

INSULATED CONCRETE FORMS FOR

# FLOORS AND ROOFS



**QUAD-LOCK**<sup>®</sup>

CONCRETE  
BUILDING SOLUTIONS

## 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 incremental 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

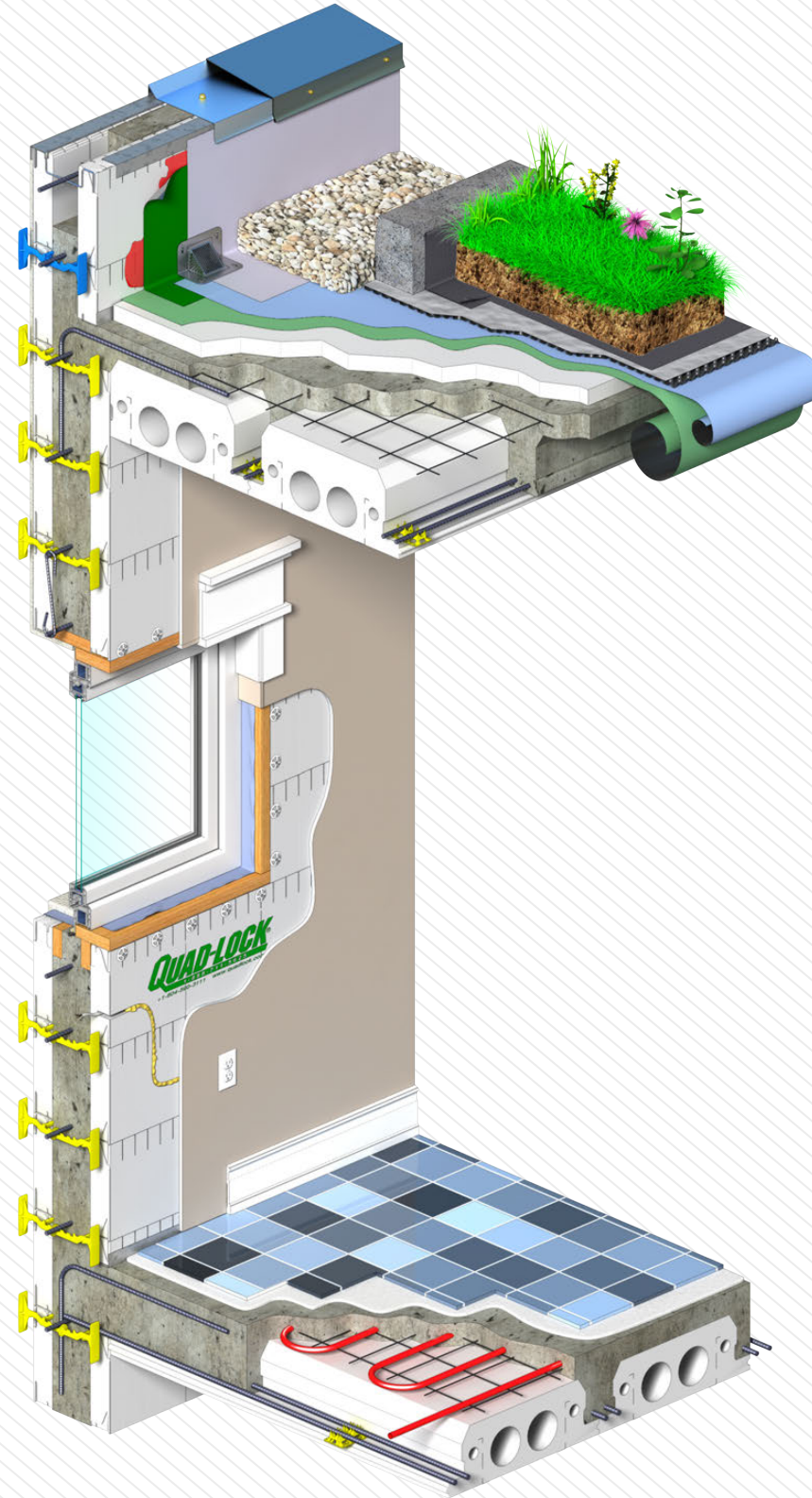
Increased energy savings from Quad-Deck's stay-in-place insulation and from Intensive or Extensive Greening

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 uses Plastbau® Technology to create an energy efficient and quality insulating concrete floor and roof system.



### 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
- Thermal mass properties; ideal for passive solar designs

#### Quiet, Healthy, Safe & Comfortable

- High STC ratings; deadens sound transmission
- 2hr. Fire Resistance Rating under USA and Canada standards
- Minimized air infiltration - no allergens, improved indoor air quality
- Inert material; doesn't 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 to site ready to install
- Lightweight, easy to handle - no forms to be stripped
- Up to 35' [10.7m] free spans, available in 7" to 12½" [178mm to 318mm]
- Designed for use in parking structures
- Easily integrates with Quad-Lock ICF 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

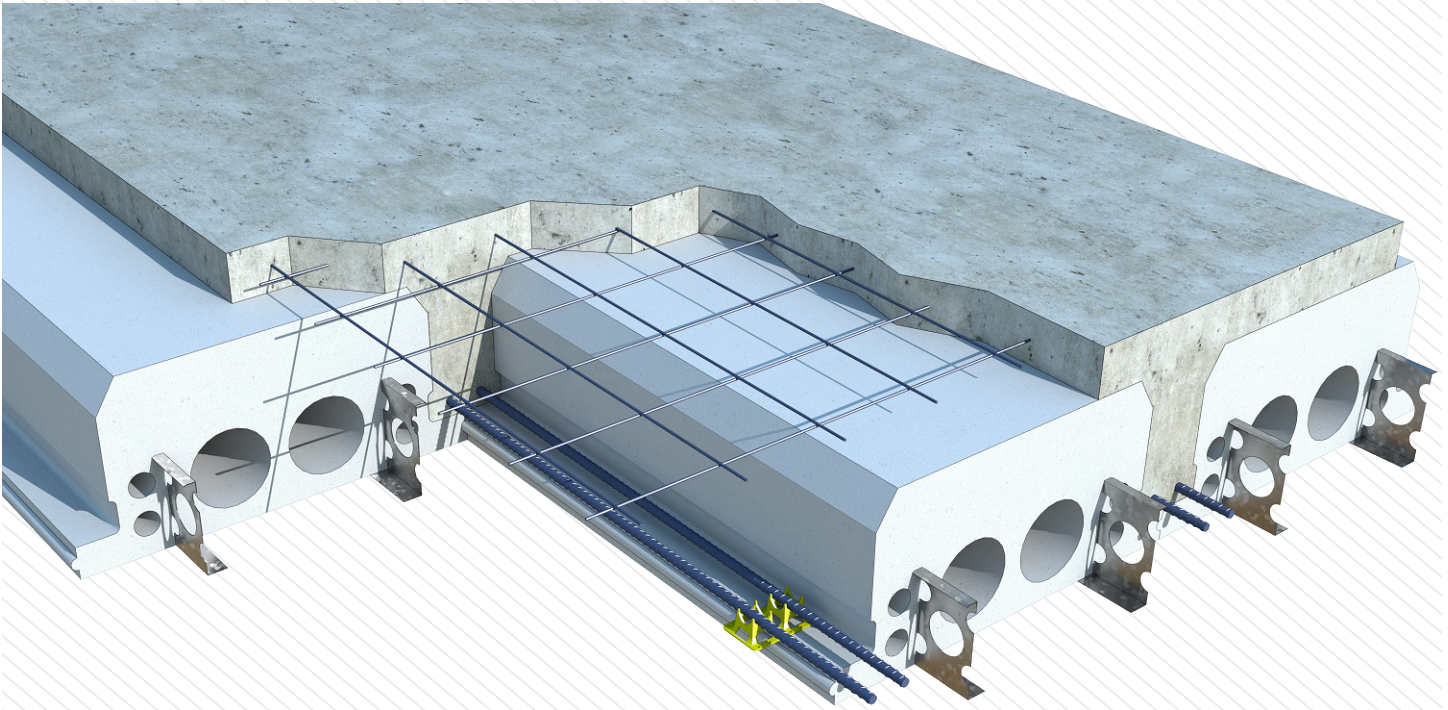
#### Reduce Costs

- No site waste
- Uses less concrete & steel compared to traditional concrete slab
- High R-Values (R-14 to R-25); Low RSI-Values (0.40 to 0.23)

# 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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