

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

5.1. Conclusions

According to the analysis of Retrofitted column using RC Jacketing wrapped by CFRP, it can be concluded as follows:

- Seismic Non-Linear analysis conducted from Seismobuild program show that the RC Jacketing wrapped by CFRP is a great solution for solving the space problem of restaurant building without losing a lot of space from the retrofitting by using the minimum thickness of concrete jacket with the support of CFRP wrap. Restaurant in Indonesia will need a lot of space to hold more customers and utilities.
- RC jacketing wrapped by CFRP is making a better performance of the structure to withstand a 50-year seismic load based on ASCE 41-17. Crowded place like restaurant building are designed using a low occupancy according to the code. In Indonesia, some of the buildings are not designed with detailed seismic calculation. This research prove that the existing building analyzed by the non-linear software will have a problem of some structural member. The research might save a lot of life in the crowded area such as restaurant from structural failure by providing the detailed analysis and know the problem for the structure to be solved.
- RC Jacketing wrapped by CFRP is increasing the capacity of each column member to withstand the overall critical element check by the Seismobuild program. Average Increasing capacity of each targeted building performances levels are:

Moment chord:

IO = 14,9% CP = 17,45% LS = 18,61%

Shear force:

IO =93,98% CP = 95,11% LS = 103.13%

5.2. Recommendations

Based on this research, several recommendations can be given such as:

- Only a few of retrofitting paper in Indonesia about RC Jacketing plus CFRP on the existing structure. This paper can be served as a guidance or a start for further research or innovation for contractor to improve the performance of existing buildings. Designer should take account for non-linear analysis to design the retrofitting to prevent the failure from designing based only from “their experience” because only a few people could operate and understand the non-linear program in Indonesia.

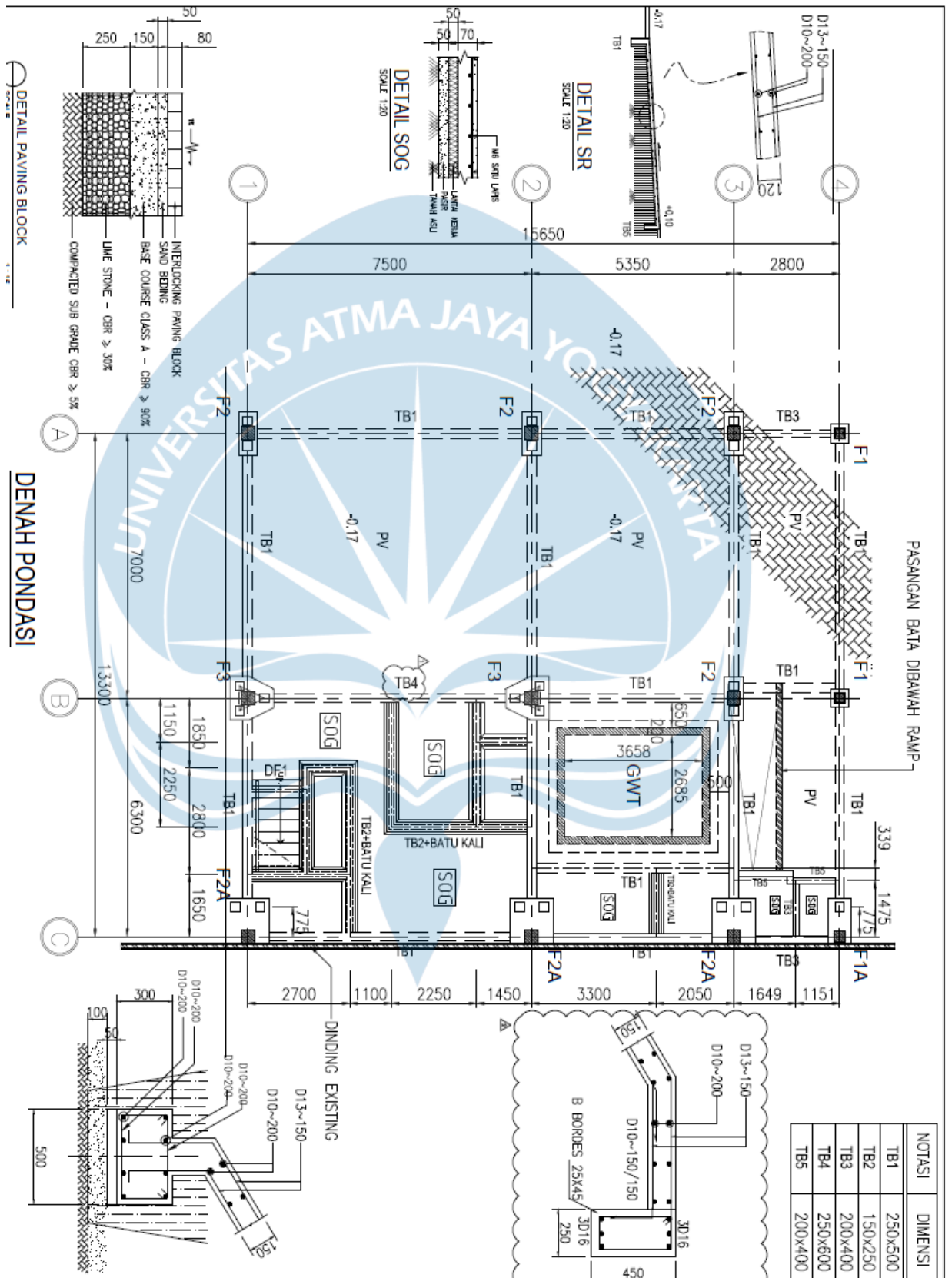


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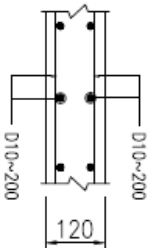
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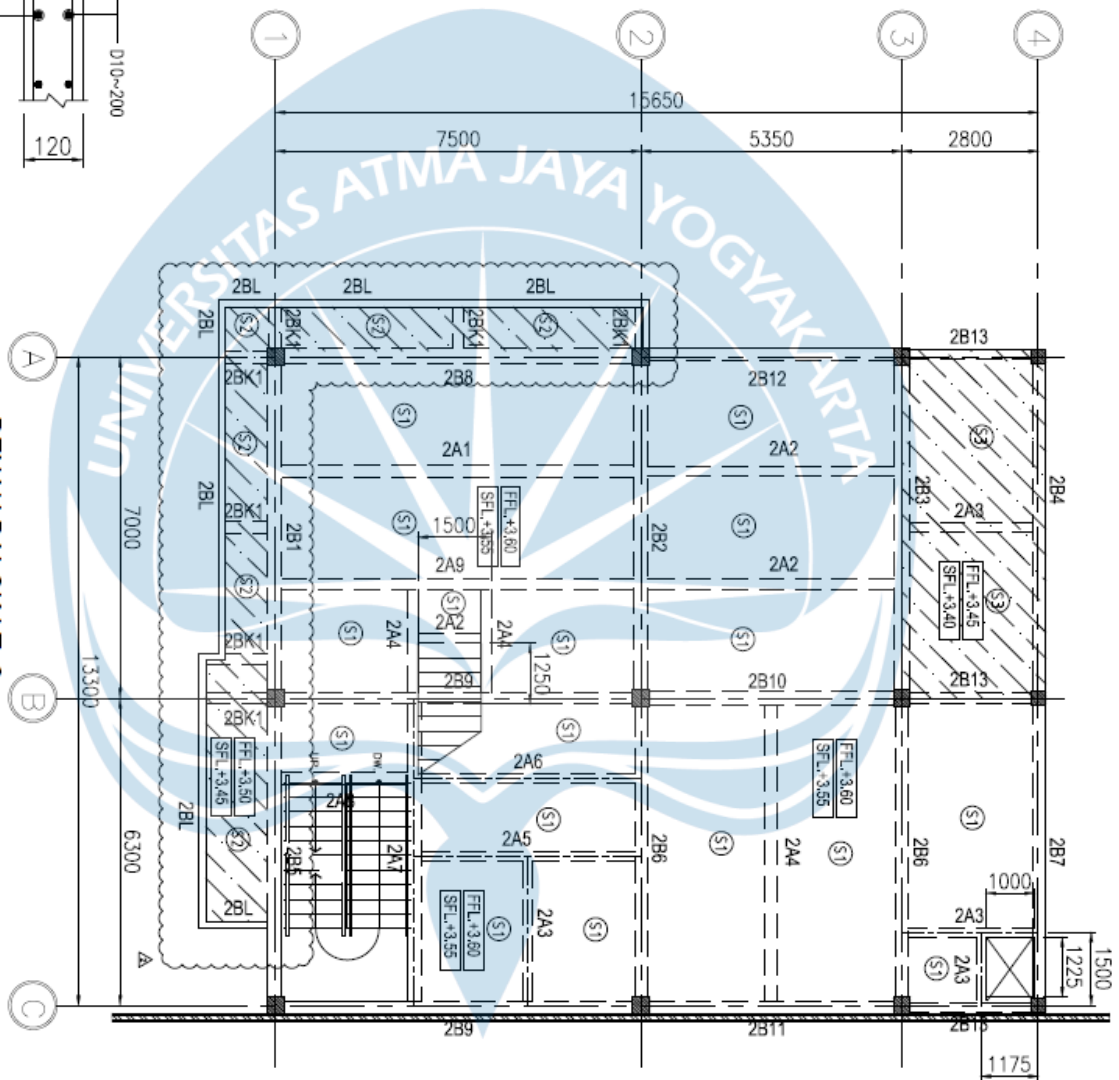




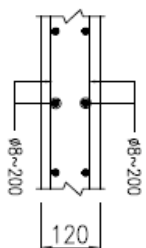
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SCALE 1:5



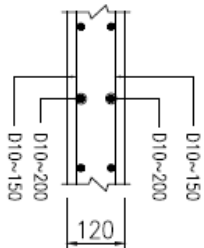
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SKALA 1 : 100



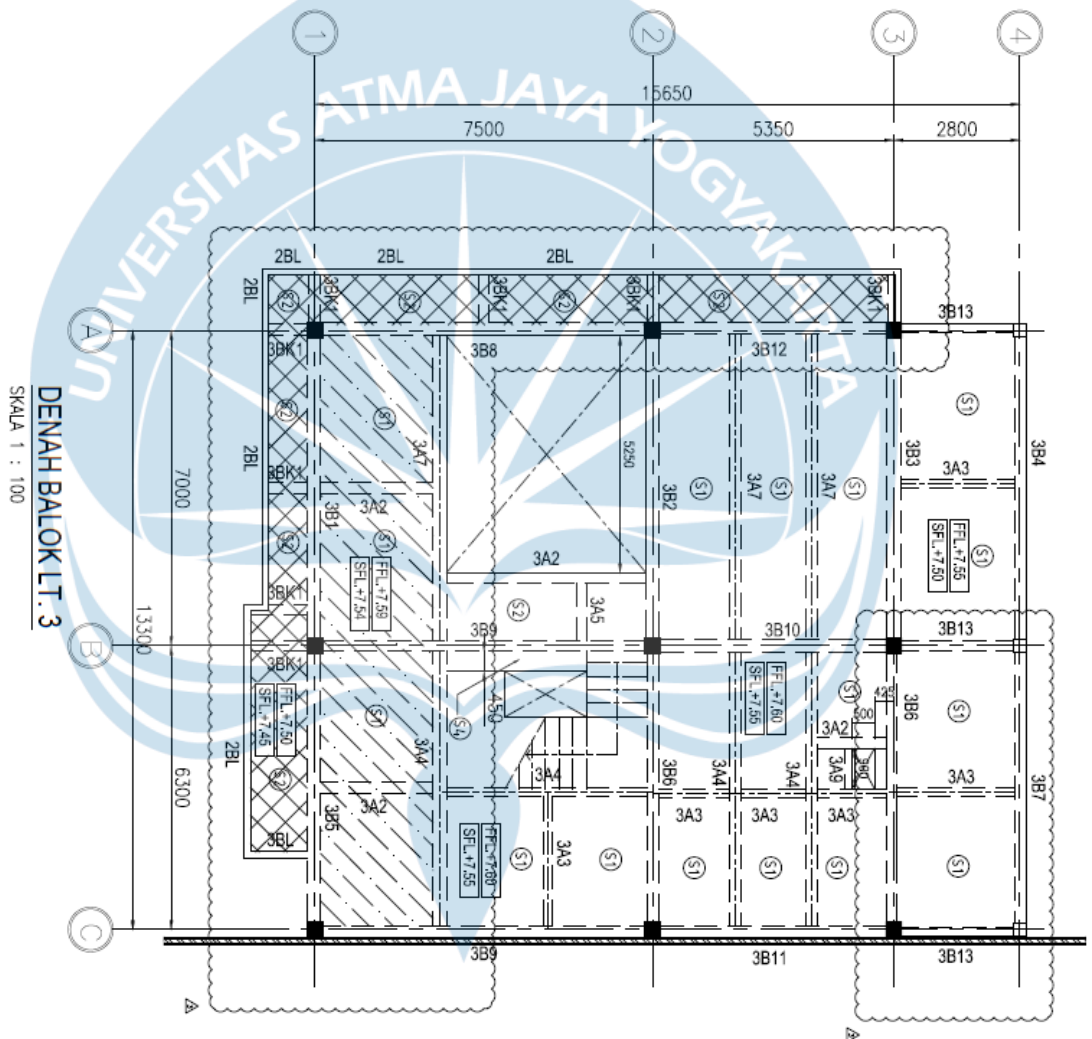
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DETAIL S3
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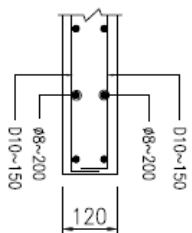
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2B5	300x500
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2B11	250x500
2B12	250x450
2B13	200x400
2BK1	250x450
2BL	150x500
2A1	250x600
2A2	200x450
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2A5	200x400
2A6	200x400
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2A8	250x500
2A9	250x600

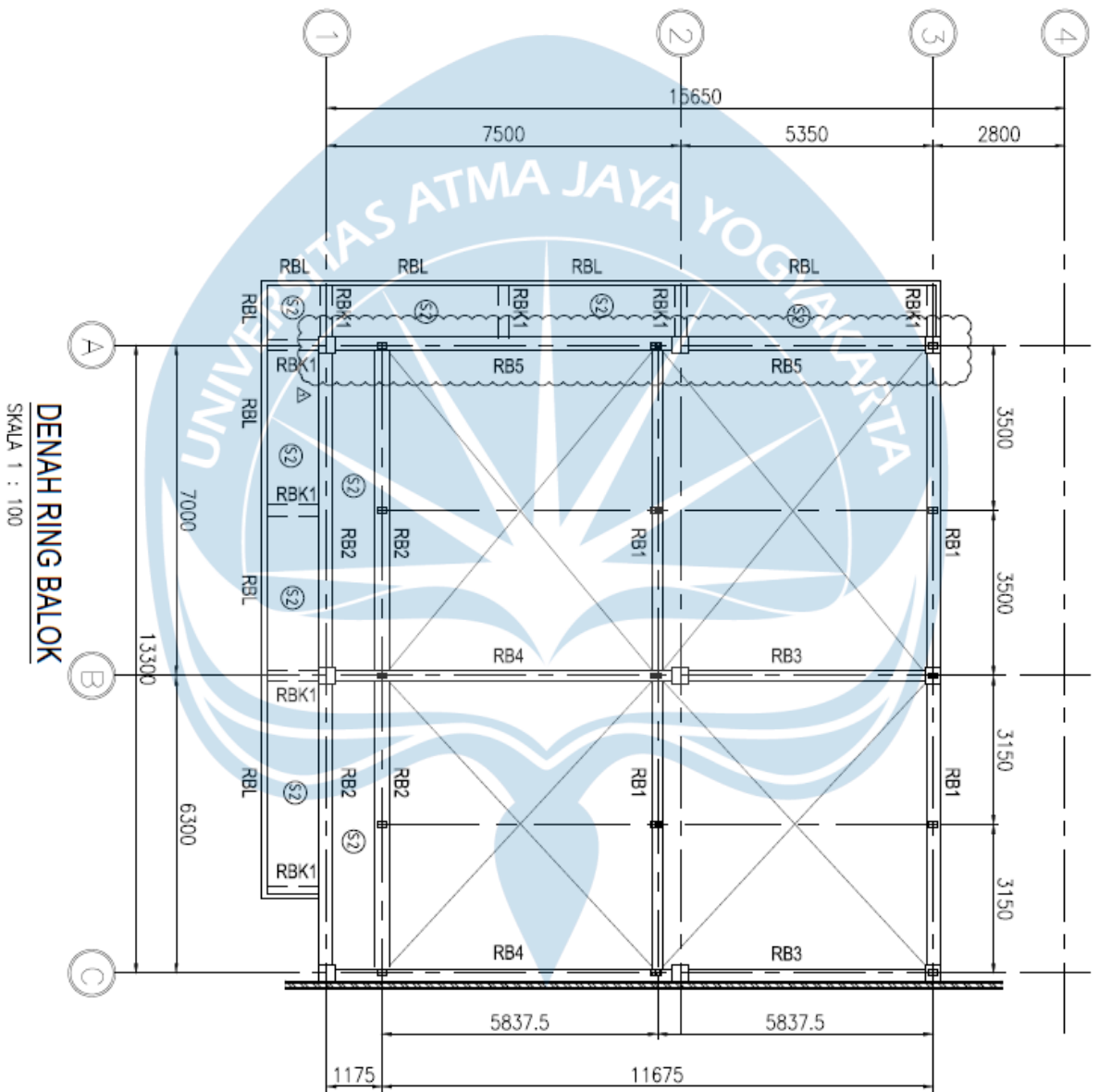


DENAH BALOK LT. 3
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3B4	250x600
3B5	300x500
3B6	250x500
3B7	250x500
3B8	300x600
3B9	250x650
3B10	300x500
3B11	250x500
3B12	250x450
3B13	200x400
3B14	250x450
3B15	150x500
3A1	250x600
3A2	200x450
3A3	200x400
3A4	250x500
3A5	200x400
3A6	200x400
3A7	300x550
3A8	250x500
3A9	150x400

DETAIL S4
SCALE 1:5

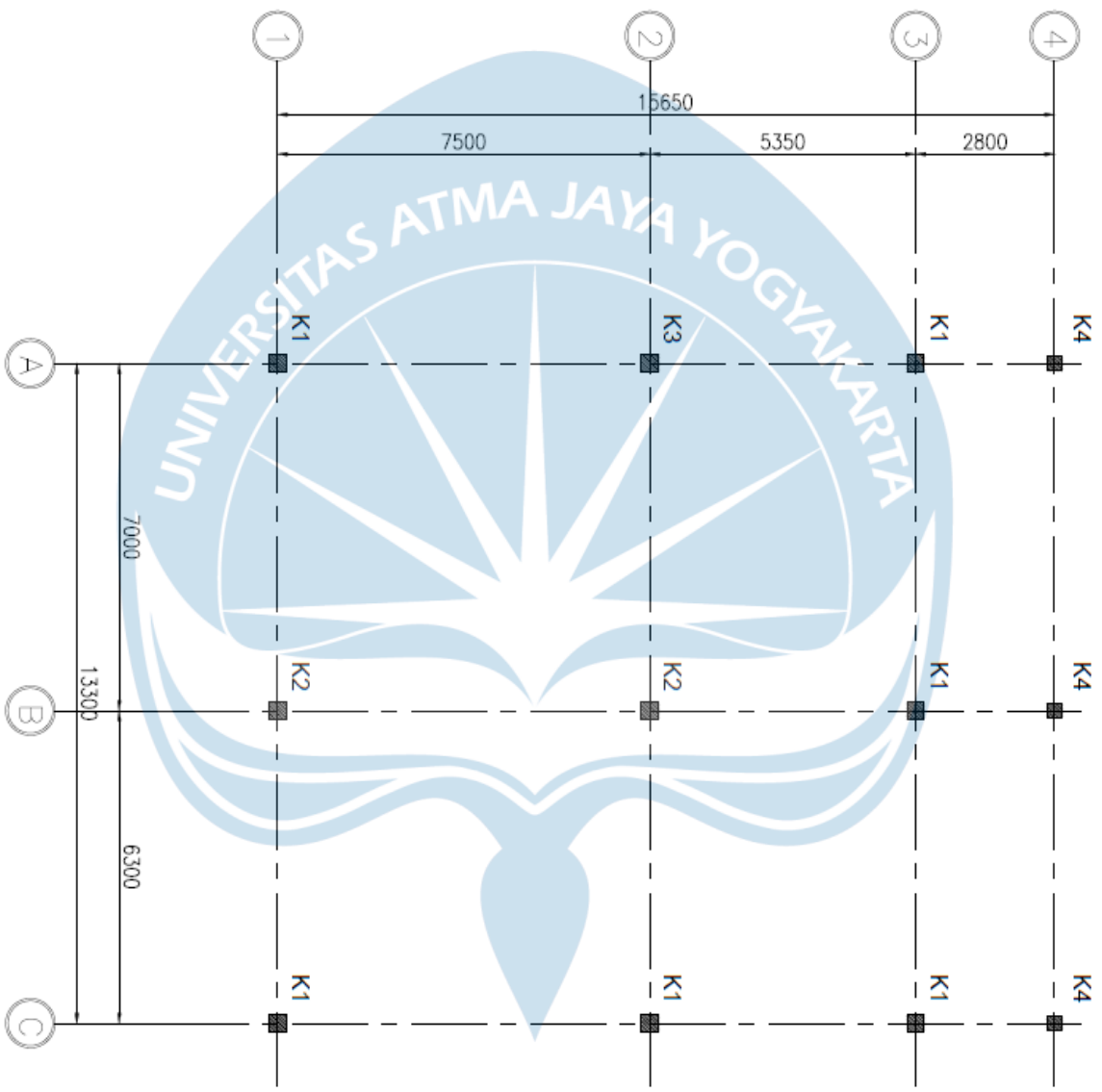
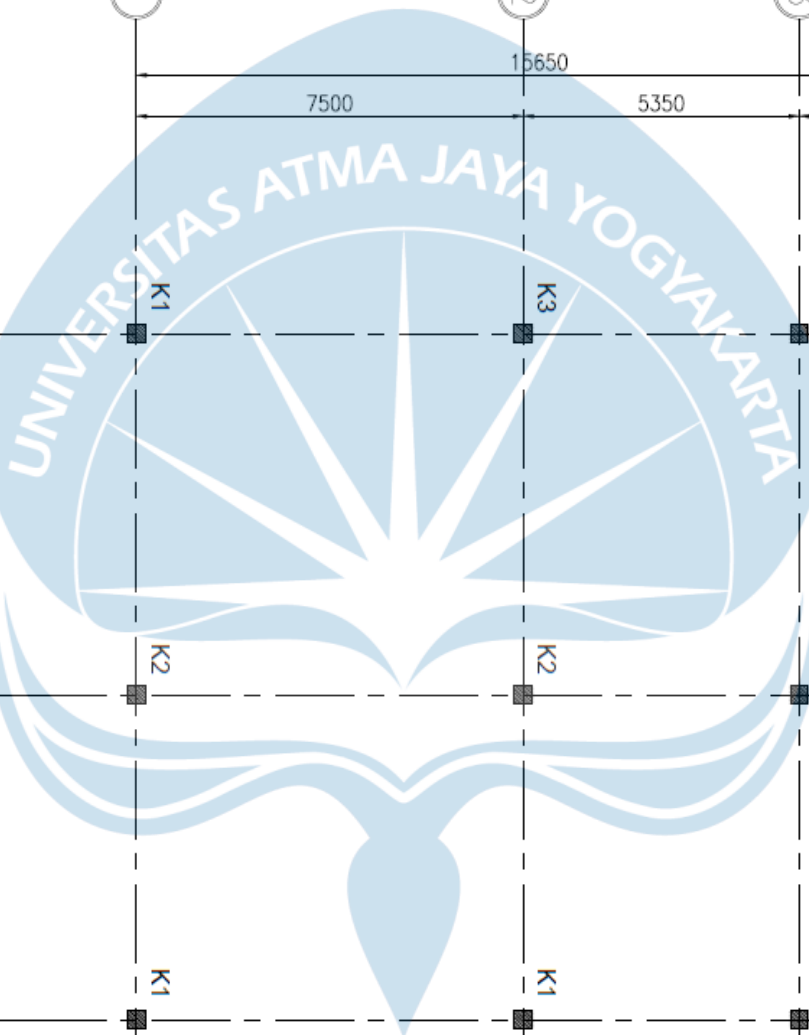




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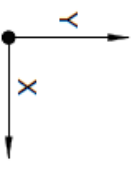
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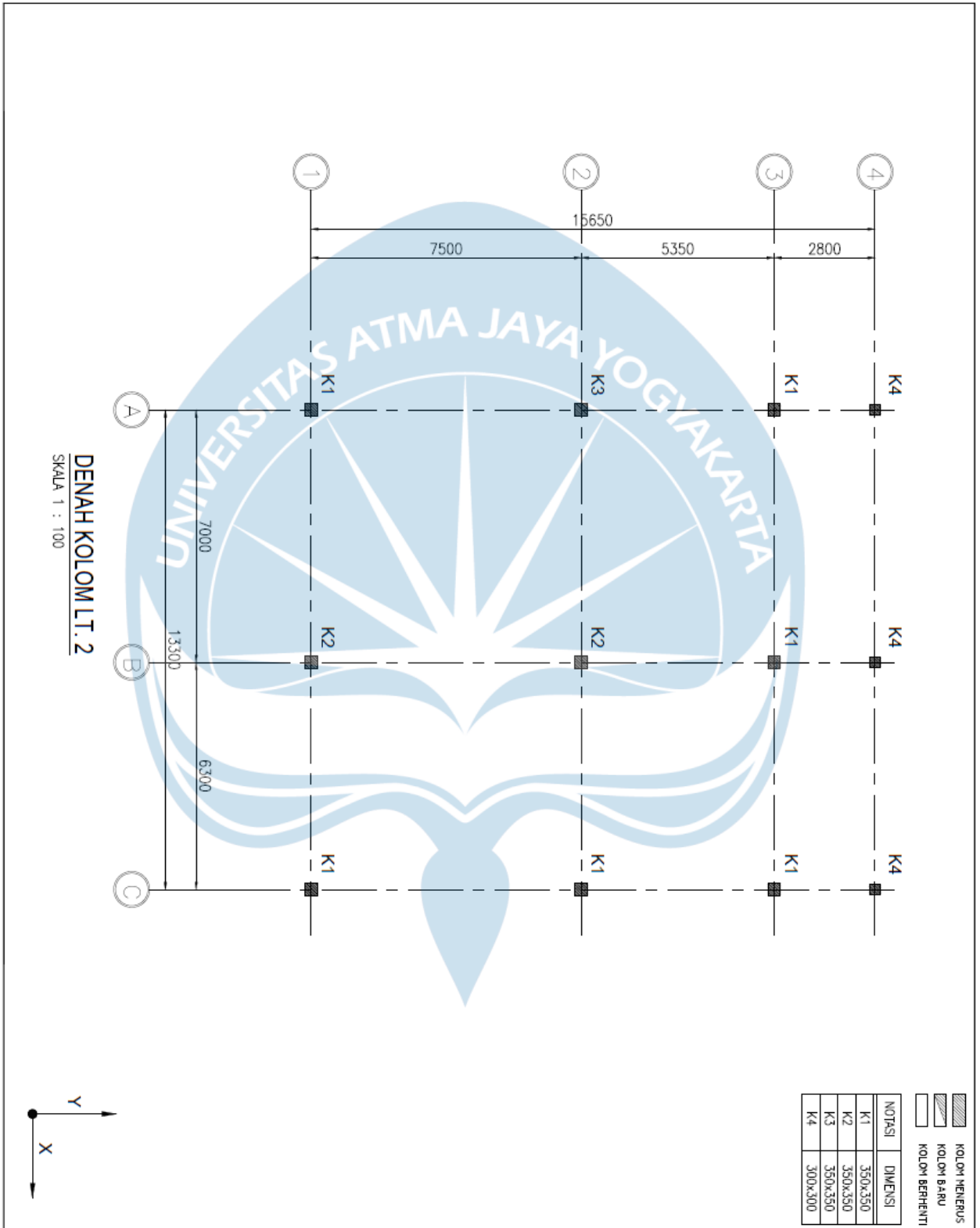
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RBL	150x500
RBK1	250x450



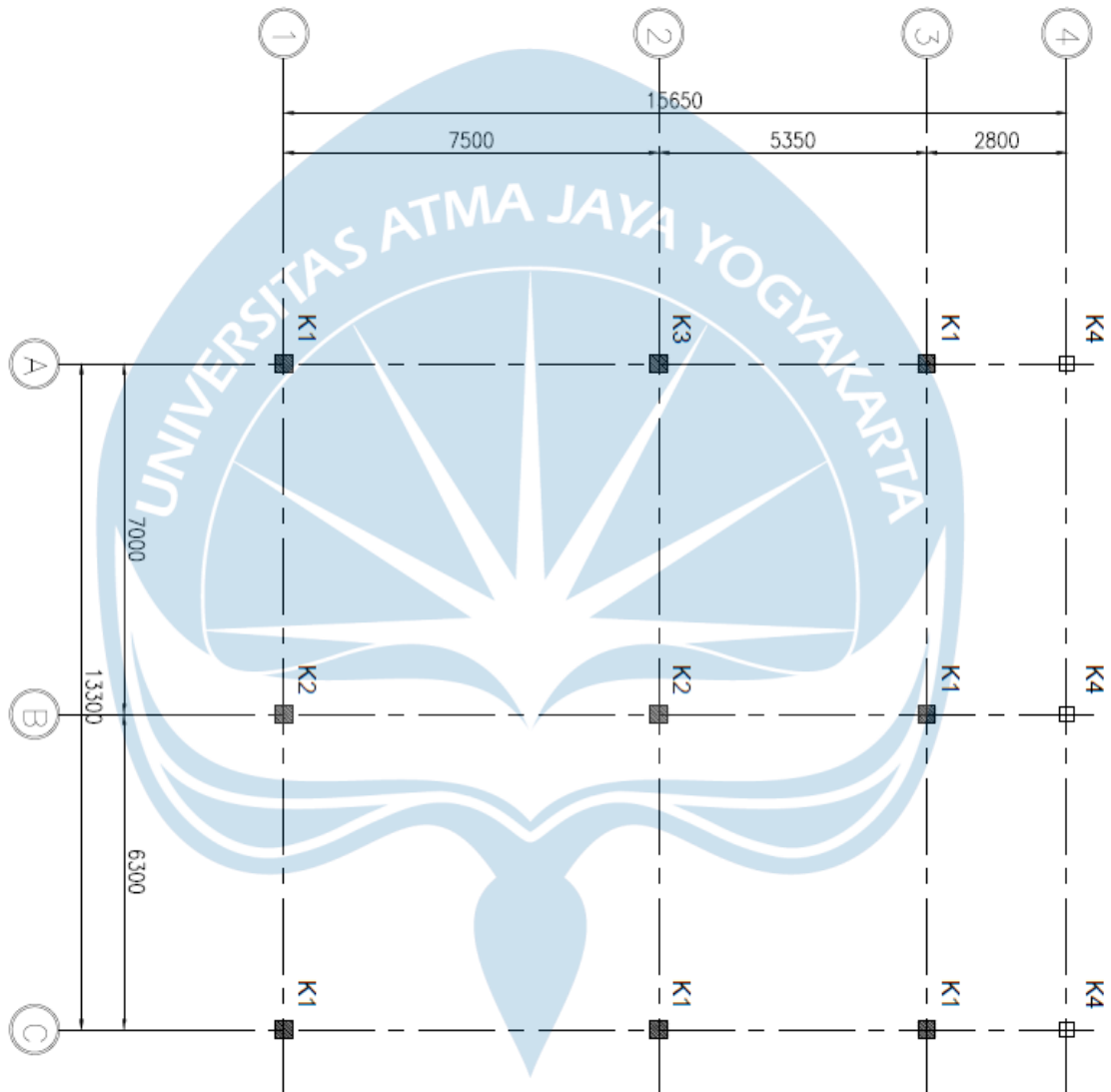
DENAH KOLOM LT. DASAR
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	KOLOM BARU
	KOLOM BERHENTI
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K3	350x350
K4	300x300

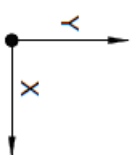


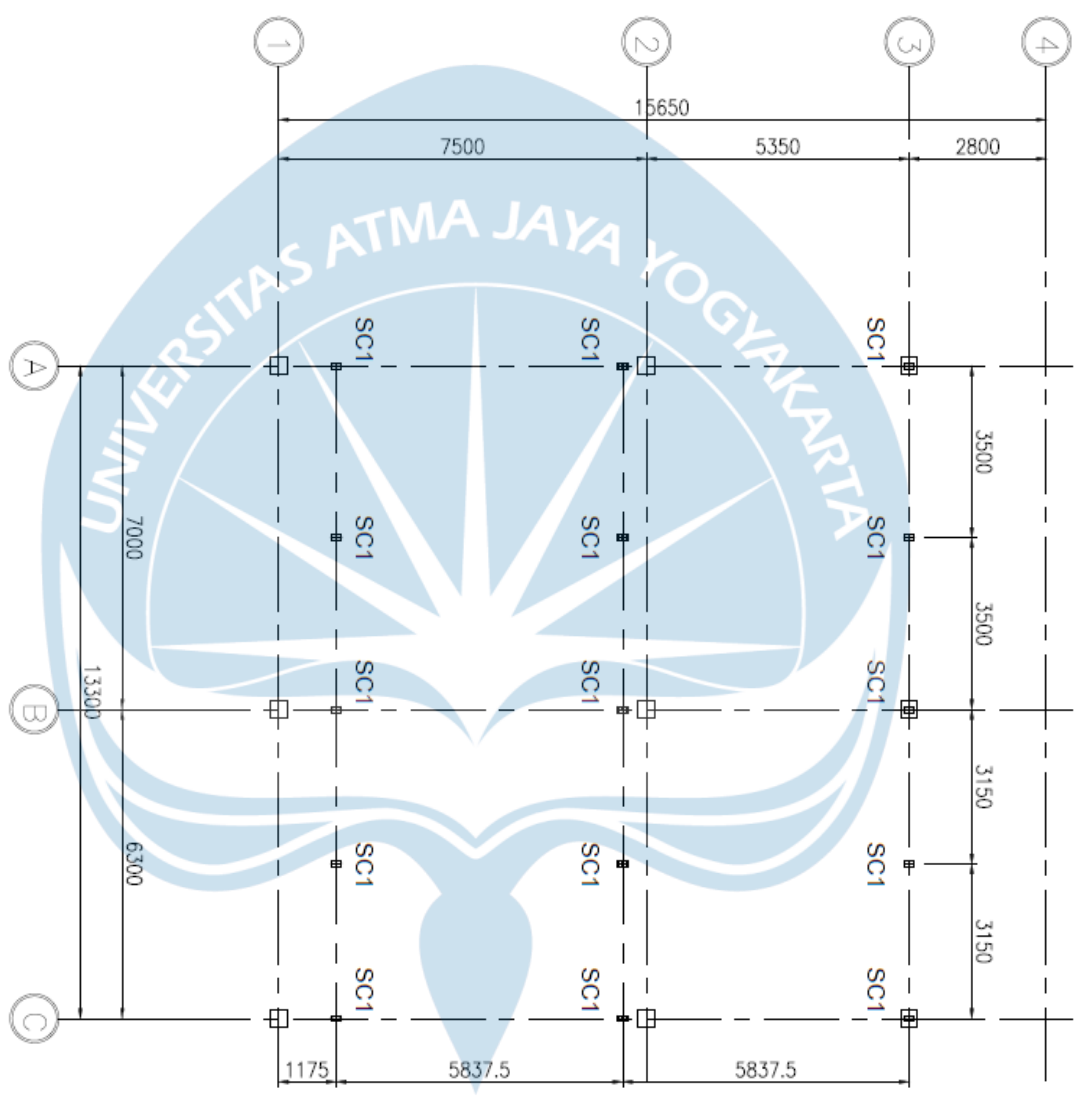


DENAH KOLOM LT. 3
SKALA 1 : 100



NOTASI	DIMENSI
	KOLOM MENERUS
	KOLOM BARU
	KOLOM BERHENTI
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K2	350x350
K3	350x350
K4	300x300

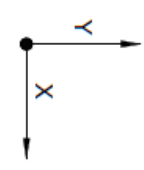




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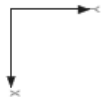
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	KOLON BARU
	KOLON BERHENTI

NOTASI	DIMENSI
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TABEL PENULANGAN KOLOM

TIPE	LANTAI	K1	K2	K3	K4					
PONDOKAN										
						TUMBUHAN TUMPAK	350 x 350	350 x 350	350 x 350	350 x 350
						TUMBUHAN BERHAJAT	350 x 350	350 x 350	350 x 350	350 x 350
						BE-S - X	350 x 350	350 x 350	350 x 350	350 x 350
BE-S - Y	350 x 350	350 x 350	350 x 350	350 x 350						
PONDOKAN										
						TUMBUHAN TUMPAK	350 x 350	350 x 350	350 x 350	350 x 350
						TUMBUHAN BERHAJAT	350 x 350	350 x 350	350 x 350	350 x 350
						BE-S - X	350 x 350	350 x 350	350 x 350	350 x 350
BE-S - Y	350 x 350	350 x 350	350 x 350	350 x 350						
PONDOKAN										
						TUMBUHAN TUMPAK	350 x 350	350 x 350	350 x 350	350 x 350
						TUMBUHAN BERHAJAT	350 x 350	350 x 350	350 x 350	350 x 350
						BE-S - X	350 x 350	350 x 350	350 x 350	350 x 350
BE-S - Y	350 x 350	350 x 350	350 x 350	350 x 350						



TABEL PENULANGAN TIE BEAM

TIPE	TIPE	T1S1	T1S2	T1S3	T1S4	T1S5
PONDOKAN						
TUMBUHAN BERHAJAT	303	303	303	303	303	303
BE-S - X	303	303	303	303	303	303
BE-S - Y	303	303	303	303	303	303

TABEL PENUNJANGAN BALOK LANTAI 2

TYPE	281	282	283	284	285	286
FORMASI	Terpulus	Lapangan	Terpulus	Lapangan	Terpulus	Lapangan
Dimensi x H	300 x 400	300 x 400	300 x 450	300 x 500	300 x 600	300 x 600
TOL ATAS	30%	30%	30%	30%	30%	30%
TOL BAWAH	40%	40%	40%	40%	40%	40%
SEPARANG	0% - 50	0% - 50	0% - 50	0% - 50	0% - 50	0% - 50
TOL PENUNJANG	200	200	200	200	200	200
FORMASI						
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FORMASI	Terpulus	Lapangan	Terpulus	Lapangan	Terpulus	Lapangan
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TOL BAWAH	40%	40%	40%	40%	40%	40%
SEPARANG	0% - 50	0% - 50	0% - 50	0% - 50	0% - 50	0% - 50
TOL PENUNJANG	200	200	200	200	200	200
FORMASI						
TYPE	293	294	295	296	297	298
FORMASI	Terpulus	Lapangan	Terpulus	Lapangan	Terpulus	Lapangan
Dimensi x H	300 x 650	300 x 650	300 x 650	300 x 650	300 x 650	300 x 650
TOL ATAS	30%	30%	30%	30%	30%	30%
TOL BAWAH	40%	40%	40%	40%	40%	40%
SEPARANG	0% - 50	0% - 50	0% - 50	0% - 50	0% - 50	0% - 50
TOL PENUNJANG	200	200	200	200	200	200
FORMASI						
TYPE	299	300	301	302	303	304
FORMASI	Terpulus	Lapangan	Terpulus	Lapangan	Terpulus	Lapangan
Dimensi x H	300 x 650	300 x 650	300 x 650	300 x 650	300 x 650	300 x 650
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TOL BAWAH	40%	40%	40%	40%	40%	40%
SEPARANG	0% - 50	0% - 50	0% - 50	0% - 50	0% - 50	0% - 50
TOL PENUNJANG	200	200	200	200	200	200
FORMASI						
TYPE	305	306	307	308	309	310
FORMASI	Terpulus	Lapangan	Terpulus	Lapangan	Terpulus	Lapangan
Dimensi x H	200 x 400	200 x 400	200 x 400	200 x 400	200 x 400	200 x 400
TOL ATAS	30%	30%	30%	30%	30%	30%
TOL BAWAH	40%	40%	40%	40%	40%	40%
SEPARANG	0% - 50	0% - 50	0% - 50	0% - 50	0% - 50	0% - 50
TOL PENUNJANG	200	200	200	200	200	200
FORMASI						

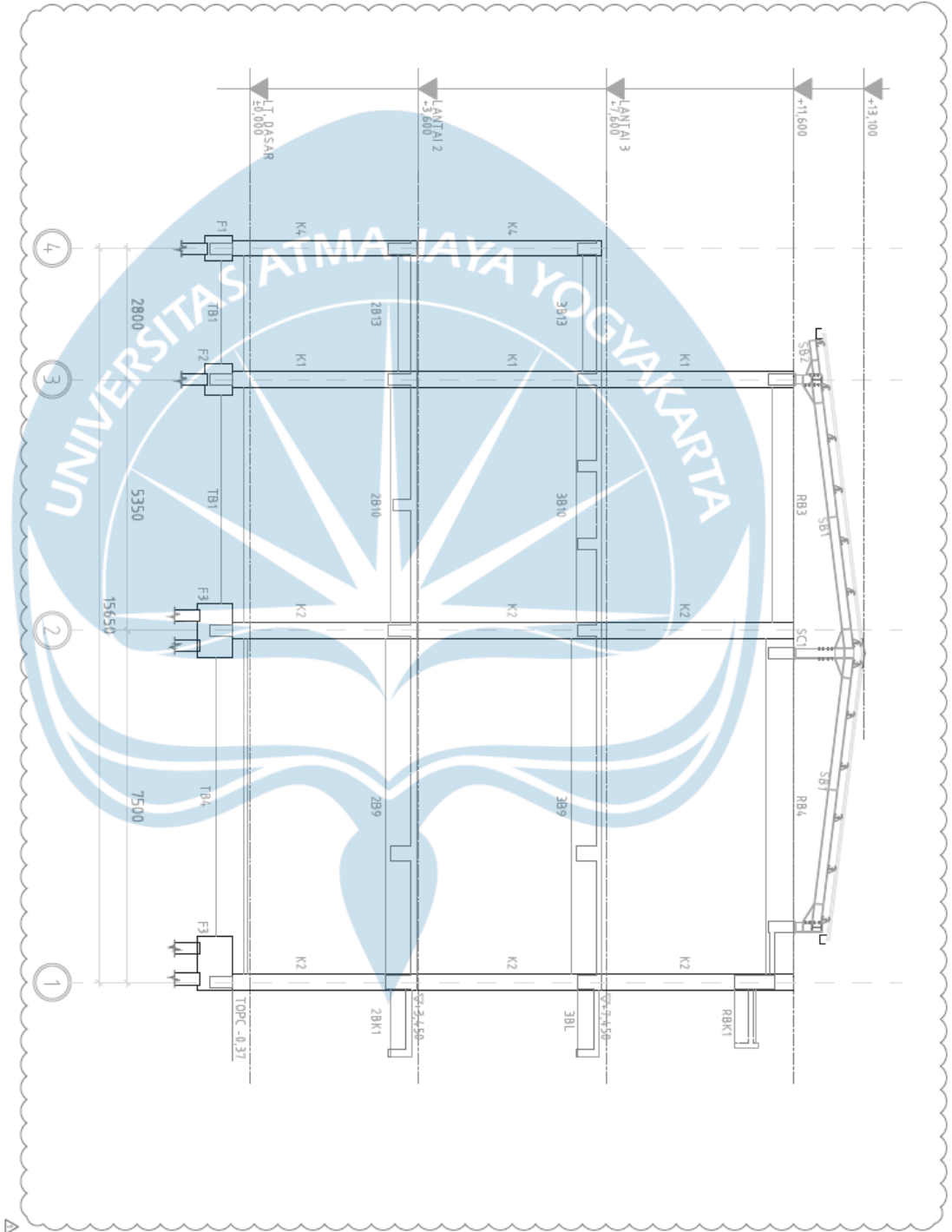
TABEL PENULANGAN BALOK LANTAI 2

TYPE	384	385	386	387	388	389	390	391	392
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Dimensi	10% 30% 01-50	30% 30% 01-50	30% 30% 01-50	30% 30% 01-50	30% 30% 01-50	30% 30% 01-50	30% 30% 01-50	30% 30% 01-50	30% 30% 01-50
Dimensi	151 x 510	210 x 400	201 x 410	201 x 410	300 x 550	300 x 550	251 x 510	251 x 510	251 x 610
Dimensi	500 250	500 250	400 200	400 200	550 300	550 300	500 250	500 250	500 250

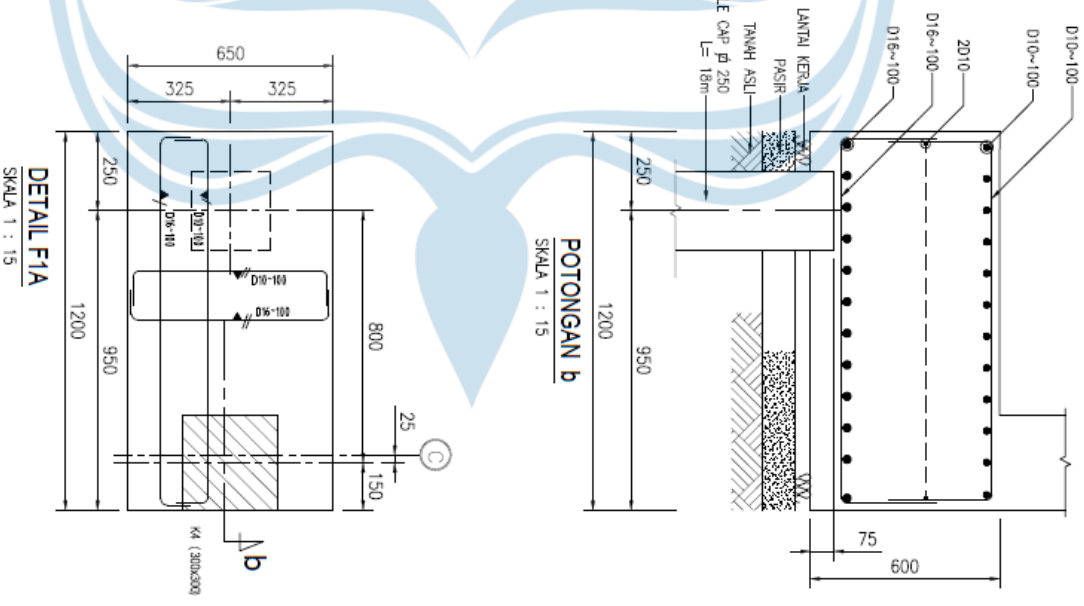
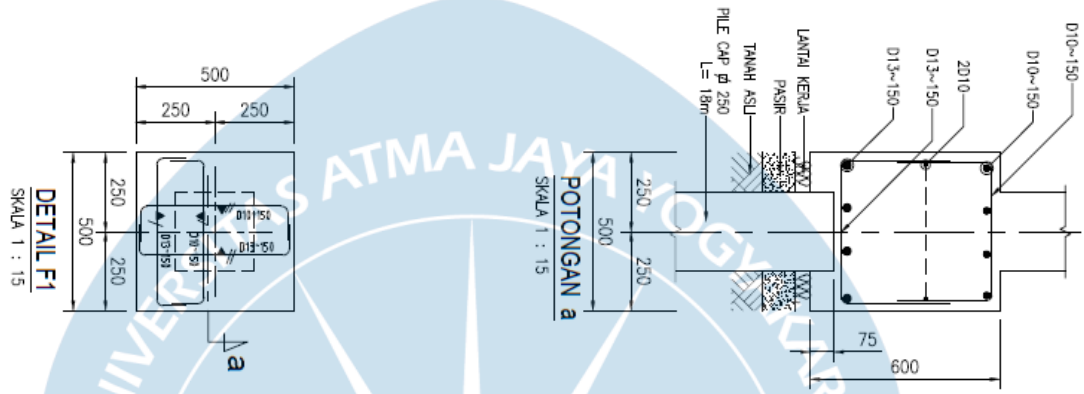
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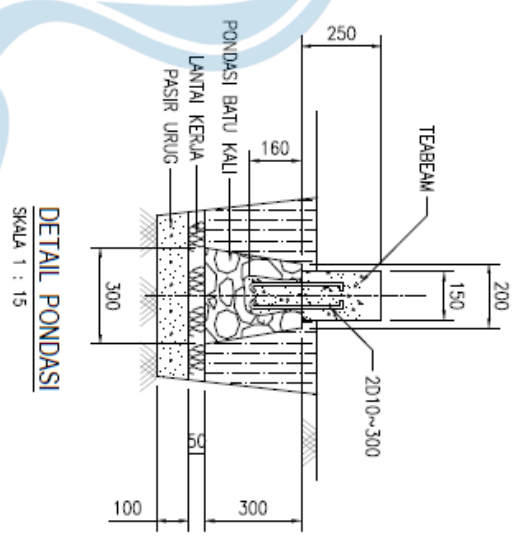
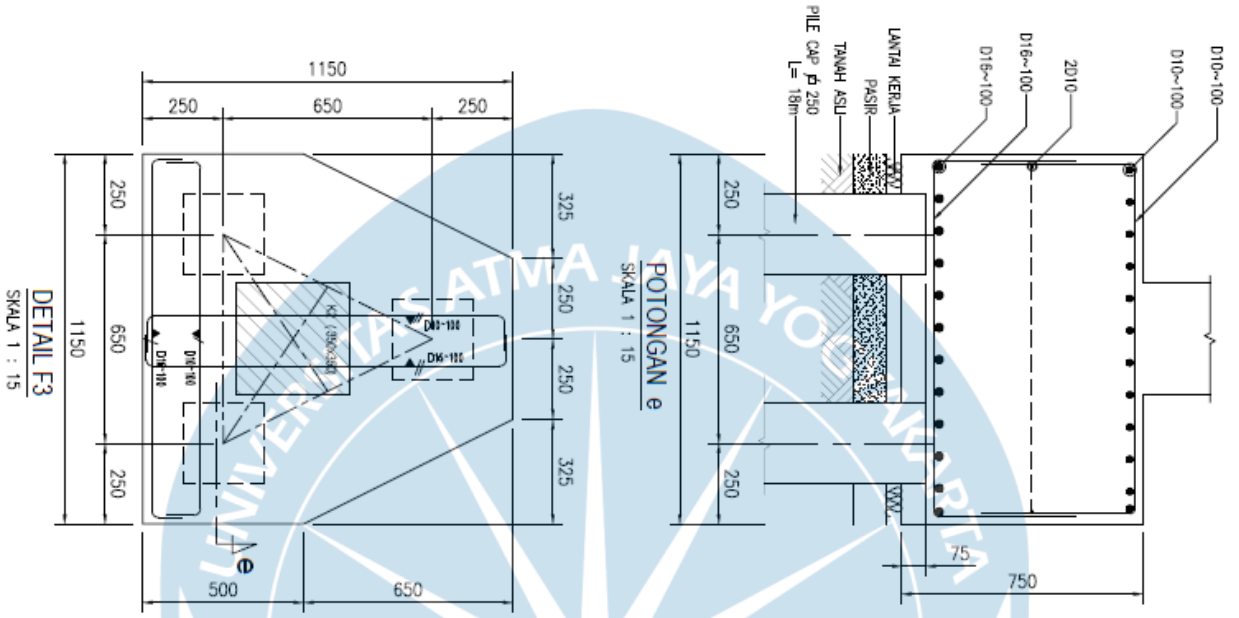
TYPE	381	382	383	384	385	386	387	388
KOTING	Tipe	Lantai	Tipe	Lantai	Tipe	Lantai	Tipe	Lantai
Dimensi	10% 30% 01-50	30% 30% 01-50	30% 30% 01-50	30% 30% 01-50	30% 30% 01-50	30% 30% 01-50	30% 30% 01-50	30% 30% 01-50
Dimensi	311 x 651	301 x 641	301 x 641	351 x 651	251 x 641	301 x 510	301 x 510	251 x 510
Dimensi	650 300	650 300	600 300	600 250	600 250	500 300	500 300	500 250

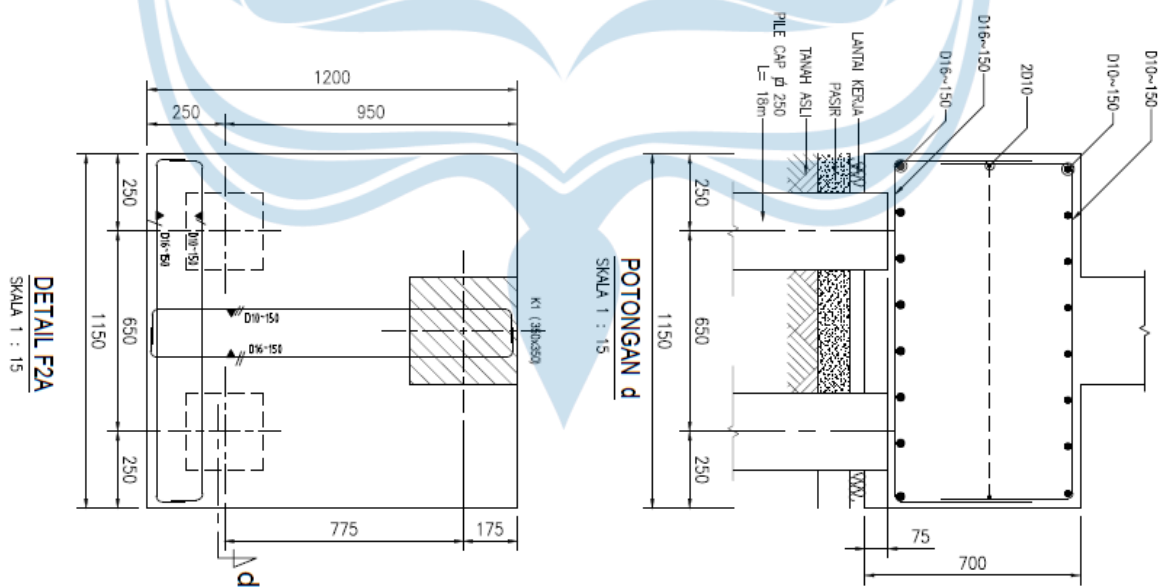
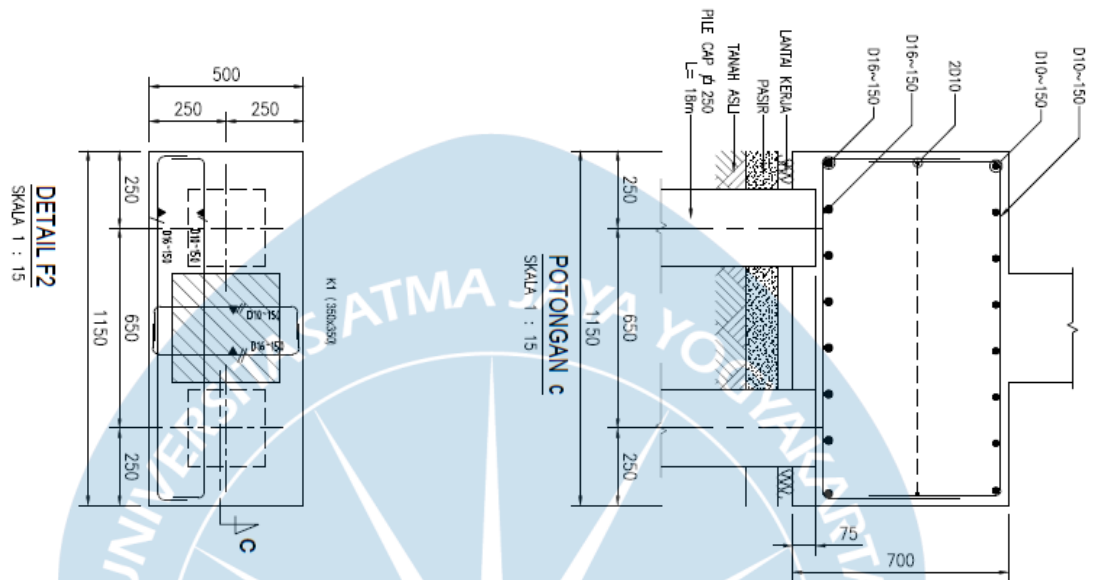
TYPE	387	388	389	390	391	392
KOTING	Tipe	Lantai	Tipe	Lantai	Tipe	Lantai
Dimensi	10% 30% 01-50	30% 30% 01-50	30% 30% 01-50	30% 30% 01-50	30% 30% 01-50	30% 30% 01-50
Dimensi	151 x 510	310 x 651	310 x 651	310 x 651	310 x 551	151 x 451
Dimensi	500 250	650 300	650 300	650 250	550 300	500 250



PORTAL AS-B
SKALA: 1:200







Existing Member Chord Ratio Uniaxial Analysis

Operational level (1-A)							
Member	floor	edge	local axis	value	capacity	perf ratio	analysis
column C1	2	End	-2	0,0286	0,0148	1,9305	Uniform - Y
column C1	2	End	-3	0,0398	0,0155	2,5651	Uniform + X
column C1	2	Start	-2	0,0284	0,0148	1,9242	Uniform - Y
column C1	2	Start	-3	0,0381	0,0155	2,4616	Uniform + X
column C10	2	End	-2	0,0284	0,0154	1,8496	Uniform - Y
column C10	2	End	-3	0,0202	0,0158	1,2777	Uniform + X
column C10	2	Start	-2	0,0274	0,0154	1,7825	Uniform - Y
column C10	2	Start	-3	0,0187	0,0157	1,1913	Uniform + X
column C11	2	End	-2	0,0253	0,0173	1,4676	Uniform - Y
column C11	2	End	-3	0,0217	0,0181	1,1980	Uniform + X
column C11	2	Start	-2	0,0256	0,0173	1,4830	Uniform - Y
column C11	2	Start	-3	0,0208	0,0181	1,1477	Uniform + X
column C12	2	End	-2	0,0215	0,0149	1,4447	Uniform - Y
column C12	2	End	-3	0,0211	0,0168	1,2554	Uniform + X
column C12	2	Start	-2	0,0224	0,0149	1,5016	Uniform - Y
column C12	2	Start	-3	0,0212	0,0167	1,2717	Uniform + X
column C2	2	End	-2	0,0233	0,0145	1,6072	Uniform - Y
column C2	2	End	-3	0,0405	0,0154	2,6209	Uniform + X
column C2	2	Start	-2	0,0232	0,0145	1,5928	Uniform - Y
column C2	2	Start	-3	0,0404	0,0154	2,6301	Uniform + X
column C3	2	End	-2	0,0226	0,0145	1,5608	Uniform - Y
column C3	2	End	-3	0,0318	0,0149	2,1287	Uniform + X
column C3	2	Start	-2	0,0230	0,0145	1,5832	Uniform - Y
column C3	2	Start	-3	0,0309	0,0149	2,0713	Uniform + X
column C4	2	End	-2	0,0284	0,0148	1,9249	Uniform - Y
column C4	2	End	-3	0,0237	0,0144	1,6507	Uniform + X
column C4	2	Start	-2	0,0283	0,0148	1,9159	Uniform - Y
column C4	2	Start	-3	0,0223	0,0143	1,5539	Uniform + X
column C5	2	End	-2	0,0255	0,0145	1,7602	Uniform - Y
column C5	2	End	-3	0,0252	0,0144	1,7495	Uniform + X
column C5	2	Start	-2	0,0257	0,0145	1,7748	Uniform - Y
column C5	2	Start	-3	0,0242	0,0144	1,6852	Uniform + X
column C6	2	End	-2	0,0226	0,0145	1,5541	Uniform - Y
column C6	2	End	-3	0,0252	0,0148	1,7047	Uniform + X
column C6	2	Start	-2	0,0228	0,0146	1,5655	Uniform - Y
column C6	2	Start	-3	0,0243	0,0147	1,6457	Uniform + X
column C7	2	End	-2	0,0263	0,0142	1,8486	Uniform - Y
column C7	2	End	-3	0,0409	0,0157	2,6099	Uniform + X
column C7	2	Start	-2	0,0257	0,0142	1,8125	Uniform - Y
column C7	2	Start	-3	0,0403	0,0157	2,5673	Uniform + X
column C8	2	End	-2	0,0256	0,0143	1,7927	Uniform - Y
column C8	2	End	-3	0,0318	0,0147	2,1566	Uniform + X
column C8	2	Start	-2	0,0257	0,0143	1,7987	Uniform - Y
column C8	2	Start	-3	0,0308	0,0148	2,0883	Uniform + X
column C9	2	End	-2	0,0286	0,0148	1,9354	Uniform - Y
column C9	2	End	-3	0,0305	0,0150	2,0255	Uniform + X
column C9	2	Start	-2	0,0288	0,0147	1,9518	Uniform - Y
column C9	2	Start	-3	0,0308	0,0151	2,0450	Uniform + X

Life safety							
Member	floor	edge	local axis	value	capacity	perf ratio	analysis
column C1	2	End	-2	0,041449	0,041553	0,997495	Uniform - Y
column C1	2	End	-3	0,056912	0,045331	1,255479	Uniform + X
column C1	2	Start	-2	0,041361	0,04152	0,996168	Uniform - Y
column C1	2	Start	-3	0,055559	0,045327	1,225751	Uniform + X
column C10	2	End	-2	0,041201	0,045676	0,902009	Uniform - Y
column C10	2	End	-3	0,028782	0,046133	0,623891	Uniform + X
column C10	2	Start	-2	0,040271	0,045688	0,88144	Uniform - Y
column C10	2	Start	-3	0,027683	0,046157	0,599768	Uniform + X
column C11	2	End	-2	0,036417	0,048037	0,758091	Uniform - Y
column C11	2	End	-3	0,030687	0,048952	0,626886	Uniform + X
column C11	2	Start	-2	0,036831	0,048035	0,766761	Uniform - Y
column C11	2	Start	-3	0,029722	0,048921	0,607563	Uniform + X
column C12	2	End	-2	0,031144	0,0453	0,687509	Uniform - Y
column C12	2	End	-3	0,029978	0,04735	0,633113	Uniform + X
column C12	2	Start	-2	0,031985	0,045315	0,70583	Uniform - Y
column C12	2	Start	-3	0,030169	0,047282	0,638069	Uniform + X
column C2	2	End	-2	0,033034	0,042685	0,773899	Uniform - Y
column C2	2	End	-3	0,058059	0,044193	1,313754	Uniform + X
column C2	2	Start	-2	0,032873	0,042737	0,769192	Uniform - Y
column C2	2	Start	-3	0,05775	0,044141	1,308308	Uniform + X
column C3	2	End	-2	0,032242	0,041174	0,783057	Uniform - Y
column C3	2	End	-3	0,045157	0,040709	1,109248	Uniform + X
column C3	2	Start	-2	0,032636	0,041187	0,792388	Uniform - Y
column C3	2	Start	-3	0,044243	0,040715	1,086666	Uniform + X
column C4	2	End	-2	0,041235	0,043417	0,949745	Uniform - Y
column C4	2	End	-3	0,033847	0,044134	0,766921	Uniform + X
column C4	2	Start	-2	0,041207	0,04342	0,949039	Uniform - Y
column C4	2	Start	-3	0,032783	0,04414	0,742709	Uniform + X
column C5	2	End	-2	0,03668	0,040082	0,915123	Uniform - Y
column C5	2	End	-3	0,03561	0,038982	0,913492	Uniform + X
column C5	2	Start	-2	0,036994	0,040081	0,922994	Uniform - Y
column C5	2	Start	-3	0,034661	0,038987	0,889039	Uniform + X
column C6	2	End	-2	0,032207	0,044317	0,726737	Uniform - Y
column C6	2	End	-3	0,035651	0,044316	0,804471	Uniform + X
column C6	2	Start	-2	0,032465	0,04432	0,73253	Uniform - Y
column C6	2	Start	-3	0,034709	0,044287	0,783728	Uniform + X
column C7	2	End	-2	0,037577	0,036461	1,030586	Uniform - Y
column C7	2	End	-3	0,058382	0,040744	1,432888	Uniform + X
column C7	2	Start	-2	0,036957	0,036459	1,013641	Uniform - Y
column C7	2	Start	-3	0,057678	0,040766	1,414859	Uniform + X
column C8	2	End	-2	0,036778	0,037484	0,981165	Uniform - Y
column C8	2	End	-3	0,045155	0,037676	1,198493	Uniform + X
column C8	2	Start	-2	0,036924	0,03749	0,984908	Uniform - Y
column C8	2	Start	-3	0,044162	0,037709	1,171123	Uniform + X
column C9	2	End	-2	0,041419	0,041241	1,004331	Uniform - Y
column C9	2	End	-3	0,043511	0,042768	1,017385	Uniform + X
column C9	2	Start	-2	0,041663	0,041211	1,010973	Uniform - Y
column C9	2	Start	-3	0,044142	0,042794	1,031508	Uniform + X

Collapse prevention							
Member	floor	edge	local axis	value	capacity	perf ratio	analysis
column C1	2	End	-2	0,055099	0,054851	1,004528	Uniform - Y
column C1	2	End	-3	0,074878	0,059455	1,259405	Uniform + X
column C1	2	Start	-2	0,055046	0,05481	1,004307	Uniform - Y
column C1	2	Start	-3	0,073827	0,059461	1,24161	Uniform + X
column C10	2	End	-2	0,054781	0,059904	0,914472	Uniform - Y
column C10	2	End	-3	0,041444	0,060145	0,689062	Modal - X
column C10	2	Start	-2	0,053955	0,05991	0,900608	Uniform - Y
column C10	2	Start	-3	0,03857	0,059576	0,647404	Modal - X
column C11	2	End	-2	0,048096	0,062685	0,767265	Uniform - Y
column C11	2	End	-3	0,040095	0,063549	0,630932	Uniform + X
column C11	2	Start	-2	0,048654	0,062678	0,776258	Uniform - Y
column C11	2	Start	-3	0,039132	0,063526	0,61599	Uniform + X
column C12	2	End	-2	0,041353	0,059452	0,695571	Uniform - Y
column C12	2	End	-3	0,039366	0,061612	0,638935	Uniform + X
column C12	2	Start	-2	0,042077	0,059453	0,707724	Uniform - Y
column C12	2	Start	-3	0,039556	0,061557	0,642594	Uniform + X
column C2	2	End	-2	0,043237	0,056098	0,770741	Uniform - Y
column C2	2	End	-3	0,076525	0,058075	1,317707	Uniform + X
column C2	2	Start	-2	0,043041	0,056199	0,765857	Uniform - Y
column C2	2	Start	-3	0,075919	0,058066	1,307458	Uniform + X
column C3	2	End	-2	0,042335	0,054003	0,783947	Uniform - Y
column C3	2	End	-3	0,059178	0,053696	1,102109	Uniform + X
column C3	2	Start	-2	0,042783	0,054014	0,792072	Uniform - Y
column C3	2	Start	-3	0,058203	0,053701	1,083823	Uniform + X
column C4	2	End	-2	0,054838	0,057232	0,958157	Uniform - Y
column C4	2	End	-3	0,041216	0,043096	0,956385	Modal - X
column C4	2	Start	-2	0,054888	0,057233	0,959039	Uniform - Y
column C4	2	Start	-3	0,036076	0,042616	0,846546	Modal - X
column C5	2	End	-2	0,04844	0,052871	0,916187	Uniform - Y
column C5	2	End	-3	0,046586	0,051169	0,910437	Uniform + X
column C5	2	Start	-2	0,048854	0,052869	0,924055	Uniform - Y
column C5	2	Start	-3	0,045643	0,051182	0,891777	Uniform + X
column C6	2	End	-2	0,042259	0,058258	0,725384	Uniform - Y
column C6	2	End	-3	0,04664	0,058154	0,802013	Uniform + X
column C6	2	Start	-2	0,042608	0,058258	0,731372	Uniform - Y
column C6	2	Start	-3	0,045684	0,058125	0,785968	Uniform + X
column C7	2	End	-2	0,049466	0,04841	1,021811	Uniform - Y
column C7	2	End	-3	0,076679	0,055795	1,374284	Uniform + X
column C7	2	Start	-2	0,048795	0,048408	1,008	Uniform - Y
column C7	2	Start	-3	0,075928	0,055837	1,359815	Uniform + X
column C8	2	End	-2	0,048571	0,04982	0,974944	Uniform - Y
column C8	2	End	-3	0,059179	0,050741	1,166296	Uniform + X
column C8	2	Start	-2	0,048772	0,049829	0,978793	Uniform - Y
column C8	2	Start	-3	0,058174	0,05076	1,146071	Uniform + X
column C9	2	End	-2	0,055058	0,05439	1,01228	Uniform - Y
column C9	2	End	-3	0,040856	0,032212	1,268346	Modal - X
column C9	2	Start	-2	0,055335	0,054371	1,017727	Uniform - Y
column C9	2	Start	-3	0,05814	0,056074	1,036844	Uniform + X

Existing Member Shear Force Uniaxial Analysis

Operational level (1-A)							
Member	floor	edge	local axis	value	capacity	perf ratio	analysis
column C1	2	End	-2	118,8529	319,8734	0,371562	Uniform - X
column C1	2	End	-3	127,545	303,3993	0,420387	Uniform + Y
column C1	2	Start	-2	118,8529	319,8734	0,371562	Uniform - X
column C1	2	Start	-3	127,545	303,3993	0,420387	Uniform + Y
column C10	2	End	-2	57,86464	217,4284	0,266132	Uniform - X
column C10	2	End	-3	74,3886	225,7872	0,329463	Uniform + Y
column C10	2	Start	-2	57,86464	217,4284	0,266132	Uniform - X
column C10	2	Start	-3	74,3886	225,7872	0,329463	Uniform + Y
column C11	2	End	-2	51,63418	225,583	0,228892	Uniform - X
column C11	2	End	-3	81,15612	231,9277	0,34992	Uniform + Y
column C11	2	Start	-2	51,63418	225,583	0,228892	Uniform - X
column C11	2	Start	-3	81,15612	231,9277	0,34992	Uniform + Y
column C12	2	End	-2	45,47373	220,5794	0,206156	Uniform + X
column C12	2	End	-3	76,13487	226,0677	0,336779	Uniform + Y
column C12	2	Start	-2	45,47373	220,5794	0,206156	Uniform + X
column C12	2	Start	-3	76,13487	226,0677	0,336779	Uniform + Y
column C2	2	End	-2	109,5666	306,2251	0,357798	Uniform - X
column C2	2	End	-3	127,7702	306,9724	0,416227	Uniform + Y
column C2	2	Start	-2	109,5666	306,2251	0,357798	Uniform - X
column C2	2	Start	-3	127,7702	306,9724	0,416227	Uniform + Y
column C3	2	End	-2	108,2661	309,3873	0,349937	Uniform - X
column C3	2	End	-3	125,4036	319,7116	0,39224	Uniform + Y
column C3	2	Start	-2	108,2661	309,3873	0,349937	Uniform - X
column C3	2	Start	-3	125,4036	319,7116	0,39224	Uniform + Y
column C4	2	End	-2	108,4701	310,928	0,348859	Uniform - X
column C4	2	End	-3	124,7134	306,6839	0,406651	Uniform + Y
column C4	2	Start	-2	108,4701	310,928	0,348859	Uniform - X
column C4	2	Start	-3	124,7134	306,6839	0,406651	Uniform + Y
column C5	2	End	-2	114,7962	317,2857	0,361807	Uniform - X
column C5	2	End	-3	131,5544	321,3388	0,409395	Uniform + Y
column C5	2	Start	-2	114,7962	317,2857	0,361807	Uniform - X
column C5	2	Start	-3	131,5544	321,3388	0,409395	Uniform + Y
column C6	2	End	-2	95,0811	302,0075	0,31483	Uniform - X
column C6	2	End	-3	100,9948	303,1668	0,333133	Uniform + Y
column C6	2	Start	-2	95,0811	302,0075	0,31483	Uniform - X
column C6	2	Start	-3	100,9948	303,1668	0,333133	Uniform + Y
column C7	2	End	-2	161,9122	269,2382	0,601372	Modal - X
column C7	2	End	-3	200,9228	259,86	0,773196	Uniform + Y
column C7	2	Start	-2	161,9122	269,2382	0,601372	Modal - X
column C7	2	Start	-3	200,9228	259,86	0,773196	Uniform + Y
column C8	2	End	-2	157,8708	261,4848	0,603748	Uniform - X
column C8	2	End	-3	209,737	268,864	0,780086	Uniform + Y
column C8	2	Start	-2	157,8708	261,4848	0,603748	Uniform - X
column C8	2	Start	-3	209,737	268,864	0,780086	Uniform + Y
column C9	2	End	-2	159,5471	331,4122	0,481416	Uniform - X
column C9	2	End	-3	236,487	318,1325	0,74336	Uniform + Y
column C9	2	Start	-2	159,5471	331,4122	0,481416	Uniform - X
column C9	2	Start	-3	236,487	318,1325	0,74336	Uniform + Y

Life safety							
Member	floor	edge	local axis	value	capacity	perf ratio	analysis
column C1	2	End	-2	189,1749	323,9069	0,584041	Uniform - X
column C1	2	End	-3	173,4156	300,5161	0,577059	Uniform + Y
column C1	2	Start	-2	189,1749	323,9069	0,584041	Uniform - X
column C1	2	Start	-3	173,4156	300,5161	0,577059	Uniform + Y
column C1	2	End	-2	92,48282	213,9063	0,432352	Uniform - X
column C1	2	End	-3	101,0155	226,7874	0,445419	Uniform + Y
column C1	2	Start	-2	92,48282	213,9063	0,432352	Uniform - X
column C1	2	Start	-3	101,0155	226,7874	0,445419	Uniform + Y
column C1	2	End	-2	81,37369	225,1522	0,361416	Uniform - X
column C1	2	End	-3	109,3548	233,424	0,468481	Uniform + Y
column C1	2	Start	-2	81,37369	225,1522	0,361416	Uniform - X
column C1	2	Start	-3	109,3548	233,4321	0,468465	Uniform + Y
column C1	2	End	-2	56,20498	220,5789	0,254807	Uniform - X
column C1	2	End	-3	102,6106	228,0831	0,449882	Uniform + Y
column C1	2	Start	-2	56,20498	220,5789	0,254807	Uniform - X
column C1	2	Start	-3	102,6106	227,3335	0,451366	Uniform + Y
column C2	2	End	-2	183,6839	306,5015	0,599292	Uniform - X
column C2	2	End	-3	173,0393	309,8561	0,55845	Uniform + Y
column C2	2	Start	-2	183,6839	306,5015	0,599292	Uniform - X
column C2	2	Start	-3	173,0393	305,7942	0,565868	Uniform + Y
column C3	2	End	-2	173,9315	305,8378	0,568705	Modal - X
column C3	2	End	-3	157,4174	306,566	0,513486	Uniform + Y
column C3	2	Start	-2	173,9315	305,8378	0,568705	Modal - X
column C3	2	Start	-3	157,4174	318,9996	0,493472	Uniform + Y
column C4	2	End	-2	171,1529	312,2801	0,548075	Uniform - X
column C4	2	End	-3	162,8909	306,5521	0,531364	Uniform + Y
column C4	2	Start	-2	171,1529	312,2801	0,548075	Uniform - X
column C4	2	Start	-3	162,8909	306,5521	0,531364	Uniform + Y
column C5	2	End	-2	181,9114	316,9372	0,573967	Uniform - X
column C5	2	End	-3	167,7306	314,8097	0,5328	Uniform + Y
column C5	2	Start	-2	181,9114	316,9372	0,573967	Uniform - X
column C5	2	Start	-3	167,7306	318,6361	0,526402	Uniform + Y
column C6	2	End	-2	151,7545	299,5509	0,506607	Uniform - X
column C6	2	End	-3	120,3796	294,3875	0,408915	Uniform + Y
column C6	2	Start	-2	151,7545	299,5509	0,506607	Uniform - X
column C6	2	Start	-3	120,3796	294,6631	0,408533	Uniform + Y
column C7	2	End	-2	277,4685	277,0522	1,001503	Modal - X
column C7	2	End	-3	272,4772	263,8938	1,032526	Uniform + Y
column C7	2	Start	-2	277,4685	277,0522	1,001503	Modal - X
column C7	2	Start	-3	272,4772	263,8938	1,032526	Uniform + Y
column C8	2	End	-2	253,7212	261,51	0,970216	Uniform - X
column C8	2	End	-3	281,3313	268,7468	1,046827	Uniform + Y
column C8	2	Start	-2	253,7212	261,51	0,970216	Uniform - X
column C8	2	Start	-3	281,3313	269,4698	1,044018	Uniform + Y
column C9	2	End	-2	262,3019	329,4054	0,796289	Modal - X
column C9	2	End	-3	322,8322	317,5436	1,016655	Uniform + Y
column C9	2	Start	-2	262,3019	329,4054	0,796289	Modal - X
column C9	2	Start	-3	322,8322	317,5436	1,016655	Uniform + Y

Collapse prevention							
Member	floor	edge	local axis	value	capacity	perf ratio	analysis
column C1	2	End	-2	286,2373	297,7699	0,96127	Modal - X
column C1	2	End	-3	222,5768	282,3711	0,788242	Uniform + Y
column C1	2	Start	-2	286,2373	304,9872	0,938522	Modal - X
column C1	2	Start	-3	222,5768	292,012	0,762218	Uniform + Y
column C1	2	End	-2	142,1875	197,51	0,719901	Uniform - X
column C1	2	End	-3	129,5525	223,8376	0,578779	Uniform + Y
column C1	2	Start	-2	142,1875	194,5708	0,730775	Uniform - X
column C1	2	Start	-3	129,5525	223,8298	0,578799	Uniform + Y
column C1	2	End	-2	124,0736	223,5524	0,555009	Uniform - X
column C1	2	End	-3	139,5763	223,5185	0,624451	Uniform + Y
column C1	2	Start	-2	124,0736	224,5267	0,552601	Uniform - X
column C1	2	Start	-3	139,5763	223,8323	0,623575	Uniform + Y
column C1	2	End	-2	86,96248	222,4356	0,390956	Uniform - X
column C1	2	End	-3	130,9856	222,9992	0,587381	Uniform + Y
column C1	2	Start	-2	86,96248	222,019	0,391689	Uniform - X
column C1	2	Start	-3	130,9856	217,4271	0,602434	Uniform + Y
column C2	2	End	-2	290,1014	306,8963	0,945275	Uniform - X
column C2	2	End	-3	221,5558	306,4454	0,722986	Uniform + Y
column C2	2	Start	-2	290,1014	306,5744	0,946268	Uniform - X
column C2	2	Start	-3	221,5558	290,309	0,763172	Uniform + Y
column C3	2	End	-2	280,999	285,1582	0,985415	Modal - X
column C3	2	End	-3	191,7277	286,5456	0,6691	Uniform + Y
column C3	2	Start	-2	280,999	293,9734	0,955865	Modal - X
column C3	2	Start	-3	191,7277	305,2365	0,628128	Uniform + Y
column C4	2	End	-2	273,7067	302,9611	0,903439	Modal - X
column C4	2	End	-3	203,8071	294,6959	0,691584	Uniform + Y
column C4	2	Start	-2	273,7067	303,9447	0,900515	Modal - X
column C4	2	Start	-3	203,8071	295,6729	0,689299	Uniform + Y
column C5	2	End	-2	289,2785	307,7412	0,940006	Modal - X
column C5	2	End	-3	206,502	297,9319	0,693118	Uniform + Y
column C5	2	Start	-2	289,2785	314,2756	0,920461	Modal - X
column C5	2	Start	-3	206,502	303,6479	0,680071	Uniform + Y
column C6	2	End	-2	233,126	281,9509	0,826832	Uniform - X
column C6	2	End	-3	141,1549	277,5296	0,508612	Uniform + Y
column C6	2	Start	-2	228,247	279,8149	0,815707	Modal - X
column C6	2	Start	-3	141,1549	277,9573	0,50783	Uniform + Y
column C7	2	End	-2	452,6682	257,2968	1,759323	Modal - X
column C7	2	End	-3	349,1645	258,4334	1,351081	Uniform + Y
column C7	2	Start	-2	452,6682	262,8434	1,722197	Modal - X
column C7	2	Start	-3	349,1645	256,6183	1,360637	Uniform + Y
column C8	2	End	-2	398,2423	262,7072	1,515917	Modal - X
column C8	2	End	-3	358,0616	255,5192	1,40131	Uniform + Y
column C8	2	Start	-2	398,2423	264,8127	1,503864	Modal - X
column C8	2	Start	-3	358,0616	256,4716	1,396106	Uniform + Y
column C9	2	End	-2	425,4469	332,1854	1,280751	Modal - X
column C9	2	End	-3	415,3715	316,9073	1,310704	Uniform + Y
column C9	2	Start	-2	425,4469	334,9585	1,270148	Modal - X
column C9	2	Start	-3	415,3715	316,9073	1,310704	Uniform + Y

Existing Member Chord Ratio Biaxial Analysis

Operational level (1-A)							
Member	floor	edge	local axis	value	capacity	perf ratio	analysis
column C1	2	End	-2	0,0224	0,0168	1,3337	Uniform + 0.3X - Y
column C1	2	End	-3	0,0277	0,0168	1,6499	Uniform + X + 0.3Y
column C1	2	Start	-2	0,0222	0,0169	1,3177	Uniform + 0.3X - Y
column C1	2	Start	-3	0,0250	0,0167	1,4940	Uniform + X + 0.3Y
column C10	2	End	-2	0,0223	0,0149	1,4977	Uniform + 0.3X - Y
column C10	2	End	-3	0,0185	0,0154	1,2019	Uniform + X - 0.3Y
column C10	2	Start	-2	0,0214	0,0148	1,4461	Uniform + 0.3X - Y
column C10	2	Start	-3	0,0169	0,0153	1,1035	Uniform + X - 0.3Y
column C11	2	End	-2	0,0205	0,0167	1,2290	Uniform - 0.3X - Y
column C11	2	End	-3	0,0199	0,0180	1,1093	Uniform + X - 0.3Y
column C11	2	Start	-2	0,0207	0,0167	1,2409	Uniform - 0.3X - Y
column C11	2	Start	-3	0,0187	0,0178	1,0500	Uniform + X - 0.3Y
column C12	2	End	-2	0,0197	0,0146	1,3501	Uniform - 0.3X - Y
column C12	2	End	-3	0,0193	0,0163	1,1886	Uniform + X - 0.3Y
column C12	2	Start	-2	0,0212	0,0147	1,4459	Uniform - 0.3X - Y
column C12	2	Start	-3	0,0195	0,0163	1,1981	Uniform + X - 0.3Y
column C2	2	End	-2	0,0215	0,0170	1,2609	Uniform - 0.3X - Y
column C2	2	End	-3	0,0277	0,0171	1,6182	Uniform + X - 0.3Y
column C2	2	Start	-2	0,0223	0,0164	1,3585	Uniform + 0.3X + Y
column C2	2	Start	-3	0,0280	0,0172	1,6333	Uniform + X - 0.3Y
column C3	2	End	-2	0,0237	0,0167	1,4232	Uniform + 0.3X + Y
column C3	2	End	-3	0,0246	0,0166	1,4866	Uniform + X - 0.3Y
column C3	2	Start	-2	0,0226	0,0166	1,3558	Uniform + 0.3X + Y
column C3	2	Start	-3	0,0234	0,0165	1,4128	Uniform + X - 0.3Y
column C4	2	End	-2	0,0223	0,0171	1,3013	Uniform + 0.3X - Y
column C4	2	End	-3	0,0202	0,0167	1,2050	Uniform + X - 0.3Y
column C4	2	Start	-2	0,0221	0,0171	1,2948	Uniform + 0.3X - Y
column C4	2	Start	-3	0,0180	0,0165	1,0912	Uniform + X - 0.3Y
column C5	2	End	-2	0,0212	0,0164	1,2980	Uniform + 0.3X + Y
column C5	2	End	-3	0,0215	0,0165	1,3071	Uniform + X - 0.3Y
column C5	2	Start	-2	0,0208	0,0164	1,2680	Uniform + 0.3X + Y
column C5	2	Start	-3	0,0203	0,0164	1,2371	Uniform + X - 0.3Y
column C6	2	End	-2	0,0235	0,0165	1,4266	Uniform + 0.3X + Y
column C6	2	End	-3	0,0216	0,0170	1,2659	Uniform + X - 0.3Y
column C6	2	Start	-2	0,0234	0,0166	1,4095	Uniform + 0.3X + Y
column C6	2	Start	-3	0,0204	0,0170	1,2005	Uniform + X - 0.3Y
column C7	2	End	-2	0,0213	0,0164	1,2931	Uniform - 0.3X - Y
column C7	2	End	-3	0,0289	0,0179	1,6114	Uniform + X - 0.3Y
column C7	2	Start	-2	0,0208	0,0165	1,2589	Uniform - 0.3X - Y
column C7	2	Start	-3	0,0278	0,0180	1,5490	Uniform + X - 0.3Y
column C8	2	End	-2	0,0212	0,0165	1,2841	Uniform + 0.3X + Y
column C8	2	End	-3	0,0244	0,0169	1,4395	Uniform + X + 0.3Y
column C8	2	Start	-2	0,0208	0,0166	1,2520	Uniform + 0.3X + Y
column C8	2	Start	-3	0,0230	0,0169	1,3677	Uniform + X + 0.3Y
column C9	2	End	-2	0,0224	0,0222	1,0118	Uniform + 0.3X - Y
column C9	2	End	-3	0,0234	0,0253	0,9267	Uniform + X - 0.3Y
column C9	2	Start	-2	0,0227	0,0221	1,0264	Uniform + 0.3X - Y
column C9	2	Start	-3	0,0234	0,0252	0,9256	Uniform + X - 0.3Y

Life safety							
Member	floor	edge	local axis	value	capacity	perf ratio	analysis
column C1	2	End	-2	0,033265	0,048801	0,681637	Uniform + 0.3X - Y
column C1	2	End	-3	0,040486	0,05158	0,784922	Uniform + X - 0.3Y
column C1	2	Start	-2	0,033178	0,048836	0,679375	Uniform + 0.3X - Y
column C1	2	Start	-3	0,038133	0,051493	0,740556	Uniform + X - 0.3Y
column C10	2	End	-2	0,03303	0,047953	0,688793	Uniform + 0.3X - Y
column C10	2	End	-3	0,027403	0,048384	0,566366	Uniform + X - 0.3Y
column C10	2	Start	-2	0,032398	0,047938	0,675828	Uniform + 0.3X - Y
column C10	2	Start	-3	0,026158	0,048367	0,54083	Uniform + X - 0.3Y
column C11	2	End	-2	0,031305	0,050799	0,616268	Uniform + 0.3X + Y
column C11	2	End	-3	0,029279	0,051362	0,570041	Uniform + X - 0.3Y
column C11	2	Start	-2	0,030627	0,049964	0,612985	Uniform - 0.3X - Y
column C11	2	Start	-3	0,028003	0,051195	0,546986	Uniform + X - 0.3Y
column C12	2	End	-2	0,033136	0,051399	0,644685	Uniform + 0.3X + Y
column C12	2	End	-3	0,0286	0,049605	0,576551	Uniform + X - 0.3Y
column C12	2	Start	-2	0,034706	0,051643	0,672041	Uniform + 0.3X + Y
column C12	2	Start	-3	0,028957	0,049615	0,583624	Uniform + X - 0.3Y
column C2	2	End	-2	0,031764	0,050335	0,631056	Uniform - 0.3X - Y
column C2	2	End	-3	0,040567	0,049766	0,815148	Uniform + X - 0.3Y
column C2	2	Start	-2	0,033447	0,050502	0,662295	Uniform + 0.3X + Y
column C2	2	Start	-3	0,040921	0,049819	0,821405	Uniform + X - 0.3Y
column C3	2	End	-2	0,035034	0,048084	0,728599	Uniform + 0.3X + Y
column C3	2	End	-3	0,035841	0,04774	0,75076	Uniform + X - 0.3Y
column C3	2	Start	-2	0,033794	0,048201	0,701093	Uniform + 0.3X + Y
column C3	2	Start	-3	0,034461	0,047715	0,722234	Uniform + X - 0.3Y
column C4	2	End	-2	0,033028	0,051137	0,645859	Uniform + 0.3X - Y
column C4	2	End	-3	0,029775	0,051025	0,583534	Uniform + X - 0.3Y
column C4	2	Start	-2	0,033086	0,051114	0,64731	Uniform + 0.3X - Y
column C4	2	Start	-3	0,027915	0,050961	0,547765	Uniform + X - 0.3Y
column C5	2	End	-2	0,031295	0,047053	0,6651	Uniform + 0.3X + Y
column C5	2	End	-3	0,031383	0,047075	0,666673	Uniform + X + 0.3Y
column C5	2	Start	-2	0,030848	0,047138	0,654409	Uniform + 0.3X + Y
column C5	2	Start	-3	0,030216	0,047206	0,640084	Uniform + X - 0.3Y
column C6	2	End	-2	0,034857	0,050865	0,685288	Uniform + 0.3X + Y
column C6	2	End	-3	0,031508	0,050757	0,62076	Uniform + X - 0.3Y
column C6	2	Start	-2	0,034754	0,050989	0,681593	Uniform + 0.3X + Y
column C6	2	Start	-3	0,030322	0,050715	0,597891	Uniform + X - 0.3Y
column C7	2	End	-2	0,031187	0,03919	0,795789	Uniform - 0.3X - Y
column C7	2	End	-3	0,041917	0,042063	0,996533	Uniform + X - 0.3Y
column C7	2	Start	-2	0,030701	0,03924	0,7824	Uniform - 0.3X - Y
column C7	2	Start	-3	0,040675	0,042084	0,966525	Uniform + X - 0.3Y
column C8	2	End	-2	0,031291	0,040049	0,781325	Uniform + 0.3X + Y
column C8	2	End	-3	0,035638	0,040135	0,887954	Uniform + X + 0.3Y
column C8	2	Start	-2	0,030828	0,040171	0,767417	Uniform + 0.3X + Y
column C8	2	Start	-3	0,034186	0,04012	0,852074	Uniform + X + 0.3Y
column C9	2	End	-2	0,033236	0,056453	0,588741	Uniform + 0.3X - Y
column C9	2	End	-3	0,03429	0,060078	0,570746	Uniform + X - 0.3Y
column C9	2	Start	-2	0,033606	0,056365	0,596225	Uniform + 0.3X - Y
column C9	2	Start	-3	0,034496	0,060095	0,574016	Uniform + X - 0.3Y

Collapse prevention							
Member	floor	edge	local axis	value	capacity	perf ratio	analysis
column C1	2	End	-2	0,044862	0,063884	0,70224	Uniform + 0.3X - Y
column C1	2	End	-3	0,05334	0,06732	0,792326	Uniform + X - 0.3Y
column C1	2	Start	-2	0,044846	0,063904	0,701778	Uniform + 0.3X - Y
column C1	2	Start	-3	0,051208	0,067279	0,761133	Uniform + X - 0.3Y
column C10	2	End	-2	0,044561	0,063165	0,705477	Uniform + 0.3X - Y
column C10	2	End	-3	0,035009	0,055136	0,634963	Uniform - X + 0.3Y
column C10	2	Start	-2	0,044075	0,06316	0,697831	Uniform + 0.3X - Y
column C10	2	Start	-3	0,036468	0,063402	0,575189	Uniform + X - 0.3Y
column C11	2	End	-2	0,042002	0,06655	0,631137	Uniform + 0.3X + Y
column C11	2	End	-3	0,033187	0,054201	0,612303	Uniform - X + 0.3Y
column C11	2	Start	-2	0,041042	0,065377	0,627765	Uniform - 0.3X - Y
column C11	2	Start	-3	0,038369	0,066739	0,574909	Uniform + X - 0.3Y
column C12	2	End	-2	0,044915	0,066964	0,670733	Uniform + 0.3X + Y
column C12	2	End	-3	0,038953	0,064999	0,599286	Uniform + X - 0.3Y
column C12	2	Start	-2	0,04677	0,06723	0,695669	Uniform + 0.3X + Y
column C12	2	Start	-3	0,039398	0,065009	0,606045	Uniform + X - 0.3Y
column C2	2	End	-2	0,043394	0,066892	0,648723	Uniform + 0.3X + Y
column C2	2	End	-3	0,05366	0,065117	0,82406	Uniform + X - 0.3Y
column C2	2	Start	-2	0,045283	0,066204	0,68399	Uniform + 0.3X + Y
column C2	2	Start	-3	0,053968	0,065158	0,828276	Uniform + X - 0.3Y
column C3	2	End	-2	0,047094	0,062954	0,748078	Uniform + 0.3X + Y
column C3	2	End	-3	0,047624	0,062655	0,760107	Uniform + X - 0.3Y
column C3	2	Start	-2	0,045734	0,063211	0,723517	Uniform + 0.3X + Y
column C3	2	Start	-3	0,046175	0,062627	0,7373	Uniform + X - 0.3Y
column C4	2	End	-2	0,044571	0,067046	0,66478	Uniform + 0.3X - Y
column C4	2	End	-3	0,035078	0,05676	0,618004	Uniform - X + 0.3Y
column C4	2	Start	-2	0,04475	0,067007	0,667839	Uniform + 0.3X - Y
column C4	2	Start	-3	0,038742	0,067156	0,576898	Uniform + X - 0.3Y
column C5	2	End	-2	0,041994	0,061126	0,68701	Uniform + 0.3X + Y
column C5	2	End	-3	0,042247	0,061334	0,688809	Uniform + X + 0.3Y
column C5	2	Start	-2	0,041548	0,061267	0,678149	Uniform + 0.3X + Y
column C5	2	Start	-3	0,04105	0,061566	0,666759	Uniform + X - 0.3Y
column C6	2	End	-2	0,046894	0,06688	0,701162	Uniform + 0.3X + Y
column C6	2	End	-3	0,042345	0,066394	0,63779	Uniform + X - 0.3Y
column C6	2	Start	-2	0,046864	0,067054	0,698898	Uniform + 0.3X + Y
column C6	2	Start	-3	0,041182	0,066352	0,620665	Uniform + X - 0.3Y
column C7	2	End	-2	0,041596	0,05074	0,819801	Uniform - 0.3X - Y
column C7	2	End	-3	0,055081	0,054191	1,016424	Uniform + X - 0.3Y
column C7	2	Start	-2	0,041107	0,050781	0,809495	Uniform - 0.3X - Y
column C7	2	Start	-3	0,053738	0,054218	0,991152	Uniform + X - 0.3Y
column C8	2	End	-2	0,041998	0,052701	0,796907	Uniform + 0.3X + Y
column C8	2	End	-3	0,047399	0,052016	0,911254	Uniform + X + 0.3Y
column C8	2	Start	-2	0,041525	0,052894	0,785067	Uniform + 0.3X + Y
column C8	2	Start	-3	0,045854	0,052	0,881807	Uniform + X + 0.3Y
column C9	2	End	-2	0,044823	0,071893	0,623459	Uniform + 0.3X - Y
column C9	2	End	-3	0,035277	0,04478	0,787784	Uniform - X + 0.3Y
column C9	2	Start	-2	0,045258	0,071793	0,630401	Uniform + 0.3X - Y
column C9	2	Start	-3	0,046229	0,076099	0,607488	Uniform + X - 0.3Y

Existing Member Shear Force Biaxial Analysis

Operational level (1-A)							
Member	floor	edge	local axis	value	capacity	perf ratio	analysis
column C1		2 End	-2	133,5172	322,9057	0,413487	Uniform - X + 0.3Y
column C1		2 End	-3	88,20108	304,9104	0,289269	Uniform - 0.3X + Y
column C1		2 Start	-2	133,5172	322,9057	0,413487	Uniform - X + 0.3Y
column C1		2 Start	-3	88,20108	304,9104	0,289269	Uniform - 0.3X + Y
column C10		2 End	-2	54,14545	219,5545	0,246615	Uniform - X - 0.3Y
column C10		2 End	-3	53,62786	227,4926	0,235735	Uniform - 0.3X + Y
column C10		2 Start	-2	54,14545	219,5545	0,246615	Uniform - X - 0.3Y
column C10		2 Start	-3	53,62786	227,4926	0,235735	Uniform - 0.3X + Y
column C11		2 End	-2	66,80176	233,0227	0,286675	Uniform - X + 0.3Y
column C11		2 End	-3	58,70213	230,1476	0,255063	Uniform - 0.3X + Y
column C11		2 Start	-2	66,80176	233,0227	0,286675	Uniform - X + 0.3Y
column C11		2 Start	-3	58,70213	230,1476	0,255063	Uniform - 0.3X + Y
column C12		2 End	-2	65,88843	218,8076	0,301125	Uniform - X + 0.3Y
column C12		2 End	-3	53,74909	223,7498	0,24022	Uniform - 0.3X + Y
column C12		2 Start	-2	65,88843	218,8076	0,301125	Uniform - X + 0.3Y
column C12		2 Start	-3	53,74909	223,7498	0,24022	Uniform - 0.3X + Y
column C2		2 End	-2	195,1134	293,7786	0,664151	Uniform - X + 0.3Y
column C2		2 End	-3	81,56324	293,7786	0,277635	Uniform - X + 0.3Y
column C2		2 Start	-2	195,1134	293,7786	0,664151	Uniform - X + 0.3Y
column C2		2 Start	-3	81,56324	293,7786	0,277635	Uniform - X + 0.3Y
column C3		2 End	-2	162,3227	307,0495	0,528653	Uniform - X + 0.3Y
column C3		2 End	-3	111,5328	318,2116	0,350499	Uniform - 0.3X + Y
column C3		2 Start	-2	162,3227	307,0495	0,528653	Uniform - X + 0.3Y
column C3		2 Start	-3	111,5328	318,2116	0,350499	Uniform - 0.3X + Y
column C4		2 End	-2	121,2488	310,14	0,390949	Uniform - X - 0.3Y
column C4		2 End	-3	102,5809	306,5692	0,334609	Uniform - 0.3X + Y
column C4		2 Start	-2	121,2488	310,14	0,390949	Uniform - X - 0.3Y
column C4		2 Start	-3	102,5809	306,5692	0,334609	Uniform - 0.3X + Y
column C5		2 End	-2	165,8274	319,5289	0,518975	Uniform - X + 0.3Y
column C5		2 End	-3	115,0883	317,8772	0,362053	Uniform - 0.3X + Y
column C5		2 Start	-2	165,8274	319,5289	0,518975	Uniform - X + 0.3Y
column C5		2 Start	-3	115,0883	317,8772	0,362053	Uniform - 0.3X + Y
column C6		2 End	-2	107,7552	298,9004	0,360505	Uniform - X + 0.3Y
column C6		2 End	-3	111,8285	299,1579	0,373811	Uniform - 0.3X + Y
column C6		2 Start	-2	107,7552	298,9004	0,360505	Uniform - X + 0.3Y
column C6		2 Start	-3	111,8285	299,1579	0,373811	Uniform - 0.3X + Y
column C7		2 End	-2	246,0856	251,8952	0,976936	Uniform - X + 0.3Y
column C7		2 End	-3	135,7566	258,8953	0,524369	Uniform - 0.3X + Y
column C7		2 Start	-2	246,0856	251,8952	0,976936	Uniform - X + 0.3Y
column C7		2 Start	-3	135,7566	258,8953	0,524369	Uniform - 0.3X + Y
column C8		2 End	-2	239,2374	262,0536	0,912933	Uniform - X + 0.3Y
column C8		2 End	-3	156,7969	271,7903	0,576904	Uniform - 0.3X + Y
column C8		2 Start	-2	239,2374	262,0536	0,912933	Uniform - X + 0.3Y
column C8		2 Start	-3	156,7969	271,7903	0,576904	Uniform - 0.3X + Y
column C9		2 End	-2	191,8764	333,8836	0,574681	Uniform - X + 0.3Y
column C9		2 End	-3	167,7921	321,8683	0,521307	Uniform - 0.3X + Y
column C9		2 Start	-2	191,8764	333,8836	0,574681	Uniform - X + 0.3Y
column C9		2 Start	-3	167,7921	321,8683	0,521307	Uniform - 0.3X + Y

Life safety							
Member	floor	edge	local axis	value	capacity	perf ratio	analysis
column C1		2 End	-2	224,7408	327,4165	0,686407	Uniform - X + 0.3Y
column C1		2 End	-3	125,3175	300,3791	0,417198	Uniform - 0.3X + Y
column C1		2 Start	-2	224,7408	329,7814	0,681484	Uniform - X + 0.3Y
column C1		2 Start	-3	125,3175	300,3791	0,417198	Uniform - 0.3X + Y
column C10		2 End	-2	86,44156	218,4746	0,39566	Uniform - X - 0.3Y
column C10		2 End	-3	77,24568	230,3493	0,335341	Uniform - 0.3X + Y
column C10		2 Start	-2	86,44156	218,4746	0,39566	Uniform - X - 0.3Y
column C10		2 Start	-3	77,24568	230,3493	0,335341	Uniform - 0.3X + Y
column C11		2 End	-2	113,0386	237,7554	0,475441	Uniform - X + 0.3Y
column C11		2 End	-3	83,5523	231,4142	0,361051	Uniform - 0.3X + Y
column C11		2 Start	-2	113,0386	237,7554	0,475441	Uniform - X + 0.3Y
column C11		2 Start	-3	83,5523	231,4142	0,361051	Uniform - 0.3X + Y
column C12		2 End	-2	116,4839	219,2696	0,531236	Uniform - X + 0.3Y
column C12		2 End	-3	77,02916	225,8044	0,341132	Uniform - 0.3X + Y
column C12		2 Start	-2	116,4839	219,2696	0,531236	Uniform - X + 0.3Y
column C12		2 Start	-3	77,02916	225,8044	0,341132	Uniform - 0.3X + Y
column C2		2 End	-2	348,9416	287,6613	1,21303	Uniform - X + 0.3Y
column C2		2 End	-3	148,4783	287,6613	0,516157	Uniform - X + 0.3Y
column C2		2 Start	-2	348,9416	287,6613	1,21303	Uniform - X + 0.3Y
column C2		2 Start	-3	148,4783	287,6613	0,516157	Uniform - X + 0.3Y
column C3		2 End	-2	280,2549	300,129	0,933781	Uniform - X + 0.3Y
column C3		2 End	-3	156,0677	319,817	0,487991	Uniform - 0.3X + Y
column C3		2 Start	-2	280,2549	300,129	0,933781	Uniform - X + 0.3Y
column C3		2 Start	-3	156,0677	319,817	0,487991	Uniform - 0.3X + Y
column C4		2 End	-2	194,7563	310,7948	0,62664	Uniform - X - 0.3Y
column C4		2 End	-3	146,6012	305,6373	0,479658	Uniform - 0.3X + Y
column C4		2 Start	-2	194,7563	310,7948	0,62664	Uniform - X - 0.3Y
column C4		2 Start	-3	146,6012	305,6373	0,479658	Uniform - 0.3X + Y
column C5		2 End	-2	284,5978	321,0236	0,886532	Uniform - X + 0.3Y
column C5		2 End	-3	162,4629	317,3439	0,511946	Uniform - 0.3X + Y
column C5		2 Start	-2	284,5978	321,0236	0,886532	Uniform - X + 0.3Y
column C5		2 Start	-3	162,4629	317,3439	0,511946	Uniform - 0.3X + Y
column C6		2 End	-2	182,4941	293,4525	0,621886	Uniform - X + 0.3Y
column C6		2 End	-3	160,1665	295,4365	0,542135	Uniform - 0.3X + Y
column C6		2 Start	-2	182,4941	293,4525	0,621886	Uniform - X + 0.3Y
column C6		2 Start	-3	160,1665	295,4365	0,542135	Uniform - 0.3X + Y
column C7		2 End	-2	428,7677	245,256	1,748246	Uniform - X + 0.3Y
column C7		2 End	-3	190,7517	261,072	0,730648	Uniform - 0.3X + Y
column C7		2 Start	-2	428,7677	245,256	1,748246	Uniform - X + 0.3Y
column C7		2 Start	-3	190,7517	261,072	0,730648	Uniform - 0.3X + Y
column C8		2 End	-2	415,5724	262,3268	1,584178	Uniform - X + 0.3Y
column C8		2 End	-3	222,7826	277,1735	0,803766	Uniform - 0.3X + Y
column C8		2 Start	-2	415,5724	262,3268	1,584178	Uniform - X + 0.3Y
column C8		2 Start	-3	222,7826	277,1735	0,803766	Uniform - 0.3X + Y
column C9		2 End	-2	327,6889	343,8257	0,953067	Uniform - X + 0.3Y
column C9		2 End	-3	241,4988	323,4102	0,746726	Uniform - 0.3X + Y
column C9		2 Start	-2	327,6889	343,8257	0,953067	Uniform - X + 0.3Y
column C9		2 Start	-3	241,4988	323,4102	0,746726	Uniform - 0.3X + Y

Collapse prevention							
Member	floor	edge	local axis	value	capacity	perf ratio	analysis
column C1	2	End	-2	363,3745	293,2063	1,239313	Uniform - X + 0.3Y
column C1	2	End	-3	170,441	294,3434	0,579055	Uniform - 0.3X + Y
column C1	2	Start	-2	363,3745	319,7495	1,136435	Uniform - X + 0.3Y
column C1	2	Start	-3	170,441	294,3434	0,579055	Uniform - 0.3X + Y
column C10	2	End	-2	148,5204	226,7588	0,654971	Uniform - X + 0.3Y
column C10	2	End	-3	105,9586	233,6256	0,45354	Uniform - 0.3X + Y
column C10	2	Start	-2	148,5204	226,3528	0,656146	Uniform - X + 0.3Y
column C10	2	Start	-3	105,9586	233,6256	0,45354	Uniform - 0.3X + Y
column C11	2	End	-2	183,3053	228,9991	0,800463	Uniform - X + 0.3Y
column C11	2	End	-3	113,7634	232,9149	0,488434	Uniform - 0.3X + Y
column C11	2	Start	-2	183,3053	244,3052	0,750313	Uniform - X + 0.3Y
column C11	2	Start	-3	113,7634	232,9149	0,488434	Uniform - 0.3X + Y
column C12	2	End	-2	193,3745	219,9619	0,879127	Uniform - X + 0.3Y
column C12	2	End	-3	105,3315	228,1893	0,461597	Uniform - 0.3X + Y
column C12	2	Start	-2	193,3745	218,9907	0,883026	Uniform - X + 0.3Y
column C12	2	Start	-3	105,3315	228,1893	0,461597	Uniform - 0.3X + Y
column C2	2	End	-2	582,7163	284,8417	2,045755	Uniform - X + 0.3Y
column C2	2	End	-3	250,17	287,6613	0,869669	Uniform - X + 0.3Y
column C2	2	Start	-2	582,7163	280,3384	2,078618	Uniform - X + 0.3Y
column C2	2	Start	-3	250,17	287,6613	0,869669	Uniform - X + 0.3Y
column C3	2	End	-2	459,478	256,5449	1,791024	Uniform - X + 0.3Y
column C3	2	End	-3	210,2103	318,7345	0,659515	Uniform - 0.3X + Y
column C3	2	Start	-2	459,478	280,3507	1,63894	Uniform - X + 0.3Y
column C3	2	Start	-3	210,2103	321,725	0,653385	Uniform - 0.3X + Y
column C4	2	End	-2	301,0188	298,2115	1,009414	Uniform - X - 0.3Y
column C4	2	End	-3	200,1181	304,4855	0,657234	Uniform - 0.3X + Y
column C4	2	Start	-2	301,0188	303,4467	0,991999	Uniform - X - 0.3Y
column C4	2	Start	-3	200,1181	304,4855	0,657234	Uniform - 0.3X + Y
column C5	2	End	-2	465,0947	298,615	1,557506	Uniform - X + 0.3Y
column C5	2	End	-3	220,0577	315,1781	0,698201	Uniform - 0.3X + Y
column C5	2	Start	-2	465,0947	319,733	1,454635	Uniform - X + 0.3Y
column C5	2	Start	-3	220,0577	316,1581	0,696037	Uniform - 0.3X + Y
column C6	2	End	-2	296,0758	262,0238	1,129958	Uniform - X + 0.3Y
column C6	2	End	-3	218,9325	281,6345	0,777364	Uniform - 0.3X + Y
column C6	2	Start	-2	296,0758	273,9595	1,080729	Uniform - X + 0.3Y
column C6	2	Start	-3	218,9325	281,2493	0,778429	Uniform - 0.3X + Y
column C7	2	End	-2	706,3922	230,8903	3,059428	Uniform - X + 0.3Y
column C7	2	End	-3	257,6109	263,6454	0,977111	Uniform - 0.3X + Y
column C7	2	Start	-2	706,3922	233,7241	3,022334	Uniform - X + 0.3Y
column C7	2	Start	-3	257,6109	263,6454	0,977111	Uniform - 0.3X + Y
column C8	2	End	-2	683,5511	255,0141	2,680444	Uniform - X + 0.3Y
column C8	2	End	-3	303,0034	274,1199	1,105368	Uniform - 0.3X + Y
column C8	2	Start	-2	683,5511	262,7404	2,601622	Uniform - X + 0.3Y
column C8	2	Start	-3	303,0034	275,3244	1,100533	Uniform - 0.3X + Y
column C9	2	End	-2	534,0849	313,8652	1,701638	Uniform - X + 0.3Y
column C9	2	End	-3	331,1063	325,2461	1,018018	Uniform - 0.3X + Y
column C9	2	Start	-2	534,0849	346,204	1,542688	Uniform - X + 0.3Y
column C9	2	Start	-3	331,1063	325,2461	1,018018	Uniform - 0.3X + Y

Retrofitted Member Chord Ratio Uniaxial Analysis

Operational level (1-A)							
Member	floor	edge	local axis	value	capacity	perf ratio	analysis
column C1	2	End	-2	0,0041	0,0170	0,2400	Uniform + Y
column C1	2	End	-3	0,0055	0,0170	0,3224	Uniform + X
column C1	2	Start	-2	0,0041	0,0175	0,2323	Uniform - Y
column C1	2	Start	-3	0,0051	0,0174	0,2934	Uniform - X
column C10	2	End	-2	0,0041	0,0157	0,2581	Uniform - Y
column C10	2	End	-3	0,0039	0,0164	0,2393	Uniform - X
column C10	2	Start	-2	0,0039	0,0161	0,2440	Uniform + Y
column C10	2	Start	-3	0,0035	0,0157	0,2220	Uniform - X
column C11	2	End	-2	0,0040	0,0199	0,2006	Uniform - Y
column C11	2	End	-3	0,0039	0,0212	0,1849	Uniform - X
column C11	2	Start	-2	0,0043	0,0204	0,2101	Uniform - Y
column C11	2	Start	-3	0,0035	0,0204	0,1720	Uniform - X
column C12	2	End	-2	0,0037	0,0196	0,1903	Uniform - Y
column C12	2	End	-3	0,0035	0,0209	0,1656	Uniform + X
column C12	2	Start	-2	0,0040	0,0201	0,1985	Uniform - Y
column C12	2	Start	-3	0,0034	0,0201	0,1692	Uniform - X
column C2	2	End	-2	0,0035	0,0175	0,2002	Uniform - Y
column C2	2	End	-3	0,0042	0,0173	0,2456	Uniform + X
column C2	2	Start	-2	0,0031	0,0168	0,1848	Uniform - Y
column C2	2	Start	-3	0,0042	0,0162	0,2575	Uniform - X
column C3	2	End	-2	0,0041	0,0169	0,2450	Uniform + Y
column C3	2	End	-3	0,0049	0,0164	0,3014	Uniform - X
column C3	2	Start	-2	0,0043	0,0171	0,2520	Uniform + Y
column C3	2	Start	-3	0,0045	0,0158	0,2817	Uniform - X
column C4	2	End	-2	0,0041	0,0162	0,2515	Uniform + Y
column C4	2	End	-3	0,0043	0,0171	0,2488	Uniform - X
column C4	2	Start	-2	0,0043	0,0166	0,2626	Uniform + Y
column C4	2	Start	-3	0,0040	0,0168	0,2403	Uniform - X
column C5	2	End	-2	0,0041	0,0169	0,2442	Uniform + Y
column C5	2	End	-3	0,0043	0,0174	0,2458	Uniform - X
column C5	2	Start	-2	0,0044	0,0173	0,2549	Uniform + Y
column C5	2	Start	-3	0,0039	0,0168	0,2294	Uniform - X
column C6	2	End	-2	0,0041	0,0161	0,2536	Uniform + Y
column C6	2	End	-3	0,0043	0,0164	0,2586	Uniform - X
column C6	2	Start	-2	0,0044	0,0165	0,2643	Uniform + Y
column C6	2	Start	-3	0,0038	0,0159	0,2421	Uniform - X
column C7	2	End	-2	0,0041	0,0164	0,2502	Uniform + Y
column C7	2	End	-3	0,0059	0,0177	0,3335	Uniform - X
column C7	2	Start	-2	0,0044	0,0167	0,2609	Uniform + Y
column C7	2	Start	-3	0,0054	0,0172	0,3126	Uniform - X
column C8	2	End	-2	0,0041	0,0169	0,2402	Uniform - Y
column C8	2	End	-3	0,0049	0,0180	0,2739	Uniform - X
column C8	2	Start	-2	0,0044	0,0173	0,2521	Uniform - Y
column C8	2	Start	-3	0,0045	0,0175	0,2575	Uniform - X
column C9	2	End	-2	0,0041	0,0167	0,2467	Uniform - Y
column C9	2	End	-3	0,0049	0,0180	0,2729	Uniform - X
column C9	2	Start	-2	0,0045	0,0172	0,2610	Uniform - Y
column C9	2	Start	-3	0,0044	0,0165	0,2688	Uniform + X

Life safety							
Member	floor	edge	local axis	value	capacity	perf ratio	analysis
column C1	2	End	-2	0,005647	0,049372	0,114366	Uniform + Y
column C1	2	End	-3	0,008363	0,050615	0,165233	Uniform - X
column C1	2	Start	-2	0,005602	0,050336	0,1113	Uniform - Y
column C1	2	Start	-3	0,007537	0,050318	0,149784	Uniform - X
column C10	2	End	-2	0,005594	0,048259	0,115914	Uniform - Y
column C10	2	End	-3	0,005136	0,048986	0,104845	Uniform - X
column C10	2	Start	-2	0,005407	0,048855	0,110676	Uniform + Y
column C10	2	Start	-3	0,004656	0,048458	0,096074	Uniform - X
column C11	2	End	-2	0,00552	0,053129	0,103898	Uniform - Y
column C11	2	End	-3	0,005237	0,054603	0,095904	Uniform - X
column C11	2	Start	-2	0,005903	0,053602	0,110137	Uniform - Y
column C11	2	Start	-3	0,004714	0,053838	0,087566	Uniform - X
column C12	2	End	-2	0,005333	0,054902	0,097141	Uniform + Y
column C12	2	End	-3	0,004471	0,054338	0,082283	Uniform + X
column C12	2	Start	-2	0,005702	0,055402	0,102918	Uniform + Y
column C12	2	Start	-3	0,004657	0,054636	0,085239	Uniform + X
column C2	2	End	-2	0,004709	0,050247	0,093714	Uniform - Y
column C2	2	End	-3	0,005724	0,049965	0,114549	Uniform + X
column C2	2	Start	-2	0,004192	0,049581	0,084558	Uniform - Y
column C2	2	Start	-3	0,006164	0,048867	0,126136	Uniform - X
column C3	2	End	-2	0,005701	0,049557	0,11504	Uniform + Y
column C3	2	End	-3	0,006948	0,048712	0,142626	Uniform - X
column C3	2	Start	-2	0,005932	0,049754	0,119233	Uniform + Y
column C3	2	Start	-3	0,006314	0,048391	0,130476	Uniform - X
column C4	2	End	-2	0,00562	0,048787	0,115193	Uniform + Y
column C4	2	End	-3	0,005709	0,049762	0,114729	Uniform - X
column C4	2	Start	-2	0,006005	0,049089	0,122324	Uniform + Y
column C4	2	Start	-3	0,005513	0,04959	0,111165	Uniform - X
column C5	2	End	-2	0,005689	0,049555	0,114802	Uniform + Y
column C5	2	End	-3	0,005829	0,050019	0,116535	Uniform - X
column C5	2	Start	-2	0,006064	0,049867	0,121598	Uniform + Y
column C5	2	Start	-3	0,005289	0,049504	0,106847	Uniform - X
column C6	2	End	-2	0,005617	0,048708	0,115324	Uniform + Y
column C6	2	End	-3	0,005787	0,048915	0,118309	Uniform - X
column C6	2	Start	-2	0,005979	0,048987	0,122048	Uniform + Y
column C6	2	Start	-3	0,005276	0,048476	0,108828	Uniform - X
column C7	2	End	-2	0,005659	0,046684	0,121214	Uniform - Y
column C7	2	End	-3	0,008544	0,050083	0,170605	Uniform - X
column C7	2	Start	-2	0,005992	0,046973	0,127562	Uniform - Y
column C7	2	Start	-3	0,007848	0,049859	0,157405	Uniform - X
column C8	2	End	-2	0,005723	0,048957	0,11689	Uniform + Y
column C8	2	End	-3	0,006946	0,050602	0,137257	Uniform - X
column C8	2	Start	-2	0,006054	0,04925	0,122915	Uniform + Y
column C8	2	Start	-3	0,006386	0,050263	0,127051	Uniform - X
column C9	2	End	-2	0,0057	0,049305	0,115607	Uniform - Y
column C9	2	End	-3	0,006839	0,049479	0,138226	Uniform - X
column C9	2	Start	-2	0,006197	0,049694	0,124695	Uniform - Y
column C9	2	Start	-3	0,006357	0,049147	0,129338	Uniform - X

Collapse prevention							
Member	floor	edge	local axis	value	capacity	perf ratio	analysis
column C1	2	End	-2	0,007739	0,063699	0,121497	Uniform + Y
column C1	2	End	-3	0,011837	0,06473	0,182862	Uniform - X
column C1	2	Start	-2	0,007716	0,065291	0,118172	Uniform - Y
column C1	2	Start	-3	0,010978	0,06461	0,16992	Uniform - X
column C10	2	End	-2	0,007647	0,062813	0,121746	Uniform - Y
column C10	2	End	-3	0,006613	0,063715	0,103783	Uniform - X
column C10	2	Start	-2	0,007424	0,063763	0,11643	Uniform + Y
column C10	2	Start	-3	0,006069	0,063347	0,095809	Uniform - X
column C11	2	End	-2	0,007487	0,068273	0,109664	Uniform - Y
column C11	2	End	-3	0,006818	0,069558	0,09802	Uniform - X
column C11	2	Start	-2	0,008216	0,070746	0,116128	Uniform + Y
column C11	2	Start	-3	0,006217	0,068931	0,090184	Uniform - X
column C12	2	End	-2	0,007074	0,07022	0,100746	Uniform + Y
column C12	2	End	-3	0,005599	0,069411	0,080671	Uniform + X
column C12	2	Start	-2	0,007567	0,070644	0,10712	Uniform + Y
column C12	2	Start	-3	0,005962	0,068689	0,086804	Uniform - X
column C2	2	End	-2	0,005933	0,064939	0,091364	Uniform - Y
column C2	2	End	-3	0,008234	0,064954	0,126764	Uniform + X
column C2	2	Start	-2	0,005581	0,064637	0,086347	Uniform - Y
column C2	2	Start	-3	0,009352	0,063366	0,147592	Uniform - X
column C3	2	End	-2	0,007694	0,064399	0,11948	Uniform + Y
column C3	2	End	-3	0,009577	0,063309	0,151281	Uniform - X
column C3	2	Start	-2	0,007974	0,064483	0,123667	Uniform + Y
column C3	2	Start	-3	0,008823	0,063116	0,139784	Uniform - X
column C4	2	End	-2	0,007683	0,063596	0,120805	Uniform + Y
column C4	2	End	-3	0,007541	0,064576	0,116776	Uniform - X
column C4	2	Start	-2	0,008271	0,063778	0,129678	Uniform + Y
column C4	2	Start	-3	0,007409	0,06453	0,114815	Uniform - X
column C5	2	End	-2	0,007727	0,064424	0,119946	Uniform + Y
column C5	2	End	-3	0,007773	0,064719	0,120103	Uniform - X
column C5	2	Start	-2	0,008226	0,064607	0,127325	Uniform + Y
column C5	2	Start	-3	0,007146	0,064452	0,110871	Uniform - X
column C6	2	End	-2	0,007555	0,063523	0,118937	Uniform + Y
column C6	2	End	-3	0,00771	0,063546	0,121334	Uniform - X
column C6	2	Start	-2	0,008032	0,063681	0,126131	Uniform + Y
column C6	2	Start	-3	0,007127	0,063328	0,112539	Uniform - X
column C7	2	End	-2	0,007684	0,059436	0,129289	Uniform - Y
column C7	2	End	-3	0,012137	0,064798	0,187312	Uniform - X
column C7	2	Start	-2	0,008089	0,059589	0,135749	Uniform - Y
column C7	2	Start	-3	0,011302	0,064658	0,174794	Uniform - X
column C8	2	End	-2	0,007782	0,062849	0,123823	Uniform + Y
column C8	2	End	-3	0,009574	0,065372	0,146458	Uniform - X
column C8	2	Start	-2	0,008215	0,063022	0,130346	Uniform + Y
column C8	2	Start	-3	0,008918	0,065218	0,136743	Uniform - X
column C9	2	End	-2	0,007807	0,064135	0,121728	Uniform - Y
column C9	2	End	-3	0,009368	0,063373	0,147826	Uniform - X
column C9	2	Start	-2	0,008465	0,064334	0,131574	Uniform - Y
column C9	2	Start	-3	0,008881	0,063209	0,140504	Uniform - X

Retrofitted Member Shear Force Uniaxial Analysis

Operational level (1-A)							
Member	floor	edge	local axis	value	capacity	perf ratio	analysis
column C1		2 End	-2	204,1651	575,7812	0,354588	Uniform - X
column C1		2 End	-3	160,811	572,6704	0,280809	Uniform - Y
column C1		2 Start	-2	204,1651	575,7812	0,354588	Uniform - X
column C1		2 Start	-3	160,811	572,6704	0,280809	Uniform - Y
column C10		2 End	-2	124,7082	536,5478	0,232427	Uniform - X
column C10		2 End	-3	134,0754	539,6906	0,24843	Uniform + Y
column C10		2 Start	-2	124,7082	536,5478	0,232427	Uniform - X
column C10		2 Start	-3	134,0754	539,6906	0,24843	Uniform + Y
column C11		2 End	-2	97,89332	432,8933	0,226137	Uniform - X
column C11		2 End	-3	112,852	443,673	0,254358	Uniform + Y
column C11		2 Start	-2	97,89332	432,8933	0,226137	Uniform - X
column C11		2 Start	-3	112,852	443,673	0,254358	Uniform + Y
column C12		2 End	-2	92,01262	433,9904	0,212015	Uniform + X
column C12		2 End	-3	107,2388	440,6298	0,243376	Uniform + Y
column C12		2 Start	-2	92,01262	433,9904	0,212015	Uniform + X
column C12		2 Start	-3	107,2388	440,6298	0,243376	Uniform + Y
column C2		2 End	-2	164,1891	567,5156	0,289312	Uniform + X
column C2		2 End	-3	130,9577	564,8413	0,231849	Uniform - Y
column C2		2 Start	-2	164,1891	567,5156	0,289312	Uniform + X
column C2		2 Start	-3	130,9577	564,8413	0,231849	Uniform - Y
column C3		2 End	-2	170,5197	546,2476	0,312166	Uniform - X
column C3		2 End	-3	161,11	563,1866	0,286069	Uniform + Y
column C3		2 Start	-2	170,5197	546,2476	0,312166	Uniform - X
column C3		2 Start	-3	161,11	563,1866	0,286069	Uniform + Y
column C4		2 End	-2	158,4566	562,0787	0,281912	Uniform - X
column C4		2 End	-3	156,3052	551,5246	0,283406	Uniform + Y
column C4		2 Start	-2	158,4566	562,0787	0,281912	Uniform - X
column C4		2 Start	-3	156,3052	551,5246	0,283406	Uniform + Y
column C5		2 End	-2	157,2869	564,6961	0,278534	Uniform - X
column C5		2 End	-3	162,6321	564,3288	0,288187	Uniform + Y
column C5		2 Start	-2	157,2869	564,6961	0,278534	Uniform - X
column C5		2 Start	-3	162,6321	564,3288	0,288187	Uniform + Y
column C6		2 End	-2	149,7948	547,3707	0,273662	Uniform - X
column C6		2 End	-3	156,1801	550,0776	0,283924	Uniform + Y
column C6		2 Start	-2	149,7948	547,3707	0,273662	Uniform - X
column C6		2 Start	-3	156,1801	550,0776	0,283924	Uniform + Y
column C7		2 End	-2	207,3465	570,1858	0,363647	Uniform - X
column C7		2 End	-3	171,9725	589,2307	0,291859	Uniform - Y
column C7		2 Start	-2	207,3465	570,1858	0,363647	Uniform - X
column C7		2 Start	-3	171,9725	589,2307	0,291859	Uniform - Y
column C8		2 End	-2	182,5638	575,5875	0,317178	Uniform - X
column C8		2 End	-3	170,1624	581,5956	0,292579	Uniform + Y
column C8		2 Start	-2	182,5638	575,5875	0,317178	Uniform - X
column C8		2 Start	-3	170,1624	581,5956	0,292579	Uniform + Y
column C9		2 End	-2	183,4003	580,9493	0,315691	Uniform - X
column C9		2 End	-3	163,6787	562,6173	0,290924	Uniform - Y
column C9		2 Start	-2	183,4003	580,9493	0,315691	Uniform - X
column C9		2 Start	-3	163,6787	562,6173	0,290924	Uniform - Y

Life safety							
Member	floor	edge	local axis	value	capacity	perf ratio	analysis
column C1	2	End	-2	243,4354	579,1394	0,42034	Uniform - X
column C1	2	End	-3	208,537	575,4479	0,362391	Uniform - Y
column C1	2	Start	-2	243,4354	579,1394	0,42034	Uniform - X
column C1	2	Start	-3	208,537	575,4479	0,362391	Uniform - Y
column C10	2	End	-2	157,9882	538,2228	0,293537	Uniform - X
column C10	2	End	-3	175,583	542,3314	0,323756	Uniform + Y
column C10	2	Start	-2	157,9882	538,2228	0,293537	Uniform - X
column C10	2	Start	-3	175,583	542,3314	0,323756	Uniform + Y
column C11	2	End	-2	126,7762	432,4433	0,293163	Uniform - X
column C11	2	End	-3	148,6814	446,2207	0,333202	Uniform + Y
column C11	2	Start	-2	126,7762	432,4433	0,293163	Uniform - X
column C11	2	Start	-3	148,6814	446,2207	0,333202	Uniform + Y
column C12	2	End	-2	117,6665	435,7773	0,270015	Uniform + X
column C12	2	End	-3	140,7186	444,0092	0,316927	Uniform + Y
column C12	2	Start	-2	117,6665	435,7773	0,270015	Uniform + X
column C12	2	Start	-3	140,7186	444,0092	0,316927	Uniform + Y
column C2	2	End	-2	211,4651	569,5306	0,371297	Uniform + X
column C2	2	End	-3	169,2139	567,3055	0,298276	Uniform - Y
column C2	2	Start	-2	211,4651	569,5306	0,371297	Uniform + X
column C2	2	Start	-3	169,2139	567,3055	0,298276	Uniform - Y
column C3	2	End	-2	224,6583	579,4454	0,387713	Uniform + X
column C3	2	End	-3	207,7796	563,4841	0,368741	Uniform + Y
column C3	2	Start	-2	224,6583	579,4454	0,387713	Uniform + X
column C3	2	Start	-3	207,7796	563,4841	0,368741	Uniform + Y
column C4	2	End	-2	200,9073	563,6649	0,35643	Uniform - X
column C4	2	End	-3	202,2058	550,2133	0,367504	Uniform + Y
column C4	2	Start	-2	200,9073	563,6649	0,35643	Uniform - X
column C4	2	Start	-3	202,2058	550,2133	0,367504	Uniform + Y
column C5	2	End	-2	202,931	565,1709	0,359061	Uniform - X
column C5	2	End	-3	209,4232	564,4409	0,371028	Uniform + Y
column C5	2	Start	-2	202,931	565,1709	0,359061	Uniform - X
column C5	2	Start	-3	209,4232	564,4409	0,371028	Uniform + Y
column C6	2	End	-2	191,1838	545,3205	0,35059	Uniform - X
column C6	2	End	-3	201,1713	548,4542	0,366797	Uniform + Y
column C6	2	Start	-2	191,1838	545,3205	0,35059	Uniform - X
column C6	2	Start	-3	201,1713	548,4542	0,366797	Uniform + Y
column C7	2	End	-2	240,8676	568,2566	0,423871	Uniform - X
column C7	2	End	-3	220,6315	593,6927	0,371626	Uniform - Y
column C7	2	Start	-2	240,8676	568,2566	0,423871	Uniform - X
column C7	2	Start	-3	220,6315	593,6927	0,371626	Uniform - Y
column C8	2	End	-2	229,8527	575,996	0,399053	Uniform - X
column C8	2	End	-3	218,1615	584,3594	0,373334	Uniform + Y
column C8	2	Start	-2	229,8527	575,996	0,399053	Uniform - X
column C8	2	Start	-3	218,1615	584,3594	0,373334	Uniform + Y
column C9	2	End	-2	229,7249	583,6325	0,393612	Uniform - X
column C9	2	End	-3	209,2893	560,7096	0,373258	Uniform - Y
column C9	2	Start	-2	229,7249	583,6325	0,393612	Uniform - X
column C9	2	Start	-3	209,2893	560,7096	0,373258	Uniform - Y

Collapse prevention							
Member	floor	edge	local axis	value	capacity	perf ratio	analysis
column C1	2	End	-3	242,0035	577,2225	0,419255	Uniform - Y
column C1	2	Start	-3	242,0035	577,2225	0,419255	Uniform - Y
column C1	2	End	-2	261,9004	581,0204	0,450759	Uniform - X
column C1	2	Start	-2	261,9004	581,0204	0,450759	Uniform - X
column C10	2	End	-2	187,386	539,279	0,347475	Uniform - X
column C10	2	Start	-2	187,386	539,279	0,347475	Uniform - X
column C10	2	End	-3	209,9175	544,2371	0,38571	Uniform + Y
column C10	2	Start	-3	209,9175	544,2371	0,38571	Uniform + Y
column C11	2	End	-2	159,2554	431,7527	0,368858	Uniform - X
column C11	2	Start	-2	159,2554	431,7527	0,368858	Uniform - X
column C11	2	End	-3	182,8461	447,7789	0,40834	Uniform + Y
column C11	2	Start	-3	182,8461	447,7789	0,40834	Uniform + Y
column C12	2	End	-2	143,4942	436,8076	0,328507	Uniform + X
column C12	2	Start	-2	143,4942	436,8076	0,328507	Uniform + X
column C12	2	End	-3	174,9147	446,1589	0,392046	Uniform + Y
column C12	2	Start	-3	174,9147	446,1589	0,392046	Uniform + Y
column C2	2	End	-3	207,1513	568,6682	0,364274	Uniform - Y
column C2	2	Start	-3	207,1513	568,6682	0,364274	Uniform - Y
column C2	2	End	-2	240,3813	570,2576	0,421531	Uniform + X
column C2	2	Start	-2	240,3813	570,2576	0,421531	Uniform + X
column C3	2	End	-3	234,7827	563,2637	0,416826	Uniform + Y
column C3	2	Start	-3	234,7827	563,2637	0,416826	Uniform + Y
column C3	2	End	-2	247,5912	581,52	0,425766	Uniform + X
column C3	2	Start	-2	247,5912	581,52	0,425766	Uniform + X
column C4	2	End	-2	227,3664	564,9776	0,402434	Uniform - X
column C4	2	Start	-2	227,3664	564,9776	0,402434	Uniform - X
column C4	2	End	-3	233,232	562,2065	0,414851	Uniform - Y
column C4	2	Start	-3	233,232	562,2065	0,414851	Uniform - Y
column C5	2	End	-2	233,2899	565,6523	0,412426	Uniform - X
column C5	2	Start	-2	233,2899	565,6523	0,412426	Uniform - X
column C5	2	End	-3	236,3194	564,4933	0,41864	Uniform + Y
column C5	2	Start	-3	236,3194	564,4933	0,41864	Uniform + Y
column C6	2	End	-2	223,4608	564,7483	0,395682	Uniform + X
column C6	2	Start	-2	223,4608	564,7483	0,395682	Uniform + X
column C6	2	End	-3	224,3852	547,8314	0,409588	Uniform + Y
column C6	2	Start	-3	224,3852	547,8314	0,409588	Uniform + Y
column C7	2	End	-3	255,2915	596,9001	0,427696	Uniform - Y
column C7	2	Start	-3	255,2915	596,9001	0,427696	Uniform - Y
column C7	2	End	-2	261,4869	577,6835	0,452647	Uniform + X
column C7	2	Start	-2	261,4869	577,6835	0,452647	Uniform + X
column C8	2	End	-3	249,6401	586,043	0,425976	Uniform + Y
column C8	2	Start	-3	249,6401	586,043	0,425976	Uniform + Y
column C8	2	End	-2	253,0568	576,5126	0,438944	Uniform - X
column C8	2	Start	-2	253,0568	576,5126	0,438944	Uniform - X
column C9	2	End	-3	243,7503	575,2269	0,423746	Uniform + Y
column C9	2	Start	-3	243,7503	575,2269	0,423746	Uniform + Y
column C9	2	End	-2	252,0837	585,1079	0,430833	Uniform - X
column C9	2	Start	-2	252,0837	585,1079	0,430833	Uniform - X

Retrofitted Member Chord Rotation Biaxial Analysis

Operational level (1-A)							
Member	floor	edge	local axis	value	capacity	perf ratio	analysis
column C1	2	End	-2	0,0043	0,0174	0,2469	Uniform + 0.3X - Y
column C1	2	End	-3	0,0059	0,0180	0,3276	Uniform - X + 0.3Y
column C1	2	Start	-2	0,0042	0,0173	0,2415	Uniform + 0.3X - Y
column C1	2	Start	-3	0,0052	0,0173	0,2983	Uniform - X + 0.3Y
column C10	2	End	-2	0,0042	0,0157	0,2681	Uniform + 0.3X - Y
column C10	2	End	-3	0,0039	0,0162	0,2403	Uniform - X - 0.3Y
column C10	2	Start	-2	0,0040	0,0162	0,2493	Uniform - 0.3X + Y
column C10	2	Start	-3	0,0035	0,0156	0,2241	Uniform - X - 0.3Y
column C11	2	End	-2	0,0040	0,0199	0,2018	Uniform - 0.3X - Y
column C11	2	End	-3	0,0039	0,0210	0,1869	Uniform - X - 0.3Y
column C11	2	Start	-2	0,0043	0,0204	0,2107	Uniform - 0.3X - Y
column C11	2	Start	-3	0,0035	0,0202	0,1747	Uniform - X - 0.3Y
column C12	2	End	-2	0,0039	0,0196	0,2005	Uniform - 0.3X - Y
column C12	2	End	-3	0,0034	0,0205	0,1677	Uniform + X - 0.3Y
column C12	2	Start	-2	0,0042	0,0201	0,2083	Uniform - 0.3X - Y
column C12	2	Start	-3	0,0035	0,0206	0,1686	Uniform + X - 0.3Y
column C2	2	End	-2	0,0035	0,0172	0,2048	Uniform - 0.3X - Y
column C2	2	End	-3	0,0044	0,0175	0,2510	Uniform + X - 0.3Y
column C2	2	Start	-2	0,0032	0,0167	0,1922	Uniform - 0.3X - Y
column C2	2	Start	-3	0,0042	0,0160	0,2624	Uniform - X + 0.3Y
column C3	2	End	-2	0,0042	0,0165	0,2566	Uniform - 0.3X - Y
column C3	2	End	-3	0,0049	0,0164	0,3008	Uniform - X + 0.3Y
column C3	2	Start	-2	0,0045	0,0168	0,2657	Uniform - 0.3X - Y
column C3	2	Start	-3	0,0045	0,0159	0,2810	Uniform - X + 0.3Y
column C4	2	End	-2	0,0042	0,0163	0,2564	Uniform - 0.3X + Y
column C4	2	End	-3	0,0042	0,0172	0,2459	Uniform - X - 0.3Y
column C4	2	Start	-2	0,0045	0,0166	0,2675	Uniform - 0.3X + Y
column C4	2	Start	-3	0,0040	0,0167	0,2397	Uniform - X + 0.3Y
column C5	2	End	-2	0,0041	0,0169	0,2413	Uniform + 0.3X + Y
column C5	2	End	-3	0,0043	0,0174	0,2457	Uniform - X - 0.3Y
column C5	2	Start	-2	0,0044	0,0172	0,2528	Uniform - 0.3X - Y
column C5	2	Start	-3	0,0039	0,0168	0,2302	Uniform - X - 0.3Y
column C6	2	End	-2	0,0042	0,0162	0,2608	Uniform + 0.3X + Y
column C6	2	End	-3	0,0042	0,0165	0,2571	Uniform - X - 0.3Y
column C6	2	Start	-2	0,0045	0,0166	0,2705	Uniform + 0.3X + Y
column C6	2	Start	-3	0,0039	0,0160	0,2417	Uniform - X - 0.3Y
column C7	2	End	-2	0,0041	0,0165	0,2464	Uniform + 0.3X + Y
column C7	2	End	-3	0,0060	0,0174	0,3454	Uniform - X + 0.3Y
column C7	2	Start	-2	0,0043	0,0167	0,2568	Uniform - 0.3X + Y
column C7	2	Start	-3	0,0054	0,0169	0,3231	Uniform - X + 0.3Y
column C8	2	End	-2	0,0041	0,0169	0,2414	Uniform - 0.3X - Y
column C8	2	End	-3	0,0049	0,0179	0,2761	Uniform - X - 0.3Y
column C8	2	Start	-2	0,0044	0,0173	0,2529	Uniform - 0.3X - Y
column C8	2	Start	-3	0,0045	0,0171	0,2620	Uniform + X - 0.3Y
column C9	2	End	-2	0,0043	0,0166	0,2596	Uniform + 0.3X - Y
column C9	2	End	-3	0,0046	0,0165	0,2768	Uniform + X - 0.3Y
column C9	2	Start	-2	0,0047	0,0170	0,2744	Uniform + 0.3X - Y
column C9	2	Start	-3	0,0045	0,0164	0,2730	Uniform + X - 0.3Y

Life safety							
Member	floor	edge	local axis	value	capacity	perf ratio	analysis
column C1	2	End	-2	0,006049	0,050147	0,120634	Uniform + 0.3X - Y
column C1	2	End	-3	0,00862	0,050587	0,170401	Uniform - X + 0.3Y
column C1	2	Start	-2	0,005859	0,05006	0,117042	Uniform + 0.3X - Y
column C1	2	Start	-3	0,007775	0,050345	0,154428	Uniform - X + 0.3Y
column C10	2	End	-2	0,005908	0,048243	0,122468	Uniform + 0.3X - Y
column C10	2	End	-3	0,005164	0,048754	0,105925	Uniform - X - 0.3Y
column C10	2	Start	-2	0,00566	0,048968	0,115578	Uniform - 0.3X + Y
column C10	2	Start	-3	0,004691	0,04823	0,097265	Uniform - X - 0.3Y
column C11	2	End	-2	0,005597	0,053142	0,105316	Uniform - 0.3X - Y
column C11	2	End	-3	0,005293	0,054256	0,097551	Uniform - X - 0.3Y
column C11	2	Start	-2	0,005961	0,053576	0,111261	Uniform - 0.3X - Y
column C11	2	Start	-3	0,004811	0,053566	0,089822	Uniform - X - 0.3Y
column C12	2	End	-2	0,00546	0,053045	0,102934	Uniform - 0.3X - Y
column C12	2	End	-3	0,004464	0,053892	0,082839	Uniform + X - 0.3Y
column C12	2	Start	-2	0,005763	0,053417	0,10788	Uniform - 0.3X - Y
column C12	2	Start	-3	0,004655	0,054194	0,085895	Uniform + X - 0.3Y
column C2	2	End	-2	0,004836	0,049948	0,096811	Uniform - 0.3X - Y
column C2	2	End	-3	0,006037	0,050181	0,120299	Uniform + X - 0.3Y
column C2	2	Start	-2	0,004386	0,049373	0,088835	Uniform - 0.3X - Y
column C2	2	Start	-3	0,006317	0,048637	0,129888	Uniform - X + 0.3Y
column C3	2	End	-2	0,005952	0,049106	0,121216	Uniform - 0.3X - Y
column C3	2	End	-3	0,007046	0,048719	0,144619	Uniform - X + 0.3Y
column C3	2	Start	-2	0,006227	0,049315	0,126267	Uniform - 0.3X - Y
column C3	2	Start	-3	0,006405	0,048421	0,132269	Uniform - X + 0.3Y
column C4	2	End	-2	0,005865	0,048911	0,119914	Uniform - 0.3X + Y
column C4	2	End	-3	0,005728	0,049846	0,114921	Uniform - X - 0.3Y
column C4	2	Start	-2	0,006265	0,049202	0,127337	Uniform - 0.3X + Y
column C4	2	Start	-3	0,005551	0,049497	0,112146	Uniform - X + 0.3Y
column C5	2	End	-2	0,005675	0,049544	0,114547	Uniform + 0.3X + Y
column C5	2	End	-3	0,005879	0,049986	0,117616	Uniform - X - 0.3Y
column C5	2	Start	-2	0,006054	0,049831	0,121498	Uniform - 0.3X - Y
column C5	2	Start	-3	0,005381	0,049527	0,108644	Uniform - X - 0.3Y
column C6	2	End	-2	0,005895	0,048866	0,120637	Uniform + 0.3X + Y
column C6	2	End	-3	0,005831	0,049009	0,118982	Uniform - X - 0.3Y
column C6	2	Start	-2	0,006231	0,049115	0,12686	Uniform + 0.3X + Y
column C6	2	Start	-3	0,005363	0,048609	0,11032	Uniform - X - 0.3Y
column C7	2	End	-2	0,005762	0,046941	0,122754	Uniform - 0.3X - Y
column C7	2	End	-3	0,008828	0,049692	0,177654	Uniform - X + 0.3Y
column C7	2	Start	-2	0,006081	0,047213	0,128792	Uniform - 0.3X - Y
column C7	2	Start	-3	0,008103	0,049427	0,163942	Uniform - X + 0.3Y
column C8	2	End	-2	0,005715	0,049118	0,116342	Uniform + 0.3X + Y
column C8	2	End	-3	0,007037	0,050618	0,13903	Uniform - X + 0.3Y
column C8	2	Start	-2	0,006088	0,049727	0,122418	Uniform - 0.3X - Y
column C8	2	Start	-3	0,006463	0,050042	0,129154	Uniform - X - 0.3Y
column C9	2	End	-2	0,006037	0,049085	0,122996	Uniform + 0.3X - Y
column C9	2	End	-3	0,006932	0,049313	0,140579	Uniform - X + 0.3Y
column C9	2	Start	-2	0,006553	0,049416	0,132612	Uniform + 0.3X - Y
column C9	2	Start	-3	0,006456	0,048929	0,131948	Uniform - X + 0.3Y

Collapse prevention							
Member	floor	edge	local axis	value	capacity	perf ratio	analysis
column C1	2	End	-2	0,008477	0,064963	0,130485	Uniform + 0.3X - Y
column C1	2	End	-3	0,012312	0,065465	0,188067	Uniform - X + 0.3Y
column C1	2	Start	-2	0,00828	0,064991	0,12741	Uniform + 0.3X - Y
column C1	2	Start	-3	0,011436	0,065389	0,174895	Uniform - X + 0.3Y
column C10	2	End	-2	0,008273	0,062764	0,131805	Uniform + 0.3X - Y
column C10	2	End	-3	0,006738	0,063466	0,106174	Uniform - X - 0.3Y
column C10	2	Start	-2	0,007918	0,063893	0,123931	Uniform - 0.3X + Y
column C10	2	Start	-3	0,006176	0,063083	0,097895	Uniform - X - 0.3Y
column C11	2	End	-2	0,007695	0,068271	0,112709	Uniform - 0.3X - Y
column C11	2	End	-3	0,006982	0,06916	0,10096	Uniform - X - 0.3Y
column C11	2	Start	-2	0,008146	0,068535	0,118859	Uniform - 0.3X - Y
column C11	2	Start	-3	0,006438	0,068651	0,093777	Uniform - X - 0.3Y
column C12	2	End	-2	0,007496	0,068156	0,10999	Uniform - 0.3X - Y
column C12	2	End	-3	0,005579	0,068009	0,082026	Uniform - X - 0.3Y
column C12	2	Start	-2	0,007852	0,068346	0,11489	Uniform - 0.3X - Y
column C12	2	Start	-3	0,006122	0,068604	0,089243	Uniform - X - 0.3Y
column C2	2	End	-2	0,006407	0,064653	0,099095	Uniform - 0.3X - Y
column C2	2	End	-3	0,008741	0,065169	0,134135	Uniform + X - 0.3Y
column C2	2	Start	-2	0,006041	0,064329	0,093906	Uniform - 0.3X - Y
column C2	2	Start	-3	0,009718	0,063226	0,153707	Uniform - X + 0.3Y
column C3	2	End	-2	0,008215	0,063898	0,128559	Uniform - 0.3X - Y
column C3	2	End	-3	0,009772	0,063332	0,154302	Uniform - X + 0.3Y
column C3	2	Start	-2	0,008525	0,064012	0,133182	Uniform - 0.3X - Y
column C3	2	Start	-3	0,009012	0,063172	0,142663	Uniform - X + 0.3Y
column C4	2	End	-2	0,008292	0,064235	0,129091	Uniform + 0.3X - Y
column C4	2	End	-3	0,007638	0,064656	0,118134	Uniform - X - 0.3Y
column C4	2	Start	-2	0,008754	0,063918	0,136955	Uniform - 0.3X + Y
column C4	2	Start	-3	0,007534	0,064606	0,11662	Uniform - X - 0.3Y
column C5	2	End	-2	0,007781	0,064419	0,120781	Uniform - 0.3X - Y
column C5	2	End	-3	0,007912	0,064711	0,122274	Uniform - X - 0.3Y
column C5	2	Start	-2	0,00828	0,0646	0,128175	Uniform - 0.3X - Y
column C5	2	Start	-3	0,007344	0,064446	0,113957	Uniform - X - 0.3Y
column C6	2	End	-2	0,008067	0,063683	0,126673	Uniform + 0.3X + Y
column C6	2	End	-3	0,007844	0,063727	0,12309	Uniform - X - 0.3Y
column C6	2	Start	-2	0,008511	0,063849	0,133302	Uniform + 0.3X + Y
column C6	2	Start	-3	0,00732	0,063466	0,115332	Uniform - X - 0.3Y
column C7	2	End	-2	0,007923	0,059904	0,132258	Uniform - 0.3X - Y
column C7	2	End	-3	0,012626	0,064329	0,196267	Uniform - X + 0.3Y
column C7	2	Start	-2	0,008311	0,060072	0,13836	Uniform - 0.3X - Y
column C7	2	Start	-3	0,011757	0,064176	0,183195	Uniform - X + 0.3Y
column C8	2	End	-2	0,007821	0,06309	0,123971	Uniform + 0.3X + Y
column C8	2	End	-3	0,009761	0,065015	0,150143	Uniform - X + 0.3Y
column C8	2	Start	-2	0,008239	0,063281	0,13019	Uniform + 0.3X + Y
column C8	2	Start	-3	0,009112	0,064792	0,140632	Uniform - X + 0.3Y
column C9	2	End	-2	0,008459	0,063853	0,132476	Uniform + 0.3X - Y
column C9	2	End	-3	0,009579	0,063225	0,151507	Uniform - X + 0.3Y
column C9	2	Start	-2	0,009109	0,06404	0,142236	Uniform + 0.3X - Y
column C9	2	Start	-3	0,009078	0,062952	0,144201	Uniform - X + 0.3Y

Retrofitted Member Shear Force Biaxial Analysis

Operational level (1-A)							
Member	floor	edge	local axis	value	capacity	perf ratio	analysis
column C1		2 End	-2	204,6318	578,8575	0,35351	Uniform - X - 0.3Y
column C1		2 End	-3	161,717	568,9639	0,284231	Uniform + 0.3X - Y
column C1		2 Start	-2	204,6318	578,8575	0,35351	Uniform - X - 0.3Y
column C1		2 Start	-3	161,717	568,9639	0,284231	Uniform + 0.3X - Y
column C10		2 End	-2	123,1492	533,0175	0,231042	Uniform - X - 0.3Y
column C10		2 End	-3	136,639	541,0183	0,252559	Uniform - 0.3X + Y
column C10		2 Start	-2	123,1492	533,0175	0,231042	Uniform - X - 0.3Y
column C10		2 Start	-3	136,639	541,0183	0,252559	Uniform - 0.3X + Y
column C11		2 End	-2	96,26407	429,4862	0,224138	Uniform - X - 0.3Y
column C11		2 End	-3	110,7239	443,3223	0,249759	Uniform + 0.3X + Y
column C11		2 Start	-2	96,26407	429,4862	0,224138	Uniform - X - 0.3Y
column C11		2 Start	-3	110,7239	443,3223	0,249759	Uniform + 0.3X + Y
column C12		2 End	-2	90,73633	429,5387	0,211241	Uniform + X - 0.3Y
column C12		2 End	-3	109,1923	442,0085	0,247037	Uniform + 0.3X + Y
column C12		2 Start	-2	90,73633	429,5387	0,211241	Uniform + X - 0.3Y
column C12		2 Start	-3	109,1923	442,0085	0,247037	Uniform + 0.3X + Y
column C2		2 End	-2	167,7293	569,9273	0,294299	Uniform + X - 0.3Y
column C2		2 End	-3	131,252	561,5424	0,233735	Uniform - 0.3X - Y
column C2		2 Start	-2	167,7293	569,9273	0,294299	Uniform + X - 0.3Y
column C2		2 Start	-3	131,252	561,5424	0,233735	Uniform - 0.3X - Y
column C3		2 End	-2	171,2484	546,777	0,313196	Uniform - X + 0.3Y
column C3		2 End	-3	165,9433	566,9098	0,292716	Uniform + 0.3X + Y
column C3		2 Start	-2	171,2484	546,777	0,313196	Uniform - X + 0.3Y
column C3		2 Start	-3	165,9433	566,9098	0,292716	Uniform + 0.3X + Y
column C4		2 End	-2	158,4782	563,3896	0,281294	Uniform - X - 0.3Y
column C4		2 End	-3	159,257	553,3271	0,287817	Uniform - 0.3X + Y
column C4		2 Start	-2	158,4782	563,3896	0,281294	Uniform - X - 0.3Y
column C4		2 Start	-3	159,257	553,3271	0,287817	Uniform - 0.3X + Y
column C5		2 End	-2	155,6065	564,4898	0,275659	Uniform - X - 0.3Y
column C5		2 End	-3	159,471	564,1314	0,282684	Uniform + 0.3X + Y
column C5		2 Start	-2	155,6065	564,4898	0,275659	Uniform - X - 0.3Y
column C5		2 Start	-3	159,471	564,1314	0,282684	Uniform + 0.3X + Y
column C6		2 End	-2	153,2463	563,5095	0,27195	Uniform + X - 0.3Y
column C6		2 End	-3	160,0494	552,1902	0,289845	Uniform + 0.3X + Y
column C6		2 Start	-2	153,2463	563,5095	0,27195	Uniform + X - 0.3Y
column C6		2 Start	-3	160,0494	552,1902	0,289845	Uniform + 0.3X + Y
column C7		2 End	-2	203,7327	564,5817	0,360856	Uniform - X + 0.3Y
column C7		2 End	-3	170,594	588,9878	0,289639	Uniform - 0.3X - Y
column C7		2 Start	-2	203,7327	564,5817	0,360856	Uniform - X + 0.3Y
column C7		2 Start	-3	170,594	588,9878	0,289639	Uniform - 0.3X - Y
column C8		2 End	-2	181,6485	578,026	0,314257	Uniform - X + 0.3Y
column C8		2 End	-3	166,3659	581,1514	0,286269	Uniform + 0.3X + Y
column C8		2 Start	-2	181,6485	578,026	0,314257	Uniform - X + 0.3Y
column C8		2 Start	-3	166,3659	581,1514	0,286269	Uniform + 0.3X + Y
column C9		2 End	-2	182,5657	579,3591	0,315117	Uniform - X - 0.3Y
column C9		2 End	-3	166,3235	559,1265	0,29747	Uniform + 0.3X - Y
column C9		2 Start	-2	182,5657	579,3591	0,315117	Uniform - X - 0.3Y
column C9		2 Start	-3	166,3235	559,1265	0,29747	Uniform + 0.3X - Y

Life safety							
Member	floor	edge	local axis	value	capacity	perf ratio	analysis
column C1	2	End	-2	247,0043	582,8686	0,423774	Uniform - X - 0.3Y
column C1	2	End	-3	205,2701	570,7184	0,35967	Uniform + 0.3X - Y
column C1	2	Start	-2	247,0043	582,8686	0,423774	Uniform - X - 0.3Y
column C1	2	Start	-3	205,2701	570,7184	0,35967	Uniform + 0.3X - Y
column C10	2	End	-2	158,7309	533,9125	0,297298	Uniform - X - 0.3Y
column C10	2	End	-3	178,9698	544,0403	0,328964	Uniform - 0.3X + Y
column C10	2	Start	-2	158,7309	533,9125	0,297298	Uniform - X - 0.3Y
column C10	2	Start	-3	178,9698	544,0403	0,328964	Uniform - 0.3X + Y
column C11	2	End	-2	125,6759	428,2561	0,29346	Uniform - X - 0.3Y
column C11	2	End	-3	139,2956	420,2281	0,331476	Uniform - 0.3X - Y
column C11	2	Start	-2	125,6759	428,2561	0,29346	Uniform - X - 0.3Y
column C11	2	Start	-3	139,2956	420,2281	0,331476	Uniform - 0.3X - Y
column C12	2	End	-2	116,6589	430,028	0,271282	Uniform + X - 0.3Y
column C12	2	End	-3	143,7793	445,7353	0,322566	Uniform + 0.3X + Y
column C12	2	Start	-2	116,6589	430,028	0,271282	Uniform + X - 0.3Y
column C12	2	Start	-3	143,7793	445,7353	0,322566	Uniform + 0.3X + Y
column C2	2	End	-2	215,4766	572,4562	0,376407	Uniform + X - 0.3Y
column C2	2	End	-3	171,4586	562,9501	0,304572	Uniform - 0.3X - Y
column C2	2	Start	-2	215,4766	572,4562	0,376407	Uniform + X - 0.3Y
column C2	2	Start	-3	171,4586	562,9501	0,304572	Uniform - 0.3X - Y
column C3	2	End	-2	230,6495	579,1439	0,398259	Uniform + X - 0.3Y
column C3	2	End	-3	209,5279	568,3882	0,368635	Uniform + 0.3X + Y
column C3	2	Start	-2	230,6495	579,1439	0,398259	Uniform + X - 0.3Y
column C3	2	Start	-3	209,5279	568,3882	0,368635	Uniform + 0.3X + Y
column C4	2	End	-2	204,1978	565,2392	0,361259	Uniform - X - 0.3Y
column C4	2	End	-3	205,7697	559,1022	0,368036	Uniform + 0.3X - Y
column C4	2	Start	-2	204,1978	565,2392	0,361259	Uniform - X - 0.3Y
column C4	2	Start	-3	205,7697	559,1022	0,368036	Uniform + 0.3X - Y
column C5	2	End	-2	197,2887	565,0166	0,349173	Uniform - X - 0.3Y
column C5	2	End	-3	204,4072	564,8217	0,361897	Uniform - 0.3X + Y
column C5	2	Start	-2	197,2887	565,0166	0,349173	Uniform - X - 0.3Y
column C5	2	Start	-3	204,4072	564,8217	0,361897	Uniform - 0.3X + Y
column C6	2	End	-2	192,6436	543,5856	0,354394	Uniform - X + 0.3Y
column C6	2	End	-3	201,7422	551,2193	0,365993	Uniform + 0.3X + Y
column C6	2	Start	-2	192,6436	543,5856	0,354394	Uniform - X + 0.3Y
column C6	2	Start	-3	201,7422	551,2193	0,365993	Uniform + 0.3X + Y
column C7	2	End	-2	246,2094	582,677	0,422549	Uniform + X - 0.3Y
column C7	2	End	-3	216,2736	592,6895	0,364902	Uniform - 0.3X - Y
column C7	2	Start	-2	246,2094	582,677	0,422549	Uniform + X - 0.3Y
column C7	2	Start	-3	216,2736	592,6895	0,364902	Uniform - 0.3X - Y
column C8	2	End	-2	226,6961	579,1833	0,391407	Uniform - X + 0.3Y
column C8	2	End	-3	211,6442	583,7463	0,362562	Uniform + 0.3X + Y
column C8	2	Start	-2	226,6961	579,1833	0,391407	Uniform - X + 0.3Y
column C8	2	Start	-3	211,6442	583,7463	0,362562	Uniform + 0.3X + Y
column C9	2	End	-2	231,6949	581,4356	0,398488	Uniform - X - 0.3Y
column C9	2	End	-3	215,8358	578,4224	0,373146	Uniform - 0.3X + Y
column C9	2	Start	-2	231,6949	581,4356	0,398488	Uniform - X - 0.3Y
column C9	2	Start	-3	215,8358	578,4224	0,373146	Uniform - 0.3X + Y

Collapse prevention							
Member	floor	edge	local axis	value	capacity	perf ratio	analysis
column C1	2	End	-2	267,1725	585,315	0,456459	Uniform - X - 0.3Y
column C1	2	End	-3	231,1674	571,5711	0,404442	Uniform + 0.3X - Y
column C1	2	Start	-2	267,1725	585,315	0,456459	Uniform - X - 0.3Y
column C1	2	Start	-3	231,1674	571,5711	0,404442	Uniform + 0.3X - Y
column C10	2	End	-2	192,2119	534,6023	0,359542	Uniform - X - 0.3Y
column C10	2	End	-3	211,5041	546,1439	0,387268	Uniform - 0.3X + Y
column C10	2	Start	-2	192,2119	534,6023	0,359542	Uniform - X - 0.3Y
column C10	2	Start	-3	211,5041	546,1439	0,387268	Uniform - 0.3X + Y
column C11	2	End	-2	154,279	427,0987	0,361226	Uniform - X - 0.3Y
column C11	2	End	-3	180,1086	446,9968	0,40293	Uniform - 0.3X + Y
column C11	2	Start	-2	154,279	427,0987	0,361226	Uniform - X - 0.3Y
column C11	2	Start	-3	180,1086	446,9968	0,40293	Uniform - 0.3X + Y
column C12	2	End	-2	145,2857	430,3821	0,337574	Uniform + X - 0.3Y
column C12	2	End	-3	176,5303	447,9317	0,394101	Uniform + 0.3X + Y
column C12	2	Start	-2	145,2857	430,3821	0,337574	Uniform + X - 0.3Y
column C12	2	Start	-3	176,5303	447,9317	0,394101	Uniform + 0.3X + Y
column C2	2	End	-2	243,8968	573,5673	0,425228	Uniform + X - 0.3Y
column C2	2	End	-3	209,3256	563,5967	0,37141	Uniform - 0.3X - Y
column C2	2	Start	-2	243,8968	573,5673	0,425228	Uniform + X - 0.3Y
column C2	2	Start	-3	209,3256	563,5967	0,37141	Uniform - 0.3X - Y
column C3	2	End	-2	255,4703	581,0747	0,439651	Uniform + X - 0.3Y
column C3	2	End	-3	233,4172	568,9185	0,410282	Uniform + 0.3X + Y
column C3	2	Start	-2	255,4703	581,0747	0,439651	Uniform + X - 0.3Y
column C3	2	Start	-3	233,4172	568,9185	0,410282	Uniform + 0.3X + Y
column C4	2	End	-2	233,7642	566,3748	0,412738	Uniform - X - 0.3Y
column C4	2	End	-3	232,011	559,9217	0,414363	Uniform + 0.3X - Y
column C4	2	Start	-2	233,7642	566,3748	0,412738	Uniform - X - 0.3Y
column C4	2	Start	-3	232,011	559,9217	0,414363	Uniform + 0.3X - Y
column C5	2	End	-2	224,0146	565,3978	0,396207	Uniform - X - 0.3Y
column C5	2	End	-3	230,8757	565,185	0,408496	Uniform - 0.3X + Y
column C5	2	Start	-2	224,0146	565,3978	0,396207	Uniform - X - 0.3Y
column C5	2	Start	-3	230,8757	565,185	0,408496	Uniform - 0.3X + Y
column C6	2	End	-2	232,1292	566,8655	0,409496	Uniform + X - 0.3Y
column C6	2	End	-3	227,4599	559,5011	0,40654	Uniform - 0.3X - Y
column C6	2	Start	-2	232,1292	566,8655	0,409496	Uniform + X - 0.3Y
column C6	2	Start	-3	227,4599	559,5011	0,40654	Uniform - 0.3X - Y
column C7	2	End	-2	263,699	584,3323	0,451283	Uniform + X - 0.3Y
column C7	2	End	-3	247,076	595,4235	0,414958	Uniform - 0.3X - Y
column C7	2	Start	-2	263,699	584,3323	0,451283	Uniform + X - 0.3Y
column C7	2	Start	-3	247,076	595,4235	0,414958	Uniform - 0.3X - Y
column C8	2	End	-2	248,7761	580,1462	0,428816	Uniform - X + 0.3Y
column C8	2	End	-3	241,1436	586,0057	0,411504	Uniform - 0.3X + Y
column C8	2	Start	-2	248,7761	580,1462	0,428816	Uniform - X + 0.3Y
column C8	2	Start	-3	241,1436	586,0057	0,411504	Uniform - 0.3X + Y
column C9	2	End	-2	256,176	582,5835	0,439724	Uniform - X - 0.3Y
column C9	2	End	-3	242,1619	579,9616	0,417548	Uniform - 0.3X + Y
column C9	2	Start	-2	256,176	582,5835	0,439724	Uniform - X - 0.3Y
column C9	2	Start	-3	242,1619	579,9616	0,417548	Uniform - 0.3X + Y

Increased Strength Member Chord Rotation Uniaxial Analysis

Operational level (1-A)										
Member	floor	edge	local ax	Increased V	Percent Inc	Inc capaci	% Cap inc	Inc perf rat	% Increase	analysis
column C1	2	End	-2	0,0245	14,2817158	0,0022	14,84533	1,6905	87,565883	Uniform - Y
column C1	2	End	-3	0,0343	13,7554036	0,0015	9,457804	2,2427	87,432682	Uniform + X
column C1	2	Start	-2	0,0244	14,3289145	0,0028	18,66838	1,6919	87,925287	Uniform - Y
column C1	2	Start	-3	0,0330	13,4018456	0,0019	12,42901	2,1681	88,07888	Uniform + X
column C10	2	End	-2	0,0243	14,2852113	0,0004	2,377076	1,5915	86,045644	Uniform - Y
column C10	2	End	-3	0,0163	19,405057	0,0006	3,60446	1,0384	81,270348	Uniform + X
column C10	2	Start	-2	0,0234	14,3702946	0,0008	4,996417	1,5385	86,31329	Uniform - Y
column C10	2	Start	-3	0,0152	18,6351986	0,0000	-0,01272	0,9693	81,363101	Uniform + X
column C11	2	End	-2	0,0213	15,7699443	0,0027	15,37481	1,2670	86,332128	Uniform - Y
column C11	2	End	-3	0,0178	18,062201	0,0031	17,02034	1,0131	84,565995	Uniform + X
column C11	2	Start	-2	0,0213	16,7577698	0,0032	18,315	1,2730	85,835927	Uniform - Y
column C11	2	Start	-3	0,0173	16,9177456	0,0023	12,86456	0,9756	85,012247	Uniform + X
column C12	2	End	-2	0,0178	17,3771407	0,0047	31,90803	1,2544	86,82748	Uniform - Y
column C12	2	End	-3	0,0176	16,4056568	0,0041	24,39678	1,0899	86,813224	Uniform + X
column C12	2	Start	-2	0,0184	17,821738	0,0052	34,84879	1,3031	86,782965	Uniform - Y
column C12	2	Start	-3	0,0178	15,9979279	0,0034	20,22519	1,1025	86,693701	Uniform + X
column C2	2	End	-2	0,0198	14,9993563	0,0030	20,41112	1,4070	87,542659	Uniform - Y
column C2	2	End	-3	0,0362	10,4840503	0,0018	11,89613	2,3753	90,630041	Uniform + X
column C2	2	Start	-2	0,0201	13,4067358	0,0023	15,55021	1,4080	88,396661	Uniform - Y
column C2	2	Start	-3	0,0362	10,3001955	0,0008	5,200807	2,3726	90,207665	Uniform + X
column C3	2	End	-2	0,0185	18,3056846	0,0024	16,62639	1,3158	84,304425	Uniform + Y
column C3	2	End	-3	0,0269	15,5396905	0,0015	9,767691	1,8273	85,843063	Uniform + X
column C3	2	Start	-2	0,0186	18,8104575	0,0026	18,17743	1,3313	84,084775	Uniform - Y
column C3	2	Start	-3	0,0265	14,4223932	0,0009	6,052491	1,7896	86,399753	Uniform + X
column C4	2	End	-2	0,0243	14,3294507	0,0014	9,666057	1,6734	86,934192	Uniform - Y
column C4	2	End	-3	0,0195	17,9383357	0,0027	19,02806	1,4019	84,9284	Uniform + X
column C4	2	Start	-2	0,0239	15,3666726	0,0018	12,10644	1,6533	86,293254	Uniform - Y
column C4	2	Start	-3	0,0183	18,1112607	0,0025	17,13608	1,3137	84,538195	Uniform + X
column C5	2	End	-2	0,0214	16,1617745	0,0024	16,52066	1,5160	86,129014	Uniform - Y
column C5	2	End	-3	0,0209	17,0005565	0,0030	20,99444	1,5037	85,949751	Uniform + X
column C5	2	Start	-2	0,0213	17,0902308	0,0028	19,02069	1,5199	85,640239	Uniform - Y
column C5	2	Start	-3	0,0204	15,9259871	0,0024	17,02394	1,4558	86,389517	Uniform + X
column C6	2	End	-2	0,0185	18,0804954	0,0016	10,81174	1,3005	83,682425	Uniform + Y
column C6	2	End	-3	0,0209	16,8797142	0,0017	11,28781	1,4461	84,831848	Uniform + X
column C6	2	Start	-2	0,0184	19,1046741	0,0019	13,18538	1,3012	83,119112	Uniform - Y
column C6	2	Start	-3	0,0204	15,8573784	0,0011	7,773708	1,4036	85,287925	Uniform + X
column C7	2	End	-2	0,0222	15,6065624	0,0022	15,28286	1,5983	86,462485	Uniform - Y
column C7	2	End	-3	0,0350	14,4190593	0,0020	12,82444	2,2763	87,219755	Uniform + X
column C7	2	Start	-2	0,0214	16,9815722	0,0025	17,95504	1,5516	85,603318	Uniform - Y
column C7	2	Start	-3	0,0349	13,3359813	0,0015	9,527755	2,2547	87,823781	Uniform + X
column C8	2	End	-2	0,0215	15,8380238	0,0026	18,23979	1,5526	86,604043	Uniform + Y
column C8	2	End	-3	0,0269	15,538989	0,0033	22,37824	1,8827	87,301489	Uniform + X
column C8	2	Start	-2	0,0213	16,9697442	0,0030	21,08286	1,5466	85,98451	Uniform + Y
column C8	2	Start	-3	0,0263	14,6268657	0,0028	18,63947	1,8308	87,670812	Uniform + X
column C9	2	End	-2	0,0244	14,4632729	0,0020	13,45033	1,6887	87,252994	Uniform - Y
column C9	2	End	-3	0,0255	16,1576355	0,0030	19,90288	1,7525	86,524965	Uniform + X
column C9	2	Start	-2	0,0243	15,6377169	0,0025	16,93028	1,6907	86,625531	Uniform - Y
column C9	2	Start	-3	0,0264	14,3700915	0,0014	9,324396	1,7762	86,854728	Uniform + X
					Average		14,89781		86,206669	

Life Safety										
Member	floor	edge	local axis	Increased Value	Percent Inc	Inc capacity	% Cap inc	Inc perf ratio	% Increase	analysis
column C1	2	End	-2	0,0358	13,6239716	0,0078	18,81693	0,8831	88,534679	Uniform - Y
column C1	2	End	-3	0,0485	14,6946162	0,0053	11,65648	1,0902	86,839047	Uniform + X
column C1	2	Start	-2	0,0358	13,54416	0,0088	21,23314	0,8849	88,827186	Uniform - Y
column C1	2	Start	-3	0,0480	13,5657589	0,0050	11,0111	1,0760	87,780226	Uniform + X
column C1	2	End	-2	0,0356	13,5773404	0,0026	5,655049	0,7861	87,149352	Uniform - Y
column C1	2	End	-3	0,0236	17,8444861	0,0029	6,184293	0,5190	83,194981	Uniform + X
column C1	2	Start	-2	0,0349	13,4265352	0,0032	6,931798	0,7708	87,443728	Uniform - Y
column C1	2	Start	-3	0,0230	16,8189864	0,0023	4,985159	0,5037	83,981473	Uniform + X
column C1	2	End	-2	0,0309	15,157756	0,0051	10,60016	0,6542	86,294785	Uniform - Y
column C1	2	End	-3	0,0255	17,0658585	0,0057	11,54396	0,5310	84,701525	Uniform + X
column C1	2	Start	-2	0,0309	16,0272596	0,0056	11,58947	0,6566	85,636072	Uniform - Y
column C1	2	Start	-3	0,0250	15,8603055	0,0049	10,0509	0,5200	85,587338	Uniform + X
column C1	2	End	-2	0,0258	17,1236835	0,0096	21,19647	0,5904	85,870585	Uniform - Y
column C1	2	End	-3	0,0255	14,9142705	0,0070	14,75818	0,5508	87,003426	Uniform + X
column C1	2	Start	-2	0,0263	17,8271065	0,0101	22,25974	0,6029	85,418869	Uniform - Y
column C1	2	Start	-3	0,0255	15,4363751	0,0074	15,55349	0,5528	86,6411	Uniform + X
column C2	2	End	-2	0,0283	14,25501	0,0076	17,71583	0,6802	87,890668	Uniform - Y
column C2	2	End	-3	0,0523	9,8589366	0,0058	13,06089	1,1992	91,280788	Uniform + X
column C2	2	Start	-2	0,0287	12,7521066	0,0068	16,01423	0,6846	89,006906	Uniform - Y
column C2	2	Start	-3	0,0516	10,6735931	0,0047	10,7066	1,1822	90,358845	Uniform + X
column C3	2	End	-2	0,0265	17,6819056	0,0084	20,35994	0,6680	85,30886	Uniform + Y
column C3	2	End	-3	0,0382	15,3863188	0,0080	19,65904	0,9666	87,1421	Uniform + X
column C3	2	Start	-2	0,0267	18,1762471	0,0086	20,80025	0,6732	84,9527	Uniform - Y
column C3	2	Start	-3	0,0379	14,2711841	0,0077	18,853	0,9562	87,992999	Uniform + X
column C4	2	End	-2	0,0356	13,6291985	0,0054	12,36843	0,8346	87,871165	Uniform - Y
column C4	2	End	-3	0,0281	16,8670783	0,0056	12,75207	0,6522	85,040311	Uniform + X
column C4	2	Start	-2	0,0352	14,5727668	0,0057	13,0562	0,8267	87,110751	Uniform - Y
column C4	2	Start	-3	0,0273	16,8166428	0,0055	12,34708	0,6315	85,032496	Uniform + X
column C5	2	End	-2	0,0310	15,5098146	0,0095	23,63405	0,8003	87,45502	Uniform - Y
column C5	2	End	-3	0,0298	16,3689975	0,0110	28,31307	0,7970	87,24291	Uniform + X
column C5	2	Start	-2	0,0309	16,3918473	0,0098	24,41556	0,8014	86,8257	Uniform - Y
column C5	2	Start	-3	0,0294	15,2592251	0,0105	26,97566	0,7822	87,981742	Uniform + X
column C6	2	End	-2	0,0266	17,440308	0,0044	9,908162	0,6114	84,131261	Uniform + Y
column C6	2	End	-3	0,0299	16,2323637	0,0046	10,37774	0,6862	85,293566	Uniform + X
column C6	2	Start	-2	0,0265	18,4167565	0,0047	10,53023	0,6105	83,338839	Uniform - Y
column C6	2	Start	-3	0,0294	15,2006684	0,0042	9,458758	0,6749	86,11406	Uniform + X
column C7	2	End	-2	0,0319	15,059744	0,0102	28,03818	0,9094	88,238342	Uniform - Y
column C7	2	End	-3	0,0498	14,6346477	0,0093	22,92117	1,2623	88,093626	Uniform + X
column C7	2	Start	-2	0,0310	16,2134372	0,0105	28,83787	0,8861	87,415466	Uniform - Y
column C7	2	Start	-3	0,0498	13,6065744	0,0091	22,30535	1,2575	88,874863	Uniform + X
column C8	2	End	-2	0,0311	15,5609332	0,0115	30,60773	0,8643	88,086611	Uniform + Y
column C8	2	End	-3	0,0382	15,3825711	0,0129	34,30831	1,0612	88,547534	Uniform + X
column C8	2	Start	-2	0,0309	16,3958401	0,0118	31,36836	0,8620	87,520154	Uniform + Y
column C8	2	Start	-3	0,0378	14,4603958	0,0126	33,29179	1,0441	89,151353	Uniform + X
column C9	2	End	-2	0,0357	13,7618001	0,0081	19,55336	0,8887	88,489153	Uniform - Y
column C9	2	End	-3	0,0367	15,7178644	0,0067	15,69164	0,8792	86,4136	Uniform + X
column C9	2	Start	-2	0,0355	14,8741089	0,0085	20,58431	0,8863	87,665843	Uniform - Y
column C9	2	Start	-3	0,0378	14,4012505	0,0064	14,84554	0,9022	87,46127	Uniform + X
					Average		17,45181		86,963206	

Collapse Prevention										
Member	floor	edge	local axis	Increased Value	Percent Inc	Inc capacity	% Cap inc	Inc perf ratio	% Increase	analysis
column C1	2	End	-2	0,0474	14,045627	0,0088	16,13097	0,8830	87,9050659	Uniform - Y
column C1	2	End	-3	0,0630	15,8083816	0,0053	8,872256	1,0765	85,4802863	Uniform + X
column C1	2	Start	-2	0,0473	14,0173673	0,0105	19,12242	0,8861	88,2334784	Uniform - Y
column C1	2	Start	-3	0,0628	14,8698985	0,0051	8,659457	1,0717	86,3145432	Uniform + X
column C1	2	End	-2	0,0471	13,9592194	0,0029	4,856103	0,7927	86,6867438	Uniform - Y
column C1	2	End	-3	0,0348	15,9564714	0,0036	5,935655	0,5853	84,9385106	Uniform + X
column C1	2	Start	-2	0,0465	13,7596145	0,0039	6,431314	0,7842	87,0720669	Uniform - Y
column C1	2	Start	-3	0,0325	15,7350272	0,0038	6,32973	0,5516	85,2010491	Uniform + X
column C1	2	End	-2	0,0406	15,5667831	0,0056	8,914413	0,6576	85,7071546	Uniform - Y
column C1	2	End	-3	0,0333	17,004614	0,0060	9,455696	0,5329	84,4642529	Uniform + X
column C1	2	Start	-2	0,0404	16,8865869	0,0081	12,87214	0,6601	85,0400254	Uniform - Y
column C1	2	Start	-3	0,0329	15,8872534	0,0054	8,508327	0,5258	85,3595026	Uniform + X
column C1	2	End	-2	0,0343	17,1063768	0,0108	18,11209	0,5948	85,5160724	Uniform - Y
column C1	2	End	-3	0,0338	14,2229335	0,0078	12,65825	0,5583	87,374146	Uniform + X
column C1	2	Start	-2	0,0345	17,9836966	0,0112	18,82327	0,6006	84,8641561	Uniform - Y
column C1	2	Start	-3	0,0336	15,0723026	0,0071	11,58601	0,5558	86,4916261	Uniform + X
column C2	2	End	-2	0,0373	13,7220436	0,0088	15,75992	0,6794	88,1459531	Uniform - Y
column C2	2	End	-3	0,0683	10,7598824	0,0069	11,84503	1,1909	90,3799555	Uniform + X
column C2	2	Start	-2	0,0375	12,9667062	0,0084	15,0145	0,6795	88,7254409	Uniform - Y
column C2	2	Start	-3	0,0666	12,318392	0,0053	9,127545	1,1599	88,7115303	Uniform + X
column C3	2	End	-2	0,0346	18,1740876	0,0104	19,25078	0,6645	84,7591738	Uniform + Y
column C3	2	End	-3	0,0496	16,183379	0,0096	17,90264	0,9508	86,2734993	Uniform + X
column C3	2	Start	-2	0,0348	18,6382442	0,0105	19,38201	0,6684	84,3868992	Uniform - Y
column C3	2	Start	-3	0,0494	15,1590124	0,0094	17,53226	0,9440	87,1026911	Uniform + X
column C4	2	End	-2	0,0472	14,0103578	0,0064	11,11965	0,8374	87,391941	Uniform - Y
column C4	2	End	-3	0,0337	18,2962927	0,0215	49,84221	0,8396	87,7898545	Uniform + X
column C4	2	Start	-2	0,0466	15,0688675	0,0065	11,43571	0,8294	86,4783393	Uniform - Y
column C4	2	Start	-3	0,0287	20,5371992	0,0219	51,422	0,7317	86,4372403	Uniform + X
column C5	2	End	-2	0,0407	15,9516928	0,0116	21,8513	0,7962	86,9081312	Uniform - Y
column C5	2	End	-3	0,0388	16,6852703	0,0136	26,48088	0,7903	86,8082031	Uniform + X
column C5	2	Start	-2	0,0406	16,8379252	0,0117	22,20205	0,7967	86,2210583	Uniform - Y
column C5	2	Start	-3	0,0385	15,656289	0,0133	25,92708	0,7809	87,5674075	Uniform + X
column C6	2	End	-2	0,0347	17,8778485	0,0053	9,037385	0,6064	83,603581	Uniform + Y
column C6	2	End	-3	0,0389	16,5308748	0,0054	9,271933	0,6807	84,8713175	Uniform + X
column C6	2	Start	-2	0,0346	18,85092	0,0054	9,308593	0,6052	82,7541935	Uniform - Y
column C6	2	Start	-3	0,0386	15,6006479	0,0052	8,951398	0,6734	85,6814781	Uniform + X
column C7	2	End	-2	0,0418	15,5339021	0,0110	22,77629	0,8925	87,347073	Uniform - Y
column C7	2	End	-3	0,0645	15,8283233	0,0090	16,13585	1,1870	86,3702117	Uniform + X
column C7	2	Start	-2	0,0407	16,5775182	0,0112	23,09742	0,8723	86,5328373	Uniform - Y
column C7	2	Start	-3	0,0646	14,8851544	0,0088	15,79777	1,1850	87,1457514	Uniform + X
column C8	2	End	-2	0,0408	16,0219061	0,0130	26,15215	0,8511	87,2994757	Uniform + Y
column C8	2	End	-3	0,0496	16,1780361	0,0146	28,83467	1,0198	87,4424674	Uniform + X
column C8	2	Start	-2	0,0406	16,8436808	0,0132	26,47655	0,8484	86,6829861	Uniform + Y
column C8	2	Start	-3	0,0493	15,3298725	0,0145	28,48306	1,0093	88,0685403	Uniform + X
column C9	2	End	-2	0,0473	14,1795924	0,0097	17,9169	0,8906	87,9748686	Uniform - Y
column C9	2	End	-3	0,0315	22,9293127	0,0312	96,73724	1,1205	88,3449784	Uniform + X
column C9	2	Start	-2	0,0469	15,297732	0,0100	18,32411	0,8862	87,0717786	Uniform - Y
column C9	2	Start	-3	0,0493	15,2751978	0,0071	12,72426	0,8963	86,4488776	Uniform + X
					Average		18,61228		86,5495086	

Increased Strength Member Shear Force Uniaxial Analysis

Operational level (1-A)										
Member	floor	edge	local axis	Increased Val	Percent In	Inc capacity	% Cap inc	Inc perf ra	% Increase	analysis
column C1	2	End	-2	85,3122	58,21412	255,9078	80,00286	0,0170	4,568282	Uniform - Y
column C1	2	End	-3	33,2660	79,31358	269,2711	88,75141	0,1396	33,20226	Uniform + X
column C1	2	Start	-2	85,3122	58,21412	255,9078	80,00286	0,0170	4,568282	Uniform - Y
column C1	2	Start	-3	33,2660	79,31358	269,2711	88,75141	0,1396	33,20226	Uniform + X
column C1	2	End	-2	66,8435	46,40003	319,1194	146,7699	0,0337	12,66477	Uniform - Y
column C1	2	End	-3	59,6867	55,48268	313,9034	139,0262	0,0810	24,59548	Uniform + X
column C1	2	Start	-2	66,8435	46,40003	319,1194	146,7699	0,0337	12,66477	Uniform - Y
column C1	2	Start	-3	59,6867	55,48268	313,9034	139,0262	0,0810	24,59548	Uniform + X
column C1	2	End	-2	46,2591	52,74535	207,3103	91,89981	0,0028	1,203624	Uniform - Y
column C1	2	End	-3	31,6959	71,91378	211,7454	91,29802	0,0956	27,30967	Uniform + X
column C1	2	Start	-2	46,2591	52,74535	207,3103	91,89981	0,0028	1,203624	Uniform - Y
column C1	2	Start	-3	31,6959	71,91378	211,7454	91,29802	0,0956	27,30967	Uniform + X
column C1	2	End	-2	46,5389	49,42118	213,4110	96,75017	-0,0059	-2,84202	Uniform - Y
column C1	2	End	-3	31,1039	70,99567	214,5621	94,91056	0,0934	27,73421	Uniform + X
column C1	2	Start	-2	46,5389	49,42118	213,4110	96,75017	-0,0059	-2,84202	Uniform - Y
column C1	2	Start	-3	31,1039	70,99567	214,5621	94,91056	0,0934	27,73421	Uniform + X
column C2	2	End	-2	54,6225	66,73195	261,2905	85,32628	0,0685	19,14097	Uniform - Y
column C2	2	End	-3	3,1875	97,56597	257,8689	84,00394	0,1844	44,29746	Uniform + X
column C2	2	Start	-2	54,6225	66,73195	261,2905	85,32628	0,0685	19,14097	Uniform - Y
column C2	2	Start	-3	3,1875	97,56597	257,8689	84,00394	0,1844	44,29746	Uniform + X
column C3	2	End	-2	62,2536	63,49185	236,8603	76,55787	0,0378	10,79366	Uniform + Y
column C3	2	End	-3	35,7065	77,83722	243,4751	76,15459	0,1062	27,06787	Uniform + X
column C3	2	Start	-2	62,2536	63,49185	236,8603	76,55787	0,0378	10,79366	Uniform - Y
column C3	2	Start	-3	35,7065	77,83722	243,4751	76,15459	0,1062	27,06787	Uniform + X
column C4	2	End	-2	49,9865	68,45416	251,1507	80,77457	0,0669	19,19027	Uniform - Y
column C4	2	End	-3	31,5918	79,78838	244,8407	79,83488	0,1232	30,30732	Uniform + X
column C4	2	Start	-2	49,9865	68,45416	251,1507	80,77457	0,0669	19,19027	Uniform - Y
column C4	2	Start	-3	31,5918	79,78838	244,8407	79,83488	0,1232	30,30732	Uniform + X
column C5	2	End	-2	42,4907	72,98523	247,4104	77,97717	0,0833	23,01586	Uniform - Y
column C5	2	End	-3	31,0777	80,89079	242,9900	75,618	0,1212	29,60661	Uniform + X
column C5	2	Start	-2	42,4907	72,98523	247,4104	77,97717	0,0833	23,01586	Uniform - Y
column C5	2	Start	-3	31,0777	80,89079	242,9900	75,618	0,1212	29,60661	Uniform + X
column C6	2	End	-2	54,7137	63,47424	245,3632	81,24408	0,0412	13,07626	Uniform + Y
column C6	2	End	-3	55,1853	64,66558	246,9107	81,44386	0,0492	14,77158	Uniform + X
column C6	2	Start	-2	54,7137	63,47424	245,3632	81,24408	0,0412	13,07626	Uniform - Y
column C6	2	Start	-3	55,1853	64,66558	246,9107	81,44386	0,0492	14,77158	Uniform + X
column C7	2	End	-2	45,4343	78,08776	300,9476	111,7774	0,2377	39,53044	Uniform - Y
column C7	2	End	-3	-28,9504	116,8343	329,3706	126,7493	0,4813	62,25291	Uniform + X
column C7	2	Start	-2	45,4343	78,08776	300,9476	111,7774	0,2377	39,53044	Uniform - Y
column C7	2	Start	-3	-28,9504	116,8343	329,3706	126,7493	0,4813	62,25291	Uniform + X
column C8	2	End	-2	24,6930	86,47432	314,1027	120,1228	0,2866	47,46517	Uniform + Y
column C8	2	End	-3	-39,5745	123,2569	312,7316	116,3159	0,4875	62,49401	Uniform + X
column C8	2	Start	-2	24,6930	86,47432	314,1027	120,1228	0,2866	47,46517	Uniform + Y
column C8	2	Start	-3	-39,5745	123,2569	312,7316	116,3159	0,4875	62,49401	Uniform + X
column C9	2	End	-2	23,8532	86,99393	249,5371	75,29509	0,1657	34,42449	Uniform - Y
column C9	2	End	-3	-72,8083	144,4824	244,4848	76,84998	0,4524	60,86365	Uniform + X
column C9	2	Start	-2	23,8532	86,99393	249,5371	75,29509	0,1657	34,42449	Uniform - Y
column C9	2	Start	-3	-72,8083	144,4824	244,4848	76,84998	0,4524	60,86365	Uniform + X
					Average		93,97728		27,78062	

Life Safety										
Member	floor	edge	local axis	Increased Val	Percent In	Inc capacity	% Cap inc	Inc perf ratio	% Increase	analysis
column C1	2	End	-2	54,2605	77,71052	255,2326	78,79813442	0,1637	28,02903	Uniform - Y
column C1	2	End	-3	35,1214	83,15818	274,9318	91,48657471	0,2147	37,20036	Uniform + X
column C1	2	Start	-2	54,2605	77,71052	255,2326	78,79813442	0,1637	28,02903	Uniform - Y
column C1	2	Start	-3	35,1214	83,15818	274,9318	91,48657471	0,2147	37,20036	Uniform + X
column C1	2	End	-2	65,5053	58,53782	324,3165	151,6161833	0,1388	32,10694	Uniform - Y
column C1	2	End	-3	74,5675	57,53148	315,5440	139,1365013	0,1217	27,31428	Uniform + X
column C1	2	Start	-2	65,5053	58,53782	324,3165	151,6161833	0,1388	32,10694	Uniform - Y
column C1	2	Start	-3	74,5675	57,53148	315,5440	139,1365013	0,1217	27,31428	Uniform + X
column C1	2	End	-2	45,4025	64,18689	207,2911	92,06710844	0,0683	18,88489	Uniform - Y
column C1	2	End	-3	39,3267	73,54971	212,7967	91,16319682	0,1353	28,87609	Uniform + X
column C1	2	Start	-2	45,4025	64,18689	207,2911	92,06710844	0,0683	18,88489	Uniform - Y
column C1	2	Start	-3	39,3267	73,54971	212,7886	91,15652996	0,1353	28,87366	Uniform + X
column C1	2	End	-2	61,4615	47,76635	215,1985	97,56076791	-0,0152	-5,96844	Uniform - Y
column C1	2	End	-3	38,1080	72,91898	215,9261	94,66991839	0,1330	29,55331	Uniform + X
column C1	2	Start	-2	61,4615	47,76635	215,1985	97,56076791	-0,0152	-5,96844	Uniform - Y
column C1	2	Start	-3	38,1080	72,91898	216,6757	95,31178905	0,1344	29,78492	Uniform + X
column C2	2	End	-2	27,7811	86,86255	263,0291	85,81657572	0,2280	38,04406	Uniform - Y
column C2	2	End	-3	-3,8254	102,2607	257,4494	83,08676833	0,2602	46,58859	Uniform + X
column C2	2	Start	-2	27,7811	86,86255	263,0291	85,81657572	0,2280	38,04406	Uniform - Y
column C2	2	Start	-3	-3,8254	102,2607	261,5113	85,51872953	0,2676	47,28877	Uniform + X
column C3	2	End	-2	50,7267	77,42049	273,6076	89,46169185	0,1810	31,82529	Uniform + X
column C3	2	End	-3	50,3623	75,76169	256,9181	83,80516441	0,1447	28,18869	Uniform + X
column C3	2	Start	-2	50,7267	77,42049	273,6076	89,46169185	0,1810	31,82529	Uniform - Y
column C3	2	Start	-3	50,3623	75,76169	244,4845	76,64101456	0,1247	25,27621	Uniform + X
column C4	2	End	-2	29,7544	85,18999	251,3848	80,4998008	0,1916	34,96693	Uniform - Y
column C4	2	End	-3	39,3149	80,55698	243,6612	79,48442117	0,1639	30,83762	Uniform + X
column C4	2	Start	-2	29,7544	85,18999	251,3848	80,4998008	0,1916	34,96693	Uniform - Y
column C4	2	Start	-3	39,3149	80,55698	243,6612	79,48442117	0,1639	30,83762	Uniform + X
column C5	2	End	-2	21,0197	89,64197	248,2337	78,32268663	0,2149	37,44222	Uniform - Y
column C5	2	End	-3	41,6925	80,09173	249,6313	79,29593078	0,1618	30,36261	Uniform + X
column C5	2	Start	-2	21,0197	89,64197	248,2337	78,32268663	0,2149	37,44222	Uniform - Y
column C5	2	Start	-3	41,6925	80,09173	245,8048	77,14281642	0,1554	29,51623	Uniform + X
column C6	2	End	-2	39,4293	79,37622	245,7695	82,04599139	0,1560	30,79646	Uniform + Y
column C6	2	End	-3	80,7917	59,83934	254,0667	86,30349651	0,0421	10,29994	Uniform + X
column C6	2	Start	-2	39,4293	79,37622	245,7695	82,04599139	0,1560	30,79646	Uniform - Y
column C6	2	Start	-3	80,7917	59,83934	253,7912	86,129273	0,0417	10,21607	Uniform + X
column C7	2	End	-2	-36,6009	115,1954	291,2044	105,1081519	0,5776	57,67651	Uniform - Y
column C7	2	End	-3	-51,8457	123,4988	329,7990	124,9741264	0,6609	64,00807	Uniform + X
column C7	2	Start	-2	-36,6009	115,1954	291,2044	105,1081519	0,5776	57,67651	Uniform - Y
column C7	2	Start	-3	-51,8457	123,4988	329,7990	124,9741264	0,6609	64,00807	Uniform + X
column C8	2	End	-2	-23,8685	110,3843	314,4860	120,2577441	0,5712	58,86967	Uniform + Y
column C8	2	End	-3	-63,1698	128,9555	315,6126	117,4386361	0,6735	64,33661	Uniform + X
column C8	2	Start	-2	-23,8685	110,3843	314,4860	120,2577441	0,5712	58,86967	Uniform + Y
column C8	2	Start	-3	-63,1698	128,9555	314,8896	116,8552486	0,6707	64,24065	Uniform + X
column C9	2	End	-2	-32,5770	114,1809	254,2271	77,177571	0,4027	50,5692	Uniform - Y
column C9	2	End	-3	-113,5429	154,2517	243,1660	76,5771889	0,6434	63,28568	Uniform + X
column C9	2	Start	-2	-32,5770	114,1809	254,2271	77,177571	0,4027	50,5692	Uniform - Y
column C9	2	Start	-3	-113,5429	154,2517	243,1660	76,5771889	0,6434	63,28568	Uniform + X
					Average		95,11043651		36,35791	

Collapse Prevention										
Member	floor	edge	local axis	Increased Va	Percent In	Inc capacity	% Cap inc	Inc perf ra	% Increase	analysis
column C1	2	End	-2	-44,2338	118,2782	279,4526	93,84849	0,5420	56,3853	Uniform - Y
column C1	2	End	-3	19,4267	91,97255	294,8513	104,4198	0,3690	46,81139	Uniform + X
column C1	2	Start	-2	-24,3369	109,2924	276,0332	90,50649	0,4878	51,9714	Uniform - Y
column C1	2	Start	-3	39,3237	84,98526	289,0084	98,97143	0,3115	40,86219	Uniform + X
column C1	2	End	-2	45,1985	75,87947	341,7690	173,0389	0,3724	51,73295	Uniform - Y
column C1	2	End	-3	57,8335	69,13669	315,4415	140,9243	0,2313	39,96413	Uniform + X
column C1	2	Start	-2	67,7299	67,73497	349,6663	179,7116	0,3451	47,21905	Uniform - Y
column C1	2	Start	-3	80,3650	61,71593	320,4073	143,1477	0,1931	33,36029	Uniform + X
column C1	2	End	-2	35,1817	77,90862	208,2003	93,13267	0,1862	33,54018	Uniform - Y
column C1	2	End	-3	19,6791	87,64307	208,2342	93,16195	0,2556	40,93083	Uniform + X
column C1	2	Start	-2	58,7725	67,85687	223,2522	99,43234	0,1443	26,10582	Uniform - Y
column C1	2	Start	-3	43,2698	76,33539	223,9466	100,0511	0,2152	34,5163	Uniform + X
column C1	2	End	-2	56,5317	60,6035	214,3720	96,37484	0,0624	15,97341	Uniform - Y
column C1	2	End	-3	12,5086	91,23287	213,8083	95,8785	0,2589	44,07259	Uniform + X
column C1	2	Start	-2	87,9523	49,71707	224,1400	100,9553	-0,0004	-0,09114	Uniform - Y
column C1	2	Start	-3	43,9292	74,88539	228,7318	105,1993	0,2104	34,923	Uniform + X
column C2	2	End	-2	-82,9502	140,0433	261,7719	85,29652	0,5810	61,4637	Uniform - Y
column C2	2	End	-3	-14,4045	106,9536	262,2229	85,56921	0,3587	49,61535	Uniform + X
column C2	2	Start	-2	-49,7202	120,6839	263,6832	86,00955	0,5247	55,45332	Uniform - Y
column C2	2	Start	-3	18,8255	92,1685	279,9486	96,43127	0,3416	44,76592	Uniform + X
column C3	2	End	-2	-46,2163	119,6847	278,1055	97,52675	0,5686	57,70046	Uniform + Y
column C3	2	End	-3	43,0550	81,66176	276,7182	96,57038	0,2523	37,70348	Uniform + X
column C3	2	Start	-2	-33,4078	113,4931	287,5466	97,81381	0,5301	55,45752	Uniform - Y
column C3	2	Start	-3	55,8635	77,4372	276,2835	90,51456	0,2024	32,21668	Uniform + X
column C4	2	End	-2	-46,3403	120,3813	262,0166	86,48522	0,5010	55,45532	Uniform - Y
column C4	2	End	-3	23,5593	89,63816	270,2818	91,71549	0,2892	41,80982	Uniform + X
column C4	2	Start	-2	-40,4748	117,3539	258,2618	84,97	0,4857	53,93181	Uniform - Y
column C4	2	Start	-3	29,4249	87,38386	266,5336	90,14476	0,2744	39,81552	Uniform + X
column C5	2	End	-2	-55,9885	123,9996	257,9111	83,80777	0,5276	56,12517	Uniform - Y
column C5	2	End	-3	26,7879	88,51732	267,7204	89,85962	0,2807	40,497	Uniform + X
column C5	2	Start	-2	-52,9591	122,41	250,2177	79,61731	0,5018	54,51844	Uniform - Y
column C5	2	Start	-3	29,8174	87,3826	260,8454	85,90393	0,2614	38,44172	Uniform + X
column C6	2	End	-2	-9,6652	104,3253	282,7974	100,3002	0,4312	52,14481	Uniform + Y
column C6	2	End	-3	82,3059	63,16764	287,2186	103,4912	0,1129	22,20357	Uniform + X
column C6	2	Start	-2	-3,8618	101,7211	268,0165	95,7835	0,4061	49,78736	Uniform - Y
column C6	2	Start	-3	83,2303	62,90741	269,8741	97,09194	0,0982	19,34545	Uniform + X
column C7	2	End	-2	-197,3767	177,3142	339,6033	131,9889	1,3316	75,68974	Uniform - Y
column C7	2	End	-3	-93,8730	136,7709	338,4667	130,9686	0,9234	68,34416	Uniform + X
column C7	2	Start	-2	-191,1813	173,1132	314,8401	119,7824	1,2696	73,71689	Uniform - Y
column C7	2	Start	-3	-87,6777	133,5304	321,0651	125,1139	0,9080	66,73271	Uniform + X
column C8	2	End	-2	-148,6022	159,5266	323,3358	123,0784	1,0899	71,89978	Uniform + Y
column C8	2	End	-3	-108,4215	143,4311	330,5238	129,3538	0,9753	69,60159	Uniform + X
column C8	2	Start	-2	-145,1855	157,3727	311,7000	117,7058	1,0649	70,81225	Uniform + Y
column C8	2	Start	-3	-105,0048	141,4946	320,0410	124,7861	0,9572	68,55941	Uniform + X
column C9	2	End	-2	-181,6966	174,5421	243,0415	73,16442	0,8570	66,91426	Uniform - Y
column C9	2	End	-3	-171,6213	170,4086	258,3196	81,51268	0,8870	67,67035	Uniform + X
column C9	2	Start	-2	-173,3631	168,772	250,1494	74,68072	0,8393	66,08009	Uniform - Y
column C9	2	Start	-3	-163,2878	164,7752	268,2006	84,63062	0,8799	67,12965	Uniform + X
					Average		103,1338		48,95585	

Increased Strength Member Chord Rotation Biaxial Analysis

Operational level (1-A)										
Member	floor	edge	local axis	Increased	Percent In	Inc capaci	% Cap inc	Inc perf ra	% Increase	analysis
column C1	2	End	-2	-0,0050	19,19151	0,0006	3,661654	1,0868	81,48626	Uniform + 0.3X - Y
column C1	2	End	-3	-0,0097	21,24309	0,0012	6,965797	1,3222	80,14107	Uniform - X + 0.3Y
column C1	2	Start	-2	-0,0050	18,77109	0,0004	2,418351	1,0762	81,67142	Uniform + 0.3X - Y
column C1	2	Start	-3	-0,0077	20,65378	0,0006	3,455285	1,1957	80,03357	Uniform - X + 0.3Y
column C1	2	End	-2	-0,0065	18,94198	0,0009	5,817473	1,2296	82,10212	Uniform + 0.3X - Y
column C1	2	End	-3	-0,0023	21,01814	0,0008	5,14256	0,9617	80,00862	Uniform - X + 0.3Y
column C1	2	Start	-2	-0,0052	18,83747	0,0014	9,255262	1,1968	82,75968	Uniform - 0.3X + Y
column C1	2	Start	-3	-0,0013	20,63699	0,0002	1,60047	0,8793	79,68837	Uniform - X + 0.3Y
column C1	2	End	-2	-0,0006	19,58335	0,0032	19,26006	1,0272	83,5808	Uniform - 0.3X + Y
column C1	2	End	-3	0,0010	19,64501	0,0030	16,58602	0,9224	83,15161	Uniform + X - 0.3Y
column C1	2	Start	-2	-0,0003	20,73713	0,0037	22,1423	1,0303	83,02296	Uniform - 0.3X + Y
column C1	2	Start	-3	0,0015	18,8757	0,0024	13,42244	0,8753	83,3579	Uniform - X + 0.3Y
column C1	2	End	-2	-0,0001	19,96652	0,0050	34,41994	1,1495	85,14559	Uniform - 0.3X - Y
column C1	2	End	-3	0,0012	17,82609	0,0043	26,34266	1,0209	85,89353	Uniform + X - 0.3Y
column C1	2	Start	-2	-0,0011	19,71526	0,0054	36,82345	1,2376	85,59177	Uniform - 0.3X - Y
column C1	2	Start	-3	0,0011	17,80169	0,0043	26,49352	1,0295	85,92494	Uniform + X - 0.3Y
column C2	2	End	-2	-0,0043	16,42139	0,0002	1,098127	1,0561	83,75548	Uniform + 0.3X - Y
column C2	2	End	-3	-0,0102	15,81609	0,0003	1,993103	1,3673	84,49138	Uniform + X - 0.3Y
column C2	2	Start	-2	-0,0057	14,35162	0,0002	1,430049	1,1663	85,85102	Uniform - 0.3X - Y
column C2	2	Start	-3	-0,0121	14,94171	-0,0012	-6,98771	1,3709	83,936	Uniform + X - 0.3Y
column C3	2	End	-2	-0,0072	17,88532	-0,0001	-0,7866	1,1666	81,97334	Uniform + 0.3X + Y
column C3	2	End	-3	-0,0082	20,04788	-0,0001	-0,90481	1,1859	79,76921	Uniform - X + 0.3Y
column C3	2	Start	-2	-0,0057	19,80685	0,0002	1,063127	1,0901	80,4017	Uniform - 0.3X - Y
column C3	2	Start	-3	-0,0075	19,07717	-0,0007	-4,0878	1,1318	80,11087	Uniform - X + 0.3Y
column C4	2	End	-2	-0,0060	18,76011	-0,0008	-4,79364	1,0449	80,29476	Uniform - 0.3X + Y
column C4	2	End	-3	-0,0030	20,90625	0,0004	2,461318	0,9591	79,59478	Uniform - X + 0.3Y
column C4	2	Start	-2	-0,0055	20,11198	-0,0005	-2,6602	1,0273	79,34094	Uniform - 0.3X + Y
column C4	2	Start	-3	-0,0013	22,27712	0,0002	1,447783	0,8516	78,03833	Uniform - X + 0.3Y
column C5	2	End	-2	-0,0044	19,1846	0,0005	3,195845	1,0567	81,40844	Uniform - 0.3X + Y
column C5	2	End	-3	-0,0042	19,82538	0,0009	5,481365	1,0614	81,20493	Uniform - X + 0.3Y
column C5	2	Start	-2	-0,0036	20,92531	0,0008	4,939627	1,0152	80,06188	Uniform - 0.3X + Y
column C5	2	Start	-3	-0,0035	19,07814	0,0004	2,543303	1,0070	81,394	Uniform - X + 0.3Y
column C6	2	End	-2	-0,0073	17,9938	-0,0003	-1,56307	1,1658	81,72168	Uniform + 0.3X + Y
column C6	2	End	-3	-0,0051	19,66316	-0,0005	-3,16593	1,0088	79,69304	Uniform - X + 0.3Y
column C6	2	Start	-2	-0,0068	19,16578	0,0000	-0,12061	1,1390	80,81146	Uniform + 0.3X + Y
column C6	2	Start	-3	-0,0044	18,94401	-0,0010	-5,90802	0,9588	79,86663	Uniform - X + 0.3Y
column C7	2	End	-2	-0,0048	19,06778	0,0000	0,06082	1,0466	80,94316	Uniform + 0.3X - Y
column C7	2	End	-3	-0,0116	20,74023	-0,0006	-3,233	1,2660	78,56555	Uniform - X + 0.3Y
column C7	2	Start	-2	-0,0041	20,58979	0,0002	0,95688	1,0021	79,60401	Uniform + 0.3X - Y
column C7	2	Start	-3	-0,0110	19,58648	-0,0011	-6,08812	1,2260	79,14328	Uniform - X + 0.3Y
column C8	2	End	-2	-0,0043	19,20305	0,0004	2,153139	1,0427	81,20339	Uniform - 0.3X + Y
column C8	2	End	-3	-0,0065	20,20662	0,0009	5,34671	1,1633	80,81657	Uniform - X + 0.3Y
column C8	2	Start	-2	-0,0035	21,05314	0,0007	4,20634	0,9990	79,79696	Uniform - 0.3X + Y
column C8	2	Start	-3	-0,0059	19,49579	0,0003	1,768546	1,1057	80,84524	Uniform - X + 0.3Y
column C9	2	End	-2	-0,0059	19,17655	-0,0056	-25,2606	0,7522	74,34422	Uniform + 0.3X - Y
column C9	2	End	-3	-0,0069	19,55482	-0,0087	-34,533	0,6499	70,13256	Uniform - X + 0.3Y
column C9	2	Start	-2	-0,0057	20,59537	-0,0051	-22,9585	0,7520	73,26628	Uniform + 0.3X - Y
column C9	2	Start	-3	-0,0070	19,16114	-0,0088	-35,0341	0,6526	70,50501	Uniform - X + 0.3Y
					Average		2,413908		80,7593	

Life Safety										
Member	floor	edge	local axis	Increased	Percent In	Inc capaci	% Cap inc	Inc perf ra	% Increase	analysis
column C1	2	End	-2	-0,0272	18,18428	0,0013	2,75814	0,5610	82,30231	Uniform + 0.3X - Y
column C1	2	End	-3	-0,0319	21,29131	-0,0010	-1,92516	0,6145	78,29071	Uniform - X + 0.3Y
column C1	2	Start	-2	-0,0273	17,65929	0,0012	2,506348	0,5623	82,77211	Uniform + 0.3X - Y
column C1	2	Start	-3	-0,0304	20,38916	-0,0011	-2,22943	0,5861	79,14702	Uniform - X + 0.3Y
column C1	2	End	-2	-0,0271	17,88677	0,0003	0,604759	0,5663	82,21991	Uniform + 0.3X - Y
column C1	2	End	-3	-0,0222	18,84465	0,0004	0,764716	0,4604	81,29743	Uniform - X + 0.3Y
column C1	2	Start	-2	-0,0267	17,47021	0,0010	2,148609	0,5603	82,89831	Uniform - 0.3X + Y
column C1	2	Start	-3	-0,0215	17,93333	-0,0001	-0,28325	0,4436	82,01561	Uniform - X + 0.3Y
column C1	2	End	-2	-0,0257	17,87893	0,0023	4,612296	0,5110	82,91068	Uniform - 0.3X + Y
column C1	2	End	-3	-0,0240	18,0778	0,0029	5,634516	0,4725	82,88702	Uniform + X - 0.3Y
column C1	2	Start	-2	-0,0247	19,46322	0,0036	7,229205	0,5017	81,84931	Uniform - 0.3X + Y
column C1	2	Start	-3	-0,0232	17,1803	0,0024	4,631312	0,4572	83,57874	Uniform - X + 0.3Y
column C1	2	End	-2	-0,0277	16,47755	0,0016	3,202397	0,5418	84,03344	Uniform - 0.3X - Y
column C1	2	End	-3	-0,0241	15,60839	0,0043	8,642274	0,4937	85,63197	Uniform + X - 0.3Y
column C1	2	Start	-2	-0,0289	16,6052	0,0018	3,435122	0,5642	83,94741	Uniform - 0.3X - Y
column C1	2	Start	-3	-0,0243	16,07556	0,0046	9,229064	0,4977	85,28248	Uniform + X - 0.3Y
column C2	2	End	-2	-0,0269	15,22478	-0,0004	-0,76885	0,5342	84,65889	Uniform + 0.3X - Y
column C2	2	End	-3	-0,0345	14,88155	0,0004	0,833903	0,6948	85,24207	Uniform + X - 0.3Y
column C2	2	Start	-2	-0,0291	13,11328	-0,0011	-2,23556	0,5735	86,58679	Uniform - 0.3X - Y
column C2	2	Start	-3	-0,0346	15,43706	-0,0012	-2,37259	0,6915	84,18709	Uniform + X - 0.3Y
column C3	2	End	-2	-0,0291	16,98921	0,0010	2,125447	0,6074	83,36314	Uniform + 0.3X + Y
column C3	2	End	-3	-0,0288	19,65905	0,0010	2,050691	0,6061	80,73699	Uniform - X + 0.3Y
column C3	2	Start	-2	-0,0276	18,42635	0,0011	2,311155	0,5748	81,98998	Uniform - 0.3X - Y
column C3	2	Start	-3	-0,0281	18,58623	0,0007	1,479619	0,5900	81,68613	Uniform - X + 0.3Y
column C4	2	End	-2	-0,0272	17,75766	-0,0022	-4,35301	0,5259	81,43341	Uniform - 0.3X + Y
column C4	2	End	-3	-0,0240	19,23762	-0,0012	-2,31063	0,4686	80,30603	Uniform - X + 0.3Y
column C4	2	Start	-2	-0,0268	18,9355	-0,0019	-3,74066	0,5200	80,32828	Uniform - 0.3X + Y
column C4	2	Start	-3	-0,0224	19,88537	-0,0015	-2,87279	0,4356	79,52662	Uniform - X + 0.3Y
column C5	2	End	-2	-0,0256	18,13389	0,0025	5,29403	0,5506	82,77748	Uniform - 0.3X + Y
column C5	2	End	-3	-0,0255	18,73307	0,0029	6,183749	0,5491	82,35777	Uniform - X + 0.3Y
column C5	2	Start	-2	-0,0248	19,62526	0,0027	5,713013	0,5329	81,43394	Uniform - 0.3X + Y
column C5	2	Start	-3	-0,0248	17,80845	0,0023	4,916748	0,5314	83,0266	Uniform - X + 0.3Y
column C6	2	End	-2	-0,0290	16,91195	-0,0020	-3,93001	0,5647	82,39616	Uniform + 0.3X + Y
column C6	2	End	-3	-0,0257	18,50641	-0,0017	-3,44386	0,5018	80,83285	Uniform - X + 0.3Y
column C6	2	Start	-2	-0,0285	17,92887	-0,0019	-3,6753	0,5547	81,38772	Uniform + 0.3X + Y
column C6	2	Start	-3	-0,0250	17,68683	-0,0021	-4,15262	0,4876	81,54848	Uniform - X + 0.3Y
column C7	2	End	-2	-0,0254	18,47565	0,0078	19,778	0,6730	84,57455	Uniform + 0.3X - Y
column C7	2	End	-3	-0,0331	21,06067	0,0076	18,13708	0,8189	82,17279	Uniform - X + 0.3Y
column C7	2	Start	-2	-0,0246	19,80717	0,0080	20,31855	0,6536	83,53885	Uniform + 0.3X - Y
column C7	2	Start	-3	-0,0326	19,92133	0,0073	17,44844	0,8026	83,038	Uniform - X + 0.3Y
column C8	2	End	-2	-0,0256	18,26404	0,0091	22,64476	0,6650	85,10965	Uniform - 0.3X + Y
column C8	2	End	-3	-0,0286	19,74578	0,0105	26,11935	0,7489	84,34266	Uniform - X + 0.3Y
column C8	2	Start	-2	-0,0247	19,74828	0,0096	23,7883	0,6450	84,04805	Uniform - 0.3X + Y
column C8	2	Start	-3	-0,0277	18,9054	0,0099	24,73081	0,7229	84,8424	Uniform - X + 0.3Y
column C9	2	End	-2	-0,0272	18,16404	-0,0074	-13,0516	0,4657	79,10864	Uniform + 0.3X - Y
column C9	2	End	-3	-0,0274	20,21581	-0,0108	-17,9184	0,4302	75,36925	Uniform - X + 0.3Y
column C9	2	Start	-2	-0,0271	19,49949	-0,0069	-12,3286	0,4636	77,75806	Uniform + 0.3X - Y
column C9	2	Start	-3	-0,0280	18,71521	-0,0112	-18,5806	0,4421	77,01318	Uniform - X + 0.3Y
					Average		3,314575		82,24556	

Collapse Prevention										
Member	floor	edge	local axis	Increased	Percent In	Inc capaci	% Cap inc	Inc perf ra	% Increase	analysis
column C1	2	End	-2	-0,0364	18,89572	0,0011	1,688999	0,5718	81,41875	Uniform + 0.3X - Y
column C1	2	End	-3	-0,0410	23,08211	-0,0019	-2,7555	0,6043	76,26394	Uniform - X + 0.3Y
column C1	2	Start	-2	-0,0366	18,46319	0,0011	1,700989	0,5744	81,84469	Uniform + 0.3X - Y
column C1	2	Start	-3	-0,0398	22,33245	-0,0019	-2,8092	0,5862	77,02176	Uniform - X + 0.3Y
column C1	2	End	-2	-0,0363	18,56556	-0,0004	-0,63485	0,5737	81,3169	Uniform + 0.3X - Y
column C1	2	End	-3	-0,0283	19,24648	0,0083	15,1081	0,5288	83,27871	Uniform - X + 0.3Y
column C1	2	Start	-2	-0,0362	17,96483	0,0007	1,160545	0,5739	82,24054	Uniform - 0.3X + Y
column C1	2	Start	-3	-0,0303	16,9354	-0,0003	-0,50314	0,4773	82,98038	Uniform - X + 0.3Y
column C1	2	End	-2	-0,0343	18,32056	0,0017	2,586026	0,5184	82,14191	Uniform - 0.3X + Y
column C1	2	End	-3	-0,0262	21,03836	0,0150	27,59912	0,5113	83,51143	Uniform + X - 0.3Y
column C1	2	Start	-2	-0,0329	19,84796	0,0032	4,830445	0,5089	81,06632	Uniform + 0.3X + Y
column C1	2	Start	-3	-0,0319	16,77917	0,0019	2,864892	0,4811	83,68838	Uniform - X + 0.3Y
column C1	2	End	-2	-0,0374	16,6893	0,0012	1,780061	0,5607	83,60152	Uniform - 0.3X - Y
column C1	2	End	-3	-0,0334	14,32239	0,0030	4,63084	0,5173	86,31271	Uniform + X - 0.3Y
column C1	2	Start	-2	-0,0389	16,78854	0,0011	1,659973	0,5808	83,48496	Uniform - 0.3X - Y
column C1	2	Start	-3	-0,0333	15,53886	0,0036	5,530004	0,5168	85,27453	Uniform + X - 0.3Y
column C2	2	End	-2	-0,0370	14,76471	-0,0022	-3,34719	0,5496	84,72461	Uniform + 0.3X - Y
column C2	2	End	-3	-0,0449	16,2896	0,0001	0,079856	0,6899	83,72267	Uniform + X - 0.3Y
column C2	2	Start	-2	-0,0392	13,34055	-0,0019	-2,83216	0,5901	86,27085	Uniform - 0.3X - Y
column C2	2	Start	-3	-0,0443	18,00697	-0,0019	-2,9651	0,6746	81,44254	Uniform + X - 0.3Y
column C3	2	End	-2	-0,0389	17,44384	0,0009	1,499508	0,6195	82,81476	Uniform + 0.3X + Y
column C3	2	End	-3	-0,0379	20,51907	0,0007	1,08052	0,6058	79,69996	Uniform - X + 0.3Y
column C3	2	Start	-2	-0,0372	18,6404	0,0008	1,267185	0,5903	81,59242	Uniform - 0.3X - Y
column C3	2	Start	-3	-0,0372	19,51705	0,0005	0,870232	0,5946	80,65062	Uniform - X + 0.3Y
column C4	2	End	-2	-0,0363	18,60403	-0,0028	-4,19264	0,5357	80,5814	Uniform - 0.3X + Y
column C4	2	End	-3	-0,0274	21,77433	0,0079	13,91121	0,4999	80,88459	Uniform - X + 0.3Y
column C4	2	Start	-2	-0,0360	19,56201	-0,0031	-4,60997	0,5309	79,49281	Uniform - 0.3X + Y
column C4	2	Start	-3	-0,0312	19,4466	-0,0026	-3,79713	0,4603	79,78499	Uniform - X + 0.3Y
column C5	2	End	-2	-0,0342	18,52884	0,0033	5,387233	0,5662	82,41932	Uniform - 0.3X + Y
column C5	2	End	-3	-0,0343	18,72796	0,0034	5,505918	0,5665	82,24849	Uniform - X + 0.3Y
column C5	2	Start	-2	-0,0333	19,92876	0,0033	5,440123	0,5500	81,09929	Uniform - 0.3X + Y
column C5	2	Start	-3	-0,0337	17,89038	0,0029	4,677907	0,5528	82,90882	Uniform - X + 0.3Y
column C6	2	End	-2	-0,0388	17,20263	-0,0032	-4,7802	0,5745	81,93385	Uniform + 0.3X + Y
column C6	2	End	-3	-0,0345	18,52403	-0,0027	-4,01693	0,5147	80,70054	Uniform - X + 0.3Y
column C6	2	Start	-2	-0,0384	18,16106	-0,0032	-4,77973	0,5656	80,92683	Uniform + 0.3X + Y
column C6	2	Start	-3	-0,0339	17,77476	-0,0029	-4,34953	0,5053	81,418	Uniform - X + 0.3Y
column C7	2	End	-2	-0,0337	19,0475	0,0092	18,0607	0,6875	83,86706	Uniform + 0.3X - Y
column C7	2	End	-3	-0,0425	22,9226	0,0101	18,7079	0,8202	80,69044	Uniform - X + 0.3Y
column C7	2	Start	-2	-0,0328	20,21797	0,0093	18,29621	0,6711	82,90786	Uniform + 0.3X - Y
column C7	2	Start	-3	-0,0420	21,87837	0,0100	18,36659	0,8080	81,51696	Uniform - X + 0.3Y
column C8	2	End	-2	-0,0342	18,62232	0,0104	19,7131	0,6729	84,44348	Uniform - 0.3X + Y
column C8	2	End	-3	-0,0376	20,59326	0,0130	24,99039	0,7611	83,52347	Uniform - X + 0.3Y
column C8	2	Start	-2	-0,0333	19,84106	0,0104	19,63739	0,6549	83,4167	Uniform - 0.3X + Y
column C8	2	Start	-3	-0,0367	19,87177	0,0128	24,6	0,7412	84,05184	Uniform - X + 0.3Y
column C9	2	End	-2	-0,0364	18,87201	-0,0080	-11,1833	0,4910	78,75145	Uniform + 0.3X - Y
column C9	2	End	-3	-0,0257	27,15367	0,0184	41,19026	0,6363	80,76795	Uniform - X + 0.3Y
column C9	2	Start	-2	-0,0361	20,12683	-0,0078	-10,7991	0,4882	77,43722	Uniform + 0.3X - Y
column C9	2	Start	-3	-0,0372	19,63702	-0,0131	-17,2762	0,4633	76,26274	Uniform - X + 0.3Y
					Average		4,766467		81,84171	

Increased Strength Member Shear Force Biaxial Analysis

Operational level (1-A)										
Member	floor	edge	local axis	Increased Value	Percent Inc	Inc capacity	% Cap inc	Inc perf ratio	% Increase	analysis
column C1	2	End	-2	71,1145	153,2625	255,9518	79,26518	0,0600	14,50517	Uniform + 0.3X - Y
column C1	2	End	-3	73,5159	183,3504	264,0535	86,60034	0,0050	1,741631	Uniform - X + 0.3Y
column C1	2	Start	-2	71,1145	153,2625	255,9518	79,26518	0,0600	14,50517	Uniform + 0.3X - Y
column C1	2	Start	-3	73,5159	183,3504	264,0535	86,60034	0,0050	1,741631	Uniform - X + 0.3Y
column C1	2	End	-2	69,0038	227,4415	313,4630	142,7723	0,0156	6,314701	Uniform + 0.3X - Y
column C1	2	End	-3	83,0112	254,7911	313,5257	137,818	-0,0168	-7,13683	Uniform - X + 0.3Y
column C1	2	Start	-2	69,0038	227,4415	313,4630	142,7723	0,0156	6,314701	Uniform - 0.3X + Y
column C1	2	Start	-3	83,0112	254,7911	313,5257	137,818	-0,0168	-7,13683	Uniform - X + 0.3Y
column C1	2	End	-2	29,4623	144,1041	196,4635	84,3109	0,0625	21,8146	Uniform - 0.3X + Y
column C1	2	End	-3	52,0218	188,6199	213,1748	92,62525	0,0053	2,079486	Uniform + X - 0.3Y
column C1	2	Start	-2	29,4623	144,1041	196,4635	84,3109	0,0625	21,8146	Uniform - 0.3X + Y
column C1	2	Start	-3	52,0218	188,6199	213,1748	92,62525	0,0053	2,079486	Uniform - X + 0.3Y
column C1	2	End	-2	24,8479	137,7121	210,7310	96,3088	0,0899	29,8494	Uniform - 0.3X - Y
column C1	2	End	-3	55,4432	203,1519	218,2586	97,54581	-0,0068	-2,83782	Uniform + X - 0.3Y
column C1	2	Start	-2	24,8479	137,7121	210,7310	96,3088	0,0899	29,8494	Uniform - 0.3X - Y
column C1	2	Start	-3	55,4432	203,1519	218,2586	97,54581	-0,0068	-2,83782	Uniform + X - 0.3Y
column C2	2	End	-2	-27,3842	85,96499	276,1487	93,99892	0,3699	55,68794	Uniform + 0.3X - Y
column C2	2	End	-3	49,6888	160,9205	267,7638	91,14478	0,0439	15,81213	Uniform + X - 0.3Y
column C2	2	Start	-2	-27,3842	85,96499	276,1487	93,99892	0,3699	55,68794	Uniform - 0.3X - Y
column C2	2	Start	-3	49,6888	160,9205	267,7638	91,14478	0,0439	15,81213	Uniform + X - 0.3Y
column C3	2	End	-2	8,9257	105,4987	239,7275	78,07456	0,2155	40,75585	Uniform + 0.3X + Y
column C3	2	End	-3	54,4105	148,7844	248,6982	78,15497	0,0578	16,48592	Uniform - X + 0.3Y
column C3	2	Start	-2	8,9257	105,4987	239,7275	78,07456	0,2155	40,75585	Uniform - 0.3X - Y
column C3	2	Start	-3	54,4105	148,7844	248,6982	78,15497	0,0578	16,48592	Uniform - X + 0.3Y
column C4	2	End	-2	37,2294	130,7049	253,2496	81,65654	0,1097	28,04842	Uniform - 0.3X + Y
column C4	2	End	-3	56,6761	155,2502	246,7579	80,49011	0,0468	13,98408	Uniform - X + 0.3Y
column C4	2	Start	-2	37,2294	130,7049	253,2496	81,65654	0,1097	28,04842	Uniform - 0.3X + Y
column C4	2	Start	-3	56,6761	155,2502	246,7579	80,49011	0,0468	13,98408	Uniform - X + 0.3Y
column C5	2	End	-2	-10,2208	93,83646	244,9609	76,66315	0,2433	46,88395	Uniform - 0.3X + Y
column C5	2	End	-3	44,3827	138,5641	246,2542	77,46832	0,0794	21,92193	Uniform - X + 0.3Y
column C5	2	Start	-2	-10,2208	93,83646	244,9609	76,66315	0,2433	46,88395	Uniform - 0.3X + Y
column C5	2	Start	-3	44,3827	138,5641	246,2542	77,46832	0,0794	21,92193	Uniform - X + 0.3Y
column C6	2	End	-2	45,4912	142,2171	264,6092	88,52754	0,0886	24,56415	Uniform + 0.3X + Y
column C6	2	End	-3	48,2209	143,1205	253,0322	84,58147	0,0840	22,46215	Uniform - X + 0.3Y
column C6	2	Start	-2	45,4912	142,2171	264,6092	88,52754	0,0886	24,56415	Uniform + 0.3X + Y
column C6	2	Start	-3	48,2209	143,1205	253,0322	84,58147	0,0840	22,46215	Uniform - X + 0.3Y
column C7	2	End	-2	-42,3529	82,78937	312,6865	124,1336	0,6161	63,06247	Uniform + 0.3X - Y
column C7	2	End	-3	34,8374	125,6616	330,0924	127,5003	0,2347	44,76428	Uniform - X + 0.3Y
column C7	2	Start	-2	-42,3529	82,78937	312,6865	124,1336	0,6161	63,06247	Uniform + 0.3X - Y
column C7	2	Start	-3	34,8374	125,6616	330,0924	127,5003	0,2347	44,76428	Uniform - X + 0.3Y
column C8	2	End	-2	-57,5888	75,92816	315,9724	120,5755	0,5987	65,57721	Uniform - 0.3X + Y
column C8	2	End	-3	9,5690	106,1028	309,3611	113,8235	0,2906	50,3784	Uniform - X + 0.3Y
column C8	2	Start	-2	-57,5888	75,92816	315,9724	120,5755	0,5987	65,57721	Uniform - 0.3X + Y
column C8	2	Start	-3	9,5690	106,1028	309,3611	113,8235	0,2906	50,3784	Uniform - X + 0.3Y
column C9	2	End	-2	-9,3107	95,14755	245,4755	73,52129	0,2596	45,16662	Uniform + 0.3X - Y
column C9	2	End	-3	-1,4686	99,12474	237,2582	73,71282	0,2238	42,93765	Uniform - X + 0.3Y
column C9	2	Start	-2	-9,3107	95,14755	245,4755	73,52129	0,2596	45,16662	Uniform + 0.3X - Y
column C9	2	Start	-3	-1,4686	99,12474	237,2582	73,71282	0,2238	42,93765	Uniform - X + 0.3Y
				Average			95,05308		27,70098	

Life Safety										
Member	floor	edge	local axis	Increased Value	Percent Inc	Inc capacity	% Cap inc	Inc perf ratio	% Increase	analysis
column C1	2	End	-2	22,2635	109,9063	255,4522	78,02055	0,2626	38,26199	Uniform + 0.3X - Y
column C1	2	End	-3	79,9526	163,8001	270,3393	89,99938	0,0575	13,78914	Uniform - X + 0.3Y
column C1	2	Start	-2	22,2635	109,9063	253,0872	76,74393	0,2577	37,816	Uniform + 0.3X - Y
column C1	2	Start	-3	79,9526	163,8001	270,3393	89,99938	0,0575	13,78914	Uniform - X + 0.3Y
column C1	2	End	-2	72,2893	183,628	315,4379	144,382	0,0984	24,86023	Uniform + 0.3X - Y
column C1	2	End	-3	101,7241	231,6891	313,6910	136,1805	0,0064	1,901646	Uniform - X + 0.3Y
column C1	2	Start	-2	72,2893	183,628	315,4379	144,382	0,0984	24,86023	Uniform - 0.3X + Y
column C1	2	Start	-3	101,7241	231,6891	313,6910	136,1805	0,0064	1,901646	Uniform - X + 0.3Y
column C1	2	End	-2	12,6373	111,1796	190,5007	80,12467	0,1820	38,27625	Uniform - 0.3X + Y
column C1	2	End	-3	55,7433	166,7166	188,8139	81,59131	0,0296	8,191364	Uniform + X - 0.3Y
column C1	2	Start	-2	12,6373	111,1796	190,5007	80,12467	0,1820	38,27625	Uniform - 0.3X + Y
column C1	2	Start	-3	55,7433	166,7166	188,8139	81,59131	0,0296	8,191364	Uniform - X + 0.3Y
column C1	2	End	-2	0,1750	100,1503	210,7584	96,1184	0,2600	48,93381	Uniform - 0.3X - Y
column C1	2	End	-3	66,7501	186,6556	219,9310	97,39889	0,0186	5,442468	Uniform + X - 0.3Y
column C1	2	Start	-2	0,1750	100,1503	210,7584	96,1184	0,2600	48,93381	Uniform - 0.3X - Y
column C1	2	Start	-3	66,7501	186,6556	219,9310	97,39889	0,0186	5,442468	Uniform + X - 0.3Y
column C2	2	End	-2	-133,4650	61,75149	284,7950	99,00358	0,8366	68,96969	Uniform + 0.3X - Y
column C2	2	End	-3	22,9803	115,4772	275,2888	95,69895	0,2116	40,99237	Uniform + X - 0.3Y
column C2	2	Start	-2	-133,4650	61,75149	284,7950	99,00358	0,8366	68,96969	Uniform - 0.3X - Y
column C2	2	Start	-3	22,9803	115,4772	275,2888	95,69895	0,2116	40,99237	Uniform + X - 0.3Y
column C3	2	End	-2	-49,6054	82,29991	279,0149	92,96497	0,5355	57,34985	Uniform + 0.3X + Y
column C3	2	End	-3	53,4602	134,2545	248,5712	77,72296	0,1194	24,45865	Uniform - X + 0.3Y
column C3	2	Start	-2	-49,6054	82,29991	279,0149	92,96497	0,5355	57,34985	Uniform - 0.3X - Y
column C3	2	Start	-3	53,4602	134,2545	248,5712	77,72296	0,1194	24,45865	Uniform - X + 0.3Y
column C4	2	End	-2	9,4415	104,8478	254,4444	81,86896	0,2654	42,34983	Uniform - 0.3X + Y
column C4	2	End	-3	59,1685	140,3601	253,4649	82,92999	0,1116	23,27116	Uniform - X + 0.3Y
column C4	2	Start	-2	9,4415	104,8478	254,4444	81,86896	0,2654	42,34983	Uniform - 0.3X + Y
column C4	2	Start	-3	59,1685	140,3601	253,4649	82,92999	0,1116	23,27116	Uniform - X + 0.3Y
column C5	2	End	-2	-87,3091	69,32194	243,9930	76,00467	0,5374	60,6136	Uniform - 0.3X + Y
column C5	2	End	-3	41,9442	125,8177	247,4778	77,9841	0,1500	29,30954	Uniform - X + 0.3Y
column C5	2	Start	-2	-87,3091	69,32194	243,9930	76,00467	0,5374	60,6136	Uniform - 0.3X + Y
column C5	2	Start	-3	41,9442	125,8177	247,4778	77,9841	0,1500	29,30954	Uniform - X + 0.3Y
column C6	2	End	-2	10,1495	105,5615	250,1331	85,23801	0,2675	43,01303	Uniform + 0.3X + Y
column C6	2	End	-3	41,5757	125,9578	255,7829	86,57796	0,1761	32,49043	Uniform - X + 0.3Y
column C6	2	Start	-2	10,1495	105,5615	250,1331	85,23801	0,2675	43,01303	Uniform + 0.3X + Y
column C6	2	Start	-3	41,5757	125,9578	255,7829	86,57796	0,1761	32,49043	Uniform - X + 0.3Y
column C7	2	End	-2	-182,5584	57,42255	337,4210	137,5791	1,3257	75,83012	Uniform + 0.3X - Y
column C7	2	End	-3	25,5219	113,3796	331,6176	127,0215	0,3657	50,05776	Uniform - X + 0.3Y
column C7	2	Start	-2	-182,5584	57,42255	337,4210	137,5791	1,3257	75,83012	Uniform + 0.3X - Y
column C7	2	Start	-3	25,5219	113,3796	331,6176	127,0215	0,3657	50,05776	Uniform - X + 0.3Y
column C8	2	End	-2	-188,8763	54,55033	316,8565	120,7869	1,1928	75,29274	Uniform - 0.3X + Y
column C8	2	End	-3	-11,1384	95,00033	306,5729	110,6069	0,4412	54,8921	Uniform - X + 0.3Y
column C8	2	Start	-2	-188,8763	54,55033	316,8565	120,7869	1,1928	75,29274	Uniform - 0.3X + Y
column C8	2	Start	-3	-11,1384	95,00033	306,5729	110,6069	0,4412	54,8921	Uniform - X + 0.3Y
column C9	2	End	-2	-95,9940	70,70575	237,6100	69,10769	0,5546	58,18888	Uniform + 0.3X - Y
column C9	2	End	-3	-25,6630	89,37345	255,0123	78,85104	0,3736	50,02906	Uniform - X + 0.3Y
column C9	2	Start	-2	-95,9940	70,70575	237,6100	69,10769	0,5546	58,18888	Uniform + 0.3X - Y
column C9	2	Start	-3	-25,6630	89,37345	255,0123	78,85104	0,3736	50,02906	Uniform - X + 0.3Y
					Average		95,96353		40,27261	

Collapse Prevention										
Member	floor	edge	local axis	increased Value	Percent Inc	Inc capacity	% Cap inc	Inc perf ratio	% Increase	analysis
column C1	2	End	-2	-96,2020	73,52539	292,1087	99,62563	0,7829	63,16838	Uniform + 0.3X - Y
column C1	2	End	-3	60,7264	135,629	277,2276	94,18509	0,1746	30,15482	Uniform - X + 0.3Y
column C1	2	Start	-2	-96,2020	73,52539	265,5656	83,05426	0,6800	59,83413	Uniform + 0.3X - Y
column C1	2	Start	-3	60,7264	135,629	277,2276	94,18509	0,1746	30,15482	Uniform - X + 0.3Y
column C10	2	End	-2	43,6915	129,4178	307,8435	135,7582	0,2954	45,10566	Uniform + 0.3X - Y
column C10	2	End	-3	105,5455	199,6101	312,5183	133,7689	0,0663	14,61216	Uniform - X + 0.3Y
column C10	2	Start	-2	43,6915	129,4178	308,2495	136,181	0,2966	45,20396	Uniform - X - 0.3X + Y
column C10	2	Start	-3	105,5455	199,6101	312,5183	133,7689	0,0663	14,61216	Uniform - X + 0.3Y
column C11	2	End	-2	-29,0264	84,16502	198,0996	86,50669	0,4392	54,87287	Uniform - 0.3X + Y
column C11	2	End	-3	66,3452	158,3185	214,0819	91,91424	0,0855	17,50574	Uniform + X - 0.3Y
column C11	2	Start	-2	-29,0264	84,16502	182,7935	74,82177	0,3891	51,85663	Uniform - 0.3X + Y
column C11	2	Start	-3	66,3452	158,3185	214,0819	91,91424	0,0855	17,50574	Uniform - X + 0.3Y
column C12	2	End	-2	-48,0888	75,1318	210,4202	95,66213	0,5416	61,60122	Uniform - 0.3X - Y
column C12	2	End	-3	71,1988	167,595	219,7424	96,2983	0,0675	14,62228	Uniform + X - 0.3Y
column C12	2	Start	-2	-48,0888	75,1318	211,3913	96,52982	0,5455	61,77077	Uniform - 0.3X - Y
column C12	2	Start	-3	71,1988	167,595	219,7424	96,2983	0,0675	14,62228	Uniform + X - 0.3Y
column C2	2	End	-2	-338,8195	41,85515	288,7256	101,3635	1,6205	79,21413	Uniform + 0.3X - Y
column C2	2	End	-3	-40,8444	83,67333	275,9354	95,92374	0,4983	57,29295	Uniform + X - 0.3Y
column C2	2	Start	-2	-338,8195	41,85515	293,2290	104,5982	1,6534	79,54275	Uniform - 0.3X - Y
column C2	2	Start	-3	-40,8444	83,67333	275,9354	95,92374	0,4983	57,29295	Uniform + X - 0.3Y
column C3	2	End	-2	-204,0078	55,60011	324,5298	126,5002	1,3514	75,45253	Uniform + 0.3X + Y
column C3	2	End	-3	23,2069	111,0399	250,1840	78,49292	0,2492	37,79035	Uniform - X + 0.3Y
column C3	2	Start	-2	-204,0078	55,60011	300,7240	107,2671	1,1993	73,17467	Uniform - 0.3X - Y
column C3	2	Start	-3	23,2069	111,0399	247,1935	76,8338	0,2431	37,2067	Uniform - X + 0.3Y
column C4	2	End	-2	-67,2546	77,65767	268,1634	89,92389	0,5967	59,11113	Uniform - X + 0.3Y
column C4	2	End	-3	31,8929	115,937	255,4362	83,89108	0,2429	36,95351	Uniform - X + 0.3Y
column C4	2	Start	-2	-67,2546	77,65767	262,9281	86,64722	0,5793	58,3933	Uniform - 0.3X + Y
column C4	2	Start	-3	31,8929	115,937	255,4362	83,89108	0,2429	36,95351	Uniform - X + 0.3Y
column C5	2	End	-2	-241,0802	48,16536	266,7829	89,34009	1,1613	74,56145	Uniform - 0.3X + Y
column C5	2	End	-3	10,8180	104,916	250,0069	79,32245	0,2897	41,49307	Uniform - X + 0.3Y
column C5	2	Start	-2	-241,0802	48,16536	245,6648	76,83437	1,0584	72,76245	Uniform - 0.3X + Y
column C5	2	Start	-3	10,8180	104,916	249,0269	78,76656	0,2875	41,31117	Uniform - X + 0.3Y
column C6	2	End	-2	-63,9466	78,40195	304,8417	116,3412	0,7205	63,76007	Uniform + 0.3X + Y
column C6	2	End	-3	8,5273	103,8949	277,8666	98,6621	0,3708	47,70275	Uniform - X + 0.3Y
column C6	2	Start	-2	-63,9466	78,40195	292,9060	106,9158	0,6712	62,10928	Uniform + 0.3X + Y
column C6	2	Start	-3	8,5273	103,8949	278,2518	98,9342	0,3719	47,7743	Uniform - X + 0.3Y
column C7	2	End	-2	-442,6932	37,3304	353,4420	153,0779	2,6081	85,24943	Uniform + 0.3X - Y
column C7	2	End	-3	-10,5349	95,91053	331,7780	125,8425	0,5622	57,53215	Uniform - X + 0.3Y
column C7	2	Start	-2	-442,6932	37,3304	350,6082	150,0095	2,5711	85,06839	Uniform + 0.3X - Y
column C7	2	Start	-3	-10,5349	95,91053	331,7780	125,8425	0,5622	57,53215	Uniform - X + 0.3Y
column C8	2	End	-2	-434,7750	36,39466	325,1321	127,4957	2,2516	84,00205	Uniform - 0.3X + Y
column C8	2	End	-3	-61,8599	79,58443	311,8858	113,7772	0,6939	62,77222	Uniform - X + 0.3Y
column C8	2	Start	-2	-434,7750	36,39466	317,4058	120,8059	2,1728	83,51736	Uniform - 0.3X + Y
column C8	2	Start	-3	-61,8599	79,58443	310,6813	112,8419	0,6890	62,60866	Uniform - X + 0.3Y
column C9	2	End	-2	-277,9089	47,9654	268,7183	85,61581	1,2619	74,15878	Uniform + 0.3X - Y
column C9	2	End	-3	-88,9445	73,13719	254,7155	78,31468	0,6005	58,98422	Uniform - X + 0.3Y
column C9	2	Start	-2	-277,9089	47,9654	236,3795	68,27752	1,1030	71,49625	Uniform + 0.3X - Y
column C9	2	Start	-3	-88,9445	73,13719	254,7155	78,31468	0,6005	58,98422	Uniform - X + 0.3Y
					Average		101,1888		53,72839	