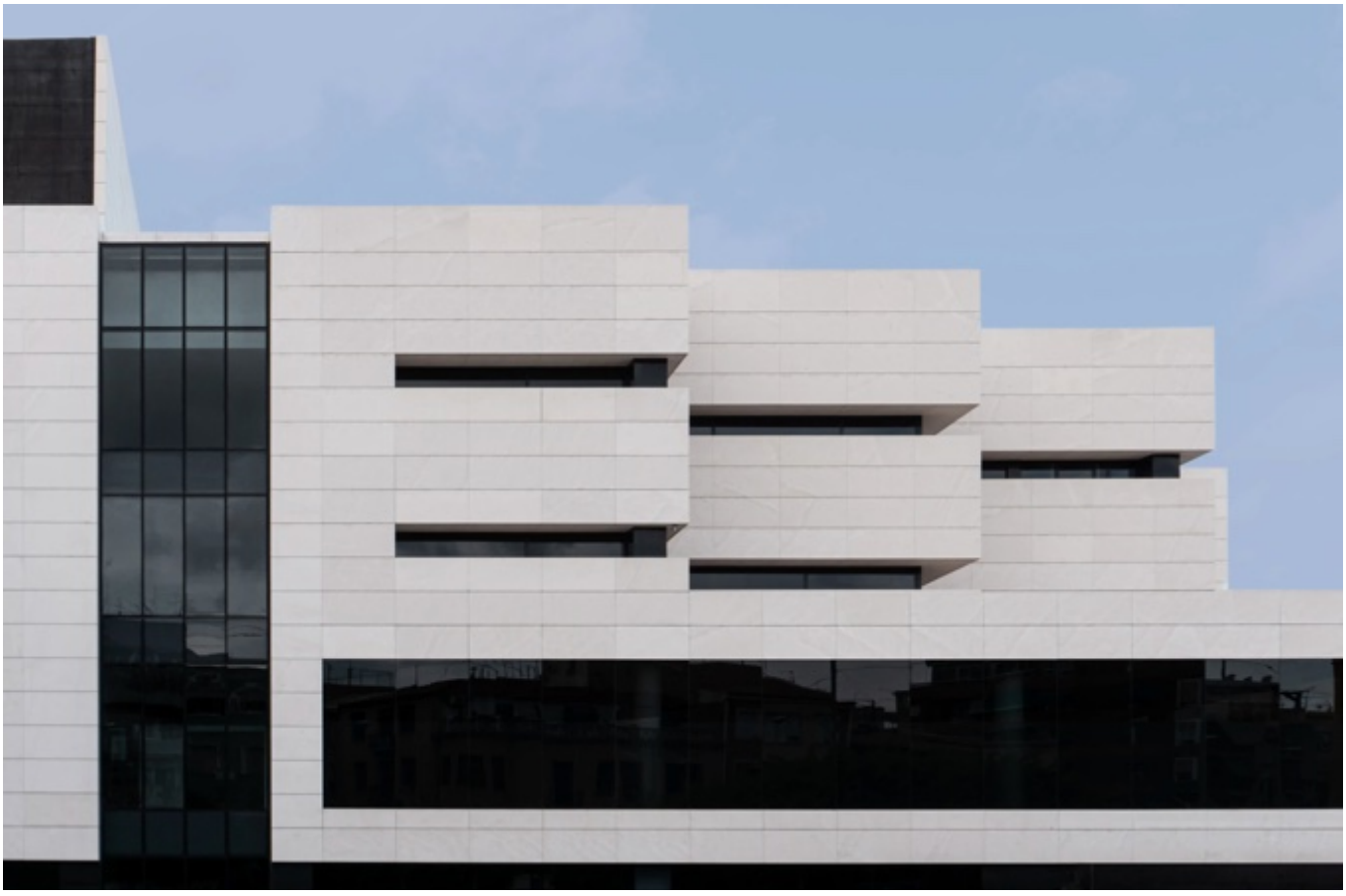
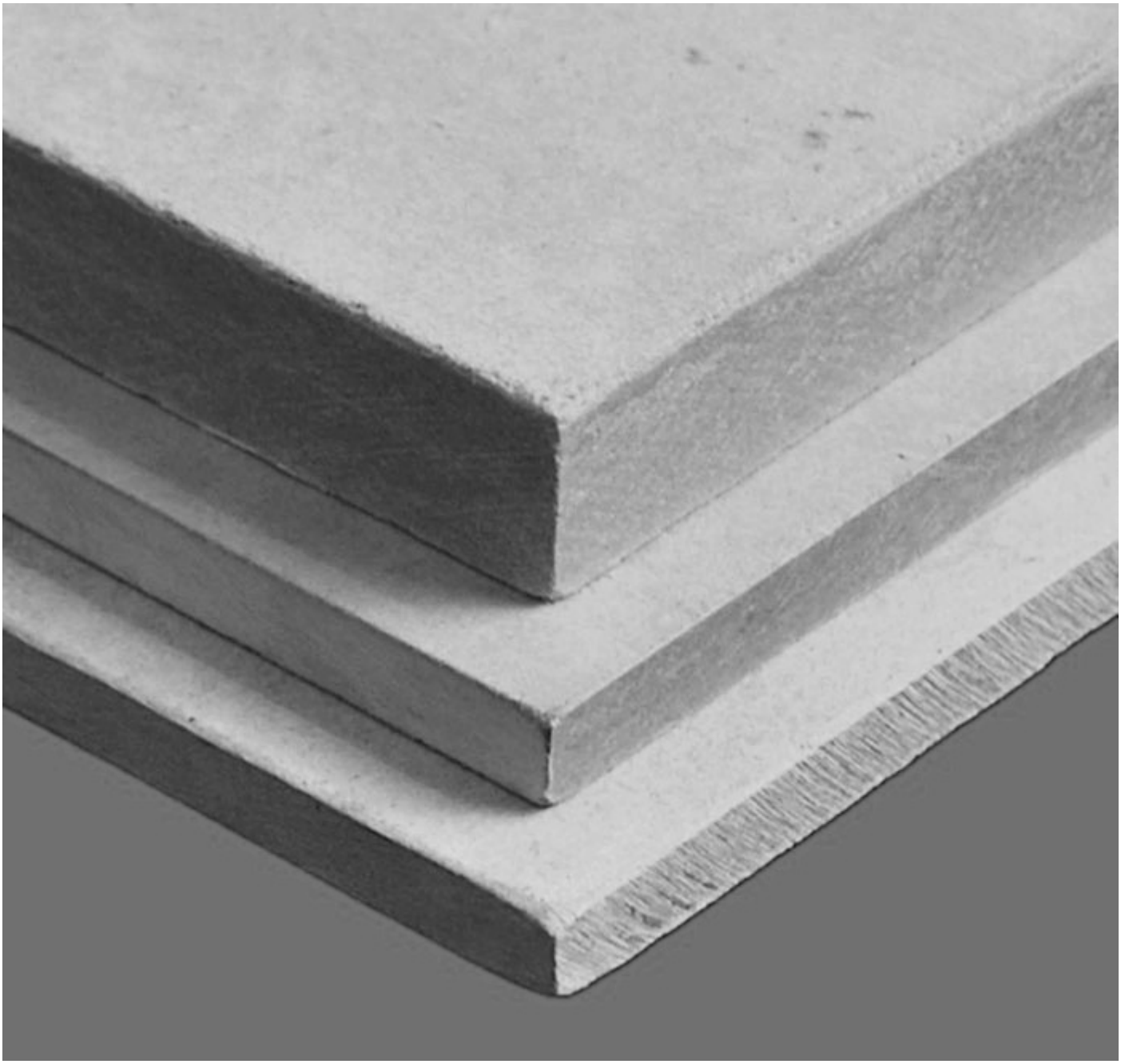
Wedge India

WegdeCEM | Insulated Cement Board

High Strength | Fire Resistant | Low Cost | Non-Asbestos





- Moisture Resistance
- Impact Resistance
- Fire Resistance
- Insect Resistance
- Heat Resistance
- Mold Resistance
- Recyclable
- Durable
- Flexible
- Health Safe
- Building Safe
- Easy cut and work with

WegdeCem | High Strength Insulated Fiber Cement Board

WegdeCem Cement Board is a building material that is commonly used in construction and home improvement projects. It is a type of sheet material that is made from a combination of Portland cement, reinforced with fibers like fiberglass or cellulose, and sometimes with additional additives for strength and durability.

WegdeCem Cement Board is known for its resilience and resistance to moisture, making it an excellent choice for applications where traditional drywall or gypsum board would not be suitable.

Here are some key features and common uses of WegdeCem Cement Board:

Water Resistance: WegdeCem Cement Board is highly resistant to moisture, which makes it an ideal choice for areas prone to water exposure, such as bathrooms, kitchens, and wet environments like showers and tub surrounds.

Fire Resistance: WegdeCem Cement Board is non-combustible and provides a good level of fire resistance. It is often used as a base for fire-resistant wall coverings or in applications where fire safety is a concern.

Durability: WegdeCem Cement Board is strong and durable, capable of supporting heavy loads. It resists rot, warping, and insect damage, making it suitable for outdoor and high-impact applications.

Tile Backer: One of the primary uses of WegdeCem Cement Board is as a substrate for ceramic and stone tile installations. It provides a stable and moisture-resistant surface for tiles and helps prevent them from cracking or shifting.

Exterior Siding: WegdeCem Cement Board is also used as an exterior siding material. It can mimic the appearance of wood siding while offering better durability and resistance to weather conditions.

Underlayment: In flooring applications, WegdeCem Cement Board is used as an underlayment for tile, vinyl, and other types of flooring materials. It helps create a level and stable surface.

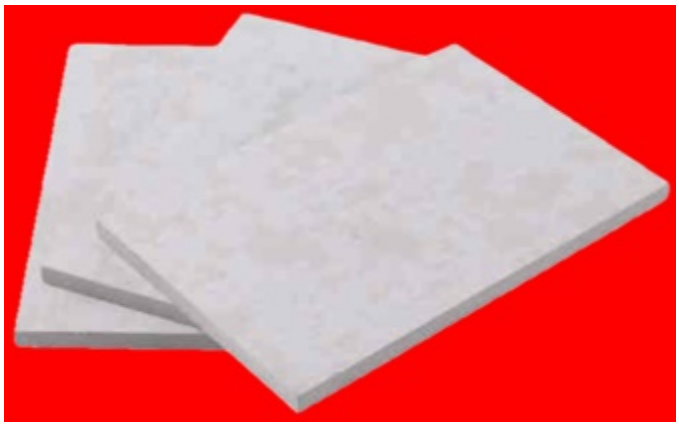
Sheathing: In some construction projects, WegdeCem Cement Board can be used as a sheathing material for walls and roofs. It provides additional strength and insulation in these applications.

Paintable: WegdeCem Cement Board can be painted, allowing for customization to match your desired aesthetic.

It's important to note that working with WegdeCem Cement Board requires proper safety precautions. When cutting or working with WegdeCem Cement Board, it's advisable to wear a mask to avoid inhaling dust, as well as eye protection and gloves to protect your hands and eyes. Additionally, use appropriate tools designed for cutting and fastening WegdeCem Cement Board.

WegdeCem Cement Board comes in various thicknesses and sizes, so you can select the one that best suits your specific project needs. Overall, it is a versatile and reliable building material that is commonly used in both residential and commercial construction.

Fiber cement boards are composite materials made primarily from cement, reinforced with fibers for added strength and durability.



The exact chemical composition of fiber cement boards can vary slightly between manufacturers and product lines, but here are the typical components:

Portland Cement: Portland cement is the primary binding agent in fiber cement boards. It is composed of calcium silicate compounds and is responsible for the board's strength and rigidity.

Cellulose Fibers: Cellulose fibers, often derived from wood pulp, are added to the cement mixture to improve the board's flexibility, impact resistance, and workability during manufacturing.

Silica: Silica is often included as a filler material to enhance the fire resistance and durability of the boards. It also helps reduce the weight of the finished product.

Calcium Carbonate: Calcium carbonate is sometimes added as a filler to improve the board's dimensional stability and reduce production costs.

Other Additives: Manufacturers may include various additives to improve specific properties of the boards, such as mold resistance, water resistance, and coloration. These additives can include proprietary formulations and may vary between different product lines.

Reinforcing Agents: In some cases, other reinforcing agents, such as fiberglass or polyvinyl alcohol (PVA) fibers, may be used to enhance the board's strength and resistance to cracking.

The exact ratios and formulations of these components can vary depending on the specific product and its intended use. Manufacturers may also incorporate technologies and additives to improve the water resistance, fire resistance, and overall performance of their fiber cement boards.

It's important to note that fiber cement boards are engineered to be durable, moisture-resistant, and resistant to various environmental factors, making them suitable for a wide range of applications, including siding, roofing, cladding, and interior wall systems. When working with or installing fiber cement boards, it's essential to follow the guidelines and safety precautions to ensure the best results and product longevity.

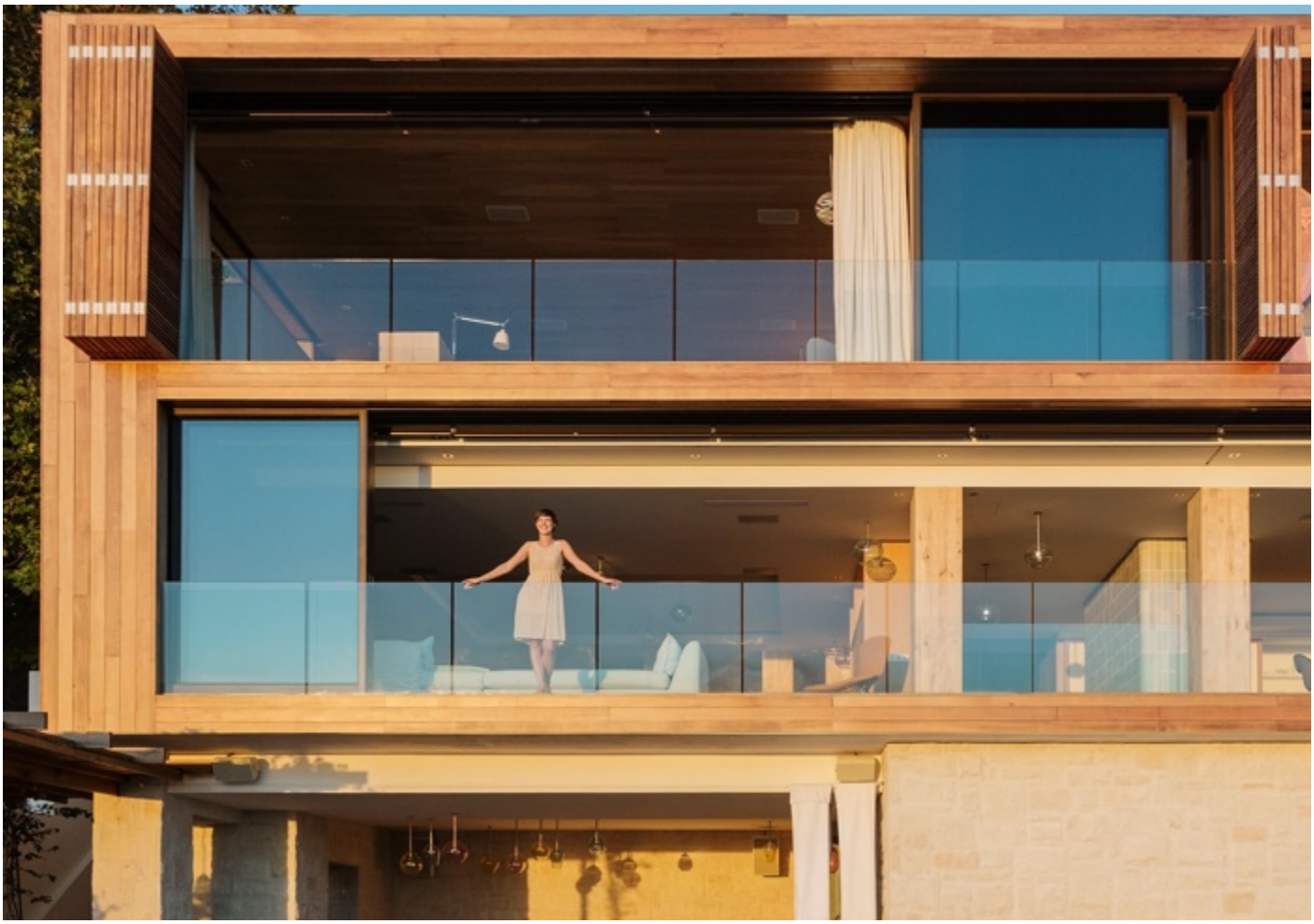
WegdeCem | Through Coloured Cement Board

Through-colored WedgeCem cement board, also known as pre-colored or pre-finished cement board, is a type of fiber cement board that is manufactured with pigments and colorants integrated throughout the material. This means that the color is not merely a surface finish or paint; instead, it runs consistently through the entire thickness of the board. Through-colored cement board offers several advantages and is commonly used in architectural and construction applications.

Features, Benefits, and Uses of Through Coloured WedegCem Cement Boards:

- **Uniform Color:** Through-colored WedgeCem cement board maintains its color throughout the board's thickness, ensuring that any surface scratches or chips won't reveal a different color underneath. This results in a consistent and long-lasting appearance.
- **Fade Resistance:** The color is UV-stable and less prone to fading due to prolonged exposure to sunlight compared to traditional painted surfaces.
- **Low Maintenance:** Because the color is integral to the board, through-colored WedgeCem cement boards generally require less maintenance and repainting than other siding or cladding materials.
- **Custom Colors:** Manufacturers offer a range of pre-finished color options, allowing architects and builders to choose from a variety of hues and shades to match specific design preferences.
- **Moisture Resistance:** Like standard fiber cement boards, through-colored versions are moisture-resistant, making them suitable for exterior applications and areas prone to wet conditions.
- **Fire Resistance:** Through-colored WedgeCem cement boards maintain the fire-resistant properties of traditional fiber cement, making them suitable for fire-rated assemblies.
- **Versatility:** Through-colored WedgeCem cement boards are versatile and can be used for various applications, including siding, cladding, fascia, soffits, and interior wall paneling.
- **Ease of Installation:** They are typically installed using similar methods as standard fiber cement boards, making them accessible for experienced contractors.

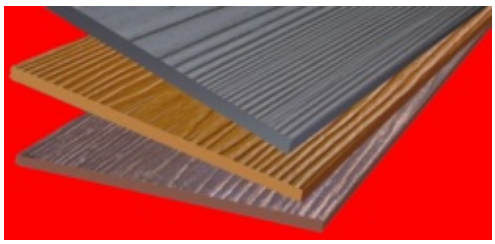
It's important to choose a through-colored WedgeCem cement board product from a reputable manufacturer to ensure quality and color consistency. Additionally, follow the manufacturer's installation guidelines and recommendations for proper care and maintenance to ensure the longevity and appearance of the material. Through-colored cement boards have become popular for contemporary architectural designs and applications where durable, low-maintenance, and aesthetically pleasing building materials are desired.



WegdeCem | Cement Board Siding Planks

WedgeCem Cement board siding planks, also known as fiber cement siding planks, are building materials used for exterior siding on residential and commercial structures. These planks are engineered to mimic the appearance of traditional wood siding while offering the advantages of cementitious materials.

Composition: WedgeCem Cement board siding planks are typically composed of Portland cement, sand, cellulose fibers (usually wood pulp or other organic fibers), and various additives. These materials are mixed and then formed into planks of various lengths, widths, and thicknesses.

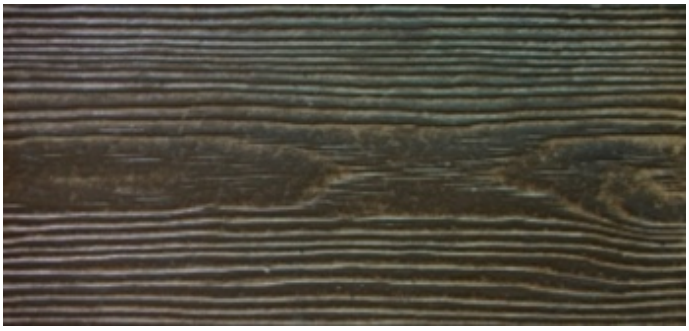


Appearance: WedgeCem Cement board siding planks come in various styles and textures to resemble natural wood siding. They can be found in styles like lap siding (where planks overlap horizontally), shingles (for a cedar shingle look), and vertical siding. The planks can also be pre-finished with a through-color finish or primed for painting.

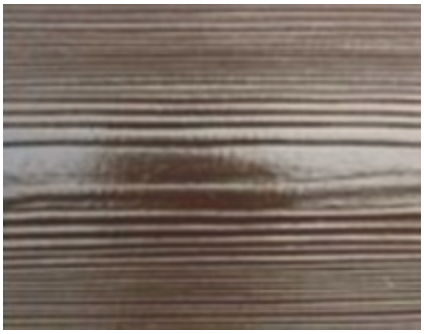
Features & Benefits:

- **Durability:** WedgeCem Cement board siding is highly durable and resistant to many environmental factors, including rot, insect damage, and moisture. It can withstand harsh weather conditions, making it a long-lasting option.
- **Fire Resistance:** WedgeCem Cement board siding is non-combustible and offers excellent fire resistance.
- **Low Maintenance:** While it may require occasional cleaning, cement board siding typically requires less maintenance than wood siding. Pre-finished planks may require even less maintenance as they resist fading and peeling.
- **Pest Resistance:** Cement board siding is not attractive to termites and other wood-damaging pests.
- **Paintability:** You can paint cement board siding planks in the color of your choice to match your home's aesthetics.
- **Installation:** Installing cement board siding planks requires skill and precision.

It's crucial to follow the manufacturer's installation guidelines, which often involve nailing or screwing the planks to a properly prepared substrate, such as plywood or a house wrap. Proper flashing and sealing at corners and joints are essential to prevent moisture infiltration.



WegdeCem | Colour Code Pre-painted Siding Planks


WEDGE-SP001


WEDGE-SP002


WEDGE-SP003


WEDGE-SP004


WEDGE-SP005


WEDGE-SP006


WEDGE-SP007


WEDGE-SP008


WEDGE-SP009


WEDGE-SP010

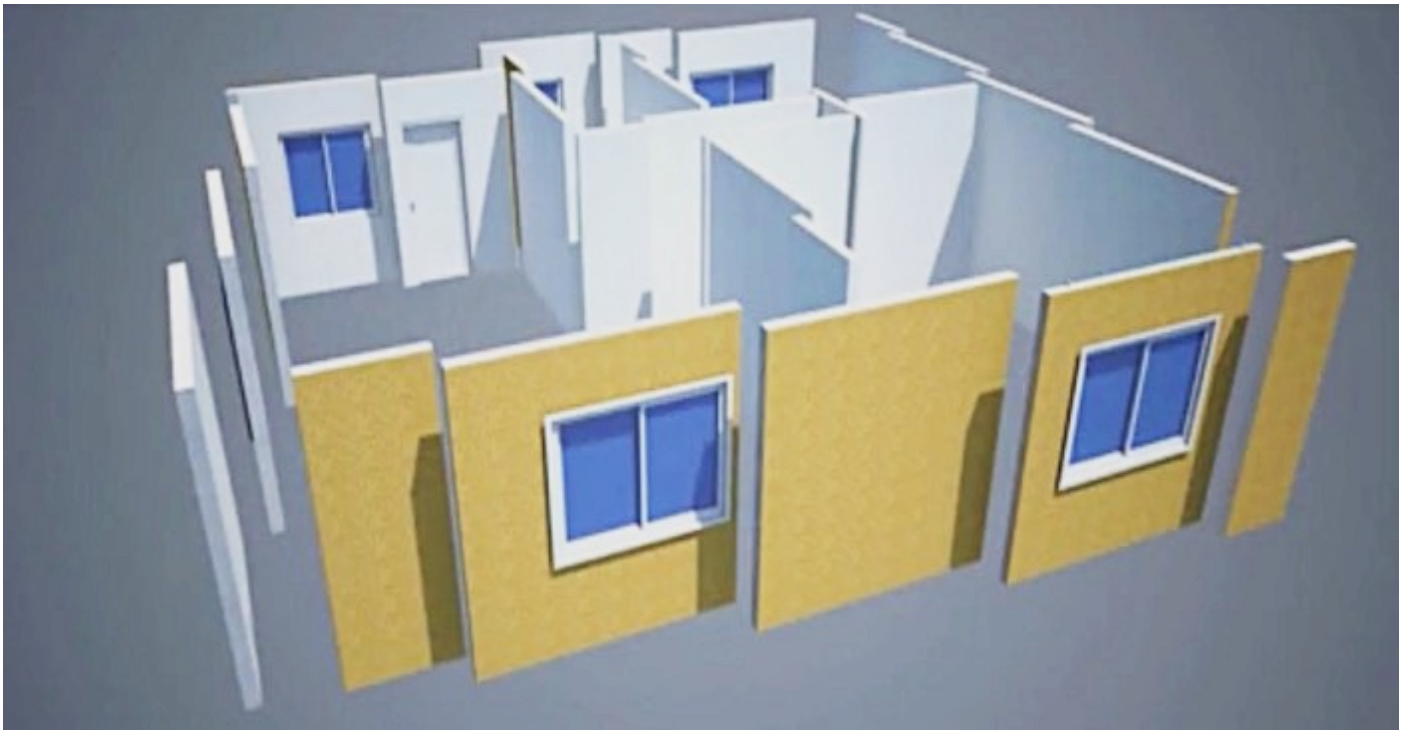
WegdeCem | Technical Properties & Specifications

Common standards for Fiber Cement Boards are ASTM C1185 - Standard Test Methods for Sampling and Testing Non-Asbestos Fiber-Cement Flat Sheet, Roofing and Siding Shingles, and Clapboards: This standard outlines procedures for sampling and testing non-asbestos fiber-cement flat sheets, roofing and siding shingles, and clapboards. It includes methods for assessing properties such as flexural strength, impact resistance, and moisture absorption. ISO 8336:2006 – Fibre-cement flat sheets – Product specification and test methods: This standard provides specifications and test methods for fiber-cement flat sheets. It covers aspects such as dimensions, surface quality, and physical properties, including flexural strength, moisture movement, and freeze-thaw resistance. ISO 8337:2006 – Fibre-cement flat sheets – Methods of test: This standard outlines the methods of testing fiber-cement flat sheets, including procedures for determining flexural strength, moisture movement, and density. The specifications of fiber WegdeCem Cement Boards specifications and characteristics:

- **Length:** Fiber WegdeCem Cement Boards typically come in various lengths, such as 8 feet, 10 feet, or 12 feet.
- **Width:** The width of fiber WegdeCem Cement Boards usually ranges from 5.5 inches to 12 inches.
- **Thickness:** Common thickness options include 5/16 inch (8 mm), ½ inch (12 mm), and 5/8 inch (16 mm).
- **Density:** The density of fiber WegdeCem Cement Boards can vary, but they are generally denser and heavier than many other building materials, such as gypsum board or plywood.
- **Natural Finish:** Some fiber WegdeCem Cement Boards come with a natural gray color that can be painted or finished on-site to achieve the desired color.
- **Pre-Finished:** Others are pre-finished with through-color pigments, offering a wide range of color options.
- **Paintability:** Even pre-finished boards can be repainted if desired.
- **Fire Resistance:** Fiber WegdeCem Cement Boards are non-combustible and offer excellent fire resistance. They are often used in fire-rated assemblies.
- **Moisture Resistance:** Fiber WegdeCem Cement Boards are generally moisture-resistant, making them suitable for exterior applications and wet areas when properly installed.
- **Pest Resistance:** Fiber cement is not attractive to termites and other pests.
- **Installation:** Fiber WegdeCem Cement Boards are typically installed using nails, screws, or adhesives. Proper installation techniques and fasteners are essential for their performance.

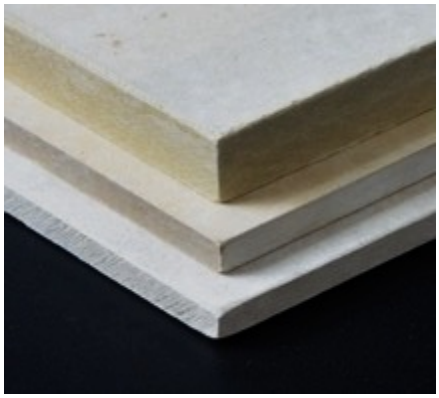
Technical properties of WegdeCem Boards

Parameters	WedgeCB13	WedgeCB14	WedgeCB16
Make OEM	Wedge	Wedge	Wedge
Non-combustibility	Non-combustible	Non-combustible	Non-combustible
Insulation	Very High	High	Medium
Strength	Medium	High	Very High
Lifespan, year	> 40	> 50	> 60
Surface spread of flame	Class 1	Class 1	Class 1
Fire Resistance, Minutes	60 @12mm	60 @12mm	60 @12mm
Thickness, mm	6 to 20	4.5 to 20	4.5 to 20
Length, mm	1220 to 3050	1220 to 3050	1220 to 3050
Width, mm	610 to 1220	610 to 1220	610 to 1220
Dimensional Tolerances, ISO 8336:2009	Pass	Pass	Pass
Density, kg/m3	1300	1450	1500 to 1600
Non Combustibility BS 476 Part IV	A1	A1	A1
Acoustic Sound Insulation System, DB	51 @6mm	51 @6mm	51 @6mm
Impact Shock Resistance, kJ/m2	9 @6mm	9 @6mm	12 @9mm
Bending strength dry, Mpa	13	15	22
Bending strength wet, Mpa	10	12	16
Screw Withdrawal Strength, N	1200	1200	1200
Moisture content, %	7.5	6 to 8	6 to 8
Frost resistance, freeze-thaw cycles	25	25	25
Moisture movement, %	0.07	0.04 to 0.07	0.07 to 0.12
Water absorption, %	35	30	32
Thermal conductivity, ASTM C177 W/(m·K)	0.167	0.25	0.27
Warm water performance, ISO 8336:2009	Pass	Pass	Pass
Soak-dry performance, ISO 8336:2009	Pass	Pass	Pass
Asbestos	None	None	None
Portland Cement, %	40	40	40
High Purity Quartz Flour, %	50	50	50
Lime, %	2	2	2
Fiber, %	8	8	8
Chemical Composition			
Calcium silicate, %	90	90	90
Cellulose fiber, %	10	10	10



WedgeCem | Comparison with MgO Boards

Cement board and magnesium oxide (MgO) board are both popular construction materials used for a variety of applications in building and construction. Each material has its advantages and disadvantages, and the choice between them depends on the specific needs of a project. Here's a comparison of cement board vs. WegdeMAG MgO board:

Features & Details	WegdeMAG MgO boards	WedgeCem Cement Board
Composition	WegdeMAG MgO boards are primarily composed of magnesium oxide (MgO), magnesium sulphate ($MgSO_4$), perlite, and fiberglass mesh.	Cement boards are typically made of a mixture of Portland cement, sand, and fibers. Some varieties may include additives to enhance moisture resistance.
Fire Resistance	WegdeMAG MgO boards are highly fire-resistant and non-combustible. They are often chosen for applications where fire safety is a concern. They can sustain higher than 1200 Degree temperatures.	Cement boards are fire-resistant and have short time fire-resistant properties. They cannot sustain higher than 300 Degree temperatures as spalling starts above 180 Degree C.
Moisture Resistance	WegdeMAG MgO boards are highly moisture-resistant and do not degrade or warp when exposed to water. They are suitable for high-humidity environments.	Cement boards are resistant to moisture but not entirely waterproof. They can swell or degrade when exposed to prolonged moisture.
Strength and Durability	WegdeMAG MgO boards are also strong and durable, with excellent impact resistance. They can be used for a wide range of applications, including structural and non-structural.	Cement boards are strong and durable, suitable for use as a substrate for tile and stone installations, as well as for exterior cladding. These boards brittle and have lower impact resistance.
Weight & Load on Building	WegdeMAG MgO boards are lighter with density of 1000 to 1100 Kg/M3, Whereas Cement boards have much higher density more than 1300 to 1400 Kg/M3	Cement boards are heavier than WegdeMAG MgO boards, which can make handling and installation more challenging.
Building Maintenance Cost	Very low maintenance cost due to its extremely low moisture absorption.	High maintenance cost due to its higher absorption of moisture in humid areas.
Installation Cost	Almost 20 to 30% lower than Cement Boards.	Higher Installation cost due to heavier weight and brittleness.
Durability & Guarantee Life	30 to 50 years.	30 to 50 years if maintained regularly.
Product Photos		

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