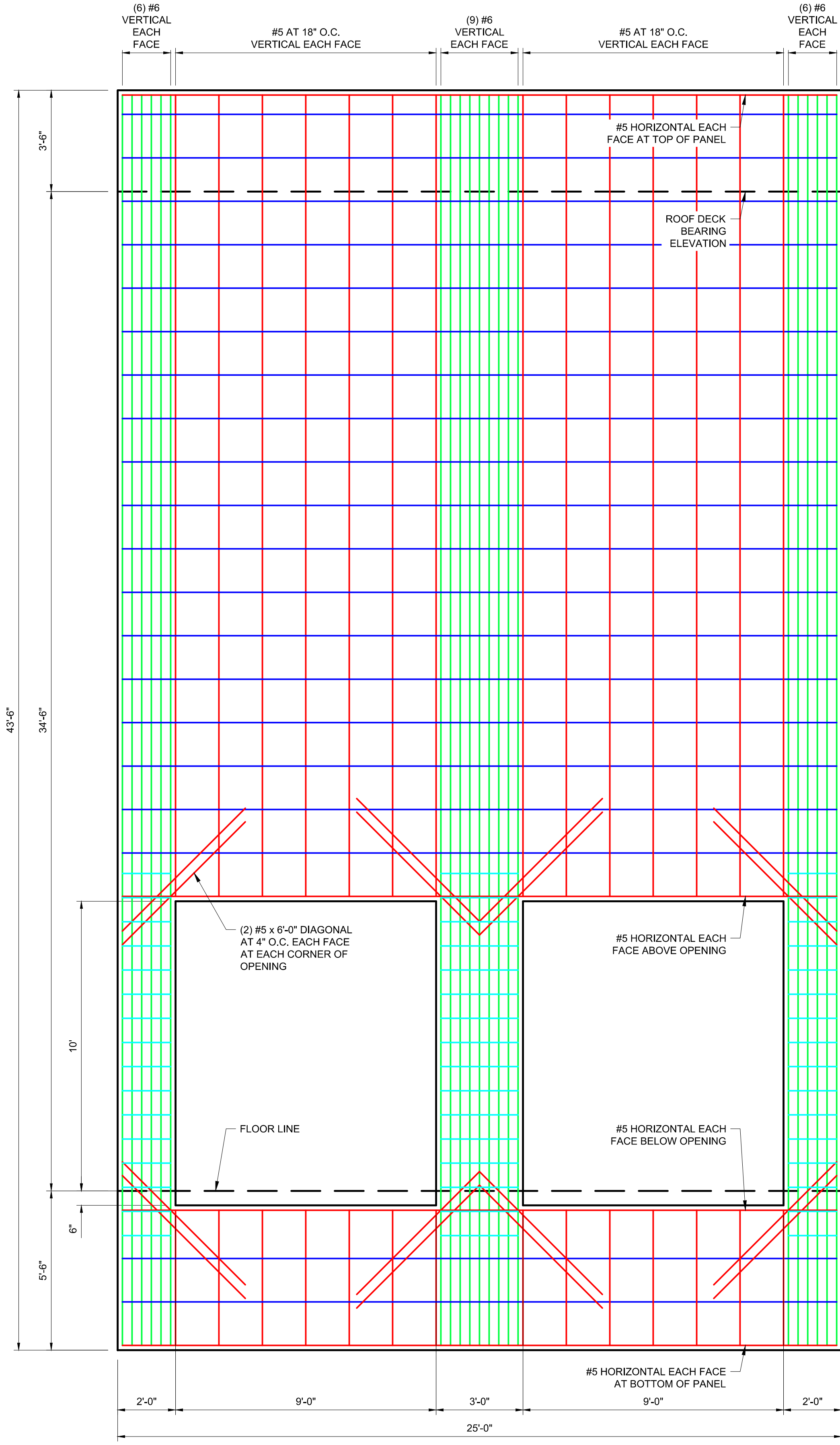


TIPS REINFORCING
3/8" = 1'-0"

TIPS
3" EXTERIOR CONCRETE WYTHE (COMPOSITE)
4" EPS INSULATION
2-1/4" INTERIOR CONCRETE WYTHE (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

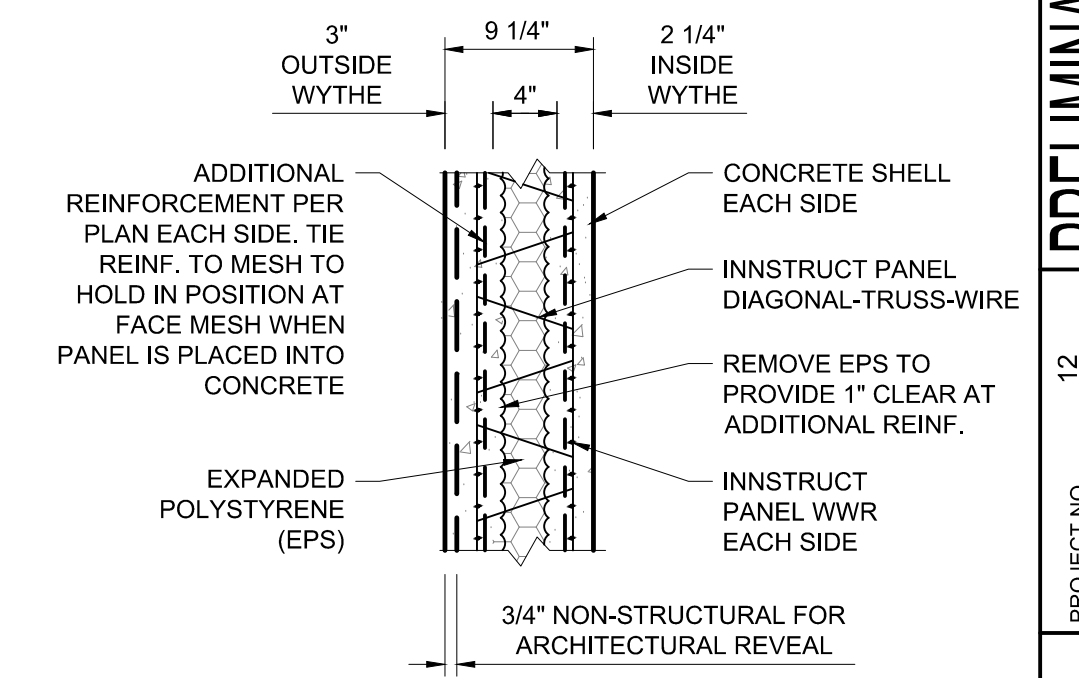
LIMITATION OF COMPARISON:
ORIGINAL PANEL DRAWINGS ARE BASED ON PROJECT PLANS

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

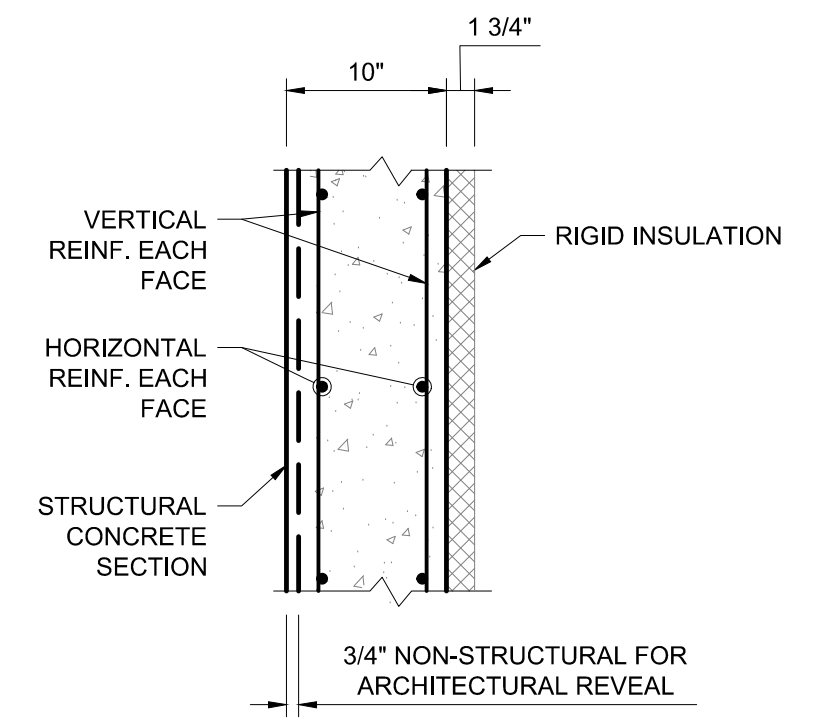
BAR SIZE LEGEND:

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

TIE BAR - - - - (SIZE PER COLOR)



TYPICAL TIPS SECTION
SCALE: N.T.S.



ORIGINAL PANEL SECTION
SCALE: N.T.S.

PRELIMINARY DRAWING NOT FOR CONSTRUCTION							FORSGREN Associates Inc.
<p>PROJECT NO. 12</p> <p>DRAWN _____ DESIGNED _____ APPROVED _____ QA/QC _____</p>							<p>95 WEST 100 SOUTH, STE. 115, LOGAN, UT 84321 PH: 435.227.0333 FAX: 435.227.0334</p>
INNOVATIVE STRUCTURAL SOLUTIONS							<p>NO. _____</p> <p>REVISIONS _____</p> <p>BY _____ DATE _____</p> <p><small>This document or any part thereof in detail or design, copyright is the property of Forsgren Associates Inc. and shall not be reproduced, stored in a retrieval system, or transmitted in any form or by any means, without the written authorization of Forsgren Associates Inc.</small></p>
PROJECT 12							TIPS COMPARISON
SHEET NO. _____							DATE: NOVEMBER 2020
PAGE NO. _____							PAGE NO. _____

INNSTRUCT | Total Integrated Panel System (TIPS)

Basic Design Comparison and Material Displacement Estimate

Project: **12F**
 Panel Description: S105 Dock door
 Total Wall Square Feet: 54,000
 Total Panels in Project: 52

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

Panel Configuration:

- 1 Number of Similar Panels in Project
- 43.50 Height (ft)
- 22.00 Width (ft)
- 174 Area of Openings (ft²) dock doors
- 783 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	24	cubic yds
Reinforcement	3,571	lbs.
Panel Weight	101,446	lbs.

TIPS Design

Amount	Units	% Reduced
13	cubic yds	48%
684	lbs.	81%
52,068	lbs.	49%

INNOVATIVE STRUCTURAL SOLUTIONS

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

BETTER PANEL | LESS EFFORT | MORE PROFIT