S2000H MINERAL HEAT INSULATION

SILICATE-BASED NATURAL MINERAL CRYSTALIZING HEAT INSULATION PAINT

Internal Temperature Differences:
Uncoated - 49 °C
Coated with **S100 Solar Guard** - 44 °C
Coated with **S2000H** - 40 °C

Surface Temperature
(Uncoated) - 54.2°C

Surface Temperature
(S2000H) - 43.1 °C

USES

1. **Heat Insulation**:
   Excellent heat insulation and anti-condensation property
   Ideal for use on walls facing the western sun
2. **Odour-free**:
   Excellent for use on outdoor and indoor walls
3. **Waterproofing**:
   Protection of concrete façades, lime or cement mortar, brick, gypsum plaster and pre-cast panels
4. **Non-static**:
   Anti-dirt attraction for basement carpark wall coatings

FEATURES

1. **Stops temperature transmission**; anti-condensation.
2. **No primer needed**; just paint 3 coats directly over cement surface.
3. **Resists algae growth**, peeling and scratches. Withstands high-pressure jet cleaning and repels water.
4. Long-term protection of over ten years.
5. Non-static; **does not attract dirt** and always remains clean, especially in basement carparks.
6. Forms crystals that allows water vapour to breath, keeping the building in a dry healthy condition.
7. Protection from acid rain. Resists peeling.
8. Excellent adhesion to cement substrates, becoming a part of them.
9. Non-reflective, dull flat matte finish.
10. Does not burn and emit noxious fumes when exposed to fire. Safe to use in indoor theatres.

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APPLICATION METHOD

1. No primer needed. Surfaces must have a certain roughness and porosity to allow good penetration and adhesion of the coating.
2. Existing acrylic paint has to be removed.
3. New cement mortar renders require a waiting period of 3 to 4 weeks before painting.
4. Surfaces painted with lime wash should be removed with a brush before applying a coat of S2000 P PRIMER diluted with 50% of water.
5. For gypsum plaster surfaces, apply one coat of S2000 P PRIMER before applying S2000H.
6. Apply thinly; thick coatings will result in powdery finishes.
7. Brush or roller only. The insulation material AEROGEL in bead form must be flattened with a stainless steel trowel during painting.
8. S2000H comes in white color.

REMARKS

1. Use protective sheets to avoid staining the surrounding area.
2. Take special care with glass, ceramic, natural stone, lacquer and metal surfaces.
3. Rinse any spillage with water immediately.
4. Avoid excessive moisture on surfaces during application.
5. The full curing of the applied coating occurs **20 days** after the product is applied.
6. Not suitable for coating over synthetic paint, fiberglass and water repellent treated surfaces.

SAFETY PRECAUTIONS

- Always wear protective gear to protect eyes and skin.
- In case of contact, rinse with water immediately.

Above are our recommendations based on in house testing and experience. If in doubt, please do a preliminary testing before use.

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TECHNICAL DATA

Nature	Inorganic silicate
Diluent	Water
Application	Brush, roller
Application Temperatures	+10 to +35°C
Surface drying time (EN ISO 1517)	< 1 hour
Coverage	0.8 kg / m² per 1 mm thickness
Water Vapor Permeability (EN ISO 7783-1/-2) (Equivalent air barrier)	SD < 5 meters Class I (EN 1504-2) Permeable to water vapor
Water permeability (EN 1062-3)	< 0.1 kg/ m².h0.5 Impermeable to water (EN 1504-2)
Adhesion to concrete support (EN 1542)	3.5 MPa(A:B/C:50%:50%
Hazardous substances (EN 1504-2)	Complies with paragraph 5.3 of EN 1504-2 Standard
Colour	White, dull flat finish. Color can be added.
K-value (theoretical)	**0.040 W/(m.K)**

PACKING

0.8 kg 1.8 kg 4 kg 18 kg

Disclaimer:

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COMPARISON BETWEEN SILICATE AND SILICONE BASED PAINTS

SILICATE-BASED	*SILICONE-BASED*
VOC Free.	Contains VOC.
Has waterproofing properties.	Has water repelling properties only.
Inhibits growth of micro-organisms.	Promotes growth of micro-organisms.
Non-flammable. Natural Mineral product.	Flammable. Petroleum product from refineries.
Can be applied on damp surfaces.	Not suitable for application on damp surfaces.
Does not form surface film. Chemically bonded and crystalized onto the cement.	Forms thin plastic film.
Penetrates into the substrate; adheres very strongly.	Coats substrate surface only. De-bonds easily.

COMPARISON BETWEEN NATURAL MINERAL SILICATE AND REGULAR ACRYLIC/LATEX PAINTS

	NATURAL MINERAL SILICATE	*ACRYLIC/LATEX*
Formation	Chemically bonded and crystalized onto the cement, thus making the coating an integral part of substrate.	Forms a thin plastic film by the evaporation of water.
Breathability	Allows water vapor permeation. Wall is dry and healthy.	Restricts water vapor diffusion. Ended with wet wall, it blisters easily.
Color Fast	Colors do not fade due to excellent resistance to UV.	Not UV stable. Significant fading of colors will occur over time.
Dirt Retention	Does not carry electrostatic charge that attracts dust.	Attracts dust due to negative electrostatic charge found on the plastic film surface.
Algae and Fungal Growth	Natural mineral; does not promote growth of micro-organism.	Promotes growth of micro-organisms due to its organic composition.
Acid and Alkalis	Highly resistant to strong acids and strong alkalis.	Not as resistant to strong acids and strong alkalis.
Fire Retardant	Non-combustible; does not emit smoke or any toxic gases.	Petrochemical product; burns and smokes easily in a fire.
Light Reflectance	Reflects light and heat due to its micro-crystalline structure.	Absorbs a proportion of light rather than reflecting it.

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