H HIDE
Exterior Covers

HIDE 12.5" DRAIN COVER FLOW RATE GUIDE:
SLOT WIDTH 0.197 IN = 17.8GPM

TECHNICAL EXPLANATION (US UNITS):

The flow capacity of a slot drain depends on the slot's cross-sectional area and the hydraulic conditions (slope/grade, surface roughness, and available head). For this estimate, we use a standard reference flow for a known slot width and scale proportionally by slot width. For project-specific design, apply open-channel hydraulics (e.g., Manning) or consult a drainage engineer.

HDC12.5 FLOW RATE:

Given

Slot width, W = 0.197 in

Total slot length around cover, L = 1,256 mm ≈ 49.45 in = 4.121 ft
(corresponds to four sides of ~12.36 in each; 12.5 in square cover)

1. Cross-Sectional Area
$A = W \times L$
$A = 0.197 \text{ in} \times 49.45 \text{ in} \approx 9.74 \text{ in}^2$

2. Reference Flow
A ½-inch (0.50 in) wide slot conveys ≈ 11.0 GPM per foot of slot length under typical conditions.

3: Total Flow Rate:
Width ratio: $0.197/0.50 = 0.3937$
Flow per foot for 0.197 in slot: 11.0 GPM/ft x 0.3937 ≈ 4.33 GPM/ft

Total flow for L=4.121 ft: 4.33 GPM/ft x 4.121 ft ≈ 17.8 GPM

4: (US hydraulic form)
17.8 GPM ≈ 0.0398 cfs
(Using 1 cfs=448.83 GPM.)

Guide Flow Rate:
For the 12.5 in Drain (≈12.36 in) Square HIDE Drain Cover with a 0.197 in slot, the estimated capacity is ≈ **17.8 GPM** (≈ 0.0398 cfs) under typical hydraulic conditions.

Disclaimer:
This figure is a general guide. Actual performance varies with installation specifics such as slope/grade, surface roughness, inlet conditions, headwater depth, and site hydraulics. For exact sizing and compliance, perform project-specific calculations or consult a licensed drainage/civil engineer.