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)

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**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.

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**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.

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**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

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**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.
The Quad-Deck Benefit

Quad-Deck 1-Way Slab
11" [280mm] Quad-Deck + 2.5" [63mm] Slab
@ 50 psf [2.4 kN/m²] Live Load

Steel Requirements

<table>
<thead>
<tr>
<th>Quad-Deck</th>
<th>33% SAVINGS IN STEEL CONSUMPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>QUAD-DECK = 4070 LB [1850KG]</td>
<td></td>
</tr>
<tr>
<td>TRADITIONAL SLAB = 6070LB [2750KG] (8&quot; DEEP CONVENTIONAL SLAB)</td>
<td></td>
</tr>
</tbody>
</table>

Concrete Requirements

<table>
<thead>
<tr>
<th>Quad-Deck</th>
<th>50% SAVINGS IN CONCRETE USAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>QUAD-DECK = 18.4YD³ [14M³]</td>
<td></td>
</tr>
<tr>
<td>TRADITIONAL SLAB = 37YD³ [28M³] (8&quot; DEEP CONVENTIONAL SLAB)</td>
<td></td>
</tr>
</tbody>
</table>

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