ARMSTRONG

CERAMSITE WALL PANEL



PRODUCT CATALOGUE 2025

LUCKY 5 CORPORATION

ABOUT US

Lucky5 Corporation is a building material manufacturer, established to meet the diverse needs of the construction industry. We specialize in manufacturing high-quality wall panels for commercial, retail, and residential projects. Our 6000 square meter production facility in San Simon, Pampanga, ensures we can cater the demands of our customers.



Main Office Address:
Aspire Corporate Plaza,
Lot 2, Super Block A, CBP 1
Pasay City, Metro Manila
Philippines



Manufacturing Plant Address:
Blk 18 L1 Global Aseana Business Park 1
Brgy. Dela Paz, San Simon, Pampanga 2015
Philippines

DIRECTION

Our Vision:
To be a global leader in sustainable pre-cast wall panel solutions, driving innovation and efficiency in the construction industry.

Our Mission:
•To manufacture and supply high-quality ceramsite wall panels that meet global construction standards.
•To promote sustainable building practices by using lightweight and eco-friendly materials.
•To create long-term partnerships with clients by providing tailored solutions and exceptional customer service.











ARMSTRONG PRE-CAST WALL PANEL

Armstrong Precast Wall Panel is a light non-load bearing compound wall material made of cement and ceramsite pulp through mixing, foaming and curing.

The product has distinct and comprehensive advantages over other pre cast boards. Armstrong is light weight, thin, has high stencil strength, good shock resistance, and high surface absorption capacity. Armstrong is also thermal, fire and sound insulated.

Compared to other traditional cored wall board which uses calcium silicate as face plate and filled with polystyrene foam particles, Armstrong Pre cast wall panel has the "inside-outside" content and is fortified by a steel mesh, thus having good physical and chemical properties and longer service life.



Physical Properties:

Lightweight
Significantly lighter than traditional aggregates.

Insulating
Excellent thermal and sound insulation properties.

Durable
Resistant to crushing and abrasion.

Porous
Contains numerous air-filled cavities.





Cross Section

Chemical Properties:

Non-toxic
Safe for various applications.

Stable
Chemically inert and resistant to environmental degradation.

PRODUCT STRUCTURE



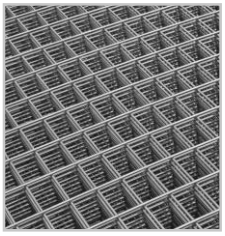
CERAMSITE
- Lightweight and porous
- Provides excellent thermal insulation
- Enhances soundproofing capabilities



PP FIBER
- Enhances tensile strength
- Reduces cracking and shrinkage
- Increases impact resistance



PORTLAND CEMENT TYPE I
- High strength and durability
- Excellent binding properties
- Ensures a solid, long-lasting structure



WIRE MESH Reinforcement
- 4mm wire mesh spaced 4 x 6 inches
- Provides additional structural integrity
- Improves load-bearing capacity and resistance to external forces



PROPRIETARY INGREDIENTS

Unique formulation for enhanced performance

Provides additional benefits such as improved workability and longevity



90mm x 610mm x 2400mm
120mm x 610mm x 2400mm



KEY FEATURES

1. **Lightweight and Low Density:** Reduces structural costs by optimizing the beam-column structure ratio.
2. **Seismic Integrity:** Impact resistance is 1.5 times that of normal hollow blocks-built walls.
3. **Sound Insulation:** Provides sound absorption and insulation, with a sound insulation rating of 46 dB for 120mm thickness panels.
4. **Fire Resistance:** Can endure fire for more than 4 hours at temperatures as high as 1000°C without emitting toxic gases.
5. **Waterproof and Moisture-Proof:** Excellent water and moisture resistance, suitable for wet areas like kitchens and basements.
6. **Heat Preservation:** Manages heat preservation and adjusts air humidity automatically according to the seasons.
7. **Environmental Protection:** Grade A product that is not harmful to humans and is non-radioactive.
8. **Clean and Efficient Construction:** Dry construction method, flat on both sides, increasing efficiency up to 15 times compared to hollow block wall structures.
9. **Space Saving:** Increased usable area as plastering is unnecessary, available in 90mm and 120mm thicknesses.

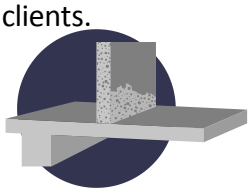
Up to 5.5 MPa Compressive Strength	700 - 800 kg/m3 Density	≥ 46 dB Sound Insulation
4 h Fire Endurance	≥ 600 kg Flexural Strength	≥ 1500 N Hanging Force

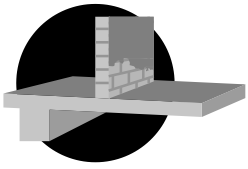


KEY FEATURES

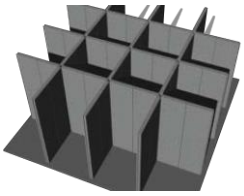
Lightweight and Low Density

ARMSTRONG PRE-CAST WALL PANEL is light in weight with a low density. It reduces the structural cost of a standard building by optimizing the beam-column structure ratio, thereby allowing increased savings to clients.

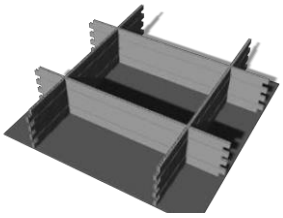




Any interval is acceptable when the floor is more than 250kgs per square meter. The weight of wall doesn't affect the structure.



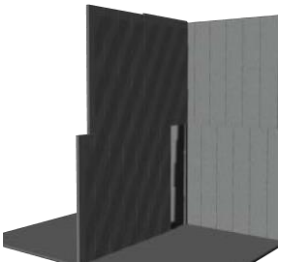
ARMSTRONG WALL PANEL



HOLLOW BLOCK WALL

Good Seismic Integrity

due to their lightweight and high strength, their low density reduces seismic forces, while durability and reinforcement enhance earthquake resistance.





KEY FEATURES

Fire Resistance

- **Extended Fire Endurance:** The panels can endure fire for more than 4 hours at temperatures as high as 1000°C.
- **Non-Toxic Emissions:** Even under extreme heat, the panels will not emit any toxic gases, maintaining a safe environment.
- **Post-Assembly Stability:** Once assembled, Armstrong Precast Wall Panels provide excellent stability and integrity.
- **Effective Fire Containment:** The panels effectively control fire and smoke within the affected area, providing crucial time for evacuation and firefighting efforts.
- **Minimized Damage:** By containing the fire and preventing its spread, the panels help avoid serious life-threatening situations and significant property losses.



Waterproof and Moisture-Proof

- Superior Material Composition: The surface of the panels is crafted from a mixture of cement and ceramsite, providing robust water and moisture resistance.
- Ideal for Wet Areas: Perfect for use in kitchens, basements, and other moisture-prone areas. The panels will not become loose, permeable, or deformed, nor will they suffer a reduction in strength due to moisture absorption.
- Proven Performance: Experiments demonstrate that even without any additional waterproofing, the cement in the panels can form a watertight pool body. The back of the panel remains dry, with no trace of moisture, and no condensation occurs in humid conditions.
- Long-Term Durability: Unlike common brickwork, which is not moisture-resistant and can have its smearing layer peel off over time,

Sound Insulation

- Advanced Material Composition: The honeycomb structure of the cement and ceramsite mixture on the panel surface enhances sound absorption and insulation.
- Enhanced Joint Design: The concave/convex slot joints between the panels further improve their sound insulating properties.
- Superior Sound Insulation: With a sound insulation rating of 46 dB for the 120mm thickness panels, Armstrong Precast Wall Panels outperform traditional brick walls, ensuring quieter and more peaceful indoor environments.

Ceramsite enhances wall panels with exceptional thermal insulation, soundproofing, moisture resistance, and fire resistance. Its porous structure helps regulate indoor temperatures, reducing energy costs, while its acoustic properties minimize noise transmission. The hard outer shell makes it water-resistant, preventing dampness and mold growth, and its non-combustible nature ensures enhanced fire safety, making it ideal for both residential and commercial construction.

Heat Preservation

- **Effective Heat Preservation:** The high-pressure steam curing process of cement, ceramsite, and inorganic fibers, combined with the internal honeycomb structure, provides superior heat preservation capabilities.
- **Seasonal Adaptability:** The panels can automatically adjust air humidity according to the seasons, ensuring a comfortable indoor environment year-round.
- **Enhanced Comfort:** By maintaining optimal temperature and humidity levels, Armstrong Precast Wall Panels contribute to a more pleasant and energy-efficient living or working space.

Environmental Protection and Energy Saving

- **Eco-Friendly Composition:** Classified as a Grade A product, Armstrong Precast Wall Panels are made from non-toxic, non-radioactive materials, ensuring they are safe for both humans and the environment.
- **Energy Efficiency:** The panels contribute to significant energy savings through their superior heat preservation and insulation properties, reducing the need for artificial heating and cooling.
- **Sustainable Building Solution:** By choosing Armstrong Precast Wall Panels, you support sustainable building practices that prioritize both human health and environmental protection.

Clean Construction, Efficient, and Time Saving

- **Dry Construction Method:** As a completely dry construction product, Armstrong panels eliminate the need for water-based processes, reducing mess and clean-up time on site.
- **Rapid Installation:** A skilled worker can install at least 35 square meters of wall per day for walls under 4 meters in height, significantly speeding up the construction process.
- **No Plastering Required:** With flat surfaces on both sides, the wall panels do not require additional plastering, saving both time and materials.
- **High Efficiency:** The installation efficiency of Armstrong Precast Wall Panels is up to 15 times greater compared to traditional hollow block wall structures, reducing labor costs and project timelines.



Space Saving

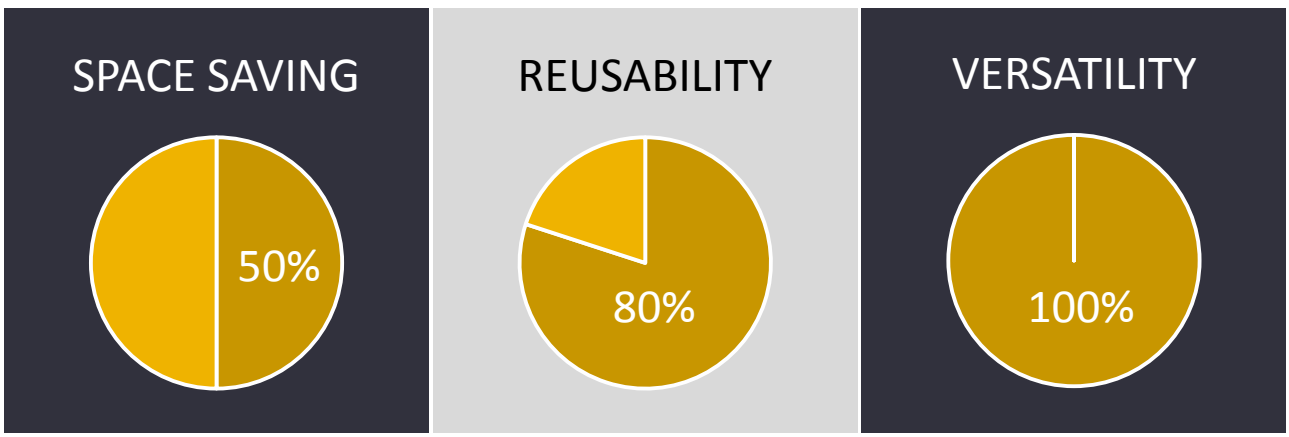
- **Armstrong Precast Wall Panels** are designed to optimize space utilization in your building projects. Here's how they provide space-saving benefits:
- **Increased Usable Area:** Since the panels do not require plastering, you gain additional usable space within your structure.
- **Versatile Thickness Options:** Available in 90mm and 120mm thicknesses, Armstrong Precast Wall Panels can be tailored to fit your specific needs, providing flexibility in design and construction.

Reusability

- **High Reusability:** The panels can be reused 70% to 90% of the time, significantly extending their lifespan and reducing the need for new materials.
- **Ideal for Flexible Spaces:** Shopping malls, office buildings, and other establishments that frequently move interior walls will find these panels particularly beneficial.
- **Easy Assembly and Disassembly:** Both assembling and disassembling the panels are simple and quick processes, enhancing efficiency and minimizing downtime.
- **Reduced Construction Waste:** The high reusability of the panels means less construction waste, contributing to more sustainable building practices.

Versatile Finishing Compatibility

- **Paint:** The panels are compatible with epoxy and acrylic paints, allowing for a smooth and durable finish.
- **Wallpaper and Wall Cloth:** Easily apply wallpaper or wall cloth to the panels using glue or polyethylene, ensuring a secure and attractive covering.
- **Decoration Board:** You can attach various types of decoration boards—such as PVC boards, aluminum plates, or thin wood boards—using glue, adhesive, or any all-purpose bonding agent.
- **Marble:** For a luxurious finish, marble can be securely attached to the panels using marble glue or ceramic adhesive.



PRODUCT APPLICATION

1. Walls and Partitions:
Ideal for internal and external walls in residential and commercial buildings.
Provides thermal and sound insulation, enhancing energy efficiency and comfort.

2. Fencing:
Durable and lightweight panels suitable for perimeter fencing in residential, industrial, and agricultural properties.
Quick installation reduces labor time and costs.

3. High-Rise Buildings:
Lightweight panels reduce structural load, making them ideal for high-rise applications.
Fire-resistant properties provide added safety.

4. Modular Construction:
Precast panels enable faster assembly of modular buildings for housing, offices, and schools.

5. Retrofitting and Renovation:
Perfect for upgrading existing structures without adding significant weight.

6. Special Projects:
Tailored applications for unique architectural designs and challenging environments.

Industries We Serve:
- Residential Construction: Single-family homes, apartments, and condominiums.
- Commercial Construction: Offices, retail spaces, and warehouses.
- Industrial Projects: Factories, production facilities, and storage units.
- Infrastructure: Fencing, boundary walls, and other structural applications.





INSTALLATION GUIDE

01 CHECK AND SETUP THE AREA
Repair uneven surfaces before cleaning the area.

02 WALL POSITIONING
Use leveling device to prepare area for Armstrong wall panel installation

03 PREPARE ADHESIVE
Prepare the cement adhesive and lay it on the foundation

04 SIZING AND CUTTING THE PANELS
Cut to size using a circular saw according to specifications

05 INSTALLING THE PANELS
- Install panel in upright position
- Apply cement adhesive in between panels
- Use a claw bar to move wall panel to the desired position
- Use wood stopper to temporarily align wall panel
- Secure panels by driving 10mm diameter x 250mm rebar at 45° into panels and slab to hold in place. Use same method for joining panels together

06 GROUTING
Apply grout to panel joints

07 CLEAN UP
Remove excess grout using scraper before it dries

TOOLS AND MATERIALS



Circular saw



14” Diamond Cutting Disc


Electric Grinder


Claw bar


Electric Drill


10mm x 250mm steel dowels

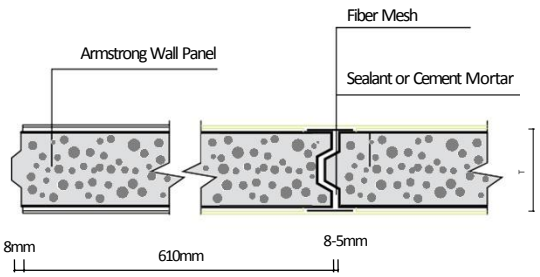

4” Cutting Disc


Wood Wedge

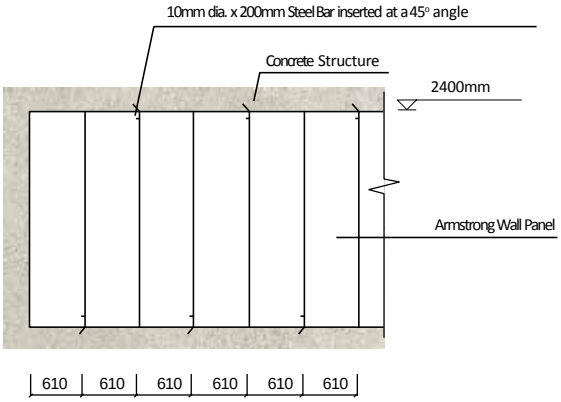

Cement Trowel


10mm x 12” drill bit

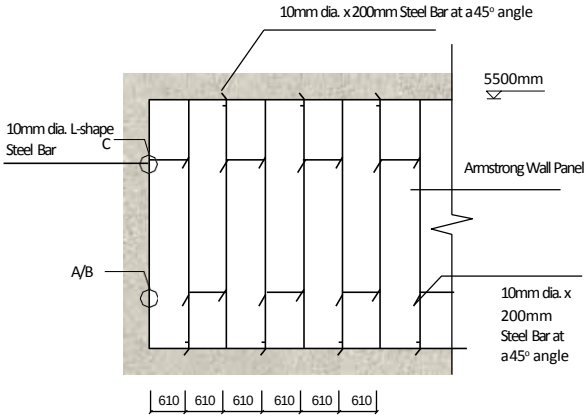
Panel-to-Panel Connection



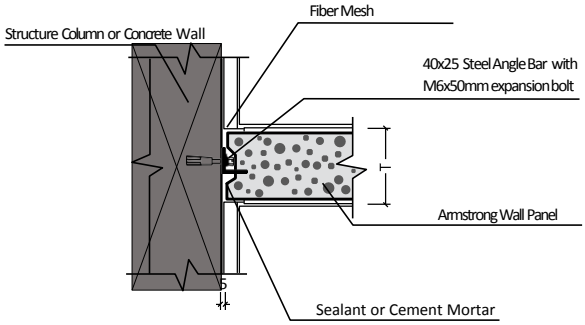
Panel Arrangement

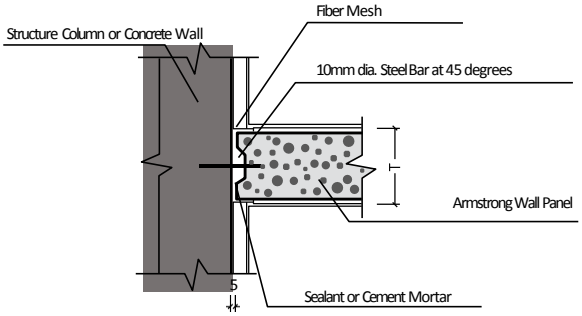


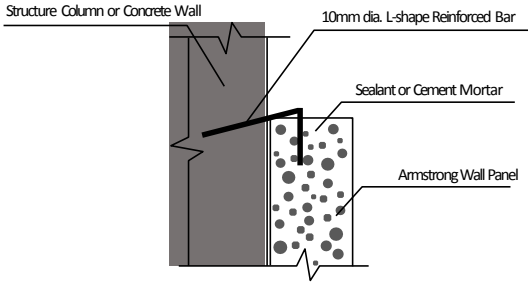
Panels Connected



Panel Fixed to Structure



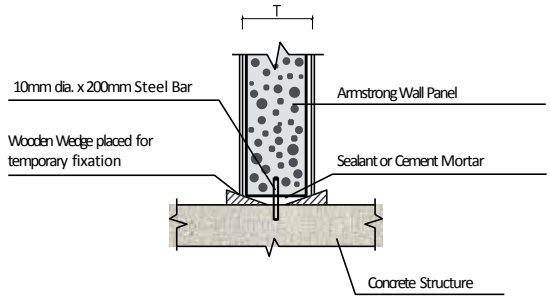


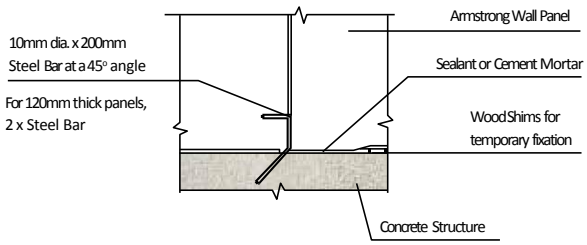




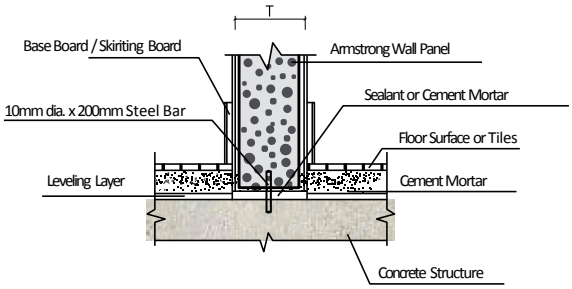


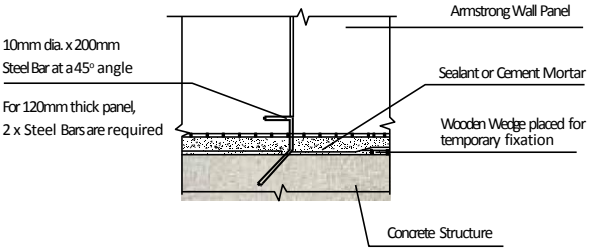
Ground Fix Guide



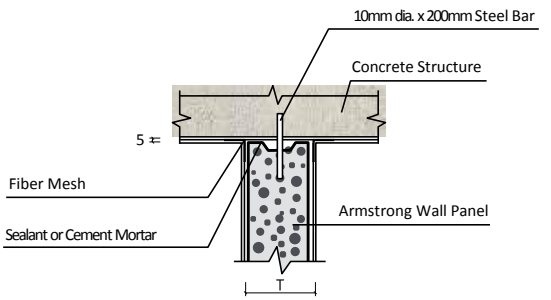


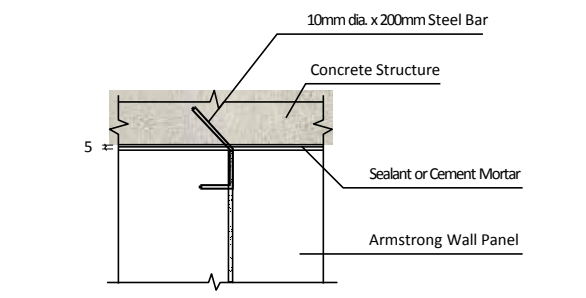
Floor Fix Guide



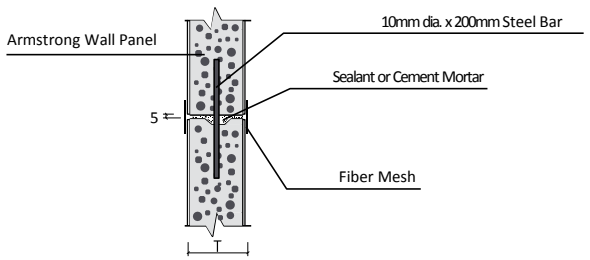


Structural Fitting

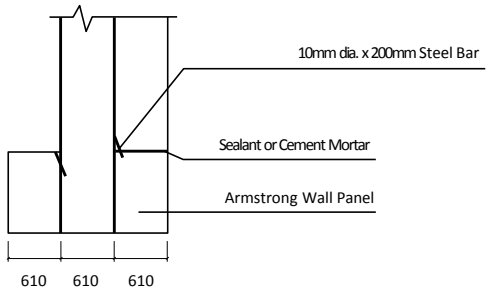




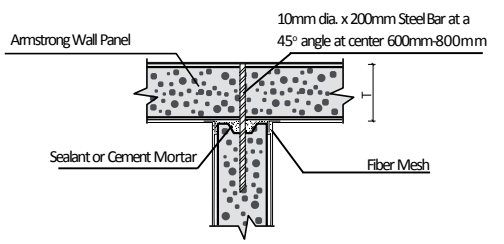
Upper and Lower Panel Fix

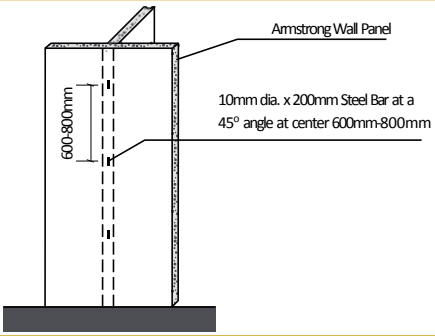


Left and Right Panel Fix

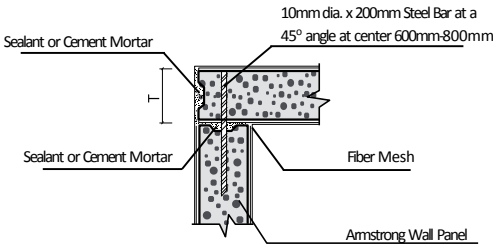


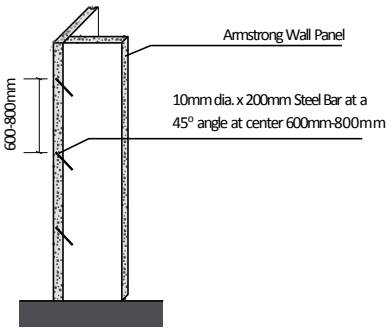
T-Wall Joint





L-Wall Joint





Summary of Installation

Anchorage at the Bottom of the Panel:

- Use a 10mm diameter steel rod.
- Drill a hole diagonally through the panel to the beam or slab soffit.
- Insert the 10mm steel rod at a 45-degree angle for secure anchorage.

Lintel Beam and Stiffener Column Requirements:

- For openings ≤1.5 meters wide, no lintel beam or stiffener column is needed for inner partitions.
- For perimeter walls, lintel beams and stiffener columns are necessary for structural stability.

Panel Arrangement:

- Install panels with alternating heights if the wall height is ≥2.8 meters.
- No cutting is required if the wall height is 2.4 meters.
- Ensure panels are properly aligned and connected for structural integrity.

Finishing:

- Apply sealant or cement mortar to all joints and connections.
- Ensure a smooth and uniform finish for the entire panel installation.



Weight per Square Meter: 69.44kg



Weight per Square Meter: 83.33kg

COMPARISON TO TRADITIONAL HOLLOW BLOCKS

Armstrong Wall Panels	ITEM	Traditional Hollow Blocks
Details		Details
90mm	Thickness	100mm
610mm x 2400mm	Size	200mm x 400mm
100kg	Weight	252kg (14kg x 18)
69.44kg	Weight/m2	175kg + 50% if plastered
1.44 m2	Wall Area	1.44 m2 (0.08m2 x 18)
X	Plastering	✓
10 - 12 mins/panel (11 mins)	Installation Time (Average)	2 - 3 mins/block (2.5 mins)
70 panels (100/1.44m2)	To Cover 100m2	1250 blocks (100/0.08m2)
770 mins (12.83 hrs) X	Total Time (100m2) Curing Time	3,125 mins (52 hrs) 24hrs

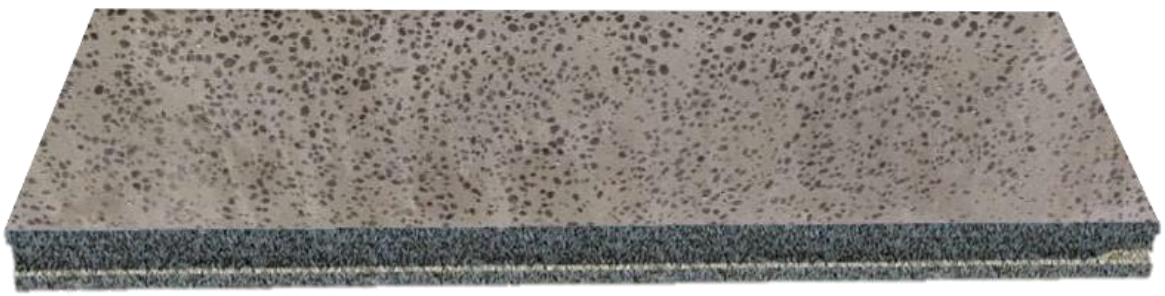
COMPARISON CHART

ITEM	Armstrong	HOLLOW BLOCK PLASTER FINISHED	AAC BLOCK	EPS SANDWICH
Compressive Strength (N/mm^2)	5.5	1.3 - 3.5	3.0 – 4.0	3.0 – 3.5
Density (kg/m^3)	700 - 800	1400 - 1900	400 - 1000	500 - 600
Fire Rating	1.5 - 4 hours	Varies	0 – 4 hours	0 – 4 hours
STC Rating (dB)	42 - 46	Up to 40	Up to 39	Up to 50
Toxic Emission	None	None	None	Possible under fire
Plaster Requirement	Not Required	Required	Required	Required
Maintenance Requirement (yrs)	5 - 10	2 - 3	2 - 5	2 - 5
Susceptible to Pests	No – Inorganic material makes it pest-resistant.	Yes – Hollow spaces in blocks can become a breeding ground for pests like termites if not sealed.	No – AAC blocks are pest-resistant due to their composition and lack of organic material.	No – EPS panels are resistant to pests but require sealing to avoid potential entry points.
Environmental Concerns	Low – Made from natural materials, Armstrong panels are sustainable and eco-friendly.	Moderate – High embodied energy and CO_2 emissions during cement production contribute to environmental concerns.	Low – AAC is made from fly ash (a waste product), making it an environmentally friendly choice.	Moderate – EPS is non-biodegradable and has environmental impacts, though it can be recycled if handled properly.
Structural Strength	Yes – High structural strength, making it ideal for structural applications.	No – Low strength unless reinforced with proper plastering.	No – Limited strength; best for non-load-bearing walls and insulation.	No – Not suitable for load-bearing walls due to its lightweight core.
Thermal Expansion Issues	Minimal – Performs well under temperature changes without significant expansion or cracking.	Moderate – Cement-based material can expand and crack under temperature variations if not properly treated.	Minimal – AAC blocks have good thermal stability but require proper sealing to prevent cracks.	Moderate – Steel or aluminum faces may expand under heat, leading to potential deformation.
Surface Vulnerability	Low – Resistant to scratches, cracks, and environmental damage.	Moderate – Surface can crack and wear over time, especially under environmental exposure.	Moderate – Surface is prone to cracking without proper plaster and finishing.	High – Vulnerable to physical damage, requiring additional layers for durability.
UV Degradation	No – Armstrong panels are resistant to UV radiation and do not degrade under sunlight.	No – Cement-based material does not degrade under sunlight.	No – AAC blocks are resistant to UV radiation.	Yes – EPS panels degrade over time if exposed to direct UV without proper protection.
Suitable for High Temperatures	Yes – Can withstand high temperatures due to its fire-resistant properties.	No – Cement-based material may degrade and lose strength under prolonged high heat.	No – Prolonged exposure to high temperatures can weaken AAC blocks.	No – EPS core may deform or emit toxic gases at high temperatures; additional fireproofing is required.
Moisture Absorption	Low – Excellent resistance to water ingress due to low absorption rates.	High – Cement-based blocks absorb water and can weaken over time without proper plaster and waterproofing.	High – AAC blocks are porous and absorb water, requiring sealing and waterproofing.	Low – EPS core resists water absorption, but panel joints need sealing to prevent moisture ingress.
Fire Resistance	Yes – Provides excellent fire resistance for extended durations.	No – Fire resistance depends on plastering and block quality; generally less resistant.	No – Limited fire resistance; additional coatings or layers are often required.	No – Requires proper fireproofing measures as EPS alone does not provide adequate fire resistance

TECHNICAL SPECIFICATIONS

Specification	90mm Wall Panel	120mm Wall Panel
Thickness (mm)	90	120
Length (mm)	2400	2400
Width (mm)	610	610
Weight (kg)	100	120
Density (kg/m3)	700-800	700-800
Fire Endurance (h)	2 - 4	2 - 4

ITEM	NATIONAL STANDARDS		TESTING INDICES	
	90 mm	120 mm	90 mm	120 mm
Shock Resistance/Time	≥ 5	≥5	≥ 10	≥ 15
Anti-Beng/Times Of Deadweight	≥ 1.5	≥ 1.5	≥ 4	≥ 5
Compressive Strength (MPa)	≥ 3.5	≥ 3.5	≥ 5.5	≥ 5.5
Softening Coefficient	≥ 0.80	≥ 0.80	≥ 0.82	≥ 0.82
Surface Density kg/㎡	≤ 90	≤ 110	≤ 70	≤ 85
Moisture Content a/%	< 12/10/8	< 12/10/8	≤ 10/9/7	≤ 10/9/7
Drying Contraction (mm/m)	≥ 0.6	≤ 0.6	≤ 0.49	≤ 0.5
Hanging Force/N	≥ 1000	≥ 1000	≥ 1300	≥ 1500
Air Sound Insulation / dB	≥ 35	≥ 40	≥ 42	≥ 46
Radioactive Activity Limit (Solid board)	≥ 1	≥ 1	≥ 1	≥ 1
Interior Irradiation Index	≥ 1	≥ 1	≥ 1	≥ 1
External Irradiation	≥ 1	≥ 1	≥ 0.2	≥ 0.4



ARMSTRONG

CERAMSITE WALL PANEL

L U C K Y 5
CORPORATION



Contact Information:

Mobile / Viber:
0917 8858823
0976 1040363

Email:
lucky5corporation@yahoo.com
jj.tee.chua@gmail.com

Website:
www.lucky5corp.com

Manufacturing Plant Address:
Blk 18 L1 Global Aseana Business Park 1
Brgy. Dela Paz, San Simon, Pampanga 2015
Philippines

Main Office Address:
Aspire Corporate Plaza, Lot 2, Super Block A, CBP 1
Pasay City, Metro Manila
Philippines