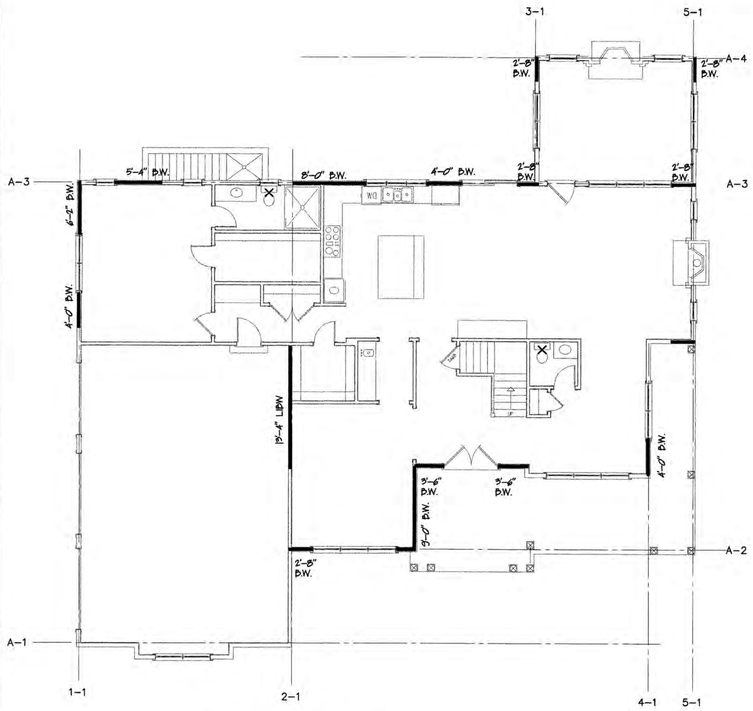
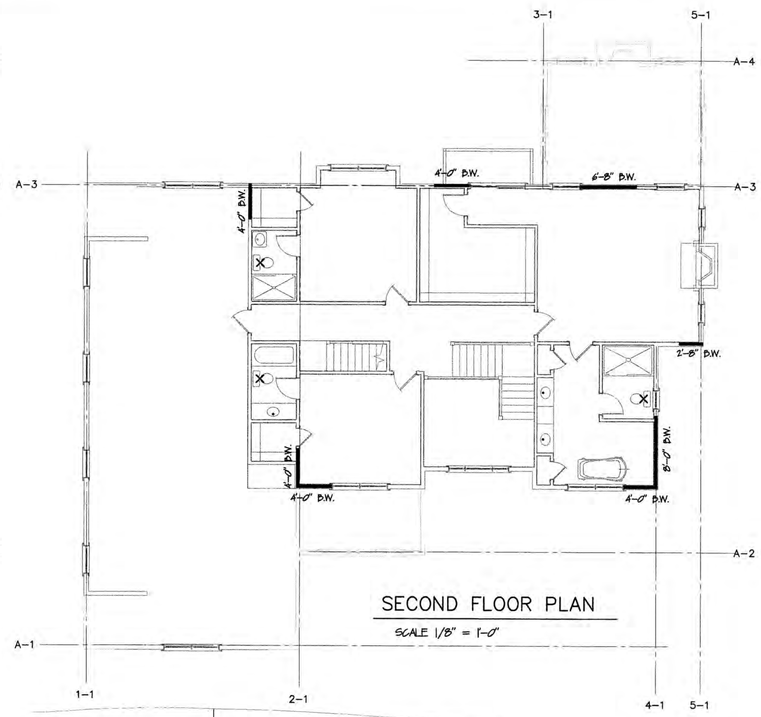


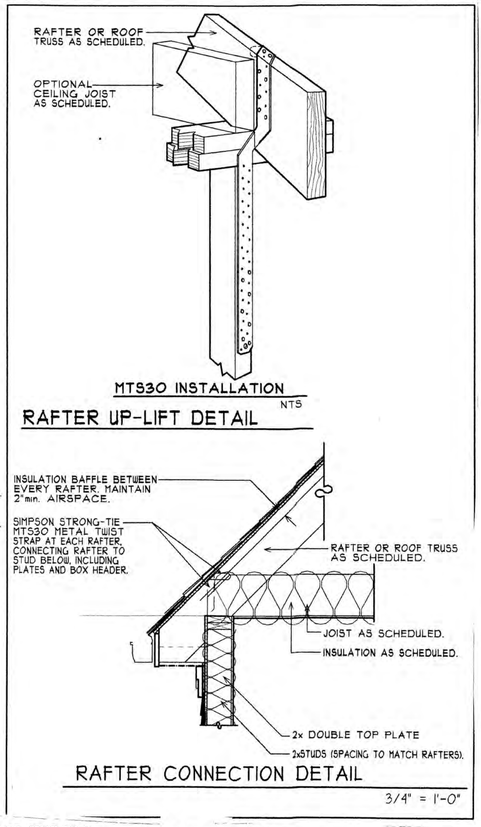
FIRST FLOOR PLAN

SCALE 1/8" = 1'-0"



SECOND FLOOR PLAN

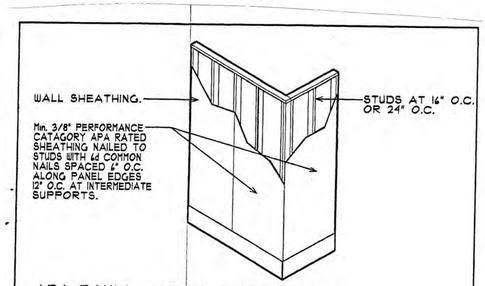
SCALE 1/8" = 1'-0"



RAFTER UP-LIFT DETAIL

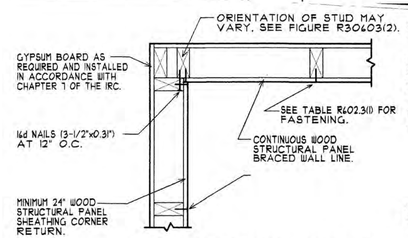
RAFTER CONNECTION DETAIL

3/4" = 1'-0"

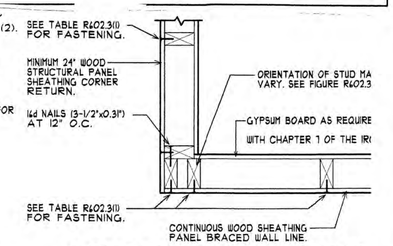


APA PANEL CORNER BRACING DETAIL

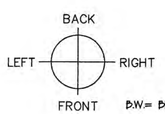
NO SCALE



INSIDE CORNER DETAIL



OUTSIDE CORNER DETAIL



B.W.= BRACED WALL

DESIGN PARAMETERS

STRUCTURE TYPE	SINGLE FAMILY DETACHED
# OF STORIES	2
SEISMIC DESIGN	B
WIND SPEED DESIGN	115 MPH
WIND EXPOSER	B
GWB ON INTERIOR WALL	YES

CS-WSP METHOD
Wall bracing requirements – 2015 International Residential Code

BRACED WALL LINES – FIRST FLOOR
Wall Bracing Side to Side Direction Wall Height = 9'-0"
CS-Wall Bracing Method Exposer Factor 1

Wall Line	Spacing	Wall Hgt	Story	Eave to Ridge Factor	Eave to ridge hgt	Wind Wall hgt factor	Tabulated Braced Wall (ft.) Tabulated	Required Wall Bracing Adjusted	Wall bracing Provided Front/Back
1-1 TO 2-1	24'-0"	10'-0"	1 OF 1	1.18	13'-0"	1	3.9'	4.6'	5'-4"B.W./5'-4" B.W.
2-1 TO 4-1	40'-0"	9'-0"	1 OF 2	1.15	15'-0"	.95	11.5'	12.46'	12'-6" B.W. / 14'-8" B.W.
4-1 TO 5-1	5'-0"	9'-0"	1 OF 2	1.0	10'-0"	.95	1.75'	1.66'	2'-8"B.W./2'-8" B.W.

BRACED WALL LINES –SECOND FLOOR
Wall Bracing Front to Back Direction Wall Height = 9'-0"
CS-Wall Bracing Method Exposer Factor 1

Wall Line	Spacing	Wall Hgt	Story	Eave to Ridge Factor	Eave to ridge hgt	Wind Wall hgt factor	Required Braced Wall (ft.) Tabulated	Required Wall Bracing Adjusted	Wall bracing Provided Front/Back
1-1 TO 2-1	N.A.								
2-1 TO 3-1	40'-0"	9'-0"	2 of 2	1.3	15'-0"	.95	5.5'	7.42'	8'-0" B.W./ 8'-0" B.W
4-1 TO 5-1	5'-0"	9'-0"	2 of 2	1.0	10'-0"	.95	1.'	.95'	2'-8"B.W./2'-8" B.W.

BRACED WALL LINES – FIRST FLOOR
Wall Bracing Side to Side Direction Wall Height = 9'-0"
CS-Wall Bracing Method Exposer Factor 1

Wall Line	Spacing	Wall Hgt	Story	Eave to Ridge Factor	Eave to ridge hgt	Wind Wall hgt factor	Tabulated braced Wall (ft.) Tabulated	Required Wall Bracing Adjusted	Wall bracing Provided lft/rgt
A-1 TO A-3	52'-0"	9'-0"	1 of 1	1.18	13'-0"	1.	7.8	9.2'	10'-2" B.W./ 12'-0" LIBW
A-2 TO A-3	41'-0"	9'-0"	1 of 2	1.15	15'-0"	.95	11.75	12.84'	13'-4" L.I.B.W./ 13'-0"BW
A-3 TO A-4	14'-0"	9'-0"	1 of 1	.88	8'-0"	.95	2.6'	2.17'	2'-8" B.W./ 2'-8" B.W.

BRACED WALL LINES – SECOND FLOOR
Wall Bracing Side to Side Direction Wall Height = 9'-0"
CS-Wall Bracing Method Exposer Factor 1

Wall Line	Spacing	Wall Hgt	Story	Eave to Ridge Factor	Eave to ridge hgt	Wind Wall hgt factor	Tabulated braced Wall (ft.) Tabulated	Required Wall Bracing Adjusted	Wall bracing Provided lft/rgt
A-1 TO A-3	N.A.								
A-2 TO A-3	34'-0"	9'-0"	2 of 2	1.3	15'-0"	.95	5.1'	6.3'	8'-0" B.W./8'-0"B.W.
A-3 TO A-4	N.A.								

WB/WBC/TWB/RCWB *Wall Bracing*

Simpson Strong-Tie® wall bracing products offer effective options to resist racking during construction. Additionally the RCWB and WB/WBC can be used to fulfill the same code bracing requirements as a 1x4 let-in brace, but are cost effective and faster to install. Not designed to replace structural panel shearwall load-carrying component.

The WBC *(coiled WB)* multiple product dispenser pack weighs less than 40 pounds, making storage and transportation easy. WB106C—15 pieces per roll, WB126C—12 pieces per roll, WB143C—10 pieces per roll.

The RCWB features a rolled edge *(the TWB has two rolled edges)* for extra strength and safety.

MATERIAL: WB and WBC—16 gauge; TWB—22 gauge; RCWB—20 gauge

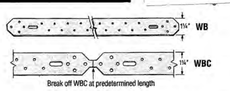
FINISH: Galvanized

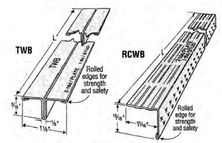
INSTALLATION: • Use all specified fasteners. See General Notes.

WB and WBC: • Install in "X" pairs or in opposing "V" fashion.
- Use with 16" or 24" o.c. 2x4 (min.) studs.

RCWB and TWB: • Use with 16" o.c. studs.
- Use minimum of 2x4 studs with TWB.
- Use minimum of 2x6 studs with RCWB *(2x4 min. for interior, non-bearing wall).*
- Establish a run-line using the bracing as a straight edge. Single cut a saw kerf ⅛" deep (TWB) or 1¼" deep (RCWB) along the run line. If the wall is pre-framed on the floor, place the part into the saw kerf, and put one nail into the top plate. Tilt the wall up and plumb before nailing off top plate, bottom plate and studs according to the nailing schedule.

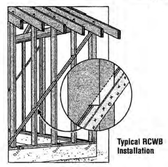
CODES: See page 12 for Code Reference Key Chart.



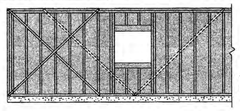


Model No.	L	Angle and Wall Height	Fasteners Plates	Fasteners Studs	Code Ref.
WB106	9'-5⅝"	8' @ 60	2-16d	1-8d	I16, L9, F15
WB106C	9'-6"	8' @ 60	2-16d	1-8d	I16, L9, F15
TWB10	9'-9"	8' @ 55	2-16d	1-8d	I16, L9, F15
RCWB12	11'-4"	8' @ 45	2-16d	1-8d	I16, F15
WB126	11'-4¾"	8' @ 45	2-16d	1-8d	I16, L9, F15
WB126C	11'-4¾"	8' @ 45	2-16d	1-8d	
TWB12	11'-4"	8' @ 53	2-16d	1-8d	I16, L9, F15
WB126	11'-4¾"	9' @ 53	2-16d	1-8d	
WB126C	11'-4¾"	9' @ 53	2-16d	1-8d	I16, L9, F15
TWB12	11'-4"	9' @ 53	2-16d	1-8d	
WB143C	14'-3"	10' @ 45	2-16d	1-8d	I16, L9, F15
RCWB14	14'-2"	10' @ 45	2-16d	1-8d	
TWB14	14'-2"	10' @ 45	2-16d	1-8d	

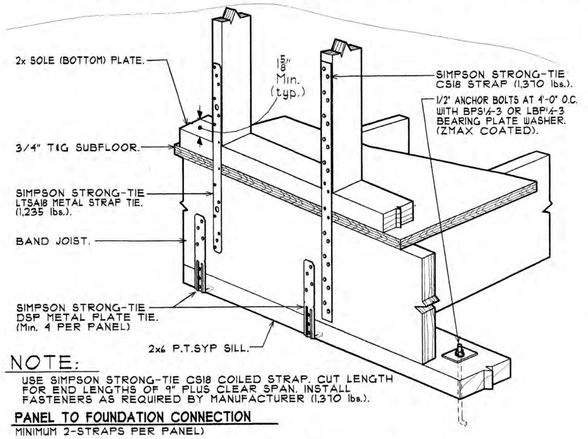
1. **NAILS:** 16d = 0.162" dia. x 3½" long, 8d = 0.131" dia. x 2½" long.
See page 22-23 for other nail sizes and information.



Typical RCWB Installation



WB or WBC Wall Bracing "X" and "V" Applications



NOTE:

USE SIMPSON STRONG-TIE CS18 COILED STRAP. CUT LENGTH FOR END LENGTHS OF 9" PLUS CLEAR SPAN. INSTALL FASTENERS AS REQUIRED BY MANUFACTURER (1,370 lbs.).

PANEL TO FOUNDATION CONNECTION

MINIMUM 2-STRAPS PER PANEL)

BRACED WALL - LOAD PATH CONNECTOR

NO SCALE

ADS
ARCH-DESIGN SERVICES
PO BOX 949
SOUTHBURY CT 06798
203-733-1392

CONSULTANTS

REVISION		

PROJECT TITLE

DRAWINGS PREPARED FOR
ASIM ALIMI

DRAWING TITLE

WIND BRACE PLAN
FOR
PROPOSED COLONIAL FARM HOUSE
AT
LOT 7 MADELINE DRIVE
NEW FAIRFIELD CT

SCALE	PROJECT NO.
DRAWN BY	WB-100
CHECKED BY	
DATE 7/18/20	7 OF 7