

## Issues for Achieving an Experimental Model Concerning Bubble Deck Concrete Slab with Spherical Gaps

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### Abstract text:

After realizing numerous constructions in the world, which use Bubble Deck concrete slabs with spherical gaps, valuable information were gathered, allowing a rigorous processing and systematization, with the purpose of realizing an experimental and documentary study. The paper presents some experimental programs which refer to concrete slabs with spherical gaps, existing in similar execution and loading conditions as those from a real construction; this implies the realization of a monolithic slab element at a scale of 1:1, which will be subjected to static gravitational loadings in order to determine the deformation (deflection), cracking and failing characteristics. The resultant conclusions will be used in defining the failing mechanisms, very useful in the formulation of an adequate mathematical model. The research proposed in the project offers an answer to the major objectives of the development of calculus methods and existent prescriptions of the concrete slabs with spherical gaps. The realization of the proposed objectives involves documentation activities, theoretical study, collaboration with different other partners, gathering and processing of the results obtained in laboratory and even in situ.

### Key Words:

concrete slab; spherical gaps; reinforcement; static loads.

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