

A modern interior space featuring a mix of materials and lighting. The ceiling has exposed wooden beams and black pipes, with several large, white, dome-shaped pendant lights hanging from it. The walls are a combination of dark, vertically-ribbed panels on the left and light-colored vertical wood slats on the right. In the center, there's a long, low wooden table with a thick top. To the left of the table is a dark, modular sofa. To the right is a kitchen area with a black countertop and a sink. The floor is a light, polished concrete. Large windows at the far end of the room let in natural light.

TRI MO

Interior Solutions

System Guidelines

For design and installation teams!

Trimo Interior Solutions System Guidelines

Descriptions of details and other information in this document are only provided to illustrate the system(s) of Trimoterm cladding products and applications. Each user of such information is fully responsible for the incorporation of this advisory information in their design.

Trimo accepts no liability for any incurred damages or failures resulting from the omission or misinterpretation of the information included in this document.

Care has been taken to ensure that the information/details are accurate, correct, complete and not misleading. However, Trimo, including its subsidiaries, does not accept responsibility or liability for errors or information that is found to be misleading.

Table of contents

A	Introduction	5
B	Wall Solutions	6
	B1 Space division	7
	B2 Fire safety	13
	B3 Acoustic comfort	17
	B4 Structural design	20
C	Ceiling Solutions	23
	C1 Trimoterm ceiling systems	24
	C2 Walkability and access conditions	28
	C3 Fire-resistant ceiling	29
	C4 Structural design	30
D	Modular Space Solutions	31
E	AirCare Solutions	32
F	Associated tools and documents	33



A Introduction

One system. Multiple interior possibilities.

These guidelines provide recommendations for the design and installation of Trimoterm sandwich panel systems used in interior applications. They are intended to support architects, designers, engineers, contractors and investors in the specification and implementation of partition walls, ceiling systems and Modular Space Solutions.

While sandwich panels are commonly associated with building envelopes, they are also widely used within building interiors. Based on mineral wool sandwich panel technology, Trimoterm systems combine structural stability, fire performance and acoustic properties in a prefabricated, non-combustible solution suitable for space division, fire compartmentation, acoustic separation and room-in-room construction.

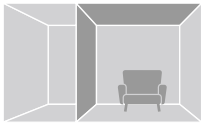
Depending on the functional requirements, Trimo offers solutions for:

- **Space division** (wall or ceiling),
- **Fire requirements,**
- **Acoustic requirements** (sound insulation between rooms, acoustic comfort within the same room),
- **Modular Space Solutions.**

Modular Space Solutions are room-in-room structures that can be integrated within industrial, warehouse and logistics facilities. Typical applications include offices, laboratories, changing rooms, canteens and other support spaces. Their modular design enables rapid installation with minimal disruption to ongoing operations.

This document does not replace project-specific design, structural verification or compliance with local regulations.

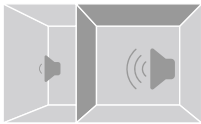
SPACE DIVISION



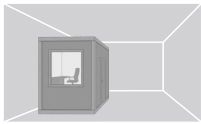
FIRE REQUIREMENTS



ACOUSTIC REQUIREMENTS



MODULAR SPACE SOLUTIONS





B

Wall Solutions

Configurable solutions for every requirement.

Trimoterm internal wall solutions are based on mineral wool sandwich panel technology, combining structural performance, fire safety, acoustic comfort and architectural flexibility in a single prefabricated system. Depending on project requirements, walls can be configured as standard partitions, fire-rated walls, acoustic elements or complete room-in-room solutions suitable for a wide range of industrial, commercial and technical applications.

Compared to traditional drywall or masonry construction, Trimoterm internal wall systems provide a robust, non-combustible and low-maintenance solution with fast installation and consistent quality. When combined with Trimoterm ceiling systems and Modular Space Solutions, they enable complete interior concepts that seamlessly integrate space division, fire protection and acoustic performance.

TRIMO SOLUTIONS ARE IDEAL FOR:



INDUSTRIAL
& PRODUCTION



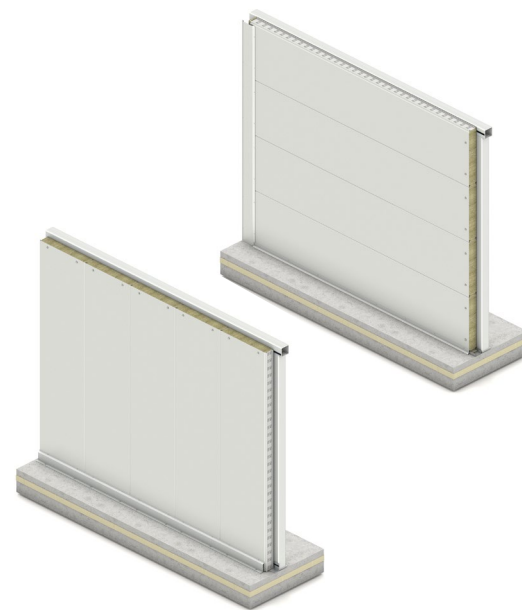
WAREHOUSING
& LOGISTIC



TECHNICAL
& UTILITY



COMMERCIAL
& OCCUPIED AREAS



100%

Designed around your needs

From simple partition walls to fire-rated, acoustic or modular solutions, the system can be configured to match your building requirements, performance targets and operational needs.



B1

Space division

Create functional spaces with speed and precision.

Large open areas often need to be divided into smaller, functional spaces such as offices, meeting rooms, classrooms, technical areas or production zones. Trimoterm wall systems provide a fast and efficient way to create internal partitions with durable finished surfaces and precise joint alignment for a clean, consistent appearance.

Compared to traditional drywall construction, prefabricated sandwich panel systems enable faster installation, require no wet trades and minimize disruption on site, allowing spaces to become operational sooner.

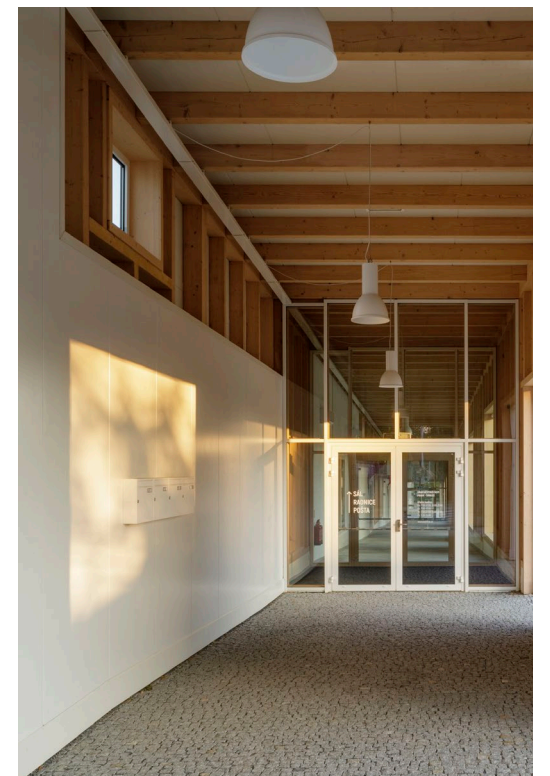


Fig. B1.2: Town Hall in Prague Dablice, Czech Republic, 2018
©Tomáš Balej

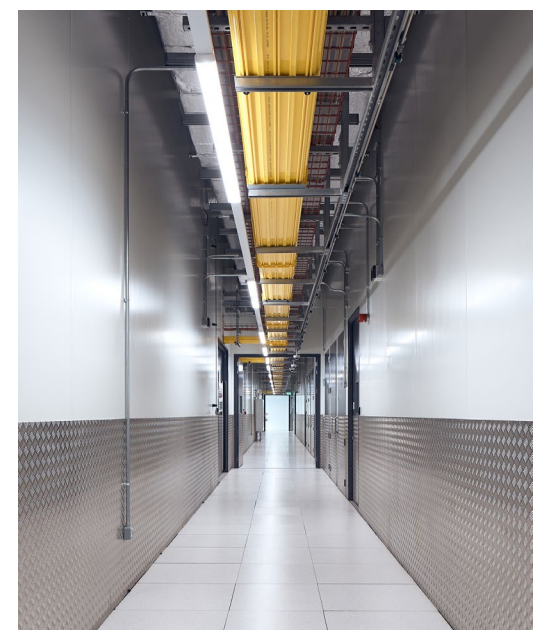


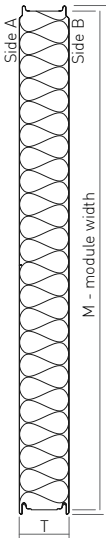
Fig. B1.3: Datacenter, London, 2026, RB-A
©Jerome Epailard



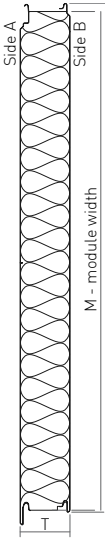
B1

B1.1 Choosing the right wall system

The following tables present selected product configurations.
Additional dimensions, material specifications, profile types, and other product options are available on request.



Panel length	Up to 14 m									
Module width - M	1000 mm, 1200 mm									
Span system	Single-span and multi-span									
Hidden fixation	No									
Profile types	S, G									
Steel sheet thickness	0.5 mm - 0.6 mm									
Colour range	Wide range of colour finishes, consult your Trimo Sales representative									
Reaction to fire	A2-s1, d0									
Core	Power T					Perform C				
Thickness - T	60	80	100	120	150	60	80	100	120	150
Max. achievable fire resistance [EN 14509]*	-	-	EI90	EI120	EI180	EI30	EI60	EI120	EI120	EI180
Airborne sound insulation Rw [C;Ctr] [dB]	30 [-2;-4]	30 [-2;-4]	31 [-3;-4]	31 [-3;-4]	31 [-3;-4]	31 [-2;-3]	31 [-2;-3]	32 [-2;-4]	32 [-2;-4]	32 [-2;-4]
Weight [kg/m²]	15.3	17.1	18.9	20.7	23.4	17	19.4	21.8	24.4	27.8



Panel length	Up to 14 m									
Module width - M	1000 mm, 1100 mm									
Span system	Single-span and multi-span									
Hidden fixation	Yes									
Profile types	S, G									
Steel sheet thickness	0.5 mm - 0.6 mm									
Colour range	Wide range of colour finishes, consult your Trimo Sales representative									
Reaction to fire	A2-s1, d0									
Core	Power T					Perform C				
Thickness - T	60	80	100	120	150	60	80	100	120	150
Max. achievable fire resistance [EN 14509]*	-	EI30	EI60	EI120	EI180	EI30	EI60	EI120	EI120	EI180
Airborne sound insulation Rw [C;Ctr] [dB]	30 [-2;-4]	30 [-2;-4]	31 [-3;-4]	31 [-3;-4]	31 [-3;-4]	31 [-2;-3]	31 [-2;-3]	31 [-2;-4]	31 [-2;-4]	31 [-2;-4]
Weight [kg/m²]	15.3	17.1	18.9	20.7	23.4	17	19.4	21.8	24.4	27.8

* Request for fire resistance must be clearly specified by customer For spans and fixing check the Trimoterm Fire application document.



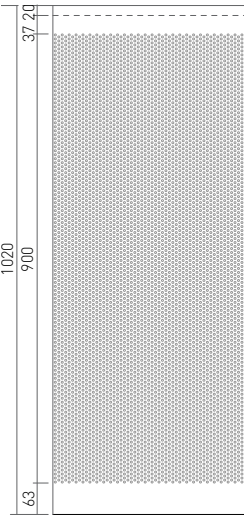
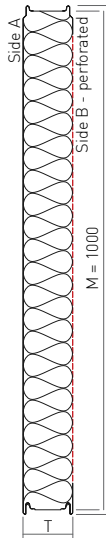
B1

Trimoterm Sound FTV

Up to 14 m
1000 mm
Single-span and multi-span
No
Side B: S
0.55 mm, 0.6 mm
Side A: Wide range of colour finishes
Side B: RAL 9002 White Grey
B-s1, d0

Power T				
60	80	100	120	150
-	-	EI90	EI90	EI90
32 [-1;-4]	32 [-1;-4]	33 [-2;-4]	33 [-2;-4]	33 [-2;-4]
14.4	16.2	18.0	21.0	22.5

Sound absorbtion (a _w)				
0.85	0.9	0.9	0.9	0.9

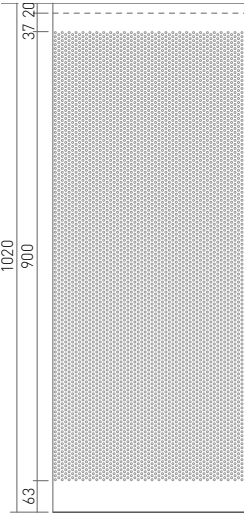
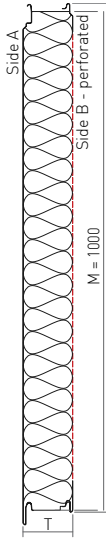


Trimoterm Sound FTV HL

Up to 14 m
1000 mm
Single-span and multi-span
Yes
Side B: S
0.55 mm, 0.6 mm
Side A: Wide range of colour finishes
Side B: RAL 9002 White Grey
B-s1, d0

Power T				
60	80	100	120	150
-	-	-	-	-
32 [-1;-4]	32 [-1;-4]	33 [-2;-4]	33 [-2;-4]	33 [-2;-4]
14.4	16.2	18.0	21.0	22.5

Sound absorbtion (a _w)				
0.85	0.9	0.9	0.9	0.9



Profile types

S (standard) profile

G (smooth) profile

	FTV		FTV HL		Sound FTV		Sound FTV HL	
Side	A	B	A	B	A	B	A	B
S [standard]	•	•	•	•	•	•	•	•
G [smooth]	•	•	•	•	•		•	

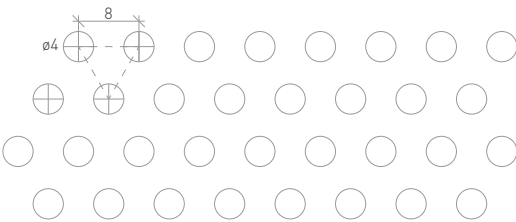


Fig B1.4: Trimoterm Sound RV Ø4 x 8 perforation

More product properties, technical data, and available options are provided in:
[Trimoterm FTV Book](#), [Trimoterm Technical specification](#), [Trimoterm Fire Guidelines](#) and [Trimoterm Load Span Tables](#)



B1

B1.2 Design and installation guidelines

Trimoterm Internal Walls should be considered as a complete system, where wall performance depends not only on the panel itself but also on supporting structures, connections and detailing.

Intended Wall Function

The required wall function should be defined at an early stage of the project. Depending on the application, the wall may provide space separation, fire compartmentation, acoustic control or hygienic performance.

Panel Orientation

Panels may be installed vertically or horizontally to suit the building layout, load-bearing structure and design requirements. Since the structural behaviour of the wall is influenced by panel orientation, the performance characteristics and design values vary between vertical and horizontal installations.

Supporting Structure

Trimoterm Internal Walls are non-loadbearing systems and should not transfer primary structural loads. Adequate support must be provided at panel supports, openings and interfaces.

Structural Movement

Wall systems should accommodate deflection and movement of the primary structure. Movement joints should be incorporated where required.

Openings and Penetrations

Doors, glazing, ducts, pipes and cable penetrations should be coordinated during design to maintain the required performance of the wall system.

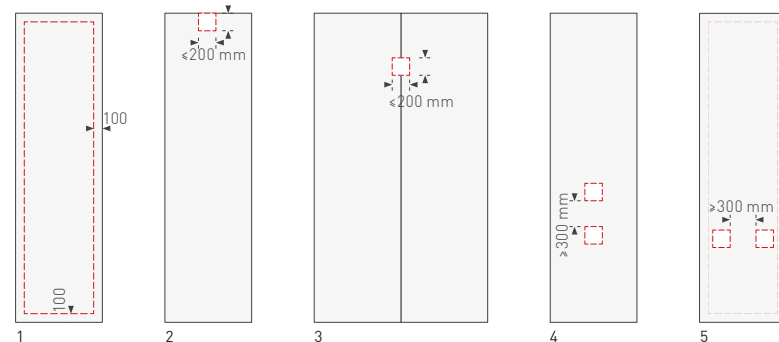


Fig. B1.6: Dimensions of cut-out openings without additional reinforcement

- 1 Within 100 mm from the panel border
- 2 Aligned with the panel edge (modules > 1000 mm). Maximum penetration ≤ 200 mm.
- 3 Central to the joint [2/3 of panel width must be intact]. Maximum penetration ≤ 200 mm.
- 4 Between penetrations min. 300 mm
- 5 Between penetrations min. 300 mm, 2/3 of panel width must be intact.

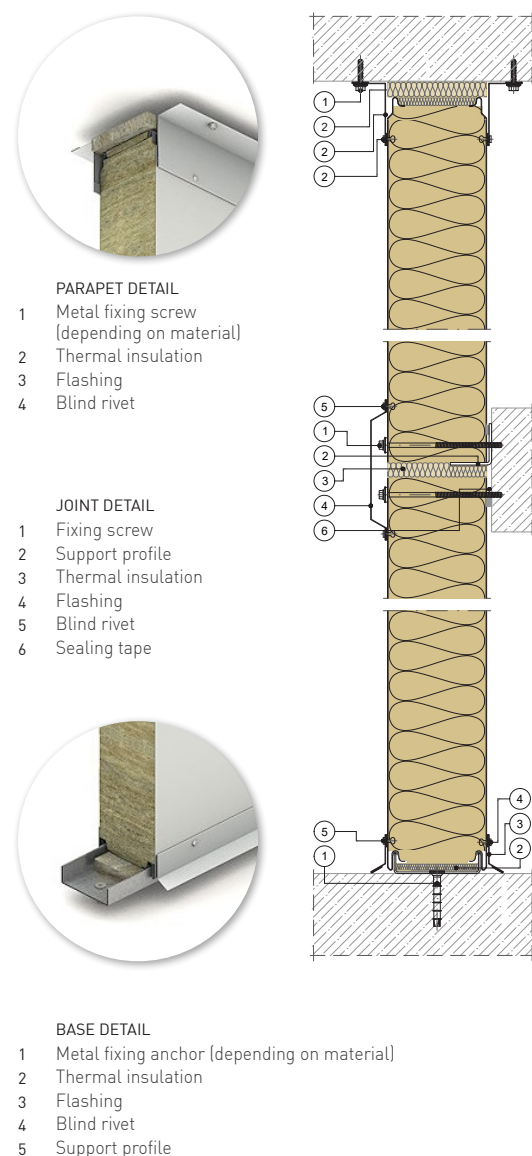


Fig. B1.5: Details



B1

Interfaces and Continuity

Particular attention should be given to floor, roof and wall junctions. Correct detailing is essential to maintain structural, fire and acoustic performance throughout the assembly.

Mounted Equipment

Luminaires, cameras, detectors and similar lightweight equipment may be fixed directly to the panel. Larger or concentrated loads should be supported by the primary structure.

Fastening

a) to the external steel sheet

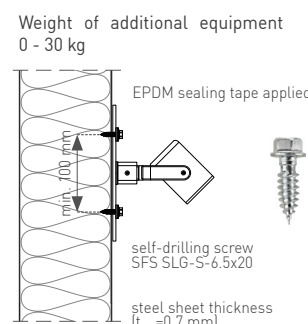


Fig. 4.9: Fastening with screws.

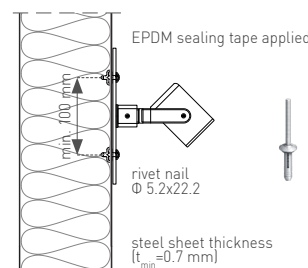


Fig. 5.0: Fastening with rivets.

b) through the element

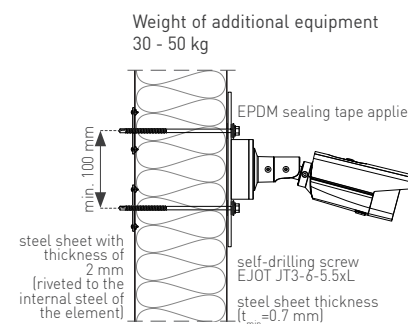


Fig. 5.1: Fastening through the panel to a 2 mm steel sheet with screws.

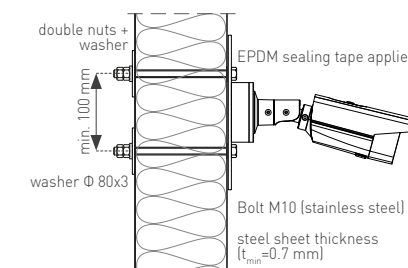


Fig. 5.2: Fastening through the panel with M10 bolts (stainless steel).

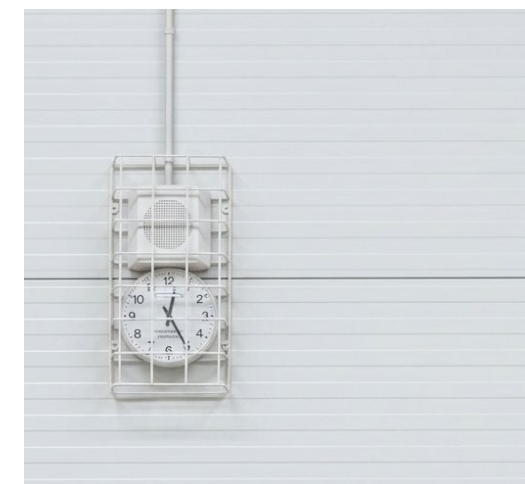


Fig. B1.7: Detail in Nemška vas Sports hall
©Miran Kambič



Trimoterm
Internal wall
system details

Trimoterm
Fire-resistant
Internal wall
system details

B2 Fire safety

Compartmentation that protects what matters most

Fire-resistant separation walls are used to create fire compartments within a building. Their primary purpose is to limit the spread of fire, heat and smoke between adjacent spaces and to maintain safe evacuation routes for a defined period of time.

Trimoterm fire-resistant panels combine non-combustible mineral wool insulation and steel facings to provide certified fire performance within a lightweight prefabricated construction system.

Fire Resistance

The ability of the wall system to maintain its integrity and thermal insulation performance for a defined period when exposed to fire.

Fire resistance is expressed through classifications such as EI 30, EI 60, EI 90, EI 120 and higher.

Reaction to Fire

How the material reacts when exposed to fire, including ignitability, flame spread, and smoke production

Trimoterm systems utilise mineral wool core technology and achieve a reaction-to-fire classification of **A2-s1,d0**, indicating very limited contribution to fire, very low smoke production and no flaming droplets.

B2.1 Choosing the right fire-rated wall

Fire resistance requirements should always be specified within the project fire strategy and coordinated with local regulations. Trimoterm fire-rated partition walls can provide certified fire resistance ratings from EI 30 up to EI 240, depending on:

- Panel type
- Panel thickness
- Installation orientation
- Span configuration
- Supporting structure

The mineral wool core remains dimensionally stable at very high temperatures and contributes significantly to maintaining insulation performance during a fire event. Steel facings provide structural integrity and enclosure, while the joint system and detailing ensure continuity of protection throughout the compartment boundary.



www.trimo-group.com

EI240



E - Integrity

Ability of the product to prevent the passage of fire and hot gases into an area not affected by the fire.



I - Insulation

Ability to limit the heat transmission through the element.



Time in minutes

The required duration (e.g. 240 minutes) during which the element must continuously meet all three criteria (R, E, and I) when exposed to fire.

A2-s1,d0



Combustibility to fire class

A2: Limited combustibility
Materials classified A1 and A2 are non-combustible, signifying a limited contribution to fire.



Smoke propagation level

s1: Little or no smoke production.
This parameter deals with the emission of fumes, signifying minimal to no smoke.



Presence of flaming droplets

d0: No flaming droplets or particles.
Deals with the presence of dripping or incandescent particles that can spread the fire.



B2

www.trimo-group.com

To support system selection, the following tables provide an overview of representative Trimoterm solutions, including key performance characteristics, dimensional limits, and application parameters. **Selected configurations are shown; additional dimensions, material specifications, profile types, and other options are available on request.**

Trimoterm FTV					Trimoterm FTV HL				
Core	Perform C, Power T				Core	Perform C, Power T			
Panel length	Up to 14 m				Panel length	Up to 14 m			
Module width - M	1000 mm, 1200 mm				Module width - M	1000 mm, 1100 mm			
Span system	Single-span and multi-span				Span system	Single-span and multi-span			
Hidden fixation	No				Hidden fixation	Yes			
Profile types	S, G				Profile types	S, G			
Reaction to fire	A2-s1. d0				Reaction to fire	A2-s1. d0			

Perform C

Panel thickness		80	100	120	150
Maximum allowable span [m]					
Fire resistance rating	Installation orientation				
EI15	Vertical	7.5	7.5	8.8	10
	Horizontal	7.5	7.5	10	10
EI20	Vertical	7.5	7.5	8.8	10
	Horizontal	7.5	7.5	10	10
EI30	Vertical	4	7.5	8.8	10
	Horizontal	7.5	7.5	10	10
EI45	Vertical	4	7.5	8.8	10
	Horizontal	7.5	7.5	10	10
EI60	Vertical	4	7.5	8.8	9
	Horizontal	7.5	7.5	10	10
EI90	Vertical	-	7.5	7.5	8.98
	Horizontal	-	7.5	8	8
EI120	Vertical	-	4	7.5	7.5
	Horizontal	-	7.5	7.5	7.5
EI180	Vertical	-	-	-	4
	Horizontal	-	-	-	6

Power T

Panel thickness		80	100	120	150
Maximum allowable span [m]					
Fire resistance rating	Installation orientation				
EI15	Vertical	-	7.5	8.8	10
	Horizontal	-	7.5	7.5	10
EI20	Vertical	-	7.5	8.8	10
	Horizontal	-	7.5	7.5	10
EI30	Vertical	-	7.5	8.8	10
	Horizontal	-	7.5	7.5	10
EI45	Vertical	-	7.5	8.8	10
	Horizontal	-	7.5	7.5	10
EI60	Vertical	-	7.5	8.8	9
	Horizontal	-	7.5	7.5	10
EI90	Vertical	-	4	7.5	8.98
	Horizontal	-	6	7.5	8
EI120	Vertical	-	-	7.5	7.5
	Horizontal	-	-	4	7.5
EI180	Vertical	-	-	-	4
	Horizontal	-	-	-	6

* Request for fire resistance must be clearly specified by customer. For spans and fixing check the Trimoterm Fire application document.



B2

B2.2 Design and installation guidelines

The fire compartment boundary extends beyond the wall panel itself. Fire-rated doors, duct penetrations, cable routes and pipe penetrations must use certified fire-stopping solutions compatible with the required compartment rating. The performance of the wall system cannot exceed the performance of its weakest component.

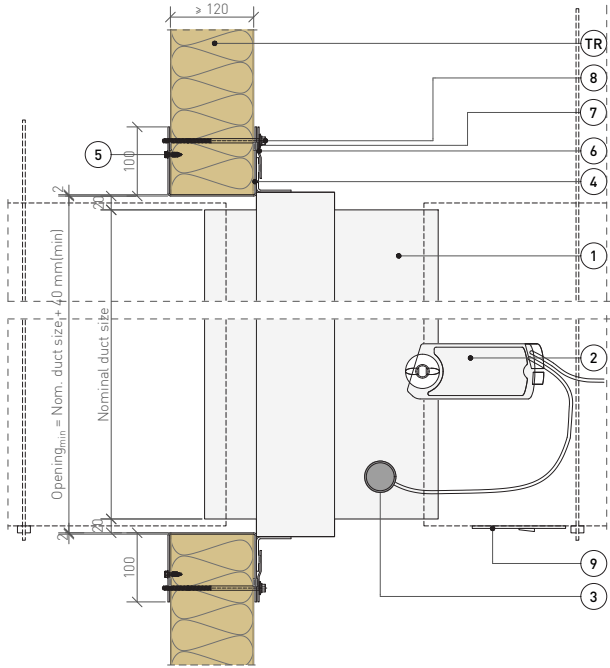
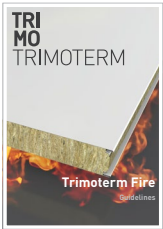


Fig. B2.1: Detail of fire damper penetration
(Trimoterm Fire-resistant Internal wall system details)

Additional fire guidelines, technical details, span tables, product documentation and design resources are available through the following documents:



- 1 Fire smoke control damper
- 2 Damper actuator
- 3 Temperature sensing element
- 4 2 mm galv. steel aperture framing capping channel
- 5 Capping fixing screw, max. distance 300 mm
- 6 Retaining flange
- 7 Ceramic sealant (all joints and gaps)
- 8 Fixing screw, max. distance 150 mm
- 9 Access door
- TR TRIMO panel system, Perform C/Power S



Trimoterm Fire Guidelines



Trimoterm Fire-resistant Internal wall system details

www.trimo-group.com

B3

Acoustic comfort

Good acoustics improve concentration, communication and workplace comfort.

Acoustic comfort plays an important role in the functionality, productivity and overall user experience of interior spaces. Depending on the application, wall systems may be required to reduce sound transmission between adjacent rooms, improve acoustic conditions within a space, or provide a combination of both.

Trimoterm Interior Solutions provide a range of systems that support acoustic comfort while maintaining the fire resistance, durability and installation advantages of mineral wool sandwich panels.

Typical applications include:

- Production halls
- Offices & meeting rooms
- Control Rooms
- Laboratories
- Transport facilities
- Sports & public halls

Acoustic wall performance is primarily defined by two requirements:



Sound insulation

Sound insulation reduces sound transmission between two separate spaces.

All Trimoterm wall panels contribute to airborne sound insulation.



Sound absorption

Sound absorption reduces sound reflections within the same space, improving speech clarity and reducing reverberation.

Class A: $\alpha_w \geq 0.90$

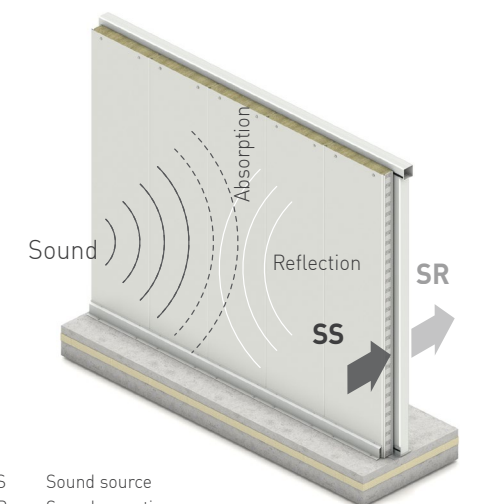
Class B: $0.80 \leq \alpha_w < 0.90$

The coefficient α_w ranges from 0-1 (1 indicates total absorption with no reflection).

Trimoterm Sound panels provide sound absorption through a perforated internal surface and mineral wool core.



Fig. B3.1: Standard colour of Trimoterm Sound panels: RAL 9002 Grey White



SS Sound source
SR Sound reception

Fig. B3.2: Trimoterm wall sound related properties



B3

B3.1 Choosing the right acoustic solution

The acoustic performance of a wall system depends on the required function. Depending on the project objectives, Trimoterm acoustic solutions can provide sound insulation between spaces, sound absorption within a room, or a combination of both.

Requirement	Recommended Solution	Typical Performance
Internal space division	Trimoterm FTV	Up to 32 dB
Sound absorption and improved room acoustics	Trimoterm Sound	α_w up to 0.90
Enhanced sound insulation between rooms	Double-wall acoustic system	43-52 dB
High-performance acoustic separation	Multi-layer acoustic system	Up to 56 dB

Acoustic Product Portfolio

A. Trimoterm FTV and FTV HL

- Suitable for:
- Internal space division
 - Sound insulation between rooms
 - Fire-rated partitions

- Performance:
- Reaction to fire A2-s1,d0
 - Fire resistance up to EI120
 - Sound insulation up to 33 dB

B. Trimoterm Sound FTV and Sound FTV HL

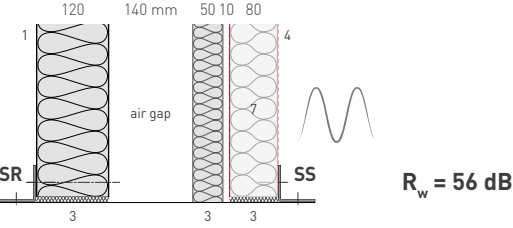
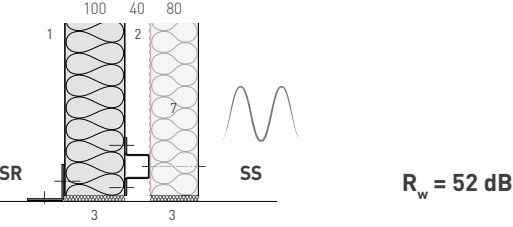
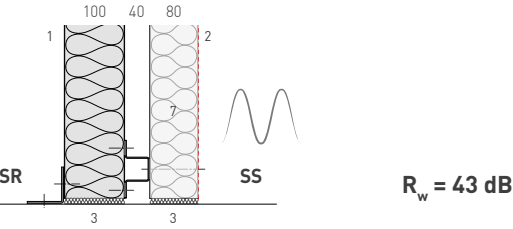
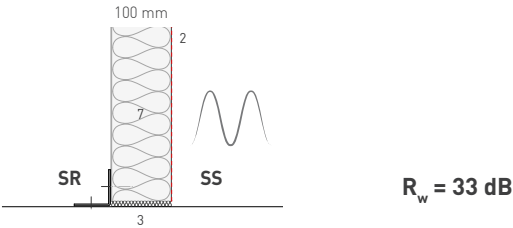
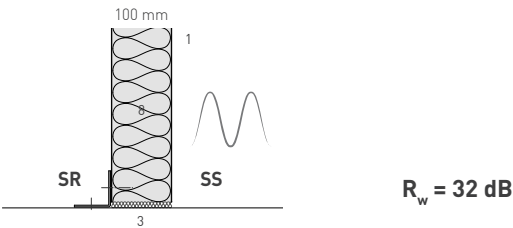
- Suitable for:
- Sound absorption
 - Acoustic comfort improvement
 - Noise control in large spaces

- Performance:
- Perforated internal face
 - Reaction to fire B-s1,d0
 - Fire resistance up to EI120
 - Sound insulation up to 34 dB
 - Sound absorption α_w up to 0.90

C. Multi-layer acoustic system

Where higher acoustic separation is required, Trimoterm FTV and Trimoterm Sound panels can be combined into double-wall and multi-layer systems achieving sound insulation levels **up to 56 dB**.

Enhanced acoustic assemblies incorporating additional materials can achieve sound insulation levels of **up to 62 dB**. For project-specific solutions and performance requirements, please contact Trimoterm technical support: technical@trimo-group.com.



- Trimoterm FTV Perform C
- Trimoterm Sound Power T
- Mineral stone wool
- Trimoterm Sound Power T - perforated on both sides

SS Sound source
SR Sound reception



B3

B3.2 Design and installation guidelines

- To achieve the declared acoustic performance:
- Ensure continuous wall construction between floor and roof structures.
 - Seal all joints, connections and perimeter interfaces.
 - Coordinate doors, glazing and service penetrations during design.
 - Consider flanking sound transmission through adjacent building elements.
 - Install the perforated face of Trimoterm Sound panels towards the space where sound absorption is required.
 - Use tested wall configurations whenever acoustic performance is specified.

For detailed acoustic calculations, tested assemblies and additional design guidance, refer to the Trimoterm FTV Book.



Trimoterm FTV Book Chapter B3.3 Sound

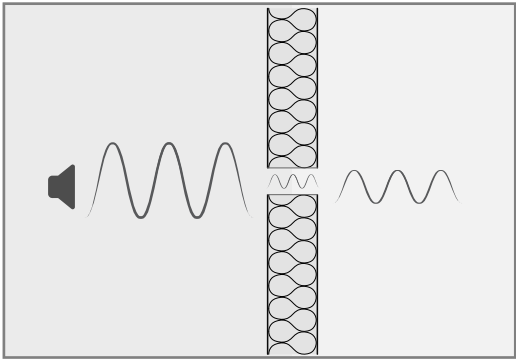


Fig. B3.3: Even the smallest gap can significantly reduce sound insulation performance. Proper sealing of all HVAC, electrical, and plumbing penetrations is essential.



B4

Structural design

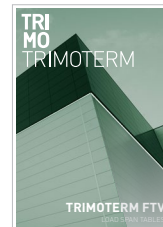
Performance starts with correct design.

Internal partition walls are typically exposed to relatively low design loads compared to external building envelopes. Structural design should consider:

- Internal pressure or suction.
- Self-weight.
- Temperature gradients that may occur between adjacent internal spaces.
- Accidental impact loads.

Span tables may be used for preliminary span estimation and are provided in the **Trimoterm FTV Load Span Tables** [🔗](#).

Technical support is available for project-specific structural verification based on actual boundary conditions, support arrangements and design loads (technical@trimo-group.com).



Trimoterm FTV
Load Span Tables



C Ceiling Solutions

Performance above every space.

Ceiling systems contribute significantly to the functionality, safety and overall quality of interior spaces. Beyond creating a finished appearance, they can provide fire protection, acoustic control and separation of technical installations while maintaining a clean and durable surface.

Trimoterm ceiling solutions are based on mineral wool sandwich panel technology, combining structural performance, fire safety and architectural flexibility in a single prefabricated element. Depending on project requirements, ceiling systems can be installed as suspended ceilings or self-supporting soffits and can be adapted to a wide range of industrial, commercial and technical applications.

Typical applications include:

- Production and manufacturing facilities
- Warehouses and logistics centres
- Commercial and retail buildings
- Technical and utility rooms
- Laboratories and controlled environments
- Educational and public buildings

Compared to traditional ceiling systems, Trimoterm ceilings offer a robust, non-combustible and low-maintenance solution with rapid installation and consistent quality. When combined with Trimoterm Internal Walls and Modular Space Solutions, they enable complete room-in-room concepts with integrated fire, acoustic and thermal performance.

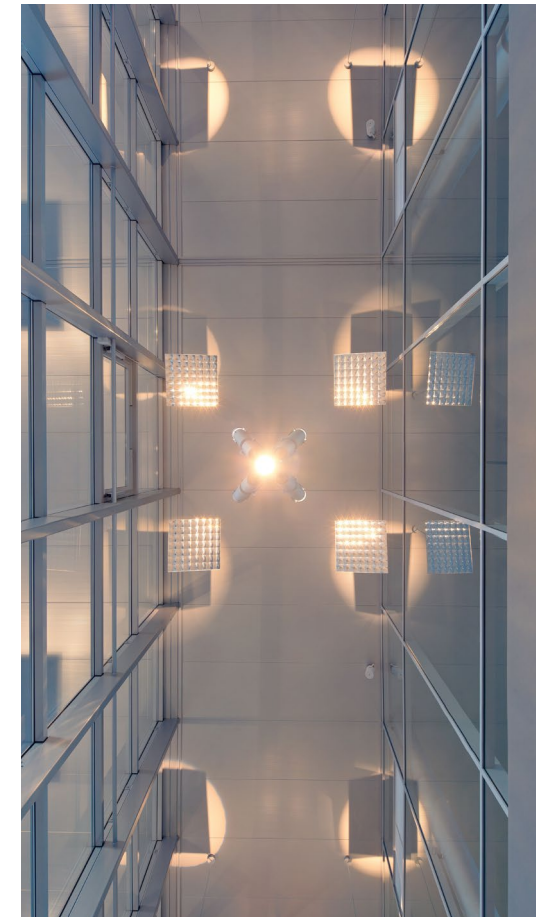


Fig. C.1: Ceiling of Osijek Bus station ©Mario Romulić & Dražen Stojčić



C1

Trimoterm ceiling systems

Self-supporting ceiling / Soffit

- Panels are fixed directly to the supporting structure.
- Fixing is performed from below or from above through the panel.
- Hidden fastening systems can be applied where required.

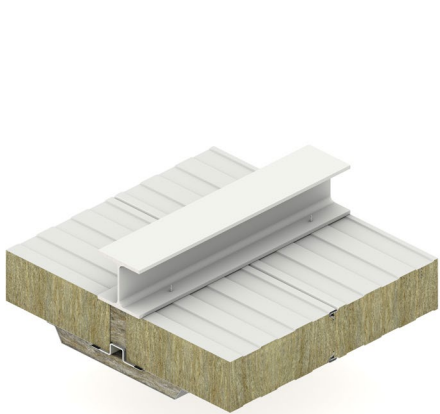


Fig.C1.1: Trimoterm self-supporting ceiling

Suspended ceiling

- Panels are suspended from the supporting structure by hangers.
- The hanging structure must be stabilised in the horizontal direction.

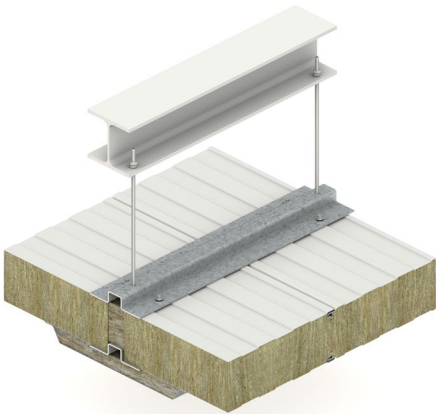


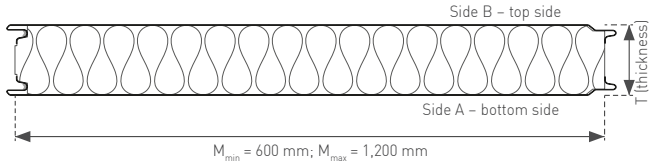
Fig.C1.2: Trimoterm suspended ceiling

C1.1 Choosing the right ceiling system

The following tables present selected product configurations.
Additional dimensions, material specifications, profile types, and other product options are available on request.

Trimoterm FTV

with visible fastening



Reaction to fire	A2-s1, d0
Certificates	CE (EN 14509:2013)
Module width - M	1000 mm, 1200 mm
Panel length	Up to 14 m
Span	Single-span and multi-span
Colour range	Wide range of colour finishes. Consult your Trimo sales representative.
Steel sheet thickness	0.55
Profile types	S, G

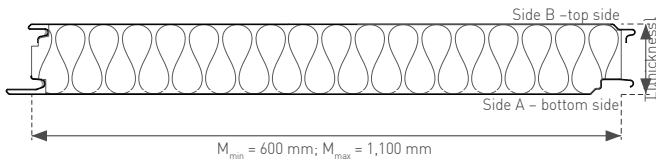
Core	Power T								Power S					
	60	80	100	120	133	150	172	200	60	80	100	120	133	150
Panel thickness - T [mm]	-	-	EI90	EI90	EI90	EI90	EI90	EI90	-	-	-	EI120	EI120	EI120
Max. achievable fire resistance [EN 14509]*	-	-	EI90	EI90	EI90	EI90	EI90	EI90	-	-	-	EI120	EI120	EI120
Airborne sound insulation Rw [C;Ctr] [db] [EN 14509]	30	30	31	31	31	31	31	31	31	31	32	32	32	32
Weight [kg/m²] MW Core + Fe 0,55/0,55	15.7	17.5	19.3	21.1	22.3	23.8	25.8	28.3	17.5	19.9	22.3	24.7	26.2	28.3

* Request for fire resistance must be clearly specified by customer. For spans and fixing check the Trimoterm Fire application document.



Trimoterm FTV HL

with hidden fastening

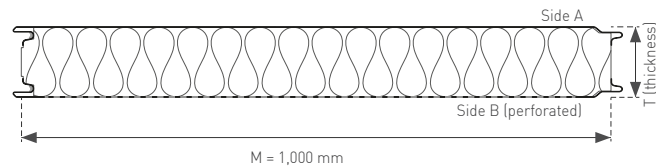
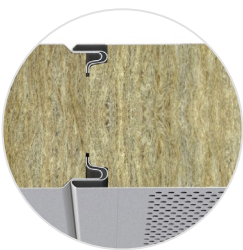


Reaction to fire	A2-s1, d0
Certificates	CE (EN 14509:2013)
Module width - M	1000 mm, 1100 mm
Panel length	Up to 14 m
Span	Single-span and multi-span
Colour range	Wide range of colour finishes. Consult your Trimo sales representative.
Steel sheet thickness	0.55
Profile types	S, G

Core	Power T								Power S							
	60	80	100	120	133	150	172	200	60	80	100	120	133	150	172	200
Panel thickness [mm]	-	-	-	-	-	-	-	-	-	EI90	EI90	EI90	EI90	EI90	EI90	EI90
Max. achievable fire resistance [EN 14509]*	-	-	-	-	-	-	-	-	-	EI90	EI90	EI90	EI90	EI90	EI90	EI90
Airborne sound insulation Rw [C;Ctr] [db] [EN 14509]	30	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31
Weight [kg/m²] MW Core + Fe 0,55/0,55	15.7	17.5	19.3	21.1	22.3	23.8	25.8	28.3	17.5	19.9	22.3	24.7	26.2	28.3	30.9	34.3

* Request for fire resistance must be clearly specified by customer. For spans and fixing check the Trimoterm Fire application document.

Trimoterm FTV Sound



Reaction to fire	B-s1, d0
Module width - M	1000 mm
Panel length	Up to 14 m
Span	Single-span and multi-span
Colour range	Side A: Wide range of colour finishes. Side B: RAL 9002 White Grey. Consult your Trimo sales representative.
Steel sheet thickness	0.55
Profile types - side A	S, G
Profile types - side B (perforated)	S

Core	Power T							
	60	80	100	120	133	150	172	200
Panel thickness [mm]	-	-	-	-	-	-	-	-
Airborne sound insulation Rw [C;Ctr] [db] [EN 14509]	32 [-1;-4]	32 [-1;-4]	33 [-2;-4]	33 [-2;-4]	33 [-2;-4]	33 [-2;-4]	33 [-2;-4]	33 [-2;-4]
Sound absorption [a _v]	0.85	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Weight [kg/m²] MW Power T + Fe 0,55/0,55	14.8	16.6	18.4	20.2	21.4	22.9	24.9	27.4

More product properties, technical data, and available options are provided in:
Trimoterm FTV Book, **Trimoterm Technical specification**, **Trimoterm Fire Guidelines** and **Trimoterm Load Span Tables**...



C1

C1.2 Design and installation guidelines

Ceiling applications require specific solutions that differ from standard wall applications. These details must be considered during design and correctly executed during installation to ensure the required structural performance, fire resistance, and durability of the system.

This section provides guidance on ceiling-specific details, including:

- panel joint stitching,
- panel prolongations,
- installation of additional mineral wool for fire protection,
- openings through the ceiling plane.

For additional details, refer to **Trimoterm Fire-resistant internal wall system details** and **Trimoterm Internall wall system details**.

Stitching and panel joints

- Panel joints may require stitching to ensure structural integrity and fire performance.
- Stitching connects the steel facings of adjacent panels; fasteners must penetrate both steel sheets.
- The typical spacing between fasteners is 0.5 m.

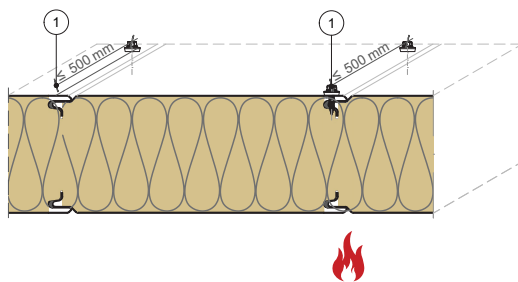


Fig.C1.3: Cross-section scheme, longitudinal joint stitching

- 1 Screw SLG-S 6,5×20 S14 or JF3-2-5,5×25 E19 (distance between screws ≤ 500mm)

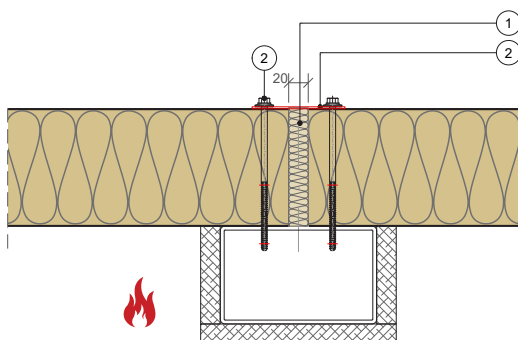


Fig.C1.4:

- 1 Stonewool (density 100 kg/m³)
2 Galvanised steel plate T= 2 mm

Panel prolongation

- Panel prolongation must be executed using a connecting upper steel sheet.
- The connecting element ensures the load transfer and continuity of the system.
- All connections must comply with the project-specific detailing.



C1

Mineral wool for fire protection

- Additional mineral wool must be installed in the details to fill voids between panels.
- The mineral wool protects supporting profiles located on the fire-exposed side.

- 1 Support profile (recommended minimum thickness 2 mm)
2 Stonewool (density 100 kg/m³)
3 Flashing

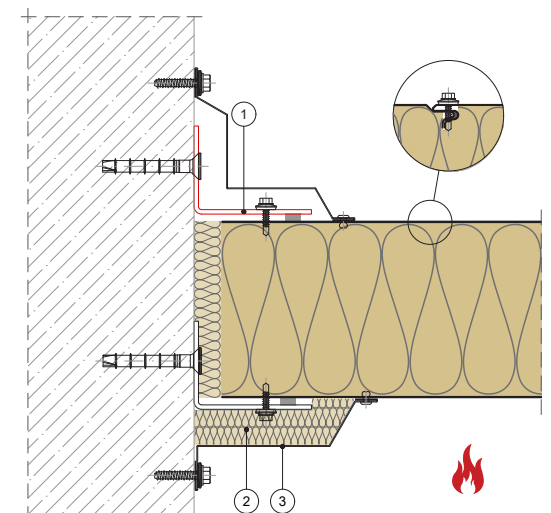


Fig.C1.5:

Penetrations and openings

- Panel cut-outs reduce structural capacity and typically require additional support from the substructure.
- Structural reinforcement or acceptance without reinforcement must be verified by a structural engineer based on project-specific conditions.
- Fire-resistant ceiling systems with panels do not allow penetrations through the ceiling plane.

- 1 Ceiling air ventilation system

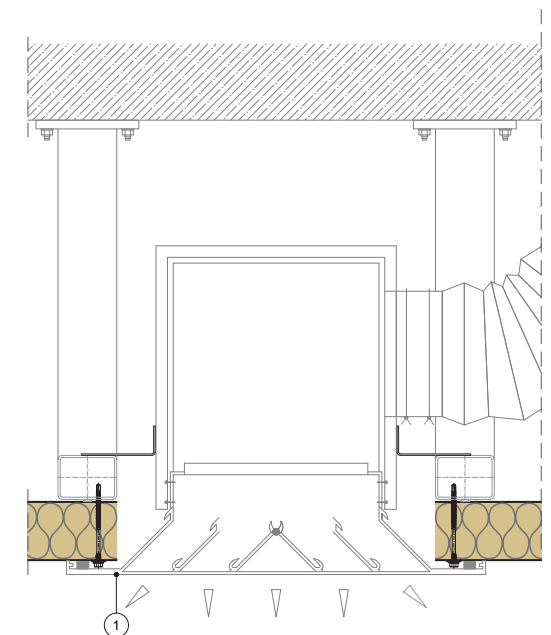


Fig.C1.6



C2

Walkability and access conditions

C2.1 Intended use and walkability

Trimoterm ceiling panels are designed to form a continuous ceiling system.

Walkability loads shall be considered in the design and remain within the defined limits (refer to Structural design section).

C2.2 Access and protection

In case of **occasional access** such as:

- installation activities during construction
- periodic inspection of the ceiling area
- maintenance of installations located above the ceiling

to ensure walkability of ceiling panels, the **load distributing plates** (e.g. aluminium checker plates) shall be applied and aligned with the panel direction on:

- A Pathways
- B Landing zones

In cases of **increased access requirements**, such as:

- frequent access
- increased loads
- installation of heavy equipment

an **independent load bearing structure shall be provided** (see fig. 05). All loads shall be transferred directly to the supporting structure without loading the ceiling panels.

In cases of **fire event** ceiling panels are **not walkable**.

C2.3 Limitations and special conditions

Ceiling panels are not intended for:

- permanent walkways
- working platforms
- load-bearing structures for suspended services or equipment
- resisting dynamic loading caused by activities such as jumping or impact from dropped objects

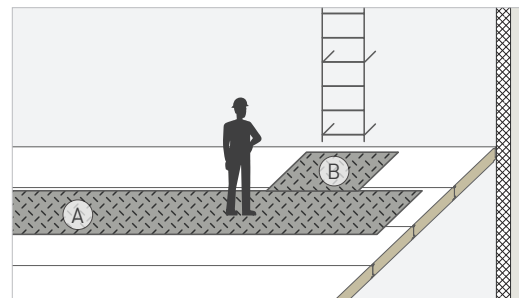


Fig. C2.1:
Limited access for maintenance
A Pathways - 3.5/5 mm aluminium checker plate
B Landing zone - 3.5/5 mm aluminium checker plate

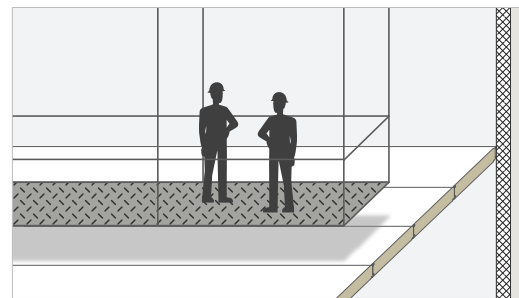


Fig. C2.2:
Frequent access → independent walkway structure

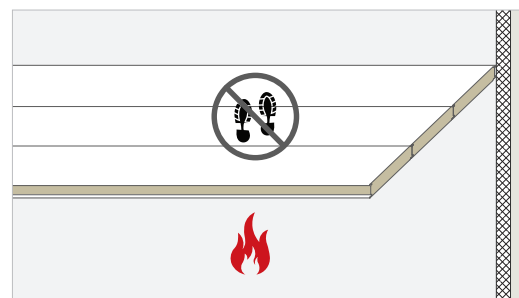


Fig. C2.3:
Not walkable. No access in case of fire



Do not walk directly on the panels. Use protective load-distributing plates.

Do not walk on Trimoterm FTV Sound panels under any circumstances.



Ceiling panels are **not walkable in fire conditions**, including during and after a fire event.



C3

Fire-resistant ceiling

Fire safety is an important consideration in ceiling design. Trimoterm panels used in ceiling applications are tested and classified in accordance with relevant fire safety standards, covering both reaction to fire and fire resistance, depending on the panel configuration and installation.

C3.1 Reaction to fire

Trimoterm sandwich panels are composed of A1 steel and A1 mineral wool. The panels themselves are rated A2-s1,d0, (B-s1,d0 for Sound panels) with no significant contribution to fire growth.

C3.2 Resistance to fire

When installed as a ceiling in accordance with the approved system configurations and detailing, Trimoterm ceiling solutions can achieve fire resistance ratings up to EI 120 (120 minutes).

For detailed fire performance classifications, span tables, fastening, and limitations for ceilings, please refer to the **Trimoterm Fire Guidelines** [document](#).



Trimoterm Fire Guidelines



Trimoterm Fire-resistant Internal wall system details

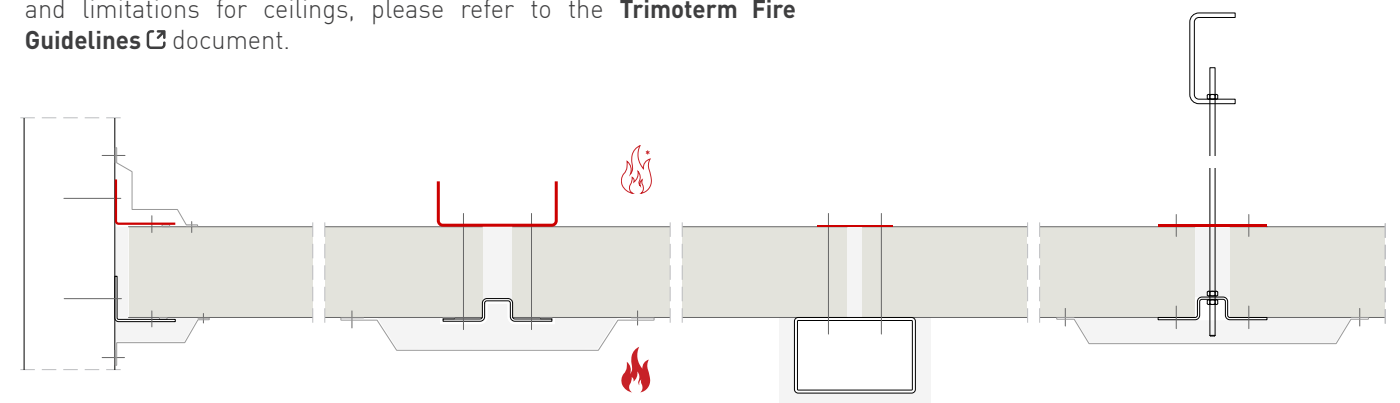


Fig. C3.1: Metal sheet fixed to panels' upper steel sheet forming a continuous plane.

* If the support structure and fixing systems are protected in such a way that the temperature increase in these will not influence the behaviour of the ceiling panels, then EXAP rules (EN 15254-7) allows application in both directions.

NOTE

Due to fire safety requirements, the outer steel sheet is, in some cases, connected to the metal sheets on the top side to form a continuous plane.

For this reason, it is important that details are executed correctly (metal sheet at the panel joint; longitudinal stitching; metal sheet at suspended ceilings).



C4

Structural design

www.trimo-group.com

Structural design must consider all relevant loads and load combinations:

- Self-weight
- Thermal effects
- Wind suction
- Installation loads
- Access loads
- Additional loads from layers and services

C4.1 Load capacities

Recommended load limits for design and use:

- Walkability load: max. 100 kg/m² (one person with tools)
- Point load: max. 250 kg at panel centre
- Permanent load: max. 20 kg/m²

These values apply only to approved system configurations. Final span and load verification must be completed for each project.

C4.2 Span verification

Span tables may be used for preliminary span estimation and are provided in the **Trimoterm FTV Load Span Tables**.

Technical Support is available for project-specific structural verification, based on actual boundary conditions and design loads.



Trimoterm FTV
Load Span Tables



Fig. C4.1: Trimoterm ceiling from above.



D

Modular Space Solutions

Flexible room-in-room concepts

Modular Space Solutions provide a fast and efficient way to create fully functional rooms within existing buildings. Prefabricated units can be delivered fully assembled or as flat-pack solutions and installed with minimal disruption, reducing on-site work and speeding up project completion.

The units combine wall, floor and ceiling systems with doors, windows and integrated building services, including electrical, sanitary, HVAC and communication installations, creating a solution ready for use.

Typical Applications

- Offices within production halls
- Meeting and training rooms
- Laboratories and quality-control areas
- Control rooms
- Technical rooms
- Welfare and changing facilities
- Security and gatehouse functions

Key Benefits

- **Flexible in Dimensions**
Standard unit lengths are available up to 30', with project-specific dimensions available on request.
- **Energy Efficient**
Insulated wall, floor and ceiling systems provide high thermal performance, with U-values as low as 0.15 W/m²K depending on the selected build-up.
- **Fire Safety**
Certified fire-resistant wall, floor and ceiling systems are available in a range of fire-resistance classifications, including solutions achieving **REI 90**, to meet project-specific requirements.
- **Easy to Transport and Relocate**
Units can be delivered fully assembled or flat-packed for efficient transport and installation. Their modular design also enables relocation, extension and reconfiguration.
- **Integrated Solutions**
Doors, windows, building services and interior finishes can be incorporated into a complete modular solution, reducing on-site coordination and installation work.

Design Flexibility

Modular units can be used individually or combined into larger office, laboratory or welfare facilities. Additional features such as glazing, secondary façades and custom finishes allow seamless integration into existing buildings.

For additional technical information and project references, refer to the Modular Space Solutions website.



www.trimo-mss.com

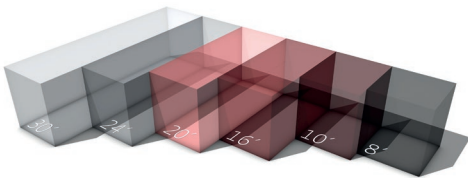


Fig D.1: Modular unit in an indoor sport facility



	Length (m)	Width (m)	Height (m)
Type	External	External	Internal
8'	2.435	up to 2.989	up to 3.0
10'	2.989		
16'	4.880		
20'	6.055		
24'	7.325		
30'	9.125		

Table D: Dimensions of Trimo MSS modular units.
Non-standard dimensions (length, width, and height) can be provided upon request.



www.trimo-mss.com



E

AirCare Solutions

Meet tomorrow's air standards. Today.

People spend much of their time indoors, where emissions from construction materials can influence indoor air quality. Selecting products with verified low emissions supports healthier indoor environments and gives architects and specifiers greater confidence when defining project requirements.

Volatile organic compounds, also known as VOCs, can be released from building materials into indoor air. Formaldehyde is one of the most closely regulated substances because elevated concentrations may affect indoor air quality and cause irritation of the eyes, nose, and respiratory system.

Regulation (EU) 2023/1464 introduces a formaldehyde emission limit of $80 \mu\text{g}/\text{m}^3$ for applicable articles placed on the European Union market from 6 August 2026. All Trimo panel solutions comply with this requirement. Selected Trimoterm solutions achieve verified formaldehyde emission levels below $10 \mu\text{g}/\text{m}^3$, supporting projects with more demanding low-emission and indoor air quality criteria.

Verified performance

- Formaldehyde emissions tested according to EN 16516
- Compliance with the European Union limit of $\leq 80 \mu\text{g}/\text{m}^3$
- Selected low-emission solutions with verified values of $< 10 \mu\text{g}/\text{m}^3$
- Independent testing by an accredited laboratory
- Support for projects pursuing low-emission material requirements under schemes such as LEED, BREEAM, WELL, Indoor Air Comfort GOLD, and French VOC A+

Available solutions

The standard formaldehyde emission requirement is met by all Trimo panel solutions. Selected Trimoterm FTV and Trimoterm FTV HL low-emission configurations are available on request. Product selection and required emission performance should therefore be defined at an early stage of the project.

AirCare Solutions help create interior spaces that not only perform technically, but also support healthier environments for the people who use them every day.



www.trimo-mss.com/downloads



$\leq 80 \mu\text{g}/\text{m}^3$

European Union formaldehyde emission limit

$10 \mu\text{g}/\text{m}^3$

Selected Trimo low-emission solutions

EN 16516

Independent emission testing



F

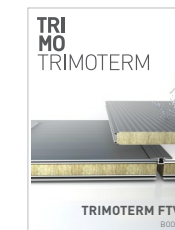
Associated tools and documents

F.1 Bookshelf

This chapter contains all the relevant technical documents for additional information on Trimoterm panels. These documents include structural design data, technical specifications, guidelines and other resources that are essential for a comprehensive understanding of the subject.



www.trimo-group.com



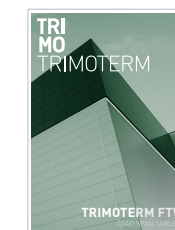
Trimoterm FTV Book



Trimoterm FTV HL Book



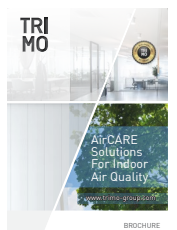
Trimoterm Technical Specification



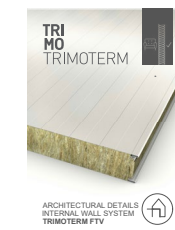
Trimoterm FTV Load Span Tables



Trimoterm Fire Guidelines



AirCare Solutions Brochure



Trimoterm Internal wall system details



Trimoterm Fire-resistant internal wall system details

F.2 Details

Our extensive library of Trimoterm details is designed to address all the challenges of your project. Each detail is available in both PDF and DWG formats.

We invite you to explore and download these comprehensive details.

F.3 BIM & CAD Libraries

We provide support with advanced design tools for AutoCAD, Revit and Archicad, specifically developed to facilitate the seamless integration of Trimoterm products into your projects.

Our 2D and 3D Trimoterm product models, complete with all necessary parameters for both design and production phases, simplify and improve your design process.

See BIM libraries tutorials at: www.youtube.com/@trimodesign



HEADQUARTERS

TRIMO D.O.O.

PRIJATELJEVA CESTA 12,
8210 TREBNJE, SLOVENIA
T: +386 (0)7 34 60 200
F: +386 (0)7 34 60 127
TRIMO@TRIMO-GROUP.COM
WWW.TRIMO-GROUP.COM

GLOBAL PRESENCE



www.trimo-group.com/en/company/about-trimo/global-presence

