	201	8 APPENI	DIX B	BUILD	ING C	ODE S	UM	MARY
Name of Pr	oject: <u>SHOP</u>	PES AT SUM	MIT – Sł	HELL BUIL	DING	Sales Marian		an' kaomin
Address: 16	625 BUFFAL	O LAKE RO	<u> AD – SA</u>	NFORD, N	ORTH C	CAROLIN	<u>A</u> 2	Zip Code: 27332
Owner/Aut	horized Agen	t: BRIAN DeL	ONG	Phone#:	336) 66	<b>7-8000</b> Е	-Mail:	: <u>brian@vpdevelopment.com</u>
Owned By:			ty/County		Country			State
Code Enfor	cement Jurist		.у		County:			State
CONTAC	T: ANDREW	W. PRIVETT	E					
DESIGNER	FIRM		= NAME		LICENSE	TELEPHO	NE	E-MAIL
Architectura	DESIGNED	TO BUILD	ANDY P	RIVETTE	3877	(910)485-	8567	andy@designedtobuild.com
Civil								
Electrical	COASTAL F	PLAINS ENGR	CHRIS L	OCKLEAR	20193	(910)521-	7213	coastalplainseng@gmail.co
Fire Alarm								
Plumbing	COASTAL				20193	(910)521	7213	coastalplainseng@gmail.co
Sprinkler-	CUASTAL	-LAINS ENGR	CHRISE	OURLEAR	20193	(910)521	1213	coastalplainseng@gman.co
Standpipe								
Structural	KIRK EDMU	INDS, PE, LLC	KIRK ED	MUNDS	12047	(843)437-	7131	kedmonds.pe@gmail.com
Retaining W	alls >5' High							
Other	1							
("Other" sh	ould include	firms and indiv	iduals suc	ch as truss, p	recast, p	re-enginee	red, ii	nterior designers, etc.)
				du - A	191			
2018 NC B	UILDING C	ODE: 🛛 New	Building	Shell/C	ore	1 <sup>st</sup> Time Ir	terior	Completions
		🗌 Addi	tion	Phased	Construe	ction-Shel	Core	
2018 NC E	XISTING BU	UILDING CO	DE:	Prescri	ptive 🗌	Alteration	1 Leve	el 1 🗌 Historic Property
				Repair		Alteration	1 Leve	el 2 🗌 Change of Use
				Chapte	er 14 🗍	Alteration	1 Leve	el 3
CONSTRU	UCTED: (dat	e)		CURREN	тоссі	JPANCY(	<b>S)</b> (C)	h. 3):
RENOVA	TED: (date)	/	~	PROPOSI	ED OCC	UPANCY	(S) (C	Ch. 3):
OCCUPAN	NCV CATEG	ORV (Table 1	604 5).	Current		Pro	nosed	
OCCUTA	CT CAILO		004.5).	current.		_ 110	Joseu	• <u></u>
BASIC BU		та						
Constructi	on Type:	I-A		I-A	□ III-/	A		7
	n erst form 🖬 🕊 🕅 Total	V-A		960 989 977		7754		Rr.
		I-B	🗆 I	I-B		В		
	1 <u>1 - 199</u> 1 18 - 1991	⊠ V-B			<u>the second second second second second</u>		64 <u></u>	
Sprinklers	: 🛛 No	Partial		NFPA 13	NFI	PA 13R		IFPA 13D

Class I I II III Wet Dry

NEW (SQ FT)

9,512 SF

9,512 SF

🛛 No 🗌 Yes

Flood Hazard Area: 🛛 No 🗌 Yes

 $\frown$ 

SUB-TOTAL

9,512 SF

9,512 SF

Standpipes: 🛛 No

FLOOR

3<sup>rd</sup> Floor

2<sup>nd</sup> Floor

Mezzanine

asement

l <sup>st</sup> Floor

**Primary Fire District:** 

GROSS BUILDING AREA

Special Inspections Required: 🛛 🛛 No 🗌 Yes

EXISTING (SQ FT)

BUILDING ELEMENT	SEPARATION DISTANCE (FEET)	REQ'D	PROVIDED (W/* REDUCTION)	DETAIL # AND SHEET #
Structural Frame, including				
columns, girders, trusses				_
Bearing Walls				
Exterior				
North	0	0		
East	0	0		
West	0	0		
South	>30	0	0	
Interior		0	0	-
Nonbearing Walls and Partitions				
Exterior				
North		N/A	N/A	
East	-	N/A	N/A	
West		N/A	N/A	
South		N/A	N/A	-
Interior		0	0	
Floor Construction		N/A	N/A	
Including supporting beams and	joists			
Floor Ceiling Assembly		N/A	N/A	
Columns Supporting Floors		N/A	N/A	
Roof Construction, including su and joists	pporting beams	0	0	
Roof Ceiling Assembly		0	0	
Columns Supporting Roof		0	0	
Shaft Enclosures - Exit		N/A	N/A	
Shaft Enclosures - Other		N/A	N/A	
Corridor Separation		N/A	N/A	
Occupancy/Fire Barrier Separat	ion	2 HR	2 HR	G-102
Party/Fire Wall Separation		N/A	N/A	
Smoke Barrier Separation		N/A	N/A	
Smoke Partition		N/A	N/A	
Tenant/Dwelling Unit/		N/A	N/A	-
Sleeping Unit Separation				
Incidental Use Separation		N/A	N/A	

FIRE SEPARATION DISTANCE (FEET) FROM PROPERTY LINES	DEGREE OF OPE PROTECTION (TAB	Allowable area (		
>30	UP, NS	NO LIMIT		
LIFE SAFETY SYSTEM	REQUIREMEN	NTS		
Emergency Lighting:	⊠Yes	🗌 No		
Emergency Lighting: Exit Signs:	⊠Yes ⊠ Yes	□ No □ No		
Emergency Lighting: Exit Signs: Fire Alarm:	⊠Yes ⊠ Yes □ Yes	□ No □ No ⊠ No		
Emergency Lighting: Exit Signs: Fire Alarm: Smoke Detection System:	⊠Yes ⊠Yes □Yes □Yes	<ul> <li>□ No</li> <li>□ No</li> <li>○ No</li> <li>○ No</li> </ul>		

ALLOWA	BLE AREA							
rimary Oc	cupancy Class	sification(s)	:		1.1 Jan	11		
As	ssembly	A-1	⊠A-2	🗌 A-3	3 🗌 A-4	□A-5		
Bu	siness	$\boxtimes$						
Ed	ucational							
Fac	ctory	🗌 F-1 Me	oderate	🗌 F-2	Low			
Ha	zardous	🗌 H-1 De	etonate	🗌 H-2	2 Deflagrate	H-3 Combust	🗌 H-	4 Health 🗌 H-5 HP
Ins	stitutional	🗌 I-1		🗌 I-2	1	🗌 I-3	🗌 I-4	
I-	3 Condition	1	2					
I-2	2 Condition	$\Box 1$	2					
I-3	3 Condition	$\Box 1$	2	3	4	5		
Me	ercantile							
Re	sidential	🗌 R-1		🗌 R-2	2	🗌 R-3	🗌 R-4	4
Sto	orage	🗌 S-1 Mo	oderate	□S-2	Low	High Piled		
		🗌 Parking	g Garage	e 🗌 Ope	en 🗌 Enclo	sed		
Uti	ility and Misce	ellaneous						
ccessory (	Occupancy Cl	lassification	n(s): <u>N//</u>	<u>A</u>				
icidental I	Uses (Table 50	09): <u>N/A</u>						
pecial Use	s (Chapter 4 –	- List Code	Sections	): <u>N/A</u>				
pecial Pro	visions (Chap	ter 5 – List	Code Se	ections):	<u>N/A</u>			
lixed Occu	upancy:		Ves	Sepa	ration: 2 Hr.	Exception:		
	-panel .		A 1 00	1				
] Non-sep	arated Use (50	08.3)	7 1 65					
Non-sep	parated Use (50 ed Use (508.4) Actual Area of lowable Area of ,797)10,500	08.3) - See below <u>f Occupancy</u> of Occupancy 0 = 0.457	v for area $\frac{vA}{cyA}$	a calcula + <u>Ac</u> Allow <b>4,</b>	tions for eac <u>ctual Area of</u> wable Area of <b>715/15,7</b>	h story. <u>Occupancy B</u> of Occupancy B 50 = 0.299	≤ 1 <b>= 0.7</b>	56 <u>≤</u> 1.00
Non-sep Separate All <b>4</b> , STORY NO.	parated Use (50 ed Use (508.4) Actual Area of lowable Area of ,797)10,500 DESCRIPTION	$\frac{1}{1000}$ $\frac{1}{2}$ $\frac{1}{1000}$	v for area v $A$ cy $A$ 7 +	a calcula + <u>Ac</u> Allow <b>4</b> ,	tions for eac etual Area of wable Area of <b>715/15,7</b> (B) TABLE 506.24 AREA	h story. <u>Occupancy B</u> of Occupancy B 50 = 0.299 (C) AREA FOR FRONTA INCREASELS	≤ 1 <b>= 0.7</b> AGE A	56 ≤ 1.00 (D) LLOWABLE AREA PER
Non-sep Separate ∠ All (4, story NO.	Actual Area of lowable Area of <b>797</b> /10,500 Description	$\frac{1}{1000}$ $\frac{1}{2}$ $\frac{1}{1000}$	v for area v for area $\frac{vA}{7}$ + BLDG AR STOP (ACTU	a calcula + <u>Ac</u> Allow <b>4</b> , EA PER RY JAL)	tions for eac etual Area of wable Area of 715/15,79 (B) TABLE 506.2 <sup>4</sup> AREA	h story. <u>Occupancy B</u> of Occupancy B 50 = 0.299 (C) AREA FOR FRONTA INCREASE1.5 A E00 SE	≤ 1 <b>= 0.7</b> AGE A	(D) LLOWABLE AREA PER STORY OR UNLIMITED2,3
Non-sep Separate All (4, story no. 1ST 1ST	Actual Area of dowable Area of dowable Area of <b>797)10,50</b> description	$\frac{1}{100}$ $\frac{1}{2}$ $\frac{1}{100}$ $\frac{1}{1$	v for area v A cy A 7 + (A) BLDG AR STOP (ACTU 4,793	a calcula + <u>Ac</u> Allow <b>4</b> , ) EA PER RY IAL) 7 SF	tions for eac <u>stual Area of</u> wable Area of <b>715/15,7</b> (B) TABLE 506.2 <sup>4</sup> AREA <b>6,000 SF</b>	h story. <u>Occupancy B</u> of Occupancy B 50 = 0.299 (C) AREA FOR FRONTA INCREASELS 4,500 SF 6 750 SE	<b>AGE AGE AGE</b>	(D) LLOWABLE AREA PER STORY OR UNLIMITED2,3 10,500 SF 45 750 SE
Non-sep Separate ∡ All (4, story no. 1ST 1ST	Actual Area of lowable Area of lowable Area of <b>797</b> /10,500 DESCRIPTION (A-2) REST (B) CLINIC	$\frac{1}{100}$ $\frac{1}{2}$ $$	v for area v A cy A 7 + (A) BLDG AR STOP (ACTU 4,791	a calcula + <u>Ac</u> Allow <b>4</b> , CAL AL AL AL AL AL	tions for eac etual Area of wable Area of 715/15,7 (B) TABLE 506.2 <sup>4</sup> AREA 6,000 SF 9,000 SF	h story. <u>Occupancy B</u> of Occupancy B 50 = 0.299 (C) AREA FOR FRONTA INCREASE1,5 4,500 SF 6,750 SF	<ul> <li>&lt; 1</li> <li>= 0.7</li> </ul> AGE <ul> <li>AGE</li> <li>A</li> </ul> Solution	(D) LLOWABLE AREA PER STORY OR UNLIMITED2,3 10,500 SF 15,750 SF
Non-sep Separate ∠ All 4, STORY NO. 1ST 1ST Frontage arc a.	Actual Area of dowable Area of	$\frac{1}{100} = \frac{1}{2}$ $\frac{1}{100} = \frac{1}{2}$ $\frac{1}{100} = \frac{1}{100}$	v for area v for area $\frac{vA}{7}$ + BLDG AR STOP (ACTU 4,79) 66.2 are co onts a pu	a calcula + <u>Ac</u> Allow <b>4</b> , CAL T SF 5 SF Computed t bblic way	(B) TABLE 506.2 <sup>4</sup> AREA <b>6,000 SF</b> hus: or open spa	h story. <u>Occupancy B</u> of Occupancy B 50 = 0.299 (C) AREA FOR FRONTA INCREASE1.5 4,500 SF 6,750 SF ce having 20 feet m	1     1     2     1     2     1     2     1     2     1     2     1     2     1	(D) ALLOWABLE AREA PER STORY OR UNLIMITED2,3 10,500 SF 15,750 SF n width = <u>520</u> (F)
Non-sep Separate ∠ All. 4, STORY NO. 1ST Frontage are a. b.	Actual Area of dowable Area of dowable Area of dowable Area of (0,797)10,500 DESCRIPTION (A-2) REST (B) CLINIC ea increases from Perimete Total Bu	$\frac{1}{100} = \frac{1}{2}$ $\frac{1}{100} = \frac{1}{2}$ $\frac{1}{100} = \frac{1}{100}$	v for area v for area $\frac{vA}{cyA}$ 7 + (A) BLDG AR STOP (ACTU 4,79) 4,711 66.2 are co onts a pu meter =	a calcula + <u>Ac</u> Allow 4, ) EA PER RY JAL) 7 SF 5 SF omputed t blic way 520 (P)	(B) TABLE 506.2 <sup>4</sup> AREA <b>6,000 SF</b> 9,000 SF hus: or open spa	h story. <u>Occupancy B</u> of Occupancy B <b>50 = 0.299</b> (C) AREA FOR FRONTA INCREASELS <b>4,500 SF</b> <b>6,750 SF</b> ce having 20 feet m	1     1     2     1     2     1     2     1     2     1     2     1     2     1	(D) ALLOWABLE AREA PER STORY OR UNLIMITED2,3 10,500 SF 15,750 SF n width = <u>520</u> (F)
Non-sep Separate ∠ All (4, story NO. 1ST 1ST Frontage are a. b. c. d	Actual Area of dowable Area of	$\frac{1}{2}$	v for area v for area $\frac{vA}{cyA}$ 7 + (A) BLDG AR STOP (ACTU 4,793 4,715 6.2 are co onts a pu meter = F/P) th of multiple	a calcula + $\underline{Ac}$ Allow 4, () EA PER RY (AL) 7 SF 5 SF omputed t blic way 520 (P)	tions for eac tual Area of wable Area of <b>715/15,7</b> (B) TABLE 506.2 <sup>4</sup> AREA <b>6,000 SF</b> <b>9,000 SF</b> hus: or open spa = <b>30</b> (W)	h story. Coccupancy B of Occupancy B Coccupancy B Cocupancy B Cocupan	1     1     1     2     1	(D) LLOWABLE AREA PER STORY OR UNLIMITED2,3 10,500 SF 15,750 SF n width = 520 (F)
Non-sep Separate ∠ All 4, STORY NO. IST IST Frontage are a. b. c. d. e	Actual Area of dowable Area of	$\frac{1}{2}$ $\frac{1}$	v for area v for area $\frac{yA}{cyA}$ 7 + (A) BLDG AR STOP (ACTU 4,793 66.2 are co onts a pu meter = F/P) th of pul increase	a calcula + $Acontrol Allow$ 4, (Allow 4, (Allow 4, (Allow) 5 SF (Allow) 7 SF 5 SF (Allow) 7 SF 5 SF (Allow) 7 SF) 7 SF (Allow) 7 SF) 7 SF)	tions for eac tions for eac tions for eac tions for eac tions for eac tions for eac tions <b>715/15,7</b> (B) TABLE 506.2 <sup>4</sup> AREA <b>6,000 SF</b> <b>9,000 SF</b> hus: or open spa = 30 (W) F/P = 0.251	h story. $\overline{Occupancy B}$ of Occupancy B $\overline{50} = 0.299$ (C) AREA FOR FRONTAINCREASELS 4,500 SF 6,750 SF ce having 20 feet m x W/30 = 75 (%)	1     1     2     1     2     1     2     1     2     1     2     1     2     1	(D) LLOWABLE AREA PER STORY OR UNLIMITED2,3 10,500 SF 15,750 SF n width = <u>520</u> (F)
Non-sep Separate ∠ All. (4, story NO. IST IST Frontage arc a. b. c. d. e. Unlimited	Actual Area of dowable Area of dowable Area of dowable Area of dowable Area of (0,797)10,500 DESCRIPTION (A-2) REST (B) CLINIC ea increases from Perimete Total Bu Ratio (F W = Mi Percent area applicable	$\frac{1}{100} = \frac{1}{2}$ $\frac{1}{100} = \frac{1}{2}$ $\frac{1}{100} = \frac{1}{2}$ $\frac{1}{100} = \frac{1}{100}$	v for area v for area $\frac{vA}{cyA}$ 7 + (A) BLDG AR STOP (ACTU) 4,793 6.2 are co onts a pu meter = F/P) th of pul increase additions of	a calcula + $Allow$ 4, () EA PER RY (AL) 7 SF 5 SF () (P) blic way 520 (P) blic way c $I_f = 100$ of Sectio	tions for eac <u>stual Area of</u> wable Area of <b>715/15,75</b> (B) TABLE 506.2 <sup>4</sup> AREA <b>6,000 SF</b> <b>9,000 SF</b> hus: or open spa = 30 (W) [F/P - 0.25] n 507.	h story. Coccupancy B of Occupancy B Cocupancy B Cocupan	1     1     2     1     2     1     2     1     2     1     2     1	(D) ALLOWABLE AREA PER STORY OR UNLIMITED2,3 10,500 SF 15,750 SF n width = <u>520</u> (F)
Non-sep Separate Separate 4, 4, STORY NO. 1ST 1ST Frontage arc a. b. c. d. e. Unlimited Maximum E	Actual Area of arated Use (508.4) Actual Area of lowable Area of owable Area of Octao Post Octao Oc	$\frac{1}{2}$ $\frac{1}$	v for area v for area $\frac{vA}{cyA}$ 7 + (A) BLDG AR STOP (ACTU 4,793 6.2 are co onts a pu meter = F/P) th of pul increase additions of r of storie	a calcula + $\underline{Ac}$ $\underline{Allow}$ 4, <b>4</b> , <b>4</b> , <b>4</b> , <b>4</b> , <b>5</b> <b>5 SF</b> <b>5 S SF</b> <b>5 S</b> <b>5 S</b> <b>5 5 5 S</b> <b>5 5 5 5 5 5 5 5 5 5</b>	tions for eac tions for eac tions for eac tions for eac tions for eac tions for eac <b>715/15,75</b> (B) TABLE 506.2 <sup>4</sup> AREA <b>6,000 SF</b> <b>9,000 SF</b> hus: or open spa = <u>30</u> (W) [F/P - 0.25] n 507. uilding x D (r	h story. $\frac{Occupancy B}{Occupancy B}$ 50 = 0.299 (C) AREA FOR FRONTA INCREASELS 4,500  SF 6,750  SF ce having 20 feet m x $W/30 = \underline{75}$ (%) maximum3 stories) (5)	<ul> <li>&lt; 1</li> <li>= 0.7</li> </ul> AGE <ul> <li>AGE</li> <li>AGE</li> <li>AGE</li> <li>AGE</li> </ul> 506.2).	(D) (D) (LLOWABLE AREA PER STORY OR UNLIMITED2,3 10,500 SF 15,750 SF In width = 520 (F)
Non-sep Separate ∠ All 4, STORY NO. IST TST Frontage arc a. b. c. d. e. Unlimited Maximum F The maximu	Actual Area of dowable Area of dowable Area of dowable Area of dowable Area of of owable Area of operimeter area applicabl Building Area = um area of oper	$\frac{1}{100} = \frac{1}{2}$ $\frac{1}{100} = \frac{1}{2}$ $\frac{1}{100} = \frac{1}{2}$ $\frac{1}{100} = \frac{1}{100}$	v for area v for area $\frac{vA}{cyA}$ 7 + (A) BLDG AR STOP (ACTU 4,797 4,715 6.2 are co onts a pu meter = F/P) th of pul increase ages must	a calcula + $\underline{Ac}$ Allow 4, () EA PER RY JAL) 7 SF 5 SF omputed t blic way 520 (P) blic way $\underline{520}$ (P) blic way $\underline{520}$ (P) blic way $\underline{520}$ (P) blic way	tions for eac tions for eac tial Area of wable Area of <b>715/15,75</b> (B) TABLE 506.2 <sup>4</sup> AREA <b>6,000 SF</b> <b>9,000 SF</b> <b>9,000 SF</b> hus: or open spa = 30 (W) 0[F/P - 0.25] n 507. uilding x D (r with Table 40	h story. $\overline{Occupancy B}$ of $Occupancy B$ $\overline{50} = 0.299$ (C) AREA FOR FRONTA INCREASELS 4,500  SF 6,750  SF ce having 20 feet m $x W/30 = \overline{75} (\%)$ maximum3 stories) (5 6.5.4. The maximum	1     1     2     1     2     1     2     1     2     1     2     1     2     1     2     1     2     1     2     1     2     1     2     1     2     1     2     1	(D) (D) (LLOWABLE AREA PER STORY OR UNLIMITED2,3 10,500 SF 15,750 SF In width = 520 (F) air traffic control tower
Non-sep Separate All (4, STORY NO. IST IST Frontage arc a. b. c. d. e. Unlimited Maximum H The maximum must comply	Actual Area of dowable Area of dowable Area of dowable Area of dowable Area of of of of dowable Area of of of of description (A-2) REST (B) CLINIC ea increases from Perimete Total Bu Ratio (F W = Mi Percent area applicabl Building Area = um area of open ly with Table 41	$\frac{1}{100} = \frac{1}{2}$ $\frac{1}{100} = \frac{1}{2}$ $\frac{1}{100} = \frac{1}{2}$ $\frac{1}{100} = \frac{1}{100}$	v for area v for area v for area v $A$ (A) BLDG AR STOP (ACTU 4,793 4,715 6.2 are co onts a pu meter = F/P) th of pul increase ages must	a calcula + $Ac$ Allow 4, () EA PER RY IAL) 7 SF 5 SF computed t blic way 520 (P) blic way $f_f = 100$ of Sectio es in the b t comply the section of the section t comply the section of the sectio	tions for eac tions for eac <b>715/15,75</b> (B) TABLE 506.2 <sup>4</sup> AREA <b>6,000 SF</b> <b>9,000 SF</b> <b>9,000 SF</b> hus: or open spa = <u>30</u> (W) [ <i>F/P</i> - 0.25] n 507. uilding x D (r with Table 40 constrained to the tion to the	h story. $\frac{Occupancy B}{Occupancy B}$ f Occupancy B 50 = 0.299 (C) AREA FOR FRONTA INCREASELS 4,500  SF 6,750  SF ce having 20 feet m $x W/30 = \overline{75}$ (%) maximum3 stories) (5 6.5.4. The maximum	< 1       AGE A       AGE A       Ininimum       506.2).       n area of	(D) LLOWABLE AREA PER STORY OR UNLIMITED2,3 10,500 SF 15,750 SF In width = $520$ (F) air traffic control tower
Non-sep Separate All (4, STORY NO. 1ST 1ST Frontage arc a. b. c. d. e. Unlimited Maximum F The maximum must comply Fro	Actual Area of dowable Area of of dowable Area of of dowable Area of dowable Area of dowable Area of dowable Area of dowable Area of dowable Area of dowable Area of dowable Area of dowable Area of dowable Area of dowable A	$\frac{1}{100} = \frac{1}{2}$ $\frac{1}{100} = \frac{1}{2}$ $\frac{1}{100} = \frac{1}{2}$ $\frac{1}{100} = \frac{1}{100}$	v for area v for area v for area v $A$ (x, y, A) (x, y, A)	a calcula + $\underline{Ac}$ $\underline{Allow}$ 4, <b>4</b> , <b>4</b> , <b>4</b> , <b>4</b> , <b>7</b> SF <b>5</b> SF <b>5</b> SF <b>5</b> Demputed to blic way $\underline{520}$ (P) blic way	tions for eac tions for eac tions for eac tions for eac tions for eac tions for eac tions <b>715/15,75</b> (B) TABLE 506.2 <sup>4</sup> AREA <b>6,000 SF</b> <b>9,000 SF</b> <b>9,000 SF</b> hus: or open spa = <u>30</u> (W) [ <i>F/P</i> - 0.25] n 507. uilding x D (r with Table 40 ea value in Table	h story. $\frac{Occupancy B}{Occupancy B}$ 50 = 0.299 (C) AREA FOR FRONTAINCREASELS 4,500 SF 6,750 SF ce having 20 feet m x $W/30 = \underline{75}$ (%) maximum3 stories) (5 6.5.4. The maximum ble 506.2.	< 1         AGE A         AGE A         Minimum         506.2).         n area of	(D) $(D)$
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LIFE SAFETY PLAN REQUIREMENTS – SEE TENANT COMPLETION DOCUMENTS Life Safety Plan Sheet #: N/A FOR SHELL BUILDING

Life Sa	afety Plan Sheet #: N/A FOR SHELL BUILDING
	Fire and/or smoke rated wall locations (Chapter 7)
	Assumed and real property line locations (if not on the site plan)
	Exterior wall opening area with respect to distance to assumed pro
	Occupancy Use for each area as it relates to occupant load calculate
	Occupant loads for each area
	Exit access travel distances (1017)
	Common path of travel distances (Tables 1006.2.1 & 1006.3.2(1))
	Dead end lengths (1020.4)
	Clear exit widths for each exit door
	Maximum calculated occupant load capacity each exit door can ac
	Actual occupant load for each exit door
	A separate schematic plan indicating where fire rated floor/ceiling purposes of occupancy separation
	Location of doors with panic hardware (1010.1.10)
	Location of doors with delayed egress locks and the amount of del
	Location of doors with electromagnetic egress locks (1010.1.9.9)
	Location of doors equipped with hold-open devices
	Location of emergency escape windows (1030)
Π	The square footage of each fire area (202)
Ξ	

The square footage of each smoke compartment for Occupancy Classification I-2 (407.5) Note any code exceptions or table notes that may have been utilized regarding the items above

TOTAL Units	Accessible Units Required	Accessible Units Provided	TYPE A Units Required	TYPE A Units Provided	TYPE B Units Required	TYPE B Units Provided	TOTAL ACCESSIBLE UNITS PROVIDED
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LOT OR PARKING	TOTAL # OF PA	RKING SPACES	# OF ACCESSIBL		
AREA	REQUIRED	PROVIDED	REGULAR WITH 5' ACCESS AISLE	132	
707.17					

USE		N	ATERCLOSI	ETS	URINALS	LAVATORI		
		MALE	FEMALE	UNISEX		MALE	FEMALE	
SPACE	EXIST'G							
	NEW							
	REQ'D							

SPECIAL APPROVALS

Special approval: (Local Jurisdiction, Department of Insurance, OSC, DPI, DHHS, etc., describe below)

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Z		

FIRE PROTECTION REQUIREMENTS

		3					4		5
					ENE	RGY SUMMARY			
ETAIL # AND SHEET #	DESIGN # FOR RATED SSEMBLY	SHEET # FOR RATED PENETRATION	SHEET # FOR RATED JOINTS	ENERGY REQUIREME Existing building envelop	INTS: pe complies with code:	☐ (If checked, the ren	ainder of this section is no	t applicable.)	INSIDE AIR FILM R=0.68
				Exempt Building:	Provide code or	statutory reference:			5/8" GYP. BD.
				Climate Zone:	3A	🖂 4A	□ 5A		
				Method of Com	pliance:				CAVITY INSULATION
				Energy Code: ASHSAE 90.1: Other:	<ul> <li>Performance</li> <li>Performance</li> <li>Performance (If "Comparison of the second se</li></ul>	Prescriptive Prescriptive Dther" specify source h	ere)		2x6 WOOD STUDS
				THERMAL ENVELOPE	E (Prescriptive method on	ıly)			TOTAL ASSEMBLY R =
G-102	UL U419			Roof/ceiling Asse         Descript         U-Value         R-Value         Skylight         Total squ         Exterior Walls (         Descript         U-Value         R-Value         Opening         Walls below grave         Descript         U-Value         R-Value         Descript         U-Value         R-Value         R-Value         Descript         U-Value         R-Value         R-Value         R-Value	embly (each assembly) ion of assembly: LOW S of total assembly: LOW S of insulation: s in each assembly: U-Value of skylight: iare footage of skylights i each assembly) ion of assembly: of total assembly: of total assembly: s (windows or doors with U-Value of assembly: Solar heat gain coefficie Projection factor: Door R-Values: de (each assembly) e of total assembly: of insulation: s (windows or doors with U-Value of assembly: Solar heat gain coefficie Projection factor: Door R-Values: de (each assembly) N/A tion of assembly: of insulation: of insulation:	SLOPE, WOOD DECK 0.029 R-30 N/A N/A in each assembly: <u>WOOD STUD, Ell</u> 0.0394 R-19 + R-5 ci 1 glazing) 0.45 cmt:0.25 < 025 (assumed) R 1.3 (minimum) 	N/A	SINGLE PLY	ASSEMBLY WALL WD STUDS WITH 1" OUTSIDE AIR FILM R=0.17 WOOD DECK R=0.98 ROOF TRUSS
x (%)	ACTUAL S	HOWN ON PLANS	(%)	Descript U-Value R-Value	ion of assembly: of total assembly: of insulation:				
42%	FRONT,	5% κεας, 10	% SIDES	Floors slab on gr Descript U-Value R-Value Horizon	<b>:ade</b> ion of assembly: of total assembly: of insulation: tal/vertical requirement:	<u>MONOLITHIC FO</u> <u>N/A</u> <u>R-15</u> 24"	UNDATIONS		TOTAL ASSEMBLY R = ASSEMBLY ROOF SINGLE PLY & F R1 <u>ON WD TRUSS W</u>

operty lines (705.8) ation (Table 1004.1.2)

ccommodate based on egress width (1005.3)

g and/or roof structure is provided for

elay (1010.1.9.7)

#### MPLETION DOCUMENTS

E SPACES PRO VAN SPACI	OVIDED ES WITH	TOTAL # ACCESSIBLE
2" ACCESS AISLE	8' ACCESS AISLE	PROVIDED

E	E TENANT COMPLETION DOCUMENTS										
RIES		SHOWERS	DRINKING FOUNTAINS								
3	UNISEX	/ TUBS	REGULAR	ACCESSIBLE							
			40								

# **SHOPPES AT SUMMIT** SHELL BUILDING

1625 BUFFALO LAKE ROAD SANFORD, NORTH CAROLINA



# **ANDREW W. PRIVETTE, ARCHITECT**

1920 FT. BRAGG ROAD - FAYETTEVILLE, N.C. 28303 - (910) 485-8567





CAROLINA

SP

∖ Sensible Approa

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3C. Gypsum Board\* - (As an alternate to Items 3, 3A and 3B) - 5/8 in. thick, 2 ft wide, tor horizontally to one side of the assembly. Installed with 1-7/8 in. long cement coated nails as de Type W coarse thread gypsum panel steel screws as described in Item 3A. Joint covering (Item CGC INC - Type SHX

UNITED STATES GYPSUM CO - Type SHX

USG MEXICO S A DE C V - Type SHX

3D. Gypsum Board\* - (As an alternate to Items 3, 3A, 3B, or 3C - Not Shown) - For Direct 30. Gypsum Board — (As an attended to items 3, 3A, 3D, or 3C — Not Shown) — For Direct in. thick lead backed gypsum panels with beveled, square or tapered edges, applied vertically. staggered min 1 stud cavity on opposite sides of studs. Wallboard secured to studs with 1-5/8 i panel steel screws spaced 8 in. OC at perimeter and in the field. Lead batten strips required be gypsum wallboard and optional at remaining stud locations. Lead batten strips, min 1-1/2 in, wir thickness of 0.125 in. placed on the face of studs and attached to the stud with two 1 in. long Ty at the top of the strip and one at the bottom of the strip. Lead discs or tabs may be used in lieu strips or optional at other locations. Max 3/4 in, diam by max 0.125 in, thick lead discs compre screw heads or max 1/2 in. by 1-1/4 in. by max 0.125 in. thick lead tabs placed on gypsum bo to the installation of the screws. Lead batten strips to have a purity of 99.9% meeting the Feder

RAY-BAR ENGINEERING CORP — Type RB-LBG (finish rating 24 min)

3E. **Gypsum Board\*** – (As an alternate to Items 3, 3A, 3B, 3C, and 3D) – 5/8 in. thick gypsu applied either horizontally or vertically. Gypsum panels fastened to framing with 1-1/4 in. long 1 steel screws spaced a max 8 in. OC, with last 2 screws 1 and 4 in. from edge of board or nailed nails 1-7/8 in. long, 0.0915 in. shank diam and 15/64 in. diam heads. When used in widths of o to be installed horizontally. GEORGIA-PACIFIC GYPSUM L L C - Type DGG (finish rating 20 min), GreenGlass Type X (fir

3F. Gypsum Board\* – (As an alternate to Items 3, 3A, 3B, 3C, 3D, and 3E) - 5/8 in. glasseither horizontally or vertically. Gypsum panels nailed 7 in. OC around the perimeter and in the 7/8 in. long, 0.0915 in. shank diam and 15/64 in. diam heads. Nails shall be placed 1 inch and 3 inch OC thereafters CGC INC — Type USGX (finish rating 22 min)

USG MEXICO S A DE C V — Type USGX (finish rating 22 min.)

UNITED STATES GYPSUM CO - Type USGX (finish rating 22 min.)

3G. Gypsum Board\* — (As an alternate to Items 3 through 3F) — 5/8 in. thick paper surfaced nailed 7 in. OC with 6d cement coated nails 1-7/8 in. long, 0.0915 in. shank diam and 15/64 in. GEORGIA-PACIFIC GYPSUM L L C - Type X ComfortGuard Sound Deadening Gypsum Board (

3H. Gypsum Board\* - (As an alternate to Items 3) - Not to be used with items 6 or 7. 5/8 i vertically only. Gypsum panels nailed 7 in. OC with 6d cement coated nails 1-7/8 in. long, 0.09 heads. NATIONAL GYPSUM CO — SoundBreak XP Type X Gypsum Board

3I. Gypsum Board\* - (As an alternate to Items 3 through 3H, Not Shown) - Nominal 5/8 in. vertically. Panels nailed 7 in. OC with 6d cement coated nails 1-7/8 in. long, 0.0915 in. shank d joints covered with paper tape and two layers of joint compound. Nailheads covered with two layers of joint compound. PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM - Type QuietRock ES (finish ratin

3J. Gypsum Board\* - (As an alternate to Item 3) - Not to be used with items 6 or 7. 5/8 in vertically only. Gypsum panels nailed 7 in. OC with 6d cement coated nails 1-7/8 in. long, 0.09 heads CERTAINTEED GYPSUM INC - Type SilentFX

3K. Gypsum Board\* - (As an alternate to Item 3) - 5/8 in. thick gypsum panels, with bevel either horizontally or vertically. Gypsum panels fastened to framing with 1-1/4 in. long Type W screws spaced a maximum 8 in. OC with the last screw 1 in. from the edge of the board. When gypsum panels are to be installed horizontal NATIONAL GYPSUM CO — Type FSK (finish rating 20 min), Type FSK-G (finish rating 20 min), Type FSW-2 (finish rating 24 min), Type FSW-3 (finish rating 20 min), Type FSW-5 (finish rating rating 20 min), Type FSK-C (finish rating 20 min), Type FSW-C (finish rating 20 min), Type FSK-C (finish rating

3L. Gypsum Board\* - (As an alternate to Item 3) - For Direct Application to Studs Only gypsum panels with beveled, square or tapered edges, applied vertically. Vertical joints centered stud cavity on opposite sides of studs. Wallboard secured to studs with 1-5/8 in. Iong Type W co screws spaced 8 in. OC at perimeter and in the field. Lead batten strips required behind vertical wallboard and optional at remaining stud locations. Lead batten strips, min 2 in. wide, max 10 fit in, placed on the face of studs and attached to the stud with two 1 in. long Type S-8 pan head strip and one at the bottom of the strip. Lead discs, max 5/16 in. diam by max 0.140 in. thick. the screw heads. Lead batten strips to have a purity of 99.5% meeting the Federal specification MAYCO INDUSTRIES INC - "X-Ray Shielded Gypsum"

3M. Gypsum Board\* - (As an alternate to Items 3) - For Direct Application to Studs Only face layer. Nom 5/8 in, thick lead backed gypsum panels with beyeled, square or tapered edge Centered over studs and staggered min 1 stud cavity on opposite sides of studs. Wallboard secu W coarse thread gypsum panel steel screws spaced 8 in. OC at perimeter and in the field when applied as the face layer screw length to be increased to 2-1/2 in. Lead batten strips required be gypsum wallboard and optional at remaining stud locations. Lead batten strips, min 2 in. wide, n of 0.14 in. placed on the face of studs and attached to the stud with construction adhesive and the steel screws, one at the top of the strip and one at the bottom of the strip. Lead discs, nominal construction adhesive and the strip and one at the bottom of the strip. Lead discs, nominal construction adhesive and the strip and one at the bottom of the strip. Lead discs, nominal construction adhesive add the strip and one at the bottom of the strip. impression fitted or adhered over the screw heads. Lead batten strips and discs to have a pur ication OO-L-201f. Grade "C". Fasteners for face layer gypsum panels (Items 4, 4A or 4 board to be min 2-1/2 in. Type S-12 bugle head steel screws spaced as described in Item 4.

3N. Gypsum Board\* - (As an alternate to Item 3) - 5/8 in. thick, 4 ft. wide, applied horizon centered over studs and staggered one stud cavity on opposite sides of studs. Secured as descri CERTAINTEED GYPSUM INC - 5/8" Easi-Lite Type X (finish rating 24 min)

RADIATION PROTECTION PRODUCTS INC - Type RPP - Lead Lined Drywall

30. Wall and Partition Facings and Accessories\* — (As an alternate to Item 3, Not Shown) panels, applied vertically. Panels nailed 7 in. OC with 6d cement coated nails 1-7/8 in. long, 0.0 diam heads. Panel joints covered with paper tape and two layers of joint compound. Nailheads correspondent. compound. PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM - Type QuietRock 527 (finish ratin

3P. Gypsum Board\* - (As an alternate to Item 3, Not Shown) - Two layers nom. 5/16 in. thi or horizontally. Horizontal edge joints and horizontal butt joints on opposite sides of studs need studs. Horizontal joints on the same side between face and base layers need not be staggered. studs with 1-1/4 in. long drywall nails spaced 8 in. OC. Face layer gypsum panels fastened to s spaced 8 in. OC starting with a 4" stagger. NATIONAL GYPSUM CO — Type FSW (finish rating 25 min)

3Q. Gypsum Board\* – (As an alternate to Item 3) – 5/8 in. thick gypsum panels, with bevel either horizontally or vertically. Gypsum panels fastened to framing with 1-1/4 in. long Type W screws spaced a maximum 10 in. OC with the last two screws 4 and 1 in. from the edges of the than 48 in., gypsum panels are to be installed horizontally. CONTINENTAL BUILDING PRODUCTS OPERATING CO, LLC - Type LGFC6A (finish rating 2) C/A, Type LGFC-WD, Type LGLLX

4. Steel Corner Fasteners — (Optional) — For use at wall corners. Channel shaped, 2 in. long I two 1/8 in. wide cleats protruding into the 5/8 in. wide channel, fabricated from 24 gauge galv st end or cut edge (not along tapered edges) of the gypsum board, no greater than 2 in. from corner in. OC. Nailed to adjacent stud through tab using one No. 6d cement coated nail per fastener. C top and bottom plate using No. 6d cement coated nails. Batts and Blankets\* – (Optional – Required when Item 6A is used (RC-1)) – Glass fiber completely or partially fill the stud cavities. When Item 6A is used, glass fiber or mineral wool i completely fill the stud cavities.

CERTAINTEED CORP JOHNS MANVILLE KNAUF INSULATION LLC MANSON INSULATION INC

OWENS CORNING HT INC, DIV OF OWENS CORNING — Corning Fiberglas Corp

ROCK WOOL MANUFACTURING CO - Delta Board

ROXUL INC - Acoustical Fire Batts

THERMAFIBER INC - Type SAFB

5A. Fiber, Sprayed\* - (Not Shown - Not for use with Item 6) - As an alternate to Batts and cellulose material. The fiber is applied with water to completely fill the enclosed cavity in accor supplied with the product with a nominal dry density of 2.7 lb/ft3. Alternate Application Method: adhesive at a nominal dry density of 3.5 lb/ft<sup>3</sup>, in accordance with the application instructions s 6B is used, Fiber, Sprayed shall be INS735, INS745, INS765LD or INS770LD. USGREENFIBER LLC - INS735 & INS745 for use with wet or dry application. INS510LD, INS INS765LD, and INS770LD are to be used for dry application only

5B. Fiber, Sprayed\* - (Not Shown - Not for use with Item 6) - As an alternate to Batts and Spray applied cellulose insulation material. The fiber is applied with water to interior surfaces in instructions supplied with the product. Applied to completely fill the enclosed cavity. Minimum NU-WOOL CO INC - Cellulose Insulation

5C. Batts and Blankets\* - Required for use with resilient channels, Item 7, 3 in. thick minera

nterior of wall. THERMAFIBER INC - Type SAFB

5D. Glass Fiber Insulation – (As an alternate to Item 5C) - 3 in. thick glass fiber batts bea to Surface Burning and/or Fire Resistance, friction-fitted to fill the interior of the wall. See Bat ategories for names of Classified companies. 5E. Batts and Blankets\* — (Required for use with Wall and Partition Facings and Accessories, nom 3-1/2 in. thick, min. density of 0.80 pcf, with a flame spread of 25 or less and a smoke defined and the spread of 25 or less and the spread of 25 to completely fill the stud cavities. See Batts and Blankets Category (BKNV) for names of man

This design was evaluated using a load design method other than the Limit States Design Method (e.g., Working Stress Design Method). For jurisdictions employing the Limit States Design Method, such as Canada, a load restriction factor shall be used — See Guide <u>BXUV</u> or <u>BXUV7</u> \* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively 12 (3 . Wood Studs - Nom 2 by 4 in. spaced 16 in. OC max, effectively firestopped. 2. Joints and Nail-Heads — Joints covered with joint compound and paper tape. Joint compound and paper tape may be omitted when square edge boards are used. As an alternate, nom 3/32 in. thick gypsum veneer plaster may be applied to the entire surface of Classified veneer baseboard with the joints reinforced with paper tape. Nailheads exposed or covered with joint compound. 3. Gypsum Board\* — 5/8 in. thick paper or vinyl surfaced, with beveled, square, or tapered edges, applied either horizontally or vertically. Gypsum panels nailed 7 in. OC with 6d cement coated nails 1-7/8 in. long, 0.0915 in. shank diam and 15/64 in. diam heads. When used in widths other than 48 in., gypsum panels are to be installed horizontally. For an alternate method of attachment of gypsum panels, refer to Items 6, 6A or 6B, Steel Framing Members\*. When Items 6, 6B, or 6C **Steel Framing Members\***, are used, gypsum panels attached to furring channels with 1 in. long Type S bugle-head steel screws spaced 12 in. OC. When Item 6A, **Steel Framing Members\***, is used, two layers of gypsum panels attached to furring channels. Base layer attached to furring channels with 1 in. long Type S bugle-head steel screws spaced 12 in. OC. Face layer attached to furring channels with 1-5/8 in. long Type S bugle-head steel screws spaced 12 in. OC. All joints in face layers staggered with joints in base layers. One layer of gypsum board attached to opposite side of wood stud without furring channels as described in Item 3. When Item 7, resilient channels are used, 5/8 in. thick, 4 ft wide gypsum panels applied vertically. Screw attached furring channels with 1 in. long, self-drilling, self-tapping Type S or S-12 steel screws spaced 8 in. OC, vertical joints located midway between studs. ACADIA DRYWALL SUPPLIES LTD — Type X (finish rating 22 min), 5/8 Type X, Moisture Resistant Type X, Gypsum Sheathing Type X, Mold & Mildew Resistant Type X and Mold & Mildew Resistant AR Type X, Type Blueglass Exterior Sheathing AMERICAN GYPSUM CO - Types AGX-1(finish rating 23 min.), M-Glass (finish rating 23 min.), Type AGX-11 (finish rating 26 min), Type LightRoc (finish rating 22 min) or Type AG-C BEIJING NEW BUILDING MATERIALS PUBLIC LTD CO - Type DBX-1 (finish rating 24 min) **CERTAINTEED GYPSUM INC** — Type 1, Type SF3 (finish rating 20 min) or FRPC; Type C, Type X or Type X-1 (finish rating 26 min); Type EGRG or GlasRoc (finish rating 23 min) CGC INC — Type AR (finish rating 24 min), Type C (finish rating 24 min), Type IP-AR (finish rating 24 min), Type IPC-AR (finish rating 24 min), Type IP-X1 (finish rating 24 min), Type IP-X2 (finish rating 24 min), Type SCX (finish rating 24 min), Type SHX (finish rating 24 min), Type ULX (finish rating 22 min), Type WRC (finish rating 24 min), Type WRX (finish rating 24 min) CONTINENTAL BUILDING PRODUCTS OPERATING CO, L L C - Type LGFC6A (finish rating 34 min), Type LGFC2A, Type LGFC-C/A, Type LGFC-WD, Type LGLLX (finish rating 21 min) GEORGIA-PACIFIC GYPSUM L L C - Type 5 (finish rating 26 min), Type 6 (finish rating 23 min), Type 9 (finish rating 26 min), Type C (finish rating 26 min), Type DGG (finish rating 20 min), Type GPFS1 (finish rating 20 min), Type GPFS2 (finish rating 20 min), Type GPFS6 (finish rating 26 min), Type DAP, Type DD (finish rating 20 min), Type DA, Type DAPC, Type LS (finish rating 23 min), Type X, Veneer Plaster Base - Type X, Water Rated - Type X, Sheathing - Type X, Soffit - Type X, Type LWX (finish rating 22 min), Veneer Plaster Base-Type LWX (finish rating 22 min), Water Rated-Type LWX (finish rating 22 min), Sheathing Type-LWX (finish rating 22 min), Soffit-Type LWX (finish rating 22 min), Type DGLW (finish rating 22 min), Water Rated-Type DGLW (finish rating 22 min), Sheathing Type- DGLW (finish rating 22 nin), Soffit-Type DGLW (finish rating 22 min), Type LWX (finish rating 22 min), Type LW2X (finish rating 22 min), Veneer Plaster Base - Type LW2X (finish rating 22 min), Water Rated - Type LW2X (finish rating 22 min), Sheathing - Type LW2X (finish rating 22 min), Soffit - Type LW2X (finish rating 22 min), Type DGL2W (finish rating 22 min), Water Rated - Type DGL2W (finish rating 22 min), Sheathing - Type DGL2 rating 22 min) NATIONAL GYPSUM CO — Type FSK (finish rating 20 min), Type FSK-G (finish rating 20 min), Type FSW (finish rating 20 min), Type FSW-2 (finish rating 24 min), Type FSW-3 (finish rating 20 min), Type FSW-5 (finish rating 22 min), Type FSW-G (finish rating 20 min), Type FSW-C (finish rating 20 min), finish rating 20 min), Type FSMR-C, Type FSW-6 (finish rating 20 min), Type FSL (finish rating 24 min), PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Types C, PG-2 (finish rating 20 min), PG-3 (finish rating 20 min), Types PG-3W, PG-5W (finish rating 20 min), Type PG-4 (finish rating 20 min), Type PG-6 (finish rating 23 min), Types PG-3WS, PG-5WS, PGS-WRS (finish rating 20 min), Types PG-5, PG-9 (finish rating 26 min), PG-11 or Type PG-C PANEL REY S A - Type GREX, PRX, PRC, PRC2; Types RHX, MDX, ETX (finish rating 22 min) SIAM GYPSUM INDUSTRY (SARABURI) CO LTD — Type EX-1 (finish rating 26 min) THAI GYPSUM PRODUCTS PCL — Type C, Type X (finish rating 26 min) UNITED STATES GYPSUM CO — Type AR (finish rating 24 min), Type C (finish rating 24 min), Type FRX-G (finish rating 29 min), Type IP-AR (finish rating 24 min), Type IP-XI (finish rating 24 min), Type IP-X2 (finish rating 24 min), Type SHX (finish rating 24 min), Type IP-X1 (finish rating 24 min), Type ISGX (finish rating 24 min), Type ULX (finish rating 22 min), Type WRX (finish rating 24 min), Type WRC (finish rating 24 min), Type ULX (finish rating 20 min), Type WRX (finish rating 24 min), Type ULX (finish rating 20 min), Type WRX (finish rating 24 min), Type ULX (finish rating 20 min), Type WRX (finish rating 24 min), Type ULX (finish rating 20 min) USG MEXICO S A DE C V — Type AR (finish rating 24 min), Type C (finish rating 24 min), Type WRX (finish rating 24 min), Type WRC (finish rating 24 min), Type IP-X1 (finish rating 24 min), Type IP-X2 (finish rating 24 min), Type SHX (finish rating 24 min), SCX (finish rating 24 min), Type IP-AR (finish rating 24 min), Type IPC-AR (finish rating 24 min), Type ULX (finish rating 22 min) 3A. Gypsum Board\* - (As an alternate to Item 3) - 5/8 in. thick gypsum panels, with beveled, square, or tapered edges, applied either horizontally or vertically. Gypsum panels fastened to framing with 1-1/4 in. long Type W coarse thread gypsum panel steel screws spaced a max 8 in. OC, with last screw 1 in. from edge of board. When used in widths of other than 48 in., gypsum boards are to be installed horizontall AMERICAN GYPSUM CO - Types AGX-1 (finish rating 25 min.), M-Glass (finish rating 25 min.), Type AG-C (finish rating 25 min.) CERTAINTEED GYPSUM INC — Type C, Type X or Type X-1 (finish rating 26 min) CGC INC - Type AR (finish rating 24 min), Type C (finish rating 24 min), Type IP-AR (finish rating 24 min), Type IPC-AR (finish rating 24 min), Type IP-X1 (finish rating 24 min), Type IP-X2 (finish rating 24 min), Type SCX (finish rating 24 min), Type SHX (finish rating 24 min), Type WRC (finish rating 24 min), Type WRX (finish rating 24 min) UNITED STATES GYPSUM CO - Type AR (finish rating 24 min), Type SCX (finish rating 24 min), Type SGX (finish rating 24 min), Type C (finish rating 24 min), Type WRX (finish rating 24 min), Type WRC (finish rating 24 min), Type IP-X1 (finish rating 24 min), Type IP-X2 (finish rating 24 min), Type SHX (finish rating 24 min), Type FRX-G (finish rating 24 min), Type IP-AR (finish rating 24 min), min), Type IPC-AR (finish rating 24 min) USG BORAL ZAWAWI DRYWALL L L C SFZ - Types C, SCX USG MEXICO S A DE C V — Type AR (finish rating 24 min), Type C (finish rating 24 min), Type WRX (finish rating 24 min), Type WRC (finish rating 24 min), Type IP-X1 (finish rating 24 min), Type IP-X2 (finish rating 24 min), Type SHX (finish rating 24 min), Type SCX, Type IP-AR (finish rating 24 min), Type IPC-AR (finish rating 24 min) 3B. Gypsum Board\* - (As an alternate to Item 3) - Nom 3/4 in. thick, installed with 1-7/8 in. long cement coated nails as described in Item 3 or 1-3/8 in. long Type W coarse thread gypsum panel steel screws as described in Item 3A. CGC INC - Types AR, IP-AR

Design No. U305

Bearing Wall Rating — 1 Hr

Finish Rating - See Items 3, 3A, 3D, 3E, 3F, 3G, 3H, 3J and 3L.

STC Rating - 56 (See Item 9)

July 14, 2016

USG MEXICO S A DE C V - Types AR, IP-AR

UNITED STATES GYPSUM CO - Types AR, IP-AR



ngue and groove edge, applied escribed in Item 3 or 1-1/4 in. long 2) not required.	5F. <b>Fiber, Sprayed*</b> — (Optional, Not Shown — Not for use with Items 6, 6A or 6B) — As an alternate to Batts and Blankets (Item 5) and Item 5A - Spray applied granulated mineral fiber material. The fiber is applied with water to completely fill the enclosed cavity in accordance with the application instructions supplied with the product. See <b>Fiber, Sprayed</b> (CCAZ). <b>AMERICAN ROCKWOOL MANUFACTURING, LLC</b> — Type Rockwool
	5G. Fiber, Sprayed* — (Optional, Not Shown — Not for use with Items 6, 6A or 6B). — As an alternate to Batts and Blankets (Item 5) and Item 5A - Brown Colored Spray applied cellulose fiber. The fiber is applied with water to completely fill the enclosed stud cavity in accordance with the application instructions supplied with the product. The minimum dry density shall be 4.30 lbs/ft <sup>3</sup> . <b>INTERNATIONAL CELLULOSE CORP</b> — Celbar-RL
t Application to Studs Only- Nom 5/8	6. Steel Framing Members* - (Optional, Not Shown) - Furring channels and Steel Framing Members as described below:
n. long Type W coarse thread gypsum hind vertical joints of lead backed	a. Furring Channels — Formed of No. 25 MSG galv steel. 2-9/16 in. or 2-23/32 in. wide by 7/8 in. deep,
ide, max 10 ft long with a max ype S-12 pan head steel screws, one u of os in addition to the load batton	spaced 24 in. OC perpendicular to study channels secured to study as described in Item b. Ends of adjoining channels are overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together
u of or in addition to the lead batten ssion fitted or adhered over steel ards underneath screw locations prior	with two self-tapping #6 framing screws, min. 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Gypsum board attached to furring channels as described in Item 3.
eral specification QQ-L-201f, Grade	b. <b>Steel Framing Members*</b> — Used to attach furring channels (Item 6a) to studs. Clips spaced 48 in. OC. RSIC-1 and RSIC-1 (2.75) clips secured to studs with No. 8 x 2-1/2 in. coarse drywall screw through the
	center grommet. RSIC-V and RSIC-V (2.75) clips secured to studs with No. 8 x 1-1/2 in. coarse drywall screw through the center hole. Furring channels are friction fitted into clips. RSIC-1 and RSIC-V clips for use
um papels, with square edges	with 2-9/16 in. wide furring channels. RSIC-1 (2.75) and RSIC-V (2.75) clips for use with 2-23/32 in. wide furring channels.
Type W coarse thread gypsum panel I 7 in. OC with 6d cement coated	PAC INTERNATIONAL L L C - Types RSIC-1, RSIC-V, RSIC-1 (2.75), RSIC-V (2.75)
otner than 48 in., gypsum boards are	6A. Steel Framing Members* - (Optional, Not Shown) - Furring channels and Steel Framing Members on one side of studs as
nish rating 23 min)	described delow:
mat faced with square edges, applied	a. Furring Channels — Formed of No. 25 MSG galv steel, spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels are overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. Batte and Bankets endered in stud.
field with 6d cement coated nails 1- 3 inch from horizontal joints and 7	cavity as described in Item 5. Two layers of gypsum board attached to furring channels as described in Item 3.
	b. Steel Framing Members* — Used to attach furring channels (Item 6Aa) to one side of studs only. Clips spaced 48 in. OC., and secured to studs with two No. 8 x 2-1/2 in. coarse drywall screws, one through the
	hole at each end of the clip. Furring channels are friction fitted into clips.
	6B. Steel Framing Members* - (Optional, Not Shown) - Furring channels and Steel Framing Members as described below:
	a. Furring Channels — Formed of No. 25 MSG galv steel. 2-3/8 in. wide by 7/8 in. deep, spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels are under the device of the steel of the ste
d applied vertically. Gypsum panels . diam heads.	overlapped 6 in, and tied together with double strand of No. 18 SWG gait steel whe hear each end of overlap. As an alternate, ends of adjoining channels may be overlapped 6 in, and secured together with two self-tapping #6 framing screws, min, 7/16 in, long at the midpoint of the overlap, with one screw on each
(finish rating 27 min)	flange of the channel. Gypsum board attached to furring channels as described in Item 3.
in, thick paper surfaced applied	D. Succer Framing Members* — Used to attach Turning channels (Item 66a) to studs. Clips spaced 48 in. OC. Genie clips secured to studs with No. 8 x 1-1/2 in. coarse drywall screw through the center hole. Furring channels are friction fitted into clips.
915 in. shank diam and 15/64 in. diam	PLITEQ INC — Type Genie Clip
. thick, 4 ft wide panels, applied	6C. Steel Framing Members* — (Optional, Not Shown) — Furring channels and Steel Framing Members as described below: <ul> <li>a. Furring Channels — Formed of No. 25 MSG oaly steel. Spaced 24 in. OC perpendicular to study. Channels</li> </ul>
diam and 15/64 in. diam heads. Panel yers of joint compound.	secured to studs as described in Item b. Ends of adjoining channels overlapped 6 in. and secured together with four self-tapping No. 8x1/2 Self Drilling screws (2 per side 1 in. and 4 in. from overlap edge). Gypsum
ng 20 min)	poard attached to ruming channels as described in Item 3. Side joint furning channels shall be attached to studs with RESILMOUNT Sound Isolation Clips located approximately 2 in. from each end of length of channel. Both Gypsum Boards at side joints fastened into channel with screws spaced 8 in. O.C. approximately,
a, thick paper surfaced applied	1/2 in. from joint edge.
15 in. shank diam and 15/64 in. diam	b. Steel Framing Members* — Used to attach furring channels (Item 6Ca) to studs. Clips spaced 16 in. OC., and secured to studs with No. 10 x 2-1/2 in. coarse drywall screw through the center hole. Furring channels are friction fitted into clips.
	STUDCO BUILDING SYSTEMS — RESILMOUNT Sound Isolation Clips - Type A237 or A237R
led, square, or tapered edges, applied coarse thread ovosum namel steel	<ol> <li>Furring Channel — Optional — Not Shown — For use on one side of the wall - Resilient channels, 25 MSG galv steel, spaced vertically 24 in. OC, flange portion screw attached to one side of studs with 1-1/4 in. long diamond shaped point, double lead Phillips head steel screws. When resilient channels are used insulation. Theme SC or SD is required</li> </ol>
used in widths other than 48 in.,	<ol> <li>Caulking and Sealants — (Not Shown, Optional) — A bead of acoustical sealant applied around the partition perimeter for sound</li> </ol>
), Type FSW (finish rating 20 min), ng 22 min). Type FSW-G (finish	control. 9. STC Rating — The STC Rating of the wall assembly is 56 when it is constructed as described by Items 1 through 6 excents
SMR-C, Type FSW-6 (finish rating 20	A. Item 2, above — Nailheads Shall be covered with joint compound.
	B. Item 2, above — Joints As described, shall be covered with fiber tape and joint compound.
Nom 5/8 in. thick lead backed d over studs and staggered min 1	C. Item 5, above — Batts and Blankets* The cavities formed by the studs shall be friction fit with R-19 unfaced fiberglass insulation batts measuring 6-1/4 in. thick and 15-1/4 in. wide.
oarse thread gypsum panel steel I joints of lead backed gypsum ft long with a max thickness of 0 140	D. Item 6, above — Steel Framing Members* Type RSIC-1 clips shall be used to attach gypsum board to studs on either side of the wall assembly.
steel screws, one at the top of the compression fitted or adhered over	E. Item 8, above — Caulking and Sealants (Not Shown) A bead of acoustical sealant shall be applied around the partition perimeter for sound control.
י עע־ב-צטנו, Grades "B, C or D".	F. Steel Corner Fasteners (Item 4), Fiber, Sprayed (Items 5A and 5B) and Steel Framing Members (Item 6A), not evaluated as alternatives for obtaining STC rating.
	10. Wall and Partition Facings and Accessories* - (Optional, Not Shown) - Nominal 1/2 in. thick, 4 ft wide panels, for optional
- For use as the base layer or as the s, applied vertically. Vertical joints	use as an additional layer on one or both sides of the assembly. Panels attached in accordance with manufacturer's recommendations. When the QR-500 or QR-510 panel is installed between the wood framing and the UL Classified gypsum board, the required UL Classified gypsum board layer(s) is/are to be installed as indicated as to fastener type and spacing, except that the
applied as the base layer. When epplied as the base layer. When behind vertical joints of lead backed	required fastener length shall be increased by a minimum of 1/2 in. Not evaluated or intended as a substitute for the required layer(s) of UL Classified Gypsum Board.
max 8 ft long with a max thickness two 1 in. long Type S-12 pan head	PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type QuietRock QR-500 and QR-510
ity of 99.9% meeting the Federal ) when installed over lead backed	11. Cementitious Backer Units* - (Optional Item Not Shown - For Use On Face Of 1 Hr Systems With All Standard Items
	Required) - 7/16 in., 1/2 in., 5/8 in., 3/4 in. or 1 in. thick, min. 32 in. wide. Applied vertically or horizontally with vertical joints centered over studs. Fastened to studs and runners with cement board screws of adequate length to penetrate stud by a minimum of 3/8 in for steel framing members and a minimum of 2/4 in for steel framing.
	boards are used, horizontal joints need not be backed by framing.
ntally or vertically with vertical joints ibed in Item 3.	NALIONAL GYPSUM CU — Type Durabacker, PermaBase, DuraBacker Plus, or PermaBase Plus
	12. Non-Bearing Wall Partition Intersection — (Optional) — Two nominal 2 by 4 in. studs or nominal 2 by 6 in. studs nailed together with two 3 in, long 10d nails spaced a max. 16 in, OC, vertically and fastened to one side of the minimum 2 by 4 in, stud
) - Nominal 5/8 in thick 1 ft wide	with 3 in. long 10d nails spaced a max. 16 in. OC. vertically. Intersection between partition wood studs to be flush with the 2 by 4 in. studs. The wall partition wood studs are to be framed by with a second 2 by 4 in. wood stud fastened with 3 in. long 10d nails spaced a max 16 in. OC. vertically. Maximum and non-back with a second 2 by 4 in. wood stud fastened with 3 in. long 10d nails
0915 in. shank diam and 15/64 in. covered with two layers of joint	stud depth shall be at a minume equal to the depth of the bearing wall partition intersection per stud cavity. Non-bearing wall partition stud depth shall be at a minum equal to the depth of the bearing wall.
ing 24 min).	13. Mesh Netting — (Not Shown) — Any thin, woven or non-woven fibrous netting material attached with staples to the outer face of one row of studs to facilitate the installation of the sprayed fiber from the opposite row.
	14. Mineral and Fiber Board* — (Optional, Not Shown) — For optional use as an additional layer on one side of wall. Nom 1/2 in. thick, 4 ft wide with long dimension parallel and centered over studs. Attached to framing with 2 in. long Type W steel screws,
nick gypsum panels applied vertically not be staggered or backed by wood	spaced 12 in. OC. The required UL Classified gypsum board layer(s) is/are to be installed as indicated as to fastener type and spacing, except that the required fastener length shall be increased by a minimum of 1/2 in. Not evaluated or intended as a substitute for the required layer(s) of UL Classified Gypsum Board
Base layer gypsum panels fastened to tuds with 1-7/8 in. long drywall nails	HOMASOTE CO — Homasote Type 440-32
	14A. Mineral and Fiber Board* — (Optional, Not Shown) — For use with Items 14B-14E) — For optional use as an additional layer on one side of wall. Nom 1/2 in. thick, 4 ft wide with long dimension parallel and centered over studs. Attached to framing with
led, square, or tapered edges, applied coarse thread gypsum panel steel	minimum 1-3/8 in. long ring shanked nails or 1-1/4 in. long Type W steel screws, spaced 12 in. OC along board edges and 24 in. OC in field of board along intermediate framing. Not evaluated or intended as a substitute for the required layer(s) of UL Classified Gynamd and the standard of the standard o
e board. When used in widths other	HOMASOTE CO — Homasote Type 440-32
21 min), Type LGFC2A, Type LGFC-	
	14B. <b>Glass Fiber Insulation</b> – (For use with Item 14A) – $3-1/2$ in. thick glass fiber batts bearing the UL Classification Marking as to Surface Burning and/or Fire Resistance, placed to fill the interior of the wall. See Batts and Blankets (BKNV or BZJZ) categories
g by 1 in. high on the back side with steel. Fasteners applied only to the	ror names of Classified companies. 14C. Batts and Blankets* — (As an alternate to Item 14B, For use with Item 14A), 3 in. thick mineral wool batts. placed to fill
ner of gypsum board, max spacing 16 Corners of wall board shall be nailed to	interior of wall, attached to the 3-1/2 in. face of the study with staples placed 24 in. OC.
or mineral wool insulation. Placed to	INERMAPIBER INC - Type SAFB
insulation shall be friction-fitted to	14D. Adhesive — (For use with Item 14A) — Construction grade adhesive applied in vertical, serpentine, nominal 3/8 in. wide beads down the length of both vertical edges of Mineral and Elber Board (Them 14A).
	14E. Gypsum Board* — (For use with Item 14A) — 5/8 in. thick, 4 ft wide, applied vertically over Mineral and Fiber Board (Item
	14A) with vertical joints located anywhere over stud cavities. Secured to mineral and fiber boards with 1-1/2 in. Type G Screws spaced 8 in. OC along edges of each vertical joint and 12 in. OC in intermediate field of the Mineral and Fiber Board (Item 14A). Secured to outermost studies and bearing plates with 2 in. Jong Type Screws spaced 8 in. OC Gurgerm Board Schemer dutte
	paper tape and joint compound. Screw heads covered with joint compound. Finish Rating 30 Min.
	AMERICAN GYPSUM CO — Type AG-C
	CERTAINTEED GYPSUM INC - Type FRPC, Type C
	CGC INC — Types C, IP-X2, IPC-AR
	CONTINENTAL BUILDING PRODUCTS OPERATING CO, L L C - Type LGFC-C/A
d Blankets (Item 5) — Spray applied dance with the application instructions	GEORGIA-PACIFIC GYPSUM L L C — Types 5, DAPC, TG-C
: The fiber is applied without water or supplied with the product. When Item	NATIONAL GYPSUM CO — Types FSK-C, FSW-C
5515LD, INS541LD, INS735, INS745,	PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type PG-C
Blankets (Item 5) and Item 54	PANEL REY S A - Type PRC
n accordance with the application dry density of 4.3 pounds per cubic ft.	
anna an an anna an an anna an anna an an	THAI GYPSUM PRODUCTS PCL — Type C
al wool batts, friction-fitted to fill	UNITED STATES GYPSUM CO — Types C, IP-X2, IPC-AR
a woor datts, inclion-fitted to fill	
	USG BORAL ZAWAWI DRYWALL L L C SFZ - Type C
ring the UL Classification Marking as	USG MEXICO S A DE C V — Types C, IP-X2, IPC-AR
CONTRACTS (DKINV OF BZJZ)	
, Item 3D) — Glass fiber insulation, eveloped of 50 or less, friction-fitted ufacturers.	• indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.
NAME OF A	

Last Updated on 2016-07-14



PERMITTING STAMP:

# GENERAL STRUCTURAL:

THE GOVERNING CODE IS NORTH CAROLINA BUILDING CODE (NCBC) 2018 EDITION AND/OR LOCAL COUNTY CODE AMMENDMENTS AND/OR ORDINANCES.

ANY REVISION INITIATED BY THE OWNER, GENERAL CONTRACTOR AND/OR THE SUBCONTRACTOR THAT DIRECTLY INFLUENCES OR CHANGES STRUCTURAL ELEMENTS INCLUDING, BUT NOT LIMITED TO FLOOR JOIST, BEAM OR HEADER SPANS; WALL HEIGHTS; BEAM OR HEADER SIZES; RELOCATION OF BEARING WALLS, FOOTING SIZES, ETC. AS INDICATED ON THESE DRAWINGS, ENGINEER OF RECORD SHALL BE NOTIFIED IN

WRITING INDICATING THE PROPOSED CHANGES FOR REVIEW. THESE DRAWINGS ARE NOT TO BE SCALED FOR CONSTRUCTION PURPOSES. DIMENSIONS NOTED TAKE PRECEDENCE OVER SCALE.

ALL DIMENSIONS SHOWN ARE TO FACE OF STUD (F.O.S.), UNLESS OTHERWISE NOTED. DIMENSIONAL ADJUSTMENTS MAY INCLUDE, BUT ARE NOT LIMITED TO: CENTER LINE (C), FACE OF CONCRETE (F.O.C.) AND FACE OF MASONRY (F.O.M.)

COMMENCEMENT OF WORK BY THE CONTRACTOR AND/OR ANY SUBCONTRACTOR SHALL INDICATE A KNOWLEDGE AND ACCEPTANCE OF ALL CONDITIONS DESCRIBED IN THESE CONSTRUCTION DOCUMENTS WHICH COULD AFFECT THEIR WORK.

IN CASE OF CONFLICT BETWEEN THE GENERAL NOTES, SPECIFICATIONS AND DRAWINGS REGARDING STRUCTURAL ISSUES, THE MOST STRINGENT REQUIREMENTS SHALL GOVERN.

WORK NOT INDICATED ON A PART OF THE DRAWINGS, BUT REASONABLY IMPLIED TO BE SIMILAR TO THAT SHOWN AT CORRESPONDING PLACES, SHALL BE REPEATED.

THE CONTRACTOR IS RESPONSIBLE FOR MEANS AND METHODS OF CONSTRUCTION AND CONSTRUCTION PROCEDURES, FABRICATION PROCESS, COORDINATION OF WORK WITH OTHER TRADES AND JOB SITE SAFETY. TEMPORARY BRACING, SHEATHING, SHORING, ETC., REQUIRED TO INSURE THE STRUCTURAL INTEGRITY/ STABILITY OF THE EXISTING BUILDINGS, SIDEWALLS, UTILITIES, ETC., DURING CONSTRUCTION IS THE CONTRACTOR'S RESPONSIBILITY.

# **DESIGN LOADS**

GRAVITY LOAD	
ROOF LIVE LOAD	= 20 PSF
PRIVATE ROOMS	= 40 PSF
PUBLIC ROOMS AND CORRIDORS SERVING TH	EM = 100 PSF
DECKS	= 100 PSF
STAIRS AND EXITS	= 100 PSF
DEAD LOAD (ACTUAL WEIGHTS WITH A MIN. (	OF) = 15 PSF
GROUND SNOW LOAD (Pg)	= 10 PSF
EXPOSURE FACTOR (Ce)	= 1.00
THERMAL FACTOR (Ct)	= 1.00
IMPORTANCE FACTOR (I)	= 1.00
ALLOWABLE DEFLECTION FACTOR FOR	
ROOF	
LIVE LOAD	= L/360
TOTAL LOAD	= L/240
FLOORS & DECKS	
LIVE LOAD	= L/480
TOTAL LOAD	= L/360
MEMBERS SUPPORTING MASONRY / BRICK	
LIVE LOAD	= L/600
TOTAL LOAD	= L/600
WIND LOAD	
ULTIMATE WIND SPEED	= 121 MPH (PER FIGURE 26.5-1A, ASCE 7-10)
EXPOSURE	= <i>C</i>

# CONCRETE

ALL CONCRETE FOR FOOTINGS, FOUNDATION WALLS, RETAINING WALLS, AND FLOOR SLABS ON GRADE SHALI ATTAIN A MINIMUM 28-DAY ULTIMATE COMPRESSIVE STRENGTH AS FOLLOWS: FOUNDATION WALLS, FOOTINGS AND GRADE SL BASEMENT SLABS AND SLABS EXPOSED TO WEA ALL CONCRETE EXPOSED TO THE WEATHER AND JIST WET CONDITION OR DEICING CHEMICALS SHALL BE AIR ENTRAINED, THE TOTAL AIR CONTENT (PERCENT BY VOLUME OF CONCRETE) SHALL NOT BE LESS THAN 5 PERCENT (5%) OR MORE THAN 7 PERCENT (7%) & MAXIMUM WATER CEMENT RATIO OF 0.45.

LOCATION OF CONCRETE		MAXIMUM SIZE OF AGGREGATE	
FOUNDATIONS (GRADE BEAMS & FOOTINGS)	3000 PSI	1 <sup>1</sup> / <sub>2</sub> "	
SLABS ON GRADE	3000 PSI	1"	

ALL CONSTRUCTION JOINTS SHALL BE ROUGHENED AND KEYS PROVIDED WHERE REQUIRED OR INDICATED ON THE DRAWINGS. CONSTRUCTION JOINTS, OTHER THAN THOSE SHOWN ON THE DRAWINGS, MAY BE PROPOSED BY THE CONTRACTOR. HOWEVER, THE LOCATIONS ARE SUBJECT TO REVIEW BY THE ARCHITECT AND/OR STRUCTURAL ENGINEER. ALL VERTICAL CONSTRUCTION, CONTROL AND CONTRACTION JOINTS SHALL LIE IN TRUE VERTICAL PLANE.

ALL FORMWORK AND PLACING OF CONCRETE SHALL BE PLUMB, LEVEL, AND SQUARE. THE STRUCTURAL ENGINEER SHALL REVIEW AND APPROVE ANY PROPOSED FORMWORK DESIGN DIFFERENT FROM INDUSTRY STANDARD PRACTICES.

EXTERIOR SLAB AREAS SHALL BE BROOM FINISHED, UNLESS OTHERWISE SPECIFIED BY THE ARCHITECT. THE STROKES SHALL MAINTAIN THE SAME DIRECTION AT ADJACENT SURFACES. NO RIPPLES, BUMPS, OR ANY OTHER IRREGULARITIES WILL BE ACCEPTABLE CONTRACTOR IS RESPONSIBLE FOR SUBMITTING CONCRETE MIX DESIGNS TO THE ENGINEER FOR APPROVAL

PRIOR TO PLACEMENT OF ANY CONCRETE.

NOT EXCEED 12'-O".) REFER TO DETAILS

# **REINFORCING STEEL**

ALL REINFORCING STEEL SHALL BE ASTM A-6: SHOWN ON THE DRAWINGS ARE TO THE CENT AND REINFORCING STEEL SHALL BE FURNISHE STANDARD BUILDING CODE REQUIREMENTS FC REINFORCED STEEL SHALL BE DETAILED IN AC DETAILING REINFORCED CONCRETE STRUCTUR UNLESS OTHERWISE INDICATED ON THE DRAW

REINFORCEMENT SHALL BE:

- A. CAST AGAINST EARTH AND PERMANENT B. EXPOSED TO EARTH OR WEATHER #6 1
- #5 B
- C. NOT EXPOSED TO WEATHER OR IN CONT THE GROUND (SLABS AND WALLS)
- D. BEAMS, GIRDERS, COLUMNS, PRIMARY

REINFORCEMENT, TIES, STIRRUPS, SPIRALS : 1.5" STEEL REINFORCING REQUIREMENTS IN CONCRETE FLOOR SLABS SHALL BE AS REQUIRED BY CODE AND/OR LOCAL JURISDICTIONS, OR PER SITE CONDITIONS.

TABLE 1-MINIMUM REINFORCING BAR LAP SPLICE AND ANCHORAGE DIMENSIONS TABLE					
TABLE FOR A615 GRADE 60- UNCOATED REINFORCING					
	TOP BARS		OTHER BARS		
BAR SIZE	LAP (INCHES)	ANCHOR (INCHES)	LAP (INCHES)	ANCHOR (INCHES)	
#3	18	14	16	12	
#4	26	20	20	15	
#5	40	31	31	24	
#6	57	44	44	34	

WHEN LAPPING TWO DIFFERENT SIZE BARS, USE THE LAP DIMENSION OF THE SMALLER BAR OR THE ANCHORAGE DIMENSION OF THE LARGER BAR. USE WHICHEVER DIMENSION IS LARGER. TOP BARS SHALL BE DEFINED AS BEAM AND SLAB HORIZONTAL REINFORCEMENT SO PLACED THAT MORE THAN 12" OF FRESH CONCRETE IS CAST IN THE MEMBER BELOW THE TOP REINFORCEMENT. HORIZONTAL REINFORCING IN WALLS SHALL BE CONSIDERED AS TOP BARS.

SITE CLASSIFICATION PERSUMPTIVE = D

SEISMIC DATA

Fa = 1.60 Fv = 2.39 Sms = .385 Sm1 = .245

SEISMIC DESIGN COEFF: Sds = .257 Sd1 = .163 SEISMIC DESIGN CATEGORY = C

S1 = .1026

SEISMIC FORCE RESISTING SYSTEM = LIGHT FRAME WALLS SHEATHED WITH WOOD STRUCTURAL PANELS RESPONSE MODIFICATION COEFFICIENT(R) = 7 (AS PER ASCE 7-10, TABLE 12.2-1)

Cs = .0395

Ss = .241

ANALYSIS PROCEDURE EQUIVALENT LATERAL FORCE

LATERAL DESIGN CONTROL = WIND

#### STRUCTURAL STEEL

ABS	: 3,000 PSI
ATHER	: 3,000 PSI
D SUBJECT TO FREEZING	G AND THAWING IN A MOI



CONTRACTOR SHALL LOCATE CONTROL JOINTS AS REQUIRED (MAXIMUM SPACING IN ANY DIRECTION SHALL

15, GRADE 60 OR BETTER. A ER LINE OF BARS, UNLESS O D, FABRICATED AND ERECTE OR REINFORCED CONCRETE S CORDANCE WITH THE ACI M. ES (ACI 315).	LL REIN THERWI D IN AC TRUCTU ANUAL (	IFORCING BAR DIMENSIONS SE NOTED. ALL CONCRETE CORDANCE WITH ACI IRES, (ACI 318–14). OF STANDARD PRACTICE F	5 
INGS, THE CLEAR CONCRETE	E COVER	R PROVIDED FOR	
TLY EXPOSED TO EARTH	:	3"	
TUPOUCUL HAA RADC		2//	

HROUGH #18 BARS	:	2"	
ARS AND SMALLER	:	1.5"	
TACT WITH			
	:	0.75"	

ALL STEEL SHALL BE ASTM, A-992 MINIMUM, Fy=50 KSI UNLESS OTHERWISE NOTED ON THE DRAWINGS. ALL CONNECTIONS SHALL BE WELDED OR BOLTED. SHOP AND FIELD FASTENERS SHALL BE ASTM A-325 HSB (HIGH STRENGTH BOLTS). IN FRICTION TYPE CONNECTIONS USE "TURN-OF-NUT" METHOD IN TIGHTENING ALL BOLTS.

HOLES SHALL NOT BE CUT THROUGH BEAMS UNLESS INDICATED OR APPROVED BY THE STRUCTURAL ENGINEER. PROVIDE STANDARD ANGLE WALL ANCHORS FOR BEAMS RESTING ON MASONRY.

STEEL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST AISC MANUAL. STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING ASTM STANDARDS:-

STEEL PLATE, CHANNELS AND ANGLES: A36STRUCTURAL PIPES AND TUBES: A500-GIANCHOR BOLTS: A325	(Fy = 36 KSI) GRADE "B" (Fy = 46 KSI) A307
--	--

BOLTED CONNECTIONS TO USE A325-TYPE N, HIGH STRENGTH BOLTS IN BEARING TYPE CONNECTIONS TIGHTENED TO A SNUG TIGHT CONDITION IN ACCORDANCE WITH RCSC SPECIFICATIONS.

BOLTS IN MOMENT CONNECTIONS SHALL BE ASTM A325-TYPE SC (SLIP CRITICAL). SLIP CRITICAL CONNECTIONS SHALL HAVE CONTACT SURFACES MEETING CLASS A SURFACE CONDITIONS BOLTS SHALL BE TENSIONED.

SHOP CONNECTIONS TO BE WELDED OR BOLTED. FIELD CONNECTIONS TO BE BOLTED UNLESS OTHERWISE SHOWN. BOLT HOLES TO BE STANDARD ROUND HOLES (d+1/16") UNLESS OTHERWISE NOTED. SHORT SLOTS SHALL BE PERMITTED NORMAL TO THE LOAD DIRECTION IN SLIP CRITICAL AND BEARING TYPE CONNECTIONS AS PER AISC REQUIREMENTS.

ALL WELDING WORK SHALL BE PERFORMED PER SPECIFICATIONS AND GUIDELINES OF AMERICAN WELDING SOCIETY.

## STRUCTURAL LUMBER

STRUCTURAL LUMBER SHALL BE IN ACCORDANCE WITH THE NATIONAL DESIGN SPECIFICATIONS FOR WOOD CONSTRUCTION (NDS) 2005 EDITION, PUBLISHED BY THE NATIONAL FOREST PRODUCTS ASSOCIATION. ALL STRUCTURAL FRAME MEMBERS SHALL BE AS FOLLOW. UNLESS OTHERWISE NOTED:

SYP #2 (HEADERS & BEAMS)

Fb	BENDING
Ft	TENSION (parallel to grain)
Fv	SHEAR (parallel to grain)
Fc ⊥	COMPRESSION (perpendicular to grain)
Fc	COMPRESSION (parallel to grain)
Ε	MODULUS OF ELASTICITY
Emin.	MODULUS OF ELASTICITY
SPF STUD G	RADE (POSTS & STUDS)
Fb	BENDING
Fb Ft	BENDING TENSION (parallel to grain)
Fb Ft Fv	BENDING TENSION (parallel to grain) SHEAR (parallel to grain)
Fb Ft Fv Fc⊥	BENDING TENSION (parallel to grain) SHEAR (parallel to grain) COMPRESSION (perpendicular to grain)
Fb Ft Fv Fc⊥ Fc∥	BENDING TENSION (parallel to grain) SHEAR (parallel to grain) COMPRESSION (perpendicular to grain) COMPRESSION (parallel to grain)

MODULUS OF ELASTICITY

DESIGN PROPERTIES FOR:

Emin.

Fv

MICROLLAM LVL (BEAM)

GRADE	= 1.9E	
Fb	BENDING	: 2,6
Fv	SHEAR (parallel to grain)	: 285
Fc ⊥	COMPRESSION (perpendicular to grain)	: 750
Fc 🛛	COMPRESSION (parallel to grain)	: 251
Ε	MODULUS OF ELASTICITY	: 1,9
PARALL	AM PSL (BEAM)	
GRADE	= 2.0E	
Fb	BENDING	

SHEAR (parallel to grain)

COMPRESSION (perpendicular to grain)

COMPRESSION (parallel to grain) Fc 🛛

MODULUS OF ELASTICITY

ALL WOOD SHALL BE MINIMUM 8" ABOVE FINISH GRADE, OR SHALL BE PRESSURE TREATED.

: 975 psi : 550 psi : 175 psi : 565 psi : 1450 psi 1,600,000 psi : 580,000 psi

: 675 psi : 350 psi : 135 psi : 425 psi : 725 psi : 1,200,000 psi : 440,000 psi

500 psi 5 psi o psi 10 psi 100,000 psi

: 2,900 psi

: 290 psi

750 psi : 2,900 psi : 2,000,000 psi

PREFABRICATED WOOD TRUSSES SHALL BE DESIGNED IN ACCORDANCE WITH THE LATEST EDITION OF THE "NATIONAL DESIGN SPECIFICATION FOR STRESS-GRADE LUMBER AND ITS FASTENERS" AS RECOMMENDED BY THE AMERICAN FOREST AND PAPER ASSOCIATION.

TRUSSES.

TEMPORARY AND PERMANENT TRUSS BRACING AND BRIDGING SHALL BE DESIGNED BY THE TRUSS MANUCATURER'S ENGINEER. ALL BRACING AND BRIDGING SHALL BE INDICATED ON THE TRUSS INSTALLATION DRAWINGS.

THE CONTRACTOR SHALL KEEP TWO COMPLETE SETS OF THE REVIEWED TRUSS SHOP DRAWINGS AND CALCULATIONS ON THE JOB SITE. ONE SET OF THESE DRAWINGS SHALL BE MADE AVAILABLE TO THE BUILDING INSPECTOR FOR FRAMING INSPECTION.

NOTES:



SHEET 1 OF 5

WHERE INDICATED ON THE DRAWINGS ENGINEERED FLOOR "I" JOISTS SHALL BE MANUFACTURED BY WEYERHAEUSER TRUSS JOISTS. PRIOR TO ORDERING THE GENERAL CONTRACTOR SHALL ACQUIRE SHOP DRAWINGS FROM THE FLOOR JOIST MANUFACTURER AND SUBMIT THEM TO ENGINEER OF RECORD IN A TIMELY MANNER FOR REVIEW PRIOR TO ORDERING. IN THE EVENT THE GENERAL CONTRACTOR FAILS TO SUBMIT SHOP DRAWINGS TO STRUCTURAL ENGINEER THE GENERAL CONTRACTOR AND THE FLOOR JOIST MANUFACTURER SHALL BEAR ALL DESIGN, PERFORMANCE AND LEGAL RESPONSIBILITIES OF THE FLOOR SYSTEM(S) AND HOLD STRUCTURAL ENGINEER HARMLESS.

PROVIDE 3/4" TONGUE AND GROOVE PLYWOOD (APA 24/16 RATED STRUCT-I-FLOOR) GLUED AND NAILED TO THE FLOOR JOISTS TO MEET THE AMERICAN PLYWOOD ASSOCIATION (APA) APPROVED GLUED FLOOR SYSTEM, UNLESS OTHERWISE SPECIFIED.

LUMBER EXPOSED TO THE ELEMENTS, MASONRY INCLUDING BUT NOT LIMITED TO: POSTS, BEAMS, DECKING, DECK, FRAMING LEDGERS, ETC. SHALL BE PRESSURE TREATED.

REQUIRED POST SIZES FROM POINT LOADS AT GIRDER TRUSS BEAM AND/OR HEADER END LOCATIONS SHALL BE CONTINUOUS, BEARING ONTO BEAMS OR CONTINUOUS TO FOOTINGS AS INDICATED. PROVIDE SQUASH BLOCKS BETWEEN FLOOR FRAMING AS NECESSARY OR REQUIRED.

STRUCTURAL CONNECTORS INDICATED ON THESE DOCUMENTS SHALL BE PROVIDED BY SIMPSON STRONG-TIE COMPANY, INC., PROVIDE JOIST HANGERS AT EACH END OF ALL FLOOR JOISTS, AND/OR BEAMS FLUSH WITH ADJACENT BEAMS, HEADERS. PROVIDE COLUMN CAPS AND POST BASES AT ALL STRUCTURAL LOAD BEARING WOOD BEAMS.

STRUCTURAL MEMBERS INDICATED ARE REQUIRED MINIMUM SIZES AND MAY BE INCREASED TO ALIGN WITH ADJACENT FRAMING MEMBERS AS NECESSARY OR REQUIRED WITHOUT ADDITIONAL STRUCTURAL ENGINEERING AT THE GENERAL CONTRACTOR/OWNER'S DISCRETION.

## PREFABRICATED WOOD TRUSSES

ALL PREFABRICATED WOOD TRUSSES SHALL BE SECURELY FASTENED TO THEIR SUPPORTING WALLS OR BEAMS WITH HURRICANE CLIPS OR ANCHORS. CLIPS OR ANCHORS TO BE SPECIFIED BY ENGINEER OF RECORD BASED ON REVIEW OF TRUSS SHOP DRAWINGS.

TRUSSES SHALL BE DESIGNED TO SUPPORT THE INDICATED DESIGN LOADS PLUS THE SELF-WEIGHTS OF THE

TRUSS MANUFACTURER SHALL SUBMIT SHOP DRAWINGS AND DESIGN NOTES SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE PROJECT'S JURISTICTION. DESIGN NOTES SHALL INCLUDE THE RATED LOAD CAPACITY OF THE CONNECTORS USED TO CONNECT THE TRUSS MEMBERS AT THE PANEL POINTS, CERTIFICATION OF THE CONNECTOR CAPACITIES AND THE MANUFACTURER'S LICENSE VERIFYNG THAT ARE CERTIFIED TO MANUFACTURE THE TRUSSES UTILIZING THE PROPOSED TRUSS CONNECTOR SYSTEM.

THE CONTRACTOR SHALL REVIEW ALL TRUSS FABRICATION AND INSTALLATION DRAWINGS PRIOR TO SUBMITTAL TO THE ARCHITECT AND PRIOR TO FABRICATION.

TRUSSES SHALL BE DESIGNED TO SUPPORT ALL SPECIFIED AND INDICATED LOADS IN ACCORDANCE WITH THE LOAD COMBINATIONS IN THE BUILDING CODE. THE TRUSS MANUCACTURER SHALL LACATE AND COMPUTE THE MAGNITUDES OF ALL SNOW DRIFT LOADS. THE TRUSS MANUFACTURER SHALL LOCATE AND COMPUTE AND ACCOUNT FOR ALL ADDITIONAL LOADS AND REACTIONS FROM ALL OVER-FRAMING AND PIGGY-BACK TRUSSES CONNECTED TO OR BEARING UPON OTHER SUPPORTING TRUSSES.

## HANGER SCHEDULE U.N.O.

HANGER SCHEDULE				
SIZE	HANGER			
2x6 thru 2x12	LB			
4x6 thru 4x14	HUSTF			
4x16	HUTF			
TJI	ITT			
/2 " & 5 <sup>1</sup> /4 "xPSL OR LV	L GLTV			
7"x PSL OR LVL	HGLTV			

1. PROVIDE SKEWED, SLOPED HANGERS AS REQ'D.

2. USE HANGERS SHOWN ON SCHED. U.N.O. ON PLANS. 3. WHEN HANGERS ARE EXPOSED TO WEATHER OR IN CONTACT OF

TREATED LUMBER USE "Z" GALVNIZED CONNECTIONS.



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![](_page_13_Figure_2.jpeg)

![](_page_14_Figure_0.jpeg)

EACH CONTRACTOR IS REQUIRED TO INCLUDE ALL MINOR ITEMS, WHETHER OR NOT SHOWN ON PLANS, AS REQUIRED BY CODE AND FOR WORKING SYSTEMS, IN INITIAL COST OF WORK, AND AT NO ADDITIONAL COST TO THE OWNER ANY DEVIATIONS FROM THESE DRAWINGS AND SPECIFICATIONS BY THE OWNER OR CONTRACTOR MUST BE APPROVED BY THE ARCHITECT IN WRITING AND PRIOR TO CONSTRUCTION. COPYRIGHT © ALL RIGHTS RESERVED BY DESIGNED TO BUILD. NOT TO BE COPIED OR REPRODUCED WITHOUT WRITTEN PERMISSION.

![](_page_15_Figure_1.jpeg)

![](_page_15_Figure_2.jpeg)

![](_page_15_Figure_3.jpeg)

![](_page_16_Figure_0.jpeg)

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![](_page_17_Figure_0.jpeg)

- 3

![](_page_17_Picture_1.jpeg)

CONTRACTOR SHALL COORDINATE WITH LOCAL UTILITY FOR SERVICE. A COMPLETE AND WORKING SYSTEM IS REQUIRED FOR COMPLIANCE WITH THESE DOCUMENTS. DETERMINE THE POINT OF CONNECTION TO THE UTILITY WITH THE UTILITY REPRESENTATIVE AND PROVIDE ACCORDINGLY FOR A COMPLETE WORKING SYSTEM. WIRE AND CABLE SHALL BE INSULATED, TYPE THWN OR THHN, 600 VOLTS, WITH COPPER CONDUCTORS. CONDUCTOR SIZES NO. 8 AWG AND LARGER MAY BE STRANDED. CONDUCTORS SIZES NO. 10 AWG AND SMALLER MAY BE SOLID OR STRANDED. NO ROMEX PERMITTED.

2

EMT SHALL BE GALVANIZED STEEL TUBING, 1/2-INCH MINIMUM SIZE, EQUAL TO ELECTRUNITE BRAND OR APPROVED AND USED ONLY WITH HEXAGONAL ALL STEEL COMPRESSION FITTINGS.

PLASTIC CONDUIT SHALL BE RIGID, 3/4-INCH MINIMUM NON-METALLIC, HEAVY DUTY, HIGH IMPACT, POLYVINYLCHLORIDE (PVC), TYPE I WILL BE USED FOR CONCRETE ENCASEMENT. FITTINGS SHALL BE THE SAME MATERIALS AND MANUFACTURER AS THE PLASTIC CONDUIT.

FLEXIBLE METAL CONDUIT SHALL BE 1/2– INCH MINIMUM SINGLE STRIP, STEEL, HOT DIPPED GALVANIZED INSIDE AND OUTSIDE, MAXIMUM LENGTH 72 INCHES FOR LIGHTING AND 36" FOR MOTORS. FLEXIBLE METAL CONDUIT SHALL BE LIQUIDTIGHT OR WATERTIGHT WITH PVC JACKET WHERE USED IN DAMP, WET OR OUTSIDE AREAS, AND LIQUIDTIGHT OR WATERTIGHT CONNECTORS SHALL BE USED.

NO RECEPTACLES OR TEL. OUTLETS TO BE MOUNTED BACK TO BACK, KEEP AT LEAST 2 INCHES BETWEEN RECEPTACLES AND TEL. OUTLETS.

ALL CONDUCTOR SHALL BE COPPER WITH A MINIMUM SIZE OF #12 AWG EXCEPT FOR FIRE ALARM. THESE CONDUCTORS SHOULD COMPLY WITH NFPA.

CONTRACTOR SHALL ALIGN FIXTURES, SMOKE DETECTORS, CEILING DIFFUSERS ETC. AS REQUIRED TO PROVIDE A UNIFORM PRESENTATION. AT NO TIME WILL AN IONIZATION DETECTOR BE LOCATED WITHIN 3'-0" OF A SUPPLY OR RETURN AIR GRILLE.

CIRCUIT BREAKERS AND WIRE ARE SIZED FOR SPECIFIC EQUIPMENT. BEFORE ORDERING WIRE, BREAKERS AND CONDUIT FOR THIS PROJECT THE CONTRACTOR SHALL COORDINATE WITH THE OTHER CONTRACTORS ON THE JOB AND VERIFY THE ELECTRICAL DATA FOR THE EQUIPMENT WHICH WILL ACTUALLY BE INSTALLED, RECOMPUTING WIRE AND BREAKER SIZES IF REQUIRED BY THE NEC.

ALL CONDUIT TERMINATING IN THE CEILING CAVITIES IS TO BE LABELED.

ALL CONDUIT SHALL BE COLOR CODED WITH 1/2" WIDE TAPE, 10'-0" ON CENTER IN ACCORDANCE WITH STANDARD INDUSTRY PRACTICE.

THE MOUNTING HEIGHTS AND LOCATIONS OF ALL WALL MOUNTED OUTLETS AND JUNCTION BOXES SHALL BE REVIEWED AND COORDINATED WITH THE ARCHITECT AND OWNER, PRIOR TO INSTALLATION, FOR USE WITH ACTUAL EQUIPMENT. EACH CONTRACTOR WILL PROVIDE HIS OWN SUPPORT OF ALL DEVICES AND EQUIPMENT PROVIDED BY HIM AND SHALL SUPPORT SUCH EQUIPMENT PER APPROVED GOVERNING CODES OR PER APPROVAL OF THE ENGINEER/ARCHITECT. UNACCEPTABLE WORKMANSHIP OR MATERIALS SHALL REPLACED AT THE REQUEST OF THE ENGINEER/ARCHITECT AT THE

CONTRACTORS EXPENSE. THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR FLOOR PLAN DIMENSIONS.

THE CONTRACTOR SHALL COORDINATE ANY AND ALL WORK WITH OTHER TRADES INVOLVED IN THIS PROJECT PRIOR TO THE INSTALLATION OF HIS EQUIPMENT, SO AS TO AVOID CONFLICTS DURING CONSTRUCTION AND ALLOW FOR OPTIMUM WORKING SPACE AND MAINTENANCE.

ALL FUSES DISCONNECT SWITCHES AND BREAKER SIZES SHOWN FOR MECHANICAL EQUIPMENT SHALL BE VERIFIED BEFORE PURCHASE AND INSTALLATION OF SAID EQUIPMENT WITH THE EQUIPMENT SUPPLIER AND MECHANICAL CONTRACTOR.

WHERE EQUIPMENT PENETRATES EXTERIOR WALL OR ROOF THEY SHALL BE PROPERLY SEALED WITH METHODS APPROVED BY THE ARCHITECT/ENGINEER. ALL WORK IS TO BE DONE IN STRICT COMPLIANCE WITH THE LATEST VERSION OF THE NEC AND APPLICABLE STATE CODES

RECESSED FIXTURES INSTALLED IN RATED ASSEMBLIES SHALL BE INSTALLED WITH AN ENCLOSURE SO AS TO MAINTAIN THE RATING OF ASSEMBLY

![](_page_17_Picture_18.jpeg)

	-											
R( M( FE N(	DOM DUNTING D FROM DTE	FLUSH UTILITY			VOLTS 208 BUS AMPS NEUTRAL	BY/1 10 1009	20V 0 %	3P 4W		A N L	NIC 22,000 MAIN BKR 100 .UGS STANDARD	
CKT #	CKT BKR	LOAD KVA	CIRCUIT	DESCRI	PTION		CKT #	CKT BKR	LOAD KVA	CIRCI	UIT DESCRIPTION	
1 3 5 7 9 11 13 15 17 19 21 23 25 27 29	20/1 20/1 20/1 20/1 20/1 20/1 20/1 20/1	0.274 0.321 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	LIGHTING LIGHTING SPACE SPACE SPACE SPACE SPACE SPACE SPACE SPACE SPACE SPACE SPACE SPACE SPACE			а <b>р</b> с а р с а р с а р с	2 4 6 8 10 12 14 16 18 20 22 24 26 28 30	20/1 20/1 20/1 20/1 20/1 20/1 20/1 20/1	0.18 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	RECE SPAC SPAC SPAC SPAC SPAC SPAC SPAC SPAC	PTACLE E E E E E E E E E E E E E E E E E E	
LI R	GHTING ECEPTACL	 ES C	CONN KVA ).596 ).18	CALC KVA 0.745 0.18	(125%) (50%>10)		TOT BAL LO PH/ PH/	AL LOAD ANCED 3 AD ASE A ASE B ASE C	5-PHASE	1	CALC KVA 0.925 2.57 A 176% 124% 0%	

![](_page_17_Picture_21.jpeg)

EACH CONTRACTOR IS REQUIRED TO INCLUDE ALL MINOR ITEMS, WHETHER OR NOT SHOWN ON PLANS, AS REQUIRED BY CODE AND FOR WORKING SYSTEMS, IN INITIAL COST OF WORK, AND AT NO ADDITIONAL COST TO THE OWNER ANY DEVIATIONS FROM THESE DRAWINGS AND SPECIFICATIONS BY THE OWNER OR CONTRACTOR MUST BE APPROVED BY THE ARCHITECT IN WRITING AND PRIOR TO CONSTRUCTION. COPYRIGHT © ALL RIGHTS RESERVED BY DESIGNED TO BUILD. NOT TO BE COPIED OR REPRODUCED WITHOUT WRITTEN PERMISSION.

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![](_page_17_Figure_23.jpeg)

![](_page_17_Figure_24.jpeg)

TYPICAL GROUNDING

# GROUNDING ELECTRODE DETAILS

GROUNDING ELECTRODE CONDUCTORS SHALL BE #4 BARE COPPER. OTHER MATERIAL AND INSTALLATION PER NEC

① CONNECT TO METALIC WATER PIPE AS REQ'D.

5

(3) 3/4"×10' LONG COPPER CLAD GROUNDING ROD W/ #6 COPPER GROUND.

(2) #A	COPPER	GROUND	PLACED
💛 то	BLDG STE	EEL	

A=#4 CU TENANT PANEL	2
A=#8 CU HOUSE PANEL	
A=#3/0 CU GUTTER	

Descentation     .     .     .     .     .     .     .

Jun 30, 2020 PERMITTING STAMP: MATH CARO SEAL 20193

∽to**~Build** 

Sensible Approac

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FAYETTEVILLE,

esiqhed

![](_page_18_Figure_0.jpeg)

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