

Metal-Plate Connected Wood Trusses:

A. Metal-plate-connected wood trusses shall comply with:

1. TPI 1, National Design Standard for metal-plate-connected wood truss construction.
2. TPI DSB, recommended design specification for temporary bracing of metal-plate-connected wood trusses.
3. TIP HIB, commentary and recommendation for handling, installing and bracing metal-plate-connected wood trusses.

B. The fabricator shall be a member of tpi and have a minimum of 3 years successful experience in the fabrication of metal-plate-connected wood trusses. the fabricator shall have sufficient production capacity to produce, transport and deliver the required trusses without cause of delay in the work.

C. Truss construction documents shall be prepared or under the supervision of a qualified professional engineer licensed to practice in the state of hawaii and shall be provided to the building official and approved prior to installation. truss construction documents shall include, at a minimum, the information specified below:

1. Show location, pitch, span, camber, configuration and spacing for each type of truss required.
2. Indicate sizes, stress grade and species for lumber.
3. Indicate locations of permanent bracing required to prevent buckling of individual truss members due to design loadS.
4. Indicate type, size, material, finish, design values, orientation, and location of metal connector plates.
5. Show splice details and bearing details.
6. Include structural analysis data signed and sealed by the qualified professional engineer responsible for the design.

D. Wood shall be preservative treated.

E. Metal connector plates shall be hot dipped galvanized astm a 653, g185 coating designation, and not less than 0.036 inch.

F. Truss members shall not be cut, notched, drilled, spliced or otherwise altered in any way without the approval of a registered design professional.

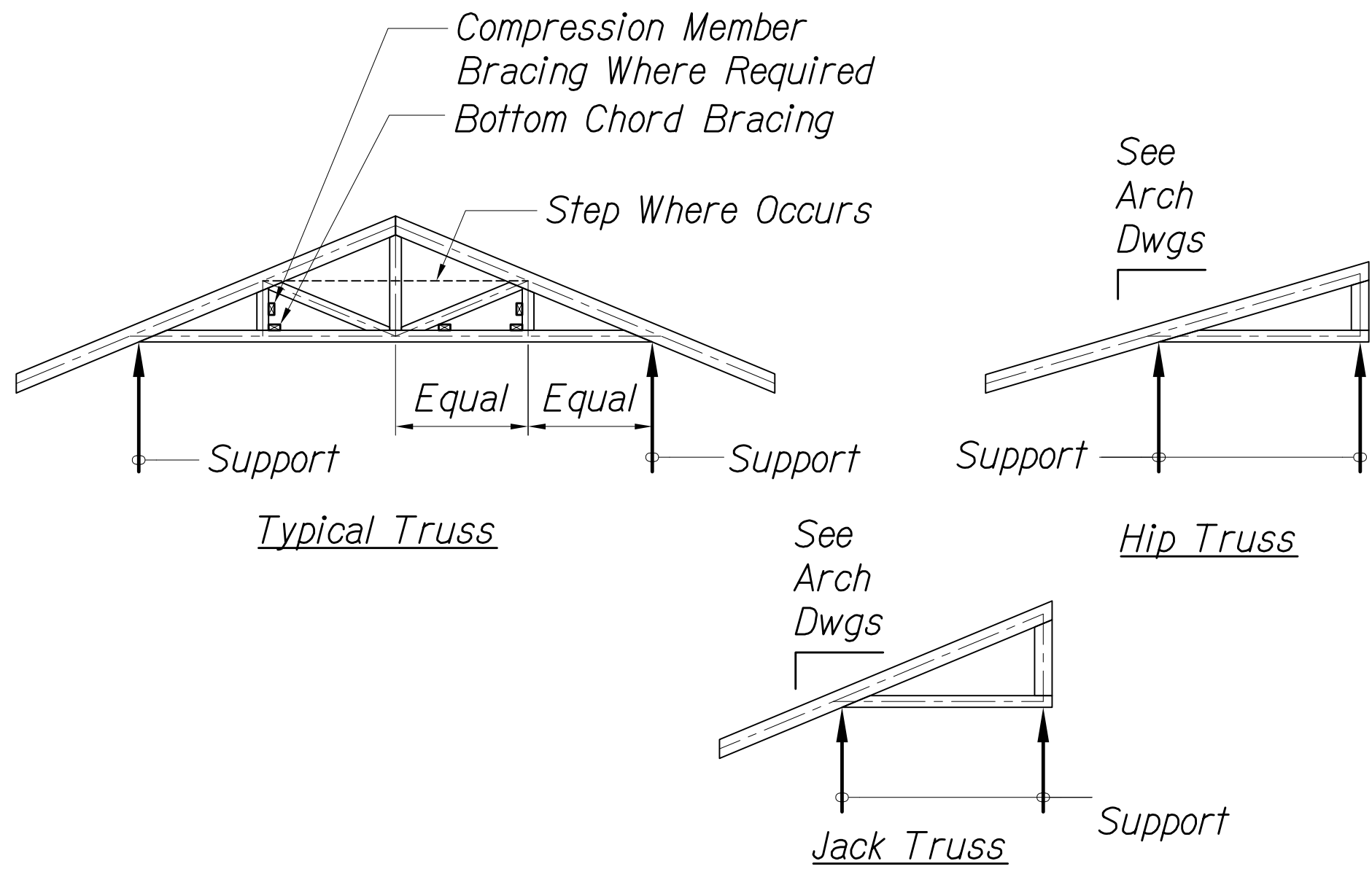
G. Multi-ply trusses shall be nailed to each other with 16d common nails at 10 inches o.c. along all truss members.

H. S Ee architectural drawings for slopes of top and bottom chords.

I. Structural performance

1. Roof dead load (not including self weight of trusses) =11 psf
2. Roof live load top chord = 20 psf (reducible)
3. Bottom chord live load = 10 psf

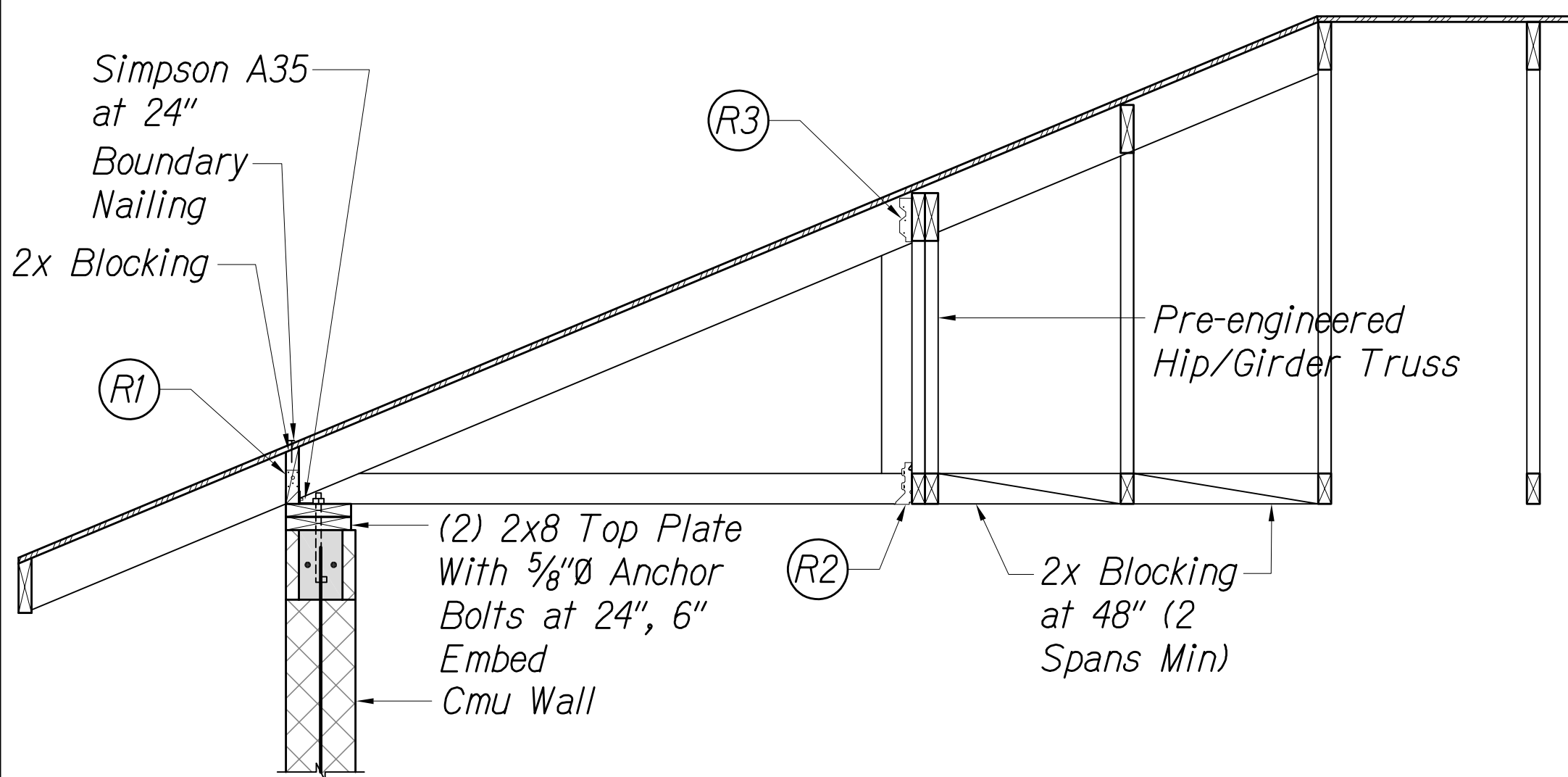
4. Wind loads in accordance with building code criteria noted on drawings
5. Load combinations in accordance with building code.
6. Top chord and bottom chord live load need not act concurrently.
7. Vertical deflection under total load shall be limited to 1/240 of span or 1 1/4", whichever is less.
8. Vertical deflection under live or wind load shall be limited to 1/360 of span or 3/4", whichever is less.
9. Wind loads along collector trusses are reversible. loads along top chord shall be transferred to bottom chord through truss member connections.
10. Minimum truss member sizes
 - a. Top chord = 2x6
 - b. Bottom chord = 2x4
 - c. Web members = 2x4



TRUSS ELEVATIONS

Not to Scale

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At Typical, Girder, Jack/Hip Truss

Connector Schedule

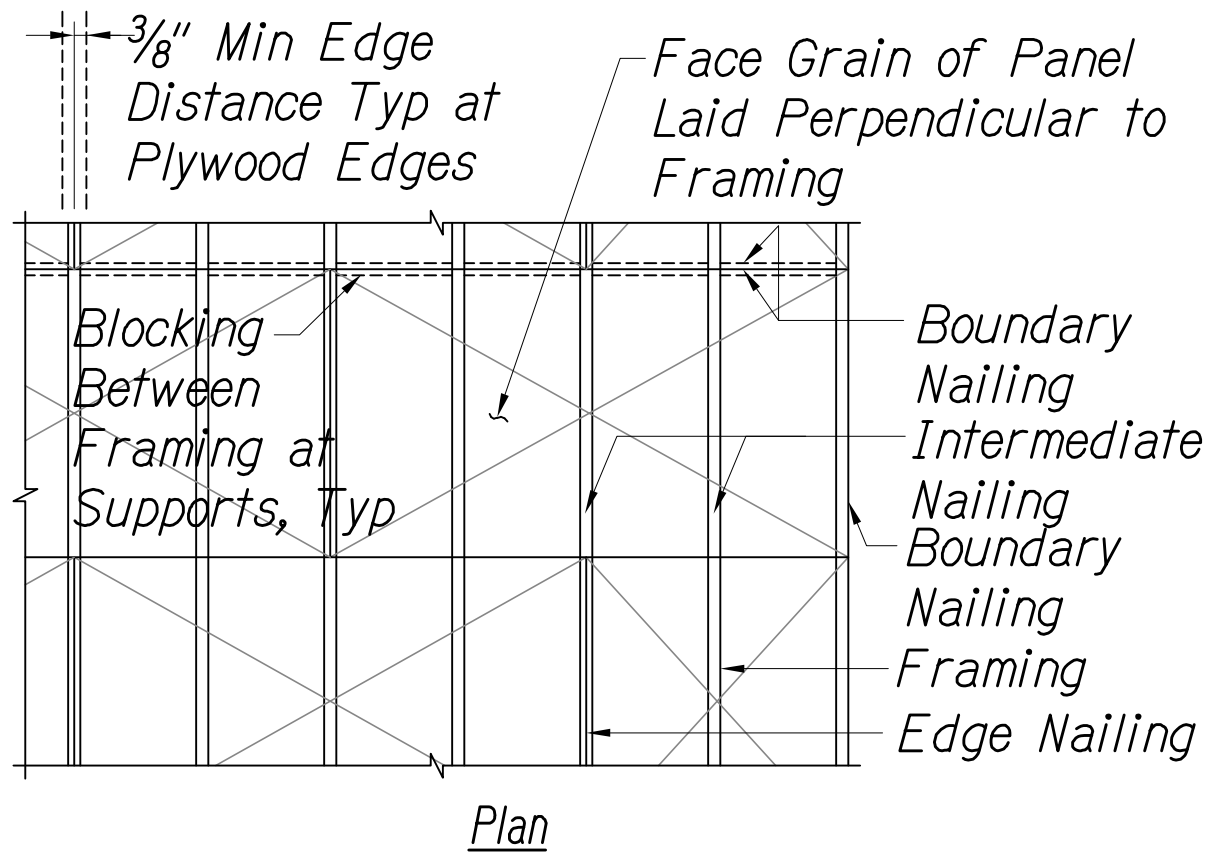
Member	Support	(R1)	(R2)	(R3)	(R4)
Typical Truss	Wall/Beam, Girder Truss	Simpson H10	-	-	-
Jack Truss	Wall/Beam, Hip/Girder Truss	Simpson H1	Simpson LUS26	Simpson LS50	-
Hip Truss	Wall/Beam, Hip/Girder Truss	(2) Simpson LS50	Simpson SUR/L26	Simpson LS50	-
Girder Truss	Wall/Beam	(2) Simpson H25A	-	-	-

TYPICAL TRUSS CONNECTION DETAIL

Not to Scale

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FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-064-1(010)	2018	103	120



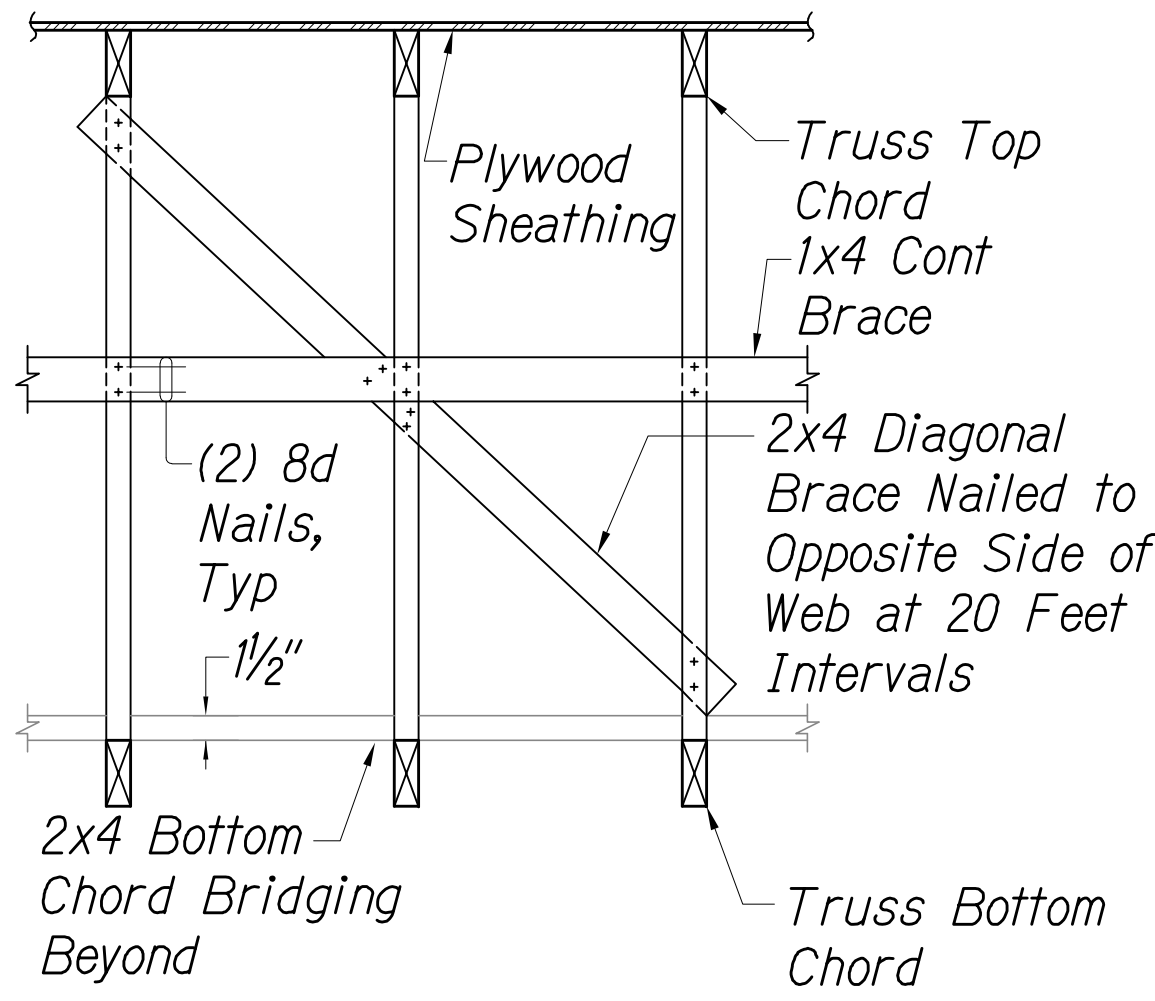
Fastening Schedule

Location	Edge	Boundaries	Intermediate	Remarks
Roof	8d at 6"	8d at 6"	8d at 12"	

SHEATHING SCHEDULE

Not to Scale

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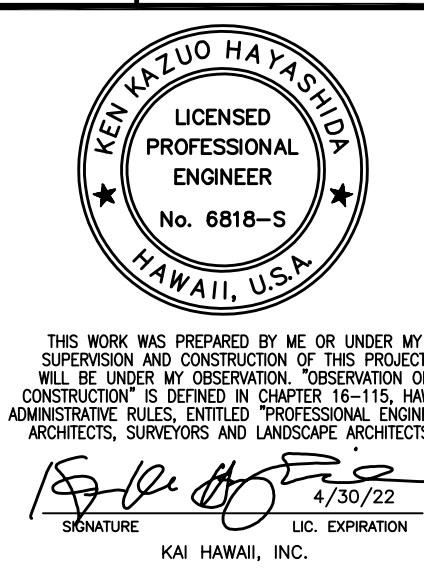
TYPICAL MINIMUM WOOD TRUSS WEB BRACE DET

Not to Scale

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SURVEY PLOTTED BY	DATE
DESIGNED BY	BY
TRACED BY	WC
NOTE BOOK	
QUANTITIES BY	
CHECKED BY	
No.	

05/21/21 Updated Notes



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STORAGE ROOF FRAMING
SECTIONS AND DETAILS

Sand Island Access Road

Truck Weigh Station

Federal Aid Project No. NH-064-1(010)

Scale: As Noted

Date: January 2021

SHEET No. S-13 OF 120 SHEETS