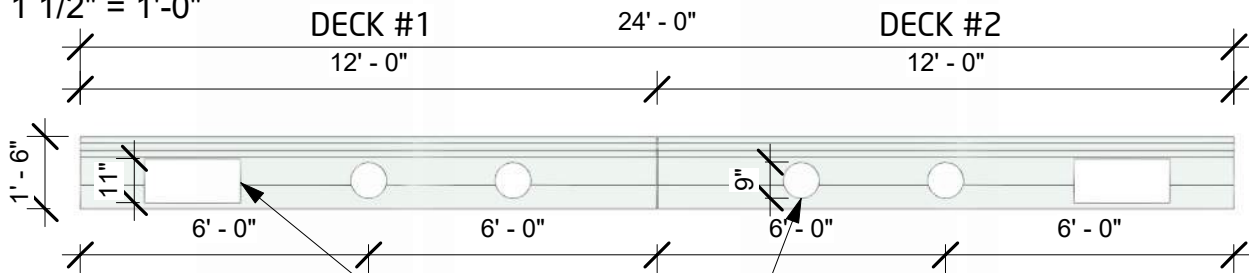
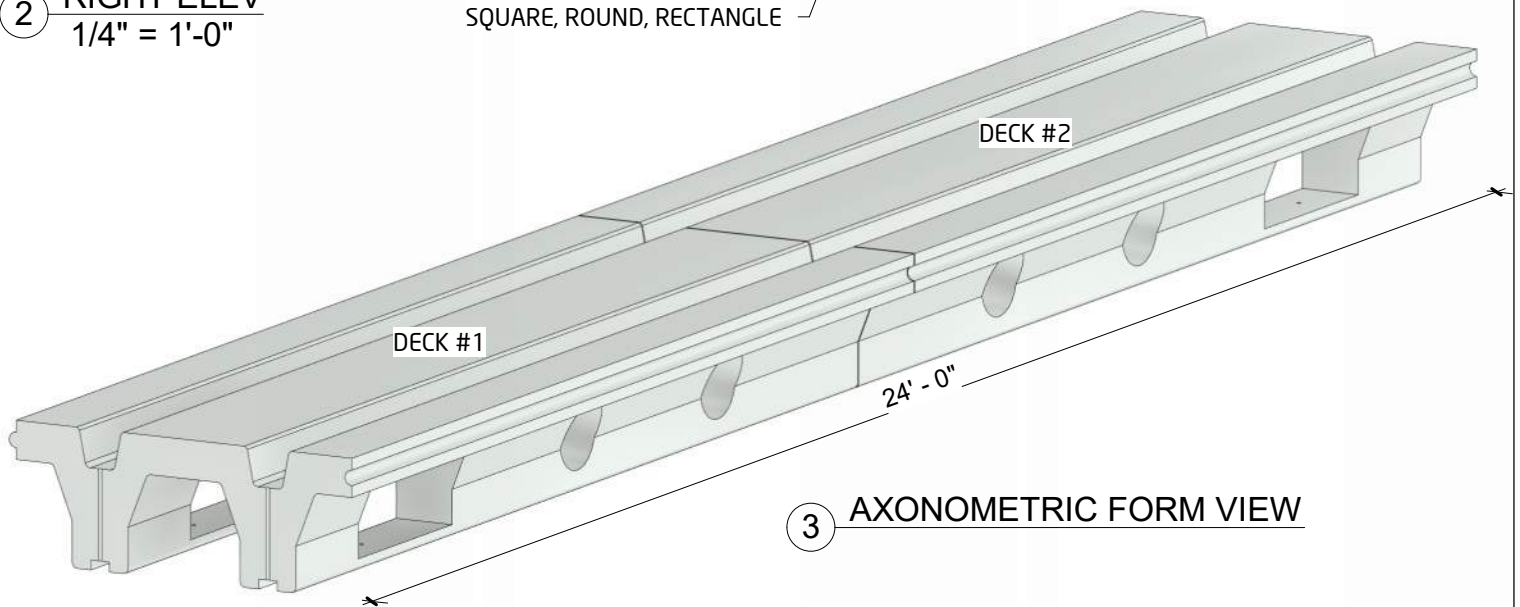


① FRONT ELEV  
1 1/2" = 1'-0"



② RIGHT ELEV  
1/4" = 1'-0"



③ AXONOMETRIC FORM VIEW



CLIMATE-DECK™  
24' SPAN

(2) @ 18" x 48" x 144"

CLIMATE-DECK™ 24' SPAN

Project number CD1848144

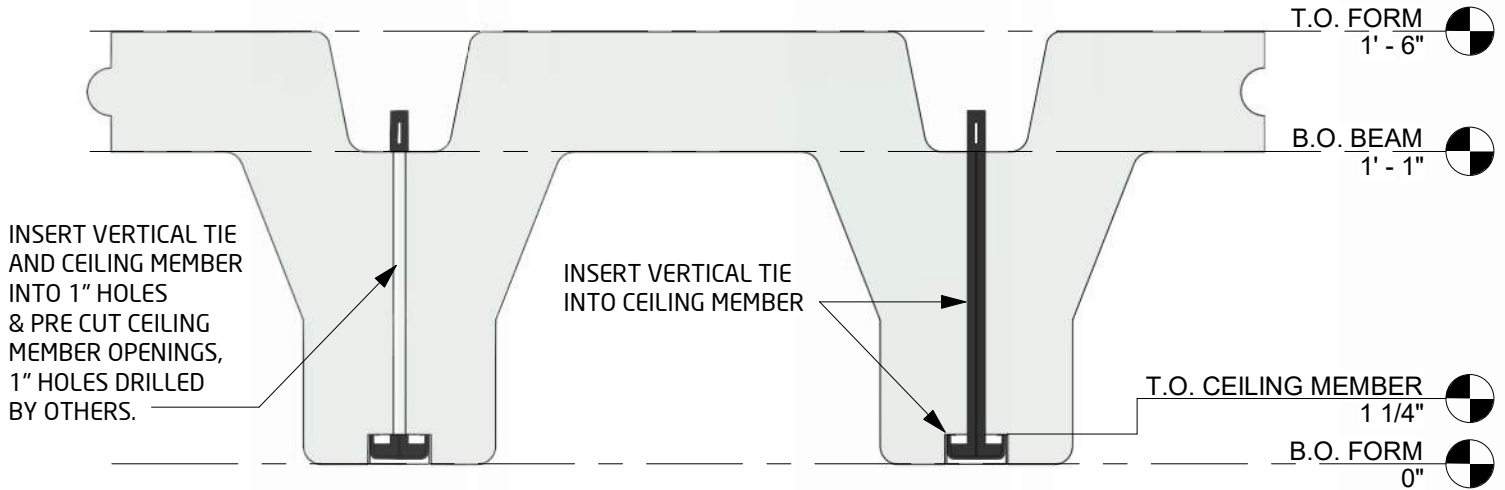
Date TODAY

Drawn by AJ

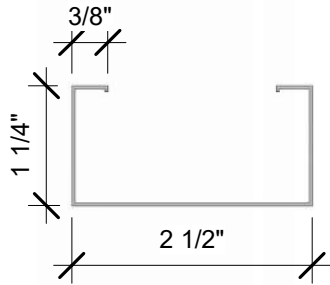
Checked by AJ

D1.0

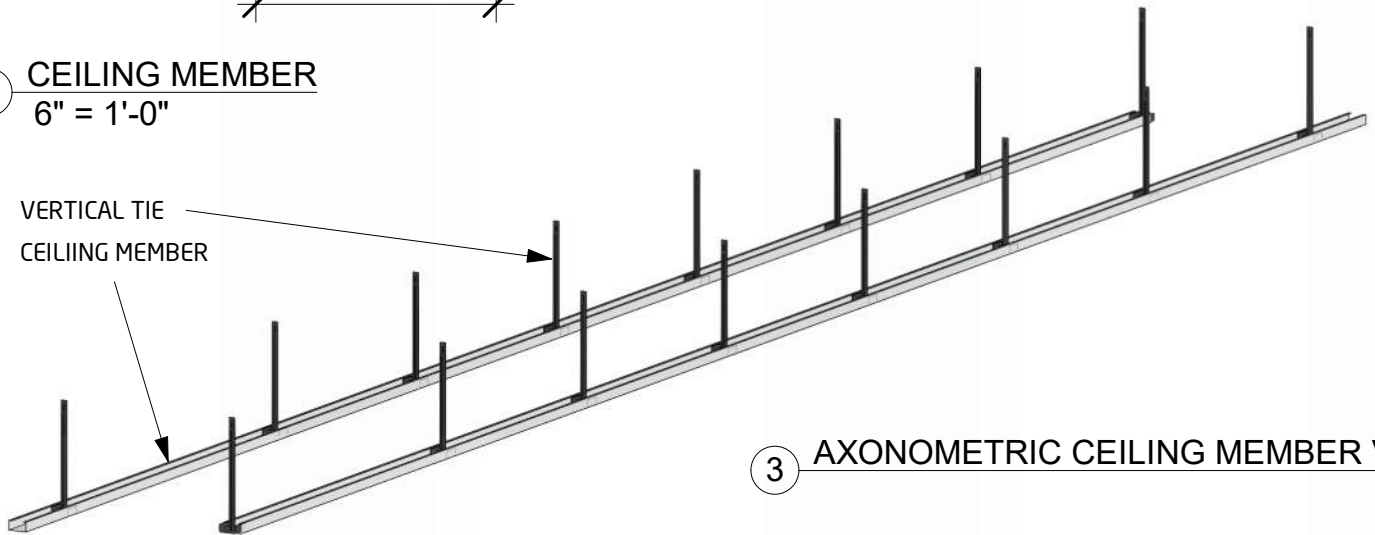
Scale As indicated



1 CEILING MEMBER CROSS SECTION  
1 1/2" = 1'-0"



2 CEILING MEMBER  
6" = 1'-0"

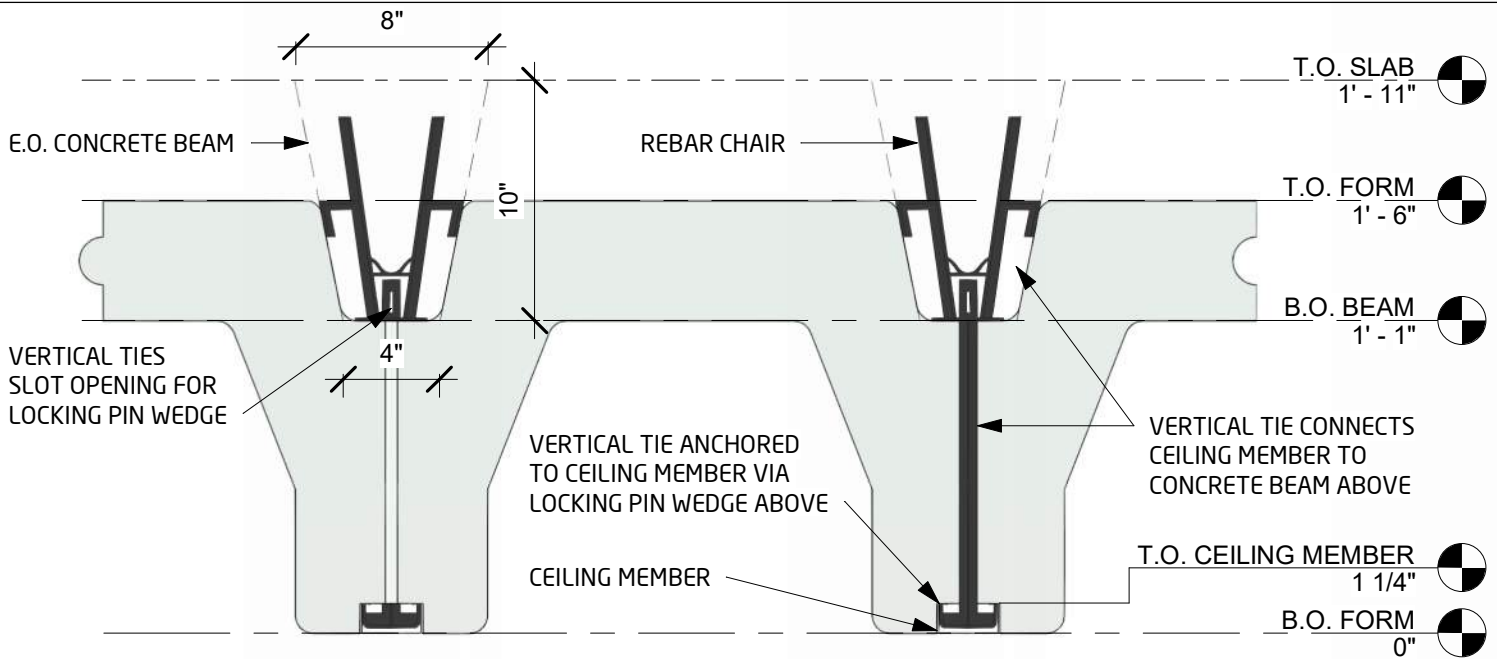


CLIMATE-DECK™  
24' SPAN

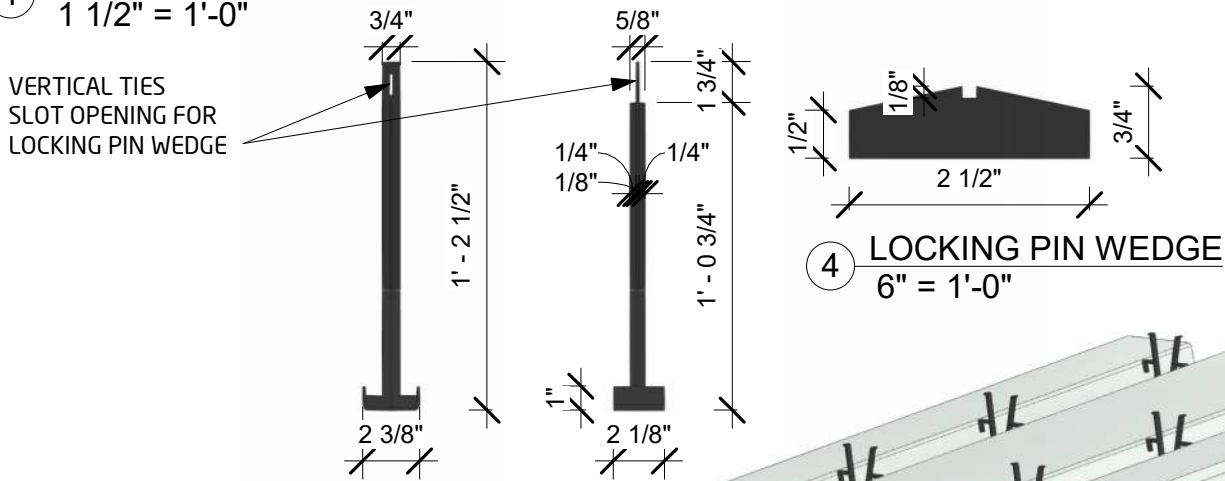
(2) @ 18" x 48" x 144"

## CEILING CONNECTION

Project number	CD1848144	<b>D2.0</b>
Date	TODAY	
Drawn by	Author	
Checked by	Checker	
Scale		As indicated

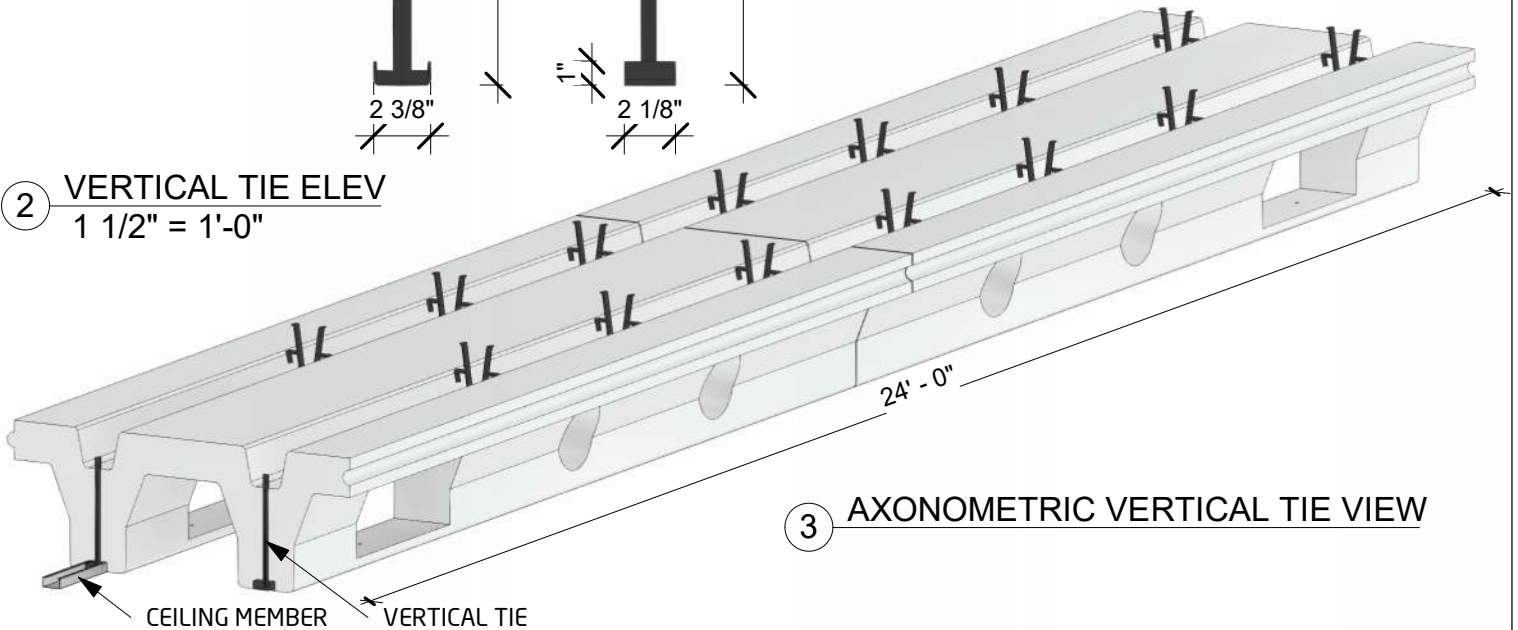


1 VERTICAL TIE CROSS SECTION  
1 1/2" = 1'-0"



4 LOCKING PIN WEDGE  
6" = 1'-0"

2 VERTICAL TIE ELEV  
1 1/2" = 1'-0"



3 AXONOMETRIC VERTICAL TIE VIEW

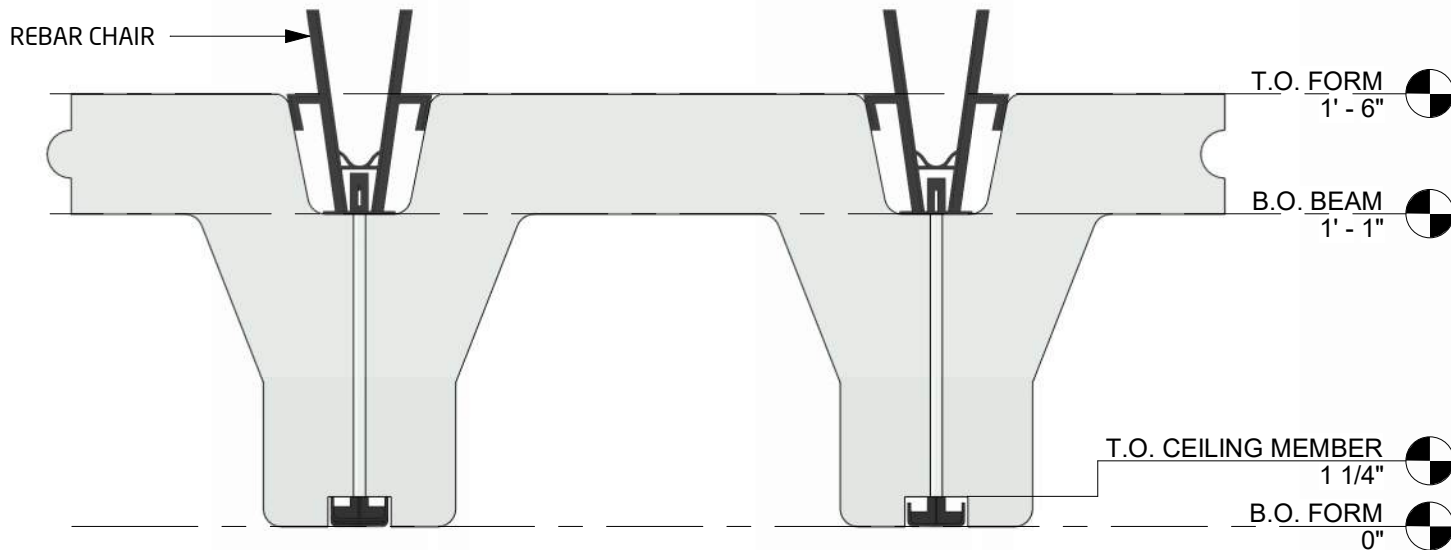
CLIMATE-DECK™  
24' SPAN

(2) @ 18" x 48" x 144"

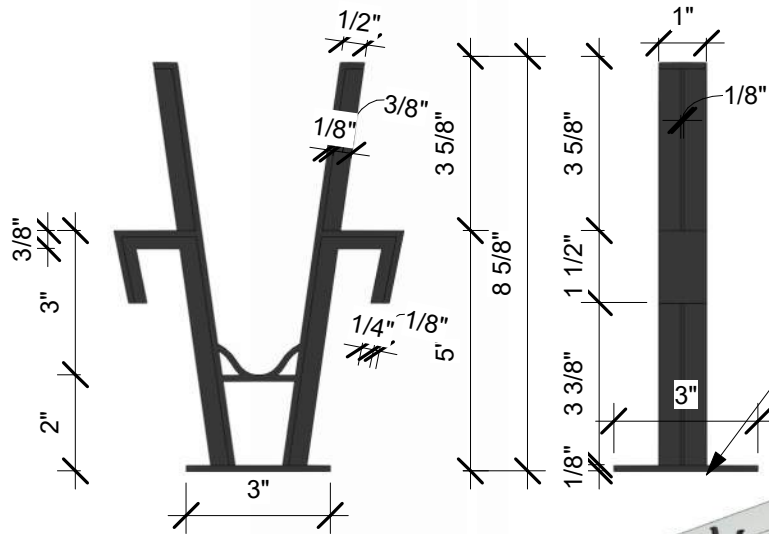
VERTICAL TIE & WEDGE

Project number	CD1848144	<b>D3.0</b>
Date	TODAY	
Drawn by	Author	
Checked by	Checker	
Scale		As indicated

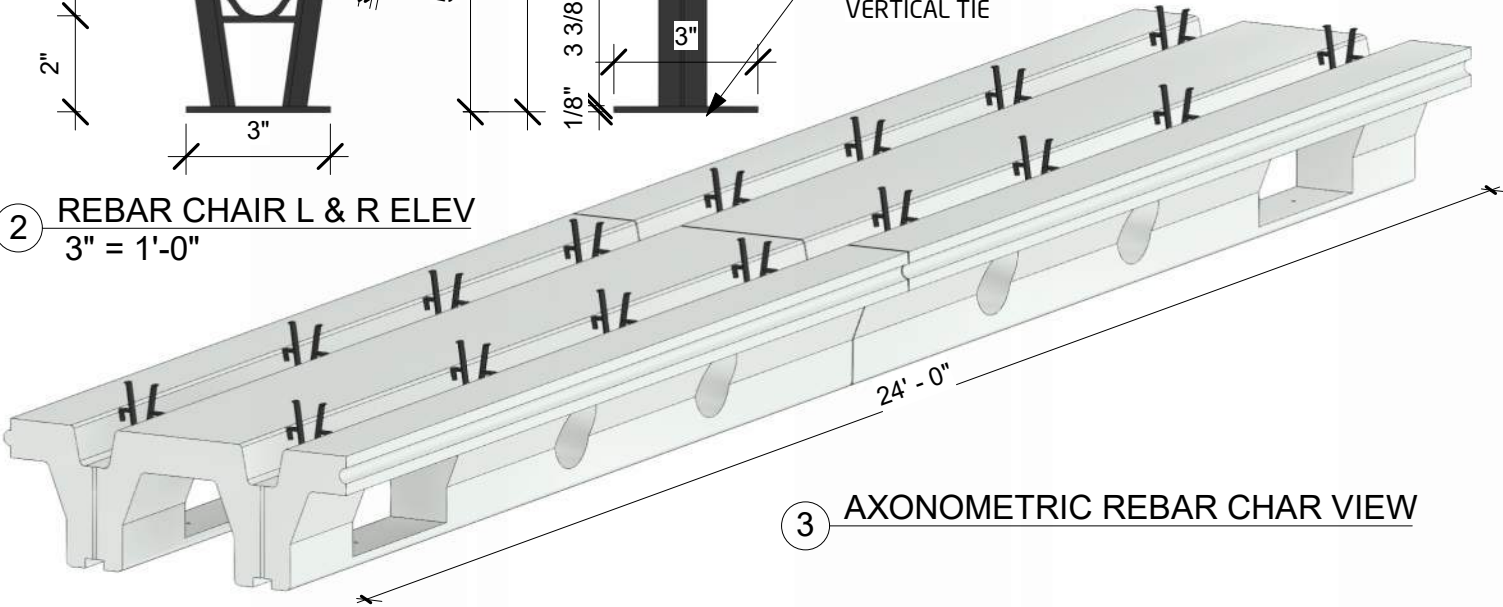




① REBAR CHAIR CROSS SECTION  
1 1/2" = 1'-0"



② REBAR CHAIR L & R ELEV  
3" = 1'-0"



③ AXONOMETRIC REBAR CHAIR VIEW

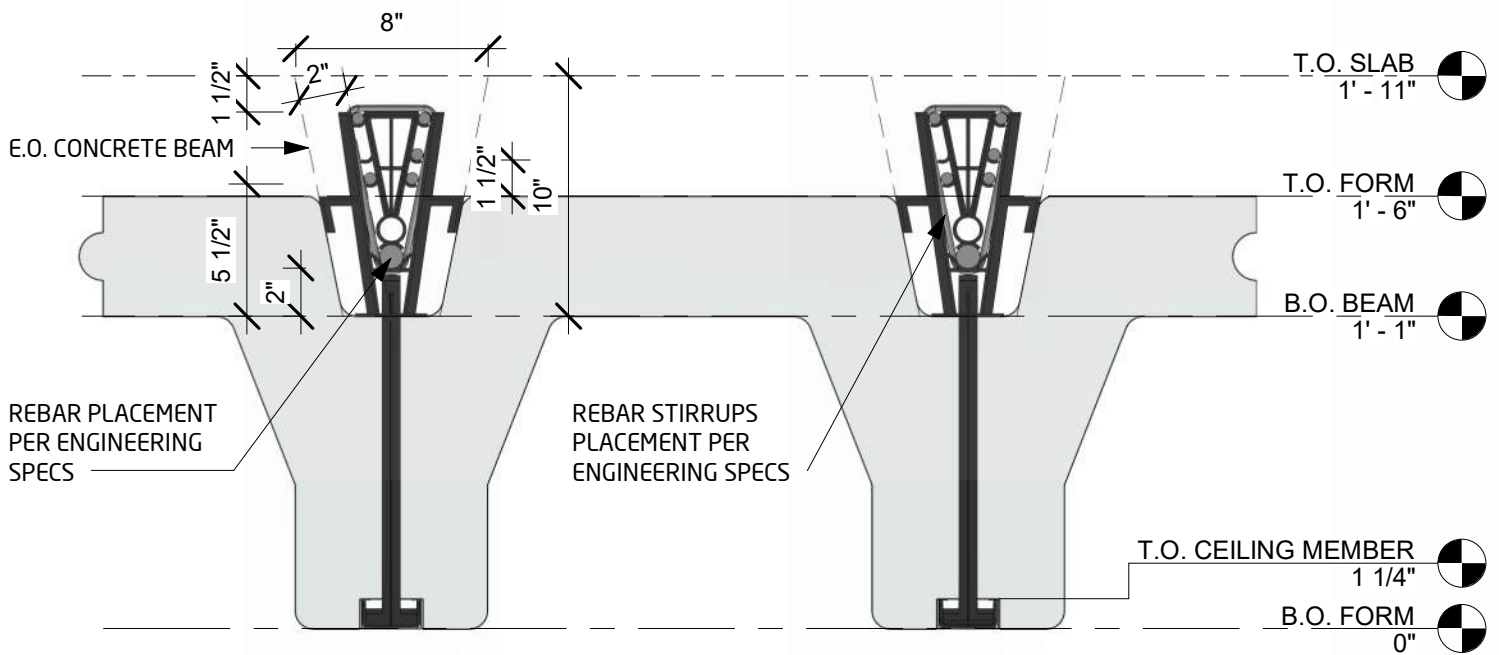


CLIMATE-DECK™  
24' SPAN

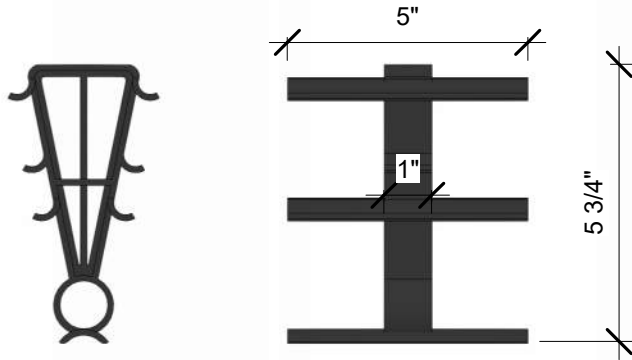
(2) @ 18" x 48" x 144"

### REBAR CHAIR

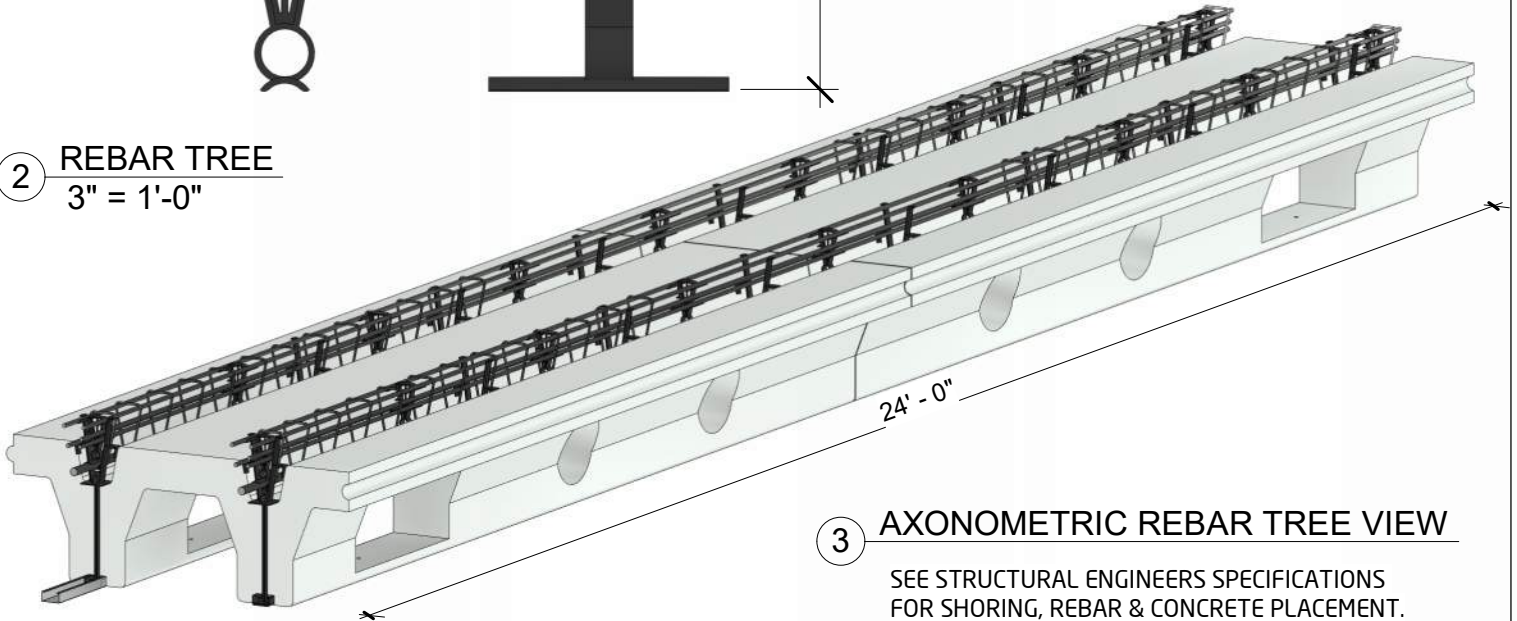
Project number	CD1848144	<b>D4.0</b>
Date	TODAY	
Drawn by	Author	
Checked by	Checker	
Scale		As indicated



① **REBAR TREE CROSS SECTION**  
 1 1/2" = 1'-0"



② **REBAR TREE**  
 3" = 1'-0"



③ **AXONOMETRIC REBAR TREE VIEW**

SEE STRUCTURAL ENGINEERS SPECIFICATIONS FOR SHORING, REBAR & CONCRETE PLACEMENT.

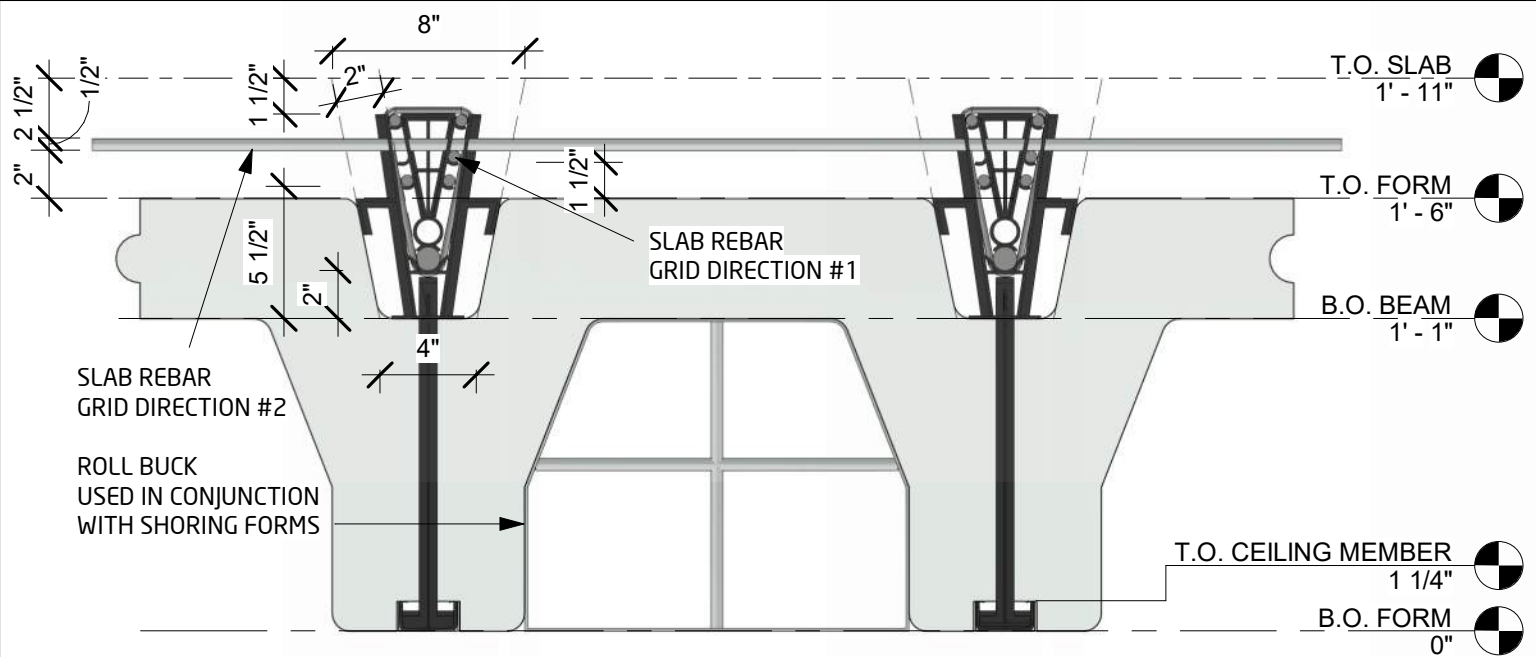


CLIMATE-DECK™  
 24' SPAN

(2) @ 18" x 48" x 144"

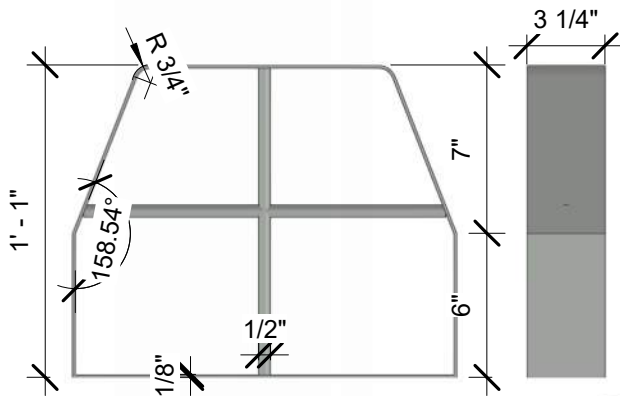
**REBAR TREE**

Project number	CD1848144	<b>D5.0</b>
Date	TODAY	
Drawn by	Author	
Checked by	Checker	
Scale	As indicated	

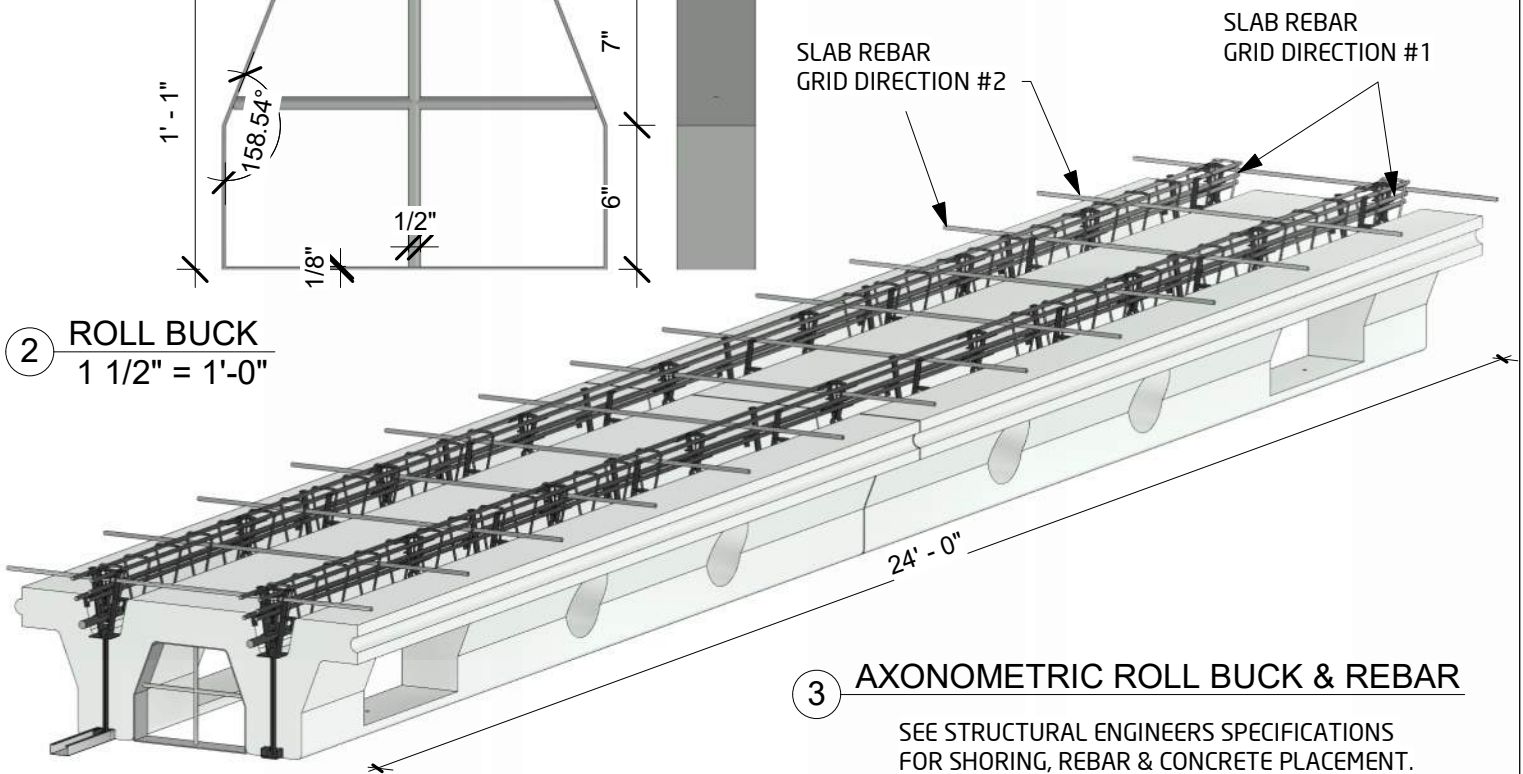


**ROLL BUCK & SLAB REBAR CROSS SECTION**

① 1 1/2" = 1'-0"



② ROLL BUCK  
1 1/2" = 1'-0"



③ AXONOMETRIC ROLL BUCK & REBAR

SEE STRUCTURAL ENGINEERS SPECIFICATIONS FOR SHORING, REBAR & CONCRETE PLACEMENT.

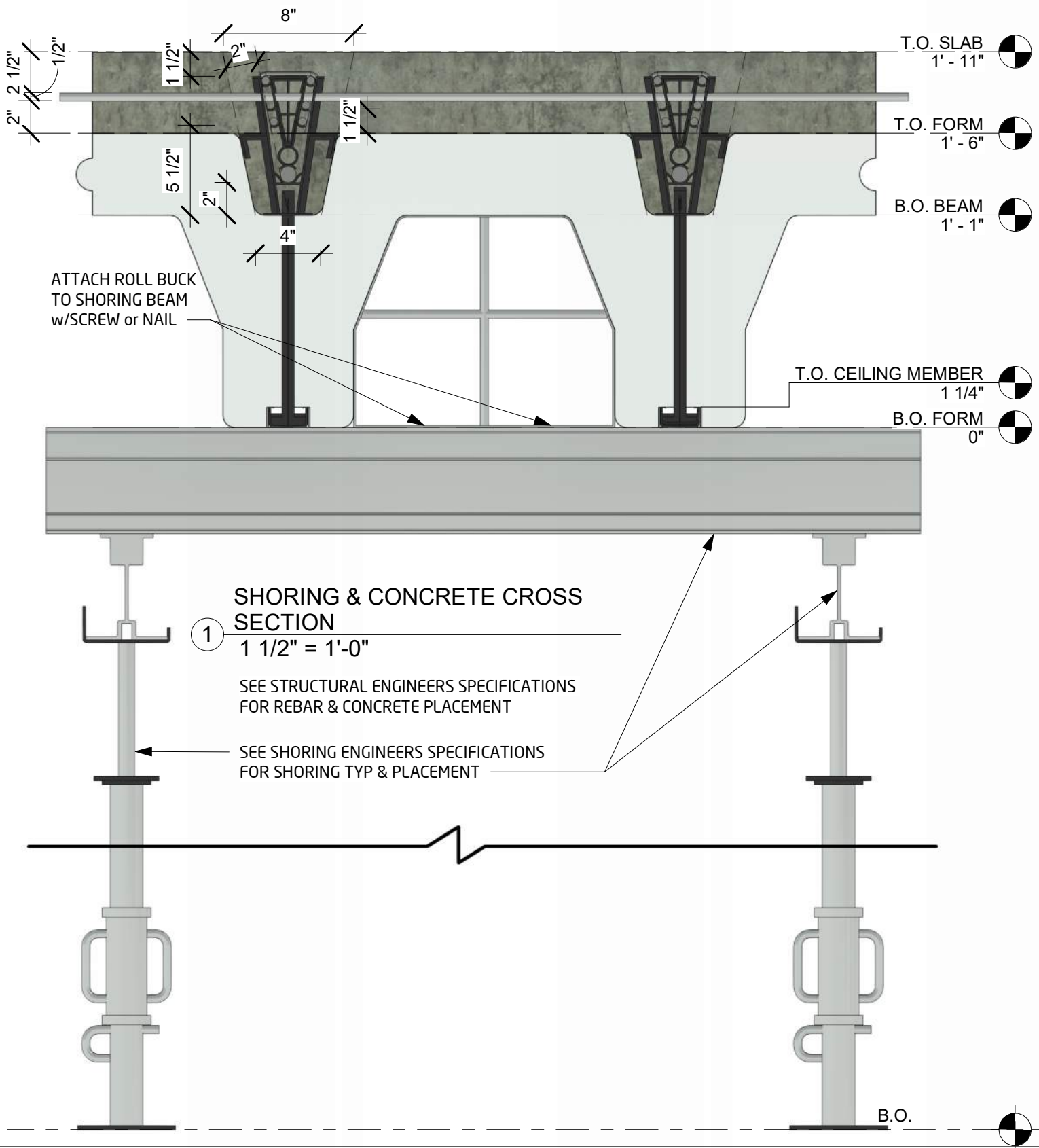


CLIMATE-DECK™  
24' SPAN

(2) @ 18" x 48" x 144"

**ROLL BUCK & SLAB REBAR**

Project number	CD1848144	<b>D6.0</b>
Date	TODAY	
Drawn by	Author	
Checked by	Checker	
		Scale 1 1/2" = 1'-0"

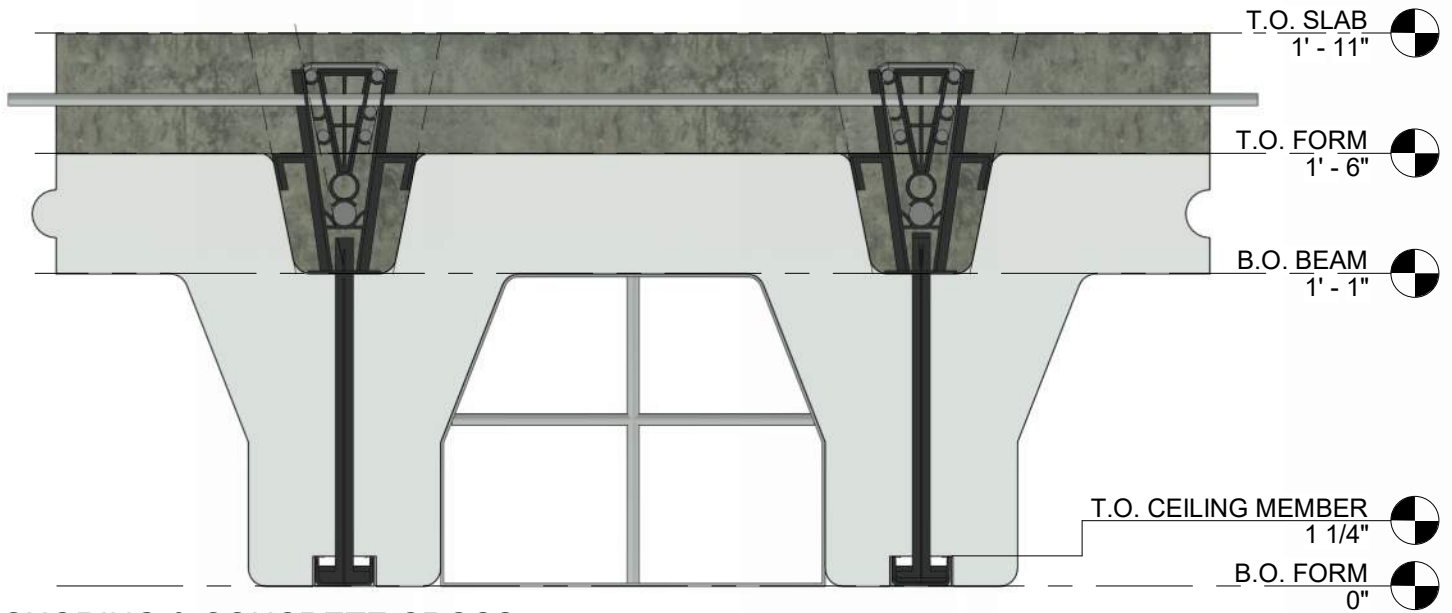


CLIMATE-DECK™  
24' SPAN

(2) @ 18" x 48" x 144"

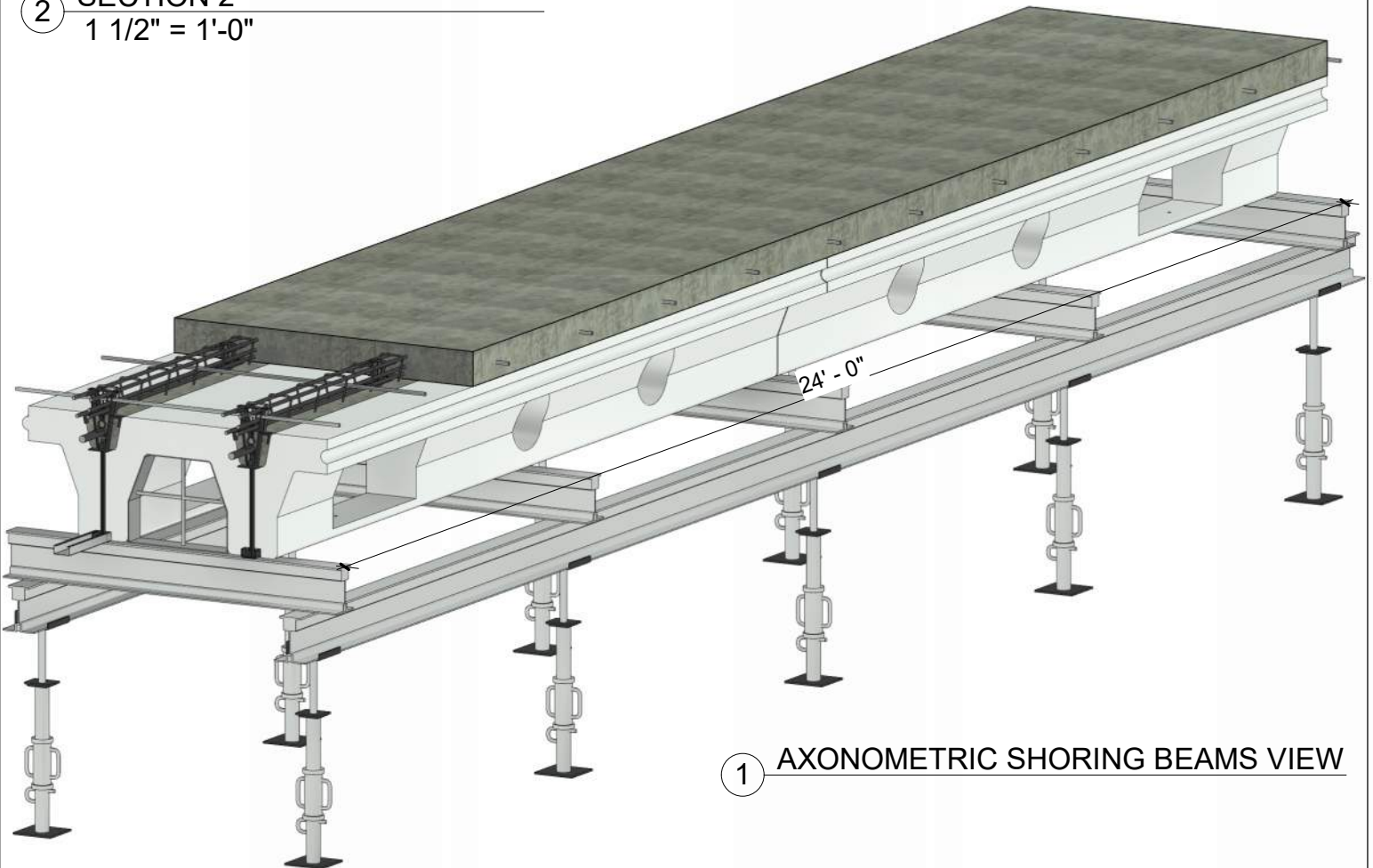
SHORING & CONCRETE

Project number	CD1848144	<b>D7.0</b>
Date	TODAY	
Drawn by	Author	
Checked by	Checker	
		Scale 1 1/2" = 1'-0"



SHORING & CONCRETE CROSS SECTION 2

② 1 1/2" = 1'-0"



① AXONOMETRIC SHORING BEAMS VIEW



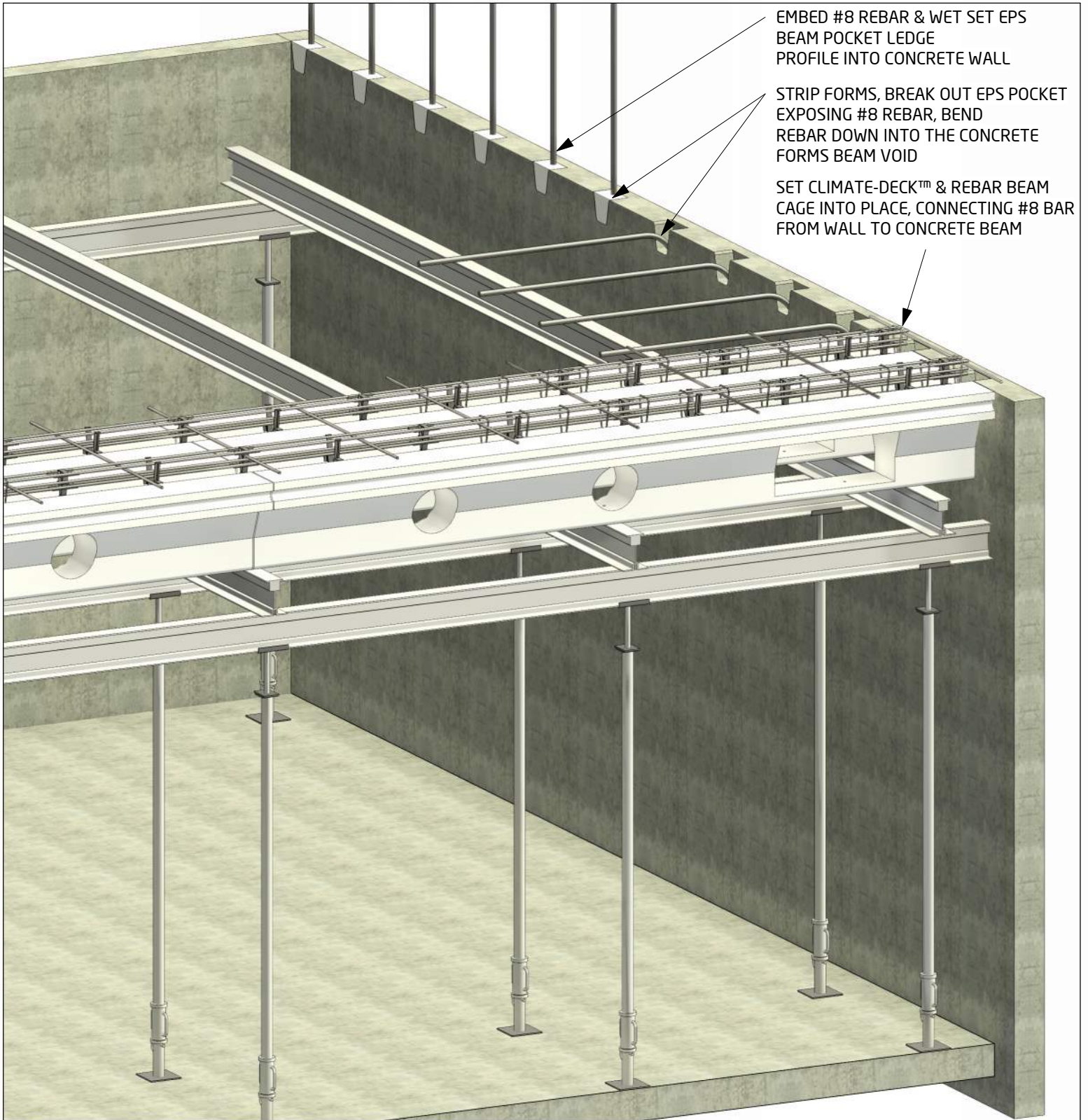
CLIMATE-DECK™  
24' SPAN

(2) @ 18" x 48" x 144"

SHORING & CONCRETE

Project number	CD1848144	D7.1
Date	TODAY	
Drawn by	Author	
Checked by	Checker	
Scale		1 1/2" = 1'-0"





EMBED #8 REBAR & WET SET EPS  
BEAM POCKET LEDGE  
PROFILE INTO CONCRETE WALL

STRIP FORMS, BREAK OUT EPS POCKET  
EXPOSING #8 REBAR, BEND  
REBAR DOWN INTO THE CONCRETE  
FORMS BEAM VOID

SET CLIMATE-DECK™ & REBAR BEAM  
CAGE INTO PLACE, CONNECTING #8 BAR  
FROM WALL TO CONCRETE BEAM

① FLOOR TO WALL BEAM VIEW



CLIMATE-DECK™  
24' SPAN

(2) @ 18" x 48" x 144"

## BEAM POCKET VIEW

Project number	CD1848144	D8.0
Date	TODAY	
Drawn by	AJ	Scale
Checked by	AJ	

# Concrete Beam

Lic. #: KW-06014113

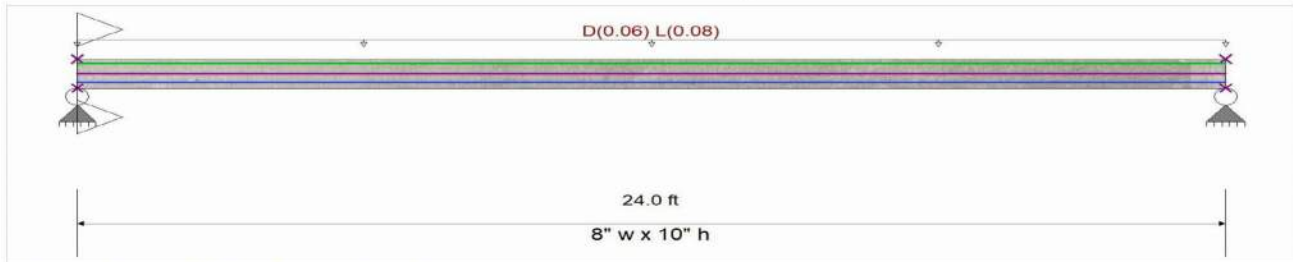
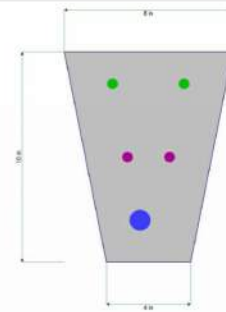
DESCRIPTION: typ 24' span

## CODE REFERENCES

Calculations per ACI 318-14, IBC 2018, CBC 2019, ASCE 7-16  
Load Combination Set : ASCE 7-16

## Material Properties

$f_c$	=	3.0 ksi	$\phi$ Phi Values	Flexure :	0.90
$f_r = f_c^{1/2} * 7.50$	=	410.792 psi		Shear :	0.750
$\psi$ Density	=	145.0 pcf	$\beta_1$	=	0.850
$\lambda$ LtWt Factor	=	1.0			
Elastic Modulus	=	3,122.0 ksi	Fy - Stirrups	=	40.0 ksi
$f_y$ - Main Rebar	=	60.0 ksi	E - Stirrups	=	29,000.0 ksi
E - Main Rebar	=	29,000.0 ksi	Stirrup Bar Size #	=	3
			Number of Resisting Legs Per Stirrup	=	2



## Cross Section & Reinforcing Details

Trapezoidal Section, TopWidth = 8.0 in, Bottom Width = 4.0 in, Height = 10.0 in

Span #1 Reinforcing...

1-#8 at 2.0 in from Bottom, from 0.0 to 24.0 ft in this span  
2-#4 at 5.0 in from Bottom, from 0.0 to 24.0 ft in this span

2-#4 at 1.50 in from Top, from 0.0 to 24.0 ft in this span

Beam self weight calculated and added to loads

Load for Span Number 1

Uniform Load : D = 0.030, L = 0.040 ksf, Tributary Width = 2.0 ft

## DESIGN SUMMARY

Design OK

Maximum Bending Stress Ratio =	<b>0.670</b> : 1	Maximum Deflection	
Section used for this span	<b>Typical Section</b>	Max Downward Transient Deflection	0.625 in Ratio = 460 >=360
Mu : Applied	19.620 k-ft	Max Upward Transient Deflection	0.000 in Ratio = 0 <360.0
Mn * Phi : Allowable	29.303 k-ft	Max Downward Total Deflection	1.735 in Ratio = 165 >=150
Location of maximum on span	12.022 ft	Max Upward Total Deflection	0.000 in Ratio = 0 <150.0
Span # where maximum occurs	Span # 1		

## Vertical Reactions

Support notation : Far left is #1

Load Combination	Support 1	Support 2
Overall MAXimum	2.405	2.405
Overall MINimum	0.867	0.867
+D+H	1.445	1.445
+D+L+H	2.405	2.405
+D+Lr+H	1.445	1.445
+D+S+H	1.445	1.445
+D+0.750Lr+0.750L+H	2.165	2.165
+D+0.750L+0.750S+H	2.165	2.165
+D+0.60W+H	1.445	1.445
+D+0.750Lr+0.750L+0.450W+H	2.165	2.165
+D+0.750L+0.750S+0.450W+H	2.165	2.165
+0.60D+0.60W+0.60H	0.867	0.867



CLIMATE-DECK™  
24' SPAN

(2) @ 18" x 48" x 144"

## Structural Detail

Project number	CD1848144	<b>SD-100</b>
Date	TODAY	
Drawn by	Author	
Checked by	Checker	
	Scale	