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ESSENTIAL ELEMENTS OF ADEQUATE WARNINGS AND INSTRUCTIONS

While the final design of adequate warnings and instructions will be the product of the prudent application of many factors contained in authoritative state-of-the-art warning design references, the most essential design elements of product warnings include (a) correct signal word and associated color, (b) text content, (c) letter size and format, and (d) location of display.

Standard “warning” signal words are “DANGER,” “WARNINGS,” and “CAUTION.” Beginning with “DANGER,” these words are used in descending order according to the degree of potential peril associated with their subject matter. The colors red and white are to be used for “DANGER” notices, and yellow and black for “WARNING” or “CAUTION” notices. Maintenance and other critical non-personal injury related notices should use the signal word “IMPORTANT” or “NOTICE” and be presented in black and white.

The text content of a warning must contain at least three essential elements necessary to communicate the *full nature* of a particular hazard potential: **(a) a clear statement of what specific potential serious injury event can occur, (b) a clear indication of exactly how such an injury event can occur, and (c) a clear statement as to what specific precautions must be taken to eliminate or avoid the hazard and resulting potential injury.** If any one of these elements is missing from a warning, such warning is inadequate to provide those persons at potential risk with information regarding the **full nature** of the risk involved, because they are deprived of information that is essential for decision-making purposes.

Warning letter size is dictated by the reasonably anticipated visual distance at which persons are likely to read warning notices and by other human factors design criteria as outlined in the authoritative warning design literature.

The location of warning display is critical. Warnings and instructions must be conspicuously placed in the “zone of danger.” That is, warnings must be placed at or near the location where persons must become aware of (or be reminded of) the content of such warnings immediately prior to the time they will be exposed to the hazards addressed by the warning; that is, the time that they must initiate specific action to prevent injury to themselves or others.

“DANGER” and “WARNING” notices must be physically placed at or within the appropriate zone of danger. Depending on the situation, warnings should be placed directly on products, machines, or facilities that correspond to such warnings. When it is proper to provide equipment instruction (operation) manuals, warnings are appropriately placed at two locations. First, all warnings should be placed on a single page or in a single section near the front of the manual titled “Safety Instructions and Warnings,” and second, individual warnings should be placed within the text of the instruction manual pertaining to the particular component or procedure related to the subject matter of the warning. Appropriate warnings should also be placed in related maintenance and parts manuals, as these manuals may be the only manuals used by experienced operators and maintenance or repair personnel.

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