

## STORM DRAINAGE

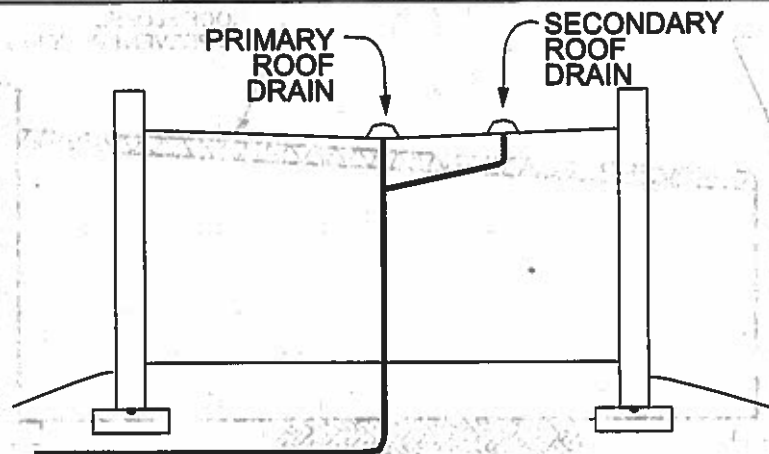
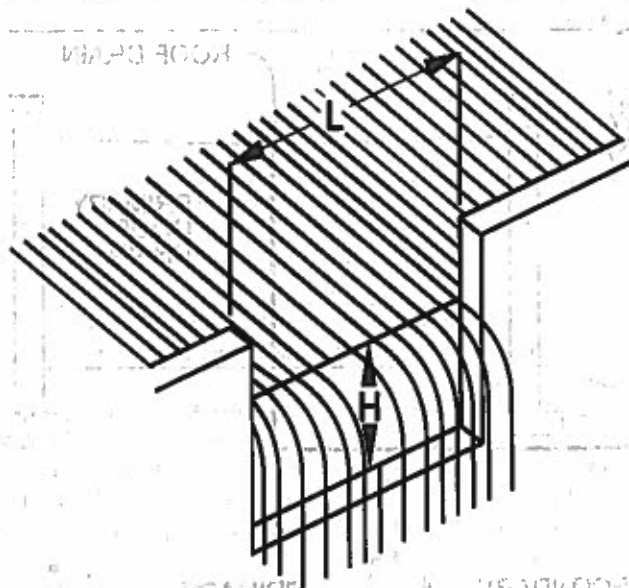


Figure 1108.2(2)  
PROHIBITED SECONDARY ROOF DRAIN CONNECTION



| HEAD (H)<br>(Inches) | CAPACITY OF SCUPPER (gallons per minute) |       |       |       |       |       |        |        |        |        |
|----------------------|------------------------------------------|-------|-------|-------|-------|-------|--------|--------|--------|--------|
|                      | Length (L) of scupper (Inches)           |       |       |       |       |       |        |        |        |        |
|                      | 4                                        | 6     | 8     | 10    | 12    | 18    | 24     | 30     | 36     | 48     |
| 1                    | 10.7                                     | 17.4  | 23.4  | 29.3  | 35.4  | 53.4  | 71.5   | 89.5   | 107.5  | 143.7  |
| 2                    | 30.5                                     | 47.5  | 64.4  | 81.4  | 98.5  | 149.4 | 200.3  | 251.1  | 302.1  | 404.0  |
| 3                    | 52.9                                     | 84.1  | 115.2 | 146.3 | 177.8 | 271.4 | 364.9  | 458.5  | 552.0  | 739.0  |
| 4                    | 76.7                                     | 124.6 | 172.6 | 220.5 | 269.0 | 413.3 | 557.5  | 701.8  | 846.0  | 1135.0 |
| 6                    | 123.3                                    | 211.4 | 299.5 | 387.5 | 476.5 | 741.1 | 1005.8 | 1270.4 | 1535.0 | 2067.5 |

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 gallon per minute = 3.785 L/m.

Based on the Francis formula:

$$Q = 3.33 (L - 0.2H) H^{1.5}$$

Where:

Q = Flow rate (cubic feet per second).

L = Length of scupper opening (feet).

H = Head on scupper [feet (measured 6 feet back from opening)].

Figure 1108.3  
SIZE OF SCUPPERS