Typical 3-Circuit, 8-Wire Configuration

All circuits require a hot, neutral, and ground wire to be complete.

Most 3 Circuit, 8-Wire electrical system consists of the following:

- Each circuit has its own neutral and they share a ground
- Typically with a special Isolated Ground Receptacle, each circuit can utilize an isolated ground to minimize feedback from items that have moving parts EG- dot matrix printer, blow dryer, old type writers with carriage return.

Each circuit is rated for a maximum of 20 amps of intermittent use or 16 amps of continuous load (continuous load defined as three hours or more of constant use). We recommend planning for continuous load. The National Electrical Code (NEC) restricts a 20 amp circuit to a maximum of 24 receptacles. In Canada, the national system is rated for 15 amps, and receptacles are limited to 20.

NOTE: The above standards are maximum amounts only. The equipment in a typical computer workstation application will often consume the amperage capacity using less than 24 receptacles. Always check your local codes for restrictions.
Typical 4-Circuit, 8-Wire Configuration

All circuits require a hot, neutral, and ground wire to be complete.

Most 4 Circuit, 8-Wire electrical system consists of the following:

- **Circuit #1**
  - share neutral and ground for basic electrical equipment

- **Circuit #3**
  - has isolated/dedicated neutral and ground for sensitive equipment such as CPUs

Each circuit is rated for a maximum of 20 amps of intermittent use or 16 amps of continuous load (continuous load defined as three hours or more of constant use). We recommend planning for continuous load. The National Electrical Code (NEC) restricts a 20 amp circuit to a maximum of 24 receptacles. In Canada, the national system is rated for 15 amps, and receptacles are limited to 20.

**NOTE:** The above standards are maximum amounts only. The equipment in a typical computer workstation application will often consume the amperage capacity using less than 24 receptacles. Always check your local codes for restrictions.