Nucor Building Systems
PO Box 1006 200 Whetstone Road
Swansea, SC 29160

FRAMING SUMMARY
FOR
DANALLISON ENTERPRISES, INC
306 MASTIC ROAD
MASTIC BEACH, NY 11951

AQUA NY WATER PHILLIP ROSS IND
AQUA NY 670 SEAMENS NECK RD.
LEVITTOWN, NY 11756
S12S0554A

BUILDING DATA

Width (ft)	=	36.0
Length (ft)	=	84.0
Eave Height (ft)	=	25.0/ 25.0
Roof Slope (rise/12)	=	3.00/ 3.00
Dead Load (psf)	=	4.00
Live Load (psf)	=	30.00
Collat. Load (psf)	=	5.00
Snow Load (psf)	=	21.55
Wind Speed(mph)	=	120.0
Wind Code	=	NYBC 10 (IBC 06)
Closed/Open	=	C
Exposure	=	B
Importance - Wind	=	1.00
Importance - Seismic	=	1.00
Seismic Design Category	=	B
Seismic Coeff (Fa*Ss)	=	0.47

Designer = NHS

9/12/12

STATE OF NEW YORK
ROBERT D. NORRIS
090449
PROFESSIONAL ENGINEER

9-20-12

S12S0554A FRAMING SUMMARY: Roof 9/12/12 4:01pm

PURLIN LAYOUT:

Surface Id	Purlin Type	Surf_Ext Left	Surf_Ext Right	Stub_Purlin Left	Stub_Purlin Right	Total Rows	Peak Space	-Set_Space- Space	Row
2	ZB	0.00	0.00	N	N	4	1.333	5.000	2
								4.323	1
								2.903	1
3	ZB	0.00	0.00	N	N	4	1.333	2.903	1
								4.323	1
								5.000	2

PURLIN & EAVE STRUT SIZE:

Surface Id	Bay Id	Purlin Part	-Purlin_Lap- Left	Right	IS_Flg Strap	Eave Strut
2	1	08Z075		2.38	2	08E3060
	2	08Z060	2.38	1.25	2	08E3060
	3	08Z060	1.25	2.38	2	08E3060
	4	08Z075	2.38		2	08E3060
3	1	08Z075		2.38	2	08E3060
	2	08Z060	2.38	1.25	2	08E3060
	3	08Z060	1.25	2.38	2	08E3060
	4	08Z075	2.38		2	08E3060

ROOF BRACING:

Bay Id	Attach_Locate Start	End	Brace Type	Brace Part	Dia
2	0.0	18.0	Rod	RDB-	0.625
	18.0	36.0	Rod	RDB-	0.625

BOLT AT EAVE STRUT:

Wall Id	Frame_Line Id	Type	Lap Plate	-Bolt_Size- No.	Type	Dia	Washer
2	1	RF	-	2	A325	0.500	1
2	2	RF	N	2	A325	0.500	1
2	3	RF	N	2	A325	0.500	1
2	4	RF	N	2	A325	0.500	1
2	5	RF	-	2	A325	0.500	1
4	5	RF	-	2	A325	0.500	1
4	4	RF	N	2	A325	0.500	1
4	3	RF	N	2	A325	0.500	1
4	2	RF	N	2	A325	0.500	1
4	1	RF	-	2	A325	0.500	1

PURLIN ANTI-ROLL:

Surf Id	Line Id	AntiRoll Type	Ds_ARoll Id	No. Purlin	Purlin_Id
2	RF	Clip w/gusset	@082	2	2 4
3	RF	Clip w/gusset	@082	2	1 3

S12S0554A FRAMING SUMMARY: Left Endwall 9/12/12 4:01pm

COLUMN:

```
-------
  Column  Column  Column           Column  Base_Clip_Bolts  ---Top_Bolts---
    Id    Offset  Part       Elev  Length  No. Type    Dia  No. Type    Dia
  ------  ------  --------  -----  ------  --- -----  -----  --- -----  -----
     2      18.0  W10x22      0.0    28.6   0                 2  A325  0.500

BASE PLATE:
-----------
  Column        -------Plate------  Bolt    Bolt   Bolt  Bolt
     Id   Type  Width Length Thick  Type     Dia   Gage   Row
  ------  ----  ----- ------ -----  -----  -----  -----  ----
     2    EB    8.00  10.25 0.375  GR36   0.750   4.00    2

DOOR JAMB/HEADER:
-----------------
                                             -------------Member_Part--------------
 Bay  ----------Opening_Size----------  Left      Right     Door      Door
  Id    Width    Height    Sill  Offset  Jamb      Jamb      Header    Sill
 ---  -------  -------  ------ -------  --------  --------  --------  --------
   1  10.5000  16.0000   0.000  5.5000  F10C067   F10C067   F10C060
   1   3.0000  23.0000  20.000  9.0000  F10C060   F10C060   F10C060   F10C060
   2   3.0000  23.0000  20.000  6.0000  F10C060   F10C060   F10C060   F10C060
   2   3.3540   7.1880   0.000  6.6460  F10C060   F10C060

GIRT LAYOUT:
 Bay                          Bay_Offset  --Support-  ----Lap----  Flg
  Id  Locate  Type  Part      Start   End  Left Right  Left Right  Rot
 ---  ------  ----  --------  -----  ----- ---- -----  ----- -----  ---
   1   3.750  ZF   10Z060     0.00   5.50 Col  Jamb   0.00  0.00   D
       3.750  ZF   10Z060    16.00  18.00 Jamb Col    0.00  0.00   D
       7.500  ZF   10Z060     0.00   5.50 Col  Jamb   0.00  0.00   D
       7.500  ZF   10Z060    16.00  18.00 Jamb Col    0.00  0.00   D
      12.417  ZF   10Z060     0.00   5.50 Col  Jamb   0.00  0.00   D
      12.417  ZF   10Z060    16.00  18.00 Jamb Col    0.00  0.00   D
      17.333  ZF   10Z075     0.00  18.00 Col  Col    0.00  0.00   D
      21.083  ZF   10Z060     0.00   9.00 Col  Jamb   0.00  0.00   D
      21.083  ZF   10Z060    12.00  18.00 Jamb Col    0.00  0.00   D
      25.250  ZF   10Z060     3.90  18.00 Col  Col    0.00  0.00   D
 ---  ------  ----  --------  -----  ----- ---- -----  ----- -----  ---
   2   3.750  ZF   10Z060     0.00   6.65 Col  Jamb   0.00  0.00   D
       3.750  ZF   10Z060    10.00  18.00 Jamb Col    0.00  0.00   D
       7.500  ZF   10Z060     0.00  18.00 Col  Col    0.00  0.00   D
      12.417  ZF   10Z060     0.00  18.00 Col  Col    0.00  0.00   D
      17.333  ZF   10Z060     0.00  18.00 Col  Col    0.00  0.00   D
      21.083  ZF   10Z060     0.00   6.00 Col  Jamb   0.00  0.00   D
      21.083  ZF   10Z060     9.00  18.00 Jamb Col    0.00  0.00   D
      25.250  ZF   10Z060     0.00  14.10 Col  Col    0.00  0.00   D

GIRT INSIDE FLANGE BRACE:
 No._Brace/Bay
   0
 ---
   0

==============================================================================
S12S0554A          FRAMING SUMMARY: Right Endwall          9/12/12  4:01pm
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COLUMN:
-------
  Column  Column  Column           Column  Base_Clip_Bolts  ---Top_Bolts---
    Id    Offset  Part       Elev  Length  No. Type    Dia  No. Type    Dia
  ------  ------  --------  -----  ------  --- -----  -----  --- -----  -----
     2      18.0  W10x22      0.0    28.6   0                 2  A325  0.500

BASE PLATE:
-----------
  Column        -------Plate------  Bolt    Bolt   Bolt  Bolt
```

Id	Type	Width	Length	Thick	Type	Dia	Gage	Row
2	EB	8.00	10.25	0.375	GR36	0.750	4.00	2

DOOR JAMB/HEADER:

Bay Id	Opening_Size Width	Height	Sill	Offset	Member_Part Left Jamb	Right Jamb	Door Header	Door Sill
1	3.0000	6.0000	3.000	7.5000	F10C060	F10C060	F10C060	F10C060
2	3.0000	6.0000	3.000	7.5000	F10C060	F10C060	F10C060	F10C060

GIRT LAYOUT:

Bay Id	Locate	Type	Part	Bay_Offset Start	End	--Support- Left	Right	----Lap---- Left	Right	Flg Rot
1	3.750	ZF	10Z060	0.00	7.50	Col	Jamb	0.00	0.00	D
	3.750	ZF	10Z060	10.50	18.00	Jamb	Col	0.00	0.00	D
	7.500	ZF	10Z060	0.00	18.00	Col	Col	0.00	0.00	D
	12.417	ZF	10Z060	0.00	18.00	Col	Col	0.00	0.00	D
	17.333	ZF	10Z060	0.00	18.00	Col	Col	0.00	0.00	D
	21.083	ZF	10Z060	0.00	18.00	Col	Col	0.00	0.00	D
	25.250	ZF	10Z060	3.90	18.00	Col	Col	0.00	0.00	D
2	3.750	ZF	10Z060	0.00	7.50	Col	Jamb	0.00	0.00	D
	3.750	ZF	10Z060	10.50	18.00	Jamb	Col	0.00	0.00	D
	7.500	ZF	10Z060	0.00	18.00	Col	Col	0.00	0.00	D
	12.417	ZF	10Z060	0.00	18.00	Col	Col	0.00	0.00	D
	17.333	ZF	10Z060	0.00	18.00	Col	Col	0.00	0.00	D
	21.083	ZF	10Z060	0.00	18.00	Col	Col	0.00	0.00	D
	25.250	ZF	10Z060	0.00	14.10	Col	Col	0.00	0.00	D

GIRT INSIDE FLANGE BRACE:

No._Brace/Bay
0
0

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S12S0554A FRAMING SUMMARY: Front Sidewall 9/12/12 4:01pm

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DOOR JAMB/HEADER:

Bay Id	Opening_Size Width	Height	Sill	Offset	Member_Part Left Jamb	Right Jamb	Door Header	Door Sill
3	3.3540	7.1880	0.000	16.8330	F08C060	F08C060		

GIRT LAYOUT:

Bay Id	Locate	Type	Part	Bay_Offset Start	End	--Support- Left	Right	----Lap---- Left	Right	Flg Rot
1	3.750	ZB	08Z054	1.33	21.00	Col	Col	0.00	1.25	D
	7.500	ZB	08Z054	1.33	21.00	Col	Col	0.00	1.25	D
	12.417	ZB	08Z054	1.33	21.00	Col	Col	0.00	1.25	D
	17.333	ZB	08Z054	1.33	21.00	Col	Col	0.00	1.25	D
	21.083	ZB	08Z054	1.33	21.00	Col	Col	0.00	1.25	D
2	3.750	ZB	08Z054	0.00	21.00	Col	Col	1.25	1.25	D
	7.500	ZB	08Z054	0.00	21.00	Col	Col	1.25	1.25	D
	12.417	ZB	08Z054	0.00	21.00	Col	Col	1.25	1.25	D
	17.333	ZB	08Z054	0.00	21.00	Col	Col	1.25	1.25	D
	21.083	ZB	08Z054	0.00	21.00	Col	Col	1.25	1.25	D
3	3.750	ZB	08Z054	0.00	16.83	Col	Jamb	1.25	0.00	D

	3.750	-B	08Z060	20.19	21.00	Jamb	Col	0.00	0.00	D
	7.500	ZB	08Z054	0.00	21.00	Col	Col	1.25	1.25	D
	12.417	ZB	08Z054	0.00	21.00	Col	Col	1.25	1.25	D
	17.333	ZB	08Z054	0.00	21.00	Col	Col	1.25	1.25	D
	21.083	ZB	08Z054	0.00	21.00	Col	Col	1.25	1.25	D
4	3.750	ZB	08Z060	0.00	19.67	Jamb	Col	0.00	0.00	D
	7.500	ZB	08Z054	0.00	19.67	Col	Col	1.25	0.00	D
	12.417	ZB	08Z054	0.00	19.67	Col	Col	1.25	0.00	D
	17.333	ZB	08Z054	0.00	19.67	Col	Col	1.25	0.00	D
	21.083	ZB	08Z054	0.00	19.67	Col	Col	1.25	0.00	D

GIRT INSIDE FLANGE BRACE:

No._Brace/Bay			
1	2	3	4
0	0	0	0

WALL BRACING:

Bay Id	Brace_Height Bot	Top	Brace Type	Brace Part	Brace Dia
4	0.00	25.00	Rod	RDB-	0.625

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S12S0554A FRAMING SUMMARY: Back Sidewall 9/12/12 4:01pm

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GIRT LAYOUT:

Bay Id	Locate	Type	Part	Bay_Offset Start	End	--Support- Left	Right	----Lap---- Left	Right	Flg Rot
1	3.750	ZB	08Z054	1.33	21.00	Col	Col	0.00	1.25	D
	7.500	ZB	08Z054	1.33	21.00	Col	Col	0.00	1.25	D
	12.417	ZB	08Z054	1.33	21.00	Col	Col	0.00	1.25	D
	17.333	ZB	08Z054	1.33	21.00	Col	Col	0.00	1.25	D
	21.083	ZB	08Z054	1.33	21.00	Col	Col	0.00	1.25	D
2	3.750	ZB	08Z054	0.00	21.00	Col	Col	1.25	1.25	D
	7.500	ZB	08Z054	0.00	21.00	Col	Col	1.25	1.25	D
	12.417	ZB	08Z054	0.00	21.00	Col	Col	1.25	1.25	D
	17.333	ZB	08Z054	0.00	21.00	Col	Col	1.25	1.25	D
	21.083	ZB	08Z054	0.00	21.00	Col	Col	1.25	1.25	D
3	3.750	ZB	08Z054	0.00	21.00	Col	Col	1.25	1.25	D
	7.500	ZB	08Z054	0.00	21.00	Col	Col	1.25	1.25	D
	12.417	ZB	08Z054	0.00	21.00	Col	Col	1.25	1.25	D
	17.333	ZB	08Z054	0.00	21.00	Col	Col	1.25	1.25	D
	21.083	ZB	08Z054	0.00	21.00	Col	Col	1.25	1.25	D
4	3.750	ZB	08Z054	0.00	19.67	Col	Col	1.25	0.00	D
	7.500	ZB	08Z054	0.00	19.67	Col	Col	1.25	0.00	D
	12.417	ZB	08Z054	0.00	19.67	Col	Col	1.25	0.00	D
	17.333	ZB	08Z054	0.00	19.67	Col	Col	1.25	0.00	D
	21.083	ZB	08Z054	0.00	19.67	Col	Col	1.25	0.00	D

GIRT INSIDE FLANGE BRACE:

No._Brace/Bay			
1	2	3	4
0	0	0	0

WALL BRACING:

Bay Id	Brace_Height Bot	Top	Brace Type	Brace Part	Brace Dia

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   1      0.00  25.00  Rod       RDB-      0.625

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S12S0554A           FRAMING SUMMARY: Rigid Frame 1             9/12/12  4:01pm
==============================================================================

LAYOUT:
-------
  Type     : RF
  No. Line :  3
  Line Id  :  2   3   4

MEMBER:
-------
  Surf  Mem  Seg            Flange  Flange  -Web_Depth-  -Plate_Thickness-
   Id    Id   Id  Part      Length   Width  Start   End    Web O-flg I-flg
  ----  ---  ---  --------  ------  ------  ----- -----  ----- ----- -----
    1     1    1              24.5    8.00   16.0  27.0  0.125 0.250 0.250
    2     2    2              16.0    5.00   24.0  16.0  0.164 0.188 0.188
    3     3    3              16.0    5.00   16.0  24.0  0.164 0.188 0.188
    4     4    4              24.5    8.00   27.0  16.0  0.125 0.250 0.250

SPLICE:
-------
  -Surface-        ---Plate---  Bolt    Bolt   Bolt  ---Top---  --Bottom-
  Id Locate  Type  Width Thick  Type     Dia   Gage  Row Space  Row Space
  -- ------  ----  ----- -----  -----  -----  -----  --- -----  --- -----
   2   0.00   VEE   8.00 0.500  A325   0.625   3.50   2  4.000   2  4.000
   3   0.00   -EE   6.00 0.375  A325   0.625   3.50   2  4.000   2  4.000
   4   0.00   VEE   8.00 0.500  A325   0.625   3.50   2  4.000   2  4.000

BASE PLATE:
-----------
                   ---Plate---  Bolt    Bolt   Bolt  Bolt
  Locate     Type  Width Thick  Type     Dia   Gage   Row
  ---------- ----  ----- ------ -----  -----  -----  ----
  Lt Column   P     8.00 0.375  GR36   0.750   4.00    2
  Rt Column   P     8.00 0.375  GR36   0.750   4.00    2

FLANGE BRACE:
-------------
  Surf           No.
   Id   Locate  Side  Part
  ----  ------  ----  --------
    1       5     1   L2525105
    2       1     1   L2525105
    2       4     1   L2525105
    3       1     1   L2525105
    3       4     1   L2525105
    4       5     1   L2525105

BEARING STIFFENER:
------------------
  Locate      Width  Thick
  ----------  -----  -----
  Lt Column    4.00  0.375
  Rt Column    4.00  0.375

==============================================================================
S12S0554A           FRAMING SUMMARY: Rigid Frame 2             9/12/12  4:01pm
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LAYOUT:
-------
  Type     : RF
  No. Line :  2
  Line Id  :  1   5
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MEMBER:

Surf Id	Mem Id	Seg Id	Part	Flange Length	Flange Width	-Web_Depth- Start	End	-Plate_Thickness- Web	O-flg	I-flg
1	1	1		24.5	8.00	14.0	24.0	0.125	0.250	0.250
2	2	2		16.3	5.00	24.0	14.0	0.150	0.188	0.188
3	3	3		16.3	5.00	14.0	24.0	0.150	0.188	0.188
4	4	4		24.5	8.00	24.0	14.0	0.125	0.250	0.250

SPLICE:

-Surface- Id	Locate	Type	---Plate--- Width	Thick	Bolt Type	Bolt Dia	Bolt Gage	---Top--- Row	Space	--Bottom- Row	Space
2	0.00	VEE	8.00	0.375	A325	0.625	3.50	2	4.000	2	4.000
3	0.00	-EE	6.00	0.375	A325	0.625	3.50	2	4.000	2	4.000
4	0.00	VEE	8.00	0.375	A325	0.625	3.50	2	4.000	2	4.000

BASE PLATE:

Locate	Type	---Plate--- Width	Thick	Bolt Type	Bolt Dia	Bolt Gage	Bolt Row
Lt Column	P	8.00	0.375	GR36	0.750	4.00	2
Rt Column	P	8.00	0.375	GR36	0.750	4.00	2

FLANGE BRACE:

Surf Id	Locate	No. Side	Part
2	1	1	L2525105
2	4	1	L2525105
3	1	1	L2525105
3	4	1	L2525105

BEARING STIFFENER:

Locate	Width	Thick
Lt Column	4.00	0.375
Rt Column	4.00	0.375

Nucor Building Systems
PO Box 1006 200 Whetstone Road
Swansea, SC 29160

STRUCTURAL DESIGN CALCULATIONS
FOR
DANALLISON ENTERPRISES, INC
306 MASTIC ROAD
MASTIC BEACH, NY 11951

AQUA NY WATER PHILLIP ROSS IND
AQUA NY 670 SEAMENS NECK RD.
LEVITTOWN, NY 11756
S12S0554A

BUILDING DATA

Width (ft)	=	36.0
Length (ft)	=	84.0
Eave Height (ft)	=	25.0/ 25.0
Roof Slope (rise/12)	=	3.00/ 3.00
Dead Load (psf)	=	4.0
Live Load (psf)	=	30.0
Collat. Load (psf)	=	5.0
Snow Load (psf)	=	21.5
Wind Speed(mph)	=	120.0
Wind Code	=	NYBC 10 (IBC 06)
Closed/Open	=	C
Exposure	=	B
Internal Wind Coeff	=	-0.18, +0.18
Importance - Wind	=	1.00
Importance - Seismic	=	1.00
Seismic Design Category	=	B
Seismic Coeff (Fa*Ss)	=	0.47

Designer = _____

9/12/12

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==============================================================================
 S12S0554A           Design Loads For Building Components:   9/12/12     4:01pm
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FRONT SIDEWALL:
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 BASIC LOADS:
                                  -----Edge_Strip_Ratio-----
  Basic   Wind_Load_Ratio          Zone                    Col/
   Wind   Deflect  Factor         Width   Girt  Panel     Jamb
   21.9     0.75    1.00           3.60   1.22   1.23     1.22

 WIND PRESSURE/SUCTION:
     Wind  Wind   Wind
    Press  Suct   Long
     20.8 -22.8          .. Girt/Header
     25.9 -28.1          .. Panel
     20.8 -22.8          .. Jamb
     32.9 -21.9          .. Parapet

BACK  SIDEWALL:
---------------

 BASIC LOADS:
                                  -----Edge_Strip_Ratio-----
  Basic   Wind_Load_Ratio          Zone                    Col/
   Wind   Deflect  Factor         Width   Girt  Panel     Jamb
   21.9     0.75    1.00           3.60   1.22   1.23     1.22

 WIND PRESSURE/SUCTION:
     Wind  Wind   Wind
    Press  Suct   Long
     20.8 -22.8          .. Girt/Header
     25.9 -28.1          .. Panel
     20.8 -22.8          .. Jamb
     32.9 -21.9          .. Parapet

LEFT  ENDWALL:
--------------

 BASIC LOADS:
                                                          ----Edge_Strip_Ratio----
  Dead  Coll  Live  Snow  Rain  Basic  Wind_Load_Ratio   Zone                Col/
  Load  Load  Load  Load  Load   Wind  Deflect  Factor  Width  Girt  Panel  Jamb
   4.0   5.0  30.0  21.5   0.0   21.9   0.75     1.00    3.60  1.22   1.23  1.22

 BASIC LOADS AT EAVE:
   Seis    ---Torsion---
   Load    Wind  Seismic
   0.00    0.00     0.00

 WIND PRESSURE/SUCTION:
     Wind  Wind
    Press  Suct
     20.8 -22.8     .. Column
     20.8 -22.8     .. Girt/Header
     20.8 -22.8     .. Jamb
     25.9 -28.1     .. Panel
     32.9 -21.9     .. Parapet

 WIND COEFFICIENTS:
         Column/Rafter      Rafter     Column/Brace
   Surf      Wind_1          Wind_2       Wind_2        Long    Surface
    Id    Left  Right     Left  Right    Left  Right    Wind    Friction
     1    0.44  -0.66    0.80  -0.30    0.44  -0.66   -0.63      0.00
     2   -1.09  -0.72   -0.73  -0.36   -1.09  -0.72   -0.87      0.00
```

3	-0.72	-1.09	-0.36	-0.73	-0.72	-1.09	-0.87	0.00
4	-0.66	0.44	-0.30	0.80	-0.66	0.44	-0.63	0.00

COLUMN & BRACING DESIGN LOADS:

Load No.	Id	Dead	Coll	---Live--- Roof	Floor	Snow	--Add_Snow- Drift	Slide	Rain	Wind_1 Left	Right	Wind_2 Left	Right	Long_Wind 1	2	Column_Wind Press	Suct	Long Seis	Tran Sei	Aux_Load s Id	Coef
22	1	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0	0.00
	2	1.00	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0	0.00
	3	1.00	1.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.75	0.00	0.0	0	0.00
	4	1.00	1.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.75	0.00	0.00	0.00	0.75	0.00	0.0	0	0.00
	5	1.00	1.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.75	0.00	0.0	0	0.00
	6	1.00	1.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.75	0.00	0.00	0.00	0.75	0.00	0.0	0	0.00
	7	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.0	0	0.00
	8	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.0	0	0.00
	9	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0.0	0	0.00
	10	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.0	0	0.00
	11	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.0	0	0.00
	12	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.0	0	0.00
	13	1.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.7	0	0.00
	14	1.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.7	0	0.00
	15	1.03	1.03	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.5	2	0.00
	16	1.03	1.03	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.5	2	0.00
	17	1.03	1.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.5	2	0.00
	18	1.03	1.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.5	2	0.00
	19	0.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.7	0	0.00
	20	0.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.7	0	0.00
	21	1.00	1.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0	1.00
	22	1.00	1.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0	2 1.00

RAFTER DESIGN LOADS:

Load No	Id	Dead	Coll	Live	Snow	--Add_Snow- Drift	Slide	Rain	Wind_1 Left	Right	Wind_2 Left	Right	Long Wind	Seis	Aux_Load Id	Coef
30	1	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
	2	1.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
	3	1.00	1.00	0.75	0.00	0.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0	0.00
	4	1.00	1.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.75	0.00	0.00	0.00	0	0.00
	5	1.00	1.00	0.75	0.00	0.00	0.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0	0.00
	6	1.00	1.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.75	0.00	0.00	0	0.00
	7	1.00	1.00	0.00	0.75	0.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0	0.00
	8	1.00	1.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.75	0.00	0.00	0.00	0	0.00
	9	1.00	1.00	0.00	0.75	0.00	0.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0	0.00
	10	1.00	1.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.75	0.00	0.00	0	0.00
	11	0.60	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0	0.00
	12	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0	0.00
	13	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0	0.00

14	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0	0.00
15	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	5	1.00
16	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	6	1.00
17	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7	1.00
18	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8	1.00
19	1.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70	0	0.00
20	1.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.70	0	0.00
21	1.03	1.03	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.52	0	0.00
22	1.03	1.03	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.52	0	0.00
23	1.03	1.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.52	0	0.00
24	1.03	1.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.52	0	0.00
25	0.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70	0	0.00
26	0.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.70	0	0.00
27	1.00	1.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1	1.00
28	1.00	1.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2	1.00
29	1.00	1.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3	1.00
30	1.00	1.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4	1.00

AUXILIARY LOADS:

No. Aux	Aux Id	Aux Name	No. Load	Add_Load Id	Add_Load Coeff
8	1	E1UNB_SL_L	3	1	0.30
				2	1.00
				3	0.69
	2	E1UNB_SL_R	3	2	0.30
				1	1.00
				4	0.69
	3	E1PAT_SL_1	1	2	0.50
	4	E1PAT_SL_2	1	1	0.50
	5	LWIND1_L	1	5	1.00
	6	LWIND1_R	1	6	1.00
	7	LWIND2_L	1	5	1.00
	8	LWIND2_R	1	6	1.00

ADDITIONAL LOADS:

No. Add	Add Id	Loc Id	Basic Load	Load Type	Fx W1	Fy W2	Mom Co	X D11	Y D12	.. Conc .. Dist
10	1	3	U_SNOW	D	-0.02	-0.02	-0.25	0.00	18.55	
	2	2	U_SNOW	D	-0.02	-0.02	0.25	0.00	18.55	
	3	2	U_SNOW	D	-0.02	-0.02	0.25	9.69	18.55	
	4	3	U_SNOW	D	-0.02	-0.02	-0.25	0.00	8.86	
	5	2	U_WIND	D	0.09	0.09	0.00	0.00	7.20	
	6	3	U_WIND	D	0.09	0.09	0.00	11.35	18.55	
	7	2	WINDL1	D	-0.08	-0.08	0.00	18.00	18.55	
	8	2	WINDL2	D	-0.08	-0.08	0.00	18.00	18.55	
	9	3	WINDR1	D	-0.08	-0.08	0.00	0.00	0.55	
	10	3	WINDR2	D	-0.08	-0.08	0.00	0.00	0.55	

RIGHT ENDWALL:

BASIC LOADS:

Dead Load	Coll Load	Live Load	Snow Load	Rain Load	Basic Wind	Wind_Load_Ratio Deflect	Wind_Load_Ratio Factor	Edge_Strip_Ratio Zone Width	Edge_Strip_Ratio Girt	Edge_Strip_Ratio Panel	Edge_Strip_Ratio Col/ Jamb
4.0	5.0	30.0	21.5	0.0	21.9	0.75	1.00	3.60	1.22	1.23	1.22

BASIC LOADS AT EAVE:

Seis Load	Torsion Wind	Torsion Seismic
0.00	0.00	0.00

WIND PRESSURE/SUCTION:

Wind Press	Wind Suct	
20.8	-22.8	.. Column
20.8	-22.8	.. Girt/Header
20.8	-22.8	.. Jamb

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     25.9 -28.1     .. Panel
     32.9 -21.9     .. Parapet

 WIND COEFFICIENTS:
         Column/Rafter       Rafter      Column/Brace
   Surf       Wind_1          Wind_2        Wind_2        Long     Surface
    Id     Left  Right     Left  Right    Left  Right    Wind     Friction
     1     0.44  -0.66     0.80  -0.30    0.44  -0.66   -0.63      0.00
     2    -1.09  -0.72    -0.73  -0.36   -1.09  -0.72   -0.87      0.00
     3    -0.72  -1.09    -0.36  -0.73   -0.72  -1.09   -0.87      0.00
     4    -0.66   0.44    -0.30   0.80   -0.66   0.44   -0.63      0.00

 COLUMN & BRACING DESIGN LOADS:
 Load              ---Live---      --Add_Snow-         Wind_1     Wind_2   Long_Wind Column_Wind  Long  Tra
n Aux_Load
No. Id  Dead Coll Roof Floor Snow Drift Slide Rain  Left Right Left Right    1    2 Press  Suct  Seis  Sei
s Id  Coef
 22  1  1.00 1.00 1.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.00  0.00  0.00  0.00  0.0
0  0  0.00
     2  1.00 1.00 0.00  0.00 1.00  0.00  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.00  0.00  0.00  0.00  0.0
0  0  0.00
     3  1.00 1.00 0.75  0.00 0.00  0.00  0.00 0.00  0.00  0.00 0.75  0.00 0.00 0.00  0.00  0.75  0.00  0.0
0  0  0.00
     4  1.00 1.00 0.75  0.00 0.00  0.00  0.00 0.00  0.00  0.00 0.00  0.75 0.00 0.00  0.00  0.75  0.00  0.0
0  0  0.00
     5  1.00 1.00 0.00  0.00 0.75  0.00  0.00 0.00  0.00  0.00 0.75  0.00 0.00 0.00  0.00  0.75  0.00  0.0
0  0  0.00
     6  1.00 1.00 0.00  0.00 0.75  0.00  0.00 0.00  0.00  0.00 0.00  0.75 0.00 0.00  0.00  0.75  0.00  0.0
0  0  0.00
     7  1.00 0.00 0.00  0.00 0.00  0.00  0.00 0.00  1.00  0.00 0.00  0.00 0.00 0.00  0.00  1.00  0.00  0.0
0  0  0.00
     8  1.00 0.00 0.00  0.00 0.00  0.00  0.00 0.00  0.00  1.00 0.00  0.00 0.00 0.00  0.00  1.00  0.00  0.0
0  0  0.00
     9  1.00 0.00 0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 1.00  0.00 0.00 0.00  0.00  1.00  0.00  0.0
0  0  0.00
    10  1.00 0.00 0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 0.00  1.00 0.00 0.00  0.00  1.00  0.00  0.0
0  0  0.00
    11  1.00 0.00 0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 0.00  0.00 1.00 0.00  0.00  1.00  0.00  0.0
0  0  0.00
    12  1.00 0.00 0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 0.00  0.00 0.00 1.00  0.00  1.00  0.00  0.0
0  0  0.00
    13  1.04 0.00 0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.00  0.00  0.00  0.00  0.7
0  0  0.00
    14  1.04 0.00 0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.00  0.00  0.00  0.00 -0.7
0  0  0.00
    15  1.03 1.03 0.75  0.00 0.00  0.00  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.00  0.00  0.00  0.00  0.5
2  0  0.00
    16  1.03 1.03 0.75  0.00 0.00  0.00  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.00  0.00  0.00  0.00 -0.5
2  0  0.00
    17  1.03 1.03 0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.00  0.00  0.00  0.00  0.5
2  0  0.00
    18  1.03 1.03 0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.00  0.00  0.00  0.00 -0.5
2  0  0.00
    19  0.56 0.00 0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.00  0.00  0.00  0.00  0.7
0  0  0.00
    20  0.56 0.00 0.00  0.00 0.00  0.00  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.00  0.00  0.00  0.00 -0.7
0  0  0.00
    21  1.00 1.00 0.00  0.00 0.01  0.00  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.00  0.00  0.00  0.00  0.0
0  1  1.00
    22  1.00 1.00 0.00  0.00 0.01  0.00  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.00  0.00  0.00  0.00  0.0
0  2  1.00

 RAFTER DESIGN LOADS:
 Load                        --Add_Snow-         Wind_1      Wind_2     Long       Aux_Load
 No Id  Dead Coll Live Snow Drift Slide Rain  Left Right  Left Right  Wind  Seis Id  Coef
 30  1  1.00 1.00 1.00 0.00  0.00  0.00 0.00  0.00  0.00  0.00  0.00  0.00  0.00  0  0.00
     2  1.00 1.00 0.00 1.00  0.00  0.00 0.00  0.00  0.00  0.00  0.00  0.00  0.00  0  0.00
     3  1.00 1.00 0.75 0.00  0.00  0.00 0.00  0.75  0.00  0.00  0.00  0.00  0.00  0  0.00
     4  1.00 1.00 0.75 0.00  0.00  0.00 0.00  0.00  0.00  0.75  0.00  0.00  0.00  0  0.00
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5	1.00	1.00	0.75	0.00	0.00	0.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0	0.00
6	1.00	1.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.75	0.00	0.00	0	0.00
7	1.00	1.00	0.00	0.75	0.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0	0.00
8	1.00	1.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.75	0.00	0.00	0.00	0	0.00
9	1.00	1.00	0.00	0.75	0.00	0.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0	0.00
10	1.00	1.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.75	0.00	0.00	0	0.00
11	0.60	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0	0.00
12	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0	0.00
13	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0	0.00
14	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0	0.00
15	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	5	1.00
16	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	6	1.00
17	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7	1.00
18	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8	1.00
19	1.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70	0	0.00
20	1.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.70	0	0.00
21	1.03	1.03	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.52	0	0.00
22	1.03	1.03	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.52	0	0.00
23	1.03	1.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.52	0	0.00
24	1.03	1.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.52	0	0.00
25	0.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70	0	0.00
26	0.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.70	0	0.00
27	1.00	1.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1	1.00
28	1.00	1.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2	1.00
29	1.00	1.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3	1.00
30	1.00	1.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4	1.00

AUXILIARY LOADS:

No. Aux	Aux Id	Aux Name	No. Load	Add_Load Id	Add_Load Coeff
8	1	E2UNB_SL_L	3	1	0.30
				2	1.00
				3	0.69
	2	E2UNB_SL_R	3	2	0.30
				1	1.00
				4	0.69
	3	E2PAT_SL_1	1	2	0.50
	4	E2PAT_SL_2	1	1	0.50
	5	LWIND1_L	1	5	1.00
	6	LWIND1_R	1	6	1.00
	7	LWIND2_L	1	5	1.00
	8	LWIND2_R	1	6	1.00

ADDITIONAL LOADS:

No. Add	Add Id	Loc Id	Basic Load	Load Type	Fx W1	Fy W2	Mom Co	X D11	Y D12	.. Conc .. Dist
10	1	3	U_SNOW	D	-0.02	-0.02	-0.25	0.00	18.55	
	2	2	U_SNOW	D	-0.02	-0.02	0.25	0.00	18.55	
	3	2	U_SNOW	D	-0.02	-0.02	0.25	9.69	18.55	
	4	3	U_SNOW	D	-0.02	-0.02	-0.25	0.00	8.86	
	5	2	U_WIND	D	0.09	0.09	0.00	0.00	7.20	
	6	3	U_WIND	D	0.09	0.09	0.00	11.35	18.55	
	7	2	WINDL1	D	-0.05	-0.05	0.00	18.00	18.55	
	8	2	WINDL2	D	-0.05	-0.05	0.00	18.00	18.55	
	9	3	WINDR1	D	-0.05	-0.05	0.00	0.00	0.55	
	10	3	WINDR2	D	-0.05	-0.05	0.00	0.00	0.55	

ROOFDES:

BASIC LOADS:

Dead Load	Coll Load	Live Load	Snow Load	Rain Load	Basic Wind	Wind_Load_Ratio Deflect	Factor	Surface Friction	Seis Factor	% Snow
4.0	5.0	30.0	21.5	0.0	21.9	0.75	1.00	0.00	1.000	0.00

WIND PRESSURE/SUCTION:

Wind Press	Wind Suct	Wind Suct_Roof

```
   10.5  -21.5                .. Purlins
    0.0  -48.3                .. Gable Extensions
   14.9  -23.7                .. Panels
   12.7   -2.4   -21.5        .. Long Bracing, Building
   17.3   -5.5                .. Long Bracing, Wall Edge Zone
   32.9  -21.9    17.5        .. Long Bracing, Facia/Parapet
```

EDGE & CORNER ZONE WIND:

Wind Id	Surf Id	No. Zone	Zone Id	Width	Length	--Purlin--- Press	Suct	---Panel--- Press	Suct
1	2	9	1	0.00	0.00	1.00	1.00	1.00	1.00
			3	0.00	3.60	1.00	1.41	1.00	1.73
			4	3.60	0.00	1.00	1.41	1.00	1.73
			5	0.00	3.60	1.00	1.41	1.00	1.73
			6	3.60	0.00	1.00	1.41	1.00	1.73
			7	3.60	3.60	1.00	2.22	1.00	2.57
			8	3.60	3.60	1.00	2.22	1.00	2.57
			9	3.60	3.60	1.00	2.22	1.00	2.57
			10	3.60	3.60	1.00	2.22	1.00	2.57
	3	9	1	0.00	0.00	1.00	1.00	1.00	1.00
			3	0.00	3.60	1.00	1.41	1.00	1.73
			4	3.60	0.00	1.00	1.41	1.00	1.73
			5	0.00	3.60	1.00	1.41	1.00	1.73
			6	3.60	0.00	1.00	1.41	1.00	1.73
			7	3.60	3.60	1.00	2.22	1.00	2.57
			8	3.60	3.60	1.00	2.22	1.00	2.57
			9	3.60	3.60	1.00	2.22	1.00	2.57
			10	3.60	3.60	1.00	2.22	1.00	2.57
2	2	1	1	0.00	0.00	1.00	1.00	1.00	1.00
	3	1	1	0.00	0.00	1.00	1.00	1.00	1.00

EDGE & CORNER ZONE WIND: LONGITUDINAL

Wind Id	Surf Id	No. Zone	Zone Id	Width	Length	Purlin Suct
3	2	1	1	0.00	0.00	1.00
	3	1	1	0.00	0.00	1.00

PURLIN DESIGN LOADS:

Surf Id	--Load- No.	Id	Dead	Coll	Live	Snow	--Add_Snow- Drift	Slide	Rain	Wind Press	Wind Suct	Aux_Load Id	Coef
2	20	1	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
		2	1.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0	0.00
		3	1.00	1.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
		4	1.00	1.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0	0.00
		5	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0	0.00
		6	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0	0.00
		7	1.00	1.00	0.75	0.00	0.00	0.00	0.00	0.75	0.00	0	0.00
		8	1.00	1.00	0.00	0.75	0.00	0.00	0.00	0.75	0.00	0	0.00
		9	1.00	1.00	0.75	0.00	0.00	0.00	0.00	0.00	0.75	0	0.00
		10	1.00	1.00	0.00	0.75	0.00	0.00	0.00	0.00	0.75	0	0.00
		11	0.60	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0	0.00
		12	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0	0.00
		13	1.00	1.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	3	1.00
		14	1.00	1.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	4	1.00
		15	1.00	1.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	5	1.00
		16	1.00	1.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	1	1.00
		17	1.00	1.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	2	1.00
		18	1.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	1	-1.00
		19	1.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	2	-1.00
		20	1.00	1.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	6	1.00
3	20	1	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
		2	1.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0	0.00
		3	1.00	1.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
		4	1.00	1.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0	0.00
		5	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0	0.00
		6	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0	0.00
		7	1.00	1.00	0.75	0.00	0.00	0.00	0.00	0.75	0.00	0	0.00
		8	1.00	1.00	0.00	0.75	0.00	0.00	0.00	0.75	0.00	0	0.00

9	1.00	1.00	0.75	0.00	0.00	0.00	0.00	0.00	0.75	0	0.00
10	1.00	1.00	0.00	0.75	0.00	0.00	0.00	0.00	0.75	0	0.00
11	0.60	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0	0.00
12	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0	0.00
13	1.00	1.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	3	1.00
14	1.00	1.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	4	1.00
15	1.00	1.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	5	1.00
16	1.00	1.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	1	1.00
17	1.00	1.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	2	1.00
18	1.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	1	-1.00
19	1.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	2	-1.00
20	1.00	1.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	6	1.00

BRACING DESIGN LOADS:

--Load-					--Add_Snow-			Wind	Wind	Seis	Aux_Load	
No.	Id	Dead	Coll	Live	Snow	Drift	Slide	Rain	Press	Suct	Load	Id	Coef
16	1	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0	0.00
	2	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
	3	1.00	1.00	0.75	0.00	0.00	0.00	0.00	0.00	0.75	0.00	0	0.00
	4	1.00	1.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
	5	1.00	1.00	0.00	0.75	0.00	0.00	0.00	0.00	0.75	0.00	0	0.00
	6	1.00	1.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
	7	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0	0.00
	8	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00
	9	1.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70	0	0.00
	10	1.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.70	0	0.00
	11	1.03	1.03	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.52	0	0.00
	12	1.03	1.03	0.75	0.00	0.00	0.00	0.00	0.00	0.00	-0.52	0	0.00
	13	1.03	1.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.52	0	0.00
	14	1.03	1.03	0.00	0.75	0.00	0.00	0.00	0.00	0.00	-0.52	0	0.00
	15	0.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70	0	0.00
	16	0.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.70	0	0.00

AUXILIARY LOADS:

No. Aux	Aux Id	Aux Name	No. Load	Add_Load Id	Coef
6	1	PAT_SL_1	1	1	0.50
	2	PAT_SL_2	1	4	0.50
	3	PAT_SL_3	2	1	0.50
				2	0.50
	4	PAT_SL_4	2	2	0.50
				3	0.50
	5	PAT_SL_5	2	3	0.50
				4	0.50
	6	UNB_SL	4	5	1.00
				6	0.69
				7	1.00
				8	0.69

ADDITIONAL LOADS:

No. Add	Add Id	Surf Id	Basic Load	Load Type	Fy W1	W2	Dx Dx1	Dx2	.. Conc .. Dist
8	1	0	U_SNOW	D	-21.5	-21.5	0.0	21.0	
	2	0	U_SNOW	D	-21.5	-21.5	21.0	42.0	
	3	0	U_SNOW	D	-21.5	-21.5	42.0	63.0	
	4	0	U_SNOW	D	-21.5	-21.5	63.0	84.0	
	5	2	U_SNOW	D	-21.5	-21.5	0.0	18.6	
	6	2	U_SNOW	D	-21.5	-21.5	9.7	18.6	
	7	3	U_SNOW	D	-21.5	-21.5	0.0	18.6	
	8	3	U_SNOW	D	-21.5	-21.5	0.0	8.9	

RIGID FRAME #1:

BASIC LOADS:

Dead	Coll	Live	Snow	Rain	Basic Wind	Defl Ratio	Temperature Change
4.0	5.0	30.0	21.5	0.0	21.9	0.75	0

BASIC LOADS AT EAVE:

Seismic Load	Weak_Axis_L Wind	Weak_Axis_L Seis	Weak_Axis_R Wind	Weak_Axis_R Seis	--Torsion-- Wind	--Torsion-- Seis	--EW_Brace- Wind	--EW_Brace- Seis
0.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

WIND COEFFICIENTS:

Surf Id	--Wind_1--- Left	--Wind_1--- Right	--Wind_2--- Left	--Wind_2--- Right	Long_Wind 1	Long_Wind 2	Surface Friction
1	0.30	-0.55	0.66	-0.19	-0.63	-0.27	0.00
2	-0.87	-0.61	-0.51	-0.25	-0.87	-0.51	0.00
3	-0.61	-0.87	-0.25	-0.51	-0.87	-0.51	0.00
4	-0.55	0.30	-0.19	0.66	-0.63	-0.27	0.00

DESIGN LOADS:

-Load-			---Live---			--Add_Snow-				--Wind_1-		--Wind_2-		Long_Wind		--Seismic-			Aux_L	
oad No.	Id	Dead	Coll	Roof	Floor	Snow	Drift	Slide	Rain	Lt	Rt	Lt	Rt	Lt	Rt	Long	Tran	Temp	Id	C
oef																				
76	1	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0
.00																				
	2	1.00	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0
.00																				
	3	1.00	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0
.00																				
	4	1.00	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0
.00																				
	5	1.00	1.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0
.00																				
	6	1.00	1.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0
.00																				
	7	1.00	1.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0
.00																				
	8	1.00	1.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0
.00																				
	9	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0
.00																				
	10	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0
.00																				
	11	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0
.00																				
	12	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0	0
.00																				
	13	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	1	1
.00																				
	14	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	2	1
.00																				
	15	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-1.00	0.00	0.00	0.00	0.00	1	1
.00																				
	16	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-1.00	0.00	0.00	0.00	0.00	2	1
.00																				
	17	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	3	1
.00																				
	18	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	4	1
.00																				
	19	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-1.00	0.00	0.00	0.00	3	1
.00																				
	20	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-1.00	0.00	0.00	0.00	4	1
.00																				
	21	1.00	1.00	0.75	0.00	0.00	0.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0
.00																				
	22	1.00	1.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0	0
.00																				
	23	1.00	1.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0
.00																				
	24	1.00	1.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0	0
.00																				
	25	1.00	1.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	1	0
.75																				
	26	1.00	1.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	2	0
--																				

27	1.00	1.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.75	0.00	0.00	0.00	0.00	1	0	.75
28	1.00	1.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.75	0.00	0.00	0.00	0.00	2	0	.75
29	1.00	1.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.75	0.00	0.00	0.00	3	0	.75
30	1.00	1.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.75	0.00	0.00	0.00	4	0	.75
31	1.00	1.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.75	0.00	0.00	0.00	3	0	.75
32	1.00	1.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.75	0.00	0.00	0.00	4	0	.75
33	1.00	1.00	0.00	0.00	0.75	0.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0	.00
34	1.00	1.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0	0	.00
35	1.00	1.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0	.00
36	1.00	1.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0	0	.00
37	1.00	1.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	1	0	.75
38	1.00	1.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	2	0	.75
39	1.00	1.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.75	0.00	0.00	0.00	0.00	1	0	.75
40	1.00	1.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.75	0.00	0.00	0.00	0.00	2	0	.75
41	1.00	1.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.75	0.00	0.00	0.00	3	0	.75
42	1.00	1.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.75	0.00	0.00	0.00	4	0	.75
43	1.00	1.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.75	0.00	0.00	0.00	3	0	.75
44	1.00	1.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.75	0.00	0.00	0.00	4	0	.75
45	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0	.00
46	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0	.00
47	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0	.00
48	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0	0	.00
49	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	1	1	.00
50	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	2	1	.00
51	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-1.00	0.00	0.00	0.00	0.00	1	1	.00
52	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-1.00	0.00	0.00	0.00	0.00	2	1	.00
53	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	3	1	.00
54	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	4	1	.00
55	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-1.00	0.00	0.00	0.00	3	1	.00
56	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-1.00	0.00	0.00	0.00	4	1	.00
57	1.04	1.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70	0.00	0	0	.00
58	1.04	1.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.70	0.00	0	0	.00
59	1.03	1.03	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.52	0.00	0	0	.00
60	1.03	1.03	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.52	0.00	0	0	.00
61	1.03	1.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.52	0.00	0	0	

```
      62 1.03 1.03 0.00  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.00 0.00 0.00 0.00  0.00 -0.52  0.00  0  0
.00
      63 0.56 0.00 0.00  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.00 0.00 0.00 0.00  0.00  0.70  0.00  0  0
.00
      64 0.56 0.00 0.00  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.00 0.00 0.00 0.00  0.00 -0.70  0.00  0  0
.00
      65 1.04 1.04 0.00  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.00 0.00 0.00 0.00  0.70  0.00  0.00  0  0
.00
      66 1.04 1.04 0.00  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.00 0.00 0.00 0.00 -0.70  0.00  0.00  0  0
.00
      67 1.03 1.03 0.75  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.00 0.00 0.00 0.00  0.52  0.00  0.00  0  0
.00
      68 1.03 1.03 0.75  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.00 0.00 0.00 0.00 -0.52  0.00  0.00  0  0
.00
      69 1.03 1.03 0.00  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.00 0.00 0.00 0.00  0.52  0.00  0.00  0  0
.00
      70 1.03 1.03 0.00  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.00 0.00 0.00 0.00 -0.52  0.00  0.00  0  0
.00
      71 0.56 0.00 0.00  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.00 0.00 0.00 0.00  1.75  0.00  0.00  0  0
.00
      72 0.56 0.00 0.00  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.00 0.00 0.00 0.00 -1.75  0.00  0.00  0  0
.00
      73 1.00 1.00 0.00  0.00 0.01  0.00  0.00 0.00  0.00 0.00 0.00 0.00 0.00 0.00  0.00  0.00  0.00  5  1
.00
      74 1.00 1.00 0.00  0.00 0.01  0.00  0.00 0.00  0.00 0.00 0.00 0.00 0.00 0.00  0.00  0.00  0.00  5  1
.00
      75 1.00 1.00 0.00  0.00 0.01  0.00  0.00 0.00  0.00 0.00 0.00 0.00 0.00 0.00  0.00  0.00  0.00  6  1
.00
      76 1.00 1.00 0.00  0.00 0.01  0.00  0.00 0.00  0.00 0.00 0.00 0.00 0.00 0.00  0.00  0.00  0.00  6  1
.00

 AUXILIARY LOADS:
   No.  Aux  Aux        No.     Add_Load
   Aux   Id  Name       Load     Id   Coeff
    6     1  LWIND1_L2E   1      1    1.00
          2  LWIND1_R2E   1      2    1.00
          3  LWIND2_L2E   1      1    1.00
          4  LWIND2_R2E   1      2    1.00
          5  F1UNB_SL_L   3      7    0.30
                                 8    1.00
                                 9    0.69
          6  F1UNB_SL_R   3      8    0.30
                                 7    1.00
                                10    0.69

 ADDITIONAL LOADS:
  No.  Add  Surf Basic  Load      Fx     Fy    Mom     Dx     Dy  .. Conc
  Add  Id    Id  Type   Type      W1     W2     Co    Dl1    Dl2  .. Dist
  10    1     2  U_WIND   D     0.17   0.17  0.000   0.00   7.20
        2     3  U_WIND   D     0.17   0.17  0.000  11.35  18.55
        3     2  WINDL1   D    -0.12  -0.12  0.000  18.00  18.55
        4     2  WINDL2   D    -0.12  -0.12  0.000  18.00  18.55
        5     3  WINDR1   D    -0.12  -0.12  0.000   0.00   0.55
        6     3  WINDR2   D    -0.12  -0.12  0.000   0.00   0.55
        7     3  U_SNOW   D    -0.43  -0.43 -0.250   0.00  18.55
        8     2  U_SNOW   D    -0.43  -0.43  0.250   0.00  18.55
        9     2  U_SNOW   D    -0.43  -0.43  0.250   9.69  18.55
       10     3  U_SNOW   D    -0.43  -0.43 -0.250   0.00   8.86

RIGID FRAME #2:
---------------
 BASIC LOADS:
                                     Basic   Defl  Temperature
   Dead  Coll  Live  Snow  Rain      Wind  Ratio     Change
    4.0   5.0  30.0  21.5   0.0      21.9   0.75          0

 BASIC LOADS AT EAVE:
   Seismic  Weak_Axis_L  Weak_Axis_R  --Torsion--  --EW_Brace-
     Load    Wind  Seis   Wind  Seis   Wind  Seis   Wind  Seis
```

```
     0.35    0.00  0.00   0.00  0.00   0.00  0.00   0.00  0.00

 WIND COEFFICIENTS:
  Surf  --Wind_1---   --Wind_2---     Long_Wind  Surface
   Id   Left  Right   Left  Right      1      2  Friction
    1   0.44  -0.66   0.80  -0.30  -0.63  -0.27    0.00
    2  -1.09  -0.72  -0.73  -0.36  -0.87  -0.51    0.00
    3  -0.72  -1.09  -0.36  -0.73  -0.87  -0.51    0.00
    4  -0.66   0.44  -0.30   0.80  -0.63  -0.27    0.00

 DESIGN LOADS:
 -Load-            ---Live---      --Add_Snow-       --Wind_1- --Wind_2- Long_Wind  --Seismic-       Aux_L
oad
 No.  Id Dead Coll Roof Floor Snow Drift Slide Rain    Lt   Rt   Lt   Rt   Lt   Rt  Long  Tran  Temp Id  C
oef
  76   1 1.00 1.00 1.00  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.00 0.00 0.00 0.00  0.00  0.00  0.00  0  0
.00
       2 1.00 1.00 1.00  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.00 0.00 0.00 0.00  0.00  0.00  0.00  0  0
.00
       3 1.00 1.00 0.00  0.00 1.00  0.00  0.00 0.00  0.00 0.00 0.00 0.00 0.00 0.00  0.00  0.00  0.00  0  0
.00
       4 1.00 1.00 0.00  0.00 1.00  0.00  0.00 0.00  0.00 0.00 0.00 0.00 0.00 0.00  0.00  0.00  0.00  0  0
.00
       5 1.00 1.00 0.75  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.00 0.00 0.00 0.00  0.00  0.00  0.00  0  0
.00
       6 1.00 1.00 0.75  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.00 0.00 0.00 0.00  0.00  0.00  0.00  0  0
.00
       7 1.00 1.00 0.00  0.00 0.75  0.00  0.00 0.00  0.00 0.00 0.00 0.00 0.00 0.00  0.00  0.00  0.00  0  0
.00
       8 1.00 1.00 0.00  0.00 0.75  0.00  0.00 0.00  0.00 0.00 0.00 0.00 0.00 0.00  0.00  0.00  0.00  0  0
.00
       9 1.00 0.00 0.00  0.00 0.00  0.00  0.00 0.00  1.00 0.00 0.00 0.00 0.00 0.00  0.00  0.00  0.00  0  0
.00
      10 1.00 0.00 0.00  0.00 0.00  0.00  0.00 0.00  0.00 0.00 1.00 0.00 0.00 0.00  0.00  0.00  0.00  0  0
.00
      11 1.00 0.00 0.00  0.00 0.00  0.00  0.00 0.00  0.00 1.00 0.00 0.00 0.00 0.00  0.00  0.00  0.00  0  0
.00
      12 1.00 0.00 0.00  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.00 1.00 0.00 0.00  0.00  0.00  0.00  0  0
.00
      13 1.00 0.00 0.00  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.00 0.00 1.00 0.00  0.00  0.00  0.00  1  1
.00
      14 1.00 0.00 0.00  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.00 0.00 1.00 0.00  0.00  0.00  0.00  2  1
.00
      15 1.00 0.00 0.00  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.00 0.00-1.00 0.00  0.00  0.00  0.00  1  1
.00
      16 1.00 0.00 0.00  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.00 0.00-1.00 0.00  0.00  0.00  0.00  2  1
.00
      17 1.00 0.00 0.00  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.00 0.00 0.00 1.00  0.00  0.00  0.00  3  1
.00
      18 1.00 0.00 0.00  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.00 0.00 0.00 1.00  0.00  0.00  0.00  4  1
.00
      19 1.00 0.00 0.00  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.00 0.00 0.00-1.00  0.00  0.00  0.00  3  1
.00
      20 1.00 0.00 0.00  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.00 0.00 0.00-1.00  0.00  0.00  0.00  4  1
.00
      21 1.00 1.00 0.75  0.00 0.00  0.00  0.00 0.00  0.75 0.00 0.00 0.00 0.00 0.00  0.00  0.00  0.00  0  0
.00
      22 1.00 1.00 0.75  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.75 0.00 0.00 0.00  0.00  0.00  0.00  0  0
.00
      23 1.00 1.00 0.75  0.00 0.00  0.00  0.00 0.00  0.00 0.75 0.00 0.00 0.00 0.00  0.00  0.00  0.00  0  0
.00
      24 1.00 1.00 0.75  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.00 0.75 0.00 0.00  0.00  0.00  0.00  0  0
.00
      25 1.00 1.00 0.75  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.00 0.00 0.75 0.00  0.00  0.00  0.00  1  0
.75
      26 1.00 1.00 0.75  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.00 0.00 0.75 0.00  0.00  0.00  0.00  2  0
.75
      27 1.00 1.00 0.75  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.00 0.00-0.75 0.00  0.00  0.00  0.00  1  0
.75
```

```
28 1.00 1.00 0.75  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.00 0.00-0.75 0.00  0.00  0.00  0.00 2  0
.75
29 1.00 1.00 0.75  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.00 0.00 0.00 0.75  0.00  0.00  0.00 3  0
.75
30 1.00 1.00 0.75  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.00 0.00 0.00 0.75  0.00  0.00  0.00 4  0
.75
31 1.00 1.00 0.75  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.00 0.00 0.00-0.75  0.00  0.00  0.00 3  0
.75
32 1.00 1.00 0.75  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.00 0.00 0.00-0.75  0.00  0.00  0.00 4  0
.75
33 1.00 1.00 0.00  0.00 0.75  0.00  0.00 0.00  0.75 0.00 0.00 0.00 0.00 0.00  0.00  0.00  0.00 0  0
.00
34 1.00 1.00 0.00  0.00 0.75  0.00  0.00 0.00  0.00 0.00 0.75 0.00 0.00 0.00  0.00  0.00  0.00 0  0
.00
35 1.00 1.00 0.00  0.00 0.75  0.00  0.00 0.00  0.00 0.75 0.00 0.00 0.00 0.00  0.00  0.00  0.00 0  0
.00
36 1.00 1.00 0.00  0.00 0.75  0.00  0.00 0.00  0.00 0.00 0.00 0.75 0.00 0.00  0.00  0.00  0.00 0  0
.00
37 1.00 1.00 0.00  0.00 0.75  0.00  0.00 0.00  0.00 0.00 0.00 0.00 0.75 0.00  0.00  0.00  0.00 1  0
.75
38 1.00 1.00 0.00  0.00 0.75  0.00  0.00 0.00  0.00 0.00 0.00 0.00 0.75 0.00  0.00  0.00  0.00 2  0
.75
39 1.00 1.00 0.00  0.00 0.75  0.00  0.00 0.00  0.00 0.00 0.00 0.00-0.75 0.00  0.00  0.00  0.00 1  0
.75
40 1.00 1.00 0.00  0.00 0.75  0.00  0.00 0.00  0.00 0.00 0.00 0.00-0.75 0.00  0.00  0.00  0.00 2  0
.75
41 1.00 1.00 0.00  0.00 0.75  0.00  0.00 0.00  0.00 0.00 0.00 0.00 0.00 0.75  0.00  0.00  0.00 3  0
.75
42 1.00 1.00 0.00  0.00 0.75  0.00  0.00 0.00  0.00 0.00 0.00 0.00 0.00 0.75  0.00  0.00  0.00 4  0
.75
43 1.00 1.00 0.00  0.00 0.75  0.00  0.00 0.00  0.00 0.00 0.00 0.00 0.00-0.75  0.00  0.00  0.00 3  0
.75
44 1.00 1.00 0.00  0.00 0.75  0.00  0.00 0.00  0.00 0.00 0.00 0.00 0.00-0.75  0.00  0.00  0.00 4  0
.75
45 0.60 0.00 0.00  0.00 0.00  0.00  0.00 0.00  1.00 0.00 0.00 0.00 0.00 0.00  0.00  0.00  0.00 0  0
.00
46 0.60 0.00 0.00  0.00 0.00  0.00  0.00 0.00  0.00 0.00 1.00 0.00 0.00 0.00  0.00  0.00  0.00 0  0
.00
47 0.60 0.00 0.00  0.00 0.00  0.00  0.00 0.00  0.00 1.00 0.00 0.00 0.00 0.00  0.00  0.00  0.00 0  0
.00
48 0.60 0.00 0.00  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.00 1.00 0.00 0.00  0.00  0.00  0.00 0  0
.00
49 0.60 0.00 0.00  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.00 0.00 1.00 0.00  0.00  0.00  0.00 1  1
.00
50 0.60 0.00 0.00  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.00 0.00 1.00 0.00  0.00  0.00  0.00 2  1
.00
51 0.60 0.00 0.00  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.00 0.00-1.00 0.00  0.00  0.00  0.00 1  1
.00
52 0.60 0.00 0.00  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.00 0.00-1.00 0.00  0.00  0.00  0.00 2  1
.00
53 0.60 0.00 0.00  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.00 0.00 0.00 1.00  0.00  0.00  0.00 3  1
.00
54 0.60 0.00 0.00  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.00 0.00 0.00 1.00  0.00  0.00  0.00 4  1
.00
55 0.60 0.00 0.00  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.00 0.00 0.00-1.00  0.00  0.00  0.00 3  1
.00
56 0.60 0.00 0.00  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.00 0.00 0.00-1.00  0.00  0.00  0.00 4  1
.00
57 1.04 1.04 0.00  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.00 0.00 0.00 0.00  0.00  0.70  0.00 0  0
.00
58 1.04 1.04 0.00  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.00 0.00 0.00 0.00  0.00 -0.70  0.00 0  0
.00
59 1.03 1.03 0.75  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.00 0.00 0.00 0.00  0.00  0.52  0.00 0  0
.00
60 1.03 1.03 0.75  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.00 0.00 0.00 0.00  0.00 -0.52  0.00 0  0
.00
61 1.03 1.03 0.00  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.00 0.00 0.00 0.00  0.00  0.52  0.00 0  0
.00
62 1.03 1.03 0.00  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.00 0.00 0.00 0.00  0.00 -0.52  0.00 0  0
```

```
      63 0.56 0.00 0.00  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.00 0.00 0.00 0.00  0.00  0.70  0.00  0  0
.00
      64 0.56 0.00 0.00  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.00 0.00 0.00 0.00  0.00 -0.70  0.00  0  0
.00
      65 1.04 1.04 0.00  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.00 0.00 0.00 0.00  0.70  0.00  0.00  0  0
.00
      66 1.04 1.04 0.00  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.00 0.00 0.00 0.00 -0.70  0.00  0.00  0  0
.00
      67 1.03 1.03 0.75  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.00 0.00 0.00 0.00  0.52  0.00  0.00  0  0
.00
      68 1.03 1.03 0.75  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.00 0.00 0.00 0.00 -0.52  0.00  0.00  0  0
.00
      69 1.03 1.03 0.00  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.00 0.00 0.00 0.00  0.52  0.00  0.00  0  0
.00
      70 1.03 1.03 0.00  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.00 0.00 0.00 0.00 -0.52  0.00  0.00  0  0
.00
      71 0.56 0.00 0.00  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.00 0.00 0.00 0.00  1.75  0.00  0.00  0  0
.00
      72 0.56 0.00 0.00  0.00 0.00  0.00  0.00 0.00  0.00 0.00 0.00 0.00 0.00 0.00 -1.75  0.00  0.00  0  0
.00
      73 1.00 1.00 0.00  0.00 0.01  0.00  0.00 0.00  0.00 0.00 0.00 0.00 0.00 0.00  0.00  0.00  0.00  5  1
.00
      74 1.00 1.00 0.00  0.00 0.01  0.00  0.00 0.00  0.00 0.00 0.00 0.00 0.00 0.00  0.00  0.00  0.00  5  1
.00
      75 1.00 1.00 0.00  0.00 0.01  0.00  0.00 0.00  0.00 0.00 0.00 0.00 0.00 0.00  0.00  0.00  0.00  6  1
.00
      76 1.00 1.00 0.00  0.00 0.01  0.00  0.00 0.00  0.00 0.00 0.00 0.00 0.00 0.00  0.00  0.00  0.00  6  1
.00

AUXILIARY LOADS:
  No.  Aux  Aux        No.     Add_Load
  Aux   Id  Name       Load     Id   Coeff
   6     1  LWIND1_L2E   1      1    1.00
         2  LWIND1_R2E   1      2    1.00
         3  LWIND2_L2E   1      1    1.00
         4  LWIND2_R2E   1      2    1.00
         5  F2UNB_SL_L   3      7    0.30
                                 8    1.00
                                 9    0.69
         6  F2UNB_SL_R   3      8    0.30
                                 7    1.00
                                10    0.69

ADDITIONAL LOADS:
 No.  Add  Surf Basic  Load      Fx     Fy    Mom     Dx     Dy  .. Conc
 Add  Id    Id  Type   Type      W1     W2     Co    Dl1    Dl2  .. Dist
 10    1     2  U_WIND   D     0.10   0.10  0.000   0.00   7.20
       2     3  U_WIND   D     0.10   0.10  0.000  11.35  18.55
       3     2  WINDL1   D    -0.10  -0.10  0.000  18.00  18.55
       4     2  WINDL2   D    -0.10  -0.10  0.000  18.00  18.55
       5     3  WINDR1   D    -0.10  -0.10  0.000   0.00   0.55
       6     3  WINDR2   D    -0.10  -0.10  0.000   0.00   0.55
       7     3  U_SNOW   D    -0.24  -0.24 -0.250   0.00  18.55
       8     2  U_SNOW   D    -0.24  -0.24  0.250   0.00  18.55
       9     2  U_SNOW   D    -0.24  -0.24  0.250   9.69  18.55
      10     3  U_SNOW   D    -0.24  -0.24 -0.250   0.00   8.86
```

S12S0554A Reactions, Anchor Bolts, & Base Plates: 9/12/12 4:01pm

Frame Line	Col Line	Foundation_Loads(k) Max_Pos_Val Id	Horz	Vert	Max_Neg_Val Id	Horz	Vert	Anc._Bolt No.	Diam	Base_Plate Width	Len	Thick
1	B	10	6.2	0.7				4	0.750	8.00	10.25	0.375
		11	0.0	0.7								
5	B	10	6.2	0.7				4	0.750	8.00	10.25	0.375
		11	0.0	0.7								
2*	A	1	5.9	11.7	2	-6.7	-5.8	4	0.750	8.00	16.50	0.375
		3	3.2	16.5	4	2.7	-12.4					
2*	C	5	6.7	-5.8	6	-5.9	11.7	4	0.750	8.00	16.50	0.375
		3	-3.2	16.5	7	-2.7	-12.4					
1*	A	1	3.9	6.9	2	-4.8	-4.6	4	0.750	8.00	14.50	0.375
		8	1.9	10.1	4	1.5	-9.2					
1*	C	5	4.8	-4.6	6	-3.9	6.9	4	0.750	8.00	14.50	0.375
		9	-1.9	10.1	7	-1.5	-9.2					

2* Frame Lines:2 3 4
1* Frame Lines:1 5

LOAD COMBINATIONS:

Id	Combination
1	DL+CL+0.75LL+0.75WR1
2	0.60DL+WL2
3	DL+CL+LL
4	0.60DL+LnWnd1+LWIND1_L2E
5	0.60DL+WR2
6	DL+CL+0.75LL+0.75WL1
7	0.60DL+LnWnd1+LWIND1_R2E
8	DL+CL+0.75LL-0.75LnWnd2+0.75LWIND2_R2E
9	DL+CL+0.75LL-0.75LnWnd2+0.75LWIND2_L2E
10	DL+WS+LnWnd2
11	1.04DL+0.70Seis_R

S12S0554A Bracing Reactions Report: 9/12/12 4:01pm

BUILDING BRACING REACTIONS:

Wall Loc	Wall Line	Col Line	Reactions(k) Wind Horz	Wind Vert	Seismic Horz	Seismic Vert	Panel Shear (lb/ft)
L_EW	1	Rigid Frame At Endwall					
F_SW	C	4 ,5	4.64	5.43	2.52	2.95	
R_EW	5	Rigid Frame At Endwall					
B_SW	A	5 ,4	4.64	5.43	2.52	2.95	

S12S0554A Additional Reactions Report: 9/12/12 4:01pm

Rigid Frame Column Reactions

Frame Line	Col Line	Dead Horz	Dead Vert	Collateral Horz	Collateral Vert	Live Horz	Live Vert	Snow Horz	Snow Vert	Wind_L1 Horz	Wind_L1 Vert
2*	A	0.4	2.5	0.4	2.0	2.4	11.9	1.7	8.6	-5.4	-10.4
2*	C	-0.4	2.5	-0.4	2.0	-2.4	11.9	-1.7	8.6	-4.4	-2.4

Frame Line	Col Line	Wind_R1 Horz	Wind_R1 Vert	Wind_L2 Horz	Wind_L2 Vert	Wind_R2 Horz	Wind_R2 Vert	LnWind_1 Horz	LnWind_1 Vert	LnWind_2 Horz	LnWind_2 Vert
2*	A	4.4	-2.4	-6.9	-7.3	2.8	0.7	2.3	-7.6	0.8	-4.4
2*	C	5.4	-10.4	-2.8	0.7	6.9	-7.3	-2.3	-7.6	-0.8	-4.4

Frame Line	Col Line	Seismic_L Horz	Seismic_L Vert	Seismic_R Horz	Seismic_R Vert	LWIND1_L2E Horz	LWIND1_L2E Vert	LWIND1_R2E Horz	LWIND1_R2E Vert	LWIND2_L2E Horz	LWIND2_L2E Vert
2*	A	-0.5	-0.7	0.5	0.7	0.1	-1.0	-0.2	-0.3	0.1	-1.0
2*	C	-0.5	0.7	0.5	-0.7	0.2	-0.3	-0.1	-1.0	0.2	-0.3

Frame Line	Col Line	LWIND2_R2E Horz	LWIND2_R2E Vert	F1UNB_SL_L Horz	F1UNB_SL_L Vert	F1UNB_SL_R Horz	F1UNB_SL_R Vert
2*	A	-0.2	-0.3	1.6	8.9	1.6	5.1
2*	C	-0.1	-1.0	-1.6	5.1	-1.6	8.9

Frame Line	Col Line	Dead Horz	Dead Vert	Collateral Horz	Collateral Vert	Live Horz	Live Vert	Snow Horz	Snow Vert	Wind_L1 Horz	Wind_L1 Vert
1*	A	0.3	1.8	0.2	1.2	1.4	6.8	1.0	4.9	-4.1	-7.4
1*	C	-0.3	1.8	-0.2	1.2	-1.4	6.8	-1.0	4.9	-3.1	-1.5

Frame Line	Col Line	Wind_R1 Horz	Wind_R1 Vert	Wind_L2 Horz	Wind_L2 Vert	Wind_R2 Horz	Wind_R2 Vert	LnWind_1 Horz	LnWind_1 Vert	LnWind_2 Horz	LnWind_2 Vert
1*	A	3.1	-1.5	-5.0	-5.7	2.2	0.3	1.3	-4.3	0.4	-2.5
1*	C	4.1	-7.4	-2.2	0.3	5.0	-5.7	-1.3	-4.3	-0.4	-2.5

Frame Line	Col Line	Seismic_L Horz	Seismic_L Vert	Seismic_R Horz	Seismic_R Vert	LWIND1_L2E Horz	LWIND1_L2E Vert	LWIND1_R2E Horz	LWIND1_R2E Vert	LWIND2_L2E Horz	LWIND2_L2E Vert
1*	A	-0.4	-0.5	0.4	0.5	0.1	-0.5	-0.1	-0.2	0.1	-0.5
1*	C	-0.4	0.5	0.4	-0.5	0.1	-0.2	-0.1	-0.5	0.1	-0.2

Frame Line	Col Line	LWIND2_R2E Horz	LWIND2_R2E Vert	F2UNB_SL_L Horz	F2UNB_SL_L Vert	F2UNB_SL_R Horz	F2UNB_SL_R Vert
1*	A	-0.1	-0.2	0.9	5.0	0.9	2.9
1*	C	-0.1	-0.5	-0.9	2.9	-0.9	5.0

2* Frame Lines:2 3 4
1* Frame Lines:1 5

Endwall Column Reactions

Frame Line	Col Line	Dead Vert	Wind_P Horz	Wind_S Horz
1	B	0.7	-5.6	6.2

Frame Line	Col Line	Dead Vert	Wind_P Horz	Wind_S Horz
5	B	0.7	-5.6	6.2

```
==============================================================================
S12S0554A           Seismic Design Report:                  9/12/12     4:01pm
==============================================================================


     Building Data
     -------------
       Code                =IBC  06
       Length              =  84.00
       Width               =  36.00
       Left  Eave Height   =  25.00
       Right Eave Height   =  25.00

     Seismic Formula
     ---------------
       Base  Shear, V      = 0.667*Ie*Fa*Ss*W/R

                   Vmin    = 0.044*Sds*Ie*W
                   Vmax    = Sd1*Ie*W/(T*R)
       T(Moment_Frame)     =   0.368
       T(Braced_Frame)     =   0.224

       Shear Force, E      = Rho*V
        (Rigid frame, endwall frame, wind bent, wind column & base reactions)

       Shear Force, Em     = Omega*V
        (Wall diagonal bracing, splice at rigid frame & wind bent knee)


       Note: Applied load is seismic force multiplied by load combination

       Fa*Ss               =   0.475
       Zone/Design Category=   B
       Ie                  =   1.000
       S1                  =   0.064
       Sd1                 =   0.102
       Sds                 =   0.316

     Seismic Dead Load, W
     --------------------
       Snow   Factor       =   0.000
       Roof   Dead+Collat  =    9.00 (psf  )
       Frame  Dead         =    3.00 (psf  )
       Roof   Total        =   12.00 (psf  )    , Weight=  36.29 (k )
       L_EW   Dead         =    3.00 (psf  )    , Weight=   1.47 (k )
       F_SW   Dead         =    3.00 (psf  )    , Weight=   3.15 (k )
       R_EW   Dead         =    3.00 (psf  )    , Weight=   1.47 (k )
       B_SW   Dead         =    3.00 (psf  )    , Weight=   3.15 (k )
                                                          -------
                                                   Total =  45.53 (k )

     Seismic Forces
     --------------
```

```
Roof Bracing
              R  =   3.00, Rho=   1.00
              Cs =   0.1055
              W  =  39.23 (k )
       Force, V  =   4.14 (k )
       Force, E  =   4.14 (k )

Sidewall Bracing
  Front       R  =   3.00, Rho=   1.00, Omega=   1.00
              Cs =   0.1055
              W  =  22.77 (k )
       Force, V  =   2.40 (k )
       Force, Em =   2.40 (k )
       Force, E  =   2.40 (k )
  Back        R  =   3.00, Rho=   1.00, Omega=   1.00
              Cs =   0.1055
              W  =  22.77 (k )
       Force, V  =   2.40 (k )
       Force, Em =   2.40 (k )
       Force, E  =   2.40 (k )

Rigid Frames
              R  =   3.00, Rho=   1.00
              Cs =   0.0928
  Frame 1     W  =  10.56 (k )
       Force, V  =   0.98 (k )  (Vmax)
       Force, E  =   0.98 (k )
  Frame 2     W  =   7.54 (k )
       Force, V  =   0.70 (k )  (Vmax)
       Force, E  =   0.70 (k )

End Plates
  Frame       R  =   3.00, Omega=   1.00

Total Base Shear
  Longitudinal
       Force, V  =   4.80 (k )
  Transverse
       Force, V  =   4.34 (k )
```

```
==============================================================================
S12S0554A            Sidewall Design Code                        9/12/12  3:58pm
==============================================================================

STRUCTURAL CODE:
  Design Basis       : WS - Working Stress
  Hot  Rolled Steel  : AISC05
  Cold Formed Steel  : NAUS01

BUILDING CODE:
  Wind Code          : NYBC 10  (IBC  06)
  Seismic Zone       : B

MODULUS OF ELASTICITY
  Hot  Rolled Steel  :  29000 (ksi  )
  Cold Formed Steel  :  29500 (ksi  )


==============================================================================
S12S0554A            Bypass Girt Design Summary                  9/12/12  3:58pm
==============================================================================

GIRT LAYOUT:
        Des Bay           Bay_Offset Design ----Lap----          ----Max_Load---
 Locate  Id  Id Part     Start   End Length  Left Right Weight  Id   UC Report  Rot
 ------ --- --- -------- ----- ----- ------ ----- ----- ------  -- ---- ------- ---
   3.75   1   1 08Z054    1.33 21.00  19.67  0.00  1.25   55.4  WS 0.76 Mom+Shr  D
              2 08Z054    0.00 21.00  21.00  1.25  1.25   62.3  WS 0.75 Mom+Shr  D
              3 08Z054    0.00 16.83  16.50  1.25  0.00   47.0  WS 0.55 Mom+Shr  D
          2   3 08Z060   20.19 21.00   0.48  0.00  0.00    1.4  WS 0.76 Mom+Shr  D
              4 08Z060    0.00 19.67  19.67  0.00  0.00   58.0  WS 0.78 Deflect  D
 ------ --- --- -------- ----- ----- ------ ----- ----- ------  -- ---- ------- ---
   7.50   3   1 08Z054    1.33 21.00  19.67  0.00  1.25   55.4  WS 0.86 Mom+Shr  D
              2 08Z054    0.00 21.00  21.00  1.25  1.25   62.3  WS 0.85 Mom+Shr  D
              3 08Z054    0.00 21.00  21.00  1.25  1.25   62.3  WS 1.03 Mom+Shr  D
              4 08Z054    0.00 19.67  19.67  1.25  0.00   55.4  WS 0.90 Mom+Shr  D
 ------ --- --- -------- ----- ----- ------ ----- ----- ------  -- ---- ------- ---
  12.42   4   1 08Z054    1.33 21.00  19.67  0.00  1.25   55.4  WS 0.99 Mom+Shr  D
              2 08Z054    0.00 21.00  21.00  1.25  1.25   62.3  WS 0.97 Mom+Shr  D
              3 08Z054    0.00 21.00  21.00  1.25  1.25   62.3  WS 0.97 Mom+Shr  D
              4 08Z054    0.00 19.67  19.67  1.25  0.00   55.4  WS 0.99 Mom+Shr  D
 ------ --- --- -------- ----- ----- ------ ----- ----- ------  -- ---- ------- ---
  17.33   5   1 08Z054    1.33 21.00  19.67  0.00  1.25   55.4  WS 0.87 Mom+Shr  D
              2 08Z054    0.00 21.00  21.00  1.25  1.25   62.3  WS 0.86 Mom+Shr  D
              3 08Z054    0.00 21.00  21.00  1.25  1.25   62.3  WS 0.86 Mom+Shr  D
              4 08Z054    0.00 19.67  19.67  1.25  0.00   55.4  WS 0.87 Mom+Shr  D
 ------ --- --- -------- ----- ----- ------ ----- ----- ------  -- ---- ------- ---
  21.08   6   1 08Z054    1.33 21.00  19.67  0.00  1.25   55.4  WS 0.75 Mom+Shr  D
              2 08Z054    0.00 21.00  21.00  1.25  1.25   62.3  WS 0.74 Mom+Shr  D
              3 08Z054    0.00 21.00  21.00  1.25  1.25   62.3  WS 0.74 Mom+Shr  D
              4 08Z054    0.00 19.67  19.67  1.25  0.00   55.4  WS 0.75 Mom+Shr  D


GIRT INSIDE FLANGE BRACE:
 No._Brace/Bay
   1   2   3   4
 --- --- --- ---
   0   0   0   0

==============================================================================
S12S0554A            Girt Design  1 (Locate=  3.750)             9/12/12  3:58pm
==============================================================================

GIRT LAYOUT:
                                                                  Available
                                                                  Reduction
 Bay                        Design  --Lap(ft)--   Load   No.          Factor
  Id  Part        Locate    Length  Left  Right  Width  Brace  Weight  Out   In
```

1	08Z054	3.7500	19.67		1.25	3.75	0	55.4	0.70	0.70
2	08Z054	3.7500	21.00	1.25	1.25	3.75	0	62.3	0.70	0.70
3	08Z054	3.7500	16.50	1.25		3.75	0	47.0	0.70	0.70
								164.7		

WIND PRESSURE :

GIRT ACTIONS:

Bay	Shear(k)				Moment(f-k)					
	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	Mid-Span Mom	Mid-Span Loc	Right Lap	Right Sup
1	0.59		-0.84	-0.94	0.00		-2.25	7.60	2.31	3.42
2	0.87	0.77	-0.67	-0.77	3.42	2.40	-1.40	11.11	1.51	2.41
3	0.79	0.69		-0.50	2.41	1.49	-1.58	10.13		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
1	RLap	-0.84	1.86	0.45	RLap	2.31	4.38	0.53	RLap	0.69	-0.41	0.98
2	LLap	0.77	1.86	0.41	LLap	2.40	4.38	0.55	LLap	0.69	-0.22	1.05
3	LLap	0.69	1.86	0.37	MidS	-1.58	4.38	0.36	LLap	0.50	0.25	

UNBRACE LENGTHS:

Bay		Minor					Cb					Mom1/Mom2				
Id	Major	LSup	LLap	MidS	RLap	RSup	LSup	LLap	MidS	RLap	RSup	LSup	LLap	MidS	RLap	RSup
1	19.7	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2	21.0	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
3	16.5	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

WIND SUCTION :

GIRT ACTIONS:

Bay	Shear(k)				Moment(f-k)					
	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	Mid-Span Mom	Mid-Span Loc	Right Lap	Right Sup
1	-0.69		0.93	1.03	0.00		2.50	7.58	-2.54	-3.76
2	-0.95	-0.84	0.74	0.84	-3.76	-2.64	1.53	11.13	-1.65	-2.63
3	-0.86	-0.76		0.55	-2.63	-1.62	1.74	10.12		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
1	RLap	0.93	1.86	0.50	RLap	-2.54	4.38	0.58	RLap	0.76	0.46	0.98
2	LLap	-0.84	1.86	0.45	LLap	-2.64	4.38	0.60	LLap	0.75	0.24	1.05
3	LLap	-0.76	1.86	0.41	MidS	1.74	4.38	0.40	LLap	0.55	-0.28	

UNBRACE LENGTHS:

Bay		Minor					Cb					Mom1/Mom2				
Id	Major	LSup	LLap	MidS	RLap	RSup	LSup	LLap	MidS	RLap	RSup	LSup	LLap	MidS	RLap	RSup
1	19.7	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2	21.0	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
3	16.5	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

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==============================================================================
S12S0554A            Girt Design  2 (Locate=  3.750)            9/12/12  3:58pm
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GIRT LAYOUT:

Bay Id	Part	Locate	Design Length	--Lap(ft)-- Left	Right	Load Width	No. Brace	Weight	Available Reduction Factor Out	In
3	08Z060	3.7500	0.48			3.75	0	1.4	0.70	0.70
4	08Z060	3.7500	19.67			3.75	0	58.0	0.70	0.70
								59.4		

WIND PRESSURE :

GIRT ACTIONS:

Bay Id	Shear(k) Left Sup	Left Lap	Right Lap	Right Sup	Moment(f-k) Left Sup	Left Lap	Mid-Span Mom	Loc	Right Lap	Right Sup
3	-1.68			-1.72	0.00		0.41	0.24		0.82
4	0.81			-0.73	0.82		-3.37	10.37		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Calc	Limit	UC	Moment(f-k) Loc	Calc	Limit	UC	-Mom+Shr- Loc	UC	Deflect(in) Calc	Limit
3	RSup	-1.72	2.56	0.67	RSup	0.82	5.12	0.16	RSup	0.69	0.05	
4	LSup	0.81	2.56	0.32	MidS	-3.37	5.12	0.66	RLap	0.53	-0.70	0.98

UNBRACE LENGTHS:

Bay Id	Major	Minor LSup	LLap	MidS	RLap	RSup	Cb LSup	LLap	MidS	RLap	RSup	Mom1/Mom2 LSup	LLap	MidS	RLap	RSup
3	0.5	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
4	19.7	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

WIND SUCTION :

GIRT ACTIONS:

Bay Id	Shear(k) Left Sup	Left Lap	Right Lap	Right Sup	Moment(f-k) Left Sup	Left Lap	Mid-Span Mom	Loc	Right Lap	Right Sup
3	1.86			1.90	0.00		-0.45	0.24		-0.90
4	-0.89			0.84	-0.90		3.72	10.39		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Calc	Limit	UC	Moment(f-k) Loc	Calc	Limit	UC	-Mom+Shr- Loc	UC	Deflect(in) Calc	Limit
3	RSup	1.90	2.56	0.74	RSup	-0.90	5.12	0.18	RSup	0.76	-0.05	
4	LSup	-0.89	2.56	0.35	MidS	3.72	5.12	0.73	RLap	0.59	0.77	0.98

UNBRACE LENGTHS:

Bay Id	Major	Minor LSup	LLap	MidS	RLap	RSup	Cb LSup	LLap	MidS	RLap	RSup	Mom1/Mom2 LSup	LLap	MidS	RLap	RSup
3	0.5	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

4	19.7	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

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S12S0554A Girt Design 3 (Locate= 7.500) 9/12/12 3:58pm

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GIRT LAYOUT:

Bay Id	Part	Locate	Design Length	--Lap(ft)-- Left	Right	Load Width	No. Brace	Weight	Available Reduction Factor Out	In
1	08Z054	7.5000	19.67		1.25	4.33	0	55.4	0.70	0.70
2	08Z054	7.5000	21.00	1.25	1.25	4.33	0	62.3	0.70	0.70
3	08Z054	7.5000	21.00	1.25	1.25	4.33	0	62.3	0.70	0.70
4	08Z054	7.5000	19.67	1.25		4.33	0	55.4	0.70	0.70
								235.4		

WIND PRESSURE :

GIRT ACTIONS:

Bay Id	Shear(k) Left Sup	Left Lap	Right Lap	Right Sup	Moment(f-k) Left Sup	Left Lap	Mid-Span Mom	Mid-Span Loc	Right Lap	Right Sup
1	0.69		-0.97	-1.08	0.00		-2.64	7.66	2.58	3.86
2	0.98	0.87	-0.80	-0.91	3.86	2.70	-1.47	10.87	2.08	3.16
3	0.94	0.83	-1.12	-0.50	3.16	2.05	-1.72	10.40	3.17	4.04
4	1.09	0.98		-0.68	4.04	2.75	-2.57	12.11		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Calc	Limit	UC	Moment(f-k) Loc	Calc	Limit	UC	-Mom+Shr- Loc	UC	Deflect(in) Calc	Limit
1	RLap	-0.97	1.86	0.52	MidS	-2.64	4.38	0.60	RLap	0.78	-0.49	0.98
2	LLap	0.87	1.86	0.47	LLap	2.70	4.38	0.62	LLap	0.77	-0.21	1.05
3	RLap	-1.12	1.86	0.60	RLap	3.17	4.38	0.72	RLap	0.94	-0.28	1.05
4	LLap	0.98	1.86	0.53	LLap	2.75	4.38	0.63	LLap	0.82	-0.46	0.98

UNBRACE LENGTHS:

Bay Id	Major	Minor LSup	LLap	MidS	RLap	RSup	Cb LSup	LLap	MidS	RLap	RSup	Mom1/Mom2 LSup	LLap	MidS	RLap	RSup
1	19.7	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2	21.0	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
3	21.0	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
4	19.7	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

WIND SUCTION :

GIRT ACTIONS:

Bay Id	Shear(k) Left Sup	Left Lap	Right Lap	Right Sup	Moment(f-k) Left Sup	Left Lap	Mid-Span Mom	Mid-Span Loc	Right Lap	Right Sup
1	-0.80		1.07	1.19	0.00		2.92	7.64	-2.83	-4.24
2	-1.08	-0.95	0.88	1.00	-4.24	-2.98	1.61	10.88	-2.28	-3.45
3	-1.03	-0.90	1.23	0.55	-3.45	-2.24	1.88	10.39	-3.49	-4.44
4	-1.20	-1.08		0.79	-4.44	-3.02	2.85	12.13		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				Mom+Shr		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
1	RLap	1.07	1.86	0.57	MidS	2.92	4.38	0.67	RLap	0.86	0.54	0.98
2	LLap	-0.95	1.86	0.51	LLap	-2.98	4.38	0.68	LLap	0.85	0.23	1.05
3	RLap	1.23	1.86	0.66	RLap	-3.49	4.38	0.80	RLap	1.03	0.31	1.05
4	LLap	-1.08	1.86	0.58	LLap	-3.02	4.38	0.69	LLap	0.90	0.51	0.98

UNBRACE LENGTHS:

Bay		Minor					Cb					Mom1/Mom2				
Id	Major	LSup	LLap	MidS	RLap	RSup	LSup	LLap	MidS	RLap	RSup	LSup	LLap	MidS	RLap	RSup
1	19.7	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2	21.0	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
3	21.0	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
4	19.7	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

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S12S0554A Girt Design 4 (Locate= 12.417) 9/12/12 3:58pm

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GIRT LAYOUT:

Bay Id	Part	Locate	Design Length	Lap(ft) Left	Lap(ft) Right	Load Width	No. Brace	Weight	Available Reduction Factor Out	Available Reduction Factor In
1	08Z054	12.4167	19.67		1.25	4.92	0	55.4	0.70	0.70
2	08Z054	12.4167	21.00	1.25	1.25	4.92	0	62.3	0.70	0.70
3	08Z054	12.4167	21.00	1.25	1.25	4.92	0	62.3	0.70	0.70
4	08Z054	12.4167	19.67	1.25		4.92	0	55.4	0.70	0.70
								235.4		

WIND PRESSURE :

GIRT ACTIONS:

Bay	Shear(k)				Moment(f-k)					
Id	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	Mid-Span Mom	Mid-Span Loc	Right Lap	Right Sup
1	0.78		-1.10	-1.23	0.00		-2.98	7.64	2.96	4.42
2	1.12	0.99	-0.90	-1.03	4.42	3.10	-1.73	10.96	2.23	3.43
3	1.03	0.90	-0.99	-1.12	3.43	2.23	-1.73	10.04	3.10	4.42
4	1.23	1.10		-0.78	4.42	2.96	-2.98	12.03		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				Mom+Shr		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
1	RLap	-1.10	1.86	0.59	MidS	-2.98	4.38	0.68	RLap	0.90	-0.55	0.98
2	LLap	0.99	1.86	0.53	LLap	3.10	4.38	0.71	LLap	0.88	-0.25	1.05
3	RLap	-0.99	1.86	0.53	RLap	3.10	4.38	0.71	RLap	0.88	-0.25	1.05
4	LLap	1.10	1.86	0.59	MidS	-2.98	4.38	0.68	LLap	0.90	-0.55	0.98

UNBRACE LENGTHS:

Bay		Minor					Cb					Mom1/Mom2				
Id	Major	LSup	LLap	MidS	RLap	RSup	LSup	LLap	MidS	RLap	RSup	LSup	LLap	MidS	RLap	RSup
1	19.7	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2	21.0	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
3	21.0	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

4	19.7	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

WIND SUCTION :

GIRT ACTIONS:

Bay Id	Shear(k) Left Sup	Shear(k) Left Lap	Shear(k) Right Lap	Shear(k) Right Sup	Moment(f-k) Left Sup	Moment(f-k) Left Lap	Moment(f-k) Mid-Span Mom	Moment(f-k) Mid-Span Loc	Moment(f-k) Right Lap	Moment(f-k) Right Sup
1	-0.91		1.21	1.35	0.00		3.30	7.62	-3.26	-4.86
2	-1.23	-1.09	0.98	1.12	-4.86	-3.41	1.89	10.97	-2.43	-3.75
3	-1.12	-0.98	1.09	1.23	-3.75	-2.43	1.89	10.03	-3.41	-4.86
4	-1.35	-1.21		0.91	-4.86	-3.26	3.30	12.05		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Shear(k) Calc	Shear(k) Limit	Shear(k) UC	Moment(f-k) Loc	Moment(f-k) Calc	Moment(f-k) Limit	Moment(f-k) UC	-Mom+Shr- Loc	-Mom+Shr- UC	Deflect(in) Calc	Deflect(in) Limit
1	RLap	1.21	1.86	0.65	MidS	3.30	4.38	0.75	RLap	0.99	0.61	0.98
2	LLap	-1.09	1.86	0.58	LLap	-3.41	4.38	0.78	LLap	0.97	0.28	1.05
3	RLap	1.09	1.86	0.58	RLap	-3.41	4.38	0.78	RLap	0.97	0.28	1.05
4	LLap	-1.21	1.86	0.65	MidS	3.30	4.38	0.75	LLap	0.99	0.61	0.98

UNBRACE LENGTHS:

Bay Id	Major	Minor LSup	Minor LLap	Minor MidS	Minor RLap	Minor RSup	Cb LSup	Cb LLap	Cb MidS	Cb RLap	Cb RSup	Mom1/Mom2 LSup	Mom1/Mom2 LLap	Mom1/Mom2 MidS	Mom1/Mom2 RLap	Mom1/Mom2 RSup
1	19.7	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2	21.0	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
3	21.0	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
4	19.7	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

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S12S0554A Girt Design 5 (Locate= 17.333) 9/12/12 3:58pm

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GIRT LAYOUT:

Bay Id	Part	Locate	Design Length	Lap(ft) Left	Lap(ft) Right	Load Width	No. Brace	Weight	Available Reduction Factor Out	Available Reduction Factor In
1	08Z054	17.3333	19.67		1.25	4.33	0	55.4	0.70	0.70
2	08Z054	17.3333	21.00	1.25	1.25	4.33	0	62.3	0.70	0.70
3	08Z054	17.3333	21.00	1.25	1.25	4.33	0	62.3	0.70	0.70
4	08Z054	17.3333	19.67	1.25		4.33	0	55.4	0.70	0.70
								235.4		

WIND PRESSURE :

GIRT ACTIONS:

Bay Id	Shear(k) Left Sup	Shear(k) Left Lap	Shear(k) Right Lap	Shear(k) Right Sup	Moment(f-k) Left Sup	Moment(f-k) Left Lap	Moment(f-k) Mid-Span Mom	Moment(f-k) Mid-Span Loc	Moment(f-k) Right Lap	Moment(f-k) Right Sup
1	0.69		-0.97	-1.08	0.00		-2.63	7.64	2.61	3.89
2	0.99	0.88	-0.79	-0.90	3.89	2.73	-1.52	10.96	1.96	3.02
3	0.90	0.79	-0.88	-0.99	3.02	1.96	-1.52	10.04	2.73	3.89
4	1.08	0.97		-0.69	3.89	2.61	-2.63	12.03		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
1	RLap	-0.97	1.86	0.52	MidS	-2.63	4.38	0.60	RLap	0.79	-0.48	0.98
2	LLap	0.88	1.86	0.47	LLap	2.73	4.38	0.62	LLap	0.78	-0.22	1.05
3	RLap	-0.88	1.86	0.47	RLap	2.73	4.38	0.62	RLap	0.78	-0.22	1.05
4	LLap	0.97	1.86	0.52	MidS	-2.63	4.38	0.60	LLap	0.79	-0.48	0.98

UNBRACE LENGTHS:

Bay		Minor					Cb					Mom1/Mom2				
Id	Major	LSup	LLap	MidS	RLap	RSup	LSup	LLap	MidS	RLap	RSup	LSup	LLap	MidS	RLap	RSup
1	19.7	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2	21.0	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
3	21.0	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
4	19.7	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

WIND SUCTION :

GIRT ACTIONS:

Bay	Shear(k)				Moment(f-k)					
Id	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	Mid-Span Mom	Mid-Span Loc	Right Lap	Right Sup
1	-0.80		1.07	1.19	0.00		2.91	7.62	-2.87	-4.28
2	-1.08	-0.96	0.87	0.99	-4.28	-3.00	1.66	10.97	-2.14	-3.30
3	-0.99	-0.87	0.96	1.08	-3.31	-2.14	1.66	10.03	-3.00	-4.28
4	-1.19	-1.07		0.80	-4.28	-2.87	2.91	12.05		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
1	RLap	1.07	1.86	0.57	MidS	2.91	4.38	0.66	RLap	0.87	0.54	0.98
2	LLap	-0.96	1.86	0.52	LLap	-3.00	4.38	0.69	LLap	0.86	0.24	1.05
3	RLap	0.96	1.86	0.52	RLap	-3.00	4.38	0.69	RLap	0.86	0.24	1.05
4	LLap	-1.07	1.86	0.57	MidS	2.91	4.38	0.66	LLap	0.87	0.54	0.98

UNBRACE LENGTHS:

Bay		Minor					Cb					Mom1/Mom2				
Id	Major	LSup	LLap	MidS	RLap	RSup	LSup	LLap	MidS	RLap	RSup	LSup	LLap	MidS	RLap	RSup
1	19.7	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2	21.0	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
3	21.0	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
4	19.7	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

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S12S0554A Girt Design 6 (Locate= 21.083) 9/12/12 3:58pm

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GIRT LAYOUT:

Bay Id	Part	Locate	Design Length	--Lap(ft)-- Left	Right	Load Width	No. Brace	Weight	Available Reduction Factor Out	In
1	08Z054	21.0833	19.67		1.25	3.75	0	55.4	0.70	0.70
2	08Z054	21.0833	21.00	1.25	1.25	3.75	0	62.3	0.70	0.70
3	08Z054	21.0833	21.00	1.25	1.25	3.75	0	62.3	0.70	0.70
4	08Z054	21.0833	19.67	1.25		3.75	0	55.4	0.70	0.70

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                                                                  ------
                                                                   235.4
```

WIND PRESSURE :

GIRT ACTIONS:

Bay Id	Shear(k) Left Sup	Left Lap	Right Lap	Right Sup	Moment(f-k) Left Sup	Left Lap	Mid-Span Mom	Mid-Span Loc	Right Lap	Right Sup
1	0.60		-0.84	-0.94	0.00		-2.27	7.64	2.26	3.37
2	0.85	0.76	-0.69	-0.78	3.37	2.36	-1.32	10.96	1.70	2.62
3	0.78	0.69	-0.76	-0.85	2.62	1.70	-1.32	10.04	2.36	3.37
4	0.94	0.84		-0.60	3.37	2.26	-2.27	12.03		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Calc	Limit	UC	Moment(f-k) Loc	Calc	Limit	UC	-Mom+Shr- Loc	UC	Deflect(in) Calc	Limit
1	RLap	-0.84	1.86	0.45	MidS	-2.27	4.38	0.52	RLap	0.68	-0.42	0.98
2	LLap	0.76	1.86	0.41	LLap	2.36	4.38	0.54	LLap	0.67	-0.19	1.05
3	RLap	-0.76	1.86	0.41	RLap	2.36	4.38	0.54	RLap	0.67	-0.19	1.05
4	LLap	0.84	1.86	0.45	MidS	-2.27	4.38	0.52	LLap	0.68	-0.42	0.98

UNBRACE LENGTHS:

Bay Id	Major	Minor LSup	LLap	MidS	RLap	RSup	Cb LSup	LLap	MidS	RLap	RSup	Mom1/Mom2 LSup	LLap	MidS	RLap	RSup
1	19.7	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2	21.0	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
3	21.0	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
4	19.7	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

WIND SUCTION :

GIRT ACTIONS:

Bay Id	Shear(k) Left Sup	Left Lap	Right Lap	Right Sup	Moment(f-k) Left Sup	Left Lap	Mid-Span Mom	Mid-Span Loc	Right Lap	Right Sup
1	-0.69		0.92	1.03	0.00		2.52	7.62	-2.48	-3.71
2	-0.94	-0.83	0.75	0.86	-3.71	-2.60	1.44	10.97	-1.86	-2.86
3	-0.86	-0.75	0.83	0.94	-2.86	-1.86	1.44	10.03	-2.60	-3.71
4	-1.03	-0.92		0.69	-3.71	-2.48	2.52	12.05		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Calc	Limit	UC	Moment(f-k) Loc	Calc	Limit	UC	-Mom+Shr- Loc	UC	Deflect(in) Calc	Limit
1	RLap	0.92	1.86	0.50	MidS	2.52	4.38	0.57	RLap	0.75	0.46	0.98
2	LLap	-0.83	1.86	0.45	LLap	-2.60	4.38	0.59	LLap	0.74	0.21	1.05
3	RLap	0.83	1.86	0.45	RLap	-2.60	4.38	0.59	RLap	0.74	0.21	1.05
4	LLap	-0.92	1.86	0.50	MidS	2.52	4.38	0.57	LLap	0.75	0.46	0.98

UNBRACE LENGTHS:

Bay Id	Major	Minor LSup	LLap	MidS	RLap	RSup	Cb LSup	LLap	MidS	RLap	RSup	Mom1/Mom2 LSup	LLap	MidS	RLap	RSup
1	19.7	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2	21.0	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
3	21.0	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

4	19.7	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

S12S0554A Sidewall Jamb/Header Summary 9/12/12 3:58pm

JAMB/HEADER LAYOUT:

Open Id	Bay Id	Locate	Part	Length	Weight
5	3	Jamb-L	F08C060	7.50	22.1
		Jamb-R	F08C060	7.50	22.1

JAMB/HEADER UNBRACED LENGTHS:

Open Id	Locate	Major	Minor Outside	Minor Inside	Available Reduction Outside	Factor Inside
5	Jamb-L	7.50	3.75	3.75	0.00	0.00
	Jamb-R	3.75	3.75	3.75	0.00	0.00

JAMB/GIRT LAYOUT:

Open Id	Locate	Bot Girt (k)	Top Girt (k)	Interior_Girt_Locations(ft)
5	Jamb-L	Base	7.50	3.750
	Jamb-R	Base	7.50	

JAMB/GIRT LOADING:

Open Id	Locate	Load Id	Support Reaction(k) Bot	Top	Jamb Load (k/ft)	Interior_Girt_Loads(k)
5	Jamb-L	WP	0.38	0.38	-0.035	-0.50
		WS	-0.42	-0.42	0.038	0.55
	Jamb-R	WP	0.07	0.07	-0.035	
		WS	-0.07	-0.07	0.038	

STRENGTH/DEFLECTION:

Open Id	Locate	Ld Id	Shear(k) Calc	Limit	UC	Moment(f-k) Calc	Limit	UC	Mom+ Shear	Deflect(in) Calc	Limit
5	Jamb-L	WP	0.38	2.56	0.15	-1.18	4.80	0.25	0.26	-0.03	0.38
		WS	-0.42	2.56	0.16	1.29	4.80	0.27	0.29	0.03	0.38
	Jamb-R	WP	0.07	2.56	0.03	-0.06	4.80	0.01	0.00	0.00	0.19
		WS	-0.07	2.56	0.03	0.07	4.80	0.01	0.00	0.00	0.19

S12S0554A Wall Panel Summary (Bay= 4) 9/12/12 3:58pm

PANEL DATA:

Bay	Part	Type	Gage	Yield	Rotation Stiffness	Panel Height
4	AW6-50	AW	26.00	50.0	0.44	24.83

MOMENTS & DEFLECTION:

Span Id	Span (ft)	LD Id	Moment(ft-lb/ft) Support Calc	Limit	UC	Midspan Calc	Limit	UC	Deflect(in) Calc	Limit	UC
1	3.75	WP	35.6	90.8	0.39	-29.5	105.3	0.28	-0.05	0.19	0.26

		WS	-47.4	105.3	0.45	39.3	90.8	0.43	0.07	0.19	0.35
2	3.75	WP	39.9	90.8	0.44	-7.8	105.3	0.07	0.00	0.19	0.00
		WS	-53.2	105.3	0.51	10.5	90.8	0.12	0.00	0.19	0.00
3	4.92	WP	58.3	90.8	0.64	-29.4	105.3	0.28	-0.07	0.25	0.28
		WS	-77.8	105.3	0.74	39.3	90.8	0.43	0.09	0.25	0.37
4	4.92	WP	58.3	90.8	0.64	-29.4	105.3	0.28	-0.07	0.25	0.28
		WS	-77.8	105.3	0.74	39.3	90.8	0.43	0.09	0.25	0.37
5	3.75	WP	39.9	90.8	0.44	-7.8	105.3	0.07	0.00	0.19	0.00
		WS	-53.2	105.3	0.51	10.5	90.8	0.12	0.00	0.19	0.00
6	3.75	WP	35.6	90.8	0.39	-29.5	105.3	0.28	-0.05	0.19	0.26
		WS	-47.5	105.3	0.45	39.3	90.8	0.43	0.07	0.19	0.35

```
==============================================================================
 S12S0554A            Weight Summary                          9/12/12  3:58pm
==============================================================================

         Girts          =  1165.81
         Frame Openings =    44.25
                          --------
                           1210.06


==============================================================================
 S12S0554A            Warning Summary                         9/12/12  3:58pm
==============================================================================

                   .. No Warnings
```

```
==============================================================================
S12S0554A            Sidewall Design Code                        9/12/12  3:58pm
==============================================================================

STRUCTURAL CODE:
  Design Basis       : WS - Working Stress
  Hot  Rolled Steel : AISC05
  Cold Formed Steel : NAUS01

BUILDING CODE:
  Wind Code          : NYBC 10  (IBC  06)
  Seismic Zone       : B

MODULUS OF ELASTICITY
  Hot  Rolled Steel :  29000 (ksi  )
  Cold Formed Steel :  29500 (ksi  )


==============================================================================
S12S0554A            Bypass Girt Design Summary                  9/12/12  3:58pm
==============================================================================

GIRT LAYOUT:
        Des Bay            Bay_Offset Design ----Lap----          ----Max_Load---
 Locate  Id  Id Part      Start   End Length  Left Right Weight  Id   UC Report  Rot
 ------ --- --- -------- ----- ----- ------ ----- ----- ------  -- ---- ------- ---
   3.75   1   1 08Z054    1.33 21.00  19.67  0.00  1.25   55.4  WS 0.75 Mom+Shr  D
              2 08Z054    0.00 21.00  21.00  1.25  1.25   62.3  WS 0.74 Mom+Shr  D
              3 08Z054    0.00 21.00  21.00  1.25  1.25   62.3  WS 0.74 Mom+Shr  D
              4 08Z054    0.00 19.67  19.67  1.25  0.00   55.4  WS 0.75 Mom+Shr  D
 ------ --- --- -------- ----- ----- ------ ----- ----- ------  -- ---- ------- ---
   7.50   2   1 08Z054    1.33 21.00  19.67  0.00  1.25   55.4  WS 0.87 Mom+Shr  D
              2 08Z054    0.00 21.00  21.00  1.25  1.25   62.3  WS 0.86 Mom+Shr  D
              3 08Z054    0.00 21.00  21.00  1.25  1.25   62.3  WS 0.86 Mom+Shr  D
              4 08Z054    0.00 19.67  19.67  1.25  0.00   55.4  WS 0.87 Mom+Shr  D
 ------ --- --- -------- ----- ----- ------ ----- ----- ------  -- ---- ------- ---
  12.42   3   1 08Z054    1.33 21.00  19.67  0.00  1.25   55.4  WS 0.99 Mom+Shr  D
              2 08Z054    0.00 21.00  21.00  1.25  1.25   62.3  WS 0.97 Mom+Shr  D
              3 08Z054    0.00 21.00  21.00  1.25  1.25   62.3  WS 0.97 Mom+Shr  D
              4 08Z054    0.00 19.67  19.67  1.25  0.00   55.4  WS 0.99 Mom+Shr  D
 ------ --- --- -------- ----- ----- ------ ----- ----- ------  -- ---- ------- ---
  17.33   4   1 08Z054    1.33 21.00  19.67  0.00  1.25   55.4  WS 0.87 Mom+Shr  D
              2 08Z054    0.00 21.00  21.00  1.25  1.25   62.3  WS 0.86 Mom+Shr  D
              3 08Z054    0.00 21.00  21.00  1.25  1.25   62.3  WS 0.86 Mom+Shr  D
              4 08Z054    0.00 19.67  19.67  1.25  0.00   55.4  WS 0.87 Mom+Shr  D
 ------ --- --- -------- ----- ----- ------ ----- ----- ------  -- ---- ------- ---
  21.08   5   1 08Z054    1.33 21.00  19.67  0.00  1.25   55.4  WS 0.75 Mom+Shr  D
              2 08Z054    0.00 21.00  21.00  1.25  1.25   62.3  WS 0.74 Mom+Shr  D
              3 08Z054    0.00 21.00  21.00  1.25  1.25   62.3  WS 0.74 Mom+Shr  D
              4 08Z054    0.00 19.67  19.67  1.25  0.00   55.4  WS 0.75 Mom+Shr  D


GIRT INSIDE FLANGE BRACE:
 No._Brace/Bay
   1   2   3   4
 --- --- --- ---
   0   0   0   0

==============================================================================
S12S0554A            Girt Design  1 (Locate=  3.750)             9/12/12  3:58pm
==============================================================================

GIRT LAYOUT:
                                                                  Available
                                                                  Reduction
 Bay                        Design  --Lap(ft)--   Load   No.        Factor
  Id  Part        Locate    Length  Left  Right  Width  Brace  Weight  Out   In
 ---  --------  -------    ------  ----  -----  -----  -----  ------  ----  ----
```

1	08Z054	3.7500	19.67		1.25	3.75	0	55.4	0.70	0.70
2	08Z054	3.7500	21.00	1.25	1.25	3.75	0	62.3	0.70	0.70
3	08Z054	3.7500	21.00	1.25	1.25	3.75	0	62.3	0.70	0.70
4	08Z054	3.7500	19.67	1.25		3.75	0	55.4	0.70	0.70

								235.4		

WIND PRESSURE :

GIRT ACTIONS:

Bay Id	Shear(k) Left Sup	Shear(k) Left Lap	Shear(k) Right Lap	Shear(k) Right Sup	Moment(f-k) Left Sup	Moment(f-k) Left Lap	Mid-Span Mom	Mid-Span Loc	Moment(f-k) Right Lap	Moment(f-k) Right Sup
1	0.60		-0.84	-0.94	0.00		-2.27	7.64	2.26	3.37
2	0.85	0.76	-0.69	-0.78	3.37	2.36	-1.32	10.96	1.70	2.62
3	0.78	0.69	-0.76	-0.85	2.62	1.70	-1.32	10.04	2.36	3.37
4	0.94	0.84		-0.60	3.37	2.26	-2.27	12.03		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Shear(k) Calc	Shear(k) Limit	Shear(k) UC	Moment(f-k) Loc	Moment(f-k) Calc	Moment(f-k) Limit	Moment(f-k) UC	-Mom+Shr- Loc	-Mom+Shr- UC	Deflect(in) Calc	Deflect(in) Limit
1	RLap	-0.84	1.86	0.45	MidS	-2.27	4.38	0.52	RLap	0.68	-0.42	0.98
2	LLap	0.76	1.86	0.41	LLap	2.36	4.38	0.54	LLap	0.67	-0.19	1.05
3	RLap	-0.76	1.86	0.41	RLap	2.36	4.38	0.54	RLap	0.67	-0.19	1.05
4	LLap	0.84	1.86	0.45	MidS	-2.27	4.38	0.52	LLap	0.68	-0.42	0.98

UNBRACE LENGTHS:

Bay Id	Major	Minor LSup	Minor LLap	Minor MidS	Minor RLap	Minor RSup	Cb LSup	Cb LLap	Cb MidS	Cb RLap	Cb RSup	Mom1/Mom2 LSup	Mom1/Mom2 LLap	Mom1/Mom2 MidS	Mom1/Mom2 RLap	Mom1/Mom2 RSup
1	19.7	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2	21.0	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
3	21.0	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
4	19.7	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

WIND SUCTION :

GIRT ACTIONS:

Bay Id	Shear(k) Left Sup	Shear(k) Left Lap	Shear(k) Right Lap	Shear(k) Right Sup	Moment(f-k) Left Sup	Moment(f-k) Left Lap	Mid-Span Mom	Mid-Span Loc	Moment(f-k) Right Lap	Moment(f-k) Right Sup
1	-0.69		0.92	1.03	0.00		2.52	7.62	-2.48	-3.71
2	-0.94	-0.83	0.75	0.86	-3.71	-2.60	1.44	10.97	-1.86	-2.86
3	-0.86	-0.75	0.83	0.94	-2.86	-1.86	1.44	10.03	-2.60	-3.71
4	-1.03	-0.92		0.69	-3.71	-2.48	2.52	12.05		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Shear(k) Calc	Shear(k) Limit	Shear(k) UC	Moment(f-k) Loc	Moment(f-k) Calc	Moment(f-k) Limit	Moment(f-k) UC	-Mom+Shr- Loc	-Mom+Shr- UC	Deflect(in) Calc	Deflect(in) Limit
1	RLap	0.92	1.86	0.50	MidS	2.52	4.38	0.57	RLap	0.75	0.46	0.98
2	LLap	-0.83	1.86	0.45	LLap	-2.60	4.38	0.59	LLap	0.74	0.21	1.05
3	RLap	0.83	1.86	0.45	RLap	-2.60	4.38	0.59	RLap	0.74	0.21	1.05
4	LLap	-0.92	1.86	0.50	MidS	2.52	4.38	0.57	LLap	0.75	0.46	0.98

UNBRACE LENGTHS:

Bay Id	Major	Minor LSup	Minor LLap	Minor MidS	Minor RLap	Minor RSup	Cb LSup	Cb LLap	Cb MidS	Cb RLap	Cb RSup	Mom1/Mom2 LSup	Mom1/Mom2 LLap	Mom1/Mom2 MidS	Mom1/Mom2 RLap	Mom1/Mom2 RSup

---	-----	----	----	----	----	----	----	----	----	----	----	----	----	----------	----
1	19.7	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2	21.0	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
3	21.0	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
4	19.7	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

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S12S0554A Girt Design 2 (Locate= 7.500) 9/12/12 3:58pm

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GIRT LAYOUT:

Bay Id	Part	Locate	Design Length	--Lap(ft)-- Left	Right	Load Width	No. Brace	Weight	Available Reduction Factor Out	In
1	08Z054	7.5000	19.67		1.25	4.33	0	55.4	0.70	0.70
2	08Z054	7.5000	21.00	1.25	1.25	4.33	0	62.3	0.70	0.70
3	08Z054	7.5000	21.00	1.25	1.25	4.33	0	62.3	0.70	0.70
4	08Z054	7.5000	19.67	1.25		4.33	0	55.4	0.70	0.70

								235.4		

WIND PRESSURE :

GIRT ACTIONS:

Bay Id	Shear(k) Left Sup	Left Lap	Right Lap	Right Sup	Moment(f-k) Left Sup	Left Lap	Mid-Span Mom	Loc	Right Lap	Right Sup
1	0.69		-0.97	-1.08	0.00		-2.63	7.64	2.61	3.89
2	0.99	0.88	-0.79	-0.90	3.89	2.73	-1.52	10.96	1.96	3.02
3	0.90	0.79	-0.88	-0.99	3.02	1.96	-1.52	10.04	2.73	3.89
4	1.08	0.97		-0.69	3.89	2.61	-2.63	12.03		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Calc	Limit	UC	Moment(f-k) Loc	Calc	Limit	UC	-Mom+Shr- Loc	UC	Deflect(in) Calc	Limit
1	RLap	-0.97	1.86	0.52	MidS	-2.63	4.38	0.60	RLap	0.79	-0.48	0.98
2	LLap	0.88	1.86	0.47	LLap	2.73	4.38	0.62	LLap	0.78	-0.22	1.05
3	RLap	-0.88	1.86	0.47	RLap	2.73	4.38	0.62	RLap	0.78	-0.22	1.05
4	LLap	0.97	1.86	0.52	MidS	-2.63	4.38	0.60	LLap	0.79	-0.48	0.98

UNBRACE LENGTHS:

Bay Id	Major	Minor LSup	LLap	MidS	RLap	RSup	Cb LSup	LLap	MidS	RLap	RSup	Mom1/Mom2 LSup	LLap	MidS	RLap	RSup
1	19.7	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2	21.0	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
3	21.0	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
4	19.7	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

WIND SUCTION :

GIRT ACTIONS:

Bay Id	Shear(k) Left Sup	Left Lap	Right Lap	Right Sup	Moment(f-k) Left Sup	Left Lap	Mid-Span Mom	Loc	Right Lap	Right Sup
1	-0.80		1.07	1.19	0.00		2.91	7.62	-2.87	-4.28

2	-1.08	-0.96	0.87	0.99	-4.28	-3.00	1.66	10.97	-2.14	-3.30
3	-0.99	-0.87	0.96	1.08	-3.31	-2.14	1.66	10.03	-3.00	-4.28
4	-1.19	-1.07		0.80	-4.28	-2.87	2.91	12.05		0.00

STRENGTH/DEFLECTION:

Bay	-------Shear(k)------				-----Moment(f-k)-----				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
1	RLap	1.07	1.86	0.57	MidS	2.91	4.38	0.66	RLap	0.87	0.54	0.98
2	LLap	-0.96	1.86	0.52	LLap	-3.00	4.38	0.69	LLap	0.86	0.24	1.05
3	RLap	0.96	1.86	0.52	RLap	-3.00	4.38	0.69	RLap	0.86	0.24	1.05
4	LLap	-1.07	1.86	0.57	MidS	2.91	4.38	0.66	LLap	0.87	0.54	0.98

UNBRACE LENGTHS:

Bay		---------Minor---------					----------Cb----------					--------Mom1/Mom2-------				
Id	Major	LSup	LLap	MidS	RLap	RSup	LSup	LLap	MidS	RLap	RSup	LSup	LLap	MidS	RLap	RSup
1	19.7	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2	21.0	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
3	21.0	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
4	19.7	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

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S12S0554A Girt Design 3 (Locate= 12.417) 9/12/12 3:58pm

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GIRT LAYOUT:

Bay Id	Part	Locate	Design Length	--Lap(ft)-- Left	Right	Load Width	No. Brace	Weight	Available Reduction Factor Out	In
1	08Z054	12.4167	19.67		1.25	4.92	0	55.4	0.70	0.70
2	08Z054	12.4167	21.00	1.25	1.25	4.92	0	62.3	0.70	0.70
3	08Z054	12.4167	21.00	1.25	1.25	4.92	0	62.3	0.70	0.70
4	08Z054	12.4167	19.67	1.25		4.92	0	55.4	0.70	0.70

								235.4		

WIND PRESSURE :

GIRT ACTIONS:

Bay	---------Shear(k)--------				--------------Moment(f-k)--------------					
Id	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	Mid-Span Mom	Mid-Span Loc	Right Lap	Right Sup
1	0.78		-1.10	-1.23	0.00		-2.98	7.64	2.96	4.42
2	1.12	0.99	-0.90	-1.03	4.42	3.10	-1.73	10.96	2.23	3.43
3	1.03	0.90	-0.99	-1.12	3.43	2.23	-1.73	10.04	3.10	4.42
4	1.23	1.10		-0.78	4.42	2.96	-2.98	12.03		0.00

STRENGTH/DEFLECTION:

Bay	-------Shear(k)------				-----Moment(f-k)-----				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
1	RLap	-1.10	1.86	0.59	MidS	-2.98	4.38	0.68	RLap	0.90	-0.55	0.98
2	LLap	0.99	1.86	0.53	LLap	3.10	4.38	0.71	LLap	0.88	-0.25	1.05
3	RLap	-0.99	1.86	0.53	RLap	3.10	4.38	0.71	RLap	0.88	-0.25	1.05
4	LLap	1.10	1.86	0.59	MidS	-2.98	4.38	0.68	LLap	0.90	-0.55	0.98

UNBRACE LENGTHS:

Bay		---------Minor---------					----------Cb----------					--------Mom1/Mom2-------				
Id	Major	LSup	LLap	MidS	RLap	RSup	LSup	LLap	MidS	RLap	RSup	LSup	LLap	MidS	RLap	RSup

1	19.7	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2	21.0	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
3	21.0	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
4	19.7	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

WIND SUCTION :

GIRT ACTIONS:

Bay Id	Shear(k) Left Sup	Left Lap	Right Lap	Right Sup	Moment(f-k) Left Sup	Left Lap	Mid-Span Mom	Mid-Span Loc	Right Lap	Right Sup
1	-0.91		1.21	1.35	0.00		3.30	7.62	-3.26	-4.86
2	-1.23	-1.09	0.98	1.12	-4.86	-3.41	1.89	10.97	-2.43	-3.75
3	-1.12	-0.98	1.09	1.23	-3.75	-2.43	1.89	10.03	-3.41	-4.86
4	-1.35	-1.21		0.91	-4.86	-3.26	3.30	12.05		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Calc	Limit	UC	Moment(f-k) Loc	Calc	Limit	UC	-Mom+Shr- Loc	UC	Deflect(in) Calc	Limit
1	RLap	1.21	1.86	0.65	MidS	3.30	4.38	0.75	RLap	0.99	0.61	0.98
2	LLap	-1.09	1.86	0.58	LLap	-3.41	4.38	0.78	LLap	0.97	0.28	1.05
3	RLap	1.09	1.86	0.58	RLap	-3.41	4.38	0.78	RLap	0.97	0.28	1.05
4	LLap	-1.21	1.86	0.65	MidS	3.30	4.38	0.75	LLap	0.99	0.61	0.98

UNBRACE LENGTHS:

Bay Id	Major	Minor LSup	LLap	MidS	RLap	RSup	Cb LSup	LLap	MidS	RLap	RSup	Mom1/Mom2 LSup	LLap	MidS	RLap	RSup
1	19.7	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2	21.0	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
3	21.0	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
4	19.7	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

S12S0554A Girt Design 4 (Locate= 17.333) 9/12/12 3:58pm

GIRT LAYOUT:

Bay Id	Part	Locate	Design Length	Lap(ft) Left	Lap(ft) Right	Load Width	No. Brace	Weight	Available Reduction Factor Out	Available Reduction Factor In
1	08Z054	17.3333	19.67		1.25	4.33	0	55.4	0.70	0.70
2	08Z054	17.3333	21.00	1.25	1.25	4.33	0	62.3	0.70	0.70
3	08Z054	17.3333	21.00	1.25	1.25	4.33	0	62.3	0.70	0.70
4	08Z054	17.3333	19.67	1.25		4.33	0	55.4	0.70	0.70
								235.4		

WIND PRESSURE :

GIRT ACTIONS:

Bay Id	Shear(k) Left Sup	Left Lap	Right Lap	Right Sup	Moment(f-k) Left Sup	Left Lap	Mid-Span Mom	Mid-Span Loc	Right Lap	Right Sup
1	0.69		-0.97	-1.08	0.00		-2.63	7.64	2.61	3.89

2	0.99	0.88	-0.79	-0.90	3.89	2.73	-1.52	10.96	1.96	3.02
3	0.90	0.79	-0.88	-0.99	3.02	1.96	-1.52	10.04	2.73	3.89
4	1.08	0.97		-0.69	3.89	2.61	-2.63	12.03		0.00

STRENGTH/DEFLECTION:

Bay	-------Shear(k)------				-----Moment(f-k)-----				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
1	RLap	-0.97	1.86	0.52	MidS	-2.63	4.38	0.60	RLap	0.79	-0.48	0.98
2	LLap	0.88	1.86	0.47	LLap	2.73	4.38	0.62	LLap	0.78	-0.22	1.05
3	RLap	-0.88	1.86	0.47	RLap	2.73	4.38	0.62	RLap	0.78	-0.22	1.05
4	LLap	0.97	1.86	0.52	MidS	-2.63	4.38	0.60	LLap	0.79	-0.48	0.98

UNBRACE LENGTHS:

Bay		---------Minor----------					----------Cb----------					--------Mom1/Mom2-------				
Id	Major	LSup	LLap	MidS	RLap	RSup	LSup	LLap	MidS	RLap	RSup	LSup	LLap	MidS	RLap	RSup
1	19.7	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2	21.0	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
3	21.0	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
4	19.7	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

WIND SUCTION :

GIRT ACTIONS:

Bay	---------Shear(k)--------				--------------Moment(f-k)--------------					
Id	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	Mid-Span Mom	Mid-Span Loc	Right Lap	Right Sup
1	-0.80		1.07	1.19	0.00		2.91	7.62	-2.87	-4.28
2	-1.08	-0.96	0.87	0.99	-4.28	-3.00	1.66	10.97	-2.14	-3.30
3	-0.99	-0.87	0.96	1.08	-3.31	-2.14	1.66	10.03	-3.00	-4.28
4	-1.19	-1.07		0.80	-4.28	-2.87	2.91	12.05		0.00

STRENGTH/DEFLECTION:

Bay	-------Shear(k)------				-----Moment(f-k)-----				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
1	RLap	1.07	1.86	0.57	MidS	2.91	4.38	0.66	RLap	0.87	0.54	0.98
2	LLap	-0.96	1.86	0.52	LLap	-3.00	4.38	0.69	LLap	0.86	0.24	1.05
3	RLap	0.96	1.86	0.52	RLap	-3.00	4.38	0.69	RLap	0.86	0.24	1.05
4	LLap	-1.07	1.86	0.57	MidS	2.91	4.38	0.66	LLap	0.87	0.54	0.98

UNBRACE LENGTHS:

Bay		---------Minor----------					----------Cb----------					--------Mom1/Mom2-------				
Id	Major	LSup	LLap	MidS	RLap	RSup	LSup	LLap	MidS	RLap	RSup	LSup	LLap	MidS	RLap	RSup
1	19.7	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2	21.0	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
3	21.0	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
4	19.7	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

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S12S0554A Girt Design 5 (Locate= 21.083) 9/12/12 3:58pm

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GIRT LAYOUT:

Bay Id	Part	Locate	Design Length	--Lap(ft)-- Left	Right	Load Width	No. Brace	Weight	Available Reduction Factor Out	In

1	08Z054	21.0833	19.67		1.25	3.75	0	55.4	0.70	0.70
2	08Z054	21.0833	21.00	1.25	1.25	3.75	0	62.3	0.70	0.70
3	08Z054	21.0833	21.00	1.25	1.25	3.75	0	62.3	0.70	0.70
4	08Z054	21.0833	19.67	1.25		3.75	0	55.4	0.70	0.70

								235.4		

WIND PRESSURE :

GIRT ACTIONS:

Bay	Shear(k)				Moment(f-k)					
	Left	Left	Right	Right	Left	Left	Mid-Span		Right	Right
Id	Sup	Lap	Lap	Sup	Sup	Lap	Mom	Loc	Lap	Sup
1	0.60		-0.84	-0.94	0.00		-2.27	7.64	2.26	3.37
2	0.85	0.76	-0.69	-0.78	3.37	2.36	-1.32	10.96	1.70	2.62
3	0.78	0.69	-0.76	-0.85	2.62	1.70	-1.32	10.04	2.36	3.37
4	0.94	0.84		-0.60	3.37	2.26	-2.27	12.03		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
1	RLap	-0.84	1.86	0.45	MidS	-2.27	4.38	0.52	RLap	0.68	-0.42	0.98
2	LLap	0.76	1.86	0.41	LLap	2.36	4.38	0.54	LLap	0.67	-0.19	1.05
3	RLap	-0.76	1.86	0.41	RLap	2.36	4.38	0.54	RLap	0.67	-0.19	1.05
4	LLap	0.84	1.86	0.45	MidS	-2.27	4.38	0.52	LLap	0.68	-0.42	0.98

UNBRACE LENGTHS:

Bay		Minor					Cb					Mom1/Mom2				
Id	Major	LSup	LLap	MidS	RLap	RSup	LSup	LLap	MidS	RLap	RSup	LSup	LLap	MidS	RLap	RSup
1	19.7	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2	21.0	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
3	21.0	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
4	19.7	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

WIND SUCTION :

GIRT ACTIONS:

Bay	Shear(k)				Moment(f-k)					
	Left	Left	Right	Right	Left	Left	Mid-Span		Right	Right
Id	Sup	Lap	Lap	Sup	Sup	Lap	Mom	Loc	Lap	Sup
1	-0.69		0.92	1.03	0.00		2.52	7.62	-2.48	-3.71
2	-0.94	-0.83	0.75	0.86	-3.71	-2.60	1.44	10.97	-1.86	-2.86
3	-0.86	-0.75	0.83	0.94	-2.86	-1.86	1.44	10.03	-2.60	-3.71
4	-1.03	-0.92		0.69	-3.71	-2.48	2.52	12.05		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
1	RLap	0.92	1.86	0.50	MidS	2.52	4.38	0.57	RLap	0.75	0.46	0.98
2	LLap	-0.83	1.86	0.45	LLap	-2.60	4.38	0.59	LLap	0.74	0.21	1.05
3	RLap	0.83	1.86	0.45	RLap	-2.60	4.38	0.59	RLap	0.74	0.21	1.05
4	LLap	-0.92	1.86	0.50	MidS	2.52	4.38	0.57	LLap	0.75	0.46	0.98

UNBRACE LENGTHS:

Bay		Minor					Cb					Mom1/Mom2				
Id	Major	LSup	LLap	MidS	RLap	RSup	LSup	LLap	MidS	RLap	RSup	LSup	LLap	MidS	RLap	RSup

1	19.7	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2	21.0	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
3	21.0	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
4	19.7	0.0	0.0	0.0	0.0	0.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

S12S0554A Wall Panel Summary (Bay= 4) 9/12/12 3:58pm

PANEL DATA:

Bay	Part	Type	Gage	Yield	Rotation Stiffness	Panel Height
4	AW6-50	AW	26.00	50.0	0.44	24.83

MOMENTS & DEFLECTION:

Span Id	Span (ft)	LD Id	Moment (ft-lb/ft) Support Calc	Support Limit	Support UC	Midspan Calc	Midspan Limit	Midspan UC	Deflect (in) Calc	Deflect Limit	Deflect UC
1	3.75	WP	35.6	90.8	0.39	-29.5	105.3	0.28	-0.05	0.19	0.26
		WS	-47.4	105.3	0.45	39.3	90.8	0.43	0.07	0.19	0.35
2	3.75	WP	39.9	90.8	0.44	-7.8	105.3	0.07	0.00	0.19	0.00
		WS	-53.2	105.3	0.51	10.5	90.8	0.12	0.00	0.19	0.00
3	4.92	WP	58.3	90.8	0.64	-29.4	105.3	0.28	-0.07	0.25	0.28
		WS	-77.8	105.3	0.74	39.3	90.8	0.43	0.09	0.25	0.37
4	4.92	WP	58.3	90.8	0.64	-29.4	105.3	0.28	-0.07	0.25	0.28
		WS	-77.8	105.3	0.74	39.3	90.8	0.43	0.09	0.25	0.37
5	3.75	WP	39.9	90.8	0.44	-7.8	105.3	0.07	0.00	0.19	0.00
		WS	-53.2	105.3	0.51	10.5	90.8	0.12	0.00	0.19	0.00
6	3.75	WP	35.6	90.8	0.39	-29.5	105.3	0.28	-0.05	0.19	0.26
		WS	-47.5	105.3	0.45	39.3	90.8	0.43	0.07	0.19	0.35

S12S0554A Weight Summary 9/12/12 3:58pm

Girts = 1177.04
Frame Openings = 0.00

1177.04

S12S0554A Warning Summary 9/12/12 3:58pm

.. No Warnings

S12S0554A Endwall Design Code 9/12/12 3:58pm

STRUCTURAL CODE:
Design Basis : WS - Working Stress
Hot Rolled Steel : AISC05
Cold Formed Steel : NAUS01

BUILDING CODE:
Wind Code : NYBC 10 (IBC 06)
Seismic Zone : B

MODULUS OF ELASTICITY
Hot Rolled Steel : 29000 (ksi)
Cold Formed Steel : 29500 (ksi)

S12S0554A Column & Rafter Design 9/12/12 3:58pm

MEMBER SIZES:

Member Id	Member Locate	Member Part	Web_Size Depth	Web_Size Thick	Flange_Size Width	Flange_Size Thick	Member Length	Member Weight
Col-1	0.7							
Col-2	18.0	W10x22	9.48	0.240	5.75	0.360	28.6	630.1
Col-3	35.3							
							Total=	630.10

DESIGN ACTIONS/STRENGTH:

Mem Id	Load Id	Axial(k) Calc	Axial(k) Limit	Shear(k) Calc	Shear(k) Limit	Moment(f-k) Calc	Moment(f-k) Limit
Col-2	1	0.63	120.26	0.00	48.96	0.00	63.69
Col-2	2	0.63	120.26	0.00	48.96	0.00	63.69
Col-2	3	0.63	120.26	-4.41	48.96	31.56	63.69
Col-2	4	0.63	120.26	-4.41	48.96	31.56	63.69
Col-2	5	0.63	120.26	-4.41	48.96	31.56	63.69
Col-2	6	0.63	120.26	-4.41	48.96	31.56	63.69
Col-2	7	0.63	120.26	-5.88	48.96	42.08	63.69
Col-2	8	0.63	120.26	-5.88	48.96	42.08	63.69
Col-2	9	0.63	120.26	-5.88	48.96	42.08	63.69
Col-2	10	0.63	120.26	-5.88	48.96	42.08	63.69
Col-2	11	0.63	120.26	-5.88	48.96	42.08	63.69
Col-2	12	0.63	120.26	-5.88	48.96	42.08	63.69
Col-2	13	0.66	120.26	0.00	48.96	0.00	63.69
Col-2	14	0.66	120.26	0.00	48.96	0.00	63.69
Col-2	15	0.65	120.26	0.00	48.96	0.00	63.69
Col-2	16	0.65	120.26	0.00	48.96	0.00	63.69
Col-2	17	0.65	120.26	0.00	48.96	0.00	63.69
Col-2	18	0.65	120.26	0.00	48.96	0.00	63.69
Col-2	19	0.35	120.26	0.00	48.96	0.00	63.69
Col-2	20	0.35	120.26	0.00	48.96	0.00	63.69
Col-2	21	0.63	120.26	0.00	48.96	0.00	63.69
Col-2	22	0.63	120.26	0.00	48.96	0.00	63.69

STRESS RATIO:

Mem Id	Load Id	Axial	Shear	Moment	Axl+Mom	Shr+Mom	Control UC
Col-2	1	0.01	0.00	0.00	0.01		0.01
Col-2	2	0.01	0.00	0.00	0.01		0.01
Col-2	3	0.01	0.09	0.50	0.50		0.50
Col-2	4	0.01	0.09	0.50	0.50		0.50
Col-2	5	0.01	0.09	0.50	0.50		0.50

Col-2	6	0.01	0.09	0.50	0.50	0.50
Col-2	7	0.01	0.12	0.66	0.66	0.66
Col-2	8	0.01	0.12	0.66	0.66	0.66
Col-2	9	0.01	0.12	0.66	0.66	0.66
Col-2	10	0.01	0.12	0.66	0.66	0.66
Col-2	11	0.01	0.12	0.66	0.66	0.66
Col-2	12	0.01	0.12	0.66	0.66	0.66
Col-2	13	0.01	0.00	0.00	0.01	0.01
Col-2	14	0.01	0.00	0.00	0.01	0.01
Col-2	15	0.01	0.00	0.00	0.01	0.01
Col-2	16	0.01	0.00	0.00	0.01	0.01
Col-2	17	0.01	0.00	0.00	0.01	0.01
Col-2	18	0.01	0.00	0.00	0.01	0.01
Col-2	19	0.00	0.00	0.00	0.00	0.00
Col-2	20	0.00	0.00	0.00	0.00	0.00
Col-2	21	0.01	0.00	0.00	0.01	0.01
Col-2	22	0.01	0.00	0.00	0.01	0.01

COLUMN REACTIONS:

Mem Id	Load Id	------Reaction(k)------- Horz(OP)	Vert	Horz(IP)
Col-2	1	0.00	0.63	0.00
Col-2	2	0.00	0.63	0.00
Col-2	3	4.41	0.63	0.00
Col-2	4	4.41	0.63	0.00
Col-2	5	4.41	0.63	0.00
Col-2	6	4.41	0.63	0.00
Col-2	7	5.88	0.63	0.00
Col-2	8	5.88	0.63	0.00
Col-2	9	5.88	0.63	0.00
Col-2	10	5.88	0.63	0.00
Col-2	11	5.88	0.63	0.00
Col-2	12	5.88	0.63	0.00
Col-2	13	0.00	0.66	0.00
Col-2	14	0.00	0.66	0.00
Col-2	15	0.00	0.65	0.00
Col-2	16	0.00	0.65	0.00
Col-2	17	0.00	0.65	0.00
Col-2	18	0.00	0.65	0.00
Col-2	19	0.00	0.35	0.00
Col-2	20	0.00	0.35	0.00
Col-2	21	0.00	0.63	0.00
Col-2	22	0.00	0.63	0.00

COLUMN MEMBER DEFLECTIONS:

Mem Id	Load Id	Deflection(in) Calc	Limit
Col-2	1	0.00	1.43
Col-2	2	0.00	1.43
Col-2	3	1.02	1.43
Col-2	4	1.02	1.43
Col-2	5	1.02	1.43
Col-2	6	1.02	1.43
Col-2	7	1.36	1.43
Col-2	8	1.36	1.43
Col-2	9	1.36	1.43
Col-2	10	1.36	1.43
Col-2	11	1.36	1.43
Col-2	12	1.36	1.43
Col-2	13	0.00	1.43
Col-2	14	0.00	1.43
Col-2	15	0.00	1.43
Col-2	16	0.00	1.43

Col-2	17	0.00	1.43
Col-2	18	0.00	1.43
Col-2	19	0.00	1.43
Col-2	20	0.00	1.43
Col-2	21	0.00	1.43
Col-2	22	0.00	1.43

S12S0554A Column Flange Brace Report 9/12/12 3:58pm

COLUMN FLANGE BRACES

Mem Id	Column Side	Part	Brace_At Girt_Id

S12S0554A Base Plate & Anchor Bolt Design 9/12/12 3:58pm

Base Plate Yield = 55.00 (ksi)
Concrete Bearing = 1.05 (ksi)

BASE SIZE:

Column_Base Id	Depth	--Plate_Size(in)-- Width	Length	Thick	-Bolts(GR36)- Row	Diam	Gage
Col-2	10.2	8.0	10.3	0.375	2	0.750	4.00

BASE REACTIONS:

Column Id	-Max_Comp- Ld	Fy(k)	-Max_Tens- Ld	Fy(k)	-Max_Shear Ld	Fx(k)	Max_Tension+Shear Tens Ld	Fy(k)	Shear Fx(k)
Col-2	*13	0.7	1	0.0	7	5.9	1	0.0	0.0

LOAD COMBINATIONS:

1 - DL+CL+LL
7 - DL+WL1+WS
13 - 1.04DL+0.7Seis

S12S0554A Flush Girt Design Report 9/12/12 3:58pm

GIRT LAYOUT:

Bay Id	Girt Id	Locate	Part	Bay_Offset Start	End	Design Length	Weight	Load Width	----Max_Load--- Id	UC	Report	Rot
1	1	3.750	10Z060	0.00	5.50	5.17	17.3	3.75	WS	0.13	Shear	D
	2	3.750	10Z060	16.00	18.00	1.33	4.5	3.75	WS	0.03	Shear	D
	3	7.500	10Z060	0.00	5.50	5.17	17.3	4.33	WS	0.15	Shear	D
	4	7.500	10Z060	16.00	18.00	1.33	4.5	4.33	WS	0.03	Shear	D
	5	12.417	10Z060	0.00	5.50	5.17	17.3	4.92	WS	0.17	Shear	D
	6	12.417	10Z060	16.00	18.00	1.33	4.5	4.92	WS	0.04	Shear	D
	7	17.333	10Z075	0.00	18.00	17.67	74.0	4.33	WS	0.94	Moment	D
	8	21.083	10Z060	0.00	9.00	8.67	29.0	3.96	WS	0.22	Shear	D
	9	21.083	10Z060	12.00	18.00	5.33	17.9	3.96	WS	0.12	Shear	D
	10	25.250	10Z060	3.90	18.00	13.77	46.1	4.18	WS	0.60	Moment	D
2	11	3.750	10Z060	0.00	6.65	5.98	20.0	3.75	WS	0.13	Shear	D
	12	3.750	10Z060	10.00	18.00	7.67	25.7	3.75	WS	0.19	Shear	D
	13	7.500	10Z060	0.00	18.00	17.67	59.2	4.33	WS	0.91	Moment	D

14	12.417	10Z060	0.00	18.00	17.67	59.2	4.92	WS	0.71	Moment	D
15	17.333	10Z060	0.00	18.00	17.67	59.2	4.33	WS	0.99	Moment	D
16	21.083	10Z060	0.00	6.00	5.33	17.9	3.96	WS	0.12	Shear	D
17	21.083	10Z060	9.00	18.00	8.67	29.0	3.96	WS	0.22	Shear	D
18	25.250	10Z060	0.00	14.10	13.77	46.1	4.18	WS	0.60	Moment	D

GIRT INSIDE FLANGE BRACE:

No._Brace/Bay	
1	2
0	0

GIRT STRENGTH:

Bay Id	Girt Id	Ld Id	----Shear(k)--- Calc	Limit	UC	--Moment(f-k)-- Calc	Limit	UC	Mom+ Shear	---Deflect(in)-- Calc	Limit	UC
1	1	WP	0.20	2.02	0.10	-0.26	6.31	0.04	0.06	0.00	0.26	0.01
		WS	-0.27	2.02	0.13	0.34	6.31	0.05	0.08	0.00	0.26	0.01
1	2	WP	-0.05	2.02	0.03	-0.02	6.31	0.00	0.00	0.00	0.07	0.00
		WS	-0.06	2.02	0.03	0.02	6.31	0.00	0.00	0.00	0.07	0.00
1	3	WP	0.23	2.02	0.12	-0.30	6.31	0.05	0.07	0.00	0.26	0.01
		WS	-0.31	2.02	0.15	0.39	6.31	0.06	0.09	0.00	0.26	0.01
1	4	WP	0.06	2.02	0.03	-0.02	6.31	0.00	0.00	0.00	0.07	0.00
		WS	-0.07	2.02	0.03	0.02	6.31	0.00	0.00	0.00	0.07	0.00
1	5	WP	0.26	2.02	0.13	-0.34	6.31	0.05	0.08	0.00	0.26	0.01
		WS	-0.35	2.02	0.17	0.44	6.31	0.07	0.10	0.00	0.26	0.01
1	6	WP	0.07	2.02	0.03	-0.02	6.31	0.00	0.00	0.00	0.07	0.00
		WS	-0.07	2.02	0.04	0.02	6.31	0.00	0.00	0.00	0.07	0.00
1	7	WP	-1.94	3.96	0.49	-7.69	9.05	0.85	0.77	-0.59	0.88	0.67
		WS	2.14	3.96	0.54	8.54	9.05	0.94	0.86	0.65	0.88	0.74
1	8	WP	0.36	2.02	0.18	-0.77	6.31	0.12	0.13	-0.02	0.43	0.04
		WS	-0.45	2.02	0.22	0.91	6.31	0.14	0.15	0.02	0.43	0.05
1	9	WP	-0.22	2.02	0.11	-0.29	6.31	0.05	0.06	0.00	0.27	0.01
		WS	0.24	2.02	0.12	0.32	6.31	0.05	0.07	0.00	0.27	0.01
1	10	WP	0.88	2.02	0.43	-3.44	6.31	0.54	0.49	-0.21	0.69	0.30
		WS	-0.96	2.02	0.48	3.77	6.31	0.60	0.54	0.23	0.69	0.33
2	11	WP	0.23	2.02	0.12	-0.35	6.31	0.06	0.07	0.00	0.30	0.01
		WS	-0.26	2.02	0.13	0.38	6.31	0.06	0.08	0.00	0.30	0.01
2	12	WP	0.30	2.02	0.15	-0.57	6.31	0.09	0.10	-0.01	0.38	0.03
		WS	0.38	2.02	0.19	0.69	6.31	0.11	0.12	0.01	0.38	0.03
2	13	WP	1.05	2.02	0.52	-5.18	6.31	0.82	0.67	-0.51	0.88	0.58
		WS	1.18	2.02	0.58	5.76	6.31	0.91	0.75	0.57	0.88	0.64
2	14	WP	0.90	2.02	0.45	-3.99	6.31	0.63	0.52	-0.40	0.88	0.46
		WS	1.07	2.02	0.53	4.45	6.31	0.71	0.59	0.45	0.88	0.51
2	15	WP	1.13	2.02	0.56	-5.66	6.31	0.90	0.75	-0.55	0.88	0.62
		WS	-1.25	2.02	0.62	6.27	6.31	0.99	0.82	0.61	0.88	0.69
2	16	WP	-0.22	2.02	0.11	-0.29	6.31	0.05	0.06	0.00	0.27	0.01
		WS	0.24	2.02	0.12	0.32	6.31	0.05	0.07	0.00	0.27	0.01
2	17	WP	0.36	2.02	0.18	-0.77	6.31	0.12	0.13	-0.02	0.43	0.04
		WS	0.45	2.02	0.22	0.91	6.31	0.14	0.15	0.02	0.43	0.05
2	18	WP	-0.88	2.02	0.43	-3.44	6.31	0.54	0.49	-0.21	0.69	0.30
		WS	0.96	2.02	0.48	3.77	6.31	0.60	0.54	0.23	0.69	0.33

UNBRACED LENGTH:

Bay Id	Girt Id	Major	----Minor--- Top	Bot	----Cb---- Top	Bot	--Mom1/Mom2- Top	Bot	Reduction Factor Top	Bot
1	1	5.17	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.47
1	2	1.33	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.47
1	3	5.17	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.47
1	4	1.33	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.47
1	5	5.17	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.47
1	6	1.33	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.47
1	7	17.67	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.47
1	8	8.67	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.47

1	9	5.33	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.47
1	10	13.77	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.47
2	11	5.98	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.47
2	12	7.67	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.47
2	13	17.67	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.47
2	14	17.67	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.47
2	15	17.67	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.47
2	16	5.33	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.47
2	17	8.67	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.47
2	18	13.77	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.47

S12S0554A Door Jamb & Header Summary 9/12/12 3:58pm

JAMB/HEADER LAYOUT:

Open Id	Bay Id	Locate	Part	Length	Weight
1	1	Jamb-L	F10C067	17.33	64.8
		Jamb-R	F10C067	17.33	64.8
		Header	F10C060	10.50	35.2
2	1	Jamb-L	F10C060	7.92	26.5
		Jamb-R	F10C060	7.92	26.5
		Header	F10C060	3.00	10.0
		Sill	F10C060	3.00	10.0
3	2	Jamb-L	F10C060	7.92	26.5
		Jamb-R	F10C060	7.92	26.5
		Header	F10C060	3.00	10.0
		Sill	F10C060	3.00	10.0
4	2	Jamb-L	F10C060	7.50	25.1
		Jamb-R	F10C060	7.50	25.1

STRENGTH/DEFLECTION:

Open Id	Member Id	Ld Id	----Shear(k)---- Calc	Limit	UC	---Moment(f-k)-- Calc	Limit	UC	Mom+ Shear	Deflect(in) Calc	Limit
1	Jamb-L	WP	-1.44	2.82	0.51	-6.25	6.97	0.90	0.71	0.54	0.87
		WS	1.58	2.82	0.56	6.85	6.97	0.98	0.78	0.60	0.87
	Jamb-R	WP	-1.13	2.82	0.40	-4.88	6.97	0.70	0.55	0.42	0.87
		WS	1.23	2.82	0.44	5.35	6.97	0.77	0.61	0.47	0.87
	Header	WP	-0.07	2.02	0.04	-0.19	5.91	0.03	0.03	0.01	0.52
		WS	0.08	2.02	0.04	0.21	5.91	0.04	0.03	0.01	0.52
2	Jamb-L	WP	-0.49	2.02	0.24	-0.98	5.79	0.17	0.17	0.02	0.40
		WS	0.54	2.02	0.27	1.07	5.79	0.19	0.19	0.02	0.40
	Jamb-R	WP	-0.37	2.02	0.18	-0.73	5.79	0.13	0.13	0.01	0.40
		WS	0.41	2.02	0.20	0.80	5.79	0.14	0.14	0.02	0.40
	Header	WP	-0.08	2.02	0.04	-0.06	5.91	0.01	0.00	0.00	0.15
		WS	0.09	2.02	0.04	0.07	5.91	0.01	0.00	0.00	0.15
	Sill	WP	-0.09	2.02	0.04	-0.07	5.91	0.01	0.00	0.00	0.15
		WS	0.10	2.02	0.05	0.07	5.91	0.01	0.00	0.00	0.15
3	Jamb-L	WP	-0.37	2.02	0.18	-0.73	5.79	0.13	0.13	0.01	0.40
		WS	0.41	2.02	0.20	0.80	5.79	0.14	0.14	0.02	0.40
	Jamb-R	WP	-0.49	2.02	0.24	-0.98	5.79	0.17	0.17	0.02	0.40
		WS	0.54	2.02	0.27	1.07	5.79	0.19	0.19	0.02	0.40
	Header	WP	-0.08	2.02	0.04	-0.06	5.91	0.01	0.00	0.00	0.15
		WS	0.09	2.02	0.04	0.07	5.91	0.01	0.00	0.00	0.15
	Sill	WP	-0.09	2.02	0.04	-0.07	5.91	0.01	0.00	0.00	0.15
		WS	0.10	2.02	0.05	0.07	5.91	0.01	0.00	0.00	0.15
4	Jamb-L	WP	-0.39	2.02	0.19	-0.73	5.91	0.12	0.13	0.01	0.38
		WS	0.43	2.02	0.21	0.80	5.91	0.14	0.15	0.01	0.38
	Jamb-R	WP	-0.44	2.02	0.22	-0.83	5.91	0.14	0.15	0.02	0.38
		WS	0.49	2.02	0.24	0.91	5.91	0.15	0.17	0.02	0.38

S12S0554A Wall Panel Report 9/12/12 3:58pm

PANEL DATA:

Bay	Part	Type	Gage	Yield	Rotation Stiffness	Panel Height
1	AW6-50	AW	26.00	50.0	0.44	29.45

MOMENTS & DEFLECTION:

Span Id	Span (ft)	Load Id	Moment (ft-lb/ft) Support Calc	Support Limit	Support UC	Midspan Calc	Midspan Limit	Midspan UC	Deflect (in) Calc	Deflect (in) Limit	Deflect (in) UC
1	3.75	WP	35.5	90.8	0.39	-29.5	105.3	0.28	-0.05	0.19	0.26
		WS	-47.4	105.3	0.45	39.4	90.8	0.43	0.07	0.19	0.35
2	3.75	WP	40.0	90.8	0.44	-7.8	105.3	0.07	0.00	0.19	0.00
		WS	-53.4	105.3	0.51	10.4	90.8	0.11	0.00	0.19	0.00
3	4.92	WP	57.9	90.8	0.64	-29.6	105.3	0.28	-0.07	0.25	0.28
		WS	-77.2	105.3	0.73	39.5	90.8	0.43	0.09	0.25	0.37
4	4.92	WP	57.9	90.8	0.64	-28.8	105.3	0.27	-0.07	0.25	0.27
		WS	-77.2	105.3	0.73	38.4	90.8	0.42	0.09	0.25	0.35
5	3.75	WP	41.6	90.8	0.46	-10.9	105.3	0.10	-0.01	0.19	0.04
		WS	-55.5	105.3	0.53	14.5	90.8	0.16	0.01	0.19	0.05
6	4.17	WP	49.6	90.8	0.55	-17.8	105.3	0.17	-0.02	0.21	0.11
		WS	-66.2	105.3	0.63	23.7	90.8	0.26	0.03	0.21	0.15
7	4.20	WP	49.6	90.8	0.55	-35.0	105.3	0.33	-0.07	0.21	0.33
		WS	-66.2	105.3	0.63	46.7	90.8	0.51	0.09	0.21	0.45

S12S0554A Screw Report 9/12/12 3:58pm

BASE SCREW CHECK:

Wall Id	Base Length	Screw Part	Screw Dia (in)	Screw Space (ft)	Screw Shear (k)	Force/Screw Wind (k)	Force/Screw Seis (k)	Shear Limit (k)	Max UC
1	0.00	H1040	0.22	1.00	2.00	0.000	0.000	0.224	0.00

S12S0554A Weight Summary 9/12/12 3:58pm

Total Column Weight	=	630.10
Total Rafter Weight	=	0.00
Total Girt Weight	=	477.69
Total Door Jamb Weight	=	361.36
Total Bracing Weight	=	0.00
Total Clips Weight	=	52.80
Total Endwall Weight	=	1521.96

S12S0554A Warning Summary 9/12/12 3:58pm

.. No Warnings

S12S0554A Endwall Design Code 9/12/12 3:58pm

STRUCTURAL CODE:
Design Basis : WS - Working Stress
Hot Rolled Steel : AISC05
Cold Formed Steel : NAUS01

BUILDING CODE:
Wind Code : NYBC 10 (IBC 06)
Seismic Zone : B

MODULUS OF ELASTICITY
Hot Rolled Steel : 29000 (ksi)
Cold Formed Steel : 29500 (ksi)

S12S0554A Column & Rafter Design 9/12/12 3:58pm

MEMBER SIZES:

Member Id	Member Locate	Member Part	Web_Size Depth	Web_Size Thick	Flange_Size Width	Flange_Size Thick	Member Length	Member Weight
Col-1	0.7							
Col-2	18.0	W10x22	9.48	0.240	5.75	0.360	28.6	630.1
Col-3	35.3							
							Total=	630.10

DESIGN ACTIONS/STRENGTH:

Mem Id	Load Id	Axial(k) Calc	Axial(k) Limit	Shear(k) Calc	Shear(k) Limit	Moment(f-k) Calc	Moment(f-k) Limit
Col-2	1	0.63	120.26	0.00	48.96	0.00	63.69
Col-2	2	0.63	120.26	0.00	48.96	0.00	63.69
Col-2	3	0.63	120.26	-4.41	48.96	31.56	63.69
Col-2	4	0.63	120.26	-4.41	48.96	31.56	63.69
Col-2	5	0.63	120.26	-4.41	48.96	31.56	63.69
Col-2	6	0.63	120.26	-4.41	48.96	31.56	63.69
Col-2	7	0.63	120.26	-5.88	48.96	42.08	63.69
Col-2	8	0.63	120.26	-5.88	48.96	42.08	63.69
Col-2	9	0.63	120.26	-5.88	48.96	42.08	63.69
Col-2	10	0.63	120.26	-5.88	48.96	42.08	63.69
Col-2	11	0.63	120.26	-5.88	48.96	42.08	63.69
Col-2	12	0.63	120.26	-5.88	48.96	42.08	63.69
Col-2	13	0.66	120.26	0.00	48.96	0.00	63.69
Col-2	14	0.66	120.26	0.00	48.96	0.00	63.69
Col-2	15	0.65	120.26	0.00	48.96	0.00	63.69
Col-2	16	0.65	120.26	0.00	48.96	0.00	63.69
Col-2	17	0.65	120.26	0.00	48.96	0.00	63.69
Col-2	18	0.65	120.26	0.00	48.96	0.00	63.69
Col-2	19	0.35	120.26	0.00	48.96	0.00	63.69
Col-2	20	0.35	120.26	0.00	48.96	0.00	63.69
Col-2	21	0.63	120.26	0.00	48.96	0.00	63.69
Col-2	22	0.63	120.26	0.00	48.96	0.00	63.69

STRESS RATIO:

Mem Id	Load Id	Axial	Shear	Moment	Axl+Mom	Shr+Mom	Control UC
Col-2	1	0.01	0.00	0.00	0.01		0.01
Col-2	2	0.01	0.00	0.00	0.01		0.01
Col-2	3	0.01	0.09	0.50	0.50		0.50
Col-2	4	0.01	0.09	0.50	0.50		0.50
Col-2	5	0.01	0.09	0.50	0.50		0.50

Col-2	6	0.01	0.09	0.50	0.50	0.50
Col-2	7	0.01	0.12	0.66	0.66	0.66
Col-2	8	0.01	0.12	0.66	0.66	0.66
Col-2	9	0.01	0.12	0.66	0.66	0.66
Col-2	10	0.01	0.12	0.66	0.66	0.66
Col-2	11	0.01	0.12	0.66	0.66	0.66
Col-2	12	0.01	0.12	0.66	0.66	0.66
Col-2	13	0.01	0.00	0.00	0.01	0.01
Col-2	14	0.01	0.00	0.00	0.01	0.01
Col-2	15	0.01	0.00	0.00	0.01	0.01
Col-2	16	0.01	0.00	0.00	0.01	0.01
Col-2	17	0.01	0.00	0.00	0.01	0.01
Col-2	18	0.01	0.00	0.00	0.01	0.01
Col-2	19	0.00	0.00	0.00	0.00	0.00
Col-2	20	0.00	0.00	0.00	0.00	0.00
Col-2	21	0.01	0.00	0.00	0.01	0.01
Col-2	22	0.01	0.00	0.00	0.01	0.01

COLUMN REACTIONS:

Mem Id	Load Id	------Reaction(k)------- Horz(OP)	Vert	Horz(IP)
Col-2	1	0.00	0.63	0.00
Col-2	2	0.00	0.63	0.00
Col-2	3	4.41	0.63	0.00
Col-2	4	4.41	0.63	0.00
Col-2	5	4.41	0.63	0.00
Col-2	6	4.41	0.63	0.00
Col-2	7	5.88	0.63	0.00
Col-2	8	5.88	0.63	0.00
Col-2	9	5.88	0.63	0.00
Col-2	10	5.88	0.63	0.00
Col-2	11	5.88	0.63	0.00
Col-2	12	5.88	0.63	0.00
Col-2	13	0.00	0.66	0.00
Col-2	14	0.00	0.66	0.00
Col-2	15	0.00	0.65	0.00
Col-2	16	0.00	0.65	0.00
Col-2	17	0.00	0.65	0.00
Col-2	18	0.00	0.65	0.00
Col-2	19	0.00	0.35	0.00
Col-2	20	0.00	0.35	0.00
Col-2	21	0.00	0.63	0.00
Col-2	22	0.00	0.63	0.00

COLUMN MEMBER DEFLECTIONS:

Mem Id	Load Id	Deflection(in) Calc	Limit
Col-2	1	0.00	1.43
Col-2	2	0.00	1.43
Col-2	3	1.02	1.43
Col-2	4	1.02	1.43
Col-2	5	1.02	1.43
Col-2	6	1.02	1.43
Col-2	7	1.36	1.43
Col-2	8	1.36	1.43
Col-2	9	1.36	1.43
Col-2	10	1.36	1.43
Col-2	11	1.36	1.43
Col-2	12	1.36	1.43
Col-2	13	0.00	1.43
Col-2	14	0.00	1.43
Col-2	15	0.00	1.43
Col-2	16	0.00	1.43

Col-2	17	0.00	1.43
Col-2	18	0.00	1.43
Col-2	19	0.00	1.43
Col-2	20	0.00	1.43
Col-2	21	0.00	1.43
Col-2	22	0.00	1.43

S12S0554A Column Flange Brace Report 9/12/12 3:58pm

COLUMN FLANGE BRACES

Mem Id	Column Side	Part	Brace_At Girt_Id

S12S0554A Base Plate & Anchor Bolt Design 9/12/12 3:58pm

Base Plate Yield = 55.00 (ksi)
Concrete Bearing = 1.05 (ksi)

BASE SIZE:

Column_Base Id	Depth	--Plate_Size(in)-- Width	Length	Thick	-Bolts(GR36)- Row	Diam	Gage
Col-2	10.2	8.0	10.3	0.375	2	0.750	4.00

BASE REACTIONS:

Column Id	-Max_Comp- Ld	Fy(k)	-Max_Tens- Ld	Fy(k)	-Max_Shear Ld	Fx(k)	Max_Tension+Shear Ld	Tens Fy(k)	Shear Fx(k)
Col-2	13	0.7	1	0.0	7	5.9	1	0.0	0.0

LOAD COMBINATIONS:

1 - DL+CL+LL
7 - DL+WL1+WS
13 - 1.04DL+0.7Seis

S12S0554A Flush Girt Design Report 9/12/12 3:58pm

GIRT LAYOUT:

Bay Id	Girt Id	Locate	Part	Bay_Offset Start	End	Design Length	Weight	Load Width	----Max_Load--- Id	UC	Report	Rot
1	1	3.750	10Z060	0.00	7.50	7.17	24.0	3.75	WS	0.18	Shear	D
	2	3.750	10Z060	10.50	18.00	6.83	22.9	3.75	WS	0.14	Shear	D
	3	7.500	10Z060	0.00	18.00	17.67	59.2	4.33	WS	0.93	Moment	D
	4	12.417	10Z060	0.00	18.00	17.67	59.2	4.92	WS	0.71	Moment	D
	5	17.333	10Z060	0.00	18.00	17.67	59.2	4.33	WS	0.62	Moment	D
	6	21.083	10Z060	0.00	18.00	17.67	59.2	3.96	WS	0.57	Moment	D
	7	25.250	10Z060	3.90	18.00	13.77	46.1	4.18	WS	0.36	Moment	D
2	8	3.750	10Z060	0.00	7.50	6.83	22.9	3.75	WS	0.14	Shear	D
	9	3.750	10Z060	10.50	18.00	7.17	24.0	3.75	WS	0.18	Shear	D
	10	7.500	10Z060	0.00	18.00	17.67	59.2	4.33	WS	0.93	Moment	D
	11	12.417	10Z060	0.00	18.00	17.67	59.2	4.92	WS	0.71	Moment	D
	12	17.333	10Z060	0.00	18.00	17.67	59.2	4.33	WS	0.62	Moment	D
	13	21.083	10Z060	0.00	18.00	17.67	59.2	3.96	WS	0.57	Moment	D

14	25.250	10Z060	0.00	14.10	13.77	46.1	4.18	WS	0.36	Moment D

GIRT INSIDE FLANGE BRACE:

No.	Brace/Bay
1	2
---	---
0	0

GIRT STRENGTH:

Bay Id	Girt Id	Ld Id	----Shear(k)--- Calc	Limit	UC	--Moment(f-k)-- Calc	Limit	UC	Mom+ Shear	---Deflect(in)-- Calc	Limit	UC
1	1	WP	0.28	2.02	0.14	-0.50	6.31	0.08	0.09	-0.01	0.36	0.02
		WS	-0.36	2.02	0.18	0.61	6.31	0.10	0.11	0.01	0.36	0.03
1	2	WP	0.27	2.02	0.13	-0.46	6.31	0.07	0.09	-0.01	0.34	0.02
		WS	-0.29	2.02	0.14	0.50	6.31	0.08	0.09	0.01	0.34	0.02
1	3	WP	-1.05	2.02	0.52	-5.30	6.31	0.84	0.67	-0.53	0.88	0.59
		WS	-1.21	2.02	0.60	5.88	6.31	0.93	0.75	0.58	0.88	0.66
1	4	WP	0.90	2.02	0.45	-3.99	6.31	0.63	0.52	-0.40	0.88	0.46
		WS	-1.07	2.02	0.53	4.45	6.31	0.71	0.59	0.45	0.88	0.51
1	5	WP	0.80	2.02	0.39	-3.52	6.31	0.56	0.46	-0.36	0.88	0.40
		WS	-0.94	2.02	0.47	3.92	6.31	0.62	0.52	0.40	0.88	0.45
1	6	WP	0.73	2.02	0.36	-3.21	6.31	0.51	0.42	-0.33	0.88	0.37
		WS	-0.86	2.02	0.43	3.59	6.31	0.57	0.47	0.36	0.88	0.41
1	7	WP	0.60	2.02	0.30	-2.06	6.31	0.33	0.29	-0.13	0.69	0.18
		WS	-0.66	2.02	0.32	2.26	6.31	0.36	0.31	0.14	0.69	0.20
2	8	WP	0.27	2.02	0.13	-0.46	6.31	0.07	0.09	-0.01	0.34	0.02
		WS	-0.29	2.02	0.14	0.50	6.31	0.08	0.09	0.01	0.34	0.02
2	9	WP	0.28	2.02	0.14	-0.50	6.31	0.08	0.09	-0.01	0.36	0.02
		WS	0.36	2.02	0.18	0.61	6.31	0.10	0.11	0.01	0.36	0.03
2	10	WP	1.05	2.02	0.52	-5.30	6.31	0.84	0.67	-0.53	0.88	0.59
		WS	1.21	2.02	0.60	5.88	6.31	0.93	0.75	0.58	0.88	0.66
2	11	WP	0.90	2.02	0.45	-3.99	6.31	0.63	0.52	-0.40	0.88	0.46
		WS	1.07	2.02	0.53	4.45	6.31	0.71	0.59	0.45	0.88	0.51
2	12	WP	0.80	2.02	0.39	-3.52	6.31	0.56	0.46	-0.36	0.88	0.40
		WS	0.94	2.02	0.47	3.92	6.31	0.62	0.52	0.40	0.88	0.45
2	13	WP	0.73	2.02	0.36	-3.21	6.31	0.51	0.42	-0.33	0.88	0.37
		WS	0.86	2.02	0.43	3.59	6.31	0.57	0.47	0.36	0.88	0.41
2	14	WP	0.60	2.02	0.30	-2.06	6.31	0.33	0.29	-0.13	0.69	0.18
		WS	0.66	2.02	0.32	2.26	6.31	0.36	0.31	0.14	0.69	0.20

UNBRACED LENGTH:

Bay Id	Girt Id	Major	----Minor--- Top	Bot	----Cb---- Top	Bot	--Mom1/Mom2- Top	Bot	Reduction Factor Top	Bot
1	1	7.17	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.47
1	2	6.83	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.47
1	3	17.67	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.47
1	4	17.67	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.47
1	5	17.67	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.47
1	6	17.67	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.47
1	7	13.77	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.47
2	8	6.83	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.47
2	9	7.17	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.47
2	10	17.67	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.47
2	11	17.67	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.47
2	12	17.67	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.47
2	13	17.67	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.47
2	14	13.77	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.47

JAMB/HEADER LAYOUT:

Open Bay

Id	Id	Locate	Part	Length	Weight
6	1	Jamb-L	F10C060	7.50	25.1
		Jamb-R	F10C060	7.50	25.1
		Header	F10C060	3.00	10.0
		Sill	F10C060	3.00	10.0
7	2	Jamb-L	F10C060	7.50	25.1
		Jamb-R	F10C060	7.50	25.1
		Header	F10C060	3.00	10.0
		Sill	F10C060	3.00	10.0

STRENGTH/DEFLECTION:

Open Id	Member Id	Ld Id	----Shear(k)---- Calc	Limit	UC	---Moment(f-k)-- Calc	Limit	UC	Mom+ Shear	Deflect(in) Calc	Limit
6	Jamb-L	WP	-0.41	2.02	0.20	-0.77	5.91	0.13	0.14	0.01	0.38
		WS	0.45	2.02	0.22	0.84	5.91	0.14	0.15	0.02	0.38
	Jamb-R	WP	-0.41	2.02	0.20	-0.77	5.91	0.13	0.14	0.01	0.38
		WS	0.45	2.02	0.22	0.84	5.91	0.14	0.15	0.02	0.38
	Header	WP	-0.02	2.02	0.01	-0.02	5.91	0.00	0.00	0.00	0.15
		WS	0.03	2.02	0.01	0.02	5.91	0.00	0.00	0.00	0.15
	Sill	WP	-0.05	2.02	0.02	-0.04	5.91	0.01	0.00	0.00	0.15
		WS	0.05	2.02	0.03	0.04	5.91	0.01	0.00	0.00	0.15
7	Jamb-L	WP	-0.41	2.02	0.20	-0.77	5.91	0.13	0.14	0.01	0.38
		WS	0.45	2.02	0.22	0.84	5.91	0.14	0.15	0.02	0.38
	Jamb-R	WP	-0.41	2.02	0.20	-0.77	5.91	0.13	0.14	0.01	0.38
		WS	0.45	2.02	0.22	0.84	5.91	0.14	0.15	0.02	0.38
	Header	WP	-0.02	2.02	0.01	-0.02	5.91	0.00	0.00	0.00	0.15
		WS	0.03	2.02	0.01	0.02	5.91	0.00	0.00	0.00	0.15
	Sill	WP	-0.05	2.02	0.02	-0.04	5.91	0.01	0.00	0.00	0.15
		WS	0.05	2.02	0.03	0.04	5.91	0.01	0.00	0.00	0.15

S12S0554A Wall Panel Report 9/12/12 3:58pm

PANEL DATA:

Bay	Part	Type	Gage	Yield	Rotation Stiffness	Panel Height
1	AW6-50	AW	26.00	50.0	0.44	29.45

MOMENTS & DEFLECTION:

Span Id	Span (ft)	Load Id	---------Moment(ft-lb/ft)--------- Support Calc	Support Limit	Support UC	Midspan Calc	Midspan Limit	Midspan UC	---Deflect(in)-- Calc	Limit	UC
1	3.75	WP	35.5	90.8	0.39	-29.5	105.3	0.28	-0.05	0.19	0.26
		WS	-47.4	105.3	0.45	39.4	90.8	0.43	0.07	0.19	0.35
2	3.75	WP	40.0	90.8	0.44	-7.8	105.3	0.07	0.00	0.19	0.00
		WS	-53.4	105.3	0.51	10.4	90.8	0.11	0.00	0.19	0.00
3	4.92	WP	57.9	90.8	0.64	-29.6	105.3	0.28	-0.07	0.25	0.28
		WS	-77.2	105.3	0.73	39.5	90.8	0.43	0.09	0.25	0.37
4	4.92	WP	57.9	90.8	0.64	-28.8	105.3	0.27	-0.07	0.25	0.27
		WS	-77.2	105.3	0.73	38.4	90.8	0.42	0.09	0.25	0.35
5	3.75	WP	41.6	90.8	0.46	-10.9	105.3	0.10	-0.01	0.19	0.04
		WS	-55.5	105.3	0.53	14.5	90.8	0.16	0.01	0.19	0.05
6	4.17	WP	49.6	90.8	0.55	-17.8	105.3	0.17	-0.02	0.21	0.11
		WS	-66.2	105.3	0.63	23.7	90.8	0.26	0.03	0.21	0.15
7	4.20	WP	49.6	90.8	0.55	-35.0	105.3	0.33	-0.07	0.21	0.33
		WS	-66.2	105.3	0.63	46.7	90.8	0.51	0.09	0.21	0.45

S12S0554A Screw Report 9/12/12 3:58pm

BASE SCREW CHECK:

Wall Id	Base Length	Screw Part	Screw Dia (in)	Screw Space (ft)	Screw Shear (k)	Force/Screw Wind (k)	Force/Screw Seis (k)	Shear Limit (k)	Max UC
1	0.00	H1040	0.22	1.00	2.00	0.000	0.000	0.224	0.00

S12S0554A Weight Summary 9/12/12 3:58pm

Total Column Weight	=	630.10
Total Rafter Weight	=	0.00
Total Girt Weight	=	611.49
Total Door Jamb Weight	=	140.70
Total Bracing Weight	=	0.00
Total Clips Weight	=	46.20
Total Endwall Weight	=	1428.49

S12S0554A Warning Summary 9/12/12 3:58pm

.. No Warnings

STRUCTURAL CODE:
Design Basis : WS - Working Stress
Hot Rolled Steel : AISC05
Cold Formed Steel : NAUS01

BUILDING CODE:
Wind Code : NYBC 10 (IBC 06)
Seismic Zone : B

MODULUS OF ELASTICITY
Hot Rolled Steel : 29000 (ksi)
Cold Formed Steel : 29500 (ksi)

SURFACE LAYOUT:

Surface Id	Length	No. Row	Peak Space
2	18.554	4	1.333

PURLIN LOCATION:

Purlin Id	Surf Offset	Space	Load Width	Dead Load	Edge Wind	Show Report	Max_Load Id	Max_Load UC	Max_Load Report
1	4.995	4.995	4.997	0.76		Y	7	1.03	Mom+Shr
2	9.995	5.000	4.662	0.81			7	0.97	Mom+Shr
3	14.318	4.323	3.613	1.05			20	0.85	Mom+Shr
4	17.221	2.903	2.785	1.36	Y	Y	20	0.66	Mom+Shr
	18.554	1.333							
			Average=	0.94					

PURLIN LAYOUT:

Bay Id	Purlin Part	Design Length	Lap(ft) Left	Lap(ft) Right	No. Brace	Unit Weight	Total Weight
LExt	08Z075	1.33			0	4.9	19.6
1	08Z075	19.67		2.38	2	81.1	324.5
2	08Z060	21.00	2.38	1.25	2	72.6	290.6
3	08Z060	21.00	1.25	2.38	2	72.6	290.6
4	08Z075	19.67	2.38		2	81.1	324.5
RExt	08Z075	1.33			0	4.9	19.6
				Total(lb)=		317.3	1269.3

SPECIAL LOADS:

Load_Location Start	End	Load_Type
0.000	3.600	Edge Zone Wind
14.954	18.554	Edge Zone Wind

ROOF PURLIN
Surface Id = 2
Purlin Id = 1
Offset = 4.99

PURLIN LAYOUT: (Purlin Id= 1)

Bay Id	Purlin Part	Design Length (ft)	Lap(ft) Left	Lap(ft) Right	Load Width	No. Brace	Available Reduction Factor Out	Available Reduction Factor In
LExt	08Z075	1.33			5.00	0	0.86	0.75
1	08Z075	19.67		2.38	5.00	2	0.86	0.75
2	08Z060	21.00	2.38	1.25	5.00	2	0.89	0.69
3	08Z060	21.00	1.25	2.38	5.00	2	0.89	0.69
4	08Z075	19.67	2.38		5.00	2	0.86	0.75
RExt	08Z075	1.33			5.00	0	0.86	0.75

LOAD COMBINATION # 1 : DL+CL+LL

PURLIN ANALYSIS:

Bay Id	Shear(k) Left Sup	Shear(k) Left Lap	Shear(k) Right Lap	Shear(k) Right Sup	Moment(f-k) Left Sup	Moment(f-k) Left Lap	Moment(f-k) MidSpan Mom	Moment(f-k) MidSpan Loc	Moment(f-k) Right Lap	Moment(f-k) Right Sup
LExt	0.00			-0.25	0.00		0.00	0.00		0.16
1	1.42		-1.77	-2.21	0.16		-5.30	7.69	3.22	7.95
2	2.02	1.58	-1.63	-1.86	7.95	3.67	-3.12	10.95	4.04	6.22
3	1.86	1.63	-1.58	-2.02	6.22	4.04	-3.12	10.05	3.67	7.95
4	2.21	1.77		-1.42	7.95	3.22	-5.30	11.98		0.16
RExt	0.25			0.00	0.16		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Shear(k) Calc	Shear(k) Limit	Shear(k) UC	Moment(f-k) Loc	Moment(f-k) Calc	Moment(f-k) Limit	Moment(f-k) UC	-Mom+Shr- Loc	-Mom+Shr- UC	Deflect(in) Calc	Deflect(in) Limit
LExt	RSup	-0.25	5.02	0.05	RSup	0.16	6.65	0.02	RSup	0.05	0.24	
1	RLap	-1.77	5.02	0.35	MidS	-5.30	5.96	0.89	RSup	0.71	-0.92	
2	RLap	-1.63	2.56	0.63	RLap	4.04	5.12	0.79	RLap	1.01	-0.55	
3	LLap	1.63	2.56	0.63	LLap	4.04	5.12	0.79	LLap	1.01	-0.55	
4	LLap	1.77	5.02	0.35	MidS	-5.30	5.96	0.89	LSup	0.71	-0.92	
RExt	LSup	0.25	5.02	0.05	LSup	0.16	6.65	0.02	LSup	0.05	0.24	

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Bay Id	Left_Lap Calc	Left_Lap Shear	Left_Lap Bear	Left_Lap UC	Right_Lap Calc	Right_Lap Shear	Right_Lap Bear	Right_Lap UC
1					0.93	2.21	2.36	0.42
2	0.74	2.21	1.89	0.39	1.24	2.21	1.89	0.66
3	1.24	2.21	1.89	0.66	0.74	2.21	1.89	0.39
4	0.93	2.21	2.36	0.42				

LOAD COMBINATION # 2 : DL+CL+SL

PURLIN ANALYSIS:

Bay Id	Shear(k) Left Sup	Shear(k) Left Lap	Shear(k) Right Lap	Shear(k) Right Sup	Moment(f-k) Left Sup	Moment(f-k) Left Lap	Moment(f-k) MidSpan Mom	Moment(f-k) MidSpan Loc	Moment(f-k) Right Lap	Moment(f-k) Right Sup
LExt	0.00			-0.19	0.00		0.00	0.00		0.13
1	1.11		-1.39	-1.73	0.13		-4.15	7.69	2.52	6.23
2	1.58	1.24	-1.27	-1.46	6.23	2.88	-2.44	10.95	3.17	4.87
3	1.46	1.27	-1.24	-1.58	4.87	3.17	-2.44	10.05	2.88	6.23
4	1.73	1.39		-1.11	6.23	2.52	-4.15	11.98		0.13
RExt	0.19			0.00	0.13		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay	-------Shear(k)------				-----Moment(f-k)-----				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
LExt	RSup	-0.19	5.02	0.04	RSup	0.13	6.65	0.02	RSup	0.04	0.18	
1	RLap	-1.39	5.02	0.28	MidS	-4.15	5.96	0.70	RSup	0.55	-0.72	
2	RLap	-1.27	2.56	0.50	RLap	3.17	5.12	0.62	RLap	0.79	-0.43	
3	LLap	1.27	2.56	0.50	LLap	3.17	5.12	0.62	LLap	0.79	-0.43	
4	LLap	1.39	5.02	0.28	MidS	-4.15	5.96	0.70	LSup	0.55	-0.72	
RExt	LSup	0.19	5.02	0.04	LSup	0.13	6.65	0.02	LSup	0.04	0.18	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay	-------Left_Lap-------				-------Right_Lap------			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.73	2.21	2.36	0.33
2	0.58	2.21	1.89	0.31	0.97	2.21	1.89	0.52
3	0.97	2.21	1.89	0.52	0.58	2.21	1.89	0.31
4	0.73	2.21	2.36	0.33				

LOAD COMBINATION # 3 : DL+CL+0.75LL

PURLIN ANALYSIS:

Bay	--------Shear(k)--------				--------------Moment(f-k)--------------					
Id	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	Loc	Right Lap	Right Sup
LExt	0.00			-0.20	0.00		0.00	0.00		0.13
1	1.15		-1.44	-1.79	0.13		-4.29	7.69	2.60	6.43
2	1.64	1.28	-1.32	-1.50	6.43	2.97	-2.52	10.95	3.27	5.03
3	1.50	1.32	-1.28	-1.64	5.03	3.27	-2.52	10.05	2.97	6.43
4	1.79	1.44		-1.15	6.43	2.60	-4.29	11.98		0.13
RExt	0.20			0.00	0.13		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay	-------Shear(k)------				-----Moment(f-k)-----				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
LExt	RSup	-0.20	5.02	0.04	RSup	0.13	6.65	0.02	RSup	0.04	0.19	
1	RLap	-1.44	5.02	0.29	MidS	-4.29	5.96	0.72	RSup	0.57	-0.74	
2	RLap	-1.32	2.56	0.51	RLap	3.27	5.12	0.64	RLap	0.82	-0.44	
3	LLap	1.32	2.56	0.51	LLap	3.27	5.12	0.64	LLap	0.82	-0.44	
4	LLap	1.44	5.02	0.29	MidS	-4.29	5.96	0.72	LSup	0.57	-0.74	
RExt	LSup	0.20	5.02	0.04	LSup	0.13	6.65	0.02	LSup	0.04	0.19	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay	-------Left_Lap-------				-------Right_Lap------			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.75	2.21	2.36	0.34
2	0.60	2.21	1.89	0.32	1.01	2.21	1.89	0.53
3	1.01	2.21	1.89	0.53	0.60	2.21	1.89	0.32
4	0.75	2.21	2.36	0.34				

LOAD COMBINATION # 4 : DL+CL+0.75SL

PURLIN ANALYSIS:

Bay	--------Shear(k)--------				--------------Moment(f-k)--------------					
Id	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	Loc	Right Lap	Right Sup
LExt	0.00			-0.16	0.00		0.00	0.00		0.11

1	0.92		-1.15	-1.43	0.11		-3.43	7.69	2.08	5.14
2	1.31	1.02	-1.05	-1.20	5.14	2.37	-2.02	10.95	2.61	4.02
3	1.20	1.05	-1.02	-1.31	4.02	2.61	-2.02	10.05	2.37	5.14
4	1.43	1.15		-0.92	5.14	2.08	-3.43	11.98		0.11
RExt	0.16			0.00	0.11		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay	-------Shear(k)------				-----Moment(f-k)-----				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
LExt	RSup	-0.16	5.02	0.03	RSup	0.11	6.65	0.02	RSup	0.04	0.15	
1	RLap	-1.15	5.02	0.23	MidS	-3.43	5.96	0.57	RSup	0.46	-0.60	
2	RLap	-1.05	2.56	0.41	RLap	2.61	5.12	0.51	RLap	0.66	-0.35	
3	LLap	1.05	2.56	0.41	LLap	2.61	5.12	0.51	LLap	0.66	-0.35	
4	LLap	1.15	5.02	0.23	MidS	-3.43	5.96	0.57	LSup	0.46	-0.60	
RExt	LSup	0.16	5.02	0.03	LSup	0.11	6.65	0.02	LSup	0.04	0.15	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay	-------Left_Lap-------				-------Right_Lap------			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.60	2.21	2.36	0.27
2	0.48	2.21	1.89	0.25	0.80	2.21	1.89	0.43
3	0.80	2.21	1.89	0.43	0.48	2.21	1.89	0.25
4	0.60	2.21	2.36	0.27				

LOAD COMBINATION # 5 : DL+WP1

PURLIN ANALYSIS:

Bay	--------Shear(k)--------				--------------Moment(f-k)--------------					
Id	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	Loc	Right Lap	Right Sup
LExt	0.00			-0.10	0.00		0.00	0.00		0.06
1	0.55		-0.69	-0.86	0.06		-2.06	7.69	1.25	3.09
2	0.79	0.62	-0.63	-0.72	3.09	1.43	-1.21	10.95	1.57	2.42
3	0.72	0.63	-0.62	-0.79	2.42	1.57	-1.21	10.05	1.43	3.09
4	0.86	0.69		-0.55	3.09	1.25	-2.06	11.98		0.06
RExt	0.10			0.00	0.06		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay	-------Shear(k)------				-----Moment(f-k)-----				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
LExt	RSup	-0.10	5.02	0.02	RSup	0.06	6.65	0.01	LSup	0.00	0.09	
1	RLap	-0.69	5.02	0.14	MidS	-2.06	5.96	0.35	RSup	0.28	-0.36	
2	RLap	-0.63	2.56	0.25	RLap	1.57	5.12	0.31	RLap	0.39	-0.21	
3	LLap	0.63	2.56	0.25	LLap	1.57	5.12	0.31	LLap	0.39	-0.21	
4	LLap	0.69	5.02	0.14	MidS	-2.06	5.96	0.35	LSup	0.28	-0.36	
RExt	LSup	0.10	5.02	0.02	LSup	0.06	6.65	0.01	LSup	0.00	0.09	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay	-------Left_Lap-------				-------Right_Lap------			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.36	2.21	2.36	0.16
2	0.29	2.21	1.89	0.15	0.48	2.21	1.89	0.26
3	0.48	2.21	1.89	0.26	0.29	2.21	1.89	0.15
4	0.36	2.21	2.36	0.16				

LOAD COMBINATION # 6 : DL+WS1

PURLIN ANALYSIS:

Bay Id	Shear(k) Left Sup	Shear(k) Left Lap	Shear(k) Right Lap	Shear(k) Right Sup	Moment(f-k) Left Sup	Moment(f-k) Left Lap	Moment(f-k) MidSpan Mom	Moment(f-k) MidSpan Loc	Moment(f-k) Right Lap	Moment(f-k) Right Sup
LExt	0.00			0.20	0.00		0.00	0.00		-0.13
1	-0.87		0.94	1.18	-0.13		2.85	7.72	-1.71	-4.23
2	-1.07	-0.84	0.86	0.98	-4.23	-1.96	1.64	10.96	-2.13	-3.28
3	-0.98	-0.86	0.84	1.07	-3.28	-2.13	1.64	10.04	-1.96	-4.23
4	-1.18	-0.94		0.87	-4.23	-1.71	2.85	11.94		-0.13
RExt	-0.20			0.00	-0.13		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Shear(k) Calc	Shear(k) Limit	Shear(k) UC	Moment(f-k) Loc	Moment(f-k) Calc	Moment(f-k) Limit	Moment(f-k) UC	-Mom+Shr- Loc	-Mom+Shr- UC	Deflect(in) Calc	Deflect(in) Limit
LExt	RSup	0.20	5.02	0.04	RSup	-0.13	6.65	0.02	RSup	0.04	-0.13	
1	RLap	0.94	5.02	0.19	MidS	2.85	6.65	0.43	RSup	0.38	0.50	
2	RLap	0.86	2.56	0.34	RLap	-2.13	5.12	0.42	RLap	0.53	0.29	
3	LLap	-0.86	2.56	0.34	LLap	-2.13	5.12	0.42	LLap	0.53	0.29	
4	LLap	-0.94	5.02	0.19	MidS	2.85	6.65	0.43	LSup	0.38	0.50	
RExt	LSup	-0.20	5.02	0.04	LSup	-0.13	6.65	0.02	LSup	0.04	-0.13	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay Id	Left_Lap Calc	Left_Lap Shear	Left_Lap Bear	Left_Lap UC	Right_Lap Calc	Right_Lap Shear	Right_Lap Bear	Right_Lap UC
1					0.49	2.21	2.36	0.22
2	0.40	2.21	1.89	0.21	0.66	2.21	1.89	0.35
3	0.66	2.21	1.89	0.35	0.40	2.21	1.89	0.21
4	0.49	2.21	2.36	0.22				

LOAD COMBINATION # 7 : DL+CL+0.75LL+0.75WP1

PURLIN ANALYSIS:

Bay Id	Shear(k) Left Sup	Shear(k) Left Lap	Shear(k) Right Lap	Shear(k) Right Sup	Moment(f-k) Left Sup	Moment(f-k) Left Lap	Moment(f-k) MidSpan Mom	Moment(f-k) MidSpan Loc	Moment(f-k) Right Lap	Moment(f-k) Right Sup
LExt	0.00			-0.25	0.00		0.00	0.00		0.17
1	1.45		-1.81	-2.26	0.17		-5.41	7.69	3.29	8.13
2	2.07	1.62	-1.66	-1.90	8.13	3.75	-3.19	10.95	4.13	6.36
3	1.90	1.66	-1.62	-2.07	6.36	4.13	-3.19	10.05	3.75	8.13
4	2.26	1.81		-1.45	8.13	3.29	-5.41	11.98		0.17
RExt	0.25			0.00	0.17		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Shear(k) Calc	Shear(k) Limit	Shear(k) UC	Moment(f-k) Loc	Moment(f-k) Calc	Moment(f-k) Limit	Moment(f-k) UC	-Mom+Shr- Loc	-Mom+Shr- UC	Deflect(in) Calc	Deflect(in) Limit
LExt	RSup	-0.25	5.02	0.05	RSup	0.17	6.65	0.03	RSup	0.06	0.24	
1	RLap	-1.81	5.02	0.36	MidS	-5.41	5.96	0.91	RSup	0.72	-0.94	
2	RLap	-1.66	2.56	0.65	RLap	4.13	5.12	0.81	RLap	1.03	-0.56	
3	LLap	1.66	2.56	0.65	LLap	4.13	5.12	0.81	LLap	1.03	-0.56	
4	LLap	1.81	5.02	0.36	MidS	-5.41	5.96	0.91	LSup	0.72	-0.94	
RExt	LSup	0.25	5.02	0.05	LSup	0.17	6.65	0.03	LSup	0.06	0.24	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay Id	Left_Lap Calc	Left_Lap Shear	Left_Lap Bear	Left_Lap UC	Right_Lap Calc	Right_Lap Shear	Right_Lap Bear	Right_Lap UC
1					0.95	2.21	2.36	0.43
2	0.76	2.21	1.89	0.40	1.27	2.21	1.89	0.67

3	1.27	2.21	1.89	0.67	0.76	2.21	1.89	0.40
4	0.95	2.21	2.36	0.43				

LOAD COMBINATION # 8 : DL+CL+0.75SL+0.75WP1

PURLIN ANALYSIS:

Bay Id	Shear(k) Left Sup	Left Lap	Right Lap	Right Sup	Moment(f-k) Left Sup	Left Lap	MidSpan Mom	MidSpan Loc	Right Lap	Right Sup
LExt	0.00			-0.21	0.00		0.00	0.00		0.14
1	1.22		-1.53	-1.90	0.14		-4.55	7.69	2.77	6.84
2	1.74	1.36	-1.40	-1.60	6.84	3.16	-2.68	10.95	3.47	5.35
3	1.60	1.40	-1.36	-1.74	5.35	3.47	-2.68	10.05	3.16	6.84
4	1.90	1.53		-1.22	6.84	2.77	-4.55	11.98		0.14
RExt	0.21			0.00	0.14		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Calc	Limit	UC	Moment(f-k) Loc	Calc	Limit	UC	-Mom+Shr- Loc	UC	Deflect(in) Calc	Limit
LExt	RSup	-0.21	5.02	0.04	RSup	0.14	6.65	0.02	RSup	0.05	0.20	
1	RLap	-1.53	5.02	0.30	MidS	-4.55	5.96	0.76	RSup	0.61	-0.79	
2	RLap	-1.40	2.56	0.55	RLap	3.47	5.12	0.68	RLap	0.87	-0.47	
3	LLap	1.40	2.56	0.55	LLap	3.47	5.12	0.68	LLap	0.87	-0.47	
4	LLap	1.53	5.02	0.30	MidS	-4.55	5.96	0.76	LSup	0.61	-0.79	
RExt	LSup	0.21	5.02	0.04	LSup	0.14	6.65	0.02	LSup	0.05	0.20	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay Id	Left_Lap Calc	Shear	Bear	UC	Right_Lap Calc	Shear	Bear	UC
1					0.80	2.21	2.36	0.36
2	0.64	2.21	1.89	0.34	1.07	2.21	1.89	0.57
3	1.07	2.21	1.89	0.57	0.64	2.21	1.89	0.34
4	0.80	2.21	2.36	0.36				

LOAD COMBINATION # 9 : DL+CL+0.75LL+0.75WS1

PURLIN ANALYSIS:

Bay Id	Shear(k) Left Sup	Left Lap	Right Lap	Right Sup	Moment(f-k) Left Sup	Left Lap	MidSpan Mom	MidSpan Loc	Right Lap	Right Sup
LExt	0.00			-0.03	0.00		0.00	0.00		0.02
1	0.39		-0.59	-0.73	0.02		-1.73	7.76	1.07	2.63
2	0.67	0.53	-0.54	-0.62	2.63	1.21	-1.04	10.93	1.35	2.08
3	0.62	0.54	-0.53	-0.67	2.08	1.35	-1.04	10.07	1.21	2.63
4	0.73	0.59		-0.39	2.63	1.07	-1.73	11.91		0.02
RExt	0.03			0.00	0.02		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Calc	Limit	UC	Moment(f-k) Loc	Calc	Limit	UC	-Mom+Shr- Loc	UC	Deflect(in) Calc	Limit
LExt	RSup	-0.03	5.02	0.01	RSup	0.02	6.65	0.00	LSup	0.00	0.08	
1	RLap	-0.59	5.02	0.12	MidS	-1.73	5.98	0.29	RSup	0.23	-0.30	
2	RLap	-0.54	2.56	0.21	RLap	1.35	5.12	0.26	RLap	0.34	-0.18	
3	LLap	0.54	2.56	0.21	LLap	1.35	5.12	0.26	LLap	0.34	-0.18	
4	LLap	0.59	5.02	0.12	MidS	-1.73	5.98	0.29	LSup	0.23	-0.30	
RExt	LSup	0.03	5.02	0.01	LSup	0.02	6.65	0.00	LSup	0.00	0.08	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay Id	Left_Lap Calc	Left_Lap Shear	Left_Lap Bear	Left_Lap UC	Right_Lap Calc	Right_Lap Shear	Right_Lap Bear	Right_Lap UC
1					0.31	2.21	2.36	0.14
2	0.25	2.21	1.89	0.13	0.42	2.21	1.89	0.22
3	0.42	2.21	1.89	0.22	0.25	2.21	1.89	0.13
4	0.31	2.21	2.36	0.14				

LOAD COMBINATION # 10 : DL+CL+0.75SL+0.75WS1

PURLIN ANALYSIS:

Bay Id	Shear(k) Left Sup	Shear(k) Left Lap	Shear(k) Right Lap	Shear(k) Right Sup	Moment(f-k) Left Sup	Moment(f-k) Left Lap	Moment(f-k) MidSpan Mom	Moment(f-k) MidSpan Loc	Moment(f-k) Right Lap	Moment(f-k) Right Sup
LExt	0.00			0.01	0.00		0.00	0.00		-0.01
1	0.16		-0.30	-0.37	-0.01		-0.87	7.83	0.54	1.34
2	0.34	0.27	-0.28	-0.32	1.34	0.61	-0.54	10.91	0.70	1.07
3	0.32	0.28	-0.27	-0.34	1.07	0.70	-0.54	10.09	0.61	1.34
4	0.37	0.30		-0.16	1.34	0.54	-0.87	11.84		-0.01
RExt	-0.01			0.00	-0.01		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Shear(k) Calc	Shear(k) Limit	Shear(k) UC	Moment(f-k) Loc	Moment(f-k) Calc	Moment(f-k) Limit	Moment(f-k) UC	-Mom+Shr- Loc	-Mom+Shr- UC	Deflect(in) Calc	Deflect(in) Limit
LExt	RSup	0.01	5.02	0.00	RSup	-0.01	6.65	0.00	LSup	0.00	0.04	
1	RLap	-0.30	5.02	0.06	MidS	-0.87	6.00	0.15	RSup	0.12	-0.15	
2	RLap	-0.28	2.56	0.11	RLap	0.70	5.12	0.14	RLap	0.17	-0.10	
3	LLap	0.28	2.56	0.11	LLap	0.70	5.12	0.14	LLap	0.17	-0.10	
4	LLap	0.30	5.02	0.06	MidS	-0.87	6.00	0.15	LSup	0.12	-0.15	
RExt	LSup	-0.01	5.02	0.00	LSup	-0.01	6.65	0.00	LSup	0.00	0.04	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay Id	Left_Lap Calc	Left_Lap Shear	Left_Lap Bear	Left_Lap UC	Right_Lap Calc	Right_Lap Shear	Right_Lap Bear	Right_Lap UC
1					0.16	2.21	2.36	0.07
2	0.13	2.21	1.89	0.07	0.21	2.21	1.89	0.11
3	0.21	2.21	1.89	0.11	0.13	2.21	1.89	0.07
4	0.16	2.21	2.36	0.07				

LOAD COMBINATION # 11 : 0.6DL+WP1

PURLIN ANALYSIS:

Bay Id	Shear(k) Left Sup	Shear(k) Left Lap	Shear(k) Right Lap	Shear(k) Right Sup	Moment(f-k) Left Sup	Moment(f-k) Left Lap	Moment(f-k) MidSpan Mom	Moment(f-k) MidSpan Loc	Moment(f-k) Right Lap	Moment(f-k) Right Sup
LExt	0.00			-0.09	0.00		0.00	0.00		0.06
1	0.49		-0.62	-0.77	0.06		-1.84	7.69	1.12	2.76
2	0.70	0.55	-0.56	-0.64	2.76	1.27	-1.08	10.95	1.40	2.16
3	0.64	0.56	-0.55	-0.70	2.16	1.40	-1.08	10.05	1.27	2.76
4	0.77	0.62		-0.49	2.76	1.12	-1.84	11.98		0.06
RExt	0.09			0.00	0.06		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Shear(k) Calc	Shear(k) Limit	Shear(k) UC	Moment(f-k) Loc	Moment(f-k) Calc	Moment(f-k) Limit	Moment(f-k) UC	-Mom+Shr- Loc	-Mom+Shr- UC	Deflect(in) Calc	Deflect(in) Limit
LExt	RSup	-0.09	5.02	0.02	RSup	0.06	6.65	0.01	LSup	0.00	0.08	
1	RLap	-0.62	5.02	0.12	MidS	-1.84	5.96	0.31	RSup	0.25	-0.32	
2	RLap	-0.56	2.56	0.22	RLap	1.40	5.12	0.27	RLap	0.35	-0.19	

3	LLap	0.56	2.56	0.22	LLap	1.40	5.12	0.27	LLap	0.35	-0.19
4	LLap	0.62	5.02	0.12	MidS	-1.84	5.96	0.31	LSup	0.25	-0.32
RExt	LSup	0.09	5.02	0.02	LSup	0.06	6.65	0.01	LSup	0.00	0.08

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay	Left_Lap				Right_Lap			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.32	2.21	2.36	0.15
2	0.26	2.21	1.89	0.14	0.43	2.21	1.89	0.23
3	0.43	2.21	1.89	0.23	0.26	2.21	1.89	0.14
4	0.32	2.21	2.36	0.15				

LOAD COMBINATION # 12 : 0.6DL+WS1

PURLIN ANALYSIS:

Bay	Shear(k)				Moment(f-k)					
Id	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	MidSpan Loc	Right Lap	Right Sup
LExt	0.00			0.21	0.00		0.00	0.00		-0.14
1	-0.93		1.02	1.27	-0.14		3.07	7.72	-1.85	-4.57
2	-1.16	-0.91	0.93	1.06	-4.57	-2.12	1.78	10.96	-2.30	-3.54
3	-1.06	-0.93	0.91	1.16	-3.54	-2.30	1.78	10.04	-2.12	-4.57
4	-1.27	-1.02		0.93	-4.57	-1.85	3.07	11.95		-0.14
RExt	-0.21			0.00	-0.14		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
LExt	RSup	0.21	5.02	0.04	RSup	-0.14	6.65	0.02	RSup	0.05	-0.14	
1	RLap	1.02	5.02	0.20	MidS	3.07	6.65	0.46	RSup	0.41	0.53	
2	RLap	0.93	2.56	0.36	RLap	-2.30	5.12	0.45	RLap	0.58	0.31	
3	LLap	-0.93	2.56	0.36	LLap	-2.30	5.12	0.45	LLap	0.58	0.31	
4	LLap	-1.02	5.02	0.20	MidS	3.07	6.65	0.46	LSup	0.41	0.53	
RExt	LSup	-0.21	5.02	0.04	LSup	-0.14	6.65	0.02	LSup	0.05	-0.14	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay	Left_Lap				Right_Lap			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.53	2.21	2.36	0.24
2	0.43	2.21	1.89	0.23	0.71	2.21	1.89	0.37
3	0.71	2.21	1.89	0.37	0.43	2.21	1.89	0.23
4	0.53	2.21	2.36	0.24				

LOAD COMBINATION # 13 : DL+CL+SL/2+PAT_SL_3

PURLIN ANALYSIS:

Bay	Shear(k)				Moment(f-k)					
Id	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	MidSpan Loc	Right Lap	Right Sup
LExt	0.00			-0.19	0.00		0.00	0.00		0.13
1	1.10		-1.40	-1.75	0.13		-4.06	7.60	2.74	6.48
2	1.64	1.29	-1.22	-1.40	6.48	3.00	-2.78	11.31	2.38	4.02
3	1.00	0.88	-0.76	-0.98	4.02	2.85	-1.28	10.61	1.75	3.81
4	1.12	0.89		-0.74	3.81	1.42	-2.80	11.84		0.08
RExt	0.13			0.00	0.08		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
LExt	RSup	-0.19	5.02	0.04	RSup	0.13	6.65	0.02	RSup	0.04	0.18	
1	RLap	-1.40	5.02	0.28	MidS	-4.06	5.95	0.68	RSup	0.57	-0.69	
2	LLap	1.29	2.56	0.50	LLap	3.00	5.12	0.59	LLap	0.77	-0.55	
3	LLap	0.88	2.56	0.34	LLap	2.85	5.12	0.56	LLap	0.65	-0.16	
4	LLap	0.89	5.02	0.18	MidS	-2.80	5.97	0.47	LSup	0.34	-0.50	
RExt	LSup	0.13	5.02	0.03	LSup	0.08	6.65	0.01	LSup	0.03	0.13	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay	Left_Lap				Right_Lap			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.76	2.21	2.36	0.34
2	0.61	2.21	1.89	0.32	0.80	2.21	1.89	0.43
3	0.80	2.21	1.89	0.43	0.36	2.21	1.89	0.19
4	0.45	2.21	2.36	0.20				

LOAD COMBINATION # 14 : DL+CL+SL/2+PAT_SL_4

PURLIN ANALYSIS:

Bay	Shear(k)				Moment(f-k)					
Id	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	MidSpan Loc	Right Lap	Right Sup
LExt	0.00			-0.13	0.00		0.00	0.00		0.08
1	0.68		-0.95	-1.18	0.08		-2.35	7.18	2.47	4.99
2	1.50	1.15	-1.36	-1.54	4.99	1.85	-2.74	10.34	3.67	5.49
3	1.54	1.36	-1.15	-1.50	5.49	3.67	-2.74	10.66	1.85	4.99
4	1.18	0.95		-0.68	4.99	2.47	-2.35	12.48		0.08
RExt	0.13			0.00	0.08		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
LExt	RSup	-0.13	5.02	0.03	RSup	0.08	6.65	0.01	RSup	0.03	0.10	
1	RLap	-0.95	5.02	0.19	RSup	2.77	6.65	0.42	RSup	0.44	-0.34	
2	RLap	-1.36	2.56	0.53	RLap	3.67	5.12	0.72	RLap	0.89	-0.55	
3	LLap	1.36	2.56	0.53	LLap	3.67	5.12	0.72	LLap	0.89	-0.55	
4	LLap	0.95	5.02	0.19	LSup	2.77	6.65	0.42	LSup	0.44	-0.34	
RExt	LSup	0.13	5.02	0.02	LSup	0.08	6.65	0.01	LSup	0.03	0.10	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay	Left_Lap				Right_Lap			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.58	2.21	2.36	0.26
2	0.47	2.21	1.89	0.25	1.10	2.21	1.89	0.58
3	1.10	2.21	1.89	0.58	0.47	2.21	1.89	0.25
4	0.58	2.21	2.36	0.26				

LOAD COMBINATION # 15 : DL+CL+SL/2+PAT_SL_5

PURLIN ANALYSIS:

Bay	Shear(k)				Moment(f-k)					
Id	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	MidSpan Loc	Right Lap	Right Sup
LExt	0.00			-0.13	0.00		0.00	0.00		0.08
1	0.74		-0.89	-1.12	0.08		-2.80	7.82	1.42	3.81

2	0.98	0.76	-0.88	-1.00	3.81	1.75	-1.28	10.39	2.85	4.02
3	1.40	1.22	-1.29	-1.64	4.02	2.38	-2.78	9.69	3.00	6.48
4	1.75	1.40		-1.10	6.48	2.74	-4.06	12.06		0.13
RExt	0.19			0.00	0.13		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay	-------Shear(k)------				-----Moment(f-k)-----				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
LExt	RSup	-0.13	5.02	0.02	RSup	0.08	6.65	0.01	RSup	0.03	0.13	
1	RLap	-0.89	5.02	0.18	MidS	-2.80	5.97	0.47	RSup	0.34	-0.50	
2	RLap	-0.88	2.56	0.34	RLap	2.85	5.12	0.56	RLap	0.65	-0.16	
3	RLap	-1.29	2.56	0.50	RLap	3.00	5.12	0.59	RLap	0.77	-0.55	
4	LLap	1.40	5.02	0.28	MidS	-4.06	5.95	0.68	LSup	0.57	-0.69	
RExt	LSup	0.19	5.02	0.04	LSup	0.13	6.65	0.02	LSup	0.04	0.18	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay	-------Left_Lap-------				-------Right_Lap------			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.45	2.21	2.36	0.20
2	0.36	2.21	1.89	0.19	0.80	2.21	1.89	0.43
3	0.80	2.21	1.89	0.43	0.61	2.21	1.89	0.32
4	0.76	2.21	2.36	0.34				

LOAD COMBINATION # 16 : DL+CL+SL/2+PAT_SL_1

PURLIN ANALYSIS:

	--------Shear(k)--------				----------Moment(f-k)----------					
Bay	Left	Left	Right	Right	Left	Left	MidSpan		Right	Right
Id	Sup	Lap	Lap	Sup	Sup	Lap	Mom	Loc	Lap	Sup
LExt	0.00			-0.19	0.00		0.00	0.00		0.13
1	1.17		-1.34	-1.68	0.13		-4.56	8.05	1.62	5.20
2	1.10	0.88	-0.76	-0.88	5.20	2.85	-1.23	11.68	1.84	2.86
3	0.93	0.81	-0.83	-1.05	2.86	1.78	-1.71	9.85	1.92	4.14
4	1.13	0.91		-0.72	4.14	1.72	-2.67	12.03		0.08
RExt	0.13			0.00	0.08		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay	-------Shear(k)------				-----Moment(f-k)-----				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
LExt	RSup	-0.19	5.02	0.04	RSup	0.13	6.65	0.02	RSup	0.04	0.21	
1	RLap	-1.34	5.02	0.27	MidS	-4.56	5.98	0.76	RSup	0.47	-0.86	
2	LLap	0.88	2.56	0.34	LLap	2.85	5.12	0.56	LLap	0.65	-0.12	
3	RLap	-0.83	2.56	0.32	RLap	1.92	5.12	0.37	RLap	0.49	-0.32	
4	LLap	0.91	5.02	0.18	MidS	-2.67	5.96	0.45	LSup	0.37	-0.46	
RExt	LSup	0.13	5.02	0.03	LSup	0.08	6.65	0.01	LSup	0.03	0.12	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay	-------Left_Lap-------				-------Right_Lap------			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.61	2.21	2.36	0.28
2	0.49	2.21	1.89	0.26	0.57	2.21	1.89	0.30
3	0.57	2.21	1.89	0.30	0.39	2.21	1.89	0.21
4	0.48	2.21	2.36	0.22				

LOAD COMBINATION # 17 : DL+CL+SL/2+PAT_SL_2

PURLIN ANALYSIS:

Bay Id	Shear(k) Left Sup	Shear(k) Left Lap	Shear(k) Right Lap	Shear(k) Right Sup	Moment(f-k) Left Sup	Moment(f-k) Left Lap	Moment(f-k) MidSpan Mom	Moment(f-k) MidSpan Loc	Moment(f-k) Right Lap	Moment(f-k) Right Sup
LExt	0.00			-0.13	0.00		0.00	0.00		0.08
1	0.72		-0.91	-1.13	0.08		-2.67	7.64	1.72	4.14
2	1.05	0.83	-0.81	-0.93	4.14	1.92	-1.71	11.15	1.78	2.86
3	0.88	0.76	-0.88	-1.10	2.86	1.84	-1.23	9.32	2.85	5.20
4	1.68	1.34		-1.17	5.20	1.62	-4.56	11.62		0.13
RExt	0.19			0.00	0.13		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Shear(k) Calc	Shear(k) Limit	Shear(k) UC	Moment(f-k) Loc	Moment(f-k) Calc	Moment(f-k) Limit	Moment(f-k) UC	-Mom+Shr- Loc	-Mom+Shr- UC	Deflect(in) Calc	Deflect(in) Limit
LExt	RSup	-0.13	5.02	0.02	RSup	0.08	6.65	0.01	RSup	0.03	0.12	
1	RLap	-0.91	5.02	0.18	MidS	-2.67	5.96	0.45	RSup	0.37	-0.46	
2	LLap	0.83	2.56	0.32	LLap	1.92	5.12	0.37	LLap	0.49	-0.32	
3	RLap	-0.88	2.56	0.34	RLap	2.85	5.12	0.56	RLap	0.65	-0.12	
4	LLap	1.34	5.02	0.27	MidS	-4.56	5.98	0.76	LSup	0.47	-0.86	
RExt	LSup	0.19	5.02	0.04	LSup	0.13	6.65	0.02	LSup	0.04	0.21	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay Id	Left_Lap Calc	Left_Lap Shear	Left_Lap Bear	Left_Lap UC	Right_Lap Calc	Right_Lap Shear	Right_Lap Bear	Right_Lap UC
1					0.48	2.21	2.36	0.22
2	0.39	2.21	1.89	0.21	0.57	2.21	1.89	0.30
3	0.57	2.21	1.89	0.30	0.49	2.21	1.89	0.26
4	0.61	2.21	2.36	0.28				

LOAD COMBINATION # 18 : DL+CL+SL-1.0PAT_SL

PURLIN ANALYSIS:

Bay Id	Shear(k) Left Sup	Shear(k) Left Lap	Shear(k) Right Lap	Shear(k) Right Sup	Moment(f-k) Left Sup	Moment(f-k) Left Lap	Moment(f-k) MidSpan Mom	Moment(f-k) MidSpan Loc	Moment(f-k) Right Lap	Moment(f-k) Right Sup
LExt	0.00			-0.13	0.00		0.00	0.00		0.08
1	0.67		-0.96	-1.18	0.08		-2.31	7.13	2.55	5.08
2	1.52	1.17	-1.34	-1.52	5.08	1.89	-2.85	10.47	3.39	5.18
3	1.47	1.29	-1.22	-1.57	5.18	3.45	-2.33	10.18	2.83	6.14
4	1.73	1.39		-1.12	6.14	2.44	-4.19	11.95		0.13
RExt	0.19			0.00	0.13		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Shear(k) Calc	Shear(k) Limit	Shear(k) UC	Moment(f-k) Loc	Moment(f-k) Calc	Moment(f-k) Limit	Moment(f-k) UC	-Mom+Shr- Loc	-Mom+Shr- UC	Deflect(in) Calc	Deflect(in) Limit
LExt	RSup	-0.13	5.02	0.02	RSup	0.08	6.65	0.01	RSup	0.03	0.09	
1	RLap	-0.96	5.02	0.19	RSup	2.82	6.65	0.42	RSup	0.44	-0.33	
2	RLap	-1.34	2.56	0.52	RLap	3.39	5.12	0.66	RLap	0.84	-0.59	
3	LLap	1.29	2.56	0.50	LLap	3.45	5.12	0.67	LLap	0.84	-0.39	
4	LLap	1.39	5.02	0.28	MidS	-4.19	5.96	0.70	LSup	0.55	-0.73	
RExt	LSup	0.19	5.02	0.04	LSup	0.13	6.65	0.02	LSup	0.04	0.19	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay Id	Left_Lap Calc	Left_Lap Shear	Left_Lap Bear	Left_Lap UC	Right_Lap Calc	Right_Lap Shear	Right_Lap Bear	Right_Lap UC
1					0.59	2.21	2.36	0.27
2	0.48	2.21	1.89	0.25	1.04	2.21	1.89	0.55
3	1.04	2.21	1.89	0.55	0.57	2.21	1.89	0.30

4	0.72	2.21	2.36	0.33

LOAD COMBINATION # 19 : DL+CL+SL-1.0PAT_SL

PURLIN ANALYSIS:

Bay Id	Shear(k) Left Sup	Shear(k) Left Lap	Shear(k) Right Lap	Shear(k) Right Sup	Moment(f-k) Left Sup	Moment(f-k) Left Lap	Moment(f-k) MidSpan Mom	Moment(f-k) MidSpan Loc	Moment(f-k) Right Lap	Moment(f-k) Right Sup
LExt	0.00			-0.19	0.00		0.00	0.00		0.13
1	1.12		-1.39	-1.73	0.13		-4.19	7.72	2.44	6.14
2	1.57	1.22	-1.29	-1.47	6.14	2.83	-2.33	10.82	3.45	5.18
3	1.52	1.34	-1.17	-1.52	5.18	3.39	-2.85	10.53	1.89	5.08
4	1.18	0.96		-0.67	5.08	2.55	-2.31	12.53		0.08
RExt	0.13			0.00	0.08		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Shear(k) Calc	Shear(k) Limit	Shear(k) UC	Moment(f-k) Loc	Moment(f-k) Calc	Moment(f-k) Limit	Moment(f-k) UC	-Mom+Shr- Loc	-Mom+Shr- UC	Deflect(in) Calc	Deflect(in) Limit
LExt	RSup	-0.19	5.02	0.04	RSup	0.13	6.65	0.02	RSup	0.04	0.19	
1	RLap	-1.39	5.02	0.28	MidS	-4.19	5.96	0.70	RSup	0.55	-0.73	
2	RLap	-1.29	2.56	0.50	RLap	3.45	5.12	0.67	RLap	0.84	-0.39	
3	LLap	1.34	2.56	0.52	LLap	3.39	5.12	0.66	LLap	0.84	-0.59	
4	LLap	0.96	5.02	0.19	LSup	2.82	6.65	0.42	LSup	0.44	-0.33	
RExt	LSup	0.13	5.02	0.03	LSup	0.08	6.65	0.01	LSup	0.03	0.09	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay Id	Left_Lap Calc	Left_Lap Shear	Left_Lap Bear	Left_Lap UC	Right_Lap Calc	Right_Lap Shear	Right_Lap Bear	Right_Lap UC
1					0.72	2.21	2.36	0.33
2	0.57	2.21	1.89	0.30	1.04	2.21	1.89	0.55
3	1.04	2.21	1.89	0.55	0.48	2.21	1.89	0.25
4	0.59	2.21	2.36	0.27				

LOAD COMBINATION # 20 : DL+CL+UNB_SL

PURLIN ANALYSIS:

Bay Id	Shear(k) Left Sup	Shear(k) Left Lap	Shear(k) Right Lap	Shear(k) Right Sup	Moment(f-k) Left Sup	Moment(f-k) Left Lap	Moment(f-k) MidSpan Mom	Moment(f-k) MidSpan Loc	Moment(f-k) Right Lap	Moment(f-k) Right Sup
LExt	0.00			-0.19	0.00		0.00	0.00		0.13
1	1.11		-1.39	-1.73	0.13		-4.15	7.69	2.52	6.23
2	1.58	1.24	-1.27	-1.46	6.23	2.88	-2.44	10.95	3.17	4.87
3	1.46	1.27	-1.24	-1.58	4.87	3.17	-2.44	10.05	2.88	6.23
4	1.73	1.39		-1.11	6.23	2.52	-4.15	11.98		0.13
RExt	0.19			0.00	0.13		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Shear(k) Calc	Shear(k) Limit	Shear(k) UC	Moment(f-k) Loc	Moment(f-k) Calc	Moment(f-k) Limit	Moment(f-k) UC	-Mom+Shr- Loc	-Mom+Shr- UC	Deflect(in) Calc	Deflect(in) Limit
LExt	RSup	-0.19	5.02	0.04	RSup	0.13	6.65	0.02	RSup	0.04	0.18	
1	RLap	-1.39	5.02	0.28	MidS	-4.15	5.96	0.70	RSup	0.55	-0.72	
2	RLap	-1.27	2.56	0.50	RLap	3.17	5.12	0.62	RLap	0.79	-0.43	
3	LLap	1.27	2.56	0.50	LLap	3.17	5.12	0.62	LLap	0.79	-0.43	
4	LLap	1.39	5.02	0.28	MidS	-4.15	5.96	0.70	LSup	0.55	-0.72	
RExt	LSup	0.19	5.02	0.04	LSup	0.13	6.65	0.02	LSup	0.04	0.18	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay Id	Left_Lap Calc	Left_Lap Shear	Left_Lap Bear	Left_Lap UC	Right_Lap Calc	Right_Lap Shear	Right_Lap Bear	Right_Lap UC
1					0.73	2.21	2.36	0.33
2	0.58	2.21	1.89	0.31	0.97	2.21	1.89	0.52
3	0.97	2.21	1.89	0.52	0.58	2.21	1.89	0.31
4	0.73	2.21	2.36	0.33				

DEFLECTION:

LOAD COMBINATION # 21 : DL+CL+LL

Bay Id	DEFLECTION(in) Calc	Limit	Ratio
LExt	0.24		
1	-0.92	0.98	0.94
2	-0.55	1.05	0.52
3	-0.55	1.05	0.52
4	-0.92	0.98	0.94
RExt	0.24		

LOAD COMBINATION # 22 : DL+CL+SL

Bay Id	DEFLECTION(in) Calc	Limit	Ratio
LExt	0.18		
1	-0.72	0.98	0.73
2	-0.43	1.05	0.41
3	-0.43	1.05	0.41
4	-0.72	0.98	0.73
RExt	0.18		

LOAD COMBINATION # 23 : LL

Bay Id	DEFLECTION(in) Calc	Limit	Ratio
LExt	0.18		
1	-0.70	0.98	0.71
2	-0.42	1.05	0.40
3	-0.42	1.05	0.40
4	-0.70	0.98	0.71
RExt	0.18		

LOAD COMBINATION # 24 : SL

Bay Id	DEFLECTION(in) Calc	Limit	Ratio
LExt	0.13		
1	-0.50	0.98	0.51
2	-0.30	1.05	0.29
3	-0.30	1.05	0.29
4	-0.50	0.98	0.51
RExt	0.13		

LOAD COMBINATION # 25 : DL+0.75WP1

Bay Id	DEFLECTION(in) Calc	Limit	Ratio
LExt	0.07		
1	-0.29	0.98	0.30
2	-0.17	1.05	0.17
3	-0.17	1.05	0.17

4	-0.29	0.98	0.30
RExt	0.07		

LOAD COMBINATION # 26 : DL+0.75WS1

Bay Id	DEFLECTION(in) Calc	Limit	Ratio
LExt	-0.09		
1	0.34	0.98	0.34
2	0.20	1.05	0.19
3	0.20	1.05	0.19
4	0.34	0.98	0.34
RExt	-0.09		

S12S0554A Purlin(Surface= 2, Id= 4) 9/12/12 3:58pm

ROOF PURLIN
Surface Id = 2
Purlin Id = 4
Offset = 17.22
Edge Strip = 3.60

PURLIN LAYOUT: (Purlin Id= 4)

Bay Id	Purlin Part	Design Length (ft)	Lap(ft) Left	Lap(ft) Right	Load Width	No. Brace	Available Reduction Factor Out	Available Reduction Factor In
LExt	08Z075	1.33			2.78	0	0.86	0.75
1	08Z075	19.67		2.38	2.78	2	0.86	0.75
2	08Z060	21.00	2.38	1.25	2.78	2	0.89	0.69
3	08Z060	21.00	1.25	2.38	2.78	2	0.89	0.69
4	08Z075	19.67	2.38		2.78	2	0.86	0.75
RExt	08Z075	1.33			2.78	0	0.86	0.75

LOAD COMBINATION # 1 : DL+CL+LL

PURLIN ANALYSIS:

Bay Id	Shear(k) Left Sup	Shear(k) Left Lap	Shear(k) Right Lap	Shear(k) Right Sup	Moment(f-k) Left Sup	Moment(f-k) Left Lap	Moment(f-k) MidSpan Mom	Moment(f-k) MidSpan Loc	Moment(f-k) Right Lap	Moment(f-k) Right Sup
LExt	0.00			-0.14	0.00		0.00	0.00		0.09
1	0.79		-0.99	-1.23	0.09		-2.95	7.69	1.79	4.43
2	1.13	0.88	-0.91	-1.03	4.43	2.05	-1.74	10.95	2.25	3.47
3	1.03	0.91	-0.88	-1.13	3.47	2.25	-1.74	10.05	2.05	4.43
4	1.23	0.99		-0.79	4.43	1.79	-2.95	11.98		0.09
RExt	0.14			0.00	0.09		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Shear(k) Calc	Shear(k) Limit	Shear(k) UC	Moment(f-k) Loc	Moment(f-k) Calc	Moment(f-k) Limit	Moment(f-k) UC	-Mom+Shr- Loc	-Mom+Shr- UC	Deflect(in) Calc	Deflect(in) Limit
LExt	RSup	-0.14	5.02	0.03	RSup	0.09	6.65	0.01	RSup	0.03	0.13	
1	RLap	-0.99	5.02	0.20	MidS	-2.95	5.96	0.50	RSup	0.39	-0.51	
2	RLap	-0.91	2.56	0.35	RLap	2.25	5.12	0.44	RLap	0.56	-0.31	
3	LLap	0.91	2.56	0.35	LLap	2.25	5.12	0.44	LLap	0.56	-0.31	
4	LLap	0.99	5.02	0.20	MidS	-2.95	5.96	0.50	LSup	0.39	-0.51	
RExt	LSup	0.14	5.02	0.03	LSup	0.09	6.65	0.01	LSup	0.03	0.13	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay Id	Left_Lap Calc	Left_Lap Shear	Left_Lap Bear	Left_Lap UC	Right_Lap Calc	Right_Lap Shear	Right_Lap Bear	Right_Lap UC
1					0.52	2.21	2.36	0.23
2	0.41	2.21	1.89	0.22	0.69	2.21	1.89	0.37
3	0.69	2.21	1.89	0.37	0.41	2.21	1.89	0.22
4	0.52	2.21	2.36	0.23				

LOAD COMBINATION # 2 : DL+CL+SL

PURLIN ANALYSIS:

Bay Id	Shear(k) Left Sup	Shear(k) Left Lap	Shear(k) Right Lap	Shear(k) Right Sup	Moment(f-k) Left Sup	Moment(f-k) Left Lap	Moment(f-k) MidSpan Mom	Moment(f-k) MidSpan Loc	Moment(f-k) Right Lap	Moment(f-k) Right Sup
LExt	0.00			-0.11	0.00		0.00	0.00		0.07
1	0.62		-0.77	-0.97	0.07		-2.31	7.69	1.41	3.47
2	0.88	0.69	-0.71	-0.81	3.47	1.60	-1.36	10.95	1.76	2.72
3	0.81	0.71	-0.69	-0.88	2.72	1.76	-1.36	10.05	1.60	3.47
4	0.97	0.77		-0.62	3.47	1.41	-2.31	11.98		0.07
RExt	0.11			0.00	0.07		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Shear(k) Calc	Shear(k) Limit	Shear(k) UC	Moment(f-k) Loc	Moment(f-k) Calc	Moment(f-k) Limit	Moment(f-k) UC	-Mom+Shr- Loc	-Mom+Shr- UC	Deflect(in) Calc	Deflect(in) Limit
LExt	RSup	-0.11	5.02	0.02	RSup	0.07	6.65	0.01	RSup	0.02	0.10	
1	RLap	-0.77	5.02	0.15	MidS	-2.31	5.96	0.39	RSup	0.31	-0.40	
2	RLap	-0.71	2.56	0.28	RLap	1.76	5.12	0.34	RLap	0.44	-0.24	
3	LLap	0.71	2.56	0.28	LLap	1.76	5.12	0.34	LLap	0.44	-0.24	
4	LLap	0.77	5.02	0.15	MidS	-2.31	5.96	0.39	LSup	0.31	-0.40	
RExt	LSup	0.11	5.02	0.02	LSup	0.07	6.65	0.01	LSup	0.02	0.10	

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Bay Id	Left_Lap Calc	Left_Lap Shear	Left_Lap Bear	Left_Lap UC	Right_Lap Calc	Right_Lap Shear	Right_Lap Bear	Right_Lap UC
1					0.41	2.21	2.36	0.18
2	0.32	2.21	1.89	0.17	0.54	2.21	1.89	0.29
3	0.54	2.21	1.89	0.29	0.32	2.21	1.89	0.17
4	0.41	2.21	2.36	0.18				

LOAD COMBINATION # 3 : DL+CL+0.75LL

PURLIN ANALYSIS:

Bay Id	Shear(k) Left Sup	Shear(k) Left Lap	Shear(k) Right Lap	Shear(k) Right Sup	Moment(f-k) Left Sup	Moment(f-k) Left Lap	Moment(f-k) MidSpan Mom	Moment(f-k) MidSpan Loc	Moment(f-k) Right Lap	Moment(f-k) Right Sup
LExt	0.00			-0.11	0.00		0.00	0.00		0.07
1	0.64		-0.80	-1.00	0.07		-2.39	7.69	1.45	3.58
2	0.91	0.71	-0.73	-0.84	3.58	1.65	-1.41	10.95	1.82	2.80
3	0.84	0.73	-0.71	-0.91	2.80	1.82	-1.41	10.05	1.65	3.58
4	1.00	0.80		-0.64	3.58	1.45	-2.39	11.98		0.07
RExt	0.11			0.00	0.07		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Shear(k) Calc	Shear(k) Limit	Shear(k) UC	Moment(f-k) Loc	Moment(f-k) Calc	Moment(f-k) Limit	Moment(f-k) UC	-Mom+Shr- Loc	-Mom+Shr- UC	Deflect(in) Calc	Deflect(in) Limit
LExt	RSup	-0.11	5.02	0.02	RSup	0.07	6.65	0.01	RSup	0.02	0.11	
1	RLap	-0.80	5.02	0.16	MidS	-2.39	5.96	0.40	RSup	0.32	-0.41	
2	RLap	-0.73	2.56	0.29	RLap	1.82	5.12	0.36	RLap	0.46	-0.25	
3	LLap	0.73	2.56	0.29	LLap	1.82	5.12	0.36	LLap	0.46	-0.25	

4	LLap	0.80	5.02	0.16	MidS	-2.39	5.96	0.40	LSup	0.32	-0.41
RExt	LSup	0.11	5.02	0.02	LSup	0.07	6.65	0.01	LSup	0.02	0.11

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay	Left_Lap				Right_Lap			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.42	2.21	2.36	0.19
2	0.34	2.21	1.89	0.18	0.56	2.21	1.89	0.30
3	0.56	2.21	1.89	0.30	0.34	2.21	1.89	0.18
4	0.42	2.21	2.36	0.19				

LOAD COMBINATION # 4 : DL+CL+0.75SL

PURLIN ANALYSIS:

Bay	Shear(k)				Moment(f-k)					
Id	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	MidSpan Loc	Right Lap	Right Sup
LExt	0.00			-0.09	0.00		0.00	0.00		0.06
1	0.51		-0.64	-0.80	0.06		-1.91	7.69	1.16	2.87
2	0.73	0.57	-0.59	-0.67	2.87	1.32	-1.12	10.95	1.46	2.24
3	0.67	0.59	-0.57	-0.73	2.24	1.46	-1.12	10.05	1.32	2.87
4	0.80	0.64		-0.51	2.87	1.16	-1.91	11.98		0.06
RExt	0.09			0.00	0.06		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
LExt	RSup	-0.09	5.02	0.02	RSup	0.06	6.65	0.01	LSup	0.00	0.08	
1	RLap	-0.64	5.02	0.13	MidS	-1.91	5.96	0.32	RSup	0.25	-0.33	
2	RLap	-0.59	2.56	0.23	RLap	1.46	5.12	0.28	RLap	0.37	-0.20	
3	LLap	0.59	2.56	0.23	LLap	1.46	5.12	0.28	LLap	0.37	-0.20	
4	LLap	0.64	5.02	0.13	MidS	-1.91	5.96	0.32	LSup	0.25	-0.33	
RExt	LSup	0.09	5.02	0.02	LSup	0.06	6.65	0.01	LSup	0.00	0.08	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay	Left_Lap				Right_Lap			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.34	2.21	2.36	0.15
2	0.27	2.21	1.89	0.14	0.45	2.21	1.89	0.24
3	0.45	2.21	1.89	0.24	0.27	2.21	1.89	0.14
4	0.34	2.21	2.36	0.15				

LOAD COMBINATION # 5 : DL+WP1

PURLIN ANALYSIS:

Bay	Shear(k)				Moment(f-k)					
Id	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	MidSpan Loc	Right Lap	Right Sup
LExt	0.00			-0.05	0.00		0.00	0.00		0.04
1	0.31		-0.38	-0.48	0.04		-1.15	7.69	0.70	1.72
2	0.44	0.34	-0.35	-0.40	1.72	0.80	-0.68	10.95	0.88	1.35
3	0.40	0.35	-0.34	-0.44	1.35	0.88	-0.68	10.05	0.80	1.72
4	0.48	0.38		-0.31	1.72	0.70	-1.15	11.98		0.04
RExt	0.05			0.00	0.04		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay -------Shear(k)------ -----Moment(f-k)----- -Mom+Shr- Deflect(in)

Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
LExt	RSup	-0.05	5.02	0.01	RSup	0.04	6.65	0.01	LSup	0.00	0.05	
1	RLap	-0.38	5.02	0.08	MidS	-1.15	5.96	0.19	RSup	0.15	-0.20	
2	RLap	-0.35	2.56	0.14	RLap	0.88	5.12	0.17	RLap	0.22	-0.12	
3	LLap	0.35	2.56	0.14	LLap	0.88	5.12	0.17	LLap	0.22	-0.12	
4	LLap	0.38	5.02	0.08	MidS	-1.15	5.96	0.19	LSup	0.15	-0.20	
RExt	LSup	0.05	5.02	0.01	LSup	0.04	6.65	0.01	LSup	0.00	0.05	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay	Left_Lap				Right_Lap			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.20	2.21	2.36	0.09
2	0.16	2.21	1.89	0.09	0.27	2.21	1.89	0.14
3	0.27	2.21	1.89	0.14	0.16	2.21	1.89	0.09
4	0.20	2.21	2.36	0.09				

LOAD COMBINATION # 6 : DL+WS1

PURLIN ANALYSIS:

Bay	Shear(k)				Moment(f-k)					
Id	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	MidSpan Loc	Right Lap	Right Sup
LExt	0.00			0.16	0.00		0.00	0.00		-0.11
1	-0.67		0.71	0.89	-0.11		2.15	7.75	-1.29	-3.19
2	-0.81	-0.63	0.65	0.74	-3.19	-1.48	1.24	10.97	-1.60	-2.47
3	-0.74	-0.65	0.63	0.81	-2.47	-1.60	1.24	10.03	-1.48	-3.19
4	-0.89	-0.71		0.67	-3.19	-1.29	2.15	11.92		-0.11
RExt	-0.16			0.00	-0.11		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
LExt	RSup	0.16	5.02	0.03	RSup	-0.11	6.65	0.02	RSup	0.04	-0.10	
1	RLap	0.71	5.02	0.14	MidS	2.15	6.65	0.32	RSup	0.28	0.37	
2	RLap	0.65	2.56	0.25	RLap	-1.60	5.12	0.31	RLap	0.40	0.22	
3	LLap	-0.65	2.56	0.25	LLap	-1.60	5.12	0.31	LLap	0.40	0.22	
4	LLap	-0.71	5.02	0.14	MidS	2.15	6.65	0.32	LSup	0.28	0.37	
RExt	LSup	-0.16	5.02	0.03	LSup	-0.11	6.65	0.02	LSup	0.04	-0.10	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay	Left_Lap				Right_Lap			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.37	2.21	2.36	0.17
2	0.30	2.21	1.89	0.16	0.49	2.21	1.89	0.26
3	0.49	2.21	1.89	0.26	0.30	2.21	1.89	0.16
4	0.37	2.21	2.36	0.17				

LOAD COMBINATION # 7 : DL+CL+0.75LL+0.75WP1

PURLIN ANALYSIS:

Bay	Shear(k)				Moment(f-k)					
Id	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	MidSpan Loc	Right Lap	Right Sup
LExt	0.00			-0.14	0.00		0.00	0.00		0.09
1	0.81		-1.01	-1.26	0.09		-3.02	7.69	1.83	4.53
2	1.15	0.90	-0.93	-1.06	4.53	2.09	-1.78	10.95	2.30	3.54

3	1.06	0.93	-0.90	-1.15	3.54	2.30	-1.78	10.05	2.09	4.53
4	1.26	1.01		-0.81	4.53	1.83	-3.02	11.98		0.09
RExt	0.14			0.00	0.09		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay	-------Shear(k)------				-----Moment(f-k)-----				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
LExt	RSup	-0.14	5.02	0.03	RSup	0.09	6.65	0.01	RSup	0.03	0.13	
1	RLap	-1.01	5.02	0.20	MidS	-3.02	5.96	0.51	RSup	0.40	-0.52	
2	RLap	-0.93	2.56	0.36	RLap	2.30	5.12	0.45	RLap	0.58	-0.31	
3	LLap	0.93	2.56	0.36	LLap	2.30	5.12	0.45	LLap	0.58	-0.31	
4	LLap	1.01	5.02	0.20	MidS	-3.02	5.96	0.51	LSup	0.40	-0.52	
RExt	LSup	0.14	5.02	0.03	LSup	0.09	6.65	0.01	LSup	0.03	0.13	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay	-------Left_Lap-------				-------Right_Lap------			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.53	2.21	2.36	0.24
2	0.42	2.21	1.89	0.22	0.71	2.21	1.89	0.37
3	0.71	2.21	1.89	0.37	0.42	2.21	1.89	0.22
4	0.53	2.21	2.36	0.24				

LOAD COMBINATION # 8 : DL+CL+0.75SL+0.75WP1

PURLIN ANALYSIS:

Bay	--------Shear(k)--------				----------Moment(f-k)----------					
Id	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	MidSpan Loc	Right Lap	Right Sup
LExt	0.00			-0.12	0.00		0.00	0.00		0.08
1	0.68		-0.85	-1.06	0.08		-2.54	7.69	1.54	3.81
2	0.97	0.76	-0.78	-0.89	3.81	1.76	-1.49	10.95	1.94	2.98
3	0.89	0.78	-0.76	-0.97	2.98	1.94	-1.49	10.05	1.76	3.81
4	1.06	0.85		-0.68	3.81	1.54	-2.54	11.98		0.08
RExt	0.12			0.00	0.08		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay	-------Shear(k)------				-----Moment(f-k)-----				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
LExt	RSup	-0.12	5.02	0.02	RSup	0.08	6.65	0.01	RSup	0.03	0.11	
1	RLap	-0.85	5.02	0.17	MidS	-2.54	5.96	0.43	RSup	0.34	-0.44	
2	RLap	-0.78	2.56	0.30	RLap	1.94	5.12	0.38	RLap	0.49	-0.26	
3	LLap	0.78	2.56	0.30	LLap	1.94	5.12	0.38	LLap	0.49	-0.26	
4	LLap	0.85	5.02	0.17	MidS	-2.54	5.96	0.43	LSup	0.34	-0.44	
RExt	LSup	0.12	5.02	0.02	LSup	0.08	6.65	0.01	LSup	0.03	0.11	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay	-------Left_Lap-------				-------Right_Lap------			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.45	2.21	2.36	0.20
2	0.36	2.21	1.89	0.19	0.60	2.21	1.89	0.32
3	0.60	2.21	1.89	0.32	0.36	2.21	1.89	0.19
4	0.45	2.21	2.36	0.20				

LOAD COMBINATION # 9 : DL+CL+0.75LL+0.75WS1

PURLIN ANALYSIS:

--------Shear(k)-------- ----------Moment(f-k)----------

Bay Id	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	MidSpan Loc	Right Lap	Right Sup
LExt	0.00			0.02	0.00		0.00	0.00		-0.01
1	0.08		-0.19	-0.24	-0.01		-0.54	7.88	0.34	0.84
2	0.22	0.17	-0.18	-0.20	0.84	0.38	-0.34	10.89	0.44	0.68
3	0.20	0.18	-0.17	-0.22	0.68	0.44	-0.34	10.11	0.38	0.84
4	0.24	0.19		-0.08	0.84	0.34	-0.54	11.78		-0.01
RExt	-0.02			0.00	-0.01		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
LExt	RSup	0.02	5.02	0.00	RSup	-0.01	6.65	0.00	LSup	0.00	0.02	
1	RLap	-0.19	5.02	0.04	MidS	-0.54	6.02	0.09	RSup	0.08	-0.09	
2	RLap	-0.18	2.56	0.07	RLap	0.44	5.12	0.09	RLap	0.11	-0.06	
3	LLap	0.18	2.56	0.07	LLap	0.44	5.12	0.09	LLap	0.11	-0.06	
4	LLap	0.19	5.02	0.04	MidS	-0.54	6.02	0.09	LSup	0.08	-0.09	
RExt	LSup	-0.02	5.02	0.00	LSup	-0.01	6.65	0.00	LSup	0.00	0.02	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay	Left_Lap				Right_Lap			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.10	2.21	2.36	0.04
2	0.08	2.21	1.89	0.04	0.14	2.21	1.89	0.07
3	0.14	2.21	1.89	0.07	0.08	2.21	1.89	0.04
4	0.10	2.21	2.36	0.04				

LOAD COMBINATION # 10 : DL+CL+0.75SL+0.75WS1

PURLIN ANALYSIS:

Bay Id	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	MidSpan Loc	Right Lap	Right Sup
	Shear(k)				Moment(f-k)					
LExt	0.00			0.04	0.00		0.00	0.00		-0.03
1	-0.05		-0.03	-0.04	-0.03		0.12	19.67	0.05	0.12
2	0.03	0.03	-0.03	-0.03	0.12	0.05	-0.06	10.61	0.08	0.12
3	0.03	0.03	-0.03	-0.03	0.12	0.08	-0.06	10.39	0.05	0.12
4	0.04	0.03		0.05	0.12	0.05	0.12	0.00		-0.03
RExt	-0.04			0.00	-0.03		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
LExt	RSup	0.04	5.02	0.01	RSup	-0.03	6.65	0.00	LSup	0.00	0.00	
1	LSup	-0.05	5.02	0.01	MidS	0.07	6.65	0.01	LSup	0.00	-0.01	
2	RLap	-0.03	2.56	0.01	RLap	0.08	5.12	0.02	RLap	0.02	-0.01	
3	LLap	0.03	2.56	0.01	LLap	0.08	5.12	0.02	LLap	0.02	-0.01	
4	RSup	0.05	5.02	0.01	LSup	0.07	6.65	0.01	LSup	0.00	-0.01	
RExt	LSup	-0.04	5.02	0.01	LSup	-0.03	6.65	0.00	LSup	0.00	0.00	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay	Left_Lap				Right_Lap			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.01	2.21	2.36	0.01
2	0.01	2.21	1.89	0.01	0.02	2.21	1.89	0.01
3	0.02	2.21	1.89	0.01	0.01	2.21	1.89	0.01
4	0.01	2.21	2.36	0.01				

LOAD COMBINATION # 11 : 0.6DL+WP1

PURLIN ANALYSIS:

Bay Id	Shear(k) Left Sup	Left Lap	Right Lap	Right Sup	Moment(f-k) Left Sup	Left Lap	MidSpan Mom	MidSpan Loc	Right Lap	Right Sup
LExt	0.00			-0.05	0.00		0.00	0.00		0.03
1	0.27		-0.34	-0.43	0.03		-1.02	7.69	0.62	1.54
2	0.39	0.31	-0.31	-0.36	1.54	0.71	-0.60	10.95	0.78	1.20
3	0.36	0.31	-0.31	-0.39	1.20	0.78	-0.60	10.05	0.71	1.54
4	0.43	0.34		-0.27	1.54	0.62	-1.02	11.98		0.03
RExt	0.05			0.00	0.03		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Calc	Limit	UC	Moment(f-k) Loc	Calc	Limit	UC	-Mom+Shr- Loc	UC	Deflect(in) Calc	Limit
LExt	RSup	-0.05	5.02	0.01	RSup	0.03	6.65	0.00	LSup	0.00	0.05	
1	RLap	-0.34	5.02	0.07	MidS	-1.02	5.96	0.17	RSup	0.14	-0.18	
2	RLap	-0.31	2.56	0.12	RLap	0.78	5.12	0.15	RLap	0.20	-0.11	
3	LLap	0.31	2.56	0.12	LLap	0.78	5.12	0.15	LLap	0.20	-0.11	
4	LLap	0.34	5.02	0.07	MidS	-1.02	5.96	0.17	LSup	0.14	-0.18	
RExt	LSup	0.05	5.02	0.01	LSup	0.03	6.65	0.00	LSup	0.00	0.05	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay Id	Left_Lap Calc	Shear	Bear	UC	Right_Lap Calc	Shear	Bear	UC
1					0.18	2.21	2.36	0.08
2	0.14	2.21	1.89	0.08	0.24	2.21	1.89	0.13
3	0.24	2.21	1.89	0.13	0.14	2.21	1.89	0.08
4	0.18	2.21	2.36	0.08				

LOAD COMBINATION # 12 : 0.6DL+WS1

PURLIN ANALYSIS:

Bay Id	Shear(k) Left Sup	Left Lap	Right Lap	Right Sup	Moment(f-k) Left Sup	Left Lap	MidSpan Mom	MidSpan Loc	Right Lap	Right Sup
LExt	0.00			0.17	0.00		0.00	0.00		-0.11
1	-0.70		0.75	0.94	-0.11		2.28	7.74	-1.37	-3.38
2	-0.85	-0.67	0.68	0.78	-3.38	-1.57	1.31	10.97	-1.70	-2.61
3	-0.78	-0.68	0.67	0.85	-2.61	-1.70	1.31	10.03	-1.57	-3.38
4	-0.94	-0.75		0.70	-3.38	-1.37	2.28	11.93		-0.11
RExt	-0.17			0.00	-0.11		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Calc	Limit	UC	Moment(f-k) Loc	Calc	Limit	UC	-Mom+Shr- Loc	UC	Deflect(in) Calc	Limit
LExt	RSup	0.17	5.02	0.03	RSup	-0.11	6.65	0.02	RSup	0.04	-0.10	
1	RLap	0.75	5.02	0.15	MidS	2.28	6.65	0.34	RSup	0.30	0.40	
2	RLap	0.68	2.56	0.27	RLap	-1.70	5.12	0.33	RLap	0.43	0.23	
3	LLap	-0.68	2.56	0.27	LLap	-1.70	5.12	0.33	LLap	0.43	0.23	
4	LLap	-0.75	5.02	0.15	MidS	2.28	6.65	0.34	LSup	0.30	0.40	
RExt	LSup	-0.17	5.02	0.03	LSup	-0.11	6.65	0.02	LSup	0.04	-0.10	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay -------Left_Lap------- -------Right_Lap------

Id	Calc Shear	Bear	UC	Calc Shear	Bear	UC
1				0.39	2.21	2.36	0.18
2	0.32	2.21	1.89	0.17	0.52	2.21	1.89	0.28
3	0.52	2.21	1.89	0.28	0.32	2.21	1.89	0.17
4	0.39	2.21	2.36	0.18				

LOAD COMBINATION # 13 : DL+CL+SL/2+PAT_SL_3

PURLIN ANALYSIS:

Bay Id	Shear(k) Left Sup	Left Lap	Right Lap	Right Sup	Moment(f-k) Left Sup	Left Lap	MidSpan Mom	MidSpan Loc	Right Lap	Right Sup
LExt	0.00			-0.11	0.00		0.00	0.00		0.07
1	0.61		-0.78	-0.97	0.07		-2.26	7.60	1.53	3.61
2	0.91	0.72	-0.68	-0.78	3.61	1.67	-1.55	11.31	1.33	2.24
3	0.56	0.49	-0.42	-0.55	2.24	1.59	-0.71	10.61	0.97	2.12
4	0.62	0.50		-0.41	2.12	0.79	-1.56	11.84		0.05
RExt	0.07			0.00	0.05		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Calc	Limit	UC	Moment(f-k) Loc	Calc	Limit	UC	-Mom+Shr- Loc	UC	Deflect(in) Calc	Limit
LExt	RSup	-0.11	5.02	0.02	RSup	0.07	6.65	0.01	RSup	0.02	0.10	
1	RLap	-0.78	5.02	0.16	MidS	-2.26	5.95	0.38	RSup	0.32	-0.38	
2	LLap	0.72	2.56	0.28	LLap	1.67	5.12	0.33	LLap	0.43	-0.30	
3	LLap	0.49	2.56	0.19	LLap	1.59	5.12	0.31	LLap	0.36	-0.09	
4	LLap	0.50	5.02	0.10	MidS	-1.56	5.97	0.26	LSup	0.19	-0.28	
RExt	LSup	0.07	5.02	0.01	LSup	0.05	6.65	0.01	LSup	0.00	0.07	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay Id	Left_Lap Calc Shear	Bear	UC	Right_Lap Calc Shear	Bear	UC
1				0.42	2.21	2.36	0.19
2	0.34	2.21	1.89	0.18	0.45	2.21	1.89	0.24
3	0.45	2.21	1.89	0.24	0.20	2.21	1.89	0.11
4	0.25	2.21	2.36	0.11				

LOAD COMBINATION # 14 : DL+CL+SL/2+PAT_SL_4

PURLIN ANALYSIS:

Bay Id	Shear(k) Left Sup	Left Lap	Right Lap	Right Sup	Moment(f-k) Left Sup	Left Lap	MidSpan Mom	MidSpan Loc	Right Lap	Right Sup
LExt	0.00			-0.07	0.00		0.00	0.00		0.05
1	0.38		-0.53	-0.66	0.05		-1.31	7.18	1.37	2.78
2	0.83	0.64	-0.76	-0.86	2.78	1.03	-1.53	10.34	2.05	3.06
3	0.86	0.76	-0.64	-0.83	3.06	2.05	-1.53	10.66	1.03	2.78
4	0.66	0.53		-0.38	2.78	1.37	-1.31	12.48		0.05
RExt	0.07			0.00	0.05		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Calc	Limit	UC	Moment(f-k) Loc	Calc	Limit	UC	-Mom+Shr- Loc	UC	Deflect(in) Calc	Limit
LExt	RSup	-0.07	5.02	0.01	RSup	0.05	6.65	0.01	LSup	0.00	0.05	
1	RLap	-0.53	5.02	0.11	RSup	1.55	6.65	0.23	RSup	0.24	-0.19	
2	RLap	-0.76	2.56	0.30	RLap	2.05	5.12	0.40	RLap	0.50	-0.31	
3	LLap	0.76	2.56	0.30	LLap	2.05	5.12	0.40	LLap	0.50	-0.31	
4	LLap	0.53	5.02	0.11	LSup	1.55	6.65	0.23	LSup	0.24	-0.19	

RExt	LSup	0.07	5.02	0.01	LSup	0.05	6.65	0.01	LSup	0.00	0.05

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay	Left_Lap				Right_Lap			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.33	2.21	2.36	0.15
2	0.26	2.21	1.89	0.14	0.61	2.21	1.89	0.32
3	0.61	2.21	1.89	0.32	0.26	2.21	1.89	0.14
4	0.33	2.21	2.36	0.15				

LOAD COMBINATION # 15 : DL+CL+SL/2+PAT_SL_5

PURLIN ANALYSIS:

Bay	Shear(k)				Moment(f-k)					
Id	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	MidSpan Loc	Right Lap	Right Sup
LExt	0.00			-0.07	0.00		0.00	0.00		0.05
1	0.41		-0.50	-0.62	0.05		-1.56	7.82	0.79	2.12
2	0.55	0.42	-0.49	-0.56	2.12	0.97	-0.71	10.39	1.59	2.24
3	0.78	0.68	-0.72	-0.91	2.24	1.33	-1.55	9.69	1.67	3.61
4	0.97	0.78		-0.61	3.61	1.53	-2.26	12.06		0.07
RExt	0.11			0.00	0.07		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
LExt	RSup	-0.07	5.02	0.01	RSup	0.05	6.65	0.01	LSup	0.00	0.07	
1	RLap	-0.50	5.02	0.10	MidS	-1.56	5.97	0.26	RSup	0.19	-0.28	
2	RLap	-0.49	2.56	0.19	RLap	1.59	5.12	0.31	RLap	0.36	-0.09	
3	RLap	-0.72	2.56	0.28	RLap	1.67	5.12	0.33	RLap	0.43	-0.30	
4	LLap	0.78	5.02	0.16	MidS	-2.26	5.95	0.38	LSup	0.32	-0.38	
RExt	LSup	0.11	5.02	0.02	LSup	0.07	6.65	0.01	LSup	0.02	0.10	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay	Left_Lap				Right_Lap			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.25	2.21	2.36	0.11
2	0.20	2.21	1.89	0.11	0.45	2.21	1.89	0.24
3	0.45	2.21	1.89	0.24	0.34	2.21	1.89	0.18
4	0.42	2.21	2.36	0.19				

LOAD COMBINATION # 16 : DL+CL+SL/2+PAT_SL_1

PURLIN ANALYSIS:

Bay	Shear(k)				Moment(f-k)					
Id	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	MidSpan Loc	Right Lap	Right Sup
LExt	0.00			-0.11	0.00		0.00	0.00		0.07
1	0.65		-0.75	-0.94	0.07		-2.54	8.05	0.90	2.90
2	0.61	0.49	-0.42	-0.49	2.90	1.59	-0.68	11.68	1.02	1.60
3	0.52	0.45	-0.46	-0.59	1.60	0.99	-0.95	9.85	1.07	2.31
4	0.63	0.51		-0.40	2.31	0.96	-1.49	12.03		0.05
RExt	0.07			0.00	0.05		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit

LExt	RSup	-0.11	5.02	0.02	RSup	0.07	6.65	0.01	RSup	0.02	0.12	
1	RLap	-0.75	5.02	0.15	MidS	-2.54	5.98	0.43	RSup	0.26	-0.48	
2	LLap	0.49	2.56	0.19	LLap	1.59	5.12	0.31	LLap	0.36	-0.07	
3	RLap	-0.46	2.56	0.18	RLap	1.07	5.12	0.21	RLap	0.28	-0.18	
4	LLap	0.51	5.02	0.10	MidS	-1.49	5.96	0.25	LSup	0.21	-0.25	
RExt	LSup	0.07	5.02	0.01	LSup	0.05	6.65	0.01	LSup	0.00	0.07	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay	Left_Lap				Right_Lap			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.34	2.21	2.36	0.15
2	0.27	2.21	1.89	0.14	0.32	2.21	1.89	0.17
3	0.32	2.21	1.89	0.17	0.22	2.21	1.89	0.11
4	0.27	2.21	2.36	0.12				

LOAD COMBINATION # 17 : DL+CL+SL/2+PAT_SL_2

PURLIN ANALYSIS:

	Shear(k)				Moment(f-k)					
Bay Id	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	MidSpan Loc	Right Lap	Right Sup
LExt	0.00			-0.07	0.00		0.00	0.00		0.05
1	0.40		-0.51	-0.63	0.05		-1.49	7.64	0.96	2.31
2	0.59	0.46	-0.45	-0.52	2.31	1.07	-0.95	11.15	0.99	1.60
3	0.49	0.42	-0.49	-0.61	1.60	1.02	-0.68	9.32	1.59	2.90
4	0.94	0.75		-0.65	2.90	0.90	-2.54	11.62		0.07
RExt	0.11			0.00	0.07		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
LExt	RSup	-0.07	5.02	0.01	RSup	0.05	6.65	0.01	LSup	0.00	0.07	
1	RLap	-0.51	5.02	0.10	MidS	-1.49	5.96	0.25	RSup	0.21	-0.25	
2	LLap	0.46	2.56	0.18	LLap	1.07	5.12	0.21	LLap	0.28	-0.18	
3	RLap	-0.49	2.56	0.19	RLap	1.59	5.12	0.31	RLap	0.36	-0.07	
4	LLap	0.75	5.02	0.15	MidS	-2.54	5.98	0.43	LSup	0.26	-0.48	
RExt	LSup	0.11	5.02	0.02	LSup	0.07	6.65	0.01	LSup	0.02	0.12	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay	Left_Lap				Right_Lap			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.27	2.21	2.36	0.12
2	0.22	2.21	1.89	0.11	0.32	2.21	1.89	0.17
3	0.32	2.21	1.89	0.17	0.27	2.21	1.89	0.14
4	0.34	2.21	2.36	0.15				

LOAD COMBINATION # 18 : DL+CL+SL-1.0PAT_SL

PURLIN ANALYSIS:

	Shear(k)				Moment(f-k)					
Bay Id	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	MidSpan Loc	Right Lap	Right Sup
LExt	0.00			-0.07	0.00		0.00	0.00		0.05
1	0.37		-0.53	-0.66	0.05		-1.29	7.13	1.42	2.83
2	0.84	0.65	-0.75	-0.85	2.83	1.05	-1.59	10.47	1.89	2.89
3	0.82	0.72	-0.68	-0.87	2.89	1.92	-1.30	10.18	1.58	3.42

4	0.96	0.77		-0.62	3.42	1.36	-2.33	11.95			0.07	
RExt	0.11			0.00	0.07		0.00	1.33			0.00	

STRENGTH/DEFLECTION:

Bay	-------Shear(k)------				-----Moment(f-k)-----				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
LExt	RSup	-0.07	5.02	0.01	RSup	0.05	6.65	0.01	LSup	0.00	0.05	
1	RLap	-0.53	5.02	0.11	RSup	1.57	6.65	0.24	RSup	0.25	-0.18	
2	RLap	-0.75	2.56	0.29	RLap	1.89	5.12	0.37	RLap	0.47	-0.33	
3	LLap	0.72	2.56	0.28	LLap	1.92	5.12	0.38	LLap	0.47	-0.22	
4	LLap	0.77	5.02	0.15	MidS	-2.33	5.96	0.39	LSup	0.30	-0.41	
RExt	LSup	0.11	5.02	0.02	LSup	0.07	6.65	0.01	LSup	0.02	0.10	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay	-------Left_Lap-------				-------Right_Lap------			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.33	2.21	2.36	0.15
2	0.27	2.21	1.89	0.14	0.58	2.21	1.89	0.31
3	0.58	2.21	1.89	0.31	0.32	2.21	1.89	0.17
4	0.40	2.21	2.36	0.18				

LOAD COMBINATION # 19 : DL+CL+SL-1.0PAT_SL

PURLIN ANALYSIS:

Bay	--------Shear(k)--------				--------------Moment(f-k)--------------					
Id	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	Loc	Right Lap	Right Sup
LExt	0.00			-0.11	0.00		0.00	0.00		0.07
1	0.62		-0.77	-0.96	0.07		-2.33	7.72	1.36	3.42
2	0.87	0.68	-0.72	-0.82	3.42	1.58	-1.30	10.82	1.92	2.89
3	0.85	0.75	-0.65	-0.84	2.89	1.89	-1.59	10.53	1.05	2.83
4	0.66	0.53		-0.37	2.83	1.42	-1.29	12.53		0.05
RExt	0.07			0.00	0.05		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay	-------Shear(k)------				-----Moment(f-k)-----				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
LExt	RSup	-0.11	5.02	0.02	RSup	0.07	6.65	0.01	RSup	0.02	0.10	
1	RLap	-0.77	5.02	0.15	MidS	-2.33	5.96	0.39	RSup	0.30	-0.41	
2	RLap	-0.72	2.56	0.28	RLap	1.92	5.12	0.38	RLap	0.47	-0.22	
3	LLap	0.75	2.56	0.29	LLap	1.89	5.12	0.37	LLap	0.47	-0.33	
4	LLap	0.53	5.02	0.11	LSup	1.57	6.65	0.24	LSup	0.25	-0.18	
RExt	LSup	0.07	5.02	0.01	LSup	0.05	6.65	0.01	LSup	0.00	0.05	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay	-------Left_Lap-------				-------Right_Lap------			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.40	2.21	2.36	0.18
2	0.32	2.21	1.89	0.17	0.58	2.21	1.89	0.31
3	0.58	2.21	1.89	0.31	0.27	2.21	1.89	0.14
4	0.33	2.21	2.36	0.15				

LOAD COMBINATION # 20 : DL+CL+UNB_SL

PURLIN ANALYSIS:

Bay	--------Shear(k)--------				--------------Moment(f-k)--------------				
	Left	Left	Right	Right	Left	Left	MidSpan	Right	Right

Id	Sup	Lap	Lap	Sup	Sup	Lap	Mom	Loc	Lap	Sup
LExt	0.00			-0.16	0.00		0.00	0.00		0.11
1	0.92		-1.15	-1.43	0.11		-3.43	7.69	2.08	5.15
2	1.31	1.02	-1.05	-1.20	5.15	2.37	-2.02	10.95	2.62	4.02
3	1.20	1.05	-1.02	-1.31	4.02	2.62	-2.02	10.05	2.37	5.15
4	1.43	1.15		-0.92	5.15	2.08	-3.43	11.98		0.11
RExt	0.16			0.00	0.11		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay	-------Shear(k)------				-----Moment(f-k)-----				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
LExt	RSup	-0.16	5.02	0.03	RSup	0.11	6.65	0.02	RSup	0.04	0.15	
1	RLap	-1.15	5.02	0.23	MidS	-3.43	5.96	0.58	RSup	0.46	-0.60	
2	RLap	-1.05	2.56	0.41	RLap	2.62	5.12	0.51	RLap	0.66	-0.35	
3	LLap	1.05	2.56	0.41	LLap	2.62	5.12	0.51	LLap	0.66	-0.35	
4	LLap	1.15	5.02	0.23	MidS	-3.43	5.96	0.58	LSup	0.46	-0.60	
RExt	LSup	0.16	5.02	0.03	LSup	0.11	6.65	0.02	LSup	0.04	0.15	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay	-------Left_Lap-------				-------Right_Lap------			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.60	2.21	2.36	0.27
2	0.48	2.21	1.89	0.25	0.80	2.21	1.89	0.43
3	0.80	2.21	1.89	0.43	0.48	2.21	1.89	0.25
4	0.60	2.21	2.36	0.27				

DEFLECTION:

LOAD COMBINATION # 21 : DL+CL+LL

Bay	DEFLECTION(in)		
Id	Calc	Limit	Ratio
LExt	0.13		
1	-0.51	0.98	0.52
2	-0.31	1.05	0.29
3	-0.31	1.05	0.29
4	-0.51	0.98	0.52
RExt	0.13		

LOAD COMBINATION # 22 : DL+CL+SL

Bay	DEFLECTION(in)		
Id	Calc	Limit	Ratio
LExt	0.10		
1	-0.40	0.98	0.41
2	-0.24	1.05	0.23
3	-0.24	1.05	0.23
4	-0.40	0.98	0.41
RExt	0.10		

LOAD COMBINATION # 23 : LL

Bay	DEFLECTION(in)		
Id	Calc	Limit	Ratio
LExt	0.10		
1	-0.39	0.98	0.40
2	-0.23	1.05	0.22
3	-0.23	1.05	0.22
4	-0.39	0.98	0.40

RExt	0.10

LOAD COMBINATION # 24 : SL

Bay Id	DEFLECTION(in) Calc	Limit	Ratio
LExt	0.07		
1	-0.28	0.98	0.29
2	-0.17	1.05	0.16
3	-0.17	1.05	0.16
4	-0.28	0.98	0.29
RExt	0.07		

LOAD COMBINATION # 25 : DL+0.75WP1

Bay Id	DEFLECTION(in) Calc	Limit	Ratio
LExt	0.04		
1	-0.16	0.98	0.17
2	-0.10	1.05	0.09
3	-0.10	1.05	0.09
4	-0.16	0.98	0.17
RExt	0.04		

LOAD COMBINATION # 26 : DL+0.75WS1

Bay Id	DEFLECTION(in) Calc	Limit	Ratio
LExt	-0.06		
1	0.24	0.98	0.25
2	0.14	1.05	0.13
3	0.14	1.05	0.13
4	0.24	0.98	0.25
RExt	-0.06		

S12S0554A Purlin Layout(Surface= 3) 9/12/12 3:58pm

SURFACE LAYOUT:

Surface Id	Length	No. Row	Peak Space
3	18.554	4	1.333

PURLIN LOCATION:

Purlin Id	Surf Offset	Space	Load Width	Dead Load	Edge Wind	Show Report	Max_Load Id	UC	Report
1	1.333	1.333	2.785	1.36	Y	Y	20	0.66	Mom+Shr
2	4.236	2.903	3.613	1.05			20	0.85	Mom+Shr
3	8.559	4.323	4.662	0.81			7	0.97	Mom+Shr
4	13.559	5.000	4.997	0.76		Y	7	1.03	Mom+Shr
	18.554	4.995							

			Average=	0.94					

PURLIN LAYOUT:

Bay Id	Purlin Part	Design Length	Lap(ft) Left	Lap(ft) Right	No. Brace	Unit Weight	Total Weight
LExt	08Z075	1.33			0	4.9	19.6
1	08Z075	19.67		2.38	2	81.1	324.5
2	08Z060	21.00	2.38	1.25	2	72.6	290.6
3	08Z060	21.00	1.25	2.38	2	72.6	290.6

4	08Z075	19.67	2.38	2	81.1	324.5
RExt	08Z075	1.33		0	4.9	19.6
					---	---
				Total(lb)=	317.3	1269.3

SPECIAL LOADS:

Load_Location Start	End	Load_Type
0.000	3.600	Edge Zone Wind
14.954	18.554	Edge Zone Wind

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S12S0554A Purlin(Surface= 3, Id= 1) 9/12/12 3:58pm

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ROOF PURLIN
  Surface Id   =  3
  Purlin  Id   =  1
  Offset       =  1.33
  Edge Strip   =  3.60
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PURLIN LAYOUT: (Purlin Id= 1)

Bay Id	Purlin Part	Design Length (ft)	Lap(ft) Left	Lap(ft) Right	Load Width	No. Brace	Available Reduction Factor Out	Available Reduction Factor In
LExt	08Z075	1.33			2.78	0	0.86	0.75
1	08Z075	19.67		2.38	2.78	2	0.86	0.75
2	08Z060	21.00	2.38	1.25	2.78	2	0.89	0.69
3	08Z060	21.00	1.25	2.38	2.78	2	0.89	0.69
4	08Z075	19.67	2.38		2.78	2	0.86	0.75
RExt	08Z075	1.33			2.78	0	0.86	0.75

LOAD COMBINATION # 1 : DL+CL+LL

PURLIN ANALYSIS:

Bay Id	Shear(k) Left Sup	Shear(k) Left Lap	Shear(k) Right Lap	Shear(k) Right Sup	Moment(f-k) Left Sup	Moment(f-k) Left Lap	Moment(f-k) MidSpan Mom	Moment(f-k) MidSpan Loc	Moment(f-k) Right Lap	Moment(f-k) Right Sup
LExt	0.00			-0.14	0.00		0.00	0.00		0.09
1	0.79		-0.99	-1.23	0.09		-2.95	7.69	1.79	4.43
2	1.13	0.88	-0.91	-1.03	4.43	2.05	-1.74	10.95	2.25	3.47
3	1.03	0.91	-0.88	-1.13	3.47	2.25	-1.74	10.05	2.05	4.43
4	1.23	0.99		-0.79	4.43	1.79	-2.95	11.98		0.09
RExt	0.14			0.00	0.09		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Shear(k) Calc	Shear(k) Limit	Shear(k) UC	Moment(f-k) Loc	Moment(f-k) Calc	Moment(f-k) Limit	Moment(f-k) UC	-Mom+Shr- Loc	-Mom+Shr- UC	Deflect(in) Calc	Deflect(in) Limit
LExt	RSup	-0.14	5.02	0.03	RSup	0.09	6.65	0.01	RSup	0.03	0.13	
1	RLap	-0.99	5.02	0.20	MidS	-2.95	5.96	0.50	RSup	0.39	-0.51	
2	RLap	-0.91	2.56	0.35	RLap	2.25	5.12	0.44	RLap	0.56	-0.31	
3	LLap	0.91	2.56	0.35	LLap	2.25	5.12	0.44	LLap	0.56	-0.31	
4	LLap	0.99	5.02	0.20	MidS	-2.95	5.96	0.50	LSup	0.39	-0.51	
RExt	LSup	0.14	5.02	0.03	LSup	0.09	6.65	0.01	LSup	0.03	0.13	

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Bay Id	Left_Lap Calc Shear	Left_Lap Bear	Left_Lap UC	Right_Lap Calc Shear	Right_Lap Bear	Right_Lap UC

1					0.52	2.21	2.36	0.23
2	0.41	2.21	1.89	0.22	0.69	2.21	1.89	0.37
3	0.69	2.21	1.89	0.37	0.41	2.21	1.89	0.22
4	0.52	2.21	2.36	0.23				

LOAD COMBINATION # 2 : DL+CL+SL

PURLIN ANALYSIS:

Bay	Shear(k)				Moment(f-k)					
	Left	Left	Right	Right	Left	Left	MidSpan		Right	Right
Id	Sup	Lap	Lap	Sup	Sup	Lap	Mom	Loc	Lap	Sup
LExt	0.00			-0.11	0.00		0.00	0.00		0.07
1	0.62		-0.77	-0.97	0.07		-2.31	7.69	1.41	3.47
2	0.88	0.69	-0.71	-0.81	3.47	1.60	-1.36	10.95	1.76	2.72
3	0.81	0.71	-0.69	-0.88	2.72	1.76	-1.36	10.05	1.60	3.47
4	0.97	0.77		-0.62	3.47	1.41	-2.31	11.98		0.07
RExt	0.11			0.00	0.07		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
LExt	RSup	-0.11	5.02	0.02	RSup	0.07	6.65	0.01	RSup	0.02	0.10	
1	RLap	-0.77	5.02	0.15	MidS	-2.31	5.96	0.39	RSup	0.31	-0.40	
2	RLap	-0.71	2.56	0.28	RLap	1.76	5.12	0.34	RLap	0.44	-0.24	
3	LLap	0.71	2.56	0.28	LLap	1.76	5.12	0.34	LLap	0.44	-0.24	
4	LLap	0.77	5.02	0.15	MidS	-2.31	5.96	0.39	LSup	0.31	-0.40	
RExt	LSup	0.11	5.02	0.02	LSup	0.07	6.65	0.01	LSup	0.02	0.10	

LAP BOLT SHEAR/BEARING:

Bolt = 0.500 (A307)

Bay	Left_Lap				Right_Lap			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.41	2.21	2.36	0.18
2	0.32	2.21	1.89	0.17	0.54	2.21	1.89	0.29
3	0.54	2.21	1.89	0.29	0.32	2.21	1.89	0.17
4	0.41	2.21	2.36	0.18				

LOAD COMBINATION # 3 : DL+CL+0.75LL

PURLIN ANALYSIS:

Bay	Shear(k)				Moment(f-k)					
	Left	Left	Right	Right	Left	Left	MidSpan		Right	Right
Id	Sup	Lap	Lap	Sup	Sup	Lap	Mom	Loc	Lap	Sup
LExt	0.00			-0.11	0.00		0.00	0.00		0.07
1	0.64		-0.80	-1.00	0.07		-2.39	7.69	1.45	3.58
2	0.91	0.71	-0.73	-0.84	3.58	1.65	-1.41	10.95	1.82	2.80
3	0.84	0.73	-0.71	-0.91	2.80	1.82	-1.41	10.05	1.65	3.58
4	1.00	0.80		-0.64	3.58	1.45	-2.39	11.98		0.07
RExt	0.11			0.00	0.07		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
LExt	RSup	-0.11	5.02	0.02	RSup	0.07	6.65	0.01	RSup	0.02	0.11	
1	RLap	-0.80	5.02	0.16	MidS	-2.39	5.96	0.40	RSup	0.32	-0.41	
2	RLap	-0.73	2.56	0.29	RLap	1.82	5.12	0.36	RLap	0.46	-0.25	
3	LLap	0.73	2.56	0.29	LLap	1.82	5.12	0.36	LLap	0.46	-0.25	
4	LLap	0.80	5.02	0.16	MidS	-2.39	5.96	0.40	LSup	0.32	-0.41	
RExt	LSup	0.11	5.02	0.02	LSup	0.07	6.65	0.01	LSup	0.02	0.11	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay	Left_Lap				Right_Lap			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.42	2.21	2.36	0.19
2	0.34	2.21	1.89	0.18	0.56	2.21	1.89	0.30
3	0.56	2.21	1.89	0.30	0.34	2.21	1.89	0.18
4	0.42	2.21	2.36	0.19				

LOAD COMBINATION # 4 : DL+CL+0.75SL

PURLIN ANALYSIS:

Bay	Shear(k)				Moment(f-k)					
	Left	Left	Right	Right	Left	Left	MidSpan		Right	Right
Id	Sup	Lap	Lap	Sup	Sup	Lap	Mom	Loc	Lap	Sup
LExt	0.00			-0.09	0.00		0.00	0.00		0.06
1	0.51		-0.64	-0.80	0.06		-1.91	7.69	1.16	2.87
2	0.73	0.57	-0.59	-0.67	2.87	1.32	-1.12	10.95	1.46	2.24
3	0.67	0.59	-0.57	-0.73	2.24	1.46	-1.12	10.05	1.32	2.87
4	0.80	0.64		-0.51	2.87	1.16	-1.91	11.98		0.06
RExt	0.09			0.00	0.06		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
LExt	RSup	-0.09	5.02	0.02	RSup	0.06	6.65	0.01	LSup	0.00	0.08	
1	RLap	-0.64	5.02	0.13	MidS	-1.91	5.96	0.32	RSup	0.25	-0.33	
2	RLap	-0.59	2.56	0.23	RLap	1.46	5.12	0.28	RLap	0.37	-0.20	
3	LLap	0.59	2.56	0.23	LLap	1.46	5.12	0.28	LLap	0.37	-0.20	
4	LLap	0.64	5.02	0.13	MidS	-1.91	5.96	0.32	LSup	0.25	-0.33	
RExt	LSup	0.09	5.02	0.02	LSup	0.06	6.65	0.01	LSup	0.00	0.08	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay	Left_Lap				Right_Lap			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.34	2.21	2.36	0.15
2	0.27	2.21	1.89	0.14	0.45	2.21	1.89	0.24
3	0.45	2.21	1.89	0.24	0.27	2.21	1.89	0.14
4	0.34	2.21	2.36	0.15				

LOAD COMBINATION # 5 : DL+WP1

PURLIN ANALYSIS:

Bay	Shear(k)				Moment(f-k)					
	Left	Left	Right	Right	Left	Left	MidSpan		Right	Right
Id	Sup	Lap	Lap	Sup	Sup	Lap	Mom	Loc	Lap	Sup
LExt	0.00			-0.05	0.00		0.00	0.00		0.04
1	0.31		-0.38	-0.48	0.04		-1.15	7.69	0.70	1.72
2	0.44	0.34	-0.35	-0.40	1.72	0.80	-0.68	10.95	0.88	1.35
3	0.40	0.35	-0.34	-0.44	1.35	0.88	-0.68	10.05	0.80	1.72
4	0.48	0.38		-0.31	1.72	0.70	-1.15	11.98		0.04
RExt	0.05			0.00	0.04		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit

LExt	RSup	-0.05	5.02	0.01	RSup	0.04	6.65	0.01	LSup	0.00	0.05
1	RLap	-0.38	5.02	0.08	MidS	-1.15	5.96	0.19	RSup	0.15	-0.20
2	RLap	-0.35	2.56	0.14	RLap	0.88	5.12	0.17	RLap	0.22	-0.12
3	LLap	0.35	2.56	0.14	LLap	0.88	5.12	0.17	LLap	0.22	-0.12
4	LLap	0.38	5.02	0.08	MidS	-1.15	5.96	0.19	LSup	0.15	-0.20
RExt	LSup	0.05	5.02	0.01	LSup	0.04	6.65	0.01	LSup	0.00	0.05

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay	Left_Lap				Right_Lap			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.20	2.21	2.36	0.09
2	0.16	2.21	1.89	0.09	0.27	2.21	1.89	0.14
3	0.27	2.21	1.89	0.14	0.16	2.21	1.89	0.09
4	0.20	2.21	2.36	0.09				

LOAD COMBINATION # 6 : DL+WS1

PURLIN ANALYSIS:

Bay	Shear(k)				Moment(f-k)					
Id	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	MidSpan Loc	Right Lap	Right Sup
LExt	0.00			0.16	0.00		0.00	0.00		-0.11
1	-0.67		0.71	0.89	-0.11		2.15	7.75	-1.29	-3.19
2	-0.81	-0.63	0.65	0.74	-3.19	-1.48	1.24	10.97	-1.60	-2.47
3	-0.74	-0.65	0.63	0.81	-2.47	-1.60	1.24	10.03	-1.48	-3.19
4	-0.89	-0.71		0.67	-3.19	-1.29	2.15	11.92		-0.11
RExt	-0.16			0.00	-0.11		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
LExt	RSup	0.16	5.02	0.03	RSup	-0.11	6.65	0.02	RSup	0.04	-0.10	
1	RLap	0.71	5.02	0.14	MidS	2.15	6.65	0.32	RSup	0.28	0.37	
2	RLap	0.65	2.56	0.25	RLap	-1.60	5.12	0.31	RLap	0.40	0.22	
3	LLap	-0.65	2.56	0.25	LLap	-1.60	5.12	0.31	LLap	0.40	0.22	
4	LLap	-0.71	5.02	0.14	MidS	2.15	6.65	0.32	LSup	0.28	0.37	
RExt	LSup	-0.16	5.02	0.03	LSup	-0.11	6.65	0.02	LSup	0.04	-0.10	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay	Left_Lap				Right_Lap			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.37	2.21	2.36	0.17
2	0.30	2.21	1.89	0.16	0.49	2.21	1.89	0.26
3	0.49	2.21	1.89	0.26	0.30	2.21	1.89	0.16
4	0.37	2.21	2.36	0.17				

LOAD COMBINATION # 7 : DL+CL+0.75LL+0.75WP1

PURLIN ANALYSIS:

Bay	Shear(k)				Moment(f-k)					
Id	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	MidSpan Loc	Right Lap	Right Sup
LExt	0.00			-0.14	0.00		0.00	0.00		0.09
1	0.81		-1.01	-1.26	0.09		-3.02	7.69	1.83	4.53
2	1.15	0.90	-0.93	-1.06	4.53	2.09	-1.78	10.95	2.30	3.54
3	1.06	0.93	-0.90	-1.15	3.54	2.30	-1.78	10.05	2.09	4.53
4	1.26	1.01		-0.81	4.53	1.83	-3.02	11.98		0.09

RExt	0.14				0.00	0.09			0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay	-------Shear(k)------				-----Moment(f-k)-----				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
LExt	RSup	-0.14	5.02	0.03	RSup	0.09	6.65	0.01	RSup	0.03	0.13	
1	RLap	-1.01	5.02	0.20	MidS	-3.02	5.96	0.51	RSup	0.40	-0.52	
2	RLap	-0.93	2.56	0.36	RLap	2.30	5.12	0.45	RLap	0.58	-0.31	
3	LLap	0.93	2.56	0.36	LLap	2.30	5.12	0.45	LLap	0.58	-0.31	
4	LLap	1.01	5.02	0.20	MidS	-3.02	5.96	0.51	LSup	0.40	-0.52	
RExt	LSup	0.14	5.02	0.03	LSup	0.09	6.65	0.01	LSup	0.03	0.13	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay	-------Left_Lap-------				-------Right_Lap------			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.53	2.21	2.36	0.24
2	0.42	2.21	1.89	0.22	0.71	2.21	1.89	0.37
3	0.71	2.21	1.89	0.37	0.42	2.21	1.89	0.22
4	0.53	2.21	2.36	0.24				

LOAD COMBINATION # 8 : DL+CL+0.75SL+0.75WP1

PURLIN ANALYSIS:

Bay	--------Shear(k)--------				--------------Moment(f-k)--------------					
Id	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	MidSpan Loc	Right Lap	Right Sup
LExt	0.00			-0.12	0.00		0.00	0.00		0.08
1	0.68		-0.85	-1.06	0.08		-2.54	7.69	1.54	3.81
2	0.97	0.76	-0.78	-0.89	3.81	1.76	-1.49	10.95	1.94	2.98
3	0.89	0.78	-0.76	-0.97	2.98	1.94	-1.49	10.05	1.76	3.81
4	1.06	0.85		-0.68	3.81	1.54	-2.54	11.98		0.08
RExt	0.12			0.00	0.08		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay	-------Shear(k)------				-----Moment(f-k)-----				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
LExt	RSup	-0.12	5.02	0.02	RSup	0.08	6.65	0.01	RSup	0.03	0.11	
1	RLap	-0.85	5.02	0.17	MidS	-2.54	5.96	0.43	RSup	0.34	-0.44	
2	RLap	-0.78	2.56	0.30	RLap	1.94	5.12	0.38	RLap	0.49	-0.26	
3	LLap	0.78	2.56	0.30	LLap	1.94	5.12	0.38	LLap	0.49	-0.26	
4	LLap	0.85	5.02	0.17	MidS	-2.54	5.96	0.43	LSup	0.34	-0.44	
RExt	LSup	0.12	5.02	0.02	LSup	0.08	6.65	0.01	LSup	0.03	0.11	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay	-------Left_Lap-------				-------Right_Lap------			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.45	2.21	2.36	0.20
2	0.36	2.21	1.89	0.19	0.60	2.21	1.89	0.32
3	0.60	2.21	1.89	0.32	0.36	2.21	1.89	0.19
4	0.45	2.21	2.36	0.20				

LOAD COMBINATION # 9 : DL+CL+0.75LL+0.75WS1

PURLIN ANALYSIS:

Bay	--------Shear(k)--------				--------------Moment(f-k)--------------					
Id	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	MidSpan Loc	Right Lap	Right Sup

LExt	0.00			0.02	0.00		0.00	0.00		-0.01
1	0.08		-0.19	-0.24	-0.01		-0.54	7.88	0.34	0.84
2	0.22	0.17	-0.18	-0.20	0.84	0.38	-0.34	10.89	0.44	0.68
3	0.20	0.18	-0.17	-0.22	0.68	0.44	-0.34	10.11	0.38	0.84
4	0.24	0.19		-0.08	0.84	0.34	-0.54	11.78		-0.01
RExt	-0.02			0.00	-0.01		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
LExt	RSup	0.02	5.02	0.00	RSup	-0.01	6.65	0.00	LSup	0.00	0.02	
1	RLap	-0.19	5.02	0.04	MidS	-0.54	6.02	0.09	RSup	0.08	-0.09	
2	RLap	-0.18	2.56	0.07	RLap	0.44	5.12	0.09	RLap	0.11	-0.06	
3	LLap	0.18	2.56	0.07	LLap	0.44	5.12	0.09	LLap	0.11	-0.06	
4	LLap	0.19	5.02	0.04	MidS	-0.54	6.02	0.09	LSup	0.08	-0.09	
RExt	LSup	-0.02	5.02	0.00	LSup	-0.01	6.65	0.00	LSup	0.00	0.02	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay	Left_Lap				Right_Lap			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.10	2.21	2.36	0.04
2	0.08	2.21	1.89	0.04	0.14	2.21	1.89	0.07
3	0.14	2.21	1.89	0.07	0.08	2.21	1.89	0.04
4	0.10	2.21	2.36	0.04				

LOAD COMBINATION # 10 : DL+CL+0.75SL+0.75WS1

PURLIN ANALYSIS:

Bay	Shear(k)				Moment(f-k)					
	Left	Left	Right	Right	Left	Left	MidSpan		Right	Right
Id	Sup	Lap	Lap	Sup	Sup	Lap	Mom	Loc	Lap	Sup
LExt	0.00			0.04	0.00		0.00	0.00		-0.03
1	-0.05		-0.03	-0.04	-0.03		0.12	19.67	0.05	0.12
2	0.03	0.03	-0.03	-0.03	0.12	0.05	-0.06	10.61	0.08	0.12
3	0.03	0.03	-0.03	-0.03	0.12	0.08	-0.06	10.39	0.05	0.12
4	0.04	0.03		0.05	0.12	0.05	0.12	0.00		-0.03
RExt	-0.04			0.00	-0.03		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
LExt	RSup	0.04	5.02	0.01	RSup	-0.03	6.65	0.00	LSup	0.00	0.00	
1	LSup	-0.05	5.02	0.01	MidS	0.07	6.65	0.01	LSup	0.00	-0.01	
2	RLap	-0.03	2.56	0.01	RLap	0.08	5.12	0.02	RLap	0.02	-0.01	
3	LLap	0.03	2.56	0.01	LLap	0.08	5.12	0.02	LLap	0.02	-0.01	
4	RSup	0.05	5.02	0.01	LSup	0.07	6.65	0.01	LSup	0.00	-0.01	
RExt	LSup	-0.04	5.02	0.01	LSup	-0.03	6.65	0.00	LSup	0.00	0.00	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay	Left_Lap				Right_Lap			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.01	2.21	2.36	0.01
2	0.01	2.21	1.89	0.01	0.02	2.21	1.89	0.01
3	0.02	2.21	1.89	0.01	0.01	2.21	1.89	0.01
4	0.01	2.21	2.36	0.01				

LOAD COMBINATION # 11 : 0.6DL+WP1

PURLIN ANALYSIS:

Bay Id	Shear(k) Left Sup	Shear(k) Left Lap	Shear(k) Right Lap	Shear(k) Right Sup	Moment(f-k) Left Sup	Moment(f-k) Left Lap	Moment(f-k) MidSpan Mom	Moment(f-k) MidSpan Loc	Moment(f-k) Right Lap	Moment(f-k) Right Sup
LExt	0.00			-0.05	0.00		0.00	0.00		0.03
1	0.27		-0.34	-0.43	0.03		-1.02	7.69	0.62	1.54
2	0.39	0.31	-0.31	-0.36	1.54	0.71	-0.60	10.95	0.78	1.20
3	0.36	0.31	-0.31	-0.39	1.20	0.78	-0.60	10.05	0.71	1.54
4	0.43	0.34		-0.27	1.54	0.62	-1.02	11.98		0.03
RExt	0.05			0.00	0.03		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Shear(k) Calc	Shear(k) Limit	Shear(k) UC	Moment(f-k) Loc	Moment(f-k) Calc	Moment(f-k) Limit	Moment(f-k) UC	-Mom+Shr- Loc	-Mom+Shr- UC	Deflect(in) Calc	Deflect(in) Limit
LExt	RSup	-0.05	5.02	0.01	RSup	0.03	6.65	0.00	LSup	0.00	0.05	
1	RLap	-0.34	5.02	0.07	MidS	-1.02	5.96	0.17	RSup	0.14	-0.18	
2	RLap	-0.31	2.56	0.12	RLap	0.78	5.12	0.15	RLap	0.20	-0.11	
3	LLap	0.31	2.56	0.12	LLap	0.78	5.12	0.15	LLap	0.20	-0.11	
4	LLap	0.34	5.02	0.07	MidS	-1.02	5.96	0.17	LSup	0.14	-0.18	
RExt	LSup	0.05	5.02	0.01	LSup	0.03	6.65	0.00	LSup	0.00	0.05	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay Id	Left_Lap Calc	Left_Lap Shear	Left_Lap Bear	Left_Lap UC	Right_Lap Calc	Right_Lap Shear	Right_Lap Bear	Right_Lap UC
1					0.18	2.21	2.36	0.08
2	0.14	2.21	1.89	0.08	0.24	2.21	1.89	0.13
3	0.24	2.21	1.89	0.13	0.14	2.21	1.89	0.08
4	0.18	2.21	2.36	0.08				

LOAD COMBINATION # 12 : 0.6DL+WS1

PURLIN ANALYSIS:

Bay Id	Shear(k) Left Sup	Shear(k) Left Lap	Shear(k) Right Lap	Shear(k) Right Sup	Moment(f-k) Left Sup	Moment(f-k) Left Lap	Moment(f-k) MidSpan Mom	Moment(f-k) MidSpan Loc	Moment(f-k) Right Lap	Moment(f-k) Right Sup
LExt	0.00			0.17	0.00		0.00	0.00		-0.11
1	-0.70		0.75	0.94	-0.11		2.28	7.74	-1.37	-3.38
2	-0.85	-0.67	0.68	0.78	-3.38	-1.57	1.31	10.97	-1.70	-2.61
3	-0.78	-0.68	0.67	0.85	-2.61	-1.70	1.31	10.03	-1.57	-3.38
4	-0.94	-0.75		0.70	-3.38	-1.37	2.28	11.93		-0.11
RExt	-0.17			0.00	-0.11		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Shear(k) Calc	Shear(k) Limit	Shear(k) UC	Moment(f-k) Loc	Moment(f-k) Calc	Moment(f-k) Limit	Moment(f-k) UC	-Mom+Shr- Loc	-Mom+Shr- UC	Deflect(in) Calc	Deflect(in) Limit
LExt	RSup	0.17	5.02	0.03	RSup	-0.11	6.65	0.02	RSup	0.04	-0.10	
1	RLap	0.75	5.02	0.15	MidS	2.28	6.65	0.34	RSup	0.30	0.40	
2	RLap	0.68	2.56	0.27	RLap	-1.70	5.12	0.33	RLap	0.43	0.23	
3	LLap	-0.68	2.56	0.27	LLap	-1.70	5.12	0.33	LLap	0.43	0.23	
4	LLap	-0.75	5.02	0.15	MidS	2.28	6.65	0.34	LSup	0.30	0.40	
RExt	LSup	-0.17	5.02	0.03	LSup	-0.11	6.65	0.02	LSup	0.04	-0.10	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay Id	Left_Lap Calc	Left_Lap Shear	Left_Lap Bear	Left_Lap UC	Right_Lap Calc	Right_Lap Shear	Right_Lap Bear	Right_Lap UC

1					0.39	2.21	2.36	0.18
2	0.32	2.21	1.89	0.17	0.52	2.21	1.89	0.28
3	0.52	2.21	1.89	0.28	0.32	2.21	1.89	0.17
4	0.39	2.21	2.36	0.18				

LOAD COMBINATION # 13 : DL+CL+SL/2+PAT_SL_3

PURLIN ANALYSIS:

Bay	Shear(k)				Moment(f-k)					
	Left	Left	Right	Right	Left	Left	MidSpan		Right	Right
Id	Sup	Lap	Lap	Sup	Sup	Lap	Mom	Loc	Lap	Sup
LExt	0.00			-0.11	0.00		0.00	0.00		0.07
1	0.61		-0.78	-0.97	0.07		-2.26	7.60	1.53	3.61
2	0.91	0.72	-0.68	-0.78	3.61	1.67	-1.55	11.31	1.33	2.24
3	0.56	0.49	-0.42	-0.55	2.24	1.59	-0.71	10.61	0.97	2.12
4	0.62	0.50		-0.41	2.12	0.79	-1.56	11.84		0.05
RExt	0.07			0.00	0.05		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
LExt	RSup	-0.11	5.02	0.02	RSup	0.07	6.65	0.01	RSup	0.02	0.10	
1	RLap	-0.78	5.02	0.16	MidS	-2.26	5.95	0.38	RSup	0.32	-0.38	
2	LLap	0.72	2.56	0.28	LLap	1.67	5.12	0.33	LLap	0.43	-0.30	
3	LLap	0.49	2.56	0.19	LLap	1.59	5.12	0.31	LLap	0.36	-0.09	
4	LLap	0.50	5.02	0.10	MidS	-1.56	5.97	0.26	LSup	0.19	-0.28	
RExt	LSup	0.07	5.02	0.01	LSup	0.05	6.65	0.01	LSup	0.00	0.07	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay	Left_Lap				Right_Lap			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.42	2.21	2.36	0.19
2	0.34	2.21	1.89	0.18	0.45	2.21	1.89	0.24
3	0.45	2.21	1.89	0.24	0.20	2.21	1.89	0.11
4	0.25	2.21	2.36	0.11				

LOAD COMBINATION # 14 : DL+CL+SL/2+PAT_SL_4

PURLIN ANALYSIS:

Bay	Shear(k)				Moment(f-k)					
	Left	Left	Right	Right	Left	Left	MidSpan		Right	Right
Id	Sup	Lap	Lap	Sup	Sup	Lap	Mom	Loc	Lap	Sup
LExt	0.00			-0.07	0.00		0.00	0.00		0.05
1	0.38		-0.53	-0.66	0.05		-1.31	7.18	1.37	2.78
2	0.83	0.64	-0.76	-0.86	2.78	1.03	-1.53	10.34	2.05	3.06
3	0.86	0.76	-0.64	-0.83	3.06	2.05	-1.53	10.66	1.03	2.78
4	0.66	0.53		-0.38	2.78	1.37	-1.31	12.48		0.05
RExt	0.07			0.00	0.05		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
LExt	RSup	-0.07	5.02	0.01	RSup	0.05	6.65	0.01	LSup	0.00	0.05	
1	RLap	-0.53	5.02	0.11	RSup	1.55	6.65	0.23	RSup	0.24	-0.19	
2	RLap	-0.76	2.56	0.30	RLap	2.05	5.12	0.40	RLap	0.50	-0.31	
3	LLap	0.76	2.56	0.30	LLap	2.05	5.12	0.40	LLap	0.50	-0.31	
4	LLap	0.53	5.02	0.11	LSup	1.55	6.65	0.23	LSup	0.24	-0.19	
RExt	LSup	0.07	5.02	0.01	LSup	0.05	6.65	0.01	LSup	0.00	0.05	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay	Left_Lap				Right_Lap			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.33	2.21	2.36	0.15
2	0.26	2.21	1.89	0.14	0.61	2.21	1.89	0.32
3	0.61	2.21	1.89	0.32	0.26	2.21	1.89	0.14
4	0.33	2.21	2.36	0.15				

LOAD COMBINATION # 15 : DL+CL+SL/2+PAT_SL_5

PURLIN ANALYSIS:

Bay	Shear(k)				Moment(f-k)					
Id	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	MidSpan Loc	Right Lap	Right Sup
LExt	0.00			-0.07	0.00		0.00	0.00		0.05
1	0.41		-0.50	-0.62	0.05		-1.56	7.82	0.79	2.12
2	0.55	0.42	-0.49	-0.56	2.12	0.97	-0.71	10.39	1.59	2.24
3	0.78	0.68	-0.72	-0.91	2.24	1.33	-1.55	9.69	1.67	3.61
4	0.97	0.78		-0.61	3.61	1.53	-2.26	12.06		0.07
RExt	0.11			0.00	0.07		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
LExt	RSup	-0.07	5.02	0.01	RSup	0.05	6.65	0.01	LSup	0.00	0.07	
1	RLap	-0.50	5.02	0.10	MidS	-1.56	5.97	0.26	RSup	0.19	-0.28	
2	RLap	-0.49	2.56	0.19	RLap	1.59	5.12	0.31	RLap	0.36	-0.09	
3	RLap	-0.72	2.56	0.28	RLap	1.67	5.12	0.33	RLap	0.43	-0.30	
4	LLap	0.78	5.02	0.16	MidS	-2.26	5.95	0.38	LSup	0.32	-0.38	
RExt	LSup	0.11	5.02	0.02	LSup	0.07	6.65	0.01	LSup	0.02	0.10	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay	Left_Lap				Right_Lap			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.25	2.21	2.36	0.11
2	0.20	2.21	1.89	0.11	0.45	2.21	1.89	0.24
3	0.45	2.21	1.89	0.24	0.34	2.21	1.89	0.18
4	0.42	2.21	2.36	0.19				

LOAD COMBINATION # 16 : DL+CL+SL/2+PAT_SL_1

PURLIN ANALYSIS:

Bay	Shear(k)				Moment(f-k)					
Id	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	MidSpan Loc	Right Lap	Right Sup
LExt	0.00			-0.11	0.00		0.00	0.00		0.07
1	0.65		-0.75	-0.94	0.07		-2.54	8.05	0.90	2.90
2	0.61	0.49	-0.42	-0.49	2.90	1.59	-0.68	11.68	1.02	1.60
3	0.52	0.45	-0.46	-0.59	1.60	0.99	-0.95	9.85	1.07	2.31
4	0.63	0.51		-0.40	2.31	0.96	-1.49	12.03		0.05
RExt	0.07			0.00	0.05		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
LExt	RSup	-0.11	5.02	0.02	RSup	0.07	6.65	0.01	RSup	0.02	0.12	

1	RLap	-0.75	5.02	0.15	MidS	-2.54	5.98	0.43	RSup	0.26	-0.48
2	LLap	0.49	2.56	0.19	LLap	1.59	5.12	0.31	LLap	0.36	-0.07
3	RLap	-0.46	2.56	0.18	RLap	1.07	5.12	0.21	RLap	0.28	-0.18
4	LLap	0.51	5.02	0.10	MidS	-1.49	5.96	0.25	LSup	0.21	-0.25
RExt	LSup	0.07	5.02	0.01	LSup	0.05	6.65	0.01	LSup	0.00	0.07

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay	Left_Lap				Right_Lap			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.34	2.21	2.36	0.15
2	0.27	2.21	1.89	0.14	0.32	2.21	1.89	0.17
3	0.32	2.21	1.89	0.17	0.22	2.21	1.89	0.11
4	0.27	2.21	2.36	0.12				

LOAD COMBINATION # 17 : DL+CL+SL/2+PAT_SL_2

PURLIN ANALYSIS:

	Shear(k)				Moment(f-k)					
Bay Id	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	MidSpan Loc	Right Lap	Right Sup
LExt	0.00			-0.07	0.00		0.00	0.00		0.05
1	0.40		-0.51	-0.63	0.05		-1.49	7.64	0.96	2.31
2	0.59	0.46	-0.45	-0.52	2.31	1.07	-0.95	11.15	0.99	1.60
3	0.49	0.42	-0.49	-0.61	1.60	1.02	-0.68	9.32	1.59	2.90
4	0.94	0.75		-0.65	2.90	0.90	-2.54	11.62		0.07
RExt	0.11			0.00	0.07		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
LExt	RSup	-0.07	5.02	0.01	RSup	0.05	6.65	0.01	LSup	0.00	0.07	
1	RLap	-0.51	5.02	0.10	MidS	-1.49	5.96	0.25	RSup	0.21	-0.25	
2	LLap	0.46	2.56	0.18	LLap	1.07	5.12	0.21	LLap	0.28	-0.18	
3	RLap	-0.49	2.56	0.19	RLap	1.59	5.12	0.31	RLap	0.36	-0.07	
4	LLap	0.75	5.02	0.15	MidS	-2.54	5.98	0.43	LSup	0.26	-0.48	
RExt	LSup	0.11	5.02	0.02	LSup	0.07	6.65	0.01	LSup	0.02	0.12	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay	Left_Lap				Right_Lap			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.27	2.21	2.36	0.12
2	0.22	2.21	1.89	0.11	0.32	2.21	1.89	0.17
3	0.32	2.21	1.89	0.17	0.27	2.21	1.89	0.14
4	0.34	2.21	2.36	0.15				

LOAD COMBINATION # 18 : DL+CL+SL-1.0PAT_SL

PURLIN ANALYSIS:

	Shear(k)				Moment(f-k)					
Bay Id	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	MidSpan Loc	Right Lap	Right Sup
LExt	0.00			-0.07	0.00		0.00	0.00		0.05
1	0.37		-0.53	-0.66	0.05		-1.29	7.13	1.42	2.83
2	0.84	0.65	-0.75	-0.85	2.83	1.05	-1.59	10.47	1.89	2.89
3	0.82	0.72	-0.68	-0.87	2.89	1.92	-1.30	10.18	1.58	3.42
4	0.96	0.77		-0.62	3.42	1.36	-2.33	11.95		0.07
RExt	0.11			0.00	0.07		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
LExt	RSup	-0.07	5.02	0.01	RSup	0.05	6.65	0.01	LSup	0.00	0.05	
1	RLap	-0.53	5.02	0.11	RSup	1.57	6.65	0.24	RSup	0.25	-0.18	
2	RLap	-0.75	2.56	0.29	RLap	1.89	5.12	0.37	RLap	0.47	-0.33	
3	LLap	0.72	2.56	0.28	LLap	1.92	5.12	0.38	LLap	0.47	-0.22	
4	LLap	0.77	5.02	0.15	MidS	-2.33	5.96	0.39	LSup	0.30	-0.41	
RExt	LSup	0.11	5.02	0.02	LSup	0.07	6.65	0.01	LSup	0.02	0.10	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay	Left_Lap				Right_Lap			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.33	2.21	2.36	0.15
2	0.27	2.21	1.89	0.14	0.58	2.21	1.89	0.31
3	0.58	2.21	1.89	0.31	0.32	2.21	1.89	0.17
4	0.40	2.21	2.36	0.18				

LOAD COMBINATION # 19 : DL+CL+SL-1.0PAT_SL

PURLIN ANALYSIS:

Bay	Shear(k)				Moment(f-k)					
Id	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	MidSpan Loc	Right Lap	Right Sup
LExt	0.00			-0.11	0.00		0.00	0.00		0.07
1	0.62		-0.77	-0.96	0.07		-2.33	7.72	1.36	3.42
2	0.87	0.68	-0.72	-0.82	3.42	1.58	-1.30	10.82	1.92	2.89
3	0.85	0.75	-0.65	-0.84	2.89	1.89	-1.59	10.53	1.05	2.83
4	0.66	0.53		-0.37	2.83	1.42	-1.29	12.53		0.05
RExt	0.07			0.00	0.05		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
LExt	RSup	-0.11	5.02	0.02	RSup	0.07	6.65	0.01	RSup	0.02	0.10	
1	RLap	-0.77	5.02	0.15	MidS	-2.33	5.96	0.39	RSup	0.30	-0.41	
2	RLap	-0.72	2.56	0.28	RLap	1.92	5.12	0.38	RLap	0.47	-0.22	
3	LLap	0.75	2.56	0.29	LLap	1.89	5.12	0.37	LLap	0.47	-0.33	
4	LLap	0.53	5.02	0.11	LSup	1.57	6.65	0.24	LSup	0.25	-0.18	
RExt	LSup	0.07	5.02	0.01	LSup	0.05	6.65	0.01	LSup	0.00	0.05	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay	Left_Lap				Right_Lap			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.40	2.21	2.36	0.18
2	0.32	2.21	1.89	0.17	0.58	2.21	1.89	0.31
3	0.58	2.21	1.89	0.31	0.27	2.21	1.89	0.14
4	0.33	2.21	2.36	0.15				

LOAD COMBINATION # 20 : DL+CL+UNB_SL

PURLIN ANALYSIS:

Bay	Shear(k)				Moment(f-k)					
Id	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	MidSpan Loc	Right Lap	Right Sup

LExt	0.00			-0.16	0.00		0.00	0.00		0.11
1	0.92		-1.15	-1.43	0.11		-3.43	7.69	2.08	5.15
2	1.31	1.02	-1.05	-1.20	5.15	2.37	-2.02	10.95	2.62	4.02
3	1.20	1.05	-1.02	-1.31	4.02	2.62	-2.02	10.05	2.37	5.15
4	1.43	1.15		-0.92	5.15	2.08	-3.43	11.98		0.11
RExt	0.16			0.00	0.11		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay	-------Shear(k)------				-----Moment(f-k)-----				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
LExt	RSup	-0.16	5.02	0.03	RSup	0.11	6.65	0.02	RSup	0.04	0.15	
1	RLap	-1.15	5.02	0.23	MidS	-3.43	5.96	0.58	RSup	0.46	-0.60	
2	RLap	-1.05	2.56	0.41	RLap	2.62	5.12	0.51	RLap	0.66	-0.35	
3	LLap	1.05	2.56	0.41	LLap	2.62	5.12	0.51	LLap	0.66	-0.35	
4	LLap	1.15	5.02	0.23	MidS	-3.43	5.96	0.58	LSup	0.46	-0.60	
RExt	LSup	0.16	5.02	0.03	LSup	0.11	6.65	0.02	LSup	0.04	0.15	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay	-------Left_Lap-------				-------Right_Lap------			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.60	2.21	2.36	0.27
2	0.48	2.21	1.89	0.25	0.80	2.21	1.89	0.43
3	0.80	2.21	1.89	0.43	0.48	2.21	1.89	0.25
4	0.60	2.21	2.36	0.27				

DEFLECTION:

LOAD COMBINATION # 21 : DL+CL+LL

Bay	DEFLECTION(in)		
Id	Calc	Limit	Ratio
LExt	0.13		
1	-0.51	0.98	0.52
2	-0.31	1.05	0.29
3	-0.31	1.05	0.29
4	-0.51	0.98	0.52
RExt	0.13		

LOAD COMBINATION # 22 : DL+CL+SL

Bay	DEFLECTION(in)		
Id	Calc	Limit	Ratio
LExt	0.10		
1	-0.40	0.98	0.41
2	-0.24	1.05	0.23
3	-0.24	1.05	0.23
4	-0.40	0.98	0.41
RExt	0.10		

LOAD COMBINATION # 23 : LL

Bay	DEFLECTION(in)		
Id	Calc	Limit	Ratio
LExt	0.10		
1	-0.39	0.98	0.40
2	-0.23	1.05	0.22
3	-0.23	1.05	0.22
4	-0.39	0.98	0.40
RExt	0.10		

LOAD COMBINATION # 24 : SL

Bay Id	DEFLECTION(in) Calc	Limit	Ratio
LExt	0.07		
1	-0.28	0.98	0.29
2	-0.17	1.05	0.16
3	-0.17	1.05	0.16
4	-0.28	0.98	0.29
RExt	0.07		

LOAD COMBINATION # 25 : DL+0.75WP1

Bay Id	DEFLECTION(in) Calc	Limit	Ratio
LExt	0.04		
1	-0.16	0.98	0.17
2	-0.10	1.05	0.09
3	-0.10	1.05	0.09
4	-0.16	0.98	0.17
RExt	0.04		

LOAD COMBINATION # 26 : DL+0.75WS1

Bay Id	DEFLECTION(in) Calc	Limit	Ratio
LExt	-0.06		
1	0.24	0.98	0.25
2	0.14	1.05	0.13
3	0.14	1.05	0.13
4	0.24	0.98	0.25
RExt	-0.06		

S12S0554A Purlin(Surface= 3, Id= 4) 9/12/12 3:58pm

ROOF PURLIN
Surface Id = 3
Purlin Id = 4
Offset = 13.56

PURLIN LAYOUT: (Purlin Id= 4)

Bay Id	Purlin Part	Design Length (ft)	Lap(ft) Left	Lap(ft) Right	Load Width	No. Brace	Available Reduction Factor Out	Available Reduction Factor In
LExt	08Z075	1.33			5.00	0	0.86	0.75
1	08Z075	19.67		2.38	5.00	2	0.86	0.75
2	08Z060	21.00	2.38	1.25	5.00	2	0.89	0.69
3	08Z060	21.00	1.25	2.38	5.00	2	0.89	0.69
4	08Z075	19.67	2.38		5.00	2	0.86	0.75
RExt	08Z075	1.33			5.00	0	0.86	0.75

LOAD COMBINATION # 1 : DL+CL+LL

PURLIN ANALYSIS:

Bay Id	Shear(k) Left Sup	Shear(k) Left Lap	Shear(k) Right Lap	Shear(k) Right Sup	Moment(f-k) Left Sup	Moment(f-k) Left Lap	Moment(f-k) MidSpan Mom	Moment(f-k) MidSpan Loc	Moment(f-k) Right Lap	Moment(f-k) Right Sup
LExt	0.00			-0.25	0.00		0.00	0.00		0.16

1	1.42		-1.77	-2.21	0.16		-5.30	7.69	3.22	7.95
2	2.02	1.58	-1.63	-1.86	7.95	3.67	-3.12	10.95	4.04	6.22
3	1.86	1.63	-1.58	-2.02	6.22	4.04	-3.12	10.05	3.67	7.95
4	2.21	1.77		-1.42	7.95	3.22	-5.30	11.98		0.16
RExt	0.25			0.00	0.16		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				Mom+Shr		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
LExt	RSup	-0.25	5.02	0.05	RSup	0.16	6.65	0.02	RSup	0.05	0.24	
1	RLap	-1.77	5.02	0.35	MidS	-5.30	5.96	0.89	RSup	0.71	-0.92	
2	RLap	-1.63	2.56	0.63	RLap	4.04	5.12	0.79	RLap	1.01	-0.55	
3	LLap	1.63	2.56	0.63	LLap	4.04	5.12	0.79	LLap	1.01	-0.55	
4	LLap	1.77	5.02	0.35	MidS	-5.30	5.96	0.89	LSup	0.71	-0.92	
RExt	LSup	0.25	5.02	0.05	LSup	0.16	6.65	0.02	LSup	0.05	0.24	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay	Left_Lap				Right_Lap			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.93	2.21	2.36	0.42
2	0.74	2.21	1.89	0.39	1.24	2.21	1.89	0.66
3	1.24	2.21	1.89	0.66	0.74	2.21	1.89	0.39
4	0.93	2.21	2.36	0.42				

LOAD COMBINATION # 2 : DL+CL+SL

PURLIN ANALYSIS:

Bay	Shear(k)				Moment(f-k)					
Id	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	MidSpan Loc	Right Lap	Right Sup
LExt	0.00			-0.19	0.00		0.00	0.00		0.13
1	1.11		-1.39	-1.73	0.13		-4.15	7.69	2.52	6.23
2	1.58	1.24	-1.27	-1.46	6.23	2.88	-2.44	10.95	3.17	4.87
3	1.46	1.27	-1.24	-1.58	4.87	3.17*	-2.44	10.05	2.88	6.23
4	1.73	1.39		-1.11	6.23	2.52	-4.15	11.98		0.13
RExt	0.19			0.00	0.13		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				Mom+Shr		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
LExt	RSup	-0.19	5.02	0.04	RSup	0.13	6.65	0.02	RSup	0.04	0.18	
1	RLap	-1.39	5.02	0.28	MidS	-4.15	5.96	0.70	RSup	0.55	-0.72	
2	RLap	-1.27	2.56	0.50	RLap	3.17	5.12	0.62	RLap	0.79	-0.43	
3	LLap	1.27	2.56	0.50	LLap	3.17	5.12	0.62	LLap	0.79	-0.43	
4	LLap	1.39	5.02	0.28	MidS	-4.15	5.96	0.70	LSup	0.55	-0.72	
RExt	LSup	0.19	5.02	0.04	LSup	0.13	6.65	0.02	LSup	0.04	0.18	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay	Left_Lap				Right_Lap			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.73	2.21	2.36	0.33
2	0.58	2.21	1.89	0.31	0.97	2.21	1.89	0.52
3	0.97	2.21	1.89	0.52	0.58	2.21	1.89	0.31
4	0.73	2.21	2.36	0.33				

LOAD COMBINATION # 3 : DL+CL+0.75LL

PURLIN ANALYSIS:

Bay Id	Shear(k) Left Sup	Left Lap	Right Lap	Right Sup	Moment(f-k) Left Sup	Left Lap	MidSpan Mom	MidSpan Loc	Right Lap	Right Sup
LExt	0.00			-0.20	0.00		0.00	0.00		0.13
1	1.15		-1.44	-1.79	0.13		-4.29	7.69	2.60	6.43
2	1.64	1.28	-1.32	-1.50	6.43	2.97	-2.52	10.95	3.27	5.03
3	1.50	1.32	-1.28	-1.64	5.03	3.27	-2.52	10.05	2.97	6.43
4	1.79	1.44		-1.15	6.43	2.60	-4.29	11.98		0.13
RExt	0.20			0.00	0.13		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Calc	Limit	UC	Moment(f-k) Loc	Calc	Limit	UC	-Mom+Shr- Loc	UC	Deflect(in) Calc	Limit
LExt	RSup	-0.20	5.02	0.04	RSup	0.13	6.65	0.02	RSup	0.04	0.19	
1	RLap	-1.44	5.02	0.29	MidS	-4.29	5.96	0.72	RSup	0.57	-0.74	
2	RLap	-1.32	2.56	0.51	RLap	3.27	5.12	0.64	RLap	0.82	-0.44	
3	LLap	1.32	2.56	0.51	LLap	3.27	5.12	0.64	LLap	0.82	-0.44	
4	LLap	1.44	5.02	0.29	MidS	-4.29	5.96	0.72	LSup	0.57	-0.74	
RExt	LSup	0.20	5.02	0.04	LSup	0.13	6.65	0.02	LSup	0.04	0.19	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay Id	Left_Lap Calc	Shear	Bear	UC	Right_Lap Calc	Shear	Bear	UC
1					0.75	2.21	2.36	0.34
2	0.60	2.21	1.89	0.32	1.01	2.21	1.89	0.53
3	1.01	2.21	1.89	0.53	0.60	2.21	1.89	0.32
4	0.75	2.21	2.36	0.34				

LOAD COMBINATION # 4 : DL+CL+0.75SL

PURLIN ANALYSIS:

Bay Id	Shear(k) Left Sup	Left Lap	Right Lap	Right Sup	Moment(f-k) Left Sup	Left Lap	MidSpan Mom	MidSpan Loc	Right Lap	Right Sup
LExt	0.00			-0.16	0.00		0.00	0.00		0.11
1	0.92		-1.15	-1.43	0.11		-3.43	7.69	2.08	5.14
2	1.31	1.02	-1.05	-1.20	5.14	2.37	-2.02	10.95	2.61	4.02
3	1.20	1.05	-1.02	-1.31	4.02	2.61	-2.02	10.05	2.37	5.14
4	1.43	1.15		-0.92	5.14	2.08	-3.43	11.98		0.11
RExt	0.16			0.00	0.11		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Calc	Limit	UC	Moment(f-k) Loc	Calc	Limit	UC	-Mom+Shr- Loc	UC	Deflect(in) Calc	Limit
LExt	RSup	-0.16	5.02	0.03	RSup	0.11	6.65	0.02	RSup	0.04	0.15	
1	RLap	-1.15	5.02	0.23	MidS	-3.43	5.96	0.57	RSup	0.46	-0.60	
2	RLap	-1.05	2.56	0.41	RLap	2.61	5.12	0.51	RLap	0.66	-0.35	
3	LLap	1.05	2.56	0.41	LLap	2.61	5.12	0.51	LLap	0.66	-0.35	
4	LLap	1.15	5.02	0.23	MidS	-3.43	5.96	0.57	LSup	0.46	-0.60	
RExt	LSup	0.16	5.02	0.03	LSup	0.11	6.65	0.02	LSup	0.04	0.15	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay Id	Left_Lap Calc	Shear	Bear	UC	Right_Lap Calc	Shear	Bear	UC
1					0.60	2.21	2.36	0.27
2	0.48	2.21	1.89	0.25	0.80	2.21	1.89	0.43

3	0.80	2.21	1.89	0.43	0.48	2.21	1.89	0.25
4	0.60	2.21	2.36	0.27				

LOAD COMBINATION # 5 : DL+WP1

PURLIN ANALYSIS:

Bay Id	Shear(k) Left Sup	Left Lap	Right Lap	Right Sup	Moment(f-k) Left Sup	Left Lap	MidSpan Mom	MidSpan Loc	Right Lap	Right Sup
LExt	0.00			-0.10	0.00		0.00	0.00		0.06
1	0.55		-0.69	-0.86	0.06		-2.06	7.69	1.25	3.09
2	0.79	0.62	-0.63	-0.72	3.09	1.43	-1.21	10.95	1.57	2.42
3	0.72	0.63	-0.62	-0.79	2.42	1.57	-1.21	10.05	1.43	3.09
4	0.86	0.69		-0.55	3.09	1.25	-2.06	11.98		0.06
RExt	0.10			0.00	0.06		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Calc	Limit	UC	Moment(f-k) Loc	Calc	Limit	UC	-Mom+Shr- Loc	UC	Deflect(in) Calc	Limit
LExt	RSup	-0.10	5.02	0.02	RSup	0.06	6.65	0.01	LSup	0.00	0.09	
1	RLap	-0.69	5.02	0.14	MidS	-2.06	5.96	0.35	RSup	0.28	-0.36	
2	RLap	-0.63	2.56	0.25	RLap	1.57	5.12	0.31	RLap	0.39	-0.21	
3	LLap	0.63	2.56	0.25	LLap	1.57	5.12	0.31	LLap	0.39	-0.21	
4	LLap	0.69	5.02	0.14	MidS	-2.06	5.96	0.35	LSup	0.28	-0.36	
RExt	LSup	0.10	5.02	0.02	LSup	0.06	6.65	0.01	LSup	0.00	0.09	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay Id	Left_Lap Calc	Shear	Bear	UC	Right_Lap Calc	Shear	Bear	UC
1					0.36	2.21	2.36	0.16
2	0.29	2.21	1.89	0.15	0.48	2.21	1.89	0.26
3	0.48	2.21	1.89	0.26	0.29	2.21	1.89	0.15
4	0.36	2.21	2.36	0.16				

LOAD COMBINATION # 6 : DL+WS1

PURLIN ANALYSIS:

Bay Id	Shear(k) Left Sup	Left Lap	Right Lap	Right Sup	Moment(f-k) Left Sup	Left Lap	MidSpan Mom	MidSpan Loc	Right Lap	Right Sup
LExt	0.00			0.20	0.00		0.00	0.00		-0.13
1	-0.87		0.94	1.18	-0.13		2.85	7.72	-1.71	-4.23
2	-1.07	-0.84	0.86	0.98	-4.23	-1.96	1.64	10.96	-2.13	-3.28
3	-0.98	-0.86	0.84	1.07	-3.28	-2.13	1.64	10.04	-1.96	-4.23
4	-1.18	-0.94		0.87	-4.23	-1.71	2.85	11.94		-0.13
RExt	-0.20			0.00	0.13		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Calc	Limit	UC	Moment(f-k) Loc	Calc	Limit	UC	-Mom+Shr- Loc	UC	Deflect(in) Calc	Limit
LExt	RSup	0.20	5.02	0.04	RSup	-0.13	6.65	0.02	RSup	0.04	-0.13	
1	RLap	0.94	5.02	0.19	MidS	2.85	6.65	0.43	RSup	0.38	0.50	
2	RLap	0.86	2.56	0.34	RLap	-2.13	5.12	0.42	RLap	0.53	0.29	
3	LLap	-0.86	2.56	0.34	LLap	-2.13	5.12	0.42	LLap	0.53	0.29	
4	LLap	-0.94	5.02	0.19	MidS	2.85	6.65	0.43	LSup	0.38	0.50	
RExt	LSup	-0.20	5.02	0.04	LSup	-0.13	6.65	0.02	LSup	0.04	-0.13	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay Id	Left_Lap Calc Shear	Bear	UC	Right_Lap Calc Shear	Bear	UC
1				0.49	2.21	2.36	0.22
2	0.40	2.21	1.89	0.21	0.66	2.21	1.89	0.35
3	0.66	2.21	1.89	0.35	0.40	2.21	1.89	0.21
4	0.49	2.21	2.36	0.22				

LOAD COMBINATION # 7 : DL+CL+0.75LL+0.75WP1

PURLIN ANALYSIS:

Bay Id	Shear(k) Left Sup	Left Lap	Right Lap	Right Sup	Moment(f-k) Left Sup	Left Lap	MidSpan Mom	MidSpan Loc	Right Lap	Right Sup
LExt	0.00			-0.25	0.00		0.00	0.00		0.17
1	1.45		-1.81	-2.26	0.17		-5.41	7.69	3.29	8.13
2	2.07	1.62	-1.66	-1.90	8.13	3.75	-3.19	10.95	4.13	6.36
3	1.90	1.66	-1.62	-2.07	6.36	4.13	-3.19	10.05	3.75	8.13
4	2.26	1.81		-1.45	8.13	3.29	-5.41	11.98		0.17
RExt	0.25			0.00	0.17		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Calc	Limit	UC	Moment(f-k) Loc	Calc	Limit	UC	-Mom+Shr- Loc	UC	Deflect(in) Calc	Limit
LExt	RSup	-0.25	5.02	0.05	RSup	0.17	6.65	0.03	RSup	0.06	0.24	
1	RLap	-1.81	5.02	0.36	MidS	-5.41	5.96	0.91	RSup	0.72	-0.94	
2	RLap	-1.66	2.56	0.65	RLap	4.13	5.12	0.81	RLap	1.03	-0.56	
3	LLap	1.66	2.56	0.65	LLap	4.13	5.12	0.81	LLap	1.03	-0.56	
4	LLap	1.81	5.02	0.36	MidS	-5.41	5.96	0.91	LSup	0.72	-0.94	
RExt	LSup	0.25	5.02	0.05	LSup	0.17	6.65	0.03	LSup	0.06	0.24	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay Id	Left_Lap Calc Shear	Bear	UC	Right_Lap Calc Shear	Bear	UC
1				0.95	2.21	2.36	0.43
2	0.76	2.21	1.89	0.40	1.27	2.21	1.89	0.67
3	1.27	2.21	1.89	0.67	0.76	2.21	1.89	0.40
4	0.95	2.21	2.36	0.43				

LOAD COMBINATION # 8 : DL+CL+0.75SL+0.75WP1

PURLIN ANALYSIS:

Bay Id	Shear(k) Left Sup	Left Lap	Right Lap	Right Sup	Moment(f-k) Left Sup	Left Lap	MidSpan Mom	MidSpan Loc	Right Lap	Right Sup
LExt	0.00			-0.21	0.00		0.00	0.00		0.14
1	1.22		-1.53	-1.90	0.14		-4.55	7.69	2.77	6.84
2	1.74	1.36	-1.40	-1.60	6.84	3.16	-2.68	10.95	3.47	5.35
3	1.60	1.40	-1.36	-1.74	5.35	3.47	-2.68	10.05	3.16	6.84
4	1.90	1.53		-1.22	6.84	2.77	-4.55	11.98		0.14
RExt	0.21			0.00	0.14		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Calc	Limit	UC	Moment(f-k) Loc	Calc	Limit	UC	-Mom+Shr- Loc	UC	Deflect(in) Calc	Limit
LExt	RSup	-0.21	5.02	0.04	RSup	0.14	6.65	0.02	RSup	0.05	0.20	
1	RLap	-1.53	5.02	0.30	MidS	-4.55	5.96	0.76	RSup	0.61	-0.79	
2	RLap	-1.40	2.56	0.55	RLap	3.47	5.12	0.68	RLap	0.87	-0.47	

3	LLap	1.40	2.56	0.55	LLap	3.47	5.12	0.68	LLap	0.87	-0.47
4	LLap	1.53	5.02	0.30	MidS	-4.55	5.96	0.76	LSup	0.61	-0.79
RExt	LSup	0.21	5.02	0.04	LSup	0.14	6.65	0.02	LSup	0.05	0.20

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay	Left_Lap				Right_Lap			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.80	2.21	2.36	0.36
2	0.64	2.21	1.89	0.34	1.07	2.21	1.89	0.57
3	1.07	2.21	1.89	0.57	0.64	2.21	1.89	0.34
4	0.80	2.21	2.36	0.36				

LOAD COMBINATION # 9 : DL+CL+0.75LL+0.75WS1

PURLIN ANALYSIS:

	Shear(k)				Moment(f-k)					
Bay Id	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	MidSpan Loc	Right Lap	Right Sup
LExt	0.00			-0.03	0.00		0.00	0.00		0.02
1	0.39		-0.59	-0.73	0.02		-1.73	7.76	1.07	2.63
2	0.67	0.53	-0.54	-0.62	2.63	1.21	-1.04	10.93	1.35	2.08
3	0.62	0.54	-0.53	-0.67	2.08	1.35	-1.04	10.07	1.21	2.63
4	0.73	0.59		-0.39	2.63	1.07	-1.73	11.91		0.02
RExt	0.03			0.00	0.02		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
LExt	RSup	-0.03	5.02	0.01	RSup	0.02	6.65	0.00	LSup	0.00	0.08	
1	RLap	-0.59	5.02	0.12	MidS	-1.73	5.98	0.29	RSup	0.23	-0.30	
2	RLap	-0.54	2.56	0.21	RLap	1.35	5.12	0.26	RLap	0.34	-0.18	
3	LLap	0.54	2.56	0.21	LLap	1.35	5.12	0.26	LLap	0.34	-0.18	
4	LLap	0.59	5.02	0.12	MidS	-1.73	5.98	0.29	LSup	0.23	-0.30	
RExt	LSup	0.03	5.02	0.01	LSup	0.02	6.65	0.00	LSup	0.00	0.08	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay	Left_Lap				Right_Lap			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.31	2.21	2.36	0.14
2	0.25	2.21	1.89	0.13	0.42	2.21	1.89	0.22
3	0.42	2.21	1.89	0.22	0.25	2.21	1.89	0.13
4	0.31	2.21	2.36	0.14				

LOAD COMBINATION # 10 : DL+CL+0.75SL+0.75WS1

PURLIN ANALYSIS:

	Shear(k)				Moment(f-k)					
Bay Id	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	MidSpan Loc	Right Lap	Right Sup
LExt	0.00			0.01	0.00		0.00	0.00		-0.01
1	0.16		-0.30	-0.37	-0.01		-0.87	7.83	0.54	1.34
2	0.34	0.27	-0.28	-0.32	1.34	0.61	-0.54	10.91	0.70	1.07
3	0.32	0.28	-0.27	-0.34	1.07	0.70	-0.54	10.09	0.61	1.34
4	0.37	0.30		-0.16	1.34	0.54	-0.87	11.84		-0.01
RExt	-0.01			0.00	-0.01		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
LExt	RSup	0.01	5.02	0.00	RSup	-0.01	6.65	0.00	LSup	0.00	0.04	
1	RLap	-0.30	5.02	0.06	MidS	-0.87	6.00	0.15	RSup	0.12	-0.15	
2	RLap	-0.28	2.56	0.11	RLap	0.70	5.12	0.14	RLap	0.17	-0.10	
3	LLap	0.28	2.56	0.11	LLap	0.70	5.12	0.14	LLap	0.17	-0.10	
4	LLap	0.30	5.02	0.06	MidS	-0.87	6.00	0.15	LSup	0.12	-0.15	
RExt	LSup	-0.01	5.02	0.00	LSup	-0.01	6.65	0.00	LSup	0.00	0.04	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay	Left_Lap				Right_Lap			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.16	2.21	2.36	0.07
2	0.13	2.21	1.89	0.07	0.21	2.21	1.89	0.11
3	0.21	2.21	1.89	0.11	0.13	2.21	1.89	0.07
4	0.16	2.21	2.36	0.07				

LOAD COMBINATION # 11 : 0.6DL+WP1

PURLIN ANALYSIS:

Bay	Shear(k)				Moment(f-k)					
Id	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	MidSpan Loc	Right Lap	Right Sup
LExt	0.00			-0.09	0.00		0.00	0.00		0.06
1	0.49		-0.62	-0.77	0.06		-1.84	7.69	1.12	2.76
2	0.70	0.55	-0.56	-0.64	2.76	1.27	-1.08	10.95	1.40	2.16
3	0.64	0.56	-0.55	-0.70	2.16	1.40	-1.08	10.05	1.27	2.76
4	0.77	0.62		-0.49	2.76	1.12	-1.84	11.98		0.06
RExt	0.09			0.00	0.06		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay	Shear(k)				Moment(f-k)				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
LExt	RSup	-0.09	5.02	0.02	RSup	0.06	6.65	0.01	LSup	0.00	0.08	
1	RLap	-0.62	5.02	0.12	MidS	-1.84	5.96	0.31	RSup	0.25	-0.32	
2	RLap	-0.56	2.56	0.22	RLap	1.40	5.12	0.27	RLap	0.35	-0.19	
3	LLap	0.56	2.56	0.22	LLap	1.40	5.12	0.27	LLap	0.35	-0.19	
4	LLap	0.62	5.02	0.12	MidS	-1.84	5.96	0.31	LSup	0.25	-0.32	
RExt	LSup	0.09	5.02	0.02	LSup	0.06	6.65	0.01	LSup	0.00	0.08	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay	Left_Lap				Right_Lap			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.32	2.21	2.36	0.15
2	0.26	2.21	1.89	0.14	0.43	2.21	1.89	0.23
3	0.43	2.21	1.89	0.23	0.26	2.21	1.89	0.14
4	0.32	2.21	2.36	0.15				

LOAD COMBINATION # 12 : 0.6DL+WS1

PURLIN ANALYSIS:

Bay	Shear(k)				Moment(f-k)					
Id	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	MidSpan Loc	Right Lap	Right Sup
LExt	0.00			0.21	0.00		0.00	0.00		-0.14
1	-0.93		1.02	1.27	-0.14		3.07	7.72	-1.85	-4.57

2	-1.16	-0.91	0.93	1.06	-4.57	-2.12	1.78	10.96	-2.30	-3.54
3	-1.06	-0.93	0.91	1.16	-3.54	-2.30	1.78	10.04	-2.12	-4.57
4	-1.27	-1.02		0.93	-4.57	-1.85	3.07	11.95		-0.14
RExt	-0.21			0.00	-0.14		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay	-------Shear(k)------				-----Moment(f-k)-----				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
LExt	RSup	0.21	5.02	0.04	RSup	-0.14	6.65	0.02	RSup	0.05	-0.14	
1	RLap	1.02	5.02	0.20	MidS	3.07	6.65	0.46	RSup	0.41	0.53	
2	RLap	0.93	2.56	0.36	RLap	-2.30	5.12	0.45	RLap	0.58	0.31	
3	LLap	-0.93	2.56	0.36	LLap	-2.30	5.12	0.45	LLap	0.58	0.31	
4	LLap	-1.02	5.02	0.20	MidS	3.07	6.65	0.46	LSup	0.41	0.53	
RExt	LSup	-0.21	5.02	0.04	LSup	-0.14	6.65	0.02	LSup	0.05	-0.14	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay	-------Left_Lap-------				-------Right_Lap------			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.53	2.21	2.36	0.24
2	0.43	2.21	1.89	0.23	0.71	2.21	1.89	0.37
3	0.71	2.21	1.89	0.37	0.43	2.21	1.89	0.23
4	0.53	2.21	2.36	0.24				

LOAD COMBINATION # 13 : DL+CL+SL/2+PAT_SL_3

PURLIN ANALYSIS:

	--------Shear(k)--------				--------------Moment(f-k)--------------					
Bay	Left	Left	Right	Right	Left	Left	MidSpan		Right	Right
Id	Sup	Lap	Lap	Sup	Sup	Lap	Mom	Loc	Lap	Sup
LExt	0.00			-0.19	0.00		0.00	0.00		0.13
1	1.10		-1.40	-1.75	0.13		-4.06	7.60	2.74	6.48
2	1.64	1.29	-1.22	-1.40	6.48	3.00	-2.78	11.31	2.38	4.02
3	1.00	0.88	-0.76	-0.98	4.02	2.85	-1.28	10.61	1.75	3.81
4	1.12	0.89		-0.74	3.81	1.42	-2.80	11.84*		0.08
RExt	0.13			0.00	0.08		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay	-------Shear(k)------				-----Moment(f-k)-----				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
LExt	RSup	-0.19	5.02	0.04	RSup	0.13	6.65	0.02	RSup	0.04	0.18	
1	RLap	-1.40	5.02	0.28	MidS	-4.06	5.95	0.68	RSup	0.57	-0.69	
2	LLap	1.29	2.56	0.50	LLap	3.00	5.12	0.59	LLap	0.77	-0.55	
3	LLap	0.88	2.56	0.34	LLap	2.85	5.12	0.56	LLap	0.65	-0.16	
4	LLap	0.89	5.02	0.18	MidS	-2.80	5.97	0.47	LSup	0.34	-0.50	
RExt	LSup	0.13	5.02	0.02	LSup	0.08	6.65	0.01	LSup	0.03	0.13	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay	-------Left_Lap-------				-------Right_Lap------			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.76	2.21	2.36	0.34
2	0.61	2.21	1.89	0.32	0.80	2.21	1.89	0.43
3	0.80	2.21	1.89	0.43	0.36	2.21	1.89	0.19
4	0.45	2.21	2.36	0.20				

LOAD COMBINATION # 14 : DL+CL+SL/2+PAT_SL_4

PURLIN ANALYSIS:

Bay Id	Shear(k) Left Sup	Left Lap	Right Lap	Right Sup	Moment(f-k) Left Sup	Left Lap	MidSpan Mom	MidSpan Loc	Right Lap	Right Sup
LExt	0.00			-0.13	0.00		0.00	0.00		0.08
1	0.68		-0.95	-1.18	0.08		-2.35	7.18	2.47	4.99
2	1.50	1.15	-1.36	-1.54	4.99	1.85	-2.74	10.34	3.67	5.49
3	1.54	1.36	-1.15	-1.50	5.49	3.67	-2.74	10.66	1.85	4.99
4	1.18	0.95		-0.68	4.99	2.47	-2.35	12.48		0.08
RExt	0.13			0.00	0.08		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Calc	Limit	UC	Moment(f-k) Loc	Calc	Limit	UC	-Mom+Shr- Loc	UC	Deflect(in) Calc	Limit
LExt	RSup	-0.13	5.02	0.03	RSup	0.08	6.65	0.01	RSup	0.03	0.10	
1	RLap	-0.95	5.02	0.19	RSup	2.77	6.65	0.42	RSup	0.44	-0.34	
2	RLap	-1.36	2.56	0.53	RLap	3.67	5.12	0.72	RLap	0.89	-0.55	
3	LLap	1.36	2.56	0.53	LLap	3.67	5.12	0.72	LLap	0.89	-0.55	
4	LLap	0.95	5.02	0.19	LSup	2.77	6.65	0.42	LSup	0.44	-0.34	
RExt	LSup	0.13	5.02	0.02	LSup	0.08	6.65	0.01	LSup	0.03	0.10	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay Id	Left_Lap Calc	Shear	Bear	UC	Right_Lap Calc	Shear	Bear	UC
1					0.58	2.21	2.36	0.26
2	0.47	2.21	1.89	0.25	1.10	2.21	1.89	0.58
3	1.10	2.21	1.89	0.58	0.47	2.21	1.89	0.25
4	0.58	2.21	2.36	0.26				

LOAD COMBINATION # 15 : DL+CL+SL/2+PAT_SL_5

PURLIN ANALYSIS:

Bay Id	Shear(k) Left Sup	Left Lap	Right Lap	Right Sup	Moment(f-k) Left Sup	Left Lap	MidSpan Mom	MidSpan Loc	Right Lap	Right Sup
LExt	0.00			-0.13	0.00		0.00	0.00		0.08
1	0.74		-0.89	-1.12	0.08		-2.80	7.82	1.42	3.81
2	0.98	0.76	-0.88	-1.00	3.81	1.75	-1.28	10.39	2.85	4.02
3	1.40	1.22	-1.29	-1.64	4.02	2.38	-2.78	9.69	3.00	6.48
4	1.75	1.40		-1.10	6.48	2.74	-4.06	12.06		0.13
RExt	0.19			0.00	0.13		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Calc	Limit	UC	Moment(f-k) Loc	Calc	Limit	UC	-Mom+Shr- Loc	UC	Deflect(in) Calc	Limit
LExt	RSup	-0.13	5.02	0.02	RSup	0.08	6.65	0.01	RSup	0.03	0.13	
1	RLap	-0.89	5.02	0.18	MidS	-2.80	5.97	0.47	RSup	0.34	-0.50	
2	RLap	-0.88	2.56	0.34	RLap	2.85	5.12	0.56	RLap	0.65	-0.16	
3	RLap	-1.29	2.56	0.50	RLap	3.00	5.12	0.59	RLap	0.77	-0.55	
4	LLap	1.40	5.02	0.28	MidS	-4.06	5.95	0.68	LSup	0.57	-0.69	
RExt	LSup	0.19	5.02	0.04	LSup	0.13	6.65	0.02	LSup	0.04	0.18	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay Id	Left_Lap Calc	Shear	Bear	UC	Right_Lap Calc	Shear	Bear	UC
1					0.45	2.21	2.36	0.20
2	0.36	2.21	1.89	0.19	0.80	2.21	1.89	0.43
3	0.80	2.21	1.89	0.43	0.61	2.21	1.89	0.32

4	0.76	2.21	2.36	0.34

LOAD COMBINATION # 16 : DL+CL+SL/2+PAT_SL_1

PURLIN ANALYSIS:

Bay Id	Shear(k) Left Sup	Shear(k) Left Lap	Shear(k) Right Lap	Shear(k) Right Sup	Moment(f-k) Left Sup	Moment(f-k) Left Lap	Moment(f-k) MidSpan Mom	Moment(f-k) MidSpan Loc	Moment(f-k) Right Lap	Moment(f-k) Right Sup
LExt	0.00			-0.19	0.00		0.00	0.00		0.13
1	1.17		-1.34	-1.68	0.13		-4.56	8.05	1.62	5.20
2	1.10	0.88	-0.76	-0.88	5.20	2.85	-1.23	11.68	1.84	2.86
3	0.93	0.81	-0.83	-1.05	2.86	1.78	-1.71	9.85	1.92	4.14
4	1.13	0.91		-0.72	4.14	1.72	-2.67	12.03		0.08
RExt	0.13			0.00	0.08		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Shear(k) Calc	Shear(k) Limit	Shear(k) UC	Moment(f-k) Loc	Moment(f-k) Calc	Moment(f-k) Limit	Moment(f-k) UC	-Mom+Shr- Loc	-Mom+Shr- UC	Deflect(in) Calc	Deflect(in) Limit
LExt	RSup	-0.19	5.02	0.04	RSup	0.13	6.65	0.02	RSup	0.04	0.21	
1	RLap	-1.34	5.02	0.27	MidS	-4.56	5.98	0.76	RSup	0.47	-0.86	
2	LLap	0.88	2.56	0.34	LLap	2.85	5.12	0.56	LLap	0.65	-0.12	
3	RLap	-0.83	2.56	0.32	RLap	1.92	5.12	0.37	RLap	0.49	-0.32	
4	LLap	0.91	5.02	0.18	MidS	-2.67	5.96	0.45	LSup	0.37	-0.46	
RExt	LSup	0.13	5.02	0.03	LSup	0.08	6.65	0.01	LSup	0.03	0.12	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay Id	Left_Lap Calc	Left_Lap Shear	Left_Lap Bear	Left_Lap UC	Right_Lap Calc	Right_Lap Shear	Right_Lap Bear	Right_Lap UC
1					0.61	2.21	2.36	0.28
2	0.49	2.21	1.89	0.26	0.57	2.21	1.89	0.30
3	0.57	2.21	1.89	0.30	0.39	2.21	1.89	0.21
4	0.48	2.21	2.36	0.22				

LOAD COMBINATION # 17 : DL+CL+SL/2+PAT_SL_2

PURLIN ANALYSIS:

Bay Id	Shear(k) Left Sup	Shear(k) Left Lap	Shear(k) Right Lap	Shear(k) Right Sup	Moment(f-k) Left Sup	Moment(f-k) Left Lap	Moment(f-k) MidSpan Mom	Moment(f-k) MidSpan Loc	Moment(f-k) Right Lap	Moment(f-k) Right Sup
LExt	0.00			-0.13	0.00		0.00	0.00		0.08
1	0.72		-0.91	-1.13	0.08		-2.67	7.64	1.72	4.14
2	1.05	0.83	-0.81	-0.93	4.14	1.92	-1.71	11.15	1.78	2.86
3	0.88	0.76	-0.88	-1.10	2.86	1.84	-1.23	9.32	2.85	5.20
4	1.68	1.34		-1.17	5.20	1.62	-4.56	11.62		0.13
RExt	0.19			0.00	0.13		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Shear(k) Calc	Shear(k) Limit	Shear(k) UC	Moment(f-k) Loc	Moment(f-k) Calc	Moment(f-k) Limit	Moment(f-k) UC	-Mom+Shr- Loc	-Mom+Shr- UC	Deflect(in) Calc	Deflect(in) Limit
LExt	RSup	-0.13	5.02	0.02	RSup	0.08	6.65	0.01	RSup	0.03	0.12	
1	RLap	-0.91	5.02	0.18	MidS	-2.67	5.96	0.45	RSup	0.37	-0.46	
2	LLap	0.83	2.56	0.32	LLap	1.92	5.12	0.37	LLap	0.49	-0.32	
3	RLap	-0.88	2.56	0.34	RLap	2.85	5.12	0.56	RLap	0.65	-0.12	
4	LLap	1.34	5.02	0.27	MidS	-4.56	5.98	0.76	LSup	0.47	-0.86	
RExt	LSup	0.19	5.02	0.04	LSup	0.13	6.65	0.02	LSup	0.04	0.21	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay Id	Left_Lap Calc	Left_Lap Shear	Left_Lap Bear	Left_Lap UC	Right_Lap Calc	Right_Lap Shear	Right_Lap Bear	Right_Lap UC
1					0.48	2.21	2.36	0.22
2	0.39	2.21	1.89	0.21	0.57	2.21	1.89	0.30
3	0.57	2.21	1.89	0.30	0.49	2.21	1.89	0.26
4	0.61	2.21	2.36	0.28				

LOAD COMBINATION # 18 : DL+CL+SL-1.0PAT_SL

PURLIN ANALYSIS:

Bay Id	Shear(k) Left Sup	Shear(k) Left Lap	Shear(k) Right Lap	Shear(k) Right Sup	Moment(f-k) Left Sup	Moment(f-k) Left Lap	Moment(f-k) MidSpan Mom	Moment(f-k) MidSpan Loc	Moment(f-k) Right Lap	Moment(f-k) Right Sup
LExt	0.00			-0.13	0.00		0.00	0.00		0.08
1	0.67		-0.96	-1.18	0.08		-2.31	7.13	2.55	5.08
2	1.52	1.17	-1.34	-1.52	5.08	1.89	-2.85	10.47	3.39	5.18
3	1.47	1.29	-1.22	-1.57	5.18	3.45	-2.33	10.18	2.83	6.14
4	1.73	1.39		-1.12	6.14	2.44	-4.19	11.95		0.13
RExt	0.19			0.00	0.13		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Shear(k) Calc	Shear(k) Limit	Shear(k) UC	Moment(f-k) Loc	Moment(f-k) Calc	Moment(f-k) Limit	Moment(f-k) UC	-Mom+Shr- Loc	-Mom+Shr- UC	Deflect(in) Calc	Deflect(in) Limit
LExt	RSup	-0.13	5.02	0.02	RSup	0.08	6.65	0.01	RSup	0.03	0.09	
1	RLap	-0.96	5.02	0.19	RSup	2.82	6.65	0.42	RSup	0.44	-0.33	
2	RLap	-1.34	2.56	0.52	RLap	3.39	5.12	0.66	RLap	0.84	-0.59	
3	LLap	1.29	2.56	0.50	LLap	3.45	5.12	0.67	LLap	0.84	-0.39	
4	LLap	1.39	5.02	0.28	MidS	-4.19	5.96	0.70	LSup	0.55	-0.73	
RExt	LSup	0.19	5.02	0.04	LSup	0.13	6.65	0.02	LSup	0.04	0.19	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay Id	Left_Lap Calc	Left_Lap Shear	Left_Lap Bear	Left_Lap UC	Right_Lap Calc	Right_Lap Shear	Right_Lap Bear	Right_Lap UC
1					0.59	2.21	2.36	0.27
2	0.48	2.21	1.89	0.25	1.04	2.21	1.89	0.55
3	1.04	2.21	1.89	0.55	0.57	2.21	1.89	0.30
4	0.72	2.21	2.36	0.33				

LOAD COMBINATION # 19 : DL+CL+SL-1.0PAT_SL

PURLIN ANALYSIS:

Bay Id	Shear(k) Left Sup	Shear(k) Left Lap	Shear(k) Right Lap	Shear(k) Right Sup	Moment(f-k) Left Sup	Moment(f-k) Left Lap	Moment(f-k) MidSpan Mom	Moment(f-k) MidSpan Loc	Moment(f-k) Right Lap	Moment(f-k) Right Sup
LExt	0.00			-0.19	0.00		0.00	0.00		0.13
1	1.12		-1.39	-1.73	0.13		-4.19	7.72	2.44	6.14
2	1.57	1.22	-1.29	-1.47	6.14	2.83	-2.33	10.82	3.45	5.18
3	1.52	1.34	-1.17	-1.52	5.18	3.39	-2.85	10.53	1.89	5.08
4	1.18	0.96		-0.67	5.08	2.55	-2.31	12.53		0.08
RExt	0.13			0.00	0.08		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay Id	Shear(k) Loc	Shear(k) Calc	Shear(k) Limit	Shear(k) UC	Moment(f-k) Loc	Moment(f-k) Calc	Moment(f-k) Limit	Moment(f-k) UC	-Mom+Shr- Loc	-Mom+Shr- UC	Deflect(in) Calc	Deflect(in) Limit
LExt	RSup	-0.19	5.02	0.04	RSup	0.13	6.65	0.02	RSup	0.04	0.19	
1	RLap	-1.39	5.02	0.28	MidS	-4.19	5.96	0.70	RSup	0.55	-0.73	
2	RLap	-1.29	2.56	0.50	RLap	3.45	5.12	0.67	RLap	0.84	-0.39	
3	LLap	1.34	2.56	0.52	LLap	3.39	5.12	0.66	LLap	0.84	-0.59	

4	LLap	0.96	5.02	0.19	LSup	2.82	6.65	0.42	LSup	0.44	-0.33
RExt	LSup	0.13	5.02	0.03	LSup	0.08	6.65	0.01	LSup	0.03	0.09

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay	-------Left_Lap-------				-------Right_Lap------			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.72	2.21	2.36	0.33
2	0.57	2.21	1.89	0.30	1.04	2.21	1.89	0.55
3	1.04	2.21	1.89	0.55	0.48	2.21	1.89	0.25
4	0.59	2.21	2.36	0.27				

LOAD COMBINATION # 20 : DL+CL+UNB_SL

PURLIN ANALYSIS:

Bay	--------Shear(k)--------				--------------Moment(f-k)--------------					
Id	Left Sup	Left Lap	Right Lap	Right Sup	Left Sup	Left Lap	MidSpan Mom	MidSpan Loc	Right Lap	Right Sup
LExt	0.00			-0.19	0.00		0.00	0.00		0.13
1	1.11		-1.39	-1.73	0.13		-4.15	7.69	2.52	6.23
2	1.58	1.24	-1.27	-1.46	6.23	2.88	-2.44	10.95	3.17	4.87
3	1.46	1.27	-1.24	-1.58	4.87	3.17	-2.44	10.05	2.88	6.23
4	1.73	1.39		-1.11	6.23	2.52	-4.15	11.98		0.13
RExt	0.19			0.00	0.13		0.00	1.33		0.00

STRENGTH/DEFLECTION:

Bay	-------Shear(k)------				-----Moment(f-k)-----				-Mom+Shr-		Deflect(in)	
Id	Loc	Calc	Limit	UC	Loc	Calc	Limit	UC	Loc	UC	Calc	Limit
LExt	RSup	-0.19	5.02	0.04	RSup	0.13	6.65	0.02	RSup	0.04	0.18	
1	RLap	-1.39	5.02	0.28	MidS	-4.15	5.96	0.70	RSup	0.55	-0.72	
2	RLap	-1.27	2.56	0.50	RLap	3.17	5.12	0.62	RLap	0.79	-0.43	
3	LLap	1.27	2.56	0.50	LLap	3.17	5.12	0.62	LLap	0.79	-0.43	
4	LLap	1.39	5.02	0.28	MidS	-4.15	5.96	0.70	LSup	0.55	-0.72	
RExt	LSup	0.19	5.02	0.04	LSup	0.13	6.65	0.02	LSup	0.04	0.18	

LAP BOLT SHEAR/BEARING:
Bolt = 0.500 (A307)

Bay	-------Left_Lap-------				-------Right_Lap------			
Id	Calc	Shear	Bear	UC	Calc	Shear	Bear	UC
1					0.73	2.21	2.36	0.33
2	0.58	2.21	1.89	0.31	0.97	2.21	1.89	0.52
3	0.97	2.21	1.89	0.52	0.58	2.21	1.89	0.31
4	0.73	2.21	2.36	0.33				

DEFLECTION:

LOAD COMBINATION # 21 : DL+CL+LL

Bay	DEFLECTION(in)		
Id	Calc	Limit	Ratio
LExt	0.24		
1	-0.92	0.98	0.94
2	-0.55	1.05	0.52
3	-0.55	1.05	0.52
4	-0.92	0.98	0.94
RExt	0.24		

LOAD COMBINATION # 22 : DL+CL+SL

Bay Id	DEFLECTION(in) Calc	Limit	Ratio
LExt	0.18		
1	-0.72	0.98	0.73
2	-0.43	1.05	0.41
3	-0.43	1.05	0.41
4	-0.72	0.98	0.73
RExt	0.18		

LOAD COMBINATION # 23 : LL

Bay Id	DEFLECTION(in) Calc	Limit	Ratio
LExt	0.18		
1	-0.70	0.98	0.71
2	-0.42	1.05	0.40
3	-0.42	1.05	0.40
4	-0.70	0.98	0.71
RExt	0.18		

LOAD COMBINATION # 24 : SL

Bay Id	DEFLECTION(in) Calc	Limit	Ratio
LExt	0.13		
1	-0.50	0.98	0.51
2	-0.30	1.05	0.29
3	-0.30	1.05	0.29
4	-0.50	0.98	0.51
RExt	0.13		

LOAD COMBINATION # 25 : DL+0.75WP1

Bay Id	DEFLECTION(in) Calc	Limit	Ratio
LExt	0.07		
1	-0.29	0.98	0.30
2	-0.17	1.05	0.17
3	-0.17	1.05	0.17
4	-0.29	0.98	0.30
RExt	0.07		

LOAD COMBINATION # 26 : DL+0.75WS1

Bay Id	DEFLECTION(in) Calc	Limit	Ratio
LExt	-0.09		
1	0.34	0.98	0.34
2	0.20	1.05	0.19
3	0.20	1.05	0.19
4	0.34	0.98	0.34
RExt	-0.09		

S12S0554A Purlin Combination Report 9/12/12 3:58pm

Surf Id	System Id	----Roof_Purlin---- Depth	Row	Weight	Added_Purlin Row	Weight	Total Weight
2	1	8.0	4	1269.3	0	0.0	1269.3
2	2	8.0	4	1269.3	4	432.6	1701.9
3	1	8.0	4	1269.3	0	0.0	1269.3

3	2	8.0	4	1269.3	4	432.6	1701.9

S12S0554A In-Plane Roof Force 9/12/12 3:58pm

Win (k)= Design load in the plane of the purlin web
Wout(k)= Design load in the plane of the purlin flange
Pl (k)= Force in plane of roof per anti-roll clip

PURLIN ROLL FORCES:

Surf Id	Load Id	Line Id	--Roof_Load-- Win	Wout	Pl
2	1	1	7.66	1.91	-0.21
2	1	2	13.95	3.49	-0.17
2	1	3	14.40	3.60	-0.01
2	1	4	13.95	3.49	-0.17
2	1	5	7.66	1.91	-0.21
3	1	1	7.66	-1.91	-0.21
3	1	2	13.95	-3.49	-0.17
3	1	3	14.40	-3.60	-0.01
3	1	4	13.95	-3.49	-0.17
3	1	5	7.66	-1.91	-0.21

STANDARD CONNECTION:

Surf Id	Line Id	No.	Attachment	Roll Id	Thick	Force/Connection Calc	Limit	UC
2	RF	4	Weld clip		0.000	0.00	0.00	0.00
3	RF	4	Weld clip		0.000	0.00	0.00	0.00

REQUIRED ANTI-ROLL CONNECTION:

Surf Id	Line Id	No.	Attachment	Roll Id	Thick	Force/Connection Calc	Limit	UC
2	RF	2	Gusset clip	@082	0.220	-0.21	2.96	0.07
3	RF	2	Gusset clip	@082	0.220	-0.21	2.96	0.07

PURLIN ANTI ROLL LOCATION:

Surf Id	Line Id	No. Purlin	Purlin Location
2	RF	2	2 4
3	RF	2	1 3

PANEL SHEAR/DIAPHRAGM:

Surf Id	Line Id	Panel_Shear Calc	Limit	-Deflection- Calc	Limit
2	RF	17.5	30.0	0.00	0.00
3	RF	17.5	30.0	0.00	0.00

S12S0554A Roof Panel Summary 9/12/12 3:58pm

PANEL LAYOUT:

Surf Id	Part	Type	Gage	Yield	Surface Length	No. Purlin	Max Space	Rotation Stiffness
2	NS4-	SS	24.00	50.0	18.55	4	5.000	0.44
3	NS4-	SS	24.00	50.0	18.55	4	5.000	0.44

PANEL STRENGTH:

--------Support-------- ---------Midspan--------

Surf Id	Area	Load Id	Offset	Moment(ft-lb/ft) Calc	Limit	Ratio	Offset	Moment(ft-lb/ft) Calc	Limit	Ratio
2	Left	1	5.0	85.9	207.5	0.41	2.0	-61.8	370.5	0.17
		2	5.0	64.5	207.5	0.31	2.0	-46.4	370.5	0.13
		3	5.0	67.0	207.5	0.32	2.0	-48.2	370.5	0.13
		4	5.0	51.0	207.5	0.25	2.0	-36.7	370.5	0.10
		5	5.0	50.2	207.5	0.24	2.0	-36.1	370.5	0.10
		6	5.0	-125	370.5	0.34	2.0	112.9	207.5	0.54
		7	5.0	96.9	207.5	0.47	2.0	-69.7	370.5	0.19
		8	5.0	-34.7	370.5	0.09	2.0	42.1	207.5	0.20
		9	5.0	80.9	207.5	0.39	2.0	-58.2	370.5	0.16
		10	5.0	-50.8	370.5	0.14	2.4	51.8	207.5	0.25
		11	5.0	46.1	207.5	0.22	2.0	-33.2	370.5	0.09
		12	5.0	-129	370.5	0.35	2.0	115.9	207.5	0.56
		13	5.0	61.8	207.5	0.30	2.0	-47.5	370.5	0.13
2	Center	1	5.0	85.9	207.5	0.41	2.0	-61.8	370.5	0.17
		2	5.0	64.5	207.5	0.31	2.0	-46.4	370.5	0.13
		3	5.0	67.0	207.5	0.32	2.0	-48.2	370.5	0.13
		4	5.0	51.0	207.5	0.25	2.0	-36.7	370.5	0.10
		5	5.0	50.2	207.5	0.24	2.0	-36.1	370.5	0.10
		6	5.0	-75.6	370.5	0.20	2.0	74.2	207.5	0.36
		7	5.0	96.9	207.5	0.47	2.0	-69.7	370.5	0.19
		8	10.0	18.5	207.5	0.09	7.1	-12.9	370.5	0.03
		9	5.0	80.9	207.5	0.39	2.0	-58.2	370.5	0.16
		10	5.0	-13.5	370.5	0.04	2.1	24.6	207.5	0.12
		11	5.0	46.1	207.5	0.22	2.0	-33.2	370.5	0.09
		12	5.0	-79.7	370.5	0.22	2.0	77.2	207.5	0.37
		13	5.0	61.8	207.5	0.30	2.0	-47.5	370.5	0.13
2	Right	1	5.0	85.9	207.5	0.41	2.0	-61.8	370.5	0.17
		2	5.0	64.5	207.5	0.31	2.0	-46.4	370.5	0.13
		3	5.0	67.0	207.5	0.32	2.0	-48.2	370.5	0.13
		4	5.0	51.0	207.5	0.25	2.0	-36.7	370.5	0.10
		5	5.0	50.2	207.5	0.24	2.0	-36.1	370.5	0.10
		6	5.0	-125	370.5	0.34	2.0	112.9	207.5	0.54
		7	5.0	96.9	207.5	0.47	2.0	-69.7	370.5	0.19
		8	5.0	-34.7	370.5	0.09	2.0	42.1	207.5	0.20
		9	5.0	80.9	207.5	0.39	2.0	-58.2	370.5	0.16
		10	5.0	-50.8	370.5	0.14	2.4	51.8	207.5	0.25
		11	5.0	46.1	207.5	0.22	2.0	-33.2	370.5	0.09
		12	5.0	-129	370.5	0.35	2.0	115.9	207.5	0.56
		13	5.0	61.8	207.5	0.30	2.0	-47.5	370.5	0.13
3	Left	1	13.6	85.9	207.5	0.41	16.6	-61.8	370.5	0.17
		2	13.6	64.5	207.5	0.31	16.6	-46.4	370.5	0.13
		3	13.6	67.0	207.5	0.32	16.6	-48.2	370.5	0.13
		4	13.6	51.0	207.5	0.25	16.6	-36.7	370.5	0.10
		5	13.6	50.2	207.5	0.24	16.6	-36.1	370.5	0.10
		6	13.6	-125	370.5	0.34	16.6	112.9	207.5	0.54
		7	13.6	96.9	207.5	0.47	16.6	-69.7	370.5	0.19
		8	13.6	-34.7	370.5	0.09	16.5	42.1	207.5	0.20
		9	13.6	80.9	207.5	0.39	16.6	-58.2	370.5	0.16
		10	13.6	-50.8	370.5	0.14	16.2	51.8	207.5	0.25
		11	13.6	46.1	207.5	0.22	16.6	-33.2	370.5	0.09
		12	13.6	-129	370.5	0.35	16.6	115.9	207.5	0.56
		13	13.6	61.8	207.5	0.30	16.6	-47.5	370.5	0.13
3	Center	1	13.6	85.9	207.5	0.41	16.6	-61.8	370.5	0.17
		2	13.6	64.5	207.5	0.31	16.6	-46.4	370.5	0.13
		3	13.6	67.0	207.5	0.32	16.6	-48.2	370.5	0.13
		4	13.6	51.0	207.5	0.25	16.6	-36.7	370.5	0.10
		5	13.6	50.2	207.5	0.24	16.6	-36.1	370.5	0.10
		6	13.6	-75.6	370.5	0.20	16.6	74.2	207.5	0.36
		7	13.6	96.9	207.5	0.47	16.6	-69.7	370.5	0.19
		8	8.6	18.5	207.5	0.09	11.5	-12.9	370.5	0.03
		9	13.6	80.9	207.5	0.39	16.6	-58.2	370.5	0.16
		10	13.6	-13.5	370.5	0.04	16.5	24.6	207.5	0.12
		11	13.6	46.1	207.5	0.22	16.6	-33.2	370.5	0.09
		12	13.6	-79.7	370.5	0.22	16.6	77.2	207.5	0.37

		13	13.6	61.8	207.5	0.30	16.6	-47.5	370.5	0.13
3	Right	1	13.6	85.9	207.5	0.41	16.6	-61.8	370.5	0.17
		2	13.6	64.5	207.5	0.31	16.6	-46.4	370.5	0.13
		3	13.6	67.0	207.5	0.32	16.6	-48.2	370.5	0.13
		4	13.6	51.0	207.5	0.25	16.6	-36.7	370.5	0.10
		5	13.6	50.2	207.5	0.24	16.6	-36.1	370.5	0.10
		6	13.6	-125	370.5	0.34	16.6	112.9	207.5	0.54
		7	13.6	96.9	207.5	0.47	16.6	-69.7	370.5	0.19
		8	13.6	-34.7	370.5	0.09	16.5	42.1	207.5	0.20
		9	13.6	80.9	207.5	0.39	16.6	-58.2	370.5	0.16
		10	13.6	-50.8	370.5	0.14	16.2	51.8	207.5	0.25
		11	13.6	46.1	207.5	0.22	16.6	-33.2	370.5	0.09
		12	13.6	-129	370.5	0.35	16.6	115.9	207.5	0.56
		13	13.6	61.8	207.5	0.30	16.6	-47.5	370.5	0.13

PANEL DEFLECTION:

Surf Id	Area	Load Id	-----Deflection(in)----- Offset	Calc	Limit	Ratio
2	Left	14	2.5	-0.02	0.33	0.05
		15	2.5	-0.01	0.33	0.04
		16	2.5	-0.01	0.33	0.04
		17	2.5	0.03	0.33	0.10
2	Center	14	2.5	-0.02	0.33	0.05
		15	2.5	-0.01	0.33	0.04
		16	2.5	-0.01	0.33	0.04
		17	2.5	0.02	0.33	0.07
2	Right	14	2.5	-0.02	0.33	0.05
		15	2.5	-0.01	0.33	0.04
		16	2.5	-0.01	0.33	0.04
		17	2.5	0.03	0.33	0.10
3	Left	14	16.1	-0.02	0.33	0.05
		15	16.1	-0.01	0.33	0.04
		16	16.1	-0.01	0.33	0.04
		17	16.1	0.03	0.33	0.10
3	Center	14	16.1	-0.02	0.33	0.05
		15	16.1	-0.01	0.33	0.04
		16	16.1	-0.01	0.33	0.04
		17	16.1	0.02	0.33	0.07
3	Right	14	16.1	-0.02	0.33	0.05
		15	16.1	-0.01	0.33	0.04
		16	16.1	-0.01	0.33	0.04
		17	16.1	0.03	0.33	0.10

LOAD COMBINATION:

Load Id	Description
1	DL+LL
2	DL+SL
3	DL+0.75LL
4	DL+0.75SL
5	DL+WP1
6	DL+WS1
7	DL+0.75LL+0.75WP1
8	DL+0.75LL+0.75WS1
9	DL+0.75SL+0.75WP1
10	DL+0.75SL+0.75WS1
11	0.6DL+WP1
12	0.6DL+WS1
13	DL+UNB_SL
14	LL
15	SL
16	DL+WP1
17	DL+WS1

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ROOF LOADS

EW Id	Attach Locate	Wind Wall1	Wind Wall2	Wind Roof	Wind React	Seismic(a) Wall1	Seismic(a) Wall2	Seismic(a) Roof	Seismic(a) React
1	0.00	1.92	0.57	0.00	4.42	0.037	0.037	1.29	2.40
1	18.00	3.24	0.61	0.00	0.00	0.081	0.081	1.91	0.00
1	36.00	1.92	0.57	0.00	4.42	0.037	0.037	1.29	2.40
3	0.00	1.92	0.57	0.00	4.42	0.037	0.037	1.29	2.40
3	18.00	3.24	0.61	0.00	0.00	0.081	0.081	1.91	0.00
3	36.00	1.92	0.57	0.00	4.42	0.037	0.037	1.29	2.40

ROOF SHEAR

EW Id	Attach_Locate Start	End	Wind	Seismic(a)
1	0.00	18.00	1.93	1.04
1	18.00	36.00	-1.93	-1.04
3	0.00	18.00	1.93	1.04
3	18.00	36.00	-1.93	-1.04

(a) Seismic results based on base shear values

LOAD COMBINATIONS

Max Wind Coeff
Frame = 1.000
Brace = 1.000
Max Seismic Coeff
Frame = 0.700
Brace = 0.700

SEISMIC LOAD

Seismic Coeff= 0.105
Roof Total=11.642
Left EW Dead= 3.000
Front SW Dead= 3.000
Right EW Dead= 3.000
Back SW Dead= 3.000
Extend Dead= 4.000

PANEL SHEAR:
Limit = 0.0
Calc
Wind = 23.0
Seismic = 8.6

DIAGONAL BRACING:

Bay Id	Brace_Locate Start	End	Diag_Brace Type	Size	Part	Brace_Tension(k) Wind Calc	Wind Limit	Seismic Calc	Seismic Limit	Max UC	KL/R
2	0.00	18.00	R	0.625	RDB-	2.57	7.34	0.97	7.34	0.35	
	18.00	36.00	R	0.625	RDB-	2.57	7.34	0.97	7.34	0.35	

ATTACHMENT DEFLECTION:

EW Id	Attach Locate	--Deflection-- Wind	Seismic	-Span/Deflect- Wind	Seismic
1	0.00	0.18	0.10	1662	3060
1	18.00	0.24	0.13	1445	2667
1	36.00	0.18	0.10	1662	3060

PANEL SHEAR:

Wall Id	Base Length	Wind Calc	Seismic Calc	Limit
2	80.6	54.8	62.6	0.0
4	84.0	52.6	60.1	0.0

DIAGONAL BRACING:

Wall Id	Bay Id	Brace_Locate Bot	Top	------Diag_Brace---- Type	Size	Part	Brace_Tension(k) ----Wind--- Calc	Limit	--Seismic-- Calc	Limit	Max UC	KL/R
2	4	0.0	25.0	R	0.625	RDB-	6.80	7.34	2.59	7.34	0.93	
4	1	0.0	25.0	R	0.625	RDB-	6.80	7.34	2.59	7.34	0.93	

BASE REACTIONS:

Wall Id	Bay Id	Col Id	Wind_Max Horz	Vert(+/-)	Seismic_Max Horz	Vert(+/-)
2	4	4	-4.42	5.17	-1.68	1.97
2	4	5	4.42	5.17	1.68	1.97
4	1	1	-4.42	5.17	-1.68	1.97
4	1	2	4.42	5.17	1.68	1.97

EAVE DEFLECTION:

Wall Id	Wall Height	--Deflection-- Wind	Seismic	-Span/Deflect- Wind	Seismic
2	25.0	0.18	0.10	1662	3060
4	25.0	0.18	0.10	1662	3060

Surf Id	Brace Locate	Purl Id	Bay Id	Purlin Part	Load Id	----Axial(k)--- Calc	Limit	UC	--Moment(f-k)-- Calc	Limit	UC	Axl+Mom Loc	UC	Max KL/R
2	18.0	4	1	08Z075	1	1.62	15.49	0.10	1.4	6.65	0.21	MidS	0.29	75
					2	-0.31	35.67	0.01	1.4	6.65	0.21	MidS	0.20	75
					3	1.22	15.49	0.08	-1.1	5.96	0.18	MidS	0.24	75
					4	-0.23	35.67	0.01	-1.1	5.96	0.18	MidS	0.18	75
					5	1.22	15.49	0.08	-0.6	5.96	0.10	MidS	0.17	75
					6	-0.23	35.67	0.01	-0.6	5.96	0.10	MidS	0.10	75
					7	1.62	15.49	0.10	1.5	6.65	0.23	MidS	0.31	75
					8	-0.31	35.67	0.01	1.5	6.65	0.23	MidS	0.22	75
					9	0.20	15.49	0.01	-0.3	5.96	0.05	MidS	0.06	75
					10	-0.20	35.67	0.01	-0.3	5.96	0.05	MidS	0.05	75
					11	0.15	15.49	0.01	-2.4	5.96	0.40	MidS	0.35	75
					12	-0.15	35.67	0.00	-2.4	5.96	0.40	MidS	0.40	75
					13	0.15	15.49	0.01	-1.9	5.96	0.32	MidS	0.29	75
					14	-0.15	35.67	0.00	-1.9	5.96	0.32	MidS	0.32	75
					15	0.20	15.49	0.01	-0.1	5.96	0.03	MidS	0.04	75

					16	-0.20	35.67	0.01	-0.1	5.96	0.03	MidS	0.02	75
2	18.0	4	2	08Z060	1	1.62	10.94	0.15	-1.0	5.12	0.21	RLap	0.34	80
					2	1.62	10.94	0.15	-1.0	5.12	0.21	RLap	0.34	80
					3	1.22	10.94	0.11	0.8	5.12	0.16	RLap	0.26	80
					4	1.22	10.94	0.11	0.8	5.12	0.16	RLap	0.26	80
					5	1.22	10.94	0.11	0.4	5.12	0.09	RLap	0.19	80
					6	1.22	10.94	0.11	0.4	5.12	0.09	RLap	0.19	80
					7	1.62	10.94	0.15	-1.1	5.12	0.23	RLap	0.36	80
					8	1.62	10.94	0.15	-1.1	5.12	0.23	RLap	0.36	80
					9	0.53	10.94	0.05	0.2	5.12	0.05	RLap	0.09	80
					10	-0.53	28.52	0.02	0.2	5.12	0.05	RLap	0.03	80
					11	0.39	10.94	0.04	1.8	5.12	0.36	RLap	0.35	80
					12	-0.39	28.52	0.01	1.8	5.12	0.36	RLap	0.35	80
					13	0.39	10.94	0.04	1.4	5.12	0.29	RLap	0.29	80
					14	-0.39	28.52	0.01	1.4	5.12	0.29	RLap	0.27	80
					15	0.53	10.94	0.05	0.1	5.12	0.03	RLap	0.07	80
					16	-0.53	28.52	0.02	0.1	5.12	0.03	RLap	0.01	80
2	18.0	4	3	08Z060	1	-0.31	28.52	0.01	-1.0	5.12	0.21	LLap	0.20	80
					2	1.62	10.94	0.15	-1.0	5.12	0.21	LLap	0.34	80
					3	-0.23	28.52	0.01	0.8	5.12	0.16	LLap	0.16	80
					4	1.22	10.94	0.11	0.8	5.12	0.16	LLap	0.26	80
					5	-0.23	28.52	0.01	0.4	5.12	0.09	LLap	0.08	80
					6	1.22	10.94	0.11	0.4	5.12	0.09	LLap	0.19	80
					7	-0.31	28.52	0.01	-1.1	5.12	0.23	LLap	0.22	80
					8	1.62	10.94	0.15	-1.1	5.12	0.23	LLap	0.36	80
					9	0.36	10.94	0.03	0.2	5.12	0.05	LLap	0.07	80
					10	-0.36	28.52	0.01	0.2	5.12	0.05	LLap	0.04	80
					11	0.27	10.94	0.02	1.8	5.12	0.36	LLap	0.33	80
					12	-0.27	28.52	0.01	1.8	5.12	0.36	LLap	0.35	80
					13	0.27	10.94	0.02	1.4	5.12	0.29	LLap	0.27	80
					14	-0.27	28.52	0.01	1.4	5.12	0.29	LLap	0.28	80
					15	0.36	10.94	0.03	0.1	5.12	0.03	LLap	0.06	80
					16	-0.36	28.52	0.01	0.1	5.12	0.03	LLap	0.01	80
2	18.0	4	4	08Z075	1	-0.31	35.67	0.01	1.4	6.65	0.21	MidS	0.20	75
					2	1.62	15.49	0.10	1.4	6.65	0.21	MidS	0.29	75
					3	-0.23	35.67	0.01	-1.1	5.96	0.18	MidS	0.18	75
					4	1.22	15.49	0.08	-1.1	5.96	0.18	MidS	0.24	75
					5	-0.23	35.67	0.01	-0.6	5.96	0.10	MidS	0.10	75
					6	1.22	15.49	0.08	-0.6	5.96	0.10	MidS	0.17	75
					7	-0.31	35.67	0.01	1.5	6.65	0.23	MidS	0.22	75
					8	1.62	15.49	0.10	1.5	6.65	0.23	MidS	0.31	75
					9	0.20	15.49	0.01	-0.3	5.96	0.05	MidS	0.06	75
					10	-0.20	35.67	0.01	-0.3	5.96	0.05	MidS	0.05	75
					11	0.15	15.49	0.01	-2.4	5.96	0.40	MidS	0.35	75
					12	-0.15	35.67	0.00	-2.4	5.96	0.40	MidS	0.40	75
					13	0.15	15.49	0.01	-1.9	5.96	0.32	MidS	0.29	75
					14	-0.15	35.67	0.00	-1.9	5.96	0.32	MidS	0.32	75
					15	0.20	15.49	0.01	-0.1	5.96	0.03	MidS	0.04	75
					16	-0.20	35.67	0.01	-0.1	5.96	0.03	MidS	0.02	75

Surf Id	Brace Locate	Purl Id	Bay Id	Purlin Part	Load Id	----Axial(k)--- Calc	Limit	UC	--Moment(f-k)-- Calc	Limit	UC	Axl+Mom Loc	UC	Max KL/R
3	18.0	1	1	08Z075	1	1.62	15.49	0.10	1.4	6.65	0.21	MidS	0.29	75
					2	-0.31	35.67	0.01	1.4	6.65	0.21	MidS	0.20	75
					3	1.22	15.49	0.08	-1.1	5.96	0.18	MidS	0.24	75
					4	-0.23	35.67	0.01	-1.1	5.96	0.18	MidS	0.18	75
					5	1.22	15.49	0.08	-0.6	5.96	0.10	MidS	0.17	75
					6	-0.23	35.67	0.01	-0.6	5.96	0.10	MidS	0.10	75
					7	1.62	15.49	0.10	1.5	6.65	0.23	MidS	0.31	75
					8	-0.31	35.67	0.01	1.5	6.65	0.23	MidS	0.22	75
					9	0.20	15.49	0.01	-0.3	5.96	0.05	MidS	0.06	75
					10	-0.20	35.67	0.01	-0.3	5.96	0.05	MidS	0.05	75
					11	0.15	15.49	0.01	-2.4	5.96	0.40	MidS	0.35	75
					12	-0.15	35.67	0.00	-2.4	5.96	0.40	MidS	0.40	75
					13	0.15	15.49	0.01	-1.9	5.96	0.32	MidS	0.29	75
					14	-0.15	35.67	0.00	-1.9	5.96	0.32	MidS	0.32	75
					15	0.20	15.49	0.01	-0.1	5.96	0.03	MidS	0.04	75

				16	-0.20	35.67	0.01	-0.1	5.96	0.03	MidS	0.02	75
3	18.0	1	2 08Z060	1	1.62	10.94	0.15	-1.0	5.12	0.21	RLap	0.34	80
				2	1.62	10.94	0.15	-1.0	5.12	0.21	RLap	0.34	80
				3	1.22	10.94	0.11	0.8	5.12	0.16	RLap	0.26	80
				4	1.22	10.94	0.11	0.8	5.12	0.16	RLap	0.26	80
				5	1.22	10.94	0.11	0.4	5.12	0.09	RLap	0.19	80
				6	1.22	10.94	0.11	0.4	5.12	0.09	RLap	0.19	80
				7	1.62	10.94	0.15	-1.1	5.12	0.23	RLap	0.36	80
				8	1.62	10.94	0.15	-1.1	5.12	0.23	RLap	0.36	80
				9	0.53	10.94	0.05	0.2	5.12	0.05	RLap	0.09	80
				10	-0.53	28.52	0.02	0.2	5.12	0.05	RLap	0.03	80
				11	0.39	10.94	0.04	1.8	5.12	0.36	RLap	0.35	80
				12	-0.39	28.52	0.01	1.8	5.12	0.36	RLap	0.35	80
				13	0.39	10.94	0.04	1.4	5.12	0.29	RLap	0.29	80
				14	-0.39	28.52	0.01	1.4	5.12	0.29	RLap	0.27	80
				15	0.53	10.94	0.05	0.1	5.12	0.03	RLap	0.07	80
				16	-0.53	28.52	0.02	0.1	5.12	0.03	RLap	0.01	80
3	18.0	1	3 08Z060	1	-0.31	28.52	0.01	-1.0	5.12	0.21	LLap	0.20	80
				2	1.62	10.94	0.15	-1.0	5.12	0.21	LLap	0.34	80
				3	-0.23	28.52	0.01	0.8	5.12	0.16	LLap	0.16	80
				4	1.22	10.94	0.11	0.8	5.12	0.16	LLap	0.26	80
				5	-0.23	28.52	0.01	0.4	5.12	0.09	LLap	0.08	80
				6	1.22	10.94	0.11	0.4	5.12	0.09	LLap	0.19	80
				7	-0.31	28.52	0.01	-1.1	5.12	0.23	LLap	0.22	80
				8	1.62	10.94	0.15	-1.1	5.12	0.23	LLap	0.36	80
				9	0.36	10.94	0.03	0.2	5.12	0.05	LLap	0.07	80
				10	-0.36	28.52	0.01	0.2	5.12	0.05	LLap	0.04	80
				11	0.27	10.94	0.02	1.8	5.12	0.36	LLap	0.33	80
				12	-0.27	28.52	0.01	1.8	5.12	0.36	LLap	0.35	80
				13	0.27	10.94	0.02	1.4	5.12	0.29	LLap	0.27	80
				14	-0.27	28.52	0.01	1.4	5.12	0.29	LLap	0.28	80
				15	0.36	10.94	0.03	0.1	5.12	0.03	LLap	0.06	80
				16	-0.36	28.52	0.01	0.1	5.12	0.03	LLap	0.01	80
3	18.0	1	4 08Z075	1	-0.31	35.67	0.01	1.4	6.65	0.21	MidS	0.20	75
				2	1.62	15.49	0.10	1.4	6.65	0.21	MidS	0.29	75
				3	-0.23	35.67	0.01	-1.1	5.96	0.18	MidS	0.18	75
				4	1.22	15.49	0.08	-1.1	5.96	0.18	MidS	0.24	75
				5	-0.23	35.67	0.01	-0.6	5.96	0.10	MidS	0.10	75
				6	1.22	15.49	0.08	-0.6	5.96	0.10	MidS	0.17	75
				7	-0.31	35.67	0.01	1.5	6.65	0.23	MidS	0.22	75
				8	1.62	15.49	0.10	1.5	6.65	0.23	MidS	0.31	75
				9	0.20	15.49	0.01	-0.3	5.96	0.05	MidS	0.06	75
				10	-0.20	35.67	0.01	-0.3	5.96	0.05	MidS	0.05	75
				11	0.15	15.49	0.01	-2.4	5.96	0.40	MidS	0.35	75
				12	-0.15	35.67	0.00	-2.4	5.96	0.40	MidS	0.40	75
				13	0.15	15.49	0.01	-1.9	5.96	0.32	MidS	0.29	75
				14	-0.15	35.67	0.00	-1.9	5.96	0.32	MidS	0.32	75
				15	0.20	15.49	0.01	-0.1	5.96	0.03	MidS	0.04	75
				16	-0.20	35.67	0.01	-0.1	5.96	0.03	MidS	0.02	75

S12S0554A Eave Strut, Longitudinal Load(Wall= 2) 9/12/12 3:58pm

Wall Id	Bay Id	Eave Part	Bay Width	Axial_Calc Wind	Axial_Calc Seis	Axial Limit	Axial Ratio	Max KL/r
2	1	08E3060	21.00	1.92	0.25	10.76	0.18	0
2	2	08E3060	21.00	3.85	1.20	10.76	0.36	0
2	3	08E3060	21.00	3.85	1.43	10.76	0.36	0
2	4	08E3060	21.00	3.85	1.66	10.76	0.36	0

S12S0554A Eave Strut, Longitudinal Load(Wall= 4) 9/12/12 3:58pm

Wall	Bay	Eave	Bay	Axial_Calc	Axial	Axial	Max

Id	Id	Part	Width	Wind	Seis	Limit	Ratio	KL/r
4	4	08E3060	21.00	1.92	0.25	10.76	0.18	0
4	3	08E3060	21.00	3.85	1.20	10.76	0.36	0
4	2	08E3060	21.00	3.85	1.43	10.76	0.36	0
4	1	08E3060	21.00	3.85	1.66	10.76	0.36	0

S12S0554A Strut Bolts 9/12/12 3:58pm

RAFTER CONNECTION:

Location	Purlin	Eave Strut
RF	Welded Clip	Direct Bolt

EAVE STRUTS:

Wall Id	Frm_Line Id	Type	Bolt_Selected No.	Type	Dia	Wshr	Bolt_Capacity Calc	Shear	Bear	Ratio
2	1	RF	2	A325	0.500	1	1.92	8.84	5.04	0.38
2	2	RF	2	A325	0.500	1	3.85	8.84	5.04	0.76
2	3	RF	2	A325	0.500	1	3.85	8.84	5.04	0.76
2	4	RF	2	A325	0.500	1	3.85	8.84	5.04	0.76
2	5	RF	2	A325	0.500	1	3.85	8.84	5.04	0.76
4	1	RF	2	A325	0.500	1	1.92	8.84	5.04	0.38
4	2	RF	2	A325	0.500	1	3.85	8.84	5.04	0.76
4	3	RF	2	A325	0.500	1	3.85	8.84	5.04	0.76
4	4	RF	2	A325	0.500	1	3.85	8.84	5.04	0.76
4	5	RF	2	A325	0.500	1	3.85	8.84	5.04	0.76

PURLINS:

Surf Id	Frm_Line Id	Type	Brace Loc	Bolt_Selected No.	Type	Dia	Wshr	Bolt_Capacity Shear Calc	Shear Limit	Bearing Calc	Bearing Limit	Ratio
2	1	RF	18.00	4	A307	0.500	0	1.62	8.84	1.62	12.59	0.18
2	2	RF	18.00	4	A307	0.500	0	1.93	8.84	1.62	20.15	0.22
2	3	RF	18.00	4	A307	0.500	0	1.93	8.84	1.62	20.15	0.22
2	4	RF	18.00	4	A307	0.500	0	1.62	8.84	1.62	20.15	0.18
2	5	RF	18.00	4	A307	0.500	0	1.62	8.84	1.62	12.59	0.18
3	1	RF	18.00	4	A307	0.500	0	1.62	8.84	1.62	12.59	0.18
3	2	RF	18.00	4	A307	0.500	0	1.93	8.84	1.62	20.15	0.22
3	3	RF	18.00	4	A307	0.500	0	1.93	8.84	1.62	20.15	0.22
3	4	RF	18.00	4	A307	0.500	0	1.62	8.84	1.62	20.15	0.18
3	5	RF	18.00	4	A307	0.500	0	1.62	8.84	1.62	12.59	0.18

S12S0554A Weight Summary 9/12/12 3:58pm

Roof Purlins	=	2538.62
Eave Struts	=	493.92
Roof Bracing	=	94.38
Wall Bracing	=	101.92
Total	=	3228.84

S12S0554A Warning Summary 9/12/12 3:58pm

.. No Warnings

STRUCTURAL CODE:
Design Basis : WS - Working Stress
Hot Rolled Steel : AISC05
Cold Formed Steel : NAUS01

BUILDING CODE:
Wind Code : NYBC 10 (IBC 06)
Seismic Zone : B

MODULUS OF ELASTICITY
Hot Rolled Steel : 29000 (ksi)
Cold Formed Steel : 29500 (ksi)

Base Plate Yield = 55.00 (ksi)
Concrete Bearing = 3.00 (ksi)
Bolt Shear Stress= 11.60 (ksi)

BASE PLATE & BOLT SIZE:

--Column_Base--			--Plate_Size(in)--			--Bolts(GR36)-			-Shear(k)-	
Loc.	Typ	Depth	Width	Length	Thick	Row	Dia	Gage	Limit	UC
Left	P	16.5	8.0	16.50	0.375	2	0.750	4.00	15.5	0.41
Right	P	16.5	8.0	16.50	0.375	2	0.750	4.00	15.5	0.41

BASE REACTIONS:

Column	-Max_Comp-		Max_Tension+Shear			-Max_Shear		Max_Shear+Tension		
				Tens	Shear				Shear	Tens
Loc.	Ld	Fy(k)	Ld	Fy(k)	Fx(k)	Ld	Fx(k)	Ld	Fx(k)	Fy(k)
Left	1	15.8	49	-11.9	5.1	46	6.4	46	6.4	-5.5
Right	2	15.8	50	-11.9	5.1	48	6.4	48	6.4	-5.5

WELDS:

Base	Outside_Flange_To_Base				Inside_Flange_To_Base				-----Web_To_Base-----			
			Shear(k/in)				Shear(k/in)				Shear(k/in)	
Id	Size	Typ	Calc	Rn/sf	Size	Typ	Calc	Rn/sf	Size	Typ	Calc	Rn/sf
Left	0.188	F1	0.74	4.33	0.188	F1	0.74	4.33	0.188	F2	0.20	2.78
Right	0.188	F1	0.74	4.33	0.188	F1	0.74	4.33	0.188	F2	0.20	2.78

LOAD COMBINATIONS:

1 - DL+CL+LL
2 - DL+CL+LL
46 - 0.60DL+WL2
48 - 0.60DL+WR2
49 - 0.60DL+LW1+LWIND1_L2E
50 - 0.60DL+LW1+LWIND1_R2E

Splice Yield = 55.00 (ksi)

PLATE SIZE:

Splice Id	Typ	Member Locate	Web Depth	Splice(in) Width	Thick	Bolts(A325) Dia	Gage	Gage2	RowT	SpaceT	RowB	SpaceB	RowI
1	VEE	1- 2	24.00	8.0	0.500	0.625	3.50	3.50	2	4.00	2	4.00	0
2	-EE	2- 3	16.49	6.0	0.375	0.625	3.50	3.50	2	4.00	2	4.00	0
3	VEE	3- 4	24.00	8.0	0.500	0.625	3.50	3.50	2	4.00	2	4.00	0

PLATE DESIGN:

Splice Id	Typ	Ten Loc	Max_Moment Load Id	Axial (k)	Shear (k)	Moment (f-k)	Max_Shear Load Id	Axial (k)	Shear (k)	Moment (f-k)	Req Thick	Req Dia	Bolt UC
1	VEE	Top	24	2.8	11.6	76.3	1	3.1	13.3	56.9	0.373	0.617	0.97
		Bot	45	-1.7	-7.9	-64.5	45	-1.7	-7.9	-64.5	0.379	0.524	0.70
2	-EE	Top	46	0.2	-2.7	7.5	12	0.3	2.8	5.8	0.157	0.217	0.12
		Bot	1	3.1	-0.2	-34.6	73	2.3	-2.6	-26.5	0.339	0.468	0.56
3	VEE	Top	22	2.8	-11.6	76.3	2	3.1	-13.3	56.9	0.373	0.617	0.97
		Bot	47	-1.7	7.9	-64.5	47	-1.7	7.9	-64.5	0.379	0.524	0.70

Splice Id	Typ	Thick Req	Dia_Required Top	Bot	Unity_Check EP Bend	Bolt Top	Bolt Bot
1	VEE	0.38	0.617	0.524	0.57	0.97	0.70
2	-EE	0.34	0.217	0.468	0.82	0.12	0.56
3	VEE	0.38	0.617	0.524	0.57	0.97	0.70

WELDS:

Splice Id	Side	Outside_Flange_To_Bep Size	Typ	Shear(k/in) Calc	Rn/sf	Inside_Flange_To_Bep Size	Typ	Shear(k/in) Calc	Rn/sf	Web_To_Bep Size	Typ	Shear(k/in) Calc	Rn/sf
1	L	0.188	F2	1.92	4.18	0.188	F2	1.83	4.18	0.188	F2	0.28	2.78
1	R	0.188	F2	2.26	4.18	0.188	F2	1.91	4.18	0.188	F2	0.28	2.78
2	L	0.188	F2	0.37	4.18	0.188	F2	1.71	4.18	0.188	F2	0.08	2.78
2	R	0.188	F2	0.37	4.18	0.188	F2	1.71	4.18	0.188	F2	0.08	2.78
3	L	0.188	F2	2.26	4.18	0.188	F2	1.91	4.18	0.188	F2	0.28	2.78
3	R	0.188	F2	1.92	4.18	0.188	F2	1.83	4.18	0.188	F2	0.28	2.78

LOAD COMBINATIONS:

1 - DL+CL+LL
2 - DL+CL+LL
12 - DL+WR2
22 - DL+CL+0.75LL+0.75WL2
24 - DL+CL+0.75LL+0.75WR2
45 - 0.60DL+WL1
46 - 0.60DL+WL2
47 - 0.60DL+WR1
73 - DL+CL+F1UNB_SL_L

S12S0554A Bearing Stiffeners 9/12/12 4:00pm

Stiffener Yield = 36.0 (ksi)

STIFFENER SIZE:

Stiffener Location	No.	Web(in) Depth	Web(in) Thick	Stiffener_Size(in) Width	Stiffener_Size(in) Thick	Stiffener_Size(in) Length
Left Col	1	27.00	0.125	4.00	0.375	26.80
Right Col	1	27.00	0.125	4.00	0.375	26.80

STIFFENER DESIGN:

Stiffener Location	Tension(k) Load	Tension(k) Calc	Tension(k) Pn/sf	Compression(k) Load	Compression(k) Calc	Compression(k) Pn/sf	Max UC
Left Col	45	19.7	64.7	24	23.5	73.1	0.32
Right Col	47	19.7	64.7	22	23.5	73.1	0.32

WELDS:

Stiffener Location	Stiff_To_Flg/EP Size	Stiff_To_Flg/EP Typ	Stiff_To_Flg/EP Shear(k/in) Calc	Stiff_To_Flg/EP Shear(k/in) Rn/sf	Stiff_To_Web Size	Stiff_To_Web Typ	Stiff_To_Web Shear(k/in) Calc	Stiff_To_Web Shear(k/in) Rn/sf
Left Col	0.188	F1	2.46	4.18	0.188	F1	0.44	2.78
Right Col	0.188	F1	2.46	4.18	0.188	F1	0.44	2.78

LOAD COMBINATIONS:

22 - DL+CL+0.75LL+0.75WL2
24 - DL+CL+0.75LL+0.75WR2
45 - 0.60DL+WL1
47 - 0.60DL+WR1

S12S0554A Flange Braces 9/12/12 4:00pm

PROPERTIES:

Flange Brace Yield= 55.0 ksi
Girt/Purlin Yield= 55.0 ksi
Flange Brace Bolt = 0.500 (A325) (2 Washers)

FLANGE BRACE DESIGN:

Surf Id	No. Brace	Loc	Side	Part	Web Depth	Brace Dist	Load Id	Calc Force	Brace_UC Comp	Brace_UC Tens	Conn UC
1	1	5	1	L2525105	26.10	28.50	24	0.16	0.04	0.04	0.07
2	2	1	1	L2525105	22.66	28.50	24	0.09	0.02	0.02	0.02
		4	1	L2525105	16.42	28.50	2	0.08	0.02	0.02	0.02
3	2	1	1	L2525105	16.42	28.50	1	0.08	0.02	0.02	0.02
		4	1	L2525105	22.66	28.50	22	0.09	0.02	0.02	0.02
4	1	5	1	L2525105	26.10	28.50	22	0.16	0.04	0.04	0.07

LOAD COMBINATIONS:

1 - DL+CL+LL
2 - DL+CL+LL
22 - DL+CL+0.75LL+0.75WL2
24 - DL+CL+0.75LL+0.75WR2

S12S0554A Web To Flange Weld 9/12/12 4:00pm

Surf Id	Mem Id	Seg Id	Sec Id	Load Id	Shear (k)	Q (in3)	Ixx (in4)	---Web_Flange_Weld--- Size	Typ	Shear(k/in) Calc	Limit
1	1	1	1	46	6.2	16.3	307	0.188	F1	0.33	2.78
2	2	2	29	1	12.0	11.3	464	0.188	F1	0.29	2.78
3	3	3	66	2	12.0	11.3	464	0.188	F1	0.29	2.78
4	4	4	94	48	6.2	16.3	307	0.188	F1	0.33	2.78

LOAD COMBINATIONS:

1 - DL+CL+LL
2 - DL+CL+LL
46 - 0.60DL+WL2
48 - 0.60DL+WR2

S12S0554A Special Segments 9/12/12 4:00pm

FLANGE PLATE:(a)

Locate	--Initial-- Width (in)	Thick (in)	-Required-- Width (in)	Thick (in)
Lt Col	8.0	0.250	8.0	0.250
Rt Col	8.0	0.250	8.0	0.250

WEB PLATE:(b)

Locate	------Load------ Id	Axial (k)	Moment (f-k)	Shear Force (k)	---Initial-- Web Thick (in)	Shear Limit (k)	--Required-- Web Thick (in)	Shear Limit (k)
Lt Col	24	5.7	76.3	35.3	0.125	14.78	0.188	49.88
Rt Col	22	5.7	76.3	35.3	0.125	14.78	0.188	49.88

REQUIRED WEB DESIGN:

Locate	H	Av	Kv	Cv
Lt Col	27.00	21.36	12.99	0.50
Rt Col	27.00	21.36	12.99	0.50

(a)DS_BUILD(frame37)=1 .. see help.
(b)DS_BUILD(frame36)=2 .. see help.

LOAD COMBINATIONS:

22 - DL+CL+0.75LL+0.75WL2
24 - DL+CL+0.75LL+0.75WR2

S12S0554A Design Summary 9/12/12 4:00pm

FRAME:

Id = 1
Type = RF
Line Id = 2 3 4
Load Width= 21.00
UC Limit= 1.03
KL/R Limit= 200.00

MEMBERS:

Mem Id	Seg Id	Flange Len	Flange Wid	Web_Depth Strt	Web_Depth End	Plate_Thickness Web	Plate_Thickness O-flg	Plate_Thickness I-flg	Max_UCV Id	Max_UCV Ld	Max_UCV Ucv	Max_UCO Id	Max_UCO Ld	Max_UCO Uco	Max_UCI Id	Max_UCI Ld	Max_UCI Uci	Max KL/R
1	1	24.5	8.0	16.0	27.0	0.125	0.250	0.250	28	52	0.74	21	46	0.57	26	23	1.01	147
2	2	16.0	5.0	24.0	16.0	0.164	0.188	0.188	29	1	0.81	29	45	0.77	29	24	0.98	175
3	3	16.0	5.0	16.0	24.0	0.164	0.188	0.188	66	2	0.81	66	47	0.77	66	22	0.98	175
4	4	24.5	8.0	27.0	16.0	0.125	0.250	0.250	67	51	0.74	74	48	0.57	69	21	1.01	147

No. Cycles For Plate Optimization= 5

LOAD COMBINATIONS:

1#- DL+CL+LL
2#- DL+CL+LL
3 - DL+CL+SL
4 - DL+CL+SL
5 - DL+CL+0.75LL
6 - DL+CL+0.75LL
7 - DL+CL+0.75SL
8 - DL+CL+0.75SL
9 - DL+WL1
10 - DL+WL2
11 - DL+WR1
12 - DL+WR2
13 - DL+LW1+LWIND1_L2E
14 - DL+LW1+LWIND1_R2E
15 - DL-LW1+LWIND1_L2E
16 - DL-LW1+LWIND1_R2E
17 - DL+LW2+LWIND2_L2E
18 - DL+LW2+LWIND2_R2E
19 - DL-LW2+LWIND2_L2E
20 - DL-LW2+LWIND2_R2E
21#- DL+CL+0.75LL+0.75WL1
22#- DL+CL+0.75LL+0.75WL2
23#- DL+CL+0.75LL+0.75WR1
24#- DL+CL+0.75LL+0.75WR2
25 - DL+CL+0.75LL+0.75LW1+0.75LWIND1_L2E
26 - DL+CL+0.75LL+0.75LW1+0.75LWIND1_R2E
27 - DL+CL+0.75LL-0.75LW1+0.75LWIND1_L2E
28 - DL+CL+0.75LL-0.75LW1+0.75LWIND1_R2E
29 - DL+CL+0.75LL+0.75LW2+0.75LWIND2_L2E
30 - DL+CL+0.75LL+0.75LW2+0.75LWIND2_R2E
31 - DL+CL+0.75LL-0.75LW2+0.75LWIND2_L2E
32 - DL+CL+0.75LL-0.75LW2+0.75LWIND2_R2E
33 - DL+CL+0.75SL+0.75WL1
34 - DL+CL+0.75SL+0.75WL2
35 - DL+CL+0.75SL+0.75WR1
36 - DL+CL+0.75SL+0.75WR2
37 - DL+CL+0.75SL+0.75LW1+0.75LWIND1_L2E
38 - DL+CL+0.75SL+0.75LW1+0.75LWIND1_R2E
39 - DL+CL+0.75SL-0.75LW1+0.75LWIND1_L2E
40 - DL+CL+0.75SL-0.75LW1+0.75LWIND1_R2E
41 - DL+CL+0.75SL+0.75LW2+0.75LWIND2_L2E
42 - DL+CL+0.75SL+0.75LW2+0.75LWIND2_R2E
43 - DL+CL+0.75SL-0.75LW2+0.75LWIND2_L2E
44 - DL+CL+0.75SL-0.75LW2+0.75LWIND2_R2E
45#- 0.60DL+WL1
46#- 0.60DL+WL2
47#- 0.60DL+WR1
48#- 0.60DL+WR2
49 - 0.60DL+LW1+LWIND1_L2E
50 - 0.60DL+LW1+LWIND1_R2E
51#- 0.60DL-LW1+LWIND1_L2E

52#- 0.60DL-LW1+LWIND1_R2E
53 - 0.60DL+LW2+LWIND2_L2E
54 - 0.60DL+LW2+LWIND2_R2E
55 - 0.60DL-LW2+LWIND2_L2E
56 - 0.60DL-LW2+LWIND2_R2E
57 - 1.04DL+1.04CL+0.70SEIS
58 - 1.04DL+1.04CL-0.70SEIS
59 - 1.03DL+1.03CL+0.75LL+0.52SEIS
60 - 1.03DL+1.03CL+0.75LL-0.52SEIS
61 - 1.03DL+1.03CL+0.52SEIS
62 - 1.03DL+1.03CL-0.52SEIS
63 - 0.56DL+0.70SEIS
64 - 0.56DL-0.70SEIS
65 - 1.04DL+1.04CL+0.70LSEIS
66 - 1.04DL+1.04CL-0.70LSEIS
67 - 1.03DL+1.03CL+0.75LL+0.52LSEIS
68 - 1.03DL+1.03CL+0.75LL-0.52LSEIS
69 - 1.03DL+1.03CL+0.52LSEIS
70 - 1.03DL+1.03CL-0.52LSEIS
71 - 0.56DL+1.75LSEIS
72 - 0.56DL-1.75LSEIS
73 - DL+CL+F1UNB_SL_L
74 - DL+CL+F1UNB_SL_L
75 - DL+CL+F1UNB_SL_R
76 - DL+CL+F1UNB_SL_R
77 - DL+CL+LL
78 - DL+CL+LL
79 - DL+CL+SL
80 - DL+CL+SL
81 - LL
82 - LL
83 - SL
84 - SL
85 - DL+0.75WL1
86 - DL+0.75WL2
87 - DL+0.75WR1
88 - DL+0.75WR2
89 - DL+0.75LW1+LWIND1_L2E
90 - DL+0.75LW1+LWIND1_R2E
91 - DL-0.75LW1+LWIND1_L2E
92 - DL-0.75LW1+LWIND1_R2E
93 - DL+0.75LW2+LWIND2_L2E
94 - DL+0.75LW2+LWIND2_R2E
95 - DL-0.75LW2+LWIND2_L2E
96 - DL-0.75LW2+LWIND2_R2E
97 - 1.04DL+1.04CL+0.70SEIS
98 - 1.04DL+1.04CL-0.70SEIS
99 - 1.03DL+1.03CL+0.75LL+0.52SEIS
100 - 1.03DL+1.03CL+0.75LL-0.52SEIS
101 - 1.03DL+1.03CL+0.52SEIS
102 - 1.03DL+1.03CL-0.52SEIS
103 - 0.56DL+0.70SEIS
104 - 0.56DL-0.70SEIS
105 - 1.04DL+1.04CL+0.70SEIS
106 - 1.04DL+1.04CL-0.70SEIS
107 - 1.03DL+1.03CL+0.75LL+0.52SEIS
108 - 1.03DL+1.03CL+0.75LL-0.52SEIS
109 - 1.03DL+1.03CL+0.52SEIS
110 - 1.03DL+1.03CL-0.52SEIS
111 - 0.56DL+0.70SEIS
112 - 0.56DL-0.70SEIS
113 - 1.04DL+1.04CL+0.70LSEIS
114 - 1.04DL+1.04CL-0.70LSEIS
115 - 1.03DL+1.03CL+0.75LL+0.52LSEIS
116 - 1.03DL+1.03CL+0.75LL-0.52LSEIS
117 - 1.03DL+1.03CL+0.52LSEIS
118 - 1.03DL+1.03CL-0.52LSEIS
119 - 0.56DL+0.70LSEIS

120 - 0.56DL-0.70LSEIS

PLATE LIMITS:

Seg Id	Web Depth/Thick Calc	Web Depth/Thick Limit	Flange Width/(2xThick) Calc	Flange Width/(2xThick) Limit	Flange Thick	Flange Min	Web_Area/Flange_Area Calc	Web_Area/Flange_Area Limit
1	216.0	221.5	16.0		0.250	0.125	1.7	10.0
2	146.0	221.5	13.3		0.188	0.164	4.2	10.0
3	146.0	221.5	13.3		0.188	0.164	4.2	10.0
4	216.0	221.5	16.0		0.250	0.125	1.7	10.0

FRAME AREA:

Frame Area= 145.23
Building Area= 981.00
Ratio= 0.15

WEIGHTS:

Member	1	2	3	4
Weight (lb)	568	278	278	568

Total Weight (lb)

Frame	=	1692
Interior Col	=	0
Conn Plates	=	167
Base Plates	=	28
Trans Stiff	=	0
		1888

REACTIONS: (Sidewall Columns)

Load Id	Left_Column Fx(k)	Left_Column Fy(k)	Left_Column Fz(k)	Left_Column M(f-k)	Right_Column Fx(k)	Right_Column Fy(k)	Right_Column Fz(k)	Right_Column M(f-k)
1	3.07	15.76	0.00	0.00	-3.07	15.62	0.00	0.00
2	3.07	15.62	0.00	0.00	-3.07	15.76	0.00	0.00
3	2.42	12.56	0.00	0.00	-2.42	12.44	0.00	0.00
4	2.42	12.44	0.00	0.00	-2.42	12.56	0.00	0.00
5	2.50	12.92	0.00	0.00	-2.50	12.80	0.00	0.00
6	2.50	12.80	0.00	0.00	-2.50	12.92	0.00	0.00
7	2.01	10.51	0.00	0.00	-2.01	10.41	0.00	0.00
8	2.01	10.41	0.00	0.00	-2.01	10.51	0.00	0.00
9	-4.77	-7.44	0.00	0.00	-4.49	0.04	0.00	0.00
10	-6.26	-4.52	0.00	0.00	-3.00	3.09	0.00	0.00
11	4.49	0.04	0.00	0.00	4.77	-7.44	0.00	0.00
12	3.00	3.09	0.00	0.00	6.26	-4.52	0.00	0.00
13	2.72	-10.89	4.42	0.00	-2.41	-10.28	4.42	0.00
14	2.41	-10.28	4.42	0.00	-2.72	-10.89	4.42	0.00
15	2.81	-0.54	0.00	0.00	-2.50	0.05	0.00	0.00
16	2.50	0.05	0.00	0.00	-2.81	-0.54	0.00	0.00
17	1.23	-7.90	4.42	0.00	-0.92	-7.30	4.42	0.00
18	0.92	-7.30	4.42	0.00	-1.23	-7.90	4.42	0.00
19	1.32	2.44	0.00	0.00	-1.01	3.03	0.00	0.00
20	1.01	3.03	0.00	0.00	-1.32	2.44	0.00	0.00
21	-1.35	5.28	0.00	0.00	-5.60	11.28	0.00	0.00
22	-2.47	7.48	0.00	0.00	-4.47	13.56	0.00	0.00
23	5.60	11.28	0.00	0.00	1.35	5.28	0.00	0.00
24	4.47	13.56	0.00	0.00	2.47	7.48	0.00	0.00

25	4.26	2.90	3.32	0.00	-4.03	3.33	3.32	0.00
26	4.03	3.33	3.32	0.00	-4.26	2.90	3.32	0.00
27	4.32	10.66	0.00	0.00	-4.09	11.08	0.00	0.00
28	4.09	11.08	0.00	0.00	-4.32	10.66	0.00	0.00
29	3.13	5.14	3.32	0.00	-2.91	5.56	3.32	0.00
30	2.91	5.56	3.32	0.00	-3.13	5.14	3.32	0.00
31	3.20	12.90	0.00	0.00	-2.97	13.31	0.00	0.00
32	2.97	13.31	0.00	0.00	-3.20	12.90	0.00	0.00
33	-1.83	2.93	0.00	0.00	-5.11	8.84	0.00	0.00
34	-2.95	5.13	0.00	0.00	-3.99	11.12	0.00	0.00
35	5.11	8.84	0.00	0.00	1.83	2.93	0.00	0.00
36	3.99	11.12	0.00	0.00	2.95	5.13	0.00	0.00
37	3.77	0.50	3.32	0.00	-3.54	0.93	3.32	0.00
38	3.54	0.93	3.32	0.00	-3.77	0.50	3.32	0.00
39	3.84	8.26	0.00	0.00	-3.61	8.68	0.00	0.00
40	3.61	8.68	0.00	0.00	-3.84	8.26	0.00	0.00
41	2.65	2.74	3.32	0.00	-2.42	3.17	3.32	0.00
42	2.42	3.17	3.32	0.00	-2.65	2.74	3.32	0.00
43	2.72	10.50	0.00	0.00	-2.49	10.92	0.00	0.00
44	2.49	10.92	0.00	0.00	-2.72	10.50	0.00	0.00
45	-4.92	-8.38	0.00	0.00	-4.34	-0.94	0.00	0.00
46	-6.41	-5.46	0.00	0.00	-2.85	2.11	0.00	0.00
47	4.34	-0.94	0.00	0.00	4.92	-8.38	0.00	0.00
48	2.85	2.11	0.00	0.00	6.41	-5.46	0.00	0.00
49	2.57	-11.86	4.42	0.00	-2.26	-11.24	4.42	0.00
50	2.26	-11.24	4.42	0.00	-2.57	-11.86	4.42	0.00
51	2.66	-1.51	0.00	0.00	-2.35	-0.91	0.00	0.00
52	2.35	-0.91	0.00	0.00	-2.66	-1.51	0.00	0.00
53	1.07	-8.87	4.42	0.00	-0.77	-8.27	4.42	0.00
54	0.77	-8.27	4.42	0.00	-1.07	-8.87	4.42	0.00
55	1.17	1.48	0.00	0.00	-0.86	2.07	0.00	0.00
56	0.86	2.07	0.00	0.00	-1.17	1.48	0.00	0.00
57	0.46	4.03	0.00	0.00	-1.15	5.03	0.00	0.00
58	1.15	5.03	0.00	0.00	-0.46	4.03	0.00	0.00
59	2.26	12.60	0.00	0.00	-2.77	13.38	0.00	0.00
60	2.77	13.38	0.00	0.00	-2.26	12.60	0.00	0.00
61	0.54	4.11	0.00	0.00	-1.05	4.85	0.00	0.00
62	1.05	4.85	0.00	0.00	-0.54	4.11	0.00	0.00
63	-0.13	0.85	0.00	0.00	-0.55	1.84	0.00	0.00
64	0.55	1.84	0.00	0.00	0.13	0.85	0.00	0.00
65	0.81	2.56	1.68	0.00	-0.81	2.56	1.68	0.00
66	0.84	6.49	0.00	0.00	-0.84	6.49	0.00	0.00
67	2.52	11.53	1.25	0.00	-2.52	11.53	1.25	0.00
68	2.54	14.45	0.00	0.00	-2.54	14.45	0.00	0.00
69	0.80	3.02	1.25	0.00	-0.80	3.02	1.25	0.00
70	0.82	5.94	0.00	0.00	-0.82	5.94	0.00	0.00
71	0.21	-3.57	4.20	0.00	-0.21	-3.57	4.20	0.00
72	0.30	6.26	0.00	0.00	-0.30	6.26	0.00	0.00
73	2.26	12.72	0.00	0.00	-2.26	9.26	0.00	0.00
74	2.25	12.82	0.00	0.00	-2.25	9.16	0.00	0.00
75	2.26	9.26	0.00	0.00	-2.26	12.72	0.00	0.00
76	2.25	9.16	0.00	0.00	-2.25	12.82	0.00	0.00

DEFLECTIONS :

Load Id	Lateral Defl @ Top Of Col Left	Right	Vert Defl @ Midspan
77	-0.24	0.16	-0.78
78	-0.16	0.24	-0.78
79	-0.19	0.12	-0.61
80	-0.12	0.19	-0.61
81	-0.18	0.12	-0.58
82	-0.12	0.18	-0.58
83	-0.13	0.09	-0.42

84	-0.09	0.13	-0.42
85	1.57	1.53	0.16
86	1.59	1.55	0.15
87	-1.53	-1.57	0.16
88	-1.55	-1.59	0.15
89	-0.12	-0.11	0.01
90	0.11	0.12	0.01
91	-0.12	-0.11	0.01
92	0.11	0.12	0.01
93	-0.12	-0.11	-0.02
94	0.11	0.12	-0.02
95	-0.12	-0.11	-0.02
96	0.11	0.12	-0.02
97	0.24	0.34	-0.21
98	-0.34	-0.24	-0.21
99	0.07	0.39	-0.64
100	-0.39	-0.07	-0.64
101	0.17	0.27	-0.20
102	-0.27	-0.17	-0.20
103	0.27	0.30	-0.06
104	-0.30	-0.27	-0.06

DEFLECTIONS RATIO:

Load Id	Lateral Defl @ Top Of Col Left	Right	Vert Defl @ Midspan
77	1221	1870	556
78	1870	1221	556
79	1546	2377	705
80	2377	1546	705
81	1639	2469	742
82	2469	1639	742
83	2283	3438	1034
84	3438	2283	1034
85	186	191	2740
86	184	189	2973
87	191	186	2740
88	189	184	2973
89	2455	2760	31226
90	2760	2455	31226
91	2415	2678	43233
92	2678	2415	43233
93	2435	2708	28639
94	2708	2435	28639
95	2396	2629	22473
96	2629	2396	22473
97	1225	856	2098
98	856	1225	2098
99	4502	751	678
100	751	4502	678
101	1778	1098	2142
102	1098	1778	2142
103	1076	979	6719
104	979	1076	6719

MAX DEFLECTION:

Type	Deflect	Span/Deflect	Limit
Live Vertical	-0.58	743.	240.
Horizontal Drift	1.59	184.	180.

Horizontal Spring Constant= 2.41 k/in

P-DELTA CHECK:(Direct Analysis)

	Max Deflect Ratio
Left Column:	0.0498
Right Column:	0.0498

Max first order drift (in) = 2.15
Max second order drift (in) = 2.12
Ratio second/first = 0.99

S12S0554A Flange Hole 9/12/12 4:00pm

S12S0554A Rigid Frame Clearances 9/12/12 4:00pm

VERTICAL CLEARANCE:

Location	Span	X_Coord	Y_Coord
Left_Column	22'11-08"	2'11-07"	22'11-08"
Right_Column	22'11-08"	33'00-09"	22'11-08"
Midspan	27'04-14"	18'00-00"	27'04-14"

HORIZONTAL CLEARANCE:

Location	Span	X_CoordL	X_CoordR
Left_Column - Right_Column	30'01-00"	2'11-08"	33'00-08"

S12S0554A Weight Summary 9/12/12 4:00pm

Total Weight (lb)

Frame	=	1692
Interior Col	=	0
Conn Plates	=	167
Base Plates	=	28
Trans Stiff	=	0
		1888

S12S0554A Warning Report 9/12/12 4:00pm

.. No Warnings

STRUCTURAL CODE:
Design Basis : WS - Working Stress
Hot Rolled Steel : AISC05
Cold Formed Steel : NAUS01

BUILDING CODE:
Wind Code : NYBC 10 (IBC 06)
Seismic Zone : B

MODULUS OF ELASTICITY
Hot Rolled Steel : 29000 (ksi)
Cold Formed Steel : 29500 (ksi)

Base Plate Yield = 55.00 (ksi)
Concrete Bearing = 3.00 (ksi)
Bolt Shear Stress= 11.60 (ksi)

BASE PLATE & BOLT SIZE:

--Column_Base--			--Plate_Size(in)--			--Bolts(GR36)-			-Shear(k)-	
Loc.	Typ	Depth	Width	Length	Thick	Row	Dia	Gage	Limit	UC
Left	P	14.5	8.0	14.50	0.375	2	0.750	4.00	15.5	0.30
Right	P	14.5	8.0	14.50	0.375	2	0.750	4.00	15.5	0.30

BASE REACTIONS:

Column	-Max_Comp-		Max_Tension+Shear			-Max_Shear		Max_Shear+Tension		
				Tens	Shear				Shear	Tens
Loc.	Ld	Fy(k)	Ld	Fy(k)	Fx(k)	Ld	Fx(k)	Ld	Fx(k)	Fy(k)
Left	32	9.6	49	-8.8	4.7	13	4.7	13	4.7	-8.1
Right	31	9.6	50	-8.8	4.7	14	4.7	14	4.7	-8.1

WELDS:

	Outside_Flange_To_Base				Inside_Flange_To_Base				-----Web_To_Base-----			
Base			Shear(k/in)				Shear(k/in)				Shear(k/in)	
Id	Size	Typ	Calc	Rn/sf	Size	Typ	Calc	Rn/sf	Size	Typ	Calc	Rn/sf
Left	0.188	F1	0.55	4.33	0.188	F1	0.55	4.33	0.188	F2	0.17	2.78
Right	0.188	F1	0.55	4.33	0.188	F1	0.55	4.33	0.188	F2	0.17	2.78

LOAD COMBINATIONS:

13 - DL+LW1+LWIND1_L2E
14 - DL+LW1+LWIND1_R2E
31 - DL+CL+0.75LL-0.75LW2+0.75LWIND2_L2E
32 - DL+CL+0.75LL-0.75LW2+0.75LWIND2_R2E
49 - 0.60DL+LW1+LWIND1_L2E
50 - 0.60DL+LW1+LWIND1_R2E

Splice Yield = 55.00 (ksi)

PLATE SIZE:

Splice Id	Typ	Member Locate	Web Depth	Splice(in) Width	Thick	Bolts(A325) Dia	Gage	Gage2	RowT	SpaceT	RowB	SpaceB	RowI
1	VEE	1- 2	24.00	8.0	0.375	0.625	3.50	3.50	2	4.00	2	4.00	0
2	-EE	2- 3	14.43	6.0	0.375	0.625	3.50	3.50	2	4.00	2	4.00	0
3	VEE	3- 4	24.00	8.0	0.375	0.625	3.50	3.50	2	4.00	2	4.00	0

PLATE DESIGN:

Splice Id	Typ	Ten Loc	Max_Moment Load Id	Axial (k)	Shear (k)	Moment (f-k)	Max_Shear Load Id	Axial (k)	Shear (k)	Moment (f-k)	Req Thick	Req Dia	Bolt UC
1	VEE	Top	24	1.5	6.7	49.1	1	1.8	7.8	34.9	0.299	0.495	0.63
		Bot	45	-1.0	-5.8	-48.4	45	-1.0	-5.8	-48.4	0.328	0.459	0.54
2	-EE	Top	46	-0.2	-1.9	5.7	12	-0.1	2.0	4.6	0.147	0.202	0.10
		Bot	1	1.8	-0.1	-19.4	22	1.2	-1.7	-10.4	0.272	0.375	0.36
3	VEE	Top	22	1.5	-6.7	49.1	2	1.8	-7.8	34.9	0.299	0.495	0.63
		Bot	47	-1.0	5.8	-48.4	47	-1.0	5.8	-48.4	0.328	0.459	0.54

Splice Id	Typ	Thick Req	Dia_Required Top	Bot	Unity_Check EP Bend	Bolt Top	Bolt Bot
1	VEE	0.33	0.495	0.459	0.77	0.63	0.54
2	-EE	0.27	0.202	0.375	0.53	0.10	0.36
3	VEE	0.33	0.495	0.459	0.77	0.63	0.54

WELDS:

Splice Id	Side	Outside_Flange_To_Bep Size	Typ	Shear(k/in) Calc	Rn/sf	Inside_Flange_To_Bep Size	Typ	Shear(k/in) Calc	Rn/sf	Web_To_Bep Size	Typ	Shear(k/in) Calc	Rn/sf
1	L	0.188	F2	1.23	4.18	0.188	F2	1.42	4.18	0.188	F2	0.16	2.78
1	R	0.188	F2	1.50	4.18	0.188	F2	1.48	4.18	0.188	F2	0.16	2.78
2	L	0.188	F2	0.34	4.18	0.188	F2	1.17	4.18	0.188	F2	0.07	2.78
2	R	0.188	F2	0.34	4.18	0.188	F2	1.17	4.18	0.188	F2	0.07	2.78
3	L	0.188	F2	1.50	4.18	0.188	F2	1.48	4.18	0.188	F2	0.16	2.78
3	R	0.188	F2	1.23	4.18	0.188	F2	1.42	4.18	0.188	F2	0.16	2.78

LOAD COMBINATIONS:

1 - DL+CL+LL
2 - DL+CL+LL
12 - DL+WR2
22 - DL+CL+0.75LL+0.75WL2
24 - DL+CL+0.75LL+0.75WR2
45 - 0.60DL+WL1
46 - 0.60DL+WL2
47 - 0.60DL+WR1

S12S0554A Bearing Stiffeners 9/12/12 4:01pm

Stiffener Yield = 36.0 (ksi)

STIFFENER SIZE:

Stiffener Location	No.	Web(in) Depth	Web(in) Thick	Stiffener_Size(in) Width	Stiffener_Size(in) Thick	Stiffener_Size(in) Length
Left Col	1	24.00	0.125	4.00	0.375	23.80
Right Col	1	24.00	0.125	4.00	0.375	23.80

STIFFENER DESIGN:

Stiffener Location	Tension(k) Load	Tension(k) Calc	Tension(k) Pn/sf	Compression(k) Load	Compression(k) Calc	Compression(k) Pn/sf	Max UC
Left Col	45	15.3	64.7	24	15.6	73.1	0.24
Right Col	47	15.3	64.7	22	15.6	73.1	0.24

WELDS:

Stiffener Location	Stiff_To_Flg/EP Size	Stiff_To_Flg/EP Typ	Stiff_To_Flg/EP Shear(k/in) Calc	Stiff_To_Flg/EP Shear(k/in) Rn/sf	Stiff_To_Web Size	Stiff_To_Web Typ	Stiff_To_Web Shear(k/in) Calc	Stiff_To_Web Shear(k/in) Rn/sf
Left Col	0.188	F1	1.91	4.18	0.188	F1	0.33	2.78
Right Col	0.188	F1	1.91	4.18	0.188	F1	0.33	2.78

LOAD COMBINATIONS:

22 - DL+CL+0.75LL+0.75WL2
24 - DL+CL+0.75LL+0.75WR2
45 - 0.60DL+WL1
47 - 0.60DL+WR1

S12S0554A Flange Braces 9/12/12 4:01pm

PROPERTIES:

Flange Brace Yield= 55.0 ksi
Girt/Purlin Yield= 55.0 ksi
Flange Brace Bolt = 0.500 (A325) (2 Washers)

FLANGE BRACE DESIGN:

Surf Id	No. Brace	Loc	Side	Part	Web Depth	Brace Dist	Load Id	Calc Force	Brace_UC Comp	Brace_UC Tens	Conn UC
1	0										
2	2	1	1	L2525105	22.19	28.50	45	0.06	0.02	0.02	0.02
		4	1	L2525105	14.54	28.50	2	0.05	0.01	0.01	0.02
3	2	1	1	L2525105	14.54	28.50	1	0.05	0.01	0.01	0.02
		4	1	L2525105	22.19	28.50	47	0.06	0.02	0.02	0.02
4	0										

LOAD COMBINATIONS:

1 - DL+CL+LL
2 - DL+CL+LL
45 - 0.60DL+WL1
47 - 0.60DL+WR1

S12S0554A Web To Flange Weld 9/12/12 4:01pm

Surf Id	Mem Id	Seg Id	Sec Id	Load Id	Shear (k)	Q (in3)	Ixx (in4)	---Web_Flange_Weld--- Size	Typ	Shear(k/in) Calc	Limit
1	1	1	1	46	4.5	14.3	232	0.188	F1	0.28	2.78
2	2	2	29	1	7.0	11.3	447	0.188	F1	0.18	2.78
3	3	3	62	2	7.0	11.3	447	0.188	F1	0.18	2.78
4	4	4	90	48	4.5	14.3	232	0.188	F1	0.28	2.78

LOAD COMBINATIONS:

1 - DL+CL+LL
2 - DL+CL+LL
46 - 0.60DL+WL2
48 - 0.60DL+WR2

S12S0554A Special Segments 9/12/12 4:01pm

FLANGE PLATE:(a)

Locate	--Initial-- Width (in)	Thick (in)	-Required-- Width (in)	Thick (in)
Lt Col	8.0	0.250	8.0	0.250
Rt Col	8.0	0.250	8.0	0.250

WEB PLATE:(b)

Locate	------Load------ Id	Axial (k)	Moment (f-k)	Shear Force (k)	---Initial-- Web Thick (in)	Shear Limit (k)	--Required-- Web Thick (in)	Shear Limit (k)
Lt Col	45	-2.5	-48.4	22.9	0.125	14.20	0.150	24.55
Rt Col	47	-2.5	-48.4	22.9	0.125	14.20	0.150	24.55

REQUIRED WEB DESIGN:

Locate	H	Av	Kv	Cv
Lt Col	24.00	21.74	11.09	0.35
Rt Col	24.00	21.74	11.09	0.35

(a)DS_BUILD(frame37)=1 .. see help.
(b)DS_BUILD(frame36)=2 .. see help.

LOAD COMBINATIONS:

45 - 0.60DL+WL1
47 - 0.60DL+WR1

S12S0554A Design Summary 9/12/12 4:01pm

FRAME:

Id = 2
Type = RF
Line Id = 1 5
Load Width= 12.00
UC Limit= 1.03
KL/R Limit= 200.00

MEMBERS:

Mem Id	Seg Id	Flange Len	Flange Wid	Web_Depth Strt	Web_Depth End	Plate_Thickness Web	Plate_Thickness O-flg	Plate_Thickness I-flg	Max_UCV Id	Max_UCV Ld	Max_UCV Ucv	Max_UCO Id	Max_UCO Ld	Max_UCO Uco	Max_UCI Id	Max_UCI Ld	Max_UCI Uci	Max KL/R
1	1	24.5	8.0	14.0	24.0	0.125	0.250	0.250	1	46	0.39	21	46	0.48	27	23	0.80	157
2	2	16.3	5.0	24.0	14.0	0.150	0.188	0.188	29	1	0.63	29	45	0.62	32	48	0.68	169
3	3	16.3	5.0	14.0	24.0	0.150	0.188	0.188	62	2	0.63	62	47	0.62	59	46	0.68	169
4	4	24.5	8.0	24.0	14.0	0.125	0.250	0.250	90	48	0.39	70	48	0.48	64	21	0.80	157

No. Cycles For Plate Optimization= 3

LOAD COMBINATIONS:

1#- DL+CL+LL
2#- DL+CL+LL
3 - DL+CL+SL
4 - DL+CL+SL
5 - DL+CL+0.75LL
6 - DL+CL+0.75LL
7 - DL+CL+0.75SL
8 - DL+CL+0.75SL
9 - DL+WL1
10 - DL+WL2
11 - DL+WR1
12 - DL+WR2
13 - DL+LW1+LWIND1_L2E
14 - DL+LW1+LWIND1_R2E
15 - DL-LW1+LWIND1_L2E
16 - DL-LW1+LWIND1_R2E
17 - DL+LW2+LWIND2_L2E
18 - DL+LW2+LWIND2_R2E
19 - DL-LW2+LWIND2_L2E
20 - DL-LW2+LWIND2_R2E
21#- DL+CL+0.75LL+0.75WL1
22 - DL+CL+0.75LL+0.75WL2
23#- DL+CL+0.75LL+0.75WR1
24 - DL+CL+0.75LL+0.75WR2
25 - DL+CL+0.75LL+0.75LW1+0.75LWIND1_L2E
26 - DL+CL+0.75LL+0.75LW1+0.75LWIND1_R2E
27 - DL+CL+0.75LL-0.75LW1+0.75LWIND1_L2E
28 - DL+CL+0.75LL-0.75LW1+0.75LWIND1_R2E
29 - DL+CL+0.75LL+0.75LW2+0.75LWIND2_L2E
30 - DL+CL+0.75LL+0.75LW2+0.75LWIND2_R2E
31 - DL+CL+0.75LL-0.75LW2+0.75LWIND2_L2E
32 - DL+CL+0.75LL-0.75LW2+0.75LWIND2_R2E
33 - DL+CL+0.75SL+0.75WL1
34 - DL+CL+0.75SL+0.75WL2
35 - DL+CL+0.75SL+0.75WR1
36 - DL+CL+0.75SL+0.75WR2
37 - DL+CL+0.75SL+0.75LW1+0.75LWIND1_L2E
38 - DL+CL+0.75SL+0.75LW1+0.75LWIND1_R2E
39 - DL+CL+0.75SL-0.75LW1+0.75LWIND1_L2E
40 - DL+CL+0.75SL-0.75LW1+0.75LWIND1_R2E
41 - DL+CL+0.75SL+0.75LW2+0.75LWIND2_L2E
42 - DL+CL+0.75SL+0.75LW2+0.75LWIND2_R2E
43 - DL+CL+0.75SL-0.75LW2+0.75LWIND2_L2E
44 - DL+CL+0.75SL-0.75LW2+0.75LWIND2_R2E
45#- 0.60DL+WL1
46#- 0.60DL+WL2
47#- 0.60DL+WR1
48#- 0.60DL+WR2
49 - 0.60DL+LW1+LWIND1_L2E
50 - 0.60DL+LW1+LWIND1_R2E
51 - 0.60DL-LW1+LWIND1_L2E
52 - 0.60DL-LW1+LWIND1_R2E

53 - 0.60DL+LW2+LWIND2_L2E
54 - 0.60DL+LW2+LWIND2_R2E
55 - 0.60DL-LW2+LWIND2_L2E
56 - 0.60DL-LW2+LWIND2_R2E
57 - 1.04DL+1.04CL+0.70SEIS
58 - 1.04DL+1.04CL-0.70SEIS
59 - 1.03DL+1.03CL+0.75LL+0.52SEIS
60 - 1.03DL+1.03CL+0.75LL-0.52SEIS
61 - 1.03DL+1.03CL+0.52SEIS
62 - 1.03DL+1.03CL-0.52SEIS
63 - 0.56DL+0.70SEIS
64 - 0.56DL-0.70SEIS
65 - 1.04DL+1.04CL+0.70LSEIS
66 - 1.04DL+1.04CL-0.70LSEIS
67 - 1.03DL+1.03CL+0.75LL+0.52LSEIS
68 - 1.03DL+1.03CL+0.75LL-0.52LSEIS
69 - 1.03DL+1.03CL+0.52LSEIS
70 - 1.03DL+1.03CL-0.52LSEIS
71 - 0.56DL+1.75LSEIS
72 - 0.56DL-1.75LSEIS
73 - DL+CL+F2UNB_SL_L
74 - DL+CL+F2UNB_SL_L
75 - DL+CL+F2UNB_SL_R
76 - DL+CL+F2UNB_SL_R
77 - DL+CL+LL
78 - DL+CL+LL
79 - DL+CL+SL
80 - DL+CL+SL
81 - LL
82 - LL
83 - SL
84 - SL
85 - DL+0.75WL1
86 - DL+0.75WL2
87 - DL+0.75WR1
88 - DL+0.75WR2
89 - DL+0.75LW1+LWIND1_L2E
90 - DL+0.75LW1+LWIND1_R2E
91 - DL-0.75LW1+LWIND1_L2E
92 - DL-0.75LW1+LWIND1_R2E
93 - DL+0.75LW2+LWIND2_L2E
94 - DL+0.75LW2+LWIND2_R2E
95 - DL-0.75LW2+LWIND2_L2E
96 - DL-0.75LW2+LWIND2_R2E
97 - 1.04DL+1.04CL+0.70SEIS
98 - 1.04DL+1.04CL-0.70SEIS
99 - 1.03DL+1.03CL+0.75LL+0.52SEIS
100 - 1.03DL+1.03CL+0.75LL-0.52SEIS
101 - 1.03DL+1.03CL+0.52SEIS
102 - 1.03DL+1.03CL-0.52SEIS
103 - 0.56DL+0.70SEIS
104 - 0.56DL-0.70SEIS
105 - 1.04DL+1.04CL+0.70SEIS
106 - 1.04DL+1.04CL-0.70SEIS
107 - 1.03DL+1.03CL+0.75LL+0.52SEIS
108 - 1.03DL+1.03CL+0.75LL-0.52SEIS
109 - 1.03DL+1.03CL+0.52SEIS
110 - 1.03DL+1.03CL-0.52SEIS
111 - 0.56DL+0.70SEIS
112 - 0.56DL-0.70SEIS
113 - 1.04DL+1.04CL+0.70LSEIS
114 - 1.04DL+1.04CL-0.70LSEIS
115 - 1.03DL+1.03CL+0.75LL+0.52LSEIS
116 - 1.03DL+1.03CL+0.75LL-0.52LSEIS
117 - 1.03DL+1.03CL+0.52LSEIS
118 - 1.03DL+1.03CL-0.52LSEIS
119 - 0.56DL+0.70LSEIS
120 - 0.56DL-0.70LSEIS

PLATE LIMITS:

Seg Id	Web Depth/Thick Calc	Web Depth/Thick Limit	Flange Width/(2xThick) Calc	Flange Width/(2xThick) Limit	Flange Thick	Flange Min	Web_Area/ Flange_Area Calc	Web_Area/ Flange_Area Limit
1	192.0	221.5	16.0		0.250	0.125	1.5	10.0
2	160.0	221.5	13.3		0.188	0.150	3.8	10.0
3	160.0	221.5	13.3		0.188	0.150	3.8	10.0
4	192.0	221.5	16.0		0.250	0.125	1.5	10.0

FRAME AREA:

Frame Area= 132.92
Building Area= 981.00
Ratio= 0.14

WEIGHTS:

Member	1	2	3	4
Weight (lb)	539	259	259	539

Total Weight (lb)

Frame	=	1596
Interior Col	=	0
Conn Plates	=	130
Base Plates	=	25
Trans Stiff	=	0
		1751

REACTIONS: (Sidewall Columns)

Load Id	Left_Column Fx(k)	Left_Column Fy(k)	Left_Column Fz(k)	Left_Column M(f-k)	Right_Column Fx(k)	Right_Column Fy(k)	Right_Column Fz(k)	Right_Column M(f-k)
1	1.81	9.32	0.00	0.00	-1.81	9.24	0.00	0.00
2	1.81	9.24	0.00	0.00	-1.81	9.32	0.00	0.00
3	1.44	7.49	0.00	0.00	-1.44	7.42	0.00	0.00
4	1.44	7.42	0.00	0.00	-1.44	7.49	0.00	0.00
5	1.48	7.70	0.00	0.00	-1.48	7.63	0.00	0.00
6	1.48	7.63	0.00	0.00	-1.48	7.70	0.00	0.00
7	1.20	6.26	0.00	0.00	-1.20	6.32	0.00	0.00
8	1.20	6.32	0.00	0.00	-1.20	6.26	0.00	0.00
9	-3.68	-5.34	0.00	0.00	-3.14	0.20	0.00	0.00
10	-4.52	-3.67	0.00	0.00	-2.29	1.94	0.00	0.00
11	3.14	0.20	0.00	0.00	3.68	-5.34	0.00	0.00
12	2.29	1.94	0.00	0.00	4.52	-3.67	0.00	0.00
13	1.57	-8.12	4.42	0.00	-1.39	-7.78	4.42	0.00
14	1.39	-7.78	4.42	0.00	-1.57	-8.12	4.42	0.00
15	1.65	2.22	0.00	0.00	-1.48	2.55	0.00	0.00
16	1.48	2.55	0.00	0.00	-1.65	2.22	0.00	0.00
17	0.72	-6.42	4.42	0.00	-0.54	-6.08	4.42	0.00
18	0.54	-6.08	4.42	0.00	-0.72	-6.42	4.42	0.00
19	0.80	3.93	0.00	0.00	-0.63	4.26	0.00	0.00
20	0.63	4.26	0.00	0.00	-0.80	3.93	0.00	0.00
21	-1.45	2.29	0.00	0.00	-3.66	6.64	0.00	0.00
22	-2.09	3.55	0.00	0.00	-3.02	7.94	0.00	0.00
23	3.66	6.64	0.00	0.00	1.45	2.29	0.00	0.00
24	3.02	7.94	0.00	0.00	2.09	3.55	0.00	0.00
25	2.48	0.31	3.32	0.00	-2.35	0.55	3.32	0.00

26	2.35	0.55	3.32	0.00	-2.48	0.31	3.32	0.00
27	2.54	8.07	0.00	0.00	-2.41	8.31	0.00	0.00
28	2.41	8.31	0.00	0.00	-2.54	8.07	0.00	0.00
29	1.84	1.59	3.32	0.00	-1.71	1.83	3.32	0.00
30	1.71	1.83	3.32	0.00	-1.84	1.59	3.32	0.00
31	1.90	9.35	0.00	0.00	-1.77	9.58	0.00	0.00
32	1.77	9.58	0.00	0.00	-1.90	9.35	0.00	0.00
33	-1.73	0.94	0.00	0.00	-3.38	5.26	0.00	0.00
34	-2.37	2.20	0.00	0.00	-2.74	6.55	0.00	0.00
35	3.38	5.26	0.00	0.00	1.73	0.94	0.00	0.00
36	2.74	6.55	0.00	0.00	2.37	2.20	0.00	0.00
37	2.19	-1.06	3.32	0.00	-2.06	-0.81	3.32	0.00
38	2.06	-0.81	3.32	0.00	-2.19	-1.06	3.32	0.00
39	2.25	6.70	0.00	0.00	-2.12	6.94	0.00	0.00
40	2.12	6.94	0.00	0.00	-2.25	6.70	0.00	0.00
41	1.56	0.22	3.32	0.00	-1.43	0.46	3.32	0.00
42	1.43	0.46	3.32	0.00	-1.56	0.22	3.32	0.00
43	1.62	7.98	0.00	0.00	-1.49	8.22	0.00	0.00
44	1.49	8.22	0.00	0.00	-1.62	7.98	0.00	0.00
45	-3.77	-6.01	0.00	0.00	-3.04	-0.49	0.00	0.00
46	-4.62	-4.34	0.00	0.00	-2.19	1.25	0.00	0.00
47	3.04	-0.49	0.00	0.00	3.77	-6.01	0.00	0.00
48	2.19	1.25	0.00	0.00	4.62	-4.34	0.00	0.00
49	1.47	-8.80	4.42	0.00	-1.30	-8.46	4.42	0.00
50	1.30	-8.46	4.42	0.00	-1.47	-8.80	4.42	0.00
51	1.55	1.55	0.00	0.00	-1.38	1.88	0.00	0.00
52	1.38	1.88	0.00	0.00	-1.55	1.55	0.00	0.00
53	0.62	-7.09	4.42	0.00	-0.45	-6.75	4.42	0.00
54	0.45	-6.75	4.42	0.00	-0.62	-7.09	4.42	0.00
55	0.70	3.25	0.00	0.00	-0.53	3.58	0.00	0.00
56	0.53	3.58	0.00	0.00	-0.70	3.25	0.00	0.00
57	0.25	2.56	0.00	0.00	-0.74	3.27	0.00	0.00
58	0.74	3.27	0.00	0.00	-0.25	2.56	0.00	0.00
59	1.31	7.47	0.00	0.00	-1.68	8.02	0.00	0.00
60	1.68	8.02	0.00	0.00	-1.31	7.47	0.00	0.00
61	0.31	2.62	0.00	0.00	-0.67	3.15	0.00	0.00
62	0.67	3.15	0.00	0.00	-0.31	2.62	0.00	0.00
63	-0.11	0.60	0.00	0.00	-0.38	1.29	0.00	0.00
64	0.38	1.29	0.00	0.00	0.11	0.60	0.00	0.00
65	0.49	0.95	1.68	0.00	-0.49	0.95	1.68	0.00
66	0.52	4.88	0.00	0.00	-0.52	4.88	0.00	0.00
67	1.49	6.28	1.25	0.00	-1.49	6.28	1.25	0.00
68	1.52	9.21	0.00	0.00	-1.52	9.21	0.00	0.00
69	0.49	1.42	1.25	0.00	-0.49	1.42	1.25	0.00
70	0.51	4.35	0.00	0.00	-0.51	4.35	0.00	0.00
71	0.14	-3.97	4.20	0.00	-0.14	-3.97	4.20	0.00
72	0.21	5.86	0.00	0.00	-0.21	5.86	0.00	0.00
73	1.34	7.57	0.00	0.00	-1.34	5.60	0.00	0.00
74	1.33	7.63	0.00	0.00	-1.33	5.54	0.00	0.00
75	1.34	5.60	0.00	0.00	-1.34	7.57	0.00	0.00
76	1.33	5.54	0.00	0.00	-1.33	7.63	0.00	0.00

DEFLECTIONS:

Load Id	Lateral Defl @ Top Of Col Left	Right	Vert Defl @ Midspan
77	-0.18	0.12	-0.57
78	-0.12	0.18	-0.57
79	-0.14	0.10	-0.45
80	-0.10	0.14	-0.45
81	-0.13	0.09	-0.42
82	-0.09	0.13	-0.42
83	-0.09	0.07	-0.30
84	-0.07	0.09	-0.30

85	1.40	1.35	0.15
86	1.41	1.36	0.15
87	-1.35	-1.40	0.15
88	-1.36	-1.41	0.15
89	-0.08	-0.07	-0.01
90	0.07	0.08	-0.01
91	-0.09	-0.07	-0.02
92	0.07	0.09	-0.02
93	-0.08	-0.07	-0.02
94	0.07	0.08	-0.02
95	-0.09	-0.07	-0.02
96	0.07	0.09	-0.02
97	0.21	0.29	-0.16
98	-0.29	-0.21	-0.16
99	0.07	0.31	-0.47
100	-0.31	-0.07	-0.47
101	0.14	0.22	-0.15
102	-0.22	-0.14	-0.15
103	0.23	0.26	-0.05
104	-0.26	-0.23	-0.05

DEFLECTIONS RATIO:

Load Id	Lateral Defl @ Top Of Col Left	Right	Vert Defl @ Midspan
77	1632	2428	756
78	2428	1632	756
79	2058	3081	955
80	3081	2058	955
81	2223	3228	1020
82	3228	2223	1020
83	3095	4495	1421
84	4495	3095	1421
85	210	217	2848
86	208	215	2977
87	217	210	2848
88	215	208	2977
89	3466	4160	38777
90	4160	3466	38777
91	3410	3997	28423
92	3997	3410	28423
93	3466	4078	23430
94	4078	3466	23430
95	3410	3921	19204
96	3921	3410	19204
97	1420	1021	2746
98	1021	1420	2746
99	4404	935	919
100	935	4404	919
101	2045	1313	2805
102	1313	2045	2805
103	1259	1150	8320
104	1150	1259	8320

MAX DEFLECTION:

Type	Deflect	Span/Deflect	Limit
Live Vertical	-0.42	1021.	240.
Horizontal Drift	-1.41	208.	180.

Horizontal Spring Constant= 2.02 k/in

P-DELTA CHECK:(Direct Analysis)

	Max Deflect Ratio
Left Column:	0.0497
Right Column:	0.0498

Max first order drift (in) = 1.91
Max second order drift (in) = 1.88
Ratio second/first = 0.99

ENDWALL VERTICAL DEFLECTION:

Column Locate	Use	--Vertical_Down(in)- Load	Deflect	Limit	---Vertical_Up(in)-- Load	Deflect	Limit
18.00	Column	85	0.57	0.00	78	0.10	0.00
18.00	Column	85	0.57	0.00	78	0.10	0.00

S12S0554A Flange Hole 9/12/12 4:01pm

S12S0554A Rigid Frame Clearances 9/12/12 4:01pm

VERTICAL CLEARANCE:

Location	Span	X_Coord	Y_Coord
Left_Column	22'10-12"	2'08-07"	22'10-12"
Right_Column	22'10-12"	33'03-09"	22'10-12"
Midspan	27'06-15"	18'00-00"	27'06-15"

HORIZONTAL CLEARANCE:

Location	Span	X_CoordL	X_CoordR
Left_Column - Right_Column	30'07-00"	2'08-08"	33'03-08"

S12S0554A Weight Summary 9/12/12 4:01pm

Total Weight (lb)

Frame	=	1596
Interior Col	=	0
Conn Plates	=	130
Base Plates	=	25
Trans Stiff	=	0
		1751

S12S0554A Warning Report 9/12/12 4:01pm

.. No Warnings