BubbleDeck® is now available from Spancrete as an addition to our line of precast concrete products that make life on the construction site easier, safer, faster and more economical.

Developed in Europe and brought to the United States by BubbleDeck North America Inc., this product will provide significant advantages for flat plate cast-in-place construction.

Prefabrication Enhances Cast-In-Place Two-Way Flat-Plate Construction

- Save 35% or more in concrete volume
- Enhance sustainability using recycled plastic to replace concrete (1 lb plastic displaces 100 lbs of concrete)
- LEED points
- Faster construction
- Dramatically reduce shoring requirements
- Virtually eliminate field forming
- Provide a safer work platform
- Construction savings

Other Characteristics

• Fire
  - Fire resistance calculated by equivalent thickness method and prescriptive concrete cover
  - Plastic balls carbonize with no toxic gases
• Sound
  - STC rating a function of weight
  - IIC rating similar to solid slab
• Thermal resistance -17% to 39% higher thermal resistance than a solid panel
• High quality finish of bottom surface
• Ability to integrate mechanical service within panel
• Easily field cored

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**What is BubbleDeck® by Spancrete?**
- Precast concrete panels incorporating top and bottom reinforcement
- Recycled plastic balls encapsulated between the reinforcement layers
- With the addition of site placed reinforcement and concrete, the system results in a monolithic two way flat plate

**Structural Characteristics**
- Span-depth ratio guideline ≤ 36:1
  - For cantilevers ≤ 10:1
- Stiffness is 81% of a solid slab of equal thickness
- Design shear strength in areas of the plastic balls is 60% of a solid slab of equal thickness
  - Plastic balls may be omitted in critical shear areas for 100% equivalent strength
- Completed designs can be converted to BubbleDeck
  - Further efficiencies are realized in the column and foundations when the reduced weight of BubbleDeck is considered
- Post-Tensioning can be used to increase the spans of BubbleDeck

**BubbleDeck Installation**
- Set shoring
- Erect BubbleDeck panels on shoring
- Place bottom splice bars supplied with BubbleDeck panels
- Set perimeter formwork and pour stops
- Install top reinforcement at column regions
- Place concrete to complete monolithic structure

**Typical Slabs**

A general guide for project scoping purposes. For project specific recommendations, contact BubbleDeck North America, Inc.

Typical units are 8 ft to 10 ft wide and up to 40 ft long.