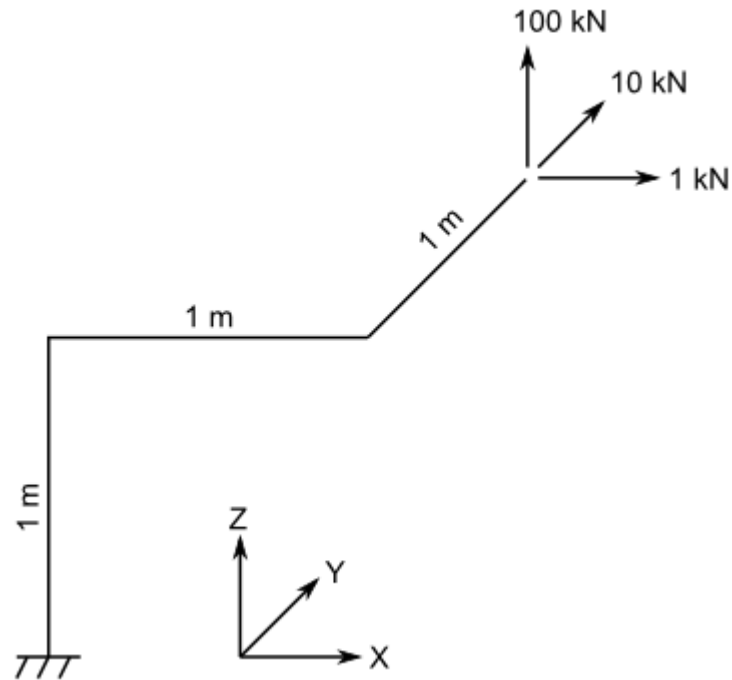


Overview

- Refer to the following wiki page for model overview and explanation of section cuts drawn in the GUI: <https://wiki.csiberkeley.com/x/0pUa>
- This report further illustrates section cuts defined by quadrilateral cutting planes and groups.

Model Geometry



Section Cuts Defined by Cutting Planes

Section Cut Data

Edit

Section Cut Name

SCUT AT 0.5,0,1 - POS

Coordinate System

GLOBAL

Units

KN, m, C

Section Cut Defined By

- ☐ Group
☒ Quadrilateral Cutting Planes

Section Cut Group

Group

ALL

Section Cut Result Type

- ☒ Analysis (F1, F2, F3, M1, M2, M3)
☐ Design (P, V2, V3, T, M2, M3)

Results Reported at this Location

- ☐ Default
☒ User Defined

X Coordinate

0.5

Y Coordinate

0.

Z Coordinate

1.

Section Cut Local Axes Orientation - Analysis

Rotation about Z

0.

Rotation about Y"

0.

Rotation about X"

0.

☐ Advanced Axes

Advanced

Results Reported Are On This Side of Elements

- ☒ Positive 3 Axis Side of Quadrilateral
☐ Negative 3 Axis Side of Quadrilateral

Quadrilateral Cutting Planes

Number of Quadrilaterals

1

Currently Displayed Quadrilateral: 1



Point	X	Y	Z
1	0.51	-0.5	0.5
2	0.51	0.5	0.5
3	0.51	0.5	1.5
4	0.51	-0.5	1.5

Check For Legal Quadrilateral

Section cut results are reported for all elements that are fully cut by quadrilaterals and have their associated objects included in the section cut group.

OK

Cancel

Section Cut Data

Edit

Section Cut Name

SCUT AT 0.5,0,1 - NEG

Coordinate System

GLOBAL

Units

KN, m, C

Section Cut Defined By

- ☐ Group
- ☒ Quadrilateral Cutting Planes

Section Cut Group

Group

ALL

Section Cut Result Type

- ☒ Analysis (F1, F2, F3, M1, M2, M3)
- ☐ Design (P, V2, V3, T, M2, M3)

Results Reported at this Location

- ☐ Default
- ☒ User Defined

X Coordinate

0.5

Y Coordinate

0.

Z Coordinate

1.

Section Cut Local Axes Orientation - Analysis

Rotation about Z

0.

Rotation about Y'

0.

Rotation about X''

0.

☐ Advanced Axes

Advanced

Results Reported Are On This Side of Elements

- ☐ Positive 3 Axis Side of Quadrilateral
- ☒ Negative 3 Axis Side of Quadrilateral

Quadrilateral Cutting Planes

Number of Quadrilaterals

1

Currently Displayed Quadrilateral: 1



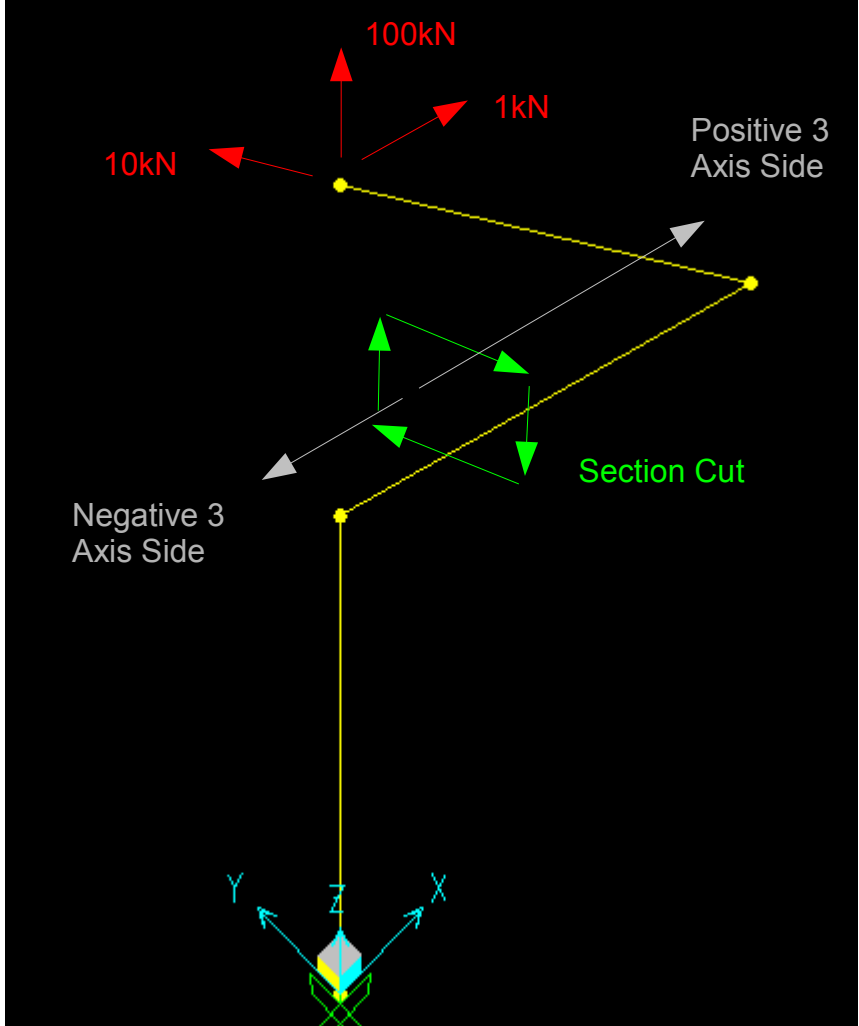
Point	X	Y	Z
1	0.51	-0.5	0.5
2	0.51	0.5	0.5
3	0.51	0.5	1.5
4	0.51	-0.5	1.5

Check For Legal Quadrilateral

Section cut results are reported for all elements that are fully cut by quadrilaterals and have their associated objects included in the section cut group.

OK

Cancel



SAP2000 v14.1.0 Advanced - model A V14.1.0

Section Cut Forces - Analysis

File View Format-Filter-Sort Select Options

Units: As Noted Section Cut Forces - Analysis

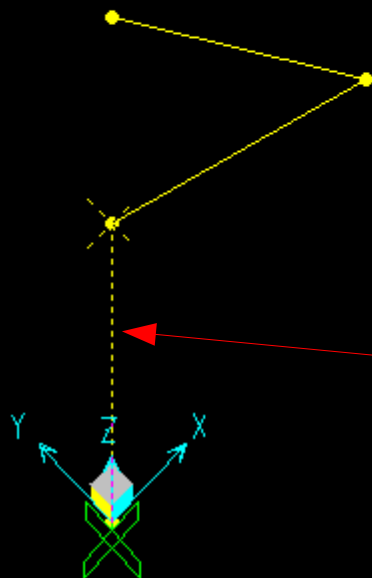
	SectionCut Text	OutputCase Text	CaseType Text	F1 KN	F2 KN	F3 KN	M1 KN-m	M2 KN-m	M3 KN-m	GlobaX m	GlobaY m	GlobaZ m
▶	SCUT AT 0.5,0,1 - NEG	FX+FY+FZ	Combination	-1	-10	-100	-100	50	-4	0.5	0	1
	SCUT AT 0.5,0,1 - POS	FX+FY+FZ	Combination	1	10	100	100	-50	4	0.5	0	1

Record: 1 of 2

Add Tables... Done

Section Cuts Defined by Groups

3-D View



Section Cut Data

Edit

Section Cut Name

SCUT 0,0,1 VERT

Coordinate System

GLOBAL

Units

KN, m, C

Section Cut Defined By

☒ Group☐ Quadrilateral Cutting Planes

Section Cut Group

Group

SCUT VERT MEMBEF

Section Cut Result Type

☒ Analysis (F1, F2, F3, M1, M2, M3)☐ Design (P, V2, V3, T, M2, M3)

Results Reported at this Location

☐ Default☒ User Defined

X Coordinate

0.

Y Coordinate

0.

Z Coordinate

1.

Section Cut Local Axes Orientation - Analysis

Rotation about Z

0.

Rotation about Y'

0.

Rotation about X''

0.

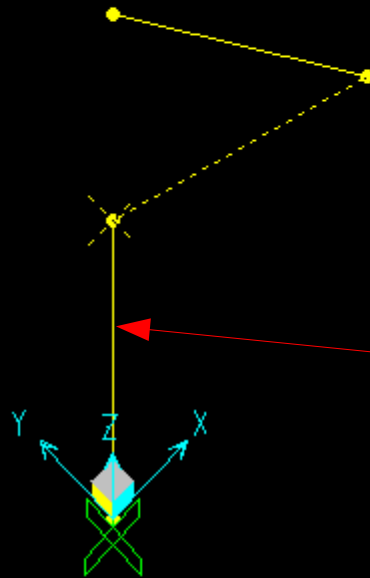
☐ Advanced Axes

Advanced

OK

Cancel

3-D View



Section Cut Data

Edit

Section Cut Name

SCUT 0,0,1 X-PARALLEL

Coordinate System

GLOBAL

Units

KN, m, C

Section Cut Defined By

- ☒ Group
☐ Quadrilateral Cutting Planes

Section Cut Group

Group

SCUT X-PARALLEL M

Section Cut Result Type

- ☒ Analysis (F1, F2, F3, M1, M2, M3)
☐ Design (P, V2, V3, T, M2, M3)

Results Reported at this Location

- ☐ Default
☒ User Defined

X Coordinate

0.

Y Coordinate

0.

Z Coordinate

1.

Section Cut Local Axes Orientation - Analysis

Rotation about Z

0.

Rotation about Y'

0.

Rotation about X''

0.

☐ Advanced Axes

Advanced

OK

Cancel

Section Cut Forces - Analysis

File View Format-Filter-Sort Select Options

Units: As Noted

Section Cut Forces - Analysis

	SectionCut Text	OutputCase Text	CaseType Text	F1 KN	F2 KN	F3 KN	M1 KN-m	M2 KN-m	M3 KN-m	GlobaX m	
▶	SCUT 0,0,1 VERT	FX+FY+FZ	Combination	1	10	100	100	-100	9	0	▲
	SCUT 0,0,1 X-PARALLEL	FX+FY+FZ	Combination	-1	-10	-100	-100	100	-9	0	▼

Record: 1 of 4

Add Tables...

Done