



FIGURE 1.3 A familiar shape of beige metal building warehouse. (Photo: Maguire Group, Inc.)



FIGURE 1.4 Metal building system in a commercial application. (Photo: Bob Cary Construction.)

but there is no second time to take advantage of the learning curve. With standard pre-engineered components, however, an experienced erector is always on familiar ground and is very efficient.

By some estimates, the use of metal building systems can save up to one-third of construction time. This time is definitely money, especially for private clients who can reap considerable savings just by reducing the duration of the inordinately expensive construction financing. It is not uncommon for small (around 10,000 ft²) metal building projects to be completed in 3 months. By this time, many stick-built structures are just coming out of the ground.

- *Cost efficiency.* In a true systems approach, well-fitting pre-engineered components are assembled by one or only a few construction trades; faster erection means less-expensive field labor. In addition, each structural member is designed for a near-total efficiency, minimizing waste of material. Less labor and less material translate into lower cost. The estimates of this cost efficiency vary, but it is commonly assumed that pre-engineered buildings are 10 to 20 percent less expensive than conventional ones. However, as is demonstrated in Chap. 3, some carefully designed stick-built structures can successfully compete with metal building systems.



FIGURE 1.5 Office building of pre-engineered construction. (*HCI Steel Building Systems, Inc.*)



FIGURE 1.6 Auto dealership housed in a metal building. (*Photo: Metallic Building Systems.*)