

## **ANEXO 5**

### **IMPERFECCIONES EN EDIFICIOS**



Cálculo de la Traslacionalidad para Porticos de Multiples pilares PA1

	Altura del Pilar(m)	Aviles(KN)										Cortantes(KN)										Deformaciones(mm)										
		Carga Perm.		G1	G	Q	V1	V2	V3	V4	N	Carga Perm.		G1	G	Q	V1	V2	V3	V4	N	Carga Perm.		G1	G	Q	V1	V2	V3	V4	N	
Planta Baja	Pilar 1	4.53	300	0.0151	12.476	151.693	164.169	24.887	-13.381	-7.226	4.557	-11.944	1.77	-0.377	4.493	4.116	-0.231	-1.22	-1.376	5.767	-7.076	-0.124	-0.004	0.167	0.163	0.038	2.368	2.876	0.003	0.021	-0.005	
	Pilar 2	4.53	300	0.0151	15.949	342.957	358.906	76.356	-11.607	0.98	-10.4	-4.172	4.043	-0.482	-0.215	-0.697	-0.274	-1.421	-1.605	3.589	-3.379	-0.146	-0.003	0.012	0.009	0.054	2.892	3.423	0.018	0.008	-0.007	
	Pilar 3	4.53	300	0.0151	14.834	121.363	136.197	28.529	-14.363	-3.146	-8.603	-7.507	4.015	-0.441	-4.829	-5.27	-0.237	-1.142	-1.303	3.054	-2.934	-0.126	-0.001	0.092	0.091	0.042	3.163	3.766	0.016	0.016	-0.008	
	Pilar 4	4.53	300	0.0151			0	0								0	0							0.000	0.000							
	Pilar 5	4.53	300	0.0151			0	0								0	0							0.000	0.000							
	Pilar 6	4.53	300	0.0151			0	0								0	0							0.000	0.000							
	Pilar 7						0	0								0	0							0.000	0.000							
	Pilar 8						0	0								0	0							0.000	0.000							
	Pilar 9						0	0								0	0							0.000	0.000							
	Pilar 10						0	0								0	0							0.000	0.000							
Planta Alta	Pilar 1	9.29	300	0.030966667	7.649	45.202	52.851	10.856	-9.146	-2.209	0.965	-9.533	2.008	-0.216	2.722	2.506	-0.182	-0.76	-0.894	4.014	-4.924	-0.103	-0.003	0.424	0.421	0.088	4.163	5.558	-0.039	0.03	-0.015	
	Pilar 2	9.29	300	0.030966667	9.692	144.756	154.448	30.818	-10.222	2.744	-7.457	-6.083	3.87	-0.606	-0.229	-0.835	-0.291	-1.278	-1.476	1.608	-4.413	-0.153	0	0.427	0.427	0.198	4.847	6.362	0.034	-0.068	-0.001	
	Pilar 3	9.29	300	0.030966667	8.7	48.057	56.757	14.649	-12.094	-0.337	-7.386	-8.181	3.903	-0.526	-3.092	-3.618	-0.184	-1.018	-1.122	1.126	-0.264	-0.088	0.001	0.329	0.33	0.119	5.58	7.243	0.006	-0.001	-0.012	
	Pilar 4	9.29	300	0.030966667			0	0								0	0							0	0							
	Pilar 5	9.29	300	0.030966667			0	0								0	0							0	0							
	Pilar 6	9.29	300	0.030966667			0	0								0	0							0	0							
	Pilar 7						0	0								0	0							0	0							
	Pilar 8						0	0								0	0							0	0							
	Pilar 9						0	0								0	0							0	0							
	Pilar 10						0	0								0	0							0	0							

Cálculo de la Traslacionalidad para Porticos de Múltiples pilares

	Altura del Pilar(m)	Axiles(KN)										Cortantes(KN)										Deformaciones (mm)										
		denominador	coeficiente $\phi$	Carga Perm.	G1	G	Q	V1	V2	V3	V4	N	Carga Perm.	G1	G	Q	V1	V2	V3	V4	N	Carga Perm.	G1	G	Q	V1	V2	V3	V4	N		
Planta Baja	Pilar 1	4,53	0,0151	300	12,462	147,717	160,179	4,776	1,775	-4,642	11,388	-1,776	-0,395	4,499	4,104	-0,224	-1,066	-1,298	5,794	-7,093	-0,121	0,005	0,276	0,281	0,068	2,311	2,838	-0,013	-0,015	0,003		
	Pilar 2	4,53	0,0151	300	16,507	349,576	366,083	0,368	6,635	-10,423	-3,534	4,038	-0,502	-0,207	-0,709	-0,266	-1,24	-1,513	3,622	-3,402	-0,143	0,008	0,495	0,503	0,136	2,779	3,346	-0,012	-0,028	0,009		
	Pilar 3	4,53	0,0151	300			138,07	-1,646	4,692	-8,628	-7,486	4,012	-0,463	-4,823	-3,286	-0,231	-0,965	-1,217	3,08	-2,951	-0,124	0,007	0,25	0,257	0,089	3,054	3,691	-0,015	-0,020	0,008		
	Pilar 4	4,53	0,0151	300			0								0																	
	Pilar 5	4,53	0,0151	300			0								0																	
	Pilar 6						0								0																	
	Pilar 7						0								0																	
	Pilar 8						0								0																	
	Pilar 9						0								0																	
	Pilar 10						0								0																	
Planta Alta	Pilar 1	9,29	0,030966667	300			52,851	-9,146	-2,209	0,965	-9,533	2,008	-0,219	2,727	2,508	-0,177	-0,636	-0,823	4,036	-4,95	-0,101	0,01	0,447	0,457	0,447	4,054	4,054	4,054	-0,057	-0,057	-0,057	
	Pilar 2	9,29	0,030966667	300			155,885	-3,006	2,292	-7,441	-5,446	3,866	-0,614	-0,222	-0,836	-0,282	-1,086	-1,365	1,641	-0,449	-0,149	0,01	0,665	0,675	0,199	4,908	4,908	-0,02	0,011	0,004		
	Pilar 3	9,29	0,030966667	300			57,418	-4,836	0,573	-7,395	-8,172	3,902	-0,527	-3,087	-3,614	-0,176	-0,908	-1,079	1,153	-0,295	-0,085	0,014	0,423	0,437	0,167	5,547	7,217	-0,005	-0,005	0,012		
	Pilar 4	9,29	0,030966667	300			0								0										0							
	Pilar 5						0								0									0								
	Pilar 6						0								0									0								
	Pilar 7						0								0									0								
	Pilar 8						0								0									0								
	Pilar 9						0								0									0								
	Pilar 10						0								0									0								

	Combinación1 1,35*G+1,50*Q+0,75*N							Combinación2 1,35*G+1,50*V1							Combinación3 1,35*G+1,50*V2							Combinación4 1,35*G+1,50*V3							Combinación5 1,35*G+1,50*V4						
	Ned(KN)	Ved(KN)	Htd(KN)	Σ def(mm)	Traslacional	r		Ned(KN)	Ved(KN)	Htd(KN)	Σ def(mm)	Traslacional	r		Ned(KN)	Ved(KN)	Htd(KN)	Σ def(mm)	Traslacional	r		Ned(KN)	Ved(KN)	Htd(KN)	Σ def(mm)	Traslacional	r		Ned(KN)	Ved(KN)	Htd(KN)	Σ def(mm)	Traslacional	r	
Pilar 1	89,0667	5,0955	1,34490717	0,352	NO	0,009585382		165,7758	3,9414	2,50321458	2,592	SI	0,297893284		150,8688	3,5934	2,72811888	3,119	SI	1,952994071		136,4823	14,2314	2,06088273	0,268	NO	0,001284168		176,2743	-5,0991	2,66174193	0,266	NO	0,00239021	
Pilar 2	351,0636	-1,48485	5,30106036	0,648	NO	0,017645817		288,8283	-2,81715	4,36130733	3,282	SI	0,37719358		290,2818	-3,22665	4,38232518	3,849	SI	2,410091112		279,2943	4,47585	4,21734393	0,491	NO	0,002352711		386,6353	-6,06015	4,32819303	0,475	NO	0,004268232	
Pilar 3	129,7797	-7,5942	1,95514347	0,354	NO	0,009639844		113,6652	-8,6136	1,71634452	3,311	SI	0,380526491		115,0587	-8,9616	1,73738637	3,948	SI	2,472080984		107,0307	-2,5161	1,61616357	0,242	NO	0,001159585		109,9092	-11,5626	1,65962892	0,237	NO	0,007129623	
Pilar 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pilar 5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pilar 6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pilar 7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pilar 8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pilar 9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pilar 10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pilar 1	89,44005	3,0294	2,769660215	0,847	NO	0,004066142		57,62985	2,4318	1,784604355	4,511	NO	0,042987925		68,03535	2,1513	1,027333785	4,511	NO	0,08403771		72,79635	9,4398	1,09924885	0,4	NO	0,000132871		57,04935	-4,0392	1,766628205	0,4	NO	0,001752657	
Pilar 2	260,82165	-1,6857	8,076777095	0,878	NO	0,004214962		205,93575	-2,7576	6,37143725	5,583	NO	0,053203632		213,88275	-3,1761	3,229629525	5,583	SI	0,104008543		3,5901	7,16085	0,05421051	0,004	NO	1,32871E-06		202,2758	-1,8021	6,263805725	0,686	NO	0,003005806	
Pilar 3	103,3491	-5,2194	3,20037713	0,616	NO	0,002957194		70,2603	-6,2409	2,17572725	5,984	NO	0,057024993		78,3738	-6,4974	1,18344438	7,654	SI	0,142590254		3,9057	8,20575	0,05897607	0,012	NO	3,98613E-06		65,2563	-5,3214	2,02077009	0,432	NO	0,001892869	
Pilar 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pilar 5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pilar 6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pilar 7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pilar 8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pilar 9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pilar 10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Cálculo de la Traslacionalidad para Porticos de Múltiples pilares PC1

		Altura del Pilar(m)	denominador	coeficiente $\phi$			Axiles(KN)						Cortantes(KN)						Deformaciones(mm)							
				G	Q	V1	V2	V3	V4	N	G	Q	V1	V2	V3	V4	N	G	Q	V1	V2	V3	V4	N		
Planta Baja	Pilar 1	4,53	300	0,0151	164,169	24,887	-13,381	-7,226	4,557	-11,944	1,77	-11,737	-2,079	7,36	8,21	-0,123	-0,263	0,059	0,163	0,038	2,368	2,876	0,003	0,021	-0,005	
	Pilar 2	4,53	300	0,0151	194,943	37,794	-10,246	0,368	-3,976	-21,43	4,435	8,666	1,572	2,541	3,004	0,012	0,038	-0,009	0,188	0,045	2,343	2,857	-0,001	0,012	-0,003	
	Pilar 3	4,53	300	0,0151	195,246	39,554	-15,021	-6,82	-1,226	-22,173	5,232	-8,293	-1,53	2,365	2,819	-0,004	0,008	-0,001	0,225	0,054	2,325	2,845	-0,005	0,003	-0,001	
	Pilar 4	4,53	300	0,0151	52,768	-11,076	-6,936	-6,173	-19,158	4,26	4,26	-0,475	0,296	2,48	2,977	-0,022	-0,027	0,006	0,254	0,061	2,314	2,838	-0,009	-0,006	0,001	
	Pilar 5	4,53	300	0,0151	160,179	24,091	-4,776	-1,775	4,642	-11,388	1,776	10,708	1,839	6,144	6,707	0,105	0,283	-0,065	0,281	0,068	2,311	2,838	-0,013	-0,015	0,003	
	Pilar 6																									
	Pilar 7																									
	Pilar 8																									
	Pilar 9																									
	Pilar 10																									
Planta Alta	Pilar 1	9,29	300	0,030966667	52,851	10,856	-9,146	-2,209	0,965	-9,533	2,008	-16,354	-3,217	5,094	4,829	0,593	1,219	-0,267	0,421	0,088	4,163	5,558	-0,039	0,03	-0,015	
	Pilar 2	9,29	300	0,030966667	107,606	23,157	-9,045	1,174	-6,233	-19,107	4,291	6,886	1,264	1,268	1,993	-0,013	-0,014	0,001	0,41	0,096	4,121	5,522	-0,027	0,006	-0,008	
	Pilar 3	9,29	300	0,030966667	104,892	23,476	-12,684	-5,053	-3,712	-19,37	4,875	-6,616	-1,215	1,104	1,748	-0,003	-0,031	0	0,452	0,115	4,091	5,495	-0,011	-0,014	-0,002	
	Pilar 4	9,29	300	0,030966667	105,464	22,699	-10,464	-6,105	-6,233	-19,258	4,284	0,857	0,235	1,28	2	0,004	-0,001	-0,001	0,445	0,124	4,067	5,478	0,005	-0,036	0,005	
	Pilar 5	9,29	300	0,030966667	54,275	11,174	-4,244	-1,308	1,016	-8,917	2,01	15,42	3,053	2,158	3,177	-0,603	-1,18	0,267	0,457	0,137	4,054	5,474	0,017	-0,057	0,011	
	Pilar 6																									
	Pilar 7																									
	Pilar 8																									
	Pilar 9																									
	Pilar 10																									

	Combinación 1 1,35*G+1,50*Q+0,75*N						Combinación 2 1,35*G+1,50*V1						Combinación 3 1,35*G+1,50*V2						Combinación 4 1,35*G+1,50*V3						
	Ned(KN)	Ved(KN)	Htd(KN)	Σ def(mm)	Traslacional	r	Ned(KN)	Ved(KN)	Htd(KN)	Σ def(mm)	Traslacional	r	Ned(KN)	Ved(KN)	Htd(KN)	Σ def(mm)	Traslacional	r	Ned(KN)	Ved(KN)	Htd(KN)	Σ def(mm)	Traslacional	r	
Planta Baja	Pilar 1	171,1116	-18,91035	2,58378516	0,196	NO	0,00319973	143,9268	-4,80495	2,17329468	2,531	NO	0,010041102	142,7538	-3,52995	2,15558238	3,039	NO	0,010924616	155,6673	-16,02945	2,35057623	0,166	NO	0,002809365
	Pilar 2	139,99005	14,049	2,113849755	0,23	NO	0,003754785	116,10345	15,5106	1,753162095	2,531	NO	0,010041102	116,696	16,2051	1,762108845	3,045	NO	0,010946185	121,2905	11,7171	1,831485795	0,187	NO	0,003746767
	Pilar 3	146,4162	-13,49145	2,21088462	0,278	NO	0,004538392	118,4724	-7,64805	1,789833324	2,55	NO	0,010111648	119,3274	-6,96705	1,80184374	3,07	NO	0,011036055	124,9569	-11,20155	1,88684919	0,22	NO	0,003723255
	Pilar 4	260,54325	-0,19185	3,934203075	0,316	NO	0,005158748	214,54335	3,07685	3,239604585	5,473	NO	0,021717743	214,2149	3,82425	3,23644235	3,092	NO	0,011155114	215,5514	-0,67425	3,254825385	0,245	NO	0,004146353
	Pilar 5	162,1353	17,1558	2,448243003	0,352	NO	0,005746453	142,1724	23,6718	2,14680324	5,433	NO	0,021554053	142,2699	24,5163	2,14827549	3,119	NO	0,01121122	148,4094	14,6133	2,24098194	0,268	NO	0,004535602
	Pilar 6	0	0	0	0	#DIV/0!	#DIV/0!	0	0	0	0	0	#DIV/0!	0	0	0	0	0	#DIV/0!	0	0	0	0	0	#DIV/0!
	Pilar 7	0	0	0	0	#DIV/0!	#DIV/0!	0	0	0	0	0	#DIV/0!	0	0	0	0	0	#DIV/0!	0	0	0	0	0	#DIV/0!
	Pilar 8	0	0	0	0	#DIV/0!	#DIV/0!	0	0	0	0	0	#DIV/0!	0	0	0	0	0	#DIV/0!	0	0	0	0	0	#DIV/0!
	Pilar 9	0	0	0	0	#DIV/0!	#DIV/0!	0	0	0	0	0	#DIV/0!	0	0	0	0	0	#DIV/0!	0	0	0	0	0	#DIV/0!
	Pilar 10	0	0	0	0	#DIV/0!	#DIV/0!	0	0	0	0	0	#DIV/0!	0	0	0	0	0	#DIV/0!	0	0	0	0	0	#DIV/0!
Planta Alta	Pilar 1	89,44005	-27,1437	2,769660215	0,494	NO	0,001684209	57,62985	-14,4369	1,784604355	9,963	NO	0,016799308	68,0355	-14,8344	1,027333785	5,979	NO	0,01218527	72,79635	-17,1884	1,099224885	0,406	NO	0,000944659
	Pilar 2	183,8655	11,193	5,69370165	0,498	NO	0,001697846	131,7006	11,1981	4,07832858	10,15	NO	0,017114622	147,0291	12,2856	2,22013941	5,932	NO	0,012089483	76,9485	6,18285	0,116192235	-0,008	NO	1,86146E-05
	Pilar 3	181,2057	-10,7541	5,61133651	0,565	NO	0,001926271	122,5782	-7,2756	3,79583826	10,153	NO	0,01711968	134,0247	-6,3066	2,02377297	5,947	NO	0,012120054	8,23725	6,1365	0,124382475	-0,002	NO	4,65365E-06
	Pilar 4	180,2805	1,50855	5,58268615	0,574	NO	0,001596955	126,6804	3,07695	3,92286972	10,113	NO	0,017055234	133,2189	4,15695	2,0160539	5,923	NO	0,012071141	7,77034	6,09915	0,11632134	0,005	NO	1,16341E-05
	Pilar 5	91,84125	25,6368	2,844017375	0,605	NO	0,002062645	66,90525	24,054	2,071832575	10,389	NO	0,017517616	71,30925	25,5825	1,076769675	5,931	NO	0,012087445	5,9505	6,44145	0,08985255	0,011	NO	2,55951E-05
	Pilar 6	0	0	0	0	#DIV/0!	#DIV/0!	0	0	0	0	0	#DIV/0!	0	0	0	0	0	#DIV/0!	0	0	0	0	0	#DIV/0!
	Pilar 7	0	0	0	0	#DIV/0!	#DIV/0!	0	0	0	0	0	#DIV/0!	0	0	0	0	0	#DIV/0!	0	0	0	0	0	#DIV/0!
	Pilar 8	0	0	0	0	#DIV/0!	#DIV/0!	0	0	0	0	0	#DIV/0!	0	0	0	0	0	#DIV/0!	0	0	0	0	0	#DIV/0!
	Pilar 9	0	0	0	0	#DIV/0!	#DIV/0!	0	0	0	0	0	#DIV/0!	0	0	0	0	0	#DIV/0!	0	0	0	0	0	#DIV/0!
	Pilar 10	0	0	0	0	#DIV/0!	#DIV/0!	0	0	0	0	0	#DIV/0!	0	0	0	0	0	#DIV/0!	0	0	0	0	0	#DIV/0!



## Cálculo de la Traslacionalidad para Porticos de Múltiples pilares PC2

[illegible]

	Combinación 1.1.35*G+1.50*Q+0.75*N				Combinación 2.1.35*G+1.50*V1				Combinación 3.1.35*G+1.50*V2				Combinación 4.1.35*G+1.50*V3				Combinación 5.1.35*G+1.50*V4													
	Neel(KN)	Ved(KN)	Htd(KN)	Σ def(mm)	r	Traslacional	Neel(KN)	Ved(KN)	Htd(KN)	Σ def(mm)	r	Traslacional	Neel(KN)	Ved(KN)	Htd(KN)	Σ def(mm)	r	Traslacional	Neel(KN)	Ved(KN)	Htd(KN)	Σ def(mm)	r	Traslacional						
Planta Baja																														
Plar 1	351,0636	35,03175	5,30106036	-1,362	NO	0,019672521	288,8283	39,23145	4,36130733	-1,214	NO	0,012841483	290,2818	40,111945	4,38325518	-1,225	NO	0,010863136	279,2943	26,06745	4,21734393	-1,192	NO	0,017283356	286,6353	26,07195	4,32819303	-1,206	NO	0,017364247
Plar 2	540,3921	41,1361	8,15992071	-1,476	NO	0,02131912	394,056	12,4338	5,9502456	-1,133	NO	0,010198407	393,8175	13,8528	5,94664425	-1,148	NO	0,010180298	394,6995	3,0498	5,95996245	-1,135	NO	0,016546887	394,7445	2,9823	5,96064195	-1,129	NO	0,016255585
Plar 3	411,85335	-24,3183	6,218985581	-1,223	NO	0,017664826	307,08345	-8,7291	4,636960095	-0,96	NO	0,0101544715	307,39245	-7,3581	4,641625985	-0,978	NO	0,008672833	307,01445	-18,0486	4,635918195	-0,95	NO	0,013774487	307,349	-18,0741	4,640969145	-0,955	NO	0,013750295
Plar 4	487,4604	18,2739	7,36065204	-1,367	NO	0,019744741	373,4349	22,9227	5,63886699	-1,369	NO	0,014481047	372,9309	24,1677	5,63125659	-1,101	NO	0,009763701	366,4179	13,2642	5,53291029	-1,053	NO	0,015267931	373,4079	13,2627	5,63845929	-1,057	NO	0,015218913
Plar 5	345,1776	-33,5151	5,21218176	-0,812	NO	0,011728405	274,6374	-6,9399	4,14702474	-0,661	NO	0,0069911944	274,0689	-5,2539	4,13844039	-0,664	NO	0,00588372	272,3004	-24,5349	4,11173604	-0,641	NO	0,005294154	279,5814	-24,6234	4,22167914	-0,653	NO	0,009402034
Plar 6																														
Plar 7																														
Plar 8																														
Plar 9																														
Plar 10																														
Planta Alta																														
Plar 1	260,82165	66,97815	8,076777095	-1,191	NO	0,004110698	205,93575	57,63165	6,37143725	-0,617	NO	0,005099518	213,88275	59,76315	3,229629525	-0,988	NO	0,018257371	199,28325	50,64015	3,009177075	-0,989	NO	0,005959556	202,2758	50,23515	6,263005725	-0,953	NO	0,006690892
Plar 2	555,63615	3,92805	17,20619945	-2,218	NO	0,007655357	429,31815	6,23305	13,29455205	-2,091	NO	0,01728216	441,85365	-9,37255	6,1371990115	-1,735	NO	0,028645747	14,1735	0,09825	0,21401985	-0,031	NO	1,86676E-05	325,6582	2,98805	13,18214405	-1,695	NO	0,011900588
Plar 3	495,58425	-18,63495	15,24659228	-1,927	NO	0,006550928	391,88145	-10,93995	12,137481904	-1,88	NO	0,01753824	406,43595	-8,03195	6,137182845	-1,561	NO	0,020861529	11,20545	0,045	0,169202795	-0,024	NO	1,44523E-05	387,7385	-13,886	12,9609734	-1,515	NO	0,010629602
Plar 4	526,7058	13,3839	16,3103294	-2,115	NO	0,02799856	403,1016	12,7275	5,48817288	-2,069	NO	0,017100329	431,7728	14,841	6,51976626	-1,72	NO	0,031784087	14,09505	0,0636	0,212835255	-0,015	NO	1,80654E-05	395,9886	9,5715	12,26244698	-1,63	NO	0,011440424
Plar 5	258,2148	-66,1182	7,99605164	-1,175	NO	0,004055476	193,1718	-36,5442	5,98188674	-1,685	NO	0,0179326561	212,6208	-38,2347	3,21057408	-0,963	NO	0,017795393	19,9425	-0,69675	0,30113175	-0,03	NO	9,803269E-06	199,3803	-49,2417	6,17414329	-0,936	NO	0,006571538
Plar 6																														
Plar 7																														
Plar 8																														
Plar 9																														
Plar 10																														

[illegible]

	Combinación 6 1.35 G+1.50 Q+0.75 N+0.9 V1										Combinación 7 1.35 G+1.50 Q+0.75 N+0.9 V2										Combinación 8 1.35 G+1.50 Q+0.75 N+0.9 V3										Combinación 9 1.35 G+1.50 Q+0.75 N+0.9 V4									
	Neel(KN)	43,16025	5,34652344	-1,373	SI	r	Traslacional	Neel(KN)	43,69305	5,3569215	-1,373	NO	r	Traslacional	Neel(KN)	348,354	35,26185	5,2601454	-1,34	NO	0,019360838	Traslacional	Neel(KN)	352,7586	35,26455	5,32665486	-1,354	NO	0,019508876	r										
Plar 1																																								
Plar 2	354,0744	9,73095	8,155429215	-1,389	SI	0,234300231		539,95155	10,58235	8,153268405	-1,461	SI	0,101610281		540,48075	4,10055	8,161259325	-1,448	SI	0,101610281		540,50775	4,06005	8,161667025	-1,442	NO	0,0202716809													
Plar 3	440,09465	11,67155	6,215425005	-1,197	SI	0,20191402		411,80295	17,8989	6,218224545	-1,226	NO	0,083651534		411,57615	-24,312	6,214799865	-1,198	NO	0,083651534		411,77685	-24,3285	6,217830435	-1,203	NO	0,017333218													
Plar 4	489,8055	24,1155	7,39606305	-1,369	SI	0,230927563		489,5031	24,8625	7,39149681	-1,382	NO	0,095550098		485,5953	18,3204	7,332498903	-1,334	NO	0,0953196693		489,7893	18,3195	7,39581843	-1,338	NO	0,019527843													
Plar 5	343,90515	-23,1789	5,139267765	-0,661	SI	0,111499722		343,56405	-22,1673	5,187817155	-0,813	NO	0,056798285		342,50295	-33,7359	5,171794545	-0,79	NO	0,055191445		346,87155	-33,789	5,237760405	-0,802	NO	0,0115545479													
Plar 6	0	0	0	0	#DIV/0!			0	0	0	0	#DIV/0!		0	0	0	0	0	0	#DIV/0!		0	0	0	0	0	0	#DIV/0!												
Plar 7	0	0	0	0	#DIV/0!			0	0	0	0	#DIV/0!		0	0	0	0	0	0	#DIV/0!		0	0	0	0	0	0	#DIV/0!												
Plar 8	0	0	0	0	#DIV/0!			0	0	0	0	#DIV/0!		0	0	0	0	0	0	#DIV/0!		0	0	0	0	0	0	#DIV/0!												
Plar 9	0	0	0	0	#DIV/0!			0	0	0	0	#DIV/0!		0	0	0	0	0	0	#DIV/0!		0	0	0	0	0	0	#DIV/0!												
Plar 10	0	0	0	0	#DIV/0!			0	0	0	0	#DIV/0!		0	0	0	0	0	0	#DIV/0!		0	0	0	0	0	0	#DIV/0!												
Plar 1	257,53635	70,1586	7,975042305	-0,617	NO	0,002942096		262,30455	71,4335	8,12697565	-0,617	NO	0,003179174		253,54485	65,9637	7,851438855	-1,152	NO	0,003976525		255,34035	65,7207	7,9073039505	-1,17	NO	0,004034612													
Plar 2	540,11865	5,8623	16,7258742	-2,091	NO	0,009970702		547,63995	7,1734	16,95858379	-2,091	NO	0,010774155		540,86555	9,9364	16,74326017	-2,16	NO	0,007452284		537,92855	3,8913	16,65767514	-2,148	NO	0,0074071133													
Plar 3	487,6023	-16,9095	15,09941789	-1,88	NO	0,008964572		496,3494	-15,76215	15,37028465	-1,88	NO	0,009686955		482,5713	-18,6332	14,94362459	-1,875	NO	0,0064725908		485,1309	-18,6746	15,02286867	-1,887	NO	0,0065071064													
Plar 4	513,53955	15,27	15,90260807	-2,069	NO	0,008657598		530,74215	16,5381	16,40531525	-2,069	NO	0,036813531		511,6235	15,84335645	-2,052	NO	0,0070831683		509,27175	13,3764	15,77044835	-2,051	NO	0,007072664														
Plar 5	248,4345	-57,20265	7,69318835	-1,685	NO	0,008034736		260,1039	-58,21695	8,05455077	-1,685	NO	0,008682186		250,9213	-65,0957	7,7702489	-1,136	NO	0,0039211295		252,1596	-64,8212	7,80854228	-1,152	NO	0,003972541													
Plar 6	0	0	0	0	#DIV/0!			0	0	0	0	#DIV/0!		0	0	0	0	0	0	#DIV/0!		0	0	0	0	0	0	#DIV/0!												
Plar 7	0	0	0	0	#DIV/0!			0	0	0	0	#DIV/0!		0	0	0	0	0	0	#DIV/0!		0	0	0	0	0	0	#DIV/0!												
Plar 8	0	0	0	0	#DIV/0!			0	0	0	0	#DIV/0!		0	0	0	0	0	0	#DIV/0!		0	0	0	0	0	0	#DIV/0!												
Plar 9	0	0	0	0	#DIV/0!			0	0	0	0	#DIV/0!		0	0	0	0	0	0	#DIV/0!		0	0	0	0	0	0	#DIV/0!												
Plar 10	0	0	0	0	#DIV/0!			0	0	0	0	#DIV/0!		0	0	0	0	0	0	#DIV/0!		0	0	0	0	0	0	#DIV/0!												

[illegible]

Planta Alta		Planta Baja	
Pilar 1	Pilar 10	Pilar 1	Pilar 10
Pilar 2		Pilar 2	
Pilar 3		Pilar 3	
Pilar 4		Pilar 4	
Pilar 5		Pilar 5	
Pilar 6		Pilar 6	
Pilar 7		Pilar 7	
Pilar 8		Pilar 8	
Pilar 9		Pilar 9	

Planta Alta		Planta Baja	
Pilar 1	Pilar 10	Pilar 1	Pilar 10
Pilar 2		Pilar 2	
Pilar 3		Pilar 3	
Pilar 4		Pilar 4	
Pilar 5		Pilar 5	
Pilar 6		Pilar 6	
Pilar 7		Pilar 7	
Pilar 8		Pilar 8	
Pilar 9		Pilar 9	

Planta Alta		Planta Baja	
Pilar 1	Pilar 10	Pilar 1	Pilar 10
Pilar 2		Pilar 2	
Pilar 3		Pilar 3	
Pilar 4		Pilar 4	
Pilar 5		Pilar 5	
Pilar 6		Pilar 6	
Pilar 7		Pilar 7	
Pilar 8		Pilar 8	
Pilar 9		Pilar 9	

	Planta Baja	Planta Alta
1.0	1.0	1.0
2.0	2.0	2.0
3.0	3.0	3.0
4.0	4.0	4.0
5.0	5.0	5.0
6.0	6.0	6.0
7.0	7.0	7.0
8.0	8.0	8.0
9.0	9.0	9.0
10.0	10.0	10.0
11.0	11.0	11.0
12.0	12.0	12.0
13.0	13.0	13.0
14.0	14.0	14.0
15.0	15.0	15.0
16.0	16.0	16.0
17.0	17.0	17.0
18.0	18.0	18.0
19.0	19.0	19.0
20.0	20.0	20.0
21.0	21.0	21.0
22.0	22.0	22.0
23.0	23.0	23.0
24.0	24.0	24.0
25.0	25.0	25.0
26.0	26.0	26.0
27.0	27.0	27.0
28.0	28.0	28.0
29.0	29.0	29.0
30.0	30.0	30.0
31.0	31.0	31.0
32.0	32.0	32.0
33.0	33.0	33.0
34.0	34.0	34.0
35.0	35.0	35.0
36.0	36.0	36.0
37.0	37.0	37.0
38.0	38.0	38.0
39.0	39.0	39.0
40.0	40.0	40.0
41.0	41.0	41.0
42.0	42.0	42.0
43.0	43.0	43.0
44.0	44.0	44.0
45.0	45.0	45.0
46.0	46.0	46.0
47.0	47.0	47.0
48.0	48.0	48.0
49.0	49.0	49.0
50.0	50.0	50.0
51.0	51.0	51.0
52.0	52.0	52.0
53.0	53.0	53.0
54.0	54.0	54.0
55.0	55.0	55.0
56.0	56.0	56.0
57.0	57.0	57.0
58.0	58.0	58.0
59.0	59.0	59.0
60.0	60.0	60.0
61.0	61.0	61.0
62.0	62.0	62.0
63.0	63.0	63.0
64.0	64.0	64.0
65.0	65.0	65.0
66.0	66.0	66.0
67.0	67.0	67.0
68.0	68.0	68.0
69.0	69.0	69.0
70.0	70.0	70.0
71.0	71.0	71.0
72.0	72.0	72.0
73.0	73.0	73.0
74.0	74.0	74.0
75.0	75.0	75.0
76.0	76.0	76.0
77.0	77.0	77.0
78.0	78.0	78.0
79.0	79.0	79.0
80.0	80.0	80.0
81.0	81.0	81.0
82.0	82.0	82.0
83.0	83.0	83.0
84.0	84.0	84.0
85.0	85.0	85.0
86.0	86.0	86.0
87.0	87.0	87.0
88.0	88.0	88.0
89.0	89.0	89.0
90.0	90.0	90.0
91.0	91.0	91.0
92.0	92.0	92.0
93.0	93.0	93.0
94.0	94.0	94.0
95.0	95.0	95.0
96.0	96.0	96.0
97.0	97.0	97.0
98.0	98.0	98.0
99.0	99.0	99.0
100.0	100.0	100.0

## Cálculo de la Traslacionalidad para Porticos de Múltiples pilares PC2

		Altura del Pilar(m)	denominador	Coefficiente φ	Axial(kN)								Cortantes(kN)								Deformaciones(mm)										
					G1	G	Q	V1	V2	V3	V4	N	Carga Perm.	G1	G	Q	V1	V2	V3	V4	N	Carga Perm.	G1	G	Q	V1	V2	V3	V4	N	
Planta Baja	Pilar 1	4,53	300	0,0151	14,865	123,205	138,07	28,549	-1,646	4,692	-8,628	-7,486	4,012	5,981	6,115	1,784	9,411	10,11	0,23	0,269	-0,121	-0,024	-0,229	-0,253	-0,053	0,003	-0,009	0,016	0,014	-0,007	
	Pilar 2	4,53	300	0,0151	30,865	198,459	229,324	59,61	-15,392	-7,253	-17,25	-16,651	8,066	0,151	1,121	1,136	0,346	6,716	7,796	-0,05	-0,062	0,025	-0,369	-0,422	-0,111	0,029	0,013	0,032	0,031	-0,015	
	Pilar 3	4,53	300	0,0151	21,765	158,191	179,956	63,977	-16,075	1,264	-21,456	-17,966	10,949	0,044	-4,956	-4,912	-1,673	6,698	7,746	0,001	-0,003	0	-0,037	-0,294	-0,331	0,030	-0,002	0,040	0,033	-0,020	
	Pilar 4	4,53	300	0,0151	31,243	185,649	216,892	54,309	-10,953	7,994	-17,106	-16,921	8,056	-0,067	3,384	3,317	1,231	6,962	7,931	0,052	0,056	-0,025	-0,345	-0,399	-0,101	0,020	-0,015	0,032	0,031	-0,015	
	Pilar 5	4,53	300	0,0151	14,834	121,363	136,197	28,529	-14,363	-3,146	-8,603	-7,507	4,015	-0,117	-5,523	-5,64	-1,687	11,92	13,128	-0,229	-0,274	0,121	-0,024	-0,225	-0,249	-0,053	0,027	0,016	0,014	-0,007	
	Pilar 6							0							0	0								0							
	Pilar 7							0							0	0								0							
	Pilar 8							0							0	0								0							
	Pilar 9							0							0	0								0							
	Pilar 10							0							0	0								0							
Planta Alta	Pilar 1	9,29	300	0,030966667	8,701	48,717	57,418	14,882	-4,836	0,573	-7,395	-8,172	3,902	0,538	12,315	12,853	3,645	4,017	5,478	-1,083	-1,281	0,55	-0,037	-0,324	-0,361	-0,082	0,012	0,03	0,03	-0,015	
	Pilar 2	9,29	300	0,030966667	23,991	100,108	114,99	30,197	-14,991	-6,691	-17,34	-16,76	8,112	0,04	1,004	1,044	0,283	2,736	4,277	-0,016	-0,015	0,006	-0,096	-0,564	-0,66	-0,17	0,058	0,066	0,064	-0,031	
	Pilar 3	9,29	300	0,030966667	14,423	101,008	115,431	36,093	-18,612	-0,537	-19,716	-20,765	11,419	0,034	-3,745	-3,745	-1,277	2,476	3,867	0	-0,002	0	-0,06	-0,491	-0,561	-0,189	0,066	0,078	0,074	-0,043	
	Pilar 4	9,29	300	0,030966667	23,987	101,122	125,109	30,529	-11,608	7,364	-17,195	-17,03	8,102	-0,08	2,518	2,438	0,949	2,679	4,208	0,017	0,011	-0,006	-0,097	-0,542	-0,639	-0,16	0,043	0,065	0,065	-0,031	
	Pilar 5	9,29	300	0,030966667	8,7	48,057	56,757	14,649	-12,094	-0,337	-7,386	-8,181	3,903	-0,529	-12,054	-12,583	-3,601	9,919	9,002	1,083	1,28	-0,551	-0,036	-0,319	-0,35	-0,082	0,05	0,007	0,03	0,03	-0,015
	Pilar 6						0								0	0								0							
	Pilar 7						0								0	0								0							
	Pilar 8						0								0	0								0							
	Pilar 9						0								0	0								0							
	Pilar 10						0								0	0								0							

	Combinación 1. 1.35*G+1.50*Q+0.75*N					Combinación 2. 1.35*G+1.50*V1					Combinación 3. 1.35*G+1.50*V2					Combinación 4. 1.35*G+1.50*V3					Combinación 5. 1.35*G+1.50*V4															
	Need(KN)	Vel(KN)	Htd(KN)	Σ def(mm)	r	Traslacional	r	Traslacional	Need(KN)	Vel(KN)	Htd(KN)	Σ def(mm)	r	Traslacional	r	Traslacional	Need(KN)	Vel(KN)	Htd(KN)	Σ def(mm)	r	Traslacional	r	Traslacional	Need(KN)	Vel(KN)	Htd(KN)	Σ def(mm)	r	Traslacional						
Planta Baja																																				
Plar 1	129.4797	10.8235	1.93514347	-0.313	NO	0.00458249			113.6652	22.37175	1.71634452	-0.262	NO	0.000603125			115.0587	23.42025	1.73738637	-0.262	NO	0.000553719			107.0307	8.60025	1.61616357	-0.237	NO	0.0034758	109.9092	8.63875	1.65962892	-0.239	NO	0.003494235
Plar 2	198.429	2.0751	2.99627779	-0.548	NO	0.00087849			153.7494	11.6076	2.32161594	-0.393	NO	0.000948133			153.5079	13.2276	2.33719629	-0.409	NO	0.000864393			154.5144	1.4406	2.33273709	-0.39	NO	0.005715671	154.5144	1.4406	2.33273709	-0.391	NO	0.00571651
Plar 3	128.51175	-9.1407	1.940527425	-0.47	NO	0.006885199			90.91425	3.4158	1.372805175	-0.301	NO	0.000763172			89.81025	4.9878	1.356134775	-0.333	NO	0.000703772			84.49875	-6.6327	1.275931125	-0.291	NO	0.004267755	91.30725	-6.6357	1.378739475	-0.298	NO	0.004356828
Plar 4	159.55365	6.30195	2.408988315	-0.515	NO	0.00754442			124.88955	14.92095	1.885832205	-0.52	NO	0.001254501			124.85025	16.37445	1.885265955	-0.414	NO	0.00087496			124.04055	4.55595	1.873012305	-0.367	NO	0.005382357	124.0706	4.56195	1.873465305	-0.368	NO	0.005380245
Plar 5																																				
Plar 6																																				
Plar 7																																				
Plar 8																																				
Plar 9																																				
Plar 10																																				
Planta Alta																																				
Plar 1	103.3491	23.31405	3.20037713	-0.458	NO	0.001592468			70.2603	23.37705	2.17572729	0.109	NO	0.000311829			78.3738	25.56855	1.18344438	-0.371	NO	0.000414247			65.2563	15.43005	2.02077009	-0.376	NO	0.000414247	65.2563	15.43005	2.02077009	-0.331	NO	0.002359743
Plar 2	207.8328	1.3393	6.43588904	-0.861	NO	0.002937202			132.75	5.5134	4.110825	-0.739	NO	0.002114143			145.2	7.8249	2.19252	-0.633	NO	0.001409799			150.9552	0.0951	0.22723352	-0.031	NO	3.41533E-05	130.0985	1.3869	4.02865495	-0.596	NO	0.004248963
Plar 3	220.24845	-6.97125	6.820360335	-0.783	NO	0.002724296			127.91385	-1.34175	3.961065555	-0.875	NO	0.00193105			155.02635	7.04475	2.340897885	-0.552	NO	0.001229393			19.12965	0.099	0.288857715	-0.043	NO	4.7374E-05	124.6844	-0.5875	3.861058705	-0.477	NO	0.0034050596
Plar 4	221.95825	4.7094	6.874056535	-0.83	NO	0.002885915			151.48515	7.3098	4.690990145	-0.791	NO	0.002262905			179.94315	9.6033	2.717411565	-0.668	NO	0.00148775			14.9562	-0.6885	0.22523862	-0.031	NO	3.41533E-05	143.3522	3.3078	4.93138245	-0.574	NO	0.0040921122
Plar 5																																				
Plar 6																																				
Plar 7																																				
Plar 8																																				
Plar 9																																				
Plar 10																																				

	2 <sup>nd</sup> Orden			2 <sup>nd</sup> Orden			2 <sup>nd</sup> Orden			2 <sup>nd</sup> Orden		
	$\Sigma$ Vel	15%Vel	Hed	$\Sigma$ Vel	15%Vel	Hed	$\Sigma$ Vel	15%Vel	Hed	$\Sigma$ Vel	15%Vel	Hed
7441, 1209	0.0231	111.618135	-11.213132559	SI	587.0589	62.5821	88.058835	53.71751061	SI	575.4744	0.0276	86.32116
Planta Baja												
7441, 1209	0.0231	111.618135	-11.213132559	SI	587.0589	62.5821	88.058835	53.71751061	SI	575.4744	0.0276	86.32116
Planta Alta												
855, 52095	0.00705	128.3281425	-26.48588209	SI	540.89025	32.74995	81.1333575	20.35183651	SI	135.7104	13.3087	20.3547296
Planta Baja												
855, 52095	0.00705	128.3281425	-26.48588209	SI	540.89025	32.74995	81.1333575	20.35183651	SI	135.7104	13.3087	20.3547296
Planta Alta												
7441, 1209	0.0231	111.618135	-11.213132559	SI	587.0589	62.5821	88.058835	53.71751061	SI	575.4744	0.0276	86.32116
Planta Baja												
7441, 1209	0.0231	111.618135	-11.213132559	SI	587.0589	62.5821	88.058835	53.71751061	SI	575.4744	0.0276	86.32116
Planta Alta												
855, 52095	0.00705	128.3281425	-26.48588209	SI	540.89025	32.74995	81.1333575	20.35183651	SI	135.7104	13.3087	20.3547296
Planta Baja												
855, 52095	0.00705	128.3281425	-26.48588209	SI	540.89025	32.74995	81.1333575	20.35183651	SI	135.7104	13.3087	20.3547296
Planta Alta												
7441, 1209	0.0231	111.618135	-11.213132559	SI	587.0589	62.5821	88.058835	53.71751061	SI	575.4744	0.0276	86.32116
Planta Baja												
7441, 1209	0.0231	111.618135	-11.213132559	SI	587.0589	62.5821	88.058835	53.71751061	SI	575.4744	0.0276	86.32116
Planta Alta												
855, 52095	0.00705	128.3281425	-26.48588209	SI	540.89025	32.74995	81.1333575	20.35183651	SI	135.7104	13.3087	20.3547296
Planta Baja												
855, 52095	0.00705	128.3281425	-26.48588209	SI	540.89025	32.74995	81.1333575	20.35183651	SI	135.7104	13.3087	20.3547296
Planta Alta												
7441, 1209	0.0231	111.618135	-11.213132559	SI	587.0589	62.5821	88.058835	53.71751061	SI	575.4744	0.0276	86.32116
Planta Baja												
7441, 1209	0.0231	111.618135	-11.213132559	SI	587.0589	62.5821	88.058835	53.71751061	SI	575.4744	0.0276	86.32116
Planta Alta												
855, 52095	0.00705	128.3281425	-26.48588209	SI	540.89025	32.74995	81.1333575	20.35183651	SI	135.7104	13.3087	20.3547296
Planta Baja												
855, 52095	0.00705	128.3281425	-26.48588209	SI	540.89025	32.74995	81.1333575	20.35183651	SI	135.7104	13.3087	20.3547296
Planta Alta												
7441, 1209	0.0231	111.618135	-11.213132559	SI	587.0589	62.5821	88.058835	53.71751061	SI	575.4744	0.0276	86.32116
Planta Baja												
7441, 1209	0.0231	111.618135	-11.213132559	SI	587.0589	62.5821	88.058835	53.71751061	SI	575.4744	0.0276	86.32116
Planta Alta												
855, 52095	0.00705	128.3281425	-26.48588209	SI	540.89025	32.74995	81.1333575	20.35183651	SI	135.7104	13.3087	20.3547296
Planta Baja												
855, 52095	0.00705	128.3281425	-26.48588209	SI	540.89025	32.74995	81.1333575	20.35183651	SI	135.7104	13.3087	20.3547296
Planta Alta												
7441, 1209	0.0231	111.618135	-11.213132559	SI	587.0589	62.5821	88.058835	53.71751061	SI	575.4744	0.0276	86.32116
Planta Baja												
7441, 1209	0.0231	111.618135	-11.213132559	SI	587.0589	62.5821	88.058835	53.71751061	SI	575.4744	0.0276	86.32116
Planta Alta												
855, 52095	0.00705	128.3281425	-26.48588209	SI	540.89025	32.74995	81.1333575	20.35183651	SI	135.7104	13.3087	20.3547296
Planta Baja												
855, 52095	0.00705	128.3281425	-26.48588209	SI	540.89025	32.74995	81.1333575	20.35183651	SI	135.7104	13.3087	20.3547296
Planta Alta												
7441, 1209	0.0231	111.618135	-11.213132559	SI	587.0589	62.5821	88.058835	53.71751061	SI	575.4744	0.0276	86.32116
Planta Baja												
7441, 1209	0.0231	111.618135	-11.213132559	SI	587.0589	62.5821	88.058835	53.71751061	SI	575.4744	0.0276	86.32116
Planta Alta												
855, 52095	0.00705	128.3281425	-26.48588209	SI	540.89025	32.74995	81.1333575	20.35183651	SI	135.7104	13.3087	20.3547296
Planta Baja												
855, 52095	0.00705	128.3281425	-26.48588209	SI	540.89025	32.74995	81.1333575	20.35183651	SI	135.7104	13.3087	20.3547296
Planta Alta												
7441, 1209	0.0231	111.618135	-11.213132559	SI	587.0589	62.5821	88.058835	53.71751061	SI	575.4744	0.0276	86.32116
Planta Baja												
7441, 1209	0.0231	111.618135	-11.213132559	SI	587.0589	62.5821	88.058835	53.71751061	SI	575.4744	0.0276	86.32116
Planta Alta												
855, 52095	0.00705	128.3281425	-26.48588209	SI	540.89025	32.74995	81.1333575	20.35183651	SI	135.7104	13.3087	20.3547296
Planta Baja												
855, 52095	0.00705	128.3281425	-26.48588209	SI	540.89025	32.74995	81.1333575	20.35183651	SI	135.7104	13.3087	20.3547296
Planta Alta												
7441, 1209	0.0231	111.618135	-11.213132559	SI	587.0589	62.5821	88.058835	53.71751061	SI	575.4744	0.0276	86.32116
Planta Baja												
7441, 1209	0.0231	111.618135	-11.213132559	SI	587.0589	62.5821	88.058835	53.71751061	SI	575.4744	0.0276	86.32116
Planta Alta												
855, 52095	0.00705	128.3281425	-26.48588209	SI	540.89025	32.74995	81.1333575	20.35183651	SI	135.7104	13.3087	20.3547296
Planta Baja												
855, 52095	0.00705	128.3281425	-26.48588209	SI	540.89025	32.74995	81.1333575	20.35183651	SI	135.7104	13.3087	20.3547296
Planta Alta												
7441, 1209	0.0231	111.618135	-11.213132559	SI	587.0589	62.5821	88.058835	53.71751061	SI	575.4744	0.0276	86.32116
Planta Baja												
7441, 1209	0.0231	111.618135	-11.213132559	SI	587.0589	62.5821	88.058835	53.71751061	SI	575.4744	0.0276	86.32116
Planta Alta												
855, 52095	0.00705	128.3281425	-26.48588209	SI	540.89025	32.74995	81.1333575	20.35183651	SI	135.7104	13.3087	20.3547296
Planta Baja												
855, 52095	0.00705	128.3281425	-26.48588209	SI	540.89025	32.74995	81.1333575	20.35183651	SI	135.7104	13.3087	20.3547296
Planta Alta												
7441, 1209	0.0231	111.618135	-11.213132559	SI	587.0589	62.5821	88.058835	53.71751061	SI	575.4744	0.0276	86.32116
Planta Baja												
7441, 1209	0.0231	111.618135	-11.213132559	SI	587.0589	62.5821	88.058835	53.71751061	SI	575.4744	0.0276	86.32116
Planta Alta												
855, 52095	0.00705	128.3281425	-26.48588209	SI	540.89025	32.74995	81.1333575	20.35183651	SI	135.7104	13.3087	20.3547296
Planta Baja												
855, 52095	0.00705	128.3281425	-26.48588209	SI	540.89025	32.74995	81.1333575	20.35183651	SI	135.7104	13.3087	20.3547296
Planta Alta												
7441, 1209	0.0231	111.618135	-11.213132559	SI	587.0589	62.5821	88.058835	53.71751061	SI	575.4744	0.0276	86.32116
Planta Baja												
7441, 1209	0.0231	111.618135	-11.213132559	SI	587.0589	62.5821	88.058835	53.71751061	SI	575.4744	0.0276	86.32116
Planta Alta												
855, 52095	0.00705	128.3281425	-26.48588209	SI	540.89025	32.74995	81.1333575	20.35183651	SI	135.7104	13.3087	20.3547296
Planta Baja												
855, 52095	0.00705	128.3281425	-26.48588209	SI	540.89025	32.74995	81.1333575	20.35183651	SI	135.7104	13.3087	20.3547296
Planta Alta												
7441, 1209	0.0231	111.618135	-11.213132559	SI	587.0589	62.5821	88.058835	53.71751061	SI	575.4744	0.0276	86.32116
Planta Baja												
7441, 1209	0.0231	111.618135	-11.213132559	SI	587.0589	62.5821	88.058835	53.71751061	SI	575.4744	0.0276	86.32116
Planta Alta												
855, 52095	0.00705	128.3281425	-26.48588209	SI	540.89025	32.74995	81.1333575	20.35183651	SI	135.7104	13.3087	20.3547296
Planta Baja												
855, 52095	0.00705	128.3281425	-26.48588209	SI	540.89025	32.74995	81.1333575	20.35183651	SI	135.7104	13.3087	20.3547296
Planta Alta												
7441, 1209	0.0231	111.618135	-11.213132559	SI	587.0589	62.5821	88.058835	53.71751061	SI	575.4744	0.0276	86.32116
Planta Baja												
7441, 1209	0.0231	1										

	Combinación 6 1.35° G+1.50° Q+0.75° N+0.9° V1					Combinación 7 1.35° G+1.50° Q+0.75° N+0.9° V2					Combinación 9 1.35° G+1.50° Q+0.75° N+0.9° V4																		
	Neq(KN)	Hed(KN)	Σ def(mm)	r	Traslacional	Neq(KN)	Hed(KN)	Σ def(mm)	r	Traslacional	Neq(KN)	Hed(KN)	Σ def(mm)	r	Traslacional														
Plar 1	132,3342	19,3104	1,99824642	-0,319	NO	0,002003635	133,1703	19,9395	2,01087153	-0,322	NO	0,001725001	128,5335	11,0475	1,93813785	-0,297	NO	0,004352307	130,0806	11,0826	1,96421706	-0,299	NO	0,004352307	130,0806	11,0826	1,96421706	-0,299	NO
Plar 2	198,075	8,11575	2,99093425	-0,466	NO	0,002526894	197,9301	9,08775	2,98874451	-0,535	NO	0,00875	198,534	2,02635	2,99760519	-0,516	NO	0,002764287	198,534	2,01555	2,9978634	-0,517	NO	0,002764287	198,534	2,01555	2,9978634	-0,517	NO
Plar 3	130,86555	-3,1125	1,976069805	-0,422	NO	0,002650577	130,20315	-2,1693	1,966067565	-0,472	NO	0,002528573	127,01625	-9,1398	1,917945375	-0,43	NO	0,002303373	131,10135	-9,1434	1,979630385	-0,437	NO	0,002303373	131,10135	-9,1434	1,979630385	-0,437	NO
Plar 4	160,13205	12,5715	2,197993955	-0,52	NO	0,003286613	160,10955	13,4436	2,417654205	-0,53	NO	0,002839287	159,6265	6,3525	2,410320205	-0,483	NO	0,002569501	159,64065	6,3561	2,41073815	-0,484	NO	0,002569501	159,64065	6,3561	2,41073815	-0,484	NO
Plar 5	126,1059	0,67425	1,90419909	-0,148	NO	0,000929586	125,6199	1,76145	1,89686049	-0,303	NO	0,001623215	127,0527	-10,2599	1,91849577	-0,293	NO	0,001569644	128,7546	-10,3004	1,94419446	-0,295	NO	0,001569644	128,7546	-10,3004	1,94419446	-0,295	NO
Plar 6	0	0	0	0	#DIV/0!	#DIV/0!	0	0	0	0	#DIV/0!	0	0	0	0	0	#DIV/0!	0	0	0	0	0	#DIV/0!	0	0	0	0	#DIV/0!	
Plar 7	0	0	0	0	#DIV/0!	#DIV/0!	0	0	0	0	#DIV/0!	0	0	0	0	0	#DIV/0!	0	0	0	0	0	#DIV/0!	0	0	0	0	#DIV/0!	
Plar 8	0	0	0	0	#DIV/0!	#DIV/0!	0	0	0	0	#DIV/0!	0	0	0	0	0	#DIV/0!	0	0	0	0	0	#DIV/0!	0	0	0	0	#DIV/0!	
Plar 9	0	0	0	0	#DIV/0!	#DIV/0!	0	0	0	0	#DIV/0!	0	0	0	0	0	#DIV/0!	0	0	0	0	0	#DIV/0!	0	0	0	0	#DIV/0!	
Plar 10	0	0	0	0	#DIV/0!	#DIV/0!	0	0	0	0	#DIV/0!	0	0	0	0	0	#DIV/0!	0	0	0	0	0	#DIV/0!	0	0	0	0	#DIV/0!	
Plar 1	98,4114	26,84685	1,304747302	0,109	NO	0,008101678	103,2795	28,16175	3,19822185	0,109	NO	0,00236813	96,1083	22,25685	2,97615369	-0,428	NO	0,001488256	95,409	22,07865	2,9544387	-0,428	NO	0,001488256	95,409	22,07865	2,9544387	-0,428	NO
Plar 2	193,1241	4,3008	5,98040963	-0,739	NO	0,054927891	200,5941	5,6877	6,21173063	-0,739	NO	0,016055486	191,01	1,824	5,914943	-0,795	NO	0,002764402	191,532	1,8249	5,9311076	-0,797	NO	0,002764402	191,532	1,8249	5,9311076	-0,797	NO
Plar 3	201,7848	-4,74285	6,24860264	-0,675	NO	0,050178942	218,0523	-3,49095	6,75235289	-0,675	NO	0,014665024	200,7912	-6,97125	6,21783416	-0,705	NO	0,002451453	199,8471	-6,97305	6,18859853	-0,709	NO	0,002451453	199,8471	-6,97305	6,18859853	-0,709	NO
Plar 4	210,31995	7,1214	6,512007785	-0,791	NO	0,065972911	227,39475	8,4975	7,041657425	-0,791	NO	0,002066295	205,2915	6,357198045	-0,765	NO	0,002606005	205,44015	4,7202	6,361796645	-0,765	NO	0,002606005	205,44015	4,7202	6,361796645	-0,765	NO	
Plar 5	90,6381	-13,8747	2,80675983	-0,931	NO	0,069198736	104,2194	-14,7	3,13442742	-0,931	NO	0,02022687	94,8753	-21,8271	2,93797179	-0,422	NO	0,001467393	94,1598	-21,6498	2,91581514	-0,422	NO	0,001467393	94,1598	-21,6498	2,91581514	-0,422	NO
Plar 6	0	0	0	0	#DIV/0!	#DIV/0!	0	0	0	0	#DIV/0!	0	0	0	0	0	#DIV/0!	0	0	0	0	0	#DIV/0!	0	0	0	0	#DIV/0!	
Plar 7	0	0	0	0	#DIV/0!	#DIV/0!	0	0	0	0	#DIV/0!	0	0	0	0	0	#DIV/0!	0	0	0	0	0	#DIV/0!	0	0	0	0	#DIV/0!	
Plar 8	0	0	0	0	#DIV/0!	#DIV/0!	0	0	0	0	#DIV/0!	0	0	0	0	0	#DIV/0!	0	0	0	0	0	#DIV/0!	0	0	0	0	#DIV/0!	
Plar 9	0	0	0	0	#DIV/0!	#DIV/0!	0	0	0	0	#DIV/0!	0	0	0	0	0	#DIV/0!	0	0	0	0	0	#DIV/0!	0	0	0	0	#DIV/0!	
Plar 10	0	0	0	0	#DIV/0!	#DIV/0!	0	0	0	0	#DIV/0!	0	0	0	0	0	#DIV/0!	0	0	0	0	0	#DIV/0!	0	0	0	0	#DIV/0!	

[illegible]

PILAR IZQUIERDO

Axiles (KN)							Deformaciones (cm)						
G	Uso	N	V1	V2	V3	V4	G	Uso	N	V1	V2	V3	V4
29.59	24.94	12.66	-20.78	-6.31	11.53	-42.50	-0.68	-0.67	-0.34	0.17	0.60	0.34	1.02
Cortantes (KN)													
34.01	33.41	16.96	-24.90	-23.26	-7.01	-42.71							

PILAR DERECHO

Axiles (KN)							Deformaciones (cm)						
G	Uso	N	V1	V2	V3	V4	G	Uso	N	V1	V2	V3	V4
54.76	20.15	0.03	4.70	14.27	0.00	0.00	0.00	0.00	0.00	-0.38	0.00	0.00	0.00
Cortantes (KN)													
-3.15	-2.01	0.00	-4.41	0.04	0.00	0.00							

altura del pilar en m: 3.805

Coeficiente del denominador: 300

Coeficente  $\phi$  = 0.012683

La deformación del nudo se ha obtenido sin aplicar coeficientes de seguridad

IZQUIERDO							DERECHO			SEGUN EAE		
										Incluir en		
Combinación							Ned (KN)			Hed 15%VEd 2º orden		
							Def. (cm)					
							Pilar					
							Htd (KN)					
Com-1	1,35*G + 1,50*U + 0,75*N	86.85	1.10	-1.69	104.17	1.32	-0.0001	101.49	28.65	NO		
Com-2	1,35*G + 1,50*V1	8.78	0.11	-0.51	80.97	1.03	-0.3824	-2.30	13.46	SI		
Com-3	1,35*G + 1,50*V2	30.48	0.39	-0.08	95.32	1.21	-0.0023	6.83	18.87	SI		
Com-4	1,35*G + 1,50*V3	57.24	0.73	-0.34	73.92	0.94	-0.0047	31.15	19.67	NO		
Com-5	1,35*G + 1,50*V4	-23.80	-0.30	0.34	73.92	0.94	-0.0047	-22.40	7.52	NO		
Com-6	1,35*G + 1,5*U + 0,75*N + 0,9V1	68.15	0.86	-1.52	108.40	1.37	-0.3778	75.11	26.48	NO		
Com-7	1,35*G + 1,5*U + 0,75*N + 0,9V2	81.17	1.03	-1.09	117.01	1.48	0.0023	80.59	29.73	NO		
Com-8	1,35*G + 1,5*U + 0,75*N + 0,9V3	97.23	1.23	-1.35	104.17	1.32	-0.0001	95.18	30.21	NO		
Com-9	1,35*G + 1,5*U + 0,75*N + 0,9V4	48.60	0.62	-0.67	104.17	1.32	-0.0001	63.05	22.92	NO		

TRASLACIONALIDAD E INTRASLACIONALIDAD

				P. IZQUIERDO			P. DERECHO			
Combinación		NEd	HEd	hp	δH,d	r	Trasla	δH,d	r	Trasla
		KN	KN	m	m			m		
Com-1	1,35*G + 1,50*U + 0,75*N	191.02	99.07	3.805	-0.0169	0.009	NO	0.0000	0.000	NO
Com-2	1,35*G + 1,50*V1	89.75	-3.44	3.805	-0.0051	0.035	NO	-0.0038	0.026	NO
Com-3	1,35*G + 1,50*V2	125.80	5.23	3.805	-0.0008	0.005	NO	0.0000	0.000	NO
Com-4	1,35*G + 1,50*V3	131.16	29.48	3.805	-0.0034	0.004	NO	0.0000	0.000	NO
Com-5	1,35*G + 1,50*V4	50.12	-23.64	3.805	0.0034	0.002	NO	0.0000	0.000	NO
Com-6	1,35*G + 1,5*U + 0,75*N + 0,9V1	176.55	72.87	3.805	-0.0152	0.010	NO	-0.0038	0.002	NO
Com-7	1,35*G + 1,5*U + 0,75*N + 0,9V2	198.18	81.04	3.805	-0.0109	0.007	NO	0.0000	0.000	NO
Com-8	1,35*G + 1,5*U + 0,75*N + 0,9V3	201.40	92.62	3.805	-0.0135	0.008	NO	0.0000	0.000	NO
Com-9	1,35*G + 1,5*U + 0,75*N + 0,9V4	152.77	61.11	3.805	-0.0067	0.004	NO	0.0000	0.000	NO