



FIRE  
RETARDANT

# PRODUCT INFORMATION



BY VENØ





# FIRE RETARDANT PANELS



BY VENØ is Danish design and acoustic panels in wood with several variants of slats for walls and ceilings in high quality.

Behind the BY VENØ brand is Fog & Venø A/S, which is responsible for all design and production. At Fog & Venø A/S, in addition to design, we also focus on the green transition in our choice of materials and handling of the product after use.

Fog & Venø produces panels in various sizes, both for private and professional actors in the construction industry.

To ensure the highest quality of our products, all panels are quality controlled during production and packing to avoid defects on acoustic panels before they are shipped to the customer.

With BY VENØ acoustic panels, you will achieve improved indoor climate and well-being in both private homes and workplaces.

2

Acoustic panels can attenuate and stop reverberation time in a room where several people are staying at the same time. With the right set-up, noise can be reduced by up to 50%.

Our Fire Retardant acoustic panels are produced with a fibreboard. Our slats are either made of plywood with veneer glued to the front. This means that there may be shade differences in the expression of the veneer.

## **How to create the ideal sound experience in a room.**

The importance of acoustic control is underestimated in many buildings. Sound affects us in our daily lives. It can make the difference between a good and a bad day at school, work, the cinema, the theatre, etc.

## **Reduce noise levels effectively with BY VENØ acoustic panels.**

How do you create the ideal indoor climate, both in private homes and at work?

Do you have challenges with hearing what others say when more people are in the room? The challenge with poor acoustics, is well known and a big challenge for many people!

## **What is the cause of bad sound and what can we do to improve it?**

Sound waves travel around the room, and each time the sound wave hits a hard surface, it is thrown back out into space, where its reverberation time becomes shorter and shorter over time. With more people, phones and small talk, there is constant reverberation in the room; this is where our acoustic panels make a big difference.

Our Danish-made acoustic panels break the sound and absorb the sound wave, so it dies out when it hits the panels. This means that the sound wave is eliminated and the reverberation time is shortened, which will improve the indoor climate and the feeling of well-being in the room, whether we are talking about private, commercial or public buildings.

### **Why choose BY VENØ?**

- Fire test: EN 13823 / B-s1,d0
- Good acoustics
- Danish design
- Danish quality product
- Healthy indoor environment that promotes well-being
- Easy and quick assembly







3



Oak



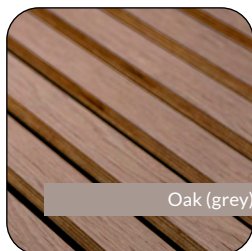
Oak (white)



Pine



Smoked Oak



Oak (grey)



American walnut



# FIRE RETARDANT PANELS specifications



Veneer	Core	Fibreboard	Dimensions	m <sup>2</sup>	Weight
Oak			21 x 600 x 2480 mm / 0.83 x 23.62 x 97.64 in.	1,44	14,2 kg
Oak (white)			21 x 600 x 2480 mm / 0.83 x 23.62 x 97.64 in.	1,44	14,2 kg
Oak (smoked)			21 x 600 x 2480 mm / 0.83 x 23.62 x 97.64 in.	1,44	14,2 kg
Oak (grey)			21 x 600 x 2480 mm / 0.83 x 23.62 x 97.64 in.	1,44	14,2 kg
Pine			21 x 600 x 2480 mm / 0.83 x 23.62 x 97.64 in.	1,44	14,2kg
American Walnut			21 x 600 x 2480 mm / 0.83 x 23.62 x 97.64 in.	1,44	14,2 kg

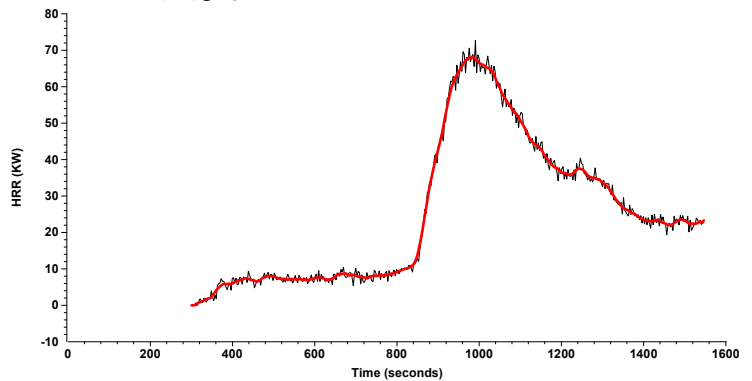
## A safe panel for your project

BY VENØ's fire approved panel is classified as a EN 13823 / B-s1,d0 product. The graph below shows that the product fully complies with the requirements - and has potential classification as an A2/B-s1,d0

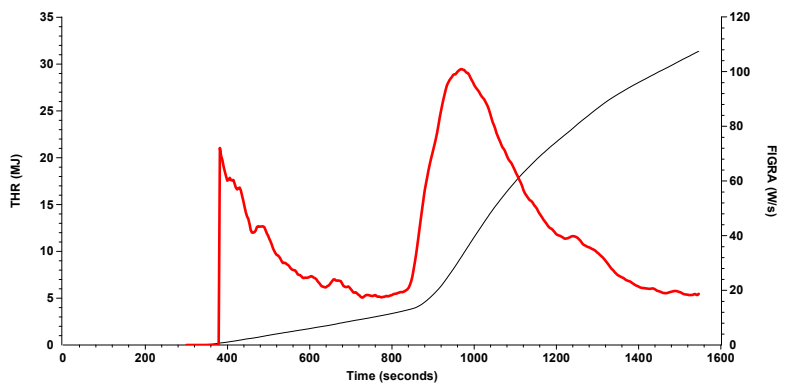
Potential classification

Class A2/B  
 Smoke production s1  
 Flaming droplets/particles d0

HRR and HRR(30) graph



THR and FIGRA graph



4

### Products that fit the panel:

- Screws 4.5 x 45 mm. black
- Kit-rep set. (Lacquer: clear/black)



# Q&A



## **How large an area can I cover with acoustic panels?**

As a starting point, we recommend that you cover approximately 20% of the wall area or about 30% of the floor area in the room to improve the room's sound quality significantly.

## **Cleaning?**

Our acoustic panels can be easily cleaned with a wrung damp cloth or with a vacuum cleaner.

## **Mounting of panels**

You can mount the panel directly on the wall or ceiling for general acoustic dampening.

If the panel is adapted during installation, fire-retardant varnish must be applied to adapted surfaces!

See assembly drawing on page 6.

## **Tolerances/Deviations from specified dimensions**

Tolerances: +/- 3mm.

Angularity: length/width +/- 2mm.

Weight +/- 10%

## **Disposal/Recycling.**

Sustainability is an important part of our DNA. Therefore, we have focused on making the handling of our panels after use as simple as possible.

The entire panel is made from wood products that can be delivered to any recycling centre, where offcuts can be deposited as "recycled wood".

## **Where can I use the FR Panels?**

BY VENØ's Fire Retardent acoustic panel may be used for commercial, public and private buildings.

Our specially developed Fire Retardant acoustic panel, which is fire approved to be a: EN 13823 / B-s1,d0 panel, allows any actor in the construction industry to optimise the indoor climate while the panel has a decorative effect, in the room where it is installed. It is available with 6 variants of veneers on the front.

## **Is there a fire test on the panel?**

Yes, our Fire Retardant acoustic panel is fire approved as a EN 13823 / B-s1,d0 building material. Approved for use in public and private buildings, with specific fire requirements for the materials.

## **Is the acoustic effect as good as your regular panels?**

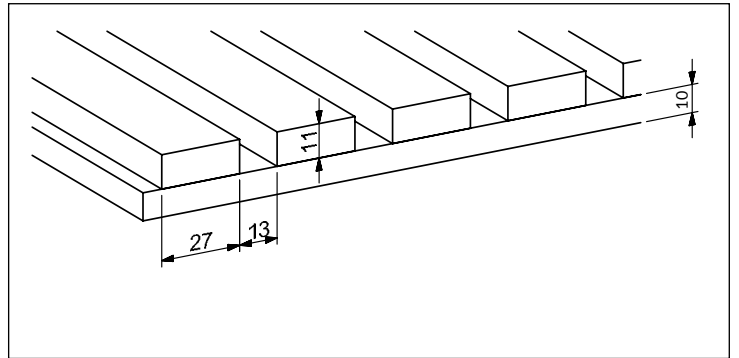
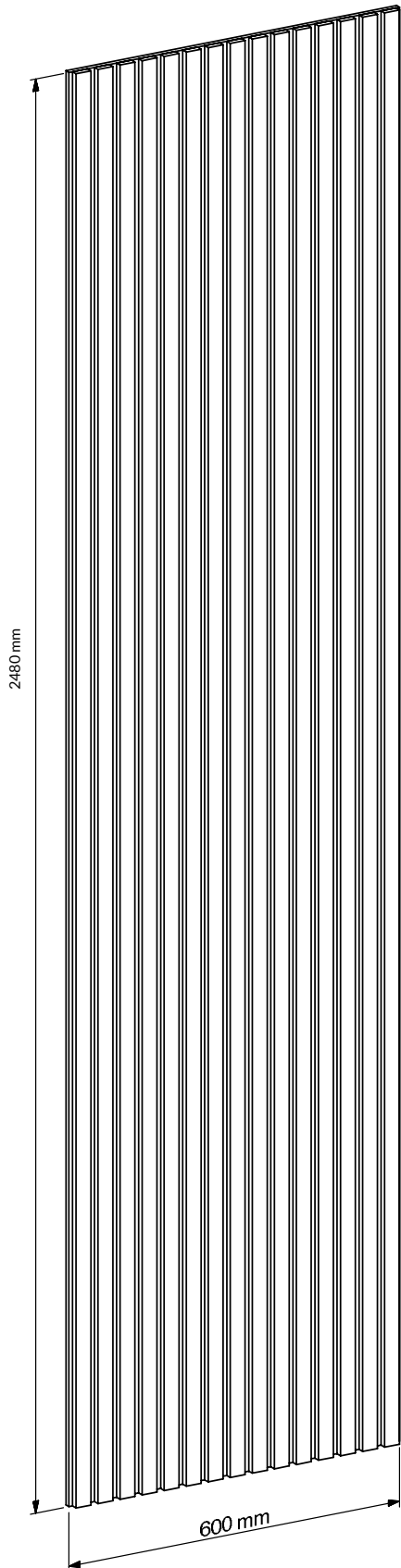
If the Fire Retardent panel is mounted directly on, e.g. aerated concrete, plaster or concrete wall, it has the same effect as our standard acoustic panels.

## **Can I oil the surface of the slat.**

It is not possible to surface treat the slats, as they are surface treated, from the factory.



# Panel mounting



Milimeters	Inches
2480 mm	97.64 in.
600 mm	23.62 in.
27 mm	1.06 in.
13 mm	0.51 in.
11 mm	0.43 in.
10 mm	0.39 in.



# Measurement of sound-absorption

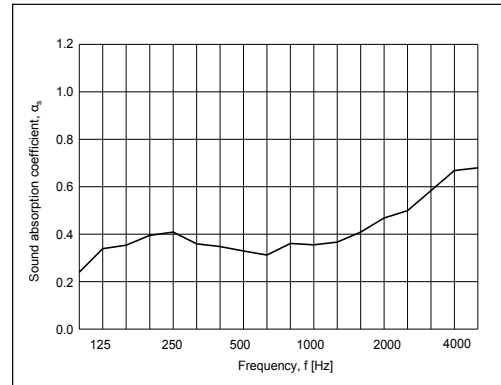
Measurement of sound absorption coefficient acc. DS/EN ISO 354:2003

**Figur 1:**

Mounting: 45mm insulation behind panels.  
Closed frame around edges.

Test Area 10.8 m<sup>2</sup>  
Room volume 215 m<sup>3</sup>  
Room surface area 305 m<sup>2</sup>

Frequency [Hz]	$\alpha_s$
100	0.24
125	0.34
160	0.35
200	0.39
250	0.41
315	0.36
400	0.35
500	0.33
630	0.31
800	0.36
1k	0.36
1.25k	0.37
1.6k	0.41
2k	0.47
2.5k	0.50
3.15k	0.58
4k	0.67
5k	0.68

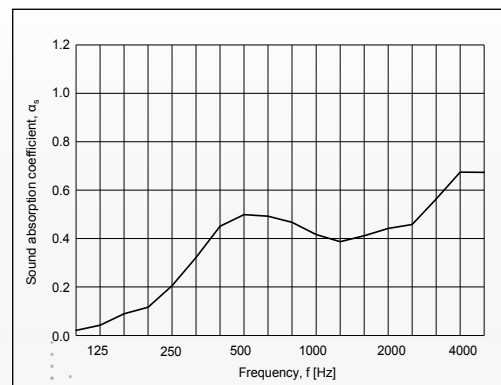


**Figur 2:**

The sound test shows installation directly on the wall.

Test Area 10.8 m<sup>2</sup>  
Room volume 215 m<sup>3</sup>  
Room surface area 305 m<sup>2</sup>

Frequency [Hz]	$\alpha_s$
100	0.02
125	0.04
160	0.09
200	0.12
250	0.21
315	0.32
400	0.45
500	0.50
630	0.49
800	0.47
1k	0.42
1.25k	0.39
1.6k	0.41
2k	0.44
2.5k	0.46
3.15k	0.56
4k	0.67
5k	0.67







BY VENØ

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