Drift

RAM Structural System 23.00.00.92
Chris Gerding
Supreme Court of MD
DataBase: 20010_SCoM_current - Copy 04/19/23 15:24:51
Building Code: IBC Steel Code: IBC

CRITERIA:

Rigid End Zones: Ignore Effects
Member Force Output: At Face of Joint
P-Delta: Yes Scale Factor (DL): 1.20 Scale Factor (LL): 1.60
Scale Factor (Roof): 1.00 Scale Factor (Snow): 1.00
Ground Level: Base

LOAD CASE DEFINITIONS:

W1	Wind Drift	Wind_ASCE716_1_X
W2	Wind Drift	Wind_ASCE716_1_Y
O1	Drift_SW_1_X	User_User
O2	Drift_SW_1_Y	User_User

USER DEFINED LOAD COMBINATIONS:

307 * 1 W1 + 1 O1
308 * 1 W2 + 1 O2

* = Load combination currently selected to use

Displacements for semirigid diaphragm are reported based on nodal displacements near to selected point.

Displacements for pseudo-flexible and flexible/none diaphragms are reported based on maximum nodal displacement within diaphragm boundary.

RESULTS:

Question 1 - No drift results for L4 and above for control point.

Location (ft): (35.790, 137.600)

Story	LdC	Displacement		Story Drift		Drift Ratio	
		X	Y	X	Y	X	Y
		in	in	in	in		
PH Roof	307	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	308	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
PH Mezz	307	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	308	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Main Roof	307	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	308	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
L5	307	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	308	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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Story	LdC	Displacement		Story Drift		Drift Ratio	
L4	307	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	308	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
L3	307	0.0000	0.0000	-0.3528	0.0213	0.0020	0.0001
	308	0.0000	0.0000	-0.0201	-0.2836	0.0001	0.0016
L2	307	0.3528	-0.0213	0.2389	-0.0149	0.0010	0.0001
	308	0.0201	0.2836	0.0132	0.1971	0.0001	0.0008
L1	307	0.1140	-0.0064	0.1140	-0.0064	0.0006	0.0000
	308	0.0069	0.0865	0.0069	0.0865	0.0000	0.0005

Location (ft): (-121.670, 6.630)

Question 2 - No drift results for control point.

Story	LdC	Displacement		Story Drift		Drift Ratio	
		X	Y	X	Y	X	Y
		in	in	in	in		
PH Roof	307	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	308	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
PH Mezz	307	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	308	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Main Roof	307	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	308	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
L5	307	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	308	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
L4	307	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	308	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
L3	307	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	308	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
L2	307	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	308	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
L1	307	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	308	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Location (ft): (68.000, 18.580)

Question 3 - Drift reversal(?) occurring between PH Roof and PH Mezz resulting in 0 displacement at PH Roof. See next page.

Drift

Deflected shape of frame does not support these results.

Story	LdC	Displacement		Story Drift		Drift Ratio	
		X	Y	X	Y	X	Y
		in	in	in	in		
PH Roof	307	0.0000	0.0000	-1.4154	-0.1763	0.0143	0.0018
	308	0.0000	0.0000	0.0590	-1.5273	0.0006	0.0154
PH Mezz	307	1.4154	0.1763	0.1594	0.3745	0.0013	0.0031
	308	-0.0590	1.5273	-0.0129	0.2593	0.0001	0.0022
Main Roof	307	1.2560	-0.1982	0.2698	-0.0467	0.0015	0.0003
	308	-0.0461	1.2680	-0.0150	0.1961	0.0001	0.0011
L5	307	0.9862	-0.1515	0.3525	-0.0438	0.0013	0.0002
	308	-0.0311	1.0719	-0.0125	0.3011	0.0000	0.0011
L4	307	0.6337	-0.1077	0.2017	-0.0357	0.0011	0.0002
	308	-0.0185	0.7707	-0.0071	0.3196	0.0000	0.0018
L3	307	0.4320	-0.0721	0.1723	-0.0256	0.0010	0.0001
	308	-0.0114	0.4511	-0.0058	0.1751	0.0000	0.0010
L2	307	0.2597	-0.0465	0.1801	-0.0304	0.0008	0.0001
	308	-0.0056	0.2760	-0.0049	0.1894	0.0000	0.0008
L1	307	0.0796	-0.0161	0.0796	-0.0161	0.0004	0.0001
	308	-0.0006	0.0865	-0.0006	0.0865	0.0000	0.0005