SONAE ARAUCO

Taking wood further

FIRE RETARDANT Solutions

Enhancing safety,
elevating spaces.

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Find out more about our FIRE RETARDANT Solutions

APPLICATIONS

- Worktops
- Offices & Education
- Retail & Exhibitions
- Naval Use
- Construction
- Walls
- Health & Wellness
- Kitchens
- Furniture
- Bedrooms
- Living Rooms
- Restaurants & Hotels
- Sports & Leisure
- Mezzanines
- Shelves
- Doors
- Panelling
- Interior Partitions
- Raised Access Flooring

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SONAE ARAUCO
Taking wood further

We believe in the value of wood for contemporary and inspiring creations while contributing to a more sustainable world.

Sonae Arauco has been awarded the EcoVadis Gold Medal, placing us among the top 5% of companies assessed worldwide. This award reflects our abiding commitment to creating long-term value through responsible, transparent and sustainable practices.

GOLD | Top 5%
ecovadis
Sustainability Rating
JAN 2026

With an industrial soul, Sonae Arauco is one of the world's largest producers of wood-based solutions, a natural, renewable and recyclable raw material.

From Innovus® decorative panels to Core & Technical® products and the AGEPAN® construction system, Sonae Arauco offers a versatile portfolio of high value-added innovative solutions for construction, furniture and interior design.

With multiple application possibilities, our products offer an attractive and unique combination of industrial expertise, functionality, quality, modern design and environmental features.

Together, we take your projects further.

Sustainability as a strategic pillar

Through our commitment to the circular bioeconomy, we transform waste wood into new products, extending its lifecycle while at the same time acting as a source of carbon retention.

80%
Recycled wood in some product ranges

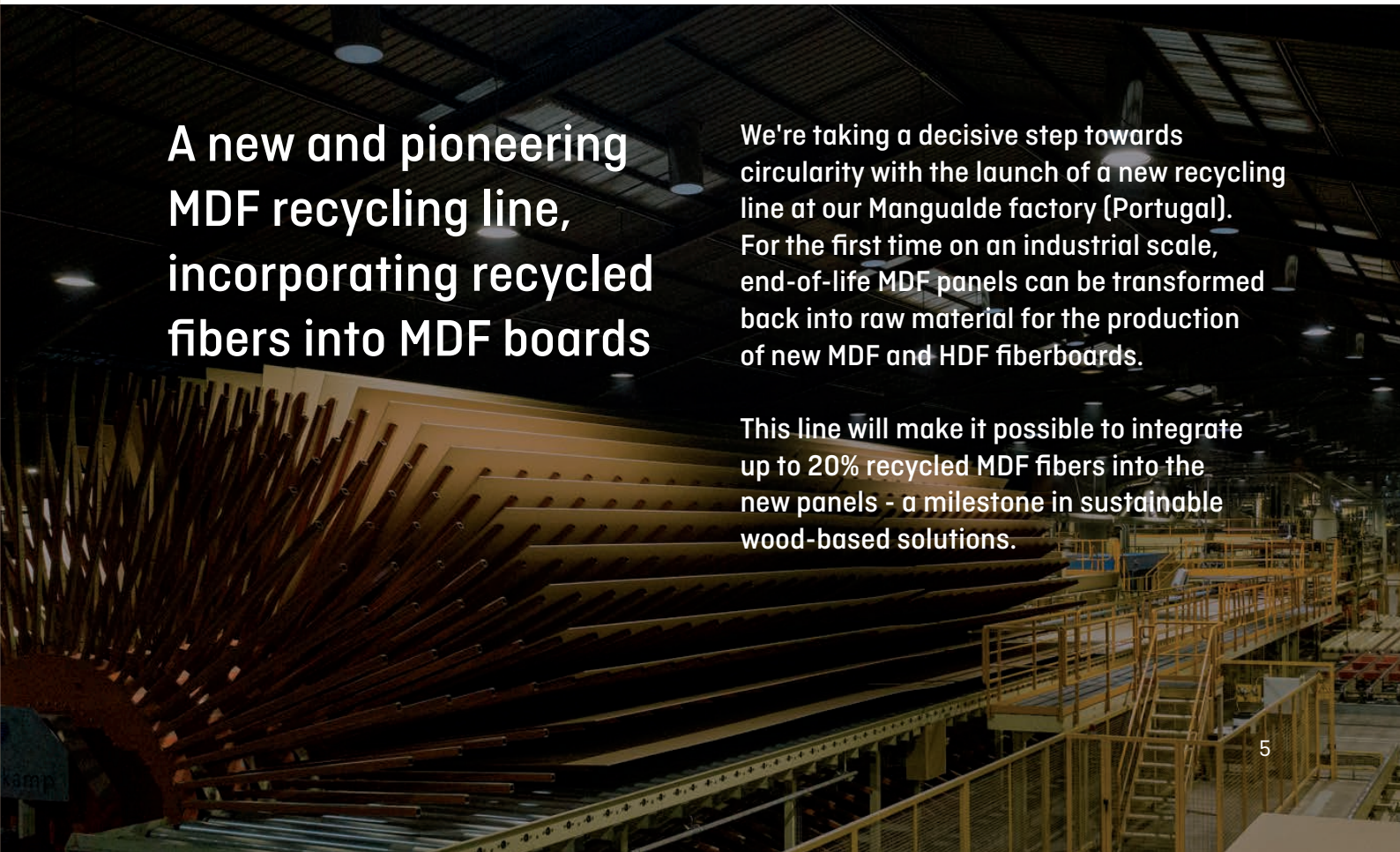
100%
Of our industrial units are FSC® (FSC®C009049) certified

FSC® certified products available on request.

3M tonnes CO_2
Retained, yearly, on average, through Sonae Arauco's products

12
Sonae Arauco owned recycling centres in Portugal and Spain

100%
Of our wood comes from certified or controlled sources



A new and pioneering MDF recycling line, incorporating recycled fibers into MDF boards

We're taking a decisive step towards circularity with the launch of a new recycling line at our Mangualde factory (Portugal). For the first time on an industrial scale, end-of-life MDF panels can be transformed back into raw material for the production of new MDF and HDF fiberboards.

This line will make it possible to integrate up to 20% recycled MDF fibers into the new panels - a milestone in sustainable wood-based solutions.

Fire Protection

At Sonae Arauco, we belive design should never compromise safety. Certified to meet the most demanding fire retardant standards, **our solutions combine exceptional protection with the elegance and versatility of wood-based panels.**

This guide highlights the key standards and classifications of fire reaction performance, along with the unique benefits our products bring to projects where fire safety is a mandatory requirement.

The main objectives of fire protection are to:

- Prevent the spread of fire, smoke and flames.
- Improve firefighting conditions and response.
- Protect the building's structural integrity and operational capacity.
- Facilitate safe evacuation by maintaining structural performance.
- Minimise the release of toxic gases, protecting both occupants and the environment.

Wood solutions: a natural advantage

Wood stands out for its reliable and consistent fire behaviour when compared with other materials.

Wood's fire performance

- When exposed to fire, wood burns in a controlled way: its surface carbonises, creating a protective layer that slows down the spread of fire inside.
- This predictable behaviour acts as a natural barrier, extending structural resistance and allowing time for safe evacuation.
- Lower thermal expansion compared to steel (less deformation).

Comparative fire performance: wood versus alternative materials

Concrete

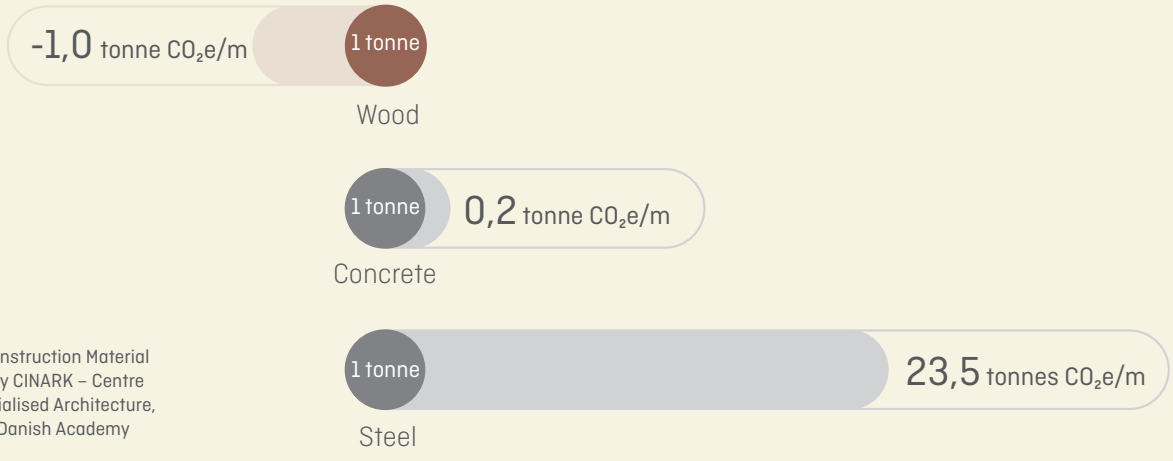
- Non-combustible and provides good fire and thermal resistance, but its performance can decrease over time when exposed to high temperatures.
- Internal steel frame can heat up and lose resistance if not properly covered.
- Can fragment (spall) due to intense vapour, especially in dense concrete.

Steel

- Non-combustible but rapidly loses resistance and mechanical strength (about 50–60%) as temperature increases, which can lead to collapse.
- Undergoes significant thermal expansion, causing deformations, connection failures and sudden collapse.

Wood also stands out for its environmental advantages.

Each cubic metre of wood stores approximately 1 tonne of CO_2 absorbed from the atmosphere, resulting in a negative Global Warming Potential.



Source: Construction Material Pyramid, by CINARK – Centre for Industrialised Architecture, The Royal Danish Academy

Fire Reaction

Fire reaction assesses how a material contributes to fire development, evaluating key properties such as **flame spread, heat release, smoke production and the potential release of burning droplets** when exposed to fire.

The European classification

In Europe, the reaction to fire of building materials is assessed through a harmonised classification system, ensuring consistent safety standards across all countries.

This system ranks materials from **Euroclass** A1 (non-combustible) to F (highly flammable), based on performance in a series of tests defined by **EN 13501-1.**

EN 13501-1 Basic Principles

Description	European classification system
Main Focus	Fire reaction performance
Applications	Construction products and building elements
Goal	Classification using data from fire reaction tests
Main Classification	Classes: A1, A2, B, C, D, E, F (From the least to the most combustible)
Additional Classification	Smoke production (s1, s2, s3) ; Flaming droplets / particles (d0, d1, d2)
Testing Methods	EN ISO 11925-2 ; EN 13823 ; EN ISO 9239-1 ; EN ISO 1182 ; EN ISO 1716
Products Examples	Wall cladding, insulation, wood-based panels and flooring
Final Classification Example	B-s1, d0 very limited combustibility - low smoke, no flaming droplets

Classification according to standard EN 13501-1

	Parameter	Final Application		Final Spread Contribution	
		Walls and Ceilings	**Flooring**		
Main Classification	Reaction to fire	A1	$A1_{fl}$	No to the highest degree	
		A2	$A2_{fl}$	No	
		B	B_{fl}	Yes - Very limited	
		C	C_{fl}	Yes - Limited	
		D	D_{fl}	Yes - Medium	
		E	E_{fl}	Yes - High	
		F	F_{fl}	Not classified	
Additional Classification	Smoke production	s1		Low quantity and speed	
		s2		Medium quantity and speed	
		s3		High quantity and speed	
	Flaming droplets / particles	d0		No production	
		d1		No production >10s	
		d2		Not classified	

FIRE X

Product Portfolio

Fire retardant solutions

Sonae Arauco offers a comprehensive portfolio of fire retardant solutions measured according to the EN 13501-1 standard - designed to meet the most demanding regulatory requirements across a wide range of applications.

Whether in construction or interior design, our solutions give you the freedom to create inspiring spaces - without compromising on protection or style.


DIRECCIÓN

PB P2 FIRE X

General all-round application mostly suited for public areas.

Find out more

B-s2, d0*

10-45 mm*
thickness range

Pigmented core

- Flame retardant
- Medium smoke production
- Low heat release
- No flaming droplets / particles

PB P2 Fire X is a particleboard with **added fire retardants that slows combustion, providing additional time for intervention and fire control** - ideal for high-traffic public environments. It has a fine, sanded surface, making it suitable for the application of decorative paper, veneer or laminate finishes.

Applications

* Fire reaction class and thickness range may vary depending on the production plant. For detailed information, please contact the Sonae Arauco team.

PB P4 FIRE X

Sturdy and strong. Versatile and reliable. Ideal for technical floors and load-bearing applications.

Find out more

B-s2, d0*

30-40 mm*
thickness range

Bfl-s1, d0*

10-40 mm*
thickness range

Pigmented core

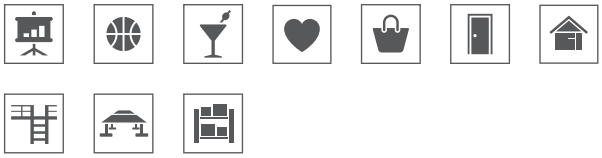
- Flame retardant

- Medium smoke production
- Low smoke production

- Low heat release
- No flaming droplets / particles
- High density and mechanical resistance

PB P4 Fire X is a high density structural board with a fine sanded surface, suitable for coating or surfacing, to be applied in dry conditions. This structural board, with red pigment in the inner layer, presents **excellent mechanical properties and is particularly adapted to hold screws and fastening systems.** It is also an **easy to cut** board.

Applications



PB P6 FIRE X

Extra sturdy and strong. Versatile and reliable. Ideal for technical floors and heavy duty load-bearing applications.

Find out more

Bfl-s1, d0*

28-40 mm*
thickness range

Pigmented core

- Flame retardant
- Low smoke production
- Low heat release
- No flaming droplets / particles
- High density and mechanical resistance for heavy duty applications

PB P6 Fire X is a **high density board with superior mechanical performance for demanding applications.** It features a fine sanded surface, ideal for coating or surfacing, for use in dry conditions. With red pigment in the inner layer, this structural board offers **excellent mechanical properties, making it suitable for technical floors and other heavy duty load-bearing applications.** It is also an **easy to cut** board.

Applications

*** Fire reaction class and thickness range may vary depending on the production plant. For detailed information, please contact the Sonae Arauco team.**

MDF FIRE X

MDF with increased fire protection requirements
for non load-bearing applications.

Find out more

B-s1, d0*

10-30 mm*
thickness range

Pigmented core

- Flame retardant
- Low smoke production
- Low heat release
- No flaming droplets / particles

MDF Fire X has **fire retardant properties that help delay combustion, allowing more time for reacting and fighting the fire**, especially relevant in spaces with high people traffic, such as public buildings. The Sonae Arauco products with these properties are subject to testing in external laboratories, as well as regular assessments and checks on performance and the production process, in compliance with the provisions of system 1 of EN 13986, which guarantees that the product provided is of high quality and reliability.

MDF Fire X also available in Ecoboard.

Applications

* Fire reaction class and thickness range may vary depending on the production plant. For detailed information, please contact the Sonae Arauco team.

INNOVUS® COLOURED MDF BLACK FIRE X ECOBOARD

Find out more

Through-dyed MDF with a natural, organic look for new design concepts.

B-s2, d0

10 mm
thickness

B-s1, d0

19 mm
thickness

- Flame retardant
- Medium smoke production
- Low smoke production
- Low heat release
- No flaming droplets / particles

Innovus® Coloured MDF Black Fire X Ecoboard is a decorative, medium density fiberboard panel, through-dyed, ideal for creative and demanding projects. It uses **high-quality pigments that meet environmental requirements and ensure that the board remains consistent in terms of colour and intensity. It is easy to handle, allowing for precision cuts, milling and finishes. Its optimised absorption reduces the need for multiple layers of varnish.** Innovus® Coloured MDF Black Fire X Ecoboard has low formaldehyde emissions, classified according to the rules of the official body, the California Air Resource Board (CARB NAF), and in compliance with ChemVerbotsV (E05) limits.

Applications

INNOVUS® DP P2 FIRE X

Interior design, wall and ceiling covering, fixtures, interior partitions mostly suited for public areas. Safe and aesthetic.

Find out more

B-s1, d0*

10-40 mm*
thickness range

- Flame retardant
- Low smoke production
- Low heat release
- No flaming droplets / particles
- Improved impact resistance, bending and machinability

Innovus® DP P2 Fire X is a multilayer particleboard panel without pigment. It is fire retardant, and has a decorative surface, making it ideal for indoor applications. Classified as B-S1,d0, this panel has superior fire reaction behaviour. It also offers **a wide range of thicknesses, higher resistance to impact and bending and better machinability, as well as a surface that is easy to clean and maintain.**

Applications

* **Fire reaction class and thickness range may vary depending on the production plant. For detailed information, please contact the Sonae Arauco team.**

INNOVUS® DP P4 FIRE X

Sturdy and strong. Versatile and reliable. Ideal for technical floors and load-bearing applications.

Find out more

B-s1, d0*

>25-38 mm*
thickness range

- Flame retardant
- Low smoke production
- Low heat release
- No flaming droplets / particles
- Improved impact resistance, bending and machinability
- For load-bearing applications

Innovus® DP P4 Fire X is a multilayer structural particleboard, that is fire retardant and finished with a decorative surface, designed for indoor use. It offers **excellent mechanical performance and strong screw-holding capacity, making it suitable for reliable fixation systems.** Recommended for projects where fire safety must be combined with structural strength.

Applications

INNOVUS® DP P6 FIRE X

Extra sturdy and strong. Versatile and reliable. Ideal for technical floors and heavy duty load-bearing applications.

Find out more

B-s1, d0

>32-38 mm
thickness range

- Flame retardant
- Low smoke production
- Low heat release
- No flaming droplets / particles
- For heavy duty load-bearing applications

Innovus® DP P6 Fire X is a high density multilayer structural board, that is fire retardant and finished with a decorative surface, ideal for indoor use. It offers **outstanding mechanical strength, making it particularly suitable for load-bearing floors and other demanding applications.** Recommended for projects where fire performance and structural reliability must go hand in hand.

Applications

*** Fire reaction class and thickness range may vary depending on the production plant. For detailed information, please contact the Sonae Arauco team.**

INNOVUS® DP MDF FIRE X

Furniture, interior design, wall and ceiling covering, fixtures, interior partitions in public areas. Safe and aesthetic.

Find out more

B-s1, d0*

10-30 mm*
thickness range

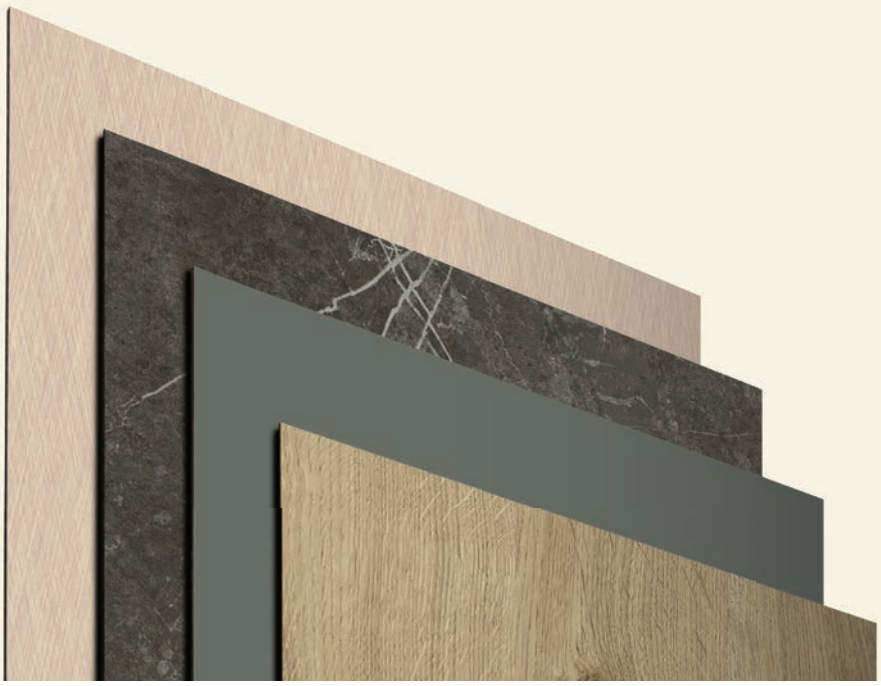
Pigmented core

- Flame retardant
- Low smoke production
- Low heat release
- No flaming droplets / particles

Innovus® DP MDF Fire X is a decorative surfaced panel medium density fiberboard for indoor use, with improved fire protection. The Innovus® DP MDF Fire X decorative panel is a product that is **easy to clean and maintain and it is highly resistant to scratches and stains.**

Applications

* Fire reaction class and thickness range may vary depending on the production plant. For detailed information, please contact the Sonae Arauco team.



INNOVUS® LAMINATE FR

Furniture, doors and wall panelling. Safe and aesthetic.

Find out more

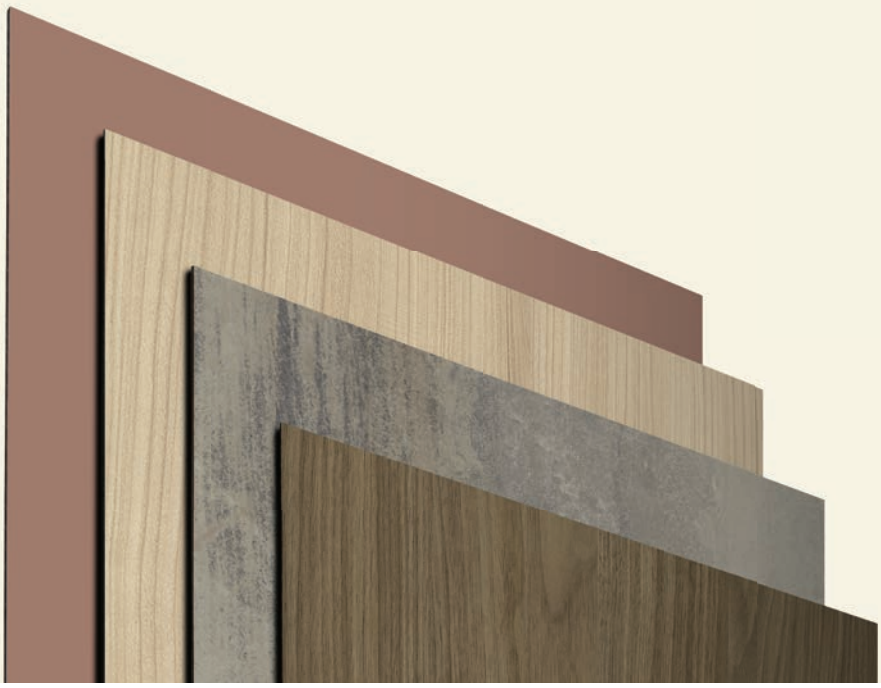
B-s2, d0

0.8 mm
thickness

- Flame retardant
- Medium smoke production
- Low heat release
- No flaming droplets / particles

Innovus® laminate is a decorative, high-pressure solution with improved fire performance for indoor use. It is an especially **hard-wearing product suitable for use in conditions of high wear and tear.** It combines **versatility and exclusivity**, making it a practical and relevant resource to help you create outstanding designs.

Applications



INNOVUS® LAMINATE IMO MED FR

For naval industry applications. Safe and aesthetic.

Find out more

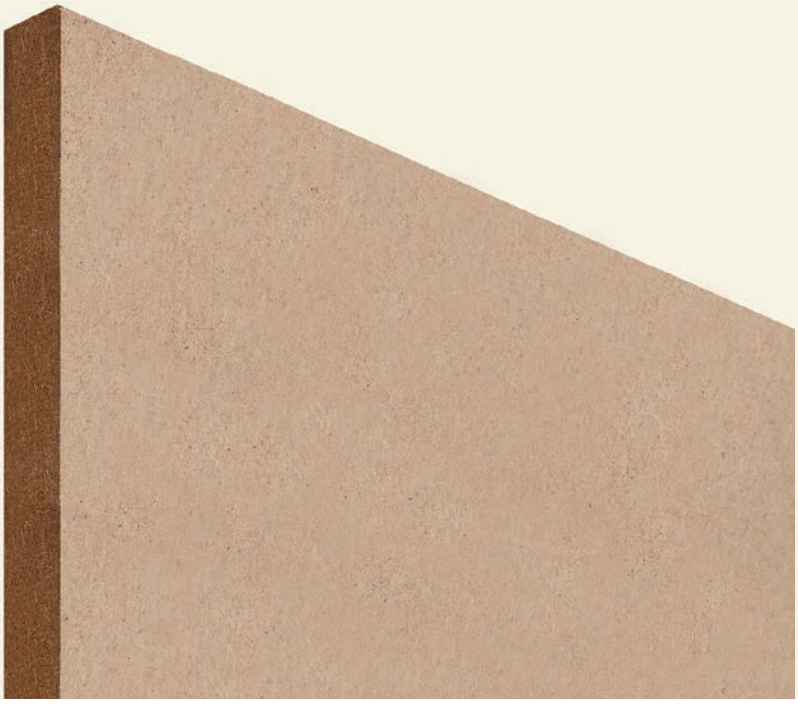
B-s1, d0

0.8-1.2 mm
thickness range

- Flame retardant
- Low smoke production
- Low heat release
- No flaming droplets / particles
- Compliance with IMO (International Maritime Organisation) and MED (Marine Equipment Directive)

Innovus® laminate with IMO MED certification assures **the conformity of the product with the International Maritime Organisation (IMO) and European Maritime Equipment Directive (MED) requirements for the safety, security and environmental performance of international shipping.** It is available in postforming (PF) and fire retardant (FR) variants, both with Module B certification, combining performance, versatility and exclusivity in furniture and wall panelling for **distinctive interior ship environments.** The conformity of the quality management system is assured with Module D certification.

Applications



AGEPAN® DWD FIRE X

Fire protection board for ventilated wall constructions
– the first MDF.RWH with fire retardant properties.

Find out more

B-s2, d0

16 mm
thickness

- Flame retardant
- Medium smoke production
- Low heat release
- No flaming droplets / particles

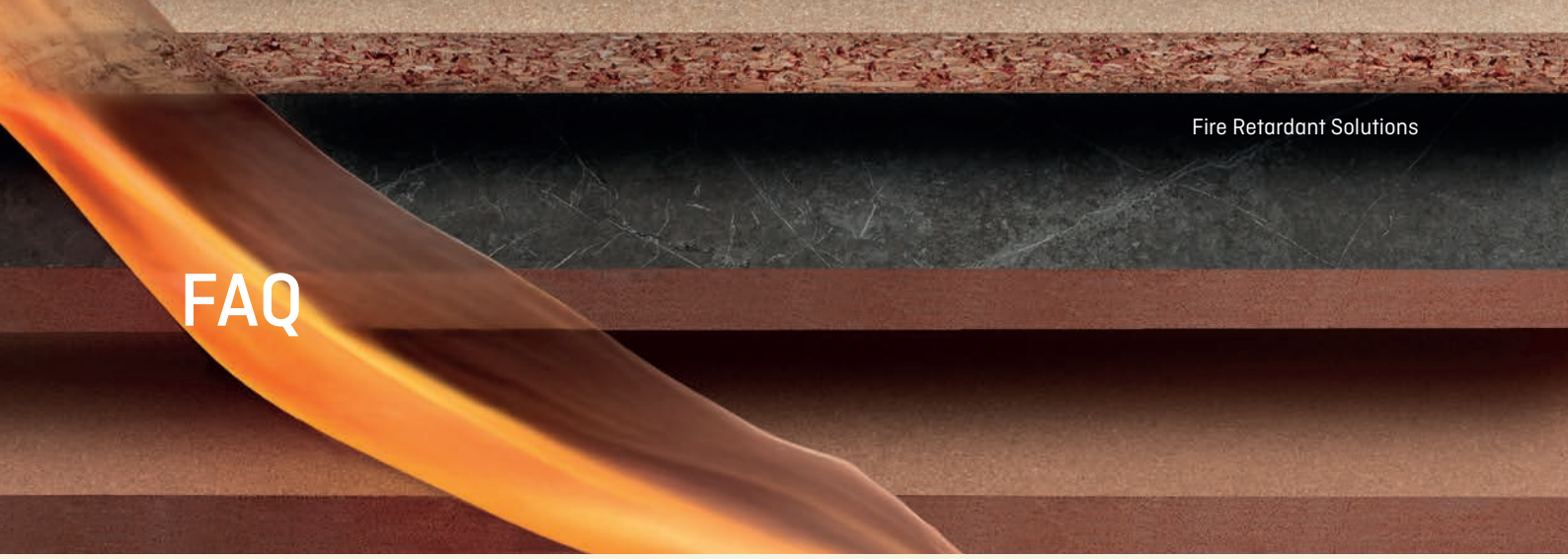
AGEPAN® DWD Fire X is a **vapour-open MDF.RWH fire protection board that complies with EN 622-5 and provides an ideal solution for ventilated wall constructions with increased fire safety requirements.**
It slows down fire spread, offering additional protection, and thanks to its density of ~630 kg/m³, it is **also suitable for fire resistant constructions according to DIN 4102-4.** At the same time, AGEPAN® DWD Fire X reflects **responsible use of wood as a renewable raw material**. Wood-based products are generally recognised as having a more favourable CO_2 balance than mineral-based building materials and are therefore considered a **resource-efficient choice in modern timber construction**.

Applications

Classification of Sonae Arauco´s FIRE X products

Fire reaction class and thickness range may vary depending on the production plant.
For detailed information, please contact the Sonae Arauco team.

			EN 13501-1 Classification		
			B-s1, d0	B-s2, d0	Bfl-s1, d0
	Support	Product			
Core & Technical®	Particleboard	P2		10-45 mm	
		P4		30-40 mm	10-40 mm
		P6			28-40 mm
	Medium Density Fiberboard	MDF	10-30 mm		
Innovus®	Coloured MDF	MDF Black	19 mm	10 mm	
	Decorative Panels	P2	10-40 mm		
		P4	>25-38 mm		
		P6	>32-38 mm		
		MDF	10-30 mm		
	Laminates	FR		0.8 mm	
		IMO MED FR	0.8-1.2 mm		
AGEPAN®	Medium Density Fiberboard	DWD		16 mm	



FAQ

What is the difference between fire reaction and fire resistance?
Fire reaction assesses ignitability, flame spread and the ability to withstand the development of fire. It applies to construction and building materials and is also applicable to floors with FR reaction classified according to flooring application.
The criteria evaluated are flame spread, heat and smoke levels, as well as the production of flaming droplets/particles. The standard used to measure this is EN 13501-1.

Fire resistance assesses the structural and functional fire resistance capacity. It applies to final construction elements such as walls, ceilings, doors and partitions. The criteria evaluated are mechanical resistance, resistance to flames and gases and thermal insulation over a period of time. The standard used to classify this is EN 13501-2.

Sonae Arauco wood-based panels are evaluated according to the EN 13501-1 (fire reaction) standard.

What is the guidance for durability, maintenance and cleaning?
Maintenance is minimal - a simple routine inspection is all it takes to ensure continued protection. For cleaning surfaced materials, standard non-abrasive and non-steam methods are sufficient to keep surfaces in optimal condition without compromising fire safety. With Fire X products, you get peace of mind, reliable protection, low upkeep and lasting value.

How should Fire X products be stored and transported?
Fire X products are designed with safety and practicality in mind - even before installation. For optimal performance, they should be stored in a dry, well-ventilated area, protected from direct sunlight and extreme temperatures. During transport, ensure the products are securely packed to prevent damage and contamination. With proper handling, Fire X maintains its integrity from warehouse to worksite, ensuring reliable fire protection from day one.

Can Fire X panels be cut, drilled and machined like standard boards?
Yes, and that's one of the key advantages of Fire X. Our products are designed to offer high fire protection without compromising on workability. They can be cut, drilled and machined using standard tools, just like conventional boards. This makes installation fast, flexible and efficient, saving time on-site while ensuring top-tier safety performance. Please be aware that any processing that could lead to changes in the board surface may require final product certification.

Is FSC® or PEFC certification available for Fire X panels?
Yes, it is. Sonae Arauco's industrial operations are certified according to the FSC® (FSC®C009049) Chain of Custody. The same applies to our industrial units in Europe, which are certified according to the PEFC (PEFC/14-35-00013).

SONAE ARAUCO

Taking wood further

FIRE X

FIRE RETARDANT SOLUTIONS.
SAFETY THAT DOESN'T FAIL.

Certified surfaces for projects that demand real performance without compromising design.

- **Compliant with European Standard EN 13501-1**
- Fire retardant solutions in PB and MDF available in various sizes and thicknesses
- **A wide range of decorative solutions for surfacing our Fire X products**
- Ideal for hotels, schools, healthcare, retail and all spaces with strict fire safety requirements

80% recycled wood in some product ranges

www.sonaearauco.com