



SATTVA
— CONCEPT TO CREATION —

STOP HEAT AT THE WALL

Ultra Lightweight
Fire Resistant
Thermal Plaster

Up to 90% Heat
Transmission
Reduction

Engineered for
Energy Efficient &
Acoustic Buildings



• PATENT APPLIED
TECHNOLOGY

• TESTED IN NABL
ACCREDITED LABORATORY

• SUBMITTED TO BIS
FOR STANDARDIZATION

COOLING EVOLUTION

Why Buildings Need Smarter Walls

30 years ago refrigerators were considered luxury.
20 years ago refrigerators became necessity while air conditioners were premium.

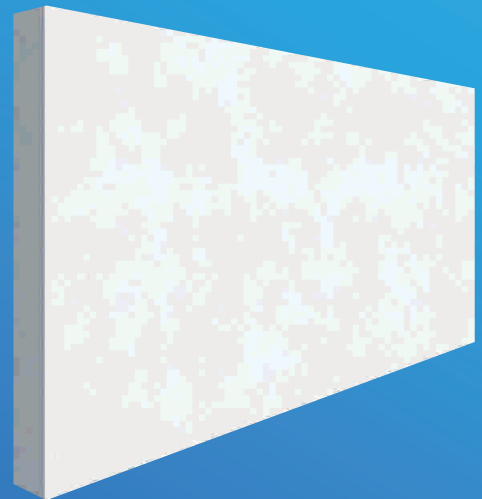
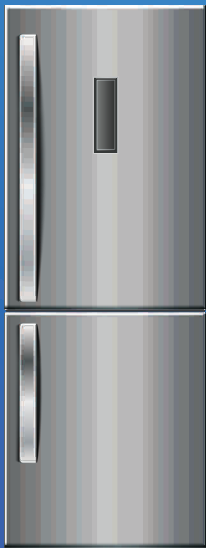
Today due to global warming and rising temperatures, air conditioning is becoming essential.



30 years ago

20 years ago

Present & Future



However increasing AC usage leads to:



Higher electricity consumption



Higher carbon emissions



Higher pressure on energy infrastructure

The smarter solution is stopping heat before it enters the building.

ABOUT SATTVA

SATTVA is an intelligent wall engineering brand dedicated to improving building performance through advanced construction materials.

Using inorganic glass technology with closed cell micro structure. SATTVA develops plaster systems that combine:



**FIRE
RESISTANCE**



**ENERGY
EFFICIENCY**



**ACOUSTIC
COMFORT**



**LIGHTWEIGHT
STRUCTURE**



**THERMAL
INSULATION**

SATTVA solutions help buildings reduce heat transfer and reduce dependency on air conditioning.

WE ENGINEER PERFORMING WALLS.

OUR STORY

For decades buildings relied on air conditioners to fight heat after it entered the building.

SATTVA started with a simple question:

What if the wall itself could stop heat?

This idea led to the development of Sattva Fire Plast, a next generation plaster technology that transforms conventional walls into thermal and fire protection systems.

Instead of fighting heat inside the room, Sattva Fire Plast stops heat at the wall itself.



FOUNDERS



VASANT MUNGARA

Founder – Labh Buildchem Pvt Ltd

B.Sc Chemistry

"Buildings should not fight heat with machines alone. The wall itself must become the first line of defense."



PARASHAR MUNGARA

Co Founder

B.E Chemical Engineering

"The future of construction lies in materials that perform — not just materials that cover surfaces."

Two Generations. One Mission.

Building safer, cooler and energy efficient structures.

WHAT WE OFFER

SATTVA delivers intelligent material systems addressing key construction challenges - heat control, fire safety, structural efficiency, acoustic comfort & energy performance.

HEAT & FIRE PROTECTION

Ultra-lightweight thermal plaster engineered to reduce heat ingress while enhancing fire resistance, improving indoor comfort & lowering cooling load.

ENERGY & CARBON REDUCTION

Reduced heat transfer lowers AC dependency, decreasing electricity consumption and operational CO₂ emissions (tCO₂e).

ULTRA-LIGHTWEIGHT EFFICIENCY

Low-density composition reduces dead load, improves structural efficiency, and enables faster application.

ACOUSTIC COMFORT

Closed-cell microstructure enhances sound insulation for quieter, more comfortable spaces.

INDUSTRIAL THERMAL PERFORMANCE

Designed for high-temperature environments to improve thermal efficiency and reduce energy loss.

SUSTAINABLE CONSTRUCTION

Performance-driven materials supporting green building and long-term carbon reduction.

CONVENTIONAL WALL CONCEPT

Heat enters --> AC fights --> Massive Energy consumption --> Co₂ increases.

SATTVA PERFORMANCE WALL™ CONCEPT

Heat Stopped at Wall --> Lower AC Load --> Reduced Electricity --> Lower tCO₂e.

Cooling The Planet Begins With Cooling The Wall.



VISION

To transform building envelopes into climate shields that reduce heat transfer and support sustainable construction.

MISSION

- Reduce cooling dependency in buildings
- Integrate fire safety and thermal insulation
- Support architects, engineers, thermal consultants, energy auditors, PMC firms and industries
- Reduce electricity consumption and carbon emissions

TECHNOLOGY

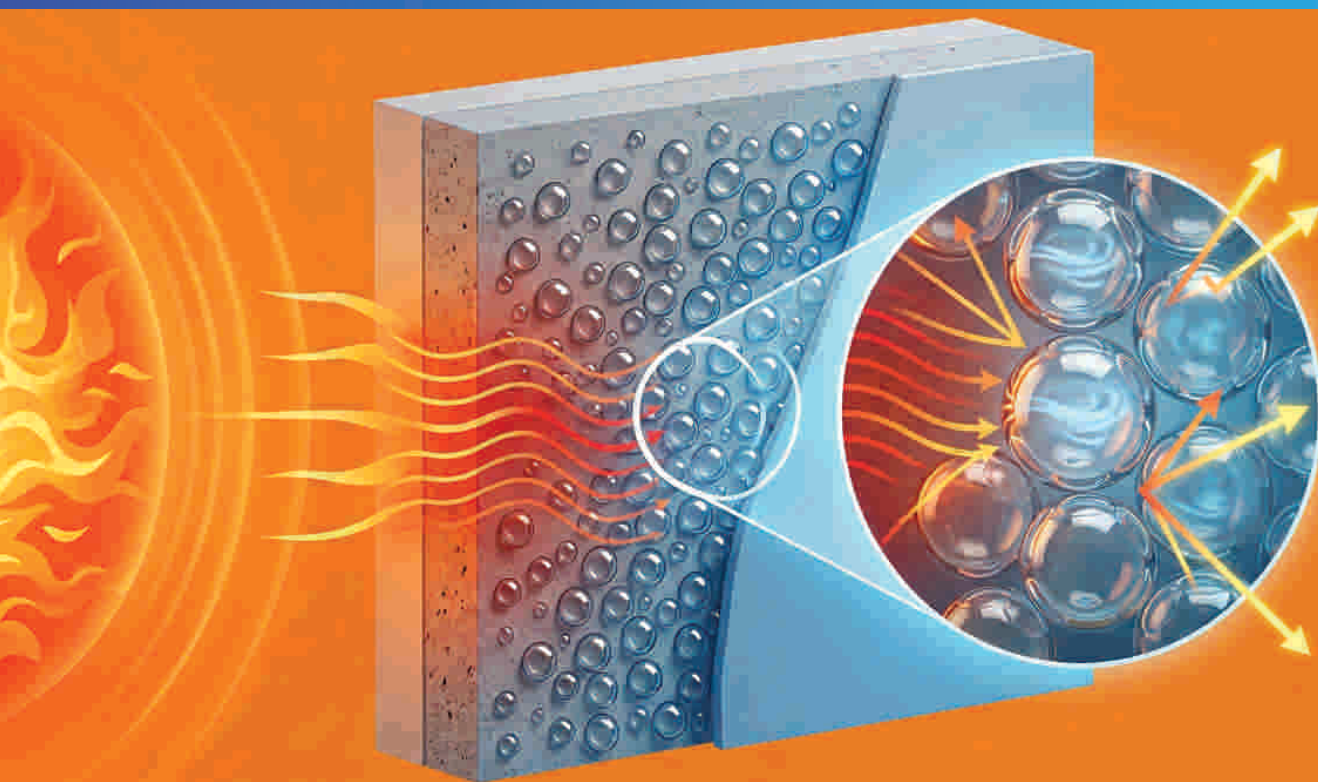
Inorganic Glass Based, Closed Micro Cell Technology

Sattva Fire Plast contains microscopic closed glass cells.

These cells:

- Trap air
- Slow heat conduction
- Reflect thermal radiation

This structure creates millions of insulation barriers inside the plaster.



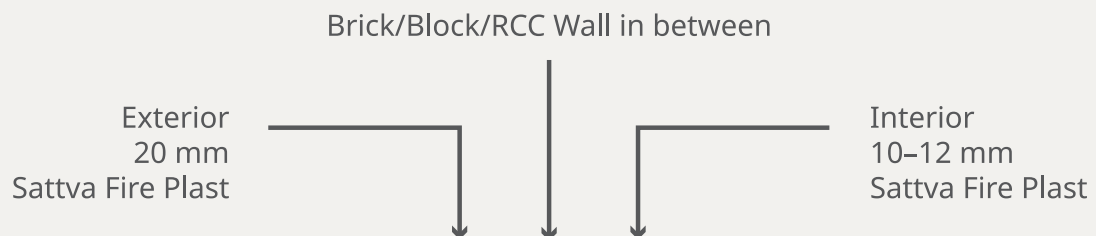
Result

Cooler interiors

Reduced heat transfer

Improved thermal comfort

SATTVA WALL SYSTEM



First thermal barrier

Second thermal barrier

This creates multiple thermal barriers that reduce heat transfer into the building.

Achieve **reduction of upto 20°C**
with 2 layers of SATTVA Fire Plast

ENERGY & CARBON IMPACT



FURNACE TEST

High temperature furnace testing demonstrates strong heat resistance.

Upto **90%**
Heat
Transmission
Reduction

SUITABLE FOR

Fire
protection
zones

Industrial
heat
environments

High temperature
& Extreme cold
facilities

TECHNICAL DATA

Thermal
Conductivity

0.1175 to 0.1385 W/mK

Fire
Resistance

Upto 1250°C

Density

380 to 900 kg/m³

Acoustic
Insulation

Yes

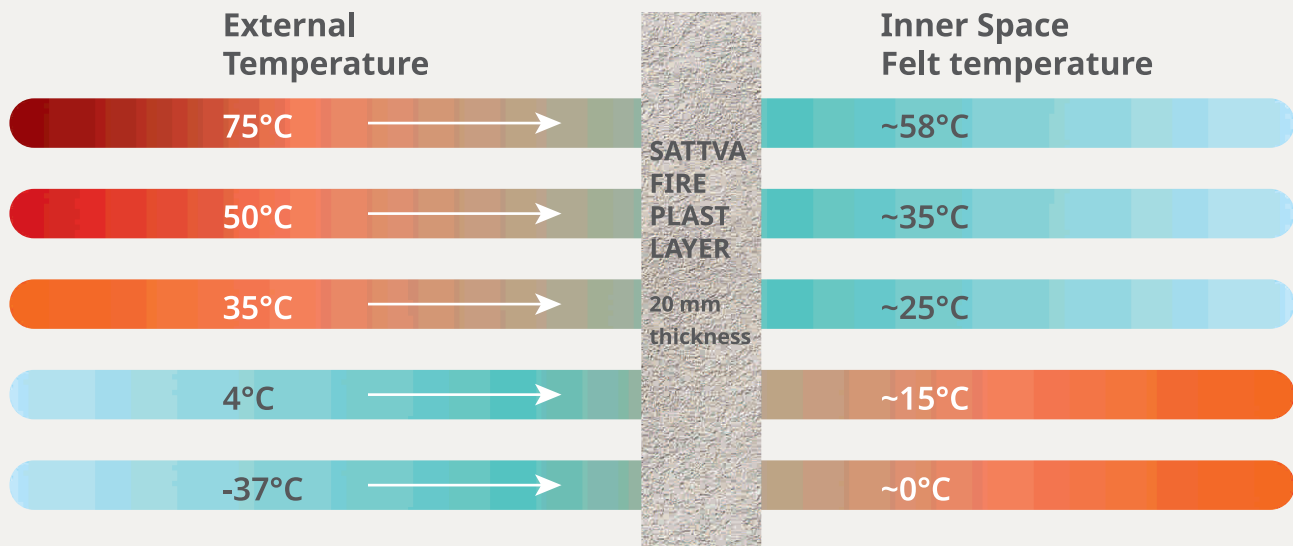
Pest & Water
Resistance

Yes

LAB TEST PERFORMANCE

Tested Product Sattva FirePlast FRP 1045	Sample Thickness 20 mm plaster layer	Thermal Conductivity K Value = 0.1385 W/mK Lower K value indicates strong resistance to heat transfer.
Ambient Temperature 25°C	Test Condition Single side heat exposure	

TEMPERATURE TEST RESULTS



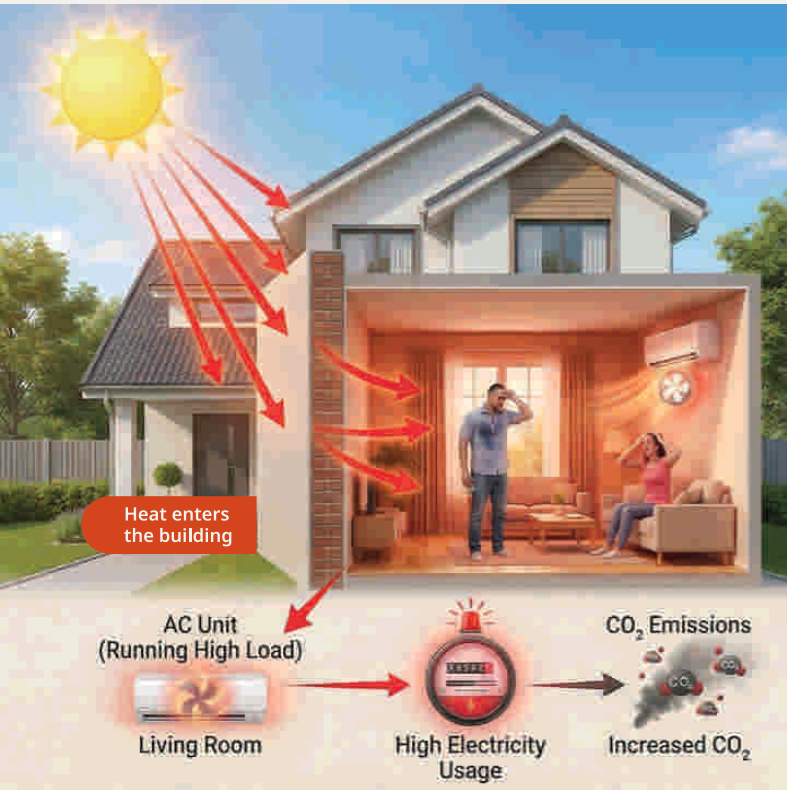
**Results represent single external plaster layer testing. Actual construction includes exterior plaster layer, wall and interior plaster layer, improving insulation.*

If we use 2 layers of SATTVA FIRE PLAST!

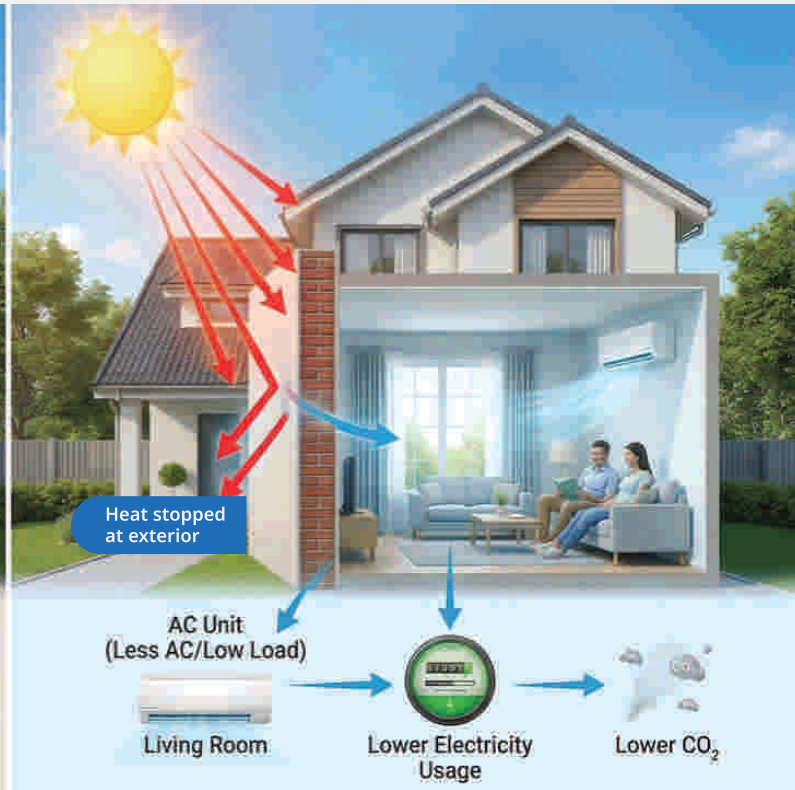
Approx 20°C of temperature reduction can be achieved.

HEAT FLOW DIFFERENCE

Conventional Plaster Wall

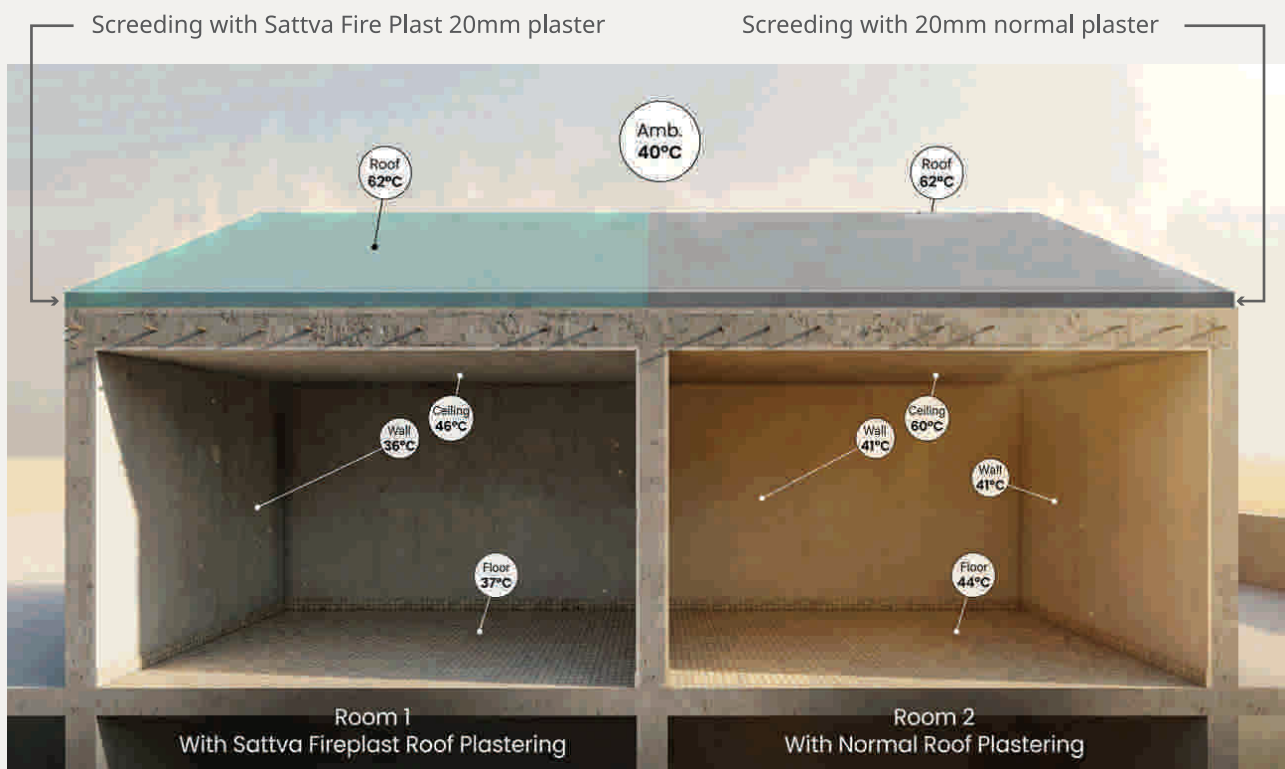


Sattva Fire Plast Wall



CASE STUDY

Thermal effect of 20mm Sattva Fire Plast



ENERGY & CARBON IMPACT

What if we use 2 layers of SATTVA FIRE PLAST?

Example Apartment

Typical cooling capacity	
• Living room AC – 1.5 Ton	• Bedroom AC – 1.5 Ton × 3
Carpet area 1000 sq ft	Wall plaster area ~3000 sq ft
Annual Cooling Electricity ≈ 5500 kWh per year	Total cooling capacity ≈ 6 Ton

Impact of Temperature Reduction

Indoor Temp Reduction	Energy Saving
≈ 5°C reduction	≈ 20% electricity saving
≈ 10°C reduction	≈ 40% electricity saving

Electricity Saving

5°C --- 1100 kWh/year

10°C --- 2200 kWh/year

Carbon Reduction

India emission factor
≈ 0.82 kg CO₂ / kWh

5°C reduction --- 0.9 tons CO₂/year

10°C reduction --- 1.8 tons CO₂/year

Tree Equivalent

CO ₂ Reduction	Trees
0.9 tons	43 trees
1.8 tons	86 trees

1 tree absorbs
≈ 21 kg CO₂
/year

What if temperature reduce by 20°C ?

KEY BENEFITS

Thermal Efficiency	Excellent thermal insulation reduces electricity consumption.
Ultra Light weight	Ultra light weight reduce dead load.
Fire Resistance	Exceptional fireproofing 1250 °C with zero smoke and fumes.
Acoustic Comfort	Improved soundproofing for quieter spaces.
Termite and Vermin Resistant	Provides lasting protection against pests.
Seepage Protection	Prevents water seepage, improving the longevity of interiors, furnitures and paints.
Low Shrinkage	Ensures crack-free finishing, even under extreme weather conditions.
Non-Toxic and Odorless	Safe for residential, commercial & industrial spaces.
Weatherproof	Performs effectively in diverse climatic conditions.
Enhanced Surface Finish	Provides a smooth and durable finish for aesthetic and functional applications.
Durability	Resistant to weather effects, spalling, and water permeability.
Eco-Friendly	Certified as a green product.
Versatile Adhesion	Suitable for spray or plaster application

APPLICATIONS

Residential & Commercial



- Apartments
- Villas
- Hotels
- Offices
- Malls
- Multiplexes
- Hospital

Industrial



- Furnaces
- Boilers
- Chemical plants
- Heat treatment plants
- Cold storage
- Metal roof factories
- Call center

Infrastructure



- Sea shore construction
- Battery storage rooms
- Electrical duct insulation
- Containers
- Logistic Park
- Food park
- Data center

...and many more sectors

PRODUCT RANGE

FOR CONSTRUCTION USE

FRP 1030

Light weight plaster with standard thermal insulation plaster

FRP 1045

Light weight plaster with advanced thermal insulation plaster

FOR INDUSTRIAL USE

HRP 1060

Extra light weight plaster with extreme heat application

HRP 1100

Ultra light weight with extreme heat application

PRODUCT GRID

Product Grid	FRP 1030	FRP 1045	HRP 1060	HRP 1100
Water expansion (%)	0.14	0.17	0.14	0.11
Drying shrinkage (%)	0.16	0.18	0.16	0.12
Flexural strength (7 days) MPa	3.7	3.4	1.5	NA
Flexural strength (28 days) MPa	4.9	4.2	1.8	NA
Compressive Strength (7days) MPa	12	11	4.1	NA
Compressive Strength (28 days) MPa	17	15.3	4.6	NA
Cube test (7 days) MPa	16	15	4.5	1.2
Cube test (28 days) MPa	21	19	6	1.7
Dry density Kg/m ³	900	650	450	350
Wet density Kg/m ³	1150	1000	775	700

MIXING INSTRUCTION

CODE	WATER	USE FOR	APPROXIMATE COMPACTED VOLUMETRIC YIELD
FRP 1030	8 to 10 Litres	Plaster & screed mix	± 0.031 m ³ 31 Litres
FRP 1045	7 to 9 Litres	Plaster & screed mix	± 0.031 m ³ 31 Litres
HRP 1060	7 to 9 Litres	Thermal insulation & heat barrier	± 0.035 m ³ 35 Litres
HRP 1100	7 to 9 Litres	Thermal insulation & heat barrier	± 0.035 m ³ 35 Litres

HOW TO USE



**SATTVA
FIRE PLAST**

+

**ADD
WATER**

+

**MIX
PROPERLY**

=

**READY
TO APPLY**

YIELD

For internal/external wall and ceiling plaster-

**Sattva Fireplast at 12mm thickness
is 25-28 sq.ft in a bag**

For roof plaster(Screed) -

**Sattva Fire Plast at 24mm thickness
is 14-15 sq. ft. in a bag**

AWARDS & RECOGNITIONS



Bureau of Indian Standards



National seminar for startups



Sardar Patel Innovation Award

CERTIFICATIONS



An ISO 9001-2015 Certified Company



Associate & MOU for Technical Support with SVIT (Sardar Vallabhbai Patel Institute Of Technology) Vasad, Gujarat.



Incubated @ SPU-SSIP-Navadhārā, SPSEC-Sardar Patel University, Anand, Gujarat.

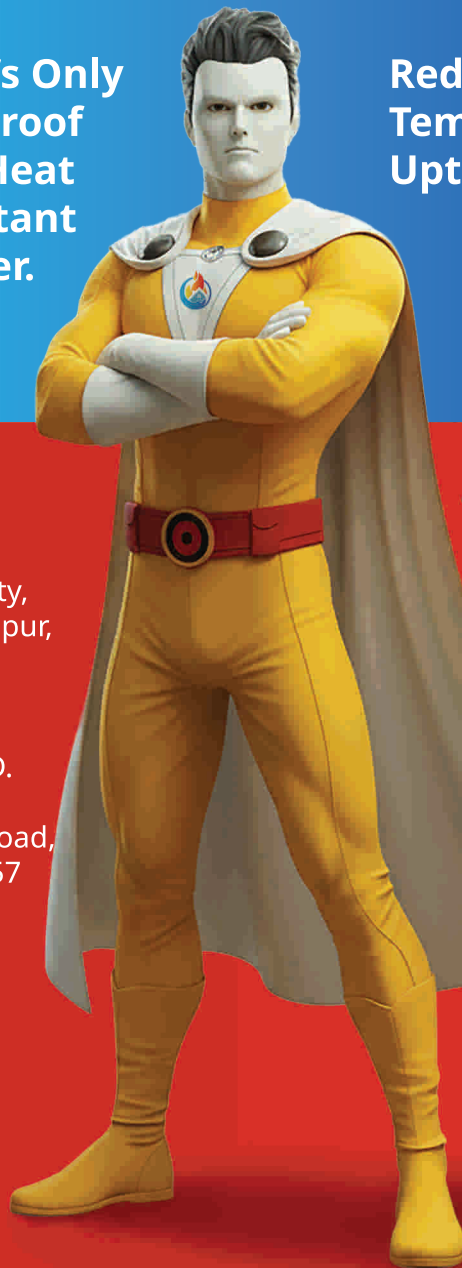


SATTVA
— CONCEPT TO CREATION —

An ISO 9001:2015 Certified Company

**India's Only
Fire Proof
And Heat
Resistant
Plaster.**

**Reduce
Temperature
Upto 20° C.**



OFFICE ADDRESS

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Vadodara-390011 (Guj)

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