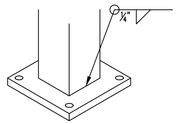
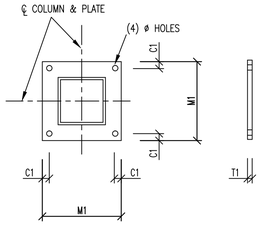
## COLUMN & CENTER COLUMN BASE

DETAIL 1



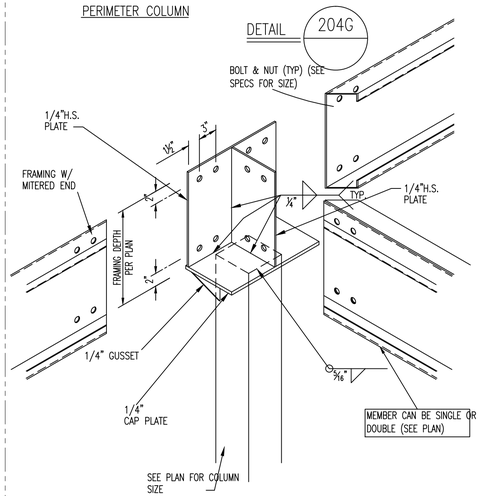




CENTERED BASE PLATE

| T1 | M1 | C1 |
|---|---|---|
| 3/4" | 10" | 1" |
| 3/4" | 12" | 1" |
| 3/8" | 7" | 3/4" |

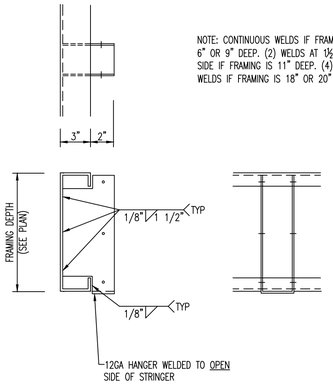
## PERIMETER COLUMN

DETAIL 204G



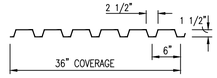

## HANGER – OPEN SIDE OF STRINGER

DETAIL 9




## TYPE "B" ROOF DECK

DETAIL 41




SECTION PROPERTIES: (PER FT. OF WIDTH)

| DECK GAGE | DESIGN THICKNESS IN. | TYPE 'B' WEIGHT–PSF PTD. | GALV. | I IN.⁴ | Sp IN.³ | Sn IN.³ |
|---|---|---|---|---|---|---|
| 20 | .0358 | 2.05 | 2.15 | .208 | .244 | .258 |
| 18 | .0474 | 2.70 | 2.80 | .303 | .335 | .349 |

DESIGN INFORMATION:

1. ROOF DECK SECTION PROPERTIES CALCULATED IN ACCORDANCE WITH THE AISI "SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS".
2. ROOF DECK LOADS COMPUTED IN ACCORDANCE WITH THE FOLLOWING SDI BENDING MOMENT AND DEFLECTION FORMULAS:

SIMPLE & TWO SPAN M=wℓ²/8
THREE SPAN OR MORE M=wℓ²/10
SIMPLE SPAN Δ =.013wℓ⁴/EI
TWO SPAN Δ =.0054wℓ⁴/EI
THREE SPAN OR MORE Δ=.0069wℓ⁴/EI

3. LOADS ARE GOVERNED BY A LIVE LOAD DEFLECTION NOT IN EXCESS OF L/240 AND BY AN ALLOWABLE FLEXURAL STRESS LIMIT OF 20,000 PSI FOR A 33,000 PSI MINIMUM YIELD.
4. SPAN LENGTHS ARE CONSIDERED CENTER-TO-CENTER SPACING OF SUPPORTS.
5. WHERE HEAVY CONSTRUCTION LOADS OR OTHER UNUSUAL CONCENTRATED LOADS ARE ANTICIPATED DURING THE LIFETIME OF THE DECK, THE SPECIFIED LIVE LOAD MUST BE INCREASED TO OFFSET THE EFFECTS OF THE ABNORMAL CONCENTRATED LOADING.
6. THE STEEL ROOF DECK CONFORMS TO ASTM A1008 WITH A MINIMUM YIELD STRENGTH = 33,000PSI.

INSTALLATION:

LAYOUT ROOF DECK PANELS PER DECK PLAN ON DRAWING. NOTE LOCATION ON DRAWING OF DECK INSTALLATION START POINT. LAY PANELS DOWN WITH MALE EDGE ALONG STARTING BORDER AND FEMALE EDGE TO OPEN AREA. WITH PANEL #1 (BELOW) IN PLACE, LAY DOWN PANEL #2, THEN #3 SO THAT BOTH FEMALE EDGES FROM PANELS #1 & #2 ARE UNDER THE MALE EDGES OF ADJACENT PANELS – NOW THE LAP CAN BE ADJUSTED PER THE SECTION BELOW SO THAT 6" INCREMENTS BETWEEN DECK RIB CENTERLINES ARE HELD. HOLD THIS 6" INCREMENT THROUGH OUT ENTIRE DECK PLAN SO PLYWOOD PANELS DON'T REQUIRE CUTTING WITHIN THE INTERIOR AREA.







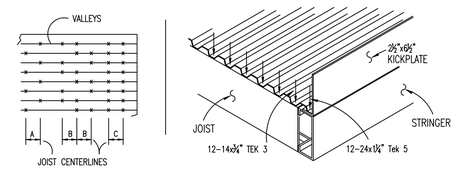
POSITION DECK PANEL ENDS SO THAT ALL END–END LAPS ARE SUPPORTED BY A FRAMING JOIST FROM BELOW.

ONCE DECK PANELS ARE LAID OUT WITH (1) KICKPLATE LEG UNDER THE DECK, USE 12–14 X 3/4" TEK 3'S TO FASTEN DECK TO FRAMING. USE 12–24x1 1/4" TEK 5'S ALONG PERIMETER WHEN FASTENING THROUGH DECK, KICKPLATE AND FRAMING. USE 12–24x1 1/4" TEK 5'S WHEN FASTENING THROUGH INTERSECTION OF FOUR ROOF DECK PANELS.

WHEN JOISTS ARE SPACED 30" OR LESS (A) APART, PLACE FASTENERS IN EVERY OTHER VALLEY AND STAGGER PATTERN (SEE LEFT PATTERN).

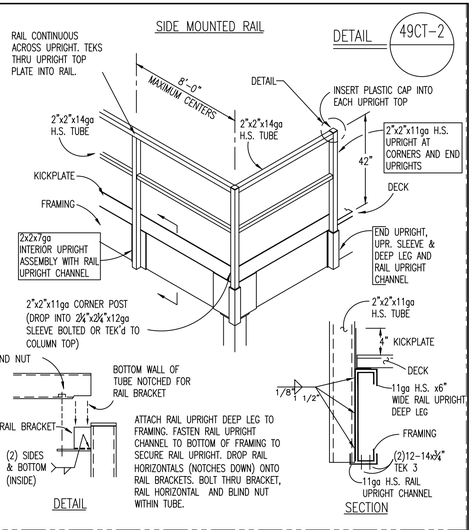
WHEN JOISTS ARE SPACED 30" TO 42" (B) APART, PLACE FASTENERS IN 2 OUT OF 3 VALLEYS AND STAGGER PATTERN (SEE MIDDLE PATTERN).

WHEN JOISTS ARE SPACED 42" OR MORE (C) APART, PLACE FASTENERS IN EVERY VALLEY (SEE RIGHT PATTERN).




## SIDE MOUNTED RAIL

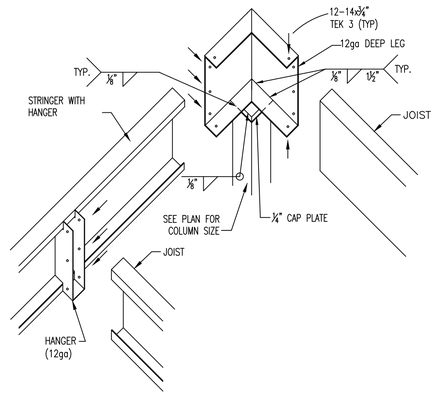
DETAIL 49CT–2




## CORNER COLUMN

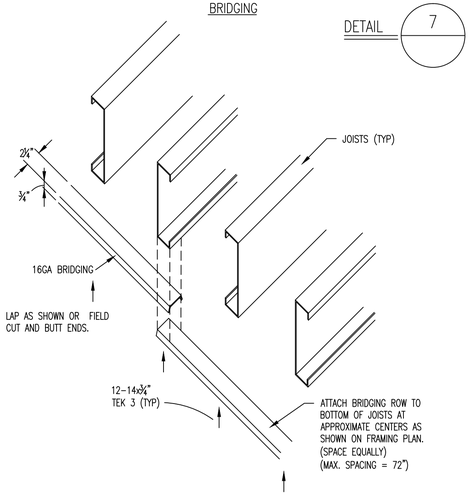
DETAIL 2

NOTE: IF FRAMING IS 13" OR 15" DEEP, CHANGE EACH SET OF (3) TEKS TO (4) TEKS. IF FRAMING IS 3¾" OR 6", CHANGE EACH SET OF (3) TEKS TO (2) TEKS



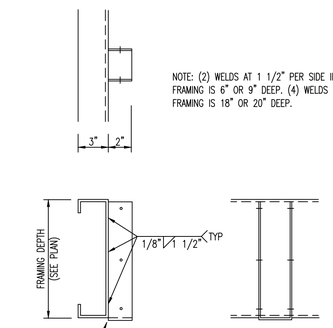

## BRIDGING

DETAIL 7




## HANGER – CLOSED SIDE OF STRINGER

DETAIL 10

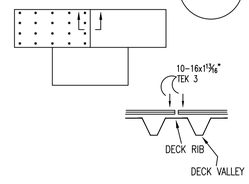



## WOOD COVER

DETAIL 42

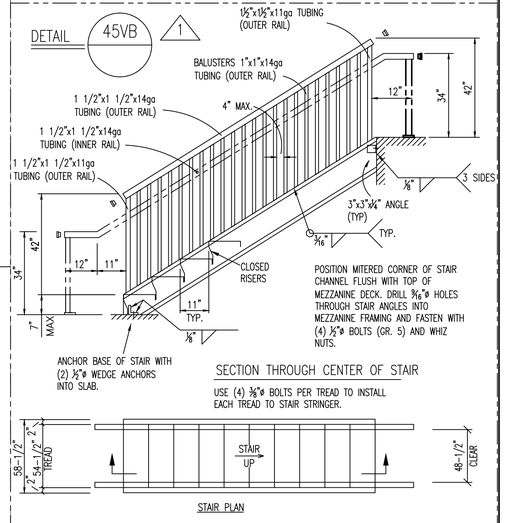
STAGGER WOOD JOINTS PER LAYOUT SHOWN AT RIGHT. BUTT SHEETS OVER DECK RIBS PER SECTION VIEW SHOWN AT LOWER RIGHT. GAP SHEETS ⅛" ALONG 4' SIDES AND 1/16" ALONG 8' SIDES FOR EXPANSION.

FASTEN EACH FULL SHEET WITH (20) 10–16x1⅜" PHILLIPS TEK 3's PER PATTERN SHOWN AT RIGHT. OUTER TEK'S SHOULD BE 1"–1½" FROM EDGE. ALL TEK'S MUST BE INTO DECK RIBS.




## SECTION THROUGH CENTER OF STAIR

DETAIL 45VB 1



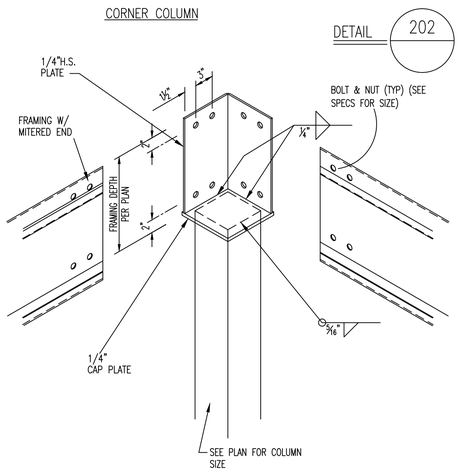

USE (4) ⅜"ø BOLTS PER TREAD TO INSTALL EACH TREAD TO STAIR STRINGER.




STAIR PLAN

## CORNER COLUMN

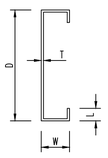
DETAIL 202




## FRAMING PROPERTIES – JOISTS & STRINGERS

DETAIL 8

50 KSI YIELD (TYP UNLESS NOTED)
* 53 KSI
** 55 KSI



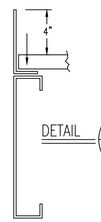

| SIZE | D (IN) | W (IN) | T (IN) | L (IN) | WT (#/') | Ix(IN^4) | Mx (IN–#) |
|---|---|---|---|---|---|---|---|
| 11CD12F | 11" | 3" | 12ga | 1 3/8" | 6.88 | 34.072 | 206,297 |
| 11CD04F | 11" | 3" | 1/4" | 1 9/16" | 16.12 | 75.736 | 509,668 |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

## KICKPLATE

DETAIL 44

POSITION 2½" LEG OF 2½"x6½" KICKPLATE UNDER STEEL ROOF DECK AND FASTEN DECK AND KICKPLATE TO FRAMING EVERY 18" WITH A 12–24x1¼" TEK 5.

IF GRATING IS THE DECK MATERIAL, POSITION 2" LEG OF 2"x5" KICKPLATE UNDER GRATING AND FASTEN AS ABOVE USING A SADDLE CLIP AND A 12–14x½" TEK 3.




| VERSION | DESCRIPTION | DATE | DRAWN | CHECKED |
|---|---|---|---|---|
| E | PLAN CHECK RESPONSE #3 | 10–15–13 | DH | MR |
| D | PLAN CHECK RESPONSE #2 | 10–3–13 | AG | DH |
| C | PLAN CHECK RESPONSE #1 | 7–3–13 | DH | MR |
| B | FOR PERMITS | 4–1–13 | KB | DH |
| | | | | |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