# **Product Submittal Sheet**

**DRAINAGE** solutions, INC (317) 346-4110 www.drainagesolutionsinc.com

# **ADJUSTABLE HEIGHT PAVER DRAIN**

The Adjustable Height Paver Drain is a dual-elevation deck drain system used for the installation of paver decks. This unique design features a top cap that can be lapped past the joints for rigidity as well as a tray built into the base to set the pavers on.





## **FLOW RATE:**

**Drain Calculations** 

### **Assumptions/ Constants:**

Gradient - Slope (S) 1 in 200 (0.5%) Surface Roughness (Mannings n) Rainfall Intensity (1) (TxDOT Manual) Runoff Coefficient (C) (TxDOT Manual)

**STEGMEIER** 

0.005 ft/ft, Contains UV inhibitors
0.009 Plastic (PVC & ABS)
5.8 in/hr for 10 year storm with time of concentration = to time of duration of 20 min.
0.95 For concrete city streets 0.9 - 0.95 - i.e. all concrete pool deck

|                                 | Area    | Wetted<br>Perimitter | Hydraulic<br>Radius Velocity |          | Capacity - Q |              | Catchment Area - A |        |       | Length |      |
|---------------------------------|---------|----------------------|------------------------------|----------|--------------|--------------|--------------------|--------|-------|--------|------|
| DRAIN NAME                      | A (ft²) | P (ft)               | R (ft)                       | V (ft/s) | (cfs)        | (liters/sec) | (gal/min)          | (Acre) | (ft²) | (m²)   | (ft) |
| ADJ. HEIGHT<br>PAVER DRAIN-LOW  | 0.014   | 0.349                | 0.039                        | 1.352    | 0.019        | 0.5          | 8.3                | 0.003  | 146   | 14     | 1    |
| ADJ. HEIGHT<br>PAVER DRAIN-HIGH | 0.020   | 0.454                | 0.044                        | 1.459    | 0.029        | 0.8          | 13.1               | 0.005  | 230   | 21     | 1    |

#### **Notes/Equations:**

1. Above Catchment area based upon 1 foot, 1 meter, etc of the drain section.

- 2. R = A/P3.  $v = (1.49/n)^{*}(R)^{(2/3)}(S)^{(1/2)}$
- 3.  $v = (1.49/n)^{*}(R)^{(2/3)^{*}}(S)^{(1)}$ 4. Q = vA
- 4. Q = VA5. A = Q/CI

Cartons includes: 8 pcs. 10' base, 8 pcs. 10' Top Cap and 8 Couplers.

| Project Information | Contractor Information | Architect Information |
|---------------------|------------------------|-----------------------|
| Name:               | Name:                  | Name:                 |
| Address:            | Contact:               | Contact:              |
|                     | Phone:                 | Phone:                |
|                     | Fax:                   | Fax:                  |