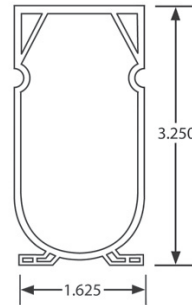


### DECK DRAIN

Stegmeier LLC Deck Drain is an extruded PVC drain that comes with connecting couplers and is designed to be set level. This drain is commonly used in pool decks, patios and other pedestrian traffic areas. Deck Drain is easy to install by staking on grade (no trenching required) and has a full 100" thickness top for durability.



### FLOW RATE: Drain Calculations

#### Assumptions/ Constants:

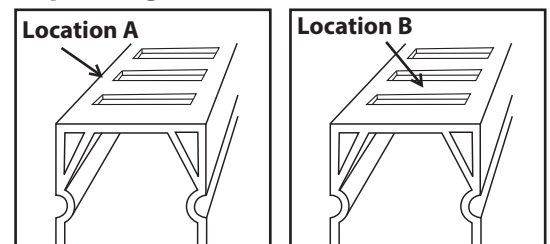
Gradient - Slope (S) 1 in 200 (0.5%)	0.005 ft/ft, Contains UV inhibitors
Surface Roughness (Mannings n)	0.009 Plastic (PVC & ABS)
Rainfall Intensity (I) (TxDOT Manual)	5.8 in/hr for 10 year storm with time of concentration = to time of duration of 20 min.
Runoff Coefficient (C) (TxDOT Manual)	0.95 For concrete city streets 0.9 - 0.95 - i.e. all concrete pool deck

DRAIN NAME	Area A (ft <sup>2</sup> )	Wetted Perimeter P (ft)	Hydraulic Radius R (ft)	Velocity V (ft/s)	Capacity - Q			Catchment Area - A			Length (ft)
					(cfs)	(liters/sec)	(gal/min)	(Acre)	(ft <sup>2</sup> )	(m <sup>2</sup> )	
<b>DECK DRAIN</b>	<b>0.025</b>	<b>0.576</b>	<b>0.043</b>	<b>1.446</b>	<b>0.036</b>	<b>1.0</b>	<b>16.2</b>	<b>0.007</b>	<b>286</b>	<b>27</b>	<b>1</b>

#### Notes/Equations:

- Above Catchment area based upon 1 foot, 1 meter, etc of the drain section.
- $R = A/P$
- $v = (1.49/n) * (R)^{(2/3)} * (S)^{(1/2)}$
- $Q = vA$
- $A = Q/C$

#### Impact Figures:



#### LOAD TESTING:

DECK DRAIN	DEFLECTION TO HORIZONTAL LINE		PUNCTURE/PERMANENT DEFORMATION MORE THAN 1/2"	
	LOCATION A	178 psi	LOCATION A	413 psi
	LOCATION B	236 psi	LOCATION B	408 psi

**Cartons includes:** 80' Deck Drain, 8 Couplers and 4 End Adapters.

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