ADVANCED FRAMING

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BIMOSE TRIBAL COUNCIL

ADVANCED FRAMING

OR

OPTIMUM VALUE ENGINEERING

IS A FRAMING SYSTEM THAT AIMS TO REDUCE THE AMOUNT OF LUMBER TO A BARE MINIMUM

ADVANCED FRAMING

WAS DEVELOPED IN THE 1960s AS A WAY FOR BUILDERS TO REDUCE THEIR FRAMING COSTS

IF YOU CAN SAVE ON LUMBER YOU CAN SPEND MORE ON OTHER BUILDING COMPONENTS OR LABOUR

LESS WOOD MEANS MORE INSULATION

ADVANCED FRAMING

LOWER LABOUR COSTS – ONCE YOU GET THE HANG OF IT!!

REDUCED ENVIRONMENTAL COST
LESS WOOD = LESS TREES

ADVANCED FRAMING

DESIGN WILL TAKE LONGER

TRAINING

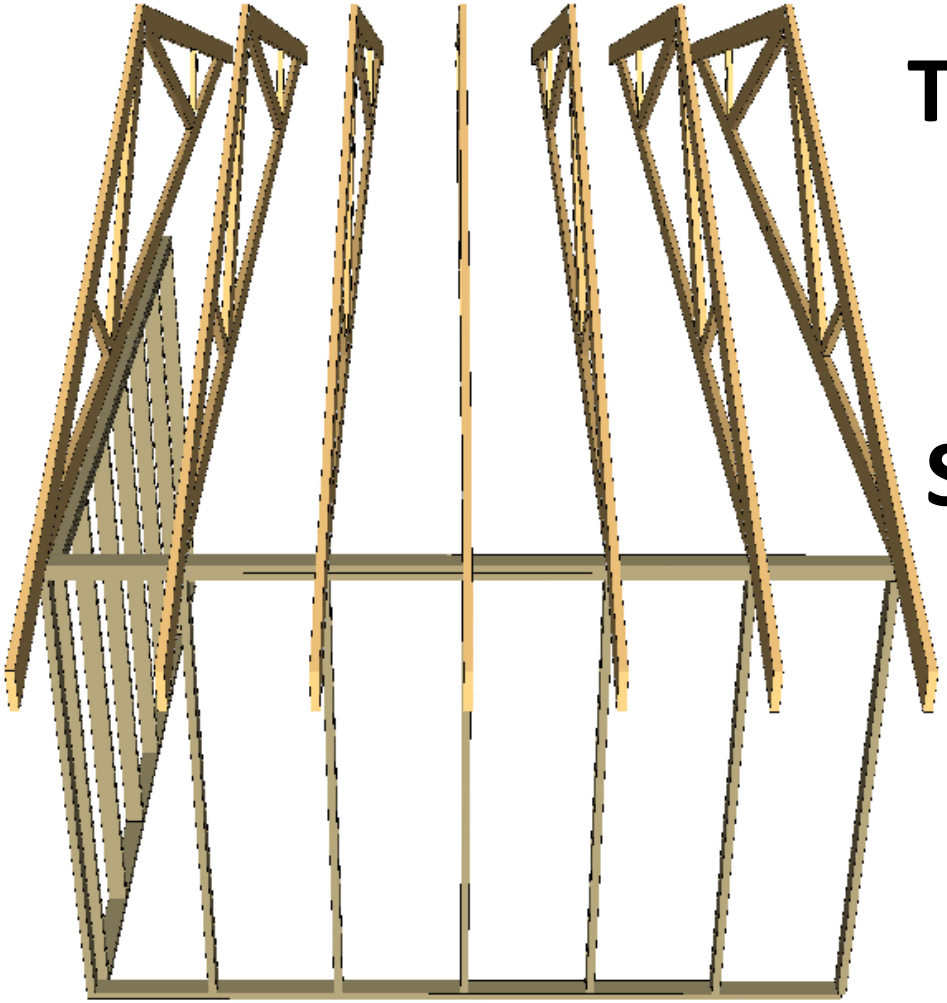
SOME SIDING CAN'T BE USED WITH 24" O.C. FRAMING

ADVANCED FRAMING

WARNING!!!!

YOU MAY NOT WANT TO DIVE HEAD FIRST INTO ALL OF THESE DETAILS

WALL STUDS DIRECTLY BELOW EACH TRUSS



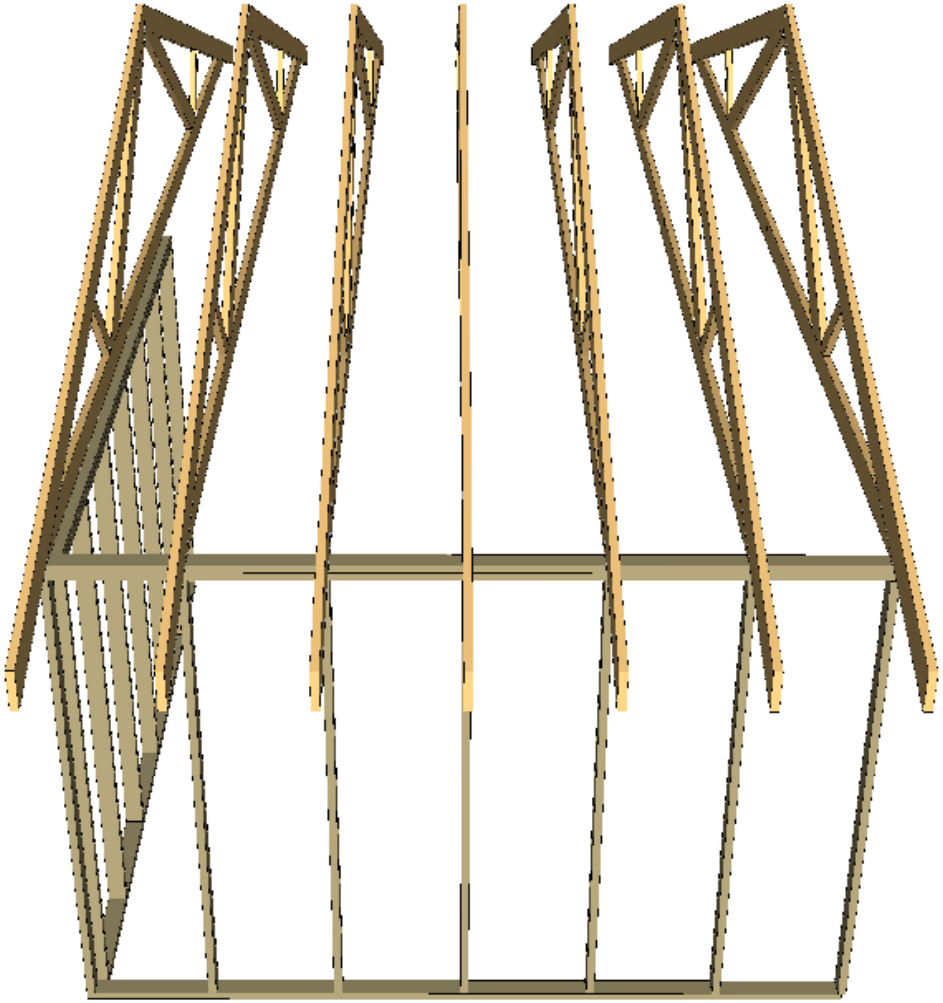
TRUSSES @ 24” O.C.

WITH

STUDS @ 24” O.C.

STACKED FRAMING

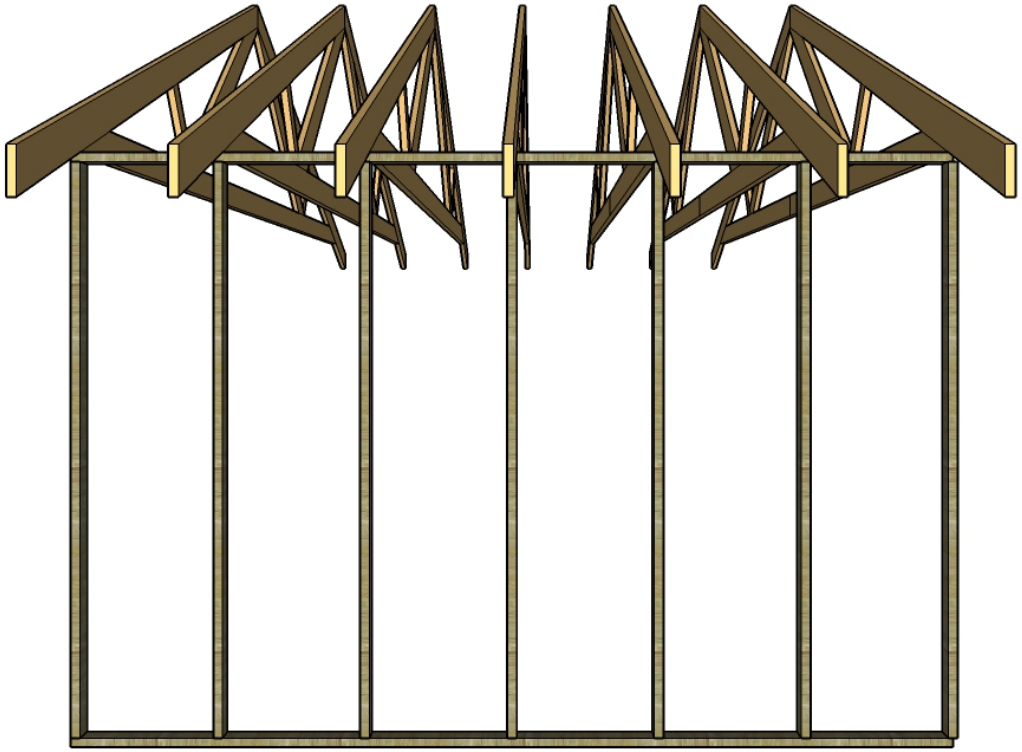
WALL STUDS AT 24” ON CENTER



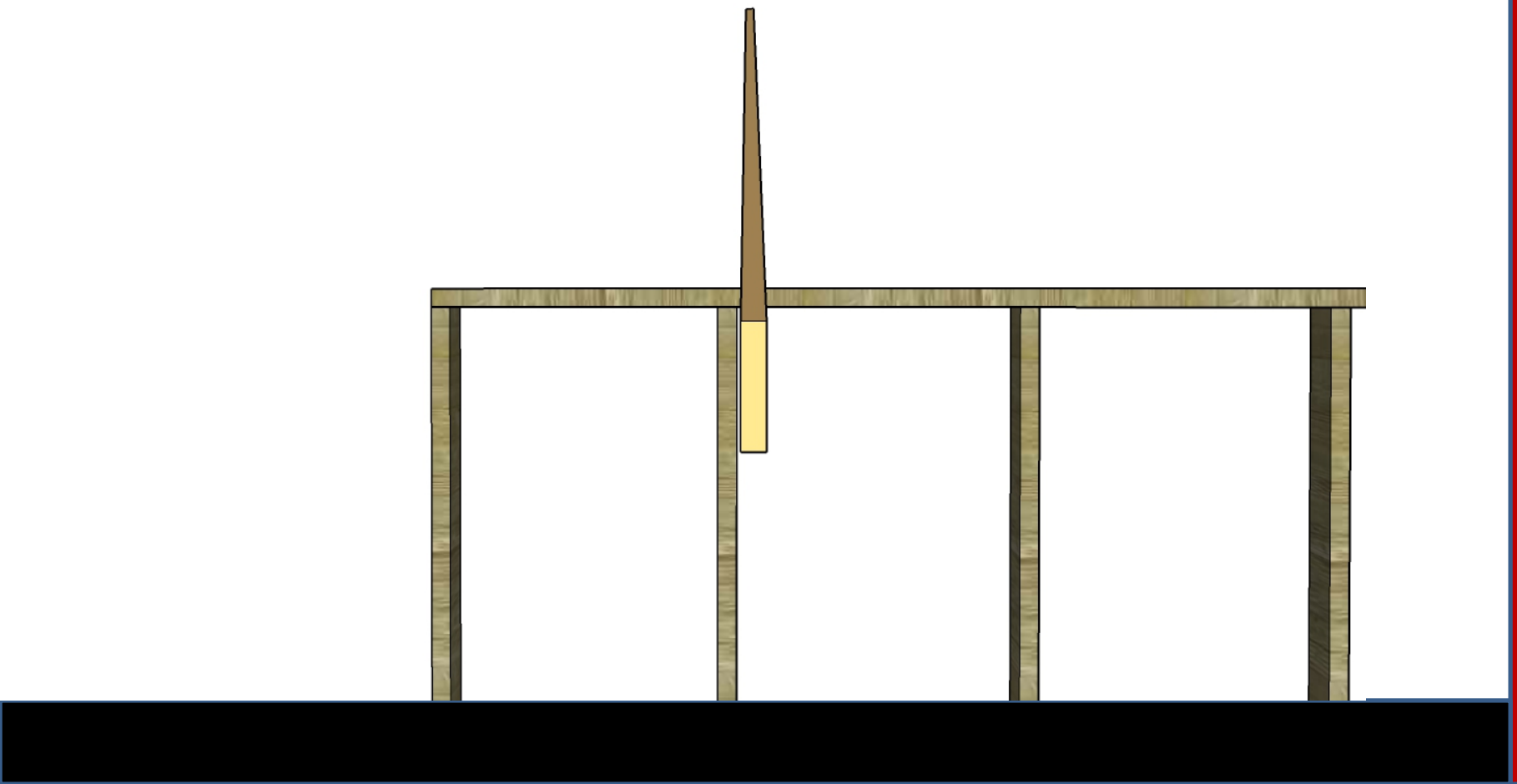
2”x4” WALL CAN SUPPORT UP TO ROOF + ATTIC

2”x6” WALL CAN SUPPORT UP TO ROOF + ATTIC + FLOOR

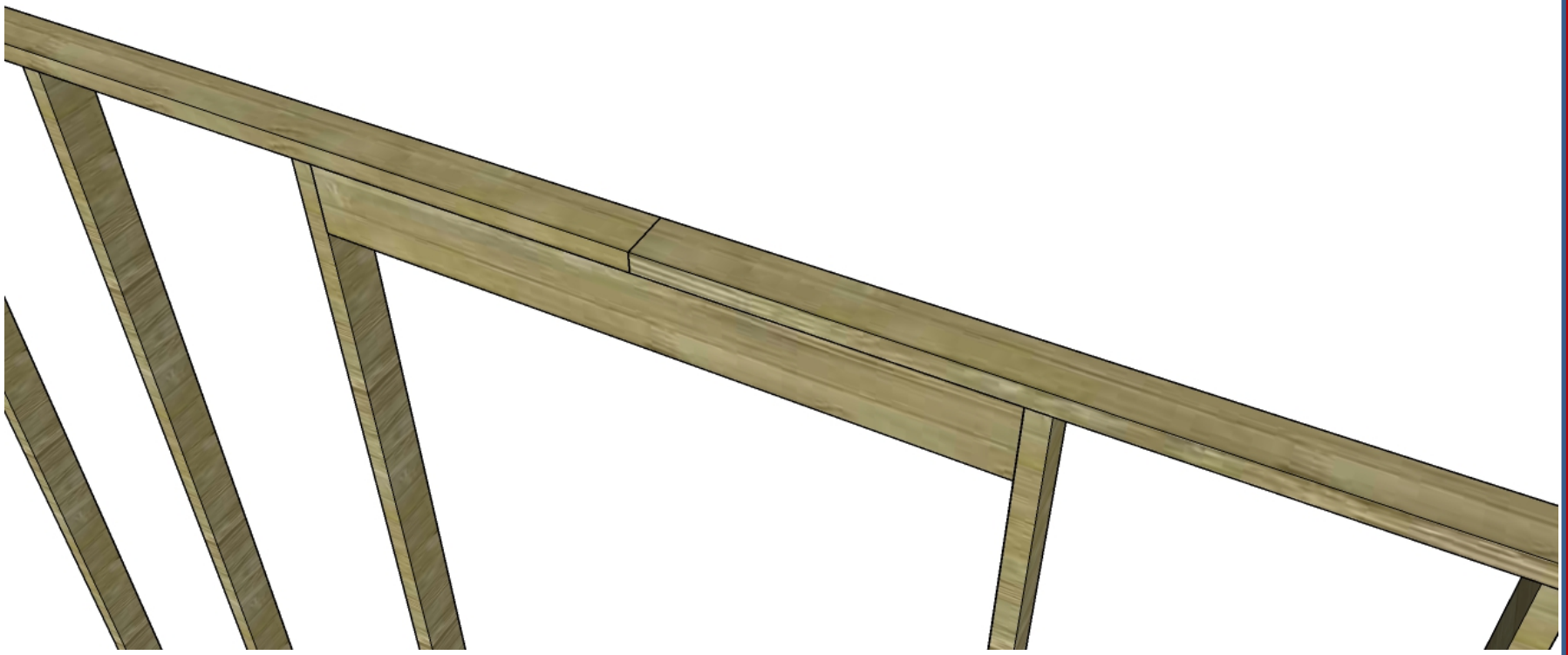
SINGLE TOP PLATE
BUT BE CAREFULL!!!!
94 1/8” STUDS



SINGLE TOP PLATE
BUT BE CAREFULL!!!!
+/- 2”

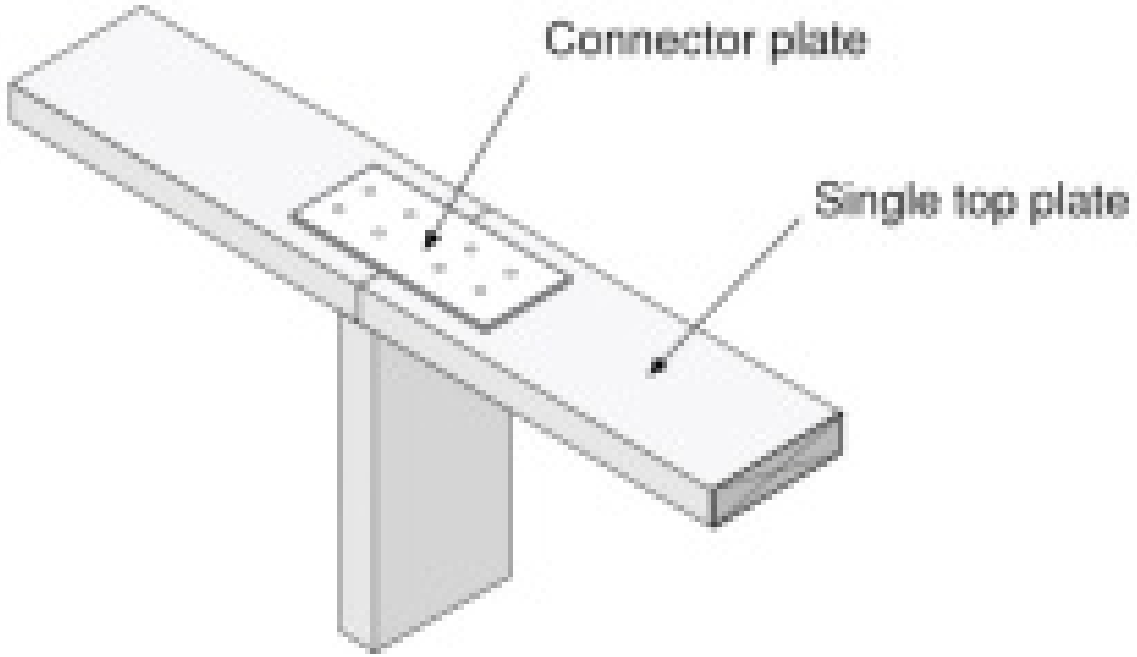


SINGLE TOP PLATE
LAP JOINT AT LINTEL
OR

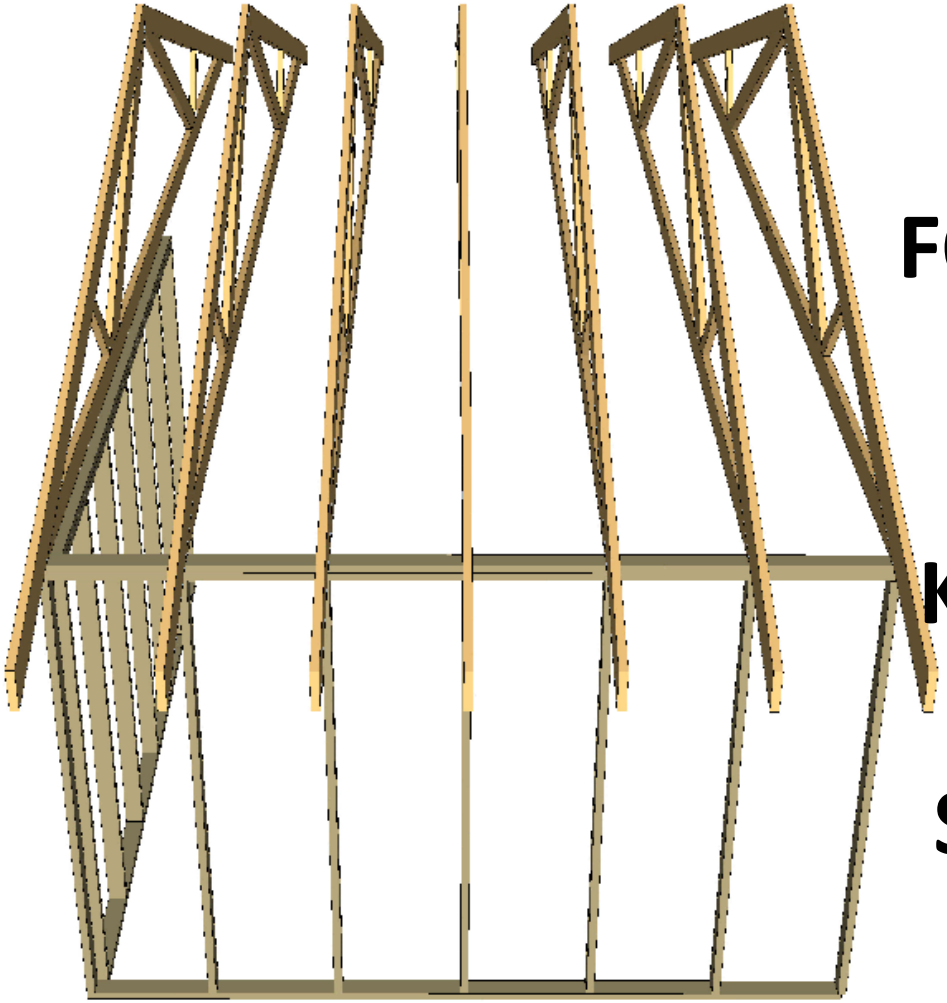


SINGLE TOP PLATE
SPLICE PLATES ARE REQUIRED

Top plate splice

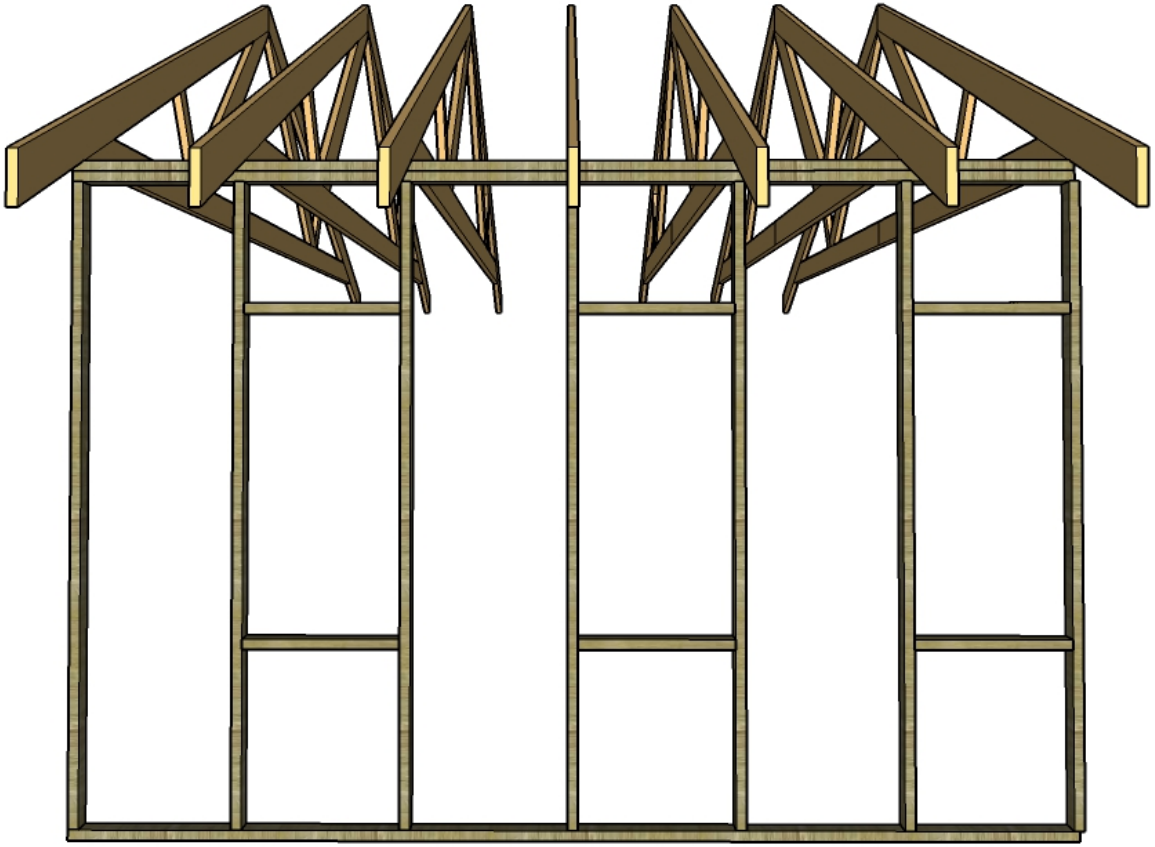


WALL STUDS AT 24” ON CENTER

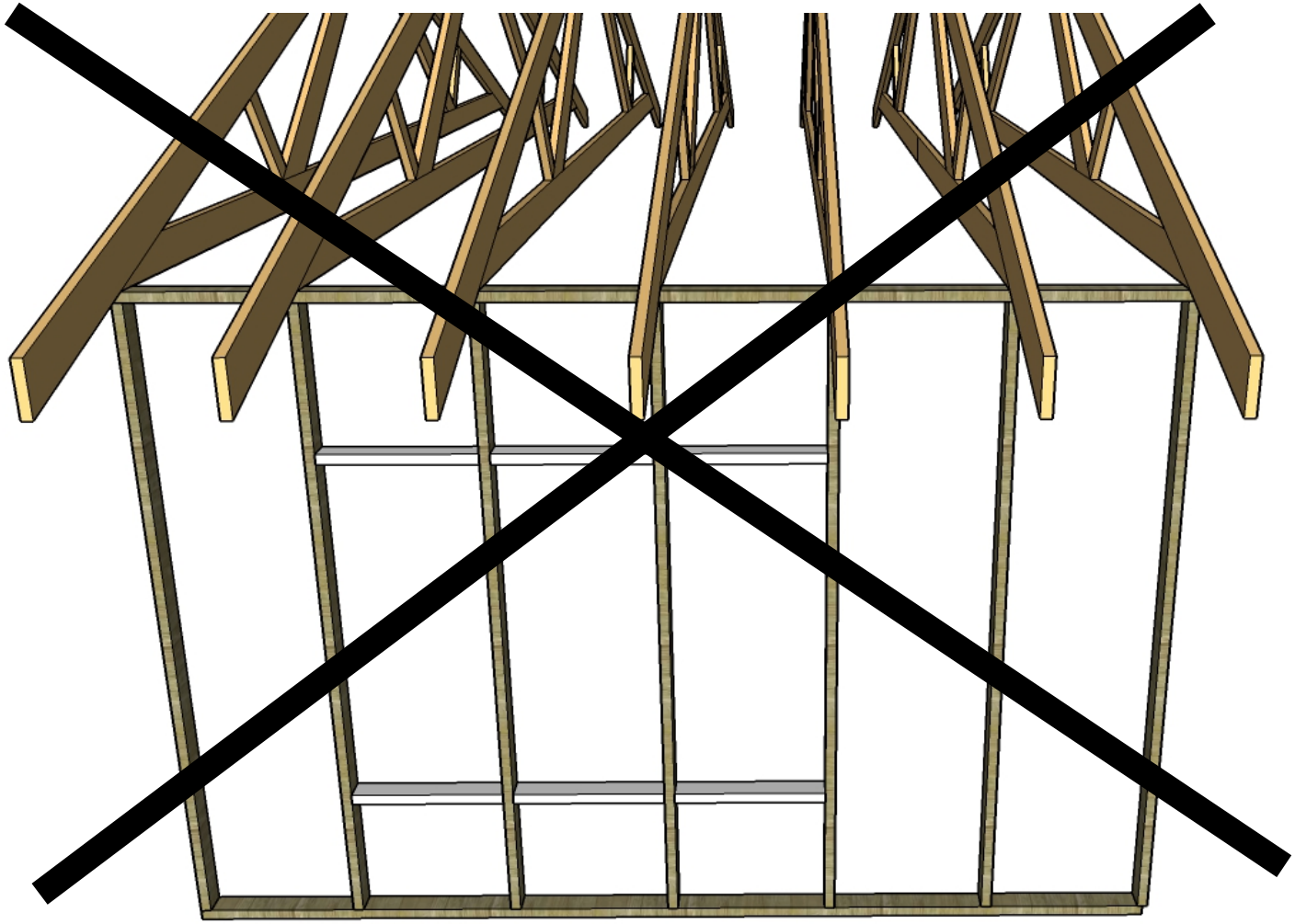


FOR YOUR FIRST TRY I WOULD HIGHLY RECOMMEND KEEPING A DOUBLE TOP PLATE TO SIMPLIFY A LOT OF DETAILS

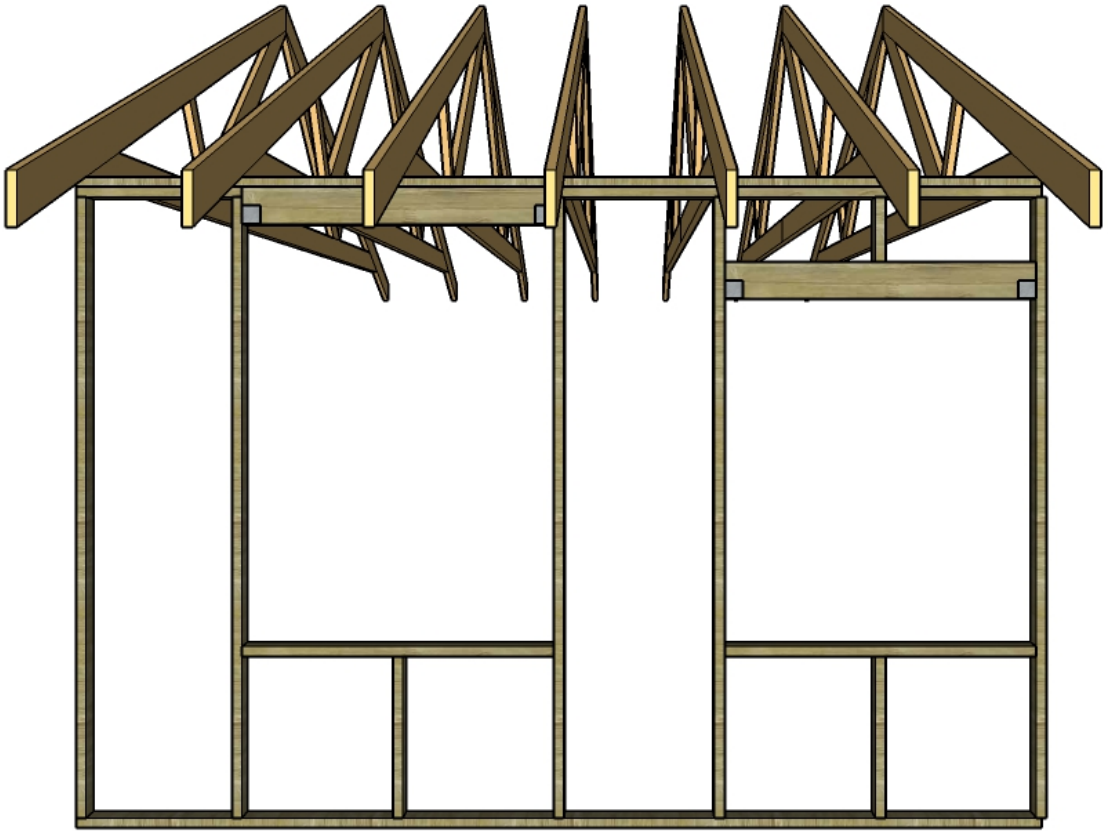
WINDOW OPTIONS
WITHIN EACH 24” CENTER
NO LINTELS NEEDED!!!



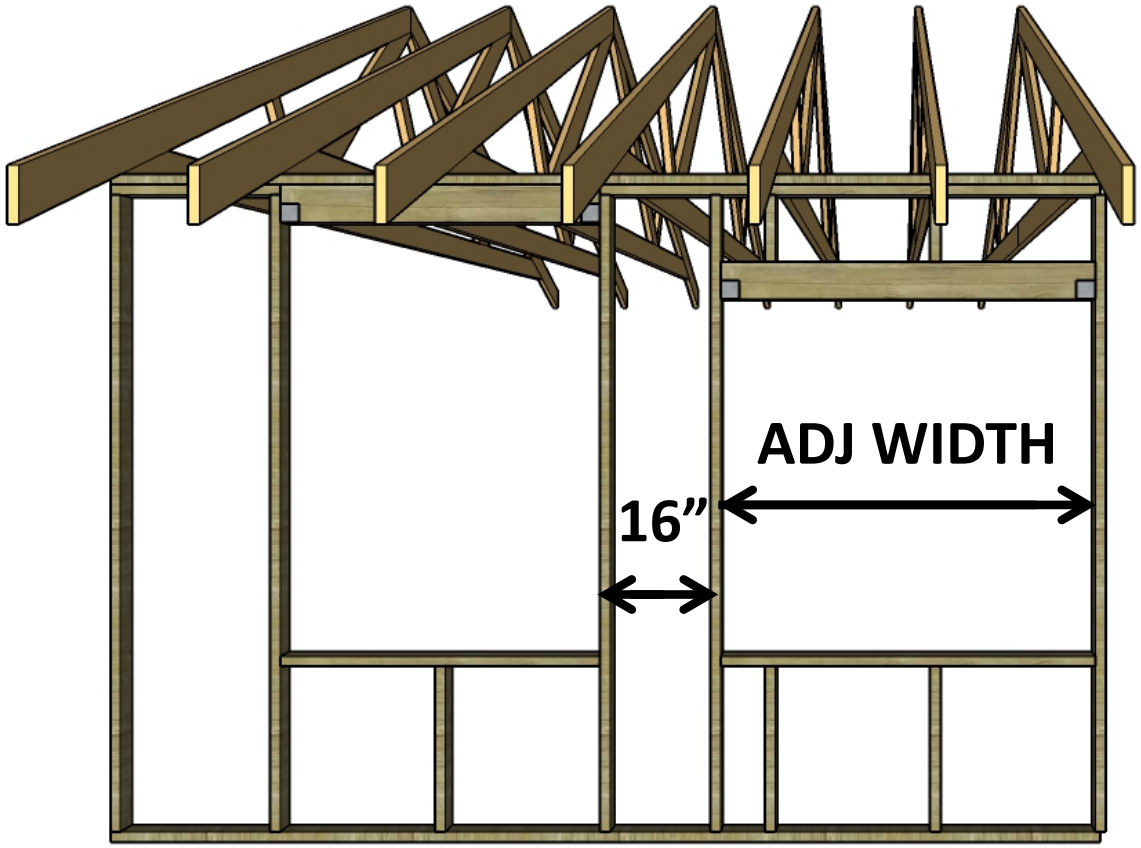
CANNOT PUT OPENINGS IN ADJACENT CAVITIES!!!



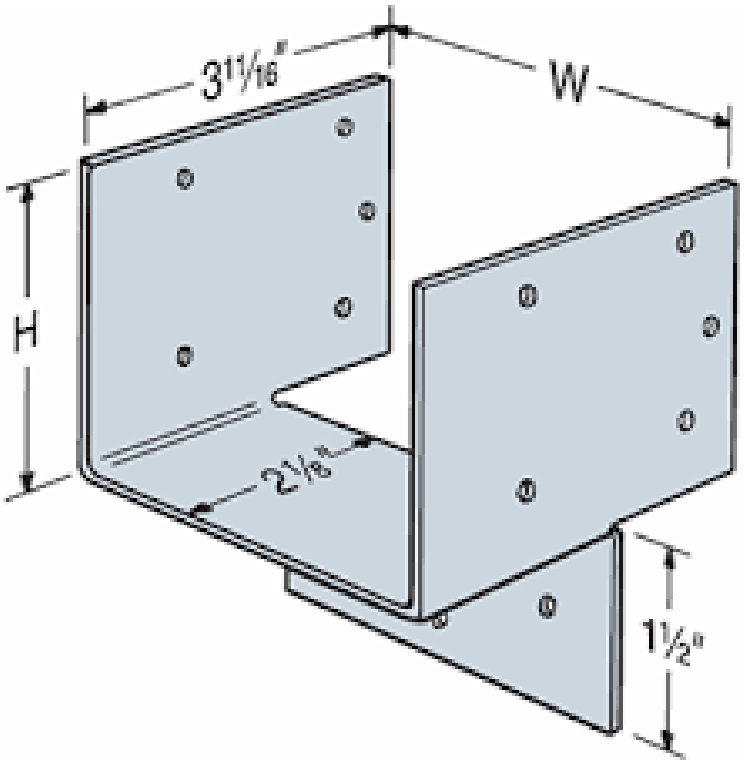
WITHIN 2 CAVITIES
NO JACK STUDS WITH HANGERS!!
NO SILL CRIPPLES!!

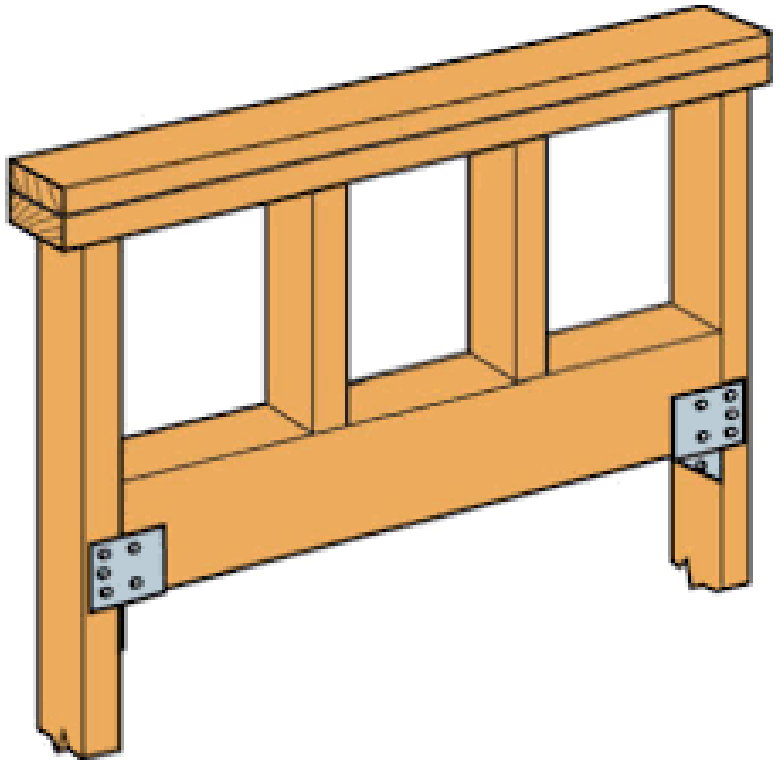


LAYOUT WINDOWS AND DOORS SO THAT YOU GET 16” O.C. SPACING



HEADER HANGER

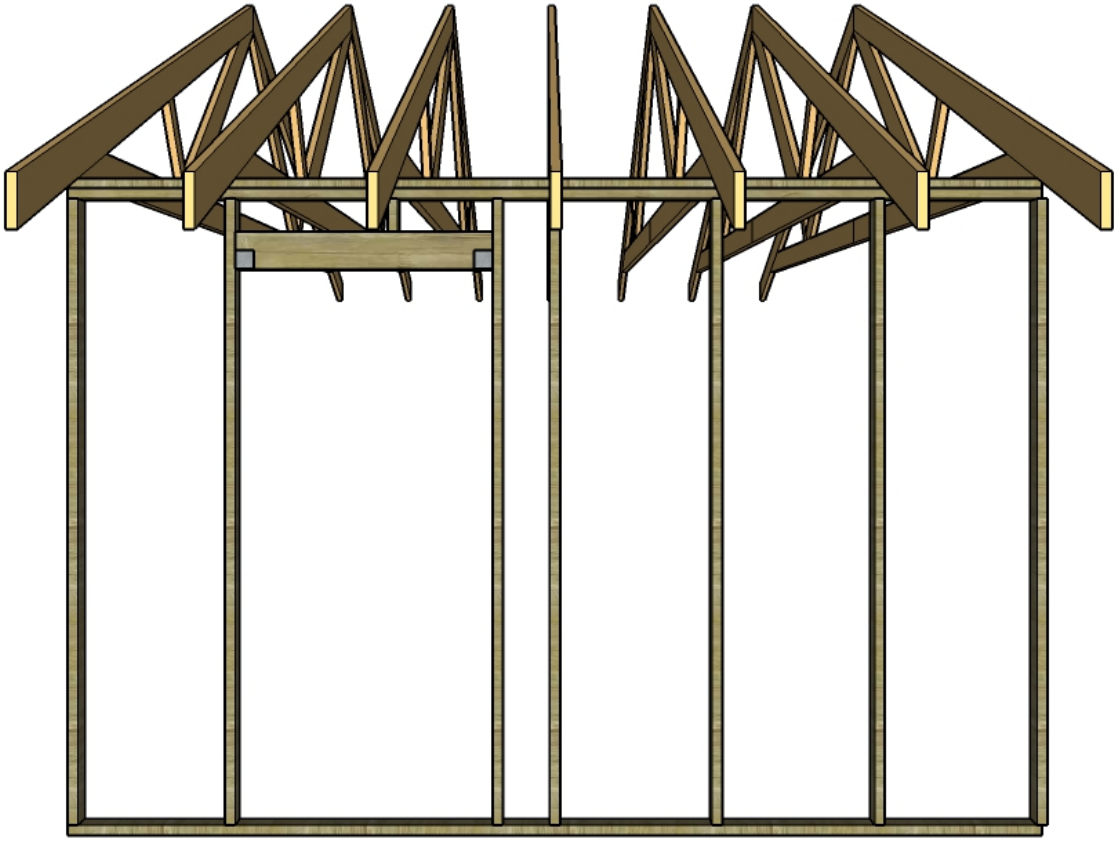




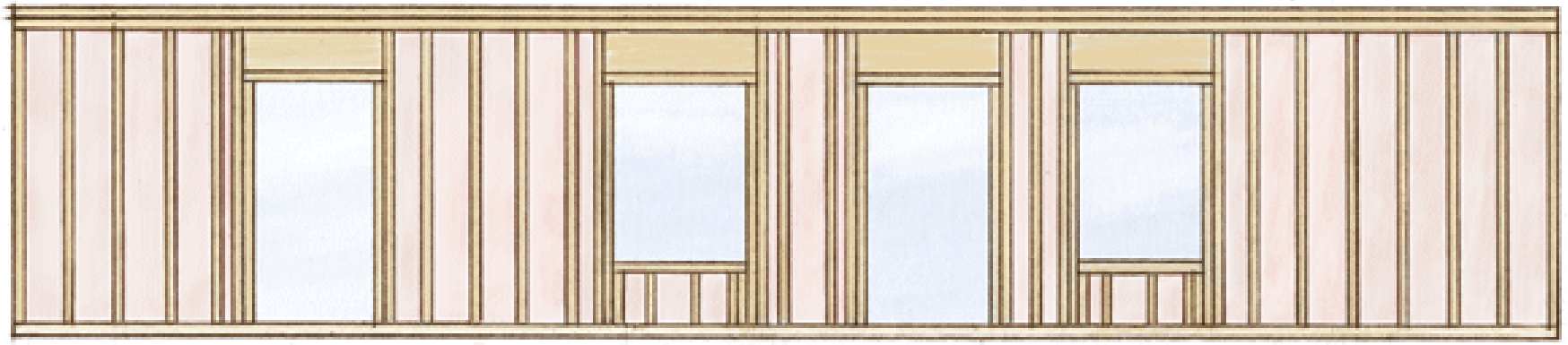
OPENING LINTELS

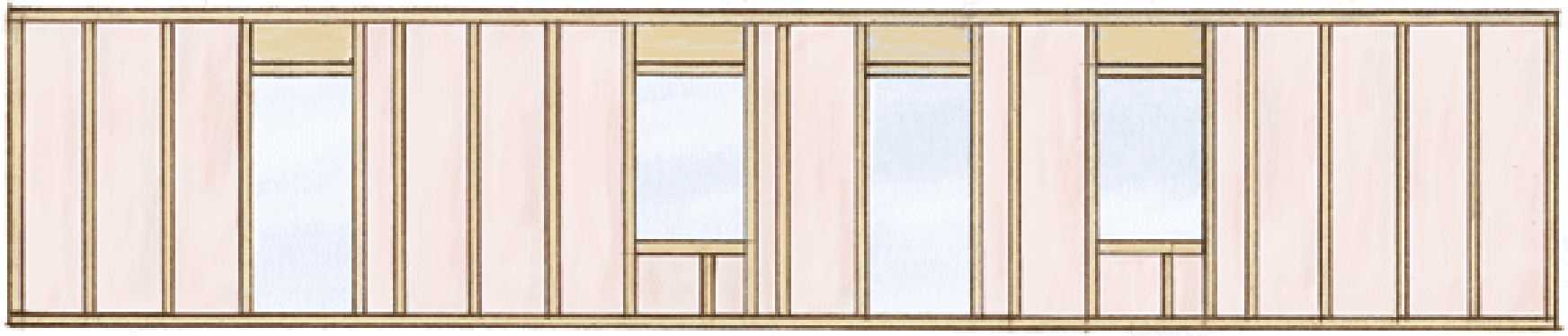
SIZE EACH LINTEL FOR EACH OPENING
DON'T JUST USE 2-2"x10"

SAME RULES CAN APPLY FOR DOORS

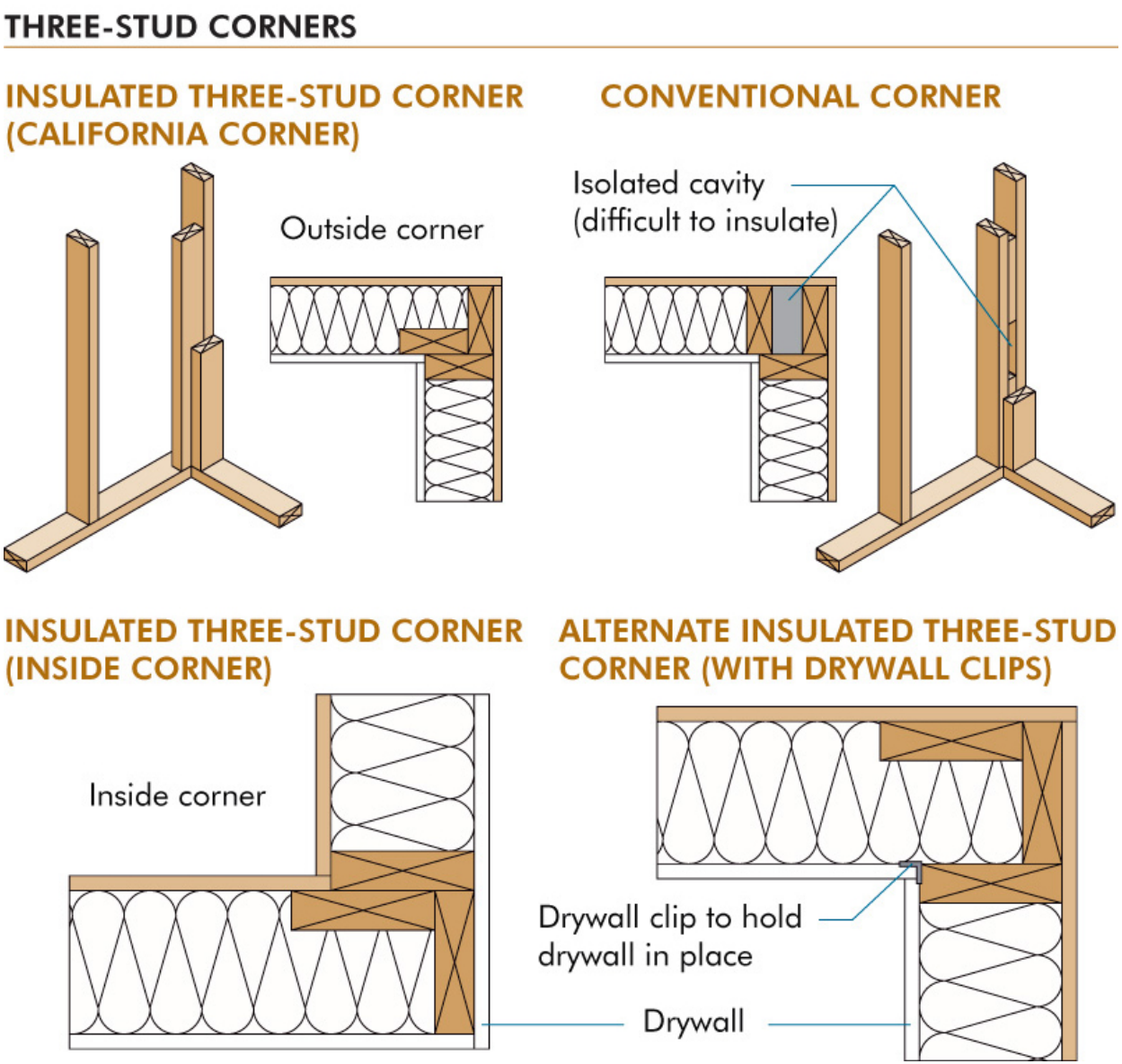


SO FAR WE HAVE DONE THIS!!

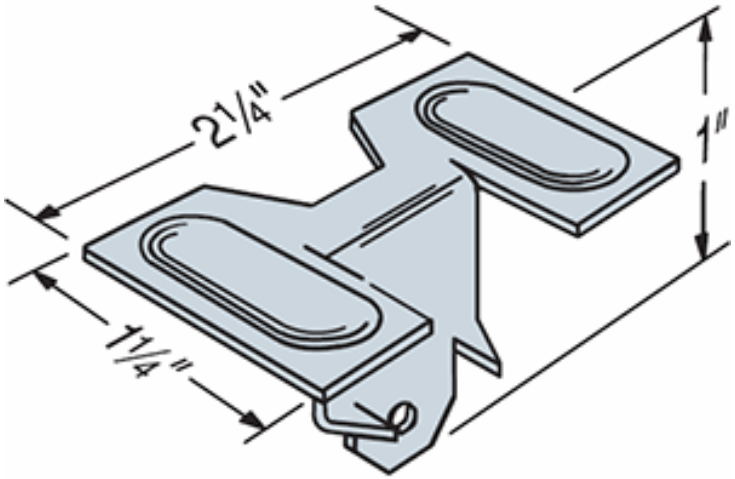


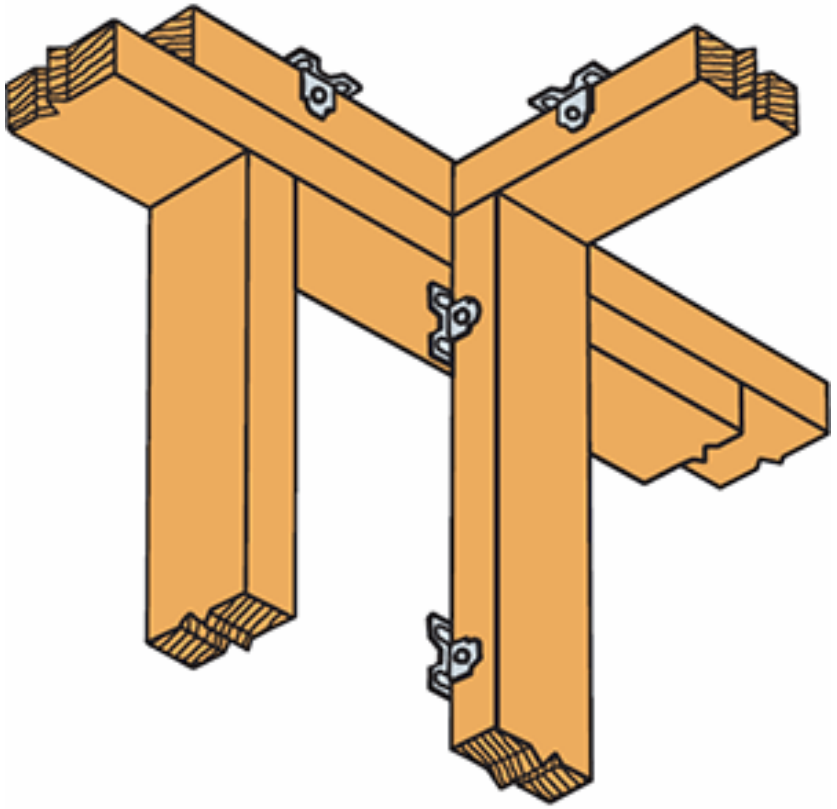


LET SAVE FROM FRAMING AT CORNERS

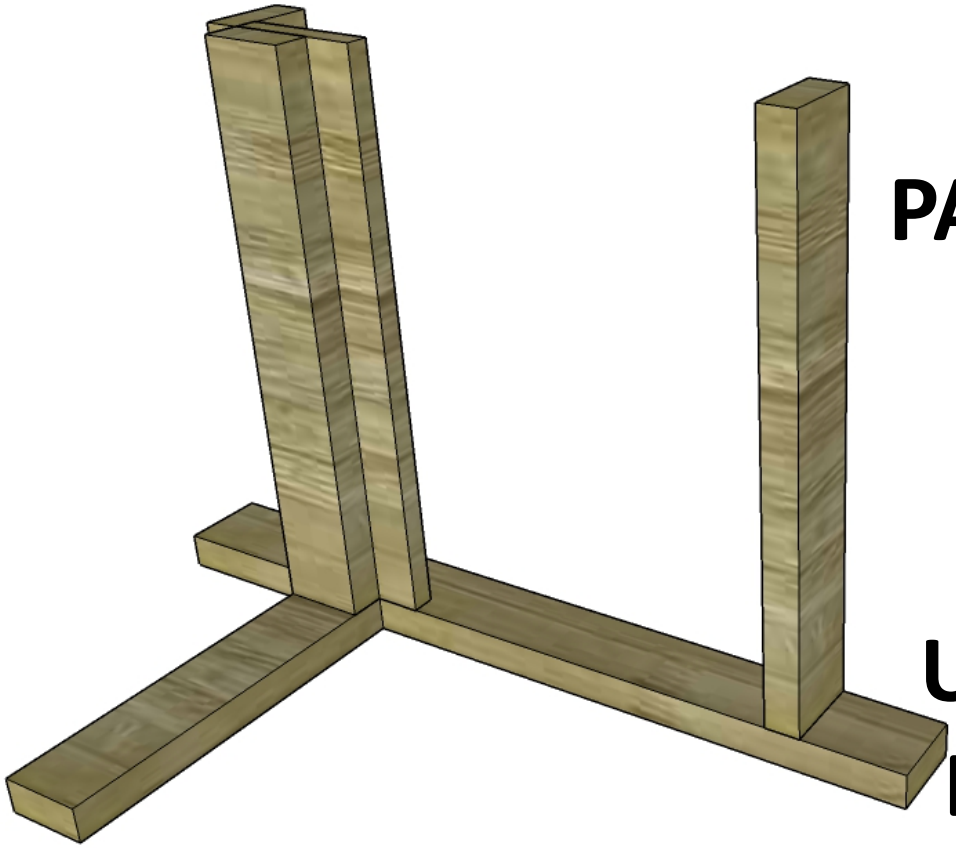


DRYWALL CLIP/STOP





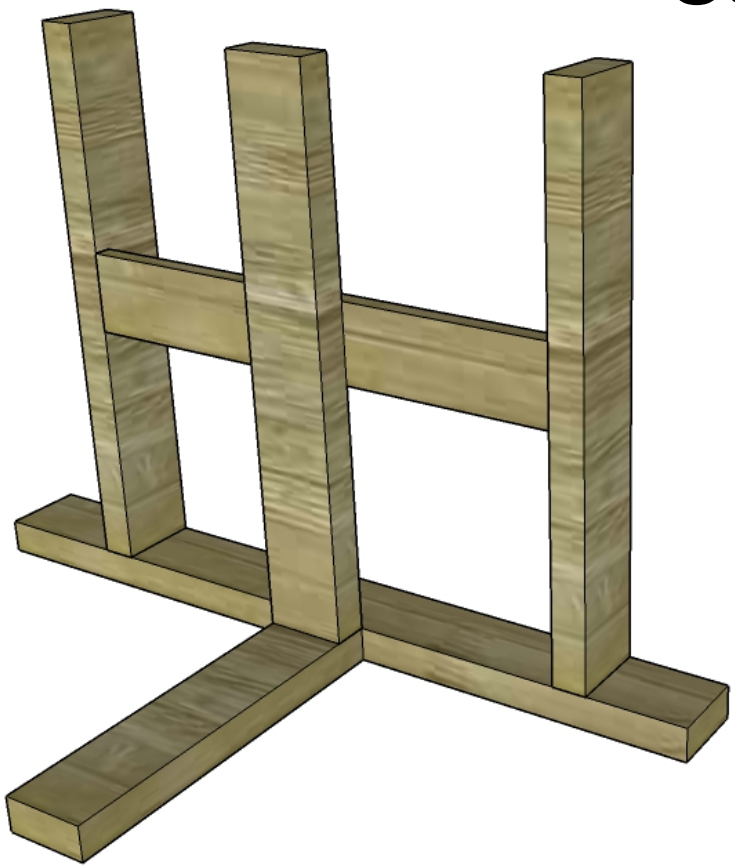
NOW WHAT ABOUT INTERIOR PARTITIONS??



DESIGN YOUR PARTITIONS TO LINE UP WITH AN EXTERIOR STUD

USE A 1”x6” FOR A DRYWALL NAILER

NOW WHAT ABOUT INTERIOR PARTITIONS??



USE 1”x4” @ 2’ O.C. FOR A DRYWALL NAILER

WHAT ARE OUR SHEATHING OPTIONS WITH STUDS AT 24” O.C.???

- ½” OSB
- ½” EXT. PLYWOOD
- 1-1/2” EXPANDED RIGID INSULATION
- 1” EXTRUDED RIGID INSULATION
- NONE! YOU DON’T HAVE TO USE IT IF YOU WANT.

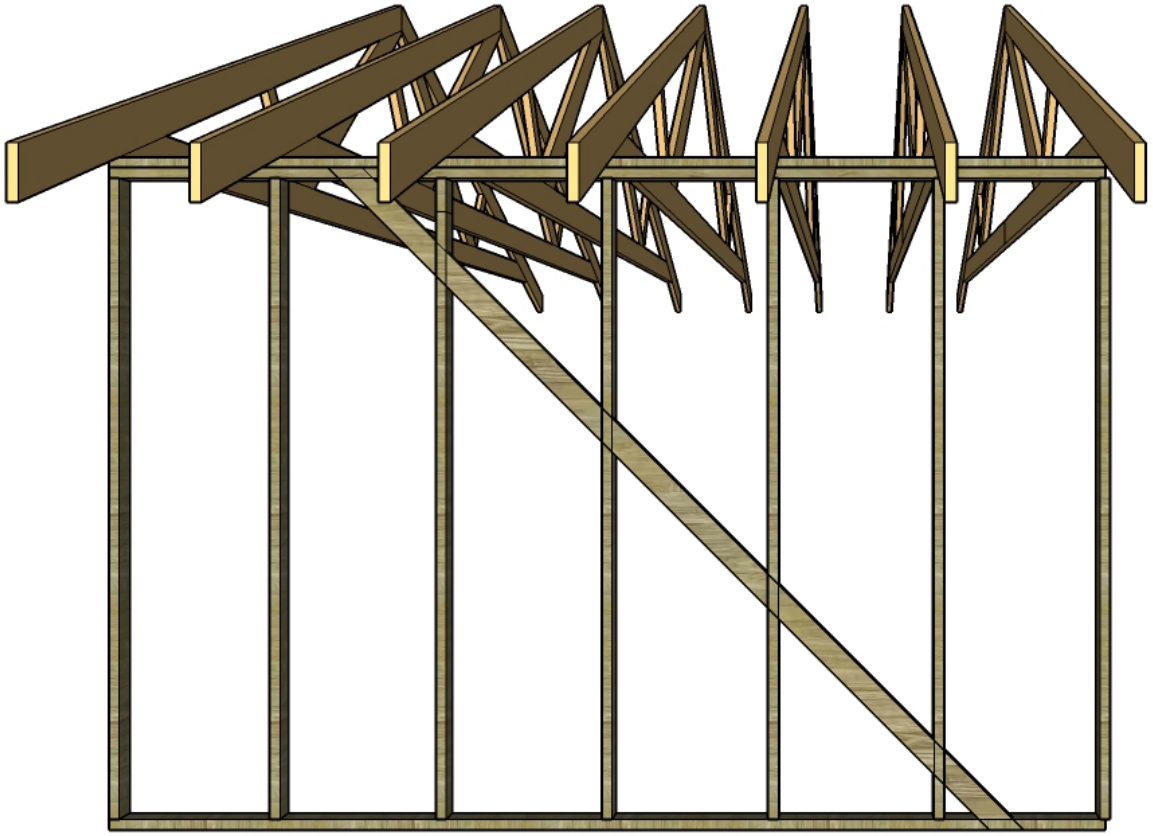
WHAT ARE OUR SHEATHING OPTIONS WITH STUDS AT 24” O.C.???

POLYSTRYENE TYPE 1,2 EXPANDED

POLYSTRYENE TYPE 3,4 EXTRUDED

SO NO WOOD SHEATHING??

THEN WE WILL NEED SOME CROSS BRACING.

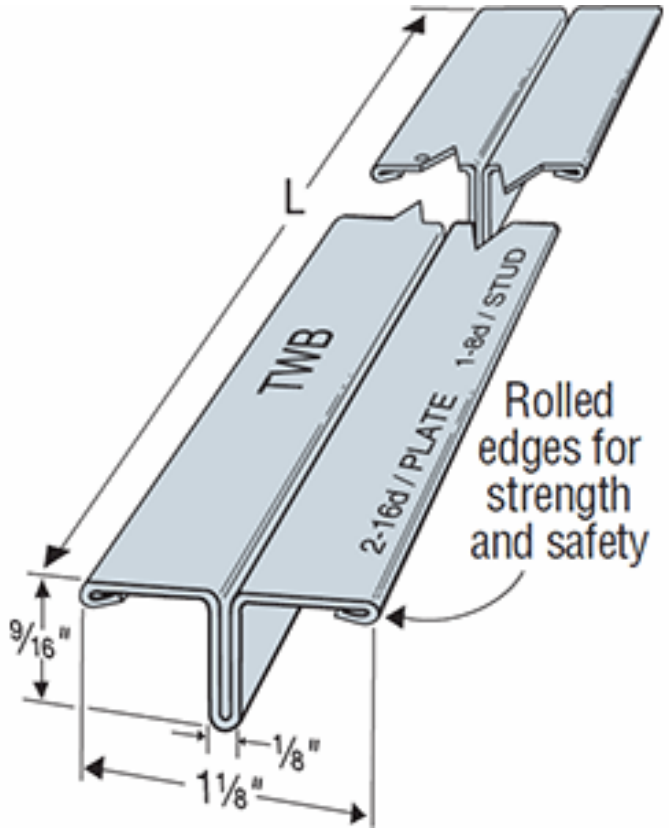


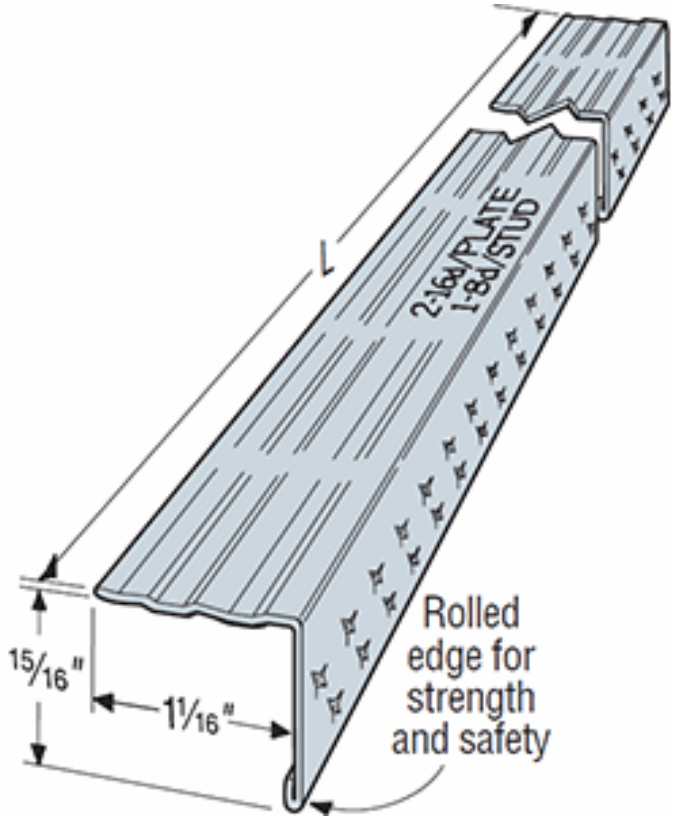
RULES FOR CROSS BRACING

- 1”x4” AT 45° LET-IN FROM BOTTOM PLATE TO TOP PLATE
- 2-2-1/2” NAILS EVERY STUD AND PLATE
- ONE EVERY WALL EVERY STOREY
- GENERAL GUIDE IS NOT TO HAVE A WALL UNBRACED FOR MORE THAN 24’
- THIS IS TO WORK IN COMBINATION WITH THE INTERIOR FINISH FOR LATERAL STRENTGH

OTHER TYPES OF CROSS BRACING

DIAGONAL METAL STRAPPING





WHY CHOOSE RIGID INSULATION??

REDUCES THERMAL BRIDGING

STRUCTURE HAS A HIGHER TEMPERATURE IN THE WINTER

CAN PREVENT CONDENSATION ON THE SHEATHING

NEEDED R-VALUE

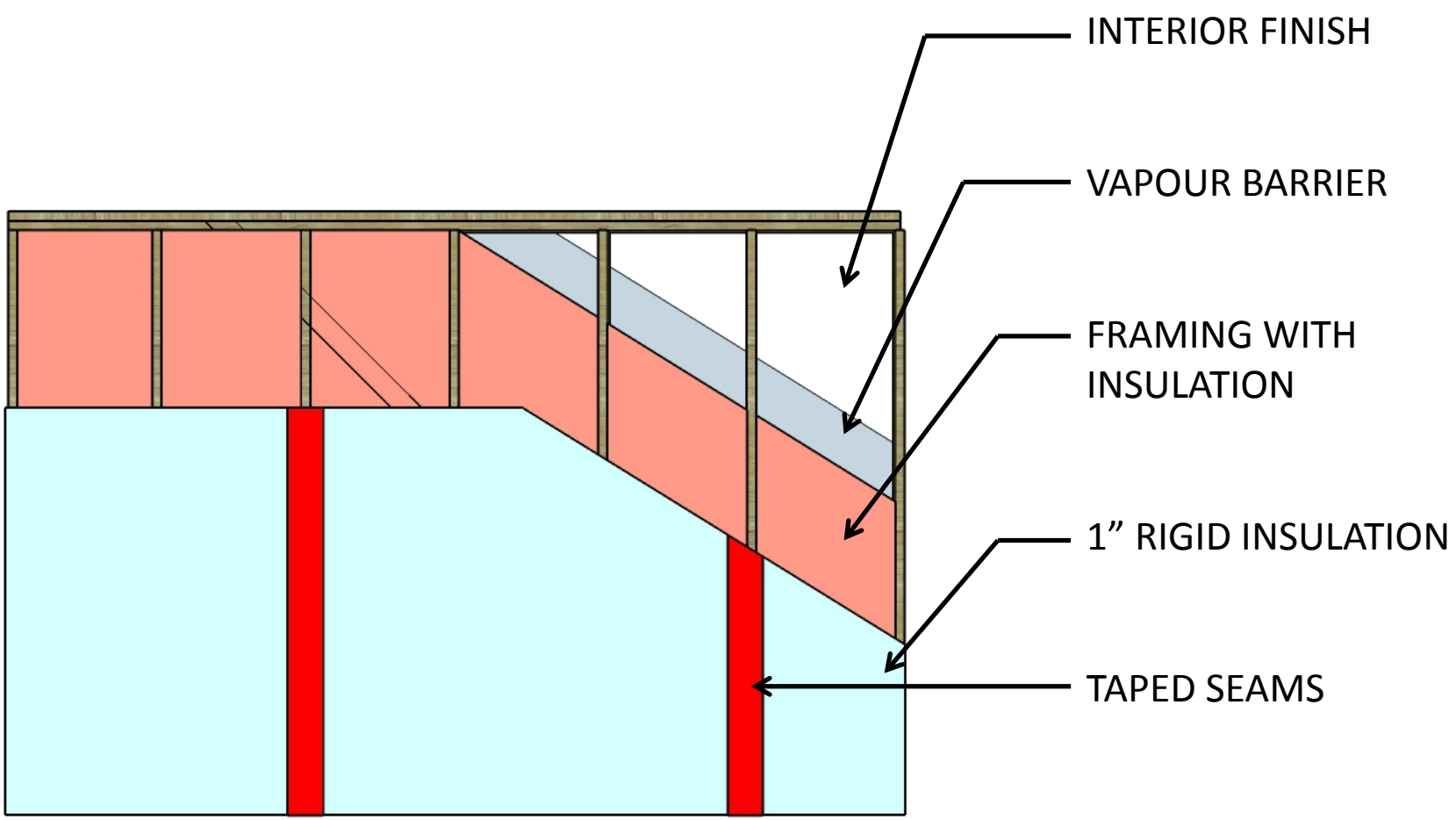
WHY NOT TO CHOOSE RIGID INSULATION??

COST

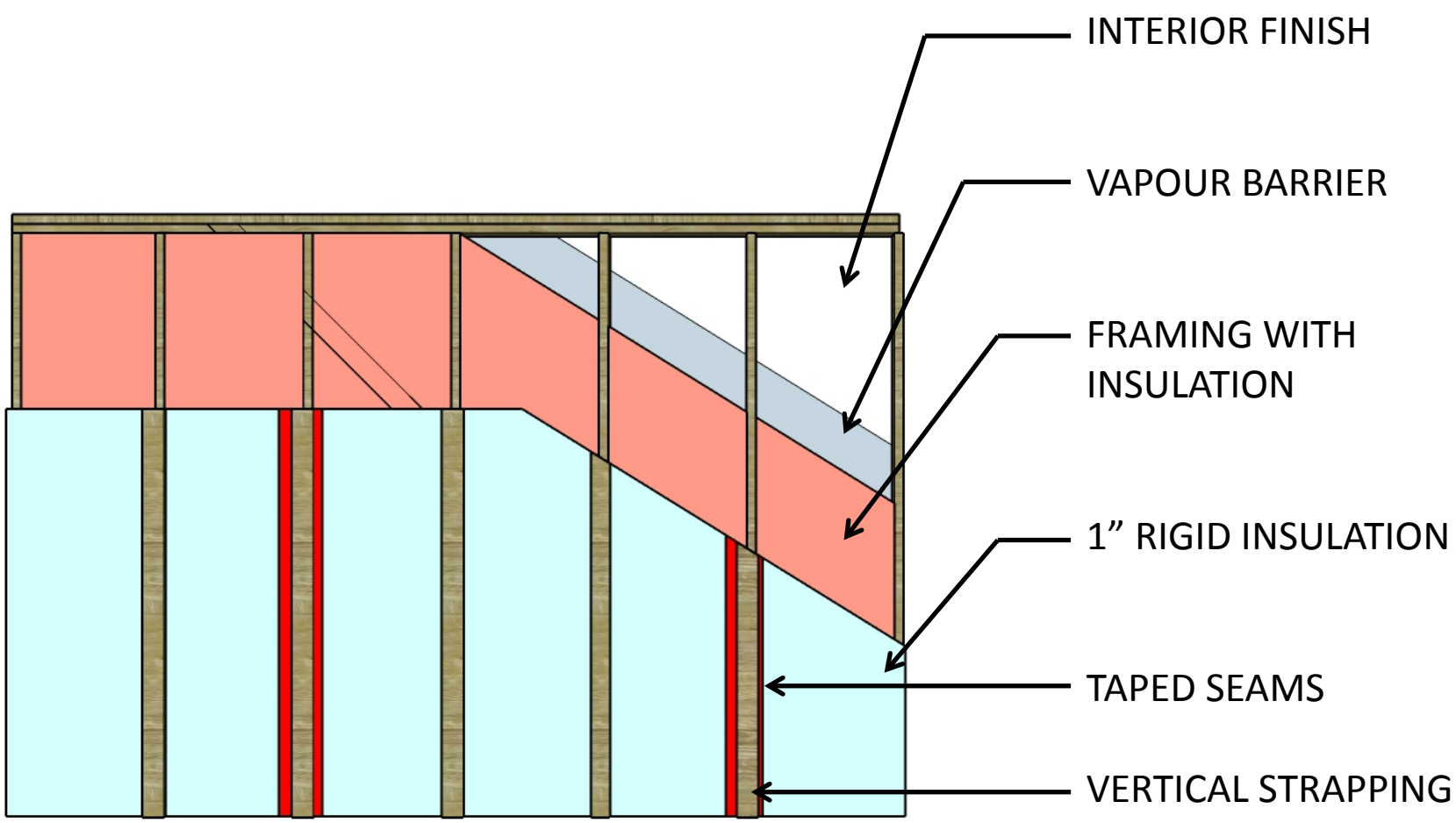
NEW TECHNIQUES AND TRAINING NEEDED

DETAILS AROUND WINDOWS AND DOORS ARE LABOUR INTENSIVE

FOR UP TO 1” EXT. RIGID INSULATION



GREATER THAN 1” EXT. RIGID INSULATION



INSULATION TIPS

USE A LITTLE FASTENERS AS POSSILBE
THE STRAPPING WILL BE DOING THE WORK

USE THE LARGEST SHEETS POSSIBLE

USE AS LITTLE LAYERS AS POSSIBLE

HORIZONTAL VS. VERTICAL

MARK WHERE YOUR STUDS ARE AT EACH LAYER

STRAPPING

NEEDED FOR SIDING

1”x4” OR PLYWOOD

IMPROVES AIR FLOW BEHIND SIDING

PERFECT HOME FOR BUG AND BATS

FASTENING STRAPPING

AT 24” O.C.

Foam thickness	Fastener spacing (assuming vinyl siding)	Fastener spacing (assuming fiber-cement siding)	Fastener spacing (assuming stucco cladding)	Fastener spacing (assuming adhered manufactured stone veneer)
4 in. or less	24 in.	24 in.	12 in.	Don’t do it
3 in. or less	24 in.	24 in.	16 in.	8 in.
2 in. or less	24 in.	24 in.	24 in.	12 in.
1 in. or less	24 in.	24 in.	24 in.	16 in.

FASTENING STRAPPING

STRAPPING AT 24” O.C.

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1 in. or less	24 in.	24 in.	24 in.	16 in.

FASTENING STRAPPING

STRUCTURAL WOOD SCREWS

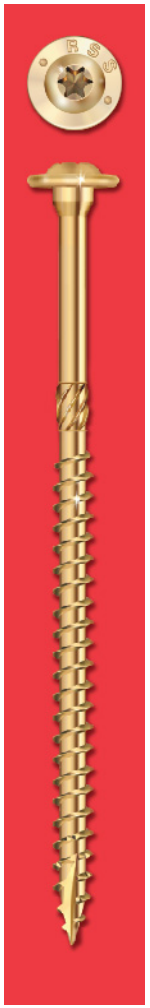
NEED 1-1/2” INTO STRUCTURE

Deckfast

HeadLOK

YELLOW ZINC

GRK



SIDING NAILING

KAYCAN:

VINYL = 16” O.C.

ENGINEERED WOOD = 16” O.C.

CANEXEL:

CED-R-VUE = 16” O.C.

RIDGEWOOD = 16” O.C.

ULTRAPLANK = 16” O.C.

SIDING NAILING

LP:

SMARTSIDE = 16” O.C.

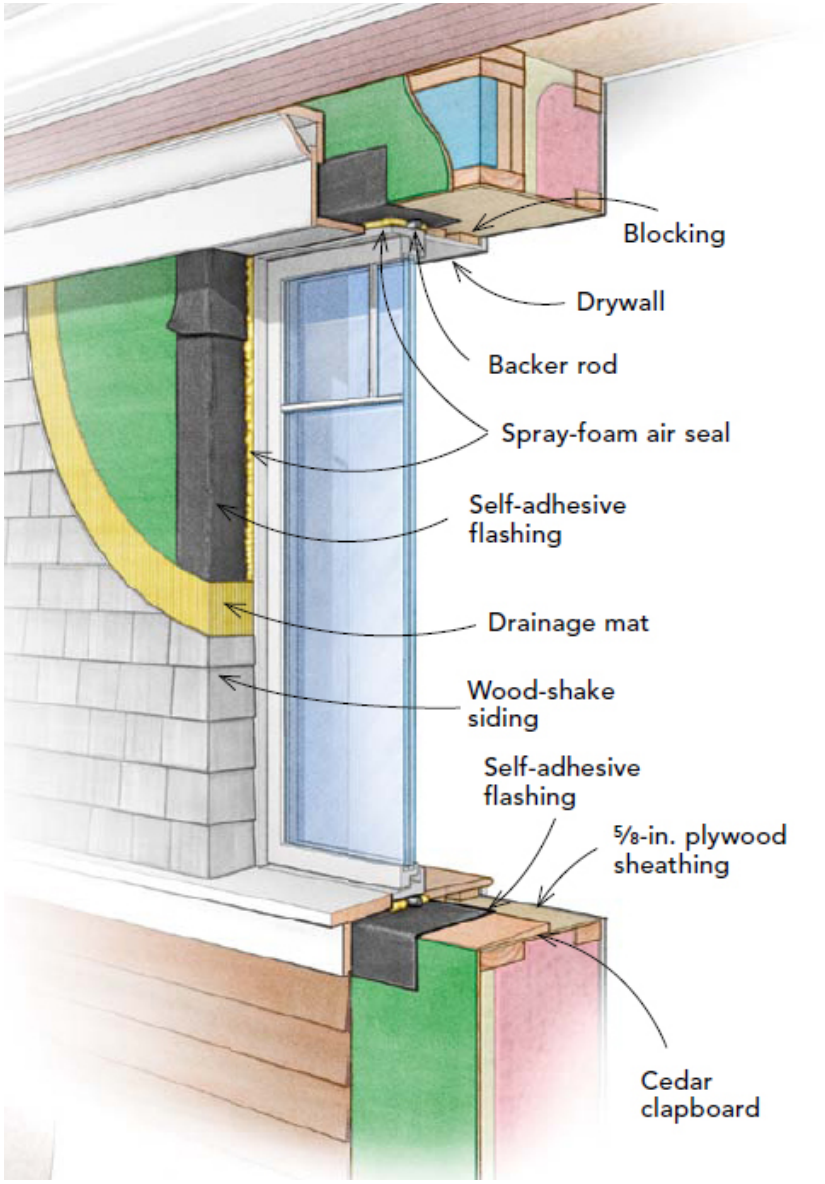
PRECISION PANEL 190 = 24” O.C.

HARDIE CEMENT:

HARDIEPLANK = 24” O.C.

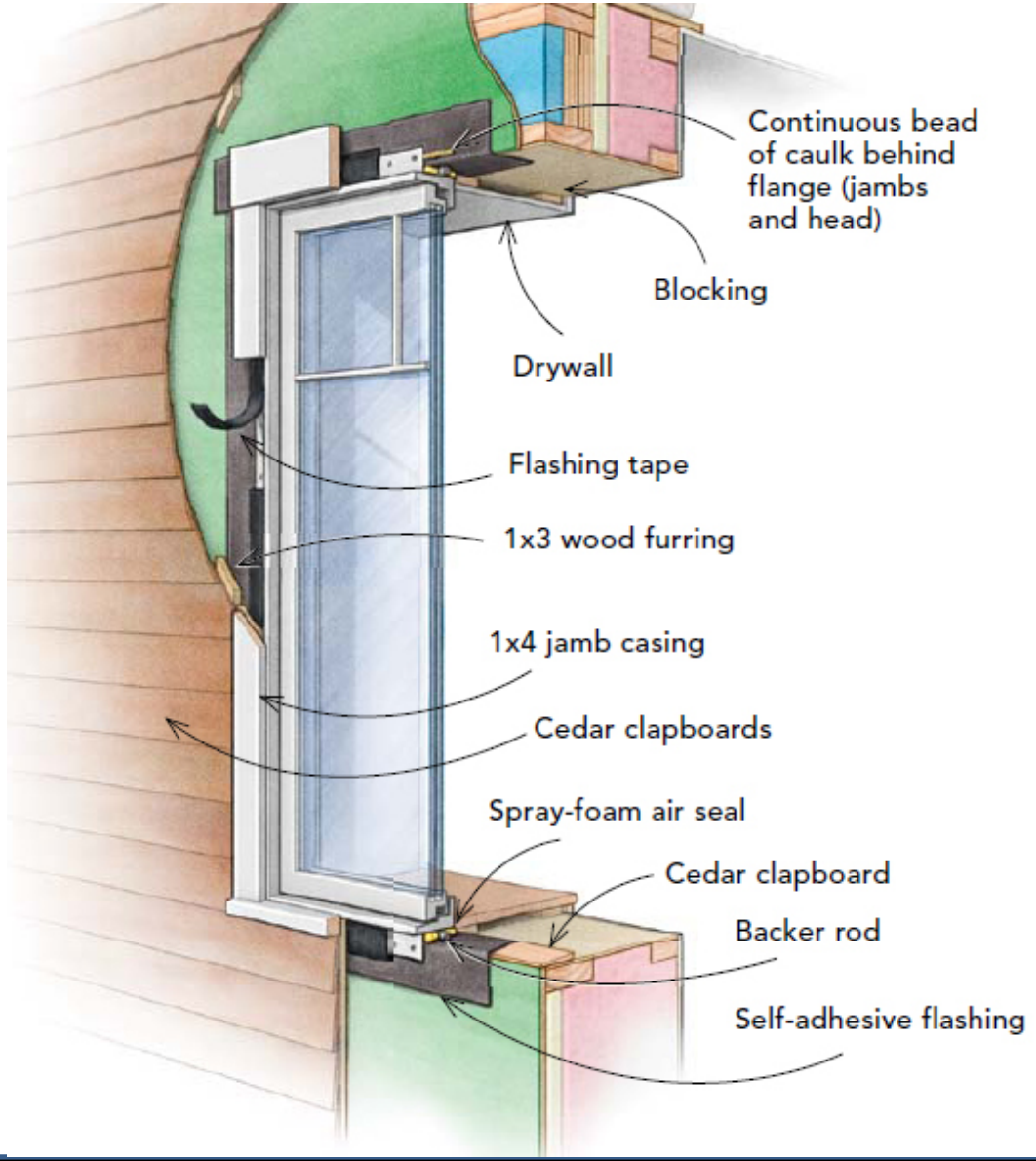
WINDOWS
INNIE VS. OUTIE

INNIE WINDOW



INNIE WINDOW

OUTIE WINDOW



OUTIE WINDOW

OUTIE WINDOW

OUTIE WINDOW

OUTIE WINDOW