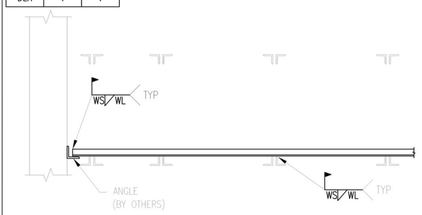
DRAWING INDEX

SHEET. #	DWG. NAME
J1	JOIST COVER - TITLE PAGE
J2	ROOF JOIST ERECTION PLAN
J3	ROOF JOIST ERECTION PLAN
J4	JOIST SECTIONS

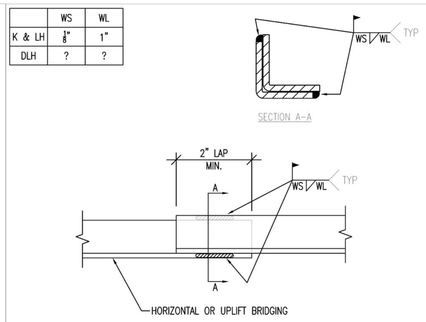
	WS	WL
K & LH	1/8"	1"
DLH	?	?



CUT BRIDGING LENGTHS TO FIT AT END OF RUNS. WHEN REQUIRED INSTALL ALL DROPS, OBTAINED FROM CUTTING WITHIN SUBSEQUENT BRIDGING RUNS TO AVOID ANY POTENTIAL SHORTAGES OF BRIDGING MATERIAL. REFERENCE " TYPICAL CONNECTION DETAIL FOR: HORIZONTAL BRIDGING AT LAPS", FOR FURTHER INSTALLATION REQUIREMENTS.

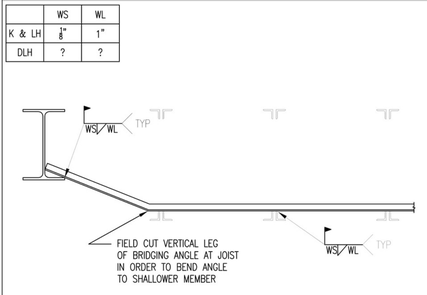
TYPICAL INSTALLATION DETAIL FOR:
UPLIFT BRIDGING
REFERENCE: NOT PROVIDED (AT ROOF ONLY)

	WS	WL
K & LH	1/8"	1"
DLH	?	?



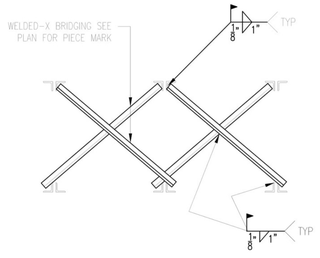
TYPICAL INSTALLATION DETAIL FOR:
CONTINUOUS HORIZONTAL BRIDGING
(LAP DETAIL)

	WS	WL
K & LH	1/8"	1"
DLH	?	?

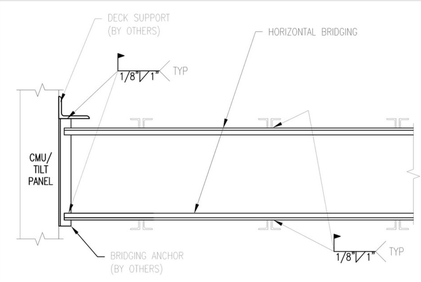


CUT BRIDGING LENGTHS TO FIT AT END OF RUNS. WHEN REQUIRED INSTALL ALL DROPS, OBTAINED FROM CUTTING WITHIN SUBSEQUENT BRIDGING RUNS TO AVOID ANY POTENTIAL SHORTAGES OF BRIDGING MATERIAL. REFERENCE " TYPICAL CONNECTION DETAIL FOR: HORIZONTAL BRIDGING AT LAPS", FOR FURTHER INSTALLATION REQUIREMENTS.

TYPICAL INSTALLATION DETAIL FOR:
UPLIFT BRIDGING
REFERENCE: NOT PROVIDED (AT ROOF ONLY)

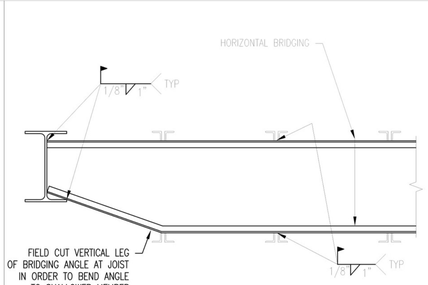


TYPICAL INSTALLATION DETAIL FOR:
WELDED DIAGONAL BRIDGING
REFERENCE: NOT PROVIDED



CUT BRIDGING LENGTHS TO FIT AT END OF RUNS. WHEN REQUIRED INSTALL ALL DROPS, OBTAINED FROM CUTTING WITHIN SUBSEQUENT BRIDGING RUNS TO AVOID ANY POTENTIAL SHORTAGES OF BRIDGING MATERIAL. REFERENCE " TYPICAL CONNECTION DETAIL FOR: HORIZONTAL BRIDGING AT LAPS", FOR FURTHER INSTALLATION REQUIREMENTS.

TYPICAL INSTALLATION DETAIL FOR:
HORIZONTAL BRIDGING @ ROOF
REFERENCE: 8/S4.2 (#2 BUILDING & BUILDING 4)



CUT BRIDGING LENGTHS TO FIT AT END OF RUNS. WHEN REQUIRED INSTALL ALL DROPS, OBTAINED FROM CUTTING WITHIN SUBSEQUENT BRIDGING RUNS TO AVOID ANY POTENTIAL SHORTAGES OF BRIDGING MATERIAL. REFERENCE " TYPICAL CONNECTION DETAIL FOR: HORIZONTAL BRIDGING AT LAPS", FOR FURTHER INSTALLATION REQUIREMENTS.

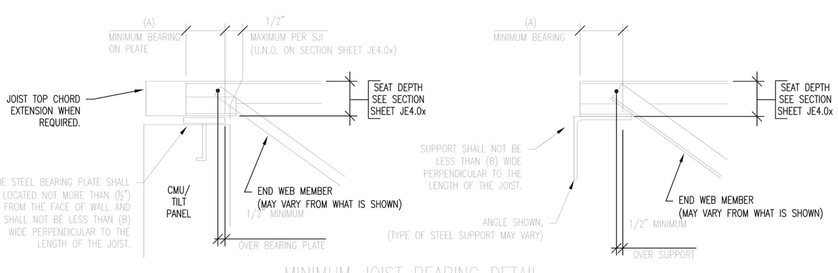
TYPICAL INSTALLATION DETAIL FOR:
HORIZONTAL BRIDGING @ ROOF
REFERENCE: NOT PROVIDED

DRAWING LEGEND

(00'-0")	= ELEVATION
(0")	= SEAT DEPTH (WHEN NON-STANDARD)
+0.0K>	= AXIAL LOADS
ES	= ERECTION STABILITY BRIDGING (MUST BE IN PLACE PRIOR TO RELEASING HOISTING LINES.)
+0.0K	= POINT LOAD - AMOUNT WRITTEN ABOVE THE LINE
▶	= MOMENT CONNECTION
*	= SPECIAL USE
XX	= DENOTES JOIST CONNECTION
XX	= DENOTES GIRDER CONNECTION
"U"	= INDICATES X-WELDED BRIDGING TO BE PLACED AT FIRST BOTTOM CHORD PANEL POINTS. ALL OTHER X-WELDED ROWS TO BE EQUALLY SPACED BETWEEN THE FIRST BOTTOM CHORD PANEL POINTS.
	= ELEVATION CHANGE
	= MAY BE USED TO INDICATE BOLTED SEAT CONNECTION
TC	= TOP CHORD
BC	= BOTTOM CHORD
EOG	= END OF GIRDER
EOJ	= END OF JOIST
JBE	= JOIST BEARING ELEVATION
DT	= DANGER JOIST - NOT DESIGNED TO SUPPORT AN EMPLOYEE WITHOUT BRIDGING INSTALLED. SEE ERECTOR NOTES FOR ADDITIONAL INFORMATION.
TJ	= TIE JOIST
TOJ	= TOP OF JOIST
BOA	= BACK OF ANGLE
BOC	= BACK OF CHANNEL
FOW	= FACE OF WALL
IFW	= INSIDE FACE OF WALL
EJ	= EXPANSION JOINT
VIF	= VERIFY IN FIELD

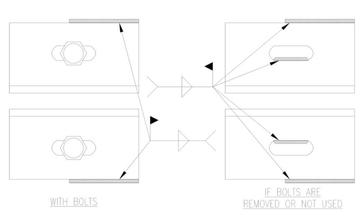
KEY NOTE	K-SERIES	LH SERIES 02-06	LH SERIES 07-17	DLH-SERIES 18-25	CJ SERIES SEAT DEPTH < 5"	CJ SERIES SEAT DEPTH ≥ 5"	JOIST GIRDERS
(A)	2½"	2½"	4"	6"	2½"	4"	4"
* (B)	6"	6"	9"	9"	6"	9"	9"

* SOMETIMES THE DESIGNS FOR THE JOIST BEARING SEATS MAY REQUIRE WIDER SEAT MATERIAL THAN THE MINIMUM BEARING SUPPORT WIDTHS SPECIFIED ON THIS DETAIL. THEREFORE, IT IS RECOMMENDED THAT YOU CONSULT W/ JOIST SUPPLIER PRIOR TO FABRICATION OR INSTALLATION OF JOIST BEARING SUPPORTS TO CONFIRM BEARING WIDTH REQUIREMENTS.

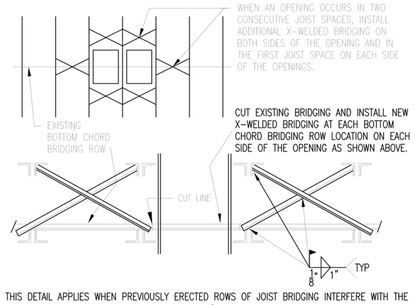


MINIMUM JOIST BEARING DETAIL

ERECTOR NOTE:
IF JOISTS HAVE BEEN FABRICATED WITH "OSHA HOLES" TO ALLOW FOR INITIAL "FIT-UP" OF JOIST OVER 40'-0" AND/OR FOR JOISTS AT OR NEAR COLUMNS, THEN THESE BOLTS ARE NOT INTENDED AS THE FINAL CONNECTION UNLESS EXPLICITLY NOTED IN THE PROJECT SPECIFIC SECTIONS. THE SNUG-TIGHT BOLTS SHALL REMAIN AFTER THE FINAL WELDED CONNECTIONS PER OUR PROJECT SPECIFIC SECTIONS ON JE3.0X. IF THE BOLTS ARE NOT PRESENT, THEN THE INSIDE EDGE OF THE SEAT SLOTS MUST BE WELDED IN ADDITION TO THE FINAL WELD REQUIREMENT.

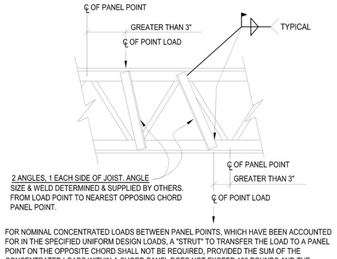


BOLTED JOIST CONNECTION DETAIL



THIS DETAIL APPLIES WHEN PREVIOUSLY ERECTED ROWS OF JOIST BRIDGING INTERFERE WITH THE INSTALLATION OF MATERIAL FROM OTHER TRADES (E.G. PIPING, MECHANICAL DUCT WORK, SKYLIGHT OPENINGS, ETC...). ONCE THE BRIDGING IS REMOVED, IT IS NECESSARY TO TERMINATE THE BOTTOM CHORD ROWS OF BRIDGING IN THE SPACES ADJACENT TO THE NEWLY VACATED SPACE. IF THE STEEL DECK IS ATTACHED DIRECTLY TO THE JOIST TOP CHORD, THEN THE TOP CHORD BRIDGING ROW DOES NOT REQUIRE TERMINATION BRIDGING AT THESE LOCATIONS. ANY X-WELDED BRIDGING REQUIRED TO MEET THIS CONDITION IS NOT BY JOIST SUPPLIER.

DISCONTINUOUS HORIZONTAL BRIDGING DETAIL



FOR NOMINAL CONCENTRATED LOADS BETWEEN PANEL POINTS, WHICH HAVE BEEN ACCOUNTED FOR IN THE SPECIFIED UNIFORM DESIGN LOADS, A "STRUT" TO TRANSFER THE LOAD TO A PANEL POINT ON THE OPPOSITE CHORD SHALL NOT BE REQUIRED, PROVIDED THE SUM OF THE CONCENTRATED LOADS WITHIN A CHORD PANEL DOES NOT EXCEED 100 POUNDS AND THE ATTACHMENTS ARE CONCENTRIC TO THE CHORD.

TYPICAL INSTALLATION DETAIL FOR:
JOIST REINFORCEMENT AT CONCENTRATED LOADS
REFERENCE: 3/S4.2 (#2 BUILDING & BUILDING 4)

JOIST ERECTION NOTES

REFER TO THE STEEL JOIST INSTITUTE'S (SJI) SPECIFICATIONS AND ITS TECHNICAL DIGEST (TD) 9

GC / ERECTOR NOTE:

DO NOT ERECT STEEL JOISTS WITHOUT OBTAINING A COPY AND THOROUGHLY READING THE SJI TD 9, HANDLING AND ERECTION OF STEEL JOISTS AND JOIST GIRDERS. SERIOUS INJURY OR DEATH CAN RESULT FROM FAILURE TO FAMILIARIZE AND COMPLY WITH ALL APPLICABLE SAFETY REQUIREMENTS OF FEDERAL, STATE, AND LOCAL REGULATIONS AND THE SAFETY GUIDELINES OUTLINED IN THE SJI TD 9. THIS MANUAL IS INTENDED TO BE AN AID AND GENERAL GUIDE FOR THE SAFE AND PROPER ERECTION OF STEEL JOIST PRODUCTS.

SJI TD 9 IS AVAILABLE FROM:
STEEL JOIST INSTITUTE
234 W. CHEVES STREET
FLORENCE, SC 29501
PHONE: 843-407-4091
FAX: 843-407-4044
WEB: WWW.STEELJOIST.ORG

JOIST DELIVERY AND UNLOADING:

1. VERIFY QUANTITIES AND CONDITION OF JOISTS AND JOIST ACCESSORIES UPON ARRIVAL. INFORM JOIST MANUFACTURER IMMEDIATELY OF ANY SHORTAGES, DISCREPANCIES OR DAMAGE.
2. THE MATERIAL LISTED ON THE BILL OF LADING ARE THE ONLY ITEMS BEING SUPPLIED.
3. WHEN UNLOADING JOISTS BY CRANE, ALWAYS HOIST JOISTS BY TOP OR BOTTOM CHORD PANEL POINTS (NOT BY WEB MEMBERS), AT OR NEAR 1/3 POINTS.
4. IF NOT ERECTED IMMEDIATELY, STORE JOISTS AND JOIST ACCESSORIES OFF THE GROUND AND KEEP THEM COVERED TO PROTECT THE PRIMER COATING.

JOIST INSTALLATION:

5. FOLLOW ALL APPLICABLE REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) FEDERAL REGISTER SUBPART R 1926. IMMEDIATELY AFTER JOIST IS SET, ATTACH JOIST TO SUPPORTS AS REQUIRED BY SJI AND OSHA. AS BRIDGING IS INSTALLED, REMOVE SWEEP IN THE JOIST AND CORRECT ANY VERTICAL MISALIGNMENT. ONCE THE BRIDGING IS INSTALLED, ATTACH JOISTS TO SUPPORTS PER FINAL ERECTION DRAWINGS.
6. ONLY DRAWINGS HAVING A "FIELD USE" STAMP SHALL BE USED FOR ERECTION.
7. REFER TO THE ERECTION SECTIONS FOR JOIST AND JOIST GIRDER END ANCHORAGE REQUIREMENTS. JOISTS, JOIST GIRDERS, AND ACCESSORIES SHALL BE ATTACHED TO STEEL SUPPORTS WITH A MINIMUM OF:

   K-SERIES JOISTS – THE EQUIVALENT OF TWO 1/8" FILLET WELDS (W) 2 1/2" LONG (L), AND BOLTED WITH TWO 1/2"ø A307 BOLTS WHERE SLOTS ARE INDICATED IN SECTION.

   LH-SERIES JOISTS, SECTION NUMBERS 02 THRU 06 – THE EQUIVALENT OF TWO 3/16" FILLET WELDS (W) 2 1/2" LONG (L), AND BOLTED WITH TWO 3/4"ø A307 BOLTS WHERE SLOTS ARE INDICATED IN SECTION.

   LH-SERIES & DLH-SERIES JOISTS, SECTION NUMBERS 07 THRU 17 – THE EQUIVALENT OF TWO 1/4" FILLET WELDS (W) 2 1/2" LONG (L), AND BOLTED WITH TWO 3/4"ø A307 BOLTS WHERE SLOTS ARE INDICATED IN SECTION.

   DLH-SERIES JOISTS, SECTION NUMBERS 18 THRU 25 – THE EQUIVALENT OF TWO 1/4" FILLET WELDS (W) 4" LONG (L), AND BOLTED WITH TWO 3/4"ø A325 BOLTS WHERE SLOTS ARE INDICATED IN SECTION.

   JOIST GIRDERS – THE EQUIVALENT OF TWO 1/4" FILLET WELDS (W) 2 1/2" LONG (L), AND BOLTED WITH TWO 3/4"ø A325 BOLTS WHERE SLOTS ARE INDICATED IN SECTION.

   BRIDGING – THE EQUIVALENT OF A 1/8" FILLET WELD (W) 1" LONG (L), WITH THE EXCEPTION OF BOLTING, FOR K-SERIES JOISTS.
   THE EQUIVALENT OF A 1/8" FILLET WELD (W) 1" LONG (L), WITH THE EXCEPTION OF BOLTING, FOR LH-SERIES & DLH-SERIES JOISTS, SECTION NUMBERS 02 THRU 15.
   THE EQUIVALENT OF A 1/8" FILLET WELD (W) 1 1/2" LONG (L), WITH THE EXCEPTION OF BOLTING, FOR DLH-SERIES JOISTS, SECTION NUMBERS 16 THRU 20.
   THE EQUIVALENT OF A 1/8" FILLET WELD (W) 2 1/4" LONG (L), WITH THE EXCEPTION OF BOLTING, FOR DLH-SERIES JOISTS, SECTION NUMBERS 21 THRU 25.

   BOTTOM CHORD BRACES – THE EQUIVALENT OF A * FILLET WELD (W) ** LONG (L).
   * = SAME AS BRACE ANGLE THICKNESS, ** = SAME AS BRACE ANGLE LEG LENGTH.
   DO NOT WELD BRACE TO JOIST GIRDER UNTIL ALL DEAD LOAD HAS BEEN APPLIED.

   KEY: W L
8. ALL STEEL BEARING JOISTS IN BAYS 40'-0" AND MORE, ARE TO BOLTED TO SUPPORTS PER OSHA, UNLESS JOISTS ARE PRE-ASSEMBLED INTO PANELS.
9. ACCORDING TO SJI, BEARING PLATES SHALL BE LOCATED NO MORE THAN 1/2" FROM THE FACE OF MASONRY OR CONCRETE SUPPORTS. REFERENCE SJI SPECIFICATIONS FOR MINIMUM BEARING PLATE WIDTHS.
10. UNBRIDGED JOISTS MAY EXHIBIT SOME DEGREE OF INSTABILITY UNDER THE ERECTOR'S WEIGHT, THEREFORE, EXTREME CAUTION MUST BE EXERCISED. WHEN IT IS NECESSARY FOR THE ERECTOR TO CLIMB ON THE JOIST, REFER TO SJI AND OSHA REQUIREMENTS.
11. VERIFY THAT ALL BRIDGING IS COMPLETELY INSTALLED, WITH JOIST AND JOIST GIRDER ENDS PERMANENTLY ATTACHED, BEFORE APPLYING CONSTRUCTION LOADS TO JOIST.
12. ADEQUATE MEANS FOR DISTRIBUTING CONCENTRATED LOADS SHOULD BE PROVIDED SO THAT THE CAPACITY OF ANY JOIST IS NOT EXCEEDED.
13. JOIST CHORDS ARE NOT DESIGNED FOR BENDING DUE TO CONCENTRATED LOADS, UNO ON PLANS. EITHER PLACE LOADS AT JOIST PANEL POINTS OR SEE THE "FIELD INSTALLED WEB MEMBERS AT CONCENTRATED LOADS" DETAIL.

O'DONNELL GENERAL NOTES:

14. NIC – NOT IN CONTRACT. UNO – UNLESS NOTED OTHERWISE.
15. TYPICAL PRIMER COATING, UNO ON PLANS:
    STD. SHOP COAT GRAY PRIMER FOR ALL JOISTS, JOIST GIRDERS & JOIST ACCESSORIES.
    SHOP PRIMER COMPLIES WITH SSPC-PAINT 15 AND FS TT-P 636.
    NOTE: SHOP PRIMER IS APPLIED BY DIPPING. COATING MAY NOT BE UNIFORM AND REQUIRE REMOVAL OF ACCUMULATIONS BEFORE FINISH COAT IS APPLIED.
16. WELDED HORIZONTAL BRIDGING IS SUPPLIED IN 25'-0" LENGTHS. FIELD CUT WELDED HORIZONTAL BRIDGING AS REQUIRED AND UTILIZE ALL DROP.
    NOTE: WELDED BRIDGING IS TO BE EQUALLY SPACED BETWEEN SUPPORTS, UNO ON PLANS. DECK MUST BE POSITIVELY ATTACHED TO JOIST TOP CHORDS IN ACCORDANCE WITH DECK FASTENING REQUIREMENTS, TO PROVIDE LATERAL STABILITY, UNO ON PLANS.
17. JOISTS MARKED TJ_ INDICATES TIE-JOISTS. THESE JOISTS ARE NOT DESIGNED TO SATISFY OSHA 29 CFR 1926.757 (a)(3). REFER TO "DANGER" TAG ON JOIST FOR ERECTION REQUIREMENTS.
18. DO NOT CUT AWAY ANY CHORDS OR WEBS.
19. PRODUCTS ARE FABRICATED TO MEET THE ERECTION REQUIREMENTS OF OSHA. FIELD COMPLIANCE WITH OSHA IS NECESSARY.

CONTRACT NOTE:

O'DONNELL WILL NOT ACCEPT THE RESPONSIBILITY OR CHARGES FOR ANY FIELD CORRECTIONSMADE WITHOUT PRIOR O'DONNELL APPROVAL.

FOR FIELD USE