

Fact Sheet #2 - Use of Cord-and-Plug Equipment

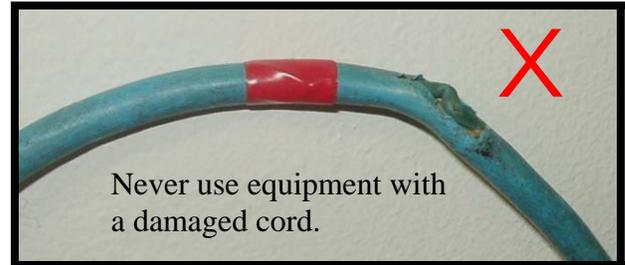
Stop for a moment and think about the number of times you use computers, printers, power tools, extension cords (flexible cord sets), power strips and other cord-and-plug connected equipment during the day. Now, think about the last time you checked the flexible cord that powers this equipment? There are good reasons for taking a moment to inspect the cord. While using equipment, the cord can be bent, twisted, or damaged by moving parts. If the piece of equipment has no moving parts, the cord can be inadvertently damaged by the use of other equipment such as power tools, buffers and polishers.

For these reasons, it is a good safety practice to check flexible power cords before use. OSHA thinks so also. In fact, the OSHA standard 29 CFR 1910.334 entitled "Use of Equipment" requires this type of pre-use inspection in the workplace on flexible cords and plugs. Additional requirements for the use of flexible cord can be found in OSHA 29 CFR 1910.305, NFPA 70E Art. 110.9(B)(3) and NFPA 70E Art. 420.7.

The requirements include a visual inspection before use on any working shift for external defects such as exposed wires, a damaged cord outer jacket, loose parts or missing pins on the plug. For possible internal damage look for evidence of the outer jacket being pinched or crushed. Make sure the cord is not spliced.

OSHA does include an exception for cord-and-plug-connected equipment and extension cords that remain connected once they are put in

place and are not exposed to damage. These devices are not required to be visually inspected until they are relocated.



If there is a defect found or evidence of damage that might expose you or someone else to injury, make sure you remove the defective or damaged item from service in a way that ensures you or your fellow co-workers will not use it until repairs and tests necessary to render the equipment safe have been made.

In the NFPA code, OSHA standard and manufacturer's instructions, you can find some other sensible safe work practices. These include making sure that the plug and receptacle are of the same type and making sure your hands are dry before you plug the equipment in. While plugging the equipment in, do not apply excessive force. Avoid running cord through doorways, windows, or similar openings. Sharp corners and projections must also be avoided. If you are working in an environment where you are likely to contact water or conductive liquids, make sure your equipment is approved for use in those locations. When your work is complete, never pull the plug out by the cord.

Before using equipment powered by flexible cord, inspect the cord and plug for damage and then use the equipment in a way as to not damage the cord and plug. If you find damage to the cord or plug, remove it from service until the necessary repairs and tests have been made to render the equipment safe.

