

TABLE S102.7 - HEADER SPANS FOR INTERIOR LOAD-BEARING WALLS

HEADERS SUPPORTING	SIZE	DROPPED HEADER		RAISED HEADER	
		BUILDING WIDTH (FT)	MAXIMUM HEADER SPAN	BUILDING WIDTH (FT)	MAXIMUM HEADER SPAN
(2) 2x4	4'-0"	24	24'-4"	24	24'-4"
(2) 2x6	5'-11"	24	35'-5"	24	36'-6"
(2) 2x8	7'-11"	24	44'-4"	24	45'-5"
(2) 2x10	9'-5"	24	53'-0"	24	53'-3"
(2) 2x12	11'-11"	24	62'-0"	24	63'-3"
(3) 2x10	9'-5"	36	53'-5"	36	53'-3"
(3) 2x12	11'-11"	36	62'-0"	36	63'-3"
(4) 2x10	10'-3"	48	62'-0"	48	63'-3"
(4) 2x12	11'-11"	48	71'-11"	48	74'-0"

TABLE S102.8 - HEADER SPANS FOR EXTERIOR LOAD-BEARING WALLS RESISTING WIND LOADS EXP "C"

WIND SPEED	120 MPH	130 MPH	140 MPH	150 MPH	160 MPH	170 MPH	180 MPH	195 MPH
(2) 2x4	5'-1"	4'-8"	4'-4"	4'-1"	3'-7"	3'-5"	3'-2"	3'-0"
(2) 2x6	6'-3"	5'-9"	5'-4"	5'-0"	4'-8"	4'-5"	4'-2"	3'-10"
(2) 2x8	6'-10"	6'-4"	5'-11"	5'-6"	5'-2"	4'-10"	4'-7"	4'-3"
(2) 2x10	7'-4"	6'-10"	6'-4"	5'-11"	5'-6"	5'-2"	4'-11"	4'-6"
(2) 2x12	7'-10"	7'-3"	6'-8"	6'-3"	5'-11"	5'-7"	5'-3"	4'-10"
(3) 2x10	8'-5"	7'-4"	7'-2"	6'-4"	6'-4"	5'-11"	5'-7"	5'-2"
(3) 2x12	9'-0"	8'-4"	7'-8"	7'-3"	6'-4"	6'-4"	6'-0"	5'-7"
(4) 2x10	9'-7"	8'-11"	8'-3"	7'-8"	7'-3"	6'-10"	6'-5"	5'-11"
(4) 2x12	10'-5"	9'-7"	8'-4"	7'-8"	7'-3"	6'-10"	6'-5"	5'-11"
(4) 2x12	11'-7"	11'-1"	10'-3"	9'-6"	8'-11"	8'-4"	7'-10"	6'-10"

TABLE S102.9 - SILL OR BOTTOM PLATE TO FOUNDATION CONNECTIONS RESISTING UPLIFT LOADS - 110 MPH WIND EXP "C"

UPLIFT LOADS	FOUNDATION SUPPORTING		MAXIMUM ANCHOR BOLT SPACING (INCHES)	
	FOUNDATION SUPPORTING	MAXIMUM ANCHOR BOLT SPACING (INCHES)	FOUNDATION SUPPORTING	MAXIMUM ANCHOR BOLT SPACING (INCHES)
1 - 3 STORES	50 INCHES ON CENTER	50 INCHES ON CENTER	50 INCHES ON CENTER	50 INCHES ON CENTER

TABLE S102.10 - BOTTOM PLATE TO FOUNDATION CONNECTIONS (ANCHOR BOLTS) RESISTING LATERAL & SHEAR LOADS - EXP "C"

UPLIFT LOADS	FOUNDATION SUPPORTING		MAXIMUM ANCHOR BOLT SPACING (INCHES)	
	FOUNDATION SUPPORTING	MAXIMUM ANCHOR BOLT SPACING (INCHES)	FOUNDATION SUPPORTING	MAXIMUM ANCHOR BOLT SPACING (INCHES)
1 STORY	31 INCHES ON CENTER	31 INCHES ON CENTER	31 INCHES ON CENTER	31 INCHES ON CENTER

TABLE S102.11 - FULL HEIGHT STUD REQUIREMENT FOR HEADERS OR WINDOW SILL PLATES IN EXTERIOR WALLS EXP "C"

HEADER SPAN (FEET)	12' O.C.		16' O.C.		24' O.C.	
	NUMBER OF FULL HEIGHT STUD REQUIRED AT EACH END OF THE HEADER	NUMBER OF FULL HEIGHT STUD REQUIRED AT EACH END OF THE HEADER	NUMBER OF FULL HEIGHT STUD REQUIRED AT EACH END OF THE HEADER	NUMBER OF FULL HEIGHT STUD REQUIRED AT EACH END OF THE HEADER	NUMBER OF FULL HEIGHT STUD REQUIRED AT EACH END OF THE HEADER	NUMBER OF FULL HEIGHT STUD REQUIRED AT EACH END OF THE HEADER
2	1	1	1	1	1	1
4	2	2	2	2	2	2
6	3	3	3	3	3	3
8	4	4	4	4	4	4
10	5	5	5	5	5	5
12	6	6	6	6	6	6
14	7	7	7	7	7	7
16	8	8	8	8	8	8

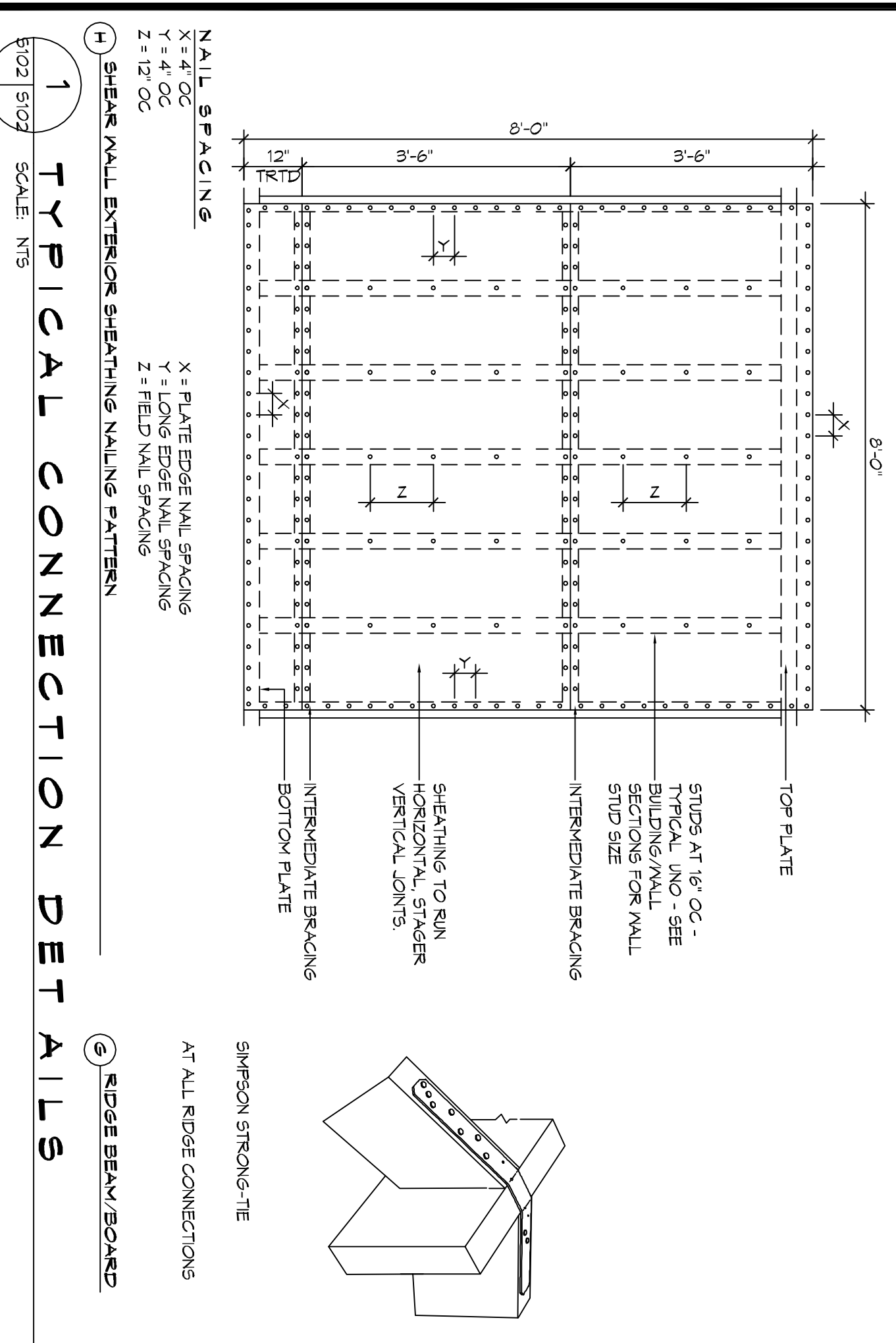


TABLE S102.5 - JACK STUD REQ. - INT LOAD-BEARING WALLS

HEADER SPAN (FT)	ROOF SPAN (FEET)					
	12 FEET	24 FEET	36 FEET	48 FEET	60 FEET	72 FEET
2	1	1	1	1	1	1
4	1	1	1	1	1	1
6	1	1	1	1	1	1
8	1	1	1	1	1	1
10	1	1	1	1	1	1
12	1	1	1	1	1	1
14	1	1	1	1	1	1
16	1	1	1	1	1	1
2	1	1	1	1	1	1
4	1	1	1	1	1	1
6	1	1	1	1	1	1
8	1	1	1	1	1	1
10	1	1	1	1	1	1
12	1	1	1	1	1	1
14	1	1	1	1	1	1
16	1	1	1	1	1	1

TABLE S102.6 - JACK STUD REQ. - EXTERIOR LOAD-BEARING WALLS

HEADER SPAN (FT)	ROOF LIVE LOAD 20 PBF						GROUND SNOW LOAD 30 PBF					
	3'	4.5'	5'	6'	8'	9'	4.5'	5'	6'	8'	9'	
2	1	1	1	1	1	1	1	1	1	1	1	
4	1	1	1	1	1	1	1	1	1	1	1	
6	2	2	2	2	2	2	2	2	2	2	2	
8	2	2	2	2	2	2	2	2	2	2	2	
10	3	3	3	3	3	3	3	3	3	3	3	
12	3	3	3	3	3	3	3	3	3	3	3	
14	4	4	4	4	4	4	4	4	4	4	4	
16	4	4	4	4	4	4	4	4	4	4	4	

TABLE S102.3 - NAILING SCHEDULE

DESCRIPTION	NUMBER OF COMMON WALLS	NUMBER OF WALL FINISHES	SPACING
TOP PLATE TO TOP PLATE (FACE VALUED)	2-16d	2-16d	PER FOOT
TOP PLATE AT INTERSECTION (FACE)	4-16d	5-16d	JOINTS - EACH SIDE
STUD TO STUD (FACE VALUED)	2-16d	2-16d	24' O.C.
HEADER TO HEADER (FACE VALUED)	16d	16d	16' O.C. EDGES
TOP OR BOTTOM PLATE TO STUD (END)	SEE TABLE	SEE TABLE	PER STUD
BOTTOM PLATE TO BANDJOIST END	2-16d	2-16d	PER FOOT
JOIST OR BLOCKING			

TABLE S102.4 - BUILDING ENVELOPE REQUIREMENTS

OPaque ELEMENTS	INSULATION	ASSEMBLY	R-VALUE
ROOFS	INSULATION ENTIRELY ABOVE DECK	U-0.048	R-20.0 c.l.
WALLS, ABOVE GRADE	METAL BUILDING STEEL-FRAMED	U-0.019	R-51.0 c.l. *
FLOORS	WOOD-FRAMED AND OTHER	U-0.107	R-9.3 c.l.
SLAB-ON-GRADE	WOOD-FRAMED AND OTHER	U-0.052	R-19.0
NON-SWIMMING	UNHEATED	F-0.790	R-1.0
OPaque DOORS	SWIMMING	U-0.700	NR
	NON-SWIMMING	U-1.450	NR

ROOF UNDERLAYMENT NOTES

- FOR ROOF SLOPES FROM TWO UNITS VERTICAL IN 12 UNITS HORIZONTAL (12% SLOPE) UP TO FOUR UNITS VERTICAL IN 12 UNITS HORIZONTAL (33% SLOPE), THE UNDERLAYMENT SHALL BE TWO LAYERS APPLIED IN THE FOLLOWING MANNER:
 A. APPLY A 1/4" THICK STRIP OF UNDERLAYMENT FELT OVER ALL UPPI AND STARTING AT THE EAVE, FASTENED SUFFICIENTLY TO HOLD IN PLACE UNDERLAYMENT, OVERLAPPING SUCCESSIVE SHEETS 14 INCHES, AND FASTENED SUFFICIENTLY TO HOLD IN PLACE.
 B. FOR ROOF SLOPES OF FOUR UNITS VERTICAL IN 12 UNITS HORIZONTAL (33% SLOPE) OR GREATER, UNDERLAYMENT SHALL BE ONE LAYER APPLIED IN THE FOLLOWING MANNER:
 1. UNDERLAYMENT SHALL BE APPLIED SINGLE FASHION, PARALLEL TO AND STARTING FROM THE EAVE AND LAPPED FASTENED SUFFICIENTLY TO HOLD IN PLACE. END LAPS SHALL BE FASTENED BY 6 FEET.

SHINGLE APPLICATION & FASTENING NOTES

- ASPHALT SHINGLE SHINGLES SHALL HAVE A MINIMUM OF SIX FASTENERS PER SHINGLE WHERE THE ROOF IS IN ONE OF THE FOLLOWING CATEGORIES:
 A. THE BASIC WIND SPEED IS 110 MPH OR GREATER AND THE EAVE IS 20 FEET OR HIGHER ABOVE GRADE.
 B. THE BASIC WIND SPEED IS 120 MPH OR GREATER.
 C. SPECIAL WIND ZONES.

GENERAL UPLIFT CONNECTION NOTES

- ROOF ASSEMBLY TO WALL ASSEMBLY:**
 UPLIFT CONNECTIONS SHALL BE FROM RAFTER OR TRUSS TO WALL STUD. WHEN RAFTERS ARE NOT LOCATED DIRECTLY ABOVE STUDS, RAFTERS SHALL BE ATTACHED TO THE WALL STUD WITH UPLIFT CONNECTIONS. UPLIFT CONNECTIONS SHALL BE IN ACCORDANCE WITH TABLE S102.10.
WALL ASSEMBLY TO WALL ASSEMBLY:
 UPLIFT CONNECTIONS SHALL BE FROM UPPER STORY WALL STUD TO LOWER STORY WALL STUD. WHEN UPPER STORY WALL STUDS ARE NOT LOCATED DIRECTLY ABOVE LOWER WALL STUDS, THE STUDS SHALL BE ATTACHED TO A COMMON MEMBER IN THE FLOOR ASSEMBLY BY UPLIFT CONNECTIONS. UPLIFT CONNECTIONS SHALL BE IN ACCORDANCE WITH TABLE S102.11.
WALL ASSEMBLY TO FOUNDATION:
 FIRST FLOOR WALL STUDS SHALL BE CONNECTED TO THE FOUNDATION SILL PLATE OR BOTTOM PLATE. A MINIMUM OF A 1-1/4" X 20 GA. ANCHOR BOLT SHALL BE USED. THE STUD SHALL BE MINIMUM 2" ABOVE THE FOUNDATION SILL PLATE AND HAVE A SLAB-ON-GRADE. IS INCHES IN MASONRY BLOCK FOUNDATIONS OR BE LAPPED UNDER THE BOTTOM PLATE. 3 HIGH SQUARE WADERS SHALL BE USED ON THE ANCHOR BOLTS AND ANCHOR BOLT SPACINGS SHALL NOT EXCEED THE REQUIREMENTS. STEEL STRAPS EMBEDDED IN OR IN CONTACT WITH SLAB-ON-GRADE OR MASONRY BLOCK FOUNDATIONS SHALL BE HOT-DIPPED GALV. AFTER FABRICATION OR SAINT-FRONT (SEE C-2450) GALV. / SILL CONNECTIONS SHALL BE IN ACCORDANCE WITH TABLE S102.12.

TABLE S102.1 - ROOF SHEATHING OR CLADDING REQUIREMENT - 110 MPH WIND LOAD EXP "C"

SHEATHING LOCATION	RAFTER / TRUSS SPACING	MAX NAIL SPACING FOR 9d COMMON WALLS OR 10d BOX WALLS (INCHES O.C.)	
		E	F
INTERIOR ZONE	12' O.C.	6	12
	16' O.C.	6	12
	24' O.C.	6	12
PERIMETER EDGE ZONE	12' O.C.	6	12
	16' O.C.	6	12
	24' O.C.	6	12

TABLE S102.2 - WALL SHEATHING OR CLADDING REQUIREMENT - 110 MPH WIND LOAD EXP "C"

SHEATHING LOCATION	STUD SPACING	MAX NAIL SPACING FOR 9d COMMON WALLS OR 10d BOX WALLS (INCHES O.C.)	
		E	F
INTERIOR ZONE	12' O.C.	6	12
	16' O.C.	6	12
	24' O.C.	6	12
PERIMETER EDGE ZONE	12' O.C.	6	12
	16' O.C.	6	12
	24' O.C.	6	12

DAMMON ENGINEERING, INC.

554 Old Spanish Trail
Slidell, LA 70458
PH: 985.649.5832

www.dammonengineering.com
info@dammonengineering.com
Fax: 985.641.9590

NOVEMBER

2018 DATE: 10-30-2018

DRAWN BY: DD/K/K CHECKED BY: CK

JOB No: 2018

SHEET TITLE: TYPICAL CONNECTION DETAILS, SCHEDULES, AND NOTES

DRAWING NUMBER: S102

SHEET No: 3 OF 4

REVISIONS

NO.	DESCRIPTION	DATE