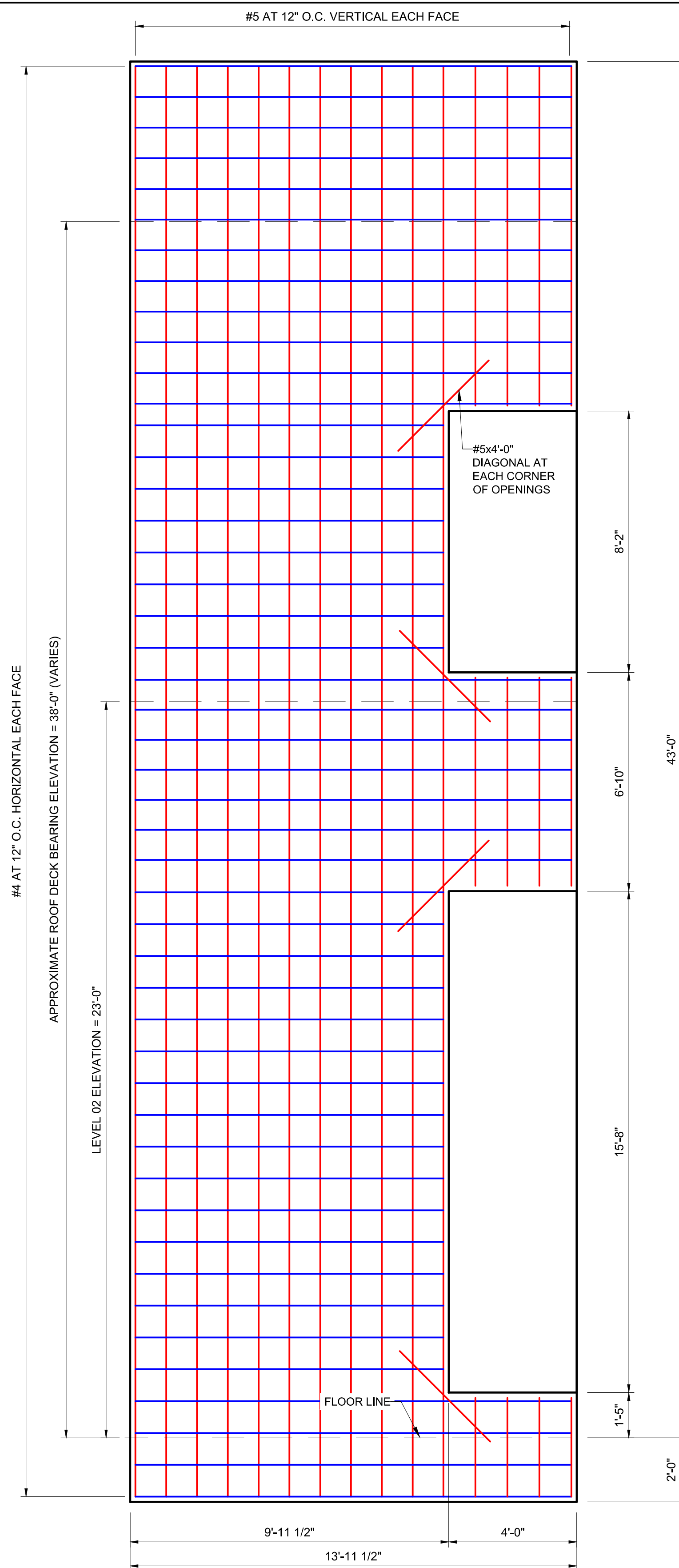


INNSTRUCT REINFORCING

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" STRUCTURAL SECTION (NON-COMPOSITE)
 2" INSULATION
 3" EXTERIOR CONCRETE FACE (NON-COMPOSITE)
 15" TOTAL THICKNESS

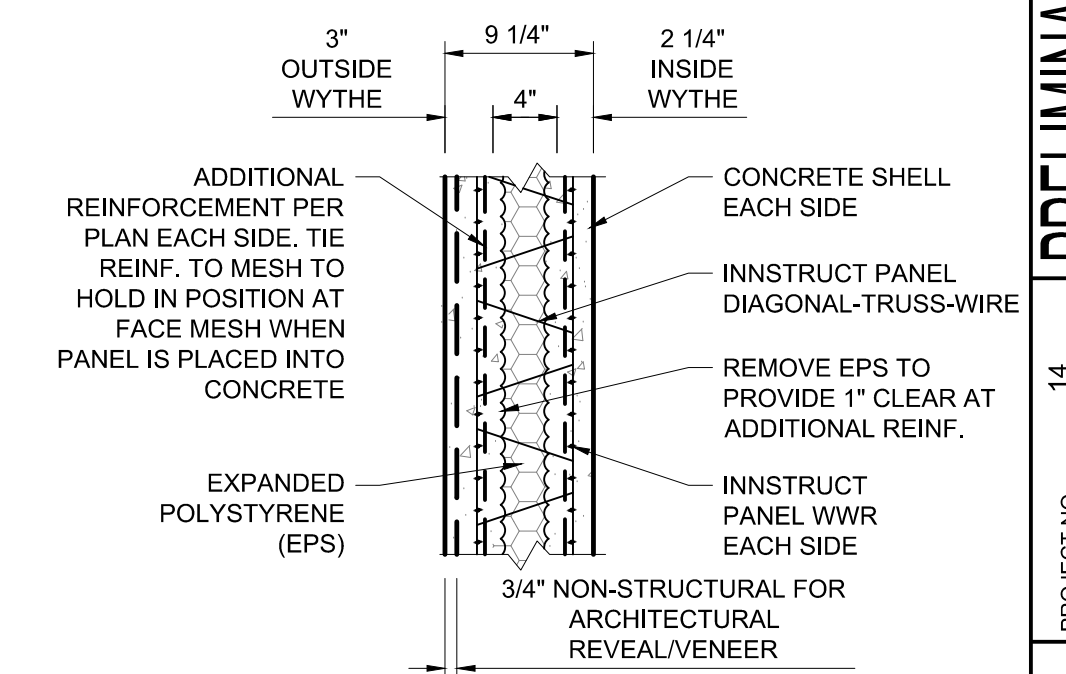
LIMITATION OF COMPARISON:
 ORIGINAL PANEL DRAWINGS ARE BASED ON
 PROJECT PLANS

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

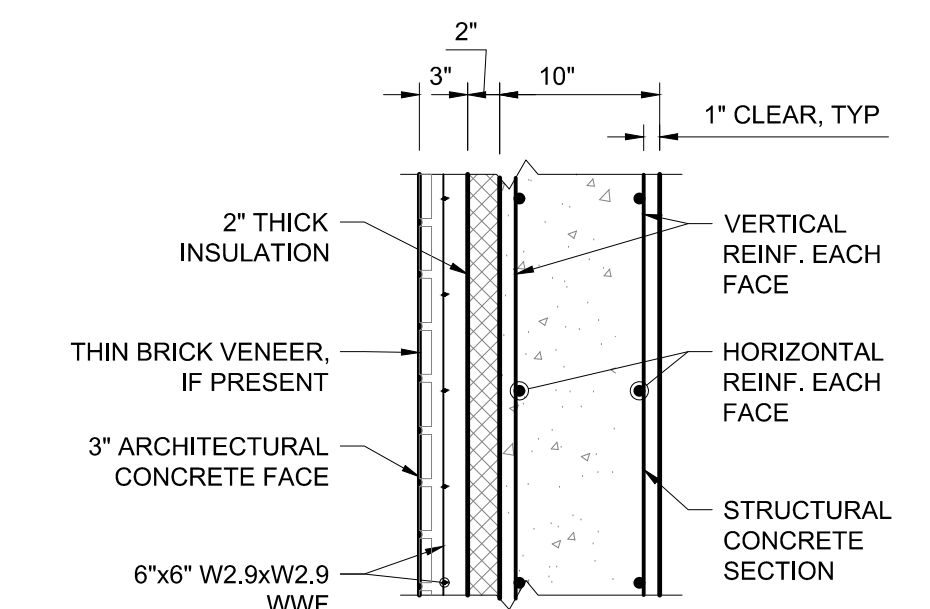
BAR SIZE LEGEND:

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

TIE BAR - - - - (SIZE PER COLOR)



TYPICAL INNSTRUCT PANEL
 SCALE: N.T.S.



NOTE:
 WYTHE CONNECTORS AT 16" O.C.
 EACH WAY TO CONNECT 3" CONCRETE
 FACE TO STRUCTURAL SECTION

ORIGINAL PANEL SECTION
 SCALE: N.T.S.

NO.	REVISIONS	BY	DATE

FORSGREN Associates Inc.
 95 WEST 100 SOUTH, STE. 115, LOGAN, UT 84321
 PH: 435.227.0333
 FAX: 435.227.0334

PRELIMINARY DRAWING NOT FOR CONSTRUCTION

PROJECT NO. 14
DRAWN
DESIGNED
APPROVED
QA/QC

INNOVATIVE STRUCTURAL SOLUTIONS

PROJECT 14
TIPS COMPARISON

SHEET NO:
DATE: NOVEMBER 2020
PAGE NO:

INNSTRUCT | Total Integrated Panel System (TIPS)

Basic Design Comparison and Material Displacement Estimate

Project: **14D**
 Panel Description: S103 windows
 Total Wall Square Feet: 54,933
 Total Panels in Project: 105

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

Panel Configuration:
 14 Number of Similar Panels in Project
 45.00 Height (ft)
 14.00 Width (ft)
 95 Area of Openings (ft²) - windows
 535 Panel Area (ft²)
 150 Concrete Weight (lbs./ft³)



Original Design Configuration:

3	Architectural Wythe (in)
2	Insulation (in)
10	Structural Wythe (in)
13	Concrete Thickness (in)
15	Total Thickness (in)
16.5	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	21	cubic yds
Reinforcement	2,023	lbs.
Panel Weight	88,889	lbs.

TIPS Design

Amount	Units	% Reduced
9	cubic yds	60%
415	lbs.	79%
35,496	lbs.	60%

INNOVATIVE STRUCTURAL SOLUTIONS

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

BETTER PANEL | LESS EFFORT | MORE PROFIT