PCR-R™ (E-House)

RIGID FRAME INTEGRATED SOLUTION FOR THE CANADIAN MARKET

CONCEPT

Powell’s PCR-R™ (E-House) is the sensible alternative to on-site construction. Powell’s customer first concept ensures that our PCR-R is custom designed to your specific needs. Our packaged solution is more cost effective by significantly reducing the need for onsite construction. It is designed for quick installation on a prepared foundation. The PCR-R arrives fully integrated, tested, complete and ready to install.

DESIGN

Powell’s packaged solution is designed to withstand the most challenging of environments. The PCR-R (E-House) consists of a structural steel rigid frame enclosed with pre-insulated interlocking metal panels for the walls and roof. All structural aspects of the building are custom engineered to accommodate all electrical equipment. A PCR-R can be shipped in one piece up to 24’Hx24’Wx125’L. Multi-split solutions are available for larger applications.

QUALITY

Your custom-engineered PCR-R is assembled under quality controlled conditions, with uncompromising standards. Extensive factory testing in accordance with the latest UL, IEEE, CSA and NEMA standards ensures that your PCR-R will meet or exceed all applicable codes. Skilled craftsmanship and advanced production techniques provide many years of reliable, trouble free service.

Turnkey E-House Solution

Fully Manufactured and Integrated All Under One Roof in an Indoor Facility

Reliable and Cost Effective One Stop Solution

CSA A660 Certified

ISO 9001:2008 Certified
SPECIFICATIONS
Powell E-Houses are custom engineered solutions and are designed per customer requirements, below are some typical specifications.

<table>
<thead>
<tr>
<th>Industry Standard</th>
<th>NEMA, IEEE, NEC, ANSI, OSHA, IBC, 2000 and CSA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal Service</td>
<td>-50°C to 40°C 125mph winds Seismic Zone 4</td>
</tr>
<tr>
<td>Standard Loading</td>
<td>Floor: 250 Lbs./ft² Roof: 40 Lbs./Ft² Walls: 400 Lbs./Linear Foot</td>
</tr>
<tr>
<td>Lifting/Shipping</td>
<td>Air-ride trailer per shipment Minimum (4) removable lugs</td>
</tr>
</tbody>
</table>

STRUCTURAL
The skid is the base of the structure and acts as a primary member of the construction. It is blasted and painted to a SP6 or better finish.

<table>
<thead>
<tr>
<th>Base Types</th>
<th>Regular</th>
<th>Draggable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roof Types</td>
<td>Gable</td>
<td>Shed</td>
</tr>
</tbody>
</table>

GIRTS & PURLINS
- Girts are galvanized steel members with a C-cross sectional shape and are installed to hold the insulated wall panels.
- Purlins have the same role as Girts, are Z-shaped and are used for roof panels. They are bolted to the welded flange on the primary members of the structural frame.

FLOORING AND FRAME
- Floor plating is either 1/4" or 3/8" as required by customer specifications.
- Cross bracing is utilized to increase the overall frame stability.
- Rods, cables or wide flange beams are used for the primary structure depending on the application and specification requirements.

Powered by Safety®
**WALL PANEL**

<table>
<thead>
<tr>
<th>Panel Thickness</th>
<th>2”</th>
<th>2.5”</th>
<th>3”</th>
<th>4”</th>
<th>5”</th>
<th>6”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insulation Value (R)</td>
<td>16</td>
<td>20</td>
<td>24</td>
<td>32</td>
<td>41</td>
<td>49</td>
</tr>
</tbody>
</table>

- Panel width is 40”, minimum length 8’, maximum is 50’
- Panel Hardware are 12Ga Stainless Steel 2 hole hidden Fastener clip with (2) ¼” – 28 x 5” TEK5 (1 per panel, per support set clip and butyl sealant).

**ROOF PANELS**

<table>
<thead>
<tr>
<th>Panel Thickness</th>
<th>3.25”</th>
<th>4”</th>
<th>5”</th>
<th>6”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insulation Value (R)</td>
<td>26</td>
<td>32</td>
<td>41</td>
<td>49</td>
</tr>
</tbody>
</table>

- Panel width is 40”, minimum length 8’ and Maximum 50’
- Insulation material: CFC-free, foamed-in-place.

**FIRE RATED PANELS**

<table>
<thead>
<tr>
<th>Panel Thickness</th>
<th>4”</th>
<th>6”</th>
<th>8”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire Ratings by Hour</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

- Fire Rated insulated panels are made from mineral wool core bonded with metal facings, available with a unique fastener for increased aesthetic appeal.
- Exterior face is available in 24 or 22 Ga, G-90 galvanized pre-painted steel.
- Panel Length is 6’ to 40’ and the width is 42”.
- Acoustical panels are available upon request.
INTEGRATION

As electrical systems continue to become more sophisticated, the interface between electrical components has increased exponentially. Engineering and manufacturing high functioning electrical systems involving equipment from multiple manufacturers requires a great level of knowledge and capability.

Powell engineers and coordinates all aspects of electrical, structural, mechanical, automation, environmental, code compliance, safety and logistics for your electrical house system in a cost effective and proficient manner. If execution is critical for your project, Powell is the partner you can rely on for all your electrical building needs.

POWELL SOLUTIONS

When an Integrated Packaged Solution is involved, Powell Project Management demonstrates its value.

At Powell, we realize we are but one link in your much larger project plan. Our expertise extends to managing the needs and requirements of the integrated solutions we have provided for more than 50 years. We take on the responsibility of making certain that the solution you receive is designed to all your needs, not only what you specify. We incorporate Powell equipment and third party systems into fully integrated solutions, meeting all codes and standards.

Powell delivers more than a product. We deliver an overall solution with the intent of solving your toughest problem.

Call us Toll Free 855.948.POWL