

GENERAL NOTES FOR JOISTS, JOIST GIRDERS AND BRIDGING

RECOMMENDATION FOR HANDLING AND ERECTING STEEL JOISTS AND JOIST GIRDERS. ALSO REFER TO TECHNICAL DIGEST #9 - HANDLING AND ERECTION OF STEEL JOISTS AND JOIST GIRDERS PUBLISHED BY THE STEEL JOIST INSTITUTE (843-626-1995)

- A. CHECK ALL QUANTITIES, MARK NUMBERS AND CONDITION OF MATERIALS ON ARRIVAL. NOTE ON THE DELIVERY TICKET, SHORTAGES, DISCREPANCIES AND DAMAGED MATERIALS. STEEL ENCOUNTERS INC. (SEI) WILL NOT BE LIABLE FOR ANY SHORTAGES OR DAMAGED MATERIALS NOT CLEARLY NOTED ON THE DELIVERY TICKET.
- B. WHEN UNLOADING BY CRANE ALWAYS HOOK CHAINS OR SLINGS TO TOP OR BOTTOM CHORDS AT PANEL POINTS (PREFERABLY AT 1/3 POINTS). NEVER HOOK TO THE WEB MEMBERS. DO NOT JERK WHILE LIFTING OR DROP WHEN LANDING. WHEN UNLOADING BY HAND USE EXTREME CARE WHEN BREAKING BUNDLES, UNLOAD EACH JOIST SEPARATELY.
- C. STORE JOIST IN BUNDLES IN A VERTICAL POSITION ON WOOD BLOCKING PLACED AT PANEL POINTS. LIGHTER JOISTS SHOULD BE STACKED ON HEAVIER JOISTS IF MORE THAN ONE LAYER IS REQUIRED. STORE JOISTS ON SIDES IF HEIGHT OF BUNDLE IS GREATER THAN TWICE ITS WIDTH. JOISTS FROM BROKEN BUNDLES SHOULD BE LAID FLAT ON BLOCKING TO PREVENT SAGGING OF JOISTS. IF JOISTS ARE NOT ERECTED IMMEDIATELY, COVER JOISTS IN A MANNER THAT PROVIDES ADEQUATE VENTILATION TO PROTECT PRIMER COAT. ALL BRIDGING MARK NUMBERS SHALL BE PROTECTED TO PREVENT DETERIORATION.
- D. ERECTION MUST BE DONE USING ONLY PLANS NOTED "FINAL PLANS FOR FIELD USE" AND EXECUTED IN ACCORDANCE WITH THE LATEST SJI AND OSHA REQUIREMENTS. REFER TO THE FINAL ERECTION DRAWING FOR THE TAGGED END LOCATION OF JOISTS AND JOIST GIRDERS, ALSO ANY BOLTED ERECTION STABILITY BRIDGING REQUIREMENTS.
- E. STEEL ENCOUNTERS INC. SHALL BE NOTIFIED AT ONCE IF JOISTS, JOIST GIRDERS OR ACCESSORIES CAN NOT BE ERECTED ACCORDING TO THE FINAL ERECTION PLANS. STEEL ENCOUNTERS INC. WILL NOT BE RESPONSIBLE FOR ANY FIELD REPAIRS OR CHANGES MADE WITHOUT PRIOR WRITTEN CONSENT FROM STEEL ENCOUNTERS INC.. OSHA REQUIRES THAT NO MODIFICATIONS THAT AFFECTS THE STRENGTH OF A STEEL JOIST OR STEEL JOIST GIRDER SHALL BE MADE WITHOUT THE APPROVAL OF THE PROJECT STRUCTURAL ENGINEER OF RECORD.
- F. JOISTS ARE FABRICATED TO MEET THE ERECTION REQUIREMENTS OF THE OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) 29 CFR SUBPART R-STEEL ERECTION, EXCEPT AS NOTED BELOW. FIELD COMPLIANCE WITH THIS ACT IS NECESSARY.

JOIST AT OR NEAR COLUMNS. (OSHA COLUMN JOISTS)

STEEL JOIST INSTITUTE SPONSORED RESEARCH HAS SHOWN THAT MANY FACTORS AFFECT THE STABILITY OF OSHA COLUMN JOISTS. LIMITATIONS REGARDING THE DESIGN OF THESE JOISTS (OSHA 1926.757(a)(5)) MAKE THEM UNSTABLE TO SAFELY SUPPORT AN EMPLOYEE WITHOUT THE NEED FOR ERECTION BRIDGING. THEREFORE, SJI AND JOIST MANUFACTURERS RECOMMEND THAT THE JOIST BRIDGING BE INSTALLED AND ANCHORED PRIOR TO ANY EMPLOYEE GOING OUT ON A JOIST.

THESE JOISTS SHALL BE ERECTED BY EITHER:

1. INSTALLING BRIDGING OR OTHERWISE STABILIZING THE JOIST PRIOR TO RELEASING THE HOISTING CABLES, OR
2. RELEASING THE HOISTING CABLES WITHOUT HAVING A WORKER ON THE JOIST. SJI AND JOIST MANUFACTURERS RECOMMEND THAT NO ONE BE ALLOWED TO WALK ON UNBRIDGED JOISTS. UNDER NO CIRCUMSTANCES ARE DECK BUNDLES, OR CONSTRUCTION LOADS OF ANY KIND, TO BE PLACED ON UNBRIDGED JOISTS.

G. DO NOT WELD JOIST OR JOIST GIRDER BOTTOM CHORD EXTENSIONS TO STABILIZER PLATES OR CLIP ANGLES UNLESS SPECIFICALLY NOTED ON THE STRUCTURAL CONTRACT DRAWINGS, AND THEN WELD ONLY AFTER ALL DEAD LOADS ARE APPLIED, OR UNLESS SPECIFICALLY NOTE OTHERWISE.

H. DO NOT CUT AWAY ANY CHORDS, WEBS OR ANY PORTION THEREOF. FIELD WELDING SHALL NOT DAMAGE JOISTS OR GIRDERS. NO HOLES ARE PROVIDED IN JOIST OR JOIST GIRDERS FOR THE ATTACHMENT OF OTHER TRADES NOR ARE THEY DESIGNED FOR THEM. DO NOT DRILL OR CUT ANY HOLES IN ANY MEMBERS IN THE FIELD.

J. METAL DECK OR CENTERING SHALL BE ATTACHED TO THE TOP CHORD OF THE JOIST AT A MAXIMUM OF 36" ON CENTER TO PROVIDE THE SJI REQUIRED PERMANENT LATERAL BRACING FOR THE TOP CHORD. FOLLOW THE MANUFACTURERS RECOMMENDATIONS FOR INSTALLATIONS OF DECK OR CENTERING. DO NOT DAMAGE JOIST TOP CHORDS.

K. ERECT BOTTOM CHORD BEARING JOISTS OR JOIST GIRDERS WITH CAMBER UPWARD. INSTALL ALL REQUIRED ERECTION STABILITY BRIDGING OR OTHERWISE STABILIZE. ALSO, ATTACH BEARING ENDS TO THE SUPPORTS PRIOR TO RELEASING THE HOISTING CABLES.

L. STEEL JOISTS AND JOIST GIRDERS SHALL NOT BE USED AS ANCHORAGE POINTS FOR A FALL ARREST SYSTEMS.

M. JOIST GIRDERS:

1. WHERE JOIST GIRDERS ARE SUPPLIED WITH SLOTS/HOLES IN THE BEARING SEATS, BOTH ERECTION BOLTS AT EACH END SHALL BE INSTALLED AND TIGHTENED PER THE "AISC" SPECIFICATION PRIOR TO RELEASING THE HOISTING CABLES. WHERE SLOTS ARE NOT SUPPLIED, JOIST GIRDER ENDS SHALL BE WELDED TO THE SUPPORTS PRIOR TO RELEASING THE HOISTING CABLES.

2. NO LOADS SHALL BE PLACED ON THE JOIST GIRDER UNTIL THE JOISTS BEARING ON THE JOIST GIRDER ARE IN PLACE AND WELDED OR BOLTED TO THE GIRDER.

3. THE STRUTTED ENDS OF THE BOTTOM CHORD OF JOIST GIRDERS MUST BE RESTRAINED FROM LATERAL MOVEMENT TO HELP BRACE THE GIRDER FROM OVERTURNING DURING ERECTION. PER SJI. THIS IS USUALLY ACCOMPLISHED WITH A VERTICAL STABILIZER PLATE BETWEEN THE BOTTOM CHORD ANGLES.

4. AFTER COLUMNS ARE PLUMB WITH ERECTION BOLTS, FIELD WELD THE JOIST GIRDERS TO THE CAP PLATE WITH A MINIMUM OF 1/4" FILLET WELDS 2" LONG AT EACH SIDE OF SEAT OR EQUAL. THE CONTRACT DRAWINGS SHOULD BE REVIEWED TO DETERMINE WHETHER ADDITIONAL WELD IS REQUIRED DUE TO SPECIAL CONDITIONS.

5. DO NOT WELD GIRDER BOTTOM CHORD BRACES (GB'S) TO THE BOTTOM CHORD OF JOISTS UNTIL ALL ROOF OR FLOOR DEAD LOADS ARE APPLIED. BOTTOM CHORD BRACES SHALL BE CONNECTED WITH A FILLET WELD OR THE EQUIVALENT. FILLET WELD SIZE SHALL NOT BE LESS THAN THE THICKNESS OF THE GB ANGLE NOR GREATER THAN 1/4". THE WELD LENGTH SHALL NOT BE LESS THAN THE LEG OF THE GB ANGLE.

N. JOISTS:

1. DO NOT COMPLETELY WELD JOISTS TO BEARING SUPPORT UNTIL PROPERLY ALIGNED. AS SOON AS THE JOIST IS IN POSITION, THE JOIST ENDS SHALL BE ATTACHED TO ITS SUPPORT AS NOTED BELOW. ALIGN JOISTS WHILE INSTALLING BRIDGING. AFTER INSTALLATION OF ALL BRIDGING, COMPLETE THE ATTACHMENT OF JOISTS TO THE BEARING SUPPORT. DO NOT ATTEMPT TO ALIGN OR STRAIGHTEN GROUPS OF JOISTS AFTER INSTALLATION AND PERMANENT ATTACHMENT TO THE BEARING SUPPORTS HAS BEEN MADE.

2. BOTH SIDES OF THE SEAT ON ONE END OF THE JOIST MUST BE ATTACHED TO THE SUPPORT AS THE JOISTS ARE POSITIONED AND PRIOR TO RELEASING THE CABLES.

3. WHEN SLOTS OR HOLES ARE PROVIDED IN THE BEARING SEATS ON ONE END OR BOTH ENDS OF A JOIST, ALL BOLTS SHALL BE INSTALLED AND TIGHTENED PER THE "AISC" SPECIFICATION PRIOR TO RELEASING HOISTING CABLES. WHERE CONSTRUCTIBILITY DOES NOT ALLOW FOR BOLTING, JOIST FINAL CONNECTIONS SHALL BE MADE BY WELDING OR AS SPECIFIED BY THE PROJECT STRUCTURAL ENGINEER OF RECORD, PRIOR TO RELEASING OF HOISTING CABLES.

4. JOIST ENDS SHALL BEAR ON STEEL STRUCTURAL MEMBERS OR BEARING PLATES AND SHALL BE ATTACHED THERETO WITH A MINIMUM OF:

K AND KCS SERIES JOISTS	-	TWO 1/8" FILLET WELDS 2" LONG OR EQUAL
LH AND DLH SERIES JOISTS	-	TWO 1/4" FILLET WELDS 2" LONG OR EQUAL
SLH 15-18 SERIES JOISTS	-	TWO 1/4" FILLET WELDS 2" LONG OR EQUAL
SLH 19-25 SERIES JOISTS	-	TWO 1/4" FILLET WELDS 4" LONG OR EQUAL

THE CONTRACT DRAWINGS SHOULD BE REVIEWED TO DETERMINE WHETHER ANY SPECIAL WELD IS REQUIRED DUE TO SPECIAL CONDITIONS.

5. WHEN PANELIZED CONSTRUCTION IS UTILIZED, THE END JOISTS MUST BE SECURED TO SUPPORTS.

6. WHERE JOISTS ARE LOCATED AT COLUMNS, THE EXTENDED ENDS OF THE BOTTOM CHORD MUST BE RESTRAINED FROM LATERAL MOVEMENT TO HELP BRACE THE JOIST FROM OVERTURNING DURING ERECTION. THIS IS USUALLY ACCOMPLISHED WITH A VERTICAL STIFFENER PLATE ATTACHED TO THE COLUMN OR BEAM, PER OSHA 1926.757 (a)(6). PLATE EXTENDS BETWEEN THE BOTTOM CHORD ANGLES.

P. BRIDGING:
THE REQUIRED ROWS OF BRIDGING SHALL BE INSTALLED AND ANCHORED DURING JOIST ERECTION PER OSHA 1926.757 FIELD COMPLIANCE IS NECESSARY.

1. CERTAIN DIAGONAL BRIDGING NOTED AS "ERECTION STABILITY BRIDGING" SHALL BE INSTALLED AND ANCHORED PRIOR TO SLACKENING THE HOISTING CABLES. PER THE LATEST STEEL JOIST INSTITUTE STANDARD SPECIFICATIONS, THE LOCATION(S) OF THE "ERECTION STABILITY BRIDGING" IS INDICATED AND LABELED AS SUCH ON THE STEEL ENCOUNTERS ERECTION DRAWINGS. KNOW AND FOLLOW ALL OSHA REQUIREMENTS.

2. JOIST SPANS THROUGH 60 FEET:
WHEN THE JOIST SPAN IS LESS THAN THE ERECTION STABILITY SPAN, ALL BRIDGING IS WELDED HORIZONTAL BRIDGING. WHEN THE JOIST SPAN IS GREATER THAN THE ERECTION STABILITY SPAN, A ROW OF BRIDGING NEAREST MID-SPAN OF THE JOIST SHALL BE "ERECTION STABILITY BRIDGING". ALL OTHER ROWS OF BRIDGING ARE WELDED HORIZONTAL BRIDGING.

3. JOIST SPANS OVER 60 FEET THROUGH 100 FEET:
ALL ROWS SHALL BE BOLTED DIAGONAL BRIDGING. THE TWO ROWS NEAREST THIRD POINTS OF THE JOIST SPAN SHALL BE BOLTED DIAGONAL "ERECTION STABILITY BRIDGING".

4. JOIST SPANS OVER 100 FEET:
ALL ROWS SHALL BE BOLTED DIAGONAL BRIDGING. ALL ROWS SHALL BE BOLTED DIAGONAL "ERECTION STABILITY BRIDGING".

5. ALL WELDED HORIZONTAL BRIDGING IS SHIPPED IN 20' 0" LENGTHS. LAP JOINTS 3" MINIMUM AND 6" MAXIMUM. WELD JOISTS WITH 1/8" FILLET 1" LONG AT EACH LEG OF BRIDGING ANGLE. USE ALL DROPS 4'-0" AND LONGER.

6. ALL WELDED HORIZONTAL BRIDGING SHALL BE ATTACHED TO EACH JOIST WITH A MINIMUM WELD AS FOLLOWS:
K AND KCS SERIES JOISTS - 1/8" FILLET WELD 1/2" LONG OR EQUAL
LH SERIES SERIES JOISTS - 1/8" FILLET WELD 1" LONG OR EQUAL
DLH SERIES SERIES JOISTS - 1/8" FILLET WELD 1 1/2" LONG OR EQUAL
WELD REQUIRED AT ONLY ONE CHORD ANGLE PER JOIST. DO NOT WELD BRIDGING TO WEB MEMBERS.

7. THE WEIGHT OF A BUNDLE OF JOIST BRIDGING SHALL NOT EXCEED 1000 POUNDS. A BUNDLE OF JOIST BRIDGING SHALL BE PLACED ON A MINIMUM OF 3 JOISTS, AND SHALL BE PLACED WITHIN 1'-0" OF THE ANCHORED END OF THESE 3 JOISTS.

8. ALL BOLTED CONNECTIONS FOR BRIDGING SHALL BE SNUG TIGHTENED PER THE "AISC" SPECIFICATION. ALL BOLTED DIAGONAL BRIDGING SHALL BE BOLTED AT THEIR POINT OF INTERSECTION.

9. ALL BRIDGING SHALL BE EQUALLY SPACED RELATIVE TO THE SPAN OF THE JOISTS AT WHICH IT IS BEING INSTALLED, UNLESS SHOWN OTHERWISE ON ERECTION DRAWINGS.

10. WHEN UPLIFT BRIDGING IS REQUIRED AT JOISTS, IT WILL BE SHOWN ON THE ERECTION DRAWINGS AND INDICATED IN THE FRAMING PLAN NOTES. SEE UPLIFT BRIDGING DIAGRAM. INSTALL UPLIFT BRIDGING AT BOTTOM CHORD ONLY WITHIN 6" OF THE FIRST BOTTOM CHORD PANEL POINT AT EACH END OF JOIST.

11. WHERE ADDITIONAL BRIDGING TERMINUS POINTS ARE REQUIRED FOR STABILITY IN ACCORDANCE WITH OSHA 1926.757(g)(5), THE MATERIAL AND DESIGN OF THOSE POINTS IS NOT BY STEEL ENCOUNTERS NOR THE JOIST MFR.

Q. ERECTION DRAWINGS:
THE ERECTION DRAWING(S) AS ISSUED BY STEEL ENCOUNTERS SHALL NOT BE USED AS NOR CONSIDERED TO BE A "SITE-SPECIFIC ERECTION PLAN" AS DEFINED BY OSHA SUBPART R-STEEL ERECTION SUB-SECTION 1926.752 (e). WITHOUT WRITTEN PERMISSION FROM STEEL ENCOUNTERS FOR THE SPECIFIC PROJECT SHOWN ON THE PLAN(S).

R. JOIST, JOIST GIRDERS AND ACCESSORIES ARE FURNISHED WITH ONE DIP COAT OF GRAY PRIMER. IT IS NOT OF ARCHITECTURAL QUALITY NOR IS IT INTENDED TO BE A FINISH COAT. THE COATING MAY NOT BE UNIFORM AND MAY INCLUDE DRIPS, RUNS AND SAGS. DIESEL SMOKE DAMAGE, BANDING & DUNNAGE MARKS, CRACKS, PEELING AND OTHER IMPERFECTIONS SHOULD BE EXPECTED. REPAIR OF SUCH DAMAGE IS NOT THE RESPONSIBILITY OF STEEL ENCOUNTERS INC.

2009 INTERNATIONAL BUILDING CODE SECTION 2206 - STEEL JOISTS

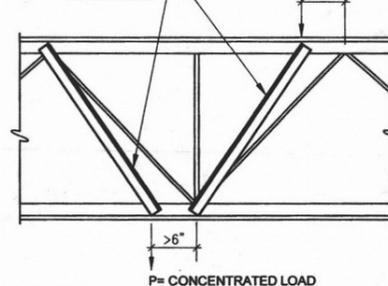
2206.2 DESIGN. THE REGISTERED DESIGN PROFESSIONAL SHALL INDICATE ON THE CONSTRUCTION DOCUMENTS THE STEEL JOIST AND/OR STEEL JOIST GIRDER DESIGNATIONS FROM THE SPECIFICATIONS LISTED IN SECTION 2206.1 AND SHALL INDICATE THE REQUIREMENTS FOR JOIST AND JOIST GIRDER DESIGN, LAYOUT, END SUPPORTS, ANCHORAGE, NON-SJI STANDARD BRIDGING, BRIDGING TERMINATION CONNECTIONS AND BEARING CONNECTION DESIGN TO RESIST UPLIFT AND LATERAL LOADS. THESE DOCUMENTS SHALL INDICATE SPECIAL REQUIREMENTS AS FOLLOWS:

1. SPECIAL LOADS INCLUDING:
 - 1.1 CONCENTRATED LOADS;
 - 1.2 NONUNIFORM LOADS;
 - 1.3 NET UPLIFT LOADS;
 - 1.4 AXIAL LOADS;
 - 1.5 END MOMENTS; AND
 - 1.6 CONNECTION FORCES.

2. SPECIAL CONSIDERATION INCLUDING:
 - 2.1 PROFILES FOR NONSTANDARD JOIST AND JOIST GIRDER CONFIGURATIONS (STANDARD JOIST AND JOIST GIRDER CONFIGURATIONS ARE AS INDICATED IN THE SJI CATALOGUE);
 - 2.2 OVERSIZED OR OTHER NONSTANDARD WEB OPENINGS; AND
 - 2.3 EXTENDED ENDS.

3. DEFLECTION CRITERIA FOR LIVE AND TOTAL LOADS FOR NON SJI STANDARD JOISTS.

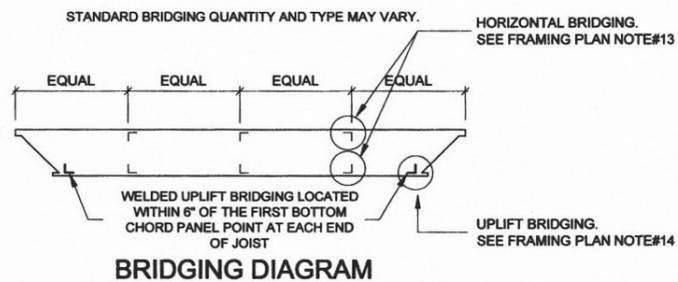
ADDITIONAL DIAGONAL WEB MEMBER AT EACH SIDE OF JOIST. SIZE PER ENGINEER OF RECORD.



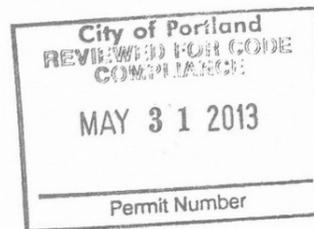
NOTE:
WHEN CONCENTRATED LOADS ON JOISTS ARE LOCATED MORE THAN 6 INCHES FROM THE PANEL POINTS, ADDITIONAL WEB MEMBERS (ONE ON EACH SIDE OF JOIST) SHALL BE FIELD WELDED FROM THE POINT OF LOAD TO THE NEAREST PANEL POINT ON THE OPPOSITE CHORD AT NO COST TO JOIST SUPPLIER.

SECTION AA

REF: #/##



BRIDGING DIAGRAM



FRAMING PLAN NOTES

1. DESIGN TO COMPLY WITH 2010 OSSC BUILDING CODE.
2. ALL LOADS ARE NOTED IN ACCORDANCE WITH 2009 IBC SECTION 2206. (SEE EXCERPT BELOW LEFT) NO LOADS ASSUMED BY STEEL ENCOUNTERS.
3. JOIST AND JOIST GIRDER DESIGN SHALL BE ACCORDING TO ALLOWABLE STRENGTH DESIGN (ASD)
4. LIMIT JOIST LIVE LOAD DEFLECTION TO L/240 LIMIT JOIST TOTAL LOAD DEFLECTION TO L/360.
5. JOISTS TO BE DESIGNED FOR A NET UPLIFT LOAD OF (60 PLF)
6. <6.8k> INDICATES THE AXIAL LOAD, TENSION OR COMPRESSION, WHICH THE TOP CHORD OF THE JOIST IS TO BE DESIGNED FOR AT BOTH ENDS.
7. JOISTS ARE DESIGNED FOR ADDITIONAL PT. LOADS AT LOCATIONS SHOWN ON PLANS. JOIST CHORDS ARE NOT DESIGNED FOR ANY OTHER LOADS BETWEEN PANEL POINTS. (UNO-SEE NOTE#7A CONCERNING LOADS THAT CAN BE PLACED BETWEEN PANEL POINTS.) IF POINT LOADS ARE NOT SPECIFICALLY DIMENSIONED ON THE PLAN, THEN PLACE THE LOADS AT PANEL POINTS OR FIELD WELD AN EXTRA MEMBER FROM POINT LOAD TO NEAREST PANEL POINT ON OPPOSITE CHORD AT NO EXPENSE TO JOIST SUPPLIER. SEE SECTION AA ON THIS SHEET.
- 7A. JOIST TO BE DESIGNED FOR AN ADDITIONAL 1,000# DEAD LOAD TO OCCUR AT ANY POINT ALONG THE TOP OR BOTTOM CHORD
8. SELF WEIGHT IS INCLUDED IN JOIST/GIRDER DESIGNATIONS.
9. GIRDERS, JOISTS AND BRIDGING TO RECEIVE ONE SHOP COAT STANDARD GRAY PRIMER. NO JOISTS ARE FIREPROOFED. JOISTS LEFT UN-PAINTED @ FIREPROOFING.
10. JOISTS ARE FABRICATED WITH CAMBER PER STEEL JOIST INSTITUTE SPECIFICATIONS. COORDINATION OF EFFECTS OF THIS CAMBER WITH ADJACENT CONSTRUCTION IS THE RESPONSIBILITY OF OTHERS. JOISTS HAVE THE APPROXIMATE CAMBERS PER THE FOLLOWING:

TOP CHORD LENGTH	APPROX. CAMBER
20'-0"	= 1/4"
30'-0"	= 3/8"
40'-0"	= 5/8"
50'-0"	= 1"
60'-0"	= 1 1/2"

CAMBER NOTED ABOVE IS FOR JOISTS WITH PARALLEL TOP AND BOTTOM CHORDS ONLY

11. * INDICATES FIELD BOLTING OF JOIST AT ERECTION. EXCEPT WHERE JOIST ARE PRE-ASSEMBLED INTO PANELS, ALL JOIST SPANNING 40'-0" OR GREATER BEARING ON STEEL BEAMS OR JOIST GIRDERS, SHALL BE FABRICATED TO ALLOW FOR FIELD BOLTING DURING ERECTION. THE FINAL CONNECTION OF THE JOIST TO STEEL STRUCTURE SHALL BE MADE BY FIELD WELDING. STEEL JOISTS THAT HAVE BEEN PRE-ASSEMBLED INTO PANELS WITH BRIDGING SHALL BE ATTACHED TO THE STRUCTURE AT EACH CORNER BEFORE THE HOISTING CABLES ARE RELEASED.
12. * INDICATES COLUMN STABILIZATION JOIST. HOISTING CABLES SHALL NOT BE RELEASED UNTIL BOTH BEARING SEATS OF THIS JOIST ARE FIELD BOLTED AT A STEEL BEAM OR JOIST GIRDER, OR FIELD WELDED AT A WALL BEARING PLATE. WHERE EITHER END OF THIS JOIST BEARS DIRECTLY AT A COLUMN, THE BOTTOM CHORD SHALL BE RESTRAINED BY A COLUMN STABILIZER PLATE.
- 12A. ** INDICATES COLUMN STABILIZATION JOIST. WHEN THE SPAN OF THE STEEL JOISTS, AT OR NEAR COLUMNS, IS GREATER THAN 60'-0", THE JOISTS SHALL BE SET IN TANDEN WITH ALL ROWS OF BOLTED DIAGONAL BRIDGING INSTALLED PRIOR TO HOISTING. HOISTING CABLES SHALL NOT BE RELEASED UNTIL BOTH SIDES OF THE JOIST BEARING SHOE ARE ATTACHED TO THE SUPPORT AT BOTH ENDS.
13. HORIZONTAL BRIDGING TO BE AS NOTED ON PLAN. SHIPPED IN 20'-0" LENGTHS AND FIELD CUT AS REQUIRED. SEE GENERAL NOTE P. ON THIS SHEET FOR MORE INFORMATION. ROWS OF BRIDGING INDICATED THUS (- - - -) ON PLAN.
14. PROVIDE ONE ROW HORIZONTAL UPLIFT BRIDGING AT EACH END OF EACH JOIST. LOCATE AT FIRST BOTTOM CHORD PANEL POINT ONLY. SEE BRIDGING DIAGRAM ON THIS SHEET. ROWS OF BRIDGING INDICATED THUS (- - - -).
15. WHEN SKYLIGHTS OR MECHANICAL DUCTS REQUIRE REMOVAL OF THE CONTINUOUS HORIZONTAL BRIDGING AT ONE JOIST SPACE, WELDED CROSS BRIDGING SHALL BE ADDED TO EACH ADJACENT JOIST SPACE. HORIZONTAL BRIDGING SHALL REMAIN AT ADJACENT JOIST SPACES.
- 16.
17. WHEN SKYLIGHTS OR MECHANICAL DUCTS INTERFERE WITH THE BOLTED DIAGONAL BRIDGING AT ONE JOIST SPACE, IT MAY BE REMOVED ONLY AFTER ROOF DECK IS IN PLACE AND BOTH OF THE ADJACENT JOIST SPACES HAVE BOLTED OR WELDED DIAGONAL BRIDGING. ALL REQUIRED ERECTION STABILITY BRIDGING* SHALL BE INSTALLED AS THE JOISTS ARE BEING ERECTED, PER OSHA REQUIREMENTS.
18. JOIST CHORD SIZES WILL NOT BE AVAILABLE UNTIL FABRICATION.
19. STEEL ENCOUNTERS' PROPOSAL EXCLUDES AN ENGINEER'S STAMP ON PLACEMENT PLANS. JOIST CALCULATIONS, IF REQUIRED WILL NOT BE AVAILABLE UNTIL FABRICATION AND WILL BE STAMPED BY CIVIL ENGINEER.
20. IF ZONING OF MATERIALS AND DELIVERIES ARE REQUIRED, PLEASE PROVIDE WITH RETURNED APPROVALS. FAILURE TO PROVIDE ERECTION ZONING OR SEQUENCING AT THIS TIME MAY HAVE COST IMPACTS AND DELAYS.

REV.	DATE	BY	DESCRIPTION
A	-	-	FOR APPROVAL

REV.	DATE	BY	DESCRIPTION
A	-	-	FOR APPROVAL

DESIGNER	S. DUFFY	DATE	1/1	CHECKER	JS	DATE	12/12/12
DESCRIPTION	GENERAL FRAMING NOTES						
PROJECT NAME	AJINOMOTO FROZEN FOODS						
LOCATION	PORTLAND, OR.						
ARCHITECT	ARCHITECT						
CUSTOMER	IN SPEC GROUP						

FINAL PLANS FOR FIELD USE
BACKCHARGES WILL NOT BE HONORED WITHOUT AUTHORIZATION BY STEEL ENCOUNTERS, INC.

SCANNED BY: 12172476-DPS-41-2
 2012-12-12 10:12:12 AM

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City of Portland, Oregon - Bureau of Development Services

1900 SW Fourth Avenue • Portland, Oregon 97201 • 503-823-7300 • www.portlandoregon.gov/bds



Deferred Submittal Requirements and Application

Applicants will provide:

- A copy of this application
- Three (3) sets of plans
- One (1) set of calculations
- Two (2) sets of product information
- Drawings and calculations must be stamped and signed by an Engineer registered in Oregon and approved by the Architect/Engineer of record for the building.
- Permit fee (paid at time of submittal)
- If the DFS includes exterior elements, plan views and elevations identifying the location(s) as approved by the Architect and Engineer of Record must be submitted.
- One (1) copy of your main building permit approved plans (NOTE: Approved plans do not need to be submitted if your project has a development liaison assigned)

Contractor submittal information:

Contact name AKIRA MAKIDO - INSPEC GROUP DFS-01

Address 140 SW ARTHUR ST

City PORTLAND State OR Zip Code 97201

Phone 503 E-mail amakido@inspecgroup.com

Value of deferred submittal \$24,000 Issued main building permit # 12-172476

Description/Scope of work STEEL JOISTS @ ROOF

Fees

Deferred submittal (DFS) fees are collected in addition to the standard building review fee paid on the main building permit. DFS fees cover the cost of the additional processing and review time associated with the design build element.

The DFS fee for processing and reviewing deferred plan submittals is 10 percent of the building permit fee calculated using the value of the particular deferred portion of the project.

Minimum fee: Residential, one and two family dwelling ...\$123 for DFS with valuation of less than or equal to \$222,000

Commercial and all other projects\$307 for DFS with valuation of less than or equal to \$680,000

The Bureau of Development Services (BDS) fee schedule is also available on the BDS web site at www.portlandoregon.gov/bds | select the Fees tab.

Helpful Information

Bureau of Development Services
1900 SW 4th Avenue, Portland, OR 97201

Submit your plans to:
Development Services Center (DSC), First Floor,
Tuesday - Friday:
8:00 am - 12:00 pm
Closed Mondays

Important Telephone Numbers

BDS main number 503-823-7300

DSC automated information line 503-823-7310

Building code information 503-823-1456

BDS 24 hour inspection request line 503-823-7000

Residential information for
one and two family dwellings..... 503-823-7388

City of Portland TTY 503-823-6868

DEFERRED SUBMITTAL REQUIREMENTS AND APPLICATION