

THE INSTALLATION OF PLUGGED-IN, OR HARD-WIRED CONNECTED, ELECTRICAL EQUIPMENT IN CHURCHES.

Introduction. Faculty and List applications for electrical work in churches invoke Rule 3.1(6) of the Faculty Jurisdiction (Amendment) Rules 2022, which states that:

For the purposes of Schedule 1 and work to an electrical installation or electrical equipment, “accredited certification scheme” means a scheme of product conformity certification for industrial and commercial electrical work which applies to the work that is to be carried out and which is accredited by the United Kingdom Accreditation Service (UKAS).

In practice this means NICEIC, NAPIT and ECA.

To satisfy the Insurers, York DAC has evolved a simple set of stipulations applying to both Faculty and List (A & B) permission for introducing electrical equipment intended to be permanent or semi-permanent.

Background. The issue has arisen from the Insurer’s concern that there is nothing in H&S law to require anything plugged in to a system, or hard-wired into it, to be electrically sound as defined by the PAT regime. This deficiency constitutes a gap in H&S law. The notion of ‘P meaning portable’ is now superseded: the 5th Edition (2020) Code of Practice for the In-Service Inspection and Testing of Electrical Equipment covers **any** electrical apparatus (including cables) not part of the building’s supply and distribution system.

Some misunderstanding has arisen among installers about how PAT testing applies in all cases, examples including Bells (electromagnetic hammer), Simulators, Sound, AV systems, Organs, etc.

Action. To satisfy the Insurers, York DAC has drafted stipulations to bridge this gap in the H&S law and protect the churchwardens in their capacity as H&S duty-holders after hand-over. The Insurers approve.

It would be unreasonable to require **all** new plugged-in equipment to be PAT-tested at the time of connection. Instead, the DAC asks:

1. That the supplier confirms that the new equipment is PAT-compliant at the time of connection
2. That the supplier offers a risk-based frequency of future PAT inspection to guide the churchwardens when employing their PAT-testing electrician.
3. That an accredited electrician confirms that the wiring between the system source (13A socket or connection box) and the new apparatus satisfies the Wiring Regulations, Regulation 521.10.202 applies, particularly concerning the prevention of premature collapse of cables (mains or signal) in the event of a fire (see below).

These are usually all simply **written** confirmation to give to the church and Insurers and would normally require visual inspection only and no physical testing.

The DAC is now adding these simple stipulations in Faculty/List cases.

For reference:

A. *Wiring Regulations BS 7671:2018 with Amendments 1:2020 and 2:2022.*

Regulation 521.10.202: Wiring systems shall be supported such that they will not be liable to premature failure in the event of a fire.

NOTE 1: Wiring systems hanging across access or egress routes may hinder evacuation and firefighting activities.

NOTE 2: Cables installed in or on steel cable containment systems are deemed to meet the requirements of this regulation.

NOTE 3: The regulation precludes, for example, the use of non-metallic cable clips or cable ties as the sole means of support where cables are clipped direct to exposed surfaces or suspended under cable tray, and the use of non-metallic cable trunking as the sole means of support of the cables therein.

NOTE 4: Suitably spaced steel or copper clips, saddles or ties are examples that will meet the requirements of this regulation.

Additional comments by York Electrics Advisor:

1. This Regulation was introduced following the tragic death of two firefighters after entanglement in collapsed cables. Note 1 mentions access and egress routes specifically, but in fact applies to all routes. NAPIT Technical Helpline endorses this.
2. 'Suitably spaced' is not defined but is taken to mean that any catenary loop that develops in a fire between two metal fixings shall not sag so far as to pose an entanglement risk.
3. It should go without saying that fixing new cabling to existing cables or cable looms not themselves compliant with 521.10.202 fails to comply with the current Wiring Regulations.

B. ('PAT' regime reference.) *Code of Practice: In-service Inspection and Testing of Electrical Equipment, 5th edition 2020. Institution of Engineering and Technology. ISBN 978-1-78561-966-3.*

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