

www.tromer.com.tr



Sounds Of Silence



Sound is an inevitable part of every environment—whether in classrooms, offices, hospitals, or industrial spaces. Managing this sound for maximum comfort requires specialized expertise. Since our establishment, Tromer has dedicated itself to advancing comfort with our innovative ceiling and wall systems that go beyond acoustics, enhancing daylight reflection, **moisture resistance**, and antibacterial properties.

Smart Acoustic Solutions

Tromer provides smart acoustic solutions for diverse spaces, including educational institutions, healthcare facilities, and industrial environments. Meeting world-class standards with local capital and engineering, our sustainable and innovative approach forms the core of everything we do.

Introduction

Sounds Of Silence



Shopping Center, Market



Recording Studio



Cinema Saloon, Theatre Saloon



Classroom



Hospital, Health Center



Office

Tromer products provide exceptional performance in various environments such as healthcare, education, and offices, including healthcare, education, offices, and industrial spaces, with advanced acoustic and ceiling solutions. These products are ideal for hospitals, classrooms, sports halls, and factories, owing to their sound control, thermal insulation, and hygienic features. Made with stone wool, these ceiling systems offer superior **sound absorption**, **fire resistance**, and energy efficiency.

Sustainability / Resilience

Tromer products are made with recyclable materials, offer **moisture resistance**, and withstand varied climatic conditions, supporting both sustainability and durability. Our innovative solutions enhance productivity and comfort, prioritizing environmental responsibility and user well-being.

Fire Class: A1

A Powerful Shield Against Fire!

Tromer panels provide exceptional sound insulation and superior fire resistance, offering safety and peace of mind



Engineered for ultimate **fire safety.**

TOTAL PROTECTION

AGAINST NOISE AND FIRE

This 100% stone wool, inorganic acoustic suspended ceiling panel offers exceptional sound absorption and high fire resistance, making it ideal for a wide range of applications.





TROMER®

Prime™

Introducing Prime, the perfect blend of elegance, durability, and functionality, designed for modern commercial spaces. Prime is the ideal choice for large-scale environments—supermarkets, retail stores, and office buildings—where aesthetics and functionality meet.

TROMER®
Prime™



TECHNICAL FEATURES

Composition:

The visible surface is coated with textured white paint, while the back side is non-combustible. This eco-friendly product has low emissions, resists microorganism growth, and is suitable for indoor use. It can be easily cleaned with an electric vacuum or by wiping.



PRODUCT MATERIAL

These acoustic panels are made from 100% stone wool, ensuring optimal **sound absorption** and **fire resistance**.

USAGE AREA

- Malls
- Supermarket
- Offices
- Educational institutions



EDGE		MODULE SIZE (mm)	
A15		600 x 600 x 15	
		1200 x 600 x 15	
A24		600 x 600 x 15	
		1200 x 600 x 15	

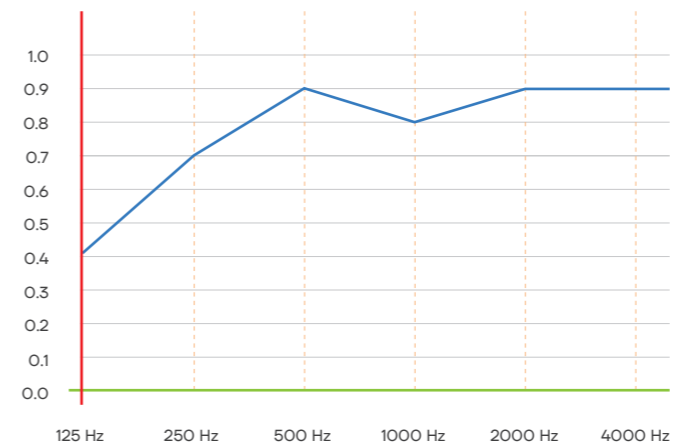
	Essential Characteristic	Performance	Harmonized Techncl. Spec.
	Reaction to fire to Class	+A1	TS EN 13964:2014
	Emission of hazardous substances for indoor environments (ZA)	Mineral stone wool does not provide nutrients for microorganisms.	
	Environmental Impact	Recyclable Material	
	Sound Absorption	aw: 0,90 (Class A)	
	Moisture and Sagging Resistance	Provides protection in high humidity	
	Light Reflection	82%	
	Thermal Conductivity (EN 12667)	Max.0,036 W/Mk	TS EN 12086
	Cleanroom compatibility	Class:ISO 4(≥0,5 µm)	ISO 14644-1

* All measurements have been made according to 15mm.

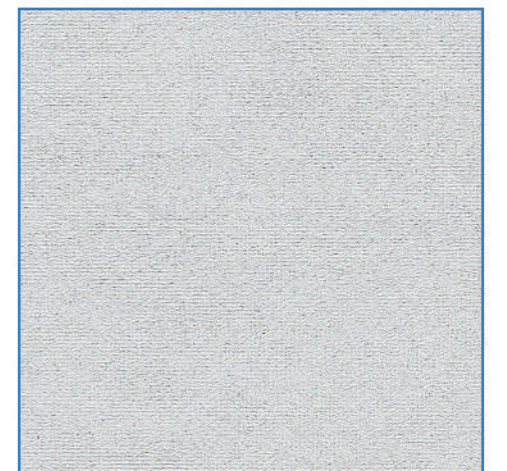
SOUND ABSORPTION

Sound Absorption Class

α_w : 0.90 (Class A)

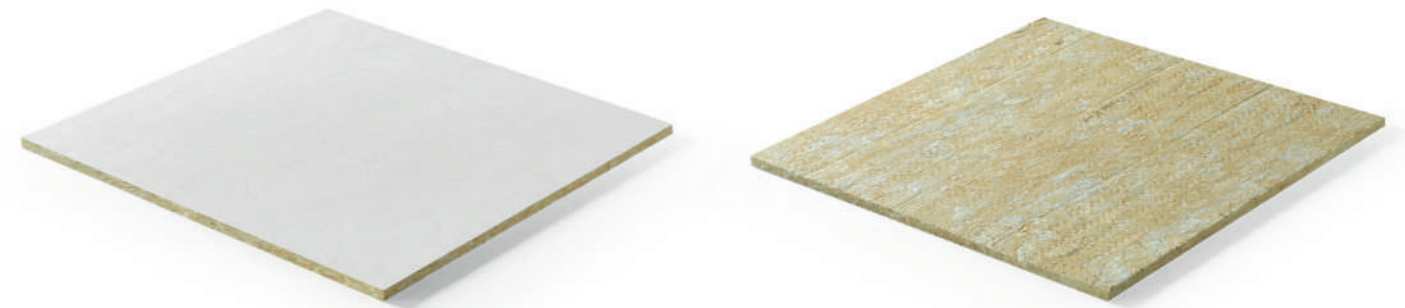


PRODUCT TEXTURE



TROMER®
Prime™

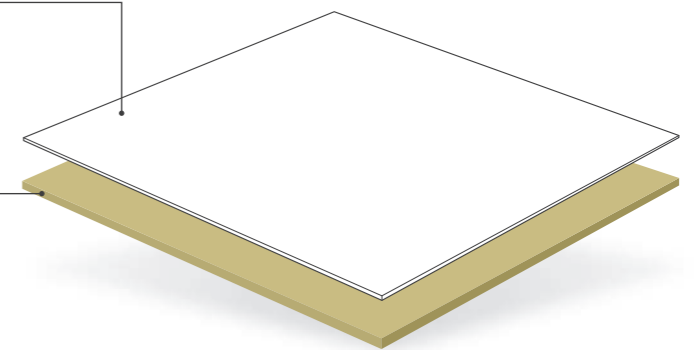
High-Performance Ceiling Systems



Our ceiling panels add prestige and safety to your spaces with advanced insulation properties and exceptional **fire resistance**. By combining aesthetics and functionality, these panels become essential to modern architectural design.

Decor Side: White veil, a thin, lightweight covering that protects the stone wool while providing a smooth, aesthetic finish.

Stone Wool Core: A natural mineral material offering high thermal and acoustic insulation, as well as fire resistance and environmental protection.



Sounds Of Silence

CE

CE Tromer ceiling systems are CE marked according to the European harmonized standard EN 13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.



TROMER®
Crea™

Introducing Crea, the pinnacle of elegance and functionality for contemporary commercial and office spaces. Expertly designed to blend sophistication with practicality, Crea redefines workplaces as dynamic hubs of inspiration and collaboration. Ideal for crafting professional environments that radiate style and enhance productivity, Crea sets a new standard in modern workspace design.



TECHNICAL FEATURES

Composition:

The visible surface features a textured white paint finish, while the reverse side is reinforced with non-combustible glass fleece. This environmentally friendly product boasts low emissions, inhibits microbial growth, and is perfectly suited for indoor applications. It is easy to maintain, with cleaning options including electric vacuuming or simple wiping.



PRODUCT MATERIAL

These acoustic panels are made from 100% stone wool, ensuring optimal **sound absorption** and **fire resistance**.

USAGE AREA

- Office
- Class
- Market
- Entertainment Areas
- Commercial Areas
- Restaurant
- Library etc.



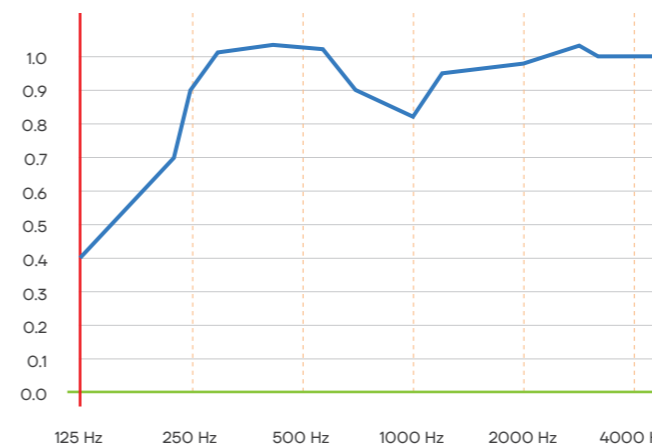
	EDGE	MODULE SIZE (mm)	EDGE	MODULE SIZE (mm)
A15		600 x 600 x 15/20/40/50		600 x 600 x 15/20/40/50
		1200 x 600 x 15/20/40/50		1200 x 600 x 15/20/40/50
A24		600 x 600 x 15/20/40/50		600 x 600 x 15/20/40/50
		1200 x 600 x 15/20/40/50		1200 x 600 x 15/20/40/50
X		600 x 600 x 22		600 x 600 x 40
		1200 x 600 x 22		1200 x 600 x 40

	Essential Characteristic	Performance	Harmonized Technical Spec.
	Reaction to fire to Class	+A1	TS EN 13964:2014
	Emission of hazardous substances for indoor environments (ZA)	Mineral stone wool does not provide nutrients for microorganisms.	
	Environmental Impact	Recyclable Material	
	Sound Absorption	aw: 1.00	
	Moisture and Sagging Resistance	Provides protection in high humidity	
	Light Reflection	87%	
	Thermal Conductivity (EN 12667)	Max.0,035 W/Mk	TS EN 12086
	Cleanroom compatibility	Class:ISO 4(>0,5 µm)	ISO 14644-1

* All measurements have been made according to 15mm.

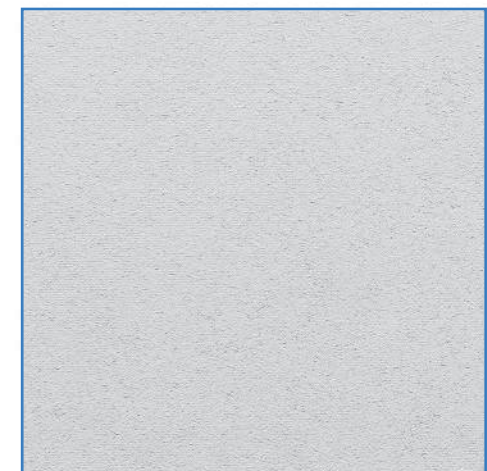
SOUND ABSORPTION

Sound Absorption Class
 α_w : 1.00 (Class A)



	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	α_w	Absorption Class	NRC
AE: 20/200	0.40	0.90	1.00	0.82	0.95	1.00	1.00	1.00	1.00

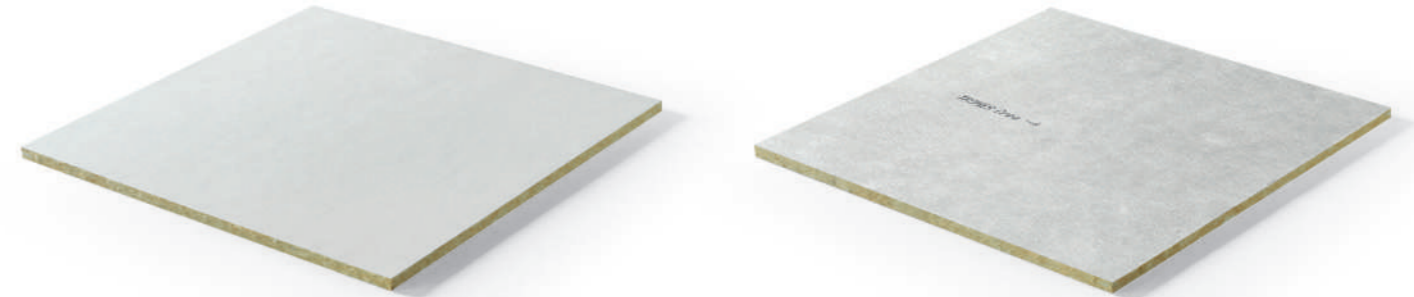
PRODUCT TEXTURE



TROMER®
Crea™

Sounds Of Silence

High-Performance Ceiling Systems

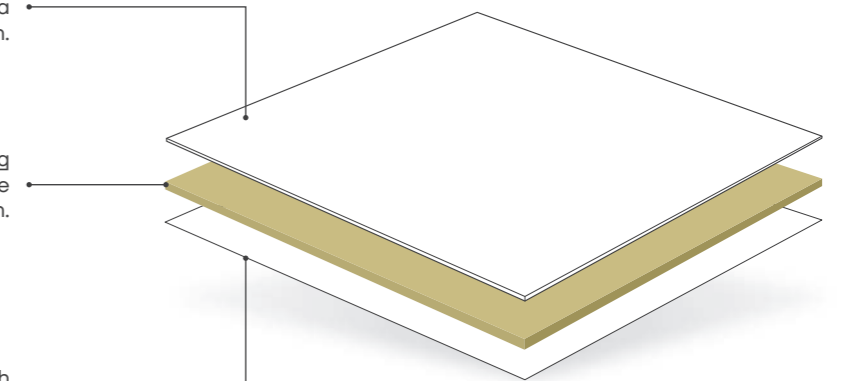


Our ceiling panels add prestige and safety to your spaces with advanced insulation properties and exceptional **fire resistance**. By combining aesthetics and functionality, these panels become essential to modern architectural design.

Decor Side: White veil, a thin, lightweight covering that protects the stone wool while providing a smooth, aesthetic finish.

Stone Wool Core: A natural mineral material offering high thermal and acoustic insulation, as well as fire resistance and environmental protection.

Back Side: The back side is coated with fire-resistant glass fleece.



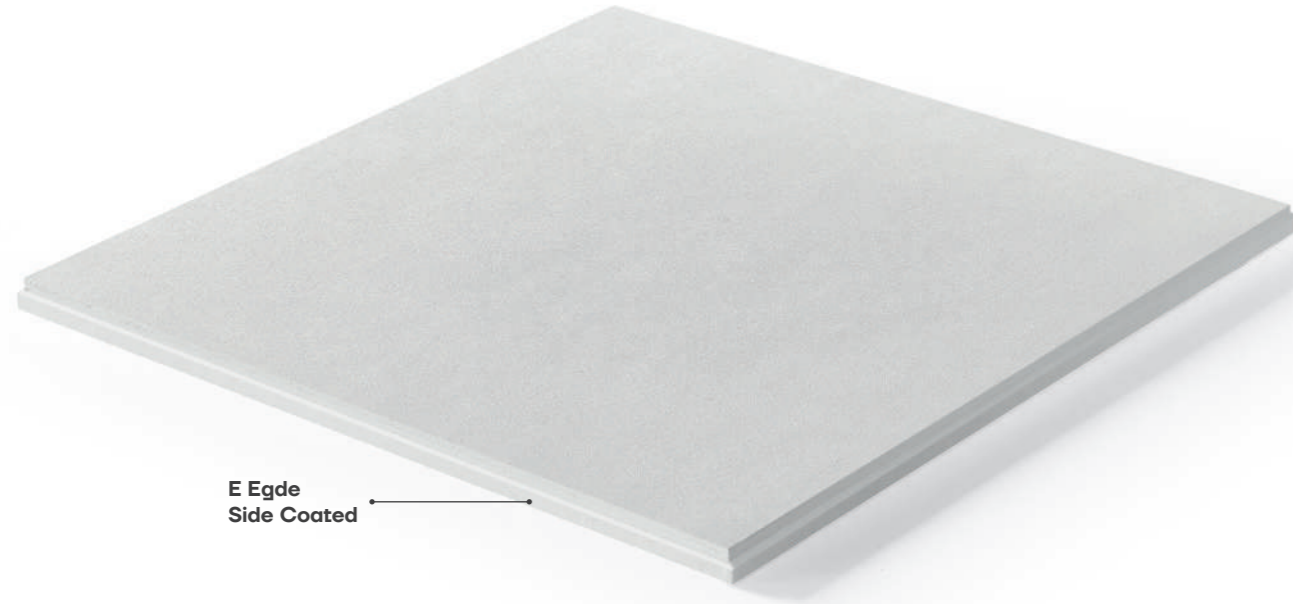
CE

CE Tromer ceiling systems are CE marked according to the European harmonized standard EN 13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.



TROMER®
Kyra™

Introducing Kyra, the groundbreaking solution for educational spaces where inspiration meets learning. Designed with functionality and durability at its core, Kyra enhances dynamic environments such as classrooms, libraries, and lecture halls, fostering success for both students and educators. Transform the learning experience with Kyra



E Edge
Side Coated

TECHNICAL FEATURES

Composition:

The visible surface is finished with textured white paint, while the back side is lined with non-combustible glass fleece. This environmentally friendly product features low emissions, inhibits microbial growth, and is ideal for indoor applications. Maintenance is effortless, with cleaning options including electric vacuuming or simple wiping



PRODUCT MATERIAL

These acoustic panels are made from 100% stone wool, ensuring optimal **sound absorption** and **fire resistance**.

USAGE AREA

- Office
- Class
- Corridor
- Mall
- Library etc.



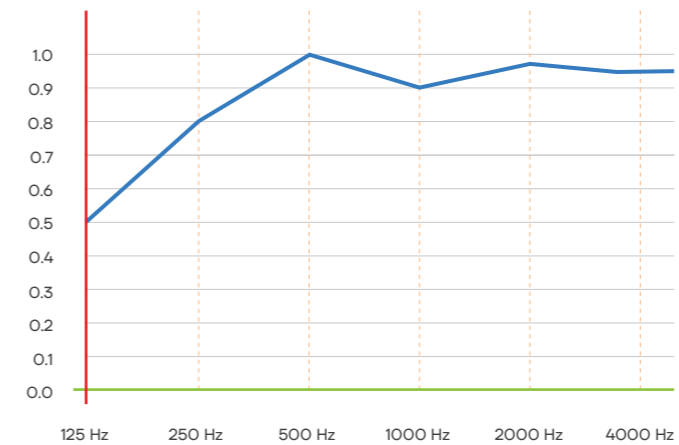
	EDGE	MODULE SIZE (mm)	EDGE	MODULE SIZE (mm)
A15		600 x 600 x 15		600 x 600 x 15
		1200 x 600 x 15		1200 x 600 x 15
A24		600 x 600 x 15		600 x 600 x 15
		1200 x 600 x 15		1200 x 600 x 15

	Essential Characteristic	Performance	Harmonized Technical Spec.
	Reaction to fire to Class	+A1	TS EN 13964:2014
	Emission of hazardous substances for indoor environments (ZA)	Mineral stone wool does not provide nutrients for microorganisms.	
	Environmental Impact	Recyclable Material	
	Sound Absorption	aw: 0.95	
	Moisture and Sagging Resistance	Provides protection in high humidity	
	Light Reflection	86%	TS EN 12086
	Thermal Conductivity (EN 12667)	Max.0,035 W/Mk	
	Cleanroom compatibility	Class:ISO 4(>0,5 µm)	ISO 14644-1

* All measurements have been made according to 15mm.

SOUND ABSORPTION

Sound Absorption Class
 α_w : 0.95 (Class A)



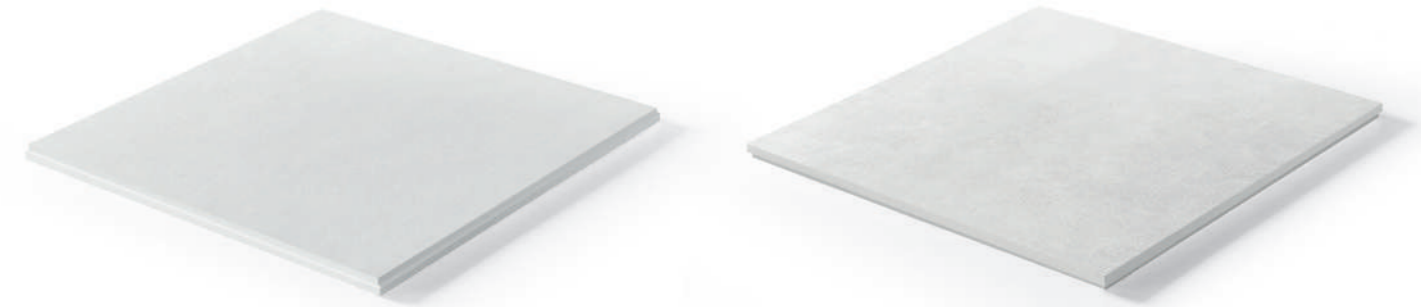
	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	α_w	Absorption Class	NRC
A: 15/200	0.50	0.85	1.00	0.90	0.98	0.95	0.95	A	0.90

PRODUCT TEXTURE



TROMER®
Kyra™

High-Performance Ceiling Systems



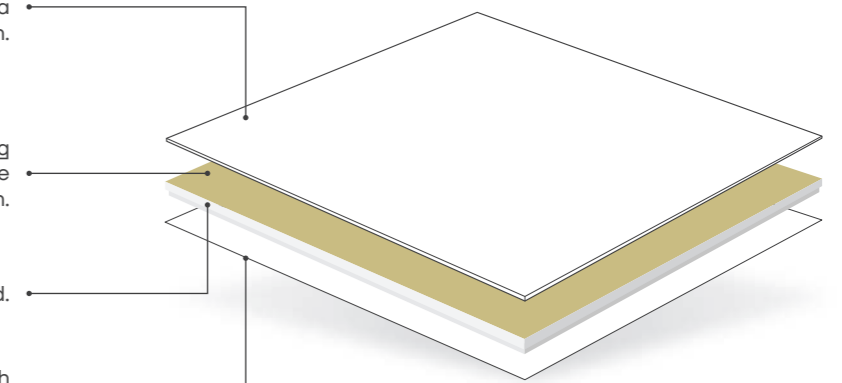
Our ceiling panels elevate your spaces with unparalleled insulation capabilities and exceptional fire resistance, delivering both prestige and safety. Seamlessly blending aesthetics with functionality, these panels are an indispensable element of contemporary architectural design.

Decor Side: White veil, a thin, lightweight covering that protects the stone wool while providing a smooth, aesthetic finish.

Stone Wool Core: A natural mineral material offering high thermal and acoustic insulation, as well as fire resistance and environmental protection.

E Edge detail: Side coated.

Back Side: The back side is coated with fire-resistant glass fleece.



CE

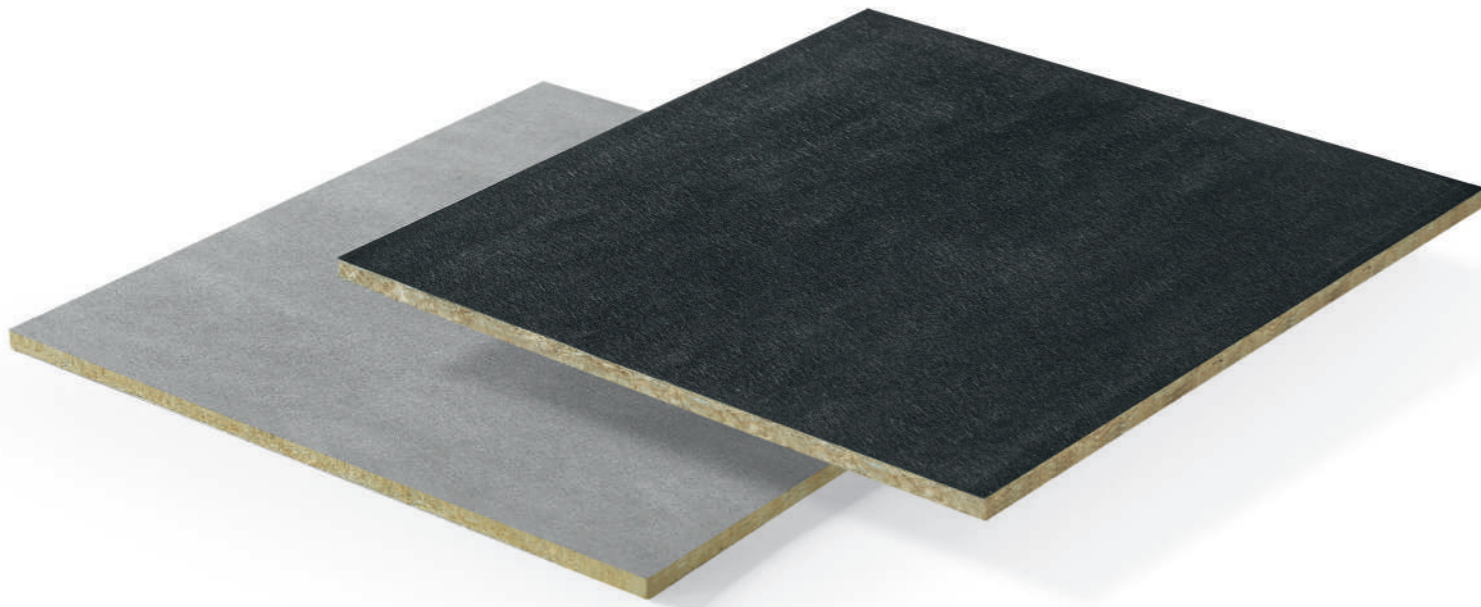
CE Tromer ceiling systems are CE marked according to the European harmonized standard EN 13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.

TROMER®

Rainbow™

Enter the dynamic world of Rainbow, where excitement meets elegance. Designed specifically for entertainment venues, Rainbow enhances experiences in cinemas, arcades, and leisure centers. Combining exceptional style with unmatched durability, Rainbow is the perfect choice for creating unforgettable moments.

TROMER® Rainbow™



TECHNICAL FEATURES

Composition:

The visible surface is coated with textured paint in a variety of colors, while the back side is laminated by glass veil non-combustible. This eco-friendly product has low emissions, resists microorganism growth, and is suitable for indoor use. It can be easily cleaned with an electric vacuum or by wiping.



PRODUCT MATERIAL

These acoustic panels are made from 100% stone wool, ensuring optimal **sound absorption** and **fire resistance**.

USAGE AREA

- Cinema Saloon
- Theatre Saloon
- Anfitheatre
- Office etc.

COLOR OPTIONS



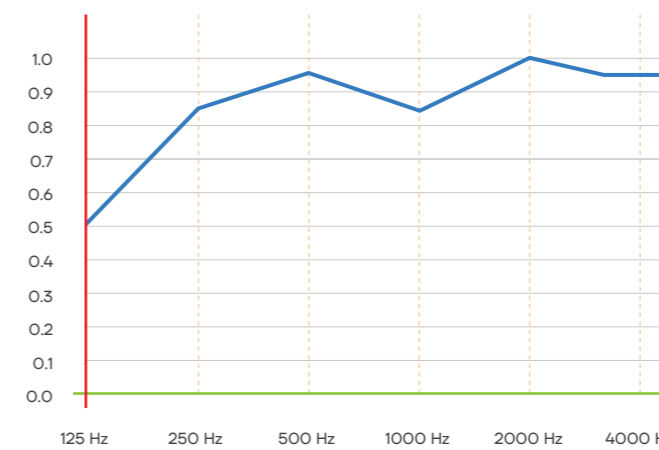
	EDGE	MODULE SIZE (mm)		EDGE	MODULE SIZE (mm)
A15		600 x 600 x 15	E15		600 x 600 x 15
		1200 x 600 x 15			1200 x 600 x 15
A24		600 x 600 x 15	E24		600 x 600 x 15
		1200 x 600 x 15			1200 x 600 x 15

	Essential Characteristic	Performance	Harmonized Techncl Spec.
	Reaction to fire to Class	+A1	TS EN 13964:2014
	Emission of hazardous substances for indoor environments (ZA)	Mineral stone wool does not provide nutrients for microorganisms.	
	Environmental Impact	Recyclable Material	
	Sound Absorption	aw: 0.95	
	Moisture and Sagging Resistance	Provides protection in high humidity	
	Light Reflection	Changeable	TS EN 12086
	Thermal Conductivity (EN 12667)	Max.0,035 W/Mk	
	Cleanroom compatibility	Class:ISO 4(≥0,5 µm)	ISO 14644-1

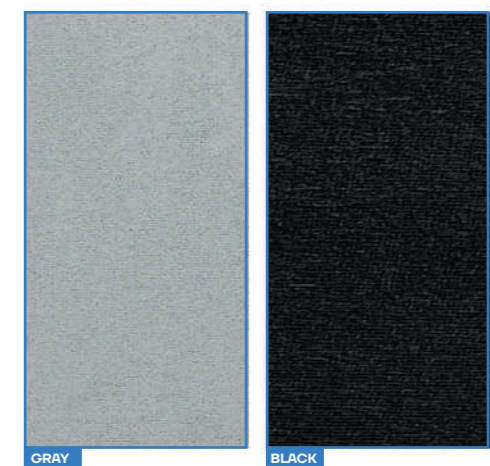
* All measurements have been made according to 15mm.

SOUND ABSORPTION

Sound Absorption Class
 α_w : 0.95 (Class A)



PRODUCT TEXTURE

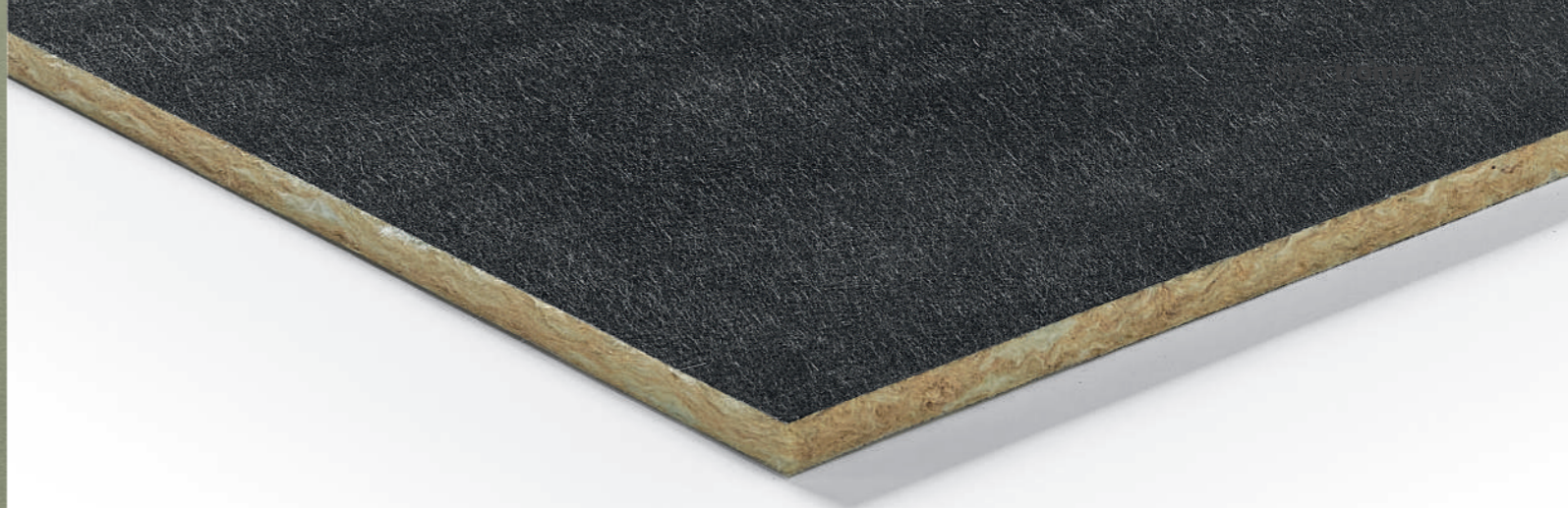


	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	α_w	Absorption Class	NRC
A: 15/200	0.50	0.85	0.95	0.85	1.00	0.95	0.95	A	0.90

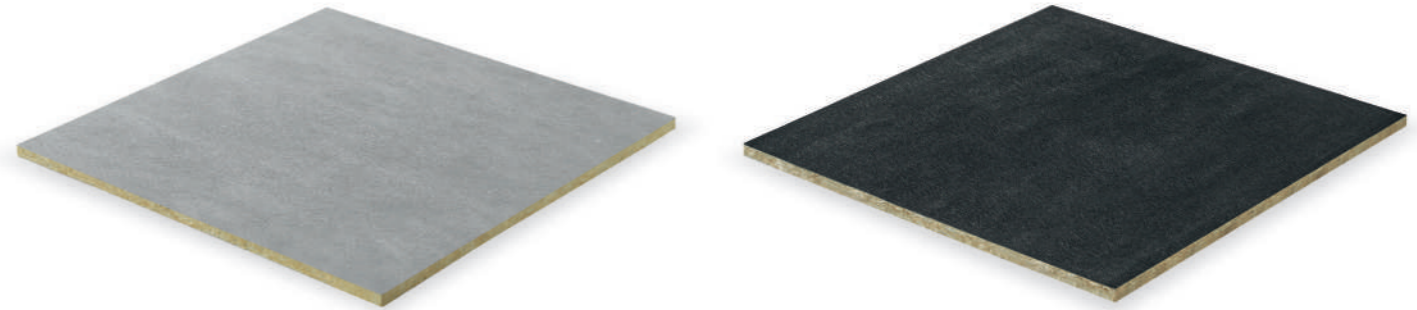
TROMER®
Rainbow™



Sounds Of Silence



High-Performance Ceiling Systems

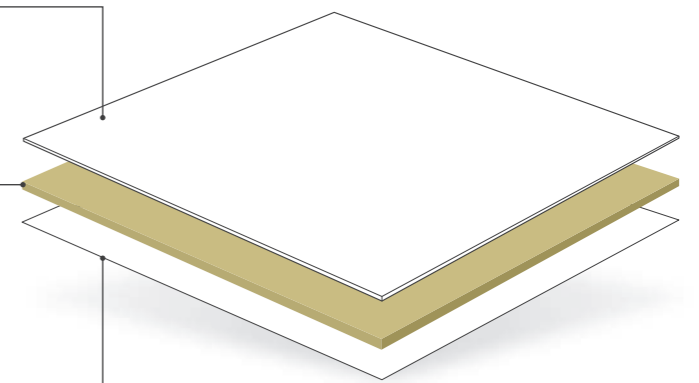


Our ceiling panels add prestige and safety to your spaces with advanced insulation properties and exceptional **fire resistance**. By combining aesthetics and functionality, these panels become essential to modern architectural design.

Decor Side: White veil, a thin, lightweight covering that protects the stone wool while providing a smooth, aesthetic finish.

Stone Wool Core: A natural mineral material offering high thermal and acoustic insulation, as well as fire resistance and environmental protection.

Back Side: Coated by glass veil fine surface.



CE

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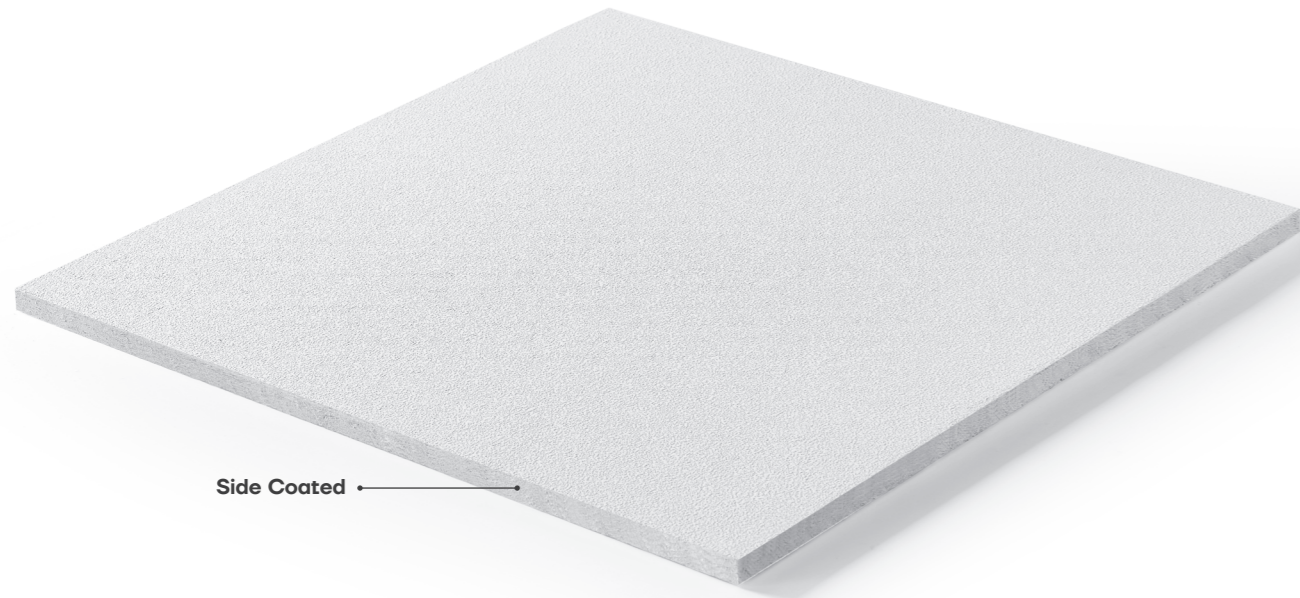


TROMER®

Mediceil™

Discover Mediceil, the benchmark of innovation for health and wellness spaces. Engineered with precision, this solution caters to hospitals, clinics, and rehabilitation centers, ensuring hygiene, comfort, and durability. Mediceil is where well-being meets modern design.

TROMER®
Mediceil™



TECHNICAL FEATURES

Composition:

The visible surface is coated with a textured white paint, while the reverse side is crafted from non-combustible material. This eco-friendly product is low in emissions, resistant to microbial growth, and perfectly suited for indoor environments. It is easy to maintain, requiring only an electric vacuum or a simple wipe for cleaning.



PRODUCT MATERIAL

These acoustic panels are made from 100% stone wool, ensuring optimal **sound absorption** and **fire resistance**.

USAGE AREA

- Hospital
- Health Center etc.



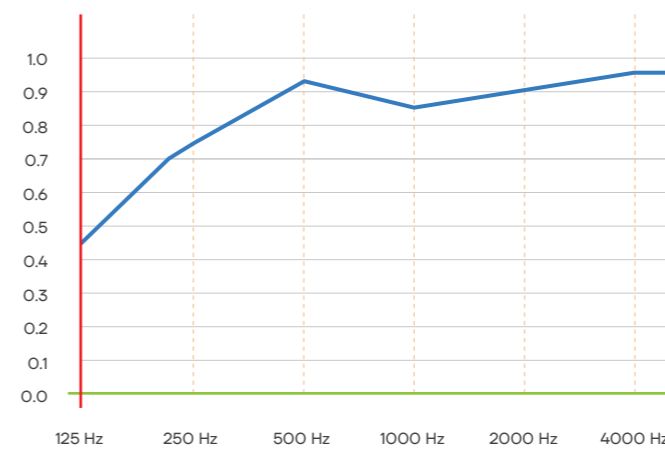
	EDGE	MODULE SIZE (mm)	EDGE	MODULE SIZE (mm)
A15		600 x 600 x 15/20		600 x 600 x 15/20
		1200 x 600 x 15/20		1200 x 600 x 15/20
A24		600 x 600 x 15/20		600 x 600 x 15/20
		1200 x 600 x 15/20		1200 x 600 x 15/20

	Essential Characteristic	Performance	Harmonized Techncl Spec.
	Reaction to fire to Class	+A1	TS EN 13964:2014
	Emission of hazardous substances for indoor environments (ZA)	Mineral stone wool does not provide nutrients for microorganisms.	
	Environmental Impact	Recyclable Material	
	Sound Absorption	aw: 0.95	
	Moisture and Sagging Resistance	Provides protection in high humidity	
	Light Reflection	86%	TS EN 12086
	Thermal Conductivity (EN 12667)	Max.0,035 W/Mk	
	Cleanroom compatibility	Class:ISO 4(≥0,5 µm)	ISO 14644-1

* All measurements have been made according to 15mm.

SOUND ABSORPTION

Sound Absorption Class
 α_w : 0.95 (Class A)



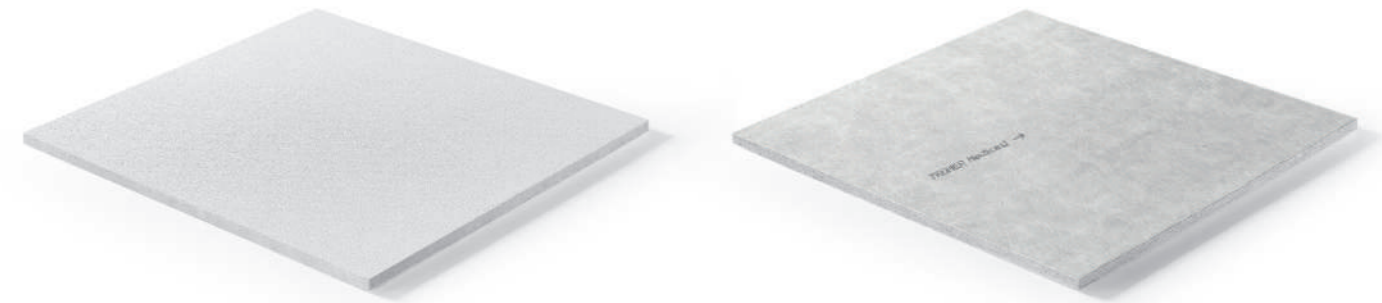
	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	α_w	Absorption Class	NRC
A: 15/200	0.45	0.75	0.95	0.85	0.90	0.95	0.95	A	0.90

PRODUCT TEXTURE



TROMER®
Mediceil™

High-Performance Ceiling Systems



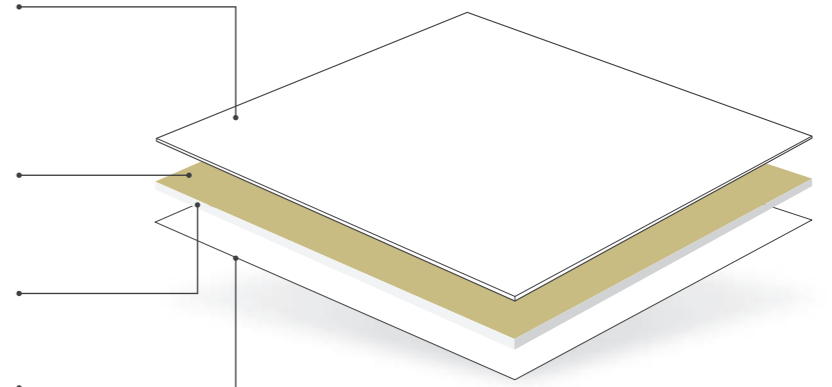
Our ceiling panels add prestige and safety to your spaces with advanced insulation properties and exceptional **fire resistance**. By combining aesthetics and functionality, these panels become essential to modern architectural design.

Decor Side: White veil, a thin, lightweight covering that protects the stone wool while providing a smooth, aesthetic finish.

Stone Wool Core: A natural mineral material offering high thermal and acoustic insulation, as well as fire resistance and environmental protection.

Edge detail: Side coated.

Back Side: The back side is coated with fire-resistant, hygienic glass fleece to enhance durability and reduce dusting.



Sounds Of Silence

CE

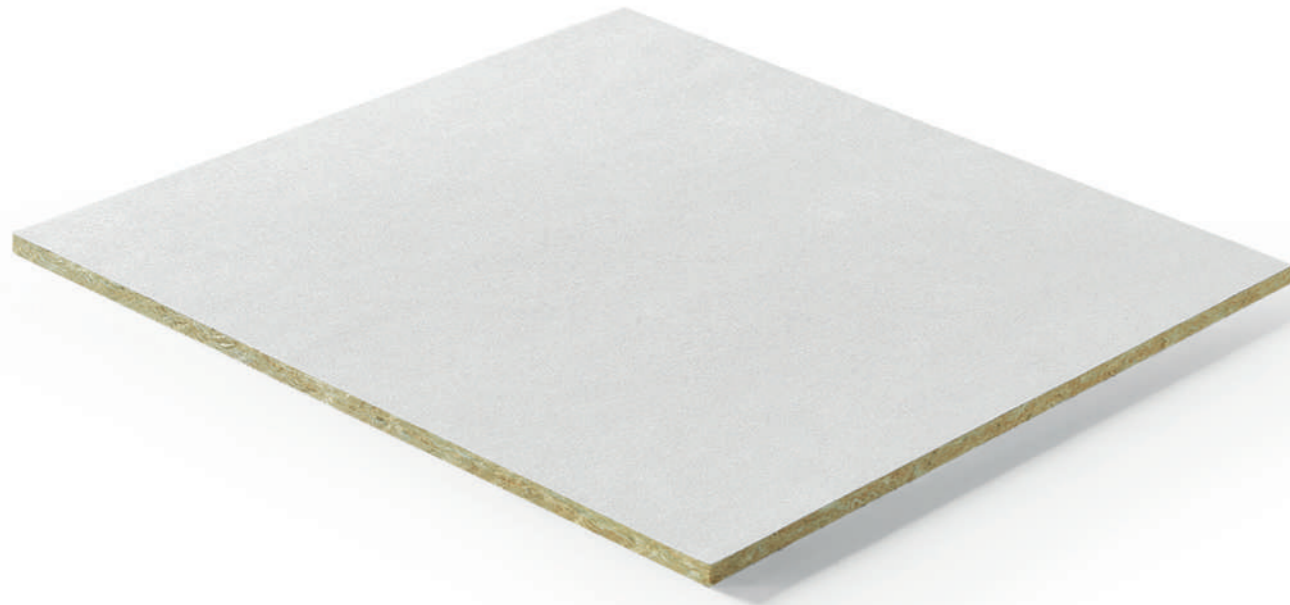
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TROMER®

Desibel™

Introducing Desibel, the powerhouse solution for industrial environments. Built for resilience and efficiency, Desibel thrives in factories and manufacturing spaces. Designed to withstand the toughest demands, it ensures both safety and productivity, making it an industrial game-changer.

TROMER®
Desibel™



TECHNICAL FEATURES

Composition:

The front surface is finished with a textured white paint, while the back is made of non-combustible material. This environmentally conscious product offers low emissions, prevents microbial growth, and is designed for indoor applications. Maintenance is simple and efficient, with options for cleaning using an electric vacuum or a damp cloth.



PRODUCT MATERIAL

These acoustic panels are made from 100% stone wool, ensuring optimal **sound absorption** and **fire resistance**.

USAGE AREA

- Shopping Centers
- Malls
- Factories



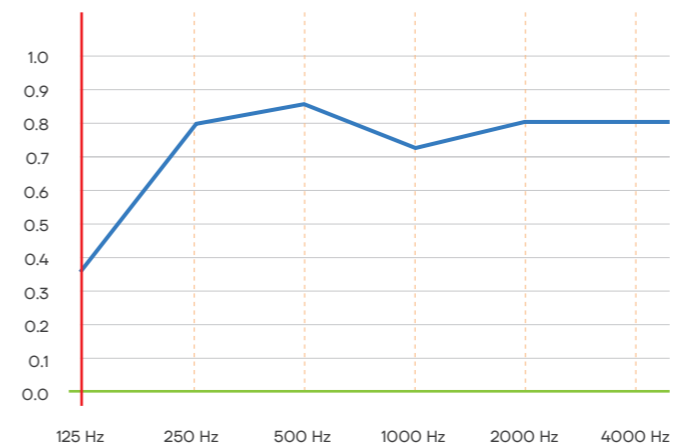
EDGE		MODULE SIZE (mm)	
A15		600 x 600 x 12	
		1200 x 600 x 12	
A24		600 x 600 x 12	
		1200 x 600 x 12	

	Essential Characteristic	Performance	Harmonized Techncl Spec.
	Reaction to fire to Class	+A1	TS EN 13964:2014
	Emission of hazardous substances for indoor environments (ZA)	Mineral stone wool does not provide nutrients for microorganisms.	
	Environmental Impact	Recyclable Material	
	Sound Absorption	aw: 0.80 (Class A)	
	Moisture and Sagging Resistance	Provides protection in high humidity	
	Light Reflection	86%	
	Thermal Conductivity (EN 12667)	Max.0,036 W/Mk	TS EN 12086
	Cleanroom compatibility	Class:ISO 4(≥0,5 µm)	ISO 14644-1

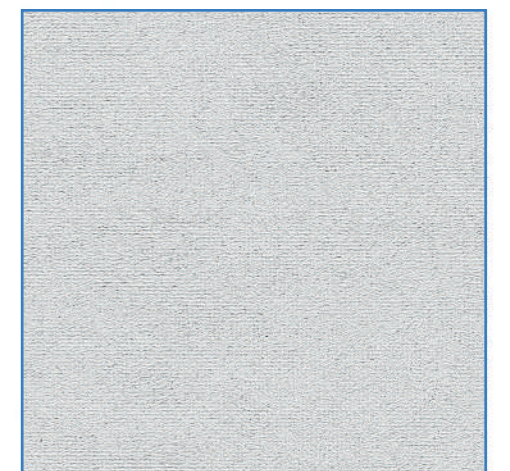
* All measurements have been made according to 15mm.

SOUND ABSORPTION

Sound Absorption Class
 α_w : 0.80 (Class A)

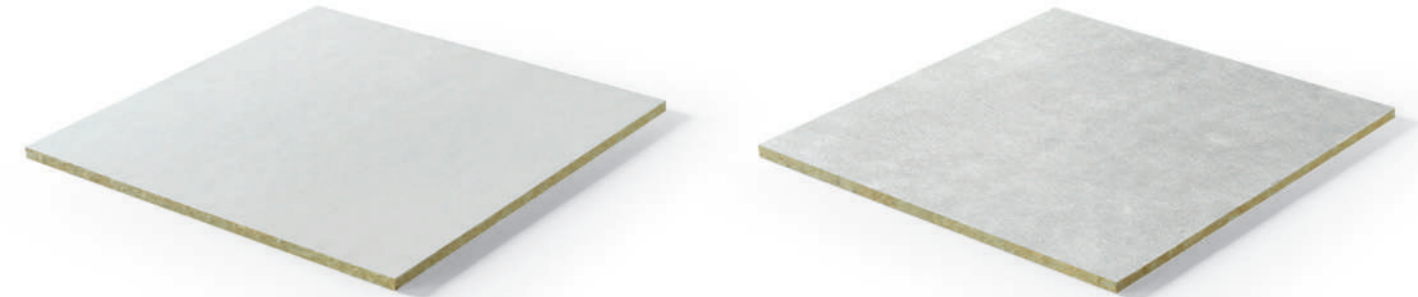


PRODUCT TEXTURE



TROMER®
Desibel™

High-Performance Ceiling Systems

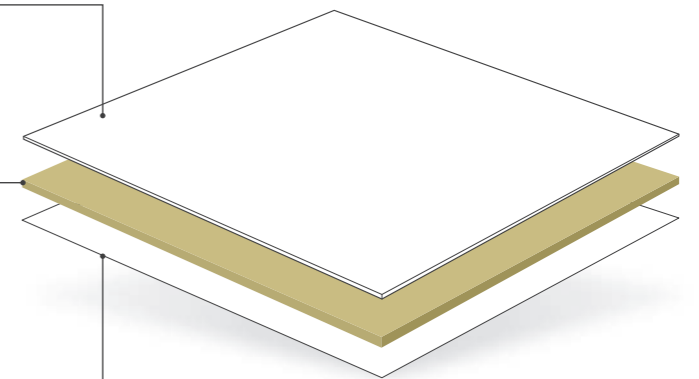


Our ceiling panels enhance your spaces by delivering superior insulation and outstanding fire resistance, ensuring both safety and elegance. By seamlessly integrating style and functionality, these panels are a vital component of contemporary architectural design

Decor Side: White Veil is a thin, lightweight layer that safeguards the stone wool while offering a sleek and visually appealing finish

Stone Wool Core: natural mineral material that provides excellent thermal and acoustic insulation, along with fire resistance and environmental sustainability.

Back Side: Uncoated fiberglass tissue covered.



Sounds Of Silence

CE

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TROMER®

Mood™

Experience exclusivity with Mood, an elegant solution tailored for specialized spaces. Created for those who value individuality, Mood offers unmatched style, comfort, and versatility. Whether for a boutique, gallery, or a bespoke setting, Mood creates an ambiance of refined sophistication..

TROMER®
Mood™



TECHNICAL FEATURES

Composition:

The front surface features a textured white paint finish, while the reverse side is composed of non-combustible material. This environmentally friendly product is low in emissions, inhibits microbial growth, and is ideal for indoor applications. It is easy to clean using an electric vacuum or a damp cloth.



PRODUCT MATERIAL

Crafted entirely from 100% stone wool, these inorganic acoustic panels are perfectly suited for use in:

USAGE AREA

- Hospital
- Health Center etc.



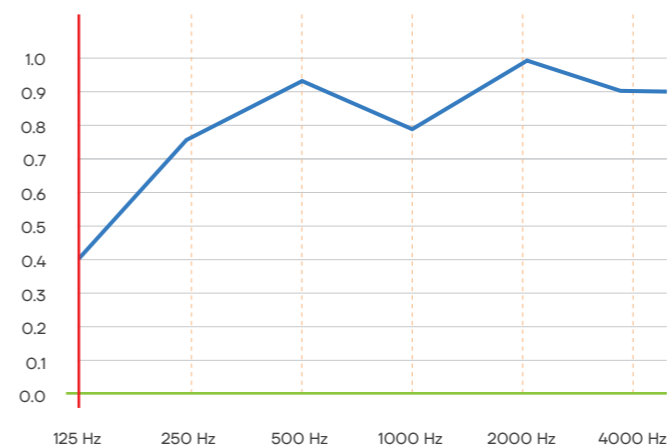
	EDGE	MODULE SIZE (mm)	EDGE	MODULE SIZE (mm)
A15		600 x 600 x 15		600 x 600 x 15
		1200 x 600 x 15		1200 x 600 x 15
A24		600 x 600 x 15		600 x 600 x 15
		1200 x 600 x 15		1200 x 600 x 15

	Essential Characteristic	Performance	Harmonized Techncl Spec.
	Reaction to fire to Class	+A1	TS EN 13964:2014
	Emission of hazardous substances for indoor environments (ZA)	Mineral stone wool does not provide nutrients for microorganisms.	
	Environmental Impact	Recyclable Material	
	Sound Absorption	aw: 0.90	
	Moisture and Sagging Resistance	Provides protection in high humidity	
	Light Reflection	85%	TS EN 12086
	Thermal Conductivity (EN 12667)	Max.0,035 W/Mk	
	Cleanroom compatibility	Class:ISO 4(≥0,5 µm)	ISO 14644-1

* All measurements have been made according to 15mm.

SOUND ABSORPTION

Sound Absorption Class
 α_w : 0.90 (Class A)



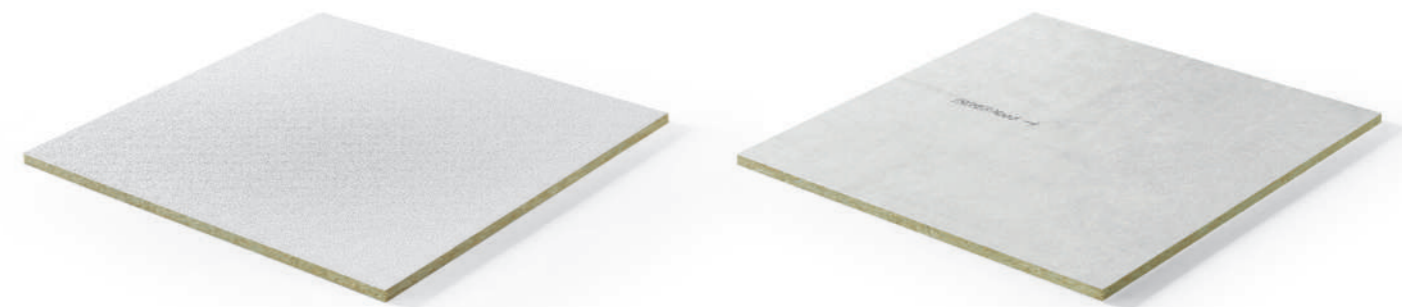
	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	α_w	Absorption Class	NRC
A: 15/200	0.40	0.75	0.95	0.90	1.00	0.90	0.90	A	0.90

PRODUCT TEXTURE



TROMER®
Mood™

High-Performance Ceiling Systems

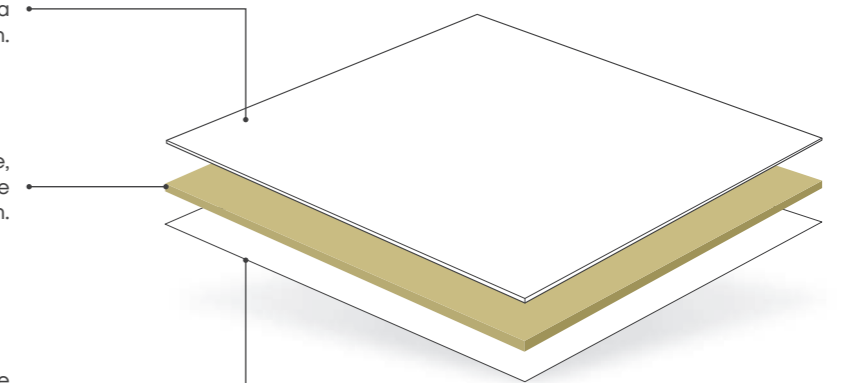


Our ceiling panels bring elegance and safety to your spaces with superior insulation capabilities and exceptional **fire resistance**. By merging style and practicality, these panels are an indispensable element of contemporary architectural design.

Decor Side: White veil, a thin, lightweight covering that protects the stone wool while providing a smooth, aesthetic finish.

Stone Wool Core: White Veil is a delicate, lightweight layer designed to shield stone wool while delivering a sleek and visually appealing finish.

Back Side: The back side coated by fine glass veil for reinforcement.



Sounds Of Silence

CE

Tromer ceiling systems are CE marked according to the European harmonized standard EN 13964:2014. CE marked construction products are covered by a Declaration of Performance (DOP) which enables customers and users to easily compare performance of products available on the European market.

TECHNICAL TERMS

USED IN THE CATALOG

α_w : Sound Absorption Class

Sound Absorption / Sound Absorption Coefficient (α):

This term describes a material's capability to absorb sound waves rather than reflecting them, a property referred to as "sound absorption." This process converts most of the acoustic energy into heat energy. It's important to note that sound absorption is distinct from sound insulation.

The **sound absorption coefficient** measures the ratio of absorbed to reflected sound energy. A value of 0 indicates complete sound reflection, while a value of 1 signifies total sound absorption. For instance, an α_w of 0.60 implies 60% sound absorption and 40% sound reflection.

Measurement:

The sound absorption coefficient is determined according to the **EN ISO 11654 standard**, which also defines the sound absorption value (α_w) and categorizes materials into sound absorption classes.

Sound Levels and Frequencies

Sound Level (dB): Expressed in decibels, this measures the intensity of sound.

Sound Frequency (Hz): Measured in hertz (Hz), this represents the rate of air pressure changes that produce sound vibrations. Humans can hear frequencies ranging from **20 Hz to 20,000 Hz**, with speech typically falling between **500 and 2,000 Hz**.

NRC (Noise Reduction Coefficient):

The NRC is a simple measure of a surface's ability to absorb sound energy.

Scale: An NRC of 0 represents total reflection, while a value of 1 denotes complete absorption.

Calculation: It is the average of the sound absorption coefficients at frequencies of 250 Hz, 500 Hz, 1000 Hz, and 2000 Hz—key ranges for human speech, making the NRC particularly useful for evaluating speech-related acoustics.

Airborne Sound (R_w):

Airborne sound refers to noise transmitted through the air, which may penetrate walls, ceilings, or floors into adjacent spaces.

Improving Sound Insulation: Enhanced sound insulation is achieved by adding insulation materials to structural elements such as walls, floors, or ceilings.

Rw Measurement: The improvement is calculated as: **Rw(after) - Rw(before)**

This metric helps assess the effectiveness of interventions in reducing noise transfer.

Impact Sound:

Impact sound is generated by physical contact, such as footsteps or objects striking structural elements like floors or walls.

Measurement Process:

1. Vibrations are measured on a bare floor due to standardized impacts, recording sound transmitted to the room below (frequency range: 100–5000 Hz). These values are summarized into a single metric: **L'n,w,R**.

2. Measurements are repeated after insulation is applied. The greater the reduction in sound level, the more effective the insulation.

Key Terms:

L'n: Impact sound level measured without accounting for indirect transmission.

L'n: Impact sound level including indirect transmission.

L'n,w: Frequency-independent impact sound level.

L'n,w: Frequency-independent impact sound level, including indirect transmission.

L'n,w,R: Improvement in impact sound level after insulation.

Inter-room Sound Insulation:

This is assessed following **ISO 10848-2** and **EN ISO 717-1** standards to evaluate sound transmission between rooms.

Weighted Standardized Facade Level

Difference ($D_{2m,nT,w}$):

This metric calculates the difference between the sound pressure level measured 2 meters in front of a facade (e.g., from traffic noise or specific sources) and the level within the receiving room.

TECHNICAL TERMS

USED IN THE CATALOG

Fire Resistance Class:

Fire resistance is classified according to the **TS EN 13501-1** standard, based on the material's reaction to fire:

A1: Non-combustible
A2, B1: Difficult to ignite
C, D: Normally flammable
E, F: Easily flammable

A1 is the highest rating, indicating non-combustibility, while lower classes represent progressively easier ignitability.

s1, s2, s3: These terms classify smoke emission levels:

s1: Minimal or negligible smoke emission.
s2: Moderate smoke emission.
s3: High smoke emission.

d0, d1, d2: These terms describe the behavior of burning droplets:

d0: No burning droplets or particles for at least 60 seconds.
d1: Limited burning droplets or particles.
d2: Continuous or high levels of burning droplets.

Thermal Conductivity (λ : mW/mK):

This value measures a material's efficiency in conducting heat and is outlined in the **TS 825 Thermal Insulation Rules for Buildings standard**. Lower thermal conductivity values indicate better insulation properties, as the material conducts less heat. For optimal thermal insulation, the conductivity value should be as close to zero as possible.

Thermal Resistance (R):

Defined by the formula $R = d/\lambda$, where:

R: Thermal resistance.

d: Thickness of the material.

λ : Thermal conductivity.

Thermal resistance increases as thermal conductivity decreases or material thickness increases, leading to better insulation performance.

Wet Scrub Resistance:

This measures a surface's durability against repeated wet scrubbing. Testing and classification follow the **TS EN ISO 11998 standard**.

Corrosion Resistance:

Refers to a material's ability to withstand chemical and environmental degradation without losing its structural integrity or bonding properties.

Sag Resistance:

Indicates a material's ability to resist deformation or sagging under applied loads while suspended.

L Value (Whiteness Index):

Indicates the level of whiteness in a material:

A value close to **100** signifies high whiteness.

A value approaching **0** indicates increasing blackness.

Measurements are performed according to the **ISO 7724 standard**.

Impact Resistance:

Measures the amount of energy a material can absorb before breaking under dynamic forces. Tested according to **EN 13964, Appendix D**.

Surface Durability:

Evaluated for resistance to wet scrubbing, rated on a scale from 1 (highest durability) to 5 (lowest durability), based on **EN ISO 11998:2007**.

Moisture Resistance:

Assesses a material's ability to withstand exposure to high humidity or persistent condensation without degrading.

Air Leakage:

Determines the rate of air seepage in pressurized areas requiring a differential pressure.

Light Reflection (Albedo):

Represents the percentage of light reflected by a surface:

100% Albedo: The surface reflects all incoming light.

0% Albedo: The surface absorbs all light and reflects none.

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