

■ 미전교

1) 합성 전

< BEFORE COMPOSITE SELF-WEIGHT LOAD >

SYSTEM

LENGTH+M FORCE+KN

JOINT

1 X= 0.000 Y=0.000 Z=0.000
2 X= 4.450 Y=0.000 Z=0.000
3 X= 9.450 Y=0.000 Z=0.000
4 X= 14.450 Y=0.000 Z=0.000
5 X= 19.450 Y=0.000 Z=0.000
6 X= 24.450 Y=0.000 Z=0.000
7 X= 29.450 Y=0.000 Z=0.000
8 X= 34.450 Y=0.000 Z=0.000
9 X= 39.450 Y=0.000 Z=0.000
10 X= 44.450 Y=0.000 Z=0.000
11 X= 49.450 Y=0.000 Z=0.000
12 X= 54.450 Y=0.000 Z=0.000
13 X= 59.450 Y=0.000 Z=0.000
14 X= 64.450 Y=0.000 Z=0.000
15 X= 69.450 Y=0.000 Z=0.000
16 X= 74.450 Y=0.000 Z=0.000
17 X= 79.450 Y=0.000 Z=0.000
18 X= 84.450 Y=0.000 Z=0.000
19 X= 89.450 Y=0.000 Z=0.000
20 X= 94.450 Y=0.000 Z=0.000
21 X= 99.450 Y=0.000 Z=0.000
22 X= 104.030 Y=0.000 Z=0.000
23 X= 0.000 Y=-7.700 Z=-0.154
24 X= 4.450 Y=-7.700 Z=-0.154
25 X= 9.450 Y=-7.700 Z=-0.154
26 X= 14.450 Y=-7.700 Z=-0.154
27 X= 19.450 Y=-7.700 Z=-0.154
28 X= 24.450 Y=-7.700 Z=-0.154
29 X= 29.450 Y=-7.700 Z=-0.154
30 X= 34.450 Y=-7.700 Z=-0.154
31 X= 39.450 Y=-7.700 Z=-0.154
32 X= 44.450 Y=-7.700 Z=-0.154
33 X= 49.450 Y=-7.700 Z=-0.154
34 X= 54.450 Y=-7.700 Z=-0.154
35 X= 59.450 Y=-7.700 Z=-0.154
36 X= 64.450 Y=-7.700 Z=-0.154
37 X= 69.450 Y=-7.700 Z=-0.154
38 X= 74.450 Y=-7.700 Z=-0.154
39 X= 79.450 Y=-7.700 Z=-0.154
40 X= 84.450 Y=-7.700 Z=-0.154
41 X= 89.450 Y=-7.700 Z=-0.154
42 X= 94.450 Y=-7.700 Z=-0.154
43 X= 99.450 Y=-7.700 Z=-0.154
44 X= 104.030 Y=-7.700 Z=-0.154
45 X= 0.000 Y=-3.850 Z=-0.077
46 X= 4.450 Y=-3.850 Z=-0.077
47 X= 9.450 Y=-3.850 Z=-0.077
48 X= 14.450 Y=-3.850 Z=-0.077
49 X= 19.450 Y=-3.850 Z=-0.077
50 X= 24.450 Y=-3.850 Z=-0.077
51 X= 29.450 Y=-3.850 Z=-0.077
52 X= 34.450 Y=-3.850 Z=-0.077
53 X= 39.450 Y=-3.850 Z=-0.077
54 X= 44.450 Y=-3.850 Z=-0.077
55 X= 49.450 Y=-3.850 Z=-0.077
56 X= 54.450 Y=-3.850 Z=-0.077
57 X= 59.450 Y=-3.850 Z=-0.077
58 X= 64.450 Y=-3.850 Z=-0.077
59 X= 69.450 Y=-3.850 Z=-0.077
60 X= 74.450 Y=-3.850 Z=-0.077
61 X= 79.450 Y=-3.850 Z=-0.077
62 X= 84.450 Y=-3.850 Z=-0.077
63 X= 89.450 Y=-3.850 Z=-0.077
64 X= 94.450 Y=-3.850 Z=-0.077

65 X= 99.450 Y=-3.850 Z=-0.077
66 X= 104.030 Y=-3.850 Z=-0.077
67 X= 0.000 Y=0.000 Z=-1.150
68 X= 0.000 Y=1.050 Z=-1.150
69 X= 0.000 Y=-1.050 Z=-1.150
70 X= 54.450 Y=0.000 Z=-1.250
71 X= 54.450 Y=1.050 Z=-1.250
72 X= 54.450 Y=-1.050 Z=-1.250
73 X= 104.030 Y=0.000 Z=-1.150
74 X= 104.030 Y=1.050 Z=-1.150
75 X= 104.030 Y=-1.050 Z=-1.150
76 X= 0.000 Y=-7.700 Z=-1.304
77 X= 0.000 Y=-6.650 Z=-1.304
78 X= 0.000 Y=-8.750 Z=-1.304
79 X= 54.450 Y=-7.700 Z=-1.404
80 X= 54.450 Y=-6.650 Z=-1.404
81 X= 54.450 Y=-8.750 Z=-1.404
82 X= 104.030 Y=-7.700 Z=-1.304
83 X= 104.030 Y=-6.650 Z=-1.304
84 X= 104.030 Y=-8.750 Z=-1.304

LOCAL

ADD= 68 ANG=0.000
ADD= 69 ANG=0.000
ADD= 71 ANG=0.000
ADD= 72 ANG=0.000
ADD= 74 ANG=0.000
ADD= 75 ANG=0.000
ADD= 77 ANG=5.872
ADD= 78 ANG=8.049
ADD= 80 ANG=0.000
ADD= 81 ANG=0.000
ADD= 83 ANG=-6.444
ADD= 84 ANG=-8.828

RESTRAINT

ADD= 68 DOF= U2, U3
ADD= 69 DOF= U2, U3
ADD= 71 DOF= U1, U2, U3
ADD= 72 DOF= U1, U2, U3
ADD= 74 DOF= U2, U3
ADD= 75 DOF= U2, U3
ADD= 77 DOF= U3
ADD= 78 DOF= U3
ADD= 80 DOF= U1, U3
ADD= 81 DOF= U1, U3
ADD= 83 DOF= U3
ADD= 84 DOF= U3

MATERIAL

Name=1
E=2.05e+008
Name=2
E=2.05e+008
Name=3
E=2.05e+008
Name=4
E=2.05e+008
Name=5
E=2.05e+008
Name=6
E=2.05e+008
Name=7
E=2.05e+008
Name=8
E=2.05e+008
Name=9
E=2.05e+008
Name=10
E=2.05e+008
Name=11
E=2.05e+008
Name=12

E=2.05e+008

FRAME SECTION

Name= 1 Mat= 1 A=0.12720 I=0.12369044, 0.13601208 J=0.15613088 : GIRDER
Name= 2 Mat= 2 A=0.13120 I=0.14852714, 0.14335621 J=0.17727419 : GIRDER
Name= 3 Mat= 3 A=0.14296 I=0.16796144, 0.15182694 J=0.19170092 : GIRDER
Name= 4 Mat= 4 A=0.17824 I=0.22444044, 0.17723912 J=0.23037929 : GIRDER
Name= 5 Mat= 5 A=0.18916 I=0.23758820, 0.18326520 J=0.23037929 : GIRDER
Name= 6 Mat= 6 A=0.16340 I=0.19725926, 0.16568315 J=0.21457718 : GIRDER
Name= 7 Mat= 7 A=0.27160 I=0.35222502, 0.26631451 J=0.34772150 : GIRDER
Name= 8 Mat= 8 A=0.16648 I=0.20555567, 0.17479430 J=0.21946679 : GIRDER
Name= 9 Mat= 9 A=0.15472 I=0.18454863, 0.16029767 J=0.20065843 : GIRDER
Name= 10 Mat= 10 A=0.02880 I=0.01174211, 0.00005426 J=0.00000138 : CROSSBEAM
Name= 11 Mat= 11 A=0.01680 I=0.00169891, 0.00005412 J=0.00000081 : STRINGER
Name= 12 Mat= 12 A=10.000000 I=10.00000000, 0.00000000 J=10.00000000 : SHOE
Name= 13 Type=Nonpr Sec= 1, 2 Elvar=2.1
Name= 14 Type=Nonpr Sec= 2, 1
Name= 15 Type=Nonpr Sec= 2, 3
Name= 16 Type=Nonpr Sec= 3, 4
Name= 17 Type=Nonpr Sec= 4, 5
Name= 18 Type=Nonpr Sec= 5, 6
Name= 19 Type=Nonpr Sec= 6, 7
Name= 20 Type=Nonpr Sec= 6, 8
Name= 21 Type=Nonpr Sec= 7, 6
Name= 22 Type=Nonpr Sec= 8, 9
Name= 23 Type=Nonpr Sec= 9, 2

FRAME

1 J= 1, 2 Sec=13 Local=12 Rdir=Z+X NSEG=4
2 J= 2, 3 Sec=15
3 J= 3, 4 Sec=16
4 J= 4, 5 Sec=4
5 J= 5, 6 Sec= 4
6 J= 6, 7 Sec= 4
7 J= 7, 8 Sec= 4
8 J= 8, 9 Sec=17
9 J= 9, 10 Sec=18
10 J= 10, 11 Sec=19
11 J= 11, 12 Sec= 7
12 J= 12, 13 Sec= 7
13 J= 13, 14 Sec=21
14 J= 14, 15 Sec=20
15 J= 15, 16 Sec= 8
16 J= 16, 17 Sec= 8
17 J= 17, 18 Sec= 8
18 J= 18, 19 Sec= 8
19 J= 19, 20 Sec=22
20 J= 20, 21 Sec=23
21 J= 21, 22 Sec=14
22 J= 23, 24 Sec=13
23 J= 24, 25 Sec=15
24 J= 25, 26 Sec=16
25 J= 26, 27 Sec= 4
26 J= 27, 28 Sec= 4
27 J= 28, 29 Sec= 4
28 J= 29, 30 Sec= 4
29 J= 30, 31 Sec=17
30 J= 31, 32 Sec=18
31 J= 32, 33 Sec=19
32 J= 33, 34 Sec= 7
33 J= 34, 35 Sec= 7
34 J= 35, 36 Sec=21
35 J= 36, 37 Sec=20
36 J= 37, 38 Sec= 8
37 J= 38, 39 Sec= 8
38 J= 39, 40 Sec= 8
39 J= 40, 41 Sec= 8
40 J= 41, 42 Sec=22
41 J= 42, 43 Sec=23
42 J= 43, 44 Sec=14
43 J= 1, 45 Sec=10 IOFF=1.350 JOFF=0.000 RIGID=1.0
44 J= 45, 23 Sec=10 IOFF=0.000 JOFF=1.350 RIGID=1.0
45 J= 2, 46 Sec=10 IOFF=1.350 JOFF=0.000 RIGID=1.0

46 J= 46, 24 Sec=10 IOFF=0.000 JOFF=1.350 RIGID=1.0
47 J= 3, 47 Sec=10 IOFF=1.350 JOFF=0.000 RIGID=1.0
48 J= 47, 25 Sec=10 IOFF=0.000 JOFF=1.350 RIGID=1.0
49 J= 4, 48 Sec=10 IOFF=1.350 JOFF=0.000 RIGID=1.0
50 J= 48, 26 Sec=10 IOFF=0.000 JOFF=1.350 RIGID=1.0
51 J= 5, 49 Sec=10 IOFF=1.350 JOFF=0.000 RIGID=1.0
52 J= 49, 27 Sec=10 IOFF=0.000 JOFF=1.350 RIGID=1.0
53 J= 6, 50 Sec=10 IOFF=1.350 JOFF=0.000 RIGID=1.0
54 J= 50, 28 Sec=10 IOFF=0.000 JOFF=1.350 RIGID=1.0
55 J= 7, 51 Sec=10 IOFF=1.350 JOFF=0.000 RIGID=1.0
56 J= 51, 29 Sec=10 IOFF=0.000 JOFF=1.350 RIGID=1.0
57 J= 8, 52 Sec=10 IOFF=1.350 JOFF=0.000 RIGID=1.0
58 J= 52, 30 Sec=10 IOFF=0.000 JOFF=1.350 RIGID=1.0
59 J= 9, 53 Sec=10 IOFF=1.350 JOFF=0.000 RIGID=1.0
60 J= 53, 31 Sec=10 IOFF=0.000 JOFF=1.350 RIGID=1.0
61 J= 10, 54 Sec=10 IOFF=1.350 JOFF=0.000 RIGID=1.0
62 J= 54, 32 Sec=10 IOFF=0.000 JOFF=1.350 RIGID=1.0
63 J= 11, 55 Sec=10 IOFF=1.350 JOFF=0.000 RIGID=1.0
64 J= 55, 33 Sec=10 IOFF=0.000 JOFF=1.350 RIGID=1.0
65 J= 12, 56 Sec=10 IOFF=1.350 JOFF=0.000 RIGID=1.0
66 J= 56, 34 Sec=10 IOFF=0.000 JOFF=1.350 RIGID=1.0
67 J= 13, 57 Sec=10 IOFF=1.350 JOFF=0.000 RIGID=1.0
68 J= 57, 35 Sec=10 IOFF=0.000 JOFF=1.350 RIGID=1.0
69 J= 14, 58 Sec=10 IOFF=1.350 JOFF=0.000 RIGID=1.0
70 J= 58, 36 Sec=10 IOFF=0.000 JOFF=1.350 RIGID=1.0
71 J= 15, 59 Sec=10 IOFF=1.350 JOFF=0.000 RIGID=1.0
72 J= 59, 37 Sec=10 IOFF=0.000 JOFF=1.350 RIGID=1.0
73 J= 16, 60 Sec=10 IOFF=1.350 JOFF=0.000 RIGID=1.0
74 J= 60, 38 Sec=10 IOFF=0.000 JOFF=1.350 RIGID=1.0
75 J= 17, 61 Sec=10 IOFF=1.350 JOFF=0.000 RIGID=1.0
76 J= 61, 39 Sec=10 IOFF=0.000 JOFF=1.350 RIGID=1.0
77 J= 18, 62 Sec=10 IOFF=1.350 JOFF=0.000 RIGID=1.0
78 J= 62, 40 Sec=10 IOFF=0.000 JOFF=1.350 RIGID=1.0
79 J= 19, 63 Sec=10 IOFF=1.350 JOFF=0.000 RIGID=1.0
80 J= 63, 41 Sec=10 IOFF=0.000 JOFF=1.350 RIGID=1.0
81 J= 20, 64 Sec=10 IOFF=1.350 JOFF=0.000 RIGID=1.0
82 J= 64, 42 Sec=10 IOFF=0.000 JOFF=1.350 RIGID=1.0
83 J= 21, 65 Sec=10 IOFF=1.350 JOFF=0.000 RIGID=1.0
84 J= 65, 43 Sec=10 IOFF=0.000 JOFF=1.350 RIGID=1.0
85 J= 22, 66 Sec=10 IOFF=1.350 JOFF=0.000 RIGID=1.0
86 J= 66, 44 Sec=10 IOFF=0.000 JOFF=1.350 RIGID=1.0
87 J= 45, 48 Sec=11
88 J= 46, 47 Sec=11
89 J= 47, 48 Sec=11
90 J= 48, 49 Sec=11
91 J= 49, 50 Sec=11
92 J= 50, 51 Sec=11
93 J= 51, 52 Sec=11
94 J= 52, 53 Sec=11
95 J= 53, 54 Sec=11
96 J= 54, 55 Sec=11
97 J= 55, 56 Sec=11
98 J= 56, 57 Sec=11
99 J= 57, 58 Sec=11
100 J= 58, 59 Sec=11
101 J= 59, 60 Sec=11
102 J= 60, 61 Sec=11
103 J= 61, 62 Sec=11
104 J= 62, 63 Sec=11
105 J= 63, 64 Sec=11
106 J= 64, 65 Sec=11
107 J= 65, 66 Sec=11
108 J= 1, 67 Sec=12
109 J= 68, 67 Sec=12
110 J= 69, 67 Sec=12
111 J= 12, 70 Sec=12
112 J= 71, 70 Sec=12
113 J= 72, 70 Sec=12
114 J= 22, 73 Sec=12
115 J= 74, 73 Sec=12
116 J= 75, 73 Sec=12
117 J= 23, 76 Sec=12
118 J= 77, 76 Sec=12

Name=CONC : SLAS SELF-WEIGHT LOAD									
Type=Distributed Span									
Add: 1	RD=0.000, 0.449	Uzpo=62.032	62.032	RI=-5.618	-5.618				
Add: 2	RD=0.000, 1.000	Uzpo=34.589	34.589	RI=-5.021	-5.021				
Add: 3	RD=0.000, 1.000	Uzpo=34.589	34.589	RI=-5.021	-5.021				
Add: 4	RD=0.000, 1.000	Uzpo=34.589	34.589	RI=-5.021	-5.021				
Add: 5	RD=0.000, 1.000	Uzpo=34.589	34.589	RI=-5.021	-5.021				
Add: 6	RD=0.000, 1.000	Uzpo=34.589	34.589	RI=-5.021	-5.021				
Add: 7	RD=0.000, 1.000	Uzpo=34.589	34.589	RI=-5.021	-5.021				
Add: 8	RD=0.000, 1.000	Uzpo=34.589	34.589	RI=-5.021	-5.021				
Add: 9	RD=0.000, 1.000	Uzpo=34.589	34.589	RI=-5.021	-5.021				
Add: 10	RD=0.000, 1.000	Uzpo=34.589	34.589	RI=-5.021	-5.021				
Add: 11	RD=0.000, 1.000	Uzpo=34.589	34.589	RI=-5.021	-5.021				
Add: 12	RD=0.000, 1.000	Uzpo=34.589	34.589	RI=-5.021	-5.021				
Add: 13	RD=0.000, 1.000	Uzpo=34.589	34.589	RI=-5.021	-5.021				
Add: 14	RD=0.000, 1.000	Uzpo=34.589	34.589	RI=-5.021	-5.021				
Add: 15	RD=0.000, 1.000	Uzpo=34.589	34.589	RI=-5.021	-5.021				
Add: 16	RD=0.000, 1.000	Uzpo=34.589	34.589	RI=-5.021	-5.021				
Add: 17	RD=0.000, 1.000	Uzpo=34.589	34.589	RI=-5.021	-5.021				
Add: 18	RD=0.000, 1.000	Uzpo=34.589	34.589	RI=-5.021	-5.021				
Add: 19	RD=0.000, 1.000	Uzpo=34.589	34.589	RI=-5.021	-5.021				
Add: 20	RD=0.000, 1.000	Uzpo=34.589	34.589	RI=-5.021	-5.021				
Add: 21	RD=0.000, 0.563	Uzpo=34.589	34.589	RI=-5.021	-5.021				
Add: 21	RD=0.563, 1.000	Uzpo=62.032	62.032	RI=-6.418	-6.418				
Add: 22	RD=0.449, 1.000	Uzpo=33.063	33.063	RI=-3.745	-3.745				

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OUTPUT
ELEM=JOINT  TYPE=DISP,REAC  LOAD=>  COMB=>
ELEM=FRAME  TYPE=FORCE      LOAD=>  COMB=>

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- 8 -

2) 합성 후
< AFTER COMPOSITE SELF-WEIGHT LOAD >

SYSTEM
LENGTH=M FORCE=KN

JOINT

1 X= 0.000 Y=0.000 Z=0.000
2 X= 4.450 Y=0.000 Z=0.000
3 X= 9.450 Y=0.000 Z=0.000
4 X= 14.450 Y=0.000 Z=0.000
5 X= 19.450 Y=0.000 Z=0.000
6 X= 24.450 Y=0.000 Z=0.000
7 X= 29.450 Y=0.000 Z=0.000
8 X= 34.450 Y=0.000 Z=0.000
9 X= 39.450 Y=0.000 Z=0.000
10 X= 44.450 Y=0.000 Z=0.000
11 X= 49.450 Y=0.000 Z=0.000
12 X= 54.450 Y=0.000 Z=0.000
13 X= 59.450 Y=0.000 Z=0.000
14 X= 64.450 Y=0.000 Z=0.000
15 X= 69.450 Y=0.000 Z=0.000
16 X= 74.450 Y=0.000 Z=0.000
17 X= 79.450 Y=0.000 Z=0.000
18 X= 84.450 Y=0.000 Z=0.000
19 X= 89.450 Y=0.000 Z=0.000
20 X= 94.450 Y=0.000 Z=0.000
21 X= 99.450 Y=0.000 Z=0.000
22 X= 104.030 Y=0.000 Z=0.000
23 X= 0.000 Y=-7.700 Z=-0.154
24 X= 4.450 Y=-7.700 Z=-0.154
25 X= 9.450 Y=-7.700 Z=-0.154
26 X= 14.450 Y=-7.700 Z=-0.154
27 X= 19.450 Y=-7.700 Z=-0.154
28 X= 24.450 Y=-7.700 Z=-0.154
29 X= 29.450 Y=-7.700 Z=-0.154
30 X= 34.450 Y=-7.700 Z=-0.154
31 X= 39.450 Y=-7.700 Z=-0.154
32 X= 44.450 Y=-7.700 Z=-0.154
33 X= 49.450 Y=-7.700 Z=-0.154
34 X= 54.450 Y=-7.700 Z=-0.154
35 X= 59.450 Y=-7.700 Z=-0.154
36 X= 64.450 Y=-7.700 Z=-0.154
37 X= 69.450 Y=-7.700 Z=-0.154
38 X= 74.450 Y=-7.700 Z=-0.154
39 X= 79.450 Y=-7.700 Z=-0.154
40 X= 84.450 Y=-7.700 Z=-0.154
41 X= 89.450 Y=-7.700 Z=-0.154
42 X= 94.450 Y=-7.700 Z=-0.154
43 X= 99.450 Y=-7.700 Z=-0.154
44 X= 104.030 Y=-7.700 Z=-0.154
45 X= 0.000 Y=-3.850 Z=-0.077
46 X= 4.450 Y=-3.850 Z=-0.077
47 X= 9.450 Y=-3.850 Z=-0.077
48 X= 14.450 Y=-3.850 Z=-0.077
49 X= 19.450 Y=-3.850 Z=-0.077
50 X= 24.450 Y=-3.850 Z=-0.077
51 X= 29.450 Y=-3.850 Z=-0.077
52 X= 34.450 Y=-3.850 Z=-0.077
53 X= 39.450 Y=-3.850 Z=-0.077
54 X= 44.450 Y=-3.850 Z=-0.077
55 X= 49.450 Y=-3.850 Z=-0.077
56 X= 54.450 Y=-3.850 Z=-0.077
57 X= 59.450 Y=-3.850 Z=-0.077
58 X= 64.450 Y=-3.850 Z=-0.077
59 X= 69.450 Y=-3.850 Z=-0.077
60 X= 74.450 Y=-3.850 Z=-0.077
61 X= 79.450 Y=-3.850 Z=-0.077
62 X= 84.450 Y=-3.850 Z=-0.077
63 X= 89.450 Y=-3.850 Z=-0.077
64 X= 94.450 Y=-3.850 Z=-0.077
65 X= 99.450 Y=-3.850 Z=-0.077
66 X= 104.030 Y=-3.850 Z=-0.077

67 X= 0.000 Y=0.000 Z=-1.150
68 X= 0.000 Y=1.050 Z=-1.150
69 X= 0.000 Y=-1.050 Z=-1.150
70 X= 54.450 Y=0.000 Z=-1.250
71 X= 54.450 Y=1.050 Z=-1.250
72 X= 54.450 Y=-1.050 Z=-1.250
73 X= 104.030 Y=0.000 Z=-1.150
74 X= 104.030 Y=1.050 Z=-1.150
75 X= 104.030 Y=-1.050 Z=-1.150
76 X= 0.000 Y=-7.700 Z=-1.304
77 X= 0.000 Y=-6.650 Z=-1.304
78 X= 0.000 Y=-8.750 Z=-1.304
79 X= 54.450 Y=-7.700 Z=-1.404
80 X= 54.450 Y=-6.650 Z=-1.404
81 X= 54.450 Y=-8.750 Z=-1.404
82 X= 104.030 Y=-7.700 Z=-1.304
83 X= 104.030 Y=-6.650 Z=-1.304
84 X= 104.030 Y=-8.750 Z=-1.304

LOCAL
ADD= 68 ANG=0.000
ADD= 69 ANG=0.000
ADD= 71 ANG=0.000
ADD= 72 ANG=0.000
ADD= 74 ANG=0.000
ADD= 75 ANG=0.000
ADD= 77 ANG=5.672
ADD= 78 ANG=8.049
ADD= 80 ANG=0.000
ADD= 81 ANG=0.000
ADD= 83 ANG=-6.444
ADD= 84 ANG=-6.628

RESTRAINT
ADD= 68 DOF= U2, U3,
ADD= 69 DOF= U2, U3,
ADD= 71 DOF= U1, U2, U3,
ADD= 72 DOF= U1, U2, U3,
ADD= 74 DOF= U2, U3,
ADD= 75 DOF= U2, U3,
ADD= 77 DOF= U3,
ADD= 78 DOF= U3,
ADD= 80 DOF= U1, U3,
ADD= 81 DOF= U1, U3,
ADD= 83 DOF= U3,
ADD= 84 DOF= U3,

MATERIAL
Name=1
E=2.05e+008
Name=2
E=2.05e+008
Name=3
E=2.05e+008
Name=4
E=2.05e+008
Name=5
E=2.05e+008
Name=6
E=2.05e+008
Name=7
E=2.05e+008
Name=8
E=2.05e+008
Name=9
E=2.05e+008
Name=10
E=2.05e+008
Name=11
E=2.05e+008
Name=12
E=2.05e+008
Name=13
E=2.05e+008

E=2.05e+008
Name=14
E=2.05e+008
Name=15
E=2.05e+008
Name=16
E=2.05e+008
Name=17
E=2.05e+008
Name=18
E=2.05e+008
Name=19
E=2.05e+008
Name=20
E=2.05e+008
Name=21
E=2.05e+008

FRAME SECTION
Name= 1 Mat= 1 A=0.31086 I=0.23700884, 0.81280104 J=0.19666515 : GIRDER
Name= 2 Mat= 2 A=0.31498 I=0.26250528, 0.82062503 J=0.22101250 : GIRDER
Name= 3 Mat= 3 A=0.32662 I=0.33306917, 0.83043648 J=0.24351348 : GIRDER
Name= 4 Mat= 4 A=0.36190 I=0.40869340, 0.85935223 J=0.26781294 : GIRDER
Name= 5 Mat= 5 A=0.37282 I=0.44508691, 0.86633164 J=0.26781294 : GIRDER
Name= 6 Mat= 6 A=0.34706 I=0.39688457, 0.84641193 J=0.26781045 : GIRDER
Name= 7 Mat= 7 A=0.45526 I=0.58100343, 0.95508413 J=0.38096295 : GIRDER
Name= 8 Mat= 8 A=0.35014 I=0.38385500, 0.85582086 J=0.26067422 : GIRDER
Name= 9 Mat= 9 A=0.33638 I=0.38030356, 0.84015859 J=0.25819292 : GIRDER
Name= 10 Mat= 10 A=0.30466 I=0.23540042, 0.75928243 J=0.19666515 : GIRDER
Name= 11 Mat= 11 A=0.30866 I=0.28057184, 0.76728296 J=0.22101250 : GIRDER
Name= 12 Mat= 12 A=0.32042 I=0.33057213, 0.77758960 J=0.24351348 : GIRDER
Name= 13 Mat= 13 A=0.35570 I=0.40556776, 0.80777754 J=0.26781294 : GIRDER
Name= 14 Mat= 14 A=0.36662 I=0.44146450, 0.81505963 J=0.26781294 : GIRDER
Name= 15 Mat= 15 A=0.34086 I=0.39364487, 0.79433278 J=0.25410445 : GIRDER
Name= 16 Mat= 16 A=0.44906 I=0.57633641, 0.90587243 J=0.38096295 : GIRDER
Name= 17 Mat= 17 A=0.34394 I=0.38093229, 0.80394935 J=0.26087422 : GIRDER
Name= 18 Mat= 18 A=0.33219 I=0.37721604, 0.78776432 J=0.25819292 : GIRDER
Name= 19 Mat= 19 A=0.02880 I=0.01174211, 0.00005426 J=0.00000138 : CROSSBEAM
Name= 20 Mat= 20 A=0.01680 I=0.00169891, 0.00005412 J=0.00000081 : STRINGER
Name= 21 Mat= 21 A=10.00000 I=10.00000000, 10.00000000 J=10.00000000 : SHOE
Name= 22 Type=Nonpr Sec= 1, 2 Elvar=2.1
Name= 23 Type=Nonpr Sec= 2, 1
Name= 24 Type=Nonpr Sec= 2, 3
Name= 25 Type=Nonpr Sec= 3, 4
Name= 26 Type=Nonpr Sec= 4, 5
Name= 27 Type=Nonpr Sec= 5, 6
Name= 28 Type=Nonpr Sec= 6, 7
Name= 29 Type=Nonpr Sec= 6, 8
Name= 30 Type=Nonpr Sec= 7, 6
Name= 31 Type=Nonpr Sec= 8, 9
Name= 32 Type=Nonpr Sec= 9, 2
Name= 33 Type=Nonpr Sec= 10, 11
Name= 34 Type=Nonpr Sec= 11, 10
Name= 35 Type=Nonpr Sec= 11, 12
Name= 36 Type=Nonpr Sec= 12, 13
Name= 37 Type=Nonpr Sec= 13, 14
Name= 38 Type=Nonpr Sec= 14, 15
Name= 39 Type=Nonpr Sec= 15, 16
Name= 40 Type=Nonpr Sec= 15, 17
Name= 41 Type=Nonpr Sec= 16, 15
Name= 42 Type=Nonpr Sec= 17, 18
Name= 43 Type=Nonpr Sec= 18, 11

FRAME
1 J= 1, 2 Sec=22 Local=12 Pdir=+X, NSEG=4
2 J= 2, 3 Sec=24
3 J= 3, 4 Sec=25
4 J= 4, 5 Sec= 4
5 J= 5, 6 Sec= 4
6 J= 6, 7 Sec= 4
7 J= 7, 8 Sec= 4
8 J= 8, 9 Sec=26
9 J= 9, 10 Sec=27

10 J= 10, 11 Sec=28
11 J= 11, 12 Sec= 7
12 J= 12, 13 Sec= 7
13 J= 13, 14 Sec=30
14 J= 14, 15 Sec=29
15 J= 15, 16 Sec= 8
16 J= 16, 17 Sec= 8
17 J= 17, 18 Sec= 8
18 J= 18, 19 Sec= 8
19 J= 19, 20 Sec=31
20 J= 20, 21 Sec=32
21 J= 21, 22 Sec=23
22 J= 23, 24 Sec=33
23 J= 24, 25 Sec=35
24 J= 25, 26 Sec=36
25 J= 26, 27 Sec=13
26 J= 27, 28 Sec=13
27 J= 28, 29 Sec=13
28 J= 29, 30 Sec=13
29 J= 30, 31 Sec=37
30 J= 31, 32 Sec=38
31 J= 32, 33 Sec=39
32 J= 33, 34 Sec=16
33 J= 34, 35 Sec=16
34 J= 35, 36 Sec=41
35 J= 36, 37 Sec=40
36 J= 37, 38 Sec=17
37 J= 38, 39 Sec=17
38 J= 39, 40 Sec=17
39 J= 40, 41 Sec=17
40 J= 41, 42 Sec=42
41 J= 42, 43 Sec=43
42 J= 43, 44 Sec=34
43 J= 1, 45 Sec=19 IOFF=1.350 JOFF=0.000 RIGID=1.0
44 J= 45, 23 Sec=19 IOFF=0.000 JOFF=1.350 RIGID=1.0
45 J= 2, 46 Sec=19 IOFF=1.350 JOFF=0.000 RIGID=1.0
46 J= 46, 24 Sec=19 IOFF=0.000 JOFF=1.350 RIGID=1.0
47 J= 3, 47 Sec=19 IOFF=1.350 JOFF=0.000 RIGID=1.0
48 J= 47, 25 Sec=19 IOFF=0.000 JOFF=1.350 RIGID=1.0
49 J= 4, 48 Sec=19 IOFF=1.350 JOFF=0.000 RIGID=1.0
50 J= 48, 26 Sec=19 IOFF=0.000 JOFF=1.350 RIGID=1.0
51 J= 5, 49 Sec=19 IOFF=1.350 JOFF=0.000 RIGID=1.0
52 J= 49, 27 Sec=19 IOFF=0.000 JOFF=1.350 RIGID=1.0
53 J= 6, 50 Sec=19 IOFF=1.350 JOFF=0.000 RIGID=1.0
54 J= 50, 28 Sec=19 IOFF=0.000 JOFF=1.350 RIGID=1.0
55 J= 7, 51 Sec=19 IOFF=1.350 JOFF=0.000 RIGID=1.0
56 J= 51, 29 Sec=19 IOFF=0.000 JOFF=1.350 RIGID=1.0
57 J= 8, 52 Sec=19 IOFF=1.350 JOFF=0.000 RIGID=1.0
58 J= 52, 30 Sec=19 IOFF=0.000 JOFF=1.350 RIGID=1.0
59 J= 9, 53 Sec=19 IOFF=1.350 JOFF=0.000 RIGID=1.0
60 J= 53, 31 Sec=19 IOFF=0.000 JOFF=1.350 RIGID=1.0
61 J= 10, 54 Sec=19 IOFF=1.350 JOFF=0.000 RIGID=1.0
62 J= 54, 32 Sec=19 IOFF=0.000 JOFF=1.350 RIGID=1.0
63 J= 11, 55 Sec=19 IOFF=1.350 JOFF=0.000 RIGID=1.0
64 J= 55, 33 Sec=19 IOFF=0.000 JOFF=1.350 RIGID=1.0
65 J= 12, 56 Sec=19 IOFF=1.350 JOFF=0.000 RIGID=1.0
66 J= 56, 34 Sec=19 IOFF=0.000 JOFF=1.350 RIGID=1.0
67 J= 13, 57 Sec=19 IOFF=1.350 JOFF=0.000 RIGID=1.0
68 J= 57, 35 Sec=19 IOFF=0.000 JOFF=1.350 RIGID=1.0
69 J= 14, 58 Sec=19 IOFF=1.350 JOFF=0.000 RIGID=1.0
70 J= 58, 36 Sec=19 IOFF=0.000 JOFF=1.350 RIGID=1.0
71 J= 15, 59 Sec=19 IOFF=1.350 JOFF=0.000 RIGID=1.0
72 J= 59, 37 Sec=19 IOFF=0.000 JOFF=1.350 RIGID=1.0
73 J= 16, 60 Sec=19 IOFF=1.350 JOFF=0.000 RIGID=1.0
74 J= 60, 38 Sec=19 IOFF=0.000 JOFF=1.350 RIGID=1.0
75 J= 17, 61 Sec=19 IOFF=1.350 JOFF=0.000 RIGID=1.0
76 J= 61, 39 Sec=19 IOFF=0.000 JOFF=1.350 RIGID=1.0
77 J= 18, 62 Sec=19 IOFF=1.350 JOFF=0.000 RIGID=1.0
78 J= 62, 40 Sec=19 IOFF=0.000 JOFF=1.350 RIGID=1.0
79 J= 19, 63 Sec=19 IOFF=1.350 JOFF=0.000 RIGID=1.0
80 J= 63, 41 Sec=19 IOFF=0.000 JOFF=1.350 RIGID=1.0
81 J= 20, 64 Sec=19 IOFF=1.350 JOFF=0.000 RIGID=1.0
82 J= 64, 42 Sec=19 IOFF=0.000 JOFF=1.350 RIGID=1.0

83 J= 21, 65 Sec=19 IOFF=1,350 JOFF=0,000 RIGID=1.0
84 J= 65, 43 Sec=19 IOFF=0,000 JOFF=1,350 RIGID=1.0
85 J= 22, 66 Sec=19 IOFF=1,350 JOFF=0,000 RIGID=1.0
86 J= 66, 44 Sec=19 IOFF=0,000 JOFF=1,350 RIGID=1.0
87 J= 45, 46 Sec=20
88 J= 46, 47 Sec=20
89 J= 47, 48 Sec=20
90 J= 48, 49 Sec=20
91 J= 49, 50 Sec=20
92 J= 50, 51 Sec=20
93 J= 51, 52 Sec=20
94 J= 52, 53 Sec=20
95 J= 53, 54 Sec=20
96 J= 54, 55 Sec=20
97 J= 55, 56 Sec=20
98 J= 56, 57 Sec=20
99 J= 57, 58 Sec=20
100 J= 58, 59 Sec=20
101 J= 59, 60 Sec=20
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103 J= 61, 62 Sec=20
104 J= 62, 63 Sec=20
105 J= 63, 64 Sec=20
106 J= 64, 65 Sec=20
107 J= 65, 66 Sec=20
108 J= 1, 67 Sec=21
109 J= 66, 67 Sec=21
110 J= 69, 67 Sec=21
111 J= 12, 70 Sec=21
112 J= 71, 70 Sec=21
113 J= 72, 70 Sec=21
114 J= 22, 73 Sec=21
115 J= 74, 73 Sec=21
116 J= 75, 73 Sec=21
117 J= 23, 76 Sec=21
118 J= 77, 76 Sec=21
119 J= 78, 76 Sec=21
120 J= 34, 79 Sec=21
121 J= 80, 79 Sec=21
122 J= 81, 79 Sec=21
123 J= 44, 82 Sec=21
124 J= 83, 82 Sec=21
125 J= 84, 82 Sec=21

LOAD
Name=AFTER : AFTER SELF-WEIGHT LOAD (부속시설하중 포함)
Type=Distributed Spar
Add= 1 RD=0.000, 1.000 Uzp=-19.076, -19.076 R1=-23.820, -23.820
Add= 2 RD=0.000, 1.000 Uzp=-19.076, -19.076 R1=-23.820, -23.820
Add= 3 RD=0.000, 1.000 Uzp=-19.076, -19.076 R1=-23.820, -23.820
Add= 4 RD=0.000, 1.000 Uzp=-19.076, -19.076 R1=-23.820, -23.820
Add= 5 RD=0.000, 1.000 Uzp=-19.076, -19.076 R1=-23.820, -23.820
Add= 6 RD=0.000, 1.000 Uzp=-19.076, -19.076 R1=-23.820, -23.820
Add= 7 RD=0.000, 1.000 Uzp=-19.076, -19.076 R1=-23.820, -23.820
Add= 8 RD=0.000, 1.000 Uzp=-19.076, -19.076 R1=-23.820, -23.820
Add= 9 RD=0.000, 1.000 Uzp=-19.076, -19.076 R1=-23.820, -23.820
Add= 10 RD=0.000, 1.000 Uzp=-19.076, -19.076 R1=-23.820, -23.820
Add= 11 RD=0.000, 1.000 Uzp=-19.076, -19.076 R1=-23.820, -23.820
Add= 12 RD=0.000, 1.000 Uzp=-19.076, -19.076 R1=-23.820, -23.820
Add= 13 RD=0.000, 1.000 Uzp=-19.076, -19.076 R1=-23.820, -23.820
Add= 14 RD=0.000, 1.000 Uzp=-19.076, -19.076 R1=-23.820, -23.820
Add= 15 RD=0.000, 1.000 Uzp=-19.076, -19.076 R1=-23.820, -23.820
Add= 16 RD=0.000, 1.000 Uzp=-19.076, -19.076 R1=-23.820, -23.820
Add= 17 RD=0.000, 1.000 Uzp=-19.076, -19.076 R1=-23.820, -23.820
Add= 18 RD=0.000, 1.000 Uzp=-19.076, -19.076 R1=-23.820, -23.820
Add= 19 RD=0.000, 1.000 Uzp=-19.076, -19.076 R1=-23.820, -23.820
Add= 20 RD=0.000, 1.000 Uzp=-19.076, -19.076 R1=-23.820, -23.820
Add= 21 RD=0.000, 1.000 Uzp=-19.076, -19.076 R1=-23.820, -23.820
Add= 22 RD=0.000, 1.000 Uzp=-18.699, -18.699 R1=16.856, 16.856
Add= 23 RD=0.000, 1.000 Uzp=-18.699, -18.699 R1=16.856, 16.856
Add= 24 RD=0.000, 1.000 Uzp=-18.699, -18.699 R1=16.856, 16.856
Add= 25 RD=0.000, 1.000 Uzp=-18.699, -18.699 R1=16.856, 16.856
Add= 26 RD=0.000, 1.000 Uzp=-18.699, -18.699 R1=16.856, 16.856
Add= 27 RD=0.000, 1.000 Uzp=-18.699, -18.699 R1=16.856, 16.856
Add= 28 RD=0.000, 1.000 Uzp=-18.699, -18.699 R1=16.856, 16.856

Add= 29 RD=0.000, 1.000 Uzp=-18.699, -18.699 R1=16.856, 16.856
Add= 30 RD=0.000, 1.000 Uzp=-18.699, -18.699 R1=16.856, 16.856
Add= 31 RD=0.000, 1.000 Uzp=-18.699, -18.699 R1=16.856, 16.856
Add= 32 RD=0.000, 1.000 Uzp=-18.699, -18.699 R1=16.856, 16.856
Add= 33 RD=0.000, 1.000 Uzp=-18.699, -18.699 R1=16.856, 16.856
Add= 34 RD=0.000, 1.000 Uzp=-18.699, -18.699 R1=16.856, 16.856
Add= 35 RD=0.000, 1.000 Uzp=-18.699, -18.699 R1=16.856, 16.856
Add= 36 RD=0.000, 1.000 Uzp=-18.699, -18.699 R1=16.856, 16.856
Add= 37 RD=0.000, 1.000 Uzp=-18.699, -18.699 R1=16.856, 16.856
Add= 38 RD=0.000, 1.000 Uzp=-18.699, -18.699 R1=16.856, 16.856
Add= 39 RD=0.000, 1.000 Uzp=-18.699, -18.699 R1=16.856, 16.856
Add= 40 RD=0.000, 1.000 Uzp=-18.699, -18.699 R1=16.856, 16.856
Add= 41 RD=0.000, 1.000 Uzp=-18.699, -18.699 R1=16.856, 16.856
Add= 42 RD=0.000, 1.000 Uzp=-18.699, -18.699 R1=16.856, 16.856
Add= 87 RD=0.000, 1.000 Uzp=-6.893, -6.893
Add= 88 RD=0.000, 1.000 Uzp=-6.893, -6.893
Add= 89 RD=0.000, 1.000 Uzp=-6.893, -6.893
Add= 90 RD=0.000, 1.000 Uzp=-6.893, -6.893
Add= 91 RD=0.000, 1.000 Uzp=-6.893, -6.893
Add= 92 RD=0.000, 1.000 Uzp=-6.893, -6.893
Add= 93 RD=0.000, 1.000 Uzp=-6.893, -6.893
Add= 94 RD=0.000, 1.000 Uzp=-6.893, -6.893
Add= 95 RD=0.000, 1.000 Uzp=-6.893, -6.893
Add= 96 RD=0.000, 1.000 Uzp=-6.893, -6.893
Add= 97 RD=0.000, 1.000 Uzp=-6.893, -6.893
Add= 98 RD=0.000, 1.000 Uzp=-6.893, -6.893
Add= 99 RD=0.000, 1.000 Uzp=-6.893, -6.893
Add=100 RD=0.000, 1.000 Uzp=-6.893, -6.893
Add=101 RD=0.000, 1.000 Uzp=-6.893, -6.893
Add=102 RD=0.000, 1.000 Uzp=-6.893, -6.893
Add=103 RD=0.000, 1.000 Uzp=-6.893, -6.893
Add=104 RD=0.000, 1.000 Uzp=-6.893, -6.893
Add=105 RD=0.000, 1.000 Uzp=-6.893, -6.893
Add=106 RD=0.000, 1.000 Uzp=-6.893, -6.893
Add=107 RD=0.000, 1.000 Uzp=-6.893, -6.893

COMBO
Name=AFTER Type=ADD :
LOAD=AFTER sf=1,000

OUTPUT
ELEM=JOINT TYPE=DISP,REAC LOAD=> COMB=>
ELEM=FRAME TYPE=FORCE LOAD=> COMB=>

3) 활하중 재하시 < MOVING LOAD >

SYSTEM
LENGTH=M FORCE=KN

JOINT
1 X= 0.000 Y=0.000 Z=0.000
2 X= 4.450 Y=0.000 Z=0.000
3 X= 9.450 Y=0.000 Z=0.000
4 X= 14.450 Y=0.000 Z=0.000
5 X= 19.450 Y=0.000 Z=0.000
6 X= 24.450 Y=0.000 Z=0.000
7 X= 29.450 Y=0.000 Z=0.000
8 X= 34.450 Y=0.000 Z=0.000
9 X= 39.450 Y=0.000 Z=0.000
10 X= 44.450 Y=0.000 Z=0.000
11 X= 49.450 Y=0.000 Z=0.000
12 X= 54.450 Y=0.000 Z=0.000
13 X= 59.450 Y=0.000 Z=0.000
14 X= 64.450 Y=0.000 Z=0.000
15 X= 69.450 Y=0.000 Z=0.000
16 X= 74.450 Y=0.000 Z=0.000
17 X= 79.450 Y=0.000 Z=0.000
18 X= 84.450 Y=0.000 Z=0.000
19 X= 89.450 Y=0.000 Z=0.000
20 X= 94.450 Y=0.000 Z=0.000
21 X= 99.450 Y=0.000 Z=0.000
22 X= 104.030 Y=0.000 Z=0.000
23 X= 0.000 Y=-7.700 Z=-0.154
24 X= 4.450 Y=-7.700 Z=-0.154
25 X= 9.450 Y=-7.700 Z=-0.154
26 X= 14.450 Y=-7.700 Z=-0.154
27 X= 19.450 Y=-7.700 Z=-0.154
28 X= 24.450 Y=-7.700 Z=-0.154
29 X= 29.450 Y=-7.700 Z=-0.154
30 X= 34.450 Y=-7.700 Z=-0.154
31 X= 39.450 Y=-7.700 Z=-0.154
32 X= 44.450 Y=-7.700 Z=-0.154
33 X= 49.450 Y=-7.700 Z=-0.154
34 X= 54.450 Y=-7.700 Z=-0.154
35 X= 59.450 Y=-7.700 Z=-0.154
36 X= 64.450 Y=-7.700 Z=-0.154
37 X= 69.450 Y=-7.700 Z=-0.154
38 X= 74.450 Y=-7.700 Z=-0.154
39 X= 79.450 Y=-7.700 Z=-0.154
40 X= 84.450 Y=-7.700 Z=-0.154
41 X= 89.450 Y=-7.700 Z=-0.154
42 X= 94.450 Y=-7.700 Z=-0.154
43 X= 99.450 Y=-7.700 Z=-0.154
44 X= 104.030 Y=-7.700 Z=-0.154
45 X= 0.000 Y=-3.850 Z=-0.077
46 X= 4.450 Y=-3.850 Z=-0.077
47 X= 9.450 Y=-3.850 Z=-0.077
48 X= 14.450 Y=-3.850 Z=-0.077
49 X= 19.450 Y=-3.850 Z=-0.077
50 X= 24.450 Y=-3.850 Z=-0.077
51 X= 29.450 Y=-3.850 Z=-0.077
52 X= 34.450 Y=-3.850 Z=-0.077
53 X= 39.450 Y=-3.850 Z=-0.077
54 X= 44.450 Y=-3.850 Z=-0.077
55 X= 49.450 Y=-3.850 Z=-0.077
56 X= 54.450 Y=-3.850 Z=-0.077
57 X= 59.450 Y=-3.850 Z=-0.077
58 X= 64.450 Y=-3.850 Z=-0.077
59 X= 69.450 Y=-3.850 Z=-0.077
60 X= 74.450 Y=-3.850 Z=-0.077
61 X= 79.450 Y=-3.850 Z=-0.077
62 X= 84.450 Y=-3.850 Z=-0.077
63 X= 89.450 Y=-3.850 Z=-0.077
64 X= 94.450 Y=-3.850 Z=-0.077
65 X= 99.450 Y=-3.850 Z=-0.077
66 X= 104.030 Y=-3.850 Z=-0.077

67 X= 0.000 Y=0.000 Z=-1.150
68 X= 0.000 Y=1.050 Z=-1.150
69 X= 0.000 Y=-1.050 Z=-1.150
70 X= 54.450 Y=0.000 Z=-1.250
71 X= 54.450 Y=1.050 Z=-1.250
72 X= 54.450 Y=-1.050 Z=-1.250
73 X= 104.030 Y=0.000 Z=-1.150
74 X= 104.030 Y=1.050 Z=-1.150
75 X= 104.030 Y=-1.050 Z=-1.150
76 X= 0.000 Y=-7.700 Z=-1.304
77 X= 0.000 Y=-6.650 Z=-1.304
78 X= 0.000 Y=-8.750 Z=-1.304
79 X= 54.450 Y=-7.700 Z=-1.404
80 X= 54.450 Y=-6.650 Z=-1.404
81 X= 54.450 Y=-8.750 Z=-1.404
82 X= 104.030 Y=-7.700 Z=-1.304
83 X= 104.030 Y=-6.650 Z=-1.304
84 X= 104.030 Y=-8.750 Z=-1.304

LOCAL
ADD= 68 ANG=0.000
ADD= 69 ANG=0.000
ADD= 71 ANG=0.000
ADD= 72 ANG=0.000
ADD= 74 ANG=0.000
ADD= 75 ANG=0.000
ADD= 77 ANG=5.672
ADD= 78 ANG=8.049
ADD= 80 ANG=0.000
ADD= 81 ANG=0.000
ADD= 83 ANG=-6.444
ADD= 84 ANG=-6.628

RESTRAINT
ADD= 68 DOF= U2, U3,
ADD= 69 DOF= U2, U3,
ADD= 71 DOF= U1, U2, U3,
ADD= 72 DOF= U1, U2, U3,
ADD= 74 DOF= U2, U3,
ADD= 75 DOF= U2, U3,
ADD= 77 DOF= U3,
ADD= 78 DOF= U3,
ADD= 80 DOF= U1, U3,
ADD= 81 DOF= U1, U3,
ADD= 83 DOF= U3,
ADD= 84 DOF= U3,

MATERIAL
Name=1
E=2.05e+008
Name=2
E=2.05e+008
Name=3
E=2.05e+008
Name=4
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Name=9
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Name=13

E=2.05e+008
Name=14
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Name=15
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E=2.05e+008
Name=20
E=2.05e+008
Name=21
E=2.05e+008

FRAME SECTION
Name= 1 Mat= 1 A=0.31086 I=0.23700884, 0.81280104 J=0.19666515 : GIRDER
Name= 2 Mat= 2 A=0.31498 I=0.26250528, 0.82062503 J=0.22101250 : GIRDER
Name= 3 Mat= 3 A=0.32662 I=0.33309117, 0.83043648 J=0.24351348 : GIRDER
Name= 4 Mat= 4 A=0.36190 I=0.40969340, 0.85933523 J=0.26781294 : GIRDER
Name= 5 Mat= 5 A=0.37282 I=0.44508691, 0.86633164 J=0.26781294 : GIRDER
Name= 6 Mat= 6 A=0.34706 I=0.39688457, 0.84641193 J=0.25410445 : GIRDER
Name= 7 Mat= 7 A=0.45526 I=0.58100343, 0.95508413 J=0.38096295 : GIRDER
Name= 8 Mat= 8 A=0.35014 I=0.38385500, 0.85582086 J=0.26067422 : GIRDER
Name= 9 Mat= 9 A=0.33638 I=0.38030356, 0.84015859 J=0.25819292 : GIRDER
Name= 10 Mat= 10 A=0.30466 I=0.23540042, 0.75928243 J=0.19666515 : GIRDER
Name= 11 Mat= 11 A=0.30966 I=0.28057184, 0.76728296 J=0.22101250 : GIRDER
Name= 12 Mat= 12 A=0.32042 I=0.33057213, 0.77758960 J=0.24351348 : GIRDER
Name= 13 Mat= 13 A=0.35570 I=0.40556776, 0.80777754 J=0.26781294 : GIRDER
Name= 14 Mat= 14 A=0.36662 I=0.44146450, 0.81509583 J=0.26781294 : GIRDER
Name= 15 Mat= 15 A=0.34086 I=0.39364487, 0.79433278 J=0.25410445 : GIRDER
Name= 16 Mat= 16 A=0.44906 I=0.57632641, 0.90587243 J=0.38096295 : GIRDER
Name= 17 Mat= 17 A=0.34394 I=0.38093229, 0.80394935 J=0.26087422 : GIRDER
Name= 18 Mat= 18 A=0.33219 I=0.37721604, 0.78776432 J=0.25819292 : GIRDER
Name= 19 Mat= 19 A=0.02880 I=0.01174211, 0.00005426 J=0.00000138 : CROSSBEAM
Name= 20 Mat= 20 A=0.01680 I=0.00169891, 0.00005412 J=0.00000081 : STRINGER
Name= 21 Mat= 21 A=10.00000 I=10.00000000, 10.00000000 J=10.00000000 : SHOE
Name= 22 Type=Nonpr Sec= 1, 2 Elvar=2.1
Name= 23 Type=Nonpr Sec= 2, 1
Name= 24 Type=Nonpr Sec= 2, 3
Name= 25 Type=Nonpr Sec= 3, 4
Name= 26 Type=Nonpr Sec= 4, 5
Name= 27 Type=Nonpr Sec= 5, 6
Name= 28 Type=Nonpr Sec= 6, 7
Name= 29 Type=Nonpr Sec= 6, 8
Name= 30 Type=Nonpr Sec= 7, 6
Name= 31 Type=Nonpr Sec= 8, 9
Name= 32 Type=Nonpr Sec= 9, 2
Name= 33 Type=Nonpr Sec= 10, 11
Name= 34 Type=Nonpr Sec= 11, 10
Name= 35 Type=Nonpr Sec= 11, 12
Name= 36 Type=Nonpr Sec= 12, 13
Name= 37 Type=Nonpr Sec= 13, 14
Name= 38 Type=Nonpr Sec= 14, 15
Name= 39 Type=Nonpr Sec= 15, 16
Name= 40 Type=Nonpr Sec= 15, 17
Name= 41 Type=Nonpr Sec= 16, 15
Name= 42 Type=Nonpr Sec= 17, 18
Name= 43 Type=Nonpr Sec= 18, 11

FRAME
1 J= 1, 2 Sec=22 Local=12 Pdir=Z+X NSEG=4
2 J= 2, 3 Sec=24
3 J= 3, 4 Sec=25
4 J= 4, 5 Sec= 4
5 J= 5, 6 Sec= 4
6 J= 6, 7 Sec= 4
7 J= 7, 8 Sec= 4
8 J= 8, 9 Sec=26
9 J= 9, 10 Sec=27

83 J= 21, 65 Sec=19 IOFF=1.350 JOFF=0.000 RIGID=1.0
84 J= 65, 43 Sec=19 IOFF=0.000 JOFF=1.350 RIGID=1.0
85 J= 22, 66 Sec=19 IOFF=1.350 JOFF=0.000 RIGID=1.0
86 J= 66, 44 Sec=19 IOFF=0.000 JOFF=1.350 RIGID=1.0
87 J= 45, 46 Sec=20
88 J= 46, 47 Sec=20
89 J= 47, 48 Sec=20
90 J= 48, 49 Sec=20
91 J= 49, 50 Sec=20
92 J= 50, 51 Sec=20
93 J= 51, 52 Sec=20
94 J= 52, 53 Sec=20
95 J= 53, 54 Sec=20
96 J= 54, 55 Sec=20
97 J= 55, 56 Sec=20
98 J= 56, 57 Sec=20
99 J= 57, 58 Sec=20
100 J= 58, 59 Sec=20
101 J= 59, 60 Sec=20
102 J= 60, 61 Sec=20
103 J= 61, 62 Sec=20
104 J= 62, 63 Sec=20
105 J= 63, 64 Sec=20
106 J= 64, 65 Sec=20
107 J= 65, 66 Sec=20
108 J= 1, 67 Sec=21
109 J= 68, 67 Sec=21
110 J= 69, 67 Sec=21
111 J= 12, 70 Sec=21
112 J= 71, 70 Sec=21
113 J= 72, 70 Sec=21
114 J= 22, 73 Sec=21
115 J= 74, 73 Sec=21
116 J= 75, 73 Sec=21
117 J= 23, 76 Sec=21
118 J= 77, 76 Sec=21
119 J= 78, 76 Sec=21
120 J= 34, 79 Sec=21
121 J= 80, 79 Sec=21
122 J= 81, 79 Sec=21
123 J= 44, 82 Sec=21
124 J= 83, 82 Sec=21
125 J= 84, 82 Sec=21

LANE
: Case = 1 ----- G1 Max DB 1선
Name=L1G1
Path= 1, 11, 1, Ecc=0.514
Path= 12, 21, 1, Ecc=0.514
Name=L1G1S1
Path= 87, 97, 1, Ecc=0.000
Path= 98, 107, 1, Ecc=0.000
Name=L1G2
Path= 22, 32, 1, Ecc=1.830
Path= 33, 42, 1, Ecc=1.830

: Case = 2 ----- G1 Max DB 2선
Name=L2G1
Path= 1, 11, 1, Ecc=-0.057
Path= 12, 21, 1, Ecc=-0.057
Name=L2G1S1
Path= 87, 97, 1, Ecc=0.000
Path= 98, 107, 1, Ecc=0.000
Name=L2G2
Path= 22, 32, 1, Ecc=1.830
Path= 33, 42, 1, Ecc=1.830

: Case = 3 ----- G1 Max DB 3선
Name=L3G1
Path= 1, 11, 1, Ecc=-0.038
Path= 12, 21, 1, Ecc=-0.038
Name=L3G1S1
Path= 87, 97, 1, Ecc=0.000

10 J= 10, 11 Sec=28
11 J= 11, 12 Sec= 7
12 J= 12, 13 Sec= 7
13 J= 13, 14 Sec=30
14 J= 14, 15 Sec=29
15 J= 15, 16 Sec= 8
16 J= 16, 17 Sec= 8
17 J= 17, 18 Sec= 8
18 J= 18, 19 Sec= 8
19 J= 19, 20 Sec=31
20 J= 20, 21 Sec=32
21 J= 21, 22 Sec=23
22 J= 23, 24 Sec=33
23 J= 24, 25 Sec=35
24 J= 25, 26 Sec=36
25 J= 26, 27 Sec=13
26 J= 27, 28 Sec=13
27 J= 28, 29 Sec=13
28 J= 29, 30 Sec=13
29 J= 30, 31 Sec=37
30 J= 31, 32 Sec=38
31 J= 32, 33 Sec=39
32 J= 33, 34 Sec=16
33 J= 34, 35 Sec=16
34 J= 35, 36 Sec=41
35 J= 36, 37 Sec=40
36 J= 37, 38 Sec=17
37 J= 38, 39 Sec=17
38 J= 39, 40 Sec=17
39 J= 40, 41 Sec=17
40 J= 41, 42 Sec=42
41 J= 42, 43 Sec=43
42 J= 43, 44 Sec=34
43 J= 1, 45 Sec=19 IOFF=1.350 JOFF=0.000 RIGID=1.0
44 J= 45, 23 Sec=19 IOFF=0.000 JOFF=1.350 RIGID=1.0
45 J= 2, 46 Sec=19 IOFF=1.350 JOFF=0.000 RIGID=1.0
46 J= 46, 24 Sec=19 IOFF=0.000 JOFF=1.350 RIGID=1.0
47 J= 3, 47 Sec=19 IOFF=1.350 JOFF=0.000 RIGID=1.0
48 J= 47, 25 Sec=19 IOFF=0.000 JOFF=1.350 RIGID=1.0
49 J= 4, 48 Sec=19 IOFF=1.350 JOFF=0.000 RIGID=1.0
50 J= 48, 26 Sec=19 IOFF=0.000 JOFF=1.350 RIGID=1.0
51 J= 5, 49 Sec=19 IOFF=1.350 JOFF=0.000 RIGID=1.0
52 J= 49, 27 Sec=19 IOFF=0.000 JOFF=1.350 RIGID=1.0
53 J= 6, 50 Sec=19 IOFF=1.350 JOFF=0.000 RIGID=1.0
54 J= 50, 28 Sec=19 IOFF=0.000 JOFF=1.350 RIGID=1.0
55 J= 7, 51 Sec=19 IOFF=1.350 JOFF=0.000 RIGID=1.0
56 J= 51, 29 Sec=19 IOFF=0.000 JOFF=1.350 RIGID=1.0
57 J= 8, 52 Sec=19 IOFF=1.350 JOFF=0.000 RIGID=1.0
58 J= 52, 30 Sec=19 IOFF=0.000 JOFF=1.350 RIGID=1.0
59 J= 9, 53 Sec=19 IOFF=1.350 JOFF=0.000 RIGID=1.0
60 J= 53, 31 Sec=19 IOFF=0.000 JOFF=1.350 RIGID=1.0
61 J= 10, 54 Sec=19 IOFF=1.350 JOFF=0.000 RIGID=1.0
62 J= 54, 32 Sec=19 IOFF=0.000 JOFF=1.350 RIGID=1.0
63 J= 11, 55 Sec=19 IOFF=1.350 JOFF=0.000 RIGID=1.0
64 J= 55, 33 Sec=19 IOFF=0.000 JOFF=1.350 RIGID=1.0
65 J= 12, 56 Sec=19 IOFF=1.350 JOFF=0.000 RIGID=1.0
66 J= 56, 34 Sec=19 IOFF=0.000 JOFF=1.350 RIGID=1.0
67 J= 13, 57 Sec=19 IOFF=1.350 JOFF=0.000 RIGID=1.0
68 J= 57, 35 Sec=19 IOFF=0.000 JOFF=1.350 RIGID=1.0
69 J= 14, 58 Sec=19 IOFF=1.350 JOFF=0.000 RIGID=1.0
70 J= 58, 36 Sec=19 IOFF=0.000 JOFF=1.350 RIGID=1.0
71 J= 15, 59 Sec=19 IOFF=1.350 JOFF=0.000 RIGID=1.0
72 J= 59, 37 Sec=19 IOFF=0.000 JOFF=1.350 RIGID=1.0
73 J= 16, 60 Sec=19 IOFF=1.350 JOFF=0.000 RIGID=1.0
74 J= 60, 38 Sec=19 IOFF=0.000 JOFF=1.350 RIGID=1.0
75 J= 17, 61 Sec=19 IOFF=1.350 JOFF=0.000 RIGID=1.0
76 J= 61, 39 Sec=19 IOFF=0.000 JOFF=1.350 RIGID=1.0
77 J= 18, 62 Sec=19 IOFF=1.350 JOFF=0.000 RIGID=1.0
78 J= 62, 40 Sec=19 IOFF=0.000 JOFF=1.350 RIGID=1.0
79 J= 19, 63 Sec=19 IOFF=1.350 JOFF=0.000 RIGID=1.0
80 J= 63, 41 Sec=19 IOFF=0.000 JOFF=1.350 RIGID=1.0
81 J= 20, 64 Sec=19 IOFF=1.350 JOFF=0.000 RIGID=1.0
82 J= 64, 42 Sec=19 IOFF=0.000 JOFF=1.350 RIGID=1.0

Path= 98, 107, 1, Ecc=0.000
Name=L3G2
Path= 22, 32, 1, Ecc=1.028
Path= 33, 42, 1, Ecc=1.028

: Case = 4 ----- G2 Max DB 1선
Name=L4G1
Path= 1, 11, 1, Ecc=-1.830
Path= 12, 21, 1, Ecc=-1.830
Name=L4G1S1
Path= 87, 97, 1, Ecc=0.000
Path= 98, 107, 1, Ecc=0.000
Name=L4G2
Path= 22, 32, 1, Ecc=-0.025
Path= 33, 42, 1, Ecc=-0.025

: Case = 5 ----- G2 Max DB 2선
Name=L5G1
Path= 1, 11, 1, Ecc=-1.814
Path= 12, 21, 1, Ecc=-1.814
Name=L5G1S1
Path= 87, 97, 1, Ecc=0.000
Path= 98, 107, 1, Ecc=0.000
Name=L5G2
Path= 22, 32, 1, Ecc=0.294
Path= 33, 42, 1, Ecc=0.294

: Case = 6 ----- G2 Max DB 3선
Name=L6G1
Path= 1, 11, 1, Ecc=-0.844
Path= 12, 21, 1, Ecc=-0.844
Name=L6G1S1
Path= 87, 97, 1, Ecc=0.000
Path= 98, 107, 1, Ecc=0.000
Name=L6G2
Path= 22, 32, 1, Ecc=0.298
Path= 33, 42, 1, Ecc=0.298

: Case = 7 ----- G1 Max DL 1선
Name=L7G1
Path= 1, 11, 1, Ecc=0.508
Path= 12, 21, 1, Ecc=0.508
Name=L7G1S1
Path= 87, 97, 1, Ecc=0.000
Path= 98, 107, 1, Ecc=0.000
Name=L7G2
Path= 22, 32, 1, Ecc=1.830
Path= 33, 42, 1, Ecc=1.830

: Case = 8 ----- G1 Max DL 2선
Name=L8G1
Path= 1, 11, 1, Ecc=-0.060
Path= 12, 21, 1, Ecc=-0.060
Name=L8G1S1
Path= 87, 97, 1, Ecc=0.000
Path= 98, 107, 1, Ecc=0.000
Name=L8G2
Path= 22, 32, 1, Ecc=1.835
Path= 33, 42, 1, Ecc=1.835

: Case = 9 ----- G1 Max DL 3선
Name=L9G1
Path= 1, 11, 1, Ecc=-0.047
Path= 12, 21, 1, Ecc=-0.047
Name=L9G1S1
Path= 87, 97, 1, Ecc=0.000
Path= 98, 107, 1, Ecc=0.000
Name=L9G2
Path= 22, 32, 1, Ecc=1.054
Path= 33, 42, 1, Ecc=1.054

: Case = 10 ----- G2 Max DL 1선
Name=L10G1

Path= 1, 11, 1, Ecc=-1.830
 Path= 12, 21, 1, Ecc=-1.830
 Name=L10GIS1
 Path= 87, 97, 1, Ecc=0.000
 Path= 98, 107, 1, Ecc=0.000
 Name=L10G2
 Path= 22, 32, 1, Ecc=-0.014
 Path= 33, 42, 1, Ecc=-0.014
 : Case = 11 ----- G2 Max DL 2선
 Name=L11G1
 Path= 1, 11, 1, Ecc=-1.733
 Path= 12, 21, 1, Ecc=-1.733
 Name=L11GIS1
 Path= 87, 97, 1, Ecc=0.000
 Path= 98, 107, 1, Ecc=0.000
 Name=L11G2
 Path= 22, 32, 1, Ecc=0.292
 Path= 33, 42, 1, Ecc=0.292
 : Case = 12 ----- G2 Max DL 3선
 Name=L12G1
 Path= 1, 11, 1, Ecc=-0.856
 Path= 12, 21, 1, Ecc=-0.856
 Name=L12GIS1
 Path= 87, 97, 1, Ecc=0.000
 Path= 98, 107, 1, Ecc=0.000
 Name=L12G2
 Path= 22, 32, 1, Ecc=0.301
 Path= 33, 42, 1, Ecc=0.301
 VEHICLES
 Name=1 TYPE=Gan : DB-24
 P=24,000
 D=4,200 P=96,000
 D=4,200 9,000 P=96,000
 Name=2 TYPE=Gan : DL-24
 W=4,233 PM=36,000 PMM=52,000

Vehicle Class
 Name=1
 Vehi=1
 Name=2
 Vehi=2

Bridge Response
 Elem=Frame
 Add=+
 Elem=Joint Type=DISP
 Add=+
 Elem=Joint Type=REAC
 Add=+

MOVING LOAD
 Name= 1 Rf=1,000 : G1 Max DB 1선
 Lane= L1G1 Class=1 Lmin= 1 Lmax= 1 Sf=2.107
 Lane= L1G2 Class=1 Lmin= 1 Lmax= 1 Sf=0.028
 Name= 2 Rf=1,000 : G1 Max DB 2선
 Lane= L2G1 Class=1 Lmin= 1 Lmax= 1 Sf=2.897
 Lane= L2GIS1 Class=1 Lmin= 1 Lmax= 1 Sf=1.146
 Name= 3 Rf=0,900 : G1 Max DB 3선
 Lane= L3G1 Class=1 Lmin= 1 Lmax= 1 Sf=2.867
 Lane= L3GIS1 Class=1 Lmin= 1 Lmax= 1 Sf=1.322
 Lane= L3G2 Class=1 Lmin= 1 Lmax= 1 Sf=1.811
 Name= 4 Rf=1,000 : G2 Max DB 1선
 Lane= L4G1 Class=1 Lmin= 1 Lmax= 1 Sf=0.039
 Lane= L4G2 Class=1 Lmin= 1 Lmax= 1 Sf=2.152

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Name= 5 Rf=1,000 : G2 Max DB 2선
 Lane= L5G1 Class=1 Lmin= 1 Lmax= 1 Sf=0.062
 Lane= L5GIS1 Class=1 Lmin= 1 Lmax= 1 Sf=1.281
 Lane= L5G2 Class=1 Lmin= 1 Lmax= 1 Sf=2.656
 Name= 6 Rf=0,900 : G2 Max DB 3선
 Lane= L6G1 Class=1 Lmin= 1 Lmax= 1 Sf=2.090
 Lane= L6GIS1 Class=1 Lmin= 1 Lmax= 1 Sf=1.246
 Lane= L6G2 Class=1 Lmin= 1 Lmax= 1 Sf=2.664
 Name= 7 Rf=1,000 : G1 Max DL 1선
 Lane= L7G1 Class=2 Lmin= 1 Lmax= 1 Sf=3.165
 Lane= L7G2 Class=2 Lmin= 1 Lmax= 1 Sf=0.043
 Name= 8 Rf=1,000 : G1 Max DL 2선
 Lane= L8G1 Class=2 Lmin= 1 Lmax= 1 Sf=4.342
 Lane= L8GIS1 Class=2 Lmin= 1 Lmax= 1 Sf=1.739
 Name= 9 Rf=0,900 : G1 Max DL 3선
 Lane= L9G1 Class=2 Lmin= 1 Lmax= 1 Sf=4.310
 Lane= L9GIS1 Class=2 Lmin= 1 Lmax= 1 Sf=1.950
 Lane= L9G2 Class=2 Lmin= 1 Lmax= 1 Sf=2.740
 Name= 10 Rf=1,000 : G2 Max DL 1선
 Lane= L10G1 Class=2 Lmin= 1 Lmax= 1 Sf=0.061
 Lane= L10G2 Class=2 Lmin= 1 Lmax= 1 Sf=3.239
 Name= 11 Rf=1,000 : G2 Max DL 2선
 Lane= L11G1 Class=2 Lmin= 1 Lmax= 1 Sf=0.063
 Lane= L11GIS1 Class=2 Lmin= 1 Lmax= 1 Sf=1.970
 Lane= L11G2 Class=2 Lmin= 1 Lmax= 1 Sf=3.967
 Name= 12 Rf=0,900 : G2 Max DL 3선
 Lane= L12G1 Class=2 Lmin= 1 Lmax= 1 Sf=3.135
 Lane= L12GIS1 Class=2 Lmin= 1 Lmax= 1 Sf=1.877
 Lane= L12G2 Class=2 Lmin= 1 Lmax= 1 Sf=3.988

COMBO
 Name=G1XDB1 Type=ENVE : G1 Max DB 1선
 MOVE=1 sf=1.167
 Name=G1XDB2 Type=ENVE : G1 Max DB 2선
 MOVE=2 sf=1.167
 Name=G1XDB3 Type=ENVE : G1 Max DB 3선
 MOVE=3 sf=1.167
 Name=G2XDB1 Type=ENVE : G2 Max DB 1선
 MOVE=4 sf=1.167
 Name=G2XDB2 Type=ENVE : G2 Max DB 2선
 MOVE=5 sf=1.167
 Name=G2XDB3 Type=ENVE : G2 Max DB 3선
 MOVE=6 sf=1.167
 Name=G1XDL1 Type=ENVE : G1 Max DL 1선
 MOVE=7 sf=1.167
 Name=G1XDL2 Type=ENVE : G1 Max DL 2선
 MOVE=8 sf=1.167
 Name=G1XDL3 Type=ENVE : G1 Max DL 3선
 MOVE=9 sf=1.167
 Name=G2XDL1 Type=ENVE : G2 Max DL 1선
 MOVE=10 sf=1.167
 Name=G2XDL2 Type=ENVE : G2 Max DL 2선
 MOVE=11 sf=1.167
 Name=G2XDL3 Type=ENVE : G2 Max DL 3선
 MOVE=12 sf=1.167

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Name=DB Type=ENVE :
 COMB=G1XDB1 sf=1,000
 COMB=G1XDB2 sf=1,000
 COMB=G1XDB3 sf=1,000
 COMB=G2XDB1 sf=1,000
 COMB=G2XDB2 sf=1,000
 COMB=G2XDB3 sf=1,000
 Name=DL Type=ENVE :
 COMB=G1XDL1 sf=1,000
 COMB=G1XDL2 sf=1,000
 COMB=G1XDL3 sf=1,000
 COMB=G2XDL1 sf=1,000
 COMB=G2XDL2 sf=1,000
 COMB=G2XDL3 sf=1,000
 Name=CAR Type=ENVE :
 COMB=DB sf=1,000
 COMB=DL sf=1,000
 Name=DESIGN Type=ENVE :
 COMB=CAR sf=1,000

OUTPUT
 ELEM=JOINT TYPE=DISP,REAC LOAD=+ COMB=+
 ELEM=FRAME TYPE=FORCE LOAD=+ COMB=+

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4) 부등침하 < UNEQUAL SETTLEMENT >

SYSTEM	LENGTH=MM	FORCE=KN
JOINT		
1	X= 0.000 Y=0.000 Z=0.000	
2	X= 4.450 Y=0.000 Z=0.000	
3	X= 9.450 Y=0.000 Z=0.000	
4	X= 14.450 Y=0.000 Z=0.000	
5	X= 19.450 Y=0.000 Z=0.000	
6	X= 24.450 Y=0.000 Z=0.000	
7	X= 29.450 Y=0.000 Z=0.000	
8	X= 34.450 Y=0.000 Z=0.000	
9	X= 39.450 Y=0.000 Z=0.000	
10	X= 44.450 Y=0.000 Z=0.000	
11	X= 49.450 Y=0.000 Z=0.000	
12	X= 54.450 Y=0.000 Z=0.000	
13	X= 59.450 Y=0.000 Z=0.000	
14	X= 64.450 Y=0.000 Z=0.000	
15	X= 69.450 Y=0.000 Z=0.000	
16	X= 74.450 Y=0.000 Z=0.000	
17	X= 79.450 Y=0.000 Z=0.000	
18	X= 84.450 Y=0.000 Z=0.000	
19	X= 89.450 Y=0.000 Z=0.000	
20	X= 94.450 Y=0.000 Z=0.000	
21	X= 99.450 Y=0.000 Z=0.000	
22	X= 104.030 Y=0.000 Z=0.000	
23	X= 0.000 Y=-7.700 Z=-0.154	
24	X= 4.450 Y=-7.700 Z=-0.154	
25	X= 9.450 Y=-7.700 Z=-0.154	
26	X= 14.450 Y=-7.700 Z=-0.154	
27	X= 19.450 Y=-7.700 Z=-0.154	
28	X= 24.450 Y=-7.700 Z=-0.154	
29	X= 29.450 Y=-7.700 Z=-0.154	
30	X= 34.450 Y=-7.700 Z=-0.154	
31	X= 39.450 Y=-7.700 Z=-0.154	
32	X= 44.450 Y=-7.700 Z=-0.154	
33	X= 49.450 Y=-7.700 Z=-0.154	
34	X= 54.450 Y=-7.700 Z=-0.154	
35	X= 59.450 Y=-7.700 Z=-0.154	
36	X= 64.450 Y=-7.700 Z=-0.154	
37	X= 69.450 Y=-7.700 Z=-0.154	
38	X= 74.450 Y=-7.700 Z=-0.154	
39	X= 79.450 Y=-7.700 Z=-0.154	
40	X= 84.450 Y=-7.700 Z=-0.154	
41	X= 89.450 Y=-7.700 Z=-0.154	
42	X= 94.450 Y=-7.700 Z=-0.154	
43	X= 99.450 Y=-7.700 Z=-0.154	
44	X= 104.030 Y=-7.700 Z=-0.154	
45	X= 0.000 Y=-3.850 Z=-0.077	
46	X= 4.450 Y=-3.850 Z=-0.077	
47	X= 9.450 Y=-3.850 Z=-0.077	
48	X= 14.450 Y=-3.850 Z=-0.077	
49	X= 19.450 Y=-3.850 Z=-0.077	
50	X= 24.450 Y=-3.850 Z=-0.077	
51	X= 29.450 Y=-3.850 Z=-0.077	
52	X= 34.450 Y=-3.850 Z=-0.077	
53	X= 39.450 Y=-3.850 Z=-0.077	
54	X= 44.450 Y=-3.850 Z=-0.077	
55	X= 49.450 Y=-3.850 Z=-0.077	
56	X= 54.450 Y=-3.850 Z=-0.077	
57	X= 59.450 Y=-3.850 Z=-0.077	
58	X= 64.450 Y=-3.850 Z=-0.077	
59	X= 69.450 Y=-3.850 Z=-0.077	
60	X= 74.450 Y=-3.850 Z=-0.077	
61	X= 79.450 Y=-3.850 Z=-0.077	
62	X= 84.450 Y=-3.850 Z=-0.077	
63	X= 89.450 Y=-3.850 Z=-0.077	
64	X= 94.450 Y=-3.850 Z=-0.077	
65	X= 99.450 Y=-3.850 Z=-0.077	

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66 X= 104.030 Y=-3.850 Z=-0.077
67 X= 0.000 Y=0.000 Z=-1.150
68 X= 0.000 Y=1.050 Z=-1.150
69 X= 0.000 Y=-1.050 Z=-1.150
70 X= 54.450 Y=0.000 Z=-1.250
71 X= 54.450 Y=1.050 Z=-1.250
72 X= 54.450 Y=-1.050 Z=-1.250
73 X= 104.030 Y=0.000 Z=-1.150
74 X= 104.030 Y=1.050 Z=-1.150
75 X= 104.030 Y=-1.050 Z=-1.150
76 X= 0.000 Y=-7.700 Z=-1.304
77 X= 0.000 Y=-6.650 Z=-1.304
78 X= 0.000 Y=-8.750 Z=-1.304
79 X= 54.450 Y=-7.700 Z=-1.404
80 X= 54.450 Y=-6.650 Z=-1.404
81 X= 54.450 Y=-8.750 Z=-1.404
82 X= 104.030 Y=-7.700 Z=-1.304
83 X= 104.030 Y=-6.650 Z=-1.304
84 X= 104.030 Y=-8.750 Z=-1.304

LOCAL
ADD= 68 ANG=0.000
ADD= 69 ANG=0.000
ADD= 71 ANG=0.000
ADD= 72 ANG=0.000
ADD= 74 ANG=0.000
ADD= 75 ANG=0.000
ADD= 77 ANG=5.872
ADD= 78 ANG=8.049
ADD= 80 ANG=0.000
ADD= 81 ANG=0.000
ADD= 83 ANG=-6.444
ADD= 84 ANG=-8.828

RESTRAINT
ADD= 68 DOF= U2, U3,
ADD= 69 DOF= U2, U3,
ADD= 71 DOF= U1, U2, U3,
ADD= 72 DOF= U1, U2, U3,
ADD= 74 DOF= U2, U3,
ADD= 75 DOF= U2, U3,
ADD= 77 DOF= U3,
ADD= 78 DOF= U3,
ADD= 80 DOF= U1, U3,
ADD= 81 DOF= U1, U3,
ADD= 83 DOF= U3,
ADD= 84 DOF= U3,

MATERIAL
Name=1
E=2.05e+008
Name=2
E=2.05e+008
Name=3
E=2.05e+008
Name=4
E=2.05e+008
Name=5
E=2.05e+008
Name=6
E=2.05e+008
Name=7
E=2.05e+008
Name=8
E=2.05e+008
Name=9
E=2.05e+008
Name=10
E=2.05e+008
Name=11
E=2.05e+008
Name=12
E=2.05e+008

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9 J= 9, 10 Sec=27
10 J= 10, 11 Sec=29
11 J= 11, 12 Sec=7
12 J= 12, 13 Sec=7
13 J= 13, 14 Sec=30
14 J= 14, 15 Sec=29
15 J= 15, 16 Sec=8
16 J= 16, 17 Sec=8
17 J= 17, 18 Sec=8
18 J= 18, 19 Sec=8
19 J= 19, 20 Sec=31
20 J= 20, 21 Sec=32
21 J= 21, 22 Sec=23
22 J= 23, 24 Sec=33
23 J= 24, 25 Sec=35
24 J= 25, 26 Sec=36
25 J= 26, 27 Sec=13
26 J= 27, 28 Sec=13
27 J= 28, 29 Sec=13
28 J= 29, 30 Sec=13
29 J= 30, 31 Sec=37
30 J= 31, 32 Sec=38
31 J= 32, 33 Sec=39
32 J= 33, 34 Sec=16
33 J= 34, 35 Sec=16
34 J= 35, 36 Sec=41
35 J= 36, 37 Sec=40
36 J= 37, 38 Sec=17
37 J= 38, 39 Sec=17
38 J= 39, 40 Sec=17
39 J= 40, 41 Sec=17
40 J= 41, 42 Sec=42
41 J= 42, 43 Sec=43
42 J= 43, 44 Sec=34
43 J= 1, 45 Sec=19 IOFF=1,350 JOFF=0,000 RIGID=1.0
44 J= 45, 23 Sec=19 IOFF=0,000 JOFF=1,350 RIGID=1.0
45 J= 2, 46 Sec=19 IOFF=1,350 JOFF=0,000 RIGID=1.0
46 J= 46, 24 Sec=19 IOFF=0,000 JOFF=1,350 RIGID=1.0
47 J= 3, 47 Sec=19 IOFF=1,350 JOFF=0,000 RIGID=1.0
48 J= 47, 25 Sec=19 IOFF=0,000 JOFF=1,350 RIGID=1.0
49 J= 4, 48 Sec=19 IOFF=1,350 JOFF=0,000 RIGID=1.0
50 J= 48, 26 Sec=19 IOFF=0,000 JOFF=1,350 RIGID=1.0
51 J= 5, 49 Sec=19 IOFF=1,350 JOFF=0,000 RIGID=1.0
52 J= 49, 27 Sec=19 IOFF=0,000 JOFF=1,350 RIGID=1.0
53 J= 6, 50 Sec=19 IOFF=1,350 JOFF=0,000 RIGID=1.0
54 J= 50, 28 Sec=19 IOFF=0,000 JOFF=1,350 RIGID=1.0
55 J= 7, 51 Sec=19 IOFF=1,350 JOFF=0,000 RIGID=1.0
56 J= 51, 29 Sec=19 IOFF=0,000 JOFF=1,350 RIGID=1.0
57 J= 8, 52 Sec=19 IOFF=1,350 JOFF=0,000 RIGID=1.0
58 J= 52, 30 Sec=19 IOFF=0,000 JOFF=1,350 RIGID=1.0
59 J= 9, 53 Sec=19 IOFF=1,350 JOFF=0,000 RIGID=1.0
60 J= 53, 31 Sec=19 IOFF=0,000 JOFF=1,350 RIGID=1.0
61 J= 10, 54 Sec=19 IOFF=1,350 JOFF=0,000 RIGID=1.0
62 J= 54, 32 Sec=19 IOFF=0,000 JOFF=1,350 RIGID=1.0
63 J= 11, 55 Sec=19 IOFF=1,350 JOFF=0,000 RIGID=1.0
64 J= 55, 33 Sec=19 IOFF=0,000 JOFF=1,350 RIGID=1.0
65 J= 12, 56 Sec=19 IOFF=1,350 JOFF=0,000 RIGID=1.0
66 J= 56, 34 Sec=19 IOFF=0,000 JOFF=1,350 RIGID=1.0
67 J= 13, 57 Sec=19 IOFF=1,350 JOFF=0,000 RIGID=1.0
68 J= 57, 35 Sec=19 IOFF=0,000 JOFF=1,350 RIGID=1.0
69 J= 14, 58 Sec=19 IOFF=1,350 JOFF=0,000 RIGID=1.0
70 J= 58, 36 Sec=19 IOFF=0,000 JOFF=1,350 RIGID=1.0
71 J= 15, 59 Sec=19 IOFF=1,350 JOFF=0,000 RIGID=1.0
72 J= 59, 37 Sec=19 IOFF=0,000 JOFF=1,350 RIGID=1.0
73 J= 16, 60 Sec=19 IOFF=1,350 JOFF=0,000 RIGID=1.0
74 J= 60, 38 Sec=19 IOFF=0,000 JOFF=1,350 RIGID=1.0
75 J= 17, 61 Sec=19 IOFF=1,350 JOFF=0,000 RIGID=1.0
76 J= 61, 39 Sec=19 IOFF=0,000 JOFF=1,350 RIGID=1.0
77 J= 18, 62 Sec=19 IOFF=1,350 JOFF=0,000 RIGID=1.0
78 J= 62, 40 Sec=19 IOFF=0,000 JOFF=1,350 RIGID=1.0
79 J= 19, 63 Sec=19 IOFF=1,350 JOFF=0,000 RIGID=1.0
80 J= 63, 41 Sec=19 IOFF=0,000 JOFF=1,350 RIGID=1.0
81 J= 20, 64 Sec=19 IOFF=1,350 JOFF=0,000 RIGID=1.0

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Name=13
E=2.05e+008
Name=14
E=2.05e+008
Name=15
E=2.05e+008
Name=16
E=2.05e+008
Name=17
E=2.05e+008
Name=18
E=2.05e+008
Name=19
E=2.05e+008
Name=20
E=2.05e+008
Name=21
E=2.05e+008

FRAME SECTION
Name= 1 Mat= 1 A=0.31088 I=0.237008894, 0.81280104 J=0.19666515 : GIRDER
Name= 2 Mat= 2 A=0.31496 I=0.26250526, 0.82062503 J=0.22101250 : GIRDER
Name= 3 Mat= 3 A=0.32682 I=0.3306917, 0.83043848 J=0.24351348 : GIRDER
Name= 4 Mat= 4 A=0.36190 I=0.40869340, 0.85935523 J=0.26781294 : GIRDER
Name= 5 Mat= 5 A=0.37282 I=0.44508691, 0.86633164 J=0.26781294 : GIRDER
Name= 6 Mat= 6 A=0.34708 I=0.39688457, 0.84641193 J=0.25410445 : GIRDER
Name= 7 Mat= 7 A=0.45526 I=0.38100343, 0.95509413 J=0.38096295 : GIRDER
Name= 8 Mat= 8 A=0.35014 I=0.38385500, 0.85582068 J=0.26087422 : GIRDER
Name= 9 Mat= 9 A=0.33838 I=0.38030356, 0.84015859 J=0.25819292 : GIRDER
Name= 10 Mat= 10 A=0.30466 I=0.23540042, 0.75928243 J=0.19666515 : GIRDER
Name= 11 Mat= 11 A=0.30866 I=0.28057184, 0.76728296 J=0.22101250 : GIRDER
Name= 12 Mat= 12 A=0.32042 I=0.33057213, 0.77758860 J=0.24351348 : GIRDER
Name= 13 Mat= 13 A=0.35570 I=0.40556776, 0.80777754 J=0.26781294 : GIRDER
Name= 14 Mat= 14 A=0.36662 I=0.44146450, 0.81509583 J=0.26781294 : GIRDER
Name= 15 Mat= 15 A=0.34086 I=0.39364487, 0.79433278 J=0.25410445 : GIRDER
Name= 16 Mat= 16 A=0.44906 I=0.57632641, 0.90587243 J=0.38096295 : GIRDER
Name= 17 Mat= 17 A=0.34394 I=0.3803229, 0.80394935 J=0.26087422 : GIRDER
Name= 18 Mat= 18 A=0.33218 I=0.37721604, 0.78776432 J=0.25819292 : GIRDER
Name= 19 Mat= 19 A=0.02880 I=0.01174211, 0.00005426 J=0.00000138 : CROSSBEAM
Name= 20 Mat= 20 A=0.01680 I=0.00169991, 0.00005412 J=0.00000081 : STRINGER
Name= 21 Mat= 21 A=10.00000 I=10.00000000, 10.00000000 J=10.00000000 : SHOE
Name= 22 Type=Nonpr Sec= 1, 2 Elvar=2.1
Name= 23 Type=Nonpr Sec= 2, 1
Name= 24 Type=Nonpr Sec= 2, 3
Name= 25 Type=Nonpr Sec= 3, 4
Name= 26 Type=Nonpr Sec= 4, 5
Name= 27 Type=Nonpr Sec= 5, 6
Name= 28 Type=Nonpr Sec= 6, 7
Name= 29 Type=Nonpr Sec= 6, 8
Name= 30 Type=Nonpr Sec= 7, 6
Name= 31 Type=Nonpr Sec= 8, 9
Name= 32 Type=Nonpr Sec= 9, 2
Name= 33 Type=Nonpr Sec= 10, 11
Name= 34 Type=Nonpr Sec= 11, 10
Name= 35 Type=Nonpr Sec= 11, 12
Name= 36 Type=Nonpr Sec= 12, 13
Name= 37 Type=Nonpr Sec= 13, 14
Name= 38 Type=Nonpr Sec= 14, 15
Name= 39 Type=Nonpr Sec= 15, 16
Name= 40 Type=Nonpr Sec= 15, 17
Name= 41 Type=Nonpr Sec= 16, 15
Name= 42 Type=Nonpr Sec= 17, 18
Name= 43 Type=Nonpr Sec= 18, 11

FRAME
1 J= 1, 2 Sec=22 Local=12 Pdir=+X,+Z NSEG=4
2 J= 2, 3 Sec=24
3 J= 3, 4 Sec=25
4 J= 4, 5 Sec= 4
5 J= 5, 6 Sec= 4
6 J= 6, 7 Sec= 4
7 J= 7, 8 Sec= 4
8 J= 8, 9 Sec=26

82 J= 64, 42 Sec=19 IOFF=0,000 JOFF=1,350 RIGID=1.0
83 J= 21, 65 Sec=19 IOFF=1,350 JOFF=0,000 RIGID=1.0
84 J= 65, 43 Sec=19 IOFF=0,000 JOFF=1,350 RIGID=1.0
85 J= 22, 66 Sec=19 IOFF=1,350 JOFF=0,000 RIGID=1.0
86 J= 66, 44 Sec=19 IOFF=0,000 JOFF=1,350 RIGID=1.0
87 J= 45, 46 Sec=20
88 J= 46, 47 Sec=20
89 J= 47, 48 Sec=20
90 J= 48, 49 Sec=20
91 J= 49, 50 Sec=20
92 J= 50, 51 Sec=20
93 J= 51, 52 Sec=20
94 J= 52, 53 Sec=20
95 J= 53, 54 Sec=20
96 J= 54, 55 Sec=20
97 J= 55, 56 Sec=20
98 J= 56, 57 Sec=20
99 J= 57, 58 Sec=20
100 J= 58, 59 Sec=20
101 J= 59, 60 Sec=20
102 J= 60, 61 Sec=20
103 J= 61, 62 Sec=20
104 J= 62, 63 Sec=20
105 J= 63, 64 Sec=20
106 J= 64, 65 Sec=20
107 J= 65, 66 Sec=20
108 J= 1, 67 Sec=21
109 J= 68, 67 Sec=21
110 J= 69, 67 Sec=21
111 J= 12, 70 Sec=21
112 J= 71, 70 Sec=21
113 J= 72, 70 Sec=21
114 J= 22, 73 Sec=21
115 J= 74, 73 Sec=21
116 J= 75, 73 Sec=21
117 J= 23, 76 Sec=21
118 J= 77, 76 Sec=21
119 J= 78, 76 Sec=21
120 J= 34, 79 Sec=21
121 J= 80, 79 Sec=21
122 J= 81, 79 Sec=21
123 J= 44, 82 Sec=21
124 J= 83, 82 Sec=21
125 J= 84, 82 Sec=21

LOAD
Type=A1 : UNEQUAL SETTLEMENT
Type=RESTRAINT DISPLACEMENT
Add= 68 Uz=-0.010
Add= 69 Uz=-0.010
Add= 77 Uz=-0.010
Add= 78 Uz=-0.010

Name=P1 : UNEQUAL SETTLEMENT
Type=RESTRAINT DISPLACEMENT
Add= 71 Uz=-0.010
Add= 72 Uz=-0.010
Add= 80 Uz=-0.010
Add= 81 Uz=-0.010

Name=A2 : UNEQUAL SETTLEMENT
Type=RESTRAINT DISPLACEMENT
Add= 74 Uz=-0.010
Add= 75 Uz=-0.010
Add= 83 Uz=-0.010
Add= 84 Uz=-0.010

COMBO
Name=2N1 Type=ENVE :
LOAD=A1 sf=1,000
LOAD=P1 sf=1,000

Name=2N2 Type=ENVE :

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LOAD=A1      sf=1,000
LOAD=A2      sf=1,000

Name=2N3     Type=ENVE  ;
LOAD=P1      sf=1,000
LOAD=A2      sf=1,000

Name=2N      Type=ENVE  ;
COMB=2N1     sf=1,000
COMB=2N2     sf=1,000
COMB=2N3     sf=1,000

Name=SETTLE  Type=ENVE  ;
LOAD=A1      sf=1,000
LOAD=P1      sf=1,000
LOAD=A2      sf=1,000
COMB=2N      sf=1,000

OUTPUT
ELEM=JOINT   TYPE=DISP,REAC  LOAD=*  COMB=*
ELEM=FRAME   TYPE=FORCE      LOAD=*  COMB=*
```