

ENECLAD® FPS

Floor Protection System

Extreme floor protection for extreme environments.

- Traffic Resistance
- Abrasion Resistance
- Chemical Resistance
- Oil Resistance
- Detergent Resistance
- Easy Application
- Easy Maintenance
- No V.O.C.'s

Easy to apply **ENECLAD® FPS** seals and protects concrete floors. This extraordinary high-performance polymer composite is extremely abrasion resistant, making it ideal for heavy traffic areas in warehouses, hangars, loading docks, etc. **ENECLAD® FPS** jackets the surface in a durable, rugged coating that resists forklift traffic, oil, gasoline and many common industrial chemicals.

ENECLAD® FPS is a solvent-free, virtually odor-free, two-component product specifically developed to solve some of the toughest industrial floor protection problems. It is easily applied by brush, roller or squeegee to a super high-gloss finish. Non-skid aggregates can be incorporated into the **ENECLAD® FPS** to provide a highly durable, slip resistant surface.

ENECLAD® FPS high performance polymer system has been specifically formulated for new or old concrete floors. **ENECLAD® FPS** produces a seamless surface that is easy to clean and easy to maintain.



ENECON® Corporation
The Fluid Flow
Systems Specialists.

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Using ENECLAD® FPS

Technical Data

Volume capacity per kg.	46 in ³ / 750 cc	
Mixed density	0.048 lbs per in ³ / 1.31 gm per cc	
Coverage rate per kg. @ 12 mils / 300 microns	25 ft ² / 2.3 m ²	
Shelf life	Indefinite	
Volume solids	100%	
Mixing ratio	Base	Activator
By volume	2	1
By weight	3	1

Cure Times

Ambient Temperature	Working Life	Touch Dry	Maximum Overcoat	Full Cure
59°F 15°C	90 min	24 hrs	48 hrs	6 days
77°F 25°C	70 min	16 hrs	24 hrs	4 days
86°F 30°C	55 min	8 hrs	16 hrs	3 days

Physical Properties

Typical Values	Test Method
Compressive strength 11,000 psi 770 kg/cm ²	ASTM C-695
Flexural strength 9,000 psi 630 kg/cm ²	ASTM D-790
Hardness - Shore D 86	ASTM D-2240
Abrasion resistance 35 mg / 1,000 cycles	ASTM D-4060
Shear adhesion - steel 4,100 psi 287 kg/cm ²	ASTM D-1002

Elcometer Adhesion - to properly prepared cementitious surfaces is greater than the cohesive strength of the substrate.

CHEMCLAD® P4C Technical Data

Theoretical coverage rate per kg. @ 3 mils.	70 - 80 ft ² / 6 - 7 m ²		
Mixing ratio	Base	Activator	
-by volume	2	5	
-by weight	2	5	
Ambient Temperature	Working Life	Minimum Overcoating	Maximum Overcoating
41°F 5°C	120 min	16 hrs	48 hrs
59°F 15°C	75 min	12 hrs	36 hrs
77°F 25°C	60 min	8 hrs	24 hrs
86°F 30°C	50 min	5 hrs	16 hrs

Chemical Resistance

Gasoline EX	Detergent Solution. EX
Kerosene EX	Trisodium Phosphate EX
50% Anti-Freeze. EX	20% Calcium Chloride. EX
Transmission Fluid EX	10% Hydrochloric Acid. EX
Power Steering Fluid EX	10% Sulfuric Acid EX
Motor Oil. EX	10% Sodium Hydroxide EX

EX - Suitable for most applications including immersion.
G - Suitable for intermittent contact, splashes, etc.

Your Local ENECON® Fluid Flow Systems Specialist

Surface Preparation - ENECLAD® FPS should only be applied to clean, firm, dry, and well roughened surfaces.

1. Remove all loose material and surface contamination.
2. Depending on the surface, solvent clean and / or remove contamination by abrasive blasting, steam cleaning, pressure washing or other suitable means.
3. New concrete should be allowed to cure for a minimum of 28 days prior to treatment. Insure that all laitance is removed from cementitious surfaces before applying FPS.
4. After removing all surface and sub-surface contamination, flush the area as necessary and allow to dry completely.
5. Metallic surfaces should be abrasive blasted to achieve a 'white metal' finish and a 3 mil profile. Commence the application of the FPS immediately upon completion of surface preparation and before any oxidation takes place.

Priming Concrete Surfaces - Prior to applying ENECLAD® FPS to concrete and / or cementitious substrates, the surface should be treated with CHEMCLAD® P4C to seal the surface, minimize out-gassing and insure that optimum adhesion is obtained. After mixing, CHEMCLAD® P4C should be applied using a brush or roller at the rate of 70 - 80 square feet (6 - 7 square meters) per kilogram to achieve the recommended film thickness of 3 mils.

Note: coverage will be reduced on very rough and / or porous surfaces.

The application of the ENECLAD® FPS may commence when the applied CHEMCLAD® P4C reaches its minimum overcoating time and should be completed within its maximum overcoating time as listed in the chart on the left. For additional details concerning the use of the CHEMCLAD® P4C, please refer to the instructions supplied with the material.

Mixing & Application - FPS is supplied in pre-measured quantities to simplify mixing of full units. Simply pour the contents of the Activator container into the Base container; then, using the supplied stirrer or a paint mixer in an electric drill, mix thoroughly until a uniform, streak-free color is achieved. Apply the mixed FPS to the prepared (and / or primed) surface using a brush, squeegee or roller. As a guide, a coverage rate of 25 square feet (2.3 square meters) per kilogram should result in an applied thickness of approximately 12 mils on a relatively smooth surface.

Note: Shape, contour, porosity, roughness, etc. will affect the coverage obtainable.

Where a slip resistant surface is desired, apply two thinner coats of ENECLAD® FPS. After applying the first coat at about 6 - 8 mils, the selected aggregate should be sprinkled on and then back-rolled into the layer. Within the specified overcoating time, apply a second coat at a thickness of about 4 - 6 mils to lock in the aggregate.

Health & Safety - Every effort is made to insure that ENECON® products are as simple and safe to use as possible. Normal industry standards and practices for housekeeping, cleanliness and personal protection should be observed. For further information and guidance, please refer to the detailed MATERIAL SAFETY DATA SHEETS (MSDS) supplied with the material and also available on request.

Cleaning of Equipment - Wipe excess material from tools immediately. Use acetone, MEK, isopropyl alcohol or similar solvent as needed.

Technical Support - The ENECON® engineering team is always available to provide technical support and assistance. For guidance on difficult application procedures or for answers to simple questions, call your local ENECON® Fluid Flow Systems Specialist or the ENECON® Engineering Center.

All information contained herein is based on long term testing in our laboratories as well as practical field experience and is believed to be reliable and accurate. No condition or warranty is given covering the results from use of our products in any particular case, whether the purpose is disclosed or not, and we cannot accept liability if the desired results are not obtained.

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