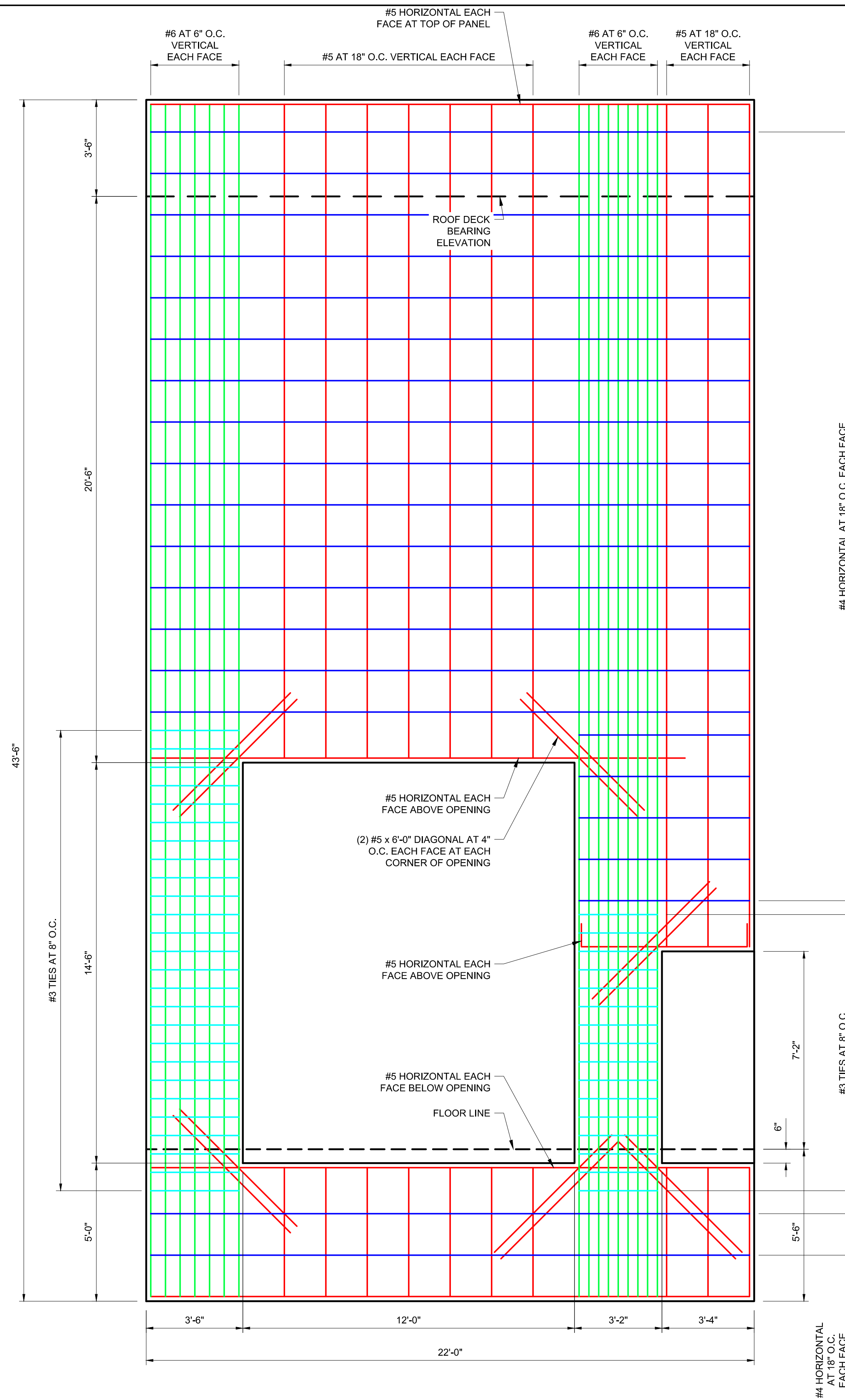


INNSTRUCT REINFORCING
 3/8" = 1'-0"

TIPS
 3" EXTERIOR CONCRETE WYTBE (COMPOSITE)
 4" EPS INSULATION
 2-1/4" INTERIOR CONCRETE WYTBE (COMPOSITE)
 9-1/4" TOTAL THICKNESS



ORIGINAL PANEL DESIGN
 3/8" = 1'-0"

ORIGINAL PANEL
 10" CONCRETE SECTION
 1-3/4" RIGID INSULATION ADHERED TO CONCRETE

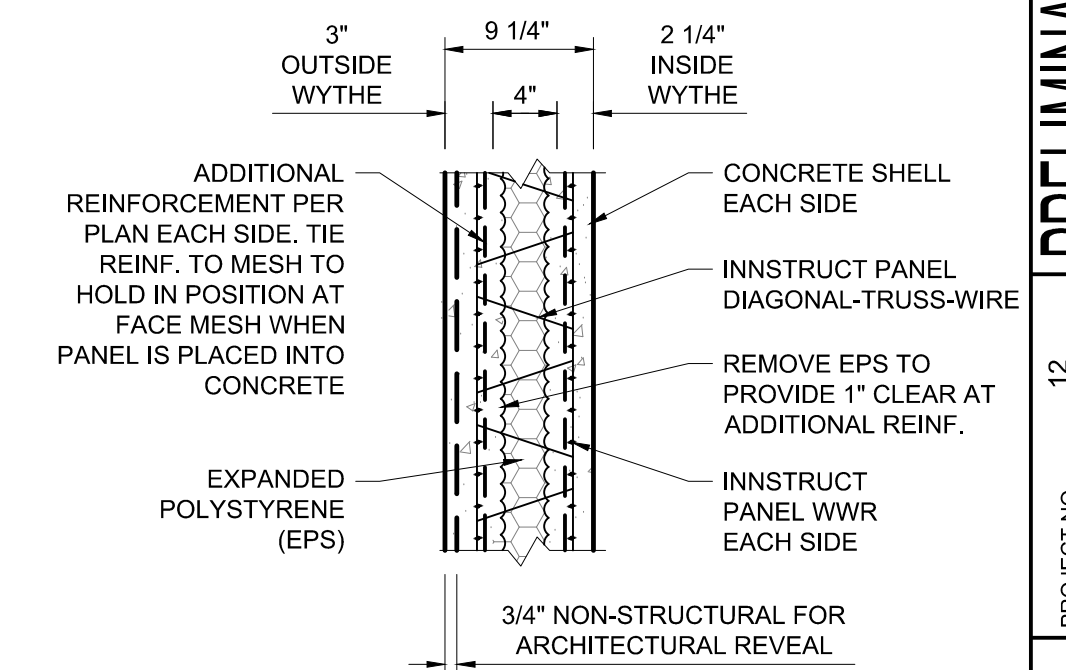
LIMITATION OF COMPARISON:
 ORIGINAL PANEL DRAWINGS ARE BASED ON PROJECT PLANS

TIPS COMPARISON DRAWINGS ARE PRELIMINARY AND ARE SUBJECT TO CHANGE BASED ON FINAL DESIGN.

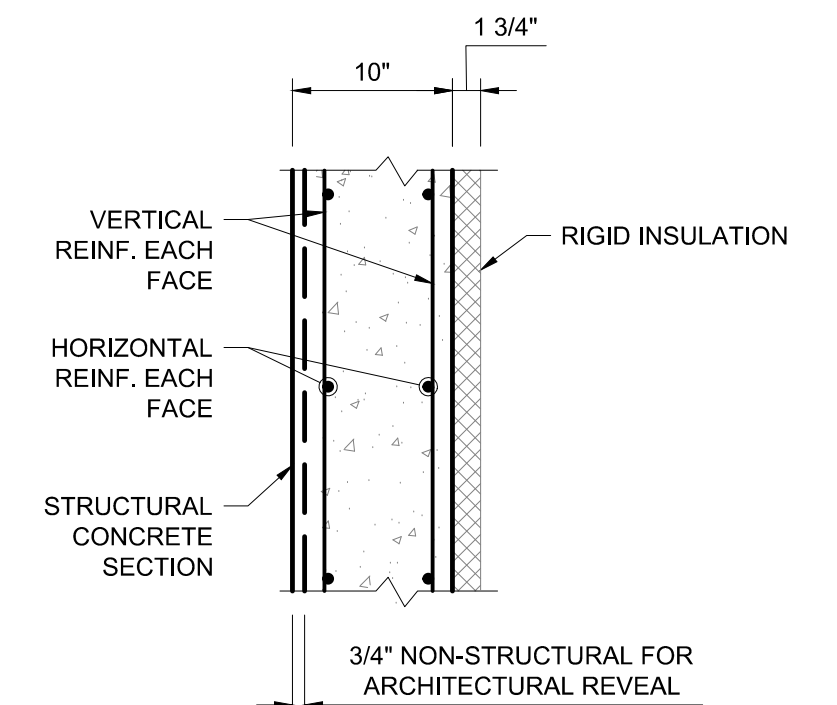
BAR SIZE LEGEND:

- #3 - CYAN
- #4 - BLUE
- #5 - RED
- #6 - GREEN
- #7 - PURPLE
- #8 - PINK

TIE BAR (SIZE PER COLOR)



TYPICAL INNSTRUCT PANEL
 SCALE: N.T.S.



ORIGINAL PANEL SECTION
 SCALE: N.T.S.

<p>FORSGREN Associates Inc. 95 WEST 100 SOUTH, STE. 115, LOGAN, UT 84321 PH: 435.227.0334</p>	
<p>PRELIMINARY DRAWING NOT FOR CONSTRUCTION</p>	<p>PROJECT NO. 12 DRAWN DESIGNED APPROVED QA/QC</p>
<p>INNOVATIVE STRUCTURAL SOLUTIONS</p>	<p>PROJECT 12 TIPS COMPARISON</p>
<p>SHEET NO:</p>	<p>DATE: NOVEMBER 2020 PAGE NO:</p>

INNSTRUCT | Total Integrated Panel System (TIPS)

Basic Design Comparison and Material Displacement Estimate

Project: **12E**

Prepared by:

Kim D. Blackburn

Panel Description: S104 Dock and man door

Date:

1/1/2021

Total Wall Square Feet: 54,000

Total Panels in Project: 52

Panel Configuration:

- 14 Number of Similar Panels in Project
- 43.50 Height (ft)
- 25.00 Width (ft)
- 180 Area of Openings (ft²) dock door, man door
- 908 Panel Area (ft²)
- 150 Concrete Weight (lbs./ft³)



Original Design Configuration:

0	Architectural Wythe (in)
1.75	Insulation (in)
10	Structural Wythe (in)
10	Concrete Thickness (in)
11.75	Total Thickness (in)
13.8	R-value Materials Only

Innstruct | TIPS Design Configuration:

3	Outside Wythe (in)
4	Insulation (in)
2.25	Inside Wythe (in)
5.25	Concrete Thickness (in)
9.25	Total Thickness (in)
22.6	R-value Materials Only

Design Comparison | Material Displacement:

Original Design

Material	Amount	Units
Concrete	28	cubic yds
Reinforcement	3,431	lbs.
Panel Weight	116,869	lbs.

TIPS Design

Amount	Units	% Reduced
15	cubic yds	48%
933	lbs.	73%
60,488	lbs.	48%

INNOVATIVE STRUCTURAL SOLUTIONS

375 East 400 North - Morgan, Utah 84050 | www.innstruct.com

BETTER PANEL | LESS EFFORT | MORE PROFIT