



**PROVIDING CRITICAL
PROTECTION - FROM THE DATA
CENTER TO THE SOLAR FIELD**

» WIRELESS:

The wireless industry is growing by leaps and bounds. The number of connected devices and the key mobile trends such as video streaming, Internet of Things (IoT), and mobile payments continue to be the driving force behind the expansion of the telecommunications industry. Behind all of this “smart” device utilization, providers are looking for infrastructure equipment that is reliable, modular and versatile. These types of shelters often include dc power plants, battery installations, backup power generators, security systems and a host of special equipment. At VFP, we understand the critical nature of these wireless suppliers and offer the experience and expertise to provide shelters designed to meet each application’s unique specifications.

VFP shelters meet all state certification requirements and our range of shelter options can help you solve difficult site problems. A variety of exterior finishes and designs including brick, lap siding, block, and more, fit in with any neighborhood. We offer concrete, light weight or panelized construction, and our experienced field service personnel will get the on-site installation done right and on schedule.

VFP provided shelters for one of the first operational cellular systems in 1983, and since then has led the industry with our innovative design solutions.





» UTILITIES:

In today's world, the threat to power utilities has never been more real. From simple vandalism and theft to the looming threat of a terrorist attack, the utility and power markets have never been more on edge about the security of their operations. Regulators have even developed security mandates to help assure that any attack on our primary services will not be catastrophic. That's why a utility infrastructure needs the experience that VFP shelters provide.

Our concrete control houses take full advantage of the strength, and long life of concrete. They are assembled from reinforced concrete panels, welded together to form a high strength structure. The floor, roof and wall panels are triple sealed for weather resistance and lifting/tie-down fittings are integral to the structure. Completed control houses are inherently bullet, vandal, and fire resistant and can meet UL-752, Level 8 Ballistics requirements. All VFP control houses meet applicable state building codes, and VFP is a state approved manufacturer.

» PUBLIC SAFETY:

Establishing public safety in countries across the world requires understanding the critical nature of infrastructure stability. With durable and versatile shelters from VFP to house these critical communication components, emergency responders and related services can respond quickly and efficiently to any situation.

VFP concrete and lightweight public safety structures come standard with a stone aggregate finish. However, VFP offers optional exterior finishes and designs to fit any site situation. From cedar shake to brick facade, our variety of exterior choices can provide an exceptional means of blending in to the given surroundings.

Additionally, VFP can customize the interior components to meet your specific public safety infrastructure needs. Available options can include fire suppression systems, security systems, customer compliant grounding systems, ice shields and bridges, steps, and bullet resistant cages for HVAC equipment. These unique systems can either be implemented directly through VFP or sent to us for complete installation.

With the variety of construction systems we offer and the expertise to provide comprehensive support systems, including backup power, and communications equipment integration, VFP is your first choice for public safety equipment shelters.



» RENEWABLE ENERGY:

Renewable energy initiatives continue to grow as consumers want to move away from traditional fossil fuel consumption. The backlash on coal, oil, and natural gas reliance has spurred renewable energy sources such as wind farms and solar fields to continue their climb in installation numbers. However, with this new expansion into alternative energy sources, the need for increased regulation and certification has also grown.

The amount of energy these types of power plants are producing, groups them into the same regulatory compliance as utility and public works agencies. Their ability to regulate, measure, and report on power generation is considered a critical infrastructure element and are clearly being included in security mandates from government agencies. VFP's concrete shelters can maintain security against intruders, vandals, AND harsh environmental elements.

Our precast concrete shelters take full advantage of the ruggedness and long life of concrete. They are manufactured with precast reinforced concrete panels and then welded together to form a high strength structure. The floor, roof and wall panels are triple-sealed with proprietary interlocking double keyway and step joint designs for superior weather protection. Completed concrete shelters are inherently bullet, vandal, and fire resistant and can meet UL-752, Level 8 Ballistics requirements



» FIBER OPTICS:

Throughout the US and across the world, initiatives for the implementation of broadband or high-speed internet to unserved, underserved and rural areas have accelerated fiber optic use. Fiber optics have long been known for their ability to transmit large amounts of data quickly and efficiently. Yet they can be susceptible to sabotage. VFP fiber huts are ideal for securely housing fiber optic cable and connectivity components designed to implement FTTx, Fiber to the Premise, Fiber to the Home, or Fiber to the Building networks.

Whether you need a lightweight structure for a hard to reach site or a concrete hut designed for the ultimate secure structure, VFP offers both to keep equipment safe.

Both are available in modular or panelized configurations. Modular designs are available to 1000 sq. ft. or more and are pre-assembled, allowing control and protection equipment to be integrated prior to delivery to site. Panelized, Build-On-Site-Solutions (BOSS) fiber huts are available in concrete and light weight metal construction. They can be easily transported and have few design restrictions. Interior heights to 15 feet or more, and buildings to 3000 sq. ft. or larger are easily handled. VFP Field Service personnel install all modular shelters, and erect and integrate all BOSS shelters on-site.

VFP fiber huts are available with a variety of exterior finishes, such as brick, block, stone aggregate, lap siding, wood grain and more. They're sure to blend in with any neighborhood.

VFP can also provide full equipment integration either in-factory or on-site including installation of dc power and backup power structures, security systems, cable tray and communications equipment.

Our expertise in providing the most comprehensive and versatile shelter and fiber hut offerings allows you to select the configuration that works best for your FTTx application.



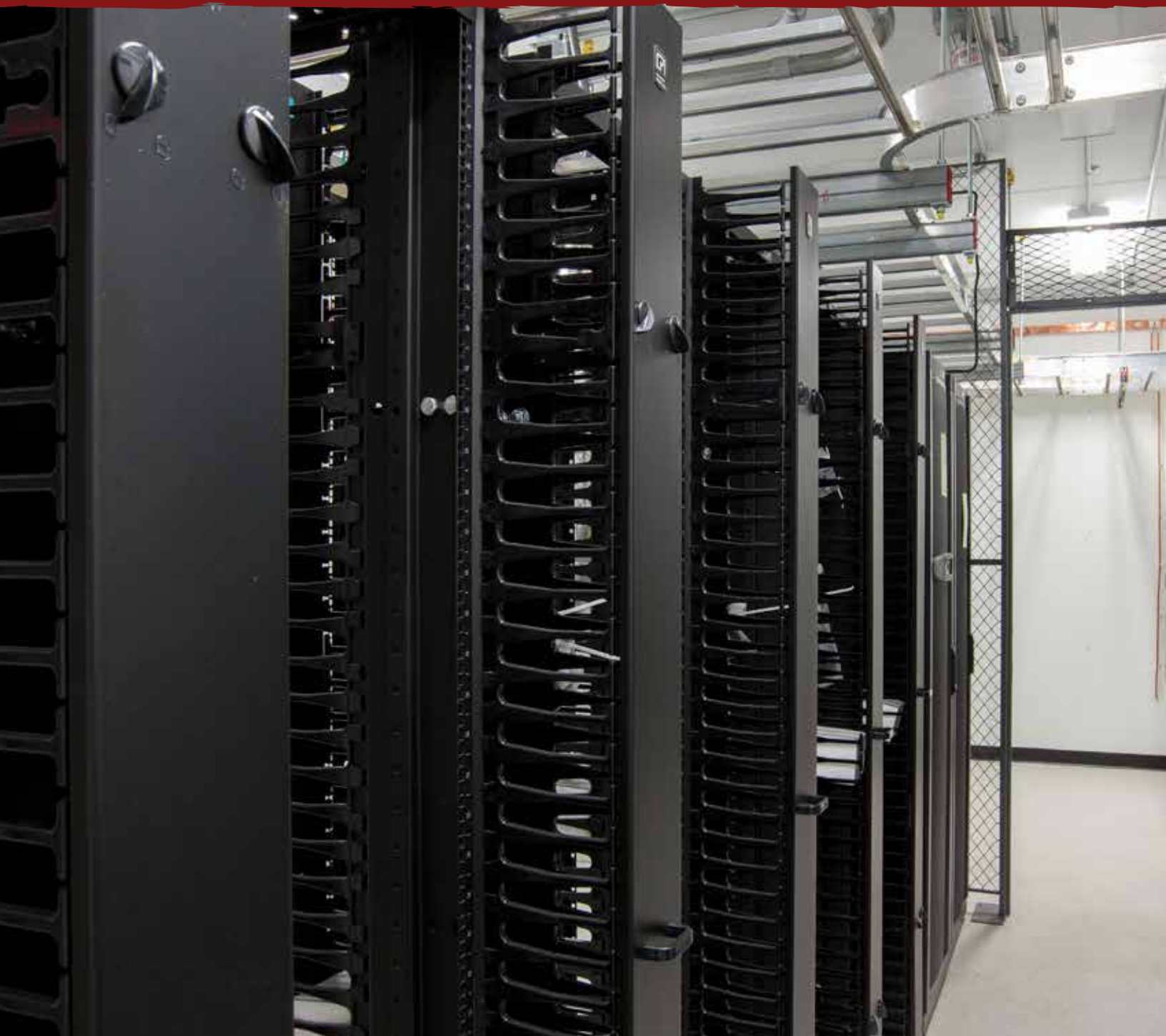
UPS BATTERY



» MODULAR DATA CENTERS:

Nearly unlimited expandability, single and redundant generator backup power, static and rotating UPS systems, environmental protection for critical equipment, and site security systems are all available with VFP MDC Solutions. In addition, VFP's experienced system integration technicians will supply and install equipment racks and system electronics to your specifications.

Site security is not limited to shelter access concerns only. Bullet resistance, fire protection and security of MDC support services are critical as well. MDC shelters can include secure entry chambers in several configurations, with a variety of locking and access systems, including biometrics. Furthermore, interior areas can include additional access controls. Exterior security options include enhanced protection for HVAC equipment, and security bars for all vents and cable openings. We can also provide secure enclosures for exterior generators and related power equipment.





Generator and UPS equipment are available to meet the most demanding installations. VFP's MDC systems have been delivered with generators of 2 mW or more including sound reduction to normal conversational levels within 3 feet. Generators are available fully integrated within the MDC shelters or in weatherproof enclosures outside. Fully incorporated static or rotating UPS systems are available as well. Remote control options are available for most system configurations. VFP offers optional Field Service on-site setup and commissioning of provided power system equipment to complete the installation.

The continuing growth of data services has created a need for easily expandable data centers. Using individual modules, VFP MDC's can grow to meet your needs. Adding power or equipment modules to an existing facility is easy and cost effective as well.





» PROJECT MANAGEMENT:

The success of each project starts with our unique marketing team who have "hands-on" experience in engineering, materials, manufacturing, quality control, customer service and field service. They are always available to offer assistance, answer questions, and guide your equipment shelter from design, through production, to on-site delivery - and long after the building is in service. From sales to delivery -- and for as long as you need us -- our "hands-on" staff will be available.

Engineering

VFP Industries prides itself on being the technical leader in the industry. Our corporate engineering team is responsible for the structural, mechanical, and electrical design for all VFP products. That capability also extends to the design details for equipment integration and installation within the shelters. Prior to production release, engineering prepares manufacturing drawings, long lead item lists, and a complete bill of materials for each shelter.

VFP maintains state-manufactured building approval for every state requiring certification and our in-house professional engineers certify construction drawings for those localities. Where required by contract, engineering can supply additional information including site specific shelter foundation drawings, rigging and off-loading drawings, exterior generator foundation, installation drawings, and more.

Let VFP engineering be a part of your project team from the beginning – our experience and know-how can reduce project costs and schedule.



Field Service

VFP employs talented Field Service Technicians responsible for the complete installation of VFP shelters on site, the assembling of modular units and the installation of accessories and items removed to facilitate shipping. But VFP Field Service doesn't end there. VFP Field Service personnel can also provide ongoing preventive maintenance services that can keep structures operational and well preserved. Some of the many preventative maintenance areas that VFP Field Service can manage include:

- » Air conditioner replacement
- » Exterior maintenance
- » Battery replacement
- » Overall general upkeep

Our Field Service crews can perform work specific to each installation or it can even be extended to include additional site maintenance not directly associated with the shelter we provide. Additionally, we understand that down the road, building modifications may be required. Upgrading HVAC equipment, adding ice shields, repairing damage, adding expansion modules and more are all areas that can be routinely handled by VFP Field Service personnel.

VFP Field Service is your source for all repair and service parts. No matter who manufactured your shelter or how long your shelter has been in service, VFP Field Service Technicians will be able to get you back up and running with needed parts and repairs.





CONTACT US TODAY TO DISCUSS A
SOLUTION TO FIT YOUR APPLICATION.



VFP INC. | 1701 MIDLAND ROAD, SALEM, VA 24153 | 540.977.0500 | INFO@VFPINC.COM