

**NORTH CAROLINA
DURHAM COUNTY**

**SERVICE CONTRACT
ENECON SOLUTIONS**

THIS CONTRACT is made, and entered into this the 8th day of October 2018, by and between the **COUNTY of DURHAM**, a political subdivision of the State of North Carolina, (hereinafter referred to as "COUNTY"), and **ENECON SOLUTIONS** a corporation duly authorized to do business in the state of North Carolina, (hereinafter referred to as "CONTRACTOR").

For and in consideration of mutual promises to each as herein after set forth, the parties hereto do mutually agree as follows:

1. **SCOPE OF SERVICES.** CONTRACTOR hereby agrees to provide the services and/or materials under this contract pursuant to the provisions and specifications identified in "Attachment 1" (hereinafter collectively referred to as "Services"). Attachment 1 is hereby incorporated herein and made a part of this contract. Time is of the essence with respect to all provisions of this contract that specify a time for performance.

The COUNTY will perform on-going contract monitoring to ensure that the terms of this contract are complied with. CONTRACTOR agrees to cooperate with the COUNTY in its monitoring process and provide documentation and/or information requested during the term of this Agreement for the purpose of monitoring the services provided by CONTRACTOR.

2. **TERM OF CONTRACT.** The Term of this contract for services is from October 8, 2018 to December 31, 2018 unless sooner terminated as provided herein.

3. **PAYMENT TO CONTRACTOR.** CONTRACTOR shall receive from COUNTY an amount not to exceed **FORTY-THREE THOUSAND NINE HUNDRED AND 00/100 DOLLARS (\$43,950.00)** as full compensation for the provision of Services. COUNTY agrees to pay CONTRACTOR at the rates specified for Services performed to the satisfaction of the COUNTY, in accordance with this contract, and Attachment 1. Unless otherwise specified, CONTRACTOR shall submit an itemized invoice to COUNTY by the end of the month during which Services are performed. A Funds Reservation number may be assigned to encumber the funds associated with this contract and must appear on all invoices and correspondence mailed to Purchaser. Payment will be processed promptly upon receipt and approval of the invoice by COUNTY.

4. **INDEPENDENT CONTRACTOR.** COUNTY and CONTRACTOR agree that CONTRACTOR is an independent contractor and shall not represent itself as an agent or employee of COUNTY for any purpose in the performance of CONTRACTOR's duties under this Contract. Accordingly, CONTRACTOR shall be responsible for payment of all federal, state and local taxes as well as business license fees arising out of CONTRACTOR's activities in accordance with this Contract. For purposes of this contract taxes shall include, but not be limited to, Federal and State Income, Social Security and Unemployment Insurance taxes.

CONTRACTOR, as an independent contractor, shall perform the Services required hereunder in a professional manner and in accordance with the standards of applicable professional organizations and licensing agencies.

5. **INDEMNIFICATION.** To the fullest extent permitted by laws and regulations, CONTRACTOR shall indemnify and hold harmless the COUNTY and its officials, agents, and employees from and against all claims, damages, losses, and expenses, direct, indirect, or consequential (including but not limited to fees and charges of engineers or architects, attorneys, and other professionals and costs related to court action or mediation) arising out of or resulting from CONTRACTOR's performance of this Contract or the actions of the CONTRACTOR or its officials, employees, or subcontractors under this Contract or under contracts entered into by the CONTRACTOR in connection with this Contract. This indemnification shall survive the termination of this Contract.

In claims against any person or entity indemnified under this provision by an employee of the CONTRACTOR, a subcontractor, an employee of a subcontractor, or an agent of the CONTRACTOR or a subcontractor, the indemnification obligation under this provision shall not be limited by a limitation on amount or type of damages, compensation or benefits payable by or for the CONTRACTOR or a subcontractor under workers' or workmen's compensation acts, disability benefit acts or other employee benefit acts.

- 6. INSURANCE.** CONTRACTOR shall procure and maintain for the duration of the contract the following insurance coverage from an insurance company(s) possessing a rating of A-VII or higher from the A.M. Best Company and licensed to do business in North Carolina. All of the policies required of the CONTRACTOR shall contain a waiver of subrogation provision to waive all rights of recovery under subrogation or otherwise against the COUNTY. In the event CONTRACTOR'S Insurance Policy or Certificate of Insurance conflicts with the aforesaid language concerning "waiver of subrogation" this contract shall govern. CONTRACTOR shall advise the COUNTY of any cancellation, non-renewal, or material change in any policy within ten (10) days of notification of such action and provide updated certificates of insurance evidencing renewals within fifteen (15) days of expiration. CONTRACTOR'S insurance shall be primary and any insurance or self-funded liability programs maintained by the COUNTY shall not contribute with respect to the CONTRACTOR's insurance. COUNTY shall not be listed as an additional insured on any Insurance Policy or Certificate of Insurance of the CONTRACTOR. In the event CONTRACTOR'S Insurance Policy or Certificate of Insurance conflicts with the aforesaid language concerning "additional insured" this contract shall govern.

6.1 Commercial General Liability: Insurance Services Office (ISO) Form CG 00 01 on an "occurrence" basis, including products and completed operations, property damage, bodily injury, and personal & advertising injury with limits no less than **\$1,000,000** per occurrence and **\$2,000,000** aggregate.

6.2 Commercial Automobile Liability: ISO Form CA 00 01 covering any auto with limit not less than **\$1,000,000** per accident for bodily injury and property damage.

6.3 Worker's Compensation and Employers Liability: as required by The State of North Carolina, with statutory limits, and Employers Liability Insurance with a limit of no less than \$1,000,000 per occurrence.

By requiring insurance herein, the COUNTY does not represent that coverage and limits will necessarily be adequate to protect CONTRACTOR, and such coverage and limits shall not be deemed as a limitation on CONTRACTOR's liability under the indemnities granted to the COUNTY in this Contract. CONTRACTOR shall provide the COUNTY a valid certificate of insurance, in advance of the performance of any work, exhibiting coverage required. CONTRACTOR shall require and verify that all subcontractors maintain insurance meeting all the requirements stated herein.

The failure of the COUNTY at any time to enforce the insurance provisions, to demand such certificates of insurance, or to identify a deficiency shall not constitute a waiver of those provisions, nor reduce obligations of the CONTRACTOR to maintain such insurance or to meet its obligations under the indemnification provisions. Notwithstanding the foregoing, nothing contained in this section shall be deemed to constitute a waiver of the governmental immunity of the COUNTY, which immunity is hereby reserved to the COUNTY.

7. TERMINATION.

7.1. EVENT OF DEFAULT. Any one or more of the following acts or omissions of the Contractor shall constitute an Event of Default hereunder:

- a. Failure to perform the Services satisfactorily or on schedule,
- b. Failure to submit any report required hereunder; and/or
- c. Failure to perform any other covenant, term, or condition of this Agreement.

Upon the occurrence of an Event of Default, the County may take one or more or all of the following actions:

1. Give Contractor written Notice of the Event of Default, specifying the Event of Default and requiring it to be remedied within, in the absence of greater or lesser specification of time, seven (7) calendar days from the date of the notice; and if the Event of Default is not timely remedied, terminate the agreement, effective two (2) days after giving the Contractor written Notice of Termination; and/or
2. Deduct any and all expenses incurred by the County for damages caused by the Contractor's Event of Default; and/or
3. Treat the agreement as breached and pursue any of its remedies at law or in equity, or both, including damages and specific performance.

7.2 TERMINATION FOR CONVENIENCE. This Contract may be terminated, without cause, by either party upon thirty (30) days written notice to the other party. This termination notice period shall begin upon receipt of the Notice of Termination. Termination of this Contract, under either section 7.1 or 7.2, shall not form the basis of any claim for loss of anticipated profits by either party.

- 8. COUNTY NOT RESPONSIBLE FOR EXPENSES.** COUNTY shall not be liable to CONTRACTOR for any expenses paid or incurred by CONTRACTOR, unless otherwise agreed in writing.
- 9. EQUIPMENT.** CONTRACTOR shall supply, at its sole expense, all equipment, tools, materials, and/or supplies required to provide Services hereunder, unless otherwise agreed in writing.
- 10. COMPLIANCE WITH LAWS.** CONTRACTOR shall abide by all statutes, rules, regulations, laws, and executive orders Federal, State and Local as they relate to, but are not limited to, (i) services in general, (ii) payment of employees, subcontractors and agents, (iii) the Fair Labor Standards Act and (iv) the Wage and Hour Division. In the event CONTRACTOR is determined by the final order of a court or appropriate agency to be in violation of any Federal, State or Local statute, rule, regulation, law or executive order or this provision, this Contract may be canceled, terminated or suspended in whole or in part by COUNTY and CONTRACTOR may be declared ineligible for further COUNTY contracts.
- 11. HEALTH AND SAFETY.** CONTRACTOR shall be responsible for initiating, maintaining and supervising all safety precautions and programs required by OSHA and all other regulatory agencies while providing Services under this Contract.
- 12. NON-DISCRIMINATION IN EMPLOYMENT.** CONTRACTOR shall not discriminate against any employee or applicant for employment because of age, sex, race, creed, national origin, or disability. CONTRACTOR shall take affirmative action to ensure that qualified applicants are employed and that employees are treated fairly and legally during employment with regard to their age, sex, race, creed, national origin, or disability. In the event CONTRACTOR is determined by the final order of an appropriate agency or court to be in violation of any non-discrimination provision of federal, state or local law or this provision, this Contract may be canceled, terminated or suspended in whole or in part by COUNTY, and CONTRACTOR may be declared ineligible for further COUNTY contracts.
- 13. EMPLOYMENT ADVERTISING REQUIREMENTS.** CONTRACTOR shall post local job openings, in connection with this contract, with the City of Durham's Office of Economic and Workforce Development, the North Carolina Department of Commerce-Division of Employment Services (formerly ESC, Employment Security Commission) and with the Durham County Department of Social Services throughout the term of this Agreement; provided that the foregoing requirement does not limit CONTRACTOR'S ability to advertise and/or otherwise post job openings with other organizations or media outlets.

14. E-VERIFY. As a condition of payment for services rendered under this agreement, CONTRACTOR shall comply with the requirements of Article 2 of Chapter 64 of the North Carolina General Statutes. Further, if CONTRACTOR provides the services to the County utilizing a subcontractor, CONTRACTOR shall require the subcontractor to comply with the requirements of Article 2 of Chapter 64 of the North Carolina General Statutes as well. CONTRACTOR shall verify, by affidavit, compliance of the terms of this section upon request by the COUNTY.

15. AFFORDABLE CARE ACT REQUIREMENTS (Applicable Only to Staffing Agencies). Beginning in 2015, employers with 100 or more full-time equivalent employees (50 or more beginning in 2016) must offer health insurance coverage that is affordable and provides “minimum value” to full-time employees and dependents as defined by the Patient Protection and Affordable Care Act or face penalties. Staffing companies under contract with Durham County are required to provide affordable minimum essential coverage as defined by the Patient Protection and Affordable Care Act and to indemnify Durham County against any 4980H penalties that result from their failure to provide the appropriate coverage. By signing this contract as a Staffing Company, CONTRACTOR shall comply with the aforementioned health insurance coverage requirements of the Affordable Care Act and to indemnify the County against any associated 4980H penalties. **Please complete Exhibit A and return with this contract.**

16. SECURITY BACKGROUND CHECKS. The Contractor is responsible for requesting and paying for criminal history checks on all individuals providing services under this contract who will be obtaining County identification badges and allowed unescorted access to County facilities. Background checks can be provided by any vendor, or from a North Carolina State agency, providing that the criminal history check is done nationwide. The Sheriff’s Office will conduct background investigations for those Contractor employees who will be working at the Courthouse or Detention Center. A criminal history will not automatically disqualify a Contractor employee from employment on a County contract unless explicitly mandated by law.

The Contractor will send the results of the background checks to their County point of contact who will provide them to the Durham County Security Manager. The Security Manager will individually assess and determine the degree to which the nature of a person’s criminal conduct has a direct and/or specific negative bearing on a person’s fitness or ability to perform contract services in Durham County buildings. The Security Manager will consult the Legal Office on any negative determinations. The Security Manager will notify the Contractor’s County point of contact of the results of the review. A Contractor can appeal a negative determination by the Security Manager to the County Manager for final disposition. Appeals need to be submitted in writing to the contract point of contact within 30 days of notice of a decision to remove or deny an individual from working the County contract due to adverse information in the background check.

This information will be updated annually by the Contractor, 90 days prior to the renewal or extension of the contract, and submitted to their County point of contact who will provide them to the Durham County Security Manager. Personnel without a currently approved background check will have their access to those buildings restricted.

Additional background screening may be necessary at specific county buildings. The Contractor shall provide names of all individuals in the Contractor communications log and to the County Representative. This information will be reviewed annually.

For those Contractor employees who will be working at the Courthouse or Detention Center, the Sheriff’s Office will make the security determination. The Contractor will provide the results of their background check to the Major for Support Services who will conduct an additional investigation and then individually assess and determine the degree to which the nature of a person’s criminal conduct has a direct and/or specific negative bearing on a person’s fitness or ability to perform contract services in the Courthouse or Detention Facility. A Contractor can appeal a negative determination to the Chief Deputy for final disposition. Appeals need to be submitted in writing to the Chief Deputy within 30 days of notice of a decision to remove or deny an individual

from working the contract due to adverse information in the background check. While an appeal is pending, the employee will not be allowed access to the Courthouse or Detention Facility.

This information will be updated by the Contractor and submitted to the Sheriff's Office annually, 90 days prior to the renewal or extension of the contract. Personnel without a currently approved background check will have their access to those buildings restricted.

17. AUDIT RIGHTS. For all Services being provided hereunder, COUNTY shall have the right to inspect, examine, and make copies of any and all books, accounts, invoices, records and other writings relating to the performance of the Services. Audits shall take place at times and locations mutually agreed upon by both parties. Notwithstanding the foregoing, CONTRACTOR must make the materials to be audited available within one (1) week of the request for them.

18. DISPUTE RESOLUTION PROCEDURE. To prevent disputes and litigation, it is agreed by the parties that any claim or dispute between COUNTY and the CONTRACTOR, arising from this Agreement or the services and/or materials being provided by the CONTRACTOR, shall be sent to the Durham County Manager who shall appoint a qualified mediator to address the issue. Such request shall be submitted to the County Manager in writing within ten (10) days of the claim or dispute. Upon receipt of a timely written claim, the Manager, or his designee, shall notify the Mediator who will conduct a mediation and notify the CONTRACTOR in writing of the decision within forty five (45) calendar days from the date of the submission of the claim or dispute, unless the Mediator requires additional time to gather information or allow the parties to provide additional information. The Mediator's orders, decisions and decrees shall be non-binding. Mediation, pursuant to this provision, shall be a pre-condition to initiating litigation concerning the dispute. During the pendency of any dispute and after a determination thereof, parties to the dispute shall act in good faith to mitigate any potential damages including utilization of schedule changes and alternate means of providing services and/or materials. The costs of mediation shall be divided equally between parties to the dispute.

The mediation session shall be private and shall be held in Durham County, North Carolina. Mediation under this provision shall not be the cause for a delay of services and/or materials being provided which is the focus of the dispute.

If the disputed issue cannot be resolved in mediation or either party disagrees with the results of the mediation, the parties may seek resolution in the General Court of Justice in the County of Durham and the State of North Carolina. If a party fails to comply in strict accordance with the requirements of this provision, the non-complying party specifically waives all of its rights provided hereunder, including its rights and remedies under State law.

19. EXISTENCE. CONTRACTOR warrants that it is a corporation or otherwise legal entity duly organized, validly existing, and in good standing under the laws of the State of North Carolina and is duly qualified to do business in the State of North Carolina and has full power and authority to enter into and fulfill all the terms and conditions of this contract.

20. CORPORATE AUTHORITY. By execution hereof, the person signing for CONTRACTOR below certifies that he/she has read this contract and that he/she is duly authorized to execute this contract on behalf of the CONTRACTOR.

21. SUCCESSORS AND ASSIGNS. CONTRACTOR shall not assign its interest in this Contract without the written consent of COUNTY. CONTRACTOR has no authority to enter into contracts on behalf of COUNTY.

22. NOTICES. All notices which may be required by this contract or any rule of law shall be effective when received by certified mail sent to the following addresses:

COUNTY OF DURHAM
ATTN: GENERAL SERVICES
310 SOUTH DILLARD STREET
DURHAM, NORTH CAROLINA 27701

ENECON SOLUTIONS
ATTN: JOSH KEITH
670 AVENUE ROAD
WASHINGTON, NORTH CAROLINA 27889

23. **HEADINGS.** The subject headings of the sections are included for purposes of convenience only and shall not affect the construction or interpretation of any of its provisions. This contract shall be deemed to have been drafted by both parties and no interpretation shall be made to the contrary.
24. **GOVERNING LAW.** This Contract shall be governed by and in accordance with the laws of the State of North Carolina. All actions relating in any way to this Contract shall be brought in the General Court of Justice in the County of Durham and the State of North Carolina.
25. **REQUIRED PROVISIONS FOR CONTRACTS/AGREEMENTS/GRANTS UTILIZING FEDERAL FUNDS.** Pursuant to the Federal Uniform Guidance Appendix II to 2 CFR Part 200, if Federal Funds are involved in this Contract/Agreement/Grant Agreement, by executing this Contract/Agreement/Grant Agreement, the Contractor/Vendor/Grantee, certifies that it agrees to and is in compliance with the provisions specified in Exhibit B – Federal Uniform Guidance Contract Provisions Certification.
26. **ENTIRE CONTRACT.** This contract, including Attachment 1, shall constitute the entire understanding between COUNTY and CONTRACTOR and shall supersede all prior understandings and agreements relating to the subject matter hereof and may be amended only by written mutual agreement of the parties.

IN TESTIMONY WHEREOF, the parties have expressed their agreement to these terms by causing this Service Contract to be executed by their duly authorized officer or agent.

COUNTY OF DURHAM

Wendell Davis, County Manager

This instrument has been pre-audited in the manner required by the Local Government Budget and Fiscal Budget Control Act.

Susan Tezai, Durham County Chief Financial Officer

ENECON SOLUTIONS

By: _____
_ Chuck Hudson, Owner/Distributor

ATTACHMENT 1” to follow

**Waterproofing Floor in Mechanical Room
at Durham County Detention Center**

**SCOPE OF SERVICES
(RFP No. 18-039)**

This Scope of Services will become an integral part of the contract between the County of Durham and the Contractor. The Contractor hereby agrees to provide services and/or materials to the County pursuant to the provisions set forth below.

- 1.0 **PURPOSE:** The purpose and intent of the Request for Proposals (RFP) is to solicit proposals from qualified firms to furnish and install a waterproofing system to the floor in mechanical room 2-D and apply slip resistant, safety yellow topcoats to all stair treads and mechanical curbs located in mechanical rooms 2-B and 2-D. Work is to be done at Durham County Detention Center located at 219 South Mangum Street Durham, North Carolina 27701.
- 2.0 **INVOICE PAYMENT:** Invoices submitted will be paid net 30 days. Invoices shall be forwarded to the County's Designated Representative for review and payment approval.
- 3.0 **TERMS OF CONTRACT:** The initial term of the contract will be from **Date of Award** through **June 30, 2019**.
- 4.0 **CANCELLATION OF CONTRACT:** The County of Durham reserves the right to cancel and terminate any resulting contract(s), in part or in whole, without penalty, upon 30 days written notice to the Contractor. Any contract cancellation shall not relieve the Contractor(s) of the obligation to deliver and/or perform services on all outstanding orders issued prior to the effective date of cancellation.
- 5.0 **COUNTY DESIGNATED REPRESENTATIVE(S):**

Richard Egnaczak, Senior Equipment Technician, Phone: (919) 257-1088
Email: regnaczak@dconc.gov

David Alpaugh, Buildings Maintenance Supervisor, Phone (919) 309-6480
Email: dalpaugh@dconc.gov
- 6.0 **BACKGROUND:** The Durham County Detention Center is located at 219 South Mangum Street in Durham, North Carolina 27701. The facility can house up to 736 inmates and operates 24 hours a day, 7 days a week. The Durham County Detention Center opened in the summer of 1996 and it consists of Intake/Release, Criminal Magistrates, Jail Administration, Central Control, Medical, Programs, Staff Facilities, Food Service, Laundry and Facility Maintenance are located on the first two levels. The remaining levels provide inmate housing. Currently, there is no waterproofing on the mechanical room floor at 2-D. The sealing of the mechanical floor is necessary to protect the floors below from water leaks. This mechanical room contains air handlers, plumbing, and other systems that have the potential to leak and cause flooding.
- 7.0 **WORK REQUIREMENTS:**
 - a. The Contractor will clean and prepare the floor per Manufacturers recommendations. (Diamond grinding, scraping, vacuuming etc.)
 - b. The Contractor will utilize vacuums, fans and other equipment as needed to insure dust and debris are not pulled into any air intakes of Air Handling Units, Boilers and other

- equipment.
- c. The Contractor will install urethane sealant or flashing tape as needed where walls and slab meet and at all penetrations in the slab. The Contractor will then apply an elastomeric coating to these areas. This process will allow for movement between these areas while still remaining watertight.
 - d. The Contractor will apply an eighth inch (1/8") of epoxy type flooring light gray in color to all floor areas to include sides of curbs and an eight-inch (8") detail on all perimeter walls.
 - e. The Contractor will broadcast a twelve (12) mesh aggregate to the flooring material to insure flooring is slip resistant. All excess aggregate will be removed and floor will be cleaned and detailed.
 - f. The Contractor will install a topcoat of pigmented epoxy coating.
 - g. The Contractor will clean and prepare all stair treads and mechanical pads per manufacturers recommendations and install a slip resistant Safety Yellow top coat to all stair treads and mechanical pads located in Mechanical Rooms 2-B and 2-D.
 - h. The Contractor will clean up all material and debris at the end of the project.

8.0 **SCHEDULES/TIMELINES:**

Regular working hours shall be Monday – Friday between the hours of 7:00am-4:30pm. All work is to be complete within Forty-Five (45) days of Notice to Proceed (NTP).



PROPOSAL FORM

In accordance with the attached instructions, terms, conditions, and Scope of Services we submit the following proposal to the County of Durham.

TOTAL PROPOSED COST

\$ 43,950

Forty-three thousand nine hundred and fifty dollars

(Total in Words)

The above Total Proposed Cost should be based on being awarded the entire project.

I certify that the contents of this proposal are known to no one outside the firm, and to the best of my knowledge all requirements have been complied with.

Date: 6/13/18

Authorized Signature: 

Name: Josh Keith

Title: Certified Technical Specialist

Firm Name: ENECON Solutions

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.



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The Fluid Flow
Systems Specialists.
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Tel: 516 349 0022 · Fax: 516 349 5522

Email: info@enecon.com

6 Platinum Court · Medford, NY 11763-2251

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 D-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 ft² / 6 - 7 m²

Theoretical coverage rate per sq. ft. @ 5 mil. dry film thickness			
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.



Using ENECLAD® FPS

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 the ENECLAD® system.
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 CHEMCLAD® SC 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 - ENECLAD® 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 ENECLAD® 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. However, shape, contour, porosity, roughness, etc. will affect the coverage.

Note: Since a minimum of two coats are recommended, ENECLAD® FPS is available in different colors to simplify overcoating.

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

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.

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.