

Does your system comply?

Would you install a non-compliant system? Of course not, and as a responsible installer you would obviously say NO.

Did you know that as of May 1st, 2023, your system installation must comply with AS 7240.13. Part 13 is now a “Normative” referenced standard in AS1670.1 which makes it **mandatory**. Your system must now have approval to this standard in order to comply with AS1670.1. Please see below the following references in AS 1670.1.

The “Normative” reference in the AS1670.1:2021 amendment:

- CI 1.3 1 After “ [AS 7240.12](#) , Fire detection and alarm systems, Part 12: Line type smoke detectors using a transmitted optical beam ([ISO 7240-12:2014](#) , MOD)”, add the following:
- [AS 7240.13](#) , Fire detection and alarm systems, Part 13: Compatibility assessment of system components

So, what is AS 7240.13? Part 13 is the “Compatibility assessment of system components”

What does this mean? In simple terms, your system must have the capability to constantly monitor the full load requirements of the system under all conditions. This ensures the system will always function in a full alarm condition, even if there is an open circuit at the end of a fully loaded loop.

Part 13 approval confirms the system has been tested and can do this.
All components must have also been tested as part of the approval.

Testing eliminates common problems that can affect any installation, including:

Insufficient power at the last devices on the circuit

Devices are tested at the extremes of the power supply, using maximum and minimum mains and battery voltage. This ensures the power at the end of the circuit is within acceptable levels for the devices used.



What Part 13 Systems Do

Voltage falling below minimum required levels

Tests are conducted using worst case alarm current and maximum cable impedance to check that operating voltage doesn't fall below the minimum required for devices at the end of the circuit.



Slow speed of response on networked systems

During testing, systems are assessed to ensure they meet the minimum critical response times for fire signal communication across networks. Meeting these minimum times is crucial to life safety.



On-site cable length alterations affecting resistance

The cable length of an installed system may differ from that of the designed system. This means that a scheme, which worked on paper, doesn't always work in reality. AS 7240-13 approved systems monitor cable resistance on site to highlight any issues and allow any adjustments to be made before critical performance is affected.



All fire system products should be designed to meet the standards required for a particular market, but not all products are tested by an independent accredited laboratory.



There's a huge gulf between the checks that individual manufacturers carry out to say they 'Designed to' AS 7240-13 standards, and the rigorous tests that independent test laboratories conduct to award 'Approved to' status.

Fusion's panels and devices have undergone rigorous third-party testing and are approved to AS 7240.13

Current applicable Standards

Further references in the standard relating to part 13:

Table 1.8 — Acceptable editions of Standards

Standard	Acceptable editions
AS 1603.17	2011 and 2020
AS 4428.3	2010 and 2020
AS 4428.16	2015 and 2020
AS 7240.2	2004 and 2018
AS 7240.3	2014 and 2021
AS 7240.4	2004 and 2018
AS ISO 7240.5	2004 and 2018
AS 7240.7	2004 and 2018
AS ISO 7240.8	2007 and 2018
AS 7240.12	2007 and 2018
AS 7240.13	2006 and 2021
AS 7240.17	2015 and 2021
AS ISO 7240.18	2015 and 2018
AS 7240.22	2008 and 2018
AS ISO 7240.24	2015 and 2018
AS 7240.27	2016 and 2018

- 1 *Delete first paragraph and replace with the following:*

FDAS components shall conform to at least one of the component Standards listed in the normative references in Clause 1.3. FDAS components shall be installed in the format detailed in the hardware documentation including any limitations of use identified and the compatibility of the components with CIE.

- 2 *Delete second note and replace with the following:*

AS 7240.13 shall be used to confirm the compatibility of components.

1.4.68

shall

indicates that a statement is mandatory

So, ask your supplier if their system is AS 7240.13 approved and therefore meets the requirements AS1670.1?

If not, your system simply does NOT comply with the standards you are required to meet.