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REVIEW QUESTIONS

- 1 Which type of insulation is most commonly specified for metal building systems?
- 2 Which standard provides requirements for energy efficiency in metal buildings?
- 3 What is the function of a vapor retarder? What are some of the challenges of working with vapor retarders in warm climates?
- 4 What would you advise the owner who wants to purchase a building with a previously "dry" use, but who wants to introduce a process that releases a lot of moisture?
- 5 Is it better to use a vapor retarder with the lowest perm rating, but installed by an inexperienced contractor, or a mediocre retarder that is placed by an experienced one? Why?
- 6 What are the benefits of placing the vapor retarder below the purlins?
- 7 What are advantages and disadvantages of ventilating a roof cavity in a warm, humid climate?

CHAPTER 9

THE PROCESS OF BUYING A METAL BUILDING

9.1 THE START

9.1.1 Before It All Begins: A Note to Owners

In this chapter we talk about the many things that have to happen between your decision to build and getting the keys for a newly constructed facility.

Once the decision to build or expand is made, you need to establish building dimensions, shape, and clear height. No matter how well everything else goes, if these fundamentals are not properly thought through, the project will not be successful. If a critical piece of machinery does not fit by a few inches, what was the point of building?

We strongly recommend that you let an experienced architect perform programming and preliminary design of your building: Architects are trained to analyze owner's needs and to offer solutions. Many years spent with architects under one roof have convinced the writer of tremendous improvements these design professionals can make to the original plans conceived by their clients. An architect often comes up with a completely different—and better—building layout. Unless you need a small basic rectangle of a building or must suit a preestablished equipment layout, let designers, not contractors, help you make design decisions. (Of course, the architect you select should be experienced in specifying metal building systems or at least should have read this book....)

The architect will help you identify your immediate and future space needs, prepare a preliminary cost estimate, and propose a timetable for construction. On your part, you have to determine whether adequate financing is available, a budget appropriated or planned, and the members of your in-house planning team are in agreement on what needs to be done.

9.1.2 Selecting the Site

After the programming phase, the project moves into schematic design. By this time a prospective location might have already been selected. If several sites are still being considered, it is best to focus on one or two choices before proceeding further, since many building parameters such as height, size, and type of construction may be affected by surrounding buildings and by local zoning codes. As usual in such transactions, prior to purchase a prospective buyer performs title and easement search, zoning check, site survey, and environmental investigation. The site should be large enough to allow for all required property setbacks, parking, access roads, and future expansion needs. If time is of the essence, it is best to stay away from protected areas such as wetlands.

Ideally, the site already has or can be economically served with all the necessary utility hookups. Sewer requirements might be tightly controlled by the community and need to be specifically investigated, and any site drainage problems addressed.