Case Study: Unbelievable Shelter Remanufacture

Introduction

In today's rapidly growing telecommunications industry, keeping infrastructure in top shape is crucial for uninterrupted service, and often extremely tight timeline requirements of 60-90 days are needed for a telecom shelter delivery that new shelter manufacturers with lead times often as long as 6-9 months can't hit.

The Challenge

For a service provider in Branson, Missouri, not only did they have a narrow time window to get the new shelter installed, but they also required a gen room configuration—a shelter partitioned with telecom racks and equipment on one partition and a generator on the other partition.

Fortunately, CellSite Solutions retains a surplus of shelters available for remanufacture to ensure our ability to deliver a more cost-effective shelter with incredibly tight delivery timelines that new manufacturers could never meet.

Before Remanufacture: Severely Dilapidated Shelter

The surplus shelter on hand that met the size dimensions required by this service provider was a severely dilapidated 12'x 30' telecom shelter. Part of the interior roof collapsed, and both the interior and exterior had significant cosmetic issues, as shown in the pictures below. While the cosmetic appearance of the shelter appeared disastrous, the shelter's concrete infrastructure was structurally sound.

Interior Pics Before Remanufacture





Exterior Pic Before Remanufacture





To further complicate the project, the service provider had specific custom modifications required to convert part of the shelter into a generator room. The generator room design requirements included:

- A section of the shelter dedicated to telecom equipment.
- The other section of the shelter needed to house an enclosed generator.
- Each section required separate entrances to ensure secure, dedicated spaces, and a 2-hour rated firewall installed between the telecom and generator partition.
- Relocation of door entrance(s) due to the site configuration.

Typically, a shelter with this degree of customization would require a more expensive, new shelter design, but you will see that CellSite Solutions delivered a remanufactured shelter that met every customer specification.

Our Remanufacture Process

The following details CellSite Solution's remanufacture process, which enabled us to deliver a shelter that met the customer's specifications in an incredibly short period, less than 90 days from start to on-site shelter installation.

- 1. **Custom Generator Room Conversion**: Structural changes were made to split the shelter into two internal sections:
 - Telecom Section: Renovated to provide optimal conditions for telecom equipment, including environmental controls.
 - Generator Section: Added a fully enclosed generator space with a separate entrance, ensuring safety and soundproofing for the operational environment. We placed a fresh air intake louver where the original door was located on the side of the shelter. A 2-hour fire-rated wall was also installed between the generator section and the telecom equipment section. Finally, special spill containment flooring was installed on the gen room section to protect in case of diesel spill.
- 2. **Interior Upgrades**: Completely restored the interior taking the walls down to bare concrete —then added insulation, fiber re-enforced wall panels, roofing, and SelecTile vinyl flooring that collectively provides a very durable, and energy-efficient environment. This interior also featured the installation of a new door entrance to the telecom section of the shelter.

Interior Pics After Remanufacture: Telecom Section





3. Electrical, HVAC, Generator, and ISP:
Added entirely new electrical
systems, energy-efficient LED lighting,
and new 3 ton BARD HVAC systems as
well as the generator, battery system,
and a Fike Novec fire suppression
system housed in the gen room
section. CellSite Solutions is also
capable of adding any necessary ISP
racks and cabling.





4. **Exterior Restoration**: There were several steps to finalize the exterior restoration starting with the addition of a new energy-efficient polyvinyl roof that features a 10-year workmanship warranty, concrete sealant, re-caulked seams, and a fresh coat of industrial-grade paint matching the customer's exterior color specification. From the pics below, you can see the remanufactured shelter features two new door locations on one side, and the side of the shelter that had the original door location is now outfitted with the air intake louver for the gen room.

Exterior Pics After Remanufacture





When comparing the BEFORE to the AFTER pics of the interior and exterior of this shelter the transformation is almost miraculous. This is an extreme example that demonstrates the product quality the CellSite Solutions production team can deliver, whether the shelter is in our warehouse, or we need to remanufacture the shelter on-site.

Conclusion

In this case study CellSite Solutions provided a comprehensive shelter transformation— a like-new telecom equipment shelter that utilized more durable materials than are often used on new shelters, ultimately an infrastructure solution that met the customer's challenging gen room specifications and timeline while more cost effective than a new shelter.

By choosing **CellSite Solutions**' remanufactured telecom shelters, service providers achieve a combination of **cost savings**, **quality and durability**, **and fast delivery** that new shelter manufacturers simply can't match. Whether it's a complete overhaul of a customer's shelter worked on in our warehouse or on-site, or a custom modification of one of our surplus shelters on hand, our remanufactured shelters offer unmatched reliability and value.

Contact us today by email at sales@cellsitesolutions.com or call **1 855 CEL SITE.**