

BAKS Kazimierz Sielski  
ul. Jagodne 5  
05-480 Karczew  
Polen

**Letter** **11010/2024**

Our Ref.: MPABS-2401372 - CM  
Customer ID: 17087.003  
Engineer/Official in charge: Christian Maertins  
Department: BS  
Contact: +495313918265  
C.Maertins@ibmb.tu-bs.de

Your ref.: tomasz.zukowski@baks.com.pl  
Your letter of: 17/06/2024

Date: 05/07/2024

**Assessment of the reaction to fire of cable systems from BAKS Kazimierz Sielski, KARCZEW, under exposure to fire along the standard temperature-time curve in accordance with DIN 4102-2 : 1977-09 with regard to the mixed installation of cables for cable systems with integrated functional integrity and cables for general power supply**

Dear Sir/Madam,

With letter of 17/06/2024, BAKS Kazimierz Sielski, Karczew, placed the order for the preparation of an expert opinion on the reaction to fire of cables systems from BAKS Kazimierz Sielski, KARCZEW, under exposure to fire along the standard temperature-time curve in accordance with DIN 4102-2 : 1977-09 with regard to the mixed installation of cables for cable systems with integrated functional integrity together with cables for general power supply.

## 1 Documentation and basis for the expert opinion

The fire-safety-related assessment is prepared for the construction to be assessed on the basis of the following documents:

- [1] DIN 4102-2 : 1977-09, Fire behaviour of building materials and building components : Building Components;
- [2] Diverse test certificates and test reports on the fire testing of cable systems with integrated functional integrity in accordance with DIN 4102-12 : 1998-11, from MPA Braunschweig;

This document may only be redistributed in full and unchanged. Extracts, abridged versions and translations require the written authorisation of MPA BS. This document is only valid with the signature and stamp of MPA BS or with a verifiable, qualified electronic signature.

- [3] Expert Opinion No. (2402/017/23) – CM dated 25/01/2024 from MPA Braunschweig, issued for BAKS Kazimierz Sielski, Karczew;
- [4] Expert Opinion No. (2402/018/23) – CM dated 25/01/2024 from MPA Braunschweig, issued for BAKS Kazimierz Sielski, Karczew;
- [5] Expert Opinion No. (2402/019/23) – CM dated 25/01/2024 from MPA Braunschweig, issued for BAKS Kazimierz Sielski, Karczew; and
- [6] Specimen guideline on fire protection requirements pertaining to conduits (Specimen Conduit Guideline [German designation: MLAR]), edition of 10/02/2015.

## **2 Description of the construction**

Cables for cable systems with integrated functional integrity shall be laid on cable ladders / cable trays from BAKS Kazimierz Sielski, Karczew, together with general power supply cables (e.g., PVC cables) as mixed installation. Instead of a description of the cable supporting constructions from BAKS Kazimierz Sielski, Karczew, reference is made to the Expert Opinions Nos. [3] to [5] (standard supporting construction), since they describe the cable supporting constructions proven acc. to DIN 4102-12 from BAKS Kazimierz Sielski, Karczew, in detail.

## **3 Assessment with regard to fire safety**

With regard to fire safety, there are no objections against the laying of cables for cable systems with integrated functional integrity and the laying of cables without requirements regarding functional integrity (PVC cables for general power supply) on cable supporting constructions (cable ladders / trays) in accordance with DIN 4102-12 : 1998-11 from BAKS Kazimierz Sielski, Karczew – provided the boundary conditions specified below are observed.

For laying cables for cable systems with integrated functional integrity for safety power supply and cables for general power supply on cable ladders / trays, the following conditions are to be observed in addition to the adherence to building authority proofs and technical regulations:

- Cable systems for safety power supply and cable systems for general power supply are to be routed on separate cable routes. If this is exceptionally not possible, the functioning of the safety power supply should be ensured by sufficient structural measures (e.g., by executing

with separating webs). It must furthermore be ensured that the functional integrity remains guaranteed in case of potential interaction with other systems, facilities or parts thereof.

- The requirements of the standards (e.g., VDE 0100-560, VDE 0100-718), guidelines (e.g., MLAR) and regulations (e.g., MVVTB) applicable for the planning of cable systems for safety power supply with integrated functional integrity are to be observed.
- The requirements with regard to the maximal spatial densities (e.g., cable load [kg/m]) and the design details of the cable supporting constructions for cable systems with integrated functional integrity are to be observed.

## 4 Special notes

- 4.1 This assessment applies only with regard to fire safety. Further requirements may arise from the technical building regulations applicable for cable systems and the respective State Building Code, or the regulations for special constructions – for example, with regard to structural physics, statics, electrical engineering, ventilation engineering, or similar.
- 4.2 This fire-safety-related assessment is no proof of usability in a building inspectorate procedure.
- 4.3 This fire-safety-related assessment applies for the cable systems described above from BAKS Kazimierz Sielski, Karczew, when fastened in solid structural elements. The fastening and the underground must have at least the same fire resistance as the cable system under exposure to fire along the standard temperature-time curve in accordance with DIN 4102-2 : 1977-09.
- 4.4 The executing company is exclusively responsible for the proper execution.
- 4.5 The validity of this fire-safety-related assessment ends on 05/07/2029.
- 4.6 The validity of this fire-safety-related assessment can be extended upon request and as a function of the state of the art.

*This document is the translated version of Letter No. 11010/2024 dated 05/07/2024. The legally binding text is the aforementioned German letter.*

Kind regards,

i. A.  
Dr.-Ing. Gary Blume  
Head of Department

i. A.  
Dipl.-Ing. (FH) Christian Maertins  
Engineer/Official in charge

Dokumente ohne Stempel und Unterschrift tragen eine verifizierbare, qualifizierte elektronische Signatur.