

# **CHEQUEO DE DERIVAS E IRREGULARIDAD**

**ANALISIS DINAMICO ELASTICO - EDIFICACIÓN 16 PISOS**  
**DERIVAS SENTIDO X**

NIVEL	DERIVA MAX.	NIVEL	DERIVA MAX.
STORY16	0.03	STORY8	0.03
STORY15	0.03	STORY7	0.03
STORY14	0.03	STORY6	0.03
STORY13	0.03	STORY5	0.03
STORY12	0.03	STORY4	0.03
STORY11	0.03	STORY3	0.03
STORY10	0.03	STORY2	0.03
STORY9	0.03	STORY1	0.03

INDICE **0.01**  
INDICE MAX **0.87**

Story	Point	Load	UX	UY	UZ	RX	RY	RZ	DERIVA X	INDICE	VERIFICACION
STORY16	1	SDX	0.3067	0.0315	0.0038	0.00069	0.00312	0.0025	0.010	0.33	CUMPLE
STORY15	1	SDX	0.2969	0.0294	0.0038	0.00071	0.00357	0.00233	0.012	0.39	CUMPLE
STORY14	1	SDX	0.2854	0.0273	0.0038	0.00072	0.0042	0.00217	0.014	0.45	CUMPLE
STORY13	1	SDX	0.272	0.0251	0.0038	0.00074	0.0049	0.00199	0.016	0.53	CUMPLE
STORY12	1	SDX	0.2564	0.0228	0.0038	0.00076	0.0056	0.00181	0.018	0.59	CUMPLE
STORY11	1	SDX	0.2387	0.0205	0.0038	0.00078	0.00628	0.00163	0.020	0.66	CUMPLE
STORY10	1	SDX	0.2189	0.0181	0.0037	0.00079	0.0069	0.00144	0.022	0.72	CUMPLE
STORY9	1	SDX	0.1974	0.0158	0.0036	0.00079	0.00745	0.00125	0.023	0.78	CUMPLE
STORY8	1	SDX	0.1742	0.0134	0.0035	0.00078	0.00791	0.00106	0.025	0.82	CUMPLE
STORY7	1	SDX	0.1497	0.011	0.0033	0.00076	0.00827	0.00087	0.026	0.85	CUMPLE
STORY6	1	SDX	0.1243	0.0087	0.003	0.00072	0.00849	0.00069	0.026	0.87	CUMPLE
STORY5	1	SDX	0.0984	0.0066	0.0027	0.00067	0.00853	0.00052	0.026	0.86	CUMPLE
STORY4	1	SDX	0.0726	0.0046	0.0023	0.00059	0.00832	0.00037	0.025	0.82	CUMPLE
STORY3	1	SDX	0.048	0.0029	0.0019	0.0005	0.00774	0.00023	0.022	0.74	CUMPLE
STORY2	1	SDX	0.0258	0.0015	0.0013	0.00037	0.00654	0.00012	0.017	0.58	CUMPLE
STORY1	1	SDX	0.0084	0.0005	0.0007	0.00023	0.00443	0.00004	0.008	0.28	CUMPLE
BASE	1	SDX	0	0	0	0	0	0			
STORY16	5	SDX	0.3067	0.0315	0.0038	0.00069	0.00312	0.0025	0.010	0.33	CUMPLE
STORY15	5	SDX	0.2969	0.0294	0.0038	0.00071	0.00357	0.00233	0.012	0.39	CUMPLE
STORY14	5	SDX	0.2854	0.0273	0.0038	0.00072	0.0042	0.00217	0.014	0.45	CUMPLE
STORY13	5	SDX	0.272	0.0251	0.0038	0.00074	0.0049	0.00199	0.016	0.53	CUMPLE
STORY12	5	SDX	0.2564	0.0228	0.0038	0.00076	0.0056	0.00181	0.018	0.59	CUMPLE
STORY11	5	SDX	0.2387	0.0205	0.0038	0.00078	0.00628	0.00163	0.020	0.66	CUMPLE
STORY10	5	SDX	0.2189	0.0181	0.0037	0.00079	0.0069	0.00144	0.022	0.72	CUMPLE
STORY9	5	SDX	0.1974	0.0158	0.0036	0.00079	0.00745	0.00125	0.023	0.78	CUMPLE
STORY8	5	SDX	0.1742	0.0134	0.0035	0.00078	0.00791	0.00106	0.025	0.82	CUMPLE
STORY7	5	SDX	0.1497	0.011	0.0033	0.00076	0.00827	0.00087	0.026	0.85	CUMPLE
STORY6	5	SDX	0.1243	0.0087	0.003	0.00072	0.00849	0.00069	0.026	0.87	CUMPLE
STORY5	5	SDX	0.0984	0.0066	0.0027	0.00067	0.00853	0.00052	0.026	0.86	CUMPLE
STORY4	5	SDX	0.0726	0.0046	0.0023	0.00059	0.00832	0.00037	0.025	0.82	CUMPLE
STORY3	5	SDX	0.048	0.0029	0.0019	0.0005	0.00774	0.00023	0.022	0.74	CUMPLE
STORY2	5	SDX	0.0258	0.0015	0.0013	0.00037	0.00654	0.00012	0.017	0.58	CUMPLE
STORY1	5	SDX	0.0084	0.0005	0.0007	0.00023	0.00443	0.00004	0.008	0.28	CUMPLE
BASE	5	SDX	0	0	0	0	0	0			
STORY16	46	SDX	0.3067	0.0315	0.0038	0.00069	0.00312	0.0025	0.010	0.33	CUMPLE
STORY15	46	SDX	0.2969	0.0294	0.0038	0.00071	0.00357	0.00233	0.012	0.39	CUMPLE
STORY14	46	SDX	0.2854	0.0273	0.0038	0.00072	0.0042	0.00217	0.014	0.45	CUMPLE
STORY13	46	SDX	0.272	0.0251	0.0038	0.00074	0.0049	0.00199	0.016	0.53	CUMPLE
STORY12	46	SDX	0.2564	0.0228	0.0038	0.00076	0.0056	0.00181	0.018	0.59	CUMPLE
STORY11	46	SDX	0.2387	0.0205	0.0038	0.00078	0.00628	0.00163	0.020	0.66	CUMPLE
STORY10	46	SDX	0.2189	0.0181	0.0037	0.00079	0.0069	0.00144	0.022	0.72	CUMPLE
STORY9	46	SDX	0.1974	0.0158	0.0036	0.00079	0.00745	0.00125	0.023	0.78	CUMPLE
STORY8	46	SDX	0.1742	0.0134	0.0035	0.00078	0.00791	0.00106	0.025	0.82	CUMPLE
STORY7	46	SDX	0.1497	0.011	0.0033	0.00076	0.00827	0.00087	0.026	0.85	CUMPLE
STORY6	46	SDX	0.1243	0.0087	0.003	0.00072	0.00849	0.00069	0.026	0.87	CUMPLE
STORY5	46	SDX	0.0984	0.0066	0.0027	0.00067	0.00853	0.00052	0.026	0.86	CUMPLE
STORY4	46	SDX	0.0726	0.0046	0.0023	0.00059	0.00832	0.00037	0.025	0.82	CUMPLE
STORY3	46	SDX	0.048	0.0029	0.0019	0.0005	0.00774	0.00023	0.022	0.74	CUMPLE
STORY2	46	SDX	0.0258	0.0015	0.0013	0.00037	0.00654	0.00012	0.017	0.58	CUMPLE
STORY1	46	SDX	0.0084	0.0005	0.0007	0.00023	0.00443	0.00004	0.008	0.28	CUMPLE
BASE	46	SDX	0	0	0	0	0	0			
STORY16	50	SDX	0.3067	0.0315	0.0038	0.00069	0.00312	0.0025	0.010	0.33	CUMPLE
STORY15	50	SDX	0.2969	0.0294	0.0038	0.00071	0.00357	0.00233	0.012	0.39	CUMPLE



**ANALISIS DINAMICO ELASTICO - EDIFICACIÓN 16 PISOS**  
**DERIVAS SENTIDO Y**

NIVEL	DERIVA MAX.	NIVEL	DERIVA MAX.
STORY16	0.03	STORY8	0.03
STORY15	0.03	STORY7	0.03
STORY14	0.03	STORY6	0.03
STORY13	0.03	STORY5	0.03
STORY12	0.03	STORY4	0.03
STORY11	0.03	STORY3	0.03
STORY10	0.03	STORY2	0.03
STORY9	0.03	STORY1	0.03

INDICE **0.01**  
INDICE MAX **0.90**

Story	Point	Load	UX	UY	UZ	RX	RY	RZ	DERIVA Y	INDICE	VERIFICACION
STORY16	1	SDY	0.0344	0.351	0.0237	0.00804	0.0008	0.00276	0.024	0.80	CUMPLE
STORY15	1	SDY	0.0322	0.3271	0.0238	0.00815	0.00079	0.00257	0.025	0.83	CUMPLE
STORY14	1	SDY	0.0298	0.3024	0.0241	0.00838	0.00082	0.00238	0.025	0.85	CUMPLE
STORY13	1	SDY	0.0274	0.2771	0.0244	0.00856	0.00084	0.00219	0.026	0.87	CUMPLE
STORY12	1	SDY	0.0249	0.2511	0.0246	0.00874	0.00087	0.00199	0.027	0.89	CUMPLE
STORY11	1	SDY	0.0223	0.2246	0.0247	0.00886	0.00088	0.00179	0.027	0.90	CUMPLE
STORY10	1	SDY	0.0197	0.1978	0.0246	0.00891	0.00089	0.00158	0.027	0.90	CUMPLE
STORY9	1	SDY	0.0171	0.1708	0.0242	0.00886	0.0009	0.00137	0.027	0.89	CUMPLE
STORY8	1	SDY	0.0145	0.1441	0.0235	0.00868	0.00089	0.00116	0.026	0.87	CUMPLE
STORY7	1	SDY	0.0119	0.118	0.0224	0.00837	0.00086	0.00095	0.025	0.84	CUMPLE
STORY6	1	SDY	0.0094	0.093	0.0209	0.00789	0.00082	0.00076	0.024	0.78	CUMPLE
STORY5	1	SDY	0.0071	0.0696	0.0189	0.00723	0.00076	0.00057	0.021	0.71	CUMPLE
STORY4	1	SDY	0.005	0.0484	0.0164	0.00637	0.00068	0.0004	0.018	0.61	CUMPLE
STORY3	1	SDY	0.0031	0.0301	0.0133	0.00527	0.00057	0.00025	0.015	0.49	CUMPLE
STORY2	1	SDY	0.0016	0.0154	0.0096	0.00393	0.00044	0.00013	0.011	0.35	CUMPLE
STORY1	1	SDY	0.0005	0.0049	0.0051	0.00235	0.00028	0.00004	0.005	0.16	CUMPLE
BASE	1	SDY	0	0	0	0	0	0			
STORY16	5	SDY	0.0344	0.351	0.0237	0.00804	0.0008	0.00276	0.024	0.80	CUMPLE
STORY15	5	SDY	0.0322	0.3271	0.0238	0.00815	0.00079	0.00257	0.025	0.83	CUMPLE
STORY14	5	SDY	0.0298	0.3024	0.0241	0.00838	0.00082	0.00238	0.025	0.85	CUMPLE
STORY13	5	SDY	0.0274	0.2771	0.0244	0.00856	0.00084	0.00219	0.026	0.87	CUMPLE
STORY12	5	SDY	0.0249	0.2511	0.0246	0.00874	0.00087	0.00199	0.027	0.89	CUMPLE
STORY11	5	SDY	0.0223	0.2246	0.0247	0.00886	0.00088	0.00179	0.027	0.90	CUMPLE
STORY10	5	SDY	0.0197	0.1978	0.0246	0.00891	0.00089	0.00158	0.027	0.90	CUMPLE
STORY9	5	SDY	0.0171	0.1708	0.0242	0.00886	0.0009	0.00137	0.027	0.89	CUMPLE
STORY8	5	SDY	0.0145	0.1441	0.0235	0.00868	0.00089	0.00116	0.026	0.87	CUMPLE
STORY7	5	SDY	0.0119	0.118	0.0224	0.00837	0.00086	0.00095	0.025	0.84	CUMPLE
STORY6	5	SDY	0.0094	0.093	0.0209	0.00789	0.00082	0.00076	0.024	0.78	CUMPLE
STORY5	5	SDY	0.0071	0.0696	0.0189	0.00723	0.00076	0.00057	0.021	0.71	CUMPLE
STORY4	5	SDY	0.005	0.0484	0.0164	0.00637	0.00068	0.0004	0.018	0.61	CUMPLE
STORY3	5	SDY	0.0031	0.0301	0.0133	0.00527	0.00057	0.00025	0.015	0.49	CUMPLE
STORY2	5	SDY	0.0016	0.0154	0.0096	0.00393	0.00044	0.00013	0.011	0.35	CUMPLE
STORY1	5	SDY	0.0005	0.0049	0.0051	0.00235	0.00028	0.00004	0.005	0.16	CUMPLE
BASE	5	SDY	0	0	0	0	0	0			
STORY16	46	SDY	0.0344	0.351	0.0237	0.00804	0.0008	0.00276	0.024	0.80	CUMPLE
STORY15	46	SDY	0.0322	0.3271	0.0238	0.00815	0.00079	0.00257	0.025	0.83	CUMPLE
STORY14	46	SDY	0.0298	0.3024	0.0241	0.00838	0.00082	0.00238	0.025	0.85	CUMPLE
STORY13	46	SDY	0.0274	0.2771	0.0244	0.00856	0.00084	0.00219	0.026	0.87	CUMPLE
STORY12	46	SDY	0.0249	0.2511	0.0246	0.00874	0.00087	0.00199	0.027	0.89	CUMPLE
STORY11	46	SDY	0.0223	0.2246	0.0247	0.00886	0.00088	0.00179	0.027	0.90	CUMPLE
STORY10	46	SDY	0.0197	0.1978	0.0246	0.00891	0.00089	0.00158	0.027	0.90	CUMPLE
STORY9	46	SDY	0.0171	0.1708	0.0242	0.00886	0.0009	0.00137	0.027	0.89	CUMPLE
STORY8	46	SDY	0.0145	0.1441	0.0235	0.00868	0.00089	0.00116	0.026	0.87	CUMPLE
STORY7	46	SDY	0.0119	0.118	0.0224	0.00837	0.00086	0.00095	0.025	0.84	CUMPLE
STORY6	46	SDY	0.0094	0.093	0.0209	0.00789	0.00082	0.00076	0.024	0.78	CUMPLE
STORY5	46	SDY	0.0071	0.0696	0.0189	0.00723	0.00076	0.00057	0.021	0.71	CUMPLE
STORY4	46	SDY	0.005	0.0484	0.0164	0.00637	0.00068	0.0004	0.018	0.61	CUMPLE
STORY3	46	SDY	0.0031	0.0301	0.0133	0.00527	0.00057	0.00025	0.015	0.49	CUMPLE
STORY2	46	SDY	0.0016	0.0154	0.0096	0.00393	0.00044	0.00013	0.011	0.35	CUMPLE
STORY1	46	SDY	0.0005	0.0049	0.0051	0.00235	0.00028	0.00004	0.005	0.16	CUMPLE
BASE	46	SDY	0	0	0	0	0	0			
STORY16	50	SDY	0.0344	0.351	0.0237	0.00804	0.0008	0.00276	0.024	0.80	CUMPLE
STORY15	50	SDY	0.0322	0.3271	0.0238	0.00815	0.00079	0.00257	0.025	0.83	CUMPLE



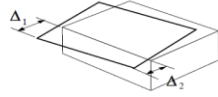
**ANALISIS DINAMICO ELASTICO - EDIFICACION 16 PISOS**  
**IRREGULARIDAD DEL TIPO 1P**

Tipo 1aP — Irregularidad torsional  
 $\phi_p = 0.9$

Tipo 1bP — Irregularidad torsional extrema  
 $\phi_p = 0.8$

$$1.4 \left( \frac{\Delta_1 + \Delta_2}{2} \right) \geq \Delta_1 > 1.2 \left( \frac{\Delta_1 + \Delta_2}{2} \right)$$

$$\Delta_1 > 1.4 \left( \frac{\Delta_1 + \Delta_2}{2} \right)$$



**IRREGULARIDAD TORSIONAL X**

NIVEL	NUDO	$\Delta_{x1}$	NUDO	$\Delta_{x2}$	$1.4(\Delta_1+\Delta_2)/2$	$\Delta_1 > 1.4(\Delta_1+\Delta_2)/2$	$1.2(\Delta_1+\Delta_2)/2$	$1.4(\Delta_1+\Delta_2)/2 \geq \Delta_1 > 1.2(\Delta_1+\Delta_2)/2$
		cm		cm	cm	cm	$\phi_p$	cm
STORY16	1	1.00	5	1.00	1.40	1.0	1.20	1.0
STORY15	1	1.17	5	1.17	1.64	1.0	1.40	1.0
STORY14	1	1.36	5	1.36	1.90	1.0	1.63	1.0
STORY13	1	1.58	5	1.58	2.21	1.0	1.89	1.0
STORY12	1	1.78	5	1.78	2.50	1.0	2.14	1.0
STORY11	1	1.99	5	1.99	2.79	1.0	2.39	1.0
STORY10	1	2.16	5	2.16	3.03	1.0	2.59	1.0
STORY9	1	2.33	5	2.33	3.27	1.0	2.80	1.0
STORY8	1	2.46	5	2.46	3.45	1.0	2.95	1.0
STORY7	1	2.55	5	2.55	3.57	1.0	3.06	1.0
STORY6	1	2.60	5	2.60	3.64	1.0	3.12	1.0
STORY5	1	2.59	5	2.59	3.62	1.0	3.11	1.0
STORY4	1	2.47	5	2.47	3.45	1.0	2.96	1.0
STORY3	1	2.22	5	2.22	3.11	1.0	2.67	1.0
STORY2	1	1.74	5	1.74	2.44	1.0	2.09	1.0
STORY1	1	0.84	5	0.84	1.18	1.0	1.01	1.0

NIVEL	NUDO	$\Delta_{x1}$	NUDO	$\Delta_{x2}$	$1.4(\Delta_1+\Delta_2)/2$	$\Delta_1 > 1.4(\Delta_1+\Delta_2)/2$	$1.2(\Delta_1+\Delta_2)/2$	$1.4(\Delta_1+\Delta_2)/2 \geq \Delta_1 > 1.2(\Delta_1+\Delta_2)/2$
		cm		cm	cm	cm	$\phi_p$	cm
STORY16	46	1.00	50	1.00	1.40	1.0	1.20	1.0
STORY15	46	1.17	50	1.17	1.64	1.0	1.40	1.0
STORY14	46	1.36	50	1.36	1.90	1.0	1.63	1.0
STORY13	46	1.58	50	1.58	2.21	1.0	1.89	1.0
STORY12	46	1.78	50	1.78	2.50	1.0	2.14	1.0
STORY11	46	1.99	50	1.99	2.79	1.0	2.39	1.0
STORY10	46	2.16	50	2.16	3.03	1.0	2.59	1.0
STORY9	46	2.33	50	2.33	3.27	1.0	2.80	1.0
STORY8	46	2.46	50	2.46	3.45	1.0	2.95	1.0
STORY7	46	2.55	50	2.55	3.57	1.0	3.06	1.0
STORY6	46	2.60	50	2.60	3.64	1.0	3.12	1.0
STORY5	46	2.59	50	2.59	3.62	1.0	3.11	1.0
STORY4	46	2.47	50	2.47	3.45	1.0	2.96	1.0
STORY3	46	2.22	50	2.22	3.11	1.0	2.67	1.0
STORY2	46	1.74	50	1.74	2.44	1.0	2.09	1.0
STORY1	46	0.84	50	0.84	1.18	1.0	1.01	1.0

**IRREGULARIDAD TORSIONAL Y**

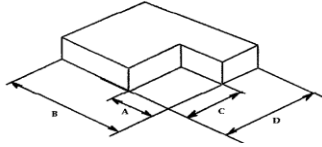
NIVEL	NUDO	$\Delta_{y1}$	NUDO	$\Delta_{y2}$	$1.4(\Delta_1+\Delta_2)/2$	$\Delta_1 > 1.4(\Delta_1+\Delta_2)/2$	$1.2(\Delta_1+\Delta_2)/2$	$1.4(\Delta_1+\Delta_2)/2 \geq \Delta_1 > 1.2(\Delta_1+\Delta_2)/2$
		cm		cm	cm	cm	$\phi_p$	cm
STORY16	1	2.40	46	2.40	3.36	1.0	2.88	1.0
STORY15	1	2.48	46	2.48	3.47	1.0	2.98	1.0
STORY14	1	2.54	46	2.54	3.56	1.0	3.05	1.0
STORY13	1	2.61	46	2.61	3.66	1.0	3.13	1.0
STORY12	1	2.66	46	2.66	3.73	1.0	3.20	1.0
STORY11	1	2.69	46	2.69	3.77	1.0	3.23	1.0
STORY10	1	2.71	46	2.71	3.80	1.0	3.25	1.0
STORY9	1	2.68	46	2.68	3.76	1.0	3.22	1.0
STORY8	1	2.62	46	2.62	3.67	1.0	3.15	1.0
STORY7	1	2.51	46	2.51	3.52	1.0	3.01	1.0
STORY6	1	2.35	46	2.35	3.29	1.0	2.82	1.0
STORY5	1	2.13	46	2.13	2.98	1.0	2.56	1.0
STORY4	1	1.84	46	1.84	2.58	1.0	2.21	1.0
STORY3	1	1.48	46	1.48	2.07	1.0	1.77	1.0
STORY2	1	1.06	46	1.06	1.48	1.0	1.27	1.0
STORY1	1	0.49	46	0.49	0.69	1.0	0.59	1.0

NIVEL	NUDO	$\Delta_{y1}$	NUDO	$\Delta_{y2}$	$1.4(\Delta_1+\Delta_2)/2$	$\Delta_1 > 1.4(\Delta_1+\Delta_2)/2$	$1.2(\Delta_1+\Delta_2)/2$	$1.4(\Delta_1+\Delta_2)/2 \geq \Delta_1 > 1.2(\Delta_1+\Delta_2)/2$
		cm		cm	cm	cm	$\phi_p$	cm
STORY16	5	2.40	50	2.40	3.36	1.0	2.88	1.0
STORY15	5	2.48	50	2.48	3.47	1.0	2.98	1.0
STORY14	5	2.54	50	2.54	3.56	1.0	3.05	1.0
STORY13	5	2.61	50	2.61	3.66	1.0	3.13	1.0
STORY12	5	2.66	50	2.66	3.73	1.0	3.20	1.0
STORY11	5	2.69	50	2.69	3.77	1.0	3.23	1.0
STORY10	5	2.71	50	2.71	3.80	1.0	3.25	1.0
STORY9	5	2.68	50	2.68	3.76	1.0	3.22	1.0
STORY8	5	2.62	50	2.62	3.67	1.0	3.15	1.0
STORY7	5	2.51	50	2.51	3.52	1.0	3.01	1.0
STORY6	5	2.35	50	2.35	3.29	1.0	2.82	1.0
STORY5	5	2.13	50	2.13	2.98	1.0	2.56	1.0
STORY4	5	1.84	50	1.84	2.58	1.0	2.21	1.0
STORY3	5	1.48	50	1.48	2.07	1.0	1.77	1.0
STORY2	5	1.06	50	1.06	1.48	1.0	1.27	1.0
STORY1	5	0.49	50	0.49	0.69	1.0	0.59	1.0

**IRREGULARIDAD DEL TIPO 2P**

RETROCESOS EN LAS ESQUINAS

Tipo 2P – Retrocesos en las esquinas -  $\phi_p = 0.9$   
 $A > 0.15B$  y  $C > 0.15D$

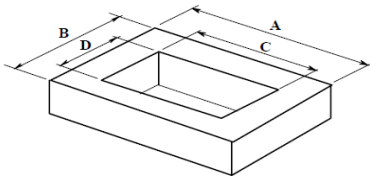


NIVEL	B <sub>(X TOTAL)</sub>	A <sub>(X RETROCESO)</sub>	A > 0.15B	D <sub>(Y TOTAL)</sub>	C <sub>(Y RETROCESO)</sub>	D > 0.15C	$\phi_p$
	m	m	S/NO	M	M	S/NO	
PISO TIPO	25.20	0.00	NO	25.00	0.00	NO	1.0

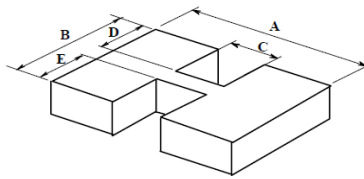
**IRREGULARIDAD DEL TIPO 3P**

IRREGULARIDAD DEL DIAFRAGMA

1)  $C \times D > 0.5 A \times B$



2)  $(C \times D + C \times E) > 0.5 A \times B$



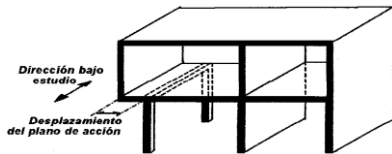
NIVEL	A <sub>(X TOTAL)</sub>	C <sub>(X VACIO)</sub>	B <sub>(Y TOTAL)</sub>	D <sub>(Y VACIO)</sub>	$C \times D > 0.5 A \times B$	$\phi_p$
	m	m	M	M	S/NO	
PISO TIPO	25.20	0.00	25.00	0.00	NO	1.0

NIVEL	A <sub>(X TOTAL)</sub>	C <sub>(X VACIO)</sub>	B <sub>(Y TOTAL)</sub>	D <sub>(Y VACIO)</sub>	E <sub>(Y VACIO)</sub>	$(C \times D + C \times E) > 0.5 A \times B$	$\phi_p$
	m	m	M	M	M	S/NO	
PISO TIPO	25.20	0.00	25.00	0.00	0.00	NO	1.0

**IRREGULARIDAD DEL TIPO 4P**

IRREGULARIDAD DEL DIAFRAGMA

Tipo 4P - Desplazamiento de los planos de Acción -  $\phi_p = 0.8$

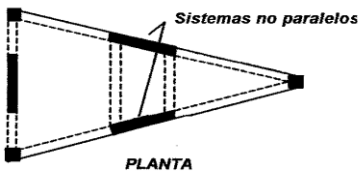


NIVEL	EXISTE DISCONTINUIDAD	$\phi_p$
	S/NO	
PISO TIPO	NO	1.0

**IRREGULARIDAD DEL TIPO 5P**

SISTEMAS NO PARALELOS

Tipo 5P - Sistemas no paralelos -  $\phi_p = 0.9$



NIVEL	EXISTE SISTEMA NO PARALELO	$\phi_p$
	S/NO	
2o	NO	1.0

## ANALISIS DINAMICO ELASTICO - EDIFICACIÓN 16 PISOS

### IRREGULARIDAD EN ALTURA

A.3.3.5.1 - Excepciones a las irregularidades en altura - Cuando para todos los pisos, la deriva de cualquier piso es menor de 1.3 veces la deriva del piso siguiente hacia arriba, puede considerarse que no existen irregularidades en altura de tipos 1A, 2A, ó 3A, tal como se definen en la tabla A.3-7, y en este caso se aplica  $\phi_a = 1.0$ .

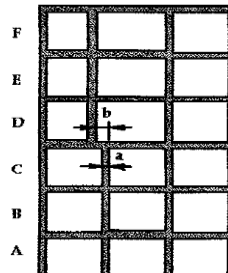
NUDO	DERIVA	DERIVA	RESULTANTE	$\Delta_{(H)} < 1.3 \Delta_{(H+1)}$	$\phi_a$
JOINT	$\Delta x$ (cm)	$\Delta y$ (cm)	$\Delta a$ (cm)	SI/NO	
STORY16	0.952	2.280	2.471	NO	1.0
STORY15	1.111	2.358	2.606	NO	1.0
STORY14	1.290	2.414	2.737	NO	1.0
STORY13	1.498	2.481	2.899	NO	1.0
STORY12	1.696	2.530	3.045	NO	1.0
STORY11	1.895	2.558	3.183	NO	1.0
STORY10	2.054	2.577	3.295	NO	1.0
STORY9	2.216	2.548	3.377	NO	1.0
STORY8	2.339	2.492	3.417	NO	1.0
STORY7	2.423	2.387	3.401	NO	1.0
STORY6	2.469	2.234	3.329	NO	1.0
STORY5	2.458	2.024	3.184	NO	1.0
STORY4	2.343	1.748	2.923	NO	1.0
STORY3	2.113	1.404	2.537	NO	1.0
STORY2	1.830	1.109	2.140	NO	1.0
STORY1	1.557	0.911	1.804	NO	1.0

### IRREGULARIDAD DEL TIPO 4A

#### RETROCESOS EN LAS ESQUINAS

Tipo 4A - Desplazamiento dentro del plano de acción -  $\phi_a = 0.8$

$$b > a$$



NIVEL	A	B	B>A	$\phi_a$
	m	m	SI/NO	
PISO TIPO	0.80	0.00	NO	1.0

### IRREGULARIDAD DEL TIPO 5A

#### PISO DEBIL

Tipo 5A - Piso débil -  $\phi_a = 0.8$

Resistencia Piso B < 0.70 Resistencia Piso C

NO PRESENTA

