

fermacell<sup>®</sup>
AESTUVER

**AESTUVER** 

Systematic Fire Protection



# **AESTUVER Systematic Fire Protection**

FERMACELL Aestuver is a full-range provider for passive fire protection.

### Comprehensive solutions

FERMACELL Aestuver offers a wide range of products for many passive fire protection applications:

#### Structural members

- Walls/floors
- Column/girder protection
- Ventilation systems
- Electrical systems
- Special structures

### Fire protection products

- Bulkhead elements (cables/pipes)
- Coating (steel/timber)
- Joints

#### **Tunnels**

- Fire protection for tunnel systems
- Fire dampers, fire doors and coverings
- Fire-resistant cable ducts

### Fire safety without compromise

Safety first! We must strictly not compromise on passive fire protection! Anyone who takes safety seriously has to think FERMACELL Aestuver.

#### Added safety

The DIN 4102/DIN EN 13501-1 standards classify AESTUVER fire-resistant boards made from glass-fibre reinforced light-weight concrete as building material class A1 products.



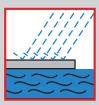




AESTUVER fire-resistant boards; AESTUVER fire-resistant cable ducts; AESTUVER fire-resistant boards for underground transport systems



Noncombustible



Water resistant



High compressive strength



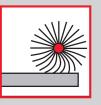
Frost resistant



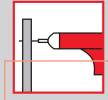
High tensile bending strength



Easy to clean

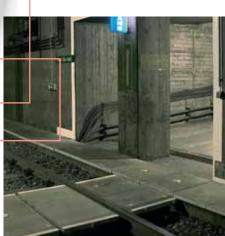


High abrasion resistance



Easy to process





Walk-on
AESTUVER D+2
fire-resistant
elements

FERMACELL Aestuver offers a wide range of tested structural elements with the required fitness-for-use attestations and/or technical approvals (general building code test certificates - ABP; national technical approvals - ABZ). Examples include fire-resistant protection for load-bearing structures and wall and floor systems, independent ventilation ducts, and solutions for safe escape and rescue routes. AESTUVER fireresistant boards have for many years also proven to be a highly successful solution in underground transport systems.

For electrical installations, FERMACELL Aestuver offers a complete system with ready-toinstall cable ducts with different fire resistance ratings. Solutions in the fields of

- bulkhead elements (cables/pipes)
- coating

system provider.

passive fire protection.

■ joints complement FERMACELL Aestuver's product portfolio as an expert

FERMACELL Aestuver is synonymous with comprehensive solutions for

fermacell° fermacell°

Systematic fire protection

Systematic dry construction

Joint competence for comprehensive solutions to meet your specific requirements



AESTUVER fire protection products for fire stopping, coating, joints

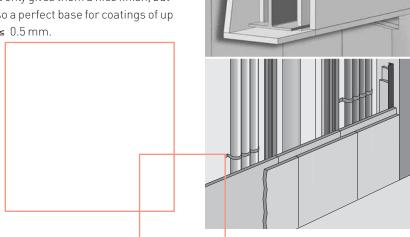


## AESTUVER fire-resistant boards

AESTUVER fire-resistant boards are universal-application elements that may, for instance, be used as protection for girders and columns or glued reinforcement, partition and shaft walls, fire-resistant false ceilings; and wherever provisions have to be made for passive fire protection.

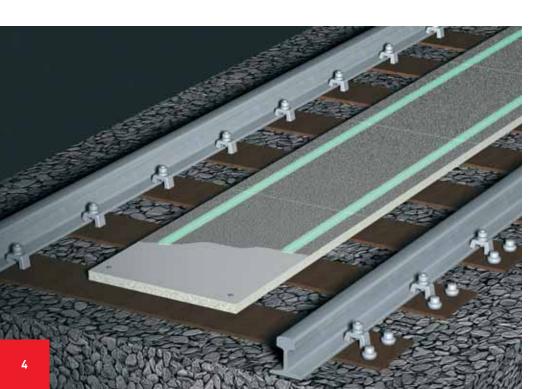
The excellent mechanical properties of AESTUVER boards recommend this material for a wide range of applications. AESTUVER boards may be processed industrially to produce standard elements and structural systems, and they may likewise be used for individual and tailor-made structural solutions on site.

AESTUVER fire-resistant boards come in the sizes 1,250 x 2,600 mm and thicknesses ranging from 8 to 60 mm. Special sizes and thicknesses are available on request. The smooth surface of the boards not only gives them a nice finish, but also a perfect base for coatings of up to  $\leq 0.5$  mm.



Example applications:
Steel girder protection
(F-30-A to F-180-A fire resistance rating)
Partition and shaft wall
(F-90-A fire resistance rating)

# AESTUVER D+2 fire-resistant walk-on element, designed to sustain dynamic loads



The D+2 fire-resistant walk-on element is designed to sustain dynamic loads and has been specially developed as a covering for concrete troughs or to replace the walk-on timber sleepers between rail tracks for safe escape-route and rescueroute surfacing. On request, the elements can come with anti-slip or afterglow finish when intended for use as an escape and rescue route guide system. The standard size is approx. 625 x 1,250 mm. Customised sizes are available on request.

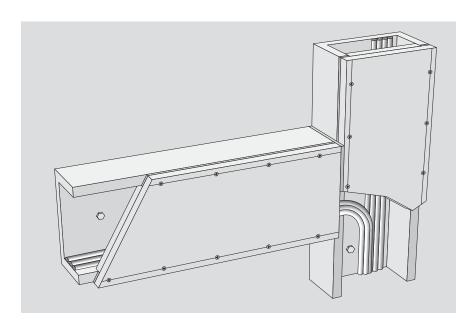
# AESTUVER fire-resistant cable duct, type "Standard"

AESTUVER "Standard" cable ducts (fire resistance E 30/I 90 rated in accordance with DIN 4102-12 and DIN 4101-11, respectively) come as ready-to-install cable duct elements that can be directly mounted on walls or floors. The cable duct consists of a pre-fabricated bottom section and a cover made from water- and frost-resistant AESTUVER fire-resistant board material. The board material has a hard, smooth and abrasion-resistant surface.

- Fire-resistant cable duct, fire-resistance rating E 30 in accordance with DIN 4102-12, designed to maintain the integrity of electrical installations
- Fire-resistant cable duct, fireresistance rating I 90 in accordance with DIN 4102-11, designed to encapsulate the fuel source in escape and rescue routes

#### **Benefits**

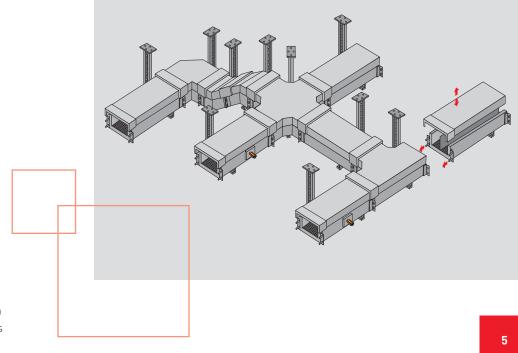
- Ducts arrive on site in a ready-to-install state
- Butted joints for simple installation
- Prefab moulded parts are not required (they are produced on site)
- Potential equalisation not required
- E-30-rated ducts also available as single-cable versions
- Primed for direct paint coating
- Max. cable weight without cable support structure = 22.5 kg/m
- Cross section available for cable installation = 34.3 cm<sup>2</sup>



# AESTUVER fire-resistant cable duct system, type "Exklusiv"

The AESTUVER "Exklusiv" fire-resistant cable duct system consists of straight duct sections and moulded parts. It is supplied with ready-to-install cable duct elements and complies with DIN 4102-11 and DIN 4102-12. The duct elements are pre-fabricated from water-and frost-resistant AESTUVER fire-resistant board material. The board material has a hard, smooth and abrasion-resistant surface.

- Fire-resistant cable duct, fire-resistance rating I 30 to I 120 in accordance with DIN 4102-11, designed to encapsulate the fuel source in escape and rescue routes
- Fire-resistant cable duct, fire-resistance rating E 30 to E 120 in accordance with DIN 4102-12, designed to maintain the integrity of electrical installations



# **AESTUVER fire-resistant products**

FERMACELL Aestuver offers comprehensive solutions for passive fire protection. This is why the AESTUVER product portfolio also includes fire safety systems that are to

- protect openings in walls, including dry walls, and floors to prevent fire spread,
- effectively protect joints as weak spots in walls and floors to prevent fire spread,
- coat steel girders and columns, as well as truss members and timber surfaces, to prevent ignition.

### AESTUVER system Bulkhead modules

- for cable and mixed-system penetration sealing
- for pipe penetration sealing in walls and floors made from fireproof materials and in drywalls

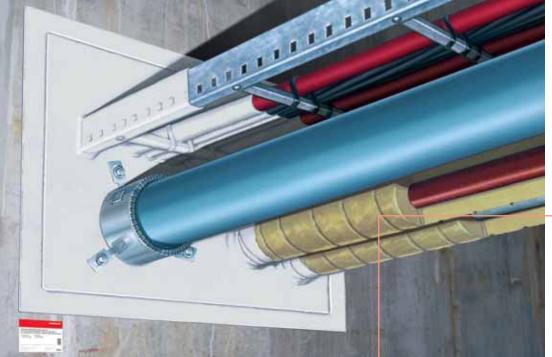
### AESTUVER system Joints

 for fire-resistant jointing in masonry or concrete walls, and in RC floors

### AESTUVER system Coatings

for fire-resistant coating of steel and timber elements

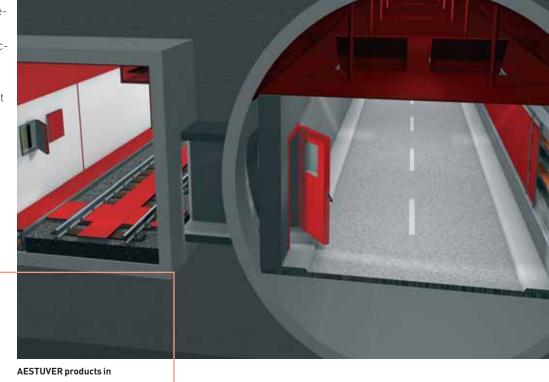






### **AESTUVER fire-resistant boards** for underground transport systems

In the event of a fire, AESTUVER fireresistant boards for underground transport systems protect the structural concrete to prevent sloughing or explosive spalling. They also protect the tunnel structure against destructive temperature exposure, as AESTUVER boards can sustain temperatures of 1,350°C and over. Further important features are their resistance to water, frost and de-icing salt as well as their high compressive and tensile bending strength and their abrasion resistance.



street and rail tunnels

### Additional information

FERMACELL Aestuver can provide detailed information material

- Product and programme brochures
- Processing instructions
- Product data sheets
- Technical approvals and test certificates
- Model tender specifications

### **AESTUVER** customer information

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Subject to technical modification. Status: 01/2009 The most recent issue shall have effect. Please call us, should you find any information to be missing in this issue.

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