Wall Panels with
Zinnia™ Technology
Alstrong is a part of the prestigious Worlds Window Group, an assemblage of progressive companies engaged in diverse businesses. The portfolio of business activities includes manufacturing, infrastructure, logistics, trading and mining. The operations of various companies of WWG are spread across the globe through its offices in India and 22 other countries. The group employs 2500 employees across the world and has a turnover of more than ₹6000 crores (US $ 1 Billion).

**Leading the way.** Alstrong products are helping create the vibrant new face of the Indian millennium. Leading the way since 2001, we have partnered with leading architects, builders, designers, contractors and fabricators in changing the landscape of the country for the better.

Alstrong is driven by its vision of creating a rich visual palette through its range of architectural décor material – Wall Panels with Zinnia™ Technology, Aluminium Composite Panels, Metal Laminates, Crystal Lacquered High Gloss Panels with Zinnia™ Technology and Partition Panels.

We believe that our brief is to create products that help unlock distinctive, long-lasting and edgy creativity. Reason why, our products are designed for years of durable, maintenance-free, performance across a variety of demanding environments and help create a visual aesthetic that ‘always looks new’. A promise vividly fulfilled across signature landmarks that proudly stand the test of time, and come out with flying colors.

**We have gone great lengths to be close by,** anywhere across the country. Our 20 Company Offices, 18 Warehouses, more than 300-strong, pan-India network of Sales Persons and more than 500 Distributors & Dealers ensure that we are just a call away, wherever be your project location.

**Delivery on time is our unswerving motto.** Alstrong Products reach you amazingly fast, backed by the efficiencies of our Group-owned logistics company, which has more than 500 company-owned trucks crisscrossing the length & breadth of the country.

**Alstrong is the leader in the ACP Industry.** The ever-growing confidence of our clients is reflected in the increased production and off take of our products. Today, ACP production is 50 million sq. ft. per year through our 5 ACP lines up from 1,00,000 sq. ft. in 2001.

**Sound Fundamentals. Outstanding Quality.** Anticipating the curve of demand and staying one step ahead of expectations is what drives us on a daily basis at Alstrong.
Wall Panels with

Zinnia™ Technology

Alstrong Wall Panels with Zinnia™ Technology sets new horizons in design and construction of building worldwide. Developed with Zinnia™ Technology, Alstrong Wall Panels come in variety of finishes including wooden, marble, metallic and solid colours. Alstrong Wall Panels are unique in their presentation & visual effect revolutionizing paneling concepts for horizontal & vertical applications.

Alstrong Wall Panels are cost effective and serve as an alternative to traditional methods of construction, such as bricks, stones, marble, wooden panels, etc. Added advantage to this is that it can be directly pressed with insulation material like EPS, XPS & PU to give you enhanced thermal insulation properties.

Alstrong Wall Panels are ideal for application in exterior and interior walls, wall claddings, façades & a host of other special applications that shall fire the imaginations of designers and users alike.

Alstrong Wall Panels are extremely durable and provides a strong base that can withstand extreme weather conditions.
Alstrong Zinnia™ Technology is ideal for providing all kinds of panel surfaces with long lasting durability, innovative designs and other host of features.

Panels are passed through multiple rounds of coatings using Zinnia™ Technology to achieve the highest levels of performance. Panels are pre-coated using photosensitive fluoro carbon agents and are subsequently cured using ultra violet rays. This helps panels gain improved durability, excellent surface finish, zero defects, stronger surface bond and enhanced impact resistance.

Zinnia™ is also eco-friendly as it excludes the emission of any environment unfriendly Volatile Organic Compounds (VOCs).
Product Features of Alstrong Wall Panels with Zinnia™ Technology

- Scratch Resistant
- Easy to Clean
- Solvent Resistant
- Easy to Install
- Long Life
- Anti Insects
- Sound Insulation
- Water Proof
- Fire Resistant
- Optimal Light Fastness
- Impact Resistant
- Eco friendly
- Keeps the Building Cool

WARRANTY
UP TO 10 YEARS *
* T & C APPLY
## Comparison with other materials

<table>
<thead>
<tr>
<th>Items</th>
<th>Alstrong Wall Panels With Zinnia™ Technology</th>
<th>Stone Curtain Wall</th>
<th>General Coil Coat</th>
<th>Paint and Finishing on the spot</th>
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<td>Inorganic Panel</td>
<td>Natural Stone</td>
<td>Thermosetting Resin + Wooden Fiber</td>
<td>Substrates</td>
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</table>
Test Pass by Alstrong Wall Panels
with Zinnia™ Technology

Soak / Dry Resistance
ISO : 8336 Part (E)

Alkali Resistance Test
ASTM C 650

Heat / Rain Resistance
ASTM C 1185

Acid Resistance Test
ASTM C 650

Warm Water Resistance
ASTM C 1185

Ignitibility
BS 476 Part 5

Freeze / Thaw Resistance
ASTM C 1185

Fire Propagation Index
BS 476 Part 6

Surface Spread of Flame
BS 476 Part 7

QUALITY ASSURANCE

APPROVED
<table>
<thead>
<tr>
<th>Characteristic Property</th>
<th>Standard</th>
<th>Unit</th>
<th>Alstrong Wall Panels</th>
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<tbody>
<tr>
<td>Tolerance - Thickness</td>
<td></td>
<td>mm</td>
<td>+ 0.4mm</td>
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<tr>
<td>Tolerance - Width</td>
<td></td>
<td>mm</td>
<td>± 3mm</td>
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<tr>
<td>Tolerance - Length</td>
<td></td>
<td>mm</td>
<td>± 3mm</td>
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<tr>
<td>Weight of Panel (9mm)</td>
<td>ISO 8336/IS 14862</td>
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<td>14.5 ± 10%</td>
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<td>Water Absorption (after edge sealing)</td>
<td>ASTM C 1185</td>
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<td>Pencil Hardness</td>
<td>ASTM D 3363</td>
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<td>&gt; 4H</td>
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<td>Coating Thickness</td>
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<td>Micron</td>
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<td>Acoustic Insulation</td>
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<td>dB</td>
<td>STC 30 dB</td>
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<td>Thermal Conductivity</td>
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<td>KJ/m²</td>
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<td>Modulus of Rupture</td>
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Alstrong Wall Panels with 

**Zinnia™ Technology**

Using high density cement fiber board as base material, Alstrong Wall Panels are treated on surface by UV curable technology at our state-of-the-art facility in Jammu.

**FEATURES**
- Base material has high strength because of high temperature treatment & high precision manufacturing process.
- Panels are FR compliant and can qualify for FR grade ‘A2’.
- It has good appearance and is available in all types of finishes whether it is matt, gloss or high gloss depending on the product texture. We can also offer customized finishes on request.
- Panels are weather resistant as special treatment is done on the surface during manufacturing.
- Alstrong Wall Panels comes in excellent finishes and it offers heat insulation at the same time.
- Panels have very smooth surface finish and it does not allow dust particles to settle down. It offers self-cleaning function.

**SCOPE OF APPLICATION**
Alstrong Wall Panels can be used for Interior as well as Exterior finishes for walls, ceiling, residential, commercial, hospitality, transportation hubs like Airports, Railway station, Bus stops, etc.

**Sizes are available in tiles and planks**

<table>
<thead>
<tr>
<th>Sr.No.</th>
<th>Tiles (9mm)</th>
<th>Planks (9mm)</th>
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<tbody>
<tr>
<td>1</td>
<td>300 x 600</td>
<td>200 x 1200</td>
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<tr>
<td>2</td>
<td>300 x 900</td>
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<tr>
<td>6</td>
<td>600 x 2400</td>
<td></td>
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</table>
Heat Insulating Systems using Alstrong Wall Panels

It fulfills the new requirement of the society to build green environment friendly buildings. Alstrong adopts new technology of compounding Wall Panels with insulation materials like EPS, XPS and PU to provide superior heat insulation in modern buildings. We offer this in two variants:

Single sided Wall Panel with Heat Insulating System

Double sided Wall Panel with Heat Insulating System
Solid & Metallic Colour Series

Sparkling Black - CBK1401
Terracota - CBS1004
Standard shades are available in Matt & High Gloss is available on request.
Standard shades are available in High Gloss & Matt is available on request.

- Botticino - CBM1801
- Crema Marfil - CBM1802
- Crema Valencia - CBM1803
- Dyna - CBM1804
- Emperador Dark - CBM1805
- Golden Portoro - CBM1806
- Light Emperador - CBM1807
- Perlato Sicilia - CBM1808
- Rosso Levanto - CBM1809
Marble Series

Satwari - CBM1810

Travertino Light - CBM1811

Travertino Dark - CBM1812
Standard shades are available in Matt & High Gloss is available on request.

- Parakan Teak - CBW2201
- Natural Oak - CBW2202
- Dark Afro - CBW2203
- Summerapple - CBW2204
- Light Afro - CBW2205
- Akro Ruby - CBW2206
- Tyrol Pine - CBW2207
- Akro Havana - CBW2208
- Noce Nero - CBW2209
Indian Apple - CBW2210
Mahogany - CBW2211
Walnut Tirano - CBW2212
Light Cherry - CBW2213
Sun Pear - CBW2214
Akro Rust - CBW2215

Wooden Series
PIONEERING

Brought to you by Alstrong for first time in India. This widely opens up the new era for wall finishes using low carbon, energy saving and an environment friendly product.

DEDICATION

Alstrong is committed to bring new technology and amazing designs to enhance lifestyle of its customers.

INNOVATIVE

Alstrong has been able to create innovative solutions across a vast variety of industries. It replaces expensive marble granite and wooden finishes which are heavy and time consuming to install.
Exterior Wall Installation:

Alstrong Wall Panels can be installed through various methods described below:

1. Wall Panels installation with Rivets on Aluminium tubes with no gap, 6 mm and 8 mm gap
2. Wall Panels installation with Fixed clamp directly on wall with 8 mm gap
3. Wall Panels installation with Fixed clamps – U Groove
4. Wall Panels installation with Adjustable clamps with Insulation – U Groove
1. Wall Panels installation with Rivets on Aluminium tubes with no gap, 6 mm and 8 mm gap

**Step 1:**
Wall preparation: Wall need to be plastered well and painted with black paint before starting the installation

Substructure: The aluminium substructure basically consists of vertical support profiles which are mounted on the wall using angle brackets.

Fix Aluminium tubes (thickness - 2 mm) on the wall with help of Aluminium angle brackets. Maintain horizontal distance between two aluminium tubes to a maximum of 450 mm (18”)

Sizes: 25 X 75 mm (1” X 3”) for horizontal joints between 02 planks
       25 X 40 mm (1” X 1.5”) for all other planks

**Step 2:**
Use from standard sizes of Wall Panels as per the customer requirement. Installation can start from the Lower corner from left or center depending on uniformity of the facade.

**Step 3:**
Drill Alstrong Wall Panel – plank with the help of 5 mm drill bit at a distance of 25mm from both the edge

**Step 4:**
Install the plank on the wall with the help of rivet gun. Use Rivet gun recommended by Alstrong for better results. Only use Rivets supplied by Alstrong.
2. Wall Panels installation with fixed clamp directly on wall with 8 mm gap

**Step 1:**
Preparation: Wall preparation: Wall need to be plastered well and painted with black paint before starting the installation.

To achieve visually appealing facade and cost efficient installation, choose from standard sizes of Alstrong Wall Panels, depending on the site requirement to minimize manual cutting at the site thereby saving on time.

**Step 2:**
Fix clamps on the wall with the help of 6 X 65 mm SS Fastener & maintain 400 mm (maximum allowable gap is 450 mm) distance between adjacent clamps both horizontally & vertically. In case of uneven surface align clamps with the help of washers so that level is maintained between the panels.

**Step 3:**
Fix panel on to the clamps. Fill the remaining gap between resting face of wall panel groove and clamp with Alstrong recommended adhesive silicone as shown in figure 1,2 & 3. Installation can start from the lower corner from left or center depending on uniformity of the façade.

**Step 4:**
There would be gap of 8 mm open in between the planks to give it a natural look. Repeat the process for further installing the panels.
Alstrong Wall Panel

Brick Wall

5mm air gap

(6x65mm) Fastener

8mm open groove

Alstrong recommended adhesive silicone

Alstrong recommended adhesive silicone

Power coated clamp face

Clamp Size: 40 x 25 x 5 x 1.5 mm
Hole Dimension: Ø 5.0 mm x 15 mm
Groove: 8 mm

Clamp Size: 40 x 25 x 5 x 1.5 mm
Hole Dimension: Ø 5.0 mm x 15 mm
Groove: 8 mm

Clamp Size: 40 x 10.5 x 5 x 1.5 mm
Hole Dimension: Ø 5.0 mm x 10 mm
Groove: 8 mm

Fig. 1

Fig. 2

Fig. 3
3. Wall Panels installation with Fixed clamps – U Groove

**Step 1:**
Preparation: To achieve visually appealing facade and cost efficient installation, choose from standard sizes of Alstrong Wall Panels, depending on the site requirement to minimize manual cutting at the site thereby saving on time.

**Step 2:**
Fix clamps on the wall with the help of 6 X 65 mm SS Fastener & maintain 200 mm gap between adjacent clamps at coners both horizontally & vertically. Maintain 500 mm gap horizontally between clamps other than at coners. In case of uneven surface align clamps with the help of rubber washers so that level is maintained between the panels. Apply adhesive silicone at the back side of panel to provide extra strength against wind load.

**Step 3:**
Fix panel on to the clamps. Fill the remaining gap between resting face of wall panel groove and clamp with Alstrong recommended adhesive silicone as shown in figure 1,2 & 3. Installation can start from the lower corner from left or center depending on uniformity of the façade.

**Step 4:**
For filling joints between the two panels fill the gap with the help of Wheather Silicone or Epoxy based grouting as per the colour matching requirement. Repeat the process for further installing the panels.
4. Wall Panels installation with Adjustable clamps with Insulation – U Groove

**Step 1:**
Preparation: To achieve visually appealing facade and cost efficient installation, choose from standard sizes of Alstrong Wall Panel (U groove) with insulation, depending on the site requirement to minimize manual cutting at the site thereby saving on time.

**Step 2:**
Fix clamps on the wall with the help of 6 X 65 mm SS Fastener & maintain 200 mm gap between adjacent clamps at corners both horizontally & vertically. Maintain 500 mm gap horizontally between clamps other than at corners. In case of uneven surface align clamps with the help of rubber washers so that level is maintained between the panels. Fix panel on to the clamps. Fill the remaining gap between resting face of wall panel groove and clamp with Alstrong recommended adhesive silicone as shown in figure 1 & 2. Installation can start from the lower corner from left or center depending on uniformity of the façade.

**Step 3:**
For filling joints between the two panels fill the gap with the help of Silicone or Epoxy based grouting. Repeat the process for further installing the panels.
Alstrong Wall Panel

5mm air gap
12mm gap to be filled with Silicone
25mm thick insulation

Adhesive Silicone

Clamp Sizes:
- ALAC-B01: 30 x 45 x 5 x 2.5 mm
  Hole Dimension: Ø 5.0 mm x 20 mm
- ALAC-B02: 30 x 45 x 5 x 2.5 mm
  Hole Dimension: Ø 5.0 mm x 20 mm
- ALAC-B03: 15 x 45 x 5 x 2.5 mm
  Hole Dimension: Ø 5.0 mm x 20 mm

Alstrong recommended adhesive silicone
Interior Wall Installation:

Alstrong Wall Panels can be installed through various methods described below:

1. Wall Panels installation with adhesive - No Groove
2. Wall Panels installation with adhesive - V Groove
3. Wall Panels installation with Fixed clamps – U Groove
1. Wall Panels installation with adhesive – No Groove

**Step 1:**
Measure the wall area for deciding required Plank sizes.

**Step 2:**
Choose from standard sizes of Alstrong Wall Panel as per the customer requirement.

**Step 3:**
Use Alstrong recommended adhesive silicone to fix the sheet on the Wall. Apply the adhesive silicone as per instruction given on the pack and fix the sheet on the wall. It is recommended to use 6mm silicone bead thickness or 10mm diameter of silicone globule with approx minimum consumption of 300ml /m².

**Step 4:**
Repeat the above procedure for installing further panels.
2. Wall Panels installation with adhesive – V Groove

**Step 1:**
Measure the wall area for deciding required Plank sizes.

**Step 2:**
Choose from standard sizes of Alstrong Wall Panel with V Groove as per the customer requirement.

**Step 3:**
Use Alstrong recommended Adhesive or Structural Silicone to fix the sheet on the Wall. Apply the Adhesive / Silicone as per instruction given on the pack and fix the sheet on the wall. It is recommended to use 6mm silicone bead thickness or 10mm diameter of silicone globule with approx minimum consumption of 300ml /m².

**Step 4:**
Paint V Groove exposed surfaces with weather proof paint as per color matching requirements or fill it with epoxy grouting.

Repeat the above procedure for installing further panels.
3. Wall Panels installation with Fixed clamps – U Groove

**Step 1:**
Preparation: To achieve visually appealing facade and cost efficient installation, choose from standard sizes of Alstrong Wall Panels, depending on the site requirement to minimize manual cutting at the site thereby saving on time.

**Step 2:**
Fix clamps on the wall with the help of 6 X 65 mm SS Fastener & maintain 200 mm gap between adjacent clamps at coners both horizontally & vertically. Maintain 500 mm gap horizontally between clamps other than at coners. In case of uneven surface align clamps with the help of rubber washers so that level is maintained between the panels. Apply adhesive silicone at the back side of panel to provide extra strength against wind load.

**Step 3:**
Fix panel on to the clamps. Fill the remaining gap between resting face of wall panel groove and clamp with Alstrong recommended adhesive silicone as shown in figure 1,2 & 3. Installation can start from the lower corner from left or center depending on uniformity of the façade.

**Step 4:**
For filling joints between the two panels fill the gap with the help of Wheather Silicone or Epoxy based grouting as per the colour matching requirement. Repeat the process for further installing the panels.
Corner Joint Detail

**Internal Corner**

**Step 1:**
As shown in drawing, install the front sides of two wall panels at 90º to each other with adhesive silicone at the back side of the wall panel and between their contacting surfaces.

**External Corner**

**Step 1:**
Making of groove: Prepare groove of 4.5 mm width and 4.5 mm depth as shown in the drawing. Please use proper tool for this purpose to avoid chipping.

**Step 2:**
Apply adhesive silicone in the groove for stronger joint and insert un-cut sheet as shown in the drawing. Hold both the sheets in position for some time so that the adhesive hold them strongly.

**Step 3:**
Fill weather silicone in the groove at the joint to finish the corner joint. Please make sure that you use masking tape on finished surface so that there is no spillage of Silicone on the finished surface of Alstrong Wall Panel.

**Note for both types of corners:**
It is recommended to use 6mm silicone bead thickness or 10mm diameter of silicone globule with approx minimum consumption of 100ml /m², along with double adhesive tape of size 2mm x 22mm parallel to the edges to provide initial support to the wall panel in case clamps are not being used for installation.
Disclaimer:

1. We have made every effort to make the colours and finishes on this catalogue / screen as close as possible to the colours and finishes of the products you’ll use. However, we cannot guarantee an exact match in colours, finishes and the images on this catalogue. The representation of colours, gloss levels and metallic pigment effects and textures are limited by technology and may vary due to screen and printer settings. The catalogue is designed to help you get a better idea of our products but you should always refer to actual sample before purchasing the product.

2. Similarly installation shown in the catalogue is indicative and is for reference only. For execution at the site proper shop drawings need to be prepared by the installer for trouble free installation.