

Wall Panel



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Factory Direct





Who We Are



Maxicomp Painéis (Maxicomp Indústria e Comércio de Painéis de Madeira Santo Antonio Ltda.) is a Brazilian company founded in 1997 in Campo Largo, Paraná, specialized in the manufacture of high-performance wall panels for dry construction systems.

With 29 years of experience, the company is a benchmark in solutions for mezzanines, dry floors, and technical flooring.



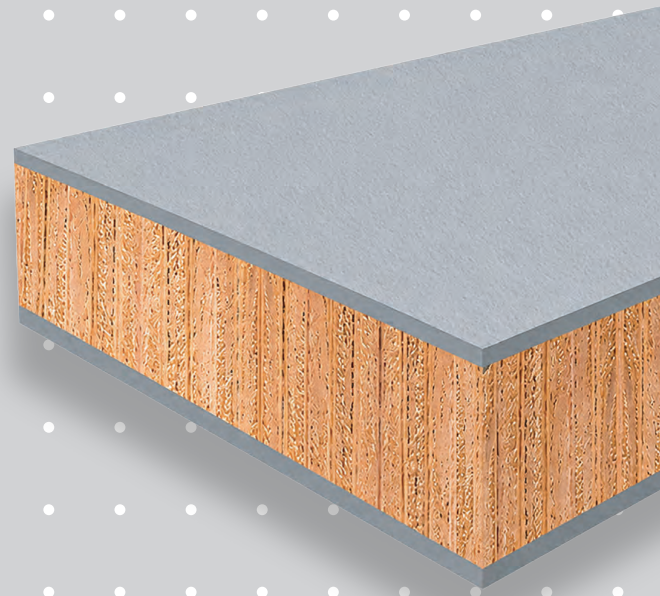
Wall Panel

General Features

The Maxicomp Wall Panel is an industrialized dry construction system composed of fiber cement boards (asbestos-free) and a structural pine wood core.

Developed to provide superior performance, the system combines:

- ▶ High mechanical resistance
- ▶ Lightweight structure
- ▶ Thermal and acoustic insulation
- ▶ Low flame spread
- ▶ Water resistance (when correctly applied)
- ▶ Fast and clean installation

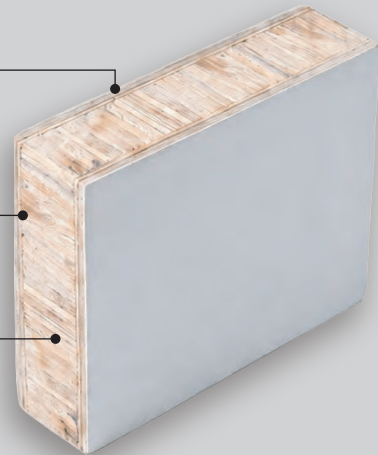


Panel Composition

2 fiber cement boards (4 mm each) – asbestos-free

2 pine veneers (3 mm each)

27 mm structural core made of pine battens.



Resistance: Supports up to 800 kg/m² with three supports, provides up to 30 minutes of fire resistance when exposed to flames, and offers water resistance when installation recommendations are properly followed.

Physical Characteristics

Approximate densities:

23 mm: 1000 kg/m³

40 mm: 800 kg/m³

55 mm: 682 kg/m³

Mechanical resistance:

Distributed load (4 supports): up to 300 kgf/m² (23 mm panel)

Distributed load (3 supports): up to 500 kgf/m² (40 mm panel)

Distributed load (3 supports): up to 800 kgf/m² (55 mm panel)

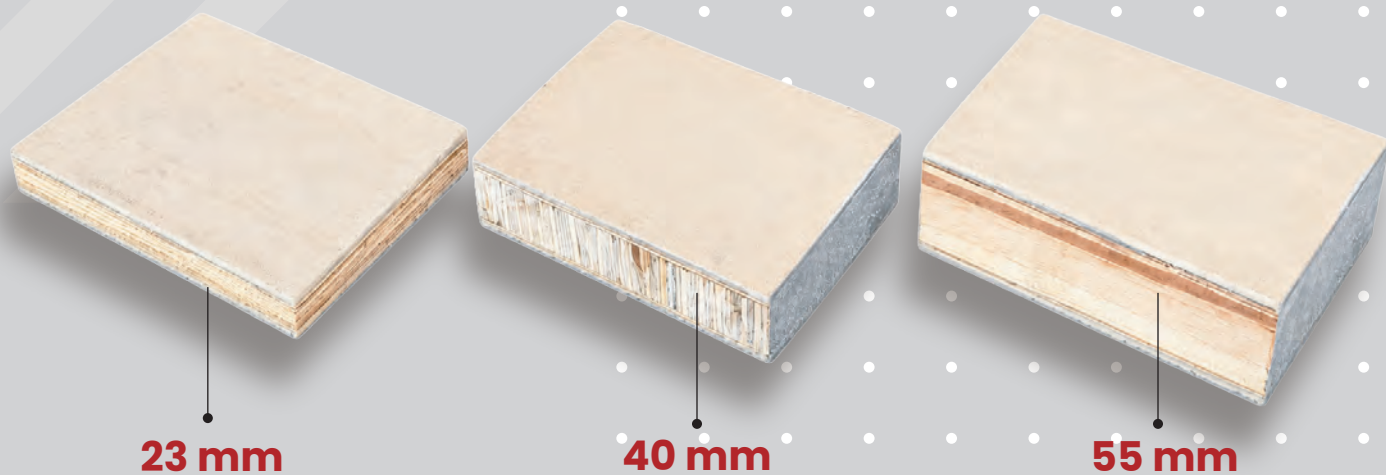
Concentrated vertical loads: 150 kgf

Axial compression resistance: 5,900 kgf

Suspended load resistance: 50 kgf

Additional technical characteristics:

The panel presents low deformation under load and excellent dimensional stability, as well as good impact resistance and low moisture absorption when properly waterproofed.



Weight and Dimensions Table

Thickness	Width	Length	Weight	Area (m ²)	Weight (kg/m ²)
23	1,2	2,50	60	3	20
	1,2	3,00	81	3,6	22,5
40	1,2	2,50	87	3	29
	1,2	2,75	95	3,3	29
	1,2	3,00	110	3,6	31
55	1,2	2,50	120	3	40

Technical notes:

- Weight per m² is the main parameter for structural calculations.
- 23 mm panel: recommended for light-duty applications.
- 40 mm panel: ideal balance between weight and strength.
- 55 mm panel: greater structural robustness.



Applications

- Floors and mezzanines
- Internal partitions
- External closures
- Facades and shafts
- Ceilings and roofing

► *Applicable for residential, commercial, and industrial projects.*

► *Suitable for dry and wet areas (with waterproofing).*

System Advantages

- High mechanical and impact resistance.
- Excellent thermal and acoustic insulation.
- Water resistance and low flame spread.
- Fast, clean, and debris-free installation.
- No special equipment required.
- Easy electrical and plumbing installations.
- Allows direct roof support.
- Suitable for indoor and outdoor applications.
- Greater usable area due to reduced thickness.

Mezzanine Application Details



Approximate weight: 60 kg/m²
Load capacity: up to 500 kg/m²

Comparison:

Reinforced concrete: ~300 kg/m²

WALL PANEL: UP TO 5 TIMES LIGHTER

Ideal solution for increasing usable area with lower structural load.

Partition Application Details

- High impact resistance.
- Suporte para cargas suspensas.
- Thermal and acoustic insulation.
- Good fire performance

Allows fixation of:

helves, frames, equipment,
and air-conditioning units.





Cutting



Cutting with circular saw (tungsten carbide blade).



Drilling with hole saw (max. 70 mm)



Apply water repellent to cut edges.



Repairs with plastic filler.

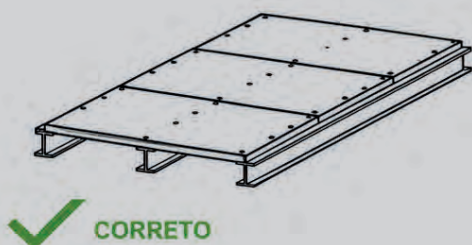


⚠ Edges must always be protected after cutting.

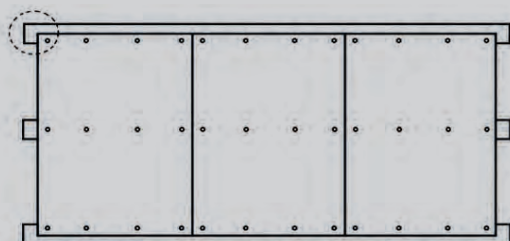


Fixing Systems

Fixing Systems The correct fixing method must be observed, ensuring proper support positioning and the recommended number of fixing screws (see illustration); 3 (three) longitudinal supports.



12 (twelve) fixing screws per panel.



Fixing Methods and Structural Design

The most common panel fixing method uses self-drilling screws according to system specifications.

It is essential to respect the correct quantity and spacing of fixings to ensure proper structural performance.

The supporting structure must be designed by the engineer responsible for the project, considering:

- Panel self-weight.
- Expected service loads.
- Spans and system usage conditions.

The approximate panel weight is 30 kg/m² and must be considered in the structural calculations together with the expected mezzanine or floor loads.

Floors

Maxicomp Wall Panels leave the factory without waterproofing and must receive appropriate finishing according to the application and usage conditions.

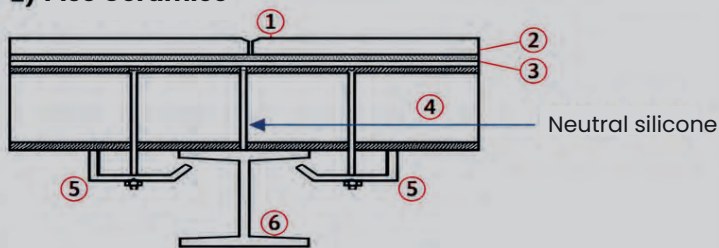
When defining the finishing system, the following factors must be considered:

- Traffic and impact resistance
- Abrasion and tensile stress
- Noise level
- Moisture exposure
- Exposure to chemical and biological agents

For ceramic, vinyl, or similar finishes applied with mortar, prior waterproofing of the panel surface is recommended.

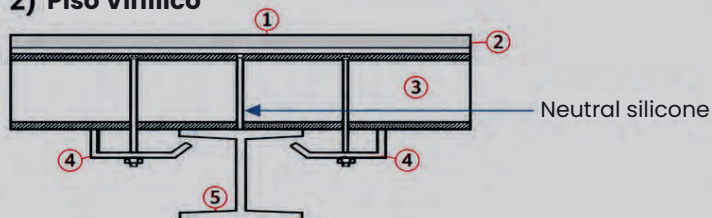
The panels allow different types of finishing according to project requirements and usage specifications.

1) Piso Cerâmico



- ① Ceramic Flooring
- ② Mortar
- ③ Stucco Mesh
- ④ Panel
- ⑤ Screw Kit
- ⑥ "I" Metal Beam

2) Piso Vinílico



- ① Ceramic Flooring
- ② Mortar
- ③ Panel
- ④ Screw Kit
- ⑤ "I" Metal Beam

WARNING

Do not use pallet jacks directly on the panels; the cement board does not support hard wheels. Our warranty does not cover board delamination.



Finishes



- **Compatible with several types of finishes:**
- Ceramic and porcelain tiles
- Vinyl flooring
- Carpets
- Paint coatings
- Epoxy resins

Recommendations:

Apply waterproofing beforehand.

For high-traffic areas:

Mesh reinforcement + AC3 mortar.

Installation



- **Dry construction system with:**
- Fast installation
- Waste reduction
- Immediate usability

Recommended:

- Level structure
- Proper support
- Installation according to project specifications



Acoustic Performance

The Maxicomp Wall Panel is an excellent solution for projects requiring enhanced acoustic performance due to its construction characteristics and system composition.

Its performance is improved by:

- High surface density
- Smooth surface contributing to sound reflection
- Heterogeneous composition of fiber cement and wood forming a highly efficient monolithic system.

For applications requiring improved acoustic insulation, the use of the 55 mm Maxicomp Wall Panel is recommended, as it provides superior performance compared to the 40 mm version.

Sound insulation performance may vary according to:

- Panel thickness
- Type of supporting structure
- Applied finishes
- Complete composition of the construction system

Acoustic performance results must be evaluated according to the specific conditions of each project.

Acoustic Insulation – 40 mm Panel

f (Hz)	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000
R (dB)	27	28	30	31	31	31	30	29	25	24	27	32	34	37	41	43	45	40

- CTS* 33

Sound Transmission Class

Acoustic Insulation – 55 mm Panel

f (Hz)	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000
R (dB)	27	29	32	31	31	31	29	27	27	29	31	34	35	37	39	41	43	45

- CTS* 33

Sound Transmission Class

Double-Wall System

For applications requiring superior acoustic performance, the use of a double-wall system with Maxicomp Wall Panels is recommended, maintaining a minimum spacing of 50 mm between panels and filling the cavity with insulating materials such as:

- Rock wool.
- Glass wool.
- PET wool.

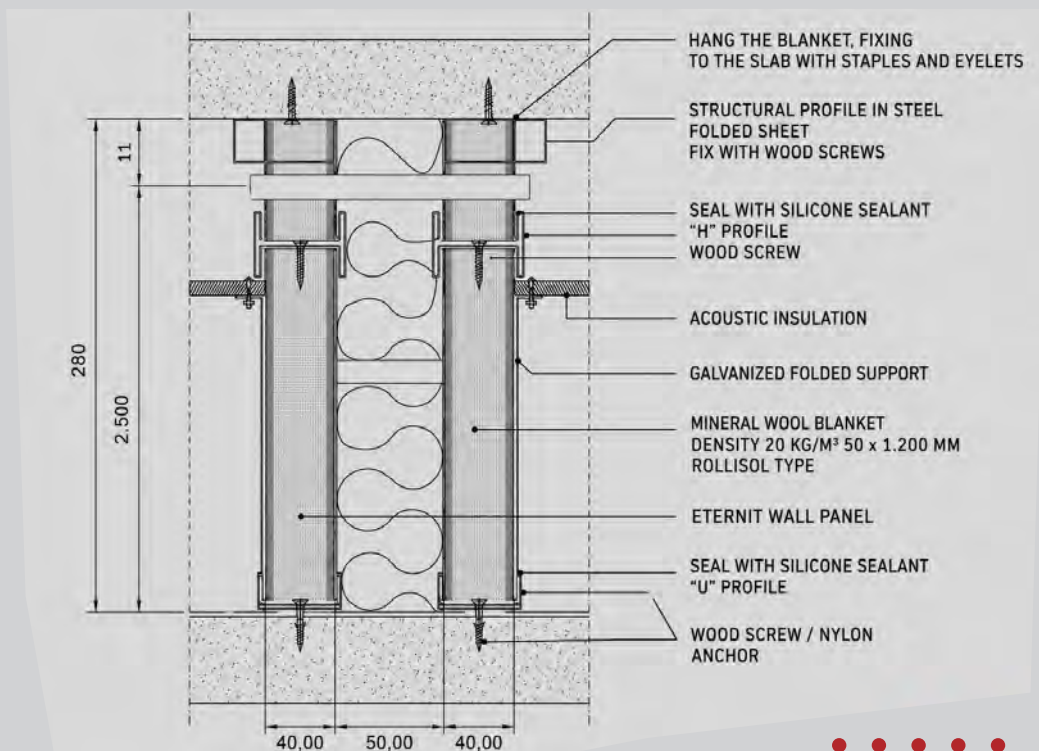
This configuration provides a significant reduction in sound transmission, especially at medium and high frequencies.

The system is recommended for environments exposed to sound sources such as:

- Conversations.
- Musical instruments .
- Equipment and machinery emitting high-frequency noise.

The use of double walls with Maxicomp Wall Panels contributes to:

- High acoustic insulation performance .
- Greater acoustic comfort between environments .
- Improved acoustic quality in residential, commercial, and industrial applications.



Fire Performance

The Maxicomp Wall Panel presents fire performance validated through technical testing, meeting the safety criteria established by applicable standards.

According to tests carried out by IPT (Institute for Technological Research), the system presents:

- Class II-A classification according to Technical Instruction No. 10 of the São Paulo State Fire Department.
- Low surface flame spread.
- Limited contribution to fire development.
- Fire resistance of up to 30 minutes under test conditions de ensaio.

This performance is related to the panel composition, consisting of fiber cement boards and a structural wood core, providing:

- Improved thermal behavior
- Delayed flame propagation
- Greater application safety

⚠ Fire performance must be considered for the complete construction system and may vary according to

- Type of structure
- Complementary materials
- Applied finishes
- Installation conditions

Consultation of specific technical reports is recommended for projects requiring fire safety regulatory validation.





REACTION TO FIRE DETERMINATION

- Classification according to BS EN 13501-1: B, s1, d1
- Test Method: BS EN ISO 13823 (SBI) and BS EN ISO 11925-2
- IPT Report: Test Report No. 1 047 007-203
- Laboratory: IPT – Institute for Technological Research



SURFACE FLAME SPREAD DETERMINATION

- The material did not reach the 150 mm mark during testing
- Flame application time: 30 seconds
- Tests carried out on edge and surface
- Test Method: BS EN ISO 11925-2



SMOKE OPTICAL DENSITY DETERMINATION

- Classification: s1
- Low smoke emission during testing
- Evaluation according to BS EN 13501-1 criteria



- Final material classification: B, s1, d1
- Material with low contribution to fire
- Low smoke emission
- No significant flame spread
- Tested by IPT Fire Safety Laboratory
- Reference report: 1 047 007-203

Transport, Handling and Storage

Maxicomp Wall Panels are supplied in batches of 20, 25, or 30 units according to order configuration.

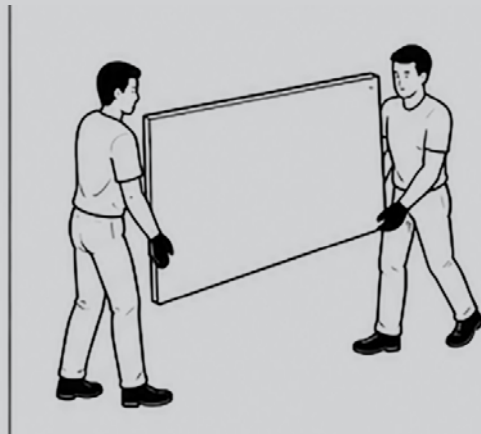
Transport and Unloading

Unloading should preferably be carried out using a forklift. When equipment is not available, the following is recommended:

- 4 people for manual unloading of panels
- 2 people for handling and internal transportation to the storage area

During transport and handling, it is recommended to:

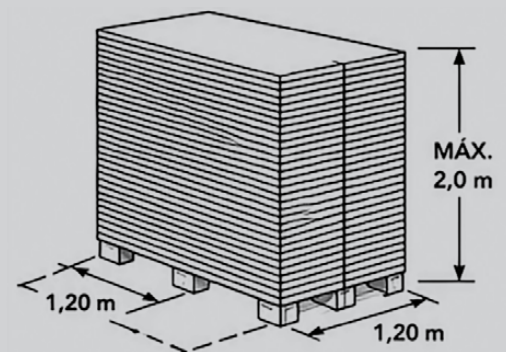
- Support panels evenly
- Transport on flat and rigid surfaces
- Avoid impacts, twisting, drops, and dragging
- Use proper handling equipment



Storage and Stacking

- Store on flat and level surfaces
- Use spacers for uniform support
- Ensure correct alignment between panels
- Avoid excessive stacking

⚠ Improper storage may compromise performance, cause deformation, and reduce product durability.



Moisture Care

The panels leave the factory without waterproofing, therefore requiring:

- Proper protection during transportation
- Storage in a dry, covered, and ventilated location
- Avoid direct contact with the ground, flooding, and environments with high relative humidity

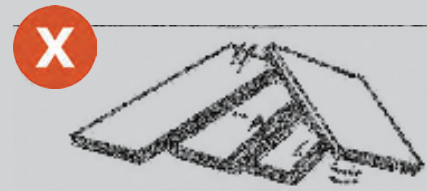
For external applications or installation of ceramic finishes, prior waterproofing of the surface is recommended.

Exposure Care

The panels must not remain exposed to intense sunlight for long periods, as natural movement of the internal wood may occur, causing warping.

They must also not be exposed to:

- Corrosive products
- Chemical solvents
- Aggressive agents without proper protection



Production at approximately 150°C.

Material free from termites, fungi, and insects.

⚠ After cutting: protect exposed areas.







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