

**STRUCTURAL GENERAL NOTES**

10 Brown St.  
Portland, ME  
SI Job #: 15-0216

**DESIGN LOADS:** International Building Code; IBC 2009 Edition, except as noted

Occupancy Category, Table 1604.5 II Standard

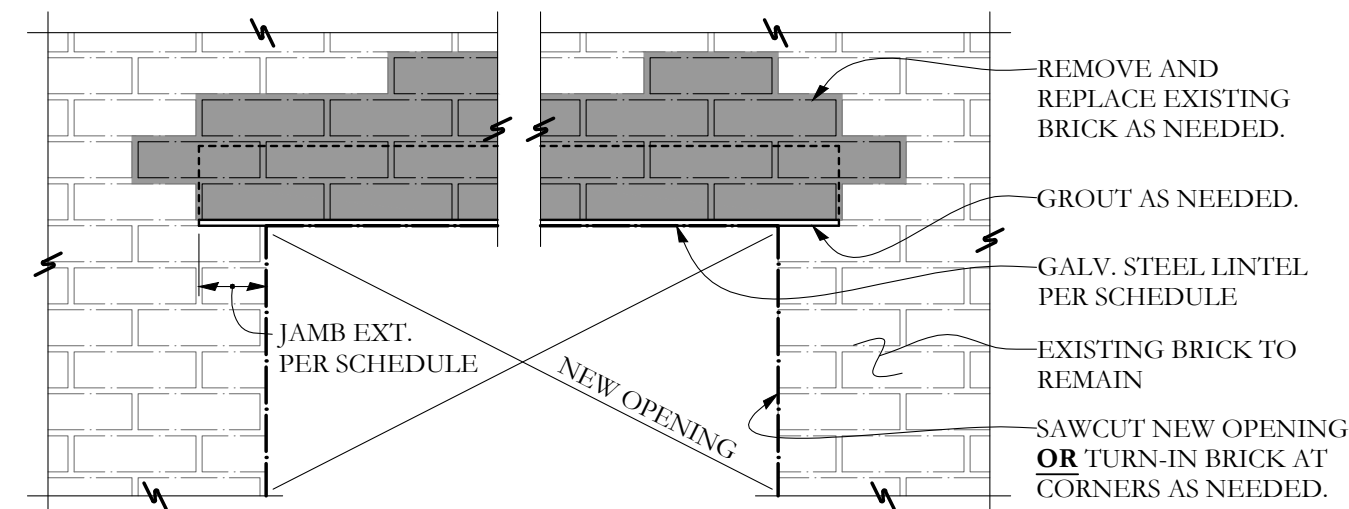
Floors: Residential 40 psf  
Corridors 100 psf

**STRUCTURAL STEEL:**

Structural steel shall be detailed, fabricated, and erected in accordance with latest AISC Specifications, and Code of Standard Practice. Structural steel wide flange beams shall conform to ASTM A992. Except as noted, framed beam connections shall be bearing-type with 3/4" diameter, snug tight, A325-X bolts, detailed in conformance with Part 4, Tables II and III, for 0.6 times the allowable uniform loads tabulated in Part 2 of the AISC Manual, 9th Edition. Install bolts in accordance with AISC "Specification for Structural Joints Using ASTM A325 or A490 Bolts". All beams shall have full depth web stiffeners each side of webs above and below columns. Anchor rods shall conform to ASTM F1554, Grade 55, with weldability supplement S1. Headed anchor studs (HAS) shall be attached to structural steel with equipment approved by the stud manufacturer according to the stud manufacturer's recommendations. Welding shall be done by a certified welder in accordance with AISC and AWS specifications and recommendations using E70-electrodes. Where not specifically noted, minimum weld shall be 3/16" fillet by length of contact edge. All post-installed anchors shall have current National Evaluation Report, and shall be installed in accordance with the manufacturer's requirements.

**STRUCTURAL WOOD FRAMING:**

In-Grade Base Values have been used for design. 2x framing shall be Spruce-Pine-Fir S4S No. 2 and better unless noted. All lumber shall be 19% maximum moisture content, unless noted. Solid timber beams and posts shall be Douglas Fir-Larch No. 1. Studs shall be Spruce-Pine-Fir S4S No. 2 and better. Top and bottom plates shall be Spruce-Pine-Fir S4S No. 2 and better. Wood in contact with concrete shall be pressure-treated Spruce-Pine-Fir S4S No. 2 or Southern Yellow Pine. Conventional light framing shall comply with IBC Section 2308. Except as noted otherwise, minimum nailing shall be provided as specified in IBC Table 2304.9.1 "Fastening Schedule." Plywood and oriented strand board (OSB) floor and roof sheathing shall be APA graded with panel identification index, thickness, and nailing as noted on the drawings. Nail wall sheathing with 8d commons at 4" o.c. at panel edges, and 12" o.c. at intermediate framing except as noted. SHEATH ALL EXTERIOR WALLS. SHEATH INTERIOR WALLS AS SHOWN ON THE DRAWINGS. BLOCK AND NAIL ALL EDGES BETWEEN STUDS. Sheathing shall be continuous from bottom plate to top plate. Cut in "L" and "T" shapes around openings. Lap sheathing over rim joists min. 4" at all floors to tie upper and lower stud walls together. Minimum height of sheathing panels shall be 16" to assure that plates are tied to studs. Minimum 3-8d per stud and nail plates with "edge nail" spacing. Sole plate at all perimeter walls and at designated shear walls shall be nailed as for braced panels with 3-16d x 3 1/2" long box nails (coated or deformed shank) per 16". 12d nails are not acceptable. Provide solid blocking between joists under jamb studs of openings. Pre-engineered, prefabricated trusses shall be designed for the fabricator by a Professional Engineer Registered in the State of construction, and shall comply with Code Requirements. Truss to truss connections specified shall be by truss supplier, unless specifically noted on the drawings. Lower chord of gable end trusses shall be anchored to wall plate with framing anchors at 4'-0" spacing and laterally braced to roof framing at 8'-0" spacing. Truss supplier shall specify all floor and roof truss bracing and bridging. All roof rafters, joists, trusses, and beams shall be anchored to supports with metal framing anchors. Light gage framing anchors shown or required, shall be Simpson "Strong Tie" and installed with the number and type of nails recommended by the manufacturer to develop the rated capacity. Note that heavy-duty hangers and skewed hangers may not be stocked locally and require special order from the factory. All beams and trusses shall be braced against rotation at points of bearing. Unless otherwise indicated, install two lengths of solid blocking x joist depth x 12 inches long in floor framing under column loads. Columns must have a continuous load path to foundation. Lead holes for lag screws shall be drilled in accordance with Table 6.23 of the AITC Timber Construction Manual, 3rd edition.



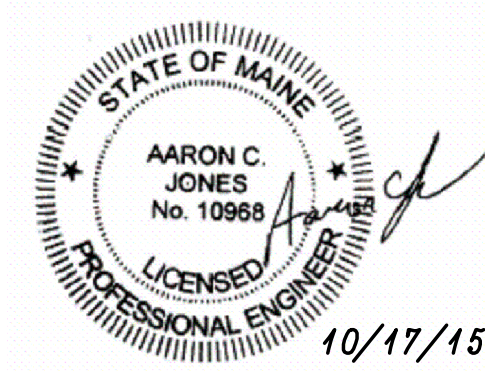
OPENING SIZE*	LINTEL PER WYTHE	JAMB EXTENSION
LESS THAN 4'-0"	1.5 x 1/2 x 3 1/2 x 1/4	4"
4'-1" TO 5'-4"	1.5 x 3/2 x 1/4	4"
5'-5" TO 6'-6"	1.6 x 3/2 x 1/4	8"

\* FOR OPENINGS GREATER THAN LISTED, SEE PLAN.  
\*\* ALL TEMPORARY SHORING BY G.C. -TYP.

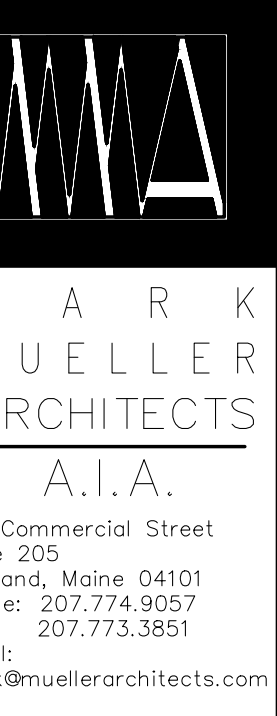
**NEW LINTEL INSTALLATION IN EXISTING BRICK**  
NO SCALE

ABBREVIATIONS KEY			
AB	Anchor Rod (Bolt)	EF	Each Face
ADDL	Additional	EJ	Expansion Joint
ADJ	Adjustable	ELEV	Elevation
AFF	Above Finished Floor	ELEC	Electric (Electrical)
ALT	Alternate	ENGR	Engineer
AMT	Amount	EQ	Equal
ANCH	Anchor, Anchorage	EQUIP	Equipment
APPROX	Approximate	EQUIV	Equivalent
ARCH	Architect, -ural	ES	Each Side
ATR	All Thread Rod	EST	Estimate
AVG	Average	E-W	East to West
BC	Bottom of Concrete	EXC	Excavate
BL	Brick Ledge	EXP	Expansion
BLK	Block	EXT	Exterior
BLKG	Blocking	FND	Foundation
BM	Beam	FF	Far Face, Finished Floor
BOT	Bottom	F-F	Face to Face
BRG	Bearing	FIG	Figure
BW	Bottom of Wall	FL	Flush
CB	Counterbore	FLG	Flange
CF	Cubic Foot	FLR	Floor
CG	Center of Gravity	FO	Face of
CIP	Cast in Place	FP	Full Penetration
CJ	Construction Joint (Control Joint)	FS	Far Side
CLG	Ceiling	FTG	Footing
CLR	Clear	GA	Gage (Gauge)
CMU	Concrete Masonry Unit	GALV	Galvanized
COL	Column	GC	General Contractor
COM	Common	GEN	General
COMB	Combination	GL	Glue laminated (Glulam)
CONC	Concrete	GND	Ground
CONN	Connection	GR	Grade
CONT	Continue (Continuous)	GT	Girder Truss
COORD	Coordinate, -tion	GYP BD	Gypsum Board
CS	Countersink	HAS	Headed Anchor Stud
CTR	Center	HORIZ	Horizontal
CY	Cubic Yard	HT	Height
DAB	Deformed Anchor Bar	ID	Inside Diameter
DET	Detail	IF	Inside Face
DEV	Develop	INT	Interior (Intermediate)
DIAG	Diagonal	JB	Joist Bearing
DIM	Dimension	JST	Joist
DL	Dead Load	JT	Joint
DN	Down	K	Kip (1,000 lbs.)
DP	Drilled Pier	LD	Load
DT	Double Tee	LL	Live Load
DWG	Drawing	LLH	Long Leg Horizontal
DWL	Dowel	LLV	Long Leg Vertical
EA	Each	LOC	Location
ECC	Eccentric	LSL	Laminated Strand Lumber (generic term)
E-E	End to End	LT	Light
		LVL	Laminated Veneer Lumber (generic term)
		MACH	Machine
		MASY	Masonry
		MATL	Material
		MAX	Maximum
		MB	Machine bolt
		MECH	Mechanical
		MEZZ	Mezzanine
		MFR	Manufacture, -er, -ed
		MIN	Minimum
		ML	Microllam (Truss-joist brand LVL)
		MO	Masonry Opening
		MTL	Metal
		NF	Near Face
		NIC	Not In Contract
		NS	Near Side
		N-S	North to South
		NTS	Not to Scale
		OJ	OSHA Column Joist
		OD	Outside Diameter
		OF	Outside Face
		OH	Opposite Hand
		OPNG	Opening
		OPP	Opposite
		OSB	Oriented Strand Board
		PAF	Powder Actuated Fastn
		PC	Precast
		PCF	Pounds Per Cubic Foot
		PEN	Penetration
		PERP	Perpendicular
		PL	Property Line
		PLF	Pounds per Linear Foot
		PNL	Panel
		PP	Panel Point
		PS	Prestressed
		PSF	Pounds per Square Foot
		PSI	Pounds per Square Inch
		PSL	Parallel Strand Lumber (generic term)
		PT (1)	Post Tensioned
		PT (2)	Pressure Treated
		PTN	Partition
		PWD	Plywood
		QTY	Quantity
		R	Radius
		RE	Reference (refer to)
		RECT	Rectangle
		REINF	Reinforce, -ed, -ing
		REQ	Required
		REQMT	Requirement
		RET	Retaining
		RM	Room
		RMO	Rough Masonry Opening
		RO	Rough Opening
		SC	Slip Critical
		SCH	Schedule
		SDST	Self Drilling Self Tapping
		SECT	Section
		SF	Square Feet
		SHT	Sheet
		SHTG	Sheathing
		SIM	Similar
		SLH	Short Leg Horizontal
		SLV	Short Leg Vertical
		SOG	Slab on Grade
		SP	Spaces
		SPEC	Specifications
		SQ	Square
		ST	Snug Tight
		STD	Standard
		STIFF	Stiffener
		STL	Steel
		STRUCT	Structure, -al
		SUPT	Support
		SY	Square Yard
		SYM	Symmetrical
		T&B	Top and Bottom
		T&G	Tongue and Groove
		TB	Top of Beam
		TC	Top of Concrete
		TD	Top of Deck
		THD	Thread
		THK	Thick, -ness
		TI	Top of Joist
		TL	Total Load
		TPG	Topping
		TRANS	Transverse
		TW	Top of Wall
		TYP	Typical
		ULT	Ultimate
		UNO	Unless Noted Otherwise
		VERT	Vertical
		VIF	Verify in Field
		WA	Wedge Anchor
		WP	Work Point
		WT	Weight
		WWF	Welded Wire Fabric
		XS	Extra Strong
		XSECT	Cross-section
		XXS	Double Extra Strong
		(E)	Existing
		(N)	New
		(R)	Remove

Structural Drawing Index	
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S1.1	1st Floor Framing Plan (NO NEW WORK)
S1.2	2nd Floor Framing Plan
S1.3	3rd Floor Framing Plan
S1.4	4th Floor Framing Plan
S1.5	Roof Framing Plan
S2.1	Sections



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EXISTING BUILDING  
11 BROWN STREET  
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S1.0