

Quad-lock®

## Who is Quad-Lock?

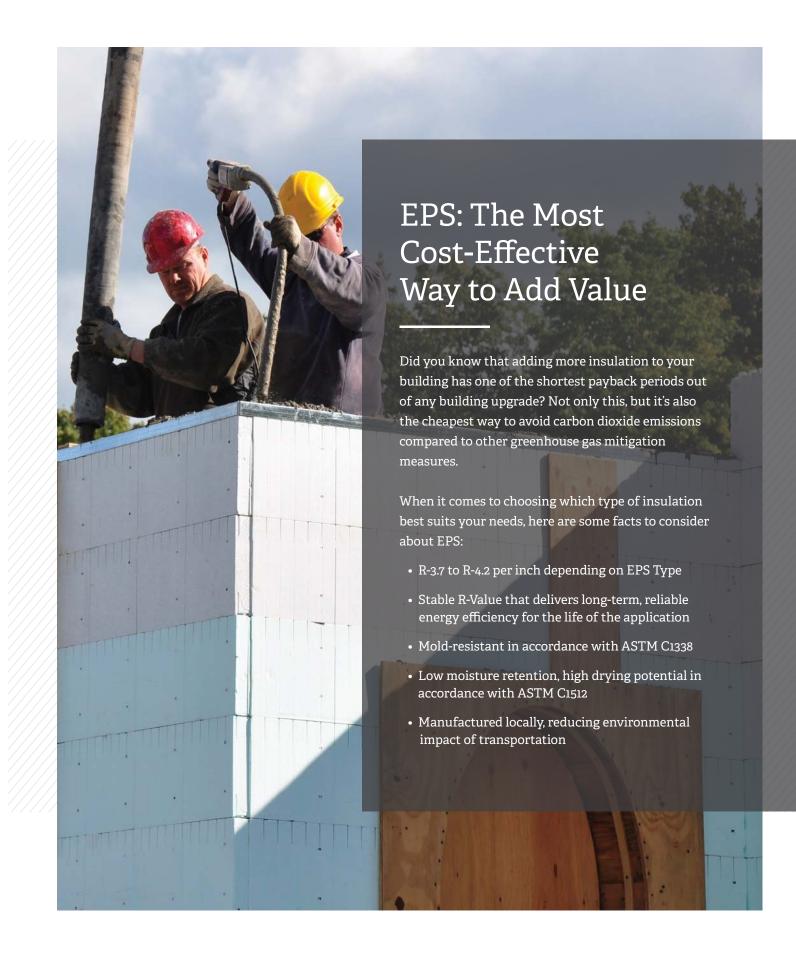
Quad-Lock Building Systems is a manufacturer of expanded polystyrene (EPS) insulation products for use in residential and commercial construction.

Established in 1994, we became one of the first manufacturers of flat-wall insulating concrete forms (ICF), and we remain an industry leader and innovator to this day. Our unique and versatile ICF system has expanded over the years to include light-weight suspended slab forms and other rigid EPS products, making us a one-stop-shop for your building envelope needs.

At Quad-Lock, we understand that high-quality construction requires the right products and a skilled team to get the job done. Our network of trained professionals can help you with product selection, product support, estimating and training, while our ISO 9001 quality management system will ensure that you're satisfied with those products and services.

Take a look at some of the areas of your project we can help you with:

Basement Foundations
Under-Slab Insulation
Energy Retrofits
Lightweight Suspended Slabs
Geofoam
Above Grade Wall Assemblies



44

The building sector has the most potential for delivering significant and cost-effective GHG emission reductions.

UNITED NATIONS ENVIRONMENT PROGRAMME

77

1 | EPS SOLUTIONS FOR A COMPLETE BUILDING ENVELOPE QUAD-LOCK BUILDING SYSTEMS | 2

## The Building Envelope: Quad-Lock has You Covered



3 | SUSTAINABLE BUILDING PRACTICES

## **Quad-Lock Insulating Concrete Forms**

## The Wall Assembly that Saves Time and Money

Energy efficient. Resilient. High-performance. These are the qualities of the future, and the characteristics of Quad-Lock's signature insulating concrete forms (ICF). The ability to meet and exceed building codes in a cost effective manner is not only a priority for contractors, but a requirement that the modern homeowner is demanding—and Quad-Lock delivers.

Quad-Lock ICF is a modular concrete form made of EPS foam. It's designed to stay in place after concrete has been poured to help insulate your structure. The system can be used for both below-grade and above-grade wall assemblies in many types of construction including single-family and multifamily residential buildings, office buildings, hotels, schools, agricultural facilities, etc.



## A One-Step Assembly

## **No Form Stripping**

ICF requires no form stripping, de-nailing or cleaning since the EPS foam remains in place.

## **No Framing**

Quad-Lock eliminates the need for framing. Interior and exterior finishes can be fastened directly to our plastic ties, while electrical components and plumbing are embedded in the EPS foam.

## **No Additional Insulating**

They're called **insulating** concrete forms for a reason! The EPS panels provide continuous insulation with effective R-Values ranging from R-22 to R-59.

## **Eliminate Membranes and Tapes**

Tired of putting up delicate air barriers? Taping seams? Patching holes? Quad-Lock ICF requires no additional air barrier, vapor barrier or weather-resistant barrier (WRB).

#### **Fewer Tools. Fewer Trades**

With such a simple installation process, our lightweight ICF system can be built by smaller crews in less time and with fewer tools and equipment.

#### Versatile

Our modular panel system makes it easy to build complex angles, radius walls and openings. Plastic ties simplify working around large amounts of rebar.

## CODE COMPLIANT

Quad-Lock's Insulating Concrete Forms have been independently tested and approved for use as stay-in-place formwork for structural concrete, loadbearing and non-loadbearing below-grade and above grade walls. For a full Code Compliance Research Report, please visit our Technical Library at www.quadlock.com

## **Built to Last**

In addition to the immediate cost and time savings during construction, Quad-Lock ICF offers benefits that will last the life of your building.

#### Resilient

Reinforced concrete structures outperform almost every other building type in the face of natural and man-made disasters.

### **Fire Resistant**

Quad-Lock offers a 3 and 4 hour FRR for its 6" and 8" concrete form, respectively.

### **Low-Maintenance**

Both concrete and EPS are highly resistant to degradation by water exposure, and our EPS panels have been independently tested and shown to be 100% mold-resistant.

#### Comfortable

The inside of a Quad-Lock ICF building maintains a more consistent temperature with higher air quality and no drafts.

## **Reduced Monthly Heating Bills**

Airtight concrete and continuous insulation are an amazing energy-saving combination.

## Soundproof

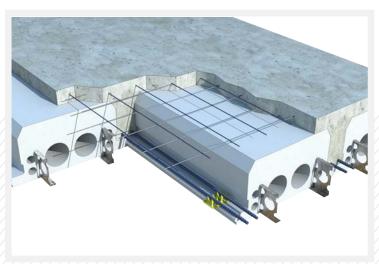
Our wall assemblies with STC 50+ will provide a quiet living space, no matter where the building is located.



## **Lightweight Suspended Slabs with Quad-Deck**

Quad-Deck is a pan-style ICF system that provides the formwork for suspended concrete floors and roofs. The side-by-side EPS panels create a series of concrete joists with a minimized slab on top reducing the overall weight, but maintaining the same structural integrity as a traditional slab.





## The Quad-Deck Advantage

## **Easy Installation**

Quad-Deck EPS panels are very lightweight and only require shoring beams every 6ft. Metal furring strips provide significant rigidity and eliminate the need for plywood.

## **Long Spans**

Our panels come in 7" to 12.5" thicknesses, so you can span up to 33 feet at 40 psf. For full span tables, consult our website.

## **A Lighter Structure**

Quad-Deck floors and roofs require roughly half the concrete of conventional suspended slabs and over 30% less steel.

## Compatible

Quad-Deck integrates well with different wall types including ICF, cast-in-place concrete, precast concrete, CMU, and more.

## Thermal Separation

EPS panels provide R-16 to R-33 effective insulation depending on their thickness, ideal for multi-family or compartmentalized construction.

## **Fire Resistant**

Quad-Deck cost-effectively provides a 2-hour Fire Resistance Rating (FRR). The EPS is also treated with the same fire retardant as the ICF system, giving it a flame spread index of 25 or less.

## Quad-Lock's Rigid EPS for Under-Slab and Exterior Insulation

Whether it's a new build, add-on, retrofit or renovation, Quad-Lock's rigid EPS products are a cost-effective way to meet your project's insulation requirements, with a lower cost per R-value than many other types of insulation.

## 1 - Exterior Insulation

Continuous exterior insulation is becoming the new standard and Quad-Lock delivers a wide range of rigid EPS products that are compatible with any new or existing wall assembly.

## 2 - Under-Slab Insulation

Adding more insulation beneath a basement foundation or slab-on-grade is an easy and low-cost way to improve your building's energy performance with no aesthetic consequences.

## Flat or Tapered Roof Systems

Our EPS billets can be customized and cut to any shape to achieve the R-value and pitch your roof requires, and it can be cut for a precise fit on site. This design versatility translates into considerable savings in labor and framing costs.



## **Characteristics of our Rigid EPS**

- Up to R-4.2 per inch of thickness
- Retains its R-value when wet
- R-value does not diminish over the life of the product
- Available in standard and custom sizes
- Available in many different densities and compressive strengths
- 100% resistant to mold growth
- Fire retardant with a Flame Spread Index of 25 or less

7 | EPS SOLUTIONS FOR A COMPLETE BUILDING ENVELOPE

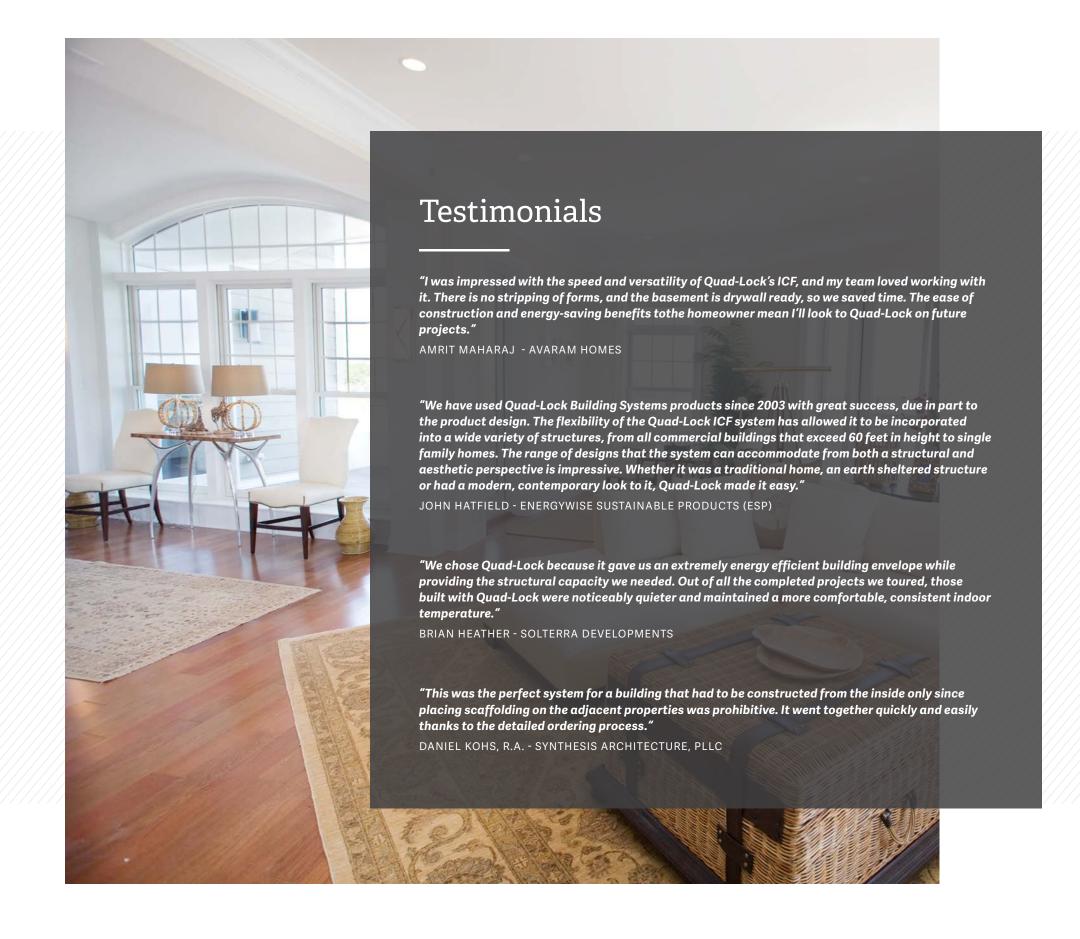
## **Building for the Future**

Building and energy codes are changing globally and the minimum standards for thermal performance, fire resistance, energy efficiency and resilience are increasing in all new construction.

As these changes take place, it will become even more important to invest in building methods that meet these enhanced requirements in a simple and cost-effective way.

Building a more insulated and airtight envelope is by far the cheapest way to improve energy efficiency in today's buildings. Whether you're constructing a hotel, school, condominium complex or single family home, Quad-Lock has a solution to help you from the foundation to the roof.

Let's work together to leave behind beautiful, energy-efficient and durable structures that will benefit owners, occupants and communities for generations to come!



9 | EPS SOLUTIONS FOR A COMPLETE BUILDING ENVELOPE QUAD-LOCK BUILDING SYSTEMS | 10



# QUAD-LOCK®

CONTACT US WITH QUESTIONS ABOUT YOUR NEXT PROJECT.

1 (888) 711-5625 • (604) 590-3111 QUADLOCK.COM