1105.3 Strainers for Flat Decks. Roof drain strainers for use on sun decks, parking decks, and similar areas that are normally serviced and maintained shall be permitted to be of the flat surface type. Such roof drain strainers shall be level with the deck and shall have an available inlet area of not less than two times the area of the conductor or leader to which the drain is connected.

1105.4 Roof Drain Flashings. Connection between the roof and roof drains that pass through the roof and into the interior of the building shall be made water-tight by the use of proper flashing material.

1105.4.1 Where lead flashing material is used, it shall be not less than 20kg/mm^2 (4 lbs./ft.^{2}).

1105.4.2 Where copper flashing material is used, it shall be not less than 4kg/mm^2 (12 lbs./ft.^{2})

1106.0 Size of Leaders, Conductors, and Storm Drains.

1106.1 Vertical Conductors and Leaders. Vertical conductors and leaders shall be sized on the basis of the maximum projected roof area and Table 11-1.

1106.2 Size of Horizontal Storm Drains and Sewers. The size of building storm drains or building storm sewers or any of their horizontal branches shall be based upon the maximum projected roof or paved area to be handled and Table 11-2.

1106.3 Size of Roof Gutters. The size of semi-circular gutters shall be based on the maximum projected roof area and Table 11-3.

1106.4 Side Walls Draining onto a Roof. Where vertical walls project above a roof so as to permit storm water to drain to the roof area below, the adjacent roof area shall be permitted to be computed from Table 11-1 as follows:

(1) For one wall – add 50 percent of the wall area to the roof area figures.

(2) For two adjacent walls of equal height – add 35 percent of the total wall areas.

(3) For two adjacent walls of unequal height – add 35 percent of the total common height and add 50 percent of the remaining height of the highest wall.

(4) Two opposite walls of same height – add no additional area.

(5) Two opposite walls of differing heights – add 50 percent of the wall area above the top of lower wall.

(6) Walls on three sides – add 50 percent of the area of the inner wall below the top of the lowest wall, plus allowance for the area of the wall above the top of the lowest wall, per (3) and (5) above.

(7) Walls on four sides having no allowance for wall areas below the top of the lowest wall – add for areas above the top of the lowest wall per (1), (3), (5), and (6) above.

1106.5 Size of Combined Storm and Sanitary Drainage. The size of a combined sanitary and storm drain or sewer shall be in accordance with Section 1106.2 and as follows:

(1) Where the total drainage fixture unit load is 256 drainage fixture units or less, use 93m^2 (1,000 ft.^{2}) as a minimum for the equivalent drainage area in horizontal projection.

(2) Where the total drainage fixture unit load exceeds 256 drainage fixture units, multiply such units by 0.36m^2 (3.9 ft.^{2}) to convert to the equivalent drained area.

These values are based on a rainfall rate of 100mm/h. Multiply by the correct factor for other rainfall rates.

1107.0 Values for Continuous Flow.

Where there is a continuous or semi-continuous discharge into the building storm drain or building storm sewer, as from a pump, ejector, air-conditioning plant, or similar device, 4L/min (1 gpm) of such discharge shall be computed as being equivalent to 2.2m^2 (24 ft.^{2}) of roof area, based upon a rate of rainfall of 100mm/h (4 in.).

1108.0 Controlled-Flow Roof Drainage.

1108.1 Application. In lieu of sizing the storm drainage system in accordance with Section 1106.0, the roof drainage shall be permitted to be sized on the basis of controlled flow and storage of the storm water on the roof, provided the following conditions are met:

(1) The water from a 25 year-frequency storm shall not be stored on the roof exceeding 24 hours.

(2) During the storm, the water depth on the roof shall not exceed the depths specified in Table 11-4.

(3) Not less than two drains shall be installed in roof areas of 929m^2 (10,000 ft.^{2}) or less, and no less than one additional drain shall be installed for each 929m^2 (10,000 ft.^{2}) of roof area exceeding 929m^2 (10,000 ft.^{2}).

(4) Each roof drain shall have a precalibrated, fixed (nonadjustable), and proportional weir (notched) in a standing water collar inside the strainer. No mechanical devices or valves shall be allowed.

(5) Pipe sizing shall be based on the pre-calibrated rate of flow (L/min) of the pre-calibrated weir for the maximum allowable water depth, and Tables 11-1 and 11-2.