

# RAINTROL® FLOW CONTROL ROOF DRAIN SIZING WORKSHEET

(To be used in conjunction with Pages 1-21 thru 1-32)

Date \_\_\_\_\_

By \_\_\_\_\_

## 1. JOB DATA: PLANT/ENGINEER

- a. Job Name Example No. 6
- b. For roof area identified as Main Bldg.
- c. Location: City: Paducah State: Ky
- d. Type Roof: (Circle one) Flat (Use Fig. 1083) Sloped (Use Fig. 1085) (Indicate rise) 2" Rise 4" Rise 6" Rise
- e. Return Period (Circle one) 10 yr. 25 yr. 50 yr. 100 yr.
- f. Overflow Provisions: Parapet Height 24" Scupper or Overflow Height 5"

## 2. SIZING

- a. Area Length: 580 ft. X Width 210 ft. = 121,800 sq. ft.
- b. Data from Table 1 for One Weir Opening  
Area Rating 25,000 sq. ft. Flow Rate 49 G.P.M. Drain Down Time 29 hrs.
- c. Build-up (Refer to Table 2) 5 inches
- d. Area 121,800 sq. ft. ÷ Area Rating 25,000 sq. ft. = 4.9 5 No. of weir openings required
- e. Number of Roof Drains 8 (refer to Pg. 1-23, (e and f))  
*(Determined by Roof Layout, Specifications and Design Considerations. Minimum of (2) up to 10,000 sq. ft. or (4) over 10,000 sq. ft.)*
- f. Number Weir Openings 5 ÷ Number of Drains 8 = 5x8 1 Weir Opening per Drain  
No. of Drains 8 with (1) Weir Opening = 8 Weir Openings  
No. of Drains \_\_\_\_\_ with (2) Weir Openings = \_\_\_\_\_ Weir Openings  
No. of Drains \_\_\_\_\_ with (3) Weir Openings = \_\_\_\_\_ Weir Openings  
No. of Drains \_\_\_\_\_ with (4) Weir Openings = \_\_\_\_\_ Weir Openings
- g. Total No. of Drains 8 Total No. of Weir Openings 8 (Not less than 2-d)
- h. Leader Sizing  
Potential Build-up 5 inches (Indicate condition selected: Table 1, Scupper Ht. or Weir Ht.)  
Corresponding Flow Rate 49 G.P.M. per Weir (Table 2)
- i. Flow per Drain: No. Weir Openings per Drain X Flow Rate per Weir = Flow per Drain Leader Size (Table 3)
- |          |   |           |   |           |        |           |
|----------|---|-----------|---|-----------|--------|-----------|
| <u>1</u> | X | <u>49</u> | = | <u>49</u> | G.P.M. | <u>3"</u> |
| _____    | X | _____     | = | _____     | G.P.M. | _____     |
| _____    | X | _____     | = | _____     | G.P.M. | _____     |

## 3. DRAIN SPECIFICATION:

Fig. No. <u>1085</u>	No. Weir Openings <u>1</u>	Quantity <u>8</u>	Outlet <u>caulk</u>	Size <u>3"</u>
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____



JAY R. SMITH MFG. CO.