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SANDWICH PANELS FOR SLAB DESIGN AND SANDWICH CONSTRUCTION

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ABSTRACT

The sandwich is comprised of the faces, the core and the adhesive junctions, have three or more components. The faces may consist of different materials overall and even the two adhesive joints can be produced with different adhesives on structural and production needs. The selection of materials is extensive, and the variety of facial materials has grown to virtually an endless number of various materials with diverse qualities, thanks to the emergence of fibre composites. Even in the past few years after the launch of more competitive cellular polymers, the number of possible cores expanded considerably. The design of sandwich constructions is thus just as difficult to pick materials as a size challenge. The huge range of material options might seem to be a further complication, but is actually one of the key benefits of sandwich designs; the materials that are most may be utilized and some may be suitable for a specific purpose difficulty may be resolved by geometric scaling.

For instance, certain reinforced plastic products lack the benefit of the high rigidity of metals, yet a possible rigidity may still be achieved by increasing the core thickness. Materials are frequently selected for reasons which are not only mechanical but are resistant for such reasons as to the environment, surface polish, the use of a certain technique of production, the Cost, strength of wear, etc. The following part is not intended in any way to be extensive, but rather to present the materials frequently used in the building of sandwiches. All provided data is typical and is not guaranteed to be accurate statistics collected from different sources.

Keywords: Sandwich Panels, Slab Design, Sandwich Construction