

BAND-FAST® CABLE CLEAT

INTERNAL FIRE PERFORMANCE TEST 4/24/2026

TEST REFERENCE

Internal Engineering Evaluation - Fire Exposure and Mechanical

PRODUCT UNDER TEST

- **Product Family:** BAND-FAST Cable Cleats
- **Specific Part Tested:** LFFC-F1015M***-A900
- **Material:** 316 Stainless Steel
- **Coating:** PPA 571 (LS/ZH)

This test is representative of the wider BAND-FAST Cable Cleat range, including both PPA-coated and uncoated variants.

APPLICABLE STANDARDS AND REFERENCES

- **IEC 61914:2015:** *Cable Tray Systems and Cable Ladder Systems - Cable Cleats*

Test approach benchmarked against principles of BS EN 50200 fire exposure methodologies (for comparative reference only; this is not an accredited BS EN 50200 certification).

TEST OBJECTIVE

The objective of this internal test was to evaluate the fire resistance performance, thermal response, and post-fire mechanical integrity of a PPA-coated stainless steel BAND-FAST Cable Cleat assembly when subjected to sustained, high-temperature, direct flame exposure, followed by mechanical impact.

TEST DATE & LOCATION

- **Date:** April 24th, 2026
- **Location:** Internal, BAND-IT test facility

TEST CONFIGURATION

- **Mounting Arrangement:** Test assembly mounted to a cable ladder in a configuration representative of typical field installation for this application.



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TEST CONFIGURATION (CONTINUED)

- **Cable Information:** Cable Outside Diameter (34.14 mm).
- **Instrumentation:** Temperature measurement using an Infrared Thermometer with adjustable emissivity. Measurement range of thermometer: -58° F to 1832° F.



FIRE EXPOSURE CONDITIONS

- **Temperature:** Sustained exposure exceeding 800° F (427° C).
- **Duration:** Greater than 120 minutes of continuous exposure.
- **Flame Application:** Direct flame impingement applied continuously to the cable cleat and cable assembly for the full duration of the test.

Temperature readings were logged throughout the test period to verify consistent thermal exposure conditions.

POST-EXPOSURE MECHANICAL EVALUATION

Upon completion of the fire exposure period:

- The cable and cleat assembly were subjected to multiple mechanical impact events simulating external disturbance.
- The cleat, coating, and overall assembly maintained structural integrity.
- No separation, release, or loss of cable retention was observed.

TEST RESULTS AND OBSERVATIONS

- The PPA-Coated BAND-FAST Cable Cleat maintained mechanical hold and functional integrity throughout prolonged high-temperature exposure.
- The coating remained adherent and provided additional surface protection without compromising performance.
- Following impact testing, the assembly continued to secure the cable effectively, demonstrating resilience under combined thermal and mechanical stress.

These results demonstrate robust fire performance characteristics consistent with demanding applications where system survivability is critical.



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COATING PERFORMANCE AND CERTIFICATIONS (PPA 571 - COATING ONLY)

During the April 24 internal fire exposure test, the PPA 571 coating performed as expected based on its established third-party fire and fume performance characteristics. Observed coating behavior during sustained high-temperature flame exposure was consistent with published test data and historical certification results.

PPA 571 is an acid-modified polyolefin thermoplastic coating formulated without halogens, phthalates, isocyanates, heavy metals, or reactive flame-retardant additives. Under fire exposure, combustion products are therefore principally carbon dioxide and water, resulting in low smoke density and low toxicity of combustion gases.

Consistent with certified performance:

- No rapid flame spread attributable to the coating was observed.
- Smoke generation remained limited relative to exposure severity.
- Coating degradation occurred in a controlled manner without contributing to loss of mechanical integrity of the cleat or cable retention system.

The PPA 571 coating applied to the tested assembly holds the following independent fire performance certifications and test results. These certifications apply to the coating material itself and are provided for reference only; they do not constitute certification of the complete cable cleat assembly.

EXTERNAL TEST RESULTS & CERTIFICATIONS - PPA 571 COATING (NOT CLEAT ASSEMBLY), AVAILABLE UPON REQUEST

- **France - NF P 92-501:** Fire performance, Classification M1
- **France - NF C20-453:** Corrosiveness of smoke (average pH ~4.46)
- **France - NF C20-454:** Gases produced during pyrolysis; no halogen acid gases detected (HCl, HBr, HCN, HF, SO₂)
- **International - IEC 332 Part 1:** Flame propagation on a single vertical insulated wire or cable (meets requirements, char height <425 mm)
- **UK - BS 476 Part 5:** Test for ignitability (Class P)
- **UK - BS 476 Part 6:** Fire propagation (Index I = 0.2)
- **UK - BS 476 Part 7:** Spread of flame (Class 1); overall classification Class 0
- **UK - SGS J89006/1:** Spread of flame (white coat)
- **UK - NES 713:** Toxicity of fume index (~1.76–1.78, well below naval requirement of 5)
- **UK - BS 6853:** Smoke density and toxicity; Ao (ON) ≈ 1.13, Ao (OFF) ≈ 1.37; toxicity index R ≈ 0.21
- **USA - NFPA 258:** Smoke generation (average optical density ~110 after 20 minutes, flaming mode)
- **USA - ASTM E84:** Surface burning characteristics (Class A / Class 1; flame spread index 10, smoke developed 10)
- **Approval Letters: UK - Metronet:** Fire and fume compliance

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PRODUCT VALUE CONSIDERATIONS

- ✓ The BAND-FAST Cable Cleat family is 3rd party tested and certified to IEC 61914:2015, demonstrating compliance with recognized requirements for cable cleat mechanical performance.
- ✓ High strength stainless steel composition.
- ✓ Robust mechanical performance under dynamic and extreme conditions.
- ✓ Broad range coverage for cable sizes and configurations.
- ✓ Compatibility with ladder, tray, and structural mounting systems.
- ✓ Proven performance across telecom, power, and infrastructure environments.

(Reference: [BAND-FAST Cable Cleat Brochure](#))

SUPPORTING MEDIA

- [Internal Fire Test Video](#)

LIMITATIONS AND DISCLAIMER



This document summarizes results from an internal, non-accredited test conducted for engineering and development evaluation. Results are intended to demonstrate comparative performance and should not be interpreted as third-party certification or formal compliance to BS EN 50200 or other fire test standards unless explicitly stated.

Prepared by: BAND-IT Engineering

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