

WINDOWS & DOORS	
SHALL BE ABLE TO RESIST THESE PRESSURES:	
INTERIOR ZONE (ZONE 4)	23.6 PSF
END ZONE (4' FROM CORNER)(ZONE 5)	29.1 PSF

SPECIAL NOTE
ALL INTERIOR SHEARWALLS SHALL BE SUPPORTED BY A CONCRETE FOUNDATION BEAM MINIMUM 10" WIDE BY 24" DEEP WITH 4-#5 REINF. AND #3 STIRRUPS AT 24" O.C.

GENERAL NOTES:
1. ENGINEERED DESIGN BASED ON 2018 IRC.
2. DESIGN LOADS:
BASIC WIND LOAD INFORMATION
1. BASIC WIND SPEED (3-SEC. GUST) Vult=130 mph Exp. B

BASIC GRAVITY LOAD INFORMATION
1. LIVE LOADS
ROOF 20 PSF
ATTIC NO STORAGE 10 PSF
ATTIC LIMITED STORAGE 20 PSF
NO SLEEPING ROOMS 40 PSF
SLEEPING ROOMS 30 PSF
EXTERIOR BALCONIES 40 PSF
2. DEAD LOADS
ROOF FRAMING 10 PSF
FLOOR FRAMING 10 PSF
WALL FRAMING 10 PSF
ROOF TILE 20 PSF
STUCCO (1" THICK) 10 PSF
BRICK VENEER 40 PSF

DESIGN DATA TABLE			
BOX NO.	1	2	3
STORY	MAIN	GARAGE	
ROOF SLOPE	6:12		
ROOF SPAN	26		
H(DES.)	8		
L	40		
W	26		

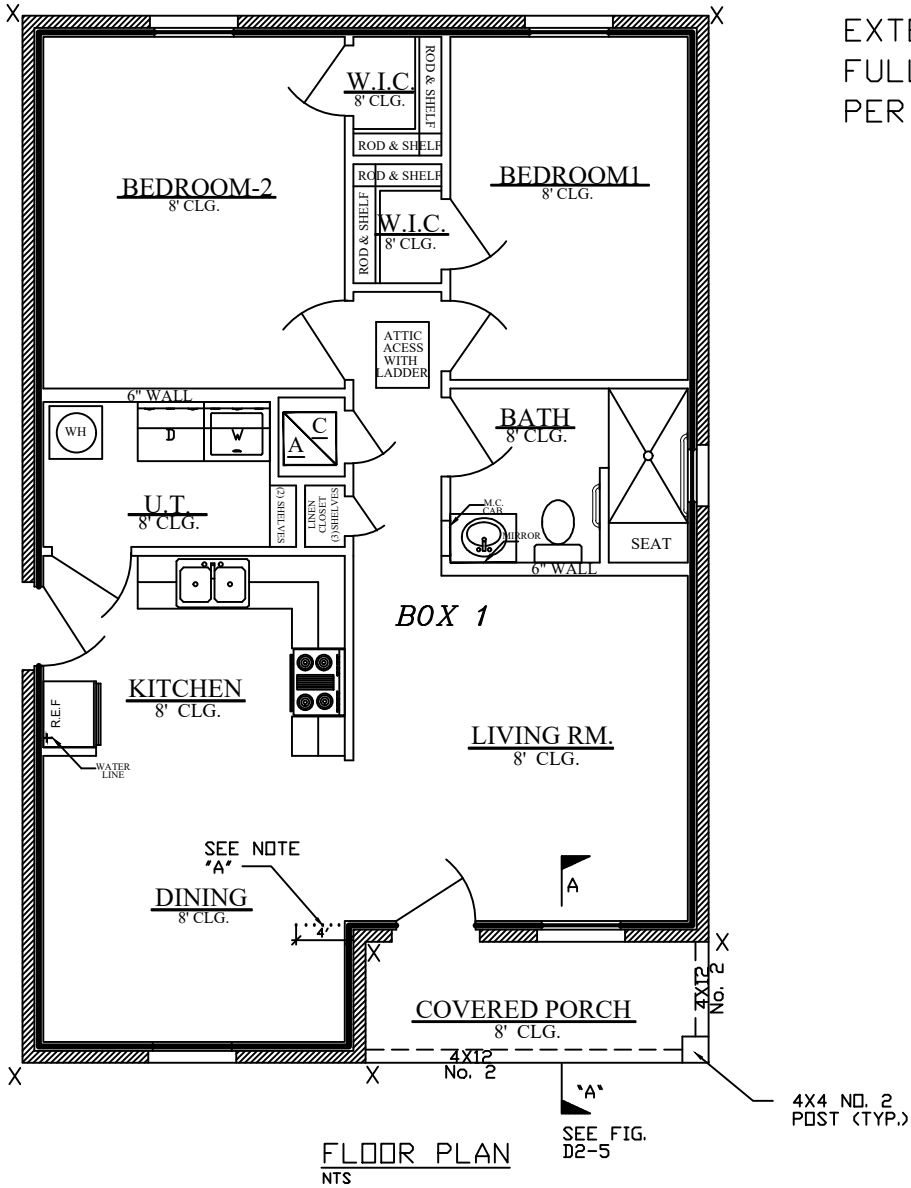
NOTES:
1. 18" OVERHANGS (EAVES AND GABLES)
4. NAILING CONNECTIONS PER TABLE 3.1 MODIFIED SEE FIG. D2-2.
5. FASTENERS FOR PRESSURE PRESERVATIVE AND FIRE-RETARDANT-TREATED WOOD SHALL BE OF HOT-DIPPED GALVANIZED STEEL, SILICON BRONZE OR COPPER.
EXCEPTION: ONE-HALF-INCH (12.7 MM) DIAMETER OR GREATER STEEL BOLTS.

MINIMUM FRAMING REQUIREMENTS:
THESE ARE MINIMUM REQUIREMENTS FOR WINDSTORM RESISTANT CONSTRUCTION OTHER REQUIREMENTS DUE TO GRAVITY LOADS MAY SUPERCEDE THESE REQUIREMENTS THE MOST STRINGENT REQUIREMENT SHALL BE APPLIED.

ENGINEER'S NOTE:
THESE PLANS ARE DESIGN PLANS AND ARE ISSUED TO OBTAIN A BUILDING PERMIT THRU THE PROPER LOCAL AGENCY HAVING JURISDICTION.
THESE PLANS SHALL BE USED AS A GUIDE TO PREPARE SHOP DRAWINGS AND CONSTRUCTION PLANS.
CONSTRUCTION SHALL PROCEED AFTER ALL INVOLVED PARTIES HAVE REVIEWED AND HAVE A COMPLETE UNDERSTANDING OF THE CONSTRUCTION PLANS AND SHOP DRAWINGS PREPARED USING THESE DESIGN PLANS AS BASIS.
IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO BE IN COMPLIANCE WITH OTHER FRAMING CODE OR CITY REQUIREMENTS SHOWN OR NOT SHOWN ON THESE PLANS.
ORTEGA ENGINEERING SHALL NOT HAVE ANY LIABILITY WHATSOEVER DUE TO THE MISUSE OF THESE PLANS.

NOTE "A"
THE DIAPHRAGM FOR EACH BOX SHALL HAVE CONTINUOUS BOUNDARY INTERIOR CHORDS PER FIG. D3-6

EXTERIOR WALLS FULLY SHEATHED PER FIG. D3-1



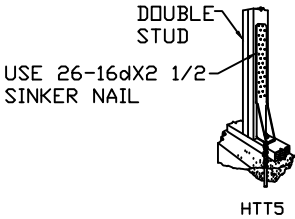
INSTALL WINDSTORM CONNECTORS PER FIG. D4-1 TO 3. USE SIMPSON STRONG-TIE OR EQUIVALENT AS APPROVED BY ENGINEER.

CONSTRUCTION NOTES:

- BEAMS SHALL BE SUPPORTED BY AT LEAST 2-STUDS U.N.D.
- EXTERIOR WALL SILL PLATE AND PORCH AND PATIO POSTS SHALL BE PRESSURE TREATED WOOD.
- FRAMING SHALL BE BUILT USING BALLOON FRAMING BETWEEN LATERAL SUPPORT FOR ALL EXTERIOR WALLS.
- EXTERIOR WALLS OF GABLE OR HIP ROOFS ABOVE LOWER ROOF PLATE SHALL HAVE ALL SIDES FULLY SHEATHED WITH 7/16" OSB USING 8d NAILS 6" O.C. EDGES AND 12" O.C. FIELD.
- LVL GANG-LAM Fb DESIGN VALUES:
1.9E Fb = 2600 PSI

LEGEND:

X DENOTES HTT5 HOLDOWN LOCATION



ALL 8d NAILS SHALL BE 0.131 X 2 1/2

REFERENCE NOTES:

- SEE FIG. D2-1 FOR STUDS, RAFTERS, JOIST, HEADER TABLES AND ROOF SHEATHING.
- SEE FIG. D2-2 FOR NAILING CONNECTIONS TABLE 3.1 MODIFIED.
- SEE FIG. D2-3 FOR HANGER TABLE.
- SEE FIG. D3-2 FOR TOP PLATE SPLICE DETAIL.
- SEE FIG. D5-4 FOR RAFTER AND PURLIN FRAMING.
- FRAME GABLE ENDWALLS PER FIG. D6-1.
- SEE FIG. D6-2 FOR PERMITTED CUTS, NOTCHES AND BORED HOLES ON JOIST AND STUDS.
- FRAME BUILDING CORNERS PER FIG. D6-3.
- FRAME COLLAR AND RAFTER TIES PER FIG. D6-4.
- SEE FIG. D6-5 FOR BEAM ASSEMBLIES.
- SEE FIG. D6-6 FOR OPENINGS ON JOIST AREAS.
- SEE FIG. D6-7 & 8 FOR BRICK VENEER SUPPORT.

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WINDSTORM PLAN
LOT 34 SEMREN SUB.
1704 E. LOEB ST.
EDINBURG, TX 78542

SHEET NO. D1
JOB NO. 000425
1 OF 6

WALLS:
STUDS:
EXTERIOR WALL:
2X4@16' O.C. 9' HT. MAX. (SPF STUD GRADE)
2X4@16' O.C. 9' HT. MAX. (SPF NO. 2)
2X6@16' O.C. 14' HT. MAX. (SPF STUD GRADE)
2X6@16' O.C. 14' HT. MAX. (SPF NO. 2)
INTERIOR WALL:
2X4@16' O.C. 14' HT. MAX. (SPF STUD GRADE)
2X4@16' O.C. 14' HT. MAX. (SPF NO. 2)
2X6@16' O.C. 20' HT. MAX. (SPF STUD GRADE)
2X6@16' O.C. 20' HT. MAX. (SPF NO. 2)

INTERIOR WALL SHEATHING:

WALL SHEATHING: 1/2" GYPSUM
BOARD (MIN.) 5d COOLER OR
WALLBOARD NAILS AT 7" O.C.

CEILING JOISTS:

20 PSF ATTIC STORAGE: *
2X6 @ 24' O.C. SPF No. 2
MAX. SPAN = 10'-6"
2X6 @ 16' O.C. SPF No. 2
MAX. SPAN = 12'-10"
2X6 @ 12' O.C. SPF No. 2
MAX. SPAN = 14'-9"
2X10@12' O.C. SPF No. 2
MAX SPAN=22'-11"
* JOIST ENDS SHALL BE HELD
IN POSITION BY FULL
DEPTH SOLID BLOCKING AND TOP LATERAL SUPPORT
SPACING AT 4' O.C.

ROOF:

ROOF SHEATHING: 7/16 OSB
NAILED WITH 8d NAILS
6' O.C. EDGES AND 12' O.C.
FIELD.

NAILS:

SPECIFIED NAILS ARE
COMMON NAILS U.N.D.

HEADER TABLE (EXTERIOR WALL)			
SPF No. 2 LUMBER (SHINGLE ROOF)			
SIZE	MAX. SPAN	NJ (JACK) STUDS	
2-2X6	4'5"	1	
2-2X8	5'7"	2	
2-2X10	6'9"	2	
2-2X12	7'10"	2	

HEADER TABLE (INTERIOR WALL)			
SPF No. 2 LUMBER			
SIZE	MAX. SPAN	NJ (JACK) STUDS	
2-2X6	4'6"	1	
2-2X8	6'0"	2	
2-2X10	8'0"	2	
2-2X12	9'0"	2	
3 1/2X11 7/8	18'0"	2	1.9E LVL

RAFTERS TABLE		
SPF No. 2 LUMBER (SHINGLE ROOF)		
SIZE	MAX. SPACING	MAX. * SPAN
2X6	24"	11'9"
2X8	24"	14'10"
2X10	24"	18'2"
2X6	16"	14'4"
2X8	16"	18'2"
2X10	16"	22'3"

* SEE FIG. D4-2 FOR PURLIN
FRAMING TO REDUCE RAFTER SPAN

RECESSED CEILING JOIST BEAM (SUPPORTING CEILING LOADS)	
SPF No. 2 LUMBER	
SIZE	MAX. SPAN
4X6	6'0"
4X8	8'0"
4X10	7'0"
2X12	7'0"
4X12	12'0"
6X12	15'0"
8X12	18'0"
3 1/2X11 7/8 1.9E LVL	20'0"

RECESSED CEILING JOIST BEAM (SUPPORTING CEILING & ROOF LOADS)	
SPF No. 2 LUMBER (SHINGLE ROOF)	
SIZE	MAX. SPAN
4X6	4'0"
4X8	5'0"
4X10	6'5"
2X12	5'0"
4X12	8'0"
6X12	11'0"
8X12	12'6"
3 1/2X11 7/8 1.9E LVL	16'0"

FIGURE D2-1
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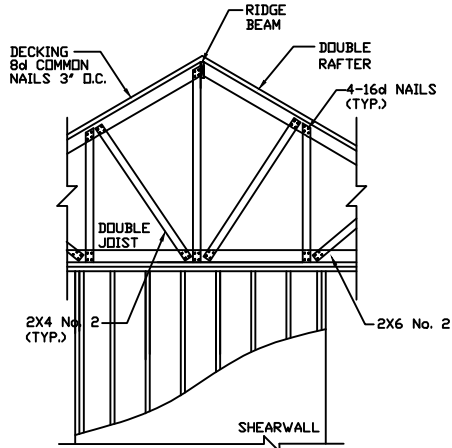
TABLE 3.1 MODIFIED NAILING SCHEDULE			
JOINT DESCRIPTION	NUMBER OF COMMON NAILS	NUMBER OF BOX NAILS	NAIL SPACING
ROOF FRAMING			
Rafter to Top Plate (Toe-nailed) and Ceiling Joist to Top Plate (Toe-nailed)	4-8d 16' o.c. rafters 5-8d 24' o.c. rafters	3-10d 16' o.c. rafters 5-10d 24' o.c. rafters	per rafter and joist
Ceiling Joist to Parallel Rafter (Face-nailed) and Ceiling Joist Laps Over Partitions (Face-nailed)	6-16d 16' o.c. rafters 9-16d 24' o.c. rafters	6-40d 16' o.c. rafters 9-40d 24' o.c. rafters	each lap each lap
Rafter to Ridge (Toe-nailed) Collar Tie to Rafter (Face-nailed) Blocking to Rafter (Toe-nailed) Rin Board to Rafter (End-nailed)	4-18d 5-8d 2-8d 2-16d	5-10d 2-10d 3-16d	per tie each end each end
WALL FRAMING			
Top Plate to Top Plate (Face-nailed) Top Plates at Intersections (Face-nailed) Stud to Stud (Face-nailed) Header to Header (Face-nailed)	2-16d ^a 4-16d 2-16d 16d	2-16d ^a 5-16d 2-16d 16d	per foot Joints-each side 24' o.c. 16' o.c. along edges
Top or Bottom Plate to Stud (End-nailed) Top or Bottom Plate to Stud (Toe-nailed) Bottom Plate to Floor Joist, Band Joist, End Joist or Blocking (Face-nailed)	3-16d 4-8d 2-16d ^a	3-40d 2-16d ^a	per stud per stud per foot
FLOOR FRAMING			
Joist to Sill, Top Plate or Girder (Toe-nailed) Bridging to Joist (Toe-nailed) Blocking to Joist (Toe-nailed) Blocking to Sill or Top Plate (Toe-nailed) Ledger Strip to Beam (Face-nailed) Joist on Ledger to Beam (Toe-nailed) Band Joist to Joist (End-nailed) Band Joist to Sill or Top Plate (Toe-nailed)	4-8d 2-8d 2-8d 3-16d 3-16d 3-8d 3-16d 2-16d ^a	4-10d 2-10d 2-10d 4-16d 4-16d 3-10d 4-16d 3-16d	per joist each end each end each block each joist per joist per joist per foot
ROOF SHEATHING			
Structural Panels Diagonal Board Sheathing 1'x6' or 1'x8' 1'x10' or wider	8d 2-8d 3-8d	10d 2-10d 3-10d	6' o.c. edge 6' o.c. field per support per support
CEILING SHEATHING			
Gypsum Wallboard	5d coolers	5d coolers	7' o.c.
WALL SHEATHING			
Structural Panels Fiberboard Panels 7/16" 25/32" Gypsum Wallboard Hardboard Particleboard Panels Diagonal Board Sheathing 1'x6' or 1'x8' 1'x10' or wider	8d 6d ^a 8d ^a 5d coolers 8d 8d 2-8d 3-8d	10d - - 5d coolers 8d 8d 2-10d 3-10d	6' o.c. edge 6' o.c. field 3' edge / 6' field 3' edge / 6' field 7 edge / 10' field 6' o.c. edge 6' o.c. field (see manufacturer) per support per support
FLOOR SHEATHING			
Structural Panels 1' or less greater than 1' Diagonal Board Sheathing 1'x6' or 1'x8' 1'x10' or wider	8d 10d 2-8d 3-8d	10d 16d 2-10d 3-10d	6' edge / 12' field 6' edge / 6' field per support per support
1 Nailing requirements are based on wall sheathing nailed 6 inches on-center at the panel edge. If wall sheathing is nailed 3 inches on-center at the panel edge to obtain higher shear capacities, nailing requirements for structural members shall be doubled, or alternate connectors, such as shear plates, shall be used to maintain the load path. 2 When wall sheathing is continuous over connected members, the tabulated number of nails shall be permitted to be reduced to 1-16d nail per foot. 3 Corrosion resistant 11 gage roofing nails and 16 gage staples are permitted, check IBC for additional requirements. 4 When intermediate support of the rafter is provided by vertical struts or purlins to a loadbearing wall, the tabulated heel joint connection requirements shall be permitted to be reduced proportionally to the reduction in span.			

FIGURE D2-2
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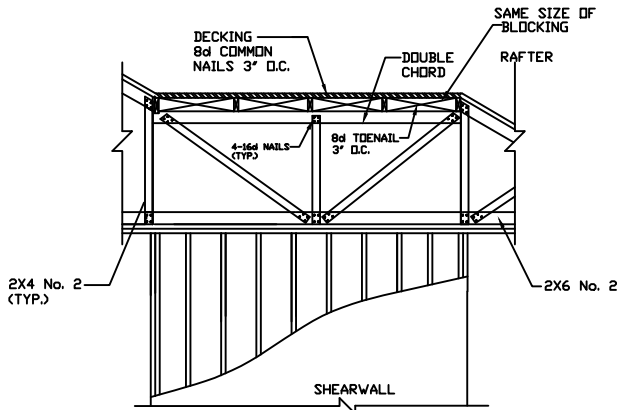
FACE MOUNT HANGERS TABLE				
NO.	JOIST SIZE	MODEL NO.	FASTENERS	
			HEADER	JOIST
H1	2X6	LU26	6-16d	4-10dX1 1/2
H2	4X6	HU46	12-16d	6-10d
H3	2X8	LU28	8-16d	6-10dX1 1/2
H4	4X8	HU48	14-16d	6-10d
H5	2X10	LU210	10-16d	6-10dX1 1/2
H6	4X10	HU410	18-16d	10-10d
H7	2X12	HU212	10-16d	6-10dX1 1/2
H8	4X12	HU412	22-16d	10-10d
H9	4X12	HUC412 (CF)	22-16d	10-10d
H10	4X12 OR 3 1/2X11 7/8 LVL	HWU 3.56/11.88 (LEFT OR RIGHT OFFSET)	8-16d	8-10dX1 1/2
H11	3 1/2X11 7/8 LVL	HWU 3.56/11.88	8-16d	6-10d
H12	3 1/2X14 LVL	HGLTV 3.514	18-16d	6-16d
H13	3 1/2X16 LVL	HGLTV 3.516	18-16d	6-16d

CF DENOTES CONCEALED FLANGES

FIGURE D2-3
NTS

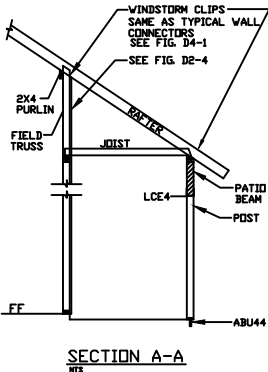


PARALLEL TO RAFTER

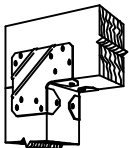


PERPENDICULAR TO RAFTER

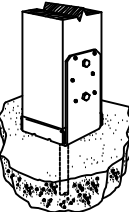
FIELD TRUSS
SHEARWALL TO ROOF CONNECTION
FIGURE D2-4
NTS



SECTION A-A
NTS




LCE4




ABU44

FIGURE D2-5
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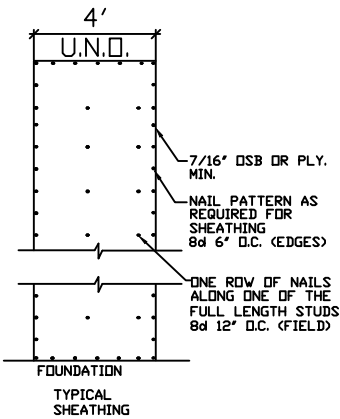
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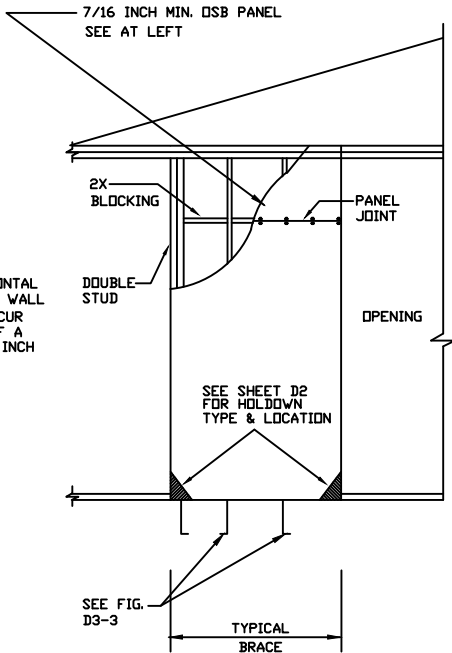
WINDSTORM PLAN
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SHEET NO.
D2
JOB NO.
000425
2 OF 6

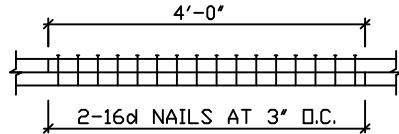
EQUIVALENT NAILING TABLE			
COMMON WIRE NAIL	MINIMUM PENETRATION	STAPLE	MINIMUM PENETRATION
6d	1 1/4"	14 GA	1"
8d	1 3/8"	13 GA	1"
10d	1 1/2"	12 GA	1"
STANDARD NAILING		REPLACEMENT	
8d NAILS 6" O.C. EDGE 12" O.C. FIELD		16 GA STAPLES 1 1/2" LONG 1" MIN. PEN. 4" O.C. EDGE 4" O.C. FIELD	
8d NAILS 4" O.C. EDGE 8" O.C. FIELD		16 GA STAPLES 2" LONG 1 1/2" MIN. PEN. 3" O.C. EDGE 3" O.C. FIELD	



NOTES:
1. R602.10.7 HORIZONTAL JOINTS IN BRACED WALL PANELS SHALL OCCUR OVER BLOCKING OF A MINIMUM OF 1-1/2 INCH THICKNESS.

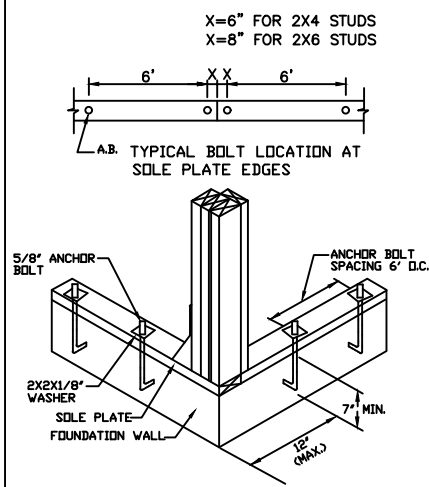


EXTERIOR WALL BRACING
FIGURE D3-1
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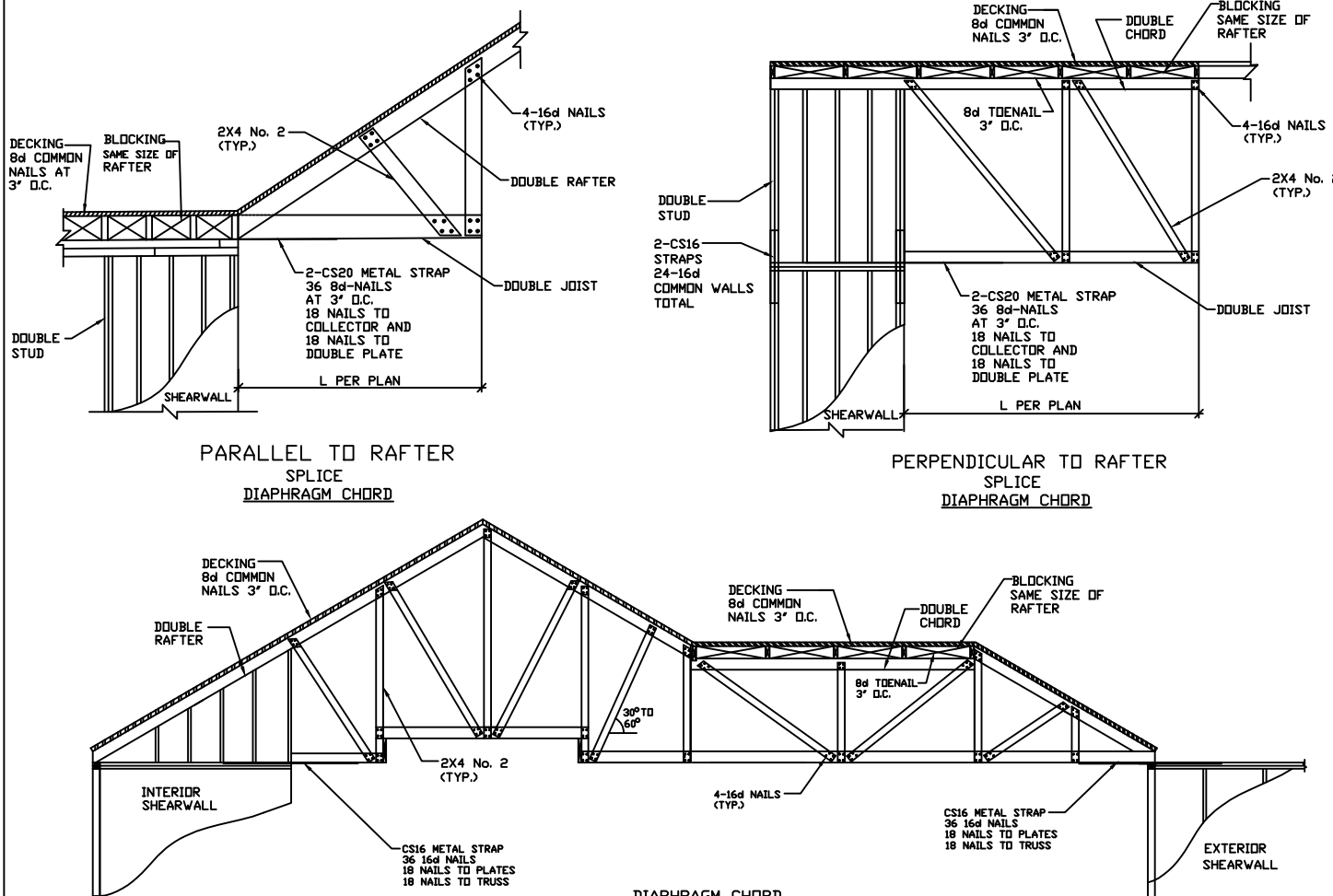
TOP PLATE SPLICE
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FIGURE D3-2
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No.	EQUIVALENT ANCHOR BOLT TABLE		
	DIAM	DESCRIPTION	REMARKS
1	5/8"	L-BOLT	2X2X1/4" WASHER (TYP.) 5/8" DIAM. 7" MIN. EMBED.
2	5/8"	WEDGE ANCHOR	5/8" DIAM. MIN. 6-1/8" EMBED. SIMPSON STRONG-BOLT WEDGE ANCHOR OR EQUIVALENT
3	5/8"	THREADED ROD	USE SET EPOXY PER MANUF. INSTRUCTIONS 7" MIN. EMBED.

FIGURE D3-3
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DIAPHRAGM CHORD
FIGURE D3-6
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(NOT USED)
FIGURE D3-4
NTS

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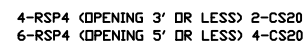


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WINDSTORM PLAN
LOT 34 SEMREN SUB.
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SHEET NO. D3
JOB NO. 000425
3 OF 6



* WHEN THERE IS NOT ENOUGH SPACE ABOVE HEADERS TO INSTALL H8 CLIPS TO SHORT STUDS. REPLACE H8 WITH CS20 STRAP WITH 10-10dx1 1/2 NAILS (5 NAILS TO PLATES AND 5 NAILS TO HEADER).

NOTE:
WINDSTORM CONNECTORS COULD BE
APPLIED TO THE EXTERIOR OR
INTERIOR SIDE OF THE WALL.

TYPICAL WALL
CONNECTORS
EVERY OTHER
RAFTER/STUD



RSP4

NOTES:

1. INSTALL CONNECTOR NAILS
PER FIG. D4-3.

CONNECTORS NAILING
SCHEDULE PER
FIG. D4-3

FIGURE D4-1
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(NOT USED)
FIGURE D4-2
NTS

ALTERNATE CONNECTORS *	
CONNECTOR	ALTERNATE
1-MTS12	2-H2.5A
1-SP4	2-H2.5A
1-H10	2-H2.5A
1-H10	1-MTS12
1-SP1	2-H4
1-SP2	2-H8
1-HD14A	2-STHD14
1-H4	1-RSP4
1-SP1	2-RSP4
1-RSP4	1-H2.5
1-H8	2-H2.5A

* NAIL CONNECTORS PER
SIMPSON NAILING SCHEDULES

SIMPSON CONNECTORS				ALTERNATE CONNECTION
MODEL No.	FASTENERS		TOP PLATE TO RAFTERS	
	TO RAFTERS	TO PLATES		
H8	5-10d x 1 1/2 (N10)	5-10d x 1 1/2 (N10)	6" LONG SCREW SDWC 15600	
H2.5A	5-8d x 1 1/2 (N8)	5-8d x 1 1/2 (N8)		
	STUD	PLATE	TOP PLATE TO STUD	
H8	5-10d x 1 1/2 (N10)	5-10d x 1 1/2 (N10)	4 1/2" SCREW SDWC 15450	
RSP4	4-8d x 1 1/2 (N8)	4-8d x 1 1/2 (N8)		
H2.5	5-8d x 1 1/2 (N8)	5-8d x 1 1/2 (N8)		
CS20	10-10d x 1-1/2 EACH END (N10)		SILL PLATE TO STUD	
CS16	10-10d x 1-1/2 EACH END (N10)			
HTT22	32-16d SINKERS OR COMMON NAILS			
LCE4	14-16d TO BEAM; 10-16d TO POST			
ABU44	12-10d TO POST			
ABU66	12-10d TO POST			
	STUDS	PLATE		
DSP	8-10dX1 1/2	4-10dX1 1/2	4 1/2" SCREW SDWC 15450	

- INSTALL PER
MANUF. INSTRUCTIONS

FIGURE D4-3
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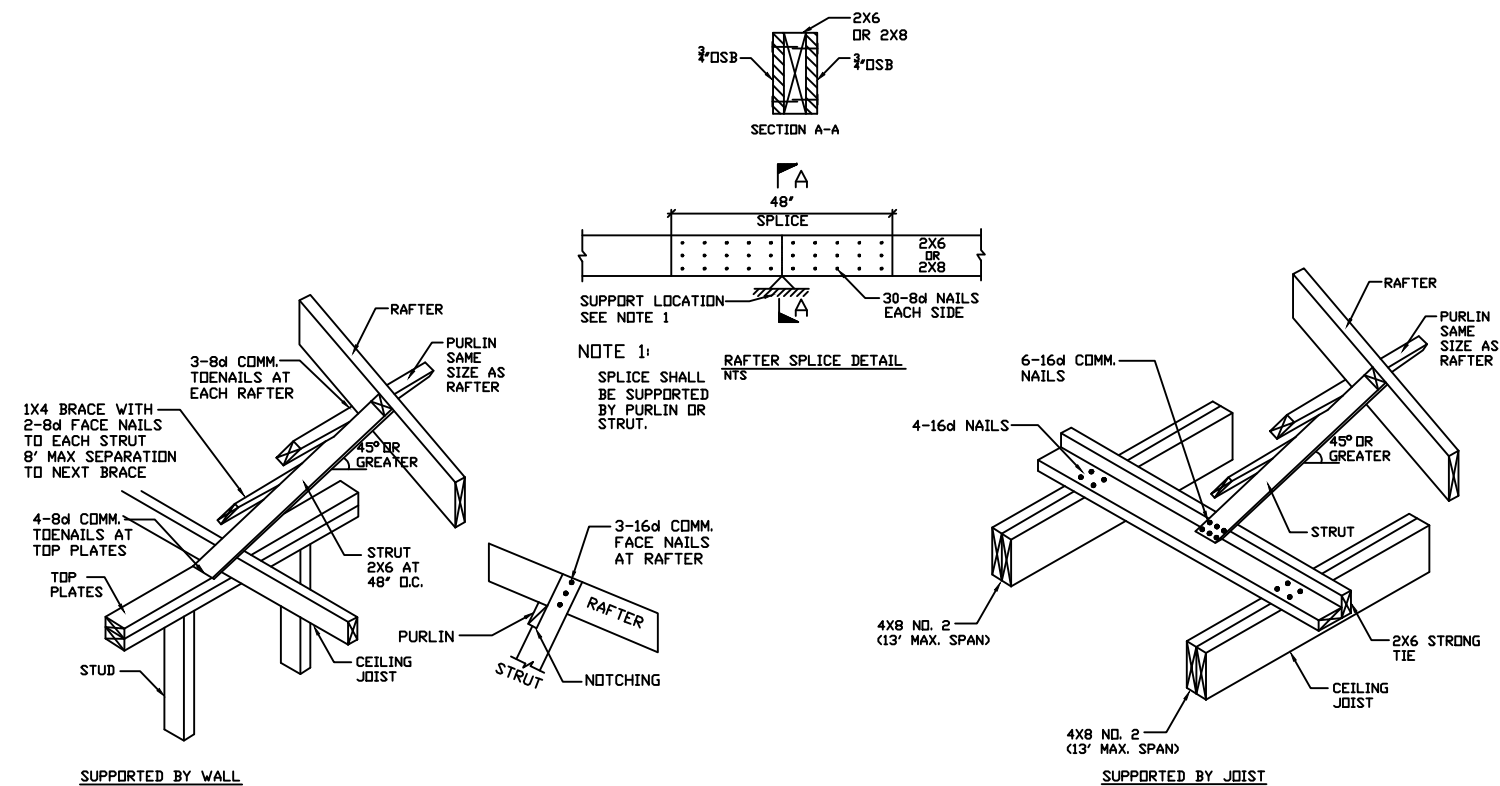
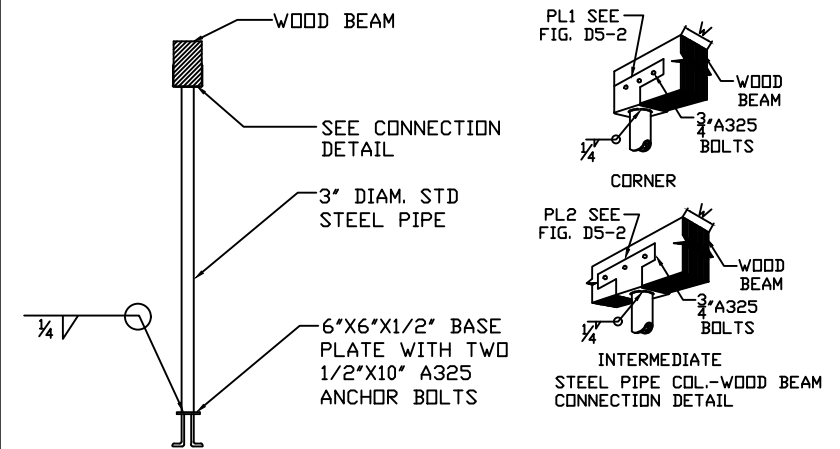
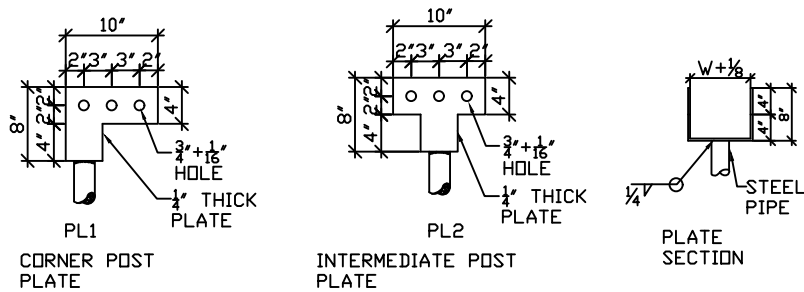
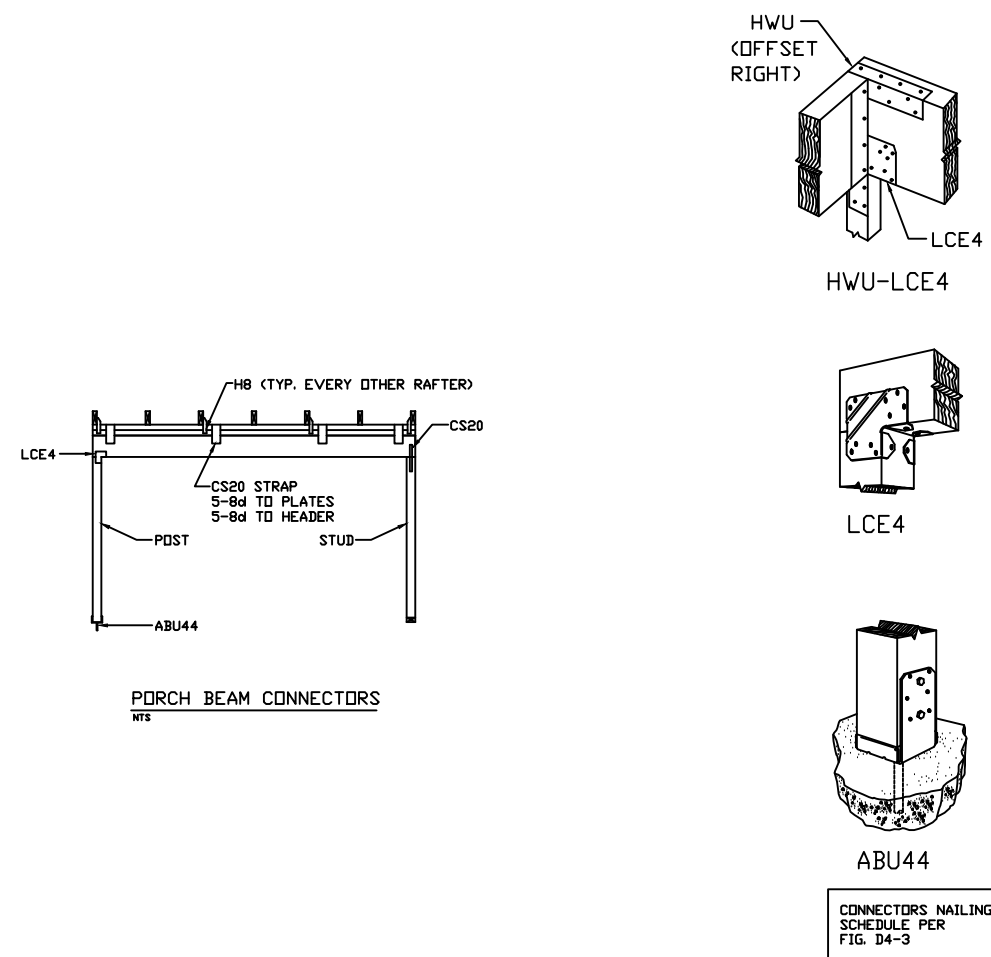
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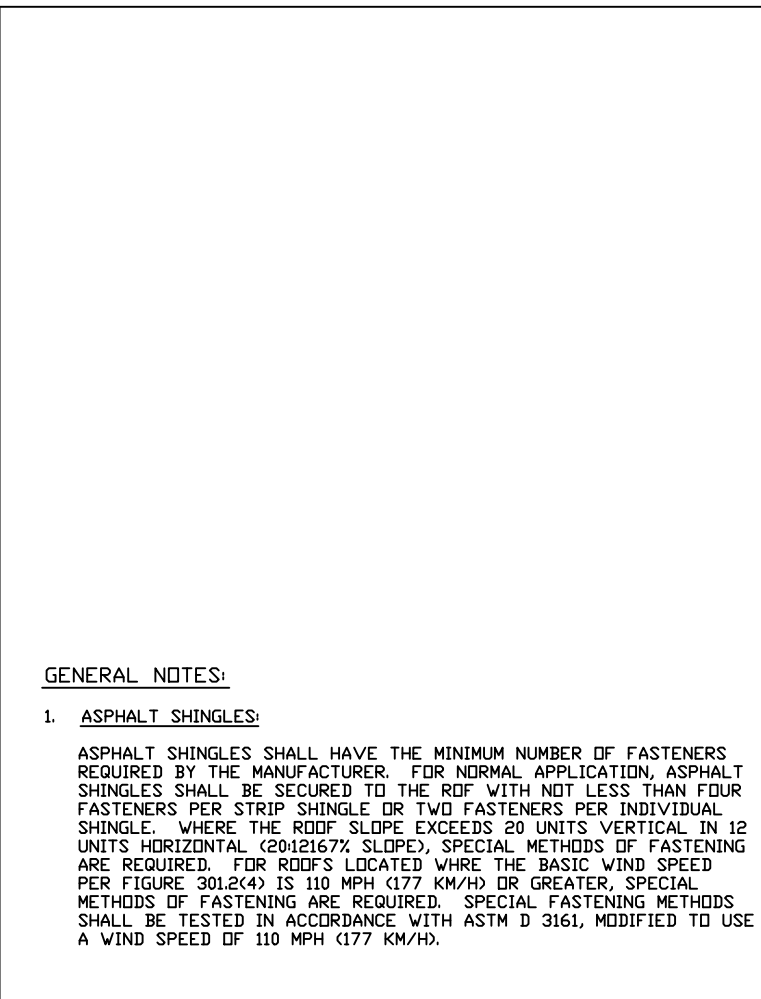
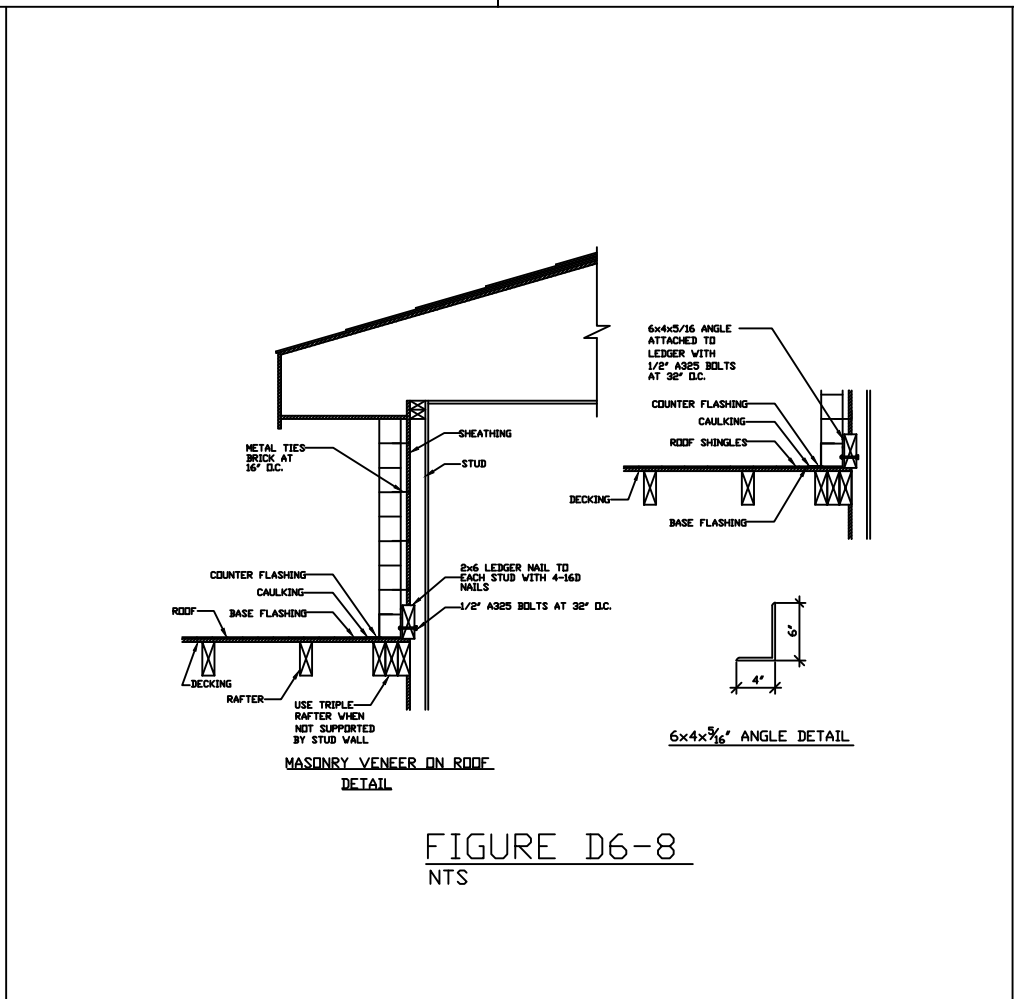
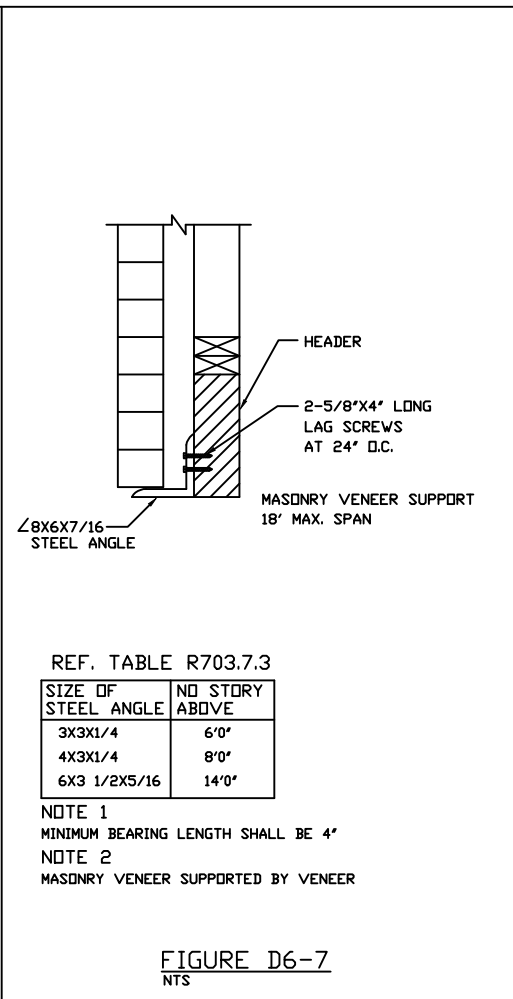
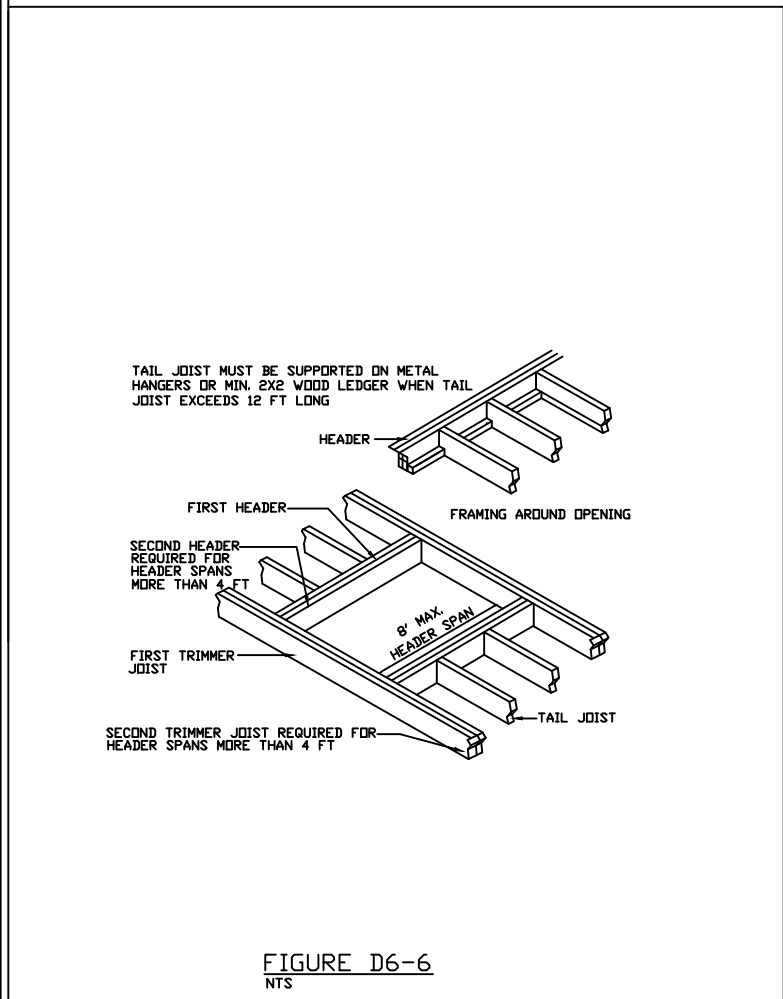
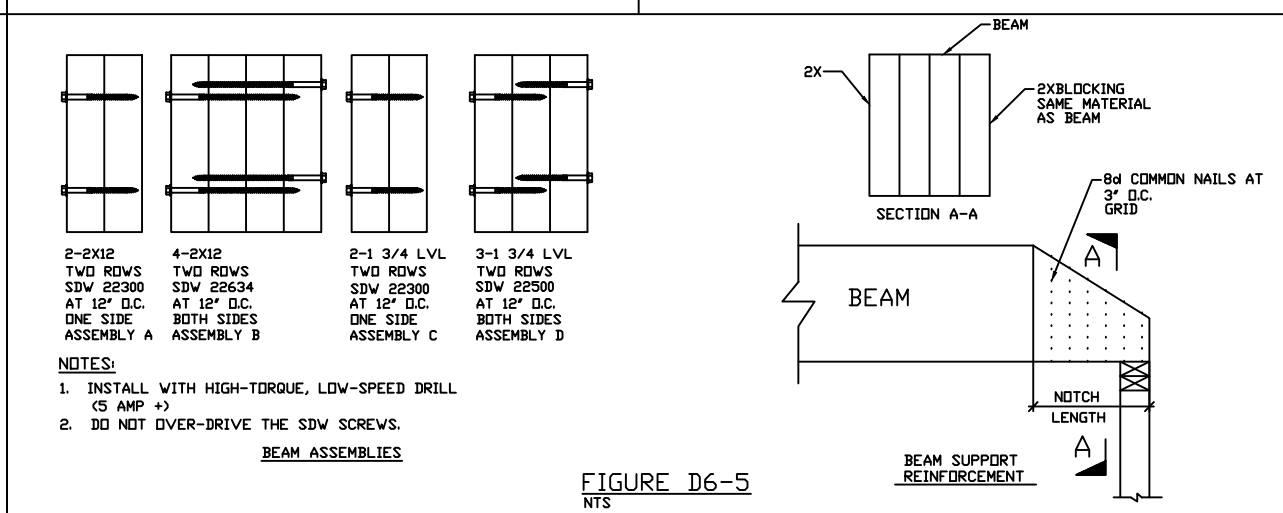
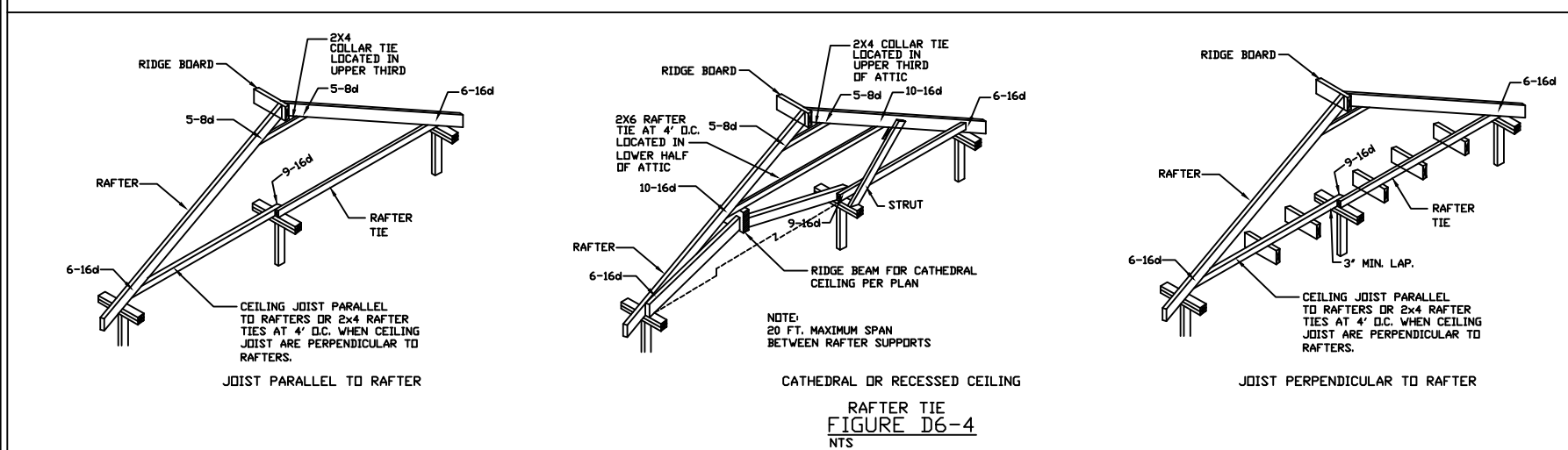
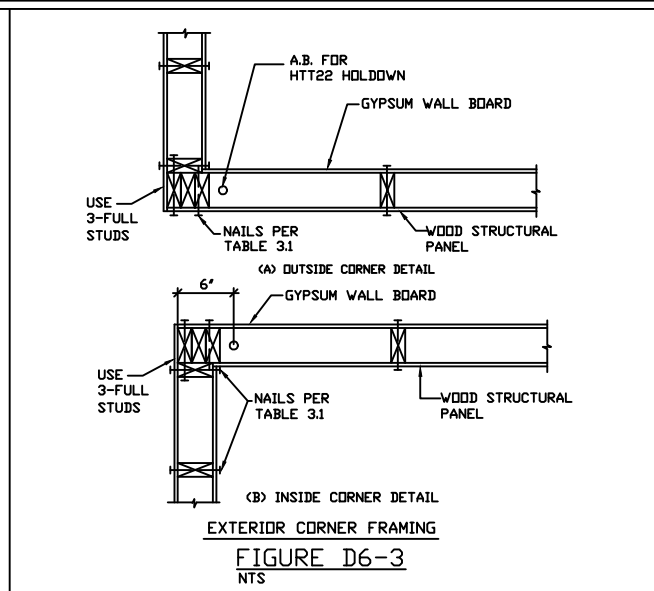
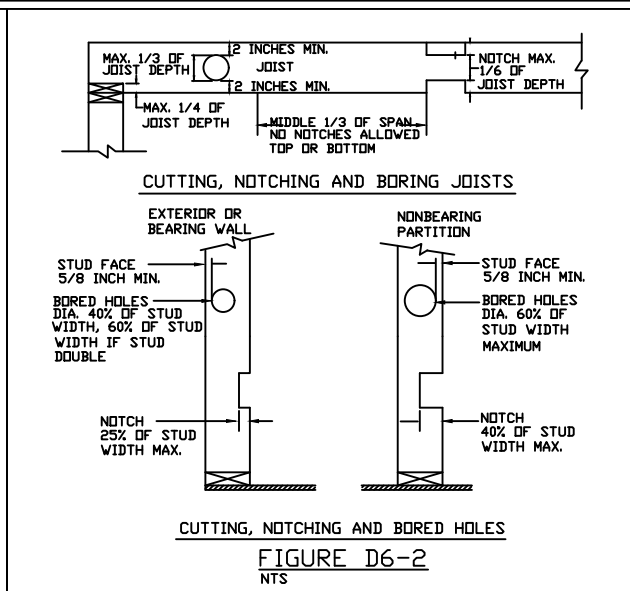
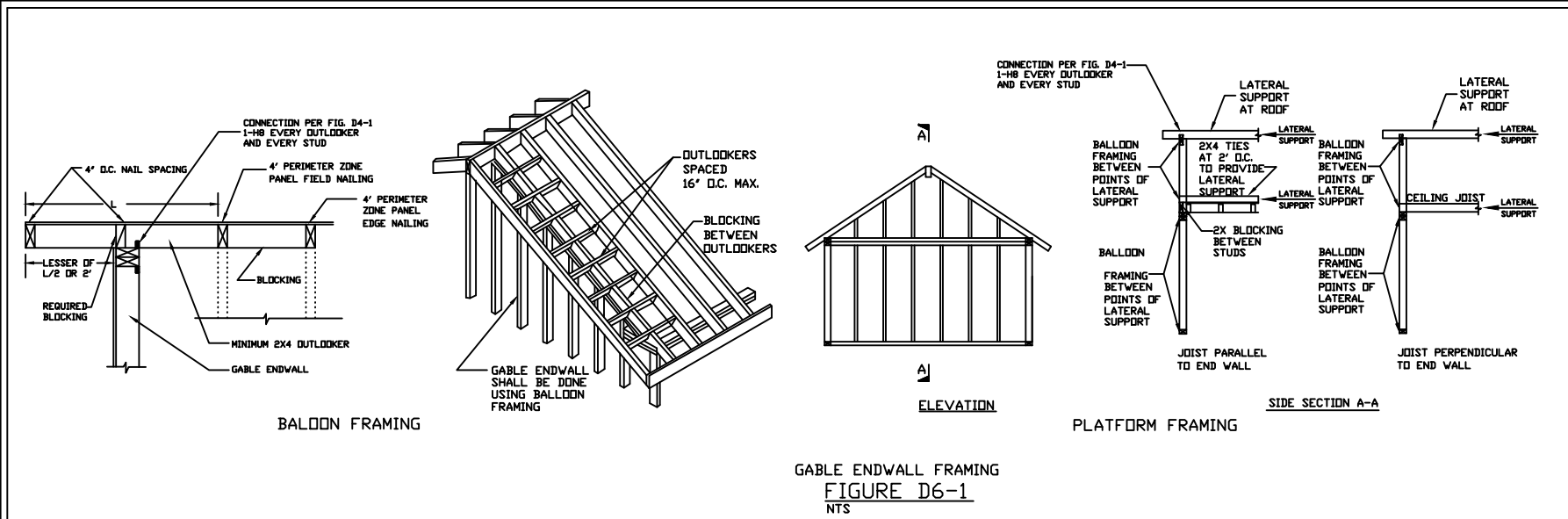
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BY	REVISION	DATE	NO.

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SIGNATURE: *[Signature]*
DATE: 2-10-2025

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