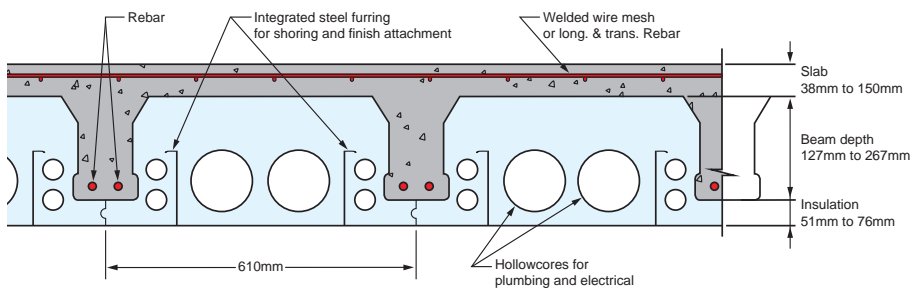




© Quad-Lock 2013

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



Fast & Flexible

- Delivered to site ready to install (pre-cut and labeled at the factory)
- Easy to handle, lightweight forms
- Up to 9.5m free spans
- Forms available in thicknesses of 178mm to 343mm
- Slab thickness from 45mm to 152mm

Durable & Sustainable

- No site waste
- Low U-values (0.35 to 0.17)
- Reduced HVAC requirements
- Thermal mass properties; ideal for passive solar designs
- High STC ratings; deadens sound transmission
- Inert material; doesn't support the growth of mould or mildew
- Superior protection against flooding and fire

Dimensioning of Quad-Deck panels according to free span and live load for the most common applications				
Floor Span	Live Load kN/m ²			
	1.46	2.44	3.90	4.88
2.43m	180mm / 127mm + 50cmm (0.35)	180mm / 127mm + 50mm (0.35)	180mm / 127mm + 50m (0.35)	180mm / 127mm + 50mm (0.35)
3.04m	180mm / 127mm + 50mm (0.35)	180mm / 127mm + 50mm (0.35)	180mm / 127mm + 50mm (0.35)	180mm / 127mm + 50mm (0.35)
3.65m	180mm / 127mm + 50mm (0.35)	180mm / 127mm + 50mm (0.35)	180mm / 127mm + 50mm (0.35)	180mm / 127mm + 50mm (0.35)
4.26m	180mm / 127mm + 50mm (0.35)	180mm / 127mm + 50mm (0.35)	180mm / 127mm + 76mm (0.35)	200mm / 152mm + 63mm (0.30)
4.87m	180mm / 127mm + 63mm (0.35)	200mm / 152mm + 50mm (0.30)	200mm / 152mm + 76mm (0.30)	228mm / 178mm + 63mm (0.26)
5.48m	200mm / 152mm + 63mm (0.30)	228mm / 178mm + 50mm (0.26)	254mm / 203mm + 50mm (0.23)	254mm / 203mm + 76mm (0.23)
6.00m	228mm / 178mm + 63mm (0.26)	254mm / 203mm + 50mm (0.23)	280mm / 229mm + 50mm (0.20)	280mm / 229mm + 76mm (0.20)
6.70m	254mm / 203mm + 76mm (0.23)	280mm / 229mm + 63mm (0.20)	305mm / 254mm + 63mm (0.18)	317mm / 267mm + 63mm (0.17)
7.31m	280mm / 229mm + 76mm (0.20)	317mm / 267mm + 63mm (0.17)		
7.92m	317mm / 267mm + 63mm (0.17)			
Thickness of Quad-Deck Panel / Height of T-Beam + Thickness of Slab (U Value)				

Remarks: This table is indicative only. Full engineering required by a qualified and certified engineer. Longer spans and higher live loads are possible. Please consult Quad-Lock's estimating program and/or contact Quad-Lock.

Living Green Roof

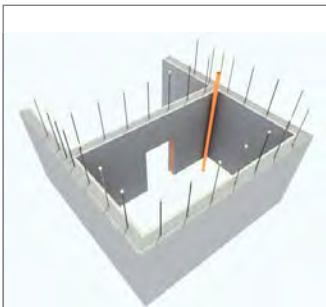
Quad-Deck is an ideal substrate for living roofs - long spans, high load capacity

- 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, mould 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 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



© Quad-Deck 2013

Installation Guide



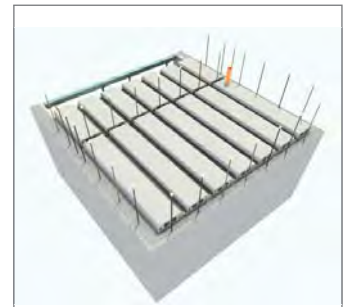
1. Walls are prepared and checked to be level and cleared of any debris. Steel work is left projecting up to 1m.



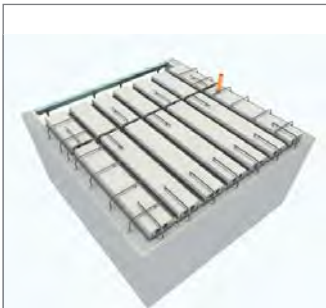
2. Support system is setup at right angles to the direction of the Quad-Deck flooring panels.



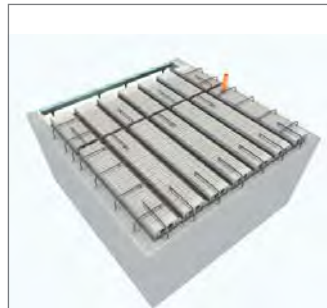
3. First Quad-Deck flooring panel is positioned with ends overlapping the concrete core of the walls.



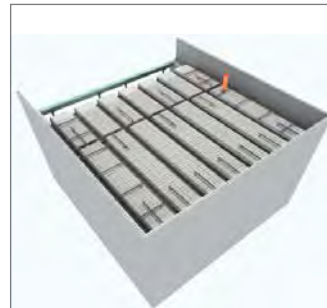
4. A sufficient space between ends is given for concrete to enter with all service penetrations cut onsite.



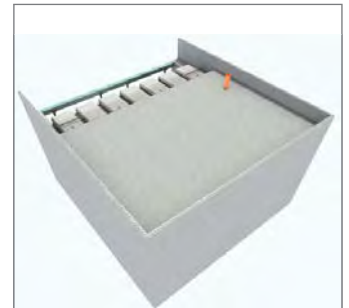
5. Steel bars are bent 90° over the Quad-Deck panels and lengths laid on mounts between each board.



6. Steel meshing is placed on top of the bent steel and tied with wire to securely fix in position.



7. The outer line of Quad-Lock ICF panels are extended above the level of the poured concrete floor and braced.



8. The concrete is poured over the panels to a thickness of between 38 - 150mm and finished as required.

This table is indicative only. Full engineering required by a qualified and certified engineer. Longer spans and higher live loads are possible. Please consult the span table and/or contact Charcon.

Health and Safety

The following fire protection criteria must be met by any construction designed to Eurocode 2:

Resistance (R), Separation (E) and Isolation (I). The designation letters R, E and I are used together with numbers referring to the resistance in minutes against the ISO standard fire. Quad Deck has awarded the following REI values:

- 40mm slab = REI 120
- 50mm slab = REI 128