



The Howell Buildings Company was formed recently based upon a wealth of experience in both wood frame and steel frame buildings, which has served the commercial and farm building structural needs through west central Ohio for over 35 years. It is the combination of experience and success representing companies like Chief steel buildings and Wick wood frame buildings in Champaign and surrounding counties that is strength we offer for providing your building solutions.

Our experience is building and “fitting hand in glove” with over 400 customers since 1991 which provides capability to provide economical building solutions in a wide range of market segments. Above you see several of the market niches we have filled for satisfied customers. Our recent addition of Energy Panel Structures (EPS) provides a leading manufacturer of structural insulated panels (SIPs) which leads the green movement in more efficient energy structures whether residential, commercial, or farm. EPS also provides an alternative source of economical post frame structures which augment our building offerings.

Please review our site and its links to some of our suppliers for your building plans. Either respond by making contact or calling to set up an appointment so we can team with you on your next building project.

Warmly,

Terry,

President,
Howell Buildings Company



Austin E. Knowlton School of Architecture-Ohio State University

Architecture is a practice. By this, we mean in simplest terms that we get better by doing it, like playing a sport or a musical instrument. More profoundly, architectural practice is a mode of understanding and operating within the world. Technique is important, certainly. We deploy an array of manual and digital techniques when designing a building just as we depend upon all manner of technologies to construct a building. Techniques and technologies are not mute tools, however, as they testify to our understanding of the world and our desire to project a world. We must examine our understandings of the world if we are to intelligently operate within it, particularly as that world becomes more diverse in its cultures and more constrained in its economies and ecologies. At the Knowlton School of Architecture, we are committed to all aspects of architectural practice: its techniques and technologies, its histories and capacities, and its central creative activity of design, which fuses all of these and answers our profound desire to address the present by building a future.

MASTER OF ARCHITECTURE

The **Master of Architecture** (MArch) program prepares students to engage in the cultural professional practice of architecture with critical ability, inventive curiosity and technical facility. Design studios and theory courses focus on the broader cultural implications of architecture, while courses in technology and professional practice prepare the student for the realities of architectural practice.



About Habitat for Humanity

- We are a nonprofit, ecumenical [Christian ministry](#) founded on the conviction that every man, woman and child should have a decent, safe and affordable place to live. We build with people in need regardless of race or religion. We welcome volunteers and supporters from all backgrounds.
- Former U.S. President [Jimmy Carter and his wife Rosalynn](#) are Habitat's most famous supporters. The couple annually leads the Jimmy & Rosalynn Carter Work Project.

What we build

- Our houses are simple, decent, and affordable to low-income families around the world. Whenever possible, we build sustainable, energy-efficient and healthy housing.

Why we build

- Nearly 2 billion people around the world live in slum housing and over 100 million are homeless. [Habitat for Humanity is needed](#) to help eliminate poverty by providing simple, decent shelter to those in need.
- Families left homeless by natural disasters, war and civil unrest often face dire housing situations as they struggle to rebuild their lives. Habitat for Humanity's [Disaster Response](#) program provides shelter and housing solutions to help these families recover.

How it's possible

- Homeowners and volunteers build under trained supervision.
- Individuals, corporations, faith groups and others provide vital financial support.
- In the U.S., Habitat for Humanity lends no-profit, no-interest mortgage loans to its beneficiary families.
- On a global scale, Habitat's traditional model is not always possible. Our [international housing finance](#) programs consist of innovative housing finance practices and/or partnerships with microfinance organizations.



Energy Panel Structures : High Performance Homes

Energy Efficiency and Healthy Homes



Energy Panel Structures is a commitment to our Clients, to provide home managed for Energy Efficiency, and Healthier Advanced Homes for Our Future:

High Performance HVAC System Technology	Building System Technology and Innovation	Builder Comparison
<p>Energy Efficient Mechanical Systems with sealed combustion flues, with controlled fresh air exchange for Healthy Homes.</p> <p>Radiant Floor Heat System</p> <p><i>Benefits:</i></p> <ul style="list-style-type: none"> • Improved Comfort with consistent design temperature • Improved Indoor Air Quality: Only indoor air is pulled to the furnace • Lowers Utility Bills: less expensive to operate heating and cooling equipment • Lower equipment cost: right sizing of air mechanical equipment <p>Programmable Thermostat with integrated Air Recycler</p> <ul style="list-style-type: none"> • EPS Program requires use of carbon monoxide tester at each floor level to provide the highest level of protection to the homeowner. <p>Ventilation: Kitchen and Bathroom Vents Standard</p> <p>.62 Highly Efficient Water Heaters- Power Vented</p>	<ul style="list-style-type: none"> • Energy Star guideline with efficient use of utility fuel supply saving money on annual energy cost <p>Higher Level of Comfort and Safety:</p> <ul style="list-style-type: none"> • Safe emission of carbon monoxide emissions with direct vent flues preventing back drafting • Fresh air dilutes indoor air contaminants, eliminates dust, and odors with controlled air movement • Right sized mechanical equipment will save Energy with the HVAC equipment running longer with less cycling, with proper dehumidification during the cooling season. <p>The implementation to bring fresh air to the furnace directly, and vent combustion air is the safest, most efficient system available, and high performance levels for the homeowners exceeding building codes by keeping the indoor air separate from the combustion exhaust process</p> <ul style="list-style-type: none"> • Menu driven programming with touch screen interaction for temperature control • Air recycler eliminates moisture inside of the house by controlling the air movement • High level of protection of combustion exhaust, (carbon monoxide) for current and future health concerns of the homeowners- Healthy Homes: Safety and Protection • Venting directly to the exterior of dryers, gas ranges, and bathroom vents with insulated duct systems, eliminates moisture in the house and opportunities for mold growth • Lower operational cost and safe emissions of fuel byproducts: carbon monoxide 	
<p>Energy Panel Structures: Tight Envelope House for Optimal Thermal Performance</p> <p>Low-E Argon Insulated Windows</p> <p>High Performance Insulation Systems with Proper Installation Program, and the EPS Energy Seal of the Exterior Envelope</p>	<ul style="list-style-type: none"> • Reduces heat loss through windows in the winter, and keeps the house cool in the summer • Sealing of exterior penetration with the Energy Seal: eliminates uncontrolled air movement and drafts, entry of moisture, pollen, insects, and pollution. • Elimination of gaps, voids, and compression of insulation for proper thermal boundaries and high performance • High thermal insulation values reduces 	

High Performance HVAC System Technology	Building System Technology and Innovation	Builder Comparison
<p>Exterior and Interior Foundation Insulation Systems</p> <p>Window Flashing Systems per Environment & Energy Building Association Standards</p> <ul style="list-style-type: none"> • Adhesive based flashing to prevent wind driven rains • Flashing of the sill for drainage of moisture penetration 	<p>energy consumption for optimal heating and cooling efficiency</p> <ul style="list-style-type: none"> • Prevents 50% of heat loss in the basement through the basement walls above grade, that are exposed to winter air and at shallow depths where the ground is frozen. • Higher thermal foundation wall properties (warmer interior surface) for utilizing the basement as potential living space by preventing heat loss. • Reduces condensation and volume of moisture from entering the basement area for more comfort, by bringing the wall temperature closer to the room temperature • Drainage plane protection from bulk water transmission, and taped seams minimizing drafts with the EPS SIPS <p>Window flashing restricts driving rains, moisture, and air infiltration from entering the exterior wall cavity to provide a safer home from moisture and the ability of mold to grow in the exterior wall cavity:</p> <p>Exceeding the Competition with Building Sciences Technology and Implementation</p>	
<p>Precision Made Components by Energy Panel Structures State of the Art Manufacturing Facility:</p> <p>Forestry Management Certification and Green Building Technology: Engineered Wood Products:</p> <ul style="list-style-type: none"> • Engineered Forest Products: I joist Floor Systems • Pro Trim-Exterior Trim • Top Flange I joist hanger system for SIP wall <p>Component Construction Systems</p> <p>Raised Roof Truss Heels and 12" Soffit Overhangs</p> <p>Energy Star Programs</p> <p>Voluntarily Third Party Certification</p> <p>"Energy Panel Structures" has commitment to provide our costumers the highest level of performance.</p>	<p>Exceeding the Competition with Building Sciences Technology and Implementation</p> <ul style="list-style-type: none"> • Engineered Wood Products provide consistency in dimension and consistency of fabrication/quality • Utilization of fast growth secondary trees for sustainable forestry management practices • Engineered wood products selected construction have less negative impact on the environment, such as I joist systems and exterior trim products. Quality Engineered Wood Products use fast growing trees, saving the impact on larger old growth trees. • Engineered product installations for higher quality and predictable production schedules. • Raised heels eliminates insulation compression and proper roof ventilation-Integration of Building Sciences and Best Builder Practices <p>Energy Star Certification Process by an EPA approved Energy Rater:</p> <p>I. Testing of the HVAC duct sealing 100 % verifying the correct air flows for optimal performance by ensuring that ducts are sealed per Energy Star Standards</p>	

High Performance HVAC System Technology	Building System Technology and Innovation	Builder Comparison
<p><i>Implementation of the Energy Panel Structures program is the process of building your home to the highest quality, exceeding ENERGY STAR-EPA standards.</i></p>	<p>II. Rough framing and mechanical testing before pre-drywall walk to verify that the air barriers have been installed correctly.</p> <p>III. Insulation inspection checking for correct installation to prevent drafts and energy loss in accordance to high performance standards.</p> <p>IV. Blower Door Test: Testing of the pressure differences and air leakage at the house envelope to assure homeowner comfort and compliance program requirements. The blower door test verifies leakage affecting energy use, air quality, and comfort control.</p> <p><i>The third party program certification will guarantee that the value provided by Energy Panel Structures will provide customer's long term Energy Efficiency, Healthier Living Environments, by verifying the correct installation practices.</i></p>	

Discover the Energy Panel Structures High-Performance System Construction with respect to providing Healthier Environments for our customers, with an emphasis in closed HVAC duct system, High Performing Mechanical Heating/Cooling Equipment, and Air Sealing for proper Insulation Installation procedures.

Architect Peter Pfeiffer: (Building Scientist Degree from California Polytechnic) :the building is well sealed against moisture transfer. Mechanical systems combine high efficiency components, commonsense design, and meticulous installation. One of the rewarding aspects of this comprehensive approach is that the benefits tend to reinforce each other, generating a cost-saving reverse domino effect.....

Synergistic