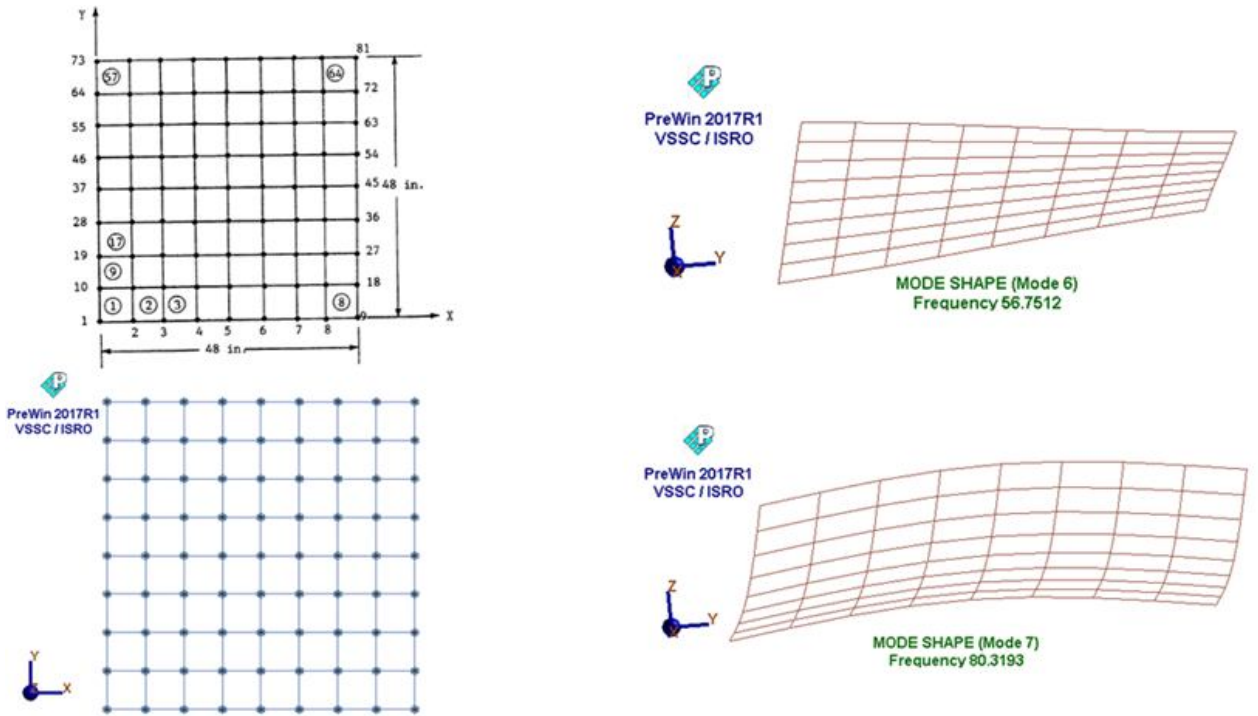


Natural frequencies of a free edged square plate



Boundary condition : $R_z = 0$ at all nodes

Material property : $E_x = 10.5 \times 10^6 \text{ psi}$, $\nu = 0.225$, $\rho = 2.58799 \times 10^{-4} \text{ lb-sec}^2/\text{in}^4$

Element type : 3-D thin shell element

Finite element analysis :

Number of elements	Number of nodes	Degrees of freedom
64	81	405

Mode (Elastic Modes)	Theoretical	FEAST ^{SMT}	NISA2 [®]
1	55.18	56.75	55.18
2	80.46	80.32	80.46
3	93.58	95.01	93.58