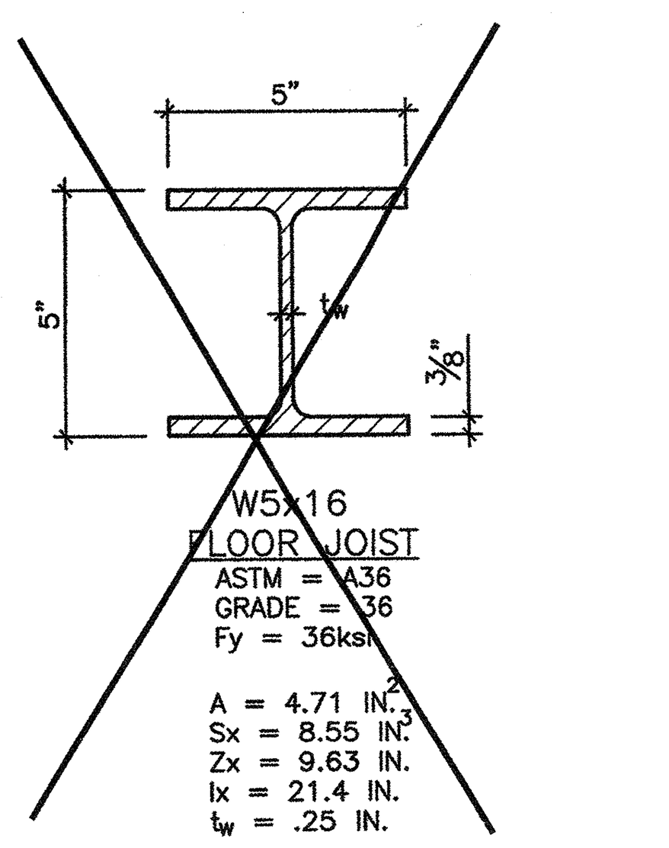
AGENCY TRACKING NO. 63321-356
FILE NO. 15-6

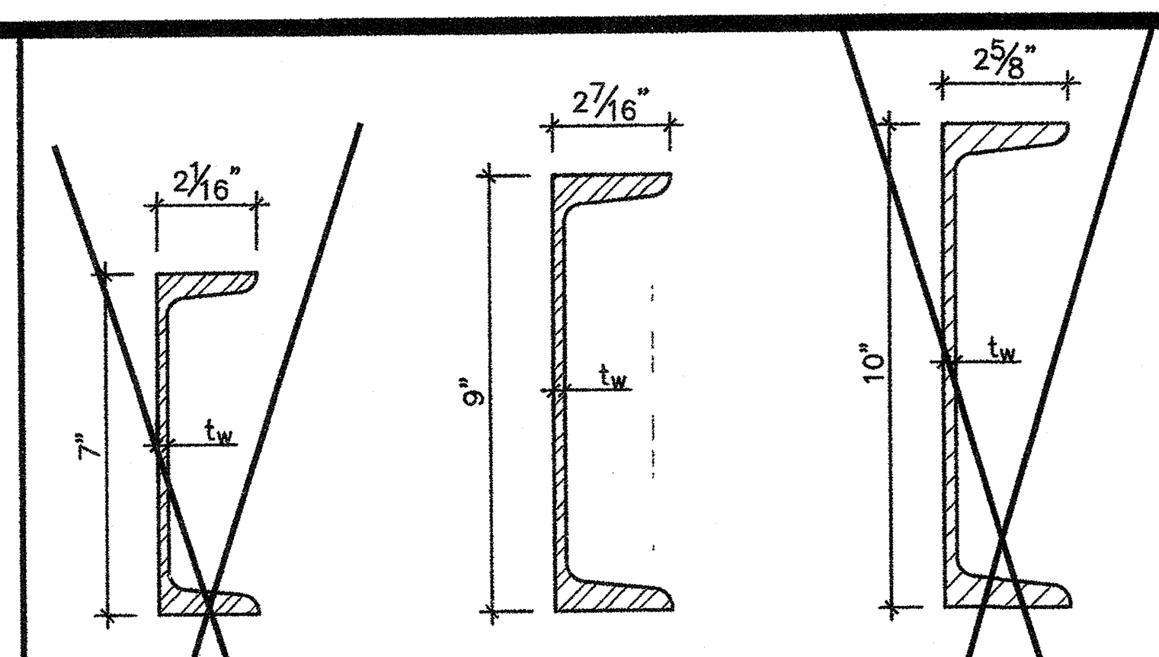
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
OFFICE OF REGULATION SERVICES
03-120240
AC ___ FLS ___ SS ___
DATE JAN 0 2 2020



W5x16
FLOOR JOIST
ASTM = A36
GRADE = 36
Fy = 36ksi

A = 4.71 IN.²
Sx = 8.55 IN.³
Zx = 9.63 IN.
Ix = 21.4 IN.
tw = .25 IN.

HOT ROLLED FLOOR JOIST PROPERTIES 1



C 7x9.8
FLOOR BEAM
ASTM = A36
GRADE = 36
FY = 36 ksi

A = 2.87 IN.²
Sx = 6.07 IN.³
Zx = 7.19 IN.³
Ix = 21.20 IN.⁴
tw = .21 IN.

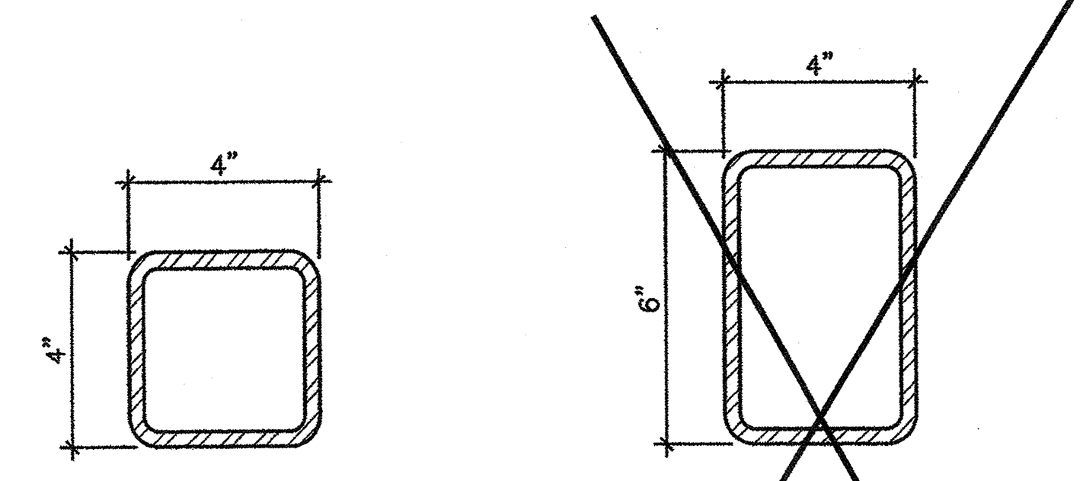
C9x13.4
FLOOR BEAM
ASTM = A36 GRADE 36
OR
ASTM = A572 GRADE 50

A = 3.94 IN.²
Sx = 10.60 IN.²
Zx = 12.60 IN.³
Ix = 47.80 IN.⁴
tw = .220 IN.

C 10x15.3
FLOOR BEAM
ASTM = A36
GRADE = 36
FY = 36 ksi

A = 4.48 IN.²
Sx = 13.50 IN.³
Zx = 15.90 IN.³
Ix = 67.30 IN.⁴
tw = .24 IN.

HOT ROLLED FLOOR BEAM PROPERTIES 2



HSS 4x4x5/16
COLUMN
ASTM = A500
GRADE = B
FY = 46ksi

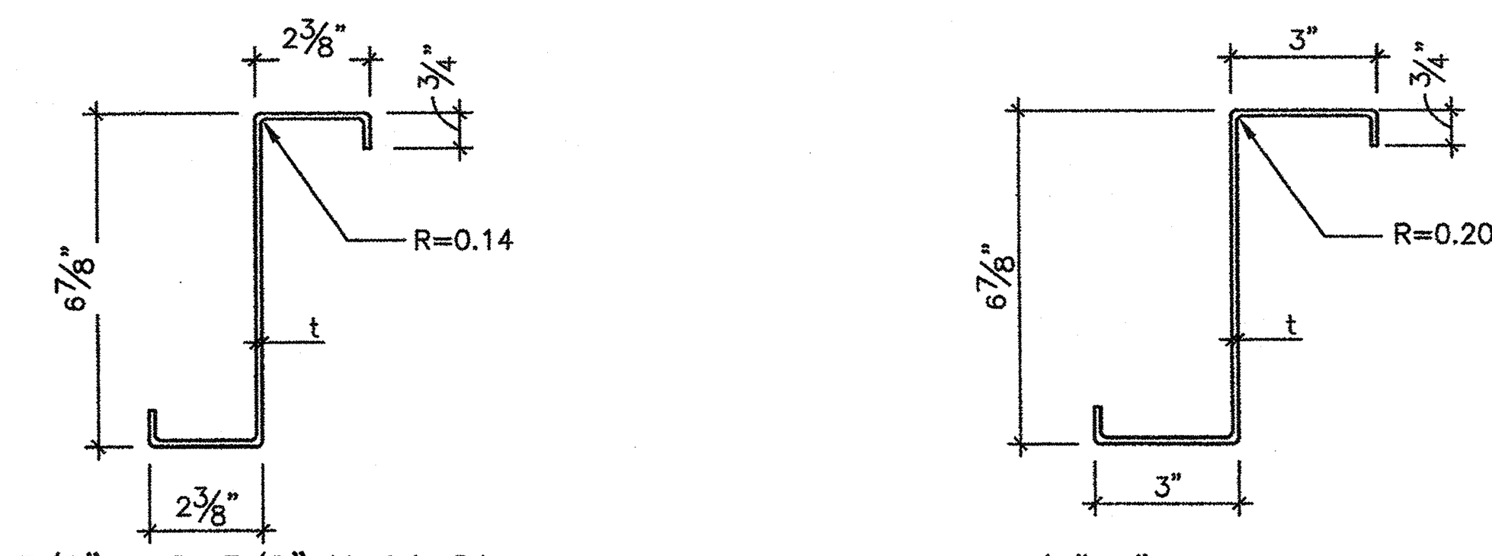
A = 4.10 IN.²
Sx = 4.57 IN.³
Zx = 5.59 IN.³
Ix = 9.14 IN.⁴
tw = .3125 IN.

HSS 6x4x5/16
COLUMN
ASTM = A500
GRADE = B
FY = 46ksi

A = 5.26 IN.²
Sx = 8.27 IN.³
Zx = 10.30 IN.³
Ix = 24.80 IN.⁴
tw = .3125 IN.

Sy = 6.58 IN.³
Zy = 7.75 IN.³
Iy = 13.2 IN.⁴

HSS COLUMN PROPERTIES 3



6-7/8" x 2-3/8" X 14 GA.
FLOOR JOIST
ASTM A1011 GRADE 45
F_Y = 45KSI

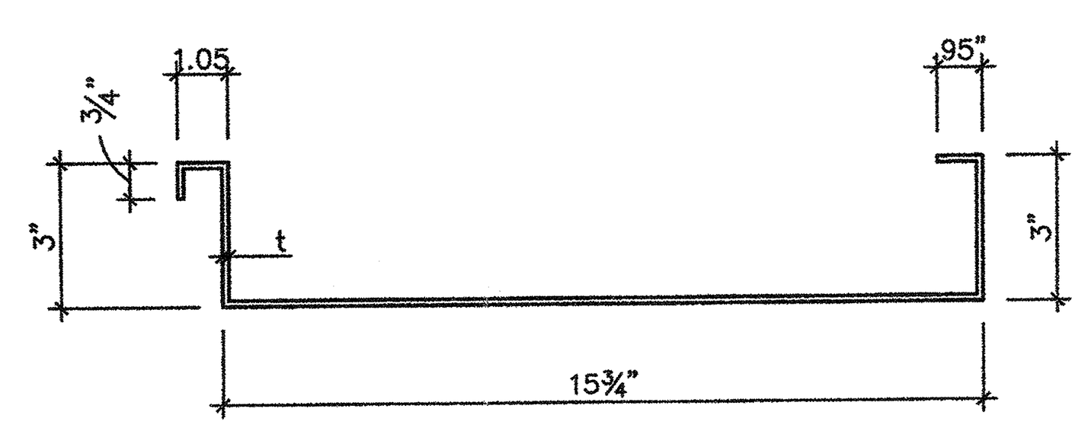
A = 0.89 IN²
Sx = 1.85 IN³
Ix = 6.37 IN⁴
t = .068 IN.

6-7/8"x3" X 12 GA.
FLOOR JOIST
ASTM A1011 GRADE 45
F_Y = 45KSI

A = 1.38 IN²
Sx = 2.97 IN³
Ix = 10.20 IN⁴
t = .097 IN.

LIGHT GAUGE FLOOR JOIST PROPERTIES 5

(26 GA. MAY BE USED W/PLYWOOD SHEATHING)



ASTM = A1011
GRADE = 36
FY = 36ksi

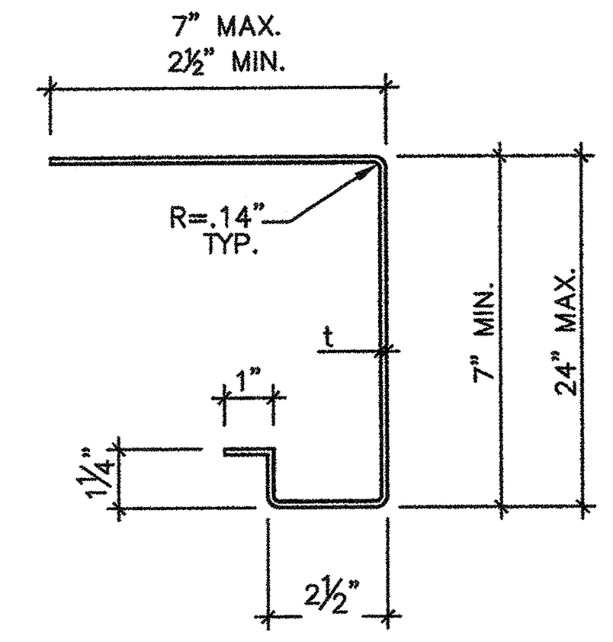
w/ GALVANIZATION
t=0.0356 IN. MIN.

w/o GALVANIZATION
t=0.0329 IN. MIN.

Sx(t) = 0.364 IN³
Sx(b) = 1.372 IN³
Ix = 0.863 IN⁴

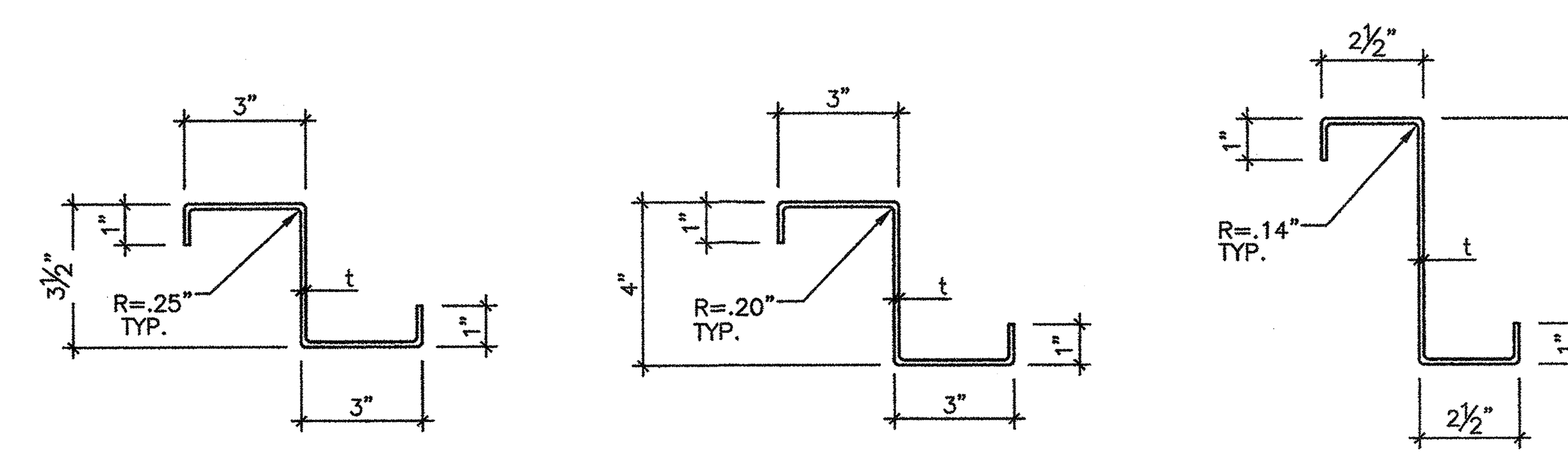
Sx(t) = 0.330 IN³
Sx(b) = 0.305 IN³
Ix = 0.476 IN.
A = 0.84 IN²

20GA ROOF PAN PROPERTIES 7



14 GA. FORMED SOFFIT CEE
ASTM = A1011
GRADE = 36
Fy = 36ksi
A = 0.97 IN²
Sx = 1.78 IN³
Ix = 6.87 IN⁴
t = 0.0713 IN.

14GA FORMED SOFFIT CEE POPERTIES 8

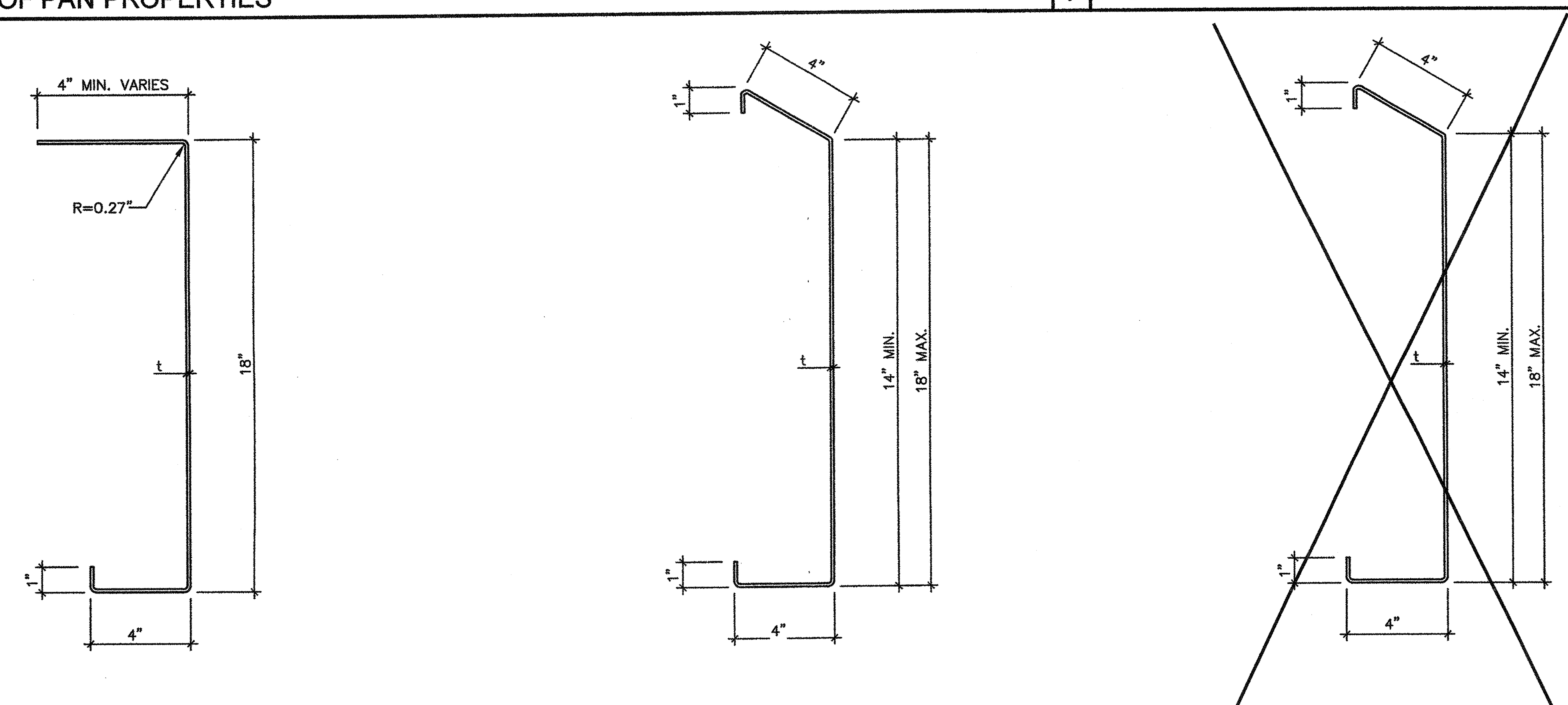


10 GA. ROOF PURLIN
ASTM = A1011
GRADE = 36
Fy = 36ksi
A = 1.30 IN²
Sx = 1.49 IN³
Ix = 2.60 IN⁴
t = 0.118 IN. MIN.

12 GA. ROOF PURLIN
ASTM = A1011
GRADE = 36
Fy = 36ksi
A = 1.14 IN²
Sx = 1.50 IN³
Ix = 3.00 IN⁴
t = 0.097 IN. MIN.

14 GA. ROOF PURLIN
ASTM = A1011
GRADE = 36
Fy = 36ksi
A = 0.089 IN²
Sx = 1.65 IN³
Ix = 4.95 IN⁴
t = 0.068 IN. MIN.

LIGHT GAUGE ROOF PURLIN PROPERTIES 10



10 GA. LONGITUDINAL BEAM
ASTM = A1011
GRADE = 50
Fy = 50ksi
t = 0.135 IN.

BEAM DEPTH	18"
A (IN²)	3.53
S_X MIN. (IN³)	16.50
I_X MIN. (IN⁴)	152.26

12 GA. TRANSVERSE BEAM
ASTM = A1011
GRADE = 36
Fy = 36ksi
t = 0.1017 IN.

BEAM DEPTH	14"	18"
A (IN²)	2.36	2.76
S_X MIN. (IN³)	9.57	13.60
I_X MIN. (IN⁴)	67.02	122.44

10 GA. TRANSVERSE BEAM
ASTM = A1011
GRADE = 50
Fy = 50ksi
t = 0.135 IN.

BEAM DEPTH	14"
A (IN²)	3.09
S_X MIN. (IN³)	12.41
I_X MIN. (IN⁴)	86.88

LIGHT GAUGE ROOF BEAM PROPERTIES 18

NOT USED 14

NOT USED 15

NOT USED 19

1. THE MATERIAL THICKNESS OF LIGHT GAUGE STRUCTURAL MEMBERS, IN THEIR END-USE, SHALL MEET OR EXCEED THE MINIMUM BASE METAL THICKNESS SPECIFIED ON SHEET S0.0 THE MATERIAL GAGE DESIGNATION IN THE PLAN SHALL BE USED AS REFERENCE ONLY.
2. UNLESS NOTED OTHERWISE, ALL SECTION PROPERTIES ARE GROSS SECTION PROPERTIES.
3. LIGHT GAUGE STRUCTURAL MEMBERS TO BE FABRICATED FROM HOT ROLLED SHEETS WITH RUST INHIBITIVE COATING. SEE SHEET N2.0, "LIGHT GAUGE METAL STUDS & COLD FORMED STEEL", FOR ADDITIONAL INFORMATION.

SHEET NOTES

American Modular Systems
787 Spreckels Ave , Manteca, CA 95336
Phone (209) 825-1921 - Fax (209) 825-7018
www.americanmodular.com

PRE-CHECKED SET NAME

24'x40' THRU 120'x40'
HIGH PITCH MODULAR
BUILDINGS

SITE SPECIFIC PROJECT NAME

SHEET TITLE

STEEL MEMBER PROPERTIES

MANUFACTURER PROFESSIONAL OF RECORD ON PC

LICENSED ARCHITECT
RANDALL PATRICK CAVANAGH
No C12631
Ren 3-31-19
STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
MANNY D. FRISCH
No S3380
STRUCTURAL
STATE OF CALIFORNIA

8-20-18
RST18175

THESE DRAWINGS ARE PRELIMINARY AND NOT FOR CONSTRUCTION UNLESS STAMPED & SIGNED BY THE ENGINEER OF RECORD

PROJECT SPECIFIC STATE AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
02 117846
AC ___ FLS ___ SS ___
DATE AUG - 2 2019

ORIGINAL PC STATE AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
PC 02-115726
AC ___ FLS ___ SS ___
DATE 10-11-2018

PRE-CHECK (PC) DOCUMENT
CODE 2016 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

REVISIONS

REVISIONS
1
2
3
4

DRAWN BY:	
SCALE.	AS NOTED
DATE.	

SHEET NUMBER

S0.0-02