

## **State-of-the-Art Review on Precast Composite Sandwich Slab Panels**

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### **ABSTRACT**

Precast construction technology is the one which rightly suits for today's world of quicker construction without compromising quality sometimes even with higher quality and performance. Precast composite sandwich slabs are one of the crucial developments in this aspect. Apart from faster in construction, composite technology yields good economy and additional benefits such as light in weight which further reduces cost of construction by effective usage of materials, insulation properties. In general, there is always a demand for improvement from existing technology at its prevailing state. It is important to assess the characteristics of various materials used for the composite sandwich slab panels from the wythe materials point of view, methods of manufacturing for better performance, nevertheless the significance of shear connectors their arrangement, pattern and material which ensures the composite action to achievement the full benefits of sandwich slab panels and to extend the service of the sandwich slab panels to large applications. This state-of-the-art review aims in providing an impression of the above and discuss the technical challenges available in front of the researchers.

**Keywords:** *Precast construction, Composite sandwich slabs, Composite Construction, Composite Materials.*