> In spite of initial protests from the Savoyes, Le Corbusier insisted—supposedly on technical and economic grounds alone—that a flat roof would be preferable to a pitched one. It would, he assured his clients, be cheaper to construct, easier to maintain and cooler in summer, and Madame Savoye would be able to do her gymnastic exercises on it without being bothered by damp vapours emanating from the ground floor. But only a week after the family moved in, the roof sprang a leak over Roger's [the Savoyes' son] bedroom, letting in so much water that the boy contracted a chest infection, which turned into pneumonia, which eventually required him to spend a year recuperating in a sanatorium in Chamonix. (De Botton 2006, p. 65)

This reads like a practical joke from the architect on his clients, but it seems that the architect had a narrow escape himself:

> In September 1936, six years after the villa's official completion, Madame Savoye compressed her feelings about the performance of the flat roof into a (rain-splattered) letter: 'It's raining in the hall, it's raining on the ramp, and the wall of the garage is absolutely soaked. What's more, it's still raining in my bathroom, which floods in bad weather, as the water comes in through the skylight.' Le Corbusier promised that the problem would be fixed straightaway, then took the opportunity to remind his client of how enthusiastically his flat-roofed design had been received by architectural critics worldwide: 'You should place a book on the table in the downstairs hall and ask all your visitors to inscribe their names and addresses in it. You'll see how many fine autographs you will collect'. But this invitation to philography was of little comfort to the rheumatic Savoye family. 'After innumerable demands on my part, you have finally accepted that this house which you built in 1929 is uninhabitable,' admonished Madame Savoye in the autumn of 1937. 'Your responsibility is at stake and I have no need to foot the bill. Please render it habitable immediately. I sincerely hope that I will not have to take recourse to legal action.' Only the outbreak of the Second World War and the Savoye family's consequent flight from Paris saved Le Corbusier from having to answer in a courtroom for the design of his largely uninhabitable, if extraordinarily beautiful, machine-for-living. (De Botton 2006, pp. 65–66)

Another figurehead of modern architecture, Ludwig Mies van der Rohe, used a minimalistic formal system based on I-beams. He "kept full scale I-beam details by his desk to get the proportions just so. He thought [the I-beam] was the modern equivalent of the Doric Column" (Jencks 2006, p. 13).

Mies van der Rohe is more famous for his use of "less is more," by which he wanted to bring architecture back to the main essentials: no ornament, decoration, or superfluous elements, unless they served a functional purpose. I-beams are part of the essentials of a building.

Or so it would seem to be. One of Mies van der Rohe's major works is the Seagram building in New York City, completed in 1958 (see Figure 14-5). There the architect faced a conundrum: much as he wanted the I-beams to show through the construction, that was impossible under American construction regulations, which demanded that metal supports should be enclosed in fireproof material, for example, concrete. But strangely, a close look at the Seagram building