ADAPT - STRUCTURAL CONCRETE SOFTWARE SYSTEM

ADAPT-RC Version 2018 Date: 08 - 25 - 2020 Time: 08:56 File: GB run 1 - GL 8

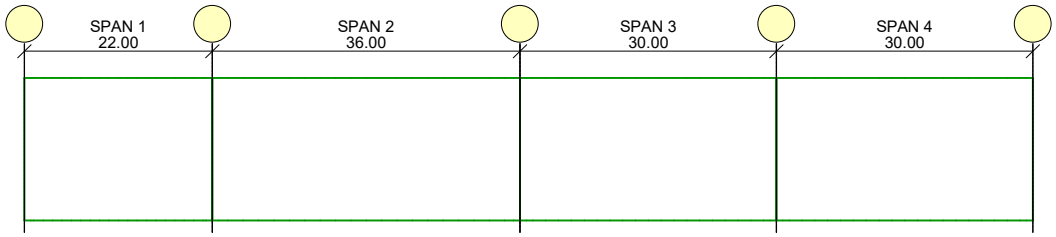
1 - PROJECT TITLE: ""

1.1 Design Strip:

1.2 Load Case: Envelope

2 - MEMBER ELEVATION

[ft]

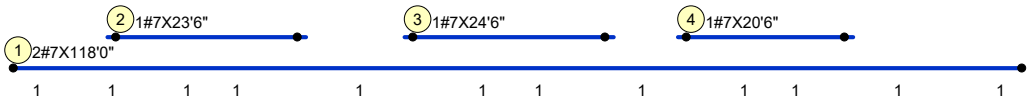


3 - TOP REBAR

3.1 ADAPT selected

3.2 ADAPT selected

3.3 Num. of layers

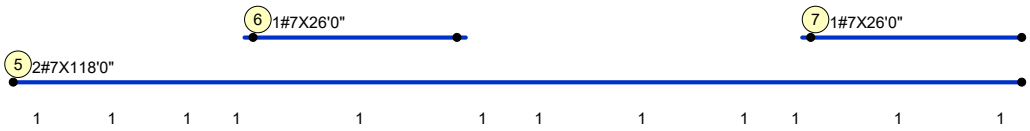


5 - BOTTOM REBAR

5.1 ADAPT selected

5.2 ADAPT selected

5.3 Num. of layers

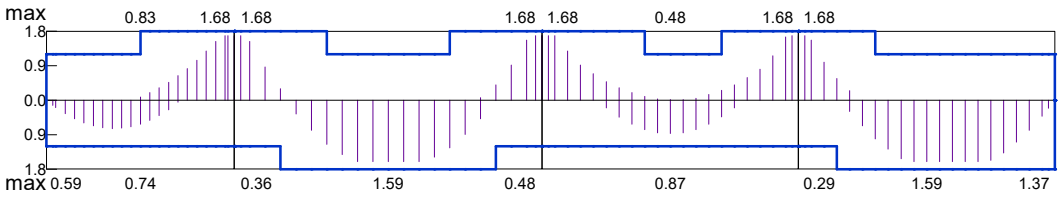


6 - REQUIRED & PROVIDED BARS

6.1 Top Bars

[in²]
required
provided

6.2 Bottom Bars

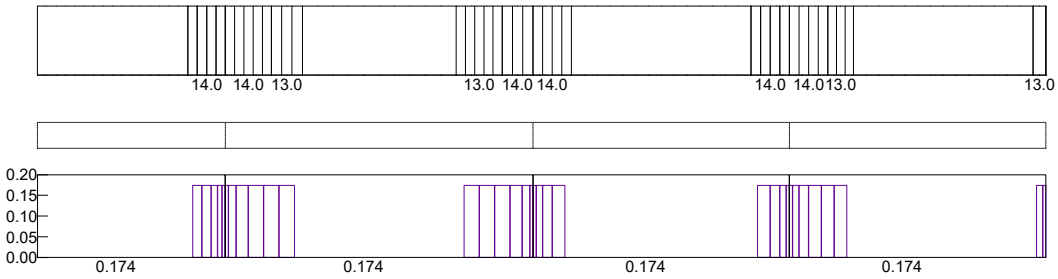


7 - SHEAR STIRRUPS

7.1 ADAPT selected.
Bar Size # 3 Legs: 2
Spacing [in]

7.2 User-selected
Bar Size # Legs:

7.3 Required area
[in²/ft]



9 - DESIGN PARAMETERS

9.1 Code: American ACI318 (2014)/IBC (2015) f'_c = 4000 psi f_y = 60 ksi (longitudinal) f_y = 60 ksi (shear)

9.2 Rebar Cover: Top = 1.5 in Bottom = 3 in Rebar Table:

10 - MATERIAL QUANTITIES

CONCRETE

Total volume of concrete = 442.5 ft³

Area covered = 177.0 ft²

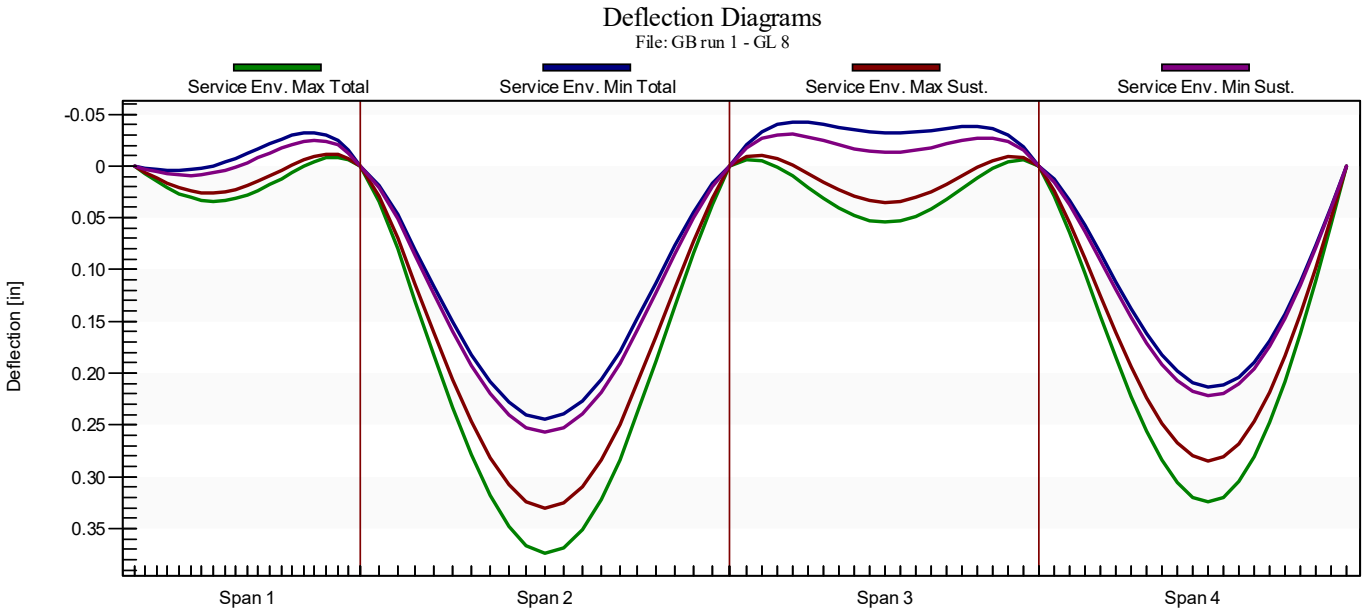
MILD STEEL

Total weight of rebar = 1209.6 lb

Average rebar usage = 6.834 lb/ft², 2.733 lb/ft³

11 - DESIGNER'S NOTES

12 - DEFLECTIONS



14 - MAXIMUM S P A N D E F L E C T I O N S

Concrete`s modulus of elasticity ..... Ec = 3605.00 ksi
Creep factor ..... K = 2.00
Values in parentheses are (span/max deflection) ratios

14.1 - Maximum Span Deflections - Service Combination 1

<.....DEFLECTION ARE ALL IN inches, DOWNWARD POSITIVE.....>

SPAN	DL	DL+SDL	DL+SDL +CREEP	LL	XL	SUSTAINED	TOTAL
1	0.00	-0.01	-0.02(15952)	0.01(20672)	0.00(*****)	0.03(10096)	0.03(7713)
2	0.04	0.09	0.27(1575)	0.06(6910)	0.00(*****)	0.33(1307)	0.37(1154)
3	0.00	-0.01	-0.02(20372)	0.03(13241)	0.00(*****)	0.04(10218)	0.05(6634)
4	0.04	0.08	0.23(1547)	0.06(6258)	0.00(*****)	0.28(1265)	0.32(1108)

14.3 - Maximum Span Deflections - Service Combination 3

<.....DEFLECTION ARE ALL IN inches, DOWNWARD POSITIVE.....>

SPAN	DL	DL+SDL	DL+SDL +CREEP	LL	XL	SUSTAINED	TOTAL
1	0.00	-0.01	-0.02(15952)	0.01(20672)	0.00(*****)	-0.02(15952)	0.03(9669)
2	0.04	0.09	0.27(1575)	0.06(6910)	0.00(*****)	0.27(1575)	0.34(1283)
3	0.00	-0.01	-0.02(20372)	0.03(13241)	0.00(*****)	-0.02(20372)	0.04(9486)
4	0.04	0.08	0.23(1547)	0.06(6258)	0.00(*****)	0.23(1547)	0.29(1240)