Collector diameter calculation

Initial data

DN 50   №1 Nominal pipe diameter   **DN 50**   №2 Nominal pipe diameter

DN 80   №3 Nominal pipe diameter   **DN 80**   №4 Nominal pipe diameter

Calculation results

S = 0.25 *3.14 *50^2 + 0.25 *3.14 *50^2   Total area of holes of pipes connected to the collector
... + 0.25 *3.14 *80^2 + 0.25 *3.14 *80^2
... = 13973 mm2

(4 *13973 / 3.14)^0.5 = 133 mm   Minimum calculated inner diameter of the collector

DN 150 mm   The nearest nominal diameter is greater than the minimum
value

| DN50 | DN50 | DN80 | DN80 |
| №1 | №2 | №3 | №4 |

DN150

220 mm   270 mm   280 mm

960 mm