

LEE'S SUMMIT, MO 64082

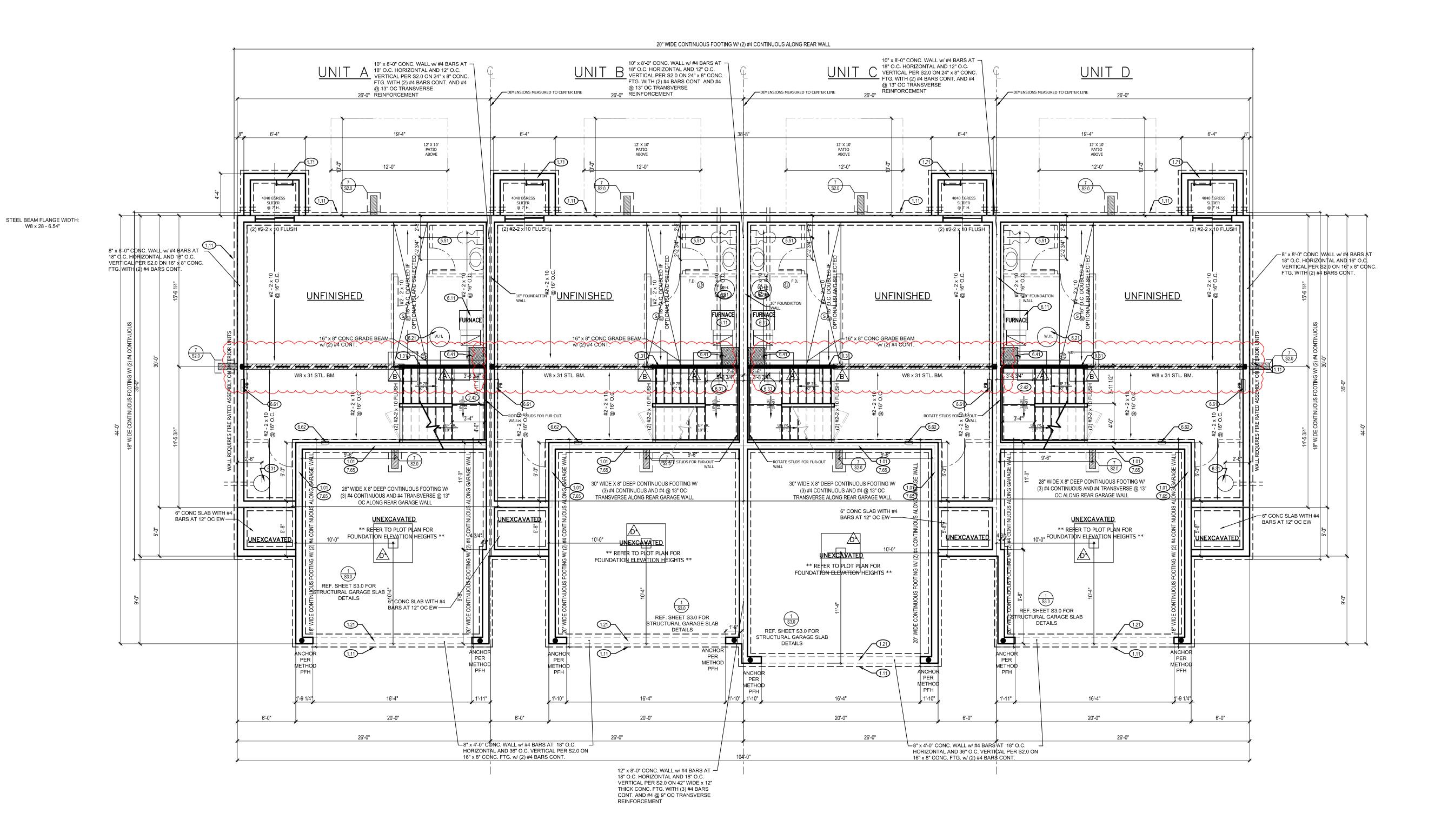
S DRAWING HAS BEEN PREPARED BY SUMMIT HOMES, OR UNDER THEIR DIRECT SUPERVISION AS AN STRUMENT OF SERVICE AND IS INTENDED FOR USE ONLY ON THIS PROJECT. ALL DRAWINGS, SPECIFICATIONS, AND DESIGNS, INCLUDING THE VERALL LAYOUT, FORM, AND COMPOSITION OF SPACES ARE PROTECTED BY COPYRIGHT REGISTERED O CPG. INC. ANY REPRODUCTION. USE. OF VITHOUT THE WRITTEN CONSENT FROM CPG. INC D/B/A SUMMIT HOMES EXCEPT AS REQUIRED FOR DDING AND CONSTRUCTION OF THIS PROJECT IS

UNIT A: 3716 SW WALSH DR UNIT B: 3714 SW WALSH DR UNIT C: 3712 SQ WALSH DR



EVERSTEAD IS RESPONSIBLE FOR STRUCTURAL SPECIFICATIONS ONLY. ARCHITECTURAL PLANS WERE PRODUCED BY OTHERS.

DIMENSIONS MEASURED FROM CENTERLINE OF PARTY WALL ASSEMBLY.



FOUNDATION PLAN NOTES

- 1.01 HOLD SILL PLATE BACK 4"
- 1.11 CONTINUOUS CONCRETE FOOTING
- 1.11 CONTINUOUS CONCRETE FOOTING
 1.21 RECESS TOP OF FOUNDATION WALL
- 1.31 2X4 STUD WALL WITH TREATED SILL PLATE
 1.71 CONCRETE WINDOW WELL FOR EGRESS WITH LADDER. PROVED SLEEVE THROUGH WALL FOR

FOUNDATION DRAIN. TOP OF WINDOW

- WELL TO BE 3" BELOW TOP OF FOUNDATION.

 2.34 PROVIDE ADDITIONAL BRACING FOR
- ISLAND ABOVE.
 2.42 FIRE RATED SHEETROCK UNDER
- 5.51 STUB OUT ONLY FOR FUTURE POWDER BATH. DRAIN LOCATION TO BE MARKED WITH REBAR AND CUT FLUSH TO FLOOR FINISH.
- 6.11 DIRECT FURNACE. FUEL BURNING
 APPLIANCES SHALL BE DIRECT
 VENTED TO EXTERIOR FOR
 COMBUSTION AIR.
- 6.21 HOT WATER HEATER WITH THERMAL EXPANSION CONTROL DEVICE
- 6.31 SUMP PIT AND PUMP. PROVIDE ELECTRICAL GFCI PROTECTION.
 PROVIDE SLEEVE THROUGH FOOTING.
 6.41 HVAC CHASE ABOVE

6.61 200 AMP ELECTRICAL PANEL.

- LOCATION TO BE DETERMINED ON SITE.

 6.62 UFER GROUND— VERIFY LOCATION
- WITH PROJECT MANAGER.

 7.65 LINE OF FLOOR ABOVE

CPC 64/04/202

clover bive

hive
120 SE 30TH ST.
LEE'S SUMMIT, MO 64082

816-246-6700

COPYRIGHT 2017

THIS DRAWING HAS BEEN PREPARED BY SUMMIT HOMES, OR UNDER THEIR DIRECT SUPERVISION AS AN INSTRUMENT OF SERVICE AND IS INTENDED FOR USE ONLY ON THIS PROJECT. ALL DRAWINGS, SPECIFICATIONS, AND DESIGNS, INCLUDING THE OVERALL LAYOUT, FORM, AND COMPOSITION OF SPACES ARE PROTECTED BY COPYRIGHT REGISTERED TO CPG, INC. ANY REPRODUCTION, USE, OR DISCLOSURE OF THE INFORMATION CONTAINED HEREIN WITHOUT THE WRITTEN CONSENT FROM CPG, INC. D/B/A SUMMIT HOMES EXCEPT AS REQUIRED FOR BIDDING AND CONSTRUCTION OF THIS PROJECT IS STRICTLY PROHIBITED.

ADDRESS:

UNIT A: 3716 SW WALSH DR UNIT B: 3714 SW WALSH DR UNIT C: 3712 SQ WALSH DR UNIT D: 3710 SW WALSH DR

> JUNEAU OSAGE # 10

PROFESSIONAL SEAL:

CHRISTOPHER
PAUL
DAYIS
NUMBER
PE-2015016986
04/03/2023

EVERSTEAD IS RESPONSIBLE FOR
STRUCTURAL SPECIFICATIONS

ONLY. ARCHITECTURAL PLANS
WERE PRODUCED BY OTHERS.

EVERSTEAD

3741 NE TROON DRIVE SUITE 200 LEE'S SUMMIT, MO 64064 816-399-4901

> DRAWN BY: S. SCARBO

ISSUE DATE: 3.15.2023

SHEET NUMBER:

GENERAL NOTES

DIMENSIONAL LUMBER IS LABELED PER INDUSTRY STANDARD TERMINOLOGY. ACTUAL LUMBER SIZING IS EXPECTED TO VARY PER VENDOR.

WINDOW SIZES ARE WRITTEN IN FEET AND INCHES PER INDUSTRY STANDARDS. EX: 3050 SH = 3'-0" X 5'-0" SINGLE HUNG, 3066 FIX = 3'-0" X 6'-6" FIXED.

FOUNDATION LEVEL PLAN (1)

MIN. STUD PACK OF (4) 2 x 4 OR (4) 2 x 6 DOUGLAS FIR LARCH #2 (DEPENDING ON WALL THICKNESS) BELOW EACH BEARING POINT OF EACH GIRDER TRUSS, UNLESS OTHERWISE NOTED. STUD PACKS SHALL BE CARRIED DOWN TO FOUNDATION OR LOAD SUPPORTING MEMBER.

PROVIDE 2X SOLID BLOCKING SUPPORT BELOW ALL POINT LOADS CONTINUOUS TO BEARING STRUCTURE AND/OR FOUNDATION BELOW.

INTERIOR LOAD BEARING WALL (EXTERIOR WALLS ARE ASSUMED LOAD BEARING)

DIMENSIONS MEASURED FROM CENTERLINE OF PARTY WALL ASSEMBLY.

MAIN FLOOR PLAN NOTES

- 1.22 EXPOSED TOP OF FOUNDATION WALL. 2.32 INSULATE CANTILEVER AS REQUIRED
- PRIOR TO BLOCKING 2.45 STAIRS TO LOWER LEVEL UNFINISHED
- 2.51 3 STUDS BETWEEN WINDOW UNITS 3.45 4X4 CEDAR POST. 1X6 TRIM AT BASE. 1X4 TRIM AT TOP.
- 6.42 HVAC BUMP TRUSSES AS NECESSARY FOR HVAC ACCESS.
- 7.65 LINE OF FLOOR ABOVE 7.71 20 MINUTE FIRE RATED SOLID CORE WITH SELF-CLOSING HINGES

120 SE 30TH ST. LEE'S SUMMIT, MO 64082 816-246-6700

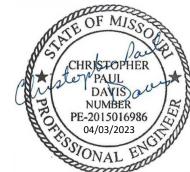
clover

COPYRIGHT 2017 S DRAWING HAS BEEN PREPARED BY SUMM HOMES. OR UNDER THEIR DIRECT SUPERVISION AS AT INSTRUMENT OF SERVICE AND IS INTENDED FOR US ONLY ON THIS PROJECT. ALL DRAWING SPECIFICATIONS, AND DESIGNS, INCLUDING T SPACES ARE PROTECTED BY COPYRIGHT REGISTERS O CPG. INC. ANY REPRODUCTION. USE. VITHOUT THE WRITTEN CONSENT FROM CPG, II D/B/A SUMMIT HOMES EXCEPT AS REQUIRED FO

TRICTLY PROHIBITED.

UNIT A: 3716 SW WALSH DR UNIT B: 3714 SW WALSH DR UNIT C: 3712 SQ WALSH DR UNIT D: 3710 SW WALSH DR

PROFESSIONAL SEAL:



EVERSTEAD IS RESPONSIBLE FOR STRUCTURAL SPECIFICATIONS ONLY. ARCHITECTURAL PLANS WERE PRODUCED BY OTHERS.

> **EVERSTEAD** 3741 NE TROON DRIVE SUITE 200 LEE'S SUMMIT, MO 64064 816-399-4901

> > DRAWN BY: S. SCARBO

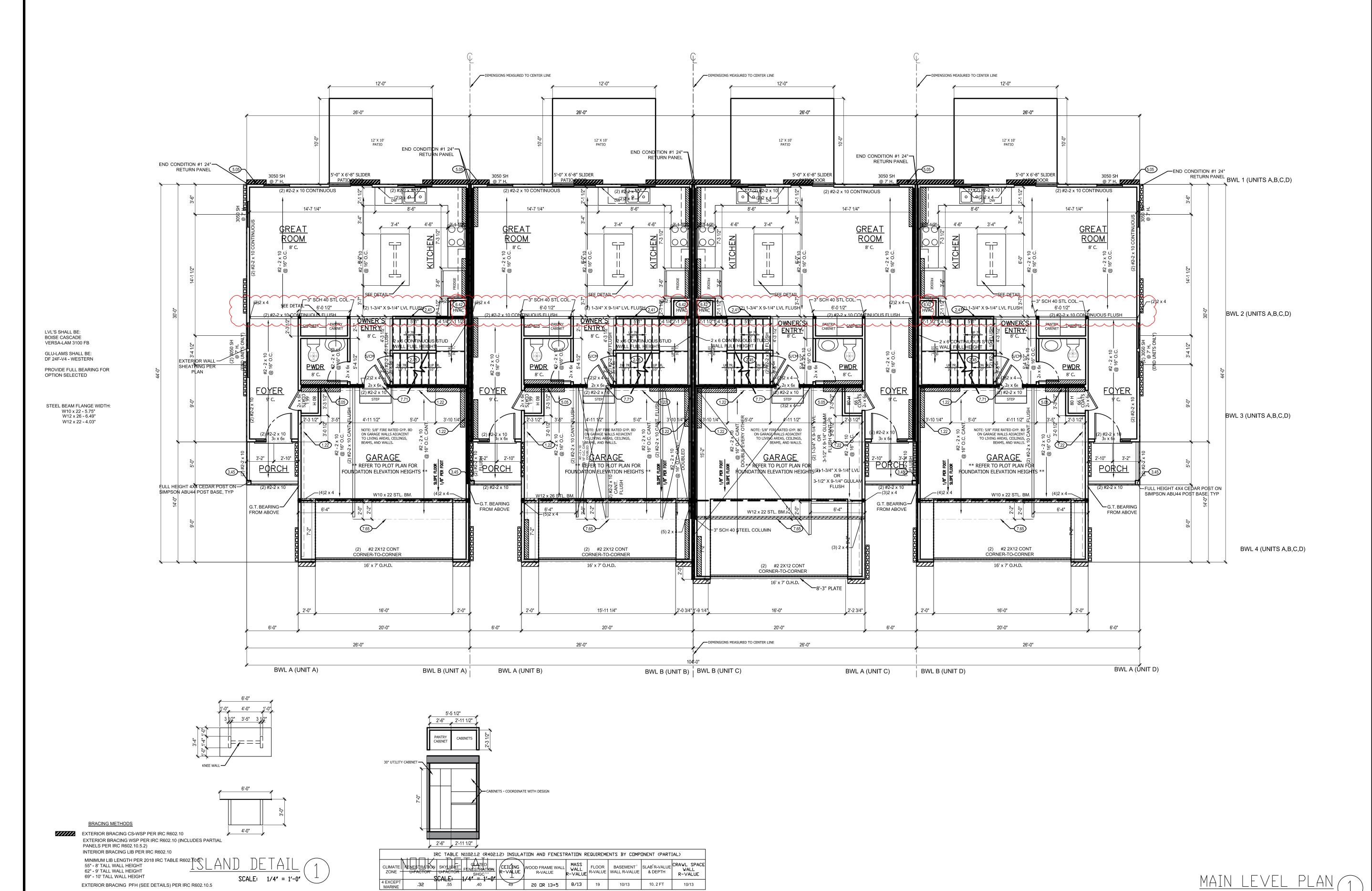
ISSUE DATE: 3.15.2023

GENERAL NOTES

DIMENSIONAL LUMBER IS LABELED PER INDUSTRY STANDARD TERMINOLOGY. ACTUAL LUMBER SIZING IS EXPECTED TO VARY PER VENDOR.

WINDOW SIZES ARE WRITTEN I FEET AND INCHES PER INDUSTRY STANDARDS. EX: 3050 SH = 3'-0" X 5'-0" SINGLE HUNG, 3066 FIX = 3'-0" X 6'-6" FIXED.





BEDROOM #3

LAUNDRY

UNIT C

(2) #2 2 x 10 (2) #2-2 x 10

- DIMENSIONS MEASURED TO CENTER LINE

BEDROOM #2

8' C. -2 x 6 CONTINUOUS STUD

BEDROOM

G.T.

4.51 VAULT TO 9' C.

(2) #2-2 x 10 CONTINUOUS

2050 SH 3050 SH 2050 SH @ 7'-6" H. EGRESS @ 7'-6" H. @ 7'-6" H.

BWL B (UNIT B) BY DBIE(ISIN) THE OF THE OF THE SINE OF

WALL FULL HEIGHT

DIMENSIONS MEASURED FROM CENTERLINE OF PARTY WALL ASSEMBLY.

UNIT D

G.T. BEARING —

(2) #2-2 x 10 (2) #2-2 x 10

10000000000

G.T. BEARING —

SPACE FLOATS OVER EXTERIOR SPACE

3'-0" 3'-0"

BWL A (UNIT D)

BEDROOM #3

<u>LAUNDRY</u>

BWL 1 (UNITS A,B,C,D)

BWL 2 (UNITS A,B,C,D)

FBWL (UNITS A.B.C.D)

BWL 4 (UNITS A,B,C,D)

SCALE: 1/4" = 1'-0"

- DIMENSIONS MEASURED TO CENTER LINE

кожожожожож

BEDROOM #2

∠2 x 6 CONTINUOUS STUD

WALL FULL HEIGHT

80 H

G.T. BEARING #1

-END CONDITION #1 24"

(2) #2-2 x 10 CONTINUOUS

2050 SH 3050 SH 2050 SH @ 7'-6" H. EGRESS @ 7'-6" H.

@ 7'-6" H.

4'-2" 2'-8" 2'-8" 4'-2"

DIMENSIONS MEASURED TO CENTER LINE

BWL A (UNIT C) BWL B (UNIT D)

UPPER FLOOR PLAN NOTES

- 2.12 2X6 STUD WALL
- 2.13 44" PONY WALL WITH TRIM CAP
- 2.31 SIX SIDED TUB ASSEMBLY INCLUDING THERMOPLY ON EXTERIOR WALL TO 2" ABOVE TOP OF TUB DECK OR
- TUB/SHOWER UNIT
- 4.51 SINGLE BOX VAULT 5.23 FIBERGLASS SHOWER UNIT

6.42 HVAC - BUMP TRUSSES AS

- NECESSARY FOR HVAC ACCESS. 6.51 1'-10"X3'-0" MINIMUM ATTIC ACCESS WITH 3/4" BACKER BOARD AND 2 LATCHES. BUMP TRUSSES FOR ATTIC
- 7.66 LINE OF FLOOR BELOW

clover 120 SE 30TH ST. LEE'S SUMMIT, MO 64082

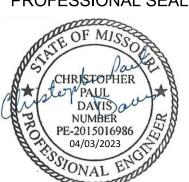
816-246-6700

COPYRIGHT 2017 3 DRAWING HAS BEEN PREPARED BY SUMM HOMES, OR UNDER THEIR DIRECT SUPERVISION AS A INSTRUMENT OF SERVICE AND IS INTENDED FOR USI ONLY ON THIS PROJECT. ALL DRAWING SPECIFICATIONS, AND DESIGNS, INCLUDING T SPACES ARE PROTECTED BY COPYRIGHT REGISTERS O CPG. INC. ANY REPRODUCTION. USE. SCLOSURE OF THE INFORMATION CONTAINED HE WITHOUT THE WRITTEN CONSENT FROM CPG, IND/B/A SUMMIT HOMES EXCEPT AS REQUIRED FO TRICTLY PROHIBITED.

ADDRESS: UNIT A: 3716 SW WALSH DR

UNIT B: 3714 SW WALSH DR UNIT C: 3712 SQ WALSH DR UNIT D: 3710 SW WALSH DR

PROFESSIONAL SEAL:



EVERSTEAD IS RESPONSIBLE FOR STRUCTURAL SPECIFICATIONS ONLY. ARCHITECTURAL PLANS WERE PRODUCED BY OTHERS.

EVERSTEAD 3741 NE TROON DRIVE SUITE 200 LEE'S SUMMIT, MO 64064 816-399-4901

> DRAWN BY: S. SCARBO

ISSUE DATE: 3.15.2023

GENERAL NOTES

DIMENSIONAL LUMBER IS LABELED PER INDUSTRY STANDARD TERMINOLOGY. ACTUAL LUMBER SIZING IS EXPECTED TO VARY PER VENDOR.

WINDOW SIZES ARE WRITTEN IN FEET AND INCHES PER INDUSTRY STANDARDS. EX: 3050 SH = 3'-0" X 5'-0" SINGLE HUNG, 3066 FIX = 3'-0" X 6'-6" FIXED.

SHEET NUMBER:

BRACING METHODS

EXTERIOR BRACING CS-WSP PER IRC R602.10

PANELS PER IRC R602.10.5.2)

55" - 8' TALL WALL HEIGHT

69" - 10' TALL WALL HEIGHT

62" - 9' TALL WALL HEIGHT

EXTERIOR BRACING WSP PER IRC R602.10 (INCLUDES PARTIAL

MINIMUM LIB LENGTH PER 2018 IRC TABLE R602.10.5:

INTERIOR BRACING LIB PER IRC R602.10

IRC TABLE N1102.1.2 (R402.1.2) INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT (PARTIAL) 49 | **20** | **R** 13+5 | **8**/13 | 19 | 10/13 | 10, 2 FT | 10/13

GIRDER TRUSS BEARING:

AND/OR FOUNDATION BELOW.

UNIT A

(2) #2-2 x 10

G.T. BEARING

BEDROOM #3

KXXXXXX

G.T. BEARING -

G.T. BEARING-

END CONDITION #1 24"— RETURN PANEL

BWL A (UNIT A)

EXTERIOR SPACE

7.66

26'-0"

MIN. STUD PACK OF (4) 2 x 4 OR (4) 2 x 6 DOUGLAS FIR

ARCH #2 (DEPENDING ON WALL THICKNESS) BELOW

EACH BEARING POINT OF EACH GIRDER TRUSS, UNLESS OTHERWISE NOTED. STUD PACKS SHALL BE

PROVIDE 2X SOLID BLOCKING SUPPORT BELOW ALL POINT LOADS CONTINUOUS TO BEARING STRUCTURE

UNIT B

26'-0"

68 26 x 68

LAUNDRY

7.66

DIMENSIONS MEASURED TO CENTER LINE

(2) #2<mark>-</mark>2 x 10

KOHOHOHOHOHOHOH

BEDROOM #2

<u>BEDROOM</u>

(2) #2-2 x 10

2050 SH 5058 SPNDJT3 PNH#1 24". @ 7'-6" H. EGRESS RET FRN FANEL

2'-8" 2'-8" 4'-2"

@ 7'-6" H.

#1 vault to 9' c. 4.51

2 x 6 CONTINUOUS STUD

(200000000)

DIMENSIONS MEASURED TO CENTER LINE

BEDROOM #3

(DOCCOCCO) (DOCCOCCO)

BEDROOM #2

BEDROOM ... G.T. BEARIN'

2050 SH 5090 SHOND SHOND H#1 24" ASSEMBLY - FINISHED

@ 7'-6" H. EGRESS RETURN PANEL 134" SPACE FLOATS OVER
EXTERIOR SPACE

BWL B (UNIT A) BWL A (UNIT B)

⁹ (2) #2-2 x 10 CONTINUOUS

4'-2" 2'-8" 2'-8" 4'-2"

2 x 6 CONTINUOUS STU⁸DC.

WALL FULL HEIGHT —

CARRIED DOWN TO FOUNDATION OR LOAD SUPPORTING MEMBER.

EXTERIOR BRACING PFH (SEE DETAILS) PER IRC R602.10.5 INTERIOR LOAD BEARING WALL (EXTERIOR WALLS ARE ASSUMED LOAD BEARING) TRUSS ROOF NOTES: (BY OTHERS)

1) DESIGNED FOR LIGHT ROOF COVERING

TOP CHORD:
LIVE LOAD/SNOW LOAD (PSF): 25

DEAD LOAD (PSF): BOTTOM CHORD: ` DEAD LOAD(PSF):

2) ALL EXTERIOR AND/OR LOAD BEARING WALL HEADERS SHALL BE MIN. (2) #2 2 x 10 UNLESS OTHERWISE NOTED.

3) CONSULT ENGINEER IF TRUSSES BEAR ON INTERIOR WALLS SHOWN AS NON-LOAD BEARING ON APPROVED PRINTS.

= ROOF TRUSS FRAMING DIRECTION

"G.T." = GIRDER TRUSS LOCATION

= INTERIOR LOAD BEARING WALL

4) ROOF IS ENGINEERED TO COMPLY WITH IRC 802

UNIT A

- 711 - \

1 8/12 | G.T. BEARING

G.T.

G.T. BEARING —

G.T. BEARING-

GIRDER TRUSS BEARING:
MIN. STUD PACK OF (4) 2 x 4 OR (4) 2 x 6 DOUGLAS FIR
LARCH #2 (DEPENDING ON WALL THICKNESS) BELOW
EACH BEARING POINT OF EACH GIRDER TRUSS,
UNLESS OTHERWISE NOTED. STUD PACKS SHALL BE
CARRIED DOWN TO FOUNDATION OR LOAD
SUPPORTING MEMBER SUPPORTING MEMBER.

<u>UNIT B</u>

G.T. BEARING

G.T.

UNIT C

G.T. BEARING __G.T._ ___ _

8/12

G.T. BEARING

G.T. BEARING —

F = = ± ;

TRUSSES BEAR OF

BEAM

~7'-3" PLATE

UNIT D

 G.T. BEARING-

8/12 G.T. BEARING-

G.T. BEARING

6'-0"

PROVIDE 2X SOLID BLOCKING SUPPORT BELOW ALL POINT LOADS CONTINUOUS TO BEARING STRUCTURE AND/OR FOUNDATION BELOW.

ROOF PLAN NOTES

4.11 MINIMUM ROOFING COMPOSITION— 30 YR COMPOSITE SHINGLES ON 15# FELT ON 1/2" OSB SHEATHING OR AS

REQUIRED BY CODE. 4.13 STANDING SEAM METAL ROOF.
INSTALL PER CODES AND
MANUFACTURER'S RECOMMENDATIONS. 4.31 BUILD CRICKET VALLEY AWAY FROM INTERSECTION FOR POSITIVE DRAINAGE.

CPG 64/202

120 SE 30TH ST. LEE'S SUMMIT, MO 64082 816-246-6700

COPYRIGHT 2017

THIS DRAWING HAS BEEN PREPARED BY SUMMIT HOMES, OR UNDER THEIR DIRECT SUPERVISION AS AN INSTRUMENT OF SERVICE AND IS INTENDED FOR USE ONLY ON THIS PROJECT. ALL DRAWINGS SPECIFICATIONS, AND DESIGNS, INCLUDING THE OVERALL LAYOUT, FORM, AND COMPOSITION OF SPACES ARE PROTECTED BY COPYRIGHT REGISTERED TO CPG, INC. ANY REPRODUCTION, USE, OR DISCLOSURE OF THE INFORMATION CONTAINED HEREIN WITHOUT THE WRITTEN CONSENT FROM CPG, INC. WITHOUT THE WRITTEN CONSENT FROM CPG, INC D/B/A SUMMIT HOMES EXCEPT AS REQUIRED FOR BIDDING AND CONSTRUCTION OF THIS PROJECT STRICTLY PROHIBITED.

ADDRESS:

UNIT A: 3716 SW WALSH DR UNIT B: 3714 SW WALSH DR UNIT C: 3712 SQ WALSH DR UNIT D: 3710 SW WALSH DR

JUNEAU OSAGE # 10

PROFESSIONAL SEAL:



EVERSTEAD IS RESPONSIBLE FOR STRUCTURAL SPECIFICATIONS ONLY. ARCHITECTURAL PLANS WERE PRODUCED BY OTHERS.

> **EVERSTEAD** 3741 NE TROON DRIVE SUITE 200 LEE'S SUMMIT, MO 64064 816-399-4901

> > DRAWN BY: S. SCARBO

ISSUE DATE: 3.15.2023

GENERAL NOTES

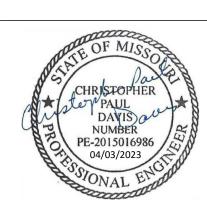
DIMENSIONAL LUMBER IS LABELED PER INDUSTRY STANDARD TERMINOLOGY. ACTUAL LUMBER SIZING IS EXPECTED TO VARY PER VENDOR.

WINDOW SIZES ARE WRITTEN IN FEET AND INCHES PER INDUSTRY STANDARDS. EX: 3050 SH = 3'-0" X 5'-0" SINGLE HUNG, 3066 FIX = 3'-0" X 6'-6" FIXED.



SHEET NUMBER:

EVERSTEAD WWW.EVERSTEAD.COM 3741 NE TROON DR SUITE 200 LEES SUMMIT, MO 64064 (816) 399-4901



EVERSTEAD IS RESPONSIBLE FOR STRUCTURAL SPECIFICATIONS ONLY. ARCHITECTURAL PLANS WERE PRODUCED BY OTHERS.

EVERSTEAD 3741 NE TROON DRIVE SUITE 200 LEE'S SUMMIT, MO 64064 816-399-4901

SHEET#

GENERAL NOTES

PLANS SHALL COMPLY WITH THE 2018 INTERNATIONAL RESIDENTIAL CODE (IRC) WITH AMENDMENTS AS ADOPTED BY THE APPROPRIATE GOVERNING JURISDICTION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD IF ANY CHANGES OR DEVIATIONS FROM THE PLAN ARE MADE DURING CONSTRUCTION. THE ENGINEER OF RECORD MAY REQUIRE REVISED DRAWING OR CALCULATIONS AT ITS

IF DISCREPANCIES ARE IDENTIFIED THE MOST CONSERVATIVE SPECIFICATION SHALL APPLY.

LOADING

LIGHT ROOF	10 PSF	
HEAVY ROOF	+10 PSF	(CONCRETE, SLATE, TILE)
ROOF + CEILING (NO STORAGE)	15 PSF	
ROOF + CEILING (STORAGE)	20 PSF	
CEILING JOISTS (STORAGE)	10 PSF	
EXTERIOR BACONIES / DECK	10 PSF	
INTERIOR FLOOR (MAIN FLOOR)	15 PSF	
INTERIOR FLOOR (UPPER FLOORS)	10 PSF	
8" THICK MASONRY WALL	80 PSF	
6" THICK MASONRY WALL	85 PSF	
EXTERIOR LIGHT FRAMED WOOD WALLS	15 PSF	
INTERIOR LIGHT FRAMED WOOD WALLS	10 PSF*	
*(INTERIOR WALLS I	NCLUDED IN	15 PSF DEAD LOAD)

<u>LIVE</u>		
ROOF LIVE LOAD FLOOR LIVE LOAD GARAGE	20 PSF 40 PSF 50 PSF	(HABITABLE)
STORAGE GUARDRAIL	20 PSF	(UN-INHABITABLE)
CONTINUOUS LINEAR MAXIMUM POINTLOAD	50 PLF 200 LBS	
SNOW		
GROUND SNOW LOAD	20 PSF	
WIND		
ULTIMATE DESIGN WIND SPEED VELOCITY	115 MPH	

SOIL AND SITE ASSUMPTIONS:

EXPOSURE CATEGORY

- FOUNDATION DESIGN ASSUME A MINIMUM SOIL BEARING PRESSURE FOR THE SITE OF 1,500 PSF. CONTRACTOR TO VISUALLY INSPECT SITE OR PROVIDE GEOTECHNICAL INVESTIGATION TO VERIFY MINIMUM ACCEPTABLE SOIL CONDITIONS SW, SP, SM, SC, GM, AND GX AS DEFINED PER IRC TABLE R301.5. THE CONTRACTOR IS RESPONSIBLE FOR ANY SOIL CONDITION THAT DOES NOT MEET THE MINIMUM REQUIREMENTS AND CONTACTING THE ENGINEER OF RECORD.
- PROVIDE A MINIMUM SOIL COVER OF <u>36 INCHES</u> MEASURED FROM THE BOTTOM OF CONCRETE ON ALL FOUNDATIONS.
- ACCESSORY STRUCTURES WITH AN EAVE HEIGHT LESS THAN 10'-0" AND AN AREA LESS THAN 600 FT MAT PROVIDE A MINIMUM SOIL COVER OF 12 INCHES MEASURED FROM THE BOTTOM OF CONCRETE.
- 4. SITE GRADING SHALL PROVIDE POSITIVE DRAINAGE AWAY FROM THE STRUCTURE AT A MINIMUM OF
- 5. LATERAL SOIL PRESSURES ACTIVE 30 PSF AT-REST 60 PSF

PASSIVE 150 PSF

FOUNDATION NOTES:

FOUNDATION ANCHORAGE (IRC 403.1.6)

SILL PLATES SHALL BE BOLTED TO THE FOUNDATION WALL WITH A MINIMUM 1/2" DIAMETER ANCHOR BOLTS EMBEDDER AT LEAST 7" INTO THE CONCRETE. BOLTS SHALL BE SPACED NO GREATER THAN 6' 0.C. THERE SHALL BE A MINIMUM OF TWO BOLTS PER PLATE SECTION, WITH A BOLT PLACED WITHIN 12" AND NOT CLOSER THAN 7 BOLT DIAMETERS. OF THE END OF EACH PLATE SECTION. A PROPERLY SIZED NUT AND WASHER SHALL BE TIGHTENED ON EACH BOLT TO THE PLATE. (NOTE: 7" EMBEDMENT + 1-1/2" SILL PLATE + 3/4" FOR NUT AND WASHER EXCEEDS A 9" LONG BOLT.)

WALL BRACING METHODS PER IRC R602 MAY REQUIRE ADDITIONAL ANCHORAGE.

CONCRETE SLABS PLACED ON FILL MATERIAL WHICH EXCEEDS 24" OF COMPACTED GRANULATED MATERIAL (SAND OR GRAVEL) OR 8" OF EARTH: THIS MAY OCCUR AT GARAGE FLOOR FILLS, OR OVER EXCAVATED AREAS UNDER FLOOR SLABS. THE DESIGN AND INSTALLATION DETAILS IN THIS DOCUMENT (WHERE APPLICABLE BASED ON SIZE AND SPACING LIMITATIONS) MAY BE USED IN LIEU OF PROVIDING A SEPARATE DESIGN. STRUCTURAL SLABS EXCEEDING THE SPANS AND CONDITIONS OF THE APPROVED DETAILS SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER.

SLABS AT MAX 4' OVER-DIG ADJACENT TO FOUNDATION WALL: WHERE SOIL IS EXCAVATED FOR A MAXIMUM DIMENSION OF 4' HORIZONTALLY ADJACENT TO A FOUNDATION WALL, THE STANDARD OVER-DIG DETAIL MAY BE USED IN LIEU OF A COMPLETE STRUCTURAL SLAB. SEE "TYPICAL FOOTING/FOUNDATION WALL/STANDARD SLAB AT MAX 4' OVER-DIG DIAGRAM FOR DETAILS.

VAPOR RETARDER / BARRIER (IRC R506.2.3)

A 6 MIL POLYETHYLENE OR APPROVED VAPOR RETARDER WITH JOINTS LAPPED A MINIMUM OF 6" IS REQUIRED BETWEEN THE CONCRETE FLOOR SLAB AND THE BASE COURSE OR PREPARED SUBGRADE, (NOT REQUIRED FOR GARAGE SLABS OR DETACHED ACCESSORY BUILDINGS)

FOUNDATION AND LOT GRADING (IRC R401.3)

GRADES SHALL BE SLOPED AWAY FROM THE FOUNDATION A MINIMUM OF 6" IN THE FIRST 10'. ALTERNATE APPROACHES MAY BE APPROVED IF THE ALTERNATE DESIGN IS EQUIVALENT IN EFFECTIVENESS AND PERFORMANCE, AND PROVIDES FOR POSITIVE SITE DRAINAGE.

IRC R403.1.4

- THE BOTTOM OF ALL FOOTINGS SHALL EXTEND NOT LESS THAN 36" BELOW GRADE FOR FROST
- FOOTINGS FOR FREESTANDING ACCESSORY STRUCTURES WITH AN AREA OF 600 SF OR LESS AND AN EAVE HEIGHT OF 10' OR LESS SHALL EXTEND BELOW GRADE A MINIMUM OF 12".

FOOTINGS:

EXTERIOR WALLS, BEARING WALLS, COLUMN AND PIERS SHALL BE SUPPORTED ON CONTINUOUS SOLID MASONRY OR CONCRETE FOOTINGS, OR APPROVED STRUCTURAL SYSTEM TO SAFELY SUPPORT THE IMPOSED LOADS AND SHALL BE SIZED AND REINFORCED IN ACCORDANCE WITH THIS STANDARD OR SHALL BE ENGINEERED DESIGN. FOOTINGS UNDER FOUNDATION WALLS SHALL BE CONTINUOUS AROUND THE STRUCTURE AND FROM ONE LEVEL TO THE NEXT. THE CONTINUOUS TRANSITIONS BETWEEN FOOTINGS AT DIFFERENT LEVELS ENCLOSING USABLE SPACE SHALL BE MADE BY APPROVED SOLID JUMPS OR SUPPORT SYSTEMS TO PROVIDE SAFE SUPPORT OF THE STRUCTURE. SEE "TYPICAL FOOTING/FOUNDATION WALLS/STANDARD SLAB AT MAXIMUM 4" OVER-DIG AND "FOOTING JUMP" DIAGRAMS FOR MORE DETAIL (PER KC, MO STANDARDS)

CONCRETE

- 1. ALL CONCRETE CONSTRUCTION SHOULD CONFORM TO ACI 318-11 AND THE 2018 INTERNATIONAL
- 2. THE MINIMUM CONCRETE 28 DAY COMPRESSIVE STRENGTH SHALL BE AS SPECIFIED IN IRC TABLE
- 3. CONCRETE MIX TO UTILIZE A MAXIMUM WATER-CEMENT MATERIALS RATIO OF 0.45 FOR ALL APPLICATIONS. ALL CONCRETE TO HAVE MAXIMUM 0.10 PERCENT WATER SOLUBLE CHLORIDE CONTENT BY WEIGHT OF CEMENT. ADMIXTURES SHALL NOT CONTAIN ANY CHLORIDES.
- 4. CONCRETE POURED AGAINST AN EXISTING SURGACE SHOULD BE ROUGHENED TO A MINIMUM 1/4 INCH AMPLITUDE.
- 5. REBAR CLEAR DISTANCE SHALL BE AS FOLLOWS: -CAST AGAINST AND PERMANENT CONTACT WITH GROUND3 IN -EXPOSED TO WEATHER OR IN CONTACT WITH GROUND - NOT EXPOSED TO WEATHER OR GROUND
- 6. CONCRETE MIX DESIGN SHALL BE 6% (±1%) AIR-ENTRAINED FOR GARAGE SLABS, FOOTINGS, WALLS, OR FLATWORK EXPOSED TO WEATHER.
- 7. SHORING AND RESHORING: -SHORING AND SUPPORTING FORMWORK SHALL NOT BE REMOVED FROM HORIZONTAL MEMBERS BEFORE CONCRETE STRENGTH REACHES 70% OF STRENGTH DETERMINED BY CYLINDERS OR 28

-SHORING MAY NOT BE REMOVED SOONER THAN RECOMMENDED BY ASTM 374-04 SECTION 3.7.2.3.

MINIMUM STANDARDS

CONCRETE SHALL BE 6% (± 1%) AIR-ENTRAINED FOR GARAGE SLABS AND FOR ALL LOCATION'S FOOTINGS, WALLS OR FLATWORK WHERE EXPOSED TO WEATHER. REBAR SHALL BE MINIMUM 60 KSI UNLESS NOTED OTHERWISE. REINFORCING BAR SHALL BE GRADE 60 MINIMUM.

CONCRETE REINFORCEMENT STEEL

- REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60.
- SMOOTH BARS OR WELDED WIRE FABRIC SHALL CONFORM TO ASTM 185.
- 3. ALL REBAR LAP SPLICES SHALL BE CLASS B LAP SPLICES AS SHOWN ON THE LAP SPLICE SCHEDULE.
- 4. DEVELOPMENT LENGTH NOTED IS EQUAL TO 80% OF THE LENGTH NOTED IN THE LAP SPLICE SCHEDULE.
- 5. 90% HOOK SHOWN IN DRAWINGS SHALL BE STANDARD PER ACI 318-14 -STRAIGHT EXTENSION LENGTH = $12x\emptyset_{BAR}$ -BEND DIAMETER = $12X\emptyset_{BAR}$
- 6. LAP SPLICE SCHEDULE (SEE TABLE 1.1)

HOOKED DOWELS:

- 7.1. HOOKED DOWELS FROM FOUNDATIONS TO WALL SHALL BE PROVIDED TO MATCH VERTICAL WALL
- REINFORCING AND EXTENDED TO 3" CLEAR FROM BOTTOM OF FOUNDATION 7.2. HOOKED DOWELS MATCH SLAB REINFORCING FROM SLAB TO WALLS OR SLAB TO FOUNDATION
- 8. PROVIDE 2 #5 BARS AROUND PERIMETER OF ALL SUSPENDED SLABS
- 9. HORIZONTAL WALL REINFORCING SHALL TERMINATE AT THE END OF THE WALL WITH A STANDARD
- 10. TOP AND BOTTOM HORIZONTAL REINFORCING SHALL BE PLACED 1-1/2" TO 2" FROM THE TOP AND BOTTOM OF THE WALL

FOOTNOTES:

- 1. WALL HEIGHT IS MEASURED FROM THE TOP OF THE WALL TO THE TOP OF THE FLOOR SLAB.
- 2. VERTICAL REINFORCEMENT FOR CONCRETE WALLS THAT ARE NOT FULL HEIGHT AND FOR REINFORCEMENT SPACED 24" O.C. MAY BE PLACED IN THE MIDDLE OF THE WALL. OTHER WALLS SHALL HAVE VERTICAL REINFORCEMENT PLACE AS FOLLOWS:
- A. 8" WALL MINIMUM 5" FROM THE OUTSIDE FACE. B. 10" WALL - MINIMUM 6-3/4" FROM THE OUTSIDE FACE.

C. EXTEND BARS TO WITHIN 8" OF THE TOP OF THE WALL.

- 3. HORIZONTAL REINFORCEMENT:
 - A. ONE BAR SHALL BE PLACED WITHIN 12" OF THE TOP OF THE WALL.
 - B. OTHER BARS SHALL BE EQUALLY SPACED WITH SPACING NOT TO EXCEED 24" O.C. C. HORIZONTAL BARS SHOULD BE AS CLOSE TO THE TENSION FACE AS POSSIBLE (INTERIOR); AND BEHIND THE VERTICAL REINFORCEMENT (I.E. 2" TOWARD THE INSIDE).
- D. SUPPLEMENTAL REINFORCEMENT AT CORNERS PLACE 1 #4 REBAR 48" LONG AT 45 DEGREE ANGLE AT CORNERS OF OPENINGS. PLACE REINFORCEMENT WITHIN 6" OF THE EDGE OF INSIDE
- 4. REINFORCEMENT SHALL BE LAPPED A MINIMUM 24" AT ENDS, SPLICES, AND AROUND CORNERS.
- 5. AT MASONRY LEDGES THE MINIMUM WALL THICKNESS SHALL BE 3-1/2". LEDGES SHALL NOT EXCEED A DEPTH OF MORE THAN 24" BELOW THE TOP OF THE WALL FOR WALL THICKNESS LESS THAN 4" PROVIDE #4 BARS AT MAXIMUM 24" O.C. TO WITHIN 8" OF THE TOP OF THE WALL.
- 6. STRAIGHT WALLS MORE THAN 5' TALL AND MORE THAN 16' LONG SHALL BE PROVIDED WITH EXTERIOR BRACED RETURN WALLS. WALL LENGTH SHALL BE MEASURED USING INSIDE THE SHORTEST DIMENSION BETWEEN INTERSECTING WALLS (SEE TYPICAL DEAD MAN SECTION).

TABLE 1.1

NORMAL WEIGHT CONCRETE LAP SPLICE SCHEDULE, IN						
BAR TOP BARS OTHER BARS						
SIZE	CASE 1	CASE 2	CASE 1	CASE 2		
#3	28	42	22	32		
#4	37	56	29	43		
#5	47	70	36	54		
#6	56	84	43	64		

STEEL DECK - SUSPENDED SLABS

- 1. STEEL DECK QUALITY, FABRICATION, DELIVERY, INSTALLATION AND ATTACHMENT SHALL COMPLY WITH THE PROVISIONS OF THE STEEL DECK INSTITUTE, SDI.
- STEEL ROOF DECK SHALL BE AS FOLLOWS UNLESS NOTED OTHERWISE ON CONSTRUCTION
- DRAWINGS: WIDE RIB CONFIGURATION
- 1.5" DEPTH
- 24GA DESIGN THICKNESS MAXIMUM SINGLE SPAN OF 4'-8" OR CONTINUOUS SPAN OF 5'-10"
- GALVANIZE PER ASTM A653 OR SHOP PRIME PER ASTM A1008
- ATTACH STEEL ROOF DECK TO SUPPORTS WITH #12 TEK AT 18" O.C. ATTACH STEEL ROOF DECK SIDELAPS WITH #10 TEK OR CRIMP/BUTTON PUNCH AT 36" O.C. OR
- MID-SPAN, WHICHEVER IS SMALLER 3. CONTRACTOR AND/OR DECK MANUFACTURER SHALL FURNISH ALL NECESSARY DECK CLOSURE
- ACCESSORIES TO PROVIDE A FINISHED SURFACE FOR THE APPLICATION OF ROOF INSULATION AND 4. STEEL FLOOR DECK SHALL BE AS FOLLOWS UNLESS NOTED OTHERWISE ON CONSTRUCTION

STEEL DECK - SUSPENDED SLABS STEEL DECK QUALITY, FABRICATION, DELIVERY, INSTALLATION AND ATTACHMENT SHALL COMPLY WITH THE PROVISIONS OF THE STEEL DECK INSTITUTE, SDI. CONTRACTOR AND/OR DECK MANUFACTURER SHALL FURNISH ALL NECESSARY DECK CLOSURE

ACCESSORIES TO PROVIDE A FINISHED SURFACE FOR THE APPLICATION OF ROOF INSULATION AND ROOF STEEL FLOOR DECK SHALL BE AS FOLLOWS UNLESS NOTED OTHERWISE ON CONSTRUCTION DRAWINGS: 2" COMPOSITE DECK WITH 6" TOTAL SLAB THICKNESS

- 19GA DESIGN THICKNESS MAXIMUM SINGLE SPAN DURING CONSTRUCTION OF 8', 2 SPAN OF 10'-1", OR 3 SPAN OF 10'-5".
- MAXIMUM SPAN SHALL NOT EXCEED 12.5'. PROVIDE W2.1xW2.1 WELDED WIRE MESH OR #4 @ 12" O.C. EACH WAY. PROVIDE 2" REBAR
- COVER MEASURED FROM TOP OF THE SLAB GALVANIZE PER ASTM A653

CLOSURES, END PLATES, AND COVER PLATES AS NEEDED.

- MINIMUM BEARING LENGTH AT EDGE SUPPORTS IS 2"
- MINIMUM BEARING LENGTH AT INTERIOR SUPPORTS IS 4" ATTACH STEEL COMPOSITE FLOOR DECK TO SUPPORTS WITH 5/8" ARC PUDDLE WELDS AT 12" O.C. MECHANICAL FASTENERS EITHER POWDER ACTUATED, PNEUMATICALLY DRIVEN, OR
- SCREWS MAY BE USED IN LIEU OF WELDING PROVIDED THEY ARE APPROVED. ATTACH STEEL ROOF DECK SIDELAPS WITH #10 TEK OR CRIMP/BUTTON PUNCH AT 36" O.C. OR

MID-SPAN, WHICHEVER IS SMALLER. CONTRACTOR AND/OR DECK MANUFACTURER SHALL FURNISH ALL NECESSARY POUR STOPS, COLUMN

STRUCTURAL STEEL

DRAWINGS:

- 1. STEEL DESIGN, FABRICATION, AND ERECTION SHALL CONFORM WITH AMERICAN INSTITUTE OF STEEL CONSTRUCTION.
- 2. STEEL GRADE AND SPECIFICATION SHALL BE AS FOLLOWS: **HOLLOW STRUCTURAL SECTIONS:** ASTM A500 (Fy = 46 KSI) ASTM A36 (Fy = 36 KSI) CHANNELS, PLATES AND ANGLES: WIDE FLANGES: ASTM A992 (Fy = 50 KSI)
- 3. BOLTS SHALL CONFORM TO ASTM A307

COLUMNS:

ANCHOR RODS:

- WELDING SHALL CONFORM TO THE AWS CODES FOR BUILDING CONSTRUCTION. WELDING SHALL BE PERFORMED IN ACCORDANCE TO WELDING PROCEDURE SPECIFICATION (WPS) AS REQUIRED IN AWS D1.1 THE WPS VARIABLES SHALL BE WITHIN THE PARAMETERS ESTABLISHED BY THE FILLER-METAL
- 5. WELDS SHALL USE E70XX ELECTRODES AND A MINIMUM OR 3/16" SIZE UNLESS NOTED OTHERWISE.
- 6. ALL WELDS SPECIFIED AS FIELD WELDS MAY BE SHOP WELDED AT THE CONTRACTOR'S OPTION IF ERECTION CAN STILL BE EXECUTED.

ENERGY REQUIREMENTS:

- 1. LIGHTING FIXTURES PENETRATING THE THERMAL ENVELOPE SHALL BE IC-RATED, LEAKAGE RATED, AND SEALED TO THE GYPSUM WALLBOARD AS REQUIRED PER IRC N1102.4.4.
- 2. PROGRAMMABLE THERMOSTATS SHALL BE INSTALLED AS REQUIRED PER N1103.1.1.
- 3. AIR HANDLERS SHALL BE RATED FOR MAXIMUM 2% AIR LEAKAGE RATE PER N1103.3.2.1.
- 4. BUILDING FRAMING CAVITIES SHALL NOT BE USED AS DUCTS OR PLENUMS.

5. HOT WATER PIPES SHALL BE INSULATED AS REQUIRED PER N1103.4.

- 6. ALL EXHAUST FANS SHALL TERMINATE TO THE BUILDING EXTERIOR AS REQUIRED PER IRC M1504.3.
- 7. MAKEUP AIR SYSTEMS SHALL BE INSTALLED FOR KITCHEN EXHAUST HOODS THAT EXCEED 400 CFM AS REQUIRED PER M1503.6.
- 8. AN AIR HANDLING SYSTEM SHALL NOT SERVE BOTH THE LIVING SPACE AND THE GARAGE PER M1601.6 ENERGY CONSERVATION.

- 1. THE GARAGE FLOOR SHALL SLOPE TOWARDS THE GARAGE DOORWAYS.
- 2. DOORS BETWEEN THE GARAGE AND THE DWELLING MINIMUM 1-3/8" SOLID CORE OR HONEY COMBED STEEL DOOR OR 20 MINUTE FIRE RATED.
- 3. THE GARAGE SHALL BE SEPARATED FROM THE DWELLING AND IT'S ATTIC AREAS BY A MINIMUM 5/8" GYPSUM BOARD APPLIED TO THE GARAGE SIDE WHERE A FLOOR/CEILING SPACE IS PROVIDED
- 4. THE GARAGE COLUMNS AND BEAMS SUPPORTING THE SEPARATION SHALL ALSO BE PROTECTED WITH 5/8" GYPSUM BOARD OR EQUIVALENT. WHERE HABITABLE SPACE OCCURS ABOVE THE GARAGE THE FLOOR CEILING ASSEMBLY SHALL BE PROTECTED WITH A MINIMUM PS TYPE "X" GYPSUM BOARD ON THE GARAGE CEILING.
- 5. GARAGE DOOR AND FRAME THE "H" FRAME FOR THE ATTACHMENT OF THE TRACK AND COUNTER BALANCE SHALL CONSIST OF THE FOLLOWING 2x6 VERTICAL JAMBS RUNNING FROM THE FLOOR TO CEILING, ATTACHED WITH 1-3/4"x0.120" NAILS AT 7" O.C. STAGGERED WITH (7) 3-1/4"x0.120" NAILS THROUGH THE JAMB INTO THE HEADER. A MINIMUM OF 2x8 HEADER FOR ATTACHMENT OF COUNTER BALANCE SYSTEM.
- 6. SELF CLOSING DEVICES SHALL BE INSTALLED FOR GARAGE AND/OR DWELLING SEPARATION DOORS
- 7. GARAGE VEHICLE DOORS AND FRAMES SHALL BE DESIGNED AND INSTALLED TO MEET THE 90 MPH WIND LOAD REQUIREMENTS OF DASMA 108 AND ASTM E330-96 (IRC 301.2.1).

ASTM A53 GR. B (Fy= 35 KSI)

ASTM F1554 (Fy = 36 KSI)

- 1. STAIRWAYS SHALL PROVIDE A MAXIMUM 7-3/4" RISE AND A MINIMUM 10" RUN.
- 2. PROVIDE GUARD RAILS BETWEEN 36" GUARD RAILS ON THE OPEN SIDES OF RAISED FLOORS, PORCHES AND BALCONIES; MINIMUM 34" GUARD RAILS ON THE OPEN SIDES OF STAIRWAYS LOCATED MORE THAN 30" ABOVE THE FLOOR OR GRADE BELOW.
- 3. GUARD RAIL ENCLOSURES SHALL HAVE INTERMEDIATE RAILS OF ORNAMENTAL PATTERNS THAT DO NOT ALLOW PASSAGE OF A SPHERE 4" IN DIAMETER.
- 4. EACH STAIRWAY OF THREE OR MORE RISERS SHALL PROVIDE A CONTINUOUS HANDRAIL ON AT LEAST ONE SIDE BETWEEN 34" AND 38" ABOVE THE NOSING OF THE TREADS.
- 5. HANDRAILS SHALL HAVE A CIRCULAR CROSS SECTION OF 1-1/4" TO 2-5/8" OR OTHER APPROVED GRASPABLE SHAPE PER IRC R311.5.6.
- 6. MINIMUM 6'-8" OF HEADROOM CLEARANCE IS REQUIRED IN STAIRWAYS.
- 7. ENCLOSED ACCESSIBLE SPACE UNDER STAIRWAYS SHALL HAVE WALLS AND THE UNDERSIDE OF THE STAIR AND LANDING PROTECTED WITH 1/2" GYPSUM BOARD ON ENCLOSURE SIDE PER IRC R311.2.2.

GLAZING

- 1. GLAZING IN HAZARDOUS LOCATIONS AS IDENTIFIED IN IRC R308.4 SHALL BE OF APPROVED SAFETY GLAZING MATERIALS: GLASS IN STORM DOORS: INDIVIDUAL FIXED OR OPENABLE PANELS ADJACENT TO A DOOR WHERE THE NEAREST VERTICAL EDGE IS WITHIN A 24" ARCH OF THE DOOR IN A CLOSED POSITION AND WHOSE BOTTOM EDGE IS WITHIN 60" OF THE FLOOR: WALLS ENCLOSING STAIRWAYS AND LANDINGS WHERE THE GLAZING IS WITHIN 60" OF THE TOP OR BOTTOM OF THE STAIR; ENCLOSURES FOR SPAS, TUBS, SHOWERS, AND WHIRLPOOLS; GLAZING IN FIXED OR OPENABLE PANELS EXCEEDING 8 SF AND WHOSE BOTTOM EDGE IS LESS THAN 18" ABOVE THE FLOOR OR WALKING SURFACE WITHIN 36".
- 2. WINDOW FALL PROTECTION SHALL BE PROVIDED IN ACCORDANCE WITH R312.2.

EMERGENCY EGRESS AND RESCUE

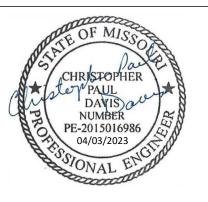
- 1. PROVIDE ONE WINDOW FROM EACH BEDROOM THAT HAS A MINIMUM OPENABLE AREA OF 5.7 SF WITH A MINIMUM OPENABLE HEIGHT OF 24" AND WIDTH OF 21"
- 2. BASEMENT EGRESS TO MEET THE REQUIREMENTS OF IRC R310.
- 3. PROVIDE SMOKE ALARMS IN EACH SLEEPING ROOM, OUTSIDE OF EACH SLEEPING AREA AND ON EACH FLOOR INCLUDING BASEMENTS. ALARMS SHALL BE INTERCONNECTED IN SUCH A MANNER THAT THE ACTUATION OF ONE ALARM WILL ACTIVATE ALL OF THE ALARMS IN THE DWELLING.
- 4. CARBON MONOXIDE DETECTORS SHALL BE INSTALLED AS REQUIRED PER R315.

FRAMING NOTES:

- 1. ALL LUMBER SIZES ARE DOUGLAS FIR-LARCH #2 UNLESS OTHERWISE NOTED.
- 2. ALL UNMARKED HEADERS SHALL BE A MINIMUM #2 DOUGLAS FIR LARCH (2) 2x10 ON LOAD BEARING
- 3. ALL HEADER/BEAMS TO BEAR ON A MINIMUM OF (2) 2x4 POSTS UNLESS NOTED OTHERWISE.
- 4. DOUBLE JOIST UNDER INTERIOR NON-LOAD BEARING WALLS.
- 5. CANTILEVERS, OVER BEAMS, AND DOOR JAMBS SHALL BE BLOCKED
- 6. ANY WOOD MEMBERS IN CONTACT WITH CONCRETE OR MASONRY (OR THE FURRING THEY ARE ATTACHED TO) SHALL BE OF DECAY RESISTANT MATERIAL.
- 7. INTERIOR NON LOAD BEARING WALLS SHALL BE ISOLATED FROM THE FLOOR FRAMING ABOVE UNLESS THE INTERIOR NON LOAD BEARING WALL RESTS DIRECTLY ON A FOOTING.
- 8. LVL STRENGTH SHALL BE VERSA-LAM 3100 Fb UNLESS NOTED OTHERWISE.

ENGINEERING & DESIGN

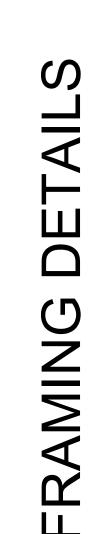
EVERSTEAD WWW.EVERSTEAD.COM 3741 NE TROON DR SUITE 200 LEES SUMMIT, MO 64064 (816) 399-4901



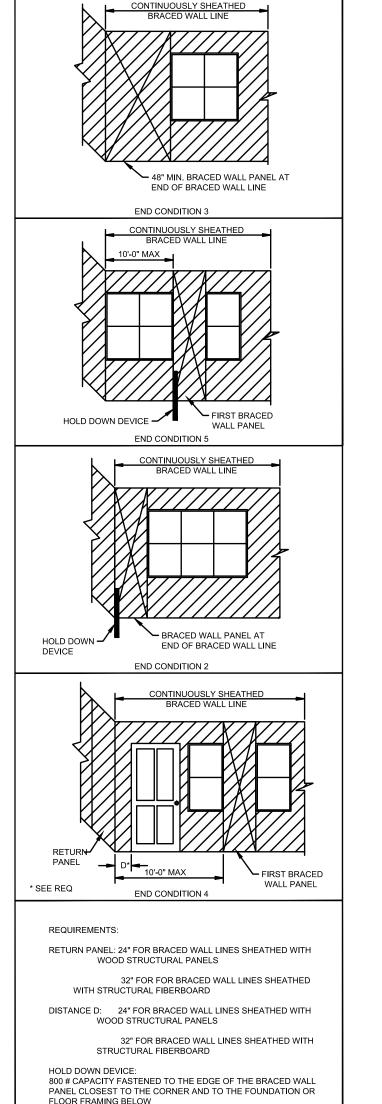
EVERSTEAD IS RESPONSIBLE FOR STRUCTURAL SPECIFICATIONS ONLY. ARCHITECTURAL PLANS WERE PRODUCED BY OTHERS.

> EVERSTEAD 3741 NE TROON DRIVE SUITE 200 LEE'S SUMMIT, MO 64064

816-399-4901



JMBER MINIMUM DESIGN REQUIREMENTS 3100 2.0x106 285 180 1.6x106



NIMUM VALL STUD AMING MINAL 'E AND RADE	MAXIMUM PONY WALL HEIGHT (FEET)	MAXIMUM TOTAL WALL HEIGHT (FEET)	MAXIMUM OPENING WIDTH (FEET)	TENSION STRAP CAPACITY REQUIRED (POUNDS) FOR 90 MPH EXPOSURE B		ENGINEEREI	D LUMBER MINI	<u></u>	
	0	10	18	1,000			g (DOI)		
			9	1,000			fb (PSI)		
	1	10	16	1,000		VERSA-LAM LVL	3100		
			18	1,000		VERTON ENTINE VE	0100		
			9	1,200		DOUGLAS FIR-LARCH #2	900		
	2 10	10	16	1,000	L	Tire Discorranz			
4 NO 2 RADE			18	2,025					
			9	2,400			CONTINUOUSLY SHEAT BRACED WALL LIN	THED	
	2	12	16	1,200			<u> </u>	//	
			18	3,200				4/	
			9	3,200				_\//	
	4	12	16	2,350					
			18	DR				- ///	
			9	1,000			<u> </u>	<u>//</u>	
	2	12	16	2,050		RETURN J PANEL	BRACED WALL PAN		
STUD			18	2,450			END OF BRACED W END CONDITION 1	ALL LINI	
RADE			9	1,500			CONTINUOUSLY SHEA	THED	
	1				1		DRACED WALL LIN	=	

18

3,675

MINIMUM LENGTH OF BRACED WALL PANELS TABLE R602.10.5 (PARTIAL)							
		MINIM	IUM LENGTH (INCHES)			
M	ETHOD		WALL HEIGHT	Γ			
		8 FEET	9 FEET	10 FEET			
	SUPPORTING ROOF ONLY	16	16	16			
PFH	SUPPORTING ONE STORY AND ROOF	24	24	24			
	PFG	24	27	30			
(CS-PF	16	18	20			
CS-WSP	ADJACENT CLEAR OPENING HEIGHT (INCHES)						
	LESS THAN OR EQUAL TO 64	24	27	30			

BRACING METHODS TABLE R602.10.4 (PARTIAL)					
METHODS,	MINIMUM	CONNECT	ION CRITEIA		
MATERIAL	THICKNESS	FASTENERS	SPACING		
WSP - WOOD		EXTERIOR SHEATHING PER TABLE R602.3(3)	6" EDGES, 12" FIELD		
STRUCTURAL PANEL	3/8	INTERIOR SHEATHING PER TABLE R602.3(1) OR R602.3(2)	VARIES BY FASTENER		
CS-WSP CONTINUOUSLY		EXERIOR SHEATHING PER TABLE R602.3(3)	6" EDGES, 12" FIELD		
SHEATHED WOOD STRUCTURAL PANEL	3/8	INTERIOR SHEATHING PER TABLE R602.3(1) OR R602.3(2)	VARIES BY FASTENER		
PFH - PORTAL FRAME WITH HOLD DOWNS	3/8	SEE IRC SECTION R602.10.6.2	SEE IRC SECTION R602.10.6.2		
PFG - PORTAL FRAME AT GARAGE	3/8	SEE IRC SECTION R602.10.6.3	SEE IRC SECTION R602.10.6.3		
LIB	1x4 WOOD OR APPROVED METAL STRAPS AT 45 TO 60	WOOD: 2-8d COMMON NAILS OR 3-8d NAILS	WOOD: PER STUD AND TOP AND BOTTOM PLATES		
LET-IN-BRACING	DEGREE ANGLES FOR MAX 16" STUD SPACING	METAL STRAP: PER MANUFACTURER	METAL: PER MANUFACTURER		
GB-GYPSUM	1/2	NAILS OR SCREWS PER TABLE R602.3(1) FOR EXTERIOR LOCATIONS	FOR ALL BRACED WALL PANEL LOCATIONS: 7"		
BOARD	1/2	NAILS OR SCREWS PER TABLE R702.3.5 FOR INTERIOR LOCATIONS	EDGES (INCLUDIN TOP AND BOTTOM PLATES) 7" FIELD		

STUD FRAMING NOMINAL SIZE AND GRADE	MAXIMUM PONY WALL HEIGHT (FEET)	MAXIMUM TOTAL WALL HEIGHT (FEET)	MAXIMUM OPENING WIDTH (FEET)	CAPACITY REQUIRED (POUNDS) FOR 90 MPH EXPOSURE B
	0	10	18	1,000
			9	1,000
	1	10	16	1,000
			18	1,000
			9	1,200
	2	10	16	1,000
2x4 NO 2 GRADE			18	2,025
0.0.2			9	2,400
	2	12	16	1,200
			18	3,200
			9	3,200
	4	12	16	2,350
			18	DR
			9	1,000
	2	12	16	2,050
2x6 STUD			18	2,450
GRADE			9	1,500
	4	12	16	3,150

MINIMUM

TOE NAIL

4" O.C. TOE NAIL

6" O.C. TOE NAIL

FACE NAIL

BLIND AND FACE NAIL

AT EACH BEARING, FACE NAIL

END NAIL

NAIL EACH LAYER AS FOLLOWS: 32" O.C. AT

TOP END AND BOTTOM AND STAGGERED.

24" O.C. FACE NAIL AT TOP AND BOTTOM

FACE NAIL AT ENDS AND AT EACH SPLICE

AT EACH JOIST OR RAFTER, FACE NAIL

EACH END, TOE NAIL

SPACING OF FASTENERS

EDGES (IN)

INTERMEDIATE

SUPPORTS (IN)

12

12

12

12

12

12

STAGGERED ON OPPOSITE SIDES

MINIMUM LENGTH OF BRACED WALL PANELS TABLE R602.10.5 (PARTIAL)						
		MINIM	IUM LENGTH (INCHES)		
M	ETHOD		WALL HEIGHT	Γ		
		8 FEET	9 FEET	10 FEET		
	SUPPORTING ROOF ONLY	16	16	16		
PFH	SUPPORTING ONE STORY AND ROOF	24	24	24		
	PFG	24	27	30		
(CS-PF	16	18	20		
CS-WSP	ADJACENT CLEAR OPENING HEIGHT (INCHES)					
	LESS THAN OR	24	27	30		

TABLE R507/2 FASTENER SPACING FOR A SOUTHERN PINE OR HEM-FIR DECK LEDGER 2" NOMINAL SOLID SAWN SPRUCE-PINE-FIR BAND JOIST (DECK LIVE LOAD = 40PSF,
DECK DEAD LOAD = 10 PSF)

2018 IRC TABLE R602.3(1) (SEE IRC FOR FOOTNOTES)

NUMBER AND TYPE OF FASTENER

4-8D BOX (2-1/2"x0.113") OR

4-8D BOX (2-1/2"x0.113") OR

3-10D BOX (3" x 0.128"); OR

3-3" x 0.131" NAILS

3-3" x 0.131" NAILS

4-3" X 0.131" NAILS

4-3" X 0.131" NAILS

4-3" X 0.131" NAILS

4-3" X0.131" NAILS

3-3" X 0.131" NAILS

3" X 0.131" NAILS

3" X 0.131" NAILS

4-10D BOX (3" X .128"); OR

4-16D (3-1/2"x0.135"); OR

4-10D BOX (3" X 0.128"); OR

3-10D BOX (3" X .128"); OR

16D COMMON (3-1/2" X 0.162")

10d BOX (3"x0.128"); OR

16D BOX (3-1/2"x0.135"); OR

16D COMMON (3-1/2" X 0.162")

16D COMMON (3-1/2"x0.162")

5-8D BOX (2-1/2" X 0.113"); OR

16D COMMON (3-1/2" X 0.162")

4-8D COMMON (2-1/2" X 0.131"); OR

8-16D COMMON(3-1/2" X 0.162"); OR

12-16D BOX (3-1/2" X 0.135"); OR

12-10D BOX (3" X 0.128"); OR

16D COMMON (3-1/2" X 0.162")

3-16d BOX NAILS (3-1/2"x0.135") OR

4-8D BOX (2-1/2"x0.113") OR

4-10D BOX (3" x 0.128"); OR

3-10D BOX (3" x 0.128"); OR

3-10D BOX (3" X 0.128"); OR

3-8D BOX (2-1/2" X 0.113"); OR

2-10D BOX (3" X 0.128"); OR

3-8D BOX (2-1/2" X 0.113"); OR

3-8D BOX (2-1/2" X 0.113"); OR 3-8D COMMON (2-1/2" X 0.131"); OR

4-8D BOX (2-1/2" X 0.113"); OR 3-8D COMMON (2-1/2" X 0.131"); OR

3-10D BOX (3" X 0.128"); OR

2-10D BOX (3" X 0.128"); OR

3-10D BOX (3" X 0.128"); OR

WIDER THAN 1" X 8"

3-16D BOX (3-1/2" x 0.135"); OR

3-16D BOX (3-1/2" x 0.135"); OR

4-8D COMMON (2-1/2" X 0.131"); OR

2-16D COMMON (3-1/2" X 0.162"); OR

2-16D COMMON (3-1/2" X 0.162"); OR

2-8D COMMON (2-1/2" X 0.131"); OR

2-8D COMMON (2-1/2" X 0.131"); OR

2 STAPLES, 1" CROWN, 16 GA.., 1-3/4" LONG

3 STAPLES, 1" CROWN, 16 GA.., 1-3/4" LONG

4 STAPLES, 1" CROWN, 16 GA.., 1-3/4" LONG

16D BOX (3-1/2" X 0.135)

4-10D BOX (3" X 0.128")

10d BOX (3"x0.128"); OR

3" X 0.131" NAILS

12-3" X 0.131" NAILS

4-3" X 0.131" NAILS

4-3" x 0.131" NAILS

3-3" x 0.131" NAILS

3-3" X 0.131" NAILS

2 STAPLES 1-3/4"

3-10D COMMON (3" X 0.148"); OR

3-16d BOX NAILS (3-1/2"x0.135") OR

2-16D COMMON NAILS (3-1/2"x0.162"); OR

TABLE R802.5.2

3-8D COMMON (2-1/2" x 0.131"); OR

3-8D COMMON (2-1/2" x 0.131"); OR

3-16D COMMON (3-1/2" X 0.162"); OR

3-16d BOX NAILS (3-1/2"x0.135") OR

3-10d COMMON NAILS (3"x0.148"); OR

SPACING AND LOCATION

TOE NAIL

PER JOIST, TOE NAIL

FACE NAIL

FACE NAIL

FACE NAIL EACH RAFTER

2 TOE NAILS ON ONE SIDE AND 1 TOE NAIL

ON OPPOSITE SIDE OF EACH RAFTER OR

TOE NAIL

END NAIL

24" O.C. FACE NAIL

16" O.C. FACE NAIL

12" O.C. FACE NAIL

16" O.C. FACE NAIL

16" O.C. ALONG EACH EDGE FACE NAIL

12" ALONG EACH EDGE FACE NAIL

TOENAIL

16" O.C. FACE NAIL

12" O.C. FACE NAIL

FACE NAIL ON EACH SIDE OF END JOINT

(MINIMUM 24" LAP SPLICE LENGTH EACH

SIDE OF END JOINT)

16" O.C. FACE NAIL

12" O.C. FACE NAIL

3 EACH 16" O.C. FACE NAIL

2 EACH 16" O.C. FACE NAIL

4 EACH 16" O.C. FACE NAIL

TOE NAIL

END NAIL

FACE NAIL

FACE NAIL

FACE NAIL

FACE NAIL

DESCRIPTION OF BUILDING

ELEMENTS

BLOCKING BETWEEN CEILING

CEILING JOSTS TO TOP PLATE

PARALLEL RAFTER LAPS OVER

CEILING JOIST ATTACHED TO

PARALLEL RAFTER (HEEL JOINT)

TO RAFTER

RAFTER OR ROOF TRUSS TO PLATE

ROOF RAFTERS TO RIDGE, VALLEY

TO MINIMUM 2" RIDGE BEAM

STUD TO STUD (NOT AT BRACED

WALL PANELS)

STUD TO STUD AND ABUTTING

STUDS AT INTERSECTING WALL

CORNERS (AT BRACED WALL

PANELS)

BUILT-UP HEADER (2" TO 2"

HEADER WITH ¹/₂" SPACER)

CONTINUOUS HEADER TO STUD

TOP PLATE TO TOP PLATE

DOUBLE TOP PLATE SPLICE

BOTTOM PLATE TO JOIST, RIM

BOTTOM PLATE TO JOIST, RIM

BRACED WALL PANELS)

TOP OR BOTTOM PLATE TO STUD

TOP PLATES, LAPS AT CORNERS

AND INTERSECTIONS

1" BRACE TO EACH STUD AND

PLATE

1"x6" SHEATHING TO EACH

BEARING

1"x8" AND WIDER SHEATHING TO

EACH BEARING

19

JOIST, BAND JOIST OR BLOCKING 16D BOX (3-1/2"x0.135"); OR

JOIST, BAND JOIST BLOCKING (AT | 2-16D COMMON (3-1/2"x0.162"); OR

(NOT AT BRACED WALL PANELS) 3" X 0.131" NAILS

OR HIP RAFTERS OR ROOF RAFTER

JOISTS OR RAFTERS TO TOP PLATE 3-10D BOX (3" x 0.128"); OR

CEILING JOISTS NOT ATTACHED TO 4-10D BOX (3" X 0.128"); OR

COLLAR TIE TO RAFTER, FACE NAIL | 4-10D BOX (3" X 0.128"); OR

OR 1-1/4"x20 GAGE RIDGE STRAP | 3-10D COMMON (3" X 0.148"); OR

ITEM

JOIST SPAN	6' AND LESS	6'1 TO 8'	8'1 TO 10'	10'1 TO 12'	12'1 TO 14'	14'1 TO 16'	16'1 TO 18'	
CONNECTION DETAILS		ON CENTER SPACING OF FASTENERS						
1/2" DIAMETER LAG SCREW WITH 15/32" MAX SHEATHING	30	23	18	15	13	11	10	
1/2" DIAMETER BOLT WITH 15/32" MAX SHEATHING	36	36	34	29	24	21	19	
1/2" DIAMETER BOLT WITH 15/32" MAX SHEATHING AND 1/2" STACKED WASHERS	36	36	29	24	21	18	16	

TABLE R507.2.1 PLACEMENT OF LAG SCREWS AND BOLTS IN DECK LEDGERS AND BAND JOISTS						
MINIMUM END AND EDGE DISTANCES AND SPACING BETWEEN ROWS (INCHES)						
	TOP EDGE BOTTOM EDGE ENDS ROW SF					
LEDGER	2	1/4	2	1-5/8		
BAND JOIST 3/4 2 2 1-5/8						

2018 IRC TABLE R602.3(1) (SEE IRC FOR FOOTNOTES)

4-8D BOX (2-1/2" X 0.113"); OR

3-10D BOX (3" X 0.128"); OR

3-3" X 0.131" NAILS

3" X 0.131" NAILS

1"x6" SUBFLOOR OR LESS TO EACH | 2-8D COMMON (2-1/2" X 0.131"); OR

2" PLANKS (PLANK & BEAM - FLOOR | 3-16D BOX (3-1/2" X 0.135"); OR

BUILT-UP GIRDERS AND BEAMS, 2" | 10D BOX (3" X 0.128"); OR

3d BOX (2-1/2"x0.113")

10D BOX (3" X 0.128"); OR

3-8D BOX (2-1/2" X 0.113"); OR

3-16D BOX (3-1/2" X 0.135"); OR

2-16D COMMON (3-1/2"x0.162")

4-10 BOX (3" X 0.128"); OR

4-3" X 0.131" NAILS ; OR

3" X 0.131" NAILS

3-3" X 0.131" NAILS

4-3" X 0.131" NAILS

0.131") NAILS

3-16D COMMON (3-1/2" X 0.162"); OR

4-3" X 14 GA. STAPLES, ⁷/₁₆" CROWN

AND: 2-20D COMMON (4" X 0.192"); OR

3-16D COMMON (3-1/2" X 0.162"); OR

COMMON (2-1/2" X 0.131"; OR 2-3" X

NUMBER AND TYPE OF FASTENER

6d COMMON (2"x0.113") NAILS (SUBFLOOR

8d COMMON (2-1/2"x0.131") NAIL (ROOF); OR

OTHER WALL SHEATHING

RSRS-01 (2-38" X 0.113") NAIL (ROOF)

8d COMMON NAIL (2-1/2"x0.131"); OR

10d COMMON (3"x0.148") NAIL OR

STAPLE WITH 76" OR 1" CROWN

STAPLE WITH 76" OR 1" CROWN

TYPE "W" OR "S"

TYPE "W" OR "S"

8D (2-1/2"x0.131") DEFORMED NAIL

RSRS-01 (2-3/8" X 0.113") NAIL (ROOF)

1-1/2" GALVANIZED ROOFING NAIL, 7/16"

HEAD DIAMETER, OR 1-1/4" LONG 16 GA.

1-3/4" GALVANIZED ROOFING NAIL, 7/16"

HEAD DIAMETER, OR 1-1/2" LONG 16 GA

1-1/2" GALVANIZED ROOFING NAIL; STAPLE

GALVANIZED, 1-1/2" LONG; 1-1/4" SCREWS,

1-3/4" GALVANIZED ROOFING NAIL; STAPLE

GALVANIZED, 1-5/8" LONG; 1-5/8" SCREWS,

6D DEFORMED (2"x0.120") NAIL OR

8D COMMON (2-1/2"x0.131") NAIL OR

8D DEFORMED (2-1/2"x0.120") NAIL

10D COMMON (3"x0.148") NAIL OR

8D DEFORMED (2-1/2"x0.120") NAIL

8D COMMON (2-1/2"x0.131") NAIL

WOOD STRUCTURAL PANELS, COMBINATION SUBFLOOR UNDERLAYMENT TO FRAMING

20D COMMON (4" X 0.192"); OR

3-10D BOX (3" X 0.128"); OR

4-10D BOX (3" X 0.128"); OR

2-10D BOX (3" X 0.128"); OR

4-16D BOX (3-1/2" X 0.135"); OR

2-16D COMMON (3-1/2"x0.162")

2 STAPLES, 1" CROWN, 16 GA.., 1-3/4" LONG

FLOOR

3-10D BOX (3" X 0.128"); OR

JOST TO SILL, TOP PLATE OR

GIRDER

RIM JOIST, BAND JOIST OR

BLOCKING TO SILL OR TOP PLATE

(ROOF APPLICATIONS ALSO)

?" SUBFLOOR TO JOIST OR GIRDER |

& ROOF)

BAND OR RIM JOIST TO JOIST

LUMBER LAYERS

LEDGER STRIP SUPPORTING

JOISTS OR RAFTERS

BRIDGING OR BLOCKING TO

DESCRIPTION OF BUILDING

ELEMENTS

3/8" - 1/2"

19/32"-1"

1-1/8" - 1-1.4"

1/2" STRUCTURAL CELLULOSIC

FIBERBOARD SHEATHING

25/32" STRUCTURAL CELLULOSTIC

FIBERBOARD SHEATHING

1/2" GYPSUM SHEATHING

5/8" GYPSUM SHEATHING

3/4" AND LESS

7/8" - 1"

1-1/8" - 1-1/4"

28

ITEM

37

3-8D COMMON (2-1/2" X 0.131"); OR

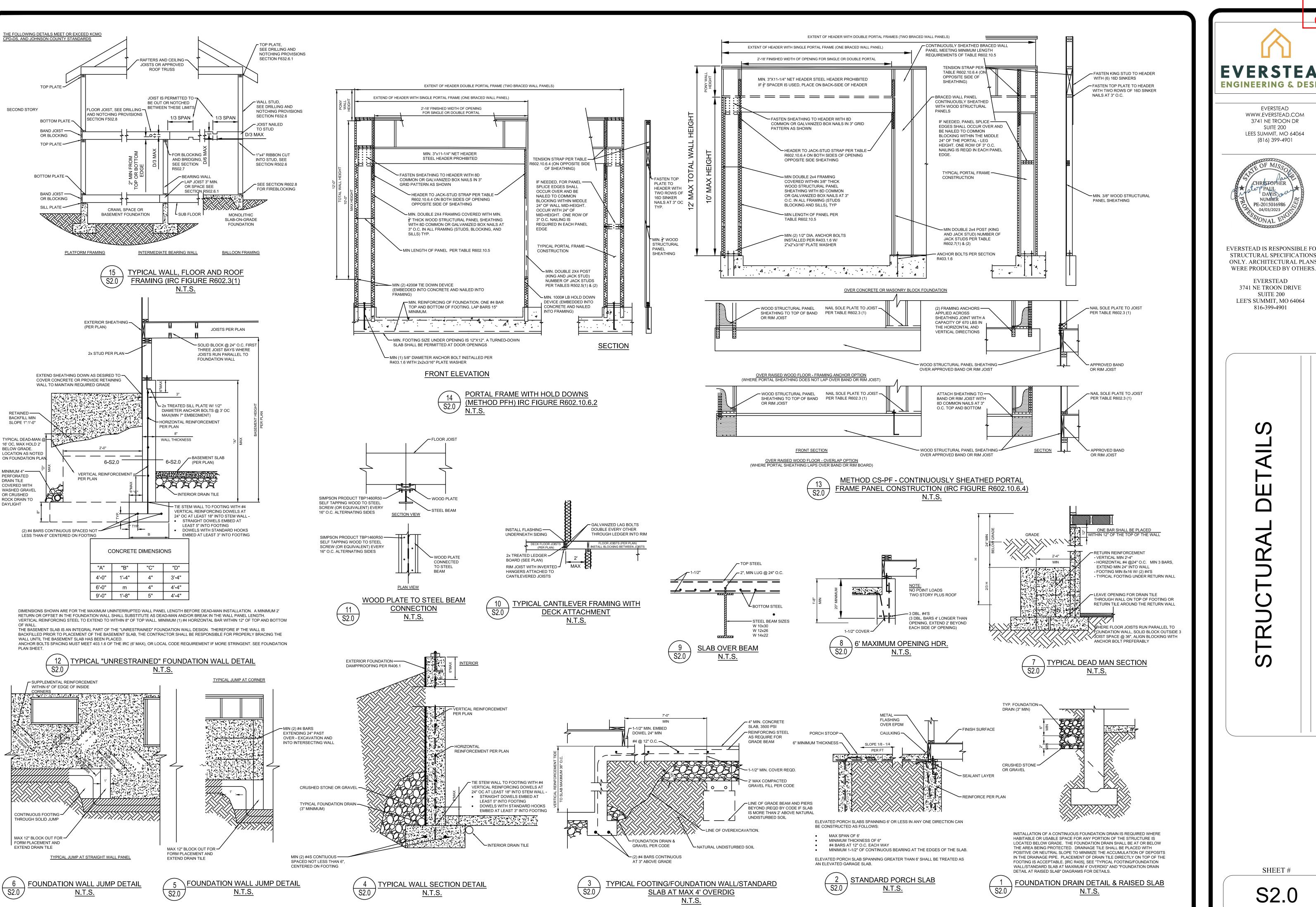
8D COMMON (2-1/2" X 0.131"); OR

REQUIREMENTS FOR WOOD STRUCTURAL PANEL WALL SHEATHING USED TO RESIST WIND PRESSURES IRC TABLE 602.3(3) (PARTIAL)									
MINIMUM NAIL		I NOMINAL PANEL I		MAX WALL STUD	PANEL NA	IL SPACING	ULTIMATE DESIGN WIND SPEED, V ULT (MPH)		
SIZE	PENETRATION (IN)	- PANEL SPAN RATING	THICKNESS (IN)	THICKNESS (IN)	THICKNESS (IN)	SPACING	EDGES (IN O.C.)	FIELD (IN O.C.)	В
6d COMMON	1.5	24/0	3/8	16	6	12	140		
8d COMMON 1.75 24/16	24/16	7/16	16	6	12	170			
	24/10	24/16 7/16		//16	24	6	12	140	

LINES WITH CONTINUOUS S1.0 SHEATHING (IRC FIGURE R602.10.7)

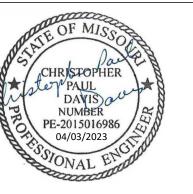
END CONDITIONS FOR BRACED WALL

SHEET#



AS NOTED FOR PLAN REVIEW

WWW.EVERSTEAD.COM 3741 NE TROON DR LEES SUMMIT, MO 64064



EVERSTEAD IS RESPONSIBLE FOR STRUCTURAL SPECIFICATIONS ONLY. ARCHITECTURAL PLANS

> 3741 NE TROON DRIVE LEE'S SUMMIT, MO 64064



✓ DOWELS:

24" LAP MINIMUM

RECESS

SPLIT SLAB OVER WALL AT RECESS

GARAGE SLAB ON FILL <u>N.T.S.</u>

SHEET#

AS NOTED FOR PLAN REVIEW DEVELOPMENT SERVICES

BASEMENT SLAB

FOUNDATION WALL

EGRESS WINDOW NOTES: PER IRC SECTION 310 5.7 SF OPENING MINIMUM 24" MINIMUM CLEAR HEIGHT 20" MINIMUM CLEAR WIDTH 44" MAXIMUM HEIGHT A.F.F.

TYPICAL EGRESS WINDOW SECTION DETAIL

SIMPSON POST — BASE

CONCRETE PIER

DETAIL MAY VARY

DOWELS #4'S @ 12" O.C.

MINIMUM

4 SLAB AT WALL

OR ¾" CLEAN CRUSHED AGGRAGATE

HELIX DOSAGE

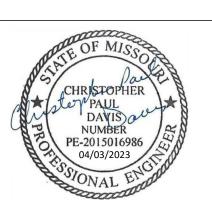
9 LB/CU FT

12.5 LB/CU FT

HELIX DOSAGE

12.5 LB/CU FT

EVERSTEAD www.everstead.com 3741 NE TROON DR SUITE 200 LEES SUMMIT, MO 64064 (816) 399-4901



EVERSTEAD IS RESPONSIBLE FOR STRUCTURAL SPECIFICATIONS ONLY. ARCHITECTURAL PLANS WERE PRODUCED BY OTHERS.

> **EVERSTEAD** 3741 NE TROON DRIVE SUITE 200 LEE'S SUMMIT, MO 64064

> > 816-399-4901

뽀

S3.1

SHEET#

HELIX REQUIREMENTS:

FOUNDATION WALL SHALL NOT EXCEED 9' HEIGHT.

• DEAD MAN SHALL BE A MAXIMUM 3'8" FROM TOP OF FOUNDATION WALL ELSE HELIX NOT PERMITTED.

ALL CONCRETE SHALL BE REINFORCED WITH HELIX MICRO REBAR ALONG WITH ANY ADDITIONAL REBAR AS NOTED:

9.0 LB/CUBIC YARD DOSAGE OF HELIX 5-25.

 VERIFY DOSAGE AT FORM INSPECTION. SEE MIXING REQUIREMENTS ON THIS PAGE.

MINIMUM 3000 PSI FOOTING COMPRESSIVE STRENGTH

MINIMUM 3000 PSI WALL COMPRESSIVE CONCRETE STRENGTH.

AIR ENTRAINED BETWEEN 5-7% OF CONCRETE VOLUME.

 GRADE 60 REINFORCING STEEL UNLESS OTHERWISE NOTED. LAP SPLICES 24" MINIMUM.

ASSUMED 1500 PSF SOIL BEARING.

• WALL SHALL BE BACK-FILLED WITH CLEAN, LEAN CLAY, OR BETTER, LOW VOLUME CHANGE MATERIAL. ON-SITE MATERIAL MAY BE USED IF DEEMED ACCEPTABLE BY THE GEOTECHNICAL ENGINEER.

HELIX ALTERNATE DESIGN NOT VALID IF ANY ONE OF THE FOLLOWING CONDITIONS ARE MET:

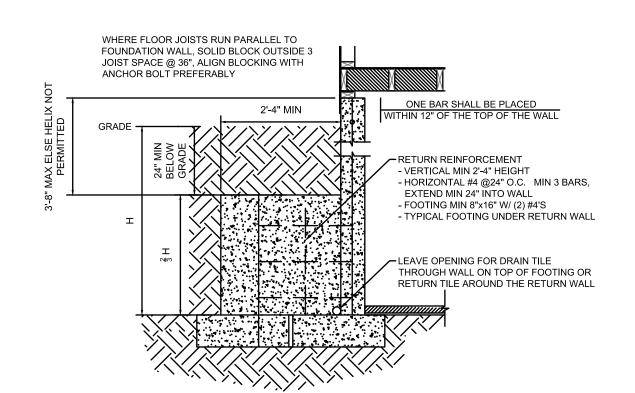
NON-UNIFORM FOOTING SUPPORT (IE. CAST IN PLACE PIERS, PUSH PILES).

DAYLIGHT WALLS EXCEEDING 6' TALL FOR A LENGTH GREATER THAN 6'.

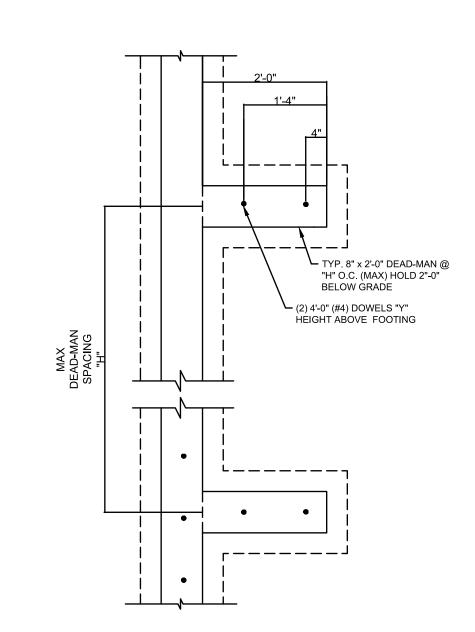
HELIX DOSING INSTRUCTIONS:

MIXING SHOULD BE DONE ACCORDANCE WITH ASTM C94 AND THE MIXING INSTRUCTIONS BELOW. THE DOSAGES OF HELIX ADDED TO THE MIX SHOULD BE NOTED ON THE BATCH DOCUMENTATION IN ACCORDANCE WITH UNIFORM EVALUATION SERVICE ER 279 SECTION 5.15. VERIFIED USING PROCEDURE IN ER 279 APPENDIX A.

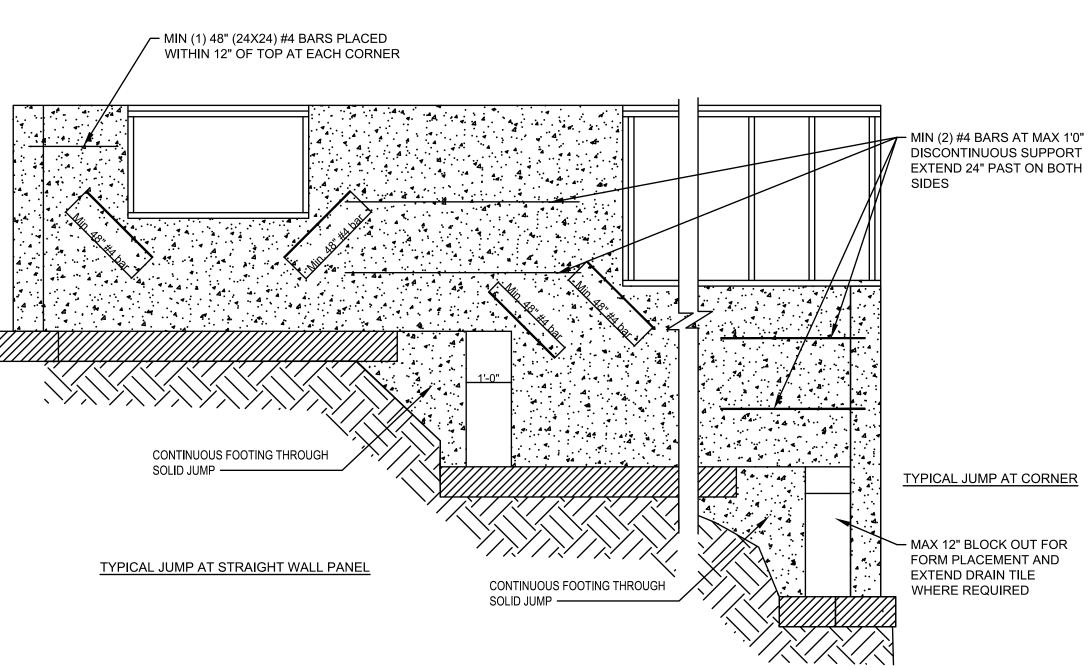
A SLUMP OF 125 MM OR 5" OR HIGHER WILL FACILITATE STRIKE OFF. A SLUMP OF LESS THAN 4" IS NOT RECOMMENDED AS THIS WILL PREVENT SURFACE SEGREGATION OF THE CEMENT AND FINES FROM THE AGGREGATE AND HELIX. SLUMP SHOULD BE MEASURED ON THE INITIAL LOAD AND ADJUSTMENTS MADE WITH A WATER REDUCER OR PLASTICIZER (NOT WATER).





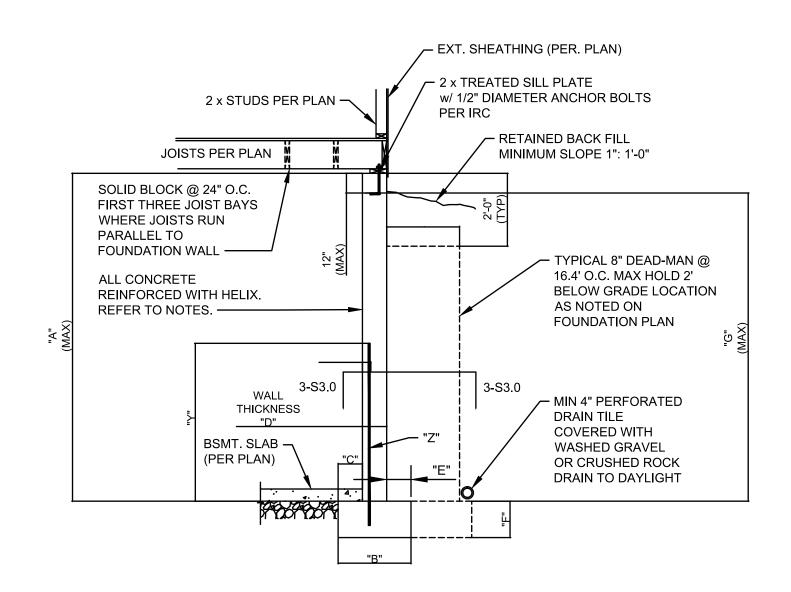








PER KCMO CPD-DS STANDARDS



CONCRETE DIMENSIONS					DIMENS	SIONS	HEIGHT ABOVE FOOTING	REINFORCINGBARS (GRADE 60)	HELIX DOSAGE.	
"A"	"B"	"C"	"D"	"E"	"F"	"G"	"Y"	"Z"	TILLIX BOOKEL.	
8'-0"	1'-4"	4"	8"	4"	8"	7'-6"	2'-6"	4 BARS AT 24" O.C.	9.0 LB/CUBIC YARD	
9'-0"	1'-4"	4"	8"	4"	8"	8'-6"	2'-6"	4 BARS AT 24" O.C.	9.0 LB/CUBIC YARD	

DIMENSIONS SHOWN IS FOR THE MAXIMUM UNINTERRUPTED WALL PANEL LENGTH BEFORE DEAD-MAN SHALL BE INSTALLED. A MINIMUM 2' RETURN OFFSET IN THE FOUNDATION WALL SHALL SUBSTITUTE AS DEAD-MAN AND/OR BREAK IN THE WALL PANEL LENGTH. WALL WILL NOT ACHIEVE FULL STRENGTH UNTIL FIRST FLOOR DECK AND BASEMENT SLAB HAVE BEEN PLACED.

TYPICAL FOUNDATION WALL DETAIL N.T.S.

		16"	3'-0"	(4) VERTICAL #4	12.5 LB/CU FT
	\triangle	18"	3'-0"	(4) VERTICAL #4	12.5 LB/CU FT
	A	24"	3'-0"	(4) VERTICAL #4	12.5 LB/CU FT
	\triangle	28"	3'-0"	(4) VERTICAL #4	12.5 LB/CU FT
		COLUMNS	GREATE	ZES ARE FOR A MAXIMUM COLUMN HEIGH R THAN 10' REQUIRE A SEPARATE ENGINE A-F SPACING OF 6" O.C. WITH 3" CLEAR C	ERED
THREE JOIS' JOISTS RUN FOUNDATION	K @ 24" O.C. FIRST BAYS WHERE PARALLEL TO WALL SPER PLAN			EXT. SHEATHING (PERPLAN) — EXTEND SHEATHING DOWN	
2 x S	TUDS PER PLAN			AS DESIRED TO COVER CONCR PROVIDE RETAINING WALL TO MAINTAIN REQUIRED GRADE.	ETE OR
W 1/2 BOLT ALL (REIN	REATED SILL PLA 2" DIAMETER AND S PER IRG CONCRETE FORCED WITH HI ER TO NOTES. — BSMT. SLAE (PER PLAN)	ELIX.		TYPICAL 8" DEAD O.C. MAX HOLD 2 LOCATION AS NO FOUNDATION PLA	0-MAN @ 16.4' 2' BELOW GRADE DTED ON

HELIX FOOTING TABLE

ALL STRIP FOOTINGS AND GRADE BEAMS

SYM PIER PAD DEPTH

1'-0"

SIZE

42"x42"

A 30"x30"

1 B 36"x36" '

D 48"x48"

∕D*\ 48"x48"

54"x54"

F 60"x60" 1'-6"

PIER

12"

3'-0"

| SYM | DIAMETER |

ISOLATED FOOTINGS AND COLUMN PADS

MINIMUM REINFORCEMENT

GRADE 60 KSI STEEL

(5) #4 BAR E.W.

(6) #4 BAR E.W.

(7) #4 BAR E.W.

(8) #4 BAR E.W.

(8) #4 BAR E.W.

(9) #4 BAR E.W.

(10) #4 BAR E.W.

MINIMUM REINFORCEMENT

GRADE 60 KSI STEEL

(4) VERTICAL #4

SCHEDULE 40

MIN FY = 35 KSI

3" DIAMETER

3" DIAMETER

3" DIAMETER

3" DIAMETER

3.5" DIAMETER

3.5" DIAMETER | 12.5 LB/CU FT

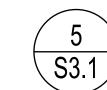
- MIN 4" PERFORATED DRAIN TILE COVERED WITH WASHED GRAVEL

OR CRUSHED ROCK DRAIN TO

STEEL COLUMN, HELIX DOSAGE

CONCRETE DIMENSIONS						IS	HEIGHT ABOVE FOOTING	REINFORCINGBARS (GRADE 60)	HELIX DOSAGE.	
"A"	"B"	"C"	"D"	"E"	"F"	"G"	"Y"	"Z"	TILLIX BOOAGE.	
4'-0"	1'-4"	4"	8"	4"	8"	3'-4"	2'-6"	4 BARS AT 24" O.C.	9.0 LB/CUBIC YARD	
6'-0"	1'-4"	4"	8"	4"	8"	4'-4"	2'-6"	4 BARS AT 24" O.C.	9.0 LB/CUBIC YARD	

DIMENSIONS SHOWN IS FOR THE MAXIMUM UNINTERRUPTED WALL PANEL LENGTH BEFORE DEAD-MAN SHALL BE INSTALLED. A MINIMUM 2' RETURN OFFSET IN THE FOUNDATION WALL SHALL SUBSTITUTE AS DEAD-MAN AND/OR BREAK IN THE WALL PANEL LENGTH. THE BASEMENT SLAB IS AN INTEGRAL PART OF THE "UNRESTRAINED" FOUNDATION WALL DESIGN. THEREFORE, IF THE WALL IS BACKFILLED PRIOR TO PLACEMENT OF THE BASEMENT SLAB, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPERLY BRACING THE WALL UNTIL THE BASEMENT SLAB HAS BEEN PLACED.



TYPICAL "UNRESTRAINED" FOUNDATION WALL DETAIL

N.T.S