d) increased non-uniform snow loads on areas adjacent to roof projections, such as penthouses, large *chimneys* and equipment, and

e) increased snow or ice loads due to snow sliding or meltwater draining from adjacent roofs.

4.1.6.3.   **Full and Partial Loading**

1) A roof or other *building* surface and its structural members subject to loads due to snow accumulation shall be designed for the specified load given in Sentence 4.1.6.2.(1), distributed over the entire loaded area.

2) In addition to the distribution mentioned in Sentence (1), flat roofs and shed roofs, gable roofs of 15° slope or less, and arched or curved roofs with rise to span ratios not more than 1/10 shall be designed for the specified uniform snow load indicated in Sentence 4.1.6.2.(1), which shall be calculated using $C_a = 1.0$, distributed on any one portion of the loaded area and half of this load on the remainder of the loaded area, in such a way as to produce the most critical effects on the member concerned. (See Appendix A.)

4.1.6.4.   **Specified Rain Load**

1) Except as provided in Sentence (4), the specified load, S, due to the accumulation of rainwater on a surface whose position, shape and deflection under load make such an accumulation possible, is that resulting from the one-day rainfall determined in conformance with Subsection 1.1.3. and applied over the horizontal projection of the surface and all tributary surfaces. (See Appendix A.)

2) The provisions of Sentence (1) apply whether or not the surface is provided with a means of drainage, such as rainwater leaders.

3) Except as provided in Sentence 4.1.6.2.(1), loads due to rain need not be considered to act simultaneously with loads due to snow. (See Appendix A.)

4) Where scuppers are provided and where the position, shape and deflection of the loaded surface make an accumulation of rainwater possible, the loads due to rain shall be the lesser of either the one-day rainfall determined in conformance with Subsection 1.1.3. or a depth of rainwater equal to 30 mm above the level of the scuppers, applied over the horizontal projection of the surface and tributary areas.

4.1.7.   **Wind Load**

4.1.7.1.   **Specified Wind Load**

1) The specified external pressure or suction due to wind on part or all of a surface of a *building* shall be calculated using the formula

$$p = I_W q C_e C_g C_p$$

where

p = specified external pressure acting statically and in a direction normal to the surface, either as a pressure directed towards the surface or as a suction directed away from the surface,

I_W = importance factor for wind load, as provided in Table 4.1.7.1.,

q = reference velocity pressure, as provided in Sentence (4),

C_e = exposure factor, as provided in Sentence (5),

C_g = gust effect factor, as provided in Sentence (6), and

C_p = external pressure coefficient, averaged over the area of the surface considered.

(See Appendix A.)