FLASH

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Hazards Associated with Branch Circuit Overloading due to Portable Air Conditioning units

Background:

Photo F1 - Example of Portable AC

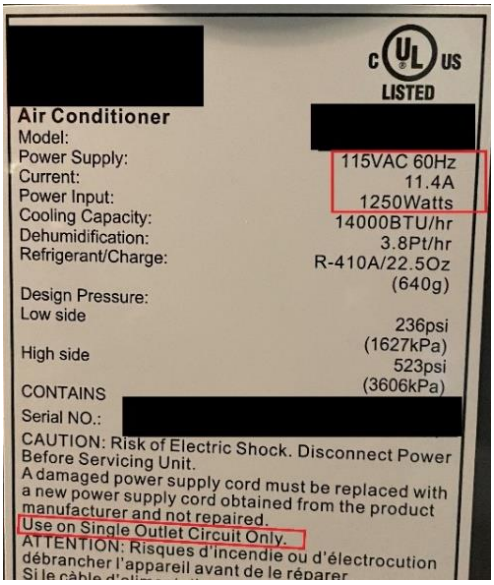
Portable Air Conditioning (AC) units (example Photo F1), including plug-in, wheel-in and window types are sometimes used in older buildings during the hot summer season as a quick solution to manage the elevated temperatures. Some portable AC units are required to be plugged into a receptacle fed by a dedicated branch circuit (a circuit that does not feed any other receptacles or loads). If these are connected to existing circuits that feeds other loads, there is a risk of overloading that circuit. Continuous overloading for a circuit may lead to overheating, deterioration of wiring/devices, and a potential fire hazard or loss of power.

Photo F2 shows an example of a nameplate of portable AC unit.

It is clearly stating ("*Use on Single Outlet Circuit Only*"), which means that the unit is required to be plugged into a receptacle fed by a dedicated branch circuit.

Recommendation:

Photo F2 - Example of Nameplate of Portable AC



- Always read the appliance label and manufacturer instructions and adhere to it.
- If the portable AC unit requires a dedicated receptacle circuit, it should not be connected to an existing branch circuit feeding other loads or general purpose receptacles.
- If a breaker is tripping when a portable AC unit is connected, do not attempt to plug it again, consult with a Licensed Electrical Contractor.
- For existing circuits that are shared between rooms, before plugging in portable AC units in each room, assessment is required to avoid connecting the AC units on the same circuit and to determine if additional dedicated circuits are needed. Recommendation
- Where multiple portable AC units will be connected to an existing installation in a building, the assessment must also take into consideration the loading of the distribution panels and main electrical service.