belonging for students who spend a short but intense part of their lives at the college as for the provision of accommodation for academic activities. It functions well as such.

## Major references

Bloomer, Kent C. and Charles W. Moore (1977). *Body, Memory, and Architecture*. New Haven: Yale University Press. Broadbent, Geoffrey (1990). Kresge College (1966-74). In *Emerging Concepts of Urban Space Design*. London: Van Nostrand Reinhold (International), 254-60.

Floyd, Nubra (1987). Kresge College. *Progressive Architecture* **68** (2): 76–9.

Kresge College. http://www.greatbuildings.com/buildings/Kresge\_College.html

## CASE STUDY

## Ghirardelli Square, San Francisco, USA: recycling a building complex (1962-7, 1982-4)

In 1893, the Ghirardelli family bought a sloping block of land bounded by North Point Street, Larkin Street, Beach Street and Polk Street in San Francisco, and constructed a red brick factory complex to carry on the chocolate making company founded by their ancestor, Domingo Ghirardelli in 1849. The factory complex was built between 1900 and 1916. The family enterprise was bought by the Golden Grain Macaroni Company in the early 1960s and moved to San Leandro, California.

The factory buildings were fine industrial structures, solidly built with well-executed brickwork. They were, however, decaying and the site was abandoned apart from a small segment for a limited continuing operation of the company. The site offered considerable potential for redevelopment. The centre of the complex was open to sunlight and to views of San Francisco Bay. The question then was what to do with it.

The financially rewarding option for a property developer would have been to

demolish the factory and build apartment buildings on the site. The constraint was that the zoning code limited the height of buildings along the city's waterfront in order: (1) to prevent any obstruction of the view of the San Francisco Bay from Russian Hill and (2) to maintain the character of the city derived from its rolling topographical contours. Concerned that no public benefit would result from building an apartment complex, William Matson Roth, a publicspirited San Franciscan, and his mother purchased the block with the eye to renovating it. He hired the architectural firm of Wurster, Bernardi and Emmons to carry out a study of possible uses for the complex. In conjunction with landscape architects Lawrence Halprin and John Matthias they developed a program for the block and carried it out. It was a total renovation project.

The project was carried out in two phases. The first was completed in 1965, and with the departure of the remaining chocolate works, the second was finished in 1967. The problem was to fit in 68 retail