BUILDING CODE SUMMARY
FOR ALL COMMERCIAL PROJECTS
NC 2012 BUILDING CODE
(except 1 and 2-family dwellings and townhouses

NC 2012 I (except 1 a (format L	BUILDING CC nd 2-family dwe updated july 2	DDE DDE ellings and to 7, 2015)	wnhouses)								Type of Constru Building Height i Building Height
Name of Proj	iect: <u>Heritag</u> 3125 Ro	<u>e Park Wes</u> oders Road	;†		Suite #						
Owner or Aut	thorized Agent: Fa:	David Ma 919 829	ацгег 0860	Ph	<u>one:</u> Email:	919 829 david@ma	4969 aurerarchii	tecture.c	:OM		BUILDING THIS SECTION RI
Johned By: Code Enforce Name of Jur	ement Jurisdiction: risdiction: W	∎ Pn © Cir ∕ake Forest	ty		City/C	state					Construction
PROJECT	SUMMARY:										Sprinklers:
Building Des	rk:	ree story sh ree story sh	nell buildin nell buildin	g g, with fir	st floor lo	obby only, el	evator and	exit sta	air enclosures		Standpipes: Fire District: Building Heiş Basement: Mezzanine:
Code Comp		ld dark shell	l for rema	inder.							High Rise: Gross Build
	vieans of Compilar	ice Kequest:			id Mouron						FLOOR Basement Ground Floor
ead Design	n Professional/Pr	oject Coordina	ator:			I IC					Mezzanine 2nd Floor 3rd Floor
rchitectural	:	Maurer Arc	hitecture	NAME	David Ma	aurer		5131	919.829.496	<u> </u>	4th Floor 5th Floor
ivil: lectrical:	· -	Atlantec Er	ngineers		David W	hitnev		17382	919.571.111	1	Porch Total
re Alarm: umbing:	-	Atlantec Er	ngineers		Jim DelP	àpa ,		22305	919.571.111	1	Area of Proje
echanical: prinkler-Star ructural:	ndpipe:	Atlantec En	ngineers Associate	<u> </u>	Jim DelP	ара Кудег		22305	919.571.111	1	Area of Const
recast: russes:			ASSOCIATE	<u> </u>		Nyzei					FIRE PROT
etaining Wa ther: ote: Special	alls >5' High:	pectors to be list	ted at end of t	his document							Life Safety Pl
uilding Coo	☐ 201 de: 2012 @rth (5 North Carolina Carolina State Bu	a Existing Bu	ilding Code NCSBC)						-	BUILDING ELEMENT
ew Buildin	☐ 201 g:New Building She	2 NC Rehab Co ell Building	de	First Time I	nterior Compl	lation					Bearing Walls NORTH
ccessibility.	Compliance Form (when annliaghte	∐ Alte	atation to She	11						EAST WEST
cisting Bui		iovation) Inter-	erior Complet	tion	Tenant Alterat	tion				SOUTH Interior Bearing
	\Box Keo	ange of Use Tena	ant Space	2411		Change of Oco	cupancy				Nonbearing W NORTH
ainal Occa	Note: Zon	ing Review May a	Be Required	for Change of	of Use or Occu	ipancy					EAST WEST
ginal Occi posed Occ	cupancy: <u>B</u>	-									SOUTH Interior Nonbea
	Information										Structural fram trusses
imary Occ	cupancies: Assemb]: A-1		A-2	A-3] A-4		A-5 🗌			Floor constructi beams and jois
Busi Higi Insti	h-Hazard:			Factory-ind] H-2				H-5			Floor Ceiling A
Insu I-:	3 USE CONDITION:] 1-2] 2	\square^{1-3}		□5				Columns Supp
Stor	age: S-1	$K-1 \square$ S-2 \square	K-2 High- <u>pi</u>	j K- Jed Faraga (406 6	з <u>П</u>	K-4					Roof constructi
S- S-	-1 SPECIAL CONDITION -2 SPECIAL CONDITION ity and Miscallaneou	ON Parking Ga	rage:	Open (406.3	3)	Enclo	osed (406. 4)				Roof Ceiling As
hor Usos.	ity and miscenaneou	12									Columns Supp
Acc Inci	essory Uses (Indicat	e Percentages):									Shafts - Other
ecial Occu	inancies: 402	1403 - 1404			406 🖂 407	 408					Shafts - Other
		[409] 409] 410] 416] 417] 416] 417]] 417]]	$\begin{array}{c} \square \\ \square $		$\begin{array}{c c} 400 & \square 407 \\ 413 & \square 414 \\ 420 & \square 421 \end{array}$	□408 □415					Corridor Separa
ecial Prov	isions:										Party/Fire Wall
ixed Occur	pancy: No]Yes □Sep	aration:								Dwelling/Sleepi Smoke Barrier S
incu occuj		Exception:									Tenant Separat * Indicate se
🗌 Non	-Separated Mixed C	Occupancy (508.	3.2)								** Indicate if
🗌 Sepa	arated Mixed Occup	ancy (508.3.3)									PERCENT.
	Actual Area	of Occupancy A	+	<u>Actual Ar</u>	rea of Occupat	$\frac{ncy B}{ancy B} \leq 1$					THIS SECTION F Allowable openin
lowable A	Area and Height (Calculations		nuo wuole n	ireu oj occupe	ancy D					
S SECTION F	COR NEW, ADDITION, CH	ANGE OF USE, <u>AND</u>	OPEN	PLETIONS WIDTH		Y					WALL LE
WALL ORTH	185'	18	IS'	OR	<pre>OPEN SPACE <30 </pre>						THIS SECTION R
	185'	18	+		<30						CHECK IF TH
EST DTAL	<u> </u>	P 49	+' 98'	F	<30	W					∐ Smo
Incre Sprin	ase Frontage % 7!	<u>ā</u>									LIFE SAFE
FRO	NTAGE INCREASE FO	ORMULA ALLOWA	ABLE AREA FC	RMULA							Eme
lf =	100(<u>F</u> - 0.25)	W									Exit Fire
BOT	P <u>H BUILDING AND TH</u>	30 MANT MUST BE I	INDICATED OF	CHART BELL	o#/	$\sim \sim \sim$	\frown	\frown	\sim		Smo Pan
STORY		(A) BLDG. AREA	(B) TARI F	(C) % OPEN	(D) %	(E) ALLOWABLE FLOOR AREA	RATIO OF	MAXIM	JM SEPARATION	N	
NO.	R	PER STORY (ACTUAL)	5035 AREA	SPACE INCREASE	SPRINKLER INCREASE2		ALLOWABLE		REQUIRED	\mathbf{k}	EXIT REQ Number and
2	B	10,916	19,000	75%	0%	33,250	.27	99,750		\leq	
ז	В	10,916	19,000	/5%	0%	33,250	.21	99,75(1	AND/OR SF
otal		10,916				33,250	.27			-}	grour Secor
Oner	n space area increases	from Section 506	.2 are computed	d thus:		$\overline{}$			$\overline{}$	7	third
a. Pe b. To	erimeter which fronts a otal building perimeter	a public way or op r = 4088	en space havin	g 20 feet minir	num width = _	ft (f)					
c. Ra d. W	atio $(f/p) = 1 (f/p)$ T = Minimum width of	p) public way =	30' ft (W)								2 Single exi
e. W e. Pe The spi a. M	ercent of frontage increase rinkler increase per Se fultistory building Is =	ease if = $100 [f/$ ection 506.3 is as f 200 percent	p - 0.25] x w/3 ollows:	0 =	(%) 75						3 Commor

- b. Single story building Is = 300 percent
- 3 Unlimited area applicable under conditions of Sections Group B, F, M, S, A-4 (507.1, 507.2, 507.3, 507.4, 507.7);
- Group A motion picture (507.10); Malls (507.11); and H-2 aircraft paint hangers (507.8).
- 4 Maximum Building Area = total number of stories in the building x E but not greater than 3 x E.
- 5 The maximum area of parking garages must comply with 406.3.5. The maximum area of air traffic control towers must comply with 412.3.2.

ALLOWABLE HEIGHT

EUSE	ALLOWABLE HEIGHT (TABLE 503)	\sim	INCREASE FOR SPRINKLERS	SHOWN ON A	CODE REFERENCE
		Type 3-B)	(Type 3-B	Table 601
t	H= 55'ft	\sim	H + 20 ft = n/a ft	н = 51'-8"	Table 503
ries	s= 3		S+1= n/a	s= 3	Table 503

ING DATA ON REQUIRED FOR ALL PROJECTS I-A 🗌 I-B 🗌 II-A 🗍 II-B 🗍 III-A 🗍 III-B 💽 tion Type: □ IV-HT □V-A □V-B Mixed construction: No 💽 Yes 🗌 Types: ers: No Yes NFPA 13 NFPA 3R Partially Sprinklered Special Suppression es: No 🕑 Yes 🗌 Class: I 🗌 II III 🗌 Wet 🗌 Dry rict: No 💽 Yes 🗌 (Appendix D) Flood Hazard Area: No Yes 🗩 🗌 Height: <u>51'-8"</u> Feet <u>3</u> Story 💽 No 🗌 Yes 🖲 No 🗌 Yes ine: \bigcirc No \square Yes Life Safety Plan Sheet # (if provided): uilding Area: EXISTING (SQ FT) NEW (SQ FT) SUB-TOTAL 10,916 sf

10,916 sf 10,916 sf

32,748 sf

roject Tenant/Alteration/Renovation: Construction: 32,748 sf

ROTECTION REOUIREMENTS ON REQUIRED FOR ALL PROJECTS

ty Plan Sheet #, if Provided

T1

	FIRE		RATING		DESIGN #	DESIGN # EOP	DESIGN #
NG	SEPARATION		PROVIDED	AND	FOR RATED	RATED	FOR RATED
N I	(FEET)	REQ'D*	(W/HR*	SHEET #	ASSEMBLY	PENETRATION	JOINTS
	$\wedge \rightarrow \wedge$	\sim		\sim			
Walls - Exte	rior (2					
HUIS LAC		\sim					
		0	0				
		0	0				
		0	0				
aring Walls		0	0				
ina Walls – F	Tyterior	0	0				
ing nano i	~30'	0	0				
	-30'	0	0				
	×30'	0	0				
	> 30'	0	0				
nhoaring Walls	01<	0	0				
		0	0				
frame, including	columns, girders,	0	0				
struction, includir d joists. List cor	ng supporting nstruction type.	0	0				
ng Assembly		0	0				
Supporting Floor	S	0	0				
truction, includin d joints **	ig supporting	0	0				
ng Assemb l y		0		T2	P522		
Supporting Roof		0	0				
xit Enclosures		1 hr	1 hr	Τ2	U425		
ther eleva	ator	1 hr	1 hr	Τ2	U905		
ther		n/a	n/a				
ther		n/a	n/a				
eparation		1 hr	1 hr	Τ2	U425		
y Separation		0	0				
Wall Separation		n/a	n/a				
Use Separation		n/a	n/a				
eeping Unit Se	paration	n/a	n/a				
rrier Separation		n/a	n/a				
eparation		n/a	n/a				
te section num	ber permitting reduction						

te if using Table 601 Note C exception

NTAGE OF WALL OPENING CALCULATIONS ON FOR ADDITION, NEW AND CHANGE OF USE

penings per Table 705.8 unlimited

LEGENDS ON REQUIRED FOR ALL PROJECTS

F THE FOLLOWING ARE PRESENT AND INDICATE BY A WALL LEGEND ON ALL PLANS Fire Walls 706 Fire Beriers 707 Smoke Partitions 711 Fire Partitions 709 Shaft Enclosure 708 Smoke Barriers 710

AFETY SY	STEM REQUIE	REMENTS				
Emergency Exit Signs: Fire Alarm: Smoke Dete	Lighting: ection Systems:	No No No No	Yes Yes Yes Yes			
Panic Hardy	ware:	NO C	res 🗀			
Panic Hardy	ware:	NO E	Yes 🗀			
Panic Hardy EQUIREM and arrang on required	ware: IENTS ement of exits FOR ALL PROJECTS	NO	ies 🗆			
Panic Hardy EQUIREM and arrang on required	Ware: IENTS ement of exits FOR ALL PROJECTS MINIMUM NUM	IBER OF EXITS	TRAVEL C	DISTANCE	ARRANGEMENT ME	ANS OF EGRESS1,3

200

200

tbd

tbd

tbd

93'

107'

107'

102'

or dead ends (Section 1018.4) e exits (Section 1015.1; Section 1021.2)

non Path of Egress Travel (Section 1014.3)

Occupant Load and Exit Width THIS SECTION REQUIRED FOR ALL PROJECTS

	(a)	(b)	(a / b)	(c)		EXIT WIDT			
USE GROUP AND/OR SPACE DESIGNATION	AREA1 SQ.FT.	AREA PER OCCUPANT	NUMBER OF	EGRESS WIDTH PER OCCUPANT (TABLE 1005.1)		REQUIRED WIDTH (SECTION 1005.1) (a / b) x c			
		LUAD	OCCUPANTS	STAIR	LEVEL	STAIR	LEVEL		
ground	10,618 sf	100 gsf	101	.3	.2	n/a	20.2"		
second	10,618 sf	100 gsf	101	.3	.2	30.3	20.2"		
third	10,618 sf	100 gsf	101	.3	.2	30.3	20.2"		
		_							
total # of occupants			303						

1 See Table 1004.1.1 to determine whether net or gross area is applicable.

2 Minimum stairway width (Section 1009.1); min. corridor width (Section 1017.2); min. door width (Section 1008.1.1)

³ Minimum width of exit passageway (Section 1021.2) 4 The loss of 1 means of egress shall not reduce the available capacity to less than 50 percent of the total required (Section 1005.1)

5 Assembly occupancies (Section 1025)

ASSEMBLY OCCUPANCY INFORMATION

THIS SECTION FOR ASSEMBLY USE AREA(S)

ce scription	Area - SF Load	Occupant Factor	Occupant Load	Exit Width	
					_
					-
					-

TOTAL

PLUMBING FIXTURE REQUIREMENTS THIS SECTION REQUIRED FOR ALL PROJECTS

			WATERCLOSETS LIPINALS L			LAVAT	ORIES		SHOWERS/	DR		
	JOUFANCT		MALE FEMALE		ALE	URINALS	MA	ιLE	FEMA	ALE .	TUBS	REGUL
Total Requ	ired											
Total Provi	ded											
		_										
BUILDING DRAIN SIZE	NUMBER OF BUILDING DRAINS	TOTAL FIXTURE UNIT LOAD	WAT SERVICI	er E size	NUMBER OF WATER SERVICES		TOTA FIXTUI UNIT LO	IL RE DAD			NOTES	
4″	1"		1"		1		see plumbing		nbing drawi	ngs		

ACCESSIBLE PARKING

	TOTAL # OF PA	RKING SPACES	# OF ACCESSIBL	TOTAL # ACCESSIBLE PROVIDED			
LOT OR PARKING AREA	REA REQUIRED PROVIDED		REGULAR W/ 5' ACCESS AISLE			VAN SPACES W/ 8' ACCESS AISLE	
see appro	oved site p	lan submiss	submission				
TOTAL							

COMchec Envelo	k Software Vo Dpe Com	ersion 3 plian	8.9.3 ICE (Cert	ifica	te
90.1 (2010) Standard						
Section 1: Project Information	n					
Project Type: New Construction Project Title : Heritage Park						
Construction Site: 3125 Rogers Road Wake Forest, NC	Owner/Agent:		Desiç	gner/Contr	actor:	
Section 2: General Information	on					
Building Location (for weather data): Climate Zone: Building Space Conditioning Type(s): Vertical Glazing / Wall Area Pct.:	Wake Forest, North C 4a Nonresidential 28%	arolina				
Building Type Office	<u>Floo</u> 1(r Area)915				
Section 3: Envelope Assemb Envelope PASSES: Design 1% better than co Climate-Specific Requirements: Component Name/Descri	lies de. ption	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U-Factor(a)
Floor: Slab-On-Grade:Unheated		512				
Front Elevation: Steel-Framed, 16" o.c.		7300	19.0	0.0	0.110	0.064
Window 1: Metal Frame Curtain Wall/Storef testing/cert. Product ID: YKK, SHGC 0.2	ront, Perf. Type: Other 2 (c)	480			0.430	0.500
Side Elevation: Wood-Framed, 16" o.c.		2430	19.0	0.0	0.067	0.089
Window 2: Metal Frame Curtain Wall/Storef testing/cert. Product ID: YKK, SHGC 0.2	ront, Perf. Type: Other 2 (c)	2177			0.430	0.500
Rear Elevation: Steel-Framed, 16" o.c.		7300	19.0	0.0	0.110	0.064
Window 3: Metal Frame Curtain Wall/Storef testing/cert. Product ID: YKK, SHGC 0.2	ront, Perf. Type: Other 2 (c)	2177			0.430	0.500
Side Elevation: Steel-Framed, 16" o.c.		2340	19.0	0.0	0.110	0.064
Window 4: Metal Frame Curtain Wall/Storef testing/cert. Product ID: YKK, SHGC 0.2	ront, Perf. Type: Other 2 (c)	672			0.430	0.500
Roof: Attic Roof with Wood Joists		10915	38.0	0.0	0.027	0.027
(a) Budget U-factors are used for software base (b) 'Other' components require supporting docu (c) Fenestrations product performance must be	eline calculations ONLY, mentation for proposed certfied in accordance v	and are not c U-factors. vith NFRC and	ode require d requires s	ments. upporting d	ocumentatio	n.

Section 4: Compliance Statement

Compliance Statement: The proposed envelope design represented in this document is consistent with the building plans, specifications and other calculations submitted with this permit application. The proposed envelope system has been designed to meet the 90.1 (2010) Standard requirements in COMcheck Version 3.9.3 and to comply with the mandatory requirements in the Requirements Checklist.

Project Title: Heritage Park Data filename: C:\Users\mMobile\Desktop\HPPW 3.cck Report date: 06/19/17 Page 1 of 2





Classification) — CKNX.R7094 PANEL REY S A (View Classification) — CKNX.R21796 USG MEXICO S A DE C V (View Classification) — CKNX.R16089

1-1/2 hr

2 hr

shown in the table above. ACADIA DRYWALL SUPPLIES LTD — Type X 4B. Gypsum Board* — As an alternate to Item 4 - Nom. 5/8 in. thick gypsum panels, with

systems) staggered a min of 12 in. TEMPLE-INLAND — GreenGlass Type X NATIONAL GYPSUM CO — Type FSW-6.

described in Item 4.



See General Information for Fire-resistance Ratings - ANSI/UL 263 Design No. U425

> May 07, 2013 (For Exterior Walls, Ratings Applicable

For Exposure To Fire On Interior Face Only, (See Items 4 and 5)

Bearing Wall Rating — 45 Min, 1, 1-1/2 or 2 HR. (See Items 2 and 4)

Load Restricted for Canadian Applications - See Guide BXUV7

INTERIOR WALL



HORIZONTAL SECTION



HORIZONTAL SECTION

1. Steel Floor and Ceiling Tracks — (Not Shown) — Top and bottom tracks of wall assemblies shall consist of steel members, min No. 20 MSG (0.0329 in., min bare metal thickness) steel or min No. 20 GSG (0.036 in. thick) galv steel or No. 20 MSG (0.033 in. thick) primed steel, that provide a sound structural connection between steel studs, and to adjacent assemblies such as a floor, ceiling, and/or other walls. Attached to floor and ceiling assemblies with steel fasteners

2. Steel Studs — Min 3-1/2 in. wide, No. 20 MSG (0.0329 in., min bare metal thickness) corrosion protected cold formed steel studs designed in accordance with the current edition of the Specification for the Design of Cold-Formed Steel Structural Members by the American Iron and Steel Institute. All design details enhancing the structural integrity of the wall assembly, including the axial design load of the studs, shall be as specified by the steel stud designer and/or producer, and shall meet the requirements of all applicable local code agencies. The max stud spacing of wall assemblies shall not exceed 24 in. OC (or 16 in. OC when Item 5b is used). Studs attached to floor and ceiling tracks with 1/2 in. long Type S-12 steel screws on both sides of studs or by welded or bolted connections designed in accordance with the AISI

3. Lateral Support Members — (Not shown) — Where required for lateral support of studs, support may be provided by means of steel straps, channels or other similar means as

4. Gypsum Board* — Any 1/2 in. thick UL Classified Gypsum Board that is eligible for use in Design No. X515. Any 5/8 in. thick UL Classified Gypsum Board that is eligible for use in Design Nos. L501, G512 or U305. Gypsum board bearing the UL Classification Marking as to Fire Resistance. Applied vertically with joints between layers staggered. Outer layer of 3 layer construction may be applied horizontally unless specified below. The thickness and number of layers and percent of design load for the 45 min, 1 hr, 1-1/2 hr and 2 hr ratings are as follows:

d Protection ss of Wall -	0/ -£
In. Each Layers	Design Load
1/2 in this!	100
1/2 in. thick 5/9 in thick	100
5/8 in. thick	100
1/2 in. thick	100
5/8 in. thick or	80
1/2 in. thick	100
3/4 in. thick	100

*Ratings applicable to assemblies serving as exterior walls where Classified fire resistive gypsum sheathing type wallboard is substituted on the exterior face.

% of

Wallboard Protection on Interior Side of Wall -No. of Layers & Thkns

> Design Load 100 100

2 layers, 5/8 in. thick 100 3 layers, 1/2 in. thick 100 2 layers, 3/4 in. thick

ACADIA DRYWALL SUPPLIES LTD (View Classification) - CKNX.R25370 AMERICAN GYPSUM CO (View Classification) — CKNX.R14196 BEIJING NEW BUILDING MATERIALS PUBLIC LTD CO (View Classification) — CKNX.R19374

CERTAINTEED GYPSUM CANADA INC (View Classification) - CKNX.R15187 CERTAINTEED GYPSUM INC (View Classification) — CKNX.R3660 CGC INC (View Classification) — CKNX.R19751 GEORGIA-PACIFIC GYPSUM L L C (View Classification) — CKNX.R2717 LAFARGE NORTH AMERICA INC (View Classification) — CKNX.R18482

LOADMASTER SYSTEMS INC (View Classification) — CKNX.R11809 NATIONAL GYPSUM CO (View Classification) — CKNX.R3501 PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM (View

SIAM GYPSUM INDUSTRY (SARABURI) CO LTD (View Classification) — CKNX.R19262 TEMPLE-INLAND (View Classification) — CKNX.R6937 THAI GYPSUM PRODUCTS PCL (View Classification) — CKNX.R27517 UNITED STATES GYPSUM CO (View Classification) — CKNX.R1319

4A. Gypsum Board — Nom. 3/4 in. gypsum board applied vertically with joints between layers staggered. The thickness and number of layers and percent of design load for the 2 hr ratings are

CGC INC — Types AR, IP-AR, IP-X3, or ULTRACODE UNITED STATES GYPSUM CO — Types AR, IP-AR, IP-X3, or ULTRACODE USG MEXICO S A DE C V — Types AR, IP-AR, IP-X3, or ULTRACODE

square edges, applied horizontally. Gypsum panels fastened to framing with 1 in. long bugle head steel screws spaced a max 8 in. OC, with last 2 screws 3/4 in. and 4 in. from each edge of board. Horizontal joints need not be backed by steel framing. Horizontal edge joints and horizontal butt joints on opposite sides of studs on interior walls need not be staggered. Horizontal edge joints and horizontal butt joints in adjacent layers on interior walls (multilayer

4C. Gypsum Board* — (As an alternate to Items 4 and 4A) - 5/8 in. thick, 4 ft. wide, paper surfaced applied vertically only and secured as described in Item 6. CERTAINTEED GYPSUM INC — Type SilentFX NATIONAL GYPSUM CO — SoundBreak XP Type X Gypsum Board

TEMPLE-INLAND — Type X ComfortGuard Sound Deadening Gypsum Board. 4D. Wall and Partition Facings and Accessories* — (As an alternate to

Items 4 through 4B) — Nominal 5/8 in. thick, 4 ft wide panels, applied vertically and secured as

SERIOUS ENERGY INC — Types QuietRock ES, QuietRock 527.

5. Gypsum Sheathing — For exterior walls, 1/2 or 5/8 in. thick Classified or unclassified exterior gypsum sheathing applied vertically and attached to studs and runner tracks with 1 in. long Type S-12 bugle head screws spaced 12 in. OC. along studs and tracks. One of the following exterior facings are to be applied over the gypsum sheathing.

a. Siding, Brick, or Stucco — Aluminum siding, steel siding, brick veneer, or stucco attached to studs over gypsum sheathing and meeting the requirements of local code agencies. When a min 3-3/4 in. thick brick veneer facing is used, the Exterior Wall Rating is applicable with exposure on either face. Brick veneer wall attached to studs with corrugated metal wall ties attached to each stud with steel screws, not more than each sixth course of brick. When a min 3-3/4 in. thick brick veneer facing is used, Foamed Plastic (Item 10) may be used.

b. Cementitious Backer Units* - 1/2 or 5/8 in. thick, square edge boards, attached to steel studs over gypsum sheathing with 1-5/8 in. long, Type S-12, corrosion resistant, wafer head steel screws, spaced 8 in. OC. Studs spaced a max of 16 in. OC. Joints covered with glass fiber mesh

UNITED STATES GYPSUM CO — Type DCB

c. Fiber-Cement Siding — Fiber-cement exterior sidings including smooth and patterned panel or lap siding. d. Molded Plastic* — Solid vinyl siding mechanically secured to framing members in

accordance with manufacturer's recommended installation details. ALSIDE, DIV OF ASSOCIATED MATERIALS INC

e. Wood Structural Panel or Lap Siding — APA Rated Siding, Exterior, plywood, OSB or composite panels with veneer faces and structural wood core, per PS 1 or APA Standard PRP-108, including textured, rough sawn, medium density overlay, brushed, grooved and lap siding.

f. Building Units* — (Not Shown) - 3 in. thick 18 x 24 in. cellular glass blocks, applied to the gypsum sheathing (Item 5) with PC 88 adhesive or fastened with F anchors spaced a maximum 24 in. OC. F anchors fastened to framing members with 1-1/4 in. long #6 drywall screws. PITTSBURGH CORNING CORP — Type FoamGlas

6. Fasteners — (Not Shown) — Screws used to attach wallboard to studs: self-tapping bugle head sheet steel type, spaced 12 in. O.C. First layer Type S-12 by 1 in. long for 1/2 and 5/8 in. thick wallboards and 1-1/4 in. long for 3/4 in. thick wallboard. Second layer Type S-12 by 1-5/8 in. long for 1/2 and 5/8 in. thick wallboards and 2-1/4 in. long for 3/4 in. thick wallboard. Third layer Type S-12 by 1-7/8 in. long.

7. Batts and Blankets* - Placed in stud cavities of all exterior walls. May or may not be used in interior walls. Any glass fiber or mineral wool batt material bearing the UL Classification Marking as to Fire Resistance, of a thickness to completely fill stud cavity. See Batts and Blankets* (BZJZ) Category for names of Classified companies

7A. Fiber, Sprayed* — As an alternate to Batts and Blankets (Item 7) — (100% Borate Formulation) - Spray applied cellulose material. The fiber is applied with water to completely fill the enclosed cavity in accordance with the application instructions supplied with the product with a nominal dry density of 2.7 lb/ft3. Alternate Application Method: The fiber is applied without water or adhesive at a nominal dry density of 3.5 lb/ft3, in accordance with the

application instructions supplied with the product. U S GREENFIBER L L C — INS735 & INS745 for use with wet or dry application. INS765LD and INS770LD are to be used for dry application only.

7B. Fiber, Sprayed* — As an alternate to Item 7 and 7A — Spray applied cellulose material. The fiber is applied with water to completely fill the enclosed cavity in accordance with the application instructions supplied with the product. Nominal dry density of 4.58 lb/ft3. NU-WOOL CO INC — Cellulose Insulation

7C. Fiber, Sprayed* — As an alternate to Batts and Blankets (Item 7) - Spray applied cellulose fiber. The fiber is applied with water to completely fill the enclosed cavity in accordance with the application instructions supplied with the product. The minimum dry density shall be 4.30 lbs/ft3.

INTERNATIONAL CELLULOSE CORP — Celbar-RL

8. Joint Tape and Compound — (Not Shown) — Vinyl or casein, dry or premixed joint compound applied in two coats to joints and screw heads of outer layer. Perforated paper tape, 2 in. wide, embedded in first layer of compound over all joints of outer layer.

9. Furring Channels — (Optional, not shown, for single or double layer systems) — Resilient furring channels fabricated from min 25 MSG corrosion-protected steel, spaced vertically a max of 24 in. OC. Flange portion attached to each intersecting stud with 1/2 in. long Type S-12 steel

10. Foamed Plastic* — Not Shown -For use with brick veneer as outlined in Item 5A - Maximum 2 in. thick rigid polystyrene insulation attached to studs with fasteners of sufficient length to penetrate the foam and 3/16 in. into the stud. A minimum 1 in. air space is to be maintained between the outer surface of the foamed plastic and the inner surface of the brick

OWENS CORNING SPECIALTY & FOAM PRODUCTS

10A. Mortar Drop Protection — (Optional, Not shown) - foamed plastic with mortar control device attached, continuous, by drainage holes at bottom of air space behind brick veneer. OWENS CORNING SPECIALTY & FOAM PRODUCTS — WeepGuard

10B. Foamed Plastic* — Polyisocyanurate foamed plastic insulation boards, any thickness, Classified in accordance with BRYX and / or CCVW. May be used with any exterior

facing shown under items 5a, 5c, 5d and 5e. THE DOW CHEMICAL CO — Type Thermax Sheathing, Thermax Light Duty Insulation, Thermax Heavy Duty Insulation, Thermax Metal Building Board, Thermax White Finish Insulation, Thermax ci Exterior Insulation, Thermax IH Insulation, Thermax Plus Liner Panel and Thermax Heavy Duty Plus (HDP)

11. Cementitious Backer Units* — (Optional Item Not Shown - For Use On Face Of 1 Hr Or 2 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 spaced a max of 8 in. OC. When 4 ft. wide boards are used, horizontal joints need not be backed by framing. 2-Hr System - Applied vertically with vertical joints centered over studs. Face layer fastened over gypsum board 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 3/4 in. for wood framing members spaced a max of 8 in. OC.

NATIONAL GYPSUM CO - Type DuraBacker, PermaBase, DuraBacker Plus, or PermaBase Plus

*Bearing the UL Classification Mark

HUNTER PANELS — Type Xci-Class A





1. Concrete Blocks* — Various designs. Classification D-2 (2 hr). See Concrete Blocks category for list of eligible manufacturers.

2. Mortar — Blocks laid in full bed of mortar, nom. 3/8 in. thick, of not less than 2-1/4 and not more than 3-1/2 parts of clean sharp sand to 1 part Portland cement (proportioned by volume) and not more than 50 percent hydrated lime (by cement volume). Vertical joints staggered.

concrete blocks (Item 1). attached to concrete blocks (Item 1).

Pro 2 Wall Insulation." HUNTER PANELS — Type Xci-Class A, Xci 286

Plus Liner Panel and Thermax Heavy Duty Plus (HDP)

*Bearing the UL Classification Mark

1 hr rtd stair enclosure <u>127' diagonal distance</u> (1/2 diagonal distance minimum
<u>3</u> <u>Third Floor Eqress</u> 1/16" = 1"-0" <u>B Occupancy</u> 10,618gsf/100=101 occupants
1 hr rtd stair enclosure <u>127' diagonal distance</u> [1/2 diagonal distance minimum
2 <u>Second Floor Egres</u> 17.1 ^{6° = 1°-0°} <u>B Occupancy</u> 10,618gsf/100=101 occupants
187' diagonal distance
EXIT it Door Capacity "/.2=170 people
1 First Floor Egress 12 1/16" = 1"-0" B Occupancy
10,618gsf/100=101 occupants

BXUV - Fire Resistance Ratings - ANSI/UL 263 BXUV7 - Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada See General Information for Fire-resistance Ratings - ANSI/UL 263 See General Information for Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada

> Design No. U905 May 19, 2014 Bearing Wall Rating — 2 HR. Nonbearing Wall Rating — 2 HR

When used in Canada it is required that all materials included within the UL design are also cUL certified.



3. Portland Cement Stucco or Gypsum Plaster — Add 1/2 hr to classification if used. Where combustible members are framed in wall, plaster or stucco must be applied on the face opposite framing to achieve a max. Classification of 1-1/2 hr. Attached to

4. Loose Masonry Fill — If all core spaces are filled with loose dry expanded slag, expanded clay or shale (Rotary Kiln Process), water repellant vermiculite masonry fill insulation, or silicone treated perlite loose fill insulation add 2 hr to classification. 5. Foamed Plastic* — (Optional-Not Shown) — 1-1/2 in. thick max, 4 ft wide sheathing

ATLAS ROOFING CORP — "EnergyShield Pro Wall Insulation" and "EnergyShield

THE DOW CHEMICAL CO — Type Thermax Sheathing, Thermax Light Duty Insulation, Thermax Heavy Duty Insulation, Thermax Metal Building Board, Thermax White Finish Insulation, Thermax ci Exterior Insulation, Thermax IH Insulation, Thermax





future rated corridor.	
to be completed during	
y interior completions	
1 hr rated stair enclosure	
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EXIT Exit Door Capacity	
Plan	

Egress Checklist

	Fire and/or smoke rated wall locations (Chapter 7)
n/a 🗌	Assumed and real property line locations
n/a 🗌	Exterior wall opening area with respect to distance to assumed property lines (705.8)
n/a 🗌	Existing structures within 30' of the proposed building
	Occupancy types for each area as it relates to occupant load calculation (Table 1004.1.1)
n/a 🗌	2012 NC Administrative Code and Policies
	Occupant loads for each area
n/a 🗌	Exit access travel distances (1016)
n/a 🗌	Common path of travel distances (1014.3 & 1028.8)
n/a 🗌	Dead end lengths (1018.4)
	Clear exit widths for each exit door
	Maximum calculated occupant load capacity each exit door can accommodate based on egress width (1005.1)
n/a 🗌	Actual occupant load for each exit door
n/a 🗌	A separate schematic plan indicating where fire rated floor/ceiling and/or roof structure is provided for purposes of occupancy separation
n/a 🗌	Location of doors with panic hardware (1008.1.10)
n/a 🗌	Location of doors with delayed egress locks and the amount of delay (1008.1.9.7)
n/a 🗌	Location of doors with electromagnetic egress locks (1008.1.9.8)
n/a 🗌	Location of doors equipped with hold-open devices
n/a 🗌	Location of emergency escape windows (1029)
n/a 🗌	The square footage of each fire area (902)
n/a 🗌	The square footage of each smoke compartment (407.4)

n/a 🗌 Note any code exceptions or table notes that may have been utilized regarding the items above

New Shell Building	Heritage Park West	3125 Rogers Road	Wake Forest, North Carolina
A THE STORE	5156 5156 516H		n)
MAURER ARCHITECTURE	115.5 EAST HARGETT STREET, SUITE 300	RALEIGH, NORTH CAROLINA 27601	TEL. 919-829-4969 FAX. 919-829-0860
DATE DR. CH. PROJ. # REVISION 1-Comme	IS ents	06.22 nm 16096 DA 2/8/	.17 .TE .18



WALL LEGEND













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Acoustic Ceilin	д Туре		
ceiling grid	Armstrong: exposed T – 15/16″		
ceiling tile	Armstrong: 2'x2' Dune Beveled Tegular		
provide ceiling tile sample to owner for approval			

Light Fixture Legend			
🗆 D1	recessed LED fixture. square trim		
(¤)P1	ceiling mounted mini-pendant		







____entry canopy below















3 Second Floor Stair A Plan



2 Second Floor Stair A Plan A1.5 1/4" = 1'-0"

1 First Floor Stair A Plan A1.5 1/4" = 1'-0"

















A2.3







— prefinished metal parapet coping





— 30 year architectural grade fiberglass roof shingles



1 Enlarged Elevation A2.4 1/4" = 1'-0"





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	DOOR SCHEDULE			
	#	NAME	S1ZE	MATERIAL
	101	MAIN LOBBY	[2] 3'-0"x8'-0"	ALUM/GLASS
	102	ELEVATOR MACHINE ROOM	3'-0"x7'-0"	WOOD
	103	FA/COMM	3'-0"x7'-0"	WOOD
	104	STAIR A	3'-0"x7'-0"	WOOD
	105a	STAIR B - INTERIOR	3'-0"x7'-0"	WOOD
	(105b	STAIR B - EXTERIOR	3'-0"x7'-0"	ALUM/GLASS
	106	TEMPORARY DOOR	3'-0"x7'-0"	WOOD
	201	STAIR A	3'-0"x7'-0"	WOOD
	202	STAIR B	3'-0"x7'-0"	WOOD
	203	FA/COMM	[2] 3'-0"x7'-0"	WOOD
	301	STAIR A	3'-0"x7'-0"	WOOD
	302	STAIR B	3'-0"x7'-0"	WOOD
1	202	EL (COMM	[0] 2/ 0// 7/ 0//	1.000

Window & Door Schedules

1-Comments 2/8/18 <u>2-Veneer 4/24/18</u>

A4.1