Quad-Deck 1-Way Slab

12" [305mm] Quad-Deck + 2.5" [63mm] Slab @ 50

Steel Requirements

<table>
<thead>
<tr>
<th>QUAD-DECK</th>
<th>4070LBS [1850KG]</th>
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</table>

33% SAVINGS IN STEEL CONSUMPTION

Traditional Slab = 6070LBS [2750KG] (8" DEEP CONVENTIONAL SLAB)

Concrete Requirements

<table>
<thead>
<tr>
<th>QUAD-DECK</th>
<th>18.4YD³ [14M³]</th>
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</table>

50% SAVINGS IN CONCRETE USAGE

Traditional Slab = 37YD³ [28M³] (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.
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 joint 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 3" (7.5cm) free spans, available in 7" to 13½" [178mm to 343mm]
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 (0.35 to 0.17)
Quad-Deck 1-Way Slab

17" [430mm] Quad-Deck
+ 2.5" [63mm] Slab @ 50

Steel Requirements

QUAD-DECK = 4070LBS [1850KG]
33% SAVINGS IN STEEL CONSUMPTION

TRADITIONAL SLAB = 6070LBS [2750KG] (6" DEEP CONVENTIONAL SLAB)

Concrete Requirements

QUAD-DECK = 18.4YD3 [14M3]
50% SAVINGS IN CONCRETE USAGE

TRADITIONAL SLAB = 37YD3 [28M3] (6" 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.