

# AITHON

[www.aithon.eu](http://www.aithon.eu)

## AITHON PV33

The fire protection has never been so transparent



60 minutes Fire Resistance  
according to ENV 13381-7 e EN 13501-2

B-s1-d0 Reaction to Fire (ETA 15/0424)

Class A (tunnel test ASTM E84)

BS 6853 Annex B.2 smoke toxicity compliant



Class A (ISO 16000 Indoor air emission)

Water based, low VOC

EMICODE EC1 Plus

AgBB Compliant

BREEM compliant

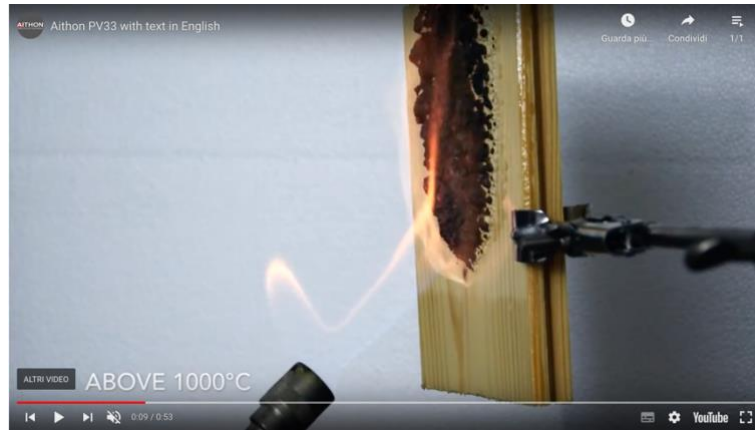




# HOW IT WORKS

See how it reacts in the video:

[www.aithon.co.uk/products/r60-fire-resistance-for-timber/](http://www.aithon.co.uk/products/r60-fire-resistance-for-timber/)



**FIRE RESISTANCE TEST**  
**THE TIMBER BEAM IS COMPLETELY WRAPPED INTO**  
**THE INSULATING CHAR LAYER GENERATED BY AITHON**  
**PV33**



AITHON PV 33 at ambient temperature is just a perfectly transparent varnish, with a natural wax-like finish.

In a fire it reacts, generating a thick layer of carbon char, up to 40mm thick, able to withstand heat above 1000°C, protecting timber structures up to 60 minutes.





*Daskalof Museum, Bulgaria*

## ***Historical buildings***

*Several tens of listed buildings across Europe are now protected with AITHON PV33.*

*It makes possible upgrading the fire resistance of timber structures preserving in the same time the ancient beauty of the original frame.*

*Using AITHON PV33, also the environmental impact of the refurbishment works is reduced.*



*Venaria Royal Palace, Turin, Italy*



# CLT and greenbuildings



CLT (X-LAM) fire protection is a constant field of research for us, supporting environmentally friendly architecture with particular attention to the afterglow, that may destroy CLT buildings even after the fire is extinguished.

AITHON PV33, has been tested also on CLT panels, achieving Class B-s1-d0.

In new buildings, the fire resistance is achieved oversizing timber beams and columns to compensate the wood thickness that is charred during a fire.

AITHON PV33 shields timber, grants class B-s1-d0 reaction to fire and reduces the charring rate.

With AITHON PV33 timber oversizing can be reduced, saving cost and weight.

## CHARRING RATE REDUCTION:

Down to 0,33 mm/min (30' fire exposure)

Down to 0,47 mm/min (60' fire exposure)

## THE WARRANTY OF A WIDELY TESTED SYSTEM

Testing laboratories in France, United Kingdom, USA, Italy and Denmark confirmed the quality and the reliability of AITHON PV33 system

ETA 15/0424: B-s1-d0 with 2 different finish options, solvent and water based

FIRES and CSTB: ENV 13381-7 and EN 13501-2 fire resistance

up to 60 minutes

Warringtonfire: Bs1-d0 on CLT and all types of timber

Intertek: Tunnel test ASTM E84: Class A

BRE: BS 6853 Annex B.2 smoke toxicity



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EAD 350402-00-1106

Fire protective product  
See ETA for relevant characteristics





AITHON PV33 has been selected to protect timber structures in many outstanding buildings



Fondaco dei Tedeschi, Venice



Palace of Versailles



Gare Maritime, Brussels