



the crib, an enviresponsible shelter®
a temporary architectural sculpture installation at Strathmore

The Crib at Strathmore

The Crib, an Enviresponsible Shelter was conceived in response to the popularity of another small building, The Shack at Hinkle Farm, which was designed by local architect, Jeffery Broadhurst, AIA, a few years ago. It became apparent that many people were interested in a small shelter that could serve as a weekend retreat, as a home yoga studio, as a backyard home office, or in multiples as cabins at an eco-resort. The current interest in such small buildings, in simplicity, and environmental responsibility has led Broadhurst Architects to design this prototype building with sustainable and recyclable materials that can be fabricated off site then transported and quickly assembled where desired. This new building, The Crib, takes its basic form from traditional American corn cribs, which were common farm buildings that served to store and dry corn. However, here the form is realized as a more sophisticated kit of parts. The main structure consists of two shop-fabricated galvanized steel bents that combine the concept of traditional wood timber framing with the structural simplicity of common scaffolding systems. The floor and roof consist of structural insulated panels (SIPs) which are supported by engineered wood and steel beams that span between the bents. Prefabricated wall panels made of unpainted heat-treated native and sustainable poplar and recyclable translucent insulating multi-layer polycarbonate sheets are weather-stripped and clipped into the framework.

This simple but exceptionally sturdy structural concept allows considerable flexibility in the length of the building and degree and type of outfitting. The "full" version of The Crib at Strathmore is a 260 square foot living/sleeping space with an additional 140 square feet of exterior deck spaces. This design was originally conceived for a client who desired a small retreat for weekend recreational use on a remote waterfront site off of the Potomac River in Southern Maryland. Unlike this installation at Strathmore, The Crib can be assembled upon a concrete foundation that houses a bathroom and mechanical and storage spaces. A small propane-fired stainless steel fireplace and a radiant floor system provide heat to the structure. Solar hot water and photovoltaics may be added to the structure. A small but well-outfitted "kitchen in a box" or an optional "office in a box" occupies the entry-end gable wall. Other features include LED/CFL lighting and a ladder-accessed sleeping loft. An insulated glass garage door generously opens to a small deck connecting the interior spaces to the landscape.

The enviresponsible aspects of The Crib include the following features:

- Very small and efficient floor plans.
- Minimal site disturbance.
- Efficient shop fabrication process and quick on-site assembly process.
- High insulation values using Structural Insulated Panels, insulated glass, and multi-layer polycarbonate panels.
- Efficient propane fireplace and/or radiant floor heat system.
- Recyclable materials including steel, aluminum, fiberglass, and polycarbonate.
- Earth-friendly non-finished heat-treated poplar for siding and limited interior finishes.
- Rain water collection system for showers and gardening.
- Energy efficient LED and CFL light sources.
- Energy efficient ceiling fan "air conditioner".
- The entire building is recyclable in that it can be dismantled and relocated to another site.

Strathmore's current Fine Artists in Residence will use the space as a visual arts studio to create new work, a lab to demonstrate their medium for visitors, and a gallery to display finished pieces. The Crib will be open for visitors at variable hours whenever Artists in Residence are working, and will always be open during Strathmore's Free Summer Outdoor Concerts.