# IceCoat-120

## Nano-Tech Insulation, Advanced For Building



IzeCoat is an innovative, environmentally friendly insulation coating that incorporates advanced Silicon Dioxide Calcium oxide and Aluminum oxide. This water-based coating is designed to provide superior thermal insulation, hydrophobic properties, and sound dampening, making it an ideal solution for both residential and commercial buildings.

#### **Key Features**

- Exceptional Thermal Insulation: IzeCoat offers outstanding thermal insulation across a wide temperature range from -50°C to 120°C. With a low thermal conductivity of 0.035-0.038 W/m·k, it effectively reduces heat transfer, ensuring energy efficiency in buildings.
- Environmentally Friendly: The product is free from hazardous chemicals, VOCs, and unpleasant odors, making it safe for both the environment and occupants. Additionally, it contributes to reducing carbon emissions by improving building energy efficiency.

#### **Technical Features**

Coating type	Acrylic	
Color	White	
Size	5L, 20L	
Density	0.55 g/mL	
Application method	brush, roller, airless spray	
Theoretical coverage	~1 kg per 1 sq. m (1mm thickness)	
Solids by volume	40%	
Dry to touch time	30 minutes	
Cure time	<5 hours	
Storage	6 months	
Thermal conductivity	0.035-0.038 W/m·k	
Storage Temp.	10~35°C	
Operating temp.	-60~120°C	
Durability	5 years	

#### **Usage and Application**

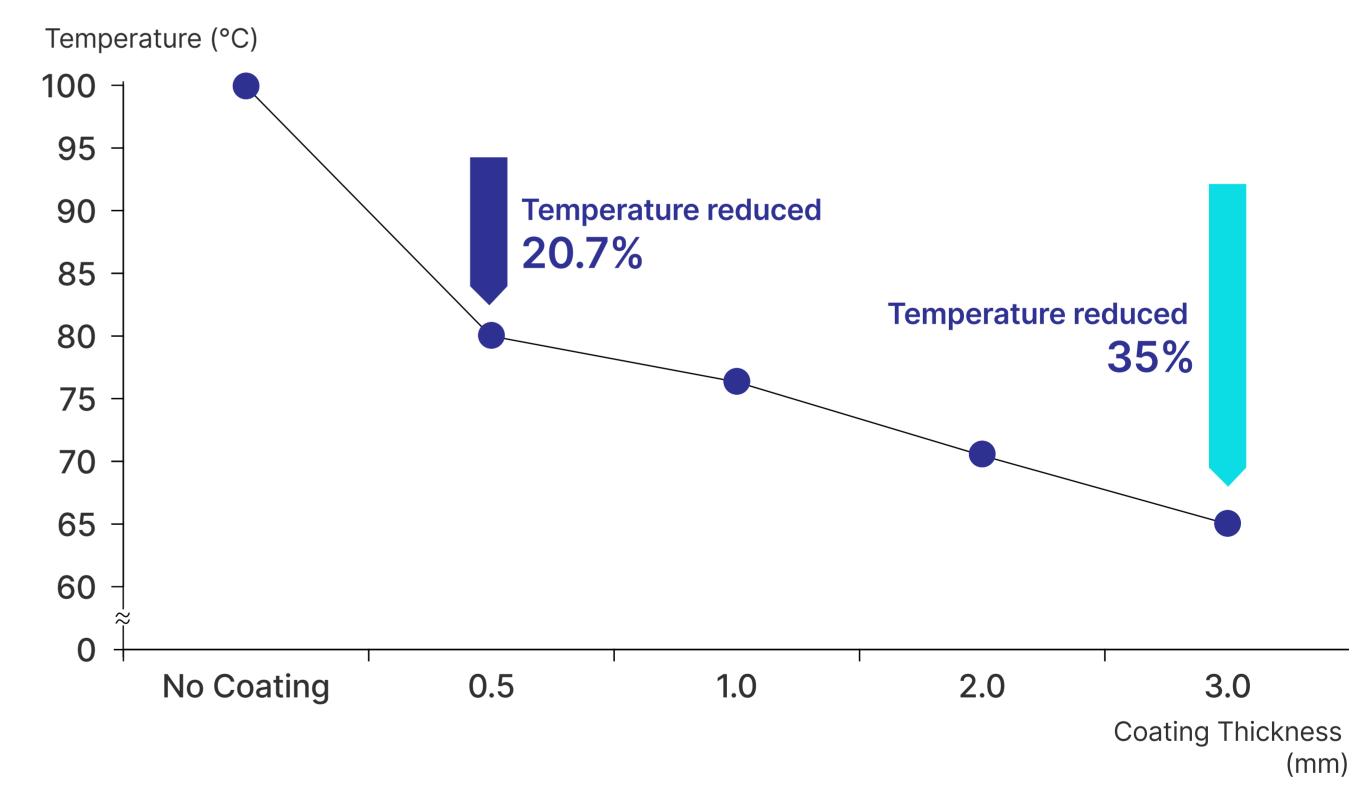
- Interior Walls: Enhance the energy efficiency of buildings by applying IzeCoat to interior walls.
- Exterior Walls: Use in conjunction with IzeCoat to insulate exterior surfaces, providing a comprehensive thermal barrier.
- Condensation Prevention: Ideal for areas prone to moisture buildup, helping to maintain dry and comfortable living spaces.

- Mold-Resistant: The coating prevents condensation, thereby reducing the risk of mold growth and ensuring long-term structural integrity.
- Versatile Application: IzeCoat can be easily applied using conventional painting equipment such as brushes, rollers, or airless sprayers, making it accessible for various construction and renovation projects.
- Sound Dampening: Apart from thermal benefits, IzeCoat also dampens ambient sound and noise, contributing to a quieter indoor environment.

#### Performance

- Excellent thermal insulation properties over wide temperature range (-50 ~ 120°C), utilizing the low thermal conductivity of aerogel (0.017 ~ 0.029mW/mk)
- Significant temperature drop observed when IzeCoat is shielding heat from a hot surface. Surface temperature drops 21% ~ 35% at various coating thickness when hot plate is set to 100°C

### **Performance Data: Surface Temperature at Various Thicknesses**



Coating Thickness (mm)	Surface Temperature (°C)	Temperature Reduced (%)
No Coating	100°C	0%
IZE COAT - 0.5	79.3°C	20.7%
IZE COAT - 1.0	75.7°C	24.3%
IZE COAT - 2.0	70.3°C	29.7%
IZE COAT - 3.0	65.0°C	35%

<sup>\*</sup>Tested by: ILUSTRO Co., Ltd., 2024





Tel. 0-2976-5290 | E-Mail: contact@cigblusolutions.com