the depth at which the determination is made may be as much as a factor of two. From the results of a soakage trial in Figure 2, the calculated infiltration rate based upon a fall of water level from:

- 75% to 50% effective depth is 5.1 3 10^{-5} m/s;
- 50% to 25% effective depth is 2.9 3 10^{-5} m/s.

The design method adopts the result determined from 75% to 25% effective depth of 3.3 3 10^{-5} m/s.

If it is impossible to carry out a full-depth soakage test, soil infiltration rate calculation should be based on the time for fall of water level from 75% to 25% of the actual maximum water depth achieved in the test. The effective area of loss from the soakage pit is then calculated as the internal surface area of the pit to 50% maximum depth achieved plus the base area of the pit.

Figure 1 Ratio of 60 minute to 2 day rainfalls of 5 year return period - from Design and analysis of urban storm damage