

Cahyana™ EPS Insulation Board UDH

Description

Cahyana™ EPS Insulation Board UDH is a high-performance rigid insulation made of superior closed-cell and lightweight expanded polystyrene (EPS). Cahyana™ EPS Insulation Board UDH has excellent dimensional stability, compressive strength and water-resistant properties.

Uses

Cahyana™ EPS Insulation Board UDH is used in numerous commercial, industrial and residential application. The following are examples of the many uses:

- Basement Walls
- Cavity Walls
- Interior Walls
- Waterproofing Protection Board
- Radiant-Heated Floors
- Siding Underlayment
- Stucco Underlayment
- Concrete Slabs
- Wall Sheathing
- Below Grade Insulation
- Under Steel Roof Insulation
- Concrete Deck Insulation

Advantages

Environmental Friendly

EPS Board contains no dyes and 100% recyclable.

Stable R-Value

EPS Board thermal properties will remain stable over its entire service life.

Cost-Effective

EPS Board is typically less expensive than other comparable insulation products.

Fire-Retardant (optional)

EPS Board can be produced with fire-retardant additive. This ensures EPS Board to be secured from accidental ignition.

Sizes and Density

Cahyana™ EPS Insulation Board UDH is available in 1.20m x 2.00m or 1.00m x 2.00m sheets with thicknesses from 2.0 cm to 60.0cm. Cahyana™ EPS Insulation Board UDH has Ultra Duty Hard density (40 kg/m³ +/- 10%).

Physical and Chemical Properties

Physical and Chemical Properties of Cahyana™ EPS Insulation Board UDH are given in following tables.

Cahyana™ EPS Insulation Board UDH Typical Properties

Board Type (Density)	UDH
Compressive Strength@10%, kPa	173
Thermal resistance of 1.00-in (25.4mm) thickness, min, F.ft2.h/Btu (K.m2/W) at Mean temperature: 75 +/- 2 °F (24 +/- 1 °C)	4.2 (0.74)
Flexural Strength, min, kPa	345
Water absorption by total immersion, max, volume, %	3,0
Compressive Strength @1%, ASTM D6817, kPa	75
Fire retardant	Optional

Compatibility of Cahyana™ EPS Insulation Board UDH with Common Chemicals

Inorganic Acies (Muriatic, Sulfuric, Boric Acid)	Excellent
Organic Acies (Carbolic, Citric, Acetic-Acid)	Good
Bases (Sodium Hydorxide, Potassium Hydroxide, Ammonia)	Excellent
Alcohols (Methanol, Ethanol, Isopropyl Alcohol)	Good
Beer, Tea, Coffee, Carbonated Soda, Water, Fruit Juice	Excellent
Household Liquid Spray Insecticides (non-aqueous)	Poor
Cement	Excellent
MEK, Methylene Chloride, Acetone	Poor
Antifreeze (Ethylene Glycol – Green, Propylenen Glycol – Orange)	Excellent
Hydrocarbons (Gasoline, Diesel, Kerosene)	Poor
Mineral Oil	Excellent
Other Oils (Corn, Motor, Palm, Coconut Oil)	Good
Agriculture (Manure, Food, Urine, Soil, Fertilizer)	Excellent
Formaldehyde, Turpentine, Chlorofom, Naphtha	Poor
Salts (Ammonium, Ferrous, Sodium Chloride, Sulfur)	Excellent
MDI-based Adhesive (Gorilla Glue, Fast-Tac, Dow Great Stuff)	Good
Bleach, Detergent, Borax	Excellent
Cured Mastic, Construction Adhesive, Hardened Asphalt	Good

Excellent = No degradation, no effect from exposure

Good = Some effect from exposure, but not significant for product performance

Poor = Significant degradation affecting performance, up to completely dissolving product

This table is a guide only – consult us for specific chemical design questions.



Cahyana Styrofoam

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