

Isotropic Material

Identification

Title : STEEL

Material Properties

Young's Modulus (E) : 1.99947e+08 kN/m2

Poisson's Ratio (ν) : 0.3

Density : 76.8191 kN/m3

Thermal Coeff(a) : 6.5e-06 /°F

Critical Damping : 0.03

Shear Modulus (G) : 7.7221e+07 kN/m2

Type of Material : STEEL

Design Properties

Yield Stress (Fy) : 0 kN/m2

Tensile Strength (Fu) : 0 kN/m2

Yield Strength Ratio (Ry) : 1.5

Tensile Strength Ratio (Rt) : 1.2

Compressive strength (Fcu) : 0 kN/m2

OK

Cancel

Load 10

CABLE STAYED BRIDGE...

Name	E N/m2	Poisson's Ratio
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Material - - Whole Structure

Isotropic Orthotropic 2D

Title

STEEL
 CONCRETE
 ALUMINUM
 STAINLESSSTEEL
 STEEL_36_KSI
 STEEL_50_KSI
 STEEL_275_NMM2

☒ Highlight Assigned Geometry

Create

Edit...

Delete...

Assignment Method

- ☒ Assign To Selected Beams
☐ Assign To View
☐ Use Cursor To Assign
☐ Assign To Edit List

89 To 139 224 To 274

Assign

Close

- ☒ 117 : COMB - 0.9 Dead + 1.5 Wind (2)
- ☒ 118 : COMB - 0.9 Dead + 1.5 Wind (3)
- ☒ 119 : COMB - 0.9 Dead + 1.5 Wind (4)
- ☒ 120 : COMB - 0.9 Dead + -1.5 Wind (1)
- ☒ 121 : COMB - 0.9 Dead + -1.5 Wind (2)
- ☒ 122 : COMB - 0.9 Dead + -1.5 Wind (3)
- ☒ 123 : COMB - 0.9 Dead + -1.5 Wind (4)
- ☒ 124 : COMB - 0.9 Dead + 1.5 Seismic-H (1)
- ☒ 125 : COMB - 0.9 Dead + 1.5 Seismic-H (2)
- ☒ 126 : COMB - 0.9 Dead + 1.5 Seismic-H (3)
- ☒ 127 : COMB - 0.9 Dead + 1.5 Seismic-H (4)
- ☒ 128 : COMB - 0.9 Dead + -1.5 Seismic-H (1)

New...

Add...

Edit ...

Delete...

☐ Toggle Load












Assignment Method

- ☐ Assign To Selected Entities
- ☐ Assign To View
- ☒ Use Cursor To Assign
- ☐ Assign To Edit List

Assign

Close

Help

-  105 : COMB - 1.5 Dead + -1.5 Wind (2)
-  106 : COMB - 1.5 Dead + -1.5 Wind (3)
-  107 : COMB - 1.5 Dead + -1.5 Wind (4)
-  108 : COMB - 1.5 Dead + 1.5 Seismic-H (1)
-  109 : COMB - 1.5 Dead + 1.5 Seismic-H (2)
-  110 : COMB - 1.5 Dead + 1.5 Seismic-H (3)
-  111 : COMB - 1.5 Dead + 1.5 Seismic-H (4)
-  112 : COMB - 1.5 Dead + -1.5 Seismic-H (1)
-  113 : COMB - 1.5 Dead + -1.5 Seismic-H (2)
-  114 : COMB - 1.5 Dead + -1.5 Seismic-H (3)
-  115 : COMB - 1.5 Dead + -1.5 Seismic-H (4)
-  116 : COMB - 0.9 Dead + 1.5 Wind (1)

New...

Add...

Edit ...

Delete...

☐ Toggle Load

Assignment Method

- ☐ Assign To Selected Entities
- ☐ Assign To View
- ☒ Use Cursor To Assign
- ☐ Assign To Edit List

Assign

Close

Help

- ☒ 93 : COMB - 1.2 Dead + 1.2 Seismic-H (2)
- ☒ 94 : COMB - 1.2 Dead + 1.2 Seismic-H (3)
- ☒ 95 : COMB - 1.2 Dead + 1.2 Seismic-H (4)
- ☒ 96 : COMB - 1.2 Dead + -1.2 Seismic-H (1)
- ☒ 97 : COMB - 1.2 Dead + -1.2 Seismic-H (2)
- ☒ 98 : COMB - 1.2 Dead + -1.2 Seismic-H (3)
- ☒ 99 : COMB - 1.2 Dead + -1.2 Seismic-H (4)
- ☒ 100 : COMB - 1.5 Dead + 1.5 Wind (1)
- ☒ 101 : COMB - 1.5 Dead + 1.5 Wind (2)
- ☒ 102 : COMB - 1.5 Dead + 1.5 Wind (3)
- ☒ 103 : COMB - 1.5 Dead + 1.5 Wind (4)
- ☒ 104 : COMB - 1.5 Dead + -1.5 Wind (1)

New...

Add...

Edit ...

Delete...

☐ Toggle Load

Assignment Method

- ☐ Assign To Selected Entities
- ☐ Assign To View
- ☒ Use Cursor To Assign
- ☐ Assign To Edit List

Assign

Close

Help

- [-] [C] 10 - 82 : GENERATE LOAD, ADD LOAD 1
 - [C] TYPE 1 - 4 0 1.8 XINC 1
 - [+] [C] 83 : COMB - 1.5 Dead
 - [+] [C] 84 : COMB - 1.2 Dead + 1.2 Wind (1)
 - [+] [C] 85 : COMB - 1.2 Dead + 1.2 Wind (2)
 - [+] [C] 86 : COMB - 1.2 Dead + 1.2 Wind (3)
 - [+] [C] 87 : COMB - 1.2 Dead + 1.2 Wind (4)
 - [+] [C] 88 : COMB - 1.2 Dead + -1.2 Wind (1)
 - [+] [C] 89 : COMB - 1.2 Dead + -1.2 Wind (2)
 - [+] [C] 90 : COMB - 1.2 Dead + -1.2 Wind (3)
 - [+] [C] 91 : COMB - 1.2 Dead + -1.2 Wind (4)
 - [+] [C] 92 : COMB - 1.2 Dead + 1.2 Seismic-H (1)

New...

Add...

Edit...

Delete...

☐ Toggle Load

Assignment Method

- ☐ Assign To Selected Entities
- ☐ Assign To View
- ☒ Use Cursor To Assign
- ☐ Assign To Edit List

Assign

Close

Help

- ☒ 121 : COMB - 0.9 Dead + -1.5 Wind (2)
- ☒ 122 : COMB - 0.9 Dead + -1.5 Wind (3)
- ☒ 123 : COMB - 0.9 Dead + -1.5 Wind (4)
- ☒ 124 : COMB - 0.9 Dead + 1.5 Seismic-H (1)
- ☒ 125 : COMB - 0.9 Dead + 1.5 Seismic-H (2)
- ☒ 126 : COMB - 0.9 Dead + 1.5 Seismic-H (3)
- ☒ 127 : COMB - 0.9 Dead + 1.5 Seismic-H (4)
- ☒ 128 : COMB - 0.9 Dead + -1.5 Seismic-H (1)
- ☒ 129 : COMB - 0.9 Dead + -1.5 Seismic-H (2)
- ☒ 130 : COMB - 0.9 Dead + -1.5 Seismic-H (3)
- ☒ 131 : COMB - 0.9 Dead + -1.5 Seismic-H (4)

☒ **Load Envelopes**

New...

Add...

Edit...

Delete...

☐ Toggle Load

Assignment Method

- ☐ Assign To Selected Entities
- ☐ Assign To View
- ☒ Use Cursor To Assign
- ☐ Assign To Edit List

Assign

Close

Help

- ☒ Time History Definitions
- ☒ Wind Definitions
 - ☒ TYPE 1 : WIND 1
- ☒ Snow Definition
- ☒ Reference Load Definitions
- ☒ Seismic Definition (IS 1893 - 2016)
 - ☒ ZONE 0.24 RF 5 I 1 SS 1 ST 1 DM 0.05
- ☒ Pushover Definitions
- ☒ Direct Analysis Definition
- ☒ **Starting Load Definition**
- ☒ Load Cases Details
 - ☒ 2 : EQX+

New...

Add...

Edit ...

Delete...

☐ Toggle Load

Assignment Method

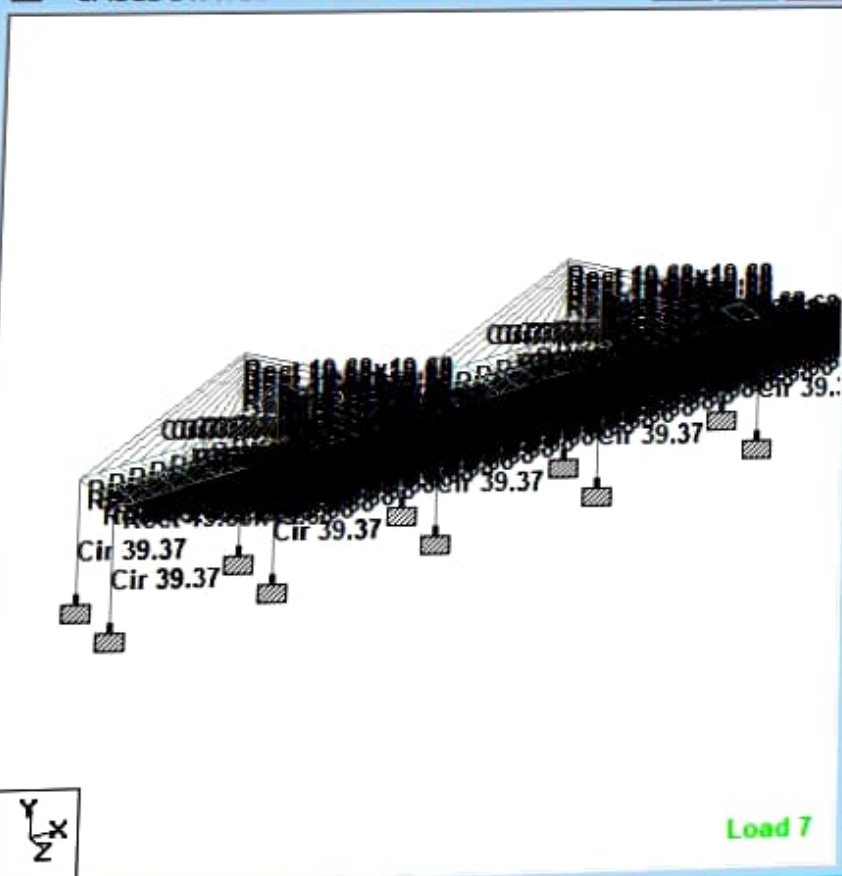
- ☐ Assign To Selected Entities
- ☐ Assign To View
- ☒ Use Cursor To Assign
- ☐ Assign To Edit List

Assign

Close

Help

CABLE STAYED BRIDGE - Whole Structure



Load & Definition

- 3 : EQX-
- 4 : EQZ+
- 5 : EQZ-
- 1 : DL
- 6 : WLX+
- 7 : WLX-
- 8 : WLZ+
- 9 : WLZ-
- 10 - 82 : GENERATE LOAD, ADD LOAD 1
 - TYPE 1 - 4 0 1.8 XINC 1
- 83 : COMB - 1.5 Dead
- 84 : COMB - 1.2 Dead + 1.2 Wind (1)

New...

Add...

Edit...

Delete...

☐ Toggle Load

Assignment Method

- ☐ Assign To Selected Entities
- ☐ Assign To View
- ☒ Use Cursor To Assign
- ☐ Assign To Edit List

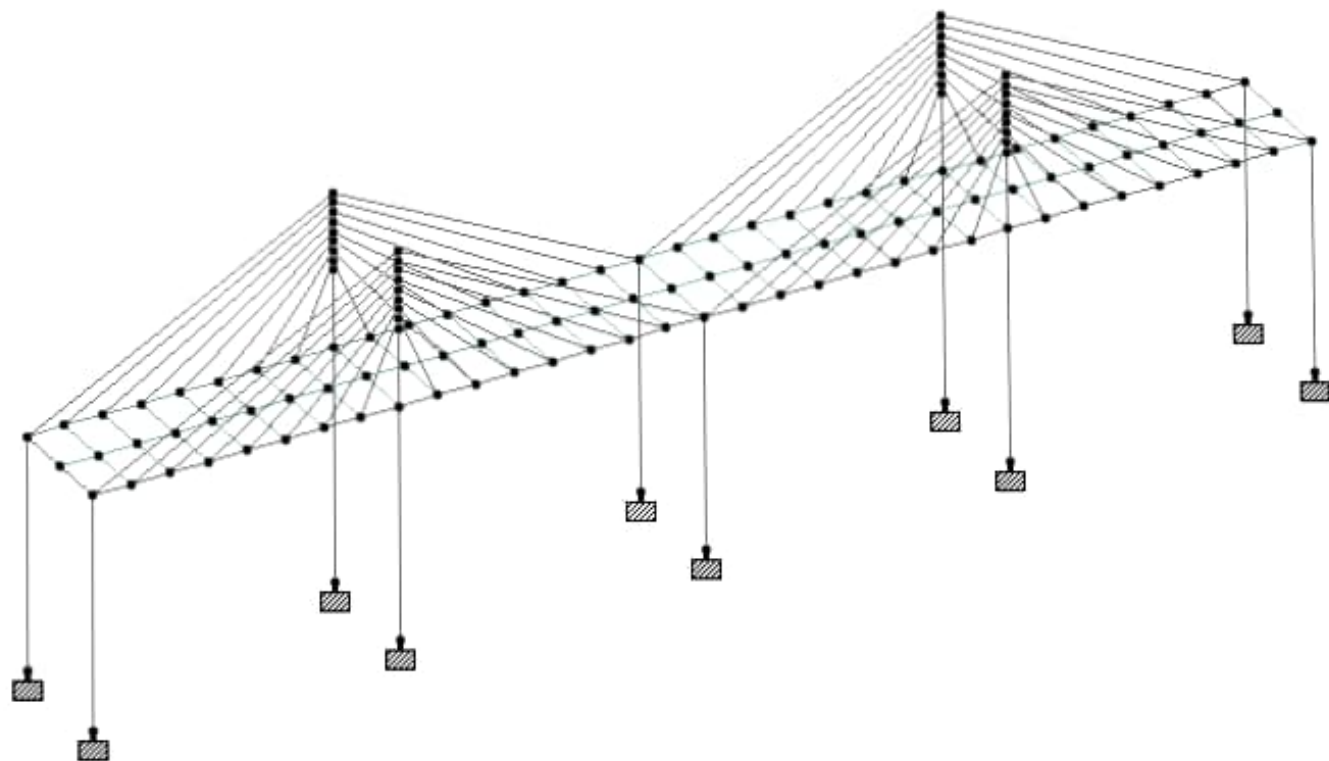
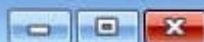
Assign

Close

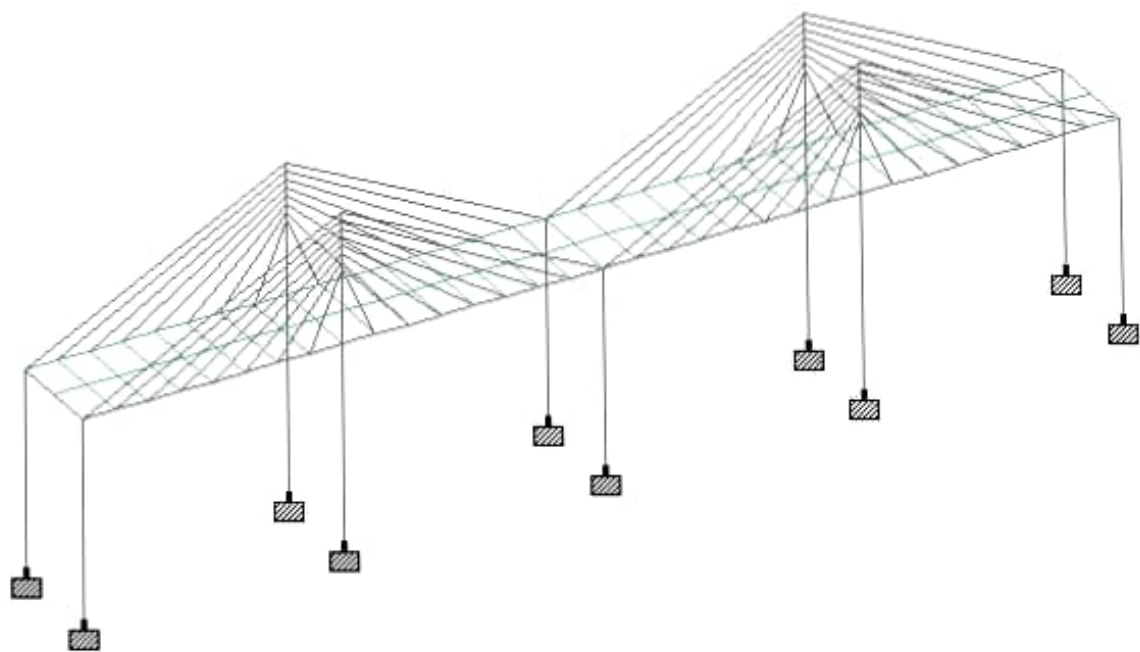
Help

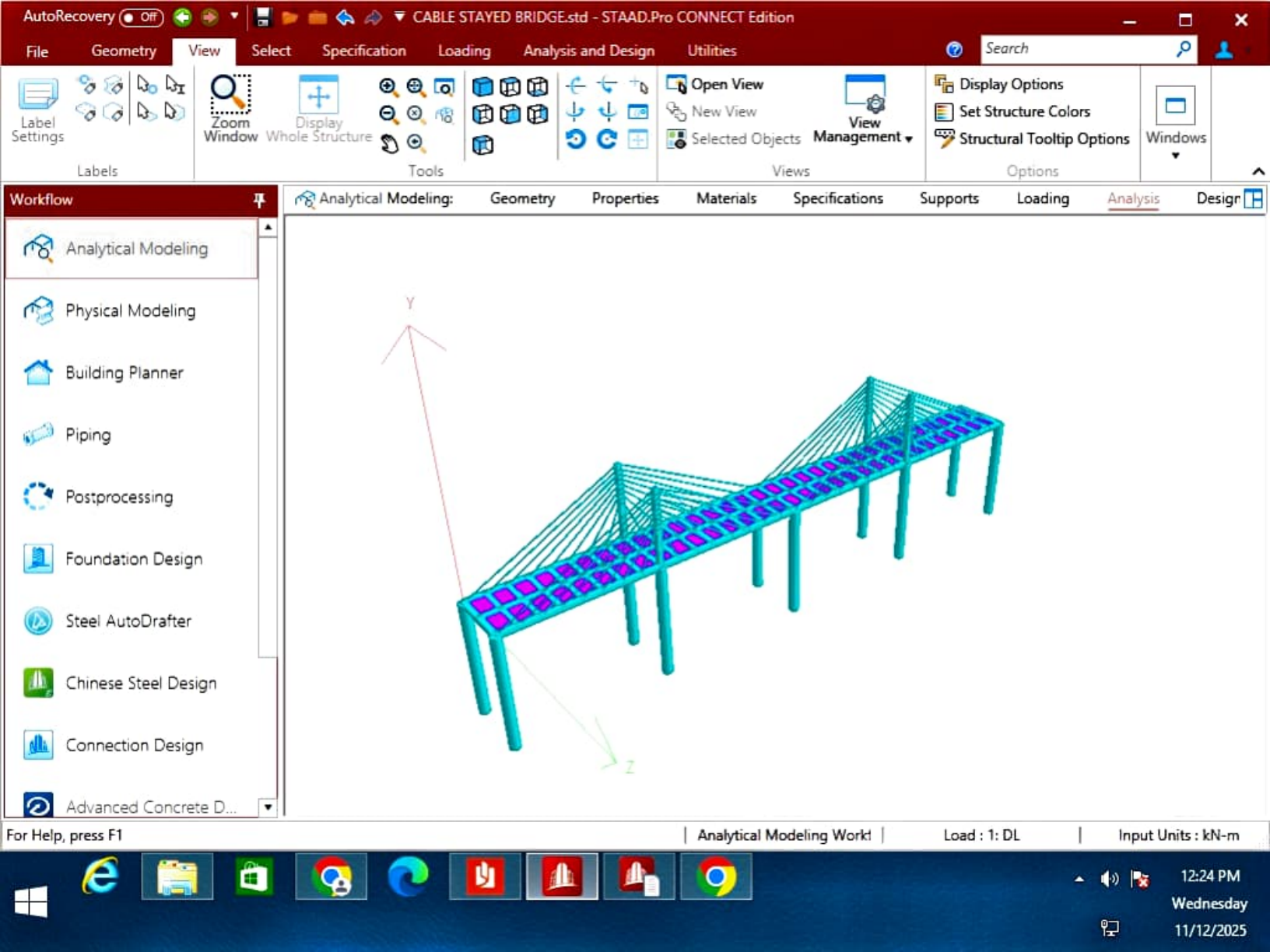


CABLE STAYED BRIDGE - Whole Structure



Load 83






default.stp - StWizard


File Edit View Help

☒ Prototype Models
 ☐ Saved User Models


Model Type: **Truss Models**




Pratt Truss




Warren Truss




Howe Bridge



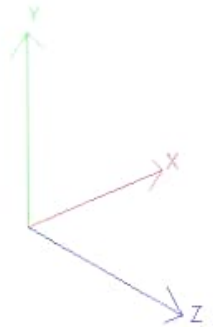
Lattice Truss



Howe Roof



North Light



Input Unit: ft

Search

Positive Deck

Loading Analysis Design

STAYED BRIDG...

X m	Y m	Z m
0.000	0.000	0.000
32.000	0.000	0.000
0.000	0.000	6.000
32.000	0.000	6.000
0.000	0.000	3.000
32.000	0.000	3.000
2.000	0.000	0.000
2.000	0.000	6.000
2.000	0.000	3.000
4.000	0.000	0.000
4.000	0.000	6.000

STAYED BRIDG...

Node A	Node B	Property Refn.
3	8	3
1	7	3
1	5	3
2	6	3
5	3	3
6	4	3
7	10	3
8	11	3
5	9	3
7	8	3

