

# PyNite Analysis Report

## Nodes & Supports

Node	X	Y	Z	Support X	Support Y	Support Z	Support RX	Support RY	Support RZ
A	1.1	-0.4	0	False	False	False	False	False	False
B	1	0	0	False	False	False	False	False	False
C	0	0	0.6	True	True	True	True	True	True
D	0	0	-0.4	True	True	True	True	True	True
E	0	0.8	0	True	True	True	True	True	True

## Members

Member	i-Node	j-Node	A	I <sub>y</sub>	I <sub>z</sub>	J	E	G
AB	A	B	7.796e-06	4.836e-12	4.836e-12	9.673e-12	2e+11	7.93e+10
AC	A	C	7.796e-06	4.836e-12	4.836e-12	9.673e-12	2e+11	7.93e+10
AD	A	D	7.796e-06	4.836e-12	4.836e-12	9.673e-12	2e+11	7.93e+10
BC	B	C	7.796e-06	4.836e-12	4.836e-12	9.673e-12	2e+11	7.93e+10
BD	B	D	7.796e-06	4.836e-12	4.836e-12	9.673e-12	2e+11	7.93e+10
BE	B	E	7.796e-06	4.836e-12	4.836e-12	9.673e-12	2e+11	7.93e+10

## Member End Releases

Member	Δ <sub>xi</sub>	Δ <sub>yi</sub>	Δ <sub>zi</sub>	θ <sub>xi</sub>	θ <sub>yi</sub>	θ <sub>zi</sub>	Δ <sub>xj</sub>	Δ <sub>yj</sub>	Δ <sub>zj</sub>	θ <sub>xj</sub>	θ <sub>yj</sub>	θ <sub>zj</sub>
AB	False	False	False	False	False	False	False	False	False	False	False	False
AC	False	False	False	False	True	True	False	False	False	False	True	True
AD	False	False	False	False	True	True	False	False	False	False	True	True
BC	False	False	False	False	True	True	False	False	False	False	True	True
BD	False	False	False	False	True	True	False	False	False	False	True	True
BE	False	False	False	False	True	True	False	False	False	False	True	True

## Plates

Plate	i-Node	j-Node	m-Node	n-Node	t	E	ν
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## Quads

Quad	i-Node	j-Node	m-Node	n-Node	t	E	ν
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## Node Reactions

Node	LC	FX	FY	FZ	MX	MY	MZ
A	Combo 1	0	0	0	0	0	0
B	Combo 1	0	0	0	0	0	0
C	Combo 1	-17	-4	10.8	0.0001296	-1.576e-05	-7.54e-05
D	Combo 1	-80.5	14	-30.8	-2.597e-05	1.009e-05	-9.378e-06
E	Combo 1	87.5	-70	0	-3.008e-05	2.406e-05	0

## Node Displacements

Node	LC	Δ <sub>x</sub>	Δ <sub>y</sub>	Δ <sub>z</sub>	θ <sub>x</sub>	θ <sub>y</sub>	θ <sub>z</sub>
A	Combo 1	9.908e-05	0.0002234	5.708e-05	-8.188e-05	-0.0002016	0.0001791
B	Combo 1	3.159e-05	0.0001868	5.173e-06	-7.309e-05	-0.0001943	0.0001755

Node	LC	$\Delta_x$	$\Delta_y$	$\Delta_z$	$\theta_x$	$\theta_y$	$\theta_z$
C	Combo 1	0	0	0	0	0	0
D	Combo 1	0	0	0	0	0	0
E	Combo 1	0	0	0	0	0	0

### Member End Forces

Member	LC	P <sub>i</sub>	P <sub>j</sub>	V <sub>yi</sub>	V <sub>zi</sub>	V <sub>yj</sub>	V <sub>zj</sub>	M <sub>yi</sub>	M <sub>zi</sub>	M <sub>yj</sub>	M <sub>zj</sub>	T <sub>i</sub>	T <sub>j</sub>
AB	Combo 1	72.15	72.15	0.0002056	-0.0001839	0.0002056	-0.0001839	1.375e-05	3.374e-05	-6.208e-05	-5.105e-05	-9.282e-06	-9.282e-06
AC	Combo 1	13.15	13.15	2.051e-19	-8.664e-20	2.051e-19	-8.664e-20	0	0	-1.14e-19	-2.698e-19	5.183e-05	5.183e-05
AD	Combo 1	-43.29	-43.29	0	0	0	0	0	0	0	0	-3.121e-05	-3.121e-05
BC	Combo 1	-32.65	-32.65	0	0	0	0	0	0	0	0	0.0001006	0.0001006
BD	Combo 1	-45.24	-45.24	0	0	0	0	0	0	0	0	1.925e-06	1.925e-06
BE	Combo 1	112.1	112.1	0	0	0	0	0	0	0	0	-3.852e-05	-3.852e-05

### Member Max/Min Internal Forces

Member	LC	P <sub>max</sub>	P <sub>min</sub>	V <sub>y,max</sub>	V <sub>y,min</sub>	V <sub>z,max</sub>	V <sub>z,min</sub>	M <sub>y,max</sub>	M <sub>y,min</sub>	M <sub>z,max</sub>	M <sub>z,min</sub>	T <sub>max</sub>	T <sub>min</sub>
AB	Combo 1	72.15	72.15	0.0002056	0.0002056	-0.0001839	-0.0001839	1.375e-05	-6.208e-05	3.374e-05	-5.105e-05	-9.282e-06	-9.282e-06
AC	Combo 1	13.15	13.15	2.051e-19	2.051e-19	-8.664e-20	-8.664e-20	0	-1.14e-19	0	-2.698e-19	5.183e-05	5.183e-05
AD	Combo 1	-43.29	-43.29	0	0	0	0	0	0	0	0	-3.121e-05	-3.121e-05
BC	Combo 1	-32.65	-32.65	0	0	0	0	0	0	0	0	0.0001006	0.0001006
BD	Combo 1	-45.24	-45.24	0	0	0	0	0	0	0	0	1.925e-06	1.925e-06
BE	Combo 1	112.1	112.1	0	0	0	0	0	0	0	0	-3.852e-05	-3.852e-05

### Plate Out-of-Plane Corner Forces

Plate	LC	i-Node					j-Node					m-Node					n-Node				
		Q <sub>x</sub>	Q <sub>y</sub>	M <sub>x</sub>	M <sub>y</sub>	M <sub>xy</sub>	Q <sub>x</sub>	Q <sub>y</sub>	M <sub>x</sub>	M <sub>y</sub>	M <sub>xy</sub>	Q <sub>x</sub>	Q <sub>y</sub>	M <sub>x</sub>	M <sub>y</sub>	M <sub>xy</sub>	Q <sub>x</sub>	Q <sub>y</sub>	M <sub>x</sub>	M <sub>y</sub>	M <sub>xy</sub>

### Plate Out-of-Plane Center Forces

Plate	LC	Q <sub>x</sub>	Q <sub>y</sub>	M <sub>x</sub>	M <sub>y</sub>	M <sub>xy</sub>
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### In-Plane (Membrane) Corner Stresses

Plate	LC	i-Node			j-Node			m-Node			n-Node		
		$\sigma_x$	$\sigma_y$	$\tau_{xy}$	$\sigma_x$	$\sigma_y$	$\tau_{xy}$	$\sigma_x$	$\sigma_y$	$\tau_{xy}$	$\sigma_x$	$\sigma_y$	$\tau_{xy}$

### In-Plane (Membrane) Center Stresses

Plate	LC	$\sigma_x$	$\sigma_y$	$\tau_{xy}$
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