

## **RESPONSE OF TRUSS-CORE SANDWICH PANEL TO AIR-BLAST LOADING**

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A three-dimensional truss-core sandwich panel is similar to other conventional sandwich systems. However, the truss-core structural sandwich panel has many advantages over conventional sandwich forms such as increased stiffness, strength and lower fabrication costs. Although the truss-core sandwich panel could be used in offshore and other terrestrial applications, it may also be considered as a potential protective barrier to resist the effects of air-blast. Numerical methods are normally used to obtain the response of the 3-D panel but this is relatively complicated and highly uneconomic. In this paper, a two-dimensional continuum solution is presented and this is used to investigate the response of the truss-core sandwich panel subjected to air-blast loading. Examples are given. The computed results are found to be in excellent agreement with solutions obtained from 3-D finite element analyses.