

E T A B S / C O N K E R

Concrete Frame Design Processor for ETABS

Version 6.20

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27 Jul 2022 10:02:10

ETABS_FILE:2F110.PST/CONKER_FILE:C10.CNK

FILE : DESCON FOR 2F BUILDING FILE : SHEDC
 MOMENT RESISTING CONCRETE FRAME UNITS : KG-M-S

DESIGN CODE TYPE-----	2 (ACI 318-89)
NUMBER OF FRAMES TO BE DESIGNED/CHECKED----	1
NUMBER OF LOAD COMBINATIONS-----	34
ETABS DEAD LOAD CONDITION NUMBER-----	1
ETABS LIVE LOAD CONDITION NUMBER-----	2
NUMBER OF REDEFINED MATERIAL PROPERTIES----	0
NUMBER OF COLUMN DESIGN PROPERTY SETS-----	0
NUMBER OF BEAM DESIGN PROPERTY SETS-----	0
NUMBER OF CURVES PER INTERACTION VOLUME----	11
NUMBER OF POINTS PER INTERACTION CURVE-----	21
CODE FOR PRINTING INTERACTION CURVES-----	0
CODE FOR UNITY PHI FACTOR OVER RIDE-----	0
TYPE OF UNITS (ENGLISH, MKS OR SI)-----	M
EXECUTION MODE-----	0
FLAG FOR MAP OF BEAM FLEXURAL STEEL-----	1
FLAG FOR MAP OF BEAM SHEAR STEEL-----	1
FLAG FOR MAP OF COLUMN DESIGN/CHECK-----	1
FLAG FOR MAP OF COLUMN SHEAR STEEL-----	1
FLAG FOR MAP OF JOINT SHEAR STRESS RATIOS--	1
FLAG FOR MAP OF B/C MOMENT CAPACITY RATIOS-	1

FILE : DESCON FOR 2F BUILDING

FILE : SHEDC

MOMENT RESISTING CONCRETE FRAME

UNITS : KG-M-S

DESIGN LOADING COMBINATION DATA

LOAD TYPE		I	II	III	A	B	C	D1	D2
1	0	1.200	1.600	0.000	0.000	0.000	0.000	0.000	0.000
2	0	1.200	1.000	0.300	1.000	0.000	0.000	0.000	0.000
3	0	1.200	1.000	0.300	0.000	1.000	0.000	0.000	0.000
4	0	1.200	1.000	0.300	-1.000	0.000	0.000	0.000	0.000
5	0	1.200	1.000	0.300	0.000	-1.000	0.000	0.000	0.000
6	0	1.200	1.000	1.000	0.300	0.000	0.000	0.000	0.000
7	0	1.200	1.000	1.000	0.000	0.300	0.000	0.000	0.000
8	0	1.200	1.000	1.000	-0.300	0.000	0.000	0.000	0.000
9	0	1.200	1.000	1.000	0.000	-0.300	0.000	0.000	0.000
10	0	1.200	1.000	-0.300	1.000	0.000	0.000	0.000	0.000
11	0	1.200	1.000	-0.300	0.000	1.000	0.000	0.000	0.000
12	0	1.200	1.000	-0.300	-1.000	0.000	0.000	0.000	0.000
13	0	1.200	1.000	-0.300	0.000	-1.000	0.000	0.000	0.000
14	0	1.200	1.000	-1.000	0.300	0.000	0.000	0.000	0.000
15	0	1.200	1.000	-1.000	0.000	0.300	0.000	0.000	0.000
16	0	1.200	1.000	-1.000	-0.300	0.000	0.000	0.000	0.000
17	0	1.200	1.000	-1.000	0.000	-0.300	0.000	0.000	0.000
18	0	0.900	0.000	0.300	1.000	0.000	0.000	0.000	0.000
19	0	0.900	0.000	0.300	0.000	1.000	0.000	0.000	0.000
20	0	0.900	0.000	1.000	0.300	0.000	0.000	0.000	0.000
21	0	0.900	0.000	1.000	0.000	0.300	0.000	0.000	0.000
22	0	0.900	0.000	0.300	-1.000	0.000	0.000	0.000	0.000
23	0	0.900	0.000	0.300	0.000	-1.000	0.000	0.000	0.000
24	0	0.900	0.000	1.000	-0.300	0.000	0.000	0.000	0.000
25	0	0.900	0.000	1.000	0.000	-0.300	0.000	0.000	0.000
26	0	0.900	0.000	-0.300	1.000	0.000	0.000	0.000	0.000
27	0	0.900	0.000	-0.300	0.000	1.000	0.000	0.000	0.000
28	0	0.900	0.000	-1.000	0.300	0.000	0.000	0.000	0.000
29	0	0.900	0.000	-1.000	0.000	0.300	0.000	0.000	0.000

ETABS_FILE:2F110.PST/CONKER_FILE:C10.CNK

FILE : DESCON FOR 2F BUILDING
MOMENT RESISTING CONCRETE FRAME

FILE : SHEDC
UNITS : KG-M-S

MATERIAL PROPERTIES

ID	TYPE	ELASTIC MODULUS {Kg/sqm}	POISSONS RATIO	UNIT WEIGHT {Kg/cum}	UNIT MASS	COEFF OF EXPANSION
1	C	0.2600E+10	0.2000	0.2400E+04	0.2446E+03	0.1000E-04
2	C	0.2600E+10	0.2000	0.2400E+04	0.2446E+03	0.1000E-04
3	M	0.2100E+10	0.1670	0.2400E+04	0.2446E+03	0.1000E-04

MATERIAL PROPERTIES FOR DESIGN

ID	TYPE	YIELD	STRENGTH	YIELD	STRENGTH	ALLOWABLES	
		FY {Kg/sqm}	FC(FM) {Kg/sqm}	FYS {Kg/sqm}	FCS(FMS) {Kg/sqm}	FBMAJ {Kg/sqm}	FBMIN {Kg/sqm}
1	C	0.420E+08	0.280E+07	0.280E+08	0.280E+07		
2	C	0.280E+08	0.280E+07	0.280E+08	0.280E+07		
3	M	0.000E+00	0.500E+06	0.000E+00	0.500E+06		

FILE : DESCON FOR 2F BUILDING
MOMENT RESISTING CONCRETE FRAME

FILE : SHEDC
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SECTION PROPERTIES FOR COLUMNS

SECT ID	SECTION TYPE	MAT ID	MAJOR DIM {m}	MINOR DIM {m}	CONCRETE COVER {m}	AREA OF BARS 1 {sqm}	AREA OF BARS 2 {sqm}
1	RR	1	0.6000	0.4000	0.04000	0.00000	0.00000

FILE : DESCON FOR 2F BUILDING

FILE : SHEDC

MOMENT RESISTING CONCRETE FRAME

UNITS : KG-M-S

SECTION PROPERTIES FOR BEAMS

SECT ID	SECT TYPE	MAT ID	DEPTH BELOW {m}	DEPTH ABOVE {m}	BEAM WIDTH {m}	SLAB THICK {m}	SLAB WIDTH {m}	TOP COVER {m}	BOTTOM COVER {m}
1	RCB	1	0.6000	0.0000	0.3500	0.0000	0.0000	0.06000	0.06000

ETABS_FILE:2F110.PST/CONKER_FILE:C10.CNK

FILE : DESCON FOR 2F BUILDING

FILE : SHEDC

MOMENT RESISTING CONCRETE FRAME

UNITS : KG-M-S

SECTION PROPERTIES FOR BEAMS

SECT	TOP STEEL	BOT STEEL	TOP STEEL	BOT STEEL
ID	END-I	END-I	END-J	END-J
	{ sqm}	{ sqm}	{ sqm}	{ sqm}
1	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

FILE : DESCON FOR 2F BUILDING
MOMENT RESISTING CONCRETE FRAME

FILE : SHEDC
UNITS : KG-M-S

FRAME NUMBER----- 1
FRAMING TYPE----- 1 (SEISMIC)
COLUMN PROPERTY REASSIGNMENT FLAG----- 0
BEAM PROPERTY REASSIGNMENT FLAG----- 0
YIELD OVERSTRENGTH FACTOR----- 1.25

FRAME ID NUMBER----- 1
NUMBER OF STORY LEVELS----- 3
NUMBER OF COLUMN LINES----- 8
NUMBER OF BAYS----- 10
NUMBER OF BRACING ELEMENTS----- 0
NUMBER OF PANEL ELEMENTS----- 0
NUMBER OF COLUMN LATERAL LOAD PATTERNS----- 0
NUMBER OF BEAM SPAN LOAD PATTERNS----- 0
MAXIMUM NUMBER OF LOADS PER BEAM SPAN----- 4

ETABS_FILE:2F110.PST/CONKER_FILE:C10.CNK

FILE : DESCON FOR 2F BUILDING FILE : SHEDC
 MOMENT RESISTING CONCRETE FRAME UNITS : KG-M-S

DESIGN OF BEAM ELEMENTS (ACI 318-89)

FRAME ID /REINFORCEMENT CONCRETE FRAME

LEVEL ID RF

BAY ID	BEAM SIZE WIDTH X DEPTH {m} {m}	STRESS POINT	/-FACTORED -MOMENT {T-m}	LOADS & +MOMENT {T-m}	COMBOS-//--REQUIRED SHEAR M{top} M{bot} V {/m} {T} {sqcm} {sqcm} {sqcm}	REBAR--/ M{top} M{bot} V {/m} {sqcm} {sqcm} {sqcm}
1	0.35 X 0.60	END I	11 < 4>	6 <26>	11 < 9>	6.33 6.33 8.86
		1/4-PT	3 <30>	6 < 2>	10 < 6>	6.33 6.33 7.54
		MIDDLE	3 < 0>	4 < 2>	7 < 6>	6.33 6.33 5.41
		3/4-PT	3 < 0>	4 < 4>	10 < 6>	6.33 6.33 7.82
		END J	10 < 2>	5 < 0>	12 < 6>	6.33 6.33 9.13
2	0.35 X 0.60	END I	8 < 4>	4 <26>	21 < 9>	6.33 6.33 16.57
		1/4-PT	5 < 4>	2 <26>	21 < 6>	6.33 6.33 16.25
		MIDDLE	2 < 9>	1 < 0>	20 <33>	6.33 6.33 15.82
		3/4-PT	5 < 2>	2 <30>	21 < 6>	6.33 6.33 16.25
		END J	8 < 2>	4 <30>	21 < 9>	6.33 6.33 16.57
3	0.35 X 0.60	END I	10 < 4>	5 < 0>	12 < 6>	6.33 6.33 9.13
		1/4-PT	3 < 0>	4 < 2>	10 < 6>	6.33 6.33 7.82
		MIDDLE	3 < 0>	4 < 4>	7 < 6>	6.33 6.33 5.41
		3/4-PT	3 <26>	6 < 4>	10 < 6>	6.33 6.33 7.54
		END J	11 < 2>	6 <30>	11 < 9>	6.33 6.33 8.86
4	0.35 X 0.60	END I	10 < 4>	6 <26>	11 < 9>	6.33 6.33 8.86
		1/4-PT	3 <30>	5 < 2>	10 < 6>	6.33 6.33 7.54
		MIDDLE	3 < 0>	4 < 2>	7 < 6>	6.33 6.33 5.41
		3/4-PT	3 < 0>	4 < 4>	10 < 6>	6.33 6.33 7.82
		END J	10 < 2>	5 < 0>	12 < 6>	6.33 6.33 9.13
5	0.35 X 0.60					

END I	7 < 4>	4 <26>	21 < 9>	6.33	6.33	16.57
1/4-PT	4 < 4>	2 <26>	21 < 6>	6.33	6.33	16.25
MIDDLE	2 < 9>	1 < 0>	20 <33>	6.33	6.33	15.82
3/4-PT	4 < 2>	2 <30>	21 < 6>	6.33	6.33	16.25
END J	7 < 2>	4 <30>	21 < 9>	6.33	6.33	16.57

6 0.35 X 0.60

END I	10 < 4>	5 < 0>	12 < 6>	6.33	6.33	9.13
1/4-PT	3 < 0>	4 < 2>	10 < 6>	6.33	6.33	7.82
MIDDLE	3 < 0>	4 < 4>	7 < 6>	6.33	6.33	5.41
3/4-PT	3 <26>	5 < 4>	10 < 6>	6.33	6.33	7.54
END J	10 < 2>	6 <30>	11 < 9>	6.33	6.33	8.86

7 0.35 X 0.60

END I	16 < 5>	8 < 0>	13 < 9>	7.89	6.33	9.94
1/4-PT	4 <31>	7 < 3>	11 < 9>	6.33	6.33	8.18
MIDDLE	4 < 0>	5 < 9>	6 <33>	6.33	6.33	5.01
3/4-PT	4 <27>	7 < 5>	11 < 9>	6.33	6.33	8.18
END J	16 < 3>	8 < 0>	13 < 9>	7.89	6.33	9.94

FILE : DESCON FOR 2F BUILDING FILE : SHEDC
 MOMENT RESISTING CONCRETE FRAME UNITS : KG-M-S

DESIGN OF BEAM ELEMENTS (ACI 318-89)

FRAME ID /REINFORCEMENT CONCRETE FRAME

LEVEL ID RF

BAY ID	BEAM SIZE WIDTH X DEPTH {m} {m}	STRESS POINT	/-FACTORED -MOMENT {T-m}	LOADS & +MOMENT {T-m}	COMBOS-//--REQUIRED SHEAR M{top} M{bot} V {/m} {T} {sqcm} {sqcm} {sqcm}	REBAR--/ M{top} M{bot} V {/m} {sqcm} {sqcm} {sqcm}
8	0.35 X 0.60	END I	19 < 5>	9 < 0>	14 <14>	9.52 6.33 10.59
		1/4-PT	5 < 0>	8 < 3>	13 < 6>	6.33 6.33 9.77
		MIDDLE	5 < 0>	7 < 9>	7 <33>	6.33 6.33 5.55
		3/4-PT	5 < 0>	8 < 5>	13 < 6>	6.33 6.33 9.77
		END J	19 < 3>	9 < 0>	14 <14>	9.52 6.33 10.59
9	0.35 X 0.60	END I	19 < 5>	10 < 0>	14 <17>	9.78 6.33 10.67
		1/4-PT	5 < 0>	8 < 3>	13 < 9>	6.33 6.33 9.86
		MIDDLE	5 < 0>	7 < 9>	7 < 2>	6.33 6.33 5.63
		3/4-PT	5 < 0>	8 < 5>	13 < 9>	6.33 6.33 9.86
		END J	19 < 3>	10 < 0>	14 <17>	9.78 6.33 10.67
10	0.35 X 0.60	END I	18 < 5>	9 <27>	13 < 6>	9.20 6.33 10.38
		1/4-PT	5 <31>	8 < 3>	11 < 6>	6.33 6.33 8.61
		MIDDLE	4 < 0>	5 < 9>	7 <33>	6.33 6.33 5.44
		3/4-PT	5 <27>	8 < 5>	11 < 6>	6.33 6.33 8.61
		END J	18 < 3>	9 <31>	13 < 6>	9.20 6.33 10.38

FILE : DESCON FOR 2F BUILDING FILE : SHEDC
 MOMENT RESISTING CONCRETE FRAME UNITS : KG-M-S

DESIGN OF BEAM ELEMENTS (ACI 318-89)

FRAME ID /REINFORCEMENT CONCRETE FRAME

LEVEL ID 2F

BAY ID	BEAM SIZE WIDTH X DEPTH {m} {m}	STRESS POINT	/-FACTORED -MOMENT {T-m}	LOADS & +MOMENT {T-m}	COMBOS-//-- SHEAR {T}	REQUIRED M{top} {sqcm}	REBAR--/ M{bot} {sqcm}	V {/m} {sqcm}
1	0.35 X 0.60	END I	18 < 4>	9 <26>	15 < 6>	9.29	6.33	11.83
		1/4-PT	6 <30>	9 < 2>	13 < 6>	6.33	6.33	10.01
		MIDDLE	5 < 0>	6 < 2>	8 < 6>	6.33	6.33	6.52
		3/4-PT	5 < 0>	6 < 4>	13 < 6>	6.33	6.33	10.19
		END J	16 < 2>	8 < 0>	15 < 9>	8.34	6.33	12.00
2	0.35 X 0.60	END I	16 < 4>	12 <26>	24 < 9>	8.11	6.33	18.93
		1/4-PT	9 < 4>	5 <26>	24 < 6>	6.33	6.33	18.53
		MIDDLE	4 < 0>	3 < 0>	23 <33>	6.33	6.33	17.93
		3/4-PT	9 < 2>	5 <30>	24 < 6>	6.33	6.33	18.53
		END J	16 < 2>	12 <30>	24 < 9>	8.11	6.33	18.93
3	0.35 X 0.60	END I	16 < 4>	8 < 0>	15 < 9>	8.34	6.33	12.00
		1/4-PT	5 < 0>	6 < 2>	13 < 6>	6.33	6.33	10.19
		MIDDLE	5 < 0>	6 < 4>	8 < 6>	6.33	6.33	6.52
		3/4-PT	6 <26>	9 < 4>	13 < 6>	6.33	6.33	10.01
		END J	18 < 2>	9 <30>	15 < 6>	9.29	6.33	11.83
4	0.35 X 0.60	END I	17 < 4>	9 < 0>	15 < 9>	8.85	6.33	11.66
		1/4-PT	5 <30>	8 < 2>	13 < 9>	6.33	6.33	9.84
		MIDDLE	4 < 0>	6 < 2>	8 < 9>	6.33	6.33	6.35
		3/4-PT	4 < 0>	6 < 4>	13 < 9>	6.33	6.33	10.02
		END J	16 < 2>	8 < 0>	15 < 9>	7.98	6.33	11.83
5	0.35 X 0.60							

END I	15 < 4>	11 <26>	24 < 6>	7.65	6.33	18.39
1/4-PT	8 < 4>	5 <26>	23 < 9>	6.33	6.33	17.99
MIDDLE	4 < 0>	3 < 0>	22 <33>	6.33	6.33	17.39
3/4-PT	8 < 2>	5 <30>	23 < 9>	6.33	6.33	17.99
END J	15 < 2>	11 <30>	24 < 6>	7.65	6.33	18.39

6 0.35 X 0.60

END I	16 < 4>	8 < 0>	15 < 9>	7.98	6.33	11.83
1/4-PT	4 < 0>	6 < 2>	13 < 9>	6.33	6.33	10.02
MIDDLE	4 < 0>	6 < 4>	8 < 9>	6.33	6.33	6.35
3/4-PT	5 <26>	8 < 4>	13 < 9>	6.33	6.33	9.84
END J	17 < 2>	9 < 0>	15 < 9>	8.85	6.33	11.66

7 0.35 X 0.60

END I	25 < 5>	12 < 0>	17 <10>	13.00	6.33	13.28
1/4-PT	6 <31>	10 < 3>	15 < 9>	6.33	6.33	11.54
MIDDLE	6 < 0>	7 < 9>	9 <33>	6.33	6.33	6.66
3/4-PT	6 <27>	10 < 5>	15 < 9>	6.33	6.33	11.54
END J	25 < 3>	12 < 0>	17 <10>	13.00	6.33	13.28

ETABS_FILE:2F110.PST/CONKER_FILE:C10.CNK

FILE : DESCON FOR 2F BUILDING FILE : SHEDC
 MOMENT RESISTING CONCRETE FRAME UNITS : KG-M-S

DESIGN OF BEAM ELEMENTS (ACI 318-89)

FRAME ID /REINFORCEMENT CONCRETE FRAME

LEVEL ID 2F

BAY ID	BEAM SIZE WIDTH X DEPTH {m} {m}	STRESS POINT	/-FACTORED -MOMENT {T-m}	LOADS & +MOMENT {T-m}	COMBOS-//--REQUIRED SHEAR M{top} M{bot} V {/m} {T} {sqcm} {sqcm} {sqcm}	REBAR--/ M{top} M{bot} V {/m} {sqcm} {sqcm} {sqcm}
8	0.35 X 0.60	END I	30 < 5>	15 < 0>	20 <25>	16.08 7.71 15.33
		1/4-PT	8 < 0>	11 < 3>	19 < 6>	6.33 6.33 14.74
		MIDDLE	8 < 0>	10 < 9>	10 <33>	6.33 6.33 8.06
		3/4-PT	8 < 0>	11 < 5>	19 < 6>	6.33 6.33 14.74
		END J	30 < 3>	15 < 0>	20 <25>	16.08 7.71 15.33
9	0.35 X 0.60	END I	31 < 5>	16 < 0>	20 <25>	16.48 7.90 15.51
		1/4-PT	8 < 0>	12 < 3>	19 < 9>	6.33 6.33 14.92
		MIDDLE	8 < 0>	10 < 9>	11 <33>	6.33 6.33 8.24
		3/4-PT	8 < 0>	12 < 5>	19 < 9>	6.33 6.33 14.92
		END J	31 < 3>	16 < 0>	20 <25>	16.48 7.90 15.51
10	0.35 X 0.60	END I	29 < 5>	14 < 0>	19 < 6>	15.15 7.29 15.03
		1/4-PT	8 <31>	11 < 3>	16 < 6>	6.33 6.33 12.53
		MIDDLE	7 < 0>	7 < 9>	10 <33>	6.33 6.33 7.64
		3/4-PT	8 <27>	11 < 5>	16 < 6>	6.33 6.33 12.53
		END J	29 < 3>	14 < 0>	19 < 6>	15.15 7.29 15.03

ETABS_FILE:2F110.PST/CONKER_FILE:C10.CNK

FILE : DESCON FOR 2F BUILDING FILE : SHEDC
 MOMENT RESISTING CONCRETE FRAME UNITS : KG-M-S

DESIGN OF BEAM ELEMENTS (ACI 318-89)

FRAME ID /REINFORCEMENT CONCRETE FRAME

LEVEL ID 1F

BAY ID	BEAM SIZE WIDTH X DEPTH {m} {m}	STRESS POINT	/-FACTORED -MOMENT {T-m}	LOADS & +MOMENT {T-m}	COMBOS-//--REQUIRED SHEAR M{top} M{bot} V {/m} {T} {sqcm} {sqcm} {sqcm}	REBAR--/ M{top} M{bot} V {/m} {sqcm} {sqcm} {sqcm}
1	0.35 X 0.60	END I	13 < 4>	7 <26>	10 < 6>	6.36 6.33 8.02
		1/4-PT	5 <22>	5 <10>	9 < 6>	6.33 6.33 6.99
		MIDDLE	3 < 0>	2 <10>	7 < 6>	6.33 6.33 5.30
		3/4-PT	4 <26>	5 < 4>	9 <14>	6.33 6.33 6.96
		END J	12 <10>	6 <22>	10 <17>	6.33 6.33 7.99
2	0.35 X 0.60	END I	17 <12>	17 <18>	28 < 2>	8.94 8.44 22.01
		1/4-PT	9 <12>	8 <18>	28 <17>	6.33 6.33 21.74
		MIDDLE	4 < 0>	4 < 0>	28 <33>	6.33 6.33 21.40
		3/4-PT	9 <10>	8 <22>	28 <17>	6.33 6.33 21.74
		END J	17 <10>	17 <22>	28 < 2>	8.94 8.44 22.01
3	0.35 X 0.60	END I	12 <12>	6 <18>	10 <17>	6.33 6.33 7.99
		1/4-PT	4 <30>	5 < 2>	9 <14>	6.33 6.33 6.96
		MIDDLE	3 < 0>	2 <12>	7 < 6>	6.33 6.33 5.30
		3/4-PT	5 <18>	5 <12>	9 < 6>	6.33 6.33 6.99
		END J	13 < 2>	7 <30>	10 < 6>	6.36 6.33 8.02
4	0.35 X 0.60	END I	12 < 4>	6 <26>	10 < 6>	6.33 6.33 8.01
		1/4-PT	4 <22>	5 <10>	9 < 9>	6.33 6.33 6.98
		MIDDLE	3 < 0>	2 <10>	7 < 9>	6.33 6.33 5.29
		3/4-PT	3 <26>	4 < 4>	9 <17>	6.33 6.33 6.94
		END J	11 <10>	5 < 0>	10 <17>	6.33 6.33 7.97
5	0.35 X 0.60					

END I	16 <12>	15 <18>	26 <17>	8.13	7.63	20.12
1/4-PT	8 <12>	8 <18>	26 < 2>	6.33	6.33	19.85
MIDDLE	4 < 0>	4 < 0>	25 < 2>	6.33	6.33	19.51
3/4-PT	8 <10>	8 <22>	26 < 2>	6.33	6.33	19.85
END J	16 <10>	15 <22>	26 <17>	8.13	7.63	20.12

6 0.35 X 0.60

END I	11 <12>	5 < 0>	10 <17>	6.33	6.33	7.97
1/4-PT	3 <30>	4 < 2>	9 <17>	6.33	6.33	6.94
MIDDLE	3 < 0>	2 <12>	7 < 9>	6.33	6.33	5.29
3/4-PT	4 <18>	5 <12>	9 < 9>	6.33	6.33	6.98
END J	12 < 2>	6 <30>	10 < 6>	6.33	6.33	8.01

7 0.35 X 0.60

END I	21 < 5>	12 <27>	12 < 2>	10.61	6.33	9.43
1/4-PT	7 <23>	8 <11>	10 <17>	6.33	6.33	8.09
MIDDLE	5 < 0>	3 <34>	8 <33>	6.33	6.33	5.90
3/4-PT	7 <19>	8 <13>	10 <17>	6.33	6.33	8.09
END J	21 < 3>	12 <31>	12 < 2>	10.61	6.33	9.43

ETABS_FILE:2F110.PST/CONKER_FILE:C10.CNK

FILE : DESCON FOR 2F BUILDING FILE : SHEDC
 MOMENT RESISTING CONCRETE FRAME UNITS : KG-M-S

DESIGN OF BEAM ELEMENTS (ACI 318-89)

FRAME ID /REINFORCEMENT CONCRETE FRAME

LEVEL ID 1F

BAY ID	BEAM SIZE WIDTH X DEPTH {m} {m}	STRESS POINT	/-FACTORED -MOMENT {T-m}	LOADS & +MOMENT {T-m}	COMBOS-//--REQUIRED SHEAR M{top} M{bot} V {/m} {T} {sqcm} {sqcm} {sqcm}	REBAR--/ M{top} M{bot} V {/m} {sqcm} {sqcm} {sqcm}
8	0.35 X 0.60	END I	24 < 5>	12 <27>	14 <17>	12.21 6.33 11.10
		1/4-PT	8 <23>	9 <11>	12 < 2>	6.33 6.33 9.23
		MIDDLE	6 < 0>	4 <34>	8 <33>	6.33 6.33 6.41
		3/4-PT	8 <19>	9 <13>	12 < 2>	6.33 6.33 9.23
		END J	24 < 3>	12 <31>	14 <17>	12.21 6.33 11.10
9	0.35 X 0.60	END I	24 < 5>	13 <27>	14 <17>	12.52 6.34 11.20
		1/4-PT	8 <23>	10 <11>	12 <17>	6.33 6.33 9.33
		MIDDLE	6 < 0>	4 <34>	8 < 2>	6.33 6.33 6.51
		3/4-PT	8 <19>	10 <13>	12 <17>	6.33 6.33 9.33
		END J	24 < 3>	13 <31>	14 <17>	12.52 6.34 11.20
10	0.35 X 0.60	END I	24 < 5>	15 <27>	13 < 2>	12.38 7.66 10.44
		1/4-PT	9 <23>	10 <11>	12 <17>	6.33 6.33 9.10
		MIDDLE	6 < 0>	4 < 0>	9 <33>	6.33 6.33 6.91
		3/4-PT	9 <19>	10 <13>	12 <17>	6.33 6.33 9.10
		END J	24 < 3>	15 <31>	13 < 2>	12.38 7.66 10.44

FILE : DESCON FOR 2F BUILDING FILE : SHEDC
 MOMENT RESISTING CONCRETE FRAME UNITS : KG-M-S

DESIGN OF COLUMN ELEMENTS (ACI 318-89)

FRAME ID /REINFORCEMENT CONCRETE FRAME

LEVEL ID RF

COL ID	COLUMN MAJOR {m}	SIZE X MINOR {m}	STR PT	/-----MOMENT INTERACTION-----/ PU {T}	MMAJ {T-m}	MMIN {T-m}	COMBO REBAR {sqcm}	/-----SHEAR DESIGN-----/ DIRN	VU {T}	COMBO A {/m}	{/m}
1	0.60	X 0.40	RR	TOP	10	5	2 <34> 24.00	MAJOR	10	< 0>	7.55
				BOT	10	5	2 <34> 24.00	MINOR	7	< 0>	9.08
2	0.60	X 0.40	RR	TOP	4	0	30 < 0> 49.34	MAJOR	12	< 0>	9.09
				BOT	4	0	19 < 0> 30.11	MINOR	14	< 0>	16.53
3	0.60	X 0.40	RR	TOP	4	0	30 < 0> 49.30	MAJOR	12	< 0>	9.30
				BOT	4	0	19 < 0> 30.05	MINOR	14	< 0>	16.53
4	0.60	X 0.40	RR	TOP	10	5	2 <34> 24.00	MAJOR	11	< 0>	8.71
				BOT	10	5	2 <34> 24.00	MINOR	7	< 0>	9.08
5	0.60	X 0.40	RR	TOP	10	5	2 <34> 24.00	MAJOR	10	< 0>	7.55
				BOT	10	5	2 <34> 24.00	MINOR	7	< 0>	8.90
6	0.60	X 0.40	RR	TOP	4	0	30 < 0> 49.34	MAJOR	12	< 0>	9.09
				BOT	4	0	18 < 0> 29.33	MINOR	14	< 0>	16.38
7	0.60	X 0.40						MAJOR	12	< 0>	9.30

RR						MINOR	14	< 0>	16.38
		TOP	4	0	30	< 0>	49.30		
		BOT	4	0	18	< 0>	29.28		
8	0.60	X							0.40
RR						MAJOR	11	< 0>	8.71
						MINOR	7	< 0>	8.90
		TOP	10	5	2	<34>	24.00		
		BOT	10	5	2	<34>	24.00		

FILE : DESCON FOR 2F BUILDING FILE : SHEDC
 MOMENT RESISTING CONCRETE FRAME UNITS : KG-M-S

DESIGN OF COLUMN ELEMENTS (ACI 318-89)

FRAME ID /REINFORCEMENT CONCRETE FRAME

LEVEL ID 2F

COL ID	COLUMN MAJOR {m}	SIZE X MINOR {m}	STR PT	/-----MOMENT PU {T}	INTERACTION MMAJ {T-m}	MINN {T-m}	COMBO REBAR {sqcm}	/-----SHEAR DIRN	VU {T}	DESIGN COMBO A {/m}	-----/ {sqcm}
1	0.60	X 0.40	RR	TOP	29	5	2 <34> 24.00	MAJOR	9	< 0>	7.33
				BOT	29	3	1 <34> 24.00	MINOR	6	< 0>	7.65
2	0.60	X 0.40	RR	TOP	37	7	1 <34> 24.00	MAJOR	11	< 0>	8.61
				BOT	8	0	20 < 0> 31.47	MINOR	12	< 0>	14.95
3	0.60	X 0.40	RR	TOP	37	7	1 <34> 24.00	MAJOR	11	< 0>	8.81
				BOT	8	0	20 < 0> 31.47	MINOR	12	< 0>	14.95
4	0.60	X 0.40	RR	TOP	29	5	2 <34> 24.00	MAJOR	11	< 0>	8.44
				BOT	29	3	1 <34> 24.00	MINOR	6	< 0>	7.65
5	0.60	X 0.40	RR	TOP	29	5	2 <34> 24.00	MAJOR	9	< 0>	7.33
				BOT	29	3	1 <34> 24.00	MINOR	6	< 0>	7.46
6	0.60	X 0.40	RR	TOP	37	7	1 <34> 24.00	MAJOR	11	< 0>	8.61
				BOT	9	0	19 < 0> 29.51	MINOR	12	< 0>	14.33
7	0.60	X 0.40						MAJOR	11	< 0>	8.81

RR							MINOR	12	< 0>	14.33
		TOP	37	7	1	<34>	24.00			
		BOT	9	0	19	< 0>	29.51			
8	0.60	X								
			0.40							
RR							MAJOR	11	< 0>	8.44
							MINOR	6	< 0>	7.46
		TOP	29	5	2	<34>	24.00			
		BOT	29	3	1	<34>	24.00			

FILE : DESCON FOR 2F BUILDING FILE : SHEDC
 MOMENT RESISTING CONCRETE FRAME UNITS : KG-M-S

DESIGN OF COLUMN ELEMENTS (ACI 318-89)

FRAME ID /REINFORCEMENT CONCRETE FRAME

LEVEL ID 1F

COL ID	COLUMN MAJOR {m}	SIZE X MINOR {m}	STR PT	/-----MOMENT PU {T}	INTERACTION MMAJ {T-m}	MMIN {T-m}	COMBO REBAR {sqcm}	/-----SHEAR DIRN	VU {T}	DESIGN COMBO A {/m}	-----/ {sqcm}
1	0.60	X 0.40	RR					MAJOR	10	< 0>	7.56
								MINOR	6	< 0>	7.23
			TOP	40	2	1	<34> 24.00				
			BOT	40	1	1	<34> 24.00				
2	0.60	X 0.40	RR					MAJOR	11	< 0>	8.62
								MINOR	16	<10>	19.16
			TOP	1	0	15	< 0> 24.18				
			BOT	51	1	1	<34> 24.00				
3	0.60	X 0.40	RR					MAJOR	11	< 0>	8.82
								MINOR	16	<12>	19.16
			TOP	1	0	15	< 0> 24.18				
			BOT	51	1	1	<34> 24.00				
4	0.60	X 0.40	RR					MAJOR	11	< 0>	8.73
								MINOR	6	< 0>	7.23
			TOP	40	2	1	<34> 24.00				
			BOT	40	1	1	<34> 24.00				
5	0.60	X 0.40	RR					MAJOR	10	< 0>	7.56
								MINOR	6	< 0>	7.20
			TOP	40	2	1	<34> 24.00				
			BOT	40	1	1	<34> 24.00				
6	0.60	X 0.40	RR					MAJOR	11	< 0>	8.62
								MINOR	14	<10>	17.25
			TOP	51	2	1	<34> 24.00				
			BOT	51	1	1	<34> 24.00				
7	0.60	X 0.40						MAJOR	11	< 0>	8.82

	RR						MINOR	14	<12>	17.25
		TOP	51	2	1	<34>	24.00			
		BOT	51	1	1	<34>	24.00			
8	0.60 X	0.40					MAJOR	11	< 0>	8.73
	RR						MINOR	6	< 0>	7.20
		TOP	40	2	1	<34>	24.00			
		BOT	40	1	1	<34>	24.00			