As the COVID-19 crisis grows, so will the need for isolation housing that is a high quality, low cost solution for individual quarantine. To support the government and private agencies in this time of need, while also thinking about future needs of the country’s population, a smart approach is necessary.

MMC’s flexible supportive isolation housing is high-volume, scalable across the U.S., maximizes space within each unit, and has the added attribute of mitigating waste and cost by providing an easy conversion of these units to permanent reuse as affordable housing. This solution addresses the immediate need to combat the spread of the COVID-19 pandemic, and provides a long term difference the country needs to house its seniors, Veterans and families.
Emergency housing is often manufactured and shipped for the one-time use of the crisis at hand. After the crisis has abated, the unit is either disposed of or liquidated at a loss. MMC’s modular solution produces units that can be used to temporarily address the emergency need and then shipped to a permanent location to be used for affordable housing or supportive housing solutions.

**Typical Emergency Housing Life Cycle**

<table>
<thead>
<tr>
<th>MANUFACTURE</th>
<th>USE IN CRISIS</th>
<th>DISPOSE OR LIQUIDATE BELOW COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 DAYS</td>
<td>30 DAYS</td>
<td>50+ YEARS</td>
</tr>
</tbody>
</table>

**FEMA has run cost benefit models comparing refurbishment/re-use vs. the cost of selling an MHU. The results typically do not present a positive outcome for re-use when weighed against the distance travelled and the length of time a unit is occupied, which maybe up to 18 months.**

**KBTX has learned the trailers that reportedly cost FEMA around $65,000 each, are now being sold on a government auction website with bids starting as low as $100.**


The modular solution to emergency units provides both lower up-front costs as well as structural resilience allowing for the units to be sanitized and relocated for future use. Rather than being disposed or sold at a loss, emergency modular units can be used to address the need for affordable and/or supportive housing across the nation.

**Isolation Housing**

To provide a high quality, low cost solution for individual isolation; with future conversion to affordable housing or senior housing.

**LIFE CYCLE OF VBC ISOLATION UNIT**

<table>
<thead>
<tr>
<th>MANUFACTURE</th>
<th>TRANSPORT/INSTALL (TEMPORARY SITE)</th>
<th>TRANSPORT (PERMANENT SITE)</th>
<th>STACK UNITS TO BUILD SENIOR OR AFFORDABLE HOUSING BUILDING</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 DAYS</td>
<td>30 DAYS</td>
<td>Place on Foundation</td>
<td>USE UNITS AS A FLEXIBLE SENIOR OR AFFORDABLE HOUSING BUILDING</td>
</tr>
</tbody>
</table>

Pricing can vary depending upon manufacturing facility. Includes HVAC, Plumbing, Sprinkler, Electrical, Interior Finishes. On-site plumbing connections and common area HVAC and corridor to be completed on site. Furniture, medical technology and installation can be included at additional cost.

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Capacity of a National Factory Network

Utilizing the MMC partner factories in our network, we will provide a rapid response to the growing need for supplemental care units by hospitals and other agencies across the country.

As COVID-19 cases are rising at a rapidly increasing rate in the United States, we find ourselves in a developing healthcare crisis. This new pandemic will result in the U.S. healthcare infrastructure seeing immediate shortages in hospital rooms for patient care. MMC’s modular units are a fast, efficient and cost effective way to address the need now, before the shortage has begun.

Together, we can have greater impact!
Each modular unit contains two rooms with two bathrooms that act as a self-contained isolation care unit for critical separation from other patients in hospitals or residents in communities.

**Isolation Module**

**Isolation Module - Building Plan**

15 units, 15 baths, 1 staff baths, 1 monitoring station
5,556 SF
100% COMPLETE MODULAR BATHROOM SOLUTION

**PLUG & PLAY MODULAR SERVICES**
Pre-complete and tested electrical and plumbing assembly ready for seamless connection.

**TYPE-I NON-COMBUSTIBLE CONSTRUCTION**
Lightweight precision cut steel frames with all service holes and notches pre-cut for easy installation.

**IMPERVIOUS AND INERT SURFACES**
Lightweight wall construction featuring mold and water resistance with anti-microbial properties.

**GLASS FIBER REINFORCED CONCRETE BASE**
Lightweight and high-strength monolithic concrete bases with cast-in lifting ferrules, water drainage falls, curved edge perimeter and coving. They are slip-resistant and mold-proof.

Bath pods are created utilizing Splash Modular Technology.
Module Use - Isolation Unit (initial use)

Pricing can vary depending upon manufacturing facility. Includes HVAC, Plumbing, Sprinkler, Electrical, Interior Finishes. On-site plumbing connections and common area HVAC and corridor to be completed on site. Furniture, medical technology and installation can be included at additional cost.

Module Use - Affordable/Senior Housing (future use)
The immediate need to address solitary isolation housing for high risk, healthy patients is critical in today’s environment. Doing so, will allow the US to navigate through the spread of the COVID-19 eventually leading us back to normal, every day life. VBC’s solution offers individual living units with fully functioning amenities to allow those living there, to sustain some sense of normality without risking exposure. As a self contained unit with full kitchen, bathroom, living and sleeping area’s, the VBC isolation housing plan is the solution.

After this crisis ends, this flexible and easily converted plan can immediately pivot into addressing more long-term housing issues that plague the US. Offsetting the cost, these units can easily convert to multifamily affordable housing for those struggling with housing cost.

This plan helps simplify the building process allowing public and private entities to forge true and immediate progress to fight current healthcare challenges, but also the ongoing struggle to provide affordable housing in the future. With these efficiencies, the savings from a reusable solution can be passed on to those that need it most; providing an affordable home they are proud of.
Affordable Housing
Unit plan (future use)
288 sq ft

Efficient Studio
$40,000

Modules can be repurposed to be used as affordable housing units after the COVID-19 crisis abates.

Pricing can vary depending upon manufacturing facility. Includes HVAC, Plumbing, Sprinkler, Electrical, Interior Finishes. On-site plumbing connections and common area HVAC and corridor to be completed on site. Furniture, medical technology and installation can be included at additional cost.
Flexible Building Designs

Reuse of isolation modules for affordable housing or senior housing

A variety of external facades and finishes can be utilized to make each building as unique as those who reside there.

- Modules can easily be added or removed during design to customize the footprint and height of the building.
- Modules can be combined to create larger living spaces while maintaining the same footprint and adjusting for market needs.
- Different length modules can be utilized to create building amenities, such as balconies with minimal impact to cost.
The established industry of modular construction has hundreds of factories nationally, with a coalition of small business factory partners that is growing daily, poised to immediately focus their entire resources to address the U.S. healthcare crisis. Our current coalition factories span across the nation with locations in CA, IN, NC, MI, WI, TX, NY and PA allowing for immediate local and regional response. With thousands of employees primarily located in more rural environments, they are less affected by the spread of COVID-19 providing a more stable workforce for continuous production through the crisis.

The Modular Mobilization Coalition is a group of 25+ small business, modular construction companies with a nationwide network of 25+ factories, a collective 4,000+ employees, and combined annual revenue of over $500MM ready to build a standardized Supplemental Care Unit (SCU). SCUs are designed to address the immediate need for quarantine, patient recovery, and care staff resting rooms that are able to be moved from city to city as the virus peaks and wanes, then can be permanently used as supportive housing after the crisis abates. By daisy chaining these factories together with a single point of contact, we will be able to expedite the build process and output by 2X resulting in units arriving at hot spots within 2-3 weeks.

Modular Coalition Supporters:
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