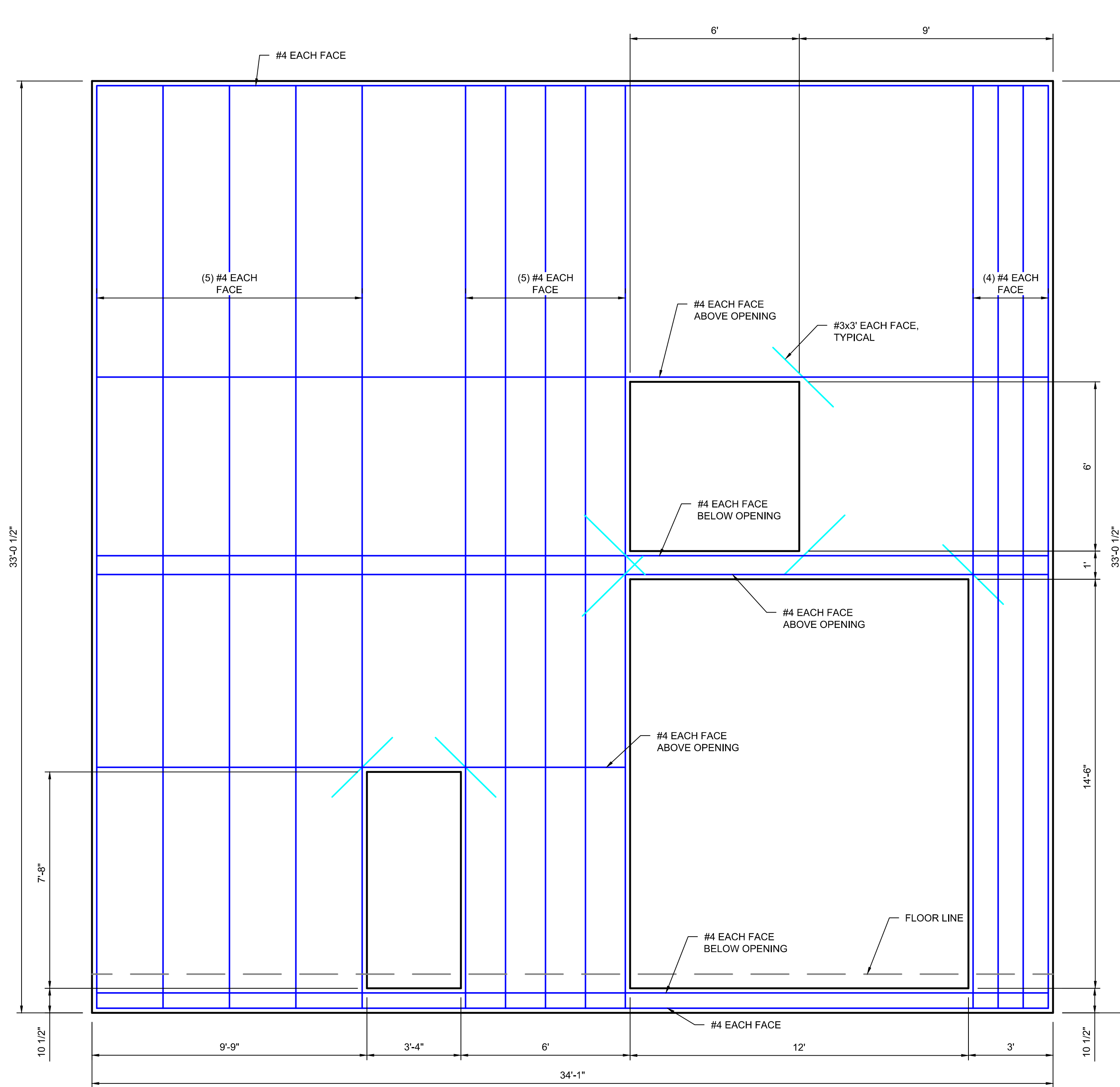


G:\Projects 18\14-18-0042 ISS Panels\14 Till-up Panel Comparison\0-Project Summary\CAD\SHEETS\2.dwg - 11/25/2020 3:03 PM

**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.



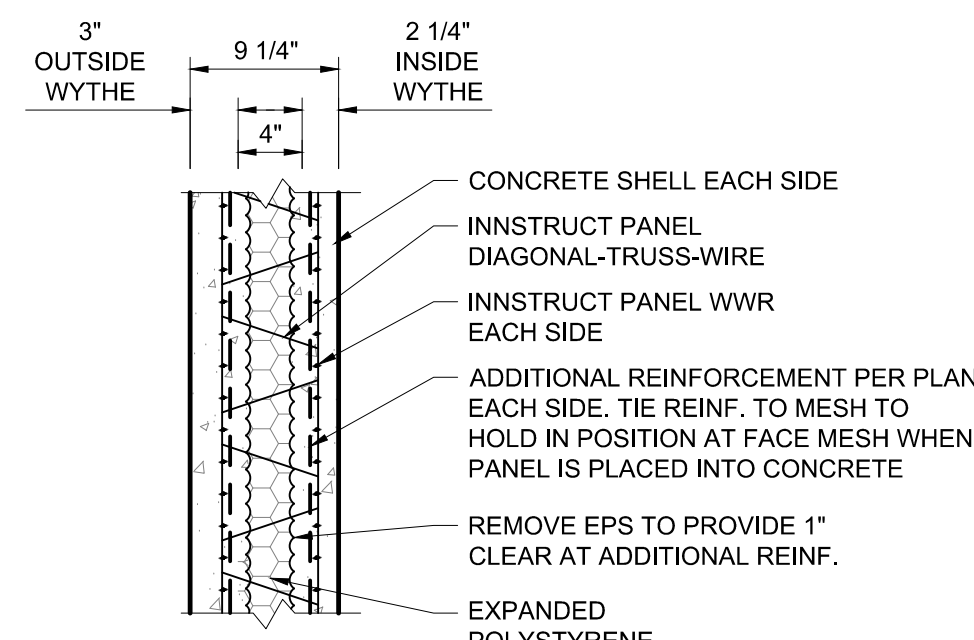
**TIPS REINFORCING**  
3/8" = 1'-0"

**BAR SIZE LEGEND:**

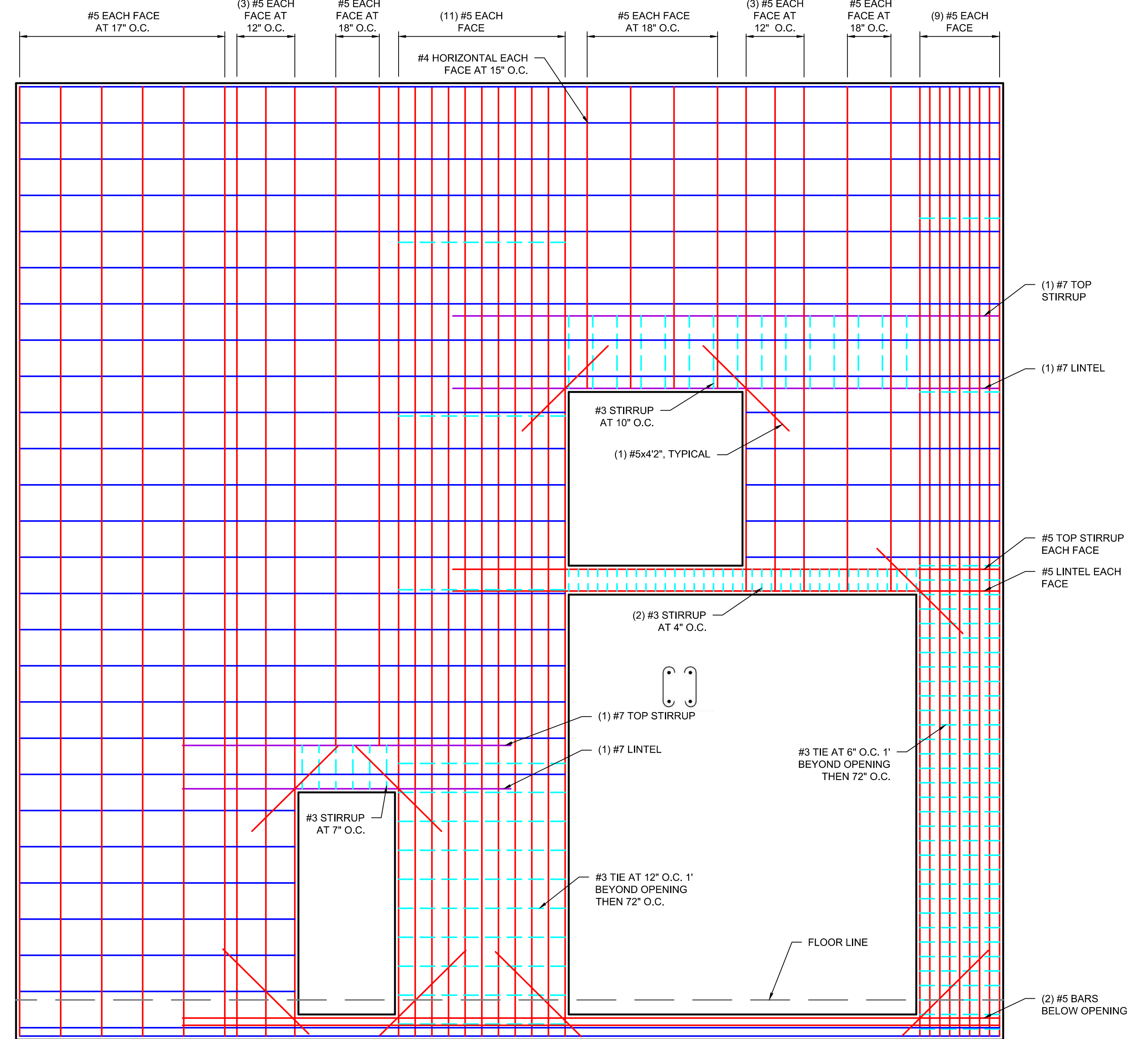
- #3 - CYAN
- #4 - BLUE
- #5 - RED
- #6 - GREEN
- #7 - PURPLE
- #8 - PINK

TIE BAR --- (SIZE PER COLOR)

**TIPS**  
3" EXTERIOR CONCRETE WYTHER (COMPOSITE)  
4" EPS INSULATION  
2.25" INTERIOR CONCRETE WYTHER (COMPOSITE)  
9.25" TOTAL THICKNESS

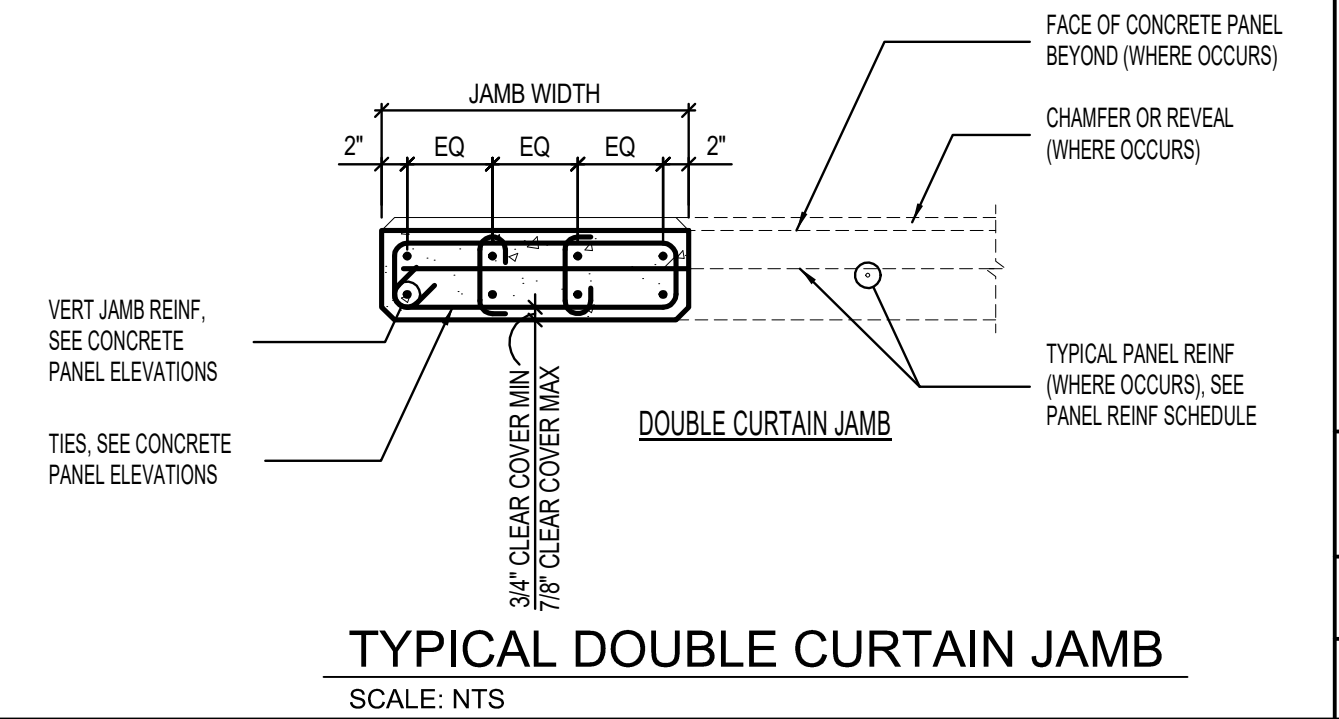


**TYPICAL TIPS SECTION**  
SCALE: NTS



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

**ORIGINAL PANEL**  
7.25" CONCRETE THICKNESS



**TYPICAL DOUBLE CURTAIN JAMB**  
SCALE: NTS

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. 2
DRAWN
DESIGNED
APPROVED
QA/QC

**INNOVATIVE STRUCTURAL SOLUTIONS**

**PROJECT 2C**  
**TIPS COMPARISON**

SHEET NO:
DATE: NOVEMBER 2020
PAGE NO:

# INNSTRUCT | Total Integrated Panel System (TIPS)

## Basic Design Comparison and Material Displacement Estimate

Project: **2C**  
 Panel Description: S102 ovrhead door, man door, window  
 Total Wall Square Feet: 23,800  
 Total Panels in Project: 27

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

**Panel Configuration:** 5 Number of Similar Panels in Project  
 33.00 Height (ft)  
 34.00 Width (ft)  
 235 Area of Openings (ft<sup>2</sup>) 3 openings  
 887 Panel Area (ft<sup>2</sup>)  
 150 Concrete Weight (lbs./ft<sup>3</sup>)



### Original Design Configuration:

0	Architectural Wythe (in)
0	Insulation (in)
7.25	Structural Wythe (in)
7.25	Concrete Thickness (in)
7.25	Total Thickness (in)
3.6	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	20	cubic yds
Reinforcement	4,293	lbs.
Panel Weight	84,677	lbs.

#### TIPS Design

Amount	Units	% Reduced
14	cubic yds	<b>28%</b>
905	lbs.	<b>79%</b>
59,114	lbs.	<b>30%</b>

INNOVATIVE STRUCTURAL SOLUTIONS

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

BETTER PANEL | LESS EFFORT | MORE PROFIT