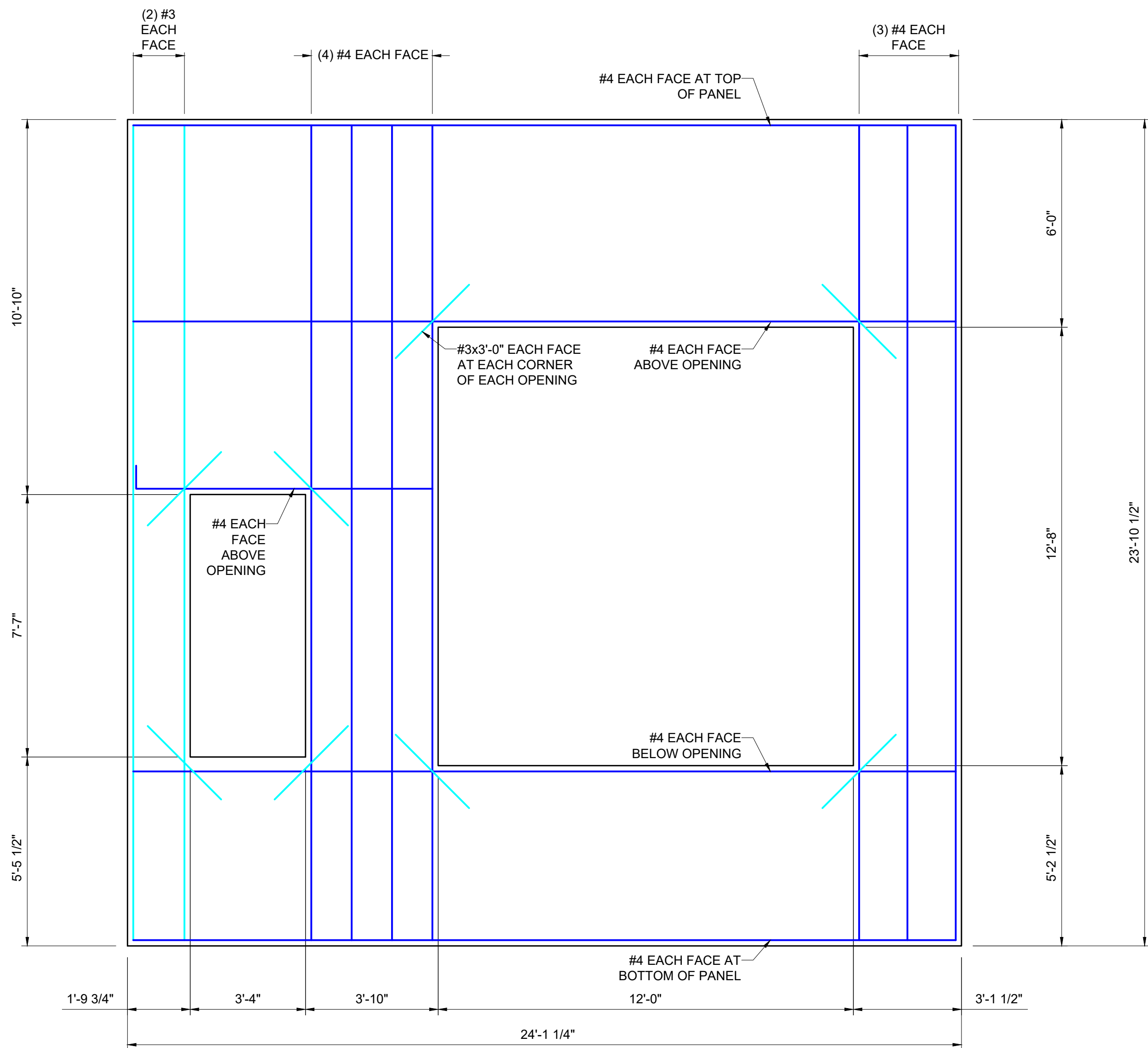


G:\Projects\18\14-18-0042 ISS Panels\14 Tilt-up Panel Comparison\0-Project Summary\CAD\SHEETS\5.dwg - 11/25/2020 3:09 PM



**TIPS REINFORCING**  
SCALE: 3/8" = 1'-0"

**TIPS**  
2-3/4" EXTERIOR CONCRETE WYTHE (COMPOSITE)  
4" EPS INSULATION  
2" INTERIOR CONCRETE WYTHE (COMPOSITE)  
8-3/4" TOTAL THICKNESS

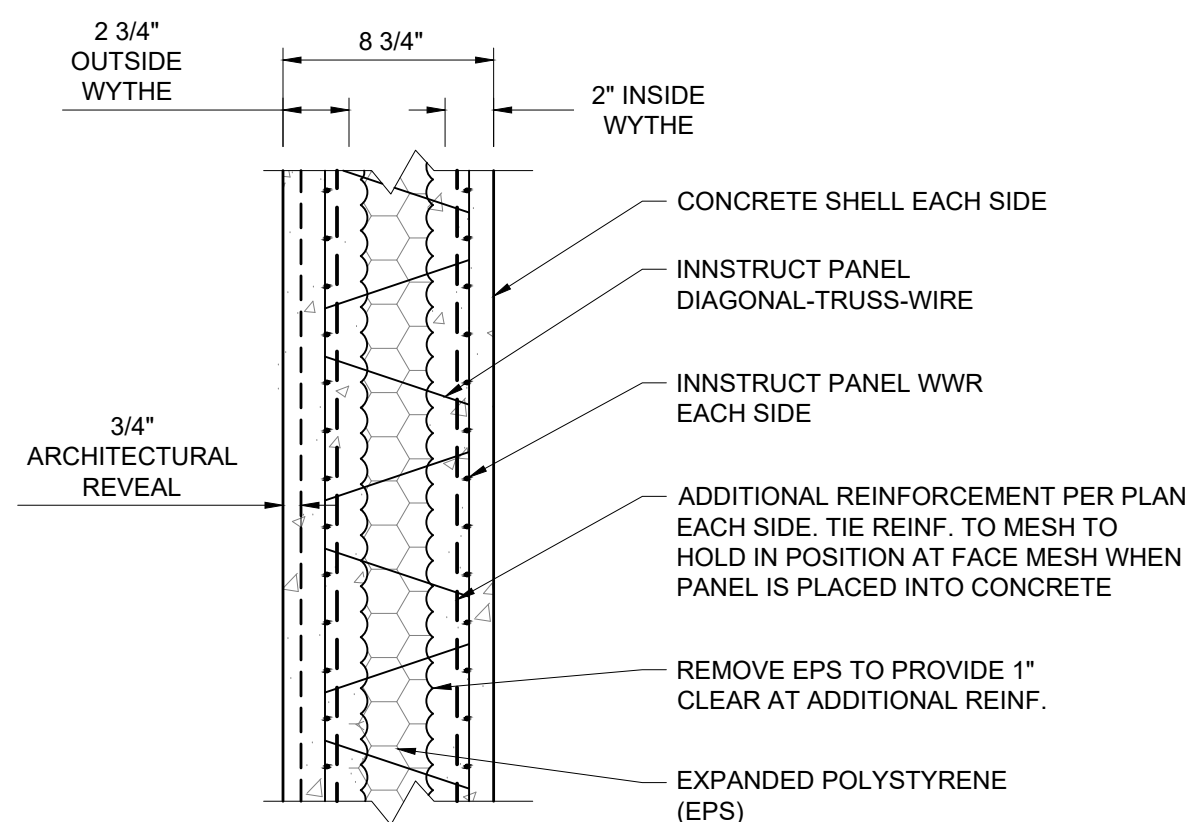
**LIMITATION OF COMPARISON:**  
ORIGINAL PANEL DRAWINGS ARE BASED ON PROJECT PLANS

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

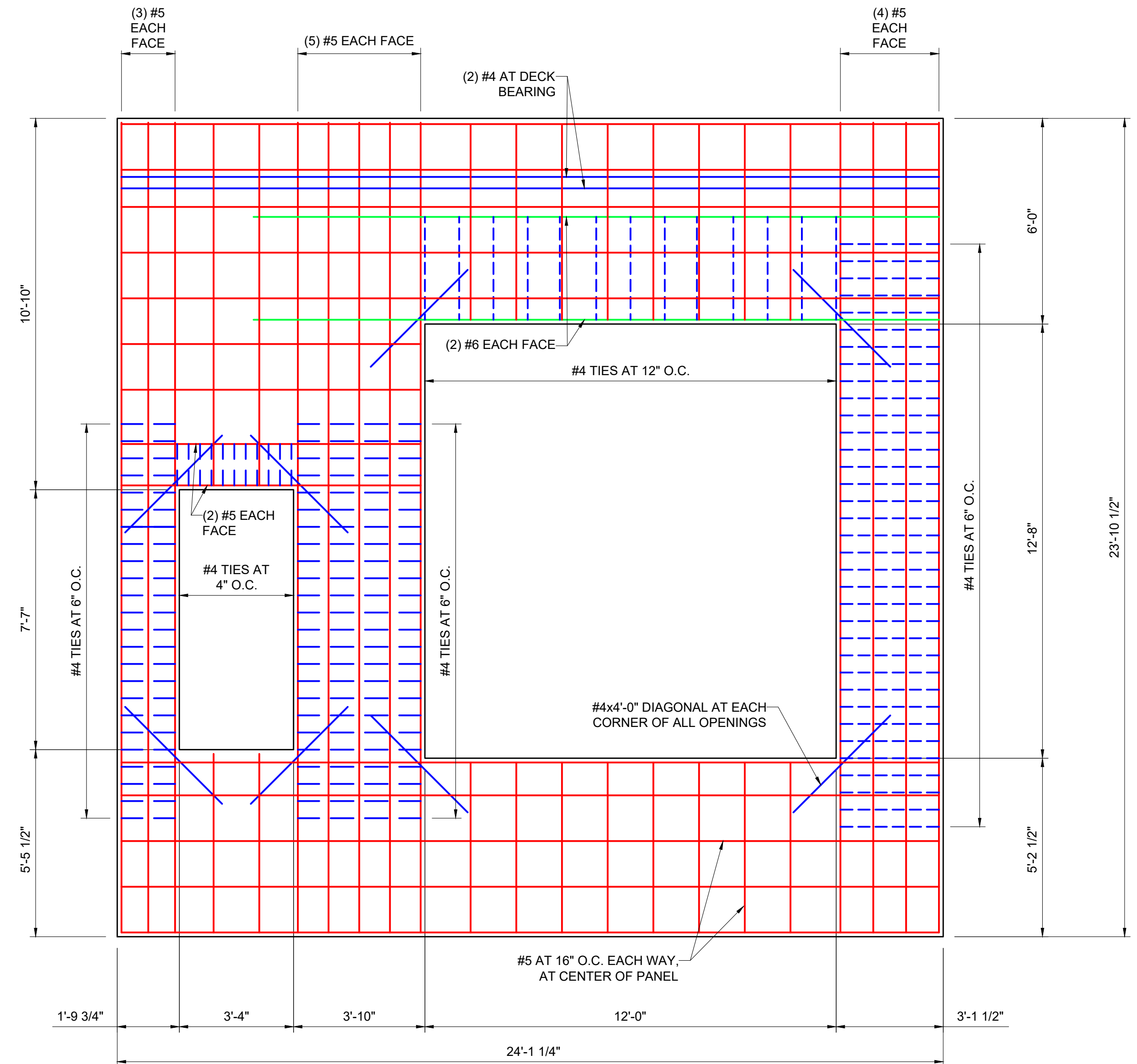
**BAR SIZE LEGEND:**

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

TIE BAR - - - - (SIZE PER COLOR)

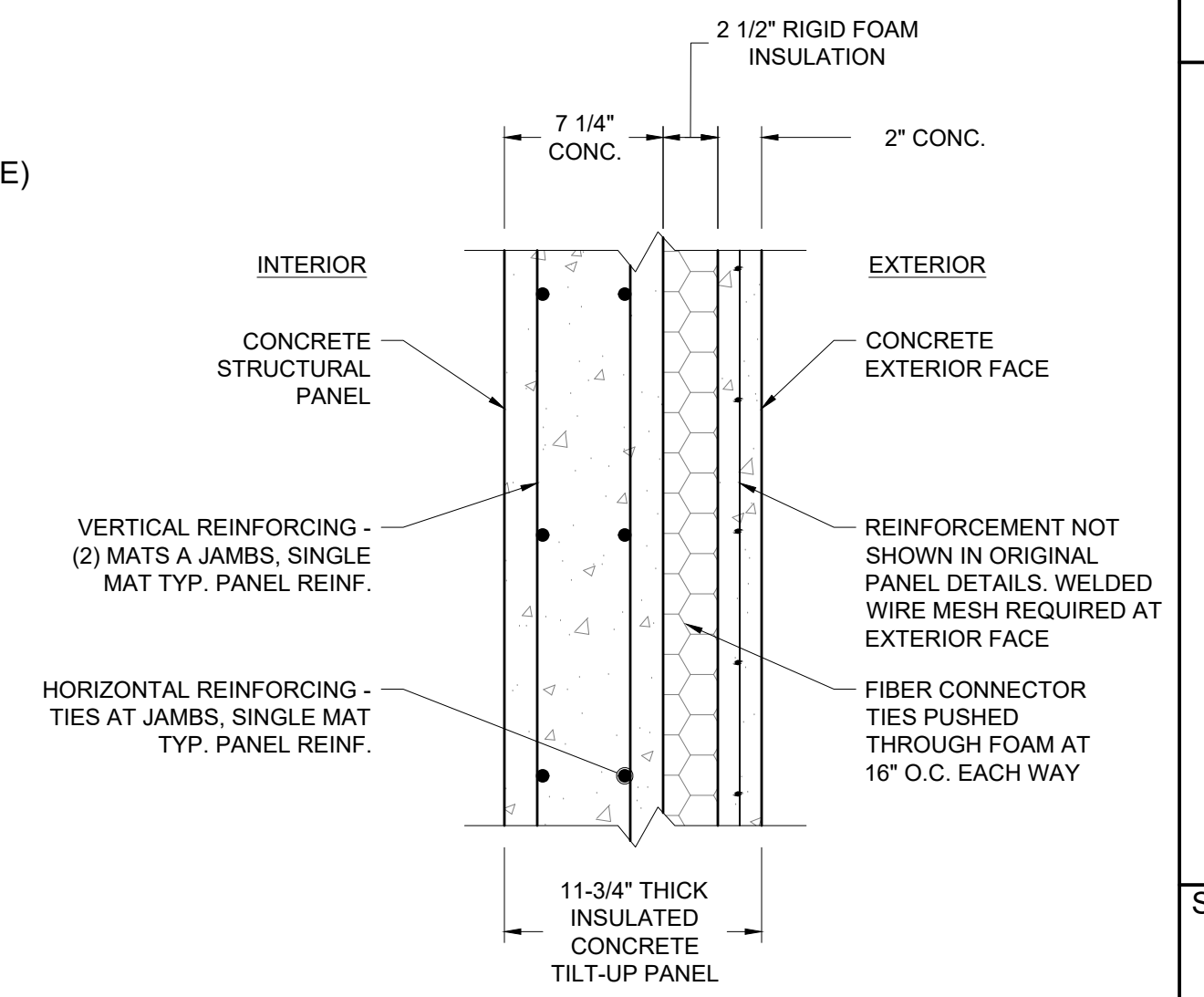


**TYPICAL TIPS SECTION**  
SCALE: 1" = 1'-0"



**ORIGINAL PANEL REINFORCING**  
SCALE: 3/8" = 1'-0"

**INSULATED PANEL**  
2" EXTERIOR CONCRETE WYTHE (NON-COMPOSITE)  
2-1/2" RIGID INSULATION  
7-1/4" INTERIOR CONCRETE WYTHE (NON-COMPOSITE)  
11-3/4" TOTAL THICKNESS



**TYPICAL INSULATED PANEL DETAIL**  
SCALE: 1" = 1'-0"

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<b>PRELIMINARY DRAWING NOT FOR CONSTRUCTION</b>							PROJECT NO. 5 DRAWN DESIGNED APPROVED QA/QC
<b>INNOVATIVE STRUCTURAL SOLUTIONS</b>							<b>PROJECT 5B</b>  <b>TIPS COMPARISON</b>
							SHEET NO: DATE: NOVEMBER 2020 PAGE NO:

# INNSTRUCT | Total Integrated Panel System (TIPS)

## Basic Design Comparison and Material Displacement Estimate

Project: **5B**  
 Panel Description: S2 dock door and man door  
 Total Wall Square Feet: 10,800  
 Total Panels in Project: 18

Prepared by: Kim D. Blackburn  
 Date: 1/1/2021

**Panel Configuration:**

- 2 Number of Similar Panels in Project
- 23.88 Height (ft)
- 24.08 Width (ft)
- 177 Area of Openings (ft<sup>2</sup>) 2 openings
- 398 Panel Area (ft<sup>2</sup>)
- 150 Concrete Weight (lbs./ft<sup>3</sup>)



### Original Design Configuration:

2	Architectural Wythe (in)
2.5	Insulation (in)
7.25	Structural Wythe (in)
9.25	Concrete Thickness (in)
11.75	Total Thickness (in)
17.1	R-value Materials Only

### Innstruct | TIPS Design Configuration:

2.75	Outside Wythe (in)
4	Insulation (in)
2.25	Inside Wythe (in)
5	Concrete Thickness (in)
9	Total Thickness (in)
22.5	R-value Materials Only

### Design Comparison | Material Displacement:

#### Original Design

Material	Amount	Units
Concrete	11	cubic yds
Reinforcement	2,364	lbs.
Panel Weight	48,349	lbs.

#### TIPS Design

Amount	Units	% Reduced
6	cubic yds	<b>46%</b>
595	lbs.	<b>75%</b>
25,452	lbs.	<b>47%</b>

INNOVATIVE STRUCTURAL SOLUTIONS

375 East 400 North - Morgan, Utah 84050 | [www.innstruct.com](http://www.innstruct.com)

BETTER PANEL | LESS EFFORT | MORE PROFIT