

Installation

Installation shall be performed by subcontractors who hold a license appropriate for any work they perform. Electrical subcontractors shall have completed the C-Bus Wiring Installation Practices training course.

Programming

C-Bus programming shall be performed by C-Bus Platinum accredited personnel. Programming shall be carried out in accordance with this Electrical Specification.

Balanced Load

Where multiple mains power phases are available the electrical load shall be distributed across all phases as evenly as practicable.

Site Testing

A test plan shall be produced by the C-Bus system designer prior to commencement of installation. Once the installation and programming of the C-Bus network is complete, site testing shall be performed in accordance with the test plan. As each test is performed with a passing result this shall be recorded on the test plan. As a minimum, the following tests shall be included in the test plan and performed prior to sign-off:

C-Bus to Earth short test

Use a multimeter to measure the absolute voltage from Earth to C-Bus negative, and Earth to C-Bus positive. The voltages shall be in opposite polarity. The highest of these absolute voltages shall be no more than 120% of the lowest. For example, the values +17 V and -19 V are acceptable as 19 is less than 112% of 17. However, the values +16 V and -20 V are unacceptable as 20 is 125% of 16.

Minimum C-Bus Voltage

Use a multimeter to test the voltage from C-Bus negative to C-Bus positive. Test the voltage at various points on the network, particularly at points where C-Bus units are located at the greatest distance from a C-Bus power supply. The voltage shall be ≥ 22 V at all test points.

System Functionality Test

Verify that all C-Bus inputs and outputs function correctly. Check each area's functionality against the area control strategies described in Section 3.0 and above. Where different strategies apply at different times (such as normal and after hours), ensure that each is tested.

Powerline AC Signal Test

Use a digital multimeter or CRO to verify that no AC signal exceeding 1.0 V p-p is present across C-Bus positive and negative. Check this at the extremities of each C-Bus run.