

# Benefits of Aestuver Fire-Resistant Boards

## Resistant to compression.

AESTUVER fire-resistant boards for underground transport systems derive their high compressive strength from the dense and homogeneous board structure. The matrix-embedded glass fibres further enhance this property.

## Resistant to tensile bending.

The high tensile bending strength of AESTUVER fire-resistant boards for underground transport systems results from the use of long glass fibres which are uniformly distributed throughout the entire board.

## Resistant to abrasion.

AESTUVER fire-resistant boards for underground transport systems owe their abrasion resistance primarily to a uniformly compacted surface. The production process ensures an optimised exposed surface that has almost no visible pores. With its smooth finish, it provides very good protection against wear.

## Water-resistant.

AESTUVER fire-resistant boards for underground transport systems have excellent water-resistance qualities. This advantage results from the cement-bound matrix structure and its low water absorbency.

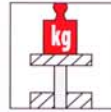
Even high moisture exposure does not significantly affect the physical properties of AESTUVER fire-resistant boards for underground transport systems. This explains why these boards do not have to be subjected to any additional waterproofing measures.

## Frost- and deicing-salt resistant.

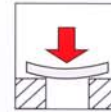
The frost and deicing-salt resistance of AESTUVER fire-resistant boards for underground transport systems has been examined in long-term tests, and the boards have been attested excellent resistance properties.



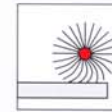
**Non-combustible**



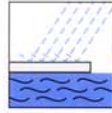
**High compressive strength**



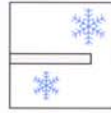
**High tensile bending strength**



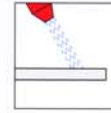
**High abrasion resistance**



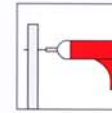
**Water-resistant**



**Frost-resistant**



**Easy to clean**



**Easy processing**

## Easy cleaning.

Because of their regular, smooth and firm surface, the boards can be cleaned easily and with lasting effect, using different cleaning methods, water- or steam-jet cleaning, and adding cleaning agents (in accordance with recommendations).

## Processing advantages.

Thanks to their excellent mechanical properties, AESTUVER fire-resistant boards for underground transport systems can be used for a wide range of applications. The boards can be processed industrially to produce standard elements and structural systems, and they can likewise be used for individual and tailor-made structural solutions on site. The smooth surface of the boards also provides an ideal base for painting and coating.

AESTUVER fire-resistant boards for underground transport systems can be sawn, milled, drilled, nailed or bolted without any problems. The low dust emission level adds to their excellent mechanical handling characteristics.

## No health risks.

Only fibres with uncritical dimensions (according to WHO) are used in the production of AESTUVER fire-resistant boards for underground transport systems. This makes the boards safe to use, because no fibres are deposited in the respiratory system or the lungs (risk of asbestosis), a known problem with the use of asbestos products.

## Advantages of AESTUVER fire-resistant boards for underground transport systems:

- Conventional cleaning methods may be used, requiring no additional treatment of the boards
- No bonding problems in connection with high-strength concrete
- Protection of movement joints
- MULTI-MONTI® screw anchors allow the protection to be removed for inspection at any time and without causing any damage to the structural system (note screw anchor type approval)
- Resistant to water, frost and de-icing salt; no loss in strength when exposed to moisture

## Fields of application of AESTUVER fire-resistant boards for underground transport systems.

The most common fields of application of AESTUVER fire-resistant boards for underground transport systems are shown on the next pages. Because of their very good processability and material properties, the boards can be a simple and effective solution to a number of other special requirements, including fire protection for expansion joints.

