

CONSTRUCTING A GREEN WORLD

Poljo **PLASTER WAALA**
Geo Polymer Eco Plaster - A Total Plastering Solution





Eco Friendly Economical Everlasting

The New Era Of Plastering Innovation

For thousands of years, civilizations such as the Egyptians, Greeks, Romans, and Indians built monuments, domes, and aqueducts that continue to stand the test of time. The secret behind their durability was natural bonding processes that delivered unmatched strength and resilience.

At Poljo Vyapar Kendra Pvt. Ltd., Irinjalakuda, in collaboration with Sathya Envirotech LLP, Coimbatore, we have transformed this proven science into a modern innovation for the future of construction. With Poljo Plasterwala 915 and Poljo Abel Plast 816, we deliver future-ready plastering solutions that combine eco-friendliness, superior strength, and long-lasting performance.

This is not the past—it is the next generation of plastering technology, engineered to meet today's demands and tomorrow's possibilities. A perfect blend of innovation, strength, and sustainability for modern construction

Tradition meets Innovation

Poljo Plasterwaala and Abel plast is a revolutionary, eco- friendly plastering solution developed through advanced geopolymers technology inspired by the ancient engineering marvels of civilizations like the Mayans, Egyptians, Romans and Indians, which built enduring structures without cement or steel. Some remarkable examples include **Sigiriya Fort** in Sri Lanka, built over 4,000 years ago, **Kallanai Dam** in Tamil Nadu, constructed around 2,000 years back, the historic **Madurai Meenakshi Temple**, also dating back two millennia, **Padmanabhaswamy Temple** in Kerala, with a legacy of over 1,200 years, and the iconic **Taj Mahal**, standing strong for 377 years all testaments to the strength and durability achieved through ancient construction methods. Because of these time tested techniques, these monuments have stood the test of time and Poljo Plasterwaala incorporates the same principles to deliver superior durability and longevity. Rediscovered by **French scientist Dr. Joseph Davidovits**, (in 1978). This technology is now widely used in advanced countries like Germany, Japan, UK, USA, France etc. Geopolymer materials mimic the natural strength and longevity of volcanic rock and limestone, setting through atmospheric CO₂ rather than energy intensive processes. Unlike conventional cement based plasters, Poljo Plasterwaala contains no cement, river sand or M sand, making it both sustainable Eco-friendly and cost effective. Developed by Sathya Envirotech LLP in collaboration with Poljo Vyapar Kendra, the product is tailored for Indian conditions using locally available minerals they offering superior durability, aesthetics and a significantly reduced carbon footprint. The timeless technology that shaped ancient wonders is now here for your construction needs. Choose eco friendly Poljo Plasterwaala let's build a greener, stronger future together.





Frankfurt
International Airport



University of
Queensland



NTPC Kahalgaon



IIT Indore



Global Change
Institute (GCI-2)

Geo-polymer technology has revolutionized the way we think about construction materials. With the ability to produce products comparable to natural inorganic polymers such as rocks and gemstones, this innovation offers strength and aesthetics that go far beyond what traditional OPC and PPC cement can provide. Being a green technology, Geo-polymers not only reduce carbon emissions but also deliver higher durability, resistance to wear, and long-lasting visual appeal. This makes them an ideal replacement for conventional cement-based construction.

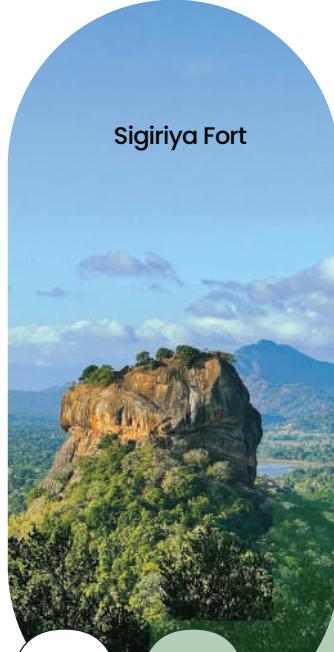
The effectiveness of geo-polymer concrete has been demonstrated in several major projects worldwide. Notable examples include the **Frankfurt International Airport in Germany (2013)**, **Brisbane, Australia (2014)**, and the **BWWA International Airport runway**, which was constructed entirely using advanced heavy-duty geo-polymer concrete. In India too, geo-polymer applications have been seen in significant infrastructure works such as the **Mullaperiyar Dam** (constructed in 1890 using lime-based technology with Geo-polymer properties), the **Delhi Metro Rail** (2012), and the **NTPC Ramagundam Road in Telangana** (2016). These successful implementations prove that geo-polymers are not just an alternative but a superior solution for building a sustainable and durable future.



Pathmanabha
Temple



Sigiriya Fort



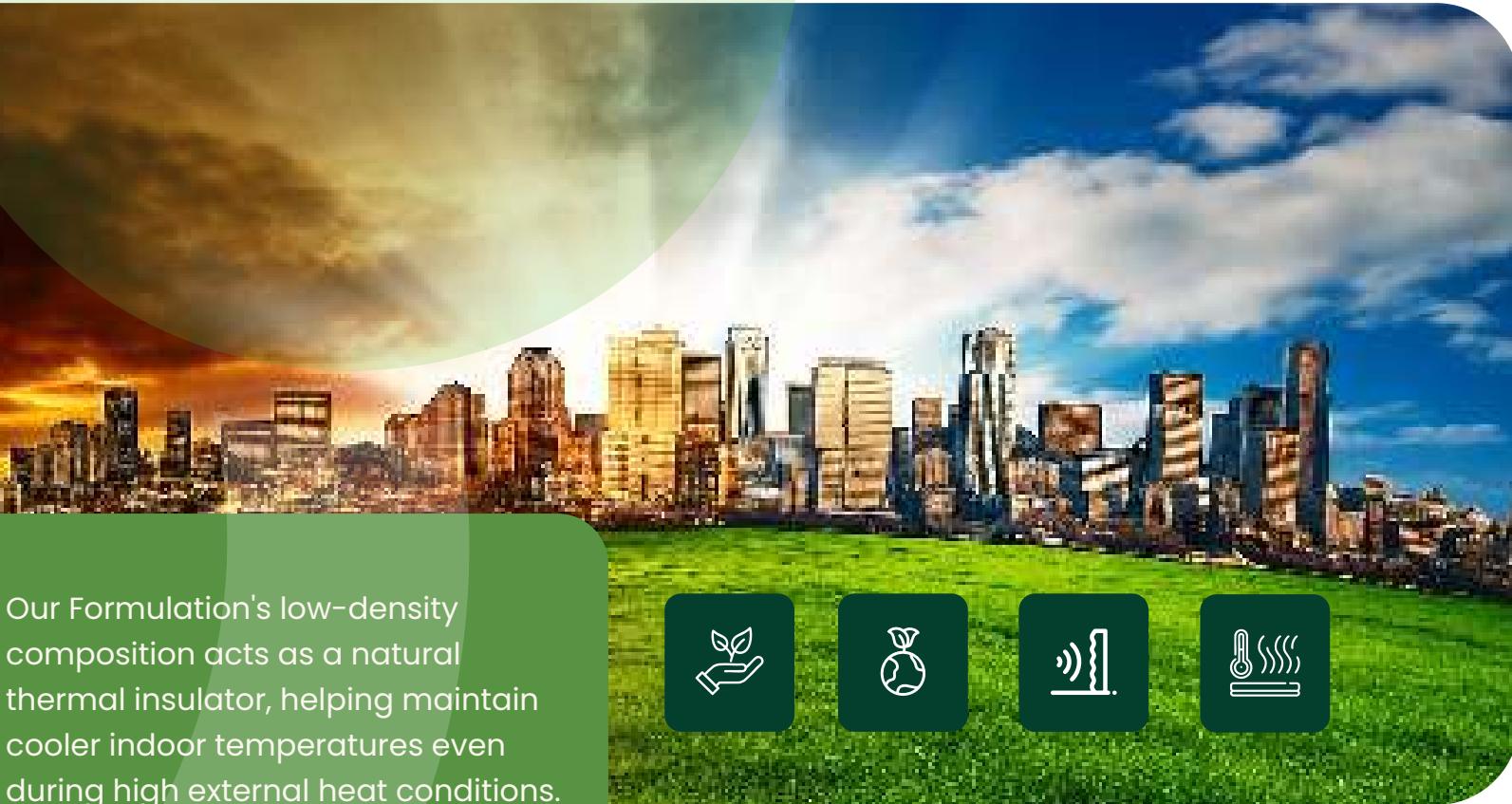
4000+
YEARS



Made with geopolymers based binders derived from locally available industrial by products substituting the Cement and Sand thereby significantly reducing the use of natural resources.

The production process of Cement emits one ton of Greenhouse gases for every one ton of cement produced; this directly affects Global warming and allied issues. Sand mining either from rivers or from queries deplete the Ecology apart from consuming huge amounts of energy. Our products avoid these two ingredients thereby providing an Eco friendly alternative.

100% Eco Friendly



Our Formulation's low-density composition acts as a natural thermal insulator, helping maintain cooler indoor temperatures even during high external heat conditions. This reduces the energy required to make the habitats comfortable.

Our Formulations provide superior acoustic properties, ensuring quieter and more peaceful indoors even in noisy city conditions.

What makes
our plaster
Standout



2 Economical

Build in
1199 AD

Can be applied at a
reduced thickness of

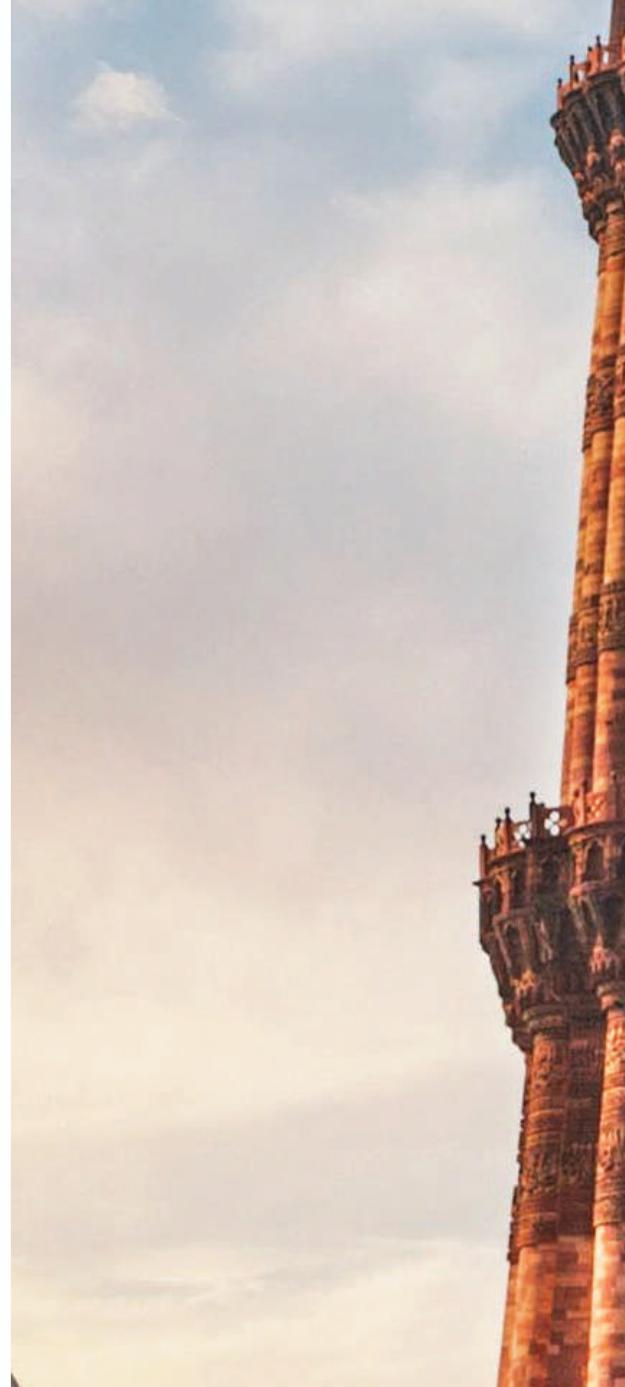


The natural off-white/beige shade of Poljo Plasterwaala 915 provides a clean, durable, and elegant appearance with UV Resistance. This avoids the need for additional surface finishes thereby saving significantly. External plastering can also be applied as a texture finish, enhancing the exterior look even further.

just 3–6 mm, compared to the 10–15 mm required in traditional cement plaster, resulting in up to 60% savings in material usage, transportation, and storage costs.



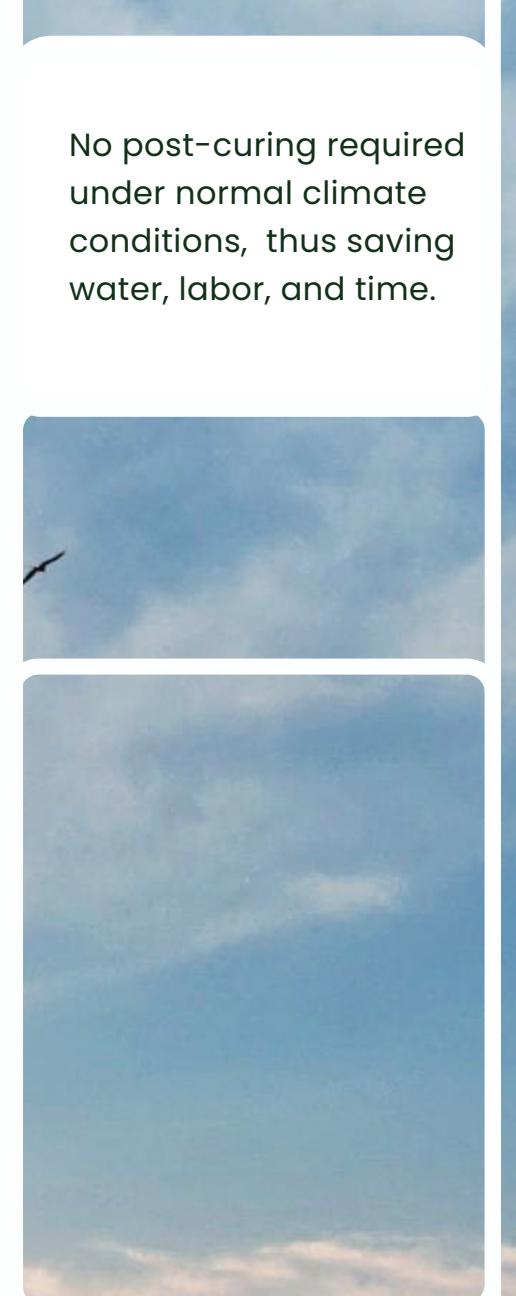
Delivers a smooth, durable and aesthetic finish, minimizing the need for extensive putty work. Thereby saving up to 50% of Putty, Primer and Finishing



Offers excellent bonding with multiple substrates, reducing risks of cracks and delamination even when exposed to heavy sun, rain, saline conditions, or other types of aggressive environment.



Qutub Minar



Can be applied easily on

No post-curing required under normal climate conditions, thus saving water, labor, and time.

materials. This significantly reduces the overall wall finishing costs.



Delivers a smooth, durable and aesthetic finish, minimizing the need for extensive putty work. Thereby saving up to 50% of Putty, Primer and Finishing materials. This significantly reduces the overall wall finishing costs.



Highly suited and compatible with plastering machine application, ensuring faster completion of the work with reduced manpower.



Highly suited and compatible with plastering machine application, both indoor and outdoor surfaces using conventional masonry tools and mechanical machines. Our products bond with all types of construction materials. As the water curing is not required saves significant resources, Time and money.



3

Long Lasting & Durable



Unlike OPC/PPC cement, which begins to degrade after 30 years due to Carbonation and Efflorescence, Our plastering materials resist ageing, unaffected by Carbonation and Efflorescence. Further the polymeric binders in the formulation ensuring exceptional durability.

Offers high resistance to heat & water, ensuring comfort, durability, & longlasting aesthetics.

Very low porosity makes it highly resistant to the fungal growth & slime formation.

High fire and heat resistance, fire-rated up to 600°C for enhanced protection

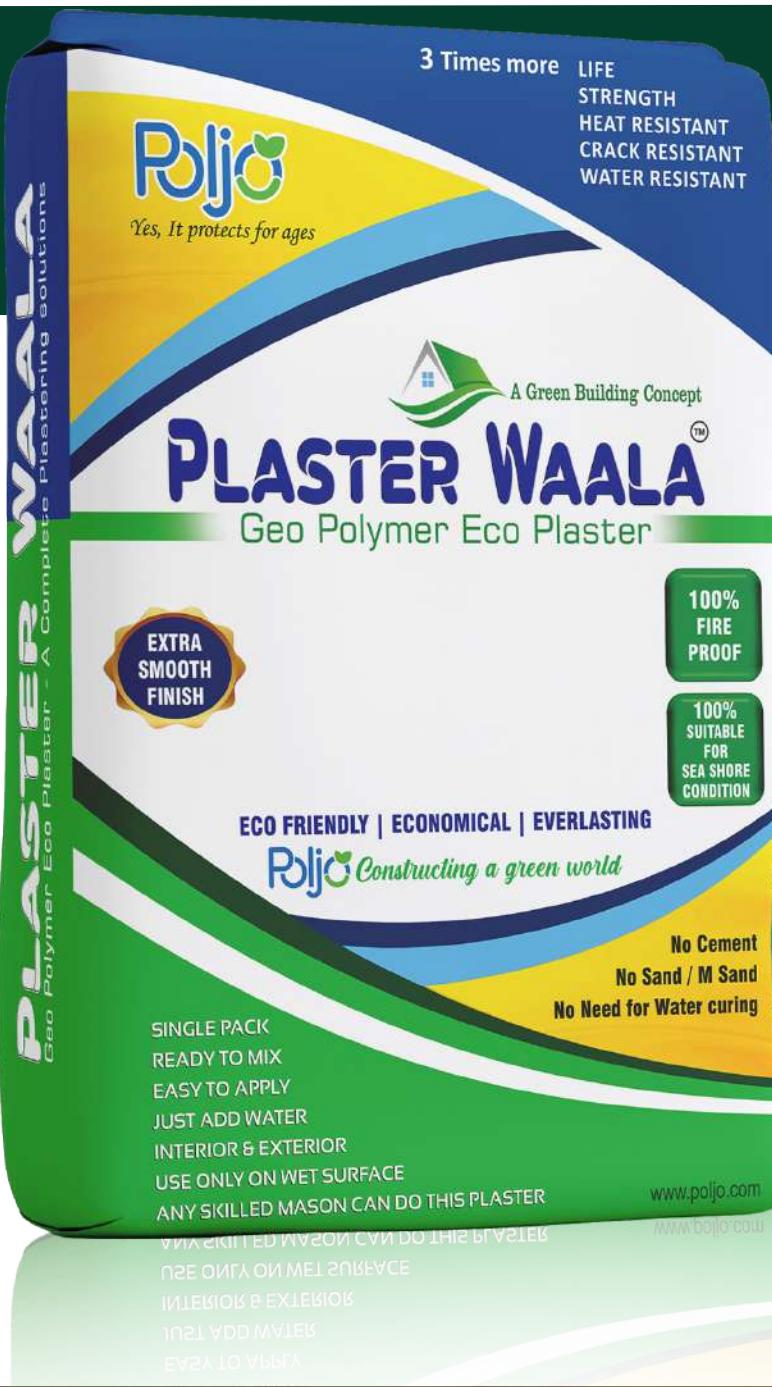
Withstands saline moisture and sea winds, making it ideal for coastal regions.

Even when mixed with hard water, the plaster remains crack-free and unaffected in strength or longevity.

Cement gains strength by forming C-S-H bonds by taking water of hydration. Whereas our Geo Polymer Plasters gains strength by condensation reaction without taking water of hydration. This polymerisation process gives Long Durability, Weather Resistance, Very High Chemical Resistance and Bio static ability.



Our Product Portfolio



POLJO PLASTERWAALA 915

Poljo Plasterwaala 915 is a 100% geopolymmer-based, ready-to-use plaster designed as a sustainable alternative to traditional cement plasters. Unlike OPC or PPC, it requires no curing, which speeds up construction and saves both water and labour.

Eco Friendly Composition:

The Plaster waala was Made entirely from geopolymers materials.

Elegant Appearance:

Comes in a natural offwhite/beige finish, delivering a clean, aesthetic look.

Durability & Strength:

It Provides a smooth, crack free coverage that strengthens over time.

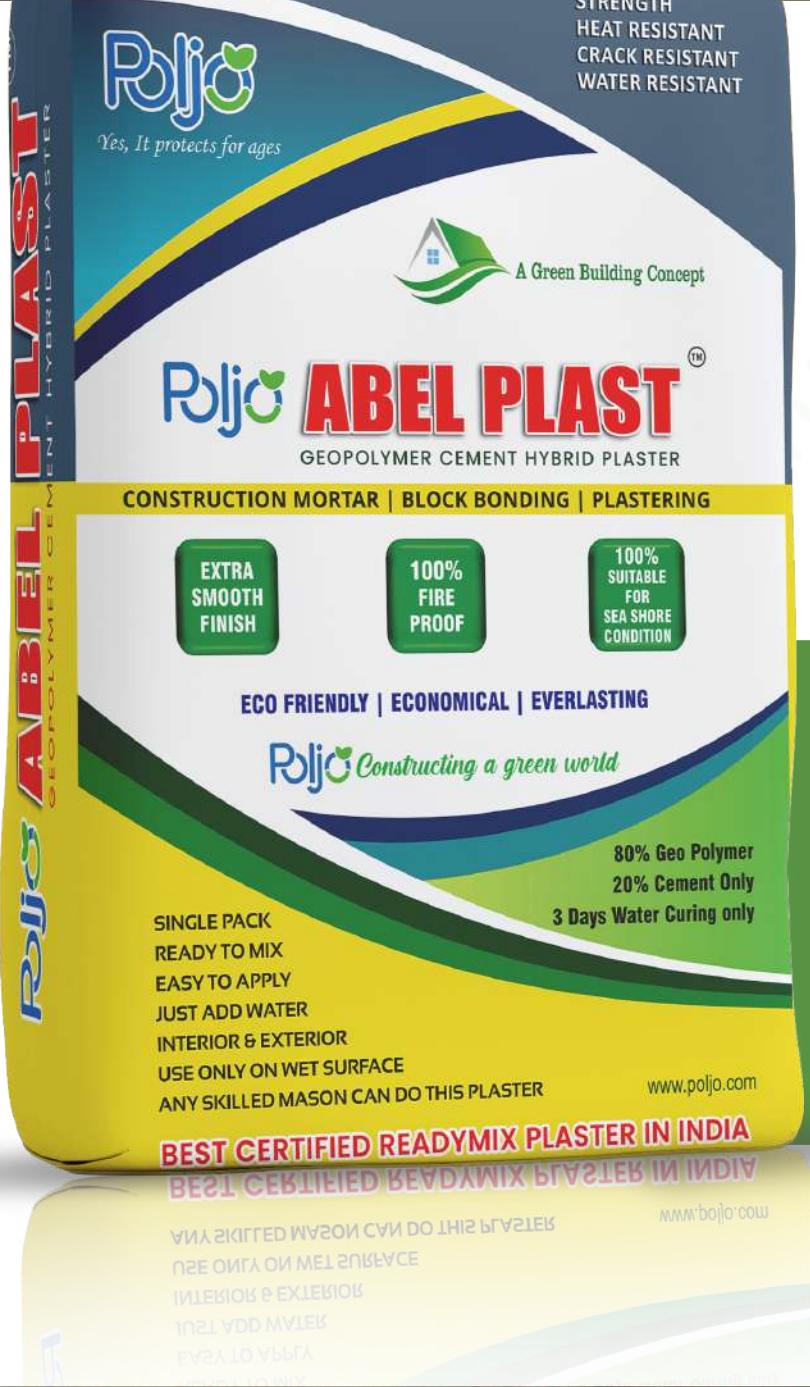
Time & Cost Efficiency:

Projects move faster, cutting down completion time and overhead costs.

Versatility:

Suitable for both interior & exterior applications, offering adhesion on surfaces like AAC blocks, laterite, clay, Porotherm brick and conventional bricks.





Poljo **ABEL PLAST**TM

GEOPOLYMER CEMENT HYBRID PLASTER

POLJO ABEL PLAST 816

Poljo Abel Plast 816 is a next-generation hybrid plaster that combines the proven strength of cement with the sustainability of geopolymer technology. With 80% geopolymer and 20% cement, it offers enhanced flexibility for modern construction needs

Ready to Mix

Robust Strength

The hybrid mix delivers higher compressive strength than conventional cement plaster.

Professional Finish

Offers zero shrinkage and crack-free results.

Adaptability

Maintains bonding and finish quality even in challenging weather conditions.

Durability in All Conditions

Requires 2 days of curing, but provides superior performance across diverse masonry blocks

Practical Usability

Longer pot life allows masons & contractors more time for large scale or complex projects.



Rijo PLASTER WAALA®
Geo Polymer Eco Plaster - A Total Plastering Solution

Rijo ABEL PLAST®
GEOPOLYMER CEMENT HYBRID PLASTER

IDEAL FOR

- Residential & Commercial Buildings
- Large-Scale Infrastructure Projects
- Fire-Protected Zones
- Coastal Constructions
(salt & moisture ^{IIT Indore}resistance)
- Acoustic-Friendly Spaces
(studios, offices)



Join the
Green Revolution
in Construction

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