

Insular

INSULATED STEEL FRAMING SYSTEM

RECOMMENDED
ATTACHMENTS
&
CONNECTION DETAILS

INDEX OF DRAWINGS

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- C-1 = ROOF PANEL TO BEVELED WALL PANEL (METAL TRACK)
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- C-3 = ROOF PANEL TO WALL PANEL WITH WOOD PLATE AND SOLID BLOCKING

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SECTION K:

- K-1 = TYPICAL METAL PROFILES (STANDARD STUD AND “LEADING EDGE” METAL)
- K-2 = TYPICAL METAL PROFILES (END “L” METAL AND ATTACHMENT PLATE)
- K-3 = TYPICAL METAL PROFILES (RIDGE CAP METAL AND HEAVY GAUGE STUD)
- K-4 = TYPICAL METAL PROFILES (METAL TRACK)

SECTION L:

- L-1 = # 8, ½” SELF-TAPPING SCREW
- L-2 = 5” DECK SCREW
- L-3 = 7” DECK SCREW

SECTION M:

- M-1 = STANDARD WIRECHASE PLACEMENT IN A STAND PANEL

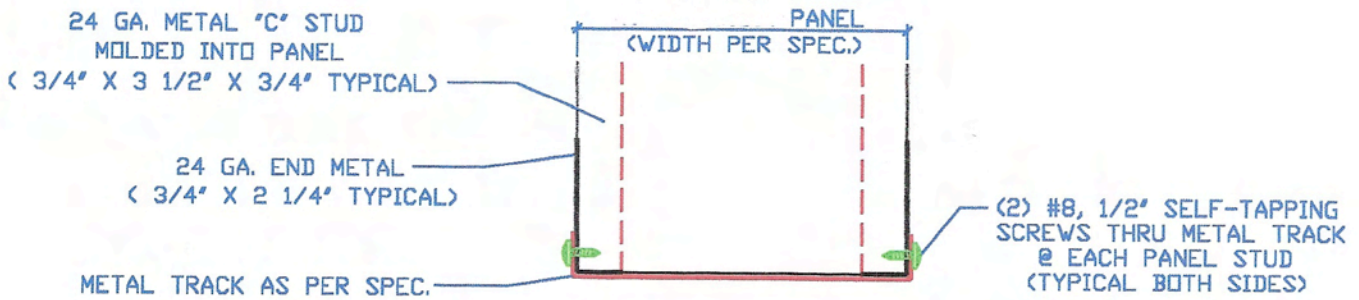
SECTION N:

- N-1 = STANDARD WALL PANEL 16” O.C.
- N-2 = STANDARD WALL PANEL 24” O.C.
- N-3 = STANDARD WINDOW PANEL
- N-4 = STANDARD DOOR PANEL
- N-5 = STANDARD HEADER PANEL
- N-6 = STANDARD CONCRETE “T-BEAM” PANEL

SECTION A:

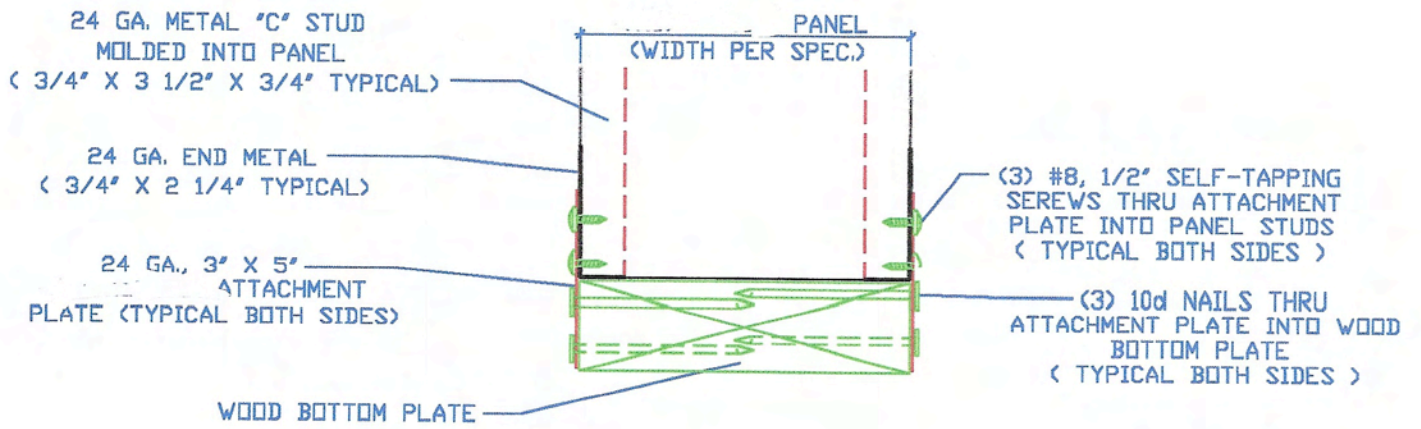
A-1 = METAL TRACK TO PANEL ATTACHMENT

A-2 = WOOD PLATE TO PANEL ATTACHMENT



TO METAL TRACK CONNECTION
(SAME ATTACHMENT FOR TOP OF PANEL)

DRAWING A-1



TO WOOD PLATE CONNECTION

DRAWING A-2

(SAME ATTACHMENT FOR TOP OF PANEL)

SECTION B

B-1= METAL TRACK TO SLAB WITH ANCHOR PINS

B-2= METAL TRACK TO SLAB WITH ANCHOR BOLTS

B-3= WOOD PLATE TO SLAB WITH ANCHOR BOLTS

B-4= METAL TRACK TO WOOD FLOOR SYSTEM ATTACHMENT

B-5= METAL TRACK TO WOOD FLOOR SYSTEM ATTACHMENT
(PREFERRED)

B-6= WOOD PLATE TO WOOD FLOOR SYSTEM ATTACHMENT

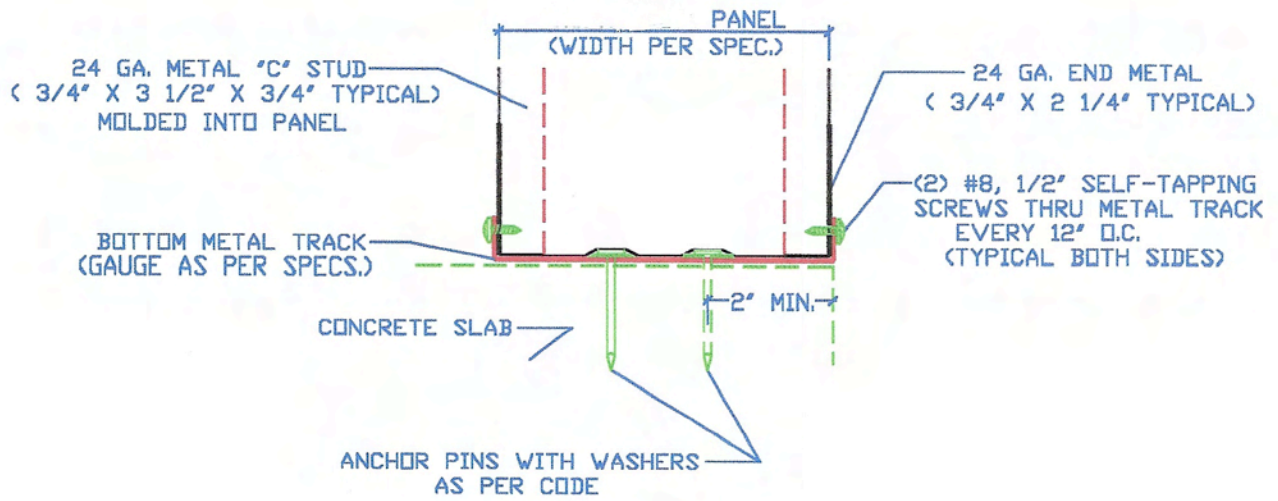
B-7= METAL PLATE TO WOOD FLOOR SYSTEM ATTACHMENT
(PREFERRED)

B-8= MULTI-STORY PANEL TO WOOD FLOOR SYSTEM WITH
METAL TRACK ATTACHMENT

B-9= MULTI-STORY PANEL TO WOOD FLOOR SYSTEM WITH
METAL TRACK ATTACHMENT (PREFERRED)

B-10= MULTI-STORY PANEL TO WOOD FLOOR SYSTEM WITH
WOOD PLATE ATTACHMENT

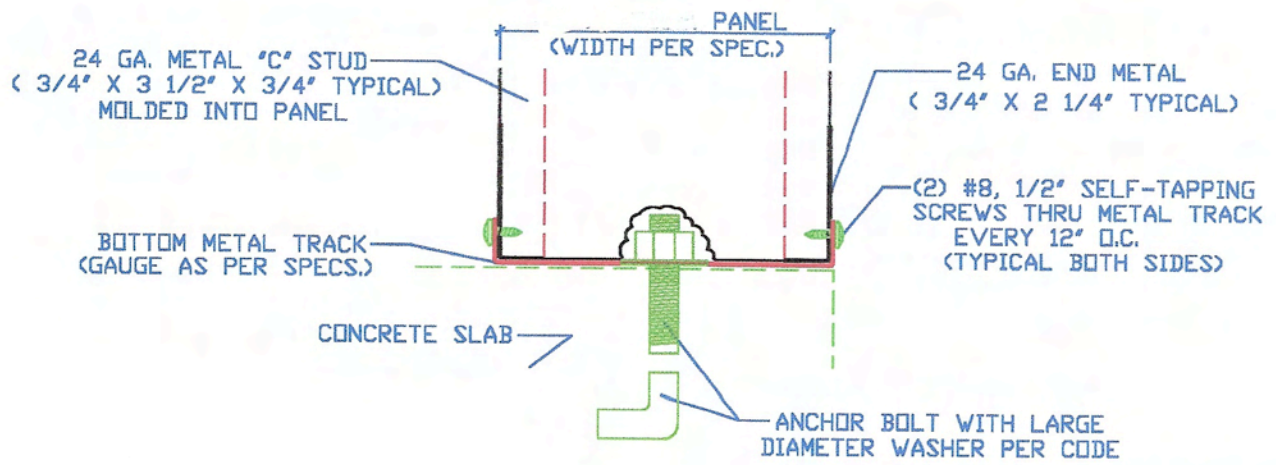
B-11= MULTI-STORY PANEL TO WOOD FLOOR SYSTEM WITH
WOOD PLATE ATTACHMENT (PREFERRED)



CONCRETE SLAB CONNECTION

DRAWING B-1

(WITH ANCHOR PINS AND METAL TRACK)

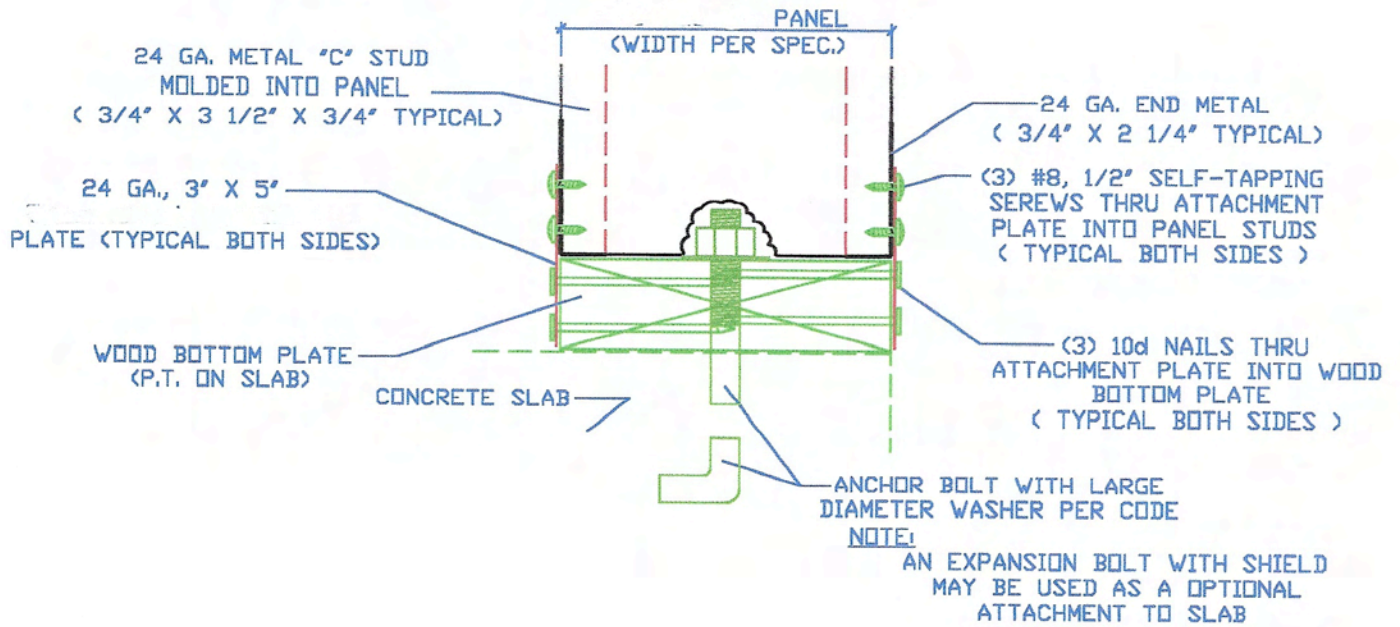


NOTE:

AN EXPANSION BOLT WITH SHIELD
MAY BE USED AS A OPTIONAL
ATTACHMENT TO SLAB

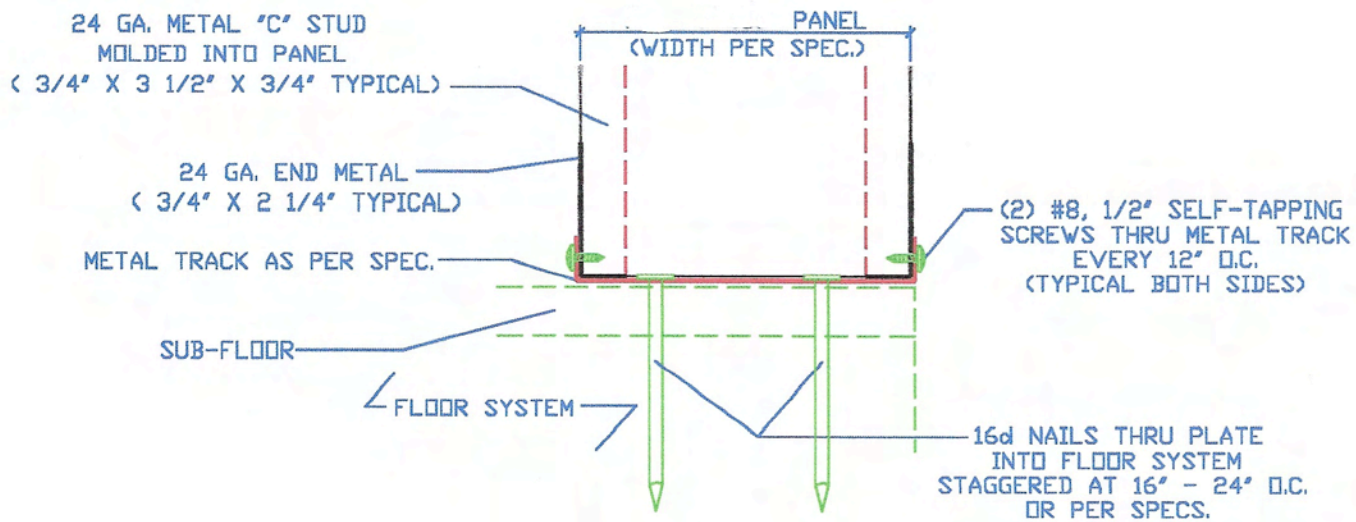
CONCRETE SLAB CONNECTION
(WITH ANCHOR BOLT AND METAL TRACK)

DRAWING B-2



CONCRETE SLAB CONNECTION
 (WITH ANCHOR BOLT AND WOOD PLATE)

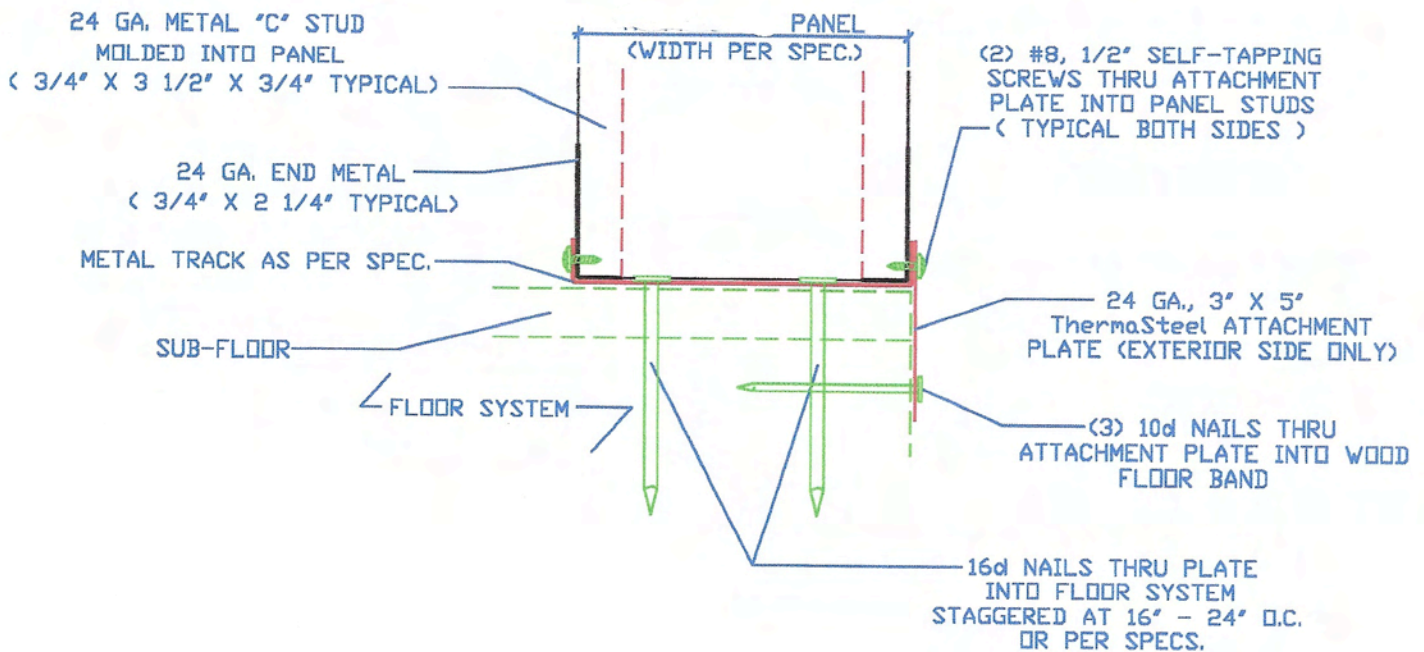
DRAWING B-3



FLOOR SYSTEM CONNECTION

DRAWING B-4

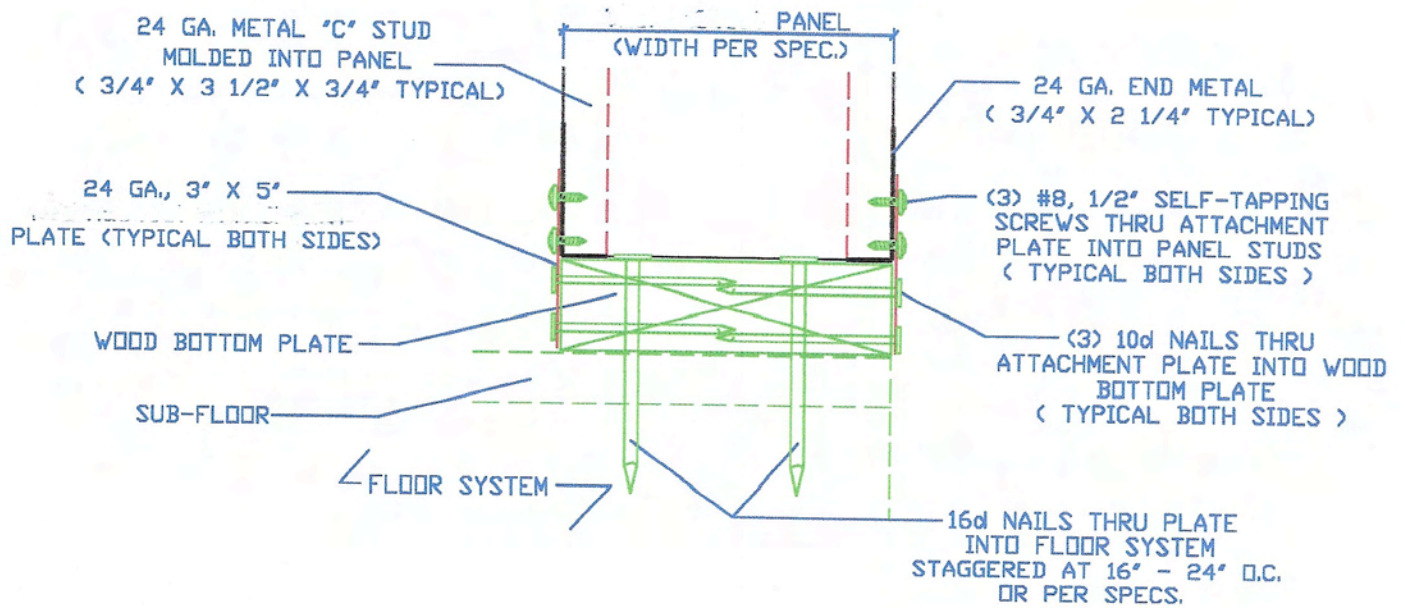
< WITH METAL TRACK NAILED DOWN >



FLOOR SYSTEM CONNECTION

DRAWING B-5

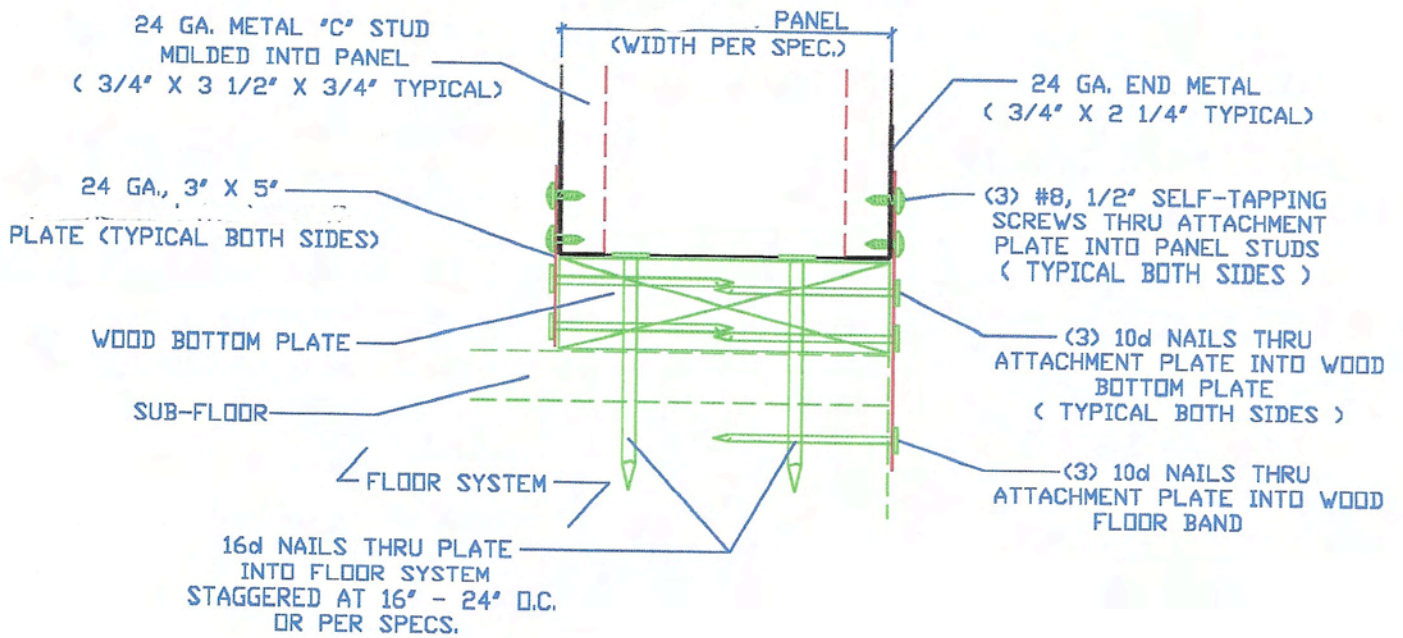
(WITH METAL TRACK NAILED DOWN AND
ATTACHMENT PLATES TO FLOOR SYSTEM)



FLOOR SYSTEM CONNECTION

DRAWING B-6

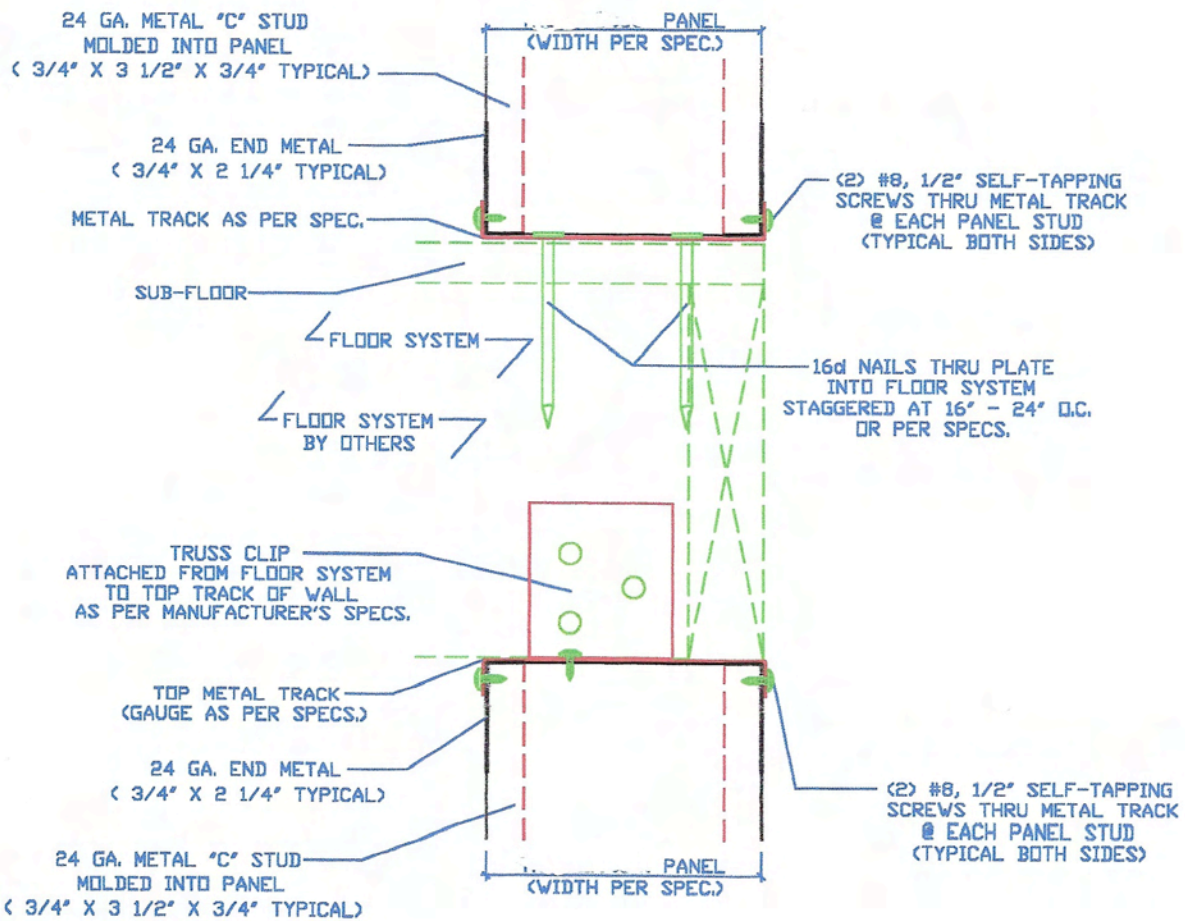
(WITH WOOD PLATE NAILED DOWN)



FLOOR SYSTEM CONNECTION

DRAWING B-7

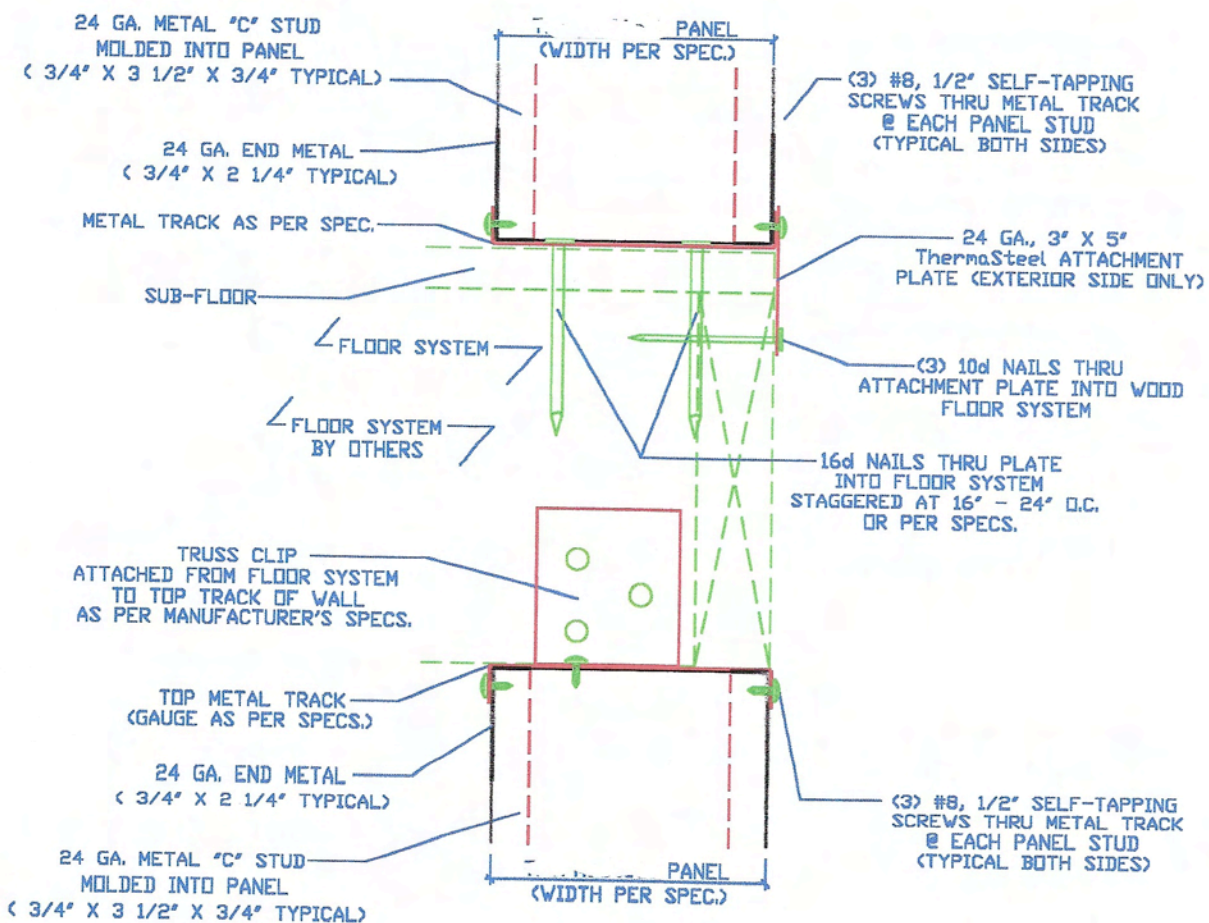
(WITH WOOD PLATE NAILED DOWN AND
ATTACHMENT PLATES TO FLOOR SYSTEM)



PANEL TO FLOOR SYSTEM CONNECTION
2 FLOORS AND ABOVE

DRAWING B-8

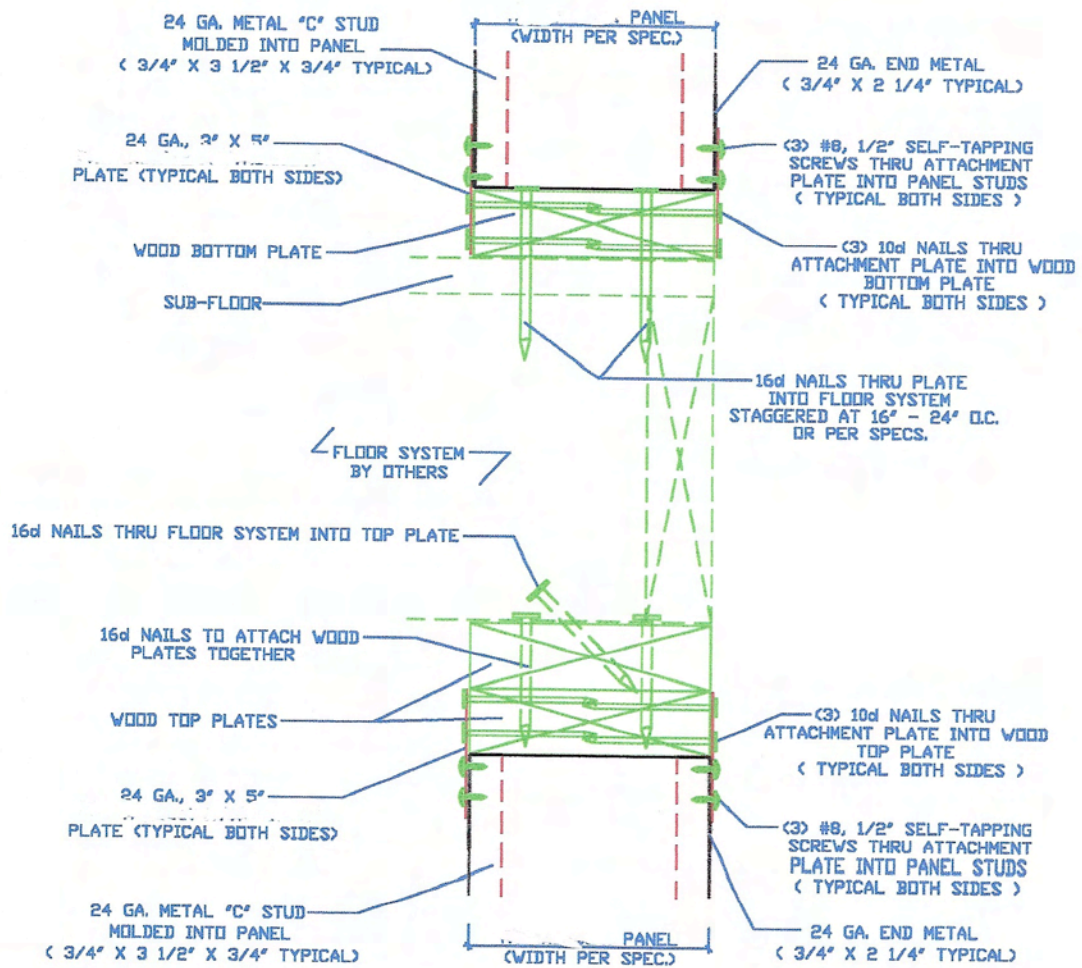
(WITH METAL TRACK NAILED DOWN)



PANEL TO FLOOR SYSTEM CONNECTION
2 FLOORS AND ABOVE

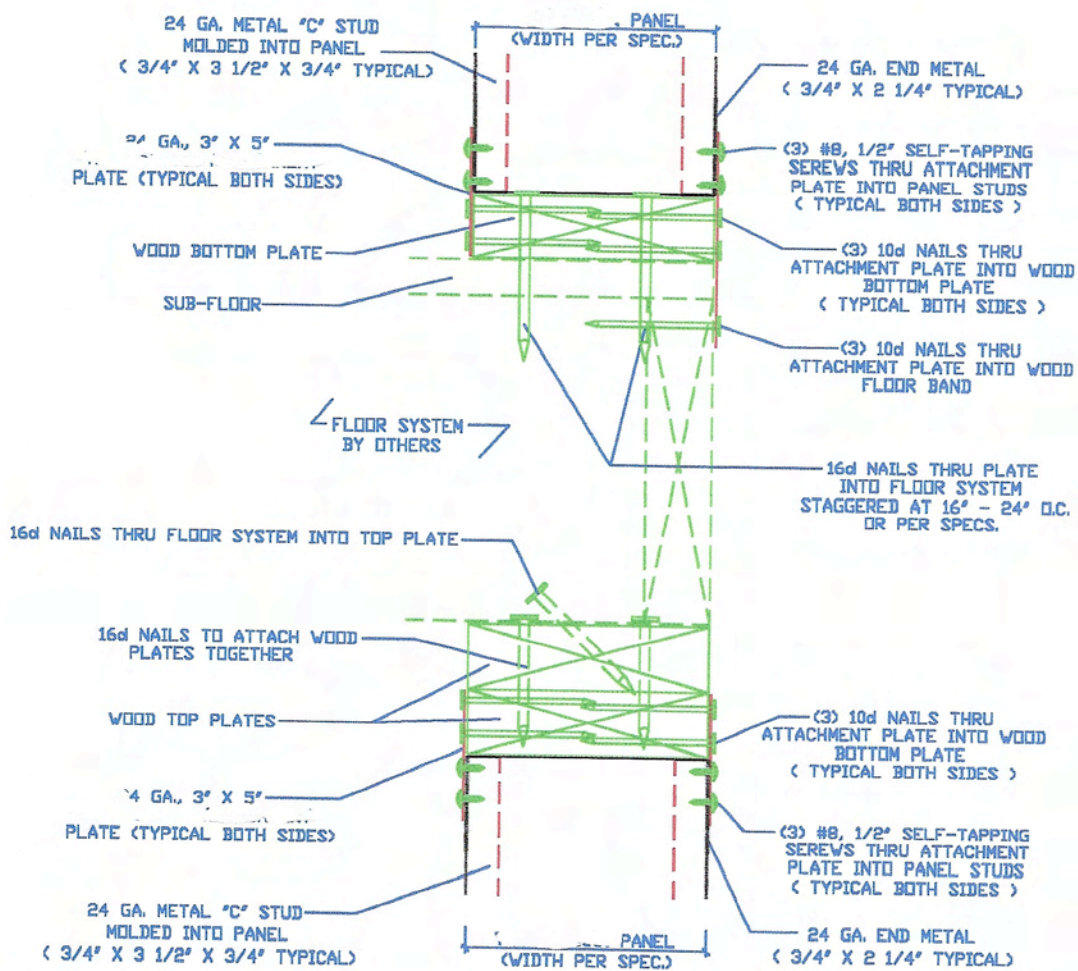
DRAWING B-9

(WITH METAL TRACK NAILED DOWN)



PANEL TO FLOOR SYSTEM CONNECTION
2 FLOORS AND ABOVE
 (WITH WOOD PLATE NAILED DOWN)

DRAWING B-10



**PANEL TO FLOOR SYSTEM CONNECTION
2 FLOORS AND ABOVE**

DRAWING B-11

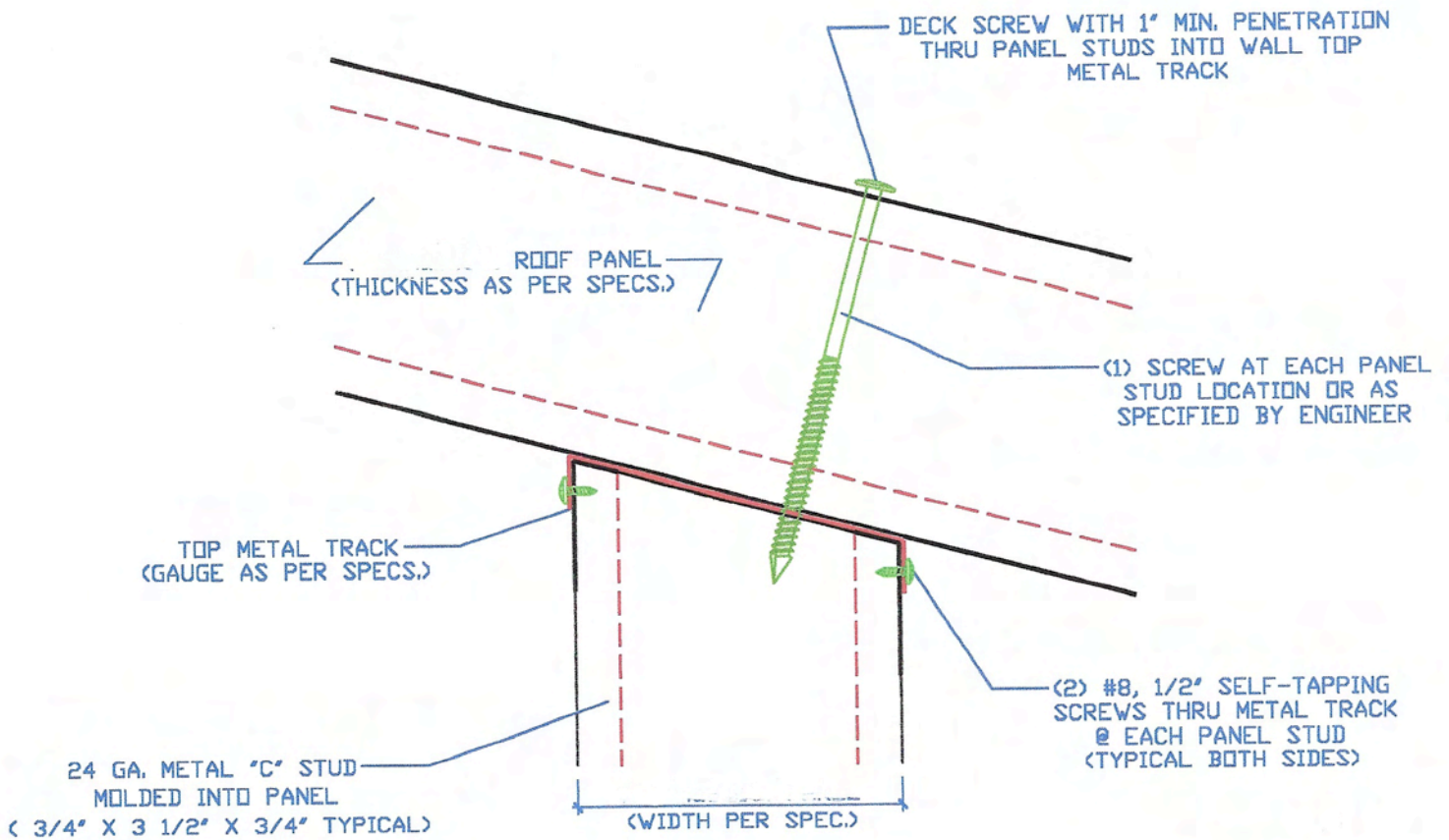
(WITH WOOD PLATE NAILED DOWN AND ATTACHMENT PLATES TO FLOOR SYSTEM)

SECTION C

C-1= ROOF PANEL TO BEVELED WALL PANEL (METAL TRACK)

C-2= ROOF PANEL TO WALL PANEL WITH METAL TRACK AND
SOLID BLOCKING

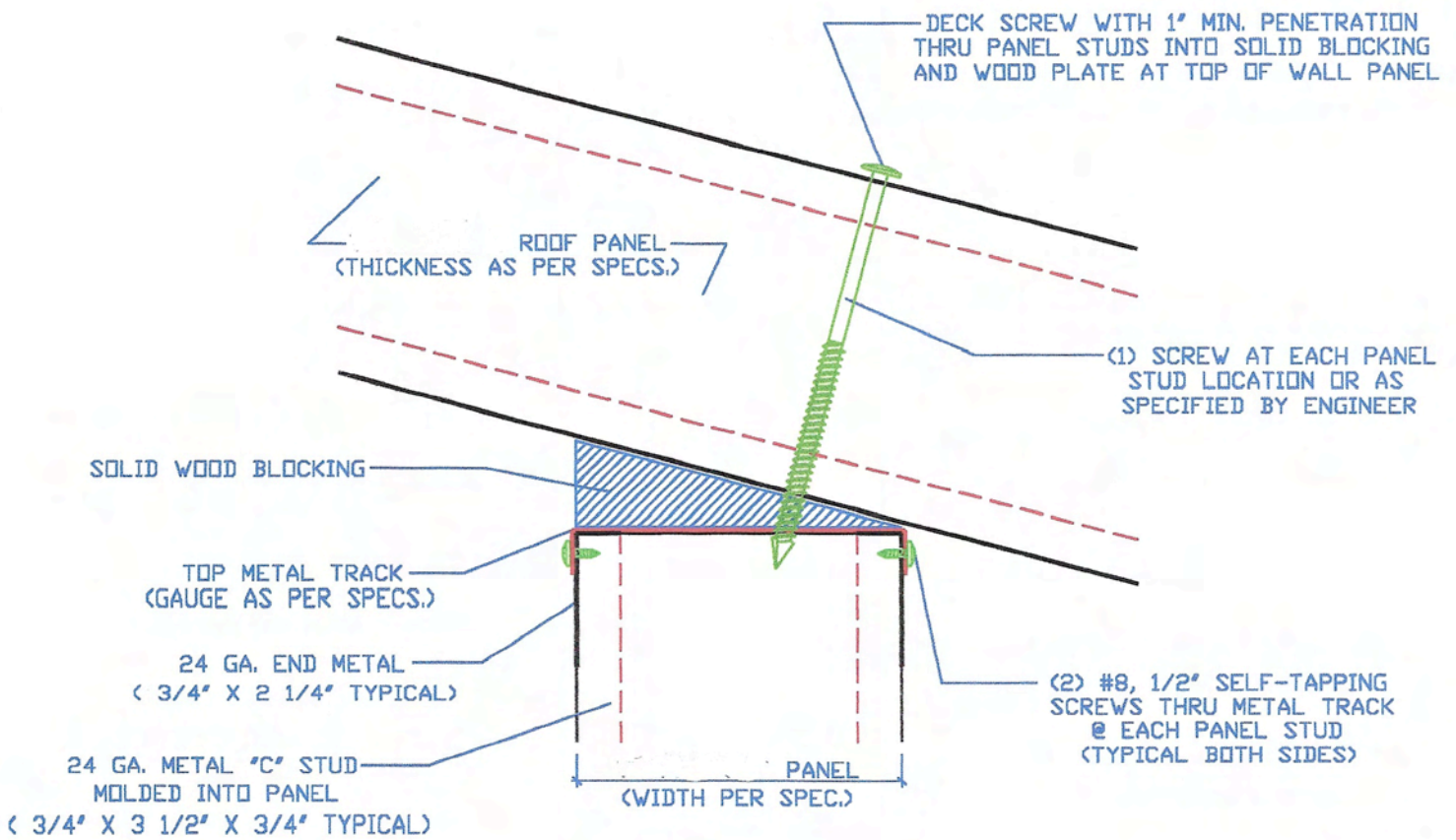
C-3= ROOF PANEL TO WALL PANEL WITH WOOD PLATE AND
SOLID BLOCKING



DRAWING C-1

ROOF PANEL CONNECTION

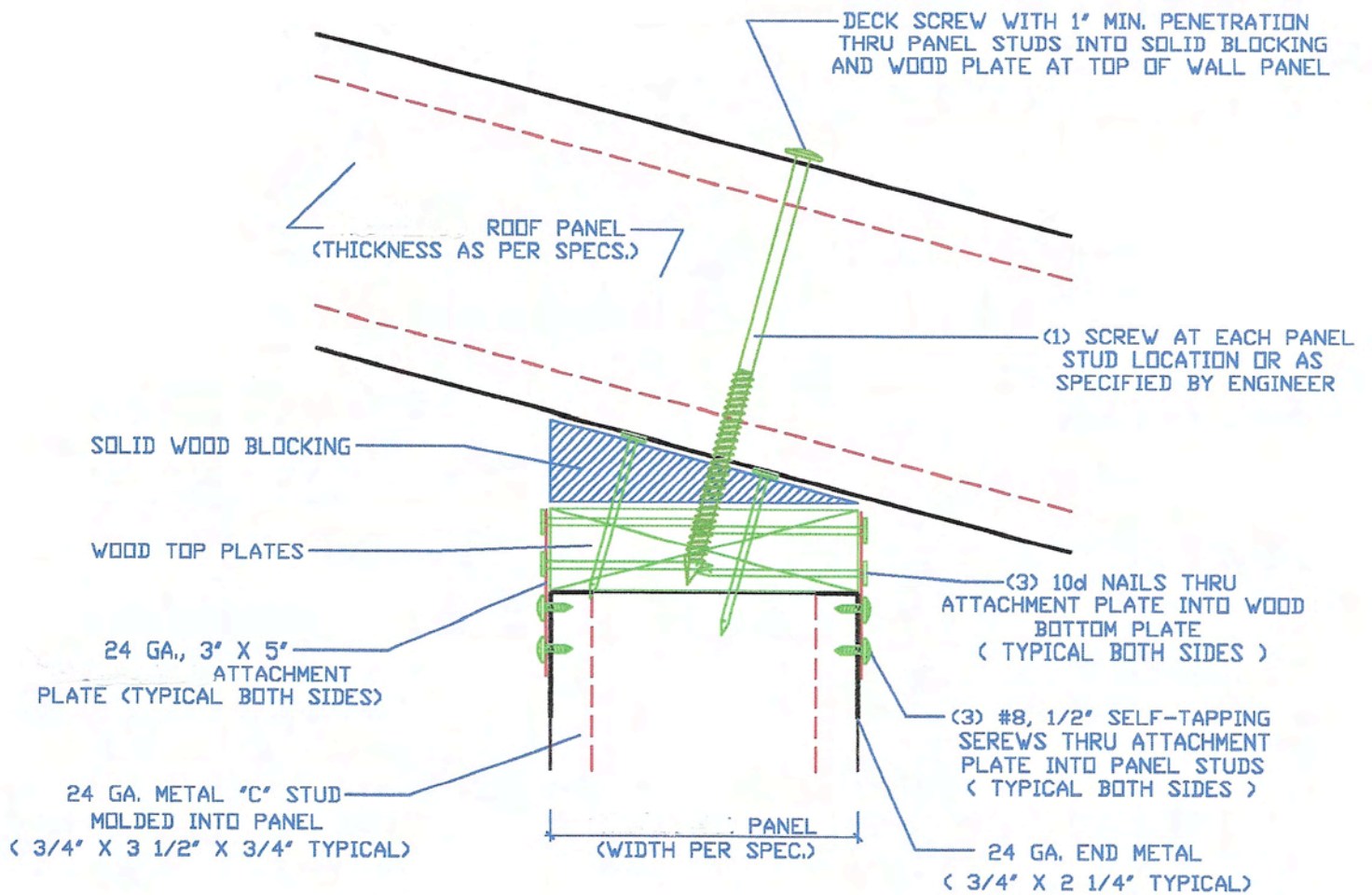
(WITH TOP METAL TRACK ON PANEL MOLDED TO ROOF PITCH)



DRAWING C-2

ROOF PANEL CONNECTION

(WITH TOP METAL TRACK AND SOLID WOOD BLOCKING)



DRAWING C-3

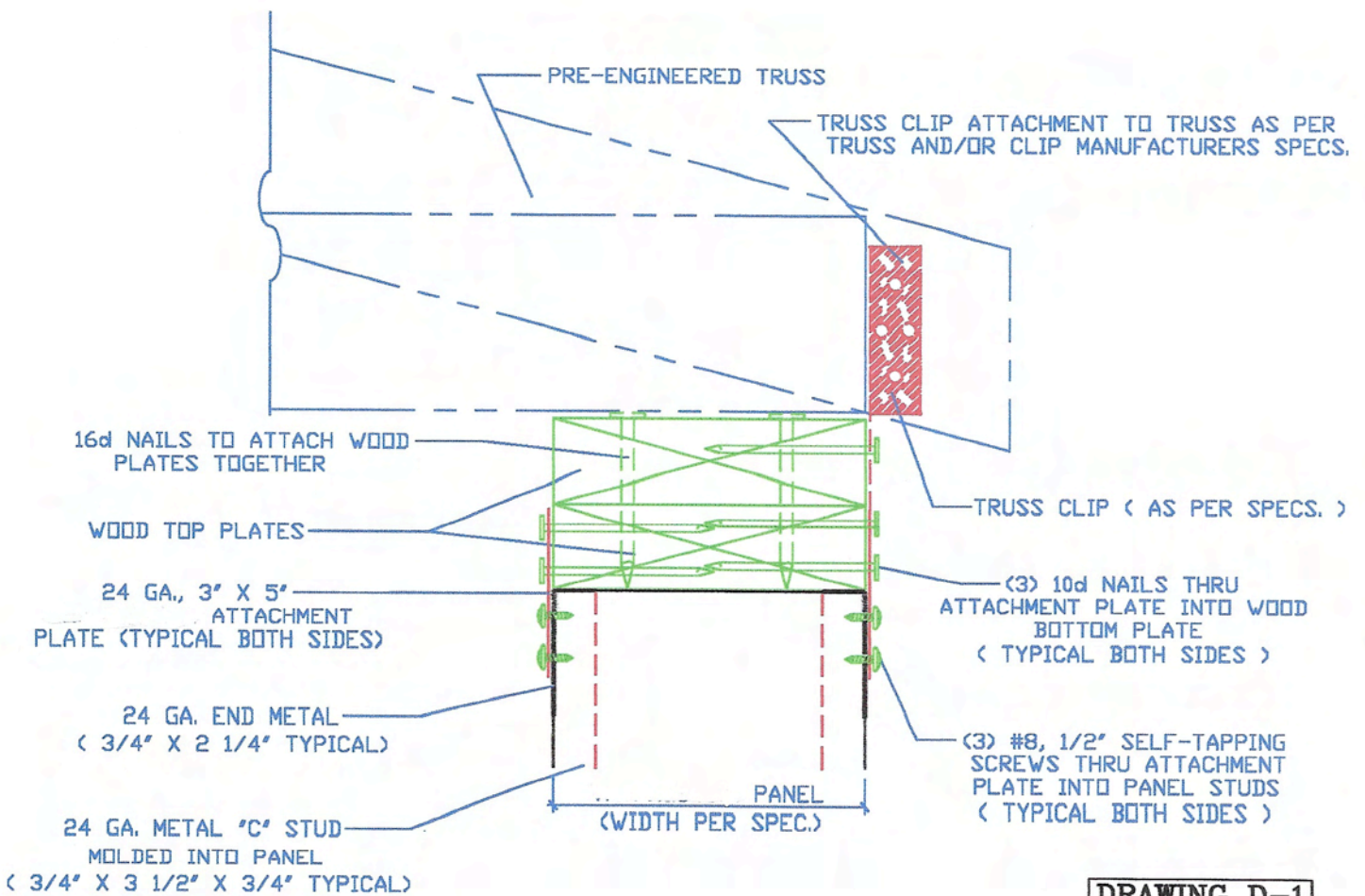
ROOF PANEL CONNECTION

(WITH TOP PLATE AND SOLID WOOD BLOCKING)

SECTION D

D-1= WALL PANEL TO PRE-ENGINEERED TRUSS SYSTEM WITH WOOD PLATES

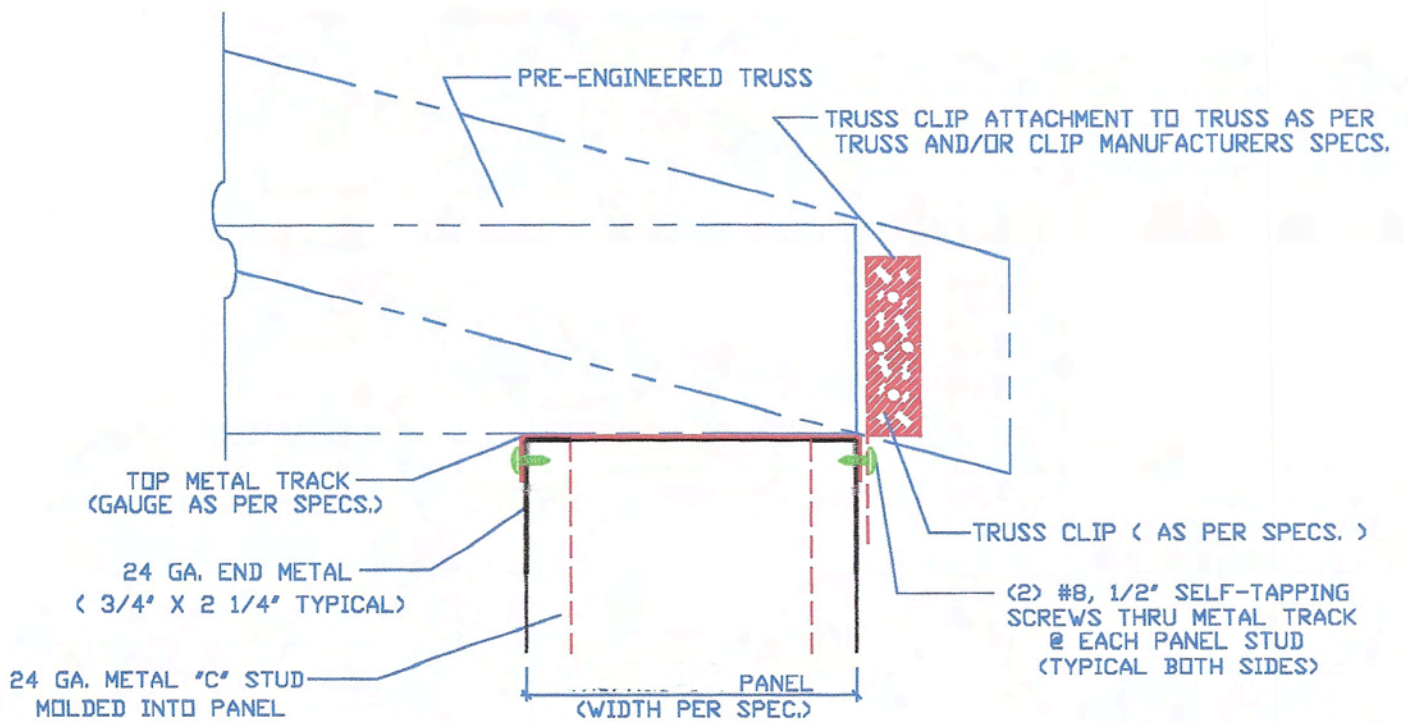
D-2= WALL PANEL TO PRE-ENGINEERED TRUSS SYSTEM WITH METAL TRACK



DRAWING D-1

**PANEL TO
PRE-ENGINEERED TRUSS CONNECTION**

(WITH (2) TOP PLATES AND CLIPS AS SPECS.)



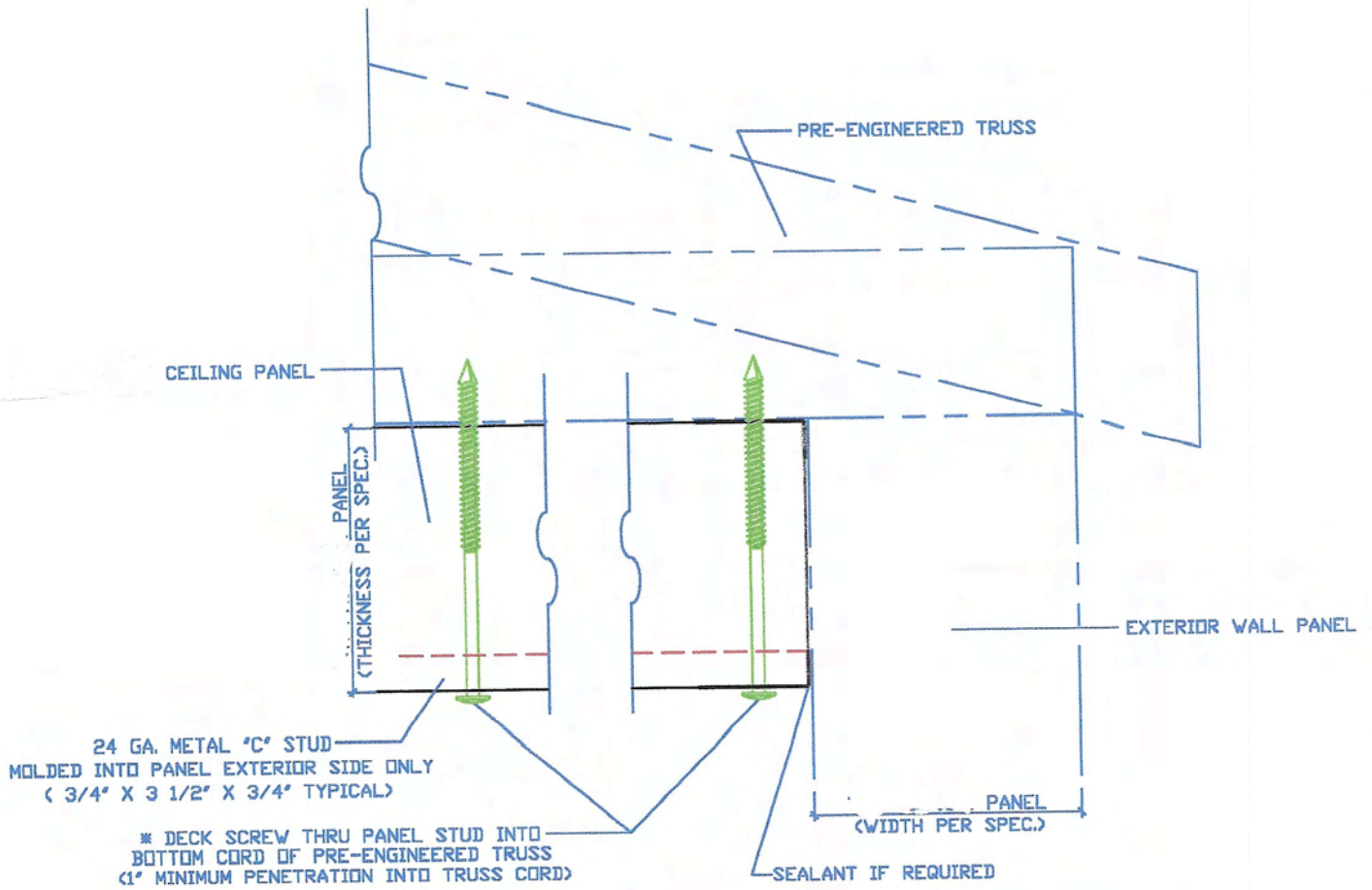
DRAWING D-2

**PANEL TO
PRE-ENGINEERED TRUSS CONNECTION**

(WITH TOP METAL TRACK AND CLIPS AS SPECS.)

SECTION E

E-1= CEILING PANEL TO PRE-ENGINEERED TRUSS SYSTEM



* (1) SCREW AT EACH PANEL STUD THAT CROSSES TRUSS CHORD
(1' MIN. PENETRATION WITH DECK SCREW INTO TRUSS CHORD)

DRAWING E-1

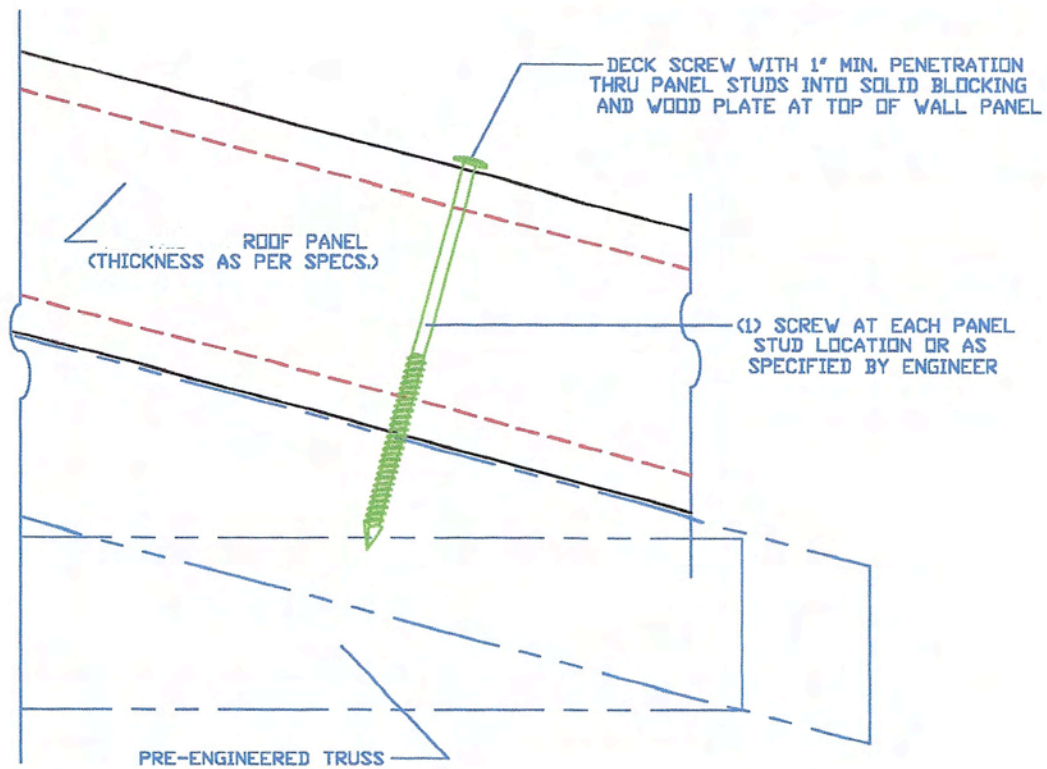
**CEILING PANEL TO
PRE-ENGINEERED TRUSS CONNECTION**

(WHEN USING CEILING PANELS TO RAFTERS USE SAME PROCEDURE)

SECTION F

F-1= ROOF PANEL TO PRE-ENGINEERED TRUSS SYSTEM

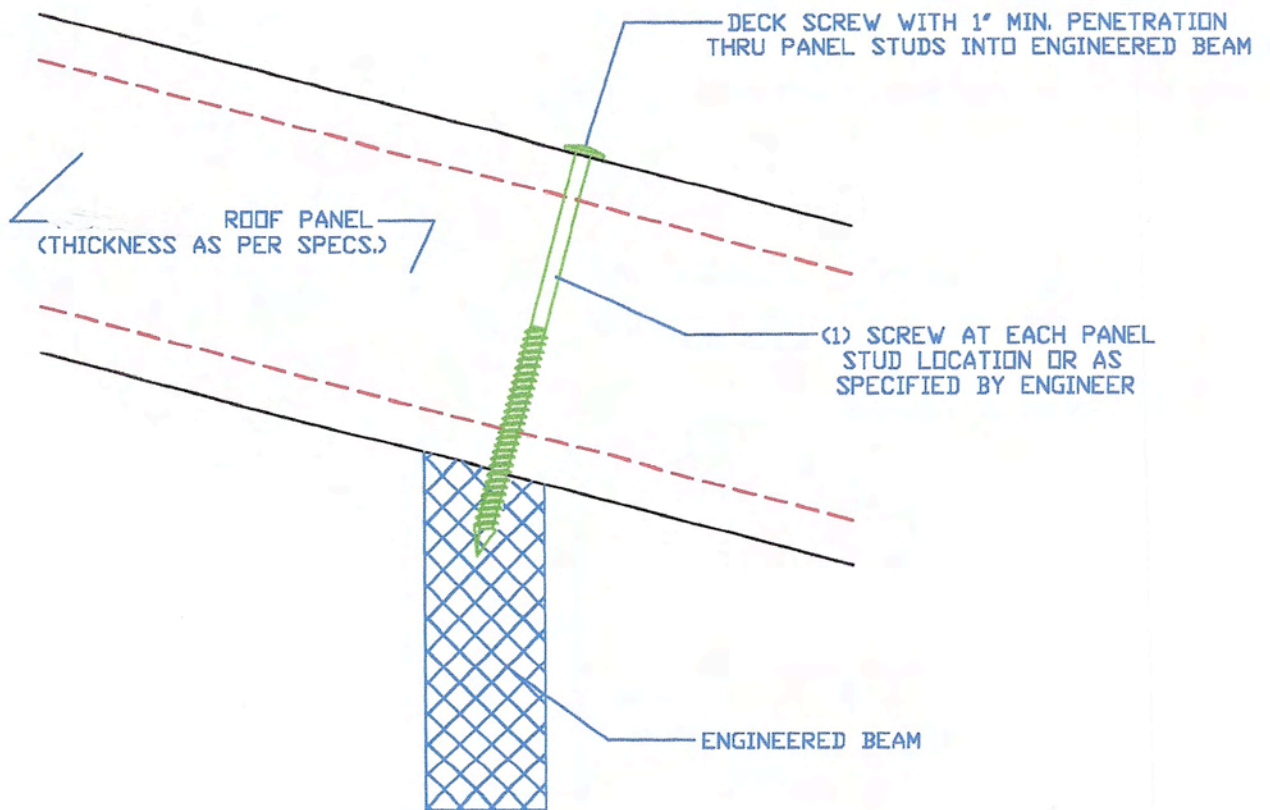
F-2= ROOF PANEL TO PRE-ENGINEERED BEAM



DRAWING F-1

***ROOF PANEL TO
PRE-ENGINEERED TRUSS CONNECTION***

(WHEN USING ROOF PANELS TO RAFTERS USE SAME PROCEDURE)



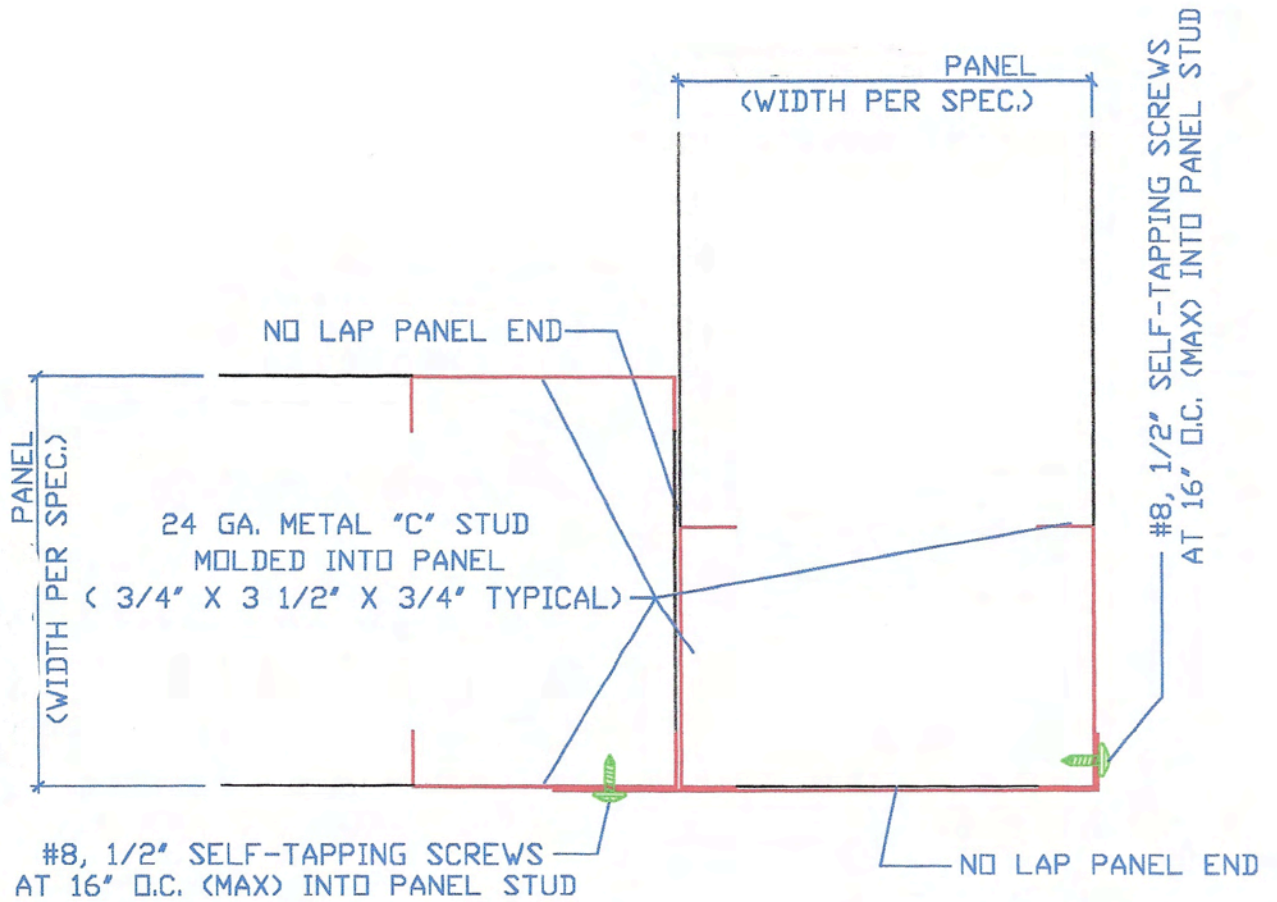
DRAWING F-2

PANEL TO
ROOF PANEL CONNECTION
 (PANEL TO PRE-ENGINEERED BEAM)

SECTION G

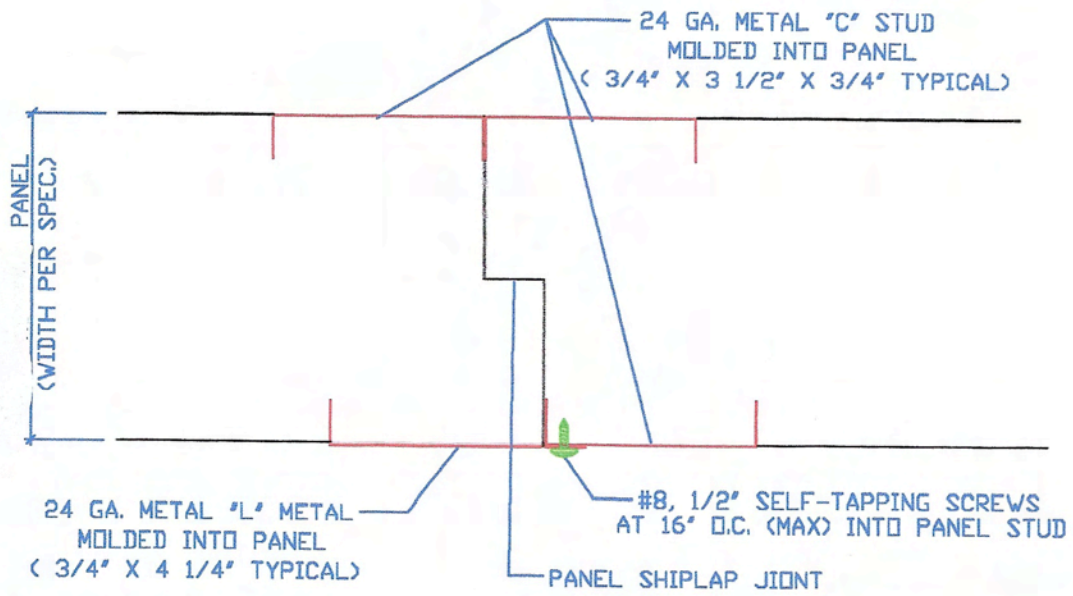
G-1= CORNER CONNECTION DETAIL

G-2= PANEL SHIPLAP DETAIL



CORNER CONNECTION

DRAWING G-1



SHIPLAP JOINT CONNECTION

DRAWING G-2

SECTION H

SECTION J

J-1= TYPICAL (2) STORY SECTION WITH WOOD PLATES AND CMU FOUNDATION

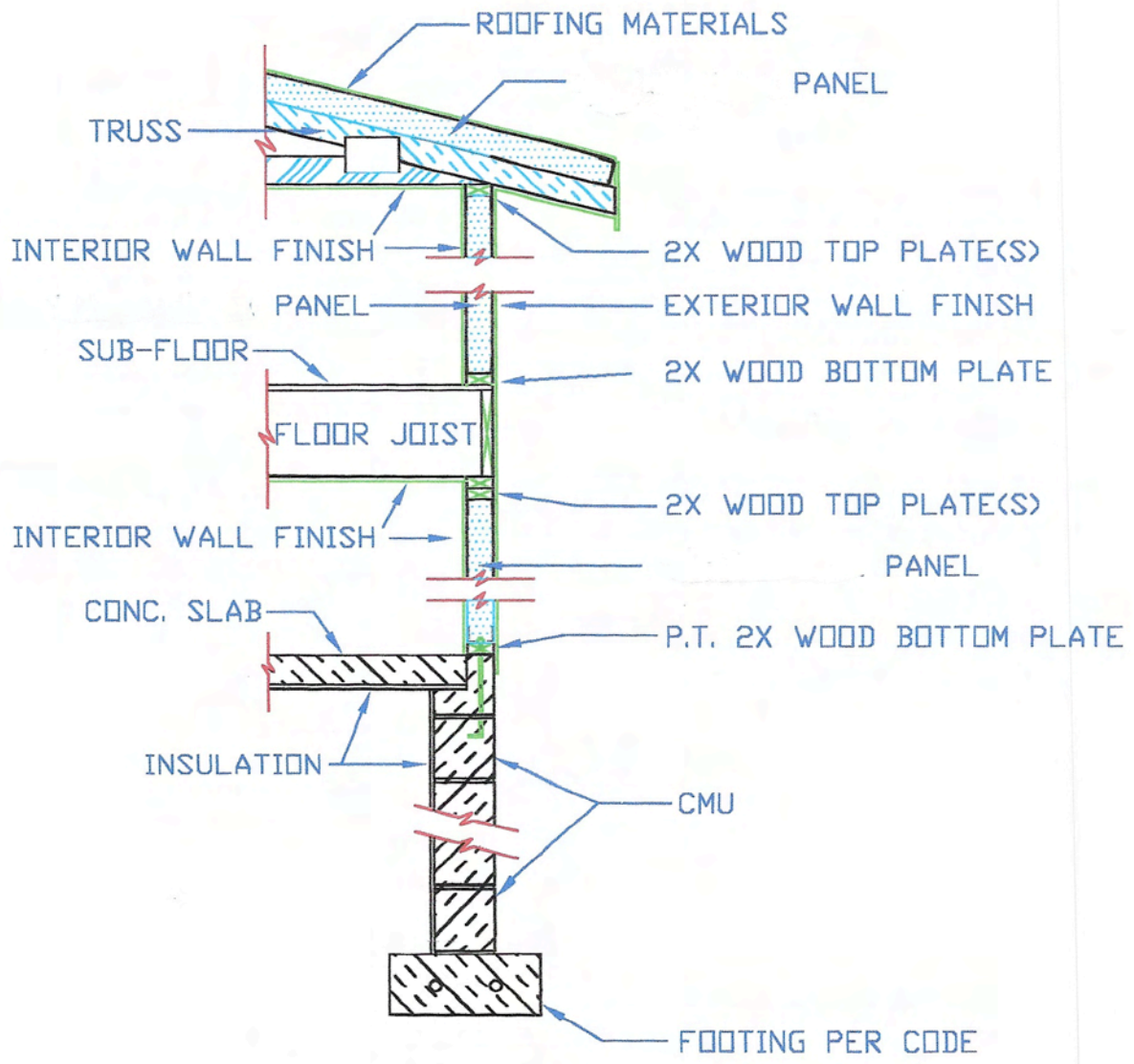
J-2= TYPICAL (2) STORY SECTION WITH WOOD PLATES AND TURNED DOWN SLAB FOUNDATION

J-3= TYPICAL (1) STORY SECTION WITH WOOD PLATES AND CMU FOUNDATION

J-4= TYPICAL (1) STORY SECTION WITH METAL TRACK AND CMU FOUNDATION

J-5= TYPICAL (1) STORY SECTION WITH WOOD PLATES AND TURNED DOWN SLAB FOUNDATION

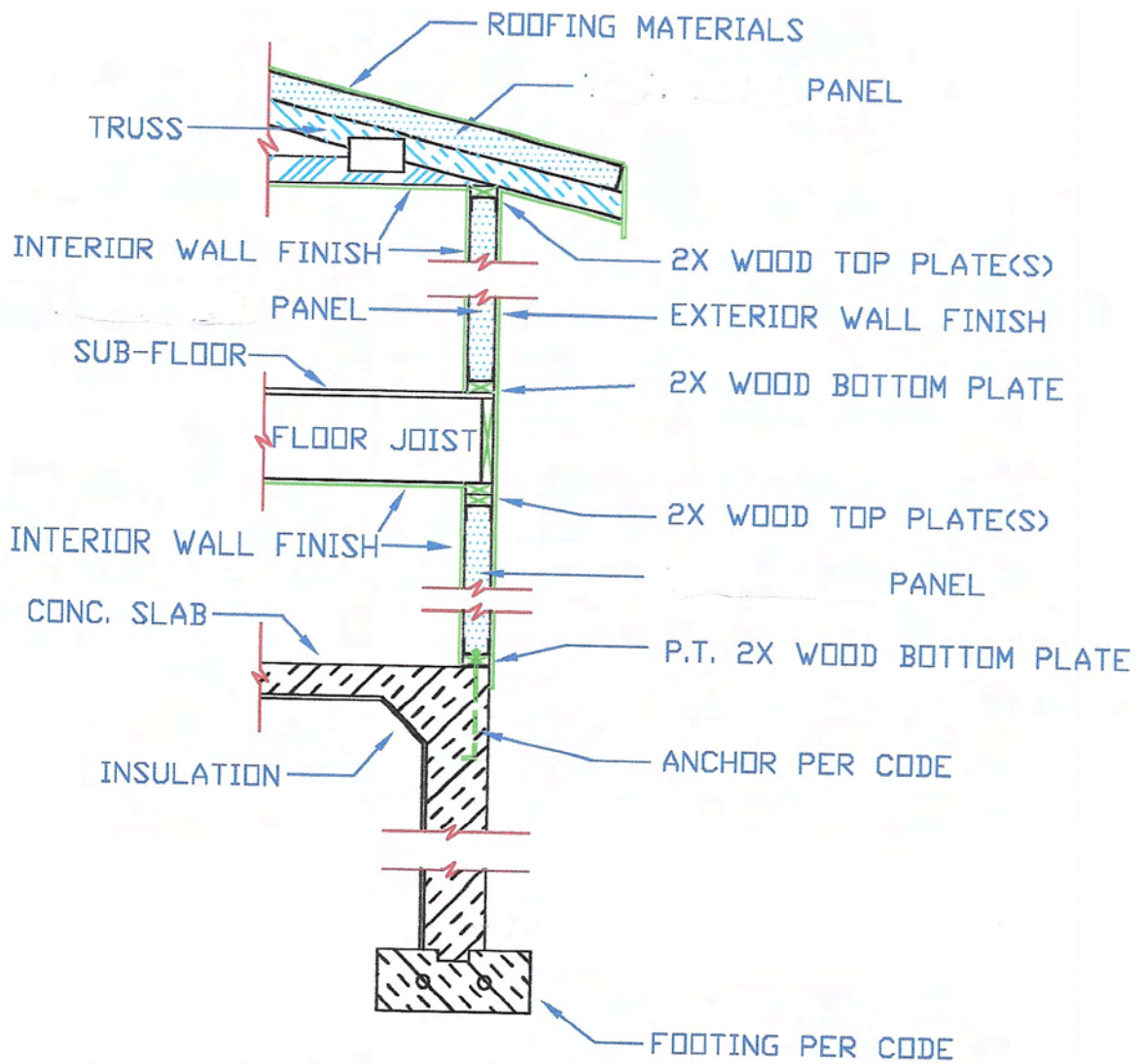
J-6 = TYPICAL (1) STORY SECTION WITH METAL TRACK AND TURNED DOWN SLAB FOUNDATION



2 STORY WALL SECTION

WITH CMU FOUNDATION

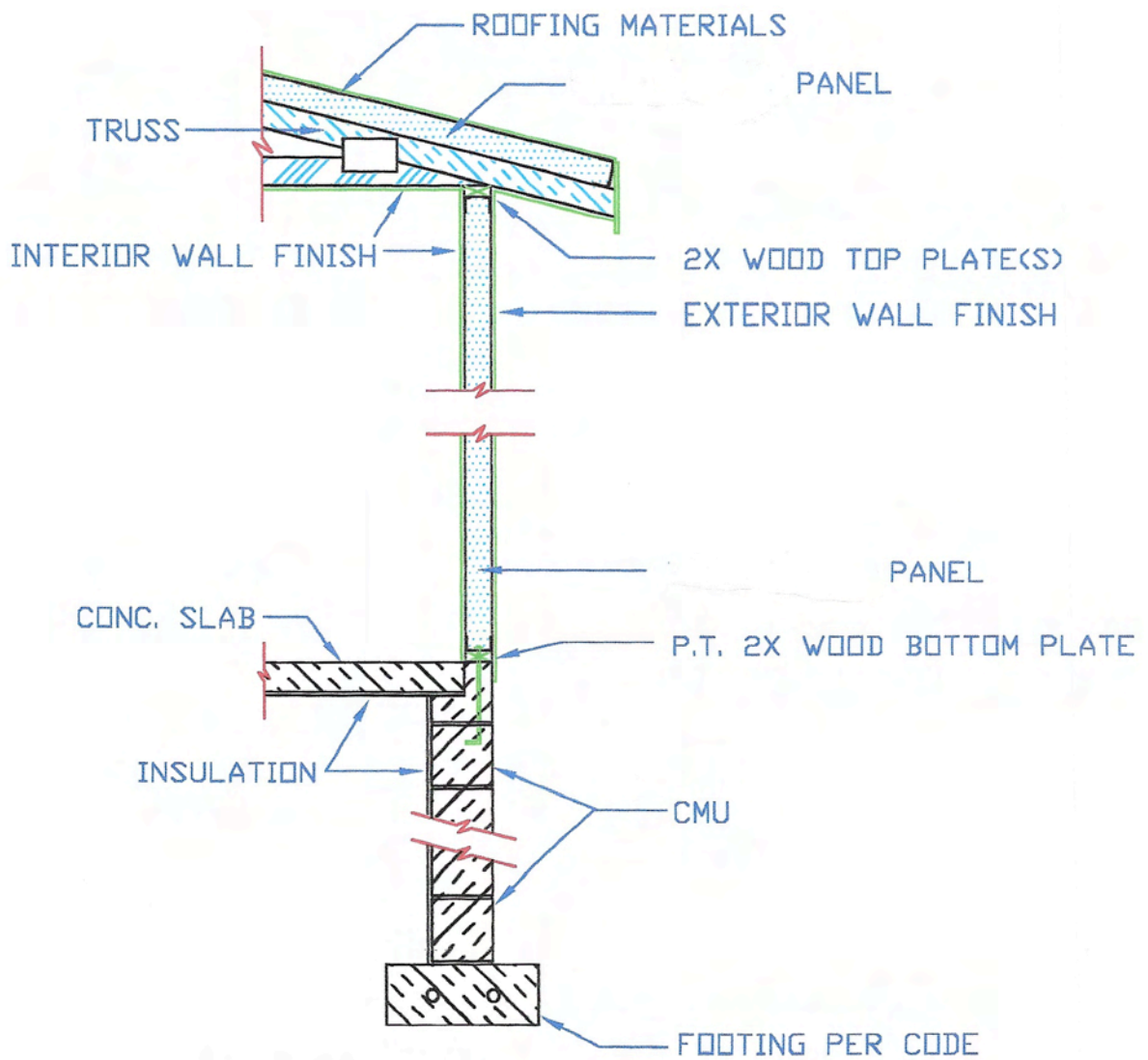
DRAWING J-1



2 STORY WALL SECTION

WITH TURNED DOWN SLAB

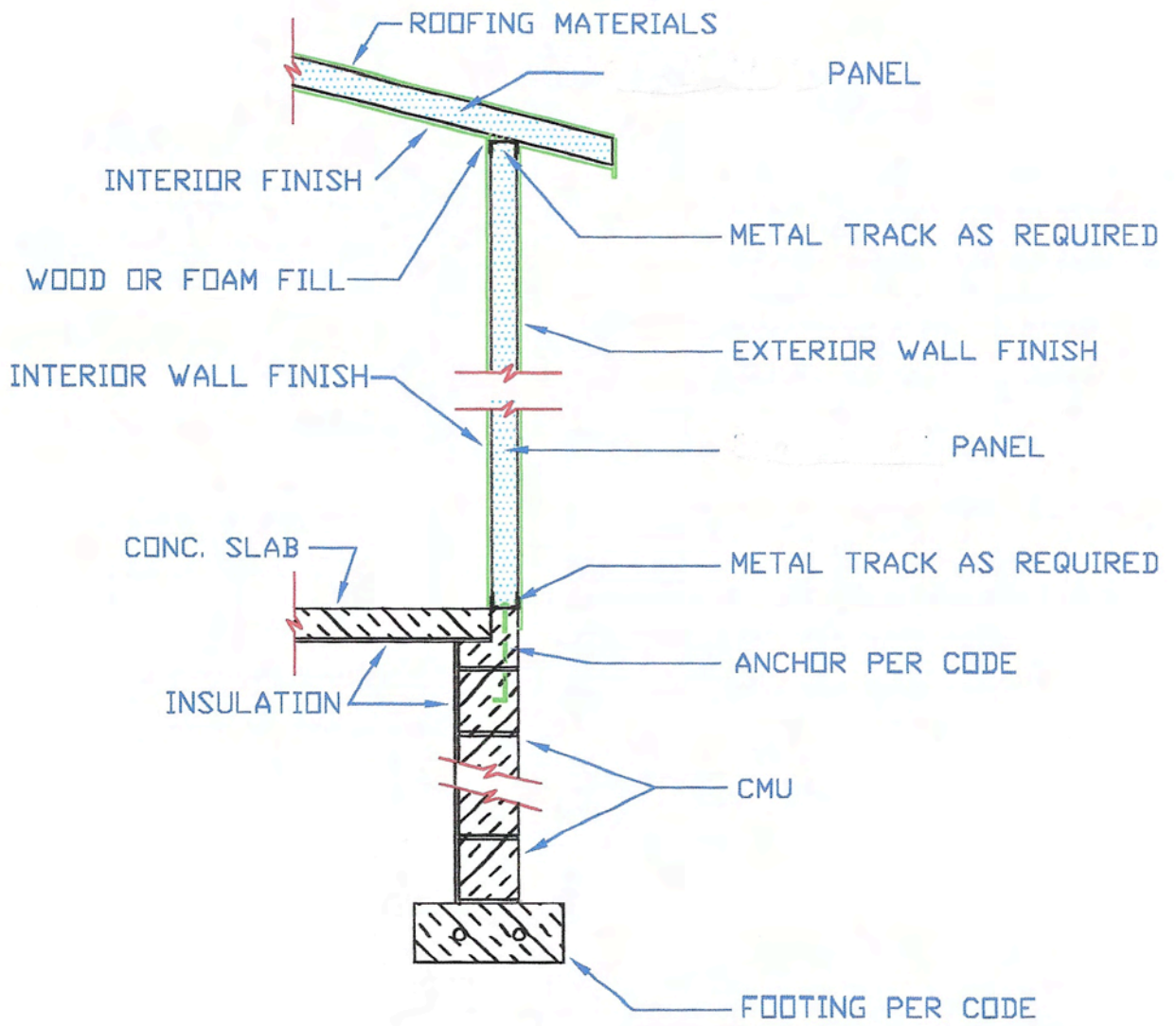
DRAWING J-2



1 STORY WALL SECTION

WITH CMU FOUNDATION

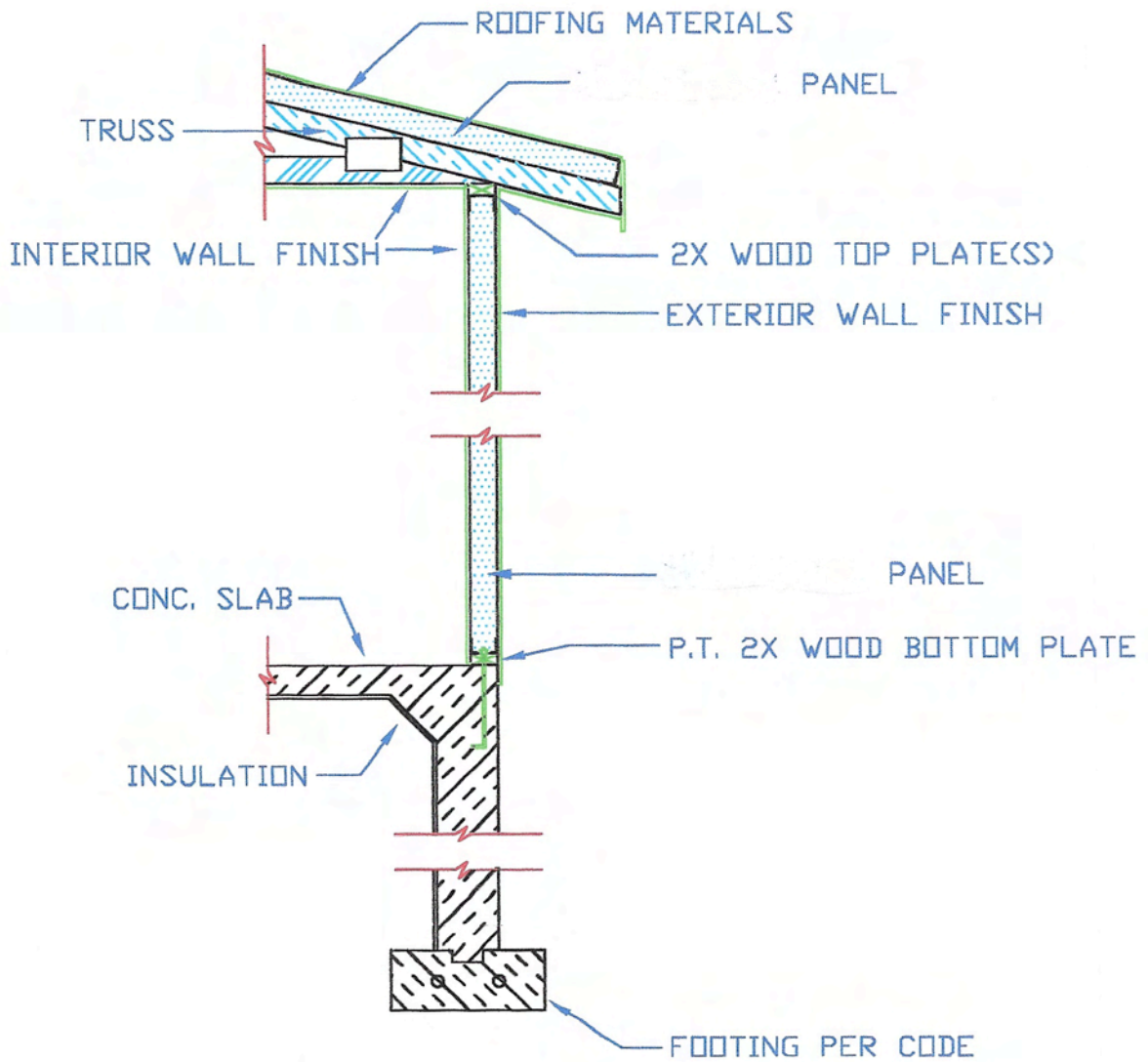
DRAWING J-3



1 STORY WALL SECTION

WITH CMU FOUNDATION

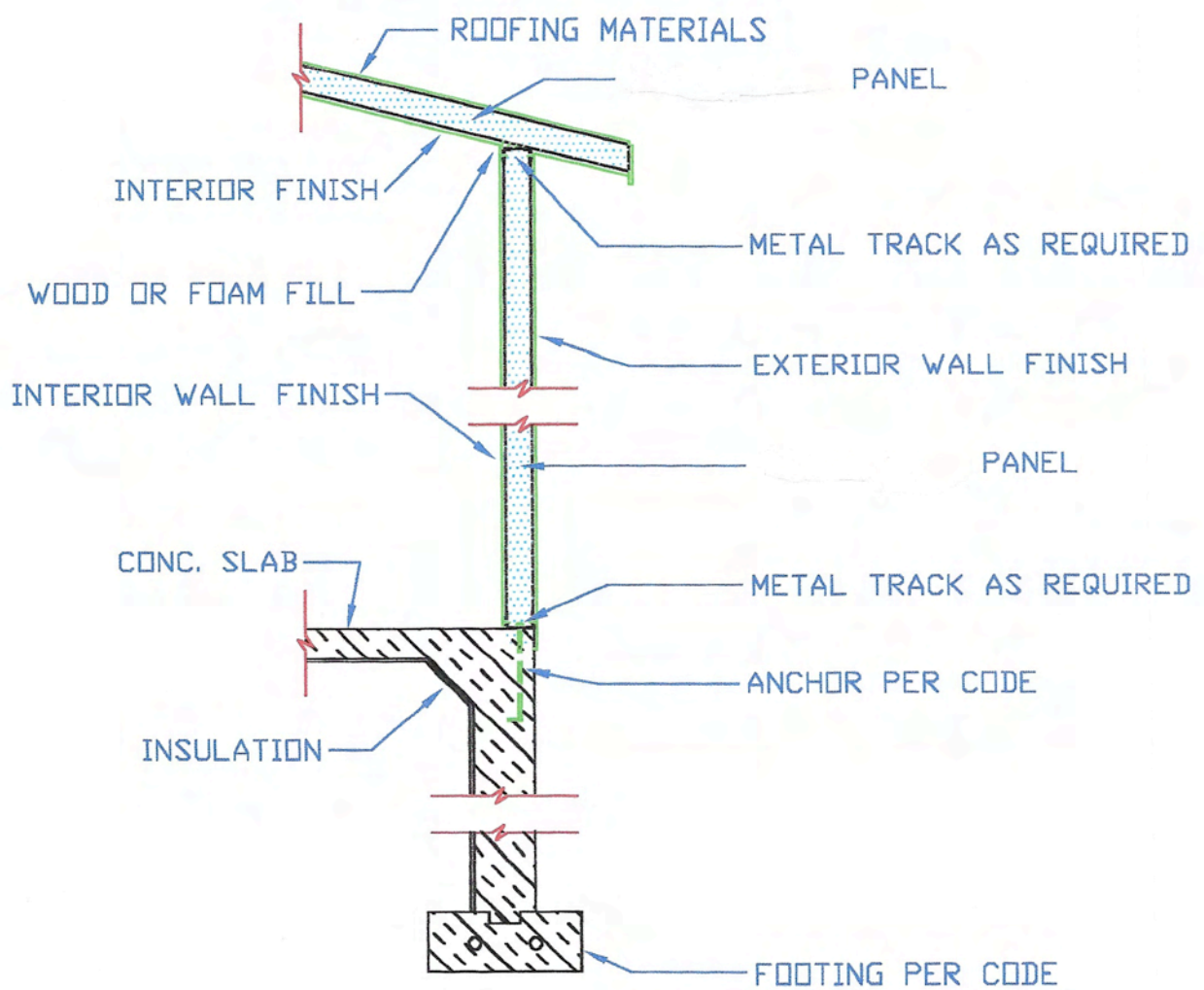
DRAWING J-4



1 STORY WALL SECTION

WITH TURNED DOWN SLAB

DRAWING J-5



1 STORY WALL SECTION

WITH TURNED DOWN SLAB

DRAWING J-6

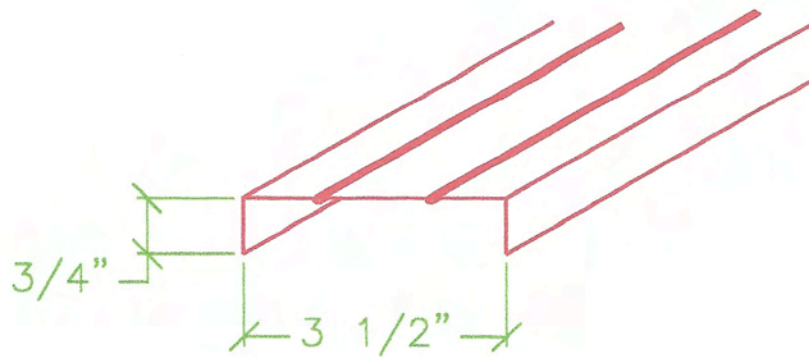
SECTION K

K-1= TYPICAL METAL PROFILES (STANDARD STUD AND
“LEADING EDGE” METAL)

K-2= TYPICAL METAL PROFILES (END “L” METAL AND
ATTACHMENT PLATE)

K-3= TYPICAL METAL PROFILES (RIDGE CAP METAL AND HEAVY
GAUGE STUD)

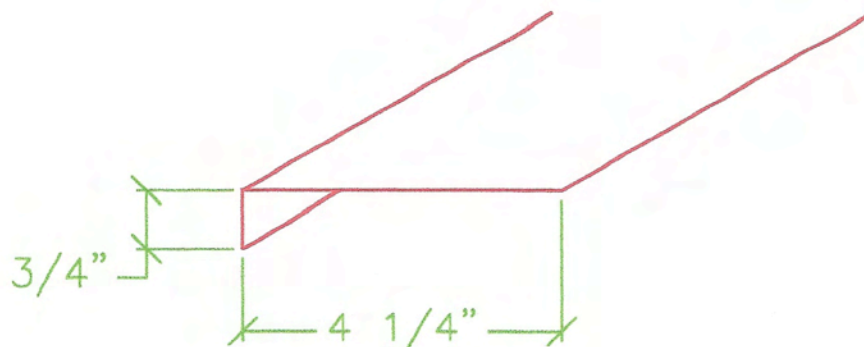
K-4= TYPICAL METAL PROFILES (METAL TRACK)



TYPICAL **"C" STUD PROFILE**

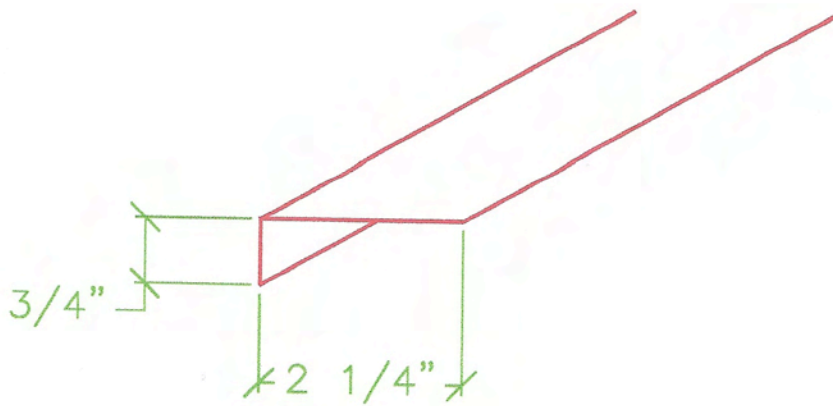
(24 GAUGE, G-90)

DRAWING K-1



TYPICAL **"LEADING EDGE" METAL PROFILE**

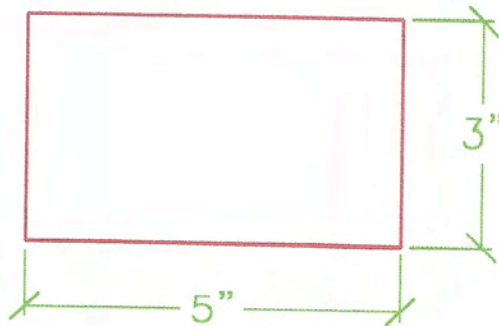
(24 GAUGE, G-90)



TYPICAL "END" METAL PROFILE

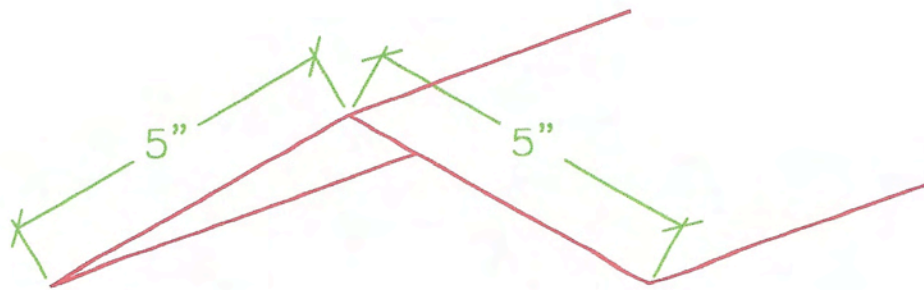
(24 GAUGE, G-90)

DRAWING K-2



TYPICAL "ATTACHMENT PLATE" PROFILE

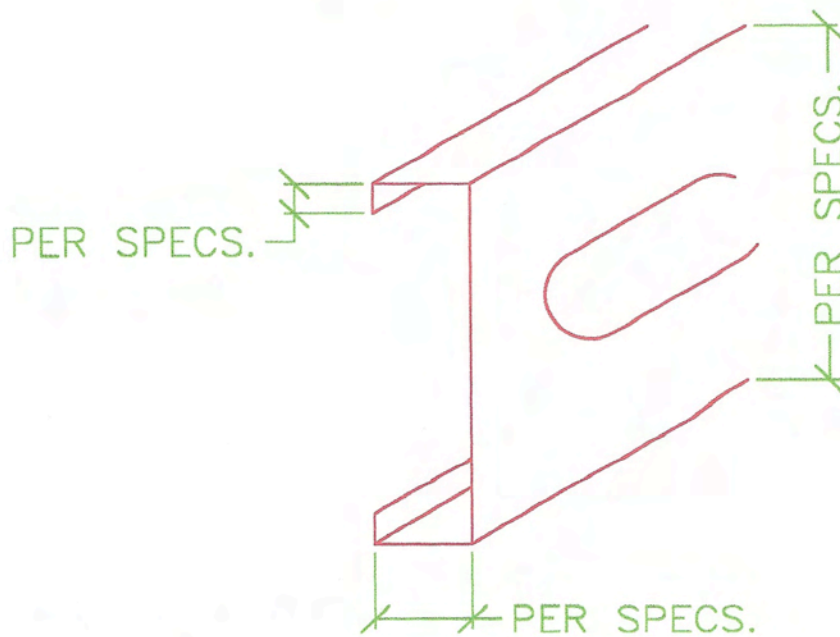
24 GA. MINIMUM



TYPICAL

"RIDGE CAP" PROFILE

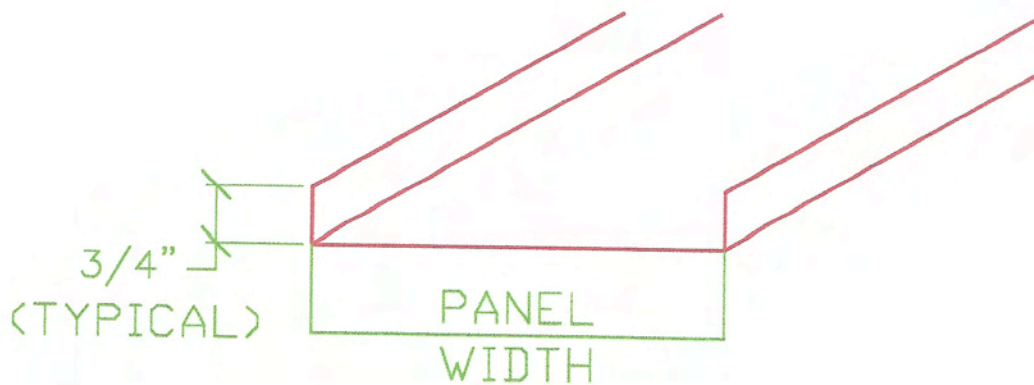
24 GA. MINIMUM



DRAWING K-3

TYPICAL HEAVY GAUGE "C" STUD PROFILE

STUDS ARE SIZED AS PER ENGINEERING SPECS. FOR PROJECT



TYPICAL "METAL TRACK" PROFILE

(* 24 GAUGE MINIMUM, G-90)

* GAUGE OF METAL AND DEPTH OF LEGS
ARE AS PER SPECIFICATIONS IF REQUIRED

DRAWING K-4

SECTION L

L-1= #8, 1/2" SELF-TAPPING SCREWS

L-2= 5" DECK SCREW

L-3= 7" DECK SCREW



TYPICAL ATTACHMENT SCREW

#8 X 1/2" (LASER CONSTRUCTION FASTENERS # 00311230320200 OR EQUAL)

DRAWING L-1



TYPICAL

5" DECK SCREW

MULE-HIDE DRILL POINT OR EQUIVALENT

DRAWING L-2



TYPICAL

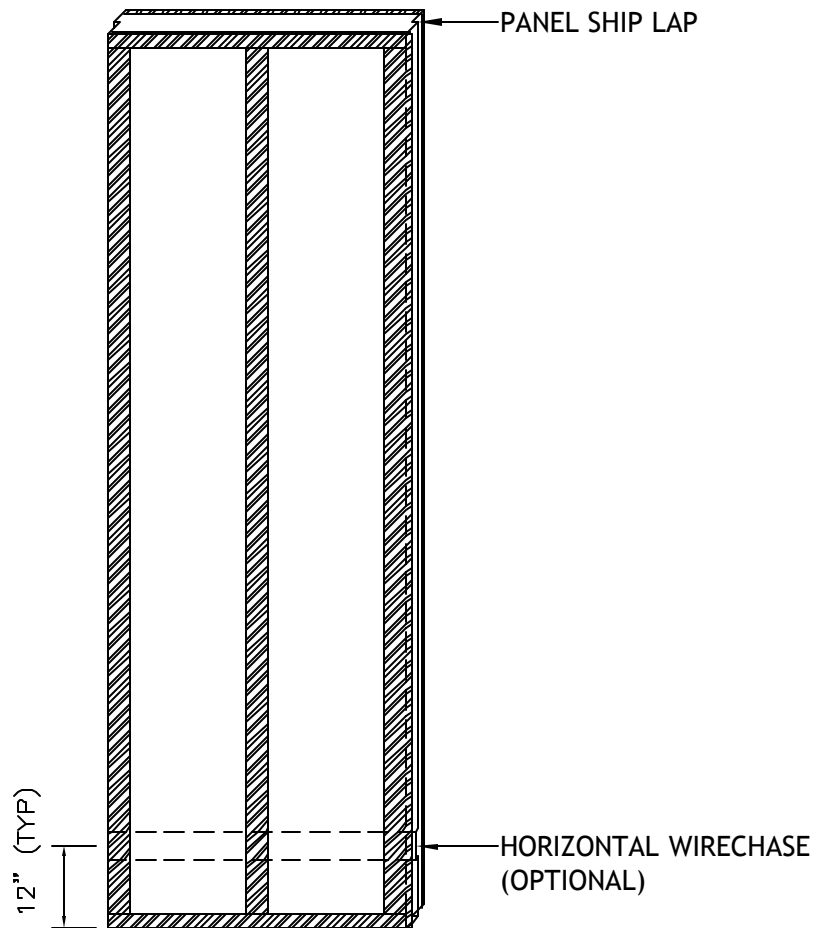
7" DECK SCREW

MULE-HIDE DRILL POINT OR EQUIVALENT

DRAWING L-3

SECTION M

M-1 = STANDARD WIRECHASE PLACEMENT IN A STAND PANEL



DRAWING M-1

TYPICAL WIRECHASE LOCATIONS

PANEL AS VIEWED FROM INSIDE THE
STRUCTURE

SECTION N

N-1= STANDARD WALL PANEL 16" O.C.

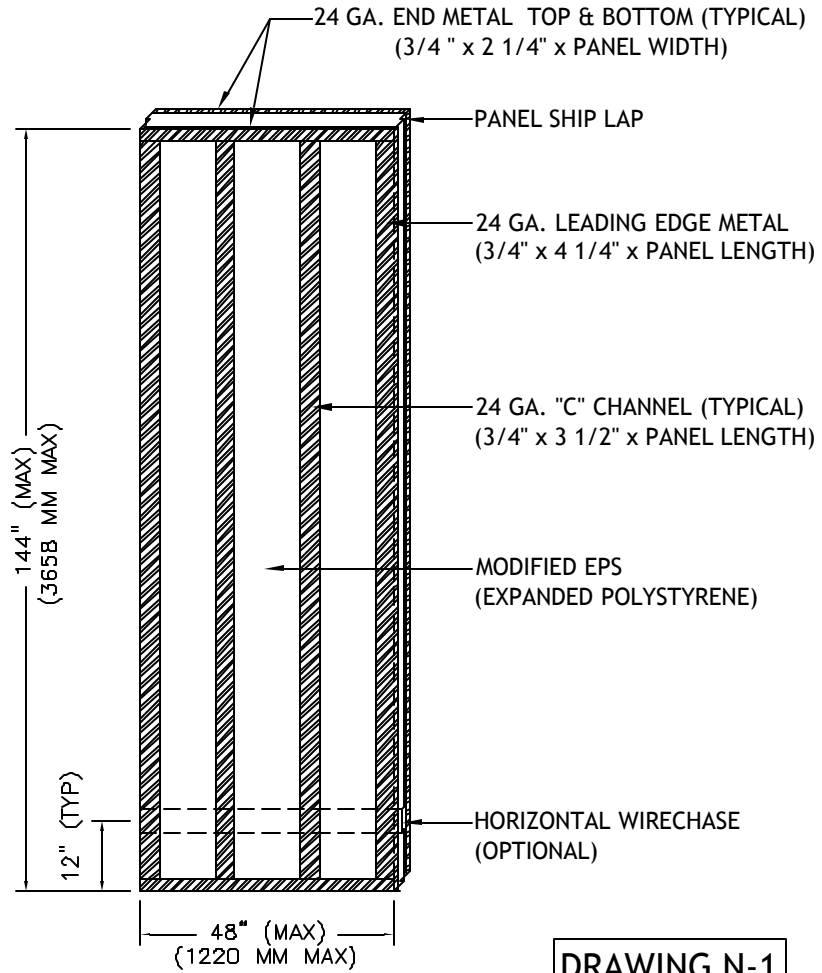
N-2= STANDARD WALL PANEL 24" O.C.

N-3= STANDARD WINDOW PANEL

N-4= STANDARD DOOR PANEL

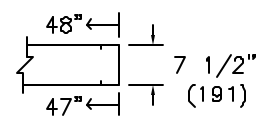
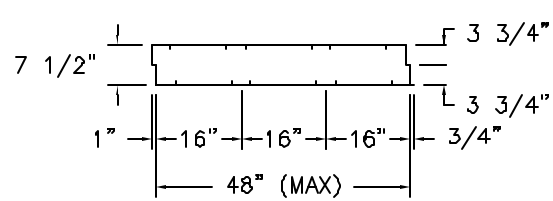
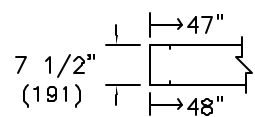
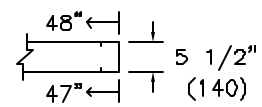
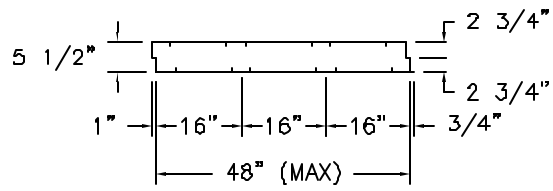
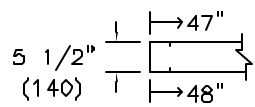
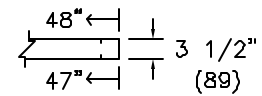
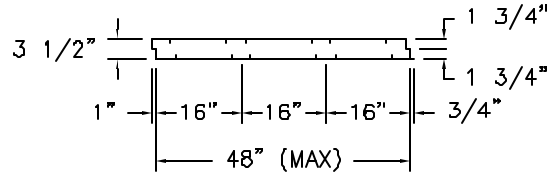
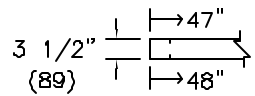
N-5= STANDARD HEADER PANEL

N-6= STANDARD CONCRETE "T-BEAM" PANEL



DRAWING N-1

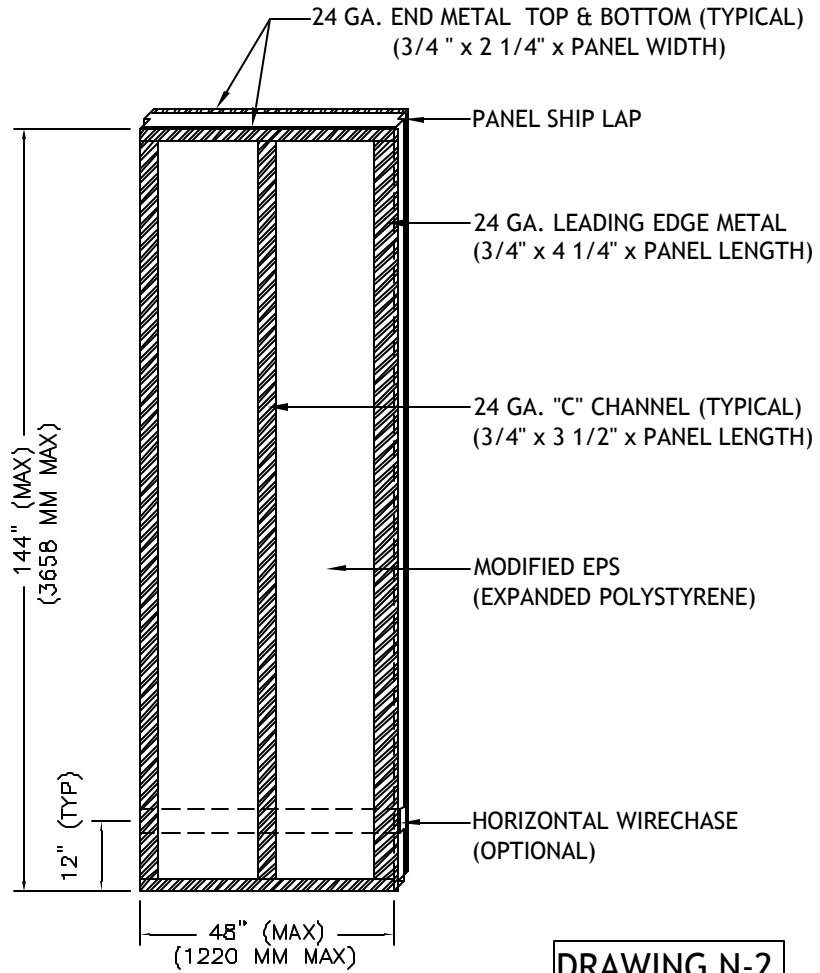
PANEL ELEVATION



**NO LAP LEFT
(NLL)**

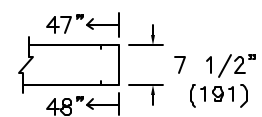
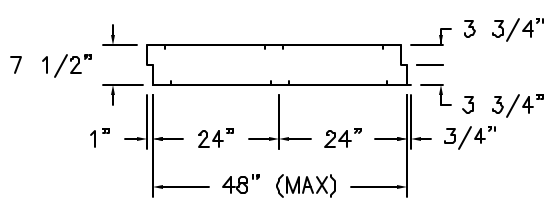
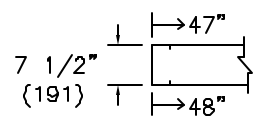
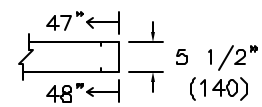
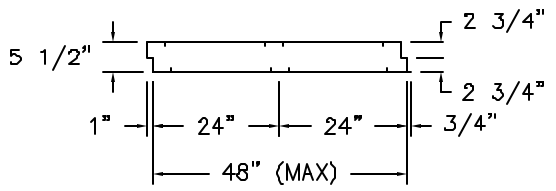
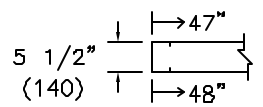
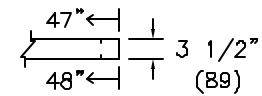
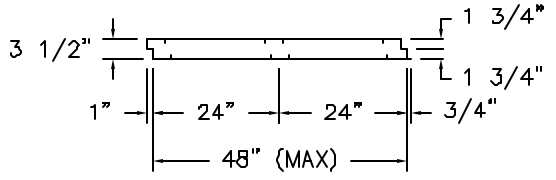
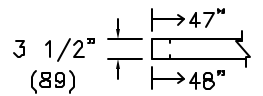
PANEL SECTIONS

**NO LAP RIGHT
(NLR)**



DRAWING N-2

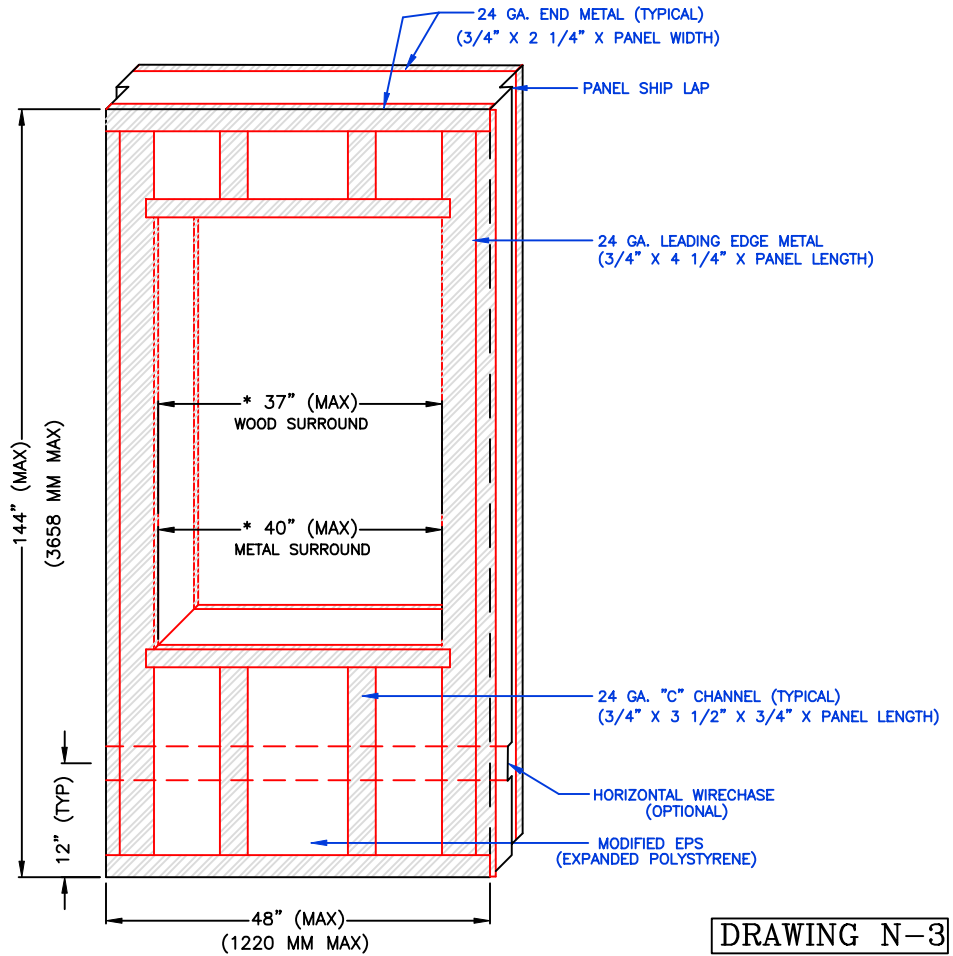
PANEL ELEVATION



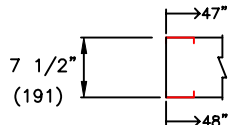
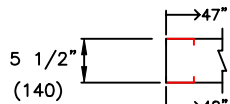
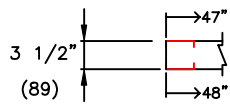
**NO LAP LEFT
(NLL)**

PANEL SECTIONS

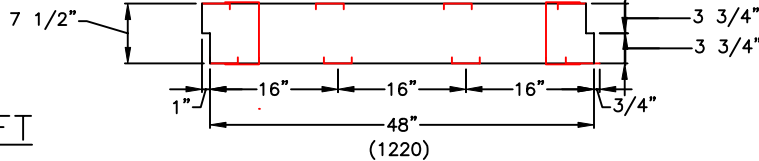
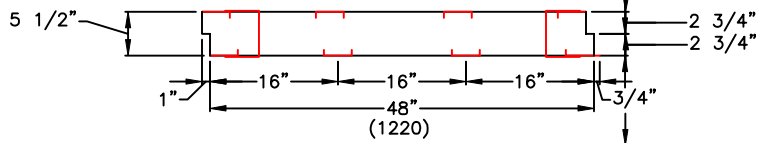
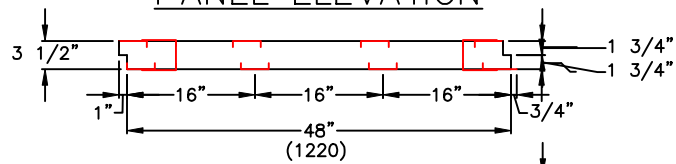
**NO LAP RIGHT
(NLR)**



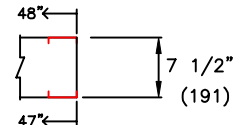
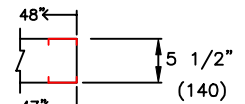
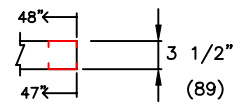
DRAWING N-3



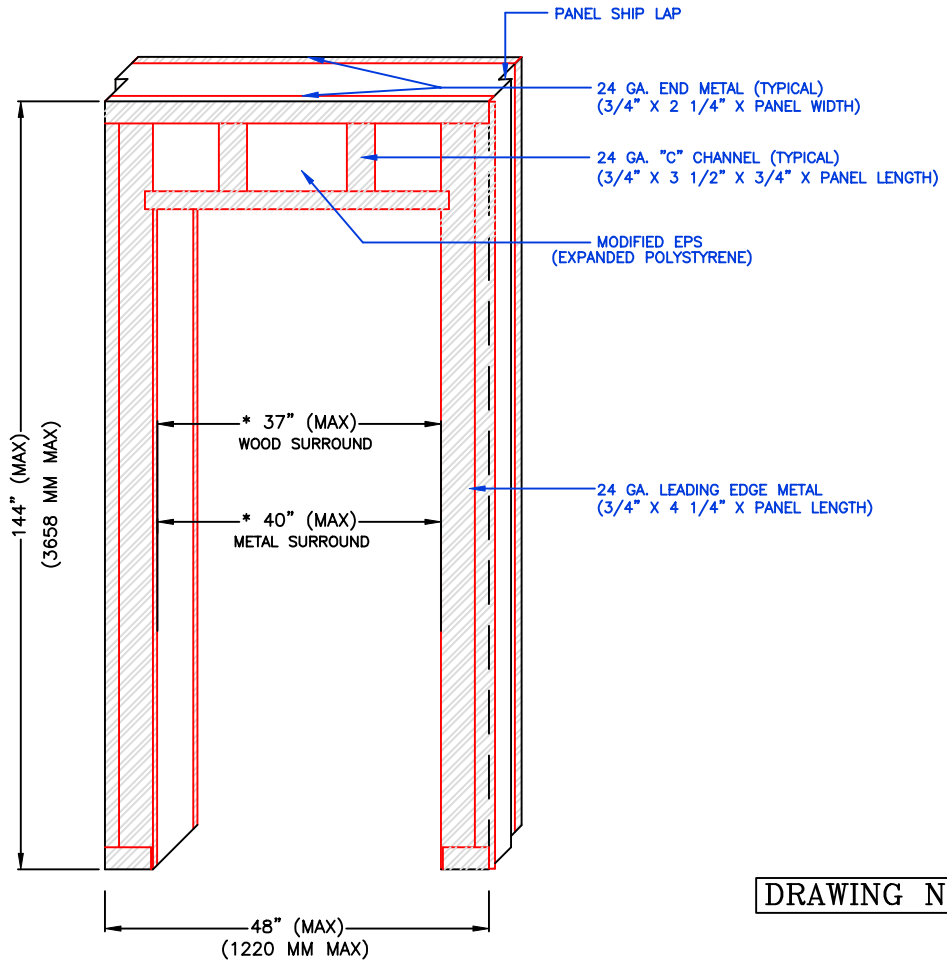
NO LAP LEFT
(NLL)



PANEL SECTIONS

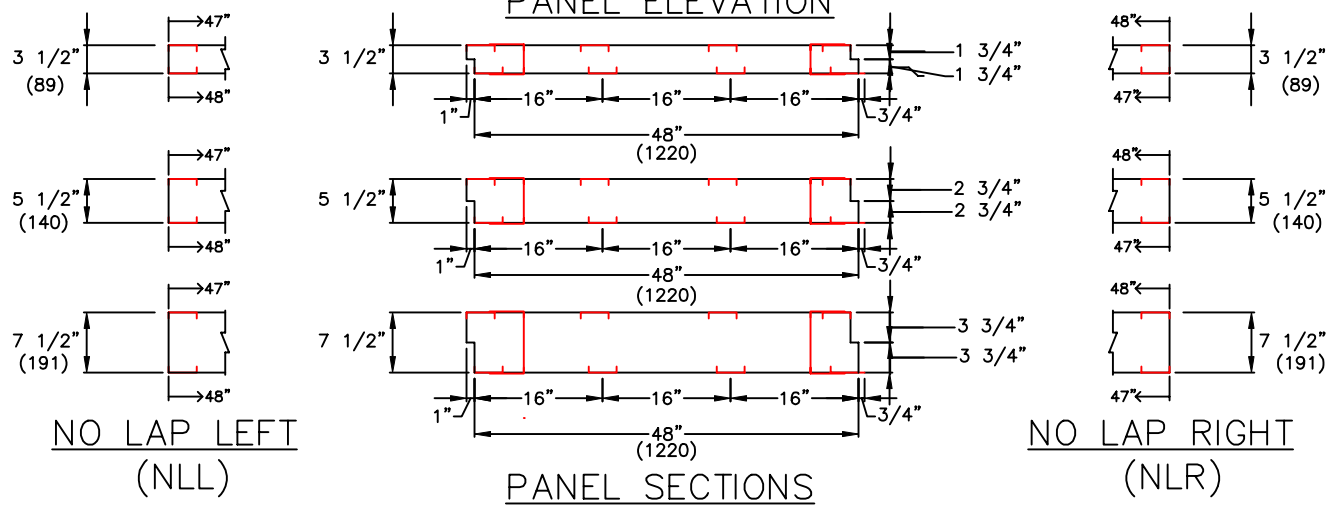


NO LAP RIGHT
(NLR)

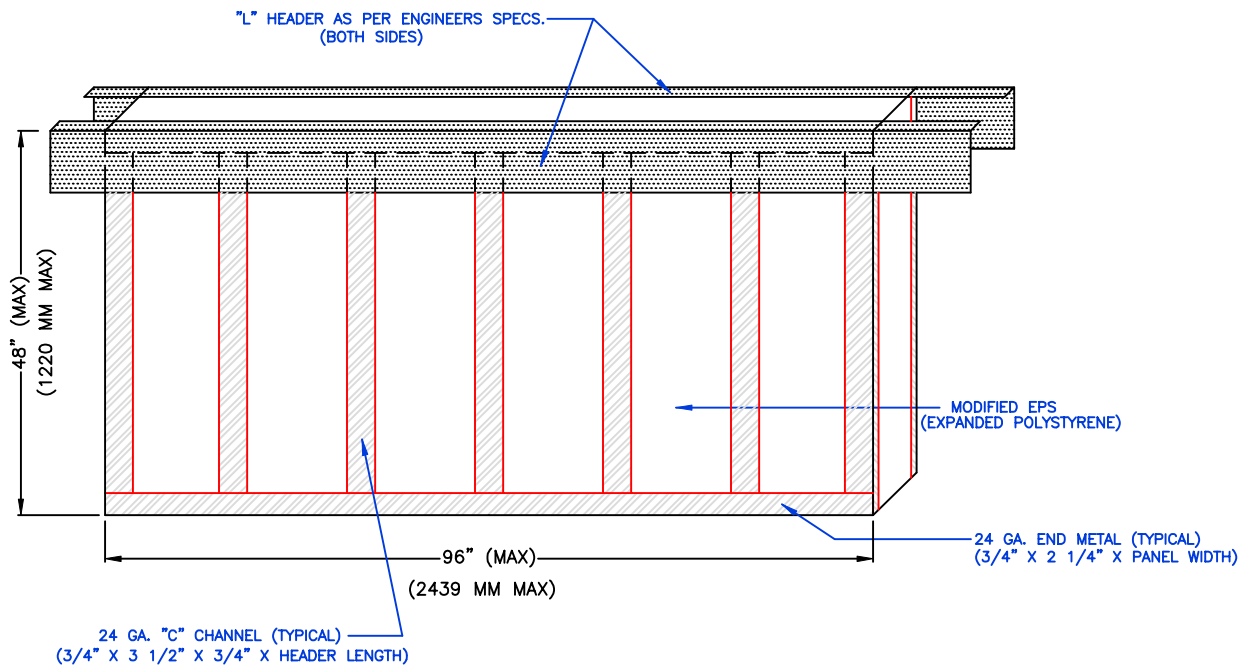


DRAWING N-4

PANEL ELEVATION

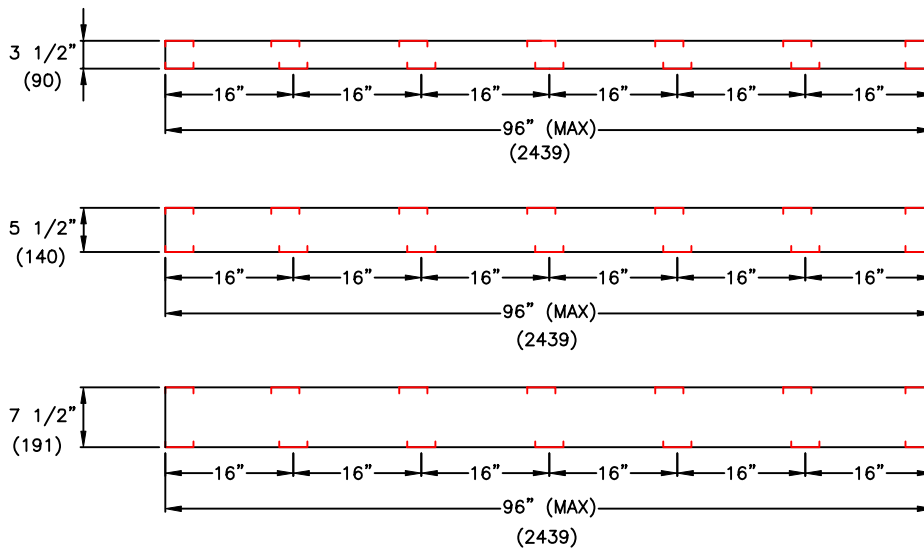


DO NOT EXCEED PANEL DESIGN LIMITATIONS



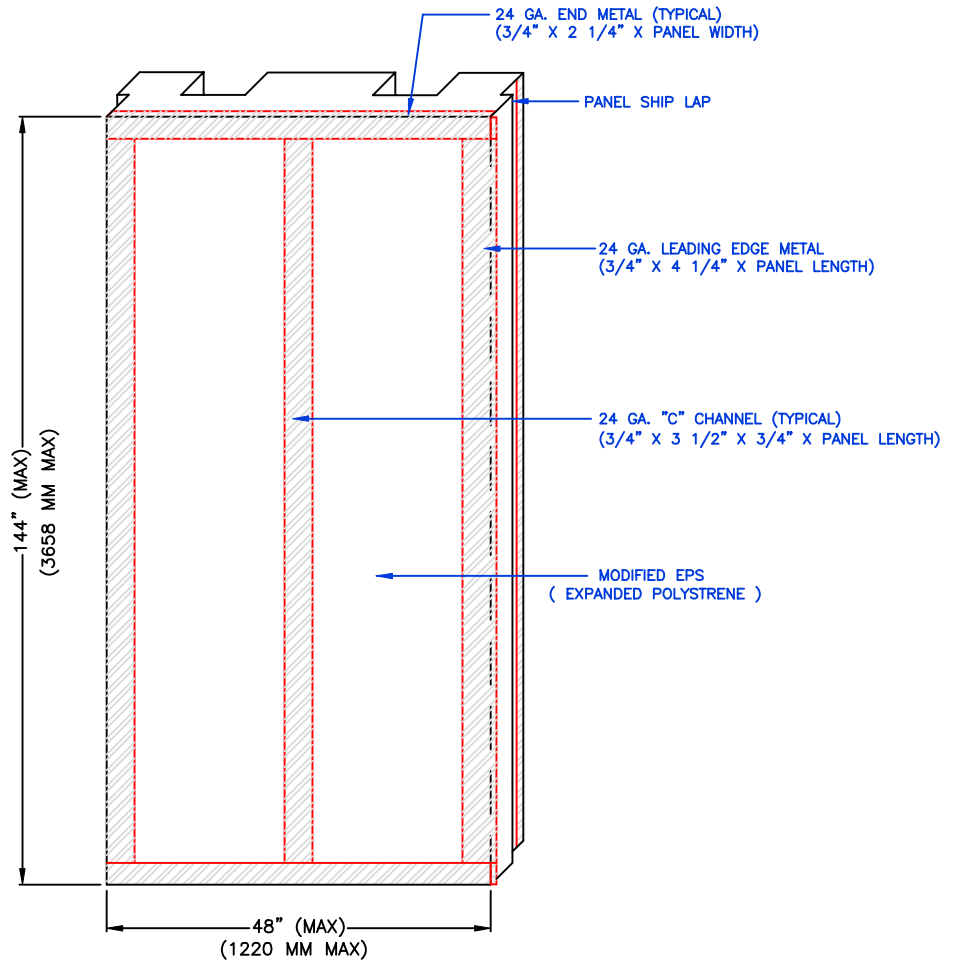
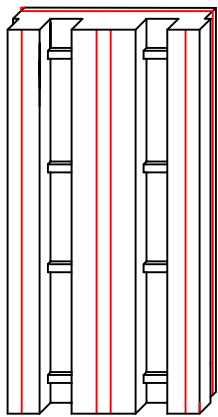
PANEL ELEVATION

DRAWING N-5



PANEL SECTIONS

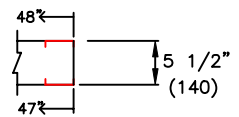
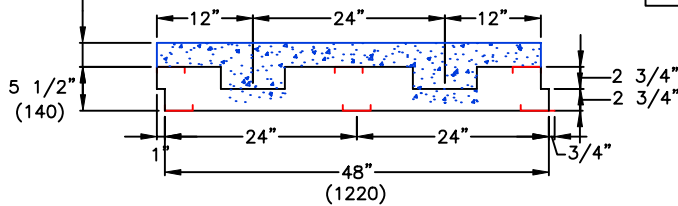
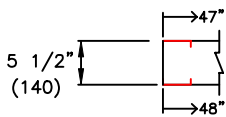
INTERIOR SIDE OF PANEL



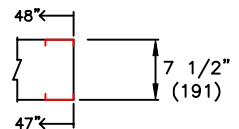
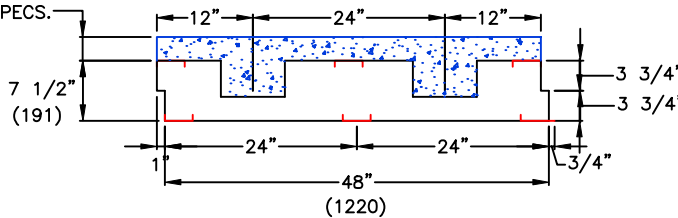
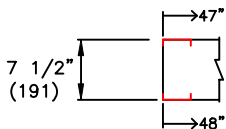
PANEL ELEVATION

DRAWING N-6

THICKNESS AS PER ENGINEERS SPECS.



THICKNESS AS PER ENGINEERS SPECS.



NO LAP LEFT
(NLL)

PANEL SECTIONS

NO LAP RIGHT
(NLR)

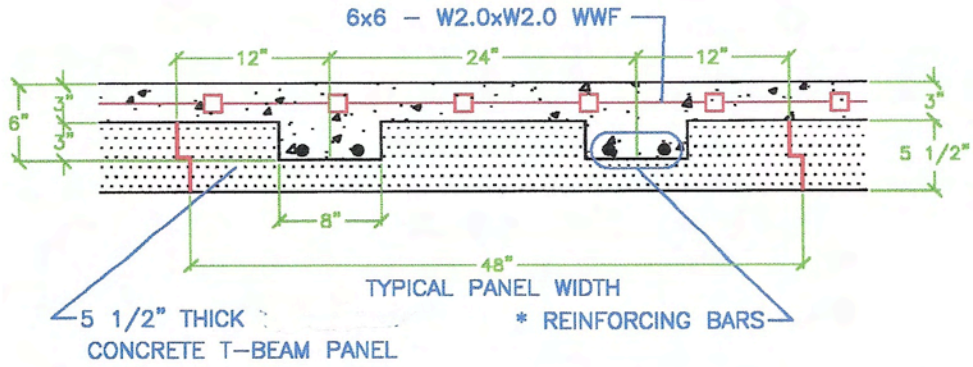


FIG. 1 - FPB - 1 & RPB - 1

* 2X THE BAR DIAMETER ABOVE BOTTOM OF POCKET

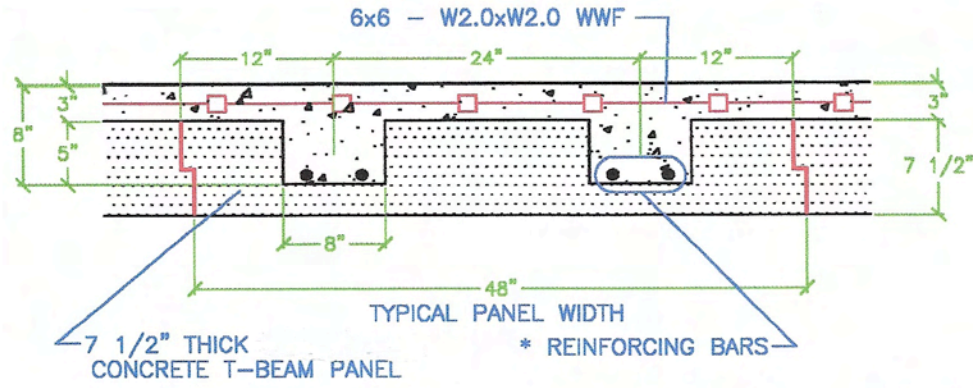


FIG. 2 - FPB - 2 & RPB - 2

* 2X THE BAR DIAMETER ABOVE BOTTOM OF POCKET

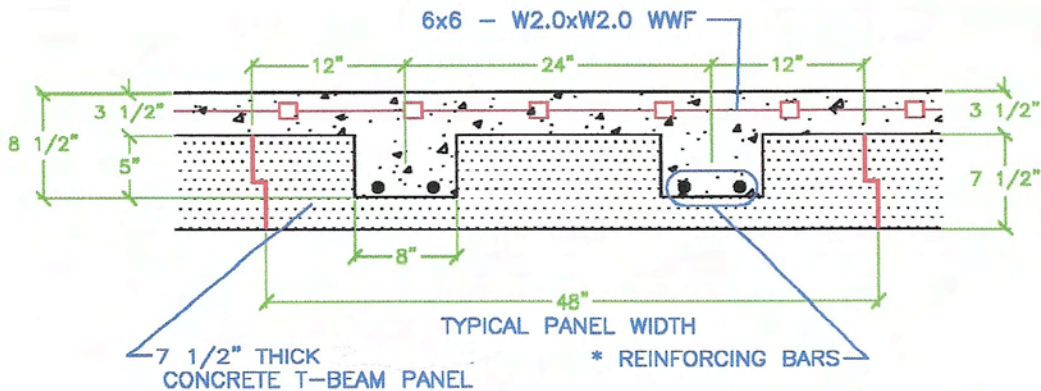


FIG. 3 - FPB - 3

* 2X THE BAR DIAMETER ABOVE BOTTOM OF POCKET

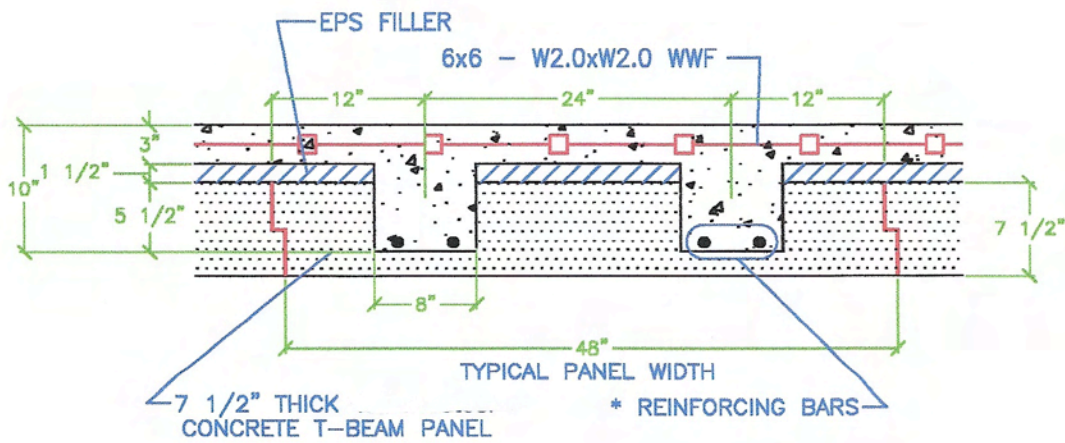


FIG. 4 - RPB - 3 & FPB - 4

* 2X THE BAR DIAMETER ABOVE BOTTOM OF POCKET

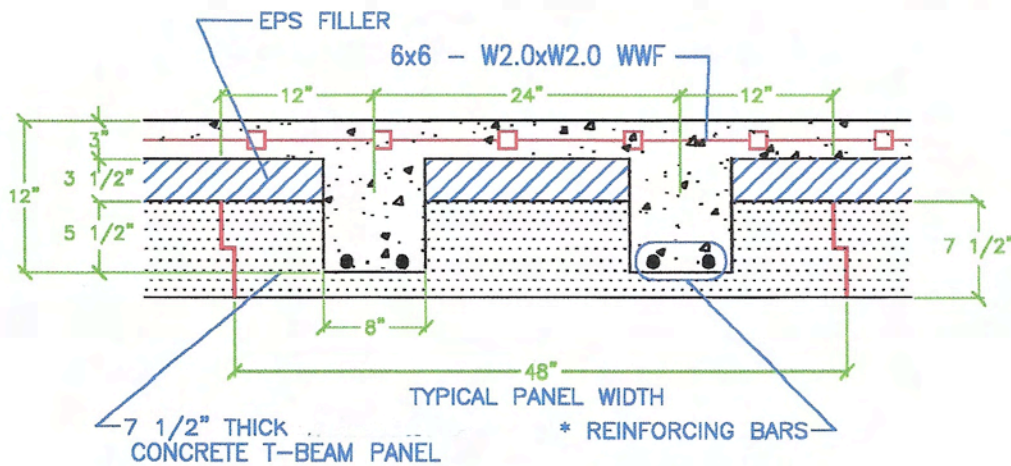


FIG. 5 - RPB - 4 & FPB - 5

* 2X THE BAR DIAMETER ABOVE BOTTOM OF POCKET

**STRUCTURAL ANALYSIS
FOR ROOF PANEL INSULAR T – BEAM**

TYPE OF ROOF PANELLING	SPAN (FT)	RESISTING MOMENT (FT-LBS)	REINFORCING BARS (BOTTOM)
RPB - 1 (SEE FIG. 1)	10	2750	2 - # 4
	12	3960	2 - # 4
	14	5400	2 - # 5
RPB - 2 (SEE FIG. 2)	16	7040	2 - # 5
	18	9850	2 - # 5
	20	12150	2 - # 6
RPB - 3 (SEE FIG. 4)	22	16100	2 - # 6
	24	19160	2 - # 6
RPB - 4 (SEE FIG. 5)	26	24420	2 - # 6
	28	28330	2 - # 7
	30	32520	2 - # 7

**STRUCTURAL ANALYSIS
FOR FLOOR PANEL INSULAR T – BEAM**

TYPE OF FLOOR PANELLING	SPAN (FT)	RESISTING MOMENT (FT-LBS)	REINFORCING BARS (BOTTOM)
FPB - 1 (SEE FIG. 1)	10	3670	2 - # 4
	12	5290	2 - # 5
FPB - 2 (SEE FIG. 2)	14	7840	2 - # 5
	16	10240	2 - # 5
	18	12960	2 - # 6
FPB - 3 (SEE FIG. 3)	20	16250	2 - # 6
FPB - 4 (SEE FIG. 4)	22	20180	2 - # 6
FPB - 5 (SEE FIG. 5)	24	26650	2 - # 6