ROOF ASSEMBLY REQUIREMENTS OVER EXPOSED GLU-LAM RAFTERS

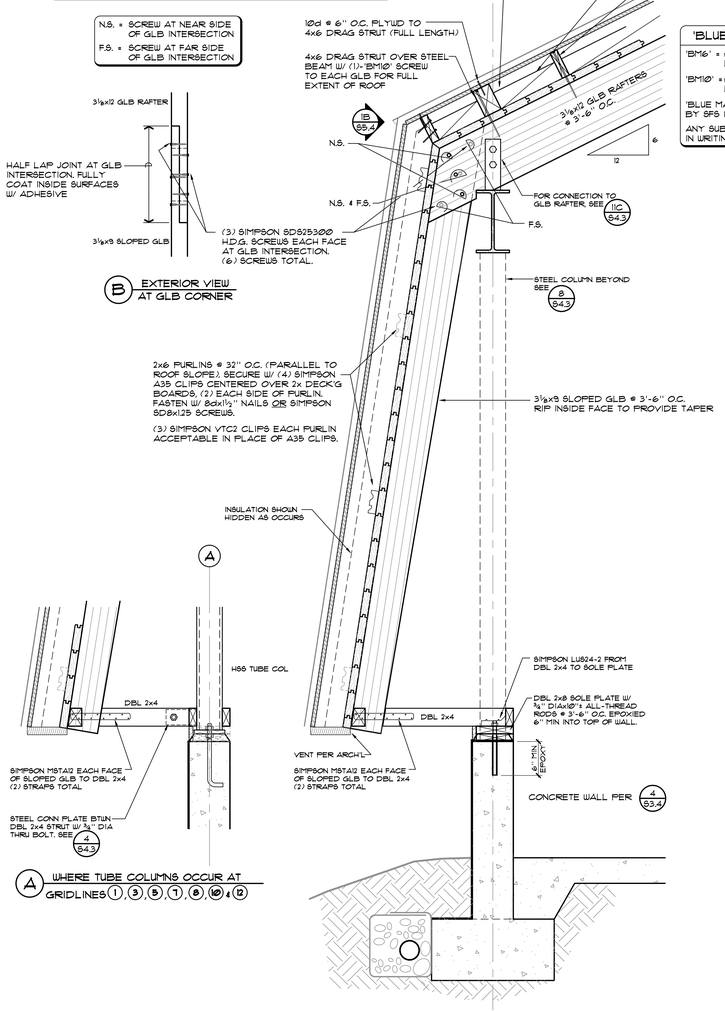
RAFTERS AND DECKING
2x T&G DECKING OVER 3⅛" GLU-LAM RAFTERS @ 3'-6" O.C.
FASTEN DECKING TO GLU-LAM RAFTERS W/ (2)-16d HDG COMMON NAILS PER DECK BOARD.

ROOF PURLINS
2x6 DF #2 ROOF PURLINS @ 32" O.C. OVER 2x6 DECKING. AT 6:12 ROOF AREA (LINES A-C, 1-12) INSTALL 2x4 BLOCKING @ 7'-0" O.C. OVER 2x6 DECKING (ALIGN W/ GLB RAFTERS) FOR WIDTH OF ROOF AREA. ANCHOR PURLINS THRU 2x6 DECKING TO GLB RAFTERS W/ 10"x ¼" DIA. "BLU-MAX" LOG SCREWS @ 7'-0" O.C. OFFSET SCREW SPACING 3'-6" AT ADJACENT PURLINS AND ANCHOR ALL PURLINS TO LAST RAFTER AT RAKED EAVES. PRE-DRILL AS REQ'D. TO PREVENT SPLITTING OF 2x6 PURLINS W/ 3/16" DIA. BIT THRU PURLINS ONLY. PROVIDE 3" EMBEDMENT INTO TOPS OF GLB RAFTERS.

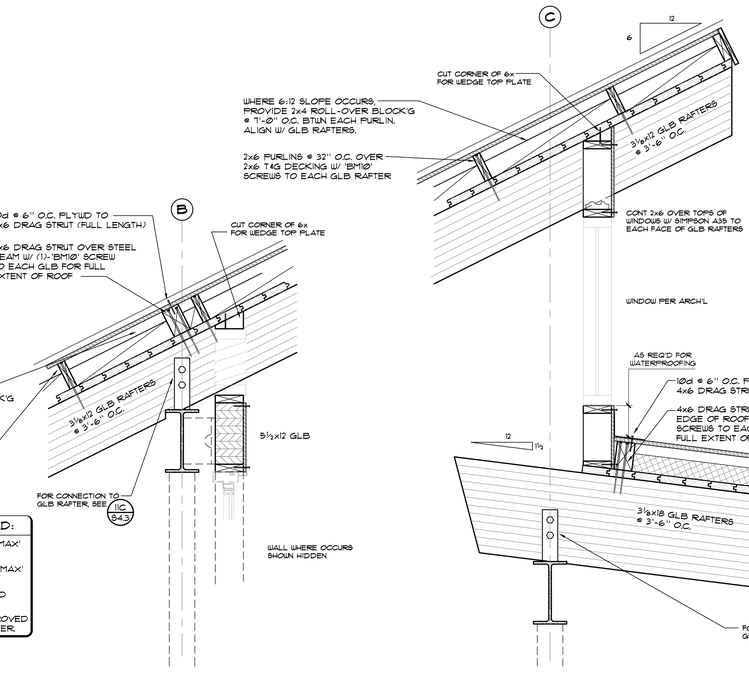
SEE ROOF FRAMING PLAN FOR PURLIN REQMENTS. AT SKY-LITES.

ADDITIONAL ROOF FRAMING ELEMENTS FOR PLYWD. DIAPHRAGM
WHERE SHOWN ON THE ROOF FRAMING AND ROOF DIAPHRAGM PLANS, PROVIDE 4x6 "DRAG-STRUTS" ON LINE WITH OR ADJACENT TO (AS SHOWN IN DETAILS) TIE-ROD BRACE FRAMES OR PLYWOOD SHEARWALLS. 4x6 SHALL BE INSTALLED FOR EXTENTS INDICATED AND SPLICED AT BREAKS W/ SIMPSON MST37 STRAPS CENTERED ON BREAK. WHERE EAST-WEST 4x6 STRUTS CROSS NORTH-SOUTH STRUTS NORTH-SOUTH STRUTS SHALL BE INSTALLED FIRST AND EAST-WEST MEMBERS BUTTED TIGHT TO THEM AT EACH SIDE. FASTEN 4x6 "DRAG-STRUTS" THRU ROOF DECKING TO GLU-LAM RAFTERS OR TOP PLATES OF SHEARWALLS W/ 10"x¼" DIA. "BLUE-MAX" LOG SCREWS (BM10) AT SPACING REQUIRED BY DIAPHRAGM ON SHEET S2.4D. AFTER ALL "DRAG-STRUTS", ROOF PURLINS, ROLL-OVER BLOCKING AND SPECIAL PLYWOOD BLOCKING HAS BEEN INSTALLED CONTACT STRUCTURAL ENGINEER FOR INSPECTION. DO NOT PROCEED WITH PLYWOOD INSTALLATION UNTIL ENGINEER HAS INSPECTED THIS WORK. INSULATION MAY BE INSTALLED PRIOR TO INSPECTION.

PLYWOOD DIAPHRAGM
3/4" APA RATED DIAPHRAGM SHEATHING OVER 2x6 ROOF PURLINS ACROSS ROOF SLOPE @ 32" (MAX) O.C. LAY PLYWD. SHEETS WITH LONG SIDES UP & DOWN ROOF SLOPE STARTING FROM LOW EDGE OF ROOF PLANE TO EDGE OF HIGH ROOF EAVE OR FACE OF WINDOW WALL. FASTEN EDGES OF PLYWOOD SHEETS TO ALL SUPPORTS W/ 10d COMMON NAILS @ 6" O.C. EXCEPT WHERE CLOSER SPACING IS REQUIRED BY "SPECIAL ROOF DIAPHRAGM REQUIREMENTS" AS INDICATED ON THE ROOF FRAMING PLAN AND LEGEND BOX. PROVIDE 2x4 FLAT BLOCKING @ UNSUPPORTED SHEET EDGES WHERE "SPECIAL DIAPHRAGM REQUIREMENTS" OCCUR FOR EDGE NAILING.



5 S5.4 **FRAMING DETAIL:** SECTION THRU GRIDLINE (A)
SCALE: 1" = 1'-0"

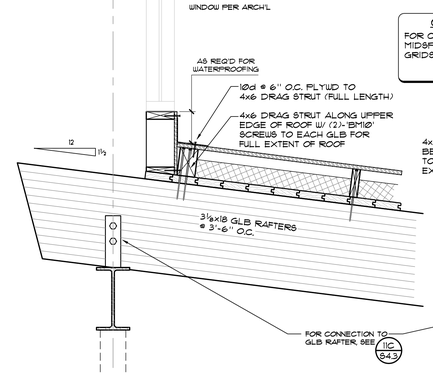


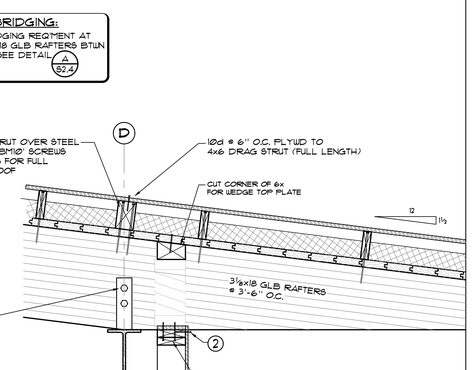
'BLUEMAX' SCREW LEGEND:
'BM6' = Ø.23" DIAx6" LONG 'BLUE MAX' LOG SCREW
'BM10' = Ø.23" DIAxIØ" LONG 'BLUE MAX' LOG SCREW
'BLUE MAX' SCREWS MANUFACTURED BY SFS Intec USA.
ANY SUBSTITUTIONS MUST BE APPROVED IN WRITING BY STRUCTURAL ENGINEER.

14 S5.4 **FRAMING DETAIL:** ROOF SECTION THRU GRIDLINE (B)
SCALE: 1" = 1'-0"

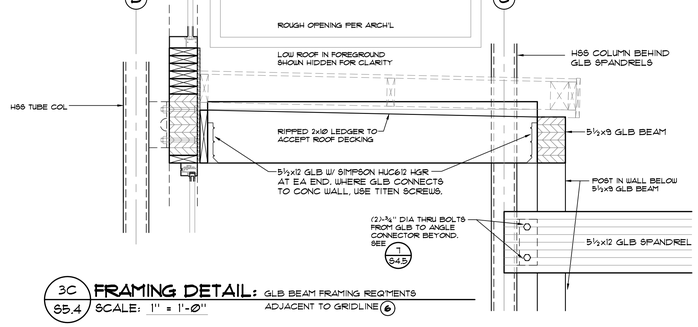
13 S5.4 **FRAMING DETAIL:** ROOF SECTION THRU GRIDLINE (C)
SCALE: 1" = 1'-0"

CROSS BRIDGING:
FOR CROSS-BRIDGING REQMENT AT MIDSPAN OF 3⅛x18 GLB RAFTERS BTWN GRIDS (C) & (D), SEE DETAIL A S2.4

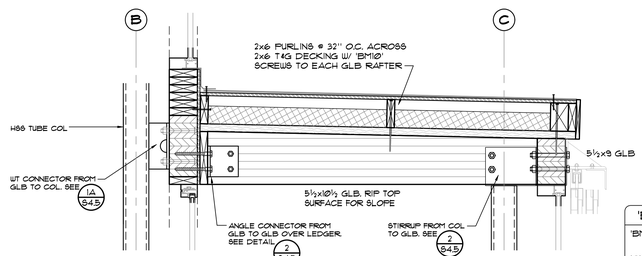




6 S5.4 **FRAMING DETAIL:** ROOF SECTION THRU GRIDLINE (D)
SCALE: 1" = 1'-0"

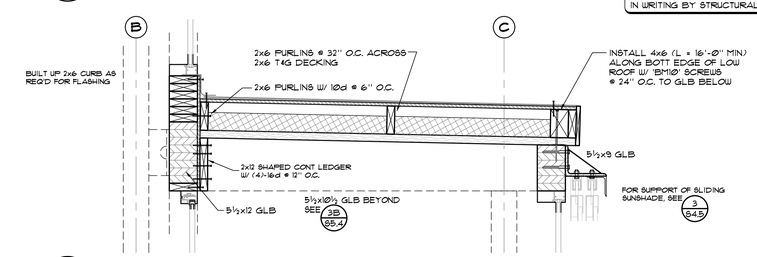


3C S5.4 **FRAMING DETAIL:** GLB BEAM FRAMING REQMENTS ADJACENT TO GRIDLINE (6)
SCALE: 1" = 1'-0"



'BLUEMAX' SCREW LEGEND:
'BM6' = Ø.23" DIAx6" LONG 'BLUE MAX' LOG SCREW
'BM10' = Ø.23" DIAxIØ" LONG 'BLUE MAX' LOG SCREW
'BLUE MAX' SCREWS MANUFACTURED BY SFS Intec USA.
ANY SUBSTITUTIONS MUST BE APPROVED IN WRITING BY STRUCTURAL ENGINEER.

3B S5.4 **FRAMING DETAIL:** LOW ROOF FRAMING WHERE GLB OCCURS
SCALE: 1" = 1'-0"



3A S5.4 **FRAMING DETAIL:** TYP LOW ROOF FRAMING
SCALE: 1" = 1'-0"

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Hawai'i Preparatory Academy
Kamuela, Hawaii
TMK: 6-5-1: 33

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WALTER T. VORFELD LICENSED PROFESSIONAL ENGINEER NO. 7004 S STATE OF HAWAII
Signature
This work was performed by me or under my supervision and construction of this project will be under my observation (observation of construction as defined in section 16-115-2 of the rules and regulations of the Board of Professional Engineers, Architects and Surveyors of the State of Hawaii).
EXP: 4/30/2010

	PERMIT SET	1/19/09

WOOD FRAMED ROOF DETAILS

PERMIT SET 01-19-09

Drawn by: WTV, RD, KC	Job Number: WVA-28012
Checked by: WTV, RD, KC	Scale: AS NOTED
PERMIT SET	Date: 01/19/2009

S
5.4