

INSULATED CONCRETE FORMS FOR

# FLOORS AND ROOFS

**QUAD-DECK**  
Rebar® Technology

CONCRETE  
BUILDING SOLUTIONS



## Advantages for Owners

### Durable & Sustainable

Long-term building durability; life-cycle measured in centuries  
Reduced HVAC requirements, heating and cooling costs  
Lower life-cycle costs  
High thermal mass properties; ideal for passive solar designs

### Quiet, Healthy, Safe & Comfortable

High STC ratings; deadens sound transmission  
Minimum 2hr. Fire Resistance Rating under USA and Canada standards  
Minimized air infiltration - no allergens, improved indoor air quality  
Inert material; does not support the growth of mold or mildew  
Not a food source for insects  
Perfect for in-floor radiant heating  
More consistent indoor temperatures  
Superior protection against catastrophic events - ideal for Safe Rooms

## Advantages for Contractors & Architects

### Fast & Flexible

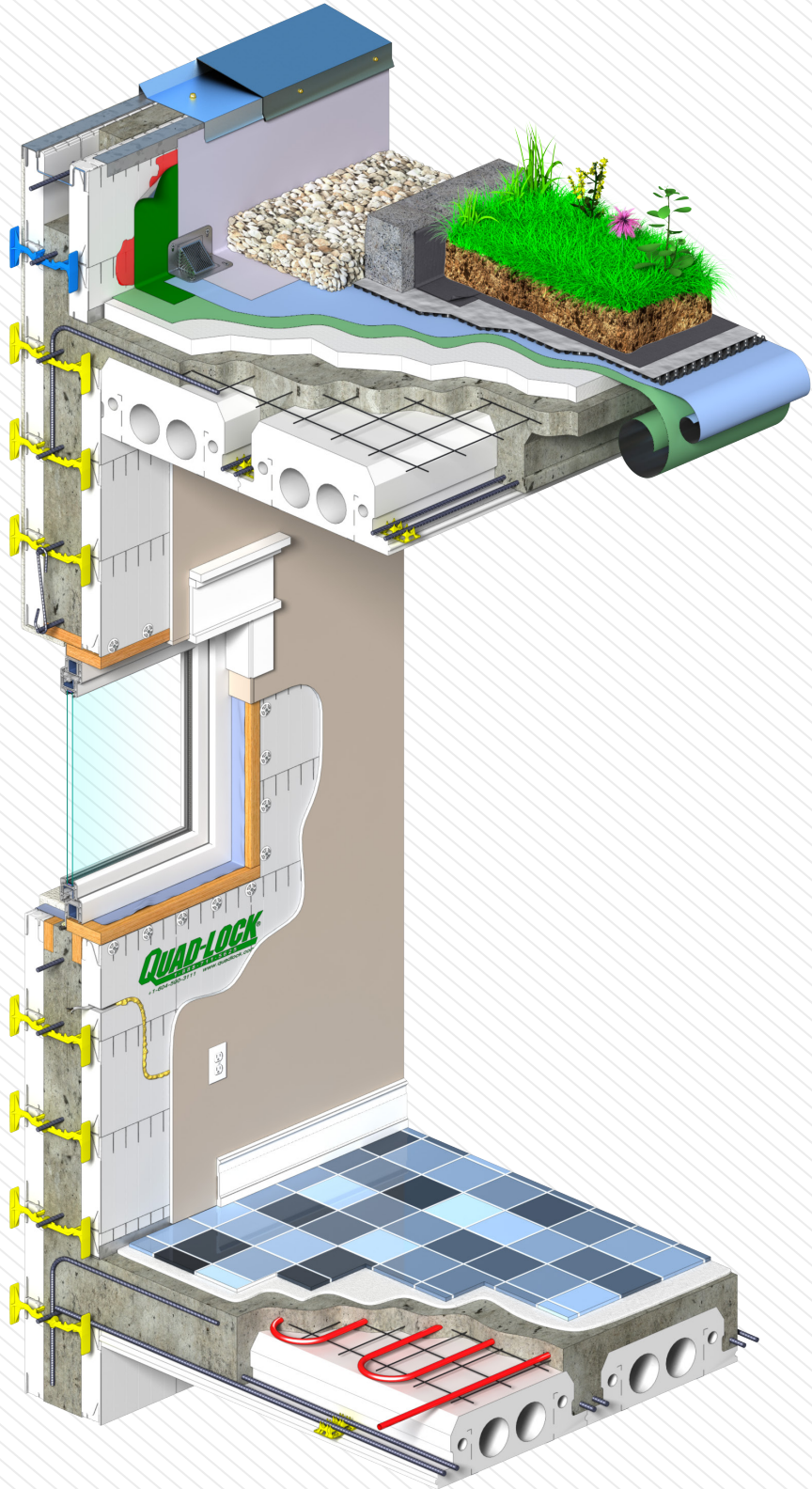
Delivered pre-cut to length - ready for installation  
Lightweight, easy to handle - no formwork to be stripped  
Up to 35' [10.7m] clear spans  
Available in 7" to 12½" [178mm to 318mm]  
EPS Top Hats allow for even greater spans  
Ideal for use in parking structures  
Easily integrates with Quad-Lock ICF wall system  
Rigid panels eliminate 50% of conventional formwork

### Lightweight

Reduces floor mass dead load by up to 50%  
Reduces structural requirements for foundations and walls  
Lighter structure is less threatened by severe earthquake and wind conditions

### Reduce Costs

No to minimal site waste  
Uses less concrete & steel compared to traditional concrete slab  
High R-Values (R-16 to R-25); Low RSI-Values (U-0.35 to U-0.23)



## How Quad-Deck Works

Each of the expanded polystyrene (EPS) panels are supported and reinforced with two integral steel beams molded into the product from end to end. The result is a rigid joist and deck forming system that provides the maximum strength of a reinforced concrete deck with minimum added forming materials and labor.

## The Quad-Deck Living Green Roof

Quad-Deck is an ideal substrate for living Green Roofs providing long spans and high load capacity.

Using Quad-Deck rather than traditional slab will add less mass to the building structure, reducing overall construction costs

Much less susceptibility to water damage, rot, mold or mildew – far superior to a wood joist roof

Quad-Deck Green Roofs contribute to lower appetite for energy with high insulation, high thermal mass and no air infiltration as well as lower heating & cooling costs, energy use, and CO<sub>2</sub> emissions

Green Roofs extend the life of your building by providing protection from the daily temperature changes to the roof membrane

Green Roofs are ideally suited for LEED certified projects and for water runoff management

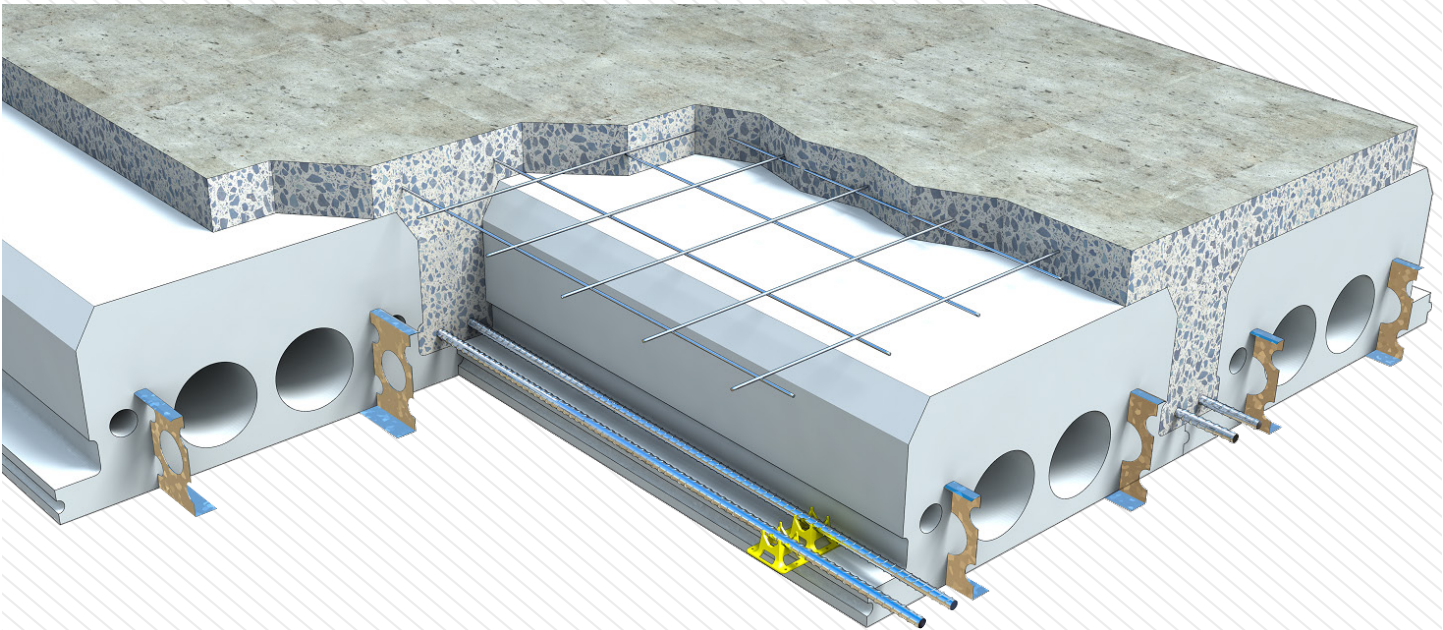
## The Quad-Deck Advantage

Ideal for use in both commercial and residential construction, Quad-Deck combines the strength, security, and reliability of concrete with the energy efficiency, design flexibility and comfort of insulating concrete forms. Quad-Deck creates energy efficient and sustainable insulating concrete floor and roof system.

# The Quad-Deck Benefit

## Quad-Deck 1-Way Slab

11" [280mm] Quad-Deck + 2.5" [63mm] Slab  
@ 50 psf [2.4 kN/m<sup>2</sup>] Live Load



### Steel Requirements

QUAD-DECK = 4070 LB [1850KG]

33% SAVINGS IN  
STEEL CONSUMPTION

TRADITIONAL SLAB = 6070LB [2750KG] (8" DEEP CONVENTIONAL SLAB)

### Concrete Requirements

QUAD-DECK = 18.4YD<sup>3</sup> [14M<sup>3</sup>]

50% SAVINGS IN  
CONCRETE USAGE

TRADITIONAL SLAB = 37YD<sup>3</sup> [28M<sup>3</sup>] (8" DEEP CONVENTIONAL SLAB)

BY REDUCING YOUR STEEL & CONCRETE REQUIREMENTS WITH QUAD-DECK,  
YOU ALSO REDUCE YOUR MASS BY OVER 50% AND USE 50% LESS SHORING.

## QUAD-LOCK BUILDING SYSTEMS

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FOR MORE INFORMATION

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