Biaxial and shear buckling of laminated composite elliptic paraboloids with cutouts and concentrated mass

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PII: S0093-6413(18)30164-2
DOI: https://doi.org/10.1016/j.mechrescom.2018.09.008
Reference: MRC 3319

To appear in: *Mechanics Research Communications*

Received date: 26 March 2018
Revised date: 31 August 2018
Accepted date: 20 September 2018

Please cite this article as: Abhay K. CHAUBEY , Chandra PRAKASH , Ajay KUMAR , Biaxial and shear buckling of laminated composite elliptic paraboloids with cutouts and concentrated mass, *Mechanics Research Communications* (2018), doi: https://doi.org/10.1016/j.mechrescom.2018.09.008

Mechanics Research Communications. Year	Publication Office: Elsevier UK
Editor-in-Chief: A. Rosato New Jersey Institute of Technology, Newark, New Jersey, USA Anthony.Rosato@njit.edu	

HIGHLIGHTS

- A new finite element model developed by authors is used to study biaxial and shear buckling analysis of laminated composite elliptic paraboloids with cutouts and concentrated mass.
- There is no result of the buckling analysis of laminated composite elliptic paraboloids with cutouts and concentrated mass.
- The parabolic variation of transverse shear strain is considered hence no shear correction factor is required
- A C^0 finite element (FE) coding in FORTRAN is developed to generate many new results for different boundary conditions, cutout sizes, lamination schemes etc.
- Many new results are presented in this paper which may be useful for further research.