PRODUCT DESIGN PRESSURE REQUIREMENTS ROOFS WITH MEAN ROOF HEIGHT OF 20'	SHEARWALL LEGEND	
140 MPH / 145 MPH / 150 MPH /	Wall Type         Sheathing [in]         Fasteners         Spcg [in]         Framing Members [in]         Apply           Grp         Surf         Material         Thick         Size         Type         Edg         Fld         Blkg         Species         G         Spc         Notes	<b>PROJECT INFORMATION</b>
PRODUCT         EXP C         EXP C         EXP C           WINDOWS         36:12 psf         38.7 psf         41:28 psf	Grp         Surf         Material         Thick         Size         Type         Edg         Fld         Blkg         Species         G         Spc         Notes           Sw6         Ext         OSB/PLYWOOD         7/16         10d         Nail         6         12         yes         S-P-F         0.50         1'-4"         1,3	TYPE OF PROJECT:
DOORS 33.54 psf 36.12 psf 38,7 psf	SW4 Ext OSB/PLYWOOD 7/16 10d Nail 4 12 yes S-P-F 0.50 1'-4" 1,3	
GARAGE DOOR (16x7)         28.38 psf         30.32 psf         32.25 psf           SIDING         36.12 psf         38.7 psf         41.28 psf	sw3         Ext         OSB/PLYWOOD         7/16         10d         Nail         3         12         yes         S-P-F         0.50         1'-4"         1,3           sw2         Ext         OSB/PLYWOOD         7/16         10d         Nail         2         12         yes         S-P-F         0.50         1'-4"         1,2*,3	CLIMATE CONTROLLED STORAGE
	Grp - Wall Design Group; Surf - Exterior or interior surface of exterior wall; Spcg - Edge or	BUILDER/ HOME OWNER:
	field nail spacing; <b>Blkg</b> – Blocked; <b>G</b> – Specific gravity; <b>Spc</b> – Wall stud spacing Notes: (1.) Capacity has been reduced according to IBC specific gravity adjustment. (2)*	ALLSIDES/WORRELL
PRODUCT DESIGN PRESSURE REQUIREMENTS	Framing at adjoining panel edges shall be 3-inch nominal or wider, and nails shall be staggered where nails are 2" o.c. (3). Shear capacity for current design has been increased	PROJECT ADDRESS:
ROOFS WITH MEAN ROOF HEIGHT OF 30'	to the value for 15/32" sheathing with same nailing because stud spacing is 16" max. or	301 PECAN STREET
140 MPH         145 MPH         150 MPH           PRODUCT         EXP C         EXP C         EXP C	panel orientation is horizontal.	
WINDOWS 39.2 psf 42 psf 44.8 psf	EXTERIOR SHEARWALLS	SWEENY, TEXAS
DOORS         36 A psf         39 Z psf         42 psf           GARAGE DOOR (16x7)         30.8 psf         32.9 psf         35 psf	All exterior walls shall be fully sheathed using wall type <u>sw4</u> shearwalls and shall extend to the Roof Framing Unless Noted Otherwise.	
SIDING 39.2 psf 42 psf 44.8 psf	** INTERIOR SHEARWALLS	
	ALL INTERIOR SHEARWALLS SHALL EXTEND TO THE ROOF FRAMING ABOVE WITH A DOUBLE RAFTER DRAG STRUT AT THE TOP SEE DETAIL M1 WS2-2	
	ALL SHEARWALLS SHALL BE FULL HEIGHT FROM THE SOLE PLATE TO THE ROOF DIAPHRAGM.	
PRODUCT DESIGN PRESSURE REQUIREMENTS		DESIGN CRITERIA/STANDARD
<b>ROOFS WITH MEAN ROOF HEIGHT OF 40</b>		2018 WOOD FRAME CONSTRUC
140 MPH 145 MPH 150 MPH PRODUCT EXP C EXP C EXP C	CORROSION RESISTANT FASTENERS	CHAPTER 2 AND ASCE 7-16
WINDOWS         417         psf         4477         psf         477         psf           DOORS         38.74         psf         417         psf         447         psf		ULTIMATE WIND SPEED: 145 N
GARAGE DOOR (16x7) 32.8 pst 35 pst 31.25 pst	GALVANIZED STEEL, STAINLESS STEEL,	EXPOSURE CATEGORY: C
SIDING 41.7 psf 44.7 psf 47.7 psf	ALUMINUM OR COPPER	DESIGN MEAN ROOF HEIGHT:
	HOLDDOWN CONNECTOR LEGEND REVISED 2018 IRC/IBC	
	HOLDDOWN CONNECTOR LEGEND REVISED: 2018 IRC/IBC HOLDDOWN CONNECTOR LEGEND	
	SIMPSON STHD14 CONNECTOR OR EQUIV. PLACED FOR SECOND FLOOR	OTHER DESIGN CRITERIA:
2x6 RAFTER SPAN FOR WIND LOADING		ALL OTHER CONSTRUCTION SI
16"o.c. (FT) (IRC 2018)		CONSTRUCTION STANDARD SH
SPACING ROOF SLOPE EXP. C EXP. C EXP. C	4800#	WINDSTORM DETAIL SHEETS V
SYP#2, 16" O.C. 0-3:12 9'-1" 8'-8" 8'-4"	SIMPSON <u>HTT5KT</u> CONNECTOR OR EQUIV. SET AFTER POUR ACCORDING TO DETAIL A2, MUNDSTORM DETAIL SUFET WS 1, 2, 5500 H	WHERE THE CONSTRUCTION S
SYP#2, 16" O.C.         4:12         9'-0"         8'-6"         8'-2"           SYP#2, 16" O.C.         5:12         8'-9"         8'-4"         7'-11"	DBL STUD PACK BELOW SHEET WS 1-2 5500# DBL STUD PACK BELOW SHEET WS2-2 (4,980#)	DOCUMENT VARY, THIS TEMPI
SYP#2, 16" O.C. 6:12 8'-6" 8'-1" 7'-9"	SIMPSON HDQ8-SDS3 CONNECTOR OR EQUIV.	,
SYP#2, 16" O.C. 7:12 10'-0" 9'-7" 9'-2"	DETAIL A3, WINDSTORM DETAIL SHEET WS 1-2	PRECEDENCE. THIS DESIGN IS
SYP#2, 16" O.C.         8:12         9'-9"         9'-3"         8'-10"           SYP#2, 16" O.C.         9:12         9'-4"         8'-10"         8'-6"	7007	
SYP#2, 16" O.C. 10:12 9'-0" 8'-6" 8'-2"	- ANCHOR BOLTS SHALL BE 5/8" DIAMETER X 10" HD " STUD PACK ABY TO STRINGER / PERP. BEAM/	OTHER OR NON SPECIFIED CO
SYP#2, 16" O.C. 11:12 8'-7" 8'-2" 7'-10"	BOLTS PLACE 32" O.C. EMBEDDED 7" INTO SLAB.	MATERIAL REQUIREMENTS AN
SYP#2, 16" O.C.12:128'-3"7'-10"7'-6"HORIZONTAL RAFTER SPAN SHALL NOT EXCEED THE SPECIFIED RAFTER	- RETRO FIT BOLTS SHALL BE 5/8" DIA. AND HAVE A TENSION CAPACITY OF 1,300 LBS. HD 5 INDICATES MSTC66 (68 NAILS) FROM DBL STUDS TO STRINGER/PERP. BEAM/DBL STUD PACK	PER THE 2018 INTERNATIONAL
SPAN FOR WIND LOADING. RAFTERS SHALL NOT EACEED THE SPECIFIED RAFTER SPAN FOR WIND LOADING. RAFTERS SHALL BE BRACED TO A LOAD BEARING WALL OR MIN. 2-2x12 BEAM AND ANCHORED TO RESIST 400#	BELOW SHEET WS2-2 (5,850#)	
PER RAFTER BRACE	UPLIFT REQUIREMENTS	
2x8 RAFTER SPAN FOR WIND LOADING	UPLIFT LOAD PATH MUST BE CONTINUOUS FROM THE ROOF TO THE FOUNDATION. ANCHORAGE POINTS AND ACCEPTABLE HURRICANE CONNECTORS PER TABLE 3, CS 1-1	1
16" o.c. (FT) (IRC 2018)		J
140 MPH 145 MPH 150 MPH	- RAFTER AND STUD ANCHORAGE (PER MEMBER)- ANCHORAGE RAFTER TO TOP PLATE: 600 LBS	
SPACING         ROOF         SLOPE         EXP. C         EXP. C         EXP. C           SYP#2, 16" O.C.         0-3:12         12'-5"         11'-11"         11'-4"	ANCHORAGE RAFTER TO TOP PLATE: 600 LBS TOP PLATE TO STUD: 600 LBS STUD TO SOLE PLATE: 420 LBS	
SYP#2, 16" O.C. 4:12 12'-2" 11'-8" 11'-2"	-HEADER ANCHORAGE-	
SYP#2, 16" O.C.         5:12         11'-10"         11'-4"         10'-10"           SYP#2, 16" O.C.         6:12         11'-6"         11'-0"         10'-7"	HEADER STUDS TO HEADER AND SOLE PLATE:	
SYP#2, 16" O.C.         6:12         11'-6"         11'-0"         10'-7"           SYP#2, 16" O.C.         7:12         13'-7"         13'-1"         12'-6"	OPENING SIZE ANCHORAGE	
SYP#2, 16" O.C. 8:12 13'-2" 12'-8" 12'-1"	6' 1125 LBS - OVERHANG ANCHORAGE-	
SYP#2, 16" O.C.         9:12         12'-7"         12'-1"         11'-7"           SYP#2, 16" O.C.         10:12         12'-2"         11'-8"         11'-2"		EMAIN ATTACHED TO THE
SYP#2, 16" O.C. 11:12 11'-7" 11'-2" 10'-8"	POST TO BLAM! 4,000 LBS THIS SHEET MUST R	Emain at IACHED IV INI
SYP#2, 16" O.C. 12:12 11'-2" 10'-9" 10'-3"	1	

<u>N:</u>

# THE 2018 IRC WILL MEET OR EXCEED THE 2009/2012/2015 IRC CODE.

WWW.CBIWINDSTORM.COM 798 FM 517 ALVIN, TEXAS 77511

> COASTAL BUILDING INSPECTIONS

WINDSTORM F-003193

SHEET

COVER

PLEASE NOTE THAT ANY CHANGE TO THE DESIGN AFTER ENGINEERING HAS BEEN COMPLETED WILL RESULT IN A MINIMUM REVISION FEE OF \$500.00

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(281) REG#

<u>D:</u> CUCTION MANUAL,

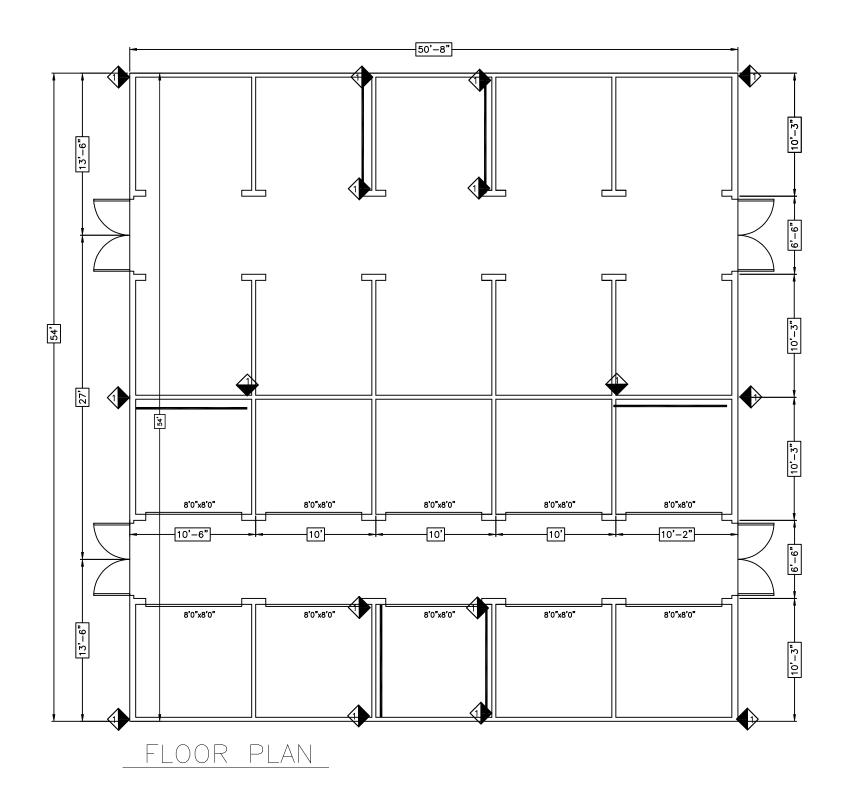
MPH

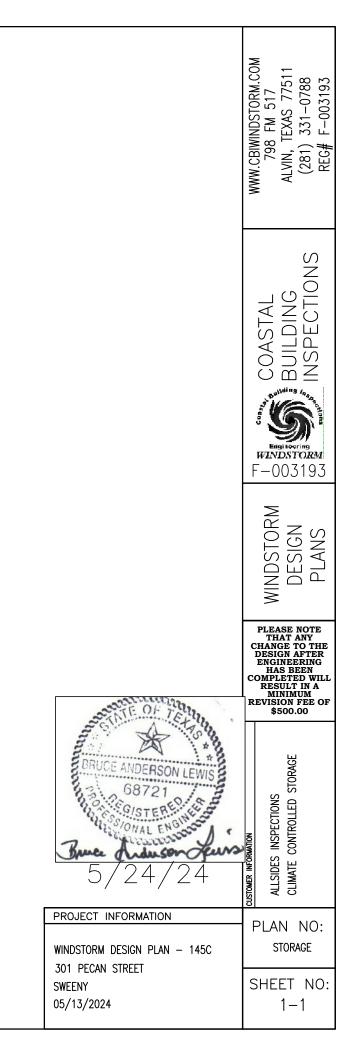
Γ: <u>20'</u>

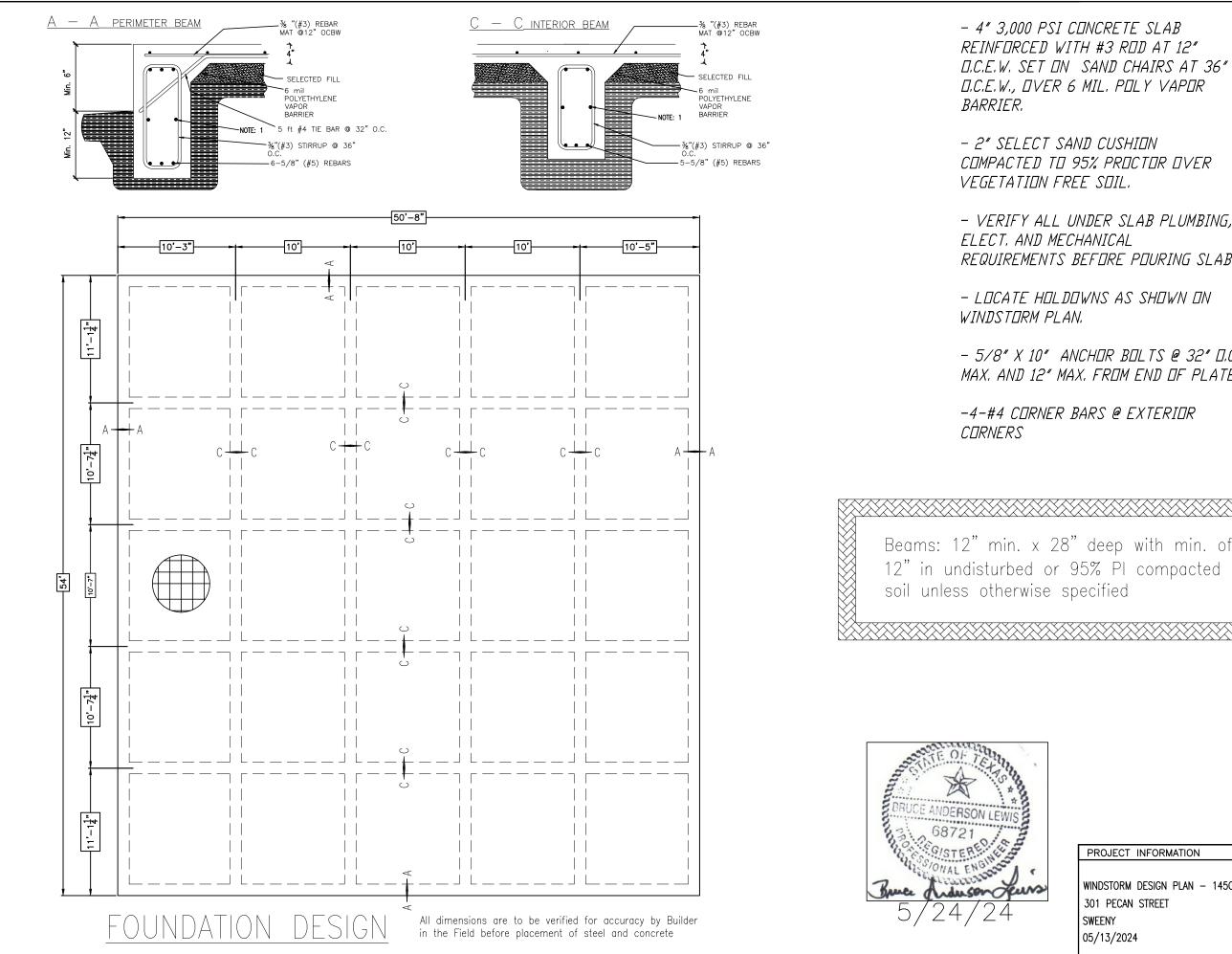
SHALL BE PER SHEET CS 1-1, AND S WS 1-2 AND WS 2-2. I STANDARD AND THIS PLATE SHALL TAKE IS FOR WIND ONLY.

CONSTRUCTION DETAILS, AND LOADS SHALL BE AL RESIDENTIAL CODE. –

# HE WINDSTORM DESIGN\*\*







- 4" 3,000 PSI CONCRETE SLAB REINFORCED WITH #3 ROD AT 12" D.C.E.W. SET DN SAND CHAIRS AT 36" D.C.E.W., DVER 6 MIL. POLY VAPOR BARRIER,

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COASTAL BUILDING INSPECTIONS

F-003193

WINDSTORM DESIGN PLANS

- 2" SELECT SAND CUSHIDN COMPACTED TO 95% PROCTOR OVER VEGETATION FREE SOIL.

- VERIFY ALL UNDER SLAB PLUMBING, ELECT. AND MECHANICAL REQUIREMENTS BEFORE POURING SLAB

- LOCATE HOLDOWNS AS SHOWN ON WINDSTORM PLAN,

- 5/8" X 10" ANCHOR BOLTS @ 32" D.C. MAX. AND 12" MAX. FROM END OF PLATE.

-4-#4 CORNER BARS @ EXTERIOR CORNERS

Beams: 12" min. x 28" deep with min. of 12" in undisturbed or 95% PI compacted soil unless otherwise specified

PLEASE NOTE THAT ANY CHANGE TO THE DESIGN AFTER ENGINEERING HAS BEEN COMPLETED WILL RESULT IN A MINIMUM REVISION FEE OF \$500.00 \$500.00 STORAGE S INSPECTIONS CONTROLLED S Allsides | Climate C DERSON PROJECT INFORMATION PLAN NO: COLLEGE ST STORAGE WINDSTORM DESIGN PLAN - 145C 301 PECAN STREET SHEET NO: SWEENY 05/13/2024 FDN

## WINDSTORM FRAMING AND CONSTRUCTION REQUIREMENTS.

- POUNDATION NOTES: 1. CONCRETE SLAB SHALL HAVE A MIN. COMPRESSIVE STRENGTH OF 3,000 psi DECEMBER 1 MIN. COM
- 2. ANCHOR BOLTS SHALL BE MIN. 5/8" X 10" HEX HEAD OR J-BOLT WITH MIN. 2" x 2" x 1/8" OR 2"
- 3. ANCHOR BOLTS SHALL HAVE A MINIMUM 7" EMBEDMENT.
- 4. ANCHOR BOLT SPACING SHALL BE 32" O.C. FOR ALL EXTERIOR WALL SUPPORTING RAFTERS
- 5. ANCHOR BOLT SHALL BE PLACED 4-3/8 to 12" FROM CORNERS, ENDS OF PLATES AND DOORS OPENINGS WITH A MINIMUM OF 2 ANCHOR BOLTS PER SEGMENT.
- 6. 5/8" DIA. ANCHOR BOLTS SHALL BE SPACED 5' O.C. FOR INTERIOR SHEARWALLS.
- . RETROFIT ANCHOR BOLTS (NON-HOLDDOWN LOCATIONS) SHALL BE MIN. 5/8" DIA. AND PROVIDE A MIN. PULL OUT CAPACITY OF 1.300 LB.
- WHERE SPECIFIED BY THE WINDSTORM DESIGN PLAN, PRE-MANUFACTURED SHEAR PANELS SHALL BE INSTALLED ACCORDING TO THE MANUFACTURES INSTALLATION INSTRUCTION AND THE WINDSTORM DESIGN PLAN. FOUNDATION FOOTING SIZE AND TEMPLATE INSTALLATION SHALL BE INSPECTED PRIOR TO PLACEMENT

## OF CONCRETE.

- HOLDDOWN INSTALLATION NOTES: 1. HOLDDOWN CONNECTORS SHALL BE INSTALLED AT ALL CORNERS, GARAGE DOOR OPENINGS, INTERIOR SHEARWALLS AND AS REQUIRED BY THE WINDSTORM DESIGN PLAN.
- ACCEPTABLE HOLDDOWN CONNECTORS SHALL BE PER W/S DESIGN PLANS
- HOLDDOWN CONNECTORS SHALL BE INSTALLED ACCORDING TO DETAIL A1, A2 & A3 AND THE
- MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- WHERE HD1 CONNECTORS ARE MISSING OR MISS-INSTALLED. IT SHALL BE ACCEPTABLE TO INSTALL A RETROFIT CONNECTOR ACCORDING TO DETAIL A2 ANCHOR BOLTS FOR HOLDDOWN CONNECTORS SHALL BE INSTALLED WITH EPOXY ANCHORS ACCORDING TO
- CONNECTORS CAPACITY SEE DETAILS A2 & A3. HOLDDOWN CONNECTOR UPLIFT LOAD PATH SHALL BE CONTINUOUS FROM 2ND FLOOR TO FOUNDATION.
- SEE DETAIL ES FOR HD1 WHERE HOLDDOWNS ARE ALIGNED VERTICALLY. SEE DETAIL EG. FOR OFFSET CONDITION
- STRAPS AND CLIPS METAL FRANKING CONNECTOR SUCH AS STRAPS, CLIPS AND HANGERS SHALL BE INSTALLED ACCORDING TO THE MANUFACTURERS INSTALLATION INSTRUCTIONS USING THE SPECIFIED NUMBER AND TYPE OF

FASTENERS CLIPS AND STRAPS SHALL FORM A CONTINUOUS LOAD PATH FROM THE RAFTER TO THE FOUNDATION.

- FOR TYPICAL UPLIFT CONNECTIONS SEE **DETAIL B1** REQUIRED CONNECTION CAPACITY AND ACCEPTABLE FRAMING ANCHORS SHALL BE AS PER TABLE 3, OR AS SPECIFIED BY THE WINDSTORM DESIGN PLANS.
- ANCHOR EACH RAFTER WHERE IT BEARS ON A WALL TO THE DOUBLE TOP PLATE ACCORDING TO TABLE ANCHOR EACH FULL HEIGHT EXTERIOR WALL STUD TO THE TOP PLATE ACCORDING TO TABLE 3.
- ANCHOR INTERIOR WALL STUDS CARRYING RAFTER BRACING TO THE TOP PLATE TO RESIST 400# UPLIFT. ANCHOR 2ND FLOOR STUDS AND HEADER STUDS TO 1ST FLOOR STUDS WITH A MINIMUM OF 5 NAILS PER
- STUD ACCORDING TO TABLE 3.
- FOR OFFSET 1ST AND 2ND FLOOR, ANCHOR STUDS AND HEADER STUDS ACCORDING TO <u>DISTAIL B2</u>. WHERE FRAMING DOES NOT COMPLY WITH DETAIL, ANCHORAGE SHALL MAY BE PROVIDED BY CUTTING FLOOR AND ANCHORING TO PLATE BELOW.
- ANCHOR TOP PLATE TO HEADER 16" O.C. ALONG HEADER ACCORDING TO TABLE 3.
- ANCHOR HEADER TO HEADER STUDS ACCORDING TO TABLE 3. SEE **DETAIL B1.** ANCHOR EACH FULL HEIGHT EXTERIOR WALL STUD, INTERIOR WALL STUD CARRYING RAFTER BRACING AND HEADER STUDS TO THE SOLE PLATE ACCORDING TO TABLE 3.
- ANCHOR EACH GABLE STUD TO END RAFTER AT THE TOP AND BOTTOM. SEE DETAIL F1.F2
- ANCHOR CEILING JOISTS TO TOP PLATE AND BEAMS AT PORCH/OVERHANG ACCORDING TO DETAIL B3.
- 15. OVERHANG SUPPORT BEAMS SHALL BE STRAPPED TO POSTS WITH 4 STRAPS (2 INSIDE/2 OUTSIDE) ACCORDING TO TABLE 3.
- 16. OVERHANG SUPPORT BEAMS SHALL BE ANCHORED TO THE STRUCTURE WITH 2 STRAPS ACCORDING TO
- TABLE 3. SEE DETAIL B4. 17. RIDGE STRAPS SHALL BE PROVIDED OVER RIDGES WITH 5 NAILS PER SIDE, SEE TABLE 3 FOR
- 18. IN LIEU OF RIDGE STRAPS, COLLAR TIES MAY BE USED AT EACH RAFTER. SEE DETAIL BS
- STRAP HIP RAFTERS TO HIP OR OPPOSING HIP RAFTER AT ALL HIPS, SEE TABLE 3 FOR ANCHORAGE. OPPOSING RAFTERS MAY BE ANCHORED TO THE HIP RAFTER WITH 5 NAILS INTO EACH MEMBER.
- 20. BEAMS AND DOUBLE JOISTS CARRYING RATER BRACING SHALL BE STRAPPED AT EACH BID TO RESIST 200 LBS UPLIFT FOR EACH BRACE SUPPORTED. LOAD PATH CONTINUOUS TO FOUNDATION. 21. PURLIN BRACES SHALL BE ANCHORED TO THE TOP PLATES, DOUBLE JOISTS OR 2-2x12 BEAM
- SUPPORTING THE BRACE.
- 22. WHERE A RAFTER CAN NOT BE FACE NAILED TO THE BRACE, AN LSTA STRAP SHALL BE USED TO ANCHOR THE RAFTER TO THE BRACE TO RESIST 400# UPLIFT.
- 23. CHIMNEY STUDS SHALL BE ANCHORED TO RAFTERS AND/ OR WALL STUDS BELOW TO RESIST 600 LBS. UPLIFT ACCORDING TO DETAIL B6.
- 24. DORMERS STUDS SHALL BE ANCHORED TOP DOUBLE RAFTERS ACCORDING TO DETAIL B7. LIVE DORMER WALL STUD SHALL BE STRAPPED AS FULL HEIGHT STUDS. 25. HORIZONTAL STRAPPING AT HEADERS AND SILLS SPECIFIED BY THE WINDSTORM DESIGN PLAN SHALL BE
- INSTALLED ACCORDING TO DETAIL DETAIL BS & B9

### PLYWOOD USED FOR SHEAR AND UPLIFT REQUIREMENT

- WHERE SPECIFIED IN THE WINDSTORM DESIGN PLAN, FULL HEIGHT PLYWOOD/OSB MAY BE USED TO REPLACE STUD-TO-PLATE AND TOP PLATE-TO-HEADER STRAPPING WHEN INSTALLED ACCORDING TO
- DETAIL 01. 27. EACH RAFTERS AND RAFTER BRACING SHALL BE ANCHORED TO THE DOUBLE TOP PLATE ACCORDING TO TABLE 3.
- 28. STRAPPING SHALL BE PROVIDED ACCORDING TO TABLE 3 FOR ALL WINDOW AND DOOR HEADER STUDS 29. WHERE SPECIFIED BY THE WINDSTORM DESIGN TEMPLATE, PLYWOOD/OSB USED TO RESIST SHEAR AND UPLIFT SHALL BE FASTENED 3" O.C. @ PANEL EDGES AND 3"O.C. ALONG HEADERS AND THE LOWER MEMBER OF THE DOUBLE TOP PLATE. SEE DETAIL C1
- 30. PLYWOOD/OSB PANELS USED TO RESIST SHEAR AND UPLIFT SHALL BE CONTINUOUS FROM THE SOLE PLATE TO THE UPPER MEMBER OF THE DOUBLE TOP PLATE
- 31. PLYWOOD/OSB PANELS USED FOR UPLIFT RESISTANCE SHALL BE NORDBORD WINDSTORM OSB PANELS OR EQUIVALENT, AND HAVE THE FOLLOWING MINIMUM LENGTHS.

WALL HEIGHT	PANEL LENGTH
8'	97 1/8"
9'	109 1/8"
10'	121 1/8"

- 33.
- Standard Length Plywood/OSB shall not be used to resist upuft loads. Plywood shall be used to resist shear and upuft only where specified. Where not specified. CLIPS and straps shall be used per the upuft requirements.

### RAMING NOTES AND LIMITATIONS:

- FRAMING FASTENER SIZE AND SPACING SHALL BE PER TABLE 4. FOR ALL CONNECTIONS FASTENERS SHALL BE CORROSION RESISTANT WHERE REQUIRED BY MUNICIPALITY OR TDI CODE AMENDMENT. RAFTERS
- RAFTERS SHALL BE MIN. 2x6 SYP. #3 MATERIAL OR EQUIV. RAFTERS SHALL BE BRACED BY A PURLIN AND RAFTER BRACING TO MEET THE RAFTER SPANS SPECIFIED IN THE
- WINDSTORM DESIGN PLAN. RAFTER BRACING AND PURINS SHALL BE FRAMED ACCORDING TO DETAIL D

ROOF DECK NOTES

2.

MIN. THICKNESS OF 7/16".

THE TOP TO THE ROOF LINE.

ACCORDING TO DETAIL K1.

O.C. ALONG OVERLAPS

SPECIFIED NAIL LINE

INSTRUCTIONS.

DOORS AND WINDOW

WITH EITHER:

NSPECTION

THEREAFTER, OR

BE AVAILABLE UPON REQUEST

METHOD AS SPECIFIED IN THE 2018 IRC.

BRICK TIES

PANEL COURSES SHALL BE STAGGERED 4'

ALL ROOF SURFACES SHALL BE FULLY SHEATHED WITH APA RATED PLYWOOD/OSB SHEATHING WITH A

EACH PANEL SHALL BE NAILED 4" O.C. TO RAFTERS AT PANEL EDGES AND 6" O.C. IN THE FIELD (FOR

CHIMNEYS AND DORMERS FRAMING SHALL BE FULLY SHEATHED WITH WOOD STRUCTURAL PANELS FROM

ROOF FELT SHALL BE FASTENED WITH CORROSION RESISTANT FASTENERS SPACED A MAXIMUM OF 12"

ASPHALT SHINGLE WRAPPERS SHALL BEAR A LABEL INDICATING COMPLIANCE WITH ASTM D3161, CLASS F OR ASTM D7158 CLASS H&G

ASPHALT SHINGLES SHALL BE FASTENED PER THE MANUFACTURER'S INSTALLATION INSTRUCTIONS ON THE

ASPHALT SHINGLES: 1. ASPHALT SHINGLE ROOF COVERINGS SHALL BE TESTED IN ACCORDANCE WITH ASTM D 3161, CLASS F

ASTM D 7158 CLASS H&G AND INSTALLED PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.

STARTER COURSE SHALL BE INSTALLED ACCORDING TO THE MANUFACTURER'S INSTALLATION

BRICK TIES SHALL BE PROVIDED 16" O.C. ALONG EACH STUD BRICK TIES SHALL BE ANCHORED TO WALL STUDS WITH 1- 8D CORROSION RESISTANT NAIL.

WINDOWS AND GLASS DOOR PRODUCTS SHALL MEET THE REQUIREMENTS OF THE 2018 IRC. IN LIEU OF THE INSTALLATION REQUIRED BY A PRODUCT EVALUATION,

ALUMINUM WINDOWS MAY BE INSTALLED WITH 10D BOX MALS (0.131 X 3"), SPACED 4" O.C. AROUND PERIMETER AND PLACED IN PRE-DRILLED HOLES WHERE PROVIDED.

7/16" HEAD DIAMETER) SPACED 3" ON CENTER. 4. 1x6 BUILD OUT MATERIAL FOR WINDOW INSTALLATION SHALL BE INSTALLED TO WALL FRAMING WITH SAME

FASTENER SIZE AND SPACING AS WINDOWS. 5. IN LIEU OF THE INSTALLATION REQUIRED BY A PRODUCT EVALUATION, ENTRY DOORS MAY BE INSTALLED

IN ADDITION TO THE AFORE MENTIONED FASTENERS, EACH DOOR HINGE AND STRIKER PLATE SHALL BE

7. GARAGE DOOR PRODUCTS SHALL BE INSTALLED ACCORDING TO THE MANUFACTURER'S SHOP DRAWINGS. SHOP DRAWINGS SHALL BE PROVIDED BE THE INSTALLER FOR EACH STRUCTURE FOR FINAL INSPECTION. 8. IT SHALL BE THE RESPONSIBILITY OF THE BUILDER TO OBTAIN AND MAINTAIN RECORDS OF PRODUCT

evaluation or testing information that verified the design pressure performance of window and

DOOR PRODUCTS AN EVALUATION REPORT OR TESTING INFORMATION FOR WIDOW AND DOOR PRODUCTS SHALL

WINDBORNE DEBRIS PROTECTION: 1. STRUCTURES LOCATED IN AREAS WHERE THE DESIGN WIND SPEED IS 140 MPH OR GREATER SHALL HAVE GLAZED EXTERIOR OPENINGS PROTECTED FROM WINDBORNE DEBRIS BY AN APPROVED PROTECTION

REQUIREMENTS OF ASTM E1886 AND 1996, OR BE AN APPROVED WOOD STRUCTURAL PANEL APPLICATION SPECIFIED IN THE 2018 IRC EVIDENCE OF PROTECTION METHOD SHALL BE PROVIDED PRIOR TO CERTIFICATION

DOOR AND GARAGE DOOR OPENINGS WITHOUT GLAZING DO NOT REQUIRE PROTECTION AGAINST WINDBORNE

DOORS AND GARAGE DOOR OPENINGS WITH GLAZING SHALL BE PROTECTED FROM WINDBORNE DEBRIS.

**CORROSION RESISTANT FASTENERS** 

GALVANIZED STEEL, STAINLESS STEEL

ALUMINUM ÓR COPPÉR

AND THE PROTECTION MATERIALS AND FASTENERS SHALL BE AT THE SITE AT THE TIME OF THE FINAL

WINDBORNE DEBRIS PROTECTION METHOD SHALL MEET THE IMPACT AND CYCLIC WIND PRESSURE TESTING

NO. 8 X 3" WOOD SCREWS, SPACED A MAXIMUM OF 4" FROM THE CORNERS AND 10" O.C.

NO. 10 X 2 %" WOOD SCREWS SPACED 6" FROM THE CORNERS AND 23" O.C. THEREAFTER.

VINYL FRAMED WINDOWS SHALL BE INSTALLED WITH 11/2" ROOFING NAILS (11 GAUGE SHANK DIAMETER,

BRICK TIES SHALL BE SPACED 6" O.C. AROUND WINDOW AND DOOR OPENINGS WHERE WINDBORNE

<u>S AND WINDOWS.</u> WINDOW, DOOR GARAGE DOOR AND SKYLIGHT PRODUCTS SHALL HAVE A MINIMUM DESIGN PRESSURE AS

GABLE ENDS, THE GABLE RAFTER AND FLY BARG SHALL BE CONSIDERED AN EDGE).

 ROOF FELT NOTES:

 1.
 ROOF FELT SHALL BE INSTALLED ACCORDING TO SECTION R905.1 OF THE 2018 IRC.

 2.
 FOR ROOF SLOPES > 4:12 PROVIDE ONE LAYER OF FELT

LAPS SHALL BE PROVIDED ACCORDING TO SECTION R905 OF THE 2018 IRC

SLOPES >2:12 AND < 4:12 SHALL BE DOUBLE FELTED WITH A 19" LAP.

FASTENERS SHALL NOT BE OVERDRIVEN OR CROOKED.

DEBRIS PROTECTION IS TO BE ANCHORED TO BRICK VENEER.

SPECIFIED IN THE WINDSTORM DESIGN PLAN.. 2. SEE WS DESIGN PLAN FOR DESIGN PRESSURES

INSTALLED W/ MIN. 1- NO. 8 x 3" WOOD SCREW.

FASTENERS SHALL BE MINIMUM 8D COMMON (0.131 X 2.5") OR AS SPECIFIED IN TABLE 4.

WHERE DORMER WALL SHEATHING INTERSECTS THE ROOF LINE, THE JOINT SHALL BE BLOCKED

- A RAFTER BRACE SHALL BE PROVIDED FOR EVERY OTHER RAFTER WHERE A BRACING LINE IS REQUIRED, AND AT LAPS OR SPLICES.
- RAFTER SHALL BE BRACED TO INTERIOR WALLS OR A MIN 2-2X12 BEAM WHICH IS ANCHORED TO FRAMING
- **BELOW** RAFTER BRACES SHALL BE NAILED IN SHEAR TO RAFTERS WITH 5 FRAMING FASTENERS
- LAPS IN RAFTERS SHALL BE MIN. 4' LONG FACE NAILED TOGETHER WITH 21 NAIL (3 ROWS OF 7 FASTENERS) ACCORDING TO **DETAIL D1**. 10. RAFTERS SHALL BE DOUBLED UNDER DORMER FRAMING.
- COLLAR TIES: 11. MIN. 1x6 COLLAR TIES SHALL BE PROVIDED FOR EVERY OTHER SET OF RAFTERS LOCATED IN UPPER THIRD OF THE RAFTER FASTENED WITH 4 NAILS AT EACH END PER DETAIL BS
- ACCEPTABLE HOLDDOWN CONNECTORS SHALL BE PER W/S DESIGN FLOWS HOLDDOWN CONNECTORS MAY BE INSTALLED ONTO ANY FACE OF THE CORNER AS LONG AS THE VERTICAL 12. EXTERIOR WALLS AND INTERIOR SHEARWALLS SHALL HAVE A CONTINUOUS DOUBLE TOP PLATE OR THE PLATE 12. EXTERIOR WALLS AND INTERIOR SHEARWALLS SHALL HAVE A CONTINUOUS DOUBLE TOP PLATE OR THE PLATE
  - 13. TOP PLATES SHALL BE LAPPED A MINIMUM OF 4' AND FASTENED TOGETHER ACCORDING TO TABLE 4
  - 14. WHERE TOP PLATES ARE NOT CONTINUOUS, NOTCHED OR DO NOT MEET THE REQUIRED LAP LENGTH, AN LSTA STRAP OR CS16 COIL STRAP SHALL BE CENTERED IN EACH PLATE WITH 7 NAILS IN THE STRAP ON EACH SIDE OF THE JOINT.

  - WALL FRAMING 15. TYPICAL WALL FRAMING SHALL BE PER **DETAIL B1** 16. BALLOON FRAMING- WALL STUDS EXPOSED TO WIND LOADS SHALL BE CONTINUOUS FROM HORIZONTAL SUPPORT 16. BALLOON FRAMING- WALL STUDS EXPOSED TO WIND LOADS SHALL BE CONTINUOUS FROM HORIZONTAL SUPPORT 16. BALLOON FRAMING- WALL STUDS EXPOSED TO WIND LOADS SHALL BE CONTINUOUS FROM HORIZONTAL SUPPORT 16. BALLOON FRAMING- WALL STUDS EXPOSED TO WIND LOADS SHALL BE CONTINUOUS FROM HORIZONTAL SUPPORT 16. BALLOON FRAMING- WALL STUDS EXPOSED TO WIND LOADS SHALL BE CONTINUOUS FROM HORIZONTAL SUPPORT 16. BALLOON FRAMING- WALL STUDS EXPOSED TO WIND LOADS SHALL BE CONTINUOUS FROM HORIZONTAL SUPPORT 16. BALLOON FRAMING- WALL STUDS EXPOSED TO WIND LOADS SHALL BE CONTINUOUS FROM HORIZONTAL SUPPORT 16. BALLOON FRAMING- WALL STUDS EXPOSED TO WIND LOADS SHALL BE CONTINUOUS FROM HORIZONTAL SUPPORT 16. BALLOON FRAMING- WALL STUDS EXPOSED TO WIND LOADS SHALL BE CONTINUOUS FROM HORIZONTAL SUPPORT 16. BALLOON FRAMING- WALL STUDS EXPOSED TO WIND LOADS SHALL BE CONTINUOUS FROM HORIZONTAL SUPPORT 16. BALLOON FRAMING- WALL STUDS EXPOSED TO WIND LOADS SHALL BE CONTINUOUS FROM HORIZONTAL SUPPORT 16. BALLOON FRAMING- WALL STUDS FROM HORIZONTAL SUPPORT 16. BALLOON FRAMING- WALL STUDY FROM HORIZONTAL SUPPORT 17. BALLOON FRAMING- HORIZONTAL SUPPORT 18. BALLOON FRAMING- WALL STUDY FROM HORIZONTAL SUPPORT 18. BALLOON FRAMING- WALLOON FROM HORIZONTAL SUPORT TO HORIZONTAL SUPPORT (FOUNDATION TO CEILING/ ROOF/FLOOR, OR FLOOR TO ROOF/CEILING) LOAD BEARING STUDS WITH HEIGHT GREATER THAN 12' SHALL BE MINIMUM 2X6 SYP. # 2 LUMBER SPACED 12"
  - O.C. OR AS SPECIFIED IN THE WINDSTORM DESIGN TEMPLATE LOAD BEARING STUDS WITH HEIGHT GREATER THAN 10' SHALL BE SYP NO. 2 LUMBER.
     2X4 LOAD BEARING STUDS OF SPECIES OTHER THAN SYP SHALL BE LIMITED IN HEIGHT ACCORDING TO TABLE
  - 3.208 OF THE WOOD FRAMED CONSTRUCTION MANUAL LATERALLY UNSUPPORTED PONY WALLS SHALL NOT BE USED FOR EXTERIOR WALLS.
  - 21
  - DOUBLE STUDS SHALL BE PROVIDED WHERE HOLDDOWN CONNECTORS ARE SPECIFIED BY THE WINDSTORM DESIGN EMPLATE
  - 22. DOUBLE STUDS SHALL BE FASTENED TOGETHER ACCORDING TO TABLE 4 AND **DETAILS E2, E3 & E4** 23. STUDS CARRYING HOLDDOWN LOADS SHALL FORM A LINE FROM 1ST FLOOR HOLDDOWN CONNECTOR TO 2ND FLOOR HOLDDOWN CONNECTOR OR AN ADDITIONAL HOLDDOWN CONNECTOR SHALL BE PROVIDED BELOW THE
  - 2ND FLOOR HOLDDOWN. SEE DETAILS ES & EG. STUDS CARRYING HOLDDOWN LOADS SHALL NOT BE NOTCHED, OR CUT
  - BOX OUT WINDOWS SHALL BE FULLY SHEATHED AND ANCHORED TO THE HEADER STUD PER DETAIL B7 26. TYPICAL GARAGE DOOR JAMB FRAMING PER DETAIL BS U.N.O.
  - SPECIAL RETURN DETAILS SHALL BE FRAMED ACCORDING TO DETAIL ES
  - HEADER/TRIMMER STUDS SHALL BE DOUBLED FOR OPENINGS 6' OR LARGER.

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- A BER END WALL FRAMING 29. GABLE END WALLS AND OFFSET GABLE ENDWALLS SHALL BE FRAMED ACCORDING TO **DETAIL F1 & F2**. 30. STRONG BACKS SHALL BE PROVIDED AT ALL GABLE END WALLS SPACED 4' O.C. AND FACE NAILED TO GABLE STUDS ACCORDING TO TABLE
- FLOOR FRAMING
- 31. 2ND FLOOR SOLE PLATE SHALL BE FASTENED TO RIM/DECK ACCORDING TO TABLE 4
- 32. FLOOR SHEATHING SHALL BE MIN. 5/8" WOOD SHEATHING
- 33. FLOOR SHEATHING PANEL COURSES SHALL BE STAGGERED 4
- 34. FLOOR SHEATHING SHALL BE FASTENED 6" O.C. ALONG PANEL EDGES AND 12" O.C. IN THE FIELD, FOR OFFSET FLOOR CONDITIONS, BLOCKING AT 1ST FLOOR PLATE SHALL BE CONSIDERED AND EDGE.
- 35. BAND/RIM JOIST SHALL BE MINIMUM 1" THICK BETWEEN 1ST STORY AND 2ND STORY PLATES (SOLID 2x BAND JOIST SHALL BE USED FOR NON-ENGINEERED FLOOR JOISTS).
- OFFSET FLOOR FRAMING (BRICK POCKET) SHALL BE FRAMED ACCORDING TO DETAIL E1 AND/OR B2. PROVIDE BLOCKING BETWEEN ALL FLOOR JOISTS OVER TOP PLATES @ OFFSET FRAMING AND ABOVE INTERIOR 37
- SHEARWALLS. ANCHOR BLOCKING TO 1ST FLOOR TOP PLATE W/ LTP4 CONNECTOR 12" O.C. OR EQUIV. 38. MODIFICATIONS TO THE FLOOR FRAMING INVOLVING THE WINDSTORM DESIGN SHALL BE AS SPECIFIED IN THE WINDSTORM DESIGN TEMPLATE.

56. IIN O

58.

- FRIT FRAMING SOFFIT OVERHANG TYPICAL FRAMING SHALL BE ACCORDING TO **DETAIL H1**.
- 40. LOOKOUT BLOCKS SHALL BE FRAMED ACCORDING TO DETAIL H3. 41. OUTLOOKERS SHALL BE FRAMED ACCORDING TO DETAIL H2
- PORCH/OVERHANG FRAMING
- OVERHANG SUPPORT POSTS SHALL BE MIN 4X4 SYP NO. 2 LUMBER (NO CEDAR). 43. HOLDDOWN CONNECTORS AT COLUMN BASES MAY BE NOTCHED INTO THE COLUMNS IN ORDER TO COVER WITH

WALL SHEATHING SHALL BE CONTINUOUS FROM THE TOE PLATE TO THE UPPER MEMBER OF THE DOUBLE TOP PLATE WITH UNSUPPORTED HORIZONTAL PANEL EDGES BLOCKED.
 WHERE SHEATHING IS NOT CONTINUOUS TO THE DOUBLE TOP PLATE, THE BOTTOM MEMBER OF THE TOP PLATE

SHEARWALL FASTENERS SHALL BE MINIMUM 8D COMMON NAILS (0.131 X 2.5") OR AS SPECIFIED IN THE TABLE 3 SHEARWALLS SHALL BE FASTENED 4" O.C. ALONG ALL PANEL EDGES AND ALONG PANEL EDGES AND BLOCKING

SPECIAL REFUND DETAILS SPECIFIED BY SPECIFIE

59. FOR OFFSET FLOOR CONDITIONS (BRICK POCKET), WALL SHEATHING SHALL BE APPLIED ACCORDING TO DETAIL

63. BLOCKING) WITH A SIMPSON LTP4 OR EQUIVALENT EVERY 12" O.C. U.N.O. ACCORDING TO DETAIL J2, J3 OR J4.

60. For stacked floor conditions, wall sheathing shall be applied according to **<u>detail j1</u>** 

61. SHEAR SHALL BE TRANSFERRED FROM ROOF AND FLOOR DIAPHRAGMS TO THE SHEARWALL BELO 62. EXTERIOR SHEARWALLS AND INTERIOR SHEARWALLS SHALL BE FASTENED TO A STRUT ( FLOOR JOIST OR

SHALL BE FACE NAILED FROM UNDERNEATH TO THE TOP MEMBER WITH 2-8D COMMON NAILS 6" O.C.

- MIN. 4" OF MATERIAL REMAINING TO FASTEN CONNECTOR BUILT UP COLUMNS SHALL BE FRAMED ACCORDING TO DETAIL
- HOLLOW COLUMNS SHALL BE ANCHORED ACCORDING TO DETAILS 12
- 46 OVERHANG SUPPORT POST MAXIMUM SPACING OF 12' UNO
- 47. LOAD BEARING PORCH BEAMS SHALL BE MIN. 2-2X12's SYP NO. 2 LUMBER. U.N.C
- 48. PORCH BEAMS SHALL ANCHORED TO INTERSECTING WALLS ACCORDING TO DETAIL B4
- SHEAR WALLS

THICKNESS OF 7/16" SHEATHING MAY BE ORIENTED VERTICALLY OR HORIZONTALLY.

SHEARWALLS SHALL BE FASTENED 12" O.C. IN THE FIELD U.N.O

- Exterior Walls and Gable End Walls shall be shearwalls U.N.O.
   Interior Shearwalls Shall be located as indicated by the Windstorm Design Plan.
- ALL SHEARWALLS SHALL BE FULLY SHEATHED WITH MIN. APA RATED PLYWOOD/OSB SHEATHING WITH A MIN.

TABLE 4- FASTENING REQUIREMENTS					
	FASTENING SCHEDULE				
TION	FASTENING	LOCATION			
	16D ( 3 1/2" X 0.135") @ 16" O.C. 3" X 0.131" NAILS @ 8" O.C.				
) wall panel	3 - 16D (3 1/2" X 0.135") @ 16" 4 - 3" X 0.131" NAILS @ 16"	shearwall locations			
d	2 - 16D (3 1/2" X 0.162") 3 - 3" X 0.131" NAILS	end nail			
e	4 - 80 (2 1/2" X 0.131") 4 - 3" X 0.131" NAIL	toenail			
	2 - 16D (3 1/2" X 0.162") 3 - 3" X 0.131" NAILS	end nail			
	16D ( 3 1/2" X 0.135") © 24" O.C. 3" X 0.131" NAILS © 8" O.C.				
35	16D (3 1/2" X 0.135") @ 16" O.C. 3" X 0.131" NAILS @ 12" O.C.				
		lap splice			
	3 - 8D (2 1/2" X 0.131")	toenail			
o plate	8D ( 2 1/2" X 0.131") @ 6" O.C. 3" X 0.131" NAILS @ 6" O.C.	toenail			
s and	0.C. 2 - 3" X 0.131" NAILS @	face nail			
der, two pieces	10" O.C. 16D (3 1/2 " X 0.162")	16" o.c. along edge			
o plate	3 - 8D (2 1/2" X 0.131") 5 - 3" X 0.131" NAILS	toenail			
ider to stud	4 - 8D (21/2" X0.131")	toenail			
aps over	3 – 16d ( 3 1/2" x 0.162") 4 – 3" x 0.131" nail	face nail			
o parallel	3 — 16D ( 3 1/2" X 0.162") 4 — 3" X 0.131" NAIL	face nail			
e	3 - 8D (2 1/2" X 0.131") 3 - 3" X 0.131" NAILS	toenail			
er studs	16D (3 1/2" X 0.162") 3" X 0.131" NAILS	12" o.c. 6" o.c.			
and beams	20D (4° X 0.192") 32° 0.C. 3° X 0.131° NAILS @ 24° 0.C.	FACE NAIL © TOP AND BOTTOM Staggered on opposite sides			
	2 — 20D (4" X 0.192") 3 — 3" X 0.131" NAILS	Face nail @ Ends and @ Each Splice			
ifter	3 – 10D (3" X 0.148") 5 – 3" X 0.131" NAILS	face nail			
	4 – 3" X 0.131" NAILS	toenail			
	2- 16D (3 1/2" X 0.162") 3 - 3" X 0.131" NAILS	face nail			
2-by ridge	2 - 16D (3 1/2" X 0.162") 3 - 3" X 0.131" NAILS	toenail			
	2 - 16D (3 1/2" X 0.162") 3 - 3" X 0.131" NAILS				
joist	3 – 16d (3 1/2" x 0.162") 4 – 3" x 0.131" nails	face nail			

TABLE 3- UPLIFT ANCHORAGE REQUIREMENTS						
ECTION	REQUIRED CAPACITY	SIMPSON	USP	TAMLYN		
le Top Plate	600 lbs.	H-8	RT7A	HT8		
g joists to ite (each joist)	600 lbs.	H-8	RT7A	HT8		
te to studs	600 lbs.	H-8	RT7A	HT8		
s to band joist uds (each stud)	600 lbs.	LSTA36	LSTA40	LTSA40		
n plate	420 lbs.	SSP	RSPT4	sptr		
king/trimmer	600 lbs.	LSTA12	MP4F	FAL		
stud to late	420 lbs.	SSP	RSPT4	SPTR		
eader header)	450 lbs.	LSTA (4 nails per side)	RSPT4 (4 nails per side)	LSTA (4 nails per side)		
ach rafter)	970 lbs.	LSTA12	LSTA-12	SS-12		
n to post	4,000 lbs.	(4) LSTA12	(4) MP4F	(4) FAL		
n to structure	2,000 lbs.	(2) LSTA12	(2) MP4F	(2) FAL		
o foundation	4,000 lbs.	HTT16, HTT22	stad14, htt22	ssad14, hah22		

CONNECTION

ana ceilina ioists

Double Top Plate (each joist)

2nd floor studs to band joist

ler end to king/trin

mmer/king stud t

sole/bottom plate Top plate to header

(16"o.c. along header

idge strap (each rafter)

hana hearn to nos

Overhana beam to structu

Support post to foundatio

CONNECTION

Sole plate to joist or blocki

2. SOLE PLATE TO JOIST OR

Top plate to stud

Stud to sole plate

Double Studs

Double top plates

Double top plates

Blocking between joists or rafte

Rim joist to top plate

Continuous header, two p

Continuous header to stud

Ceiling joists, laps over

. Ceiling joists to parallel

Rafters to plate

17. Build- up corner studs

18. Built-up girder and beams

19. Collar tie to rafter

20. Jack rafter to hip

21. Roof rafter to 2-by ridge

22. Joist to band joist

10. Top plates, laps and

12. Ceiling joists to plate

Locking of Braced Wall Pan

r 1st floor studs (each stud)

Double top plate to studs

Rafter to Double Top P

h rafter)

(each stud)

(each stud)

Stud to bottom plate



