Safety

Enclosures may contain the controls or elements of a control system which are crucial to the safety of many people. Control enclosures in large chemical plants, electrical generating facilities, airports, mass transit systems or hospitals can house equipment critical to the well being of numerous individuals. In these and many other applications, rigorous security requirements are designed to protect the public and prevent unauthorized or accidental operation of control equipment.

Location

If the enclosure will be installed in a fenced area, within a building or in other secure areas, the security requirements will be affected. The selection of latches and hinges can be influenced by the location of adjacent equipment or other enclosures.

Appearance

Enclosure appearance can be influenced by both hinges and latches. Some enclosures are designed with hidden hinges and quarter turn latches to make these features less prominent.

Hinges & Latches

Access frequency – daily or annually can be an important factor in specifying the type of latches. Will the location or any specifications require a tool for opening, will it require a padlock are other considerations for latches. In many cases when the enclosure is selected the hinge type is automatically selected because the hinge is an integral part of the enclosure. For some enclosures it is possible to select the hinge or hinge less options available.

Monetary Loss

In some applications the monetary value of the equipment in an enclosure may be sufficient to justify additional security costs. In most applications, the economic consequences of unauthorized or accidental operation of a control system will be more significant than the value of the equipment.

Myth: It is much easier for vandals to get into a non-metallic enclosure vs. a metal enclosure.

Truth: An individual can simply break the lock, NOT the box, no matter the material. Various hinge and latch combinations are available to secure the contents of an enclosure. Although the security requirements will be unique for each application, the selection process should include at least the following considerations.