

Design Data Form

Print out or copy this form for recording your design information on. It will make the design process much easier for you.

Fill in the following items as you work through the sprinkler design tutorial.

For "City Slickers" (Water from water company):

Design Pressure _____ **PSI**

Supply Pipe Size _____

Water Meter Size _____

Maximum Available GPM _____ **GPM**

Initial Design Flow _____ **GPM** (use pencil, may need to change)

For "Country Bumpkins" (Water pumped from well, pond, river, etc.):

Dry Method:

(A) Pump Horsepower _____ **H.P.**

(B) Dynamic Water Depth _____ **ft.**

(C) Elevation Difference _____ **ft.**

(D) Elevation Head _____ **ft. (formula: B + C = D)**

(E) Design Pressure _____ **PSI.**

(F) Design Head _____ **ft. hd. (formula: E * 2.31 = F)**

(G) Total Pressure Head _____ **ft. hd. (formula: D + F = G)**

(H) Initial Design Flow _____ **GPM (formula: A * 2178 / G = H)**

Wet Method:

(I) Design Pressure _____ **PSI.**

(J) Initial Design Flow _____ GPM

Country Bumpkins: Don't forget that "Valve Zone GPM should be between 80% and 100% of Design Flow".

For "Backwoods Water" (Gravity flow systems from streams, tanks, etc.):

Maximum GPM _____ PSI

Tank Inflow GPM _____ GPM (only for those with tanks)

Initial Design Pressure _____ PSI

For everyone:

Pressure Loss Table

_____ **PSI - Water Meter**

_____ **PSI - Backflow Preventer**

_____ **PSI - Filter (Optional, but recommended)**

_____ **PSI - House Mainline 1 (from water source to water meter)**

_____ **PSI - House Mainline 2 (from water meter to irrigation connection)**

_____ **PSI - Irrigation Mainline (from irrigation connection to valves)**

_____ **PSI - Valves**

_____ **PSI - Elevation Change**

_____ **PSI - Sprinkler Heads**

_____ **PSI - Laterals (maximum 20% of sprinkler head value above)**

_____ **PSI - TOTAL PRESSURE LOSS**

Note that not all of the items in the list above may be applicable to your system.