

# Infrastructure Solutions

Safety cables to meet the most rigorous requirements

- CPR standard cables
- Cable with very high fire protection for example for tunnels
- Cables according to the VDE standard
- Cables according to the British standard
- Halogen-free, flame-retardant
- Maximum safety and performance

We offer an outstanding variety of cable solutions. And in doing so, we attach great importance to function and fire protection. In an extensive production area, we work with state-of-the-art processing methods in both material and

extrusion technology as well as electron beam cross-linking. This results in higher product quality with excellent physical and electrical properties.

## A whole range of national and international certificates are evidence of our innovative strength

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### **BETAflam® cable according to VDE standard**

Lines and cables to meet demanding safety requirements – free of harmful substances, flame-retardant, low smoke gas and fire-retardant, and offering:

- Maximum safety performance
- Halogen- and silicone-free
- RoHS-compliant
- Total system integrity acc. to DIN 4102, Part 12
- Cables and laying system from a single source



### **BETAflam® cable in accordance with British Standard BS 6387**

Conductors and cables to meet demanding safety requirements in accordance with British Standard BS 6387.

- Free from harmful substances
- Flame-retardant
- Low smoke and fire retardant
- Approved according to BS 6387 C.W.Z.



### **BETAflam® cable according to the Swiss standard**

Our wires and cables meet the required safety standards and provide economical, durable solutions with the following features:

- High to very high fire class (EN 13501-6)
- No flame propagation (EN 50399)
- Low to very low smoke emission (EN 50399 and EN 61034)
- Halogen-free, low acidity of combustion gases (EN 60754-2)
- Insulation integrity (IEC 60331-21)
- System integrity (DIN 4102, Part 12)



### **BETAfixss® certified cable support systems with total system integrity according to DIN 4102**

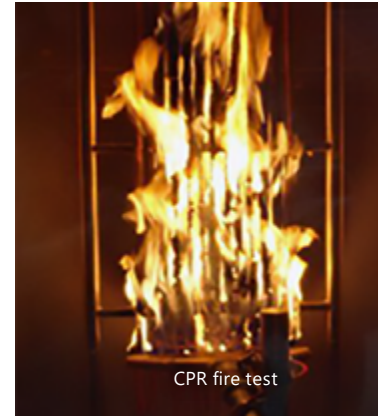
BETAfixss® support systems are used for electrical cable systems with total system integrity. They also guarantee fireproof mounting of installed cables in the area between floor slabs and F30 or F90 suspended ceilings.

- Large laying distances
- Reduced material costs
- Short installation times
- High-quality materials
- Tested and approved according to DIN 4102-12, E30/E60/E90



In our in-house fire laboratory, installation cables, fire alarm cables, supply lines and other products are subjected to various fire tests and trials in virtually real-life conditions. Among other things, we are able to carry out fire tests in accordance with the Construction Products Regulation. We also test medium-voltage cables in our long-term aging system for their electrical function with a long service life. Our **BETAflam®** safety cables and the **BETAfixss®** cable support

system are certified according to the criteria of total system integrity, fire propagation and insulation integrity as well as other properties and international standards and regulations. In addition, many of our products are certified according to the European Construction Regulation for fire-resistant cables with reduced flame propagation and heat generation, while at the same time releasing low levels of corrosive gases and smoke.




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**Non-flame propagating**

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**Halogen-free cables**

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**Corrosive effects of combustion gases**

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**Smoke density**

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**Flame-retardant**

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**Insulation integrity under fire conditions**

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**Insulation integrity when exposed to water**

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**Insulation integrity with mechanical shock**

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**Total system integrity under fire conditions**

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EN 50399, EN 60332-3, IEC 60332-3, VDE 0482-266-2 Serie

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EN 60754-1, IEC 60754-1

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EN 60754-2, IEC 60754-2

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EN 61034, IEC 61034

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EN 60332-1-2, IEC 60332-1-2

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IEC 60331-21, DIN VDE 0472-814, BS 6387 C

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BS 6387 W, VdS 3423

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EN 50200, EN 50362, VDE 0482-200, BS 6387 Z

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DIN 4102, Teil 12

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## Cables with very high fire protection for open laying in railway tunnels

According to the TSI-SRT (Technical Specification for Interoperability- Safety in Railway Tunnels), cables that may be exposed to fire in tunnels must meet the very demanding fire class B2<sub>ca</sub>-s1a, a1.

### Studer Cables offers such cables:

- Low voltage power supply, also with functional integrity
- Medium voltage power supply up to 36 kV
- Signal box cables
- Fire alarm cables with functional integrity



## Ensuring that people can move around safely and guaranteeing property protection

Today building and traffic route infrastructures have to meet high requirements for protection against disruption and fire. Building owners and planners take their responsibility seriously and equip buildings such as hospitals, event venues and office complexes with the appropriate security technology. This ensures that people are able to get to safety in the event of a fire and that the damage is kept to a minimum as a result of effective fire-fighting. While infrastructures face new challenges due to increasingly complex applications, it is mandatory to ensure the very highest level of security at all times. Our **BETAflam®** products meet the relevant international regulations and standards in both structural and civil engineering.

We firmly believe that the trend towards comprehensive security will continue to be a high priority in the future, and we aim make a key contribution here with our high-quality products.

**Studer Cables – competent & indispensable.**



Further information can be found on our website:  
<https://studercables.com>

## Applications

- **Public buildings**  
Our cables and suspension systems supply the safety systems and evacuation routes.
- **Railway & underground stations, airports**  
Lighting, emergency exits and signals ensure security in infrastructure buildings. Thanks to total system integrity under fire, our products make an important contribution in critical situations.
- **Traffic routes**  
Our products are used for marking, lighting and controlling traffic routes.
- **Tunnels**  
With our cables and support systems, we help ensure functioning lighting and optical guidance systems as well as providing power for fans and escape routes in emergency situations.



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