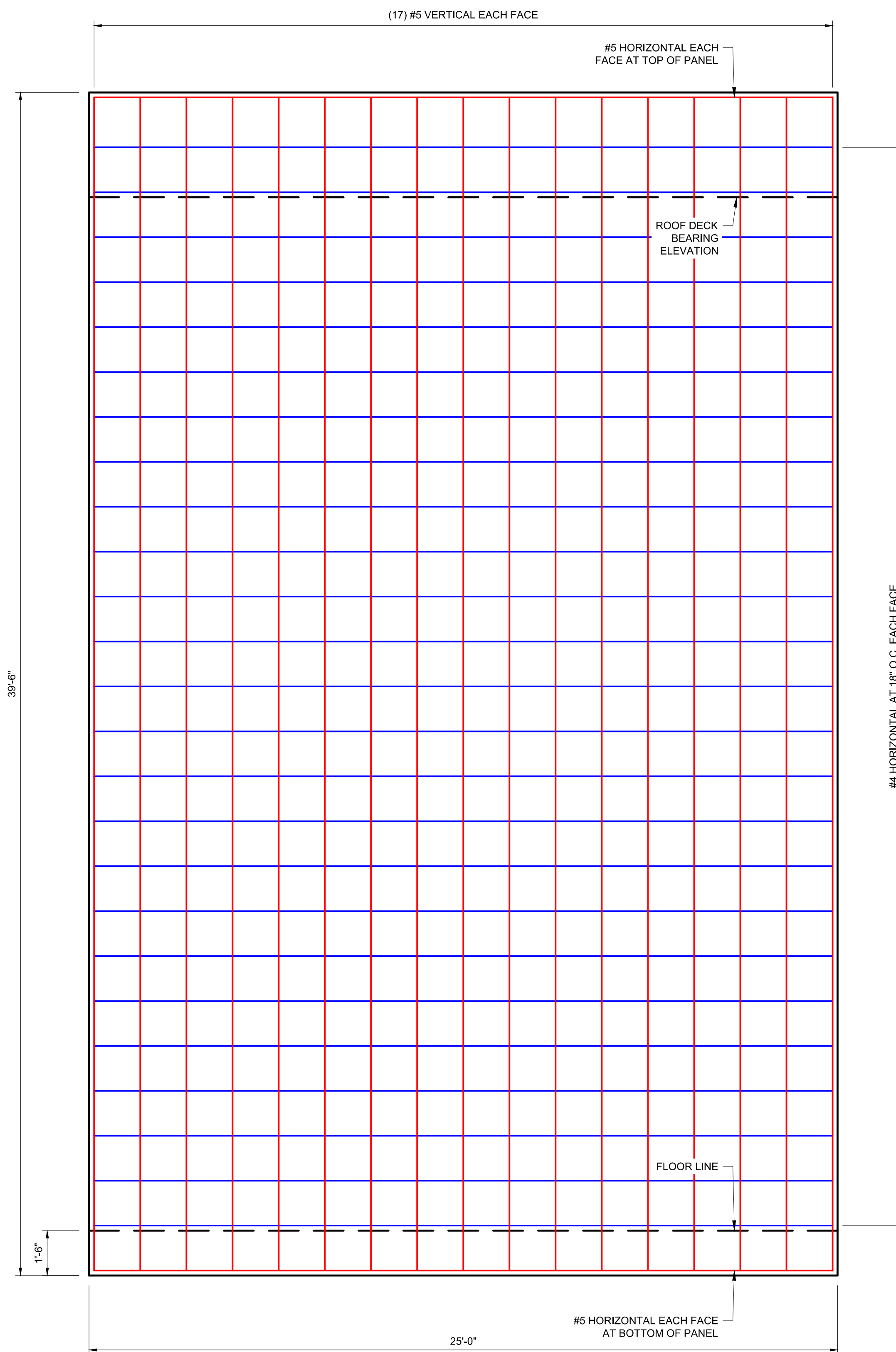


TIPS REINFORCING

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

#4 HORIZONTAL AT 18" O.C. EACH FACE

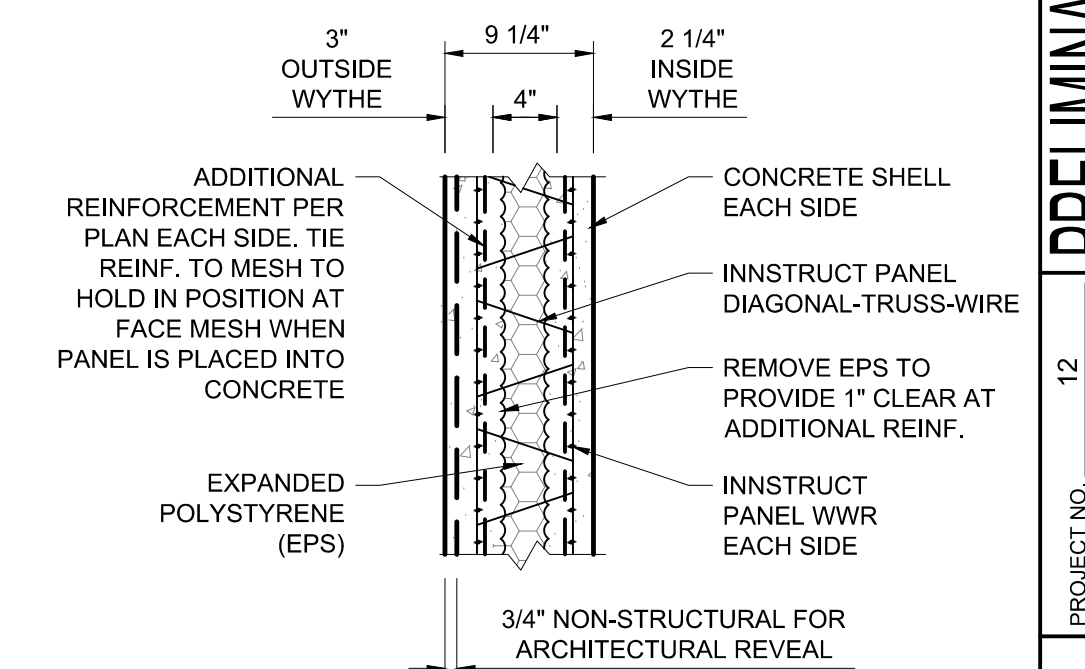
LIMITATION OF COMPARISON:
ORIGINAL PANEL DRAWINGS ARE BASED ON PROJECT PLANS

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

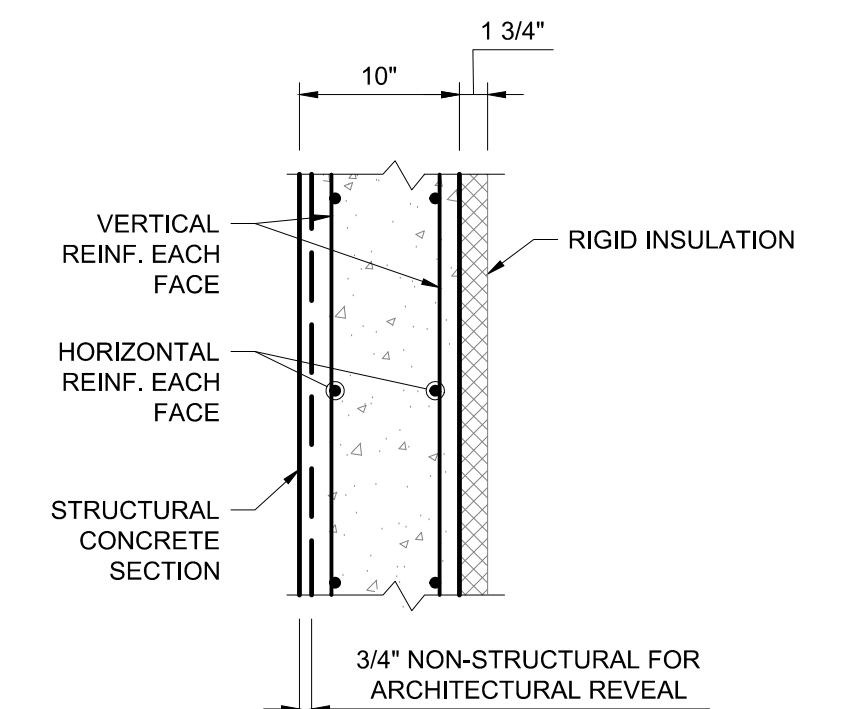
BAR SIZE LEGEND:

- #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.	
PROJECT NO. 12 DRAWN _____ DESIGNED _____ APPROVED _____ QA/QC _____							NO. _____ REVISIONS _____ BY _____ DATE _____ <small>This document or any part thereof in detail or design shall be the property of Forsgren Associates Inc. and shall not be reproduced or transmitted in any form or by any means without the written authorization of Forsgren Associates Inc.</small>	
INNOVATIVE STRUCTURAL SOLUTIONS							PROJECT 12	
TIPS COMPARISON							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: **12B**
 Panel Description: S101 no openings
 Total Wall Square Feet: 54,000
 Total Panels in Project: 52

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

Panel Configuration: 23 Number of Similar Panels in Project
 39.50 Height (ft)
 25.00 Width (ft)
 - Area of Openings (ft²)
 988 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	30	cubic yds
Reinforcement	2,387	lbs.
Panel Weight	125,825	lbs.

TIPS Design

Amount	Units	% Reduced
16	cubic yds	48%
612	lbs.	74%
65,417	lbs.	48%

INNOVATIVE STRUCTURAL SOLUTIONS

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

BETTER PANEL | LESS EFFORT | MORE PROFIT