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An ounce of prevention goes a long way

The lumber and woodworking industries face unique electrical fire and safety hazards. Defective electrical equipment or equipment misuse can result in conditions that lead to ignition of combustible materials. But ongoing maintenance practices can minimize the potential of electrical fire.

As the adage goes, "an ounce of prevention goes a long way." Consider the following preventative measures associated with electric panel boxes and extension cords and make managing electrical fire safety issues part of your overall loss prevention effort. And remember, "Electrical installation, service and repair work should be performed only by trained and qualified electricians, in accordance with nationally recognized standards including the Occupational Safety and Health Act (OSHA), National Fire Protection Association (NFPA) and National Electrical Code (NEC)."

Electrical Panel Boxes:

- A minimum 36-inch clearance should be maintained in front of wall panel boxes.
 Employees should not be allowed to store or lean stock against panel boxes even temporarily. In storage or congested areas, the use of steel posts or railings may be necessary to help maintain proper clearances. Painted floor markings in front of panels can also help identify areas that are to be kept clear.
- Panel box doors should be kept closed. Panel doors left open allow sawdust to easily accumulate creating a significant fire safety hazard.
- Panel boxes should be clearly labeled. Circuit breakers within a panel should be accurately labeled.
- Blank cartridges should be used to fill open space where there are no circuit breakers on a panel.
- If a circuit breaker trips, investigate the underlying cause for the overload and correct the root problem. Do not allow taped circuit breakers or leave electric boxes open for cooling purposes.
- In areas where sawdust is present, electric boxes should be properly cleaned at the end
 of each day so that sawdust is not allowed to accumulate.

Extension Cords:

- Extension cords are approved for temporary use only. In the lumber and woodworking
 industries, this will typically involve portable power tools that are used in different areas
 at different times. Power tools, equipment and appliances that are normally arranged
 and kept in the same locations should be plugged directly into a wall outlet.
- Extension cords should be UL listed and approved. Cords should be properly rated for the application and for the equipment or tools being used. Cords not listed and rated for outdoor use should only be used indoors and should be kept dry.

- Cords left on workplace floors are particularly subject to wear, tear and damage. Every
 effort should be made to minimize cords on the floor in high traffic areas. The use of
 overhead retractable cord reels is a desirable option. Extension cords should be
 unplugged when not in use.
- Never use cords that are worn, frayed, torn or otherwise defective. Extension cords should be visually checked for safe working condition prior to each use.
- An extension cord should not be plugged into another extension cord (no "piggyback or daisy chain").
- The use of multi-plug strips should be limited to office equipment such as computers, printers and fax machines.

For an extra dose of prevention, consider thermography and the science of infrared imaging to identify potential electrical, mechanical or process problems. This non-contact technology detects temperature variations that visual inspections simply cannot. It works like this.

Thermal energy is "light that is not visible because its wavelength is too long to be detected by the human eye and is part of the electromagnetic spectrum that we perceive as heat." Thermography enables us to see and measure the thermal energy being emitted from objects. From a safe distance, moving, elevated and even high temperature surfaces can be scanned for temperature differences or "hot spots" that often indicate that a problem exists or that failure could be imminent. Corrective action can be taken; potential problems eliminated.

Remember, "if you are aware of it, take care of it."

Information source: Pennsylvania Lumbermens Mutual Insurance Company, www.plmins.com.