

NOTATION

The following symbols are used in this thesis :

a, b	=	Linear dimensions of rectangular sandwich plate
E	=	Young's modulus of face
E_1, E_2	=	Young's modulus along X and Y axis respectively
G	=	Shear modulus of the Core
G_{13}, G_{23}	=	Shear moduli of the Core
G_{xz}, G_{yz}	=	Shear moduli of the Core
h	=	Core thickness (measured from middle surface of each face)
I_1^m, I_2^m	=	first and second invariants of averaged strains
I_m, I_1^{im}	=	a coupling parameter
q	=	lateral load
t	=	face thickness
u, v, w	=	displacements in x, y and Z directions respectively
\bar{V}_0	=	strain energy per unit area
x, y, z	=	rectangular co-ordinate system
ϵ, γ	=	strain component
σ, τ	=	stress component
ν	=	Poisson's ratio of face
ν_1, ν_2	=	Poisson's ratio along x and Y axes respectively
$()^c$	=	core variable
$()^f$	=	face variable
$()^u$	=	upper face variable
$()^l$	=	lower face variable
$()^m$	=	averaged value
$()^t$	=	upper face variable
$()^b$	=	lower face variable

- r, s = difference of in-plane displacements
 ϕ_1, ϕ_2 = surface density and core density of the plate respectively
 $f(t)$ = function of time
 λ = a constant depending on the Poisson's ratio of the plate material
 W_1^*, W_1 = non linear and linear frequency respectively
 M_x, M_y = bending moments
 M_{xy} = twisting moments
 ξ = $re^{i\theta}$ = a complex quantity
 z, \bar{z} = complex number
 k_1, k_2 = mapping function coefficients
 r, θ = polar co-ordinate
 ϵ_n = error function in Galerkin's method.
 F = Airy's stress function
 D_1, D_2 = flexural rigidity of the plate
 D_{12} = torsional rigidity of the plate