



Prepared for
Abbasi

ACI 318-99
Concrete Frame Design Report

Prepared by
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Model Name: Abbasi.edb

18 September 2011

Design Preferences

Consider Minimum Eccentricity = Yes
Number of Interaction Curves = 24
Number of Interaction Points = 11
 Pattern Live Load Factor = 0.750
 Utilization Factor Limit = 1.000
 Phi (Bending/Tension) = 0.900
 Phi (Compression Tied) = 0.700
 Phi (Compression Spiral) = 0.750
 Phi (Shear) = 0.850

Load Combinations

Load Combinations

Combination Name	Combination Definition
COMB1	1.400*DEAD + 1.700*LIVE
COMB2	1.050*DEAD + 1.275*LIVE + 1.403*EXP + 0.420*EY
COMB3	1.050*DEAD + 1.275*LIVE + 1.403*EXP - 0.420*EY
COMB4	1.050*DEAD + 1.275*LIVE - 1.403*EXP + 0.420*EY
COMB5	1.050*DEAD + 1.275*LIVE - 1.403*EXP - 0.420*EY
COMB6	1.050*DEAD + 1.275*LIVE + 1.403*EYP + 0.420*EX
COMB7	1.050*DEAD + 1.275*LIVE + 1.403*EYP - 0.420*EX
COMB8	1.050*DEAD + 1.275*LIVE - 1.403*EYP + 0.420*EX
COMB9	1.050*DEAD + 1.275*LIVE - 1.403*EYP - 0.420*EX
COMB10	0.900*DEAD + 1.430*EXP + 0.430*EY
COMB11	0.900*DEAD + 1.430*EXP - 0.430*EY
COMB12	0.900*DEAD - 1.430*EXP + 0.430*EY
COMB13	0.900*DEAD - 1.430*EXP - 0.430*EY
COMB14	0.900*DEAD + 1.430*EYP + 0.430*EX
COMB15	0.900*DEAD + 1.430*EYP - 0.430*EX
COMB16	0.900*DEAD - 1.430*EYP + 0.430*EX
COMB17	0.900*DEAD - 1.430*EYP - 0.430*EX
COMB18	1.050*DEAD + 1.275*LIVE + 1.403*EXN + 0.420*EY
COMB19	1.050*DEAD + 1.275*LIVE + 1.403*EXN - 0.420*EY
COMB20	1.050*DEAD + 1.275*LIVE - 1.403*EXN + 0.420*EY
COMB21	1.050*DEAD + 1.275*LIVE - 1.403*EXN - 0.420*EY
COMB22	1.050*DEAD + 1.275*LIVE + 1.403*EYN + 0.420*EX
COMB23	1.050*DEAD + 1.275*LIVE + 1.403*EYN - 0.420*EX
COMB24	1.050*DEAD + 1.275*LIVE - 1.403*EYN + 0.420*EX
COMB25	1.050*DEAD + 1.275*LIVE - 1.403*EYN - 0.420*EX
COMB26	0.900*DEAD + 1.430*EXN + 0.430*EY
COMB27	0.900*DEAD + 1.430*EXN - 0.430*EY
COMB28	0.900*DEAD - 1.430*EXN + 0.430*EY
COMB29	0.900*DEAD - 1.430*EXN - 0.430*EY
COMB30	0.900*DEAD + 1.430*EYN + 0.430*EX
COMB31	0.900*DEAD + 1.430*EYN - 0.430*EX
COMB32	0.900*DEAD - 1.430*EYN + 0.430*EX
COMB33	0.900*DEAD - 1.430*EYN - 0.430*EX

Material Property Data - General

Material Property Data - General

Name	Type	Dir/Plane	Modulus of Elasticity	Poisson's Ratio	Thermal Coefficient	Shear Modulus
CONC	Iso	All	2188190000.0	0.2000	9.9000E-06	911745833.3

Material Property Data - Mass & Weight

Material Property Data - Mass & Weight

Name	Mass per Unit Volume	Weight per Unit Volume
CONC	2.5460E+02	2.5000E+03

Material Property Data - Concrete Design

Material Property Data - Concrete Design

Name	Lightweight Concrete	Concrete f_c	Rebar f_y	Rebar f_{ys}	Lightweight Reduc. Factor
CONC	No	2100000.000	40000000.00	30000000.000	N/A

Frame Section Property Data - Concrete Columns

Frame Section Property Data - Concrete Columns

Frame Section Name	Material Name	Column Depth	Column Width	Rebar Pattern	Concrete Cover	Bar Size	Corner Bar Size
C45-16F20	CONC	0.450	0.450	RR-5-5	5.500E-02	20Ø	20Ø
C45-12F22	CONC	0.450	0.450	RR-4-4	5.500E-02	22Ø	22Ø
C45-12F20	CONC	0.450	0.450	RR-4-4	5.500E-02	20Ø	20Ø
C40-12F20	CONC	0.400	0.400	RR-4-4	5.500E-02	20Ø	20Ø
C40-8F18	CONC	0.400	0.400	RR-3-3	5.500E-02	18Ø	18Ø
C35-8F18	CONC	0.350	0.350	RR-3-3	5.500E-02	18Ø	18Ø
C35-8F16	CONC	0.350	0.350	RR-3-3	5.500E-02	16Ø	16Ø
C30-8F16	CONC	0.300	0.300	RR-3-3	5.500E-02	16Ø	16Ø
C30-8F14	CONC	0.300	0.300	RR-3-3	5.500E-02	14Ø	14Ø
C40-12F18	CONC	0.400	0.400	RR-4-4	5.500E-02	18Ø	18Ø
C35-12F18	CONC	0.350	0.350	RR-4-4	5.500E-02	18Ø	18Ø
C45-12F18	CONC	0.450	0.450	RR-4-4	5.500E-02	18Ø	18Ø

Frame Section Property Data - Concrete Beams Part 1 of 2

Frame Section Property Data - Concrete Beams Part 1 of 2

Frame Section Name	Material Name	Beam Depth	Beam Width	Top Cover	Bottom Cover
B35X35	CONC	0.350	0.350	5.500E-02	5.500E-02
B30X30	CONC	0.300	0.300	5.500E-02	5.500E-02
B35X25	CONC	0.350	0.250	5.500E-02	5.500E-02
B30X20	CONC	0.300	0.200	5.500E-02	5.500E-02
B30X35	CONC	0.300	0.350	5.500E-02	5.500E-02
B35X40	CONC	0.350	0.400	5.500E-02	5.500E-02
B40X45	CONC	0.400	0.450	5.500E-02	5.500E-02
B35X30	CONC	0.350	0.300	5.500E-02	5.500E-02
B40X40	CONC	0.400	0.400	5.500E-02	5.500E-02
B40X25	CONC	0.400	0.250	5.500E-02	5.500E-02
B40X50	CONC	0.400	0.500	5.500E-02	5.500E-02
B45X45	CONC	0.450	0.450	5.500E-02	5.500E-02
B45X40	CONC	0.450	0.400	5.500E-02	5.500E-02
B45X25	CONC	0.450	0.250	5.500E-02	5.500E-02
B45X30	CONC	0.450	0.300	5.500E-02	5.500E-02
B40X30	CONC	0.400	0.300	5.500E-02	5.500E-02
DUBL	CONC	0.300	0.200	3.000E-02	3.000E-02
B50X45	CONC	0.500	0.450	5.500E-02	5.500E-02
B45X50	CONC	0.450	0.500	5.500E-02	5.500E-02
B40X35	CONC	0.400	0.350	5.500E-02	5.500E-02

Frame Section Property Data - Concrete Beams Part 1 of 2

Frame Section Name	Material Name	Beam Depth	Beam Width	Top Cover	Bottom Cover
B50X50	CONC	0.500	0.500	5.500E-02	5.500E-02
B50X25	CONC	0.500	0.250	5.500E-02	5.500E-02
B55X50	CONC	0.550	0.500	5.500E-02	5.500E-02
B50X55	CONC	0.500	0.550	5.500E-02	5.500E-02
B55X55	CONC	0.550	0.550	5.500E-02	5.500E-02
B45X35	CONC	0.450	0.350	5.500E-02	5.500E-02
B55X45	CONC	0.550	0.450	5.500E-02	5.500E-02
B50X30	CONC	0.500	0.300	5.500E-02	5.500E-02
B30X25	CONC	0.300	0.250	5.500E-02	5.500E-02
B50X35	CONC	0.500	0.350	5.500E-02	5.500E-02
B30X55	CONC	0.300	0.550	5.500E-02	5.500E-02
B30X50	CONC	0.300	0.500	5.500E-02	5.500E-02
B55X30	CONC	0.550	0.300	5.500E-02	5.500E-02
B60X55	CONC	0.600	0.550	5.500E-02	5.500E-02
B40X55	CONC	0.400	0.550	5.500E-02	5.500E-02
B80X55	CONC	0.800	0.550	5.500E-02	5.500E-02
B50X40	CONC	0.500	0.400	5.500E-02	5.500E-02
B55X40	CONC	0.550	0.400	5.500E-02	5.500E-02
B40X35	CONC	0.400	0.300	5.500E-02	5.500E-02

Frame Section Property Data - Concrete Beams Part 2 of 2

Frame Section Property Data - Concrete Beams Part 2 of 2

Frame Section Name	Rebar AT-1	Rebar AT-2	Rebar AB-1	Rebar AB-2
B35X35	CONC	0.350	0.350	5.500E-02
B30X30	CONC	0.300	0.300	5.500E-02
B35X25	CONC	0.350	0.250	5.500E-02
B30X20	CONC	0.300	0.200	5.500E-02
B30X35	CONC	0.300	0.350	5.500E-02
B35X40	CONC	0.350	0.400	5.500E-02
B40X45	CONC	0.400	0.450	5.500E-02
B35X30	CONC	0.350	0.300	5.500E-02
B40X40	CONC	0.400	0.400	5.500E-02
B40X25	CONC	0.400	0.250	5.500E-02
B40X50	CONC	0.400	0.500	5.500E-02
B45X45	CONC	0.450	0.450	5.500E-02
B45X40	CONC	0.450	0.400	5.500E-02
B45X25	CONC	0.450	0.250	5.500E-02
B45X30	CONC	0.450	0.300	5.500E-02
B40X30	CONC	0.400	0.300	5.500E-02
DUBL	CONC	0.300	0.200	3.000E-02
B50X45	CONC	0.500	0.450	5.500E-02
B45X50	CONC	0.450	0.500	5.500E-02
B40X35	CONC	0.400	0.350	5.500E-02
B50X50	CONC	0.500	0.500	5.500E-02
B50X25	CONC	0.500	0.250	5.500E-02
B55X50	CONC	0.550	0.500	5.500E-02

Frame Section Property Data - Concrete Beams Part 2 of 2

Frame Section Name	Rebar AT-1	Rebar AT-2	Rebar AB-1	Rebar AB-2
B50X55	CONC	0.500	0.550	5.500E-02
B55X55	CONC	0.550	0.550	5.500E-02
B45X35	CONC	0.450	0.350	5.500E-02
B55X45	CONC	0.550	0.450	5.500E-02
B50X30	CONC	0.500	0.300	5.500E-02
B30X25	CONC	0.300	0.250	5.500E-02
B50X35	CONC	0.500	0.350	5.500E-02
B30X55	CONC	0.300	0.550	5.500E-02
B30X50	CONC	0.300	0.500	5.500E-02
B55X30	CONC	0.550	0.300	5.500E-02
B60X55	CONC	0.600	0.550	5.500E-02
B40X55	CONC	0.400	0.550	5.500E-02
B80X55	CONC	0.800	0.550	5.500E-02
B50X40	CONC	0.500	0.400	5.500E-02
B55X40	CONC	0.550	0.400	5.500E-02
B40X35	CONC	0.400	0.300	5.500E-02

Concrete Column Design - Element Information

Concrete Column Design - Element Information

Story Level	Column Line	Section Name	Frame Type	RLLF Factor	L_Ratio Major	L_Ratio Minor	K Major	K Minor
STORY4	C1	C35-8F18	SWYSPEC	1.000	0.891	0.891	1.000	1.000
STORY3	C1	C40-8F18	SWYSPEC	1.000	0.875	0.875	1.000	1.000
STORY2	C1	C45-12F18	SWYSPEC	0.940	0.859	0.859	1.000	1.000
STORY1	C1	C45-16F20	SWYSPEC	0.881	0.850	0.850	1.000	1.000
STORY4	C2	C35-12F18	SWYSPEC	1.000	0.891	0.891	1.000	1.000
STORY3	C2	C40-12F20	SWYSPEC	0.921	0.875	0.875	1.000	1.000
STORY2	C2	C45-16F20	SWYSPEC	0.824	0.859	0.859	1.000	1.000
STORY1	C2	C45-16F20	SWYSPEC	0.727	0.850	0.850	1.000	1.000
STORY4	C3	C35-8F18	SWYSPEC	1.000	0.891	0.891	1.000	1.000
STORY3	C3	C40-8F18	SWYSPEC	1.000	0.875	0.875	1.000	1.000
STORY2	C3	C45-12F18	SWYSPEC	1.000	0.859	0.859	1.000	1.000
STORY1	C3	C45-16F20	SWYSPEC	0.983	0.850	0.850	1.000	1.000
STORY4	C4	C35-12F18	SWYSPEC	1.000	0.891	0.891	1.000	1.000
STORY3	C4	C40-12F20	SWYSPEC	0.878	0.875	0.875	1.000	1.000
STORY2	C4	C45-16F20	SWYSPEC	0.758	0.859	0.859	1.000	1.000
STORY1	C4	C45-16F20	SWYSPEC	0.638	0.850	0.850	1.000	1.000
STORY5	C5	C30-8F14	SWYSPEC	1.000	0.900	0.900	1.000	1.000
STORY4	C5	C35-8F18	SWYSPEC	0.923	0.891	0.891	1.000	1.000
STORY3	C5	C40-12F18	SWYSPEC	0.764	0.875	0.875	1.000	1.000
STORY2	C5	C45-12F20	SWYSPEC	0.605	0.859	0.859	1.000	1.000
STORY1	C5	C45-12F22	SWYSPEC	0.442	0.850	0.850	1.000	1.000
STORY5	C6	C30-8F14	SWYSPEC	1.000	0.900	0.900	1.000	1.000
STORY4	C6	C35-8F18	SWYSPEC	1.000	0.891	0.891	1.000	1.000
STORY3	C6	C40-12F18	SWYSPEC	1.000	0.875	0.875	1.000	1.000
STORY2	C6	C45-12F20	SWYSPEC	0.992	0.859	0.859	1.000	1.000
STORY1	C6	C45-12F22	SWYSPEC	0.958	0.850	0.850	1.000	1.000

Concrete Column Design - Element Information

Story Level	Column Line	Section Name	Frame Type	RLLF Factor	L_Ratio Major	L_Ratio Minor	K Major	K Minor
STORY5	C7	C30-8F16	SWYSPEC	1.000	0.900	0.900	1.000	1.000
STORY4	C7	C35-8F16	SWYSPEC	1.000	0.497	0.891	1.000	1.000
STORY3	C7	C40-12F18	SWYSPEC	0.980	0.497	0.875	1.000	1.000
STORY2	C7	C45-12F18	SWYSPEC	0.925	0.497	0.859	1.000	1.000
STORY1	C7	C45-16F20	SWYSPEC	0.872	0.490	0.850	1.000	1.000
STORY5	C8	C30-8F16	SWYSPEC	1.000	5.100	0.900	1.000	1.000
STORY4	C8	C35-8F16	SWYSPEC	1.000	0.497	0.891	1.000	1.000
STORY3	C8	C40-12F18	SWYSPEC	1.000	0.497	0.875	1.000	1.000
STORY2	C8	C45-12F18	SWYSPEC	1.000	0.497	0.859	1.000	1.000
STORY1	C8	C45-16F20	SWYSPEC	1.000	0.490	0.850	1.000	1.000
STORY4	C9	C35-8F18	SWYSPEC	1.000	0.891	0.891	1.000	1.000
STORY3	C9	C40-8F18	SWYSPEC	0.991	0.875	0.875	1.000	1.000
STORY2	C9	C45-12F18	SWYSPEC	0.925	0.859	0.859	1.000	1.000
STORY1	C9	C45-16F20	SWYSPEC	0.858	0.850	0.850	1.000	1.000

Concrete Beam Design - Element Information

Concrete Beam Design - Element Information

Story Level	Beam Bay	Section Name	Frame Type	RLLF Factor	L_Ratio Major	L_Ratio Minor
STORY5	B4	B30X30	SWYSPEC	1.000	0.940	0.940
STORY5	B5	B30X30	SWYSPEC	1.000	0.893	0.893
STORY5	B6	B30X30	SWYSPEC	1.000	0.940	0.940
STORY5	B12	B30X30	SWYSPEC	1.000	0.893	0.893
STORY4	B1	B35X35	SWYSPEC	0.998	0.930	0.930
STORY4	B2	B35X35	SWYSPEC	1.000	0.876	0.876
STORY4	B3	B35X35	SWYSPEC	1.000	0.938	0.938
STORY4	B4	B35X35	SWYSPEC	1.000	0.930	0.930
STORY4	B6	B35X35	SWYSPEC	1.000	0.930	0.930
STORY4	B7	B35X35	SWYSPEC	1.000	0.941	0.941
STORY4	B8	B35X35	SWYSPEC	0.999	0.932	0.932
STORY4	B9	B35X35	SWYSPEC	1.000	0.942	0.942
STORY4	B10	B35X35	SWYSPEC	1.000	0.936	0.936
STORY4	B11	B35X35	SWYSPEC	0.877	0.932	0.932
STORY4	B12	B35X35	SWYSPEC	1.000	0.875	0.875
STORY4	B14	B35X35	SWYSPEC	1.000	1.000	1.000
STORY3	B1	B40X40	SWYSPEC	0.998	0.920	0.920
STORY3	B2	B40X40	SWYSPEC	1.000	0.858	0.858
STORY3	B3	B40X40	SWYSPEC	1.000	0.929	0.929
STORY3	B4	B40X35	SWYSPEC	1.000	0.920	0.920
STORY3	B6	B40X40	SWYSPEC	1.000	0.920	0.920
STORY3	B7	B40X40	SWYSPEC	1.000	0.933	0.933
STORY3	B8	B40X40	SWYSPEC	1.000	0.922	0.922
STORY3	B9	B40X40	SWYSPEC	0.999	0.933	0.933
STORY3	B10	B40X40	SWYSPEC	1.000	0.927	0.927
STORY3	B11	B40X40	SWYSPEC	0.986	0.922	0.922
STORY3	B12	B40X40	SWYSPEC	1.000	0.857	0.857
STORY3	B14	B35X35	SWYSPEC	1.000	1.000	1.000

Concrete Beam Design - Element Information

Story Level	Beam Bay	Section Name	Frame Type	RLLF Factor	L_Ratio Major	L_Ratio Minor
STORY2	B1	B45X45	SWYSPEC	0.998	0.910	0.910
STORY2	B2	B45X45	SWYSPEC	1.000	0.840	0.840
STORY2	B3	B45X45	SWYSPEC	1.000	0.920	0.920
STORY2	B4	B45X35	SWYSPEC	1.000	0.910	0.910
STORY2	B6	B45X45	SWYSPEC	1.000	0.910	0.910
STORY2	B7	B45X45	SWYSPEC	1.000	0.924	0.924
STORY2	B8	B45X45	SWYSPEC	1.000	0.913	0.913
STORY2	B9	B45X45	SWYSPEC	0.999	0.925	0.925
STORY2	B10	B45X45	SWYSPEC	1.000	0.918	0.918
STORY2	B11	B45X45	SWYSPEC	0.986	0.913	0.913
STORY2	B12	B45X45	SWYSPEC	1.000	0.839	0.839
STORY2	B14	B35X35	SWYSPEC	1.000	1.000	1.000
STORY1	B1	B45X45	SWYSPEC	0.998	0.910	0.910
STORY1	B2	B45X45	SWYSPEC	1.000	0.840	0.840
STORY1	B3	B45X45	SWYSPEC	1.000	0.920	0.920
STORY1	B4	B45X35	SWYSPEC	1.000	0.910	0.910
STORY1	B6	B45X45	SWYSPEC	1.000	0.910	0.910
STORY1	B7	B45X45	SWYSPEC	1.000	0.924	0.924
STORY1	B8	B45X45	SWYSPEC	1.000	0.913	0.913
STORY1	B9	B45X45	SWYSPEC	0.999	0.925	0.925
STORY1	B10	B45X45	SWYSPEC	1.000	0.918	0.918
STORY1	B11	B45X45	SWYSPEC	0.986	0.913	0.913
STORY1	B12	B45X45	SWYSPEC	1.000	0.839	0.839
STORY1	B13	B35X35	SWYSPEC	1.000	1.000	1.000

Concrete Column Design - P-M-M Interaction & Shear Design

Concrete Column Design - P-M-M Interaction & Shear Design

Story Level	Column Line	Section Name	Column End	PMM Ratio or Rebar %	Flexural Rebar Area	Shear22 Rebar Area	Shear33 Rebar Area
STORY4	C1	C35-8F18	Top	0.762	0.002	6.748E-04	7.060E-04
STORY4	C1	C35-8F18	Bottom	0.654	0.002	6.748E-04	7.060E-04
STORY3	C1	C40-8F18	Top	0.735	0.002	6.267E-04	6.572E-04
STORY3	C1	C40-8F18	Bottom	0.841	0.002	6.267E-04	6.572E-04
STORY2	C1	C45-12F18	Top	0.488	0.003	7.404E-04	8.576E-04
STORY2	C1	C45-12F18	Bottom	0.721	0.003	7.404E-04	8.576E-04
STORY1	C1	C45-16F20	Top	0.248	0.005	7.169E-04	7.855E-04
STORY1	C1	C45-16F20	Bottom	0.823	0.005	7.169E-04	7.855E-04
STORY4	C2	C35-12F18	Top	0.677	0.003	0.001	7.365E-04
STORY4	C2	C35-12F18	Bottom	0.665	0.003	0.001	7.365E-04
STORY3	C2	C40-12F20	Top	Joint shear ratio exceeds limit			
STORY3	C2	C40-12F20	Bottom	0.841	0.004	0.001	7.354E-04
STORY2	C2	C45-16F20	Top	Joint shear ratio exceeds limit			
STORY2	C2	C45-16F20	Bottom	0.760	0.005	0.001	9.206E-04
STORY1	C2	C45-16F20	Top	Joint shear ratio exceeds limit			
STORY1	C2	C45-16F20	Bottom	0.866	0.005	0.001	8.556E-04
STORY4	C3	C35-8F18	Top	0.598	0.002	6.014E-04	7.395E-04
STORY4	C3	C35-8F18	Bottom	0.548	0.002	6.014E-04	7.395E-04
STORY3	C3	C40-8F18	Top	Joint shear ratio exceeds limit			
STORY3	C3	C40-8F18	Bottom	0.890	0.002	6.066E-04	7.858E-04
STORY2	C3	C45-12F18	Top	Joint shear ratio exceeds limit			
STORY2	C3	C45-12F18	Bottom	0.769	0.003	7.936E-04	9.726E-04
STORY1	C3	C45-16F20	Top	0.286	0.005	8.439E-04	9.030E-04
STORY1	C3	C45-16F20	Bottom	0.845	0.005	8.439E-04	9.030E-04
STORY4	C4	C35-12F18	Top	0.924	0.003	9.394E-04	0.001
STORY4	C4	C35-12F18	Bottom	0.848	0.003	9.394E-04	0.001
STORY3	C4	C40-12F20	Top	Joint shear ratio exceeds limit			
STORY3	C4	C40-12F20	Bottom	0.975	0.004	6.627E-04	0.001
STORY2	C4	C45-16F20	Top	Joint shear ratio exceeds limit			
STORY2	C4	C45-16F20	Bottom	0.896	0.005	5.273E-04	5.273E-04
STORY1	C4	C45-16F20	Top	Joint shear ratio exceeds limit			
STORY1	C4	C45-16F20	Bottom	0.966	0.005	5.273E-04	5.273E-04
STORY5	C5	C30-8F14	Top	0.628	0.001	4.245E-04	3.957E-04
STORY5	C5	C30-8F14	Bottom	0.596	0.001	4.245E-04	3.957E-04
STORY4	C5	C35-8F18	Top	Beam/Column capacity ratio exceeds limit			
STORY4	C5	C35-8F18	Bottom	0.857	0.002	7.661E-04	6.681E-04

Concrete Column Design - P-M-M Interaction & Shear Design

Story Level	Column Line	Section Name	Column End	PMM Ratio or Rebar %	Flexural Rebar Area	Shear22 Rebar Area	Shear33 Rebar Area
STORY3	C5	C40-12F18	Top	Beam/Column capacity ratio exceeds limit			
STORY3	C5	C40-12F18	Bottom	0.994	0.003	4.687E-04	4.687E-04
STORY2	C5	C45-12F20	Top	0.771	0.004	5.273E-04	5.273E-04
STORY2	C5	C45-12F20	Bottom	0.985	0.004	5.273E-04	5.273E-04
STORY1	C5	C45-12F22	Top	0.518	0.005	5.273E-04	5.273E-04
STORY1	C5	C45-12F22	Bottom	0.986	0.005	5.273E-04	5.273E-04
STORY5	C6	C30-8F14	Top	0.656	0.001	3.895E-04	4.552E-04
STORY5	C6	C30-8F14	Bottom	0.589	0.001	3.895E-04	4.552E-04
STORY4	C6	C35-8F18	Top	0.828	0.002	4.572E-04	6.240E-04
STORY4	C6	C35-8F18	Bottom	0.761	0.002	4.572E-04	6.240E-04
STORY3	C6	C40-12F18	Top	Beam/Column capacity ratio exceeds limit			
STORY3	C6	C40-12F18	Bottom	0.929	0.003	7.105E-04	0.001
STORY2	C6	C45-12F20	Top	Joint shear ratio exceeds limit			
STORY2	C6	C45-12F20	Bottom	0.893	0.004	9.529E-04	0.001
STORY1	C6	C45-12F22	Top	0.417	0.005	9.055E-04	0.001
STORY1	C6	C45-12F22	Bottom	0.963	0.005	9.055E-04	0.001
STORY5	C7	C30-8F16	Top	0.625	0.002	4.996E-04	3.854E-04
STORY5	C7	C30-8F16	Bottom	0.349	0.002	4.996E-04	3.854E-04
STORY4	C7	C35-8F16	Top	0.762	0.002	8.228E-04	4.101E-04
STORY4	C7	C35-8F16	Bottom	0.789	0.002	8.611E-04	4.101E-04
STORY3	C7	C40-12F18	Top	Joint shear ratio exceeds limit			
STORY3	C7	C40-12F18	Bottom	0.749	0.003	0.001	7.621E-04
STORY2	C7	C45-12F18	Top	Joint shear ratio exceeds limit			
STORY2	C7	C45-12F18	Bottom	0.758	0.003	0.001	9.365E-04
STORY1	C7	C45-16F20	Top	0.305	0.005	5.273E-04	5.273E-04
STORY1	C7	C45-16F20	Bottom	0.873	0.005	5.273E-04	5.273E-04
STORY5	C8	C30-8F16	Top	0.959	0.002	3.515E-04	4.413E-04
STORY5	C8	C30-8F16	Bottom	0.381	0.002	3.515E-04	4.413E-04
STORY4	C8	C35-8F16	Top	0.611	0.002	4.101E-04	4.134E-04
STORY4	C8	C35-8F16	Bottom	0.562	0.002	4.101E-04	4.901E-04
STORY3	C8	C40-12F18	Top	0.408	0.003	4.687E-04	5.615E-04
STORY3	C8	C40-12F18	Bottom	0.525	0.003	4.687E-04	5.615E-04
STORY2	C8	C45-12F18	Top	0.306	0.003	5.273E-04	6.681E-04
STORY2	C8	C45-12F18	Bottom	0.580	0.003	5.273E-04	6.681E-04
STORY1	C8	C45-16F20	Top	0.289	0.005	5.295E-04	7.093E-04
STORY1	C8	C45-16F20	Bottom	0.893	0.005	9.313E-04	6.987E-04
STORY4	C9	C35-8F18	Top	0.826	0.002	8.700E-04	6.375E-04
STORY4	C9	C35-8F18	Bottom	0.703	0.002	8.700E-04	6.375E-04
STORY3	C9	C40-8F18	Top	Joint shear ratio exceeds limit			
STORY3	C9	C40-8F18	Bottom	0.953	0.002	6.344E-04	7.997E-04

Concrete Column Design - P-M-M Interaction & Shear Design

Story Level	Column Line	Section Name	Column End	PMM Ratio or Rebar %	Flexural Rebar Area	Shear22 Rebar Area	Shear33 Rebar Area
STORY2	C9	C45-12F18	Top	Joint shear ratio exceeds limit			
STORY2	C9	C45-12F18	Bottom	0.796	0.003	8.249E-04	9.434E-04
STORY1	C9	C45-16F20	Top	0.270	0.005	7.894E-04	8.892E-04
STORY1	C9	C45-16F20	Bottom	0.878	0.005	7.894E-04	8.892E-04

Concrete Column Joint Design - Beam to Column D/C Ratios & Joint Shear Check

Concrete Column Joint Design - Beam to Column D/C Ratios & Joint Shear Check

Story Level	Column Line	Section Name	(6/5)Beam-Column Ratio Major	(6/5)Beam-Column Ratio Minor	Joint Shear Ratio Major	Joint Shear Ratio Minor
STORY4	C1	C35-8F18	0.736	0.769	0.624	0.649
STORY3	C1	C40-8F18	0.711	0.744	0.835	0.868
STORY2	C1	C45-12F18	0.638	0.740	0.757	0.884
STORY1	C1	C45-16F20	0.381	0.417	0.701	0.767
STORY4	C2	C35-12F18	0.885	0.581	0.822	0.540
STORY3	C2	C40-12F20	Joint shear ratio exceeds limit			
STORY2	C2	C45-16F20	Joint shear ratio exceeds limit			
STORY1	C2	C45-16F20	Joint shear ratio exceeds limit			
STORY4	C3	C35-8F18	0.674	0.830	0.551	0.683
STORY3	C3	C40-8F18	Joint shear ratio exceeds limit			
STORY2	C3	C45-12F18	Joint shear ratio exceeds limit			
STORY1	C3	C45-16F20	0.474	0.556	0.764	0.901
STORY4	C4	C35-12F18	0.740	0.936	0.723	0.880
STORY3	C4	C40-12F20	Joint shear ratio exceeds limit			
STORY2	C4	C45-16F20	Joint shear ratio exceeds limit			
STORY1	C4	C45-16F20	Joint shear ratio exceeds limit			
STORY5	C5	C30-8F14	0.711	0.662	0.493	0.457
STORY4	C5	C35-8F18	Beam/Column capacity ratio exceeds limit			
STORY3	C5	C40-12F18	Beam/Column capacity ratio exceeds limit			
STORY2	C5	C45-12F20	0.983	0.948	0.972	0.932
STORY1	C5	C45-12F22	0.703	0.648	0.870	0.799
STORY5	C6	C30-8F14	0.648	0.759	0.450	0.532
STORY4	C6	C35-8F18	0.638	0.859	0.620	0.826
STORY3	C6	C40-12F18	Beam/Column capacity ratio exceeds limit			
STORY2	C6	C45-12F20	Joint shear ratio exceeds limit			
STORY1	C6	C45-12F22	0.495	0.673	0.737	0.971
STORY5	C7	C30-8F16	0.672	0.516	0.588	0.444
STORY4	C7	C35-8F16	0.663	0.582	0.786	0.680
STORY3	C7	C40-12F18	Joint shear ratio exceeds limit			

Concrete Column Joint Design - Beam to Column D/C Ratios & Joint Shear Check

Story Level	Column Line	Section Name	(6/5)Beam-Column Ratio Major	(6/5)Beam-Column Ratio Minor	Joint Shear Ratio Major	Joint Shear Ratio Minor
STORY2	C7	C45-12F18	Joint shear ratio exceeds limit			
STORY1	C7	C45-16F20	0.387	0.444	0.746	0.871
STORY5	C8	C30-8F16	0.591	0.589	0.516	0.514
STORY4	C8	C35-8F16		0.600		0.690
STORY3	C8	C40-12F18		0.574		0.752
STORY2	C8	C45-12F18		0.533		0.702
STORY1	C8	C45-16F20		0.342		0.598
STORY4	C9	C35-8F18	0.954	0.694	0.827	0.587
STORY3	C9	C40-8F18	Joint shear ratio exceeds limit			
STORY2	C9	C45-12F18	Joint shear ratio exceeds limit			
STORY1	C9	C45-16F20	0.409	0.474	0.760	0.902

Concrete Beam Design - Flexural & Shear Design Rebar Areas

Concrete Beam Design - Flexural & Shear Design Rebar Areas

Story Level	Beam Bay	Section Name	Location	Top Rebar Area	Bottom Rebar Area	Shear Rebar Area
STORY5	B4	B30X30	End-I	3.750E-04	2.584E-04	4.167E-04
STORY5	B4	B30X30	Middle	1.195E-04	1.992E-04	3.515E-04
STORY5	B4	B30X30	End-J	3.627E-04	2.584E-04	4.145E-04
STORY5	B5	B30X30	End-I	4.150E-04	2.908E-04	8.509E-04
STORY5	B5	B30X30	Middle	1.316E-04	1.904E-04	5.934E-04
STORY5	B5	B30X30	End-J	3.644E-04	2.867E-04	8.176E-04
STORY5	B6	B30X30	End-I	3.135E-04	2.584E-04	3.515E-04
STORY5	B6	B30X30	Middle	1.261E-04	1.743E-04	3.515E-04
STORY5	B6	B30X30	End-J	3.226E-04	2.584E-04	3.515E-04
STORY5	B12	B30X30	End-I	3.478E-04	2.584E-04	7.366E-04
STORY5	B12	B30X30	Middle	1.112E-04	1.618E-04	5.127E-04
STORY5	B12	B30X30	End-J	3.171E-04	2.584E-04	7.179E-04
STORY4	B1	B35X35	End-I	5.937E-04	3.630E-04	6.767E-04
STORY4	B1	B35X35	Middle	1.989E-04	3.630E-04	5.176E-04
STORY4	B1	B35X35	End-J	6.300E-04	3.630E-04	6.991E-04
STORY4	B2	B35X35	End-I	5.442E-04	3.630E-04	0.001
STORY4	B2	B35X35	Middle	1.731E-04	2.043E-04	8.170E-04
STORY4	B2	B35X35	End-J	5.324E-04	4.345E-04	9.986E-04
STORY4	B3	B35X35	End-I	6.069E-04	3.912E-04	5.239E-04
STORY4	B3	B35X35	Middle	2.624E-04	3.322E-04	4.239E-04
STORY4	B3	B35X35	End-J	5.859E-04	3.630E-04	5.254E-04
STORY4	B4	B35X35	End-I	7.017E-04	3.630E-04	7.570E-04
STORY4	B4	B35X35	Middle	2.268E-04	3.630E-04	5.607E-04
STORY4	B4	B35X35	End-J	7.248E-04	4.013E-04	7.528E-04
STORY4	B6	B35X35	End-I	7.140E-04	3.933E-04	7.351E-04
STORY4	B6	B35X35	Middle	2.236E-04	3.613E-04	5.506E-04
STORY4	B6	B35X35	End-J	6.951E-04	3.630E-04	7.396E-04
STORY4	B7	B35X35	End-I	4.968E-04	3.636E-04	4.101E-04
STORY4	B7	B35X35	Middle	2.873E-04	3.163E-04	4.101E-04
STORY4	B7	B35X35	End-J	5.446E-04	3.789E-04	4.259E-04

Concrete Beam Design - Flexural & Shear Design Rebar Areas

Story Level	Beam Bay	Section Name	Location	Top Rebar Area	Bottom Rebar Area	Shear Rebar Area
STORY4	B8	B35X35	End-I	7.848E-04	3.742E-04	7.527E-04
STORY4	B8	B35X35	Middle	2.555E-04	3.825E-04	5.663E-04
STORY4	B8	B35X35	End-J	8.242E-04	3.919E-04	7.427E-04
STORY4	B9	B35X35	End-I	5.633E-04	3.630E-04	5.019E-04
STORY4	B9	B35X35	Middle	2.179E-04	2.742E-04	4.101E-04
STORY4	B9	B35X35	End-J	5.251E-04	3.586E-04	5.039E-04
STORY4	B10	B35X35	End-I	5.411E-04	3.630E-04	5.158E-04
STORY4	B10	B35X35	Middle	2.405E-04	3.246E-04	4.157E-04
STORY4	B10	B35X35	End-J	5.557E-04	3.684E-04	5.087E-04
STORY4	B11	B35X35	End-I	8.667E-04	4.109E-04	8.905E-04
STORY4	B11	B35X35	Middle	2.885E-04	6.412E-04	6.668E-04
STORY4	B11	B35X35	End-J	9.415E-04	4.440E-04	9.061E-04
STORY4	B12	B35X35	End-I	9.115E-04	4.308E-04	0.002
STORY4	B12	B35X35	Middle	2.802E-04	3.630E-04	0.001
STORY4	B12	B35X35	End-J	8.124E-04	5.238E-04	0.002
STORY4	B14	B35X35	End-I	0.001	8.070E-04	0.002
STORY4	B14	B35X35	Middle	3.630E-04	4.507E-04	0.002
STORY4	B14	B35X35	End-J	0.001	7.242E-04	0.002
STORY3	B1	B40X40	End-I	0.001	5.443E-04	0.001
STORY3	B1	B40X40	Middle	3.545E-04	4.929E-04	9.014E-04
STORY3	B1	B40X40	End-J	0.001	5.308E-04	0.001
STORY3	B2	B40X40	End-I	0.001	8.676E-04	0.002
STORY3	B2	B40X40	Middle	3.302E-04	3.302E-04	0.001
STORY3	B2	B40X40	End-J	0.001	9.670E-04	0.002
STORY3	B3	B40X40	End-I	0.001	6.446E-04	0.001
STORY3	B3	B40X40	Middle	4.179E-04	5.444E-04	9.067E-04
STORY3	B3	B40X40	End-J	0.001	6.286E-04	0.001
STORY3	B4	B40X35	End-I	0.001	6.617E-04	0.001
STORY3	B4	B40X35	Middle	4.022E-04	4.245E-04	8.251E-04
STORY3	B4	B40X35	End-J	0.001	7.575E-04	9.754E-04
STORY3	B6	B40X40	End-I	0.001	6.812E-04	0.001
STORY3	B6	B40X40	Middle	4.481E-04	5.755E-04	0.001
STORY3	B6	B40X40	End-J	0.001	6.927E-04	0.001
STORY3	B7	B40X40	End-I	0.001	5.497E-04	0.001
STORY3	B7	B40X40	Middle	4.851E-04	4.851E-04	8.286E-04
STORY3	B7	B40X40	End-J	0.001	6.178E-04	0.001
STORY3	B8	B40X40	End-I	0.001	7.531E-04	0.001
STORY3	B8	B40X40	Middle	3.969E-04	4.851E-04	8.738E-04
STORY3	B8	B40X40	End-J	0.001	8.101E-04	0.001
STORY3	B9	B40X40	End-I	0.002	7.189E-04	6.840E-04
STORY3	B9	B40X40	Middle	4.645E-04	6.682E-04	1.800E-04
STORY3	B9	B40X40	End-J	0.002	7.161E-04	6.270E-04
STORY3	B10	B40X40	End-I	0.001	6.152E-04	0.001
STORY3	B10	B40X40	Middle	4.652E-04	4.851E-04	8.390E-04
STORY3	B10	B40X40	End-J	0.001	7.438E-04	9.719E-04
STORY3	B11	B40X40	End-I	0.001	5.734E-04	0.001
STORY3	B11	B40X40	Middle	3.729E-04	4.851E-04	8.635E-04
STORY3	B11	B40X40	End-J	0.001	5.508E-04	0.001

Concrete Beam Design - Flexural & Shear Design Rebar Areas

Story Level	Beam Bay	Section Name	Location	Top Rebar Area	Bottom Rebar Area	Shear Rebar Area
STORY3	B12	B40X40	End-I	0.001	9.890E-04	0.002
STORY3	B12	B40X40	Middle	4.089E-04	4.163E-04	0.002
STORY3	B12	B40X40	End-J	0.001	0.001	0.002
STORY3	B14	B35X35	End-I	0.002	0.001	0.002
STORY3	B14	B35X35	Middle	3.630E-04	5.028E-04	0.002
STORY3	B14	B35X35	End-J	0.002	0.001	0.002
STORY2	B1	B45X45	End-I	0.001	6.375E-04	0.001
STORY2	B1	B45X45	Middle	4.161E-04	6.249E-04	9.998E-04
STORY2	B1	B45X45	End-J	0.001	6.249E-04	0.001
STORY2	B2	B45X45	End-I	0.001	0.001	0.002
STORY2	B2	B45X45	Middle	4.558E-04	4.558E-04	0.002
STORY2	B2	B45X45	End-J	0.001	0.001	0.002
STORY2	B3	B45X45	End-I	0.002	9.423E-04	0.002
STORY2	B3	B45X45	Middle	6.249E-04	6.623E-04	0.001
STORY2	B3	B45X45	End-J	0.002	8.759E-04	0.002
STORY2	B4	B45X35	End-I	0.001	8.938E-04	0.001
STORY2	B4	B45X35	Middle	4.860E-04	4.860E-04	9.538E-04
STORY2	B4	B45X35	End-J	0.001	9.803E-04	0.001
STORY2	B6	B45X45	End-I	0.002	0.001	0.002
STORY2	B6	B45X45	Middle	5.592E-04	6.789E-04	0.001
STORY2	B6	B45X45	End-J	0.002	9.607E-04	0.002
STORY2	B7	B45X45	End-I	0.001	8.486E-04	0.001
STORY2	B7	B45X45	Middle	6.134E-04	6.249E-04	9.611E-04
STORY2	B7	B45X45	End-J	0.001	9.213E-04	0.001
STORY2	B8	B45X45	End-I	0.001	0.001	0.001
STORY2	B8	B45X45	Middle	5.983E-04	6.249E-04	0.001
STORY2	B8	B45X45	End-J	0.001	0.001	0.001
STORY2	B9	B45X45	End-I	0.002	8.397E-04	0.001
STORY2	B9	B45X45	Middle	6.249E-04	7.005E-04	0.001
STORY2	B9	B45X45	End-J	0.002	8.165E-04	0.001
STORY2	B10	B45X45	End-I	0.001	9.729E-04	0.001
STORY2	B10	B45X45	Middle	6.249E-04	6.249E-04	0.001
STORY2	B10	B45X45	End-J	0.001	0.001	0.001
STORY2	B11	B45X45	End-I	0.001	7.705E-04	0.002
STORY2	B11	B45X45	Middle	4.443E-04	6.249E-04	0.001
STORY2	B11	B45X45	End-J	0.001	6.729E-04	0.002
STORY2	B12	B45X45	End-I	0.002	0.001	0.003
STORY2	B12	B45X45	Middle	5.500E-04	5.500E-04	0.002
STORY2	B12	B45X45	End-J	0.002	0.002	0.003
STORY2	B14	B35X35	End-I	0.002	0.001	0.002
STORY2	B14	B35X35	Middle	3.630E-04	4.899E-04	0.002
STORY2	B14	B35X35	End-J	0.002	0.001	0.002
STORY1	B1	B45X45	End-I	0.001	6.249E-04	0.001
STORY1	B1	B45X45	Middle	3.895E-04	6.249E-04	9.697E-04
STORY1	B1	B45X45	End-J	0.001	6.249E-04	0.001
STORY1	B2	B45X45	End-I	0.001	0.001	0.002
STORY1	B2	B45X45	Middle	4.279E-04	4.279E-04	0.002
STORY1	B2	B45X45	End-J	0.001	0.001	0.002

Concrete Beam Design - Flexural & Shear Design Rebar Areas

Story Level	Beam Bay	Section Name	Location	Top Rebar Area	Bottom Rebar Area	Shear Rebar Area
STORY1	B3	B45X45	End-I	0.001	7.756E-04	0.001
STORY1	B3	B45X45	Middle	5.201E-04	6.249E-04	0.001
STORY1	B3	B45X45	End-J	0.001	7.126E-04	0.001
STORY1	B4	B45X35	End-I	0.001	7.439E-04	0.001
STORY1	B4	B45X35	Middle	4.346E-04	4.860E-04	8.578E-04
STORY1	B4	B45X35	End-J	0.001	8.242E-04	9.966E-04
STORY1	B6	B45X45	End-I	0.002	8.787E-04	0.002
STORY1	B6	B45X45	Middle	4.823E-04	6.249E-04	0.001
STORY1	B6	B45X45	End-J	0.002	7.860E-04	0.002
STORY1	B7	B45X45	End-I	0.001	6.984E-04	0.001
STORY1	B7	B45X45	Middle	5.110E-04	6.249E-04	8.808E-04
STORY1	B7	B45X45	End-J	0.001	7.705E-04	0.001
STORY1	B8	B45X45	End-I	0.001	0.001	0.001
STORY1	B8	B45X45	Middle	5.314E-04	6.249E-04	0.001
STORY1	B8	B45X45	End-J	0.001	0.001	0.001
STORY1	B9	B45X45	End-I	0.002	7.598E-04	0.001
STORY1	B9	B45X45	Middle	5.220E-04	6.297E-04	0.001
STORY1	B9	B45X45	End-J	0.002	7.493E-04	0.001
STORY1	B10	B45X45	End-I	0.001	8.123E-04	0.001
STORY1	B10	B45X45	Middle	5.740E-04	6.249E-04	9.463E-04
STORY1	B10	B45X45	End-J	0.001	9.243E-04	0.001
STORY1	B11	B45X45	End-I	0.001	6.708E-04	0.001
STORY1	B11	B45X45	Middle	4.070E-04	6.249E-04	9.330E-04
STORY1	B11	B45X45	End-J	0.001	6.249E-04	0.001
STORY1	B12	B45X45	End-I	0.002	0.001	0.003
STORY1	B12	B45X45	Middle	5.034E-04	5.034E-04	0.002
STORY1	B12	B45X45	End-J	0.002	0.001	0.003
STORY1	B13	B35X35	End-I	0.001	6.072E-04	0.002
STORY1	B13	B35X35	Middle	3.143E-04	3.630E-04	0.001
STORY1	B13	B35X35	End-J	0.001	5.803E-04	0.002

Concrete Beam Design - Torsion Design Rebar Areas

Concrete Beam Design - Torsion Design Rebar Areas

Story Level	Beam Bay	Section Name	Torsion-Shear Rebar Area	Torsion-Long. Rebar Area
STORY5	B4	B30X30	0.000	0.000
STORY5	B5	B30X30	0.000	0.000
STORY5	B6	B30X30	0.000	0.000
STORY5	B12	B30X30	0.000	0.000
STORY4	B1	B35X35	0.000	0.000
STORY4	B2	B35X35	0.000	0.000
STORY4	B3	B35X35	1.291E-04	4.278E-04
STORY4	B4	B35X35	2.931E-04	4.278E-04
STORY4	B6	B35X35	2.776E-04	4.278E-04
STORY4	B7	B35X35	0.000	0.000
STORY4	B8	B35X35	0.000	0.000
STORY4	B9	B35X35	0.000	0.000

Concrete Beam Design - Torsion Design Rebar Areas

Story Level	Beam Bay	Section Name	Torsion-Shear Rebar Area	Torsion-Long. Rebar Area
STORY4	B10	B35X35	1.322E-04	4.278E-04
STORY4	B11	B35X35	0.000	0.000
STORY4	B12	B35X35	0.000	0.000
STORY4	B14	B35X35	0.000	0.000
STORY3	B1	B40X40	1.519E-04	5.498E-04
STORY3	B2	B40X40	1.541E-04	5.498E-04
STORY3	B3	B40X40	0.000	0.000
STORY3	B4	B40X35	3.864E-04	4.964E-04
STORY3	B6	B40X40	3.226E-04	5.204E-04
STORY3	B7	B40X40	0.000	0.000
STORY3	B8	B40X40	1.590E-04	5.498E-04
STORY3	B9	B40X40	1.443E-04	5.498E-04
STORY3	B10	B40X40	1.408E-04	5.498E-04
STORY3	B11	B40X40	0.000	0.000
STORY3	B12	B40X40	1.801E-04	5.498E-04
STORY3	B14	B35X35	1.394E-04	4.278E-04
STORY2	B1	B45X45	1.604E-04	6.870E-04
STORY2	B2	B45X45	1.663E-04	6.870E-04
STORY2	B3	B45X45	1.516E-04	6.870E-04
STORY2	B4	B45X35	3.911E-04	5.651E-04
STORY2	B6	B45X45	3.920E-04	6.870E-04
STORY2	B7	B45X45	0.000	0.000
STORY2	B8	B45X45	1.662E-04	6.870E-04
STORY2	B9	B45X45	1.650E-04	6.870E-04
STORY2	B10	B45X45	1.517E-04	6.870E-04
STORY2	B11	B45X45	0.000	0.000
STORY2	B12	B45X45	1.471E-04	6.870E-04
STORY2	B14	B35X35	1.355E-04	4.278E-04
STORY1	B1	B45X45	1.455E-04	6.870E-04
STORY1	B2	B45X45	1.528E-04	6.870E-04
STORY1	B3	B45X45	0.000	0.000
STORY1	B4	B45X35	3.163E-04	5.582E-04
STORY1	B6	B45X45	3.485E-04	6.870E-04
STORY1	B7	B45X45	0.000	0.000
STORY1	B8	B45X45	1.554E-04	6.870E-04
STORY1	B9	B45X45	1.481E-04	6.870E-04
STORY1	B10	B45X45	1.365E-04	6.870E-04
STORY1	B11	B45X45	0.000	0.000
STORY1	B12	B45X45	1.496E-04	6.870E-04
STORY1	B13	B35X35	0.000	0.000