



Specials

TrafoDeck

Type Specials (flame-extinguishing panel) based on AP perforated panels

Optimal protection against fire risks in oil-cooled transformer stations. Significant heat is released at the points where overhead lines enter the ground. To cool the transformers, oil is used – but under extreme heat this oil can ignite, leading to a blow-out. To ensure safety in these environments, Staco has developed the TrafoDeck flame-extinguishing panel: a solution that quickly extinguishes a potential fire, preventing it from spreading and creating a controlled environment.

Suitable for the following sector



Energy

Suitable for the following application



Floors

Fire safety for **transformer environments**

TrafoDeck is manufactured from multiple specially designed perforated panels (AP), welded together to form a platform/walkway by means of strips along both sides. Thanks to the perforation pattern, a maximum 5% air passage is guaranteed, which is absolutely essential. The perforated panels feature a unique hole pattern, and the gap between the panels is limited to a maximum of 4 mm.

Technical specifications

- » Material: Galvanised steel and stainless steel
- » Thickness: 2 and 3 mm
- » Length: up to approx. 2000 mm
- » Standard panel width: 250 mm
- » Maximum platform width: 1000 mm
- » Height: depending on requirements
- » Anti-slip classification: R11 on walking surface

Ensuring effectiveness

To test the effectiveness of TrafoDeck, Staco carried out extensive fire tests in collaboration with Efectis Nederland BV. During these tests, burning transformer oil was poured into a containment system fitted with TrafoDeck panels, simulating a blow-out and measuring how quickly and effectively the panels extinguished the fire. As a reference, we refer to the test with the highest temperature (144°C). This test set-up was based on real and current operating conditions.

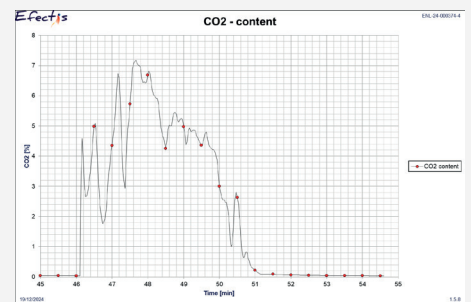
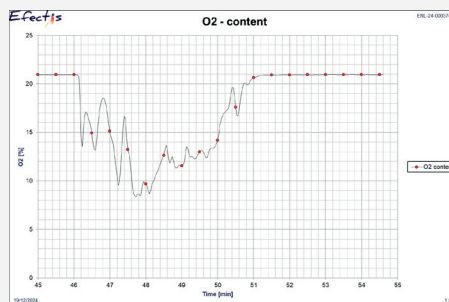
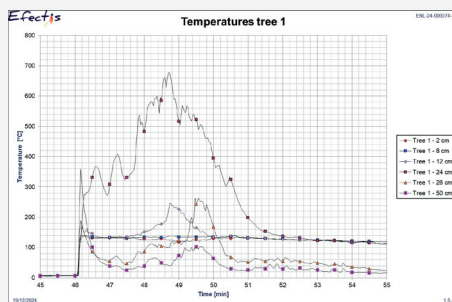


Extensive fire tests under extreme conditions

During the tests, transformer oil was exposed to different temperatures:

- 🔥 85°C (operational scenario) – Representative of normal use and operating conditions.
- 🔥 124°C (critical scenario) – Leakage and heating caused by equipment faults.
- 🔥 144°C (worst-case scenario) – The self-ignition temperature of the oil, representing maximum risk.

The results demonstrate that TrafoDeck effectively extinguishes fires and prevents their spread under all these conditions.



Key test results:

- ✅ Rapid extinguishing effect – Flames were extinguished within 4 to 8 seconds of contact with the panels.
- ✅ Controlled temperature – Temperatures in the containment tank fell below the ignition point.
- ✅ Regulated oxygen supply – Reduced O₂ concentration beneath the panel prevented re-ignition.
- ✅ Self-extinguishing ability – Small flames that flared up shortly after initial extinguishing died out automatically within seconds.

Why choose TrafoDeck?

✓ Proven safety

Tested and validated by an independent testing institute.

✓ Sustainable solution

Low-maintenance and designed for long-term use.

✓ Easy installation

Standardised, tailor-made products.

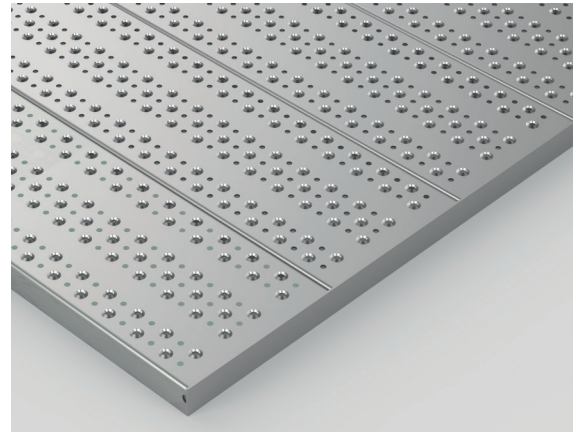
✓ Compliant with IEC 61936 (2021)

Supports recommended fire prevention measures for electrical installations.

✓ Optimal perforation

The specific 4.8% perforation rate proved to be crucial:

- Too little perforation = delayed oil flow-through, longer burning time on the panel.
- Too much perforation = insufficient oxygen cut-off, reduced self-extinguishing ability.



With TrafoDeck, you choose a proven, effective solution that enhances fire safety and minimises fire-related damage.

Want to know more?

Would you like to know more about TrafoDeck? Arrange a **free consultation** with one of our experts for further information. Interested in the full fire test report? Download it from the **[TrafoDeck product page](#)**.

Certificates:



STACO

**We are Staco,
We are metal.**

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