



Credits: Harish Suri, Punjabi Bagh, Delhi

THE ALL-WEATHER CHAMPION

Whether it is the intense heatwave of Rajasthan, frosty winters of Jammu & Kashmir or the endless showers of Mawsynram, India is a country of extremes. It experiences ever changing climates and diverse weather conditions beyond normal levels. To ensure a high-end, smart and long-lasting solution to all such outer influences, Merino offers you its premium range of Merino Armour External Wall Claddings which is designed to withstand these drastic climatic conditions that this tropical sub-continent possesses. These come in an assortment of high-quality luxurious designs with subtle variations that not just add style to your surroundings but also resist the damages that these conditions try to inflict. All in all, it's a range that is exclusively made in India.

MERINO LAMINATES

22109

Pearl Black

EWC

SUPERCLAD TECHNOLOGY in solids EWC range

MERINO ARMOUR™ EXTERNAL CLADDING

MERINO LAMINATES

UV Resistant Filmed EWC range (EGS grade)





About Merino

Since 1965, the journey of Merino has been an extraordinary tale of evolution. Beginning with the humble plywood, the group has constantly introduced new products based on top-of-the-line raw materials, production and technology to achieve the podium on which it stands today. As one of the world's largest manufacturers of decorative laminates, the Merino group is globally recognised as leader in the industry of laminates and surface solutions. Products, technologies and techniques may have evolved but one thing is always constant – focus on quality and the zeal to bring world-class surface solutions for our customers. Today Merino Group has a beautifully strong presence in over 80 countries with an annual turnover of over 245 million USD with diverse business interests that expand from Interior Architectural products to Information Technology to Food & Agro products.



Our Vision

Our business is built on the steady pillars of a globally relevant mission, a far-reaching vision and a three-pronged motto.

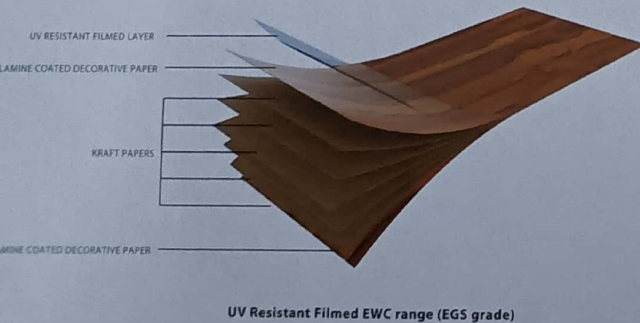
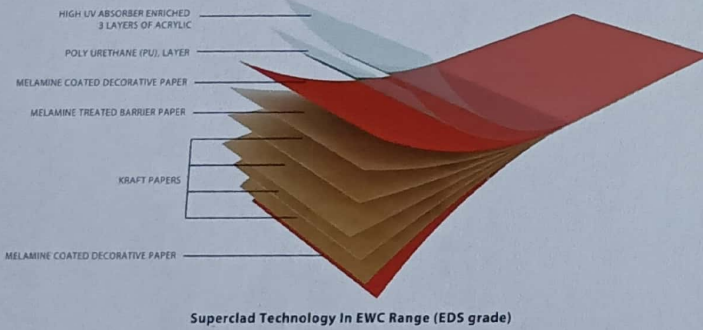
- Our Vision** : Global competence & global competitiveness; Economic excellence by synergizing western work culture & Indian ethos.
- Our Mission** : Universal wealth through trade & industry
- Our Motto** : Economy | Excellence | Ethics
- Excellence in Economy is** : Economic, when founded on work ethics
Sustainable, when nourished by moral ethics
- Our Inspiration** : "Arise, awake and stop not till the goal is reached" - Swami Vivekananda

TECHNOLOGY THAT STANDS APART

MERINO ARMOUR TECHNOLOGY

Merino Armour External Wall Cladding epitomizes beauty and toughness. It has been built with the superior external cladding technology called "**Merino Superclad Technology**" which makes the exteriors enduring to the core and helps it withstand the impact of erratic weather conditions.

A special EWC range with Superclad Technology has a UV resistant top coating treated with Poly Urethane (PU) and Acrylic to protect the exterior wall from the harmful Ultra-violet rays, which prevents fading and significantly enhances durability. The other EWC range comes with UV resistant **Filmed Layer** and is manufactured under high pressures and temperatures which yields a highly durable and dense EWC panel; hence, making Merino Armour External Wall Claddings truly superior and strong for your exteriors.

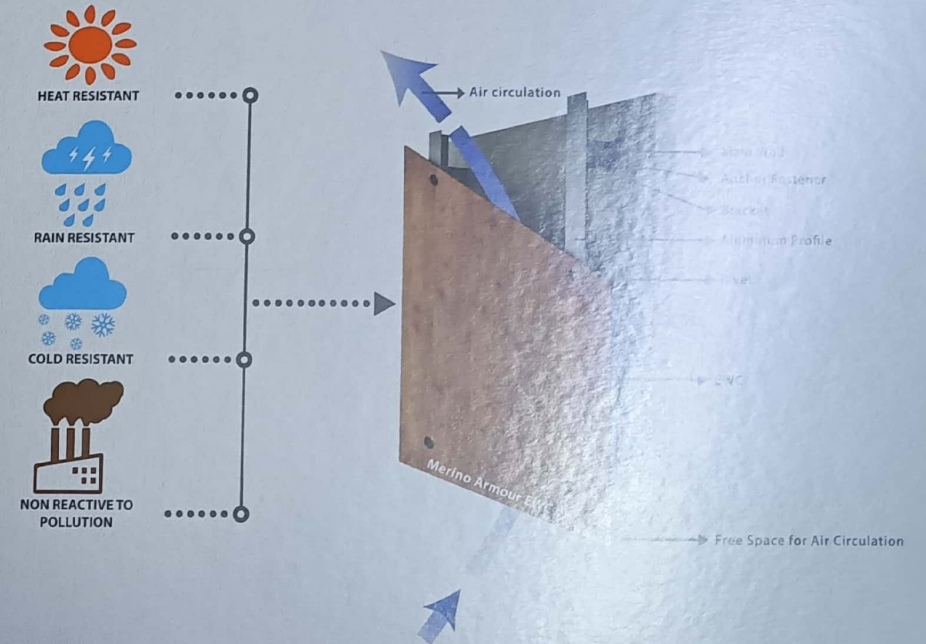


5

THE ENERGY SAVER

ARMOUR'S ENERGY SAVING SYSTEM

Merino Armour External Wall Cladding is not only an innovative, durable and aesthetic shield to your exterior; it also has a natural mechanism which embodies an efficient 'Energy Saving System'. A natural insulation i.e. an air cavity gets created between the wall and the External Wall Cladding. This air gap facilitates continuous air ventilation that reduces heat or moisture effect on base structured wall thus, allowing retention of indoor temperature. The ventilation process contributes to reduced levels of energy consumption and also avoids corrosion of the exterior surfaces. The buildings are now better ventilated providing more comfortable indoor environment and ensuring significant energy saving.



DUE TO ITS SPECIAL VENTILATION TECHNOLOGY, MERINO ARMOUR IS ENERGY-EFFICIENT, SUSTAINABLE, INNOVATIVE AND LONG-LASTING PROTECTOR TO YOUR HOME'S EXTERIOR.

6



ARMoured AGAINST ALL ODDS

The special Armour robustly justifies its name for the exteriors. Merino's Armour is the ultimate weatherproofing shield to safeguard your exterior surfaces against everyday weather variations and extreme climatic conditions. It is truly the superhero in the world of external claddings.



Against ALL WEATHER:

Highly weather resistant even when exposed to extreme cold or heat conditions and extreme levels of humidity.



Against UV:

A special UV protected treatment makes the claddings UV resistant and prevents discoloring under long exposure to direct sunlight.



Against CLIMATIC SHOCK:

It is resistant to sudden change in temperature and humidity in the atmosphere.



Against CORROSION:

Absolutely corrosion free unlike other external cladding products.



Against GRAFFITI:

Any writing marks made on the surface can be easily removed using soap water or hot water.



Against TERMITES:

Highly resistant to termite and fungal attack.



Against MOISTURE:

Highly moisture resistant hence, ideal for use in all types of exterior cladding.



Against IMPACT:

It is impact resistant and has a very good modulus of elasticity due to the modified phenolic resin.



Against ABRASION:

It has superior abrasion and wear resistance capabilities which gives it good lifespan.



Against FLAME:

Special edition claddings are resistant to high temperatures and flame conditions. EWC is available with flame retardant grade.



Armoured against all odds for 10 years.

*Applicable for Superclad

CERTIFICATIONS



14177 Columbian Walnut

Craving for a Green Project, Mr. Sathyaiah

EXCELLENCE IN QUALITY

Merino firmly believes that trust is built by delivering high quality and repairable products that adhere to the global standards of quality assurance and environment safety, thus ensuring reliability and credibility in all its deliverables.



GRIHA

Green Rating for Integrated Habitat Assessment (GRIHA) was adopted as the national rating system for green buildings by the Government of India in 2007. Merino is GRIHA-certified for its Sustainable Building Material.



The EPH

Merino Compact is EPH-certified and holds a proof of performance in the building industry for panelling and cladding.



GREENGUARD

GreenGuard Certification ensures that a product has met some of the world's most rigorous and comprehensive standards for low emissions of volatile organic compounds (VOCs) into the air. Merino Compact testifies it.



GREENGUARD GOLD

Merino Compact adheres to GREENGUARD Gold standard that ensures products are acceptable for use in environments such as schools and healthcare facilities.

THE ARMOUR-SCAPE

Explore the endless external possibilities of claddings...

Merino Armour External Wall Claddings can adorn many external surfaces and it gives a new protective dimension to different kinds of spaces. Let's have glance at these possibilities of using EWC for specific sites of your building.

- 1 Ceilings
- 2 Ventilated Facades
- 3 Balcony Claddings
- 4 Pillars
- 5 Doors
- 6 As Highlighter



OTHER APPLICATION AREAS

- Partitions • Railings • Fences • Outdoor Furniture • Public Facilities • Playground Facilities • Sports Facilities
- Sun Protection System • Office Entry Portals • Windows

Armour's Application Possibilities

Merino Armour External Wall Claddings are truly versatile in nature. But it ideally works best for these application areas.



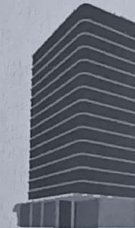
RESIDENCE
(Kothi)



SHOPPING MALL



HOTELS



OFFICE BUILDINGS
INDUSTRY &



RETAIL SHOPS

APPLICATION PLACES

- Residence (Kothis) • Shopping Malls • Hotels
- Motels • Residence (High Rise Apartments)
- Industries • Office Buildings • Retail Shops
- Airport Terminals • More...

Technical Specifications Technical Data Sheet

| PROPERTIES | TEST METHOD | ATTRIBUTES PROPERTY | UNIT | EWC | |
|-----------------------------|--------------------------|---------------------------------|-------------------|---|---|
| | | | | Standard Value | Actual Merino Armour EWC value |
| Thickness | EN 438 2-5 | 6.0 ≤ e < 8.0 | mm | Tol: ± 0.4 | ± 0.2 |
| Length & Width | EN 438 2-6 | Panel | mm | ± 10.0 | ± 10.0 |
| Edge Straightness | EN 438 2-7 | Panel | mm | ± 1.5 | ± 1.5 |
| Squareness | EN 438 2-8 | Panel | mm/m | ± 1.5 | ± 1.5 |
| Flatness | EN 438 2-9 | 6.0 ≤ e < 8.0 | mm | ± 3.0 | ± 3.0 |
| Density | ISO 1183 | Mass | g/cm ³ | ± 0.3 | ± 0.3 |
| Wear Resistance | EN 438 2-10 | Abrasion Resistance | Revolution | 3.0 | 3.0 |
| Impact Resistance | EN 438 2-21 | Dropped ball e = 6 mm | mm | 11500 = Ball Diameter 44.5 Region: 1000 1000 mm 1000 mm | 11500 = Ball Diameter 44.5 Region: 1000 1000 mm 1000 mm |
| Dry Heat Resistance | EN 438 2-16 | Resistance to Dry Heat at 160°C | Appearance | 1000 h | 1000 h |
| Resistance to Boiling Water | EN 438 2-12 T: 5.0 mm | Moisture Resistance | | % Mass Increase | ± 0.2 |
| | | | | % Thickness Increase | ± 0.2 |
| | | | | % Mass Increase | ± 0.2 |

Mechanical Properties

Exterior Grade Compact Laminate - Merino Armour EWC

| PROPERTIES | TEST METHOD | ATTRIBUTES PROPERTY | UNIT | EWC | Actual Merino Armour EWC value |
|-----------------------|------------------|---------------------|------|---------|--------------------------------|
| Modules of Elasticity | ISO 178 | Strength | MPa | ≥ 11000 | ≥ 11000 |
| Flexural Strength | ISO 178 | Strength | MPa | ≥ 120 | ≥ 120 |
| Face Screw Holding | ISO 13894-1:2000 | Strength | N | ≥ 2300 | ≥ 2300 |

Weather Resistance

Technical Data Sheet

| PROPERTIES | TEST METHOD | ATTRIBUTES PROPERTY | UNIT | EWC | Actual Merino Armour EWC value | |
|---|-------------------------------|--------------------------------|-------|-------------------------|--------------------------------|--------------|
| Light Fastness | EN 438 2-27 | Contrast | Level | ≥ Level 4 | ≥ Level 4 | |
| Artificial Weathering | EN 438 2-29 3000h 1500h | Contrast Appearance | Level | Min. Level 3 | Min. Level 3 | |
| | | | | For EGS only | For EGS only | |
| UV - Light | EN 438 2-28 | Contrast Appearance | Level | For EDS C-3, A-4 | For EDS C-3, A-4 | |
| Dimensional Stability At elevated temperature | EN 438 2-17 | Accumulated dimensional change | % | <Max 0.3% | <Max 0.3% (L) | |
| | | | | <Max 0.6% | <Max 0.6% (W) | |
| Resistance to climate shock | EN 438 2-19 | Appearance | Level | Level 5 | Level 5 | |
| | | | | Flexural strength index | Min 0.80 | For EDS 0.92 |
| | | | | Flexural modulus index | Min 0.90 | For EDS 0.84 |

Fire Retardant Properties

Reaction to Flame ASTM E-84 Flame Retardant Flame Characteristics

| PROPERTIES | TEST METHOD | ATTRIBUTES PROPERTY | UNIT | EWC | |
|--|----------------------|---------------------|---------|----------------|----------------|
| | | | | Classification | Standard Value |
| Flame Characteristics (For FR Grade EWC) | | | | | |
| Reaction to flame | ASTM E-84 | Flame retardant | Class 1 | FSI 0-25 | FSI 25 |
| | | | | SD Max. 450 | SD 40 |
| Reaction to flame | EN438-7 EN13501-1 | EURO CLASS | Class B | B, s2, d0 | B, s1, d0 |



10510, 14177.

Credits: Ar. Space Mast- Project SNN Raj Spiritua - Bangalore



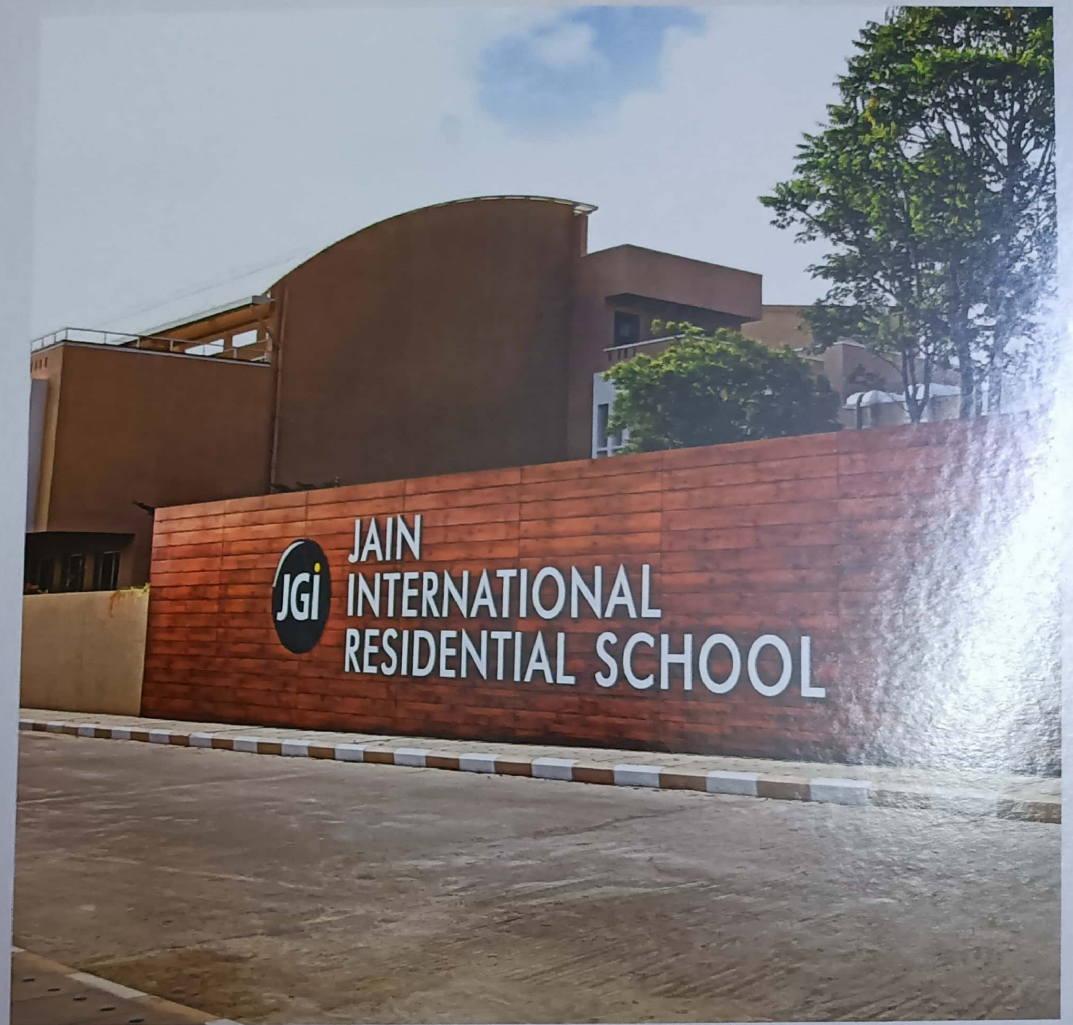
10659 - NOVOCENO PINE

Credits: Ar. Ravi Anchuri-Hyderabad



10659 NOVOCENO PINE

Credits: Ar. APSE Designs, Project: T. Sridhar Reddy Residence



10659 NOVOCENO PINE

Credits Parswanath M S director: Projects and Facilities at the JGI Group/ Jain University



VERTICAL WALNUT

Credits: Ar. Arun Bhalla



14539 BRAZILIAN VERTICAL WALNUT



14624 BROWN WOODS



10510 MAGAS WALNUT BRONZE



14640 BRAN BAMBUS



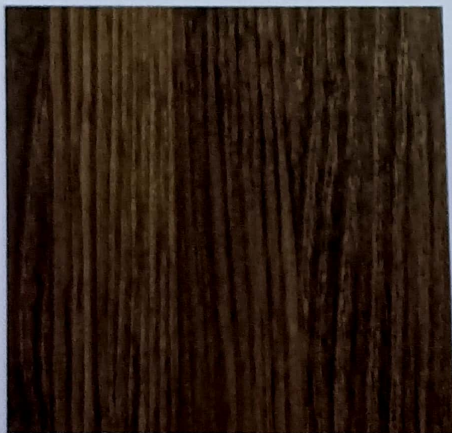
10451 ORLANDO WALNUT



10659 NOVOCEÑO PINE



14177 COLUMBIAN CADIZ WALNUT



14620 PECONIC CHESTNUT



10659 NOVOCEÑO PINE AND 40232 SOFT TRAVERTINE

Credits: Anant Kotiraju Developers - Visakhapatnam



10699 MAHAGONY

Credits: Ar. Srot, Shalimar Bagh, New Delhi



10019 SAPELLE



10392 OKOUME



10699 MAHAGONY



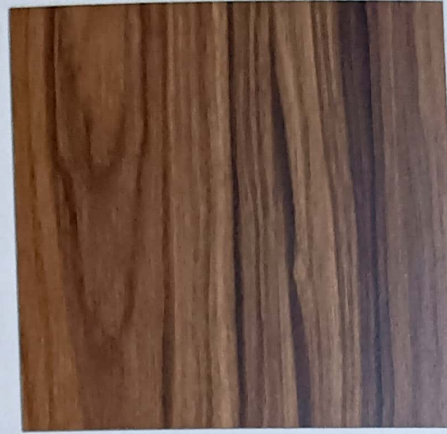
10197 NICE WOOD



14638 ODER PEARWOOD



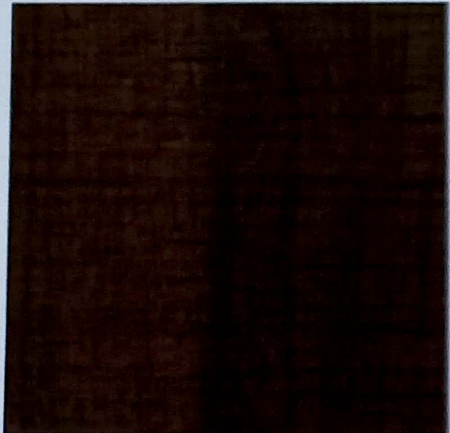
14530 TROPICAL OLMO WALNUT



14675 EBONY SEPIA



13744 MALISE WENGE



14142 AUBURN KAOS OAK



10511 MAGAS MYSTIQUE WALNUT





40232 SOFT TRAVERTINE

Credits: Harish Suri, Punjabi Bagh, Delhi



40232 SOFT TRAVERTINE



40233 SOFT TRAVERTINE



40266 MOLTEN GRANITE



40214 SKY MARBLE





40232 SOFT TRAVERTINE



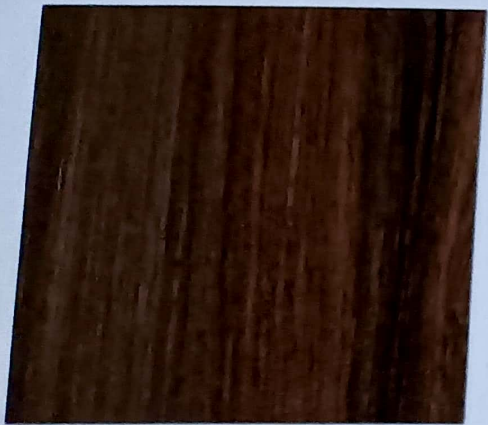
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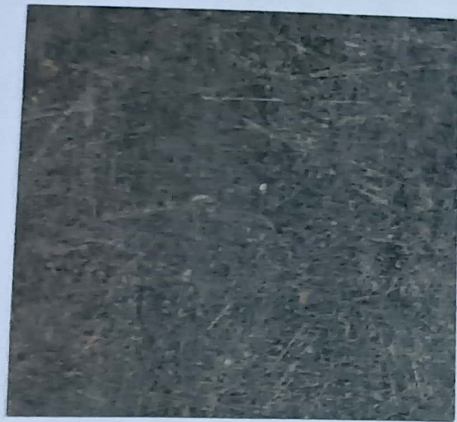
40266 MOLTEN GRANITE



40214 SKY MARBLE



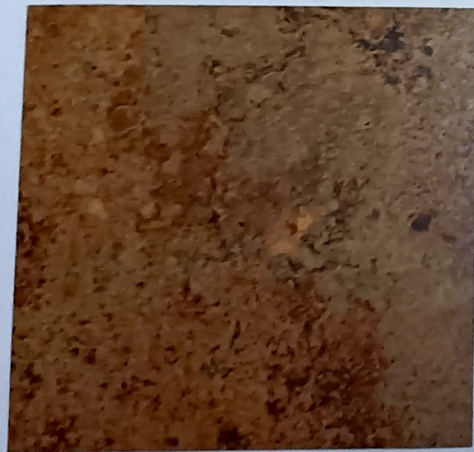
14690 ALHAMARA WOOD



44762 ALIES MICAS



14178 CHERRY CADIZ WALNUT



44789 RUSTY OXID METAL



44789 RUSTY OXID METAL

Visual representation of Armour EWC on Exteriors



Visual representation of Armour EWC on Exteriors



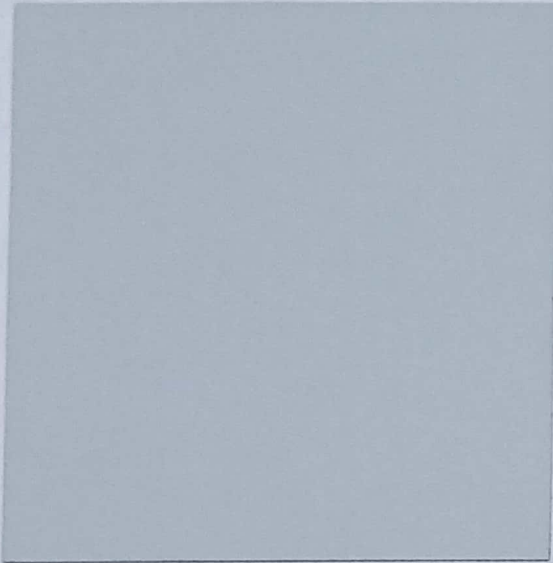
22109 PEARL BLACK



22112 ADRIATIC BLUE



21127 TAN



21069 SILVER GREY



22102 TROOPER



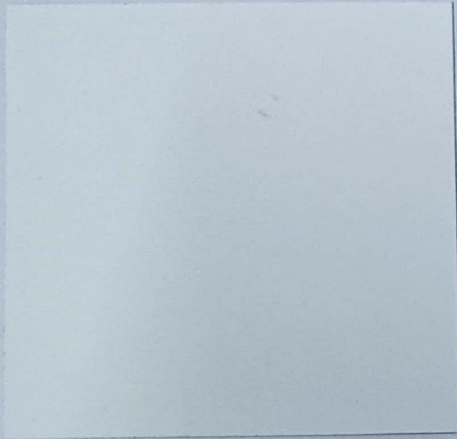
22119 AUTUMN LEAF, 22102 TROOPER, 21069 SILVER GREY

Visual representation of Armour EWC on Exteriors





Visual representation of Armour EWC on Exteriors



21341 INTERIOR WHITE



22017 PARAKEET

INSTALLATION SCHEMATICS

JUST ARMOUR IT UP

3 EASY AND QUICK SCHEMATICS TO INSTALL ARMOUR EWC

ADHESIVE:

This uses a 3M adhesive to fix the panel. It gives a clean look and is relatively cheaper.



ADHESIVE



RIVETED:

It uses a PU coated rivet and is a more trusted and extensively tested method. It makes the panel strong and durable.



RIVETED



Z-CLIP:

Imported channels are used for fixing the panels which makes it easy to install and even replace.



Z-CLIP

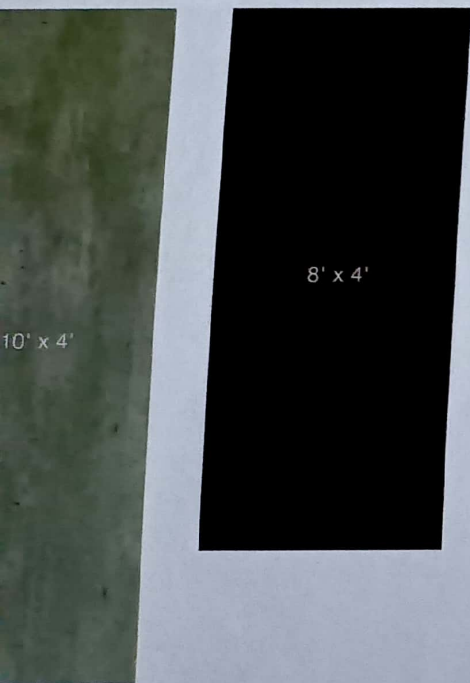


*REFER ARMOUR TECHNICAL MANUAL FOR DETAILED INSTALLATION GUIDELINES

ARMOUR'S AVAILABLE DIMENSIONS

Armour EWC panels is readily available in the following standard sizes and thicknesses :

AVAILABLE FULL SIZES WALL CLADDING*



Superclad only available in 4" width.
Larger size width available in UV
Resistant filmed EWC on request.

Panel can be customised according to customer needs.

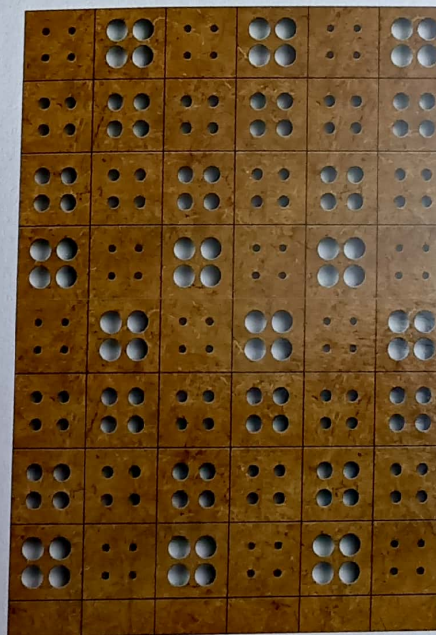
37

CUSTOMISE YOUR EXTERIORS IN AN INNOVATIVE WAY

We give you the freedom to imagine, innovate and customise your exteriors with your creative instincts and give them a strikingly appealing look. With varying forms and outputs to customized shapes, Merino Armour suits various design philosophies. Armour's External Wall Cladding panels can be made available in quad forms like tiles and planks but the possibilities to customise your exteriors using Armour's perforation technique are limitless...

Armour's perforation technique fulfills all your design needs and aspirations as it gives you the power to opt for any customized form. Choose any geometrical shape (involving straight cut), abstract patterns or perforable designs that inspires you to give a revitalising expression to the exterior.

PERFORATION



* These shapes are shown for reference only. The EWC can be customised according to your design needs.



Credits: Alkesh Gangawal and Associates, Aurangabad (Architect and Interior Designer), Sebastian Zachariah (Photography).

38

