

Product Description:

CHEMIGREEN - WHP PAINT is Heat Barrier, Anti-carbonation Protection For Masonry Facades. Masonry Wall retrofit has always been a premature expense to building owners. Where the general integrity of the existing paint finish is sound, excluding unsightly failures over continually moving cracks in the substrate.

The Best Elastomeric Wall Coatings Go Unnoticed!

Unlike normal paint, **CHEMIGREEN – WHP** e-Paint elastomeric wall coatings maintain their elasticity with time. Substrate movement for whatever reason leads to cracks. These cracks are easily bridged during initial application and remain bridged throughout the worst ravages of cold winters and hot humid summers.

Other than poor aesthetic appeal, cracks in buildings protective finish leaves the building vulnerable to premature masonry failures as the cracks allow the ingress of water, chloride ions, (salts), and environmental gases such as, (SO₂ and CO₂) into the masonry substrate and expose the concrete and its reinforcement to their potentially destructive effects.

Durability:

Heat and moisture are the two main contributing factors that accelerate the degradation of exterior coatings. In highly humid, tropical environments, conventional acrylics have been known to last as little as three years by fading from its original depth of color.

CHEMIGREEN – WHP e-Paint coatings have increased durability and life expectancy compared with conventional paints. After exposure to 2800hrs of UVB 313/Moisture testing, in accordance to ASTM G53-96 the, gloss, depth of color, adhesion and film integrity remained un-changed, providing a performance increase of more than 400% when compared to a standard exterior acrylic.

Low Temperature Flexibility-Down To -20 deg C:

Membranes for dimensionally unstable masonry substrates must have long-term low temperature flexibility. This flexibility is necessary to accommodate thermal expansion and contraction of the substrate caused by rapid freeze/thaw weather cycling. Many products claim elastomeric performance, but do not have this main property of low temperature flexibility that is essential to a truly durable elastomeric coating.

CHEMIGREEN – WHP e-Paint elastomeric wall coatings are plasticizer free, internal plasticized membranes that derive their elasticity from a unique combination of special composition, molecular weight, and cross linking. As a result, they retain their flexibility over extended periods of time, over a broader range of temperatures expanding and contracting over continually moving substrates without wrinkling at high temperatures or cracking at low temperatures.



Key Properties:

- High Solar Reflectivity in dark colours.
- Excellent Crack Bridging.
- Excellent elongation
- Resistance to Co₂
- Resistance to Chloride Ions (Seafront)
- Energy efficient.
- Cooler internal building temperatures
- Plasticizer free, (internally plasticized)
- Outstanding elastic recovery
- Low temperate flexibility to – 20°C
- Low V.O.C., Low odour.
- Excellent resistance to alkali and efflorescence.

Advantages:

- Provides a seamless, durable membrane.
- Superior adhesion to various substrates.
- Contains fungicides and mildew ides.

Storage:

- i) Keep containers closed.
- j) Store in a dry, cool place.
- k) Protect from freezing (33°F).
- l) For cold weather application, keep material stored above 65°F.

Thinning:

Thinning is not required or recommended.

Safety Equipment and Ventilation:

Spray application creates finely atomized particles and vapors which dictate specific procedures to minimize health and safety risks.

Protective Equipment:

- i) NIOSH approved liquid particulate filter mask
- j) Fabric coveralls
- k) Gloves
- l) Safety goggles or face shield.

Master-Coat Technical Data:

Coating Type	Acrylic Elastomeric Coating
Thermal Transmission	ASTM C 177-97 / C1045 – (0.05 -0.017) W/m/K
Solar Reflectance	ASTM E 1980-01 Reflects > 85 %
Toxicity	None
Water Absorption	ASTM D 471 12 % after 4 weeks
High Humidity Resistance	ASTM D3273 No growth or discoloration
Fungus Resistance	ASTM G21 No growth or discoloration
Impact Resistance	Good
Tensile Strength (MPa)	ASTM D 412 / 1.31
Elongation, (%)	ASTM D 412 / 175.88
Compressive Strength, (psi)	ASTM C 469 / 3.6 X 10 ⁶
Adhesion, (N/mm ²)	ASTM C 836 / 2.50
Color	White
Chemical Resistance	
Alkali Solution (NaOH 5 %)	Discoloration and surface damage
Hydrochloric acid (HCl 5%)	No Reaction
Alkali Soluttion (H ₂ SO ₄ 5%)	Discoloration and surface damage
Alkali Soluttion (HNO ₃ 5%)	No Reaction
Lead (Pb)	ppm / LT 0.05
Cadmium (Cd)	ppm / LT 0.05
Chromium (Cr)	ppm / LT 0.05
Violate Organic Compound	None
Fire rating	ASTM E-48-01 Class A UL 790 CLASS A
Abrasion Resistance	Excellent
Number of Coats	2 or 3
Surface Ozone Cracking	ASTM D-1149 70 days exposure
Breathing Trapped Water Vapor	ASTM 1653 9.4 perms
Solids by weight	53.00%
Solids by volume	61.80%
Warranty	10 years
Accelerated Weathering	D822 Discoloration – None / Chalking – None