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### **ALL IRRIGATIONS SYSTEMS ARE EQUAL-----AREN'T THEY?**

All irrigation systems are created equal-----aren't they? The fact of the matter is they are NOT. To the client or the novice, the perception is that if the turf and the shrubbery are getting wet, then the sprinkler system is a good one. This concept is coupled with the incorrect assumption that an inexpensive sprinkler system is just as good as a more expensive system, since they both apply water; the perception being that the contractor is just making more profit. However, consider the reality of this age-old adage: **“You get what you paid for.”**

Most clients do not honestly know what constitutes a good irrigation system, nor do they know what key questions to ask when purchasing a sprinkler system. The blame for this does NOT solely belong to the consumer, but also should fall on the shoulders of the professional irrigation contractor. It is the contractor's professional responsibility to educate the client on the merits of an irrigation system, such as operating costs, water conservation, compliance with state and local regulations, and longevity.

The irrigation industry as a whole can do a much better job of educating the general public about irrigation systems and the importance of a solid design. People understand that when they purchase a new automobile, they have a responsibility to maintain it, and it will have costs associated with ownership, such as maintenance, insurance, operations costs, etc. They further understand that to get a more fuel-efficient and maintenance-free vehicle, they will have to spend more money.

Yet, these same consumers will purchase a sprinkler system for the least amount of money, and never consider the efficiency, operating costs, or costs of landscaping replacement if the irrigation system is not adequate. The major difference here is that at least with a vehicle you can correct a bad decision, trade it in and buy a new one. An irrigation system is like a child. Once you have it, it's yours; you cannot give it back, sell it, or trade it in. You have to accept it and work with it; regardless of the cost. In other words, **“does it pay to purchase the cheapest sprinkler system?”**

There are several generally accepted formats that should be followed throughout the industry when it comes to design. Unfortunately, these have yet to be fully standardized and implemented across the United States. This is due to the lack of formalized standards, and, to a point, a level of education. However, there are many positive steps being taken across the nation to change this.

The bottom line is that the irrigation professional should understand that when they design an irrigation system, they have the professional responsibility to design the most water-efficient system they can. In addition, they should educate their prospective clients on the benefits of solid and efficient sprinkler design.

There are five fundamental components that will impact the overall performance and efficiency of every irrigation system, regardless of whether it is the largest commercial project or the smallest residential job. These are design, manufacturers specifications, component selection, matched participation rates, and the irrigation contractor.

1. **Design:** Although this sounds like a basic concept and should not warrant any time, it is in fact one of the most fundamental failures of irrigation systems. Contractors seem to use the “boot” method. The “boot” method is simply stepping off the number of paces that the contractor feels is appropriate in the field, and installing a head at this location. Then, by gut feel experience, divine intervention, or some mystical power, the hydraulics of this system will magically operate to the minimum of performance. Your professional irrigation contractor should review their drawing with you, and fully-explain what will be installed. This is your first indication, if the contractor **does not** provide a drawing, eliminate this contractor, their guessing.
2. **Manufacturers specifications:** The actual performance of any given irrigation product should not be a surprise to any irrigation designer. Yet, often times, some irrigation contractors and designers are amazed when a given brand of product does not deliver water at a 50' radius, at 6 GPM, when they are only supplied the product with a 20 PSI dynamic pressure. The product is not to blame for improper performance, but rather, it was the contractor's responsibility to follow the manufacturers recommended criteria. One of the biggest factors seen here is the failure of the professional contractor to understand that the specification catalogs list the minimum dynamic pressure to be delivered to the product is less than the minimum requirements, the product will simply not perform.
3. **Component selection:** The selection of the component is, in fact, the most critical juncture of the design process. Although brand loyalty is a nice thing, it is more important to ensure that the component you have selected will work in the application that you have chosen to install.

Remember that when you specify or design an irrigation system, the end user is stuck with your recommendations for many years to come. You should be sure that the product you have selected will perform to the conditions that your specific site will provide.

4. **Matched participation rates:** Matched participation rates or MPR is one of the most overused and least understood concepts in the professional irrigation world. A designer could follow most all of the generally accepted principals and practices of irrigation design by not exceeding 5lfs, utilizing progressive pie size, sizing the water meter, backflow, and valves, and yet if MPR is not obtained, the design will be dead on arrival.
5. **Contractors:** The contractor you select should review all aspects of the installation of your new automatic lawn sprinkler system. If you feel uncomfortable from the beginning, get another estimate. Be careful in selecting your contractor, because the system they install will be with you forever. Make sure they have references, and ask for names of people they have installed sprinklers for. Ask how long they have been in business. By installing over 25 years, doesn't mean they are experts. In fact, they are probably cutting corners. There are many contractors installing the wrong sprinkler systems. You won't find this out until it's over.

Warranties are extremely important. If the contractor doesn't warranty their work, eliminate this contractor. Know the products they are installing. Are they the most current brands? Some contractors use old products, that's why their prices are so low.

Call the town you reside in to see if this contractor is licensed in your town. If not, eliminate this contractor. If they are not licensed they have no insurance or bond with the town or city.