Expertise in fire protection

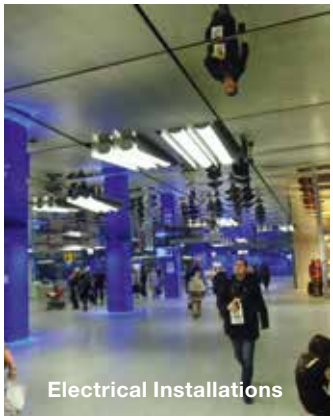
Fire protection products
August 2024

AESTUVER®

Structural fire protection

Tunnel

Industry & OEM



Electrical Installations

Subway & Metro

Infrastructure

Areas of application

- Fire protection cladding for protecting structures, wall and ceiling fabrications in drywall constructions
- System solutions for timber constructions
- Solutions for the safe design of escape and rescue routes
- Fire protection for cable duct systems
- Joint fire protection

Special solutions:

- Fillings for fire doors and gates
- Fire protection inserts for metal components and concrete reinforcements
- Fire protection elements in façade constructions
- Insulation inserts for fire dampers and hatches

AESTUVER®

Intelligent fire protection

Aestuver® is one of the leading brands in structural fire protection offering a wide range of economical and high-performance solutions for safety in construction, tunnels, industry and infrastructure.

Our fire protection boards and accessories offer long-term security for your investment.

- Project planning and management by experienced fire protection experts
- All systems and components are externally certified (ETA, AbP, abZ, aBG) and production is constantly monitored for quality control
- Aestuver® fire protection boards achieve the highest classification with Type-X, the best classification for weather, frost and water resistance
- Hygienic, no bacteria or fungal growth

Application range

The outstanding mechanical properties of Aestuver® fire protection boards open a wide range of possible applications. The areas of use range from industrial installation through standardized building elements and systems to the individual, tailor-made production of constructions onsite e.g. protection for electrical installations.

When planning a project, you can rely on our team of engineers with fire protection experience and a foundation of research and development. Together we will find the best solution.

HIGH-QUALITY FIRE PROTECTION SOLUTIONS

Aestuver® fire protection boards

Weather plays a crucial role in planning, execution and durability of construction projects. Weather resistance determines how well a material can maintain its physical and aesthetic properties over time under the influence of weather conditions.

Aestuver® fire protection panels and products have excellent weathering properties. They undergo extensive testing to prove their resistance to UV radiation, moisture, temperature fluctuations, salt, dirt and other environmental influences.

WEATHER RESISTANT

Aestuver® fire protection boards defy the effects of rain and snow. Even after years, they provide the required structural fire protection in the event of a fire. After a fire, the panels can be replaced quickly and easily.

The solutions and systems include e.g. fire protection cladding for load-bearing structures, drywall and ceiling constructions and solutions for the safe design of escape routes.

Aestuver® fire protection boards have also been tried and tested for years, especially for use in above ground and underground transportation systems.

For electrical installations, Aestuver® products offer a complete system of prefabricated cable ducts in various fire resistance classes.

HIGH-QUALITY FIRE PROTECTION SOLUTIONS

Aestuver® Board Types

Fire protection up to 1200 C

With special additives

Easy processing with wood tools

Used for structural fire protection

Aestuver® fire protection board BSP

Cement-bonded, glass fiber reinforced concrete panels for high-quality structural fire protection.

- Panels for versatile use in high-quality fire protection
- No flammable components
- Resistant to weathering, frost and water
- Use in wall/ceiling constructions
- Component in façades, External Thermal Insulation Composite Systems (ETICS), reinforcement elements and shaft walls
- Cladding for steel and timber constructions
- Filler and insulator for door, gate and window profiles, security containers

Fire protection up to 1350 C

Economical in price

Economical to process

Used in tunnels

Aestuver® fire protection board T

Cement-bonded, glass fiber reinforced concrete panels for high-quality fire protection in underground transportation systems for direct installation during concrete pouring.

- Cladding as protection against concrete damage caused by fires in tunnels
- Economically optimized in production and processing
- Installation directly cast in concrete
- Developed for internationally recognized temperature curves

Fire protection up to 1400 C

Dimensionally stable at extreme temperatures

Reliable chemical resistance

Used in tunnels

Aestuver® fire protection board Tx

Cement-bonded, glass fiber reinforced concrete panels for high-quality fire protection in underground transportation systems for retrofitting.

- Even higher quality components and high-performance binders
- Dimensionally stable even at extreme temperatures
- Higher chemical resistance
- Installation on the tunnel walls and ceilings
- Easily adjustable while fastening
- For all tunnel shapes

STRUCTURAL FIRE PROTECTION

WALLS & CEILINGS

Thanks to the special performance of Aestuver® fire protection boards, constructions are available for all interior and exterior application categories. These offer planners, fabricators, builders and subsequent occupants or users of the buildings the required level of fire safety.

Assembly walls

Non-load bearing, room-enclosing partition wall construction in metal stud design. Double-layer boarding on both sides for fire resistance F90 or F120. Various design and connection details.

Shaft Walls

Non-load bearing, room-enclosing partition wall constructions. Can be constructed with metal substructure. Boarded on one side for single-sided installation with F90 fire resistance.

Steel frame walls

Non-load bearing, space-enclosing partition wall construction with metal stud subframe and increased wall heights. Single-layer cladding on both sides for fire resistance F90 or F120. Various design and connection details.

Suspended ceilings

Suspended and self-supporting ceilings, with single or multi-layer coverings. For various types of ceilings with fire resistances from F60–F90.

Trapezoidal steel sheet ceilings

Cladding for trapezoidal steel sheet ceilings with fire resistances up to F120.

Beam and column cladding

Fire protection cladding for steel columns and steel beams in the fire resistance classes F30–F180 (National standard) and R30–R180 (European standard).

STRUCTURAL FIRE PROTECTION

Pipeing, concrete protection & fire flash over

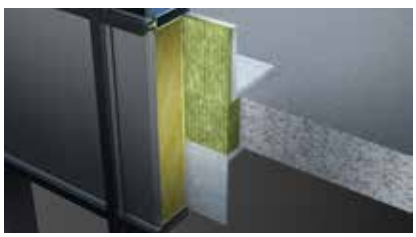
Fire protection cladding for sprinkler supply lines F90

Protection against flash over fires for fascia and eaves

Fire protection cladding of steel components to replace missing concrete covering

Fire protection cladding for exhaust systems L 90

Cladding of roof overhangs to protect against fire flashover

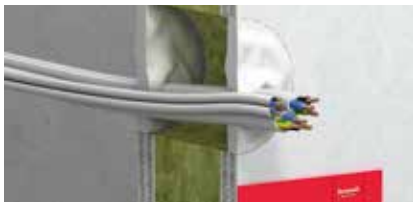


Parapet and apron element EI 90 / EI 120

STRUCTURAL FIRE PROTECTION

Aestuver™ penetration seals

Aestuver™ partitioning systems are used to make penetrations through wall and ceiling components fire-resistant. These room-enclosing, fire-resistant cable seals prevent the spread of fire.



Aestuver™ cable penetration seal Mx

Permanent fire barrier for electrical cables.
Fire resistance: EI 30 – EI 120.

Aestuver™ combination penetration seal S

Suitable for creating permanent fire seals for electrical cables and of electrical cables and pipes as well as combustible and non-combustible pipes.

Aestuver™ combi penetration seal ST

Fiber-free, fire-resistant penetration seal for electrical cables and pipes. Subsequent changes to the assignment are possible.

STRUCTURAL FIRE PROTECTION

Aestuver™ joint fire protection

Expansion or movement joints: Aestuver® offers high-performance fire protection products.

Aestuver™ FPM mastic

Paintable and weather-resistant fire protection compound, also suitable for wide expansion and movement joints.

Aestuver™ Expansion joint B

For fire protection sealing of joints in ceilings and walls in building construction.

Aestuver™ Expansion joint M

Is used as a permanently elastic seal for joints between solid ceilings or solid walls – that is effective for fire protection.

STRUCTURAL FIRE PROTECTION

Fire protection for electrical installations

For electrical installations, Aestuver® offers a complete system of prefabricated cable ducts in various fire resistance classes. These ensure the protection of people, animals and goods, particularly in climatically stressed environments such as outdoor areas, in commercial and industrial buildings and in infrastructure, to ensure the functionality of the systems in the event of a fire.

Cable ducts “Standard” (I and E-ducts)

The Aestuver™ Standard fire protection cable duct system consists of bases / covers for direct wall and ceiling installation.

- Simple installation thanks to butt joint technology
- Can be individually adapted to construction site conditions on site (no molded parts required)

Cable ducts “Exclusiv” (I-ducts)

Aestuver™ installation ducts prevent the spread of fire from the inside to the outside and protect the surrounding rooms, such as escape and rescue routes (fire load protection). These cable ducts are tested in accordance with DIN 4102-11.

Cable ducts “Exclusiv” (E-ducts)

Aestuver™ fire protection cable ducts for the functional integrity of electrical systems ensure that no heat penetrates the duct from the outside in the event of a fire and that the temperatures inside remain low. This ensures that there is no short circuit or interruption to the power supply. These cable ducts are tested in accordance with DIN 4102-12.

FIRE PROTECTION IN TUNNELS AND INFRASTRUCTURE

Tunnel and underground facilities

Aestuver® fire protection solutions are also used to protect tunnels and other underground facilities. In the event of a fire, they protect the structures from serious damage and enable rapid restoration work afterwards.

Our major STUVA study from 2020 showed that the costs of installing fire protection panels will be recovered over the service life of a tunnel if there is at least one major fire occurs during this time. Invest in the safety and the benefits of our fire protection products:

- Frost-proof and water resistant
- Safe and easy to clean, abrasion-resistant
- Easy to maintain
- Easy to install and replace after a fire
- Can be coated and painted, depending on the design concept of the tunnel

Smoke extraction ceiling retrofitted

Retrofitted fire protection cladding

Concreted-on fire protection cladding

PROTECTION FROM HIGH TEMPERATURES!

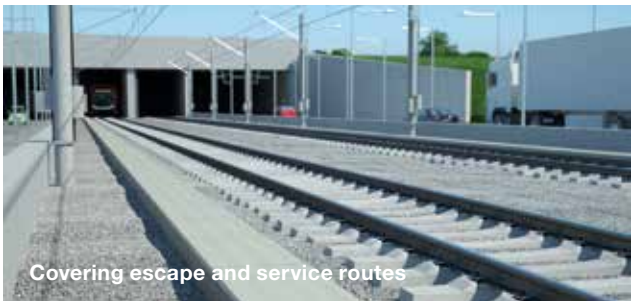
Aestuver® fire protection boards meet or exceed the high requirements of the international time-temperature curves. Further information and details can be found in our tunnel brochure at **www.aestuver.com.**

FIRE PROTECTION IN TUNNELS AND INFRASTRUCTURE

Aestuver™ fire protection element D+2

The Aestuver® composite element D+2 was specially developed for cable trough covers and escape and rescue routes in underground transportation systems. Our cement-bonded, glass fiber-reinforced lightweight concrete sandwich panels are ideal for absorbing dynamic loads.

With proof of resistance to water and freezing/thawing these panels offer a wide range of possible applications: e.g. as a fire-resistant cable duct cover, which significantly simplifies maintenance, or as a durable and fire-safe replacement for existing wooden planks in escape and rescue routes.



Covering escape and service routes

Cable tray cover

ADVANTAGES

- Durable and load bearing under traffic loads (permissible load of up to 12.5 kN/m²)
- Low weight makes installation and repair quick and uncomplicated
- Abrasion-resistant and easy to clean
- Non-flammable, water-resistant, frost-resistant

Escape and service routes in track areas

FIRE PROTECTION FOR INDUSTRIE & OEM

Wide range of applications

Aestuver® offers a comprehensive range of economical and high-performance solutions for fire protection and construction technology for applications in the industrial and OEM sector. Tell us what you need and we will support you with our knowledge and experience to find the best solution for your individual requirement.

Aestuver® fire protection boards and fermacell® gypsum fiberboards are always used when the highest demands are placed on the product in terms of fire protection, weather and frost resistance. The following are examples of various areas of application:

ADVANTAGES

- In-house component production for special constructions
- In-house orientation fire protection tests
- Customized cutting and fabrication according to customer requirements possible

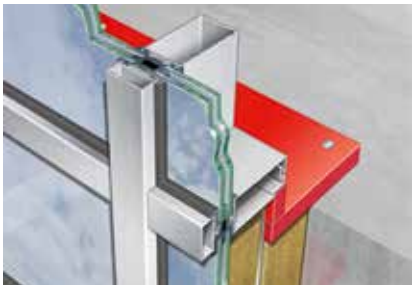
Panels and carrier plates for fire doors and gates

Fire doors made of metal and wood

Fire protection doors for power plants or tunnels

Fire protection elements in façade constructions

Fire protection insulators and -panels in facade systems



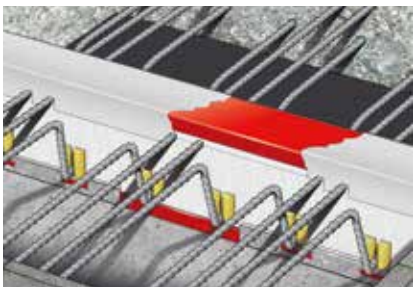
Cuts for fire protection parapet elements

SERVICE

We will work with you to find the best fire protection solution for your individual problem. Contact our fire protection experts at **www.aestuver.de/de/kontakt**

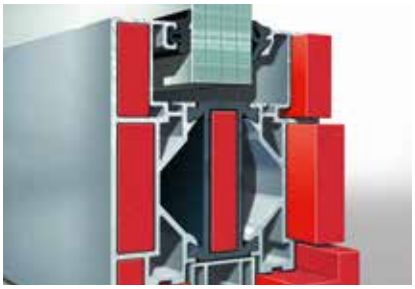
Safety cabinets
Insulation inserts and support panels for fire protection cabinets and safety containers as well as fire protection cladding for room cells and modular construction

Fire protection inserts for reinforcement elements



Fire protection strips in reinforcement elements in reinforced concrete construction

Insulators and inserts for fire protection profiles made of steel or aluminum



Fire protection insulators and -panels in façade systems

Profile fillers for fire protection in complex hollow chamber profiles

AESTUVER® FIRE PROTECTION WITH SYSTEM

References

Schweriner Schloss, Germany

With Aestuver® fire protection panels, the fire resistance class F90 required for the ceilings in the office area and F30 for the floors of the technical center were met in the new construction of the plenary hall in Schwerin Palace. Thanks to their resistance to weathering, frost and water, the special fire protection boards were also able to cope with the challenging climatic requirements of the technical center.

Lehrter Bahnhof, Germany

In Berlin's main station Lehrter Bahnhof one of Europe's largest transportation hubs, the extensive technical installations were. safely encapsulated using fire protection cable ducts. The large-scale project required many special solutions, which were implemented quickly and flexibly thanks to the use of Aestuver™ cable ducts. The installation time was significantly reduced as the ducts were delivered to the construction site ready for installation "just-in-time".

Bergiseltunnel, Austria

As part of the modernization of the fire protection system in the busy Bergiseltunnel near Innsbruck, the concrete structure of the ceiling was protected with Aestuver® Tx proofing panels, specially designed for the highest safety requirements in underground traffic facilities. The entire installation of the approx. 19,000 m² of Aestuver® Tx panels were installed by TBT in just 12 weeks – plus one week for the remaining work.

AESTUVER® FIRE PROTECTION WITH SYSTEM

Service & Quality

Planning support and project management

Our experienced fire protection experts will support you right from the start and work with you to find the right solution. For simple projects, we provide you with free planning assistance and for complex requirements, we offer customized system solutions for your individual construction project.

Certification and quality inspection

Our systems and components are externally certified (ETA, AbP, abZ, aBG). The production process is constantly monitored. And we carry out regular quality inspections in our in-house laboratories. Thanks to an intelligent labeling system, all products can be traced even years later.

Technical customer service on the construction site

Whether you need help with processing, planning or implementation, we will support you with all your needs.

Our experienced fire protection experts will help you solve your problems. In addition to installation tips, we also offer on-site training on how best to process our panels.

In-House component production

The proven fire protection and moisture resistance properties make Aestuver® panel materials a preferred product in industrial processing. Special requirements often arise. With Aestuver® the geometry of the components and the production-specific requirements are determined by our industrial and OEM customers. Also, the shape of processing and the packaging of the products can be defined individually.

JamesHardie™ fermacell® AESTUVER®

Aestuver® is a brand of James Hardie

The company James Hardie Europe GmbH, under which the brand and the products of Aestuver® are marketed, supports the various parties involved in construction projects as a partner in the respective project phases. In addition to customized products, we offer comprehensive services as part of our customer-oriented project support and an interesting selection of other building products.

The latest version of this brochure, which you can download from our website, applies. Subject to technical changes. If you require additional information, please contact our customer service.

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