An every second day schedule would be used to apply .3 inches of water. Again, cycles of .15 inches of water would be the best method to ensure that the plants make use of the water entering the soil.

Every second or third day is best to optimize plant root development. For newly laid sod several cycles daily should be used to relieve plant surface stress and allow the water to soak through to grade. For annuals, since their root depth is minimal, a daily watering schedule should be used.