

Facilities Standards & Guidelines

C.29 System Connection Types & Details at Cubicles

Revision 1

Issue Date: 08/29/2022, Revised 03/29/2024

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Section 1 – Summary

- 1.1 The objective for providing cubicle and system connection standards is provide flexibility and interchangeability for these systems across BAE’s campus. The design standards set forth here are intended to assist designers and contractors in providing a design which is conducive to supporting BAE’s operational, maintenance, and life cycle needs.

Section 2 – Specific Design Requirements

2.1 General

- 2.1.1 Modular workstations have configurable internal connections that distribute power and data. Power and data can either be fed directly from a nearby wall, or from a power pole that originates from the ceiling and is anchored to the ground.
- 2.1.2 The connector that interfaces the incoming power from the building into the workstation is referred to as a power whip.
- 2.1.3 The incoming power feed supports up to (4) 120V 20A circuits, and the number of circuits depends on how many workstations are interconnected. This wiring is referred to as 3+1 configuration since up to three circuits feed the workstations, and one circuit is ‘dedicated’ and doesn’t support workstations.
- 2.1.4 The dedicated circuit is not required in all installations and should be used on a case-by-case basis. Typically, this circuit is supplied for higher power appliances such as plotters, printers, copiers, microwave, space heaters, or specialized desktop test equipment.
- 2.1.5 Dedicated circuits shall have their own separately derived neutral wire. A neutral should be shared for the three circuits feeding the modular workstations. Refer to C.29- 1 for additional wiring details.

2.2 Required Number of Circuits

- 2.2.1 The number or circuits serving modular workstations is determined by the number of stations connected. When multiple circuits are used for a group of workstations, the circuits are diversified throughout. Receptacles are marked with one, two, three, or four dots to denote which circuit they are connected into.
- 2.2.2 For 1-3 stations, 1 circuit shall be used.
 For 4-6 stations, 2 circuits shall be used.
 For 7-9 stations, 3 circuits shall be used.
 A dedicated circuit can be utilized on a case by case basis for any of these workstation groups.

Supplemental Document Information

The following resource documents should be referenced for execution of the standards and guidelines described above.

Document Number	Document Title
C.29-1	Modular Workstation Wiring Diagram

Revision Log

Revision	Release Date	Description of Changes
0	03/08/2022	Initial Release
1	03/29/2024	Branding update to BAE Systems