

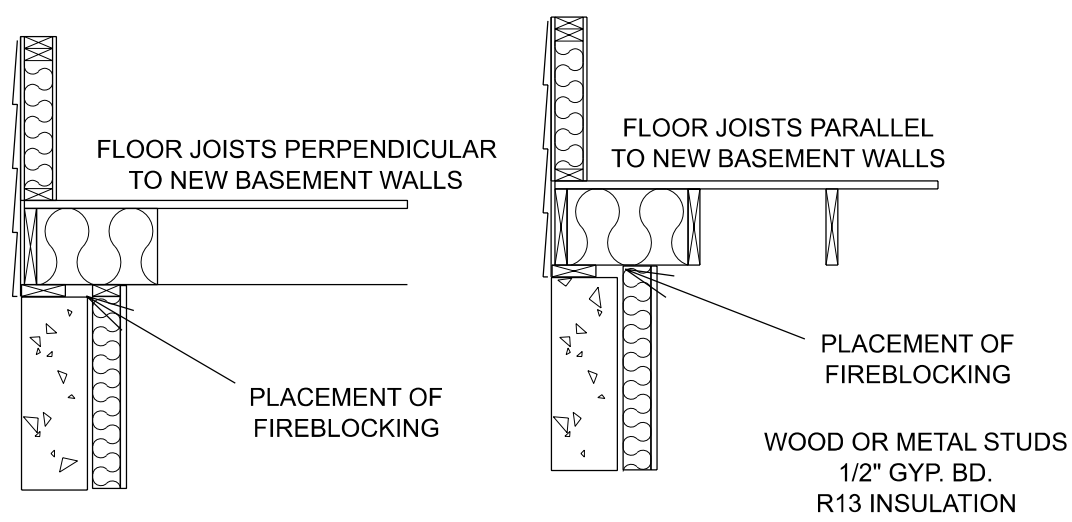
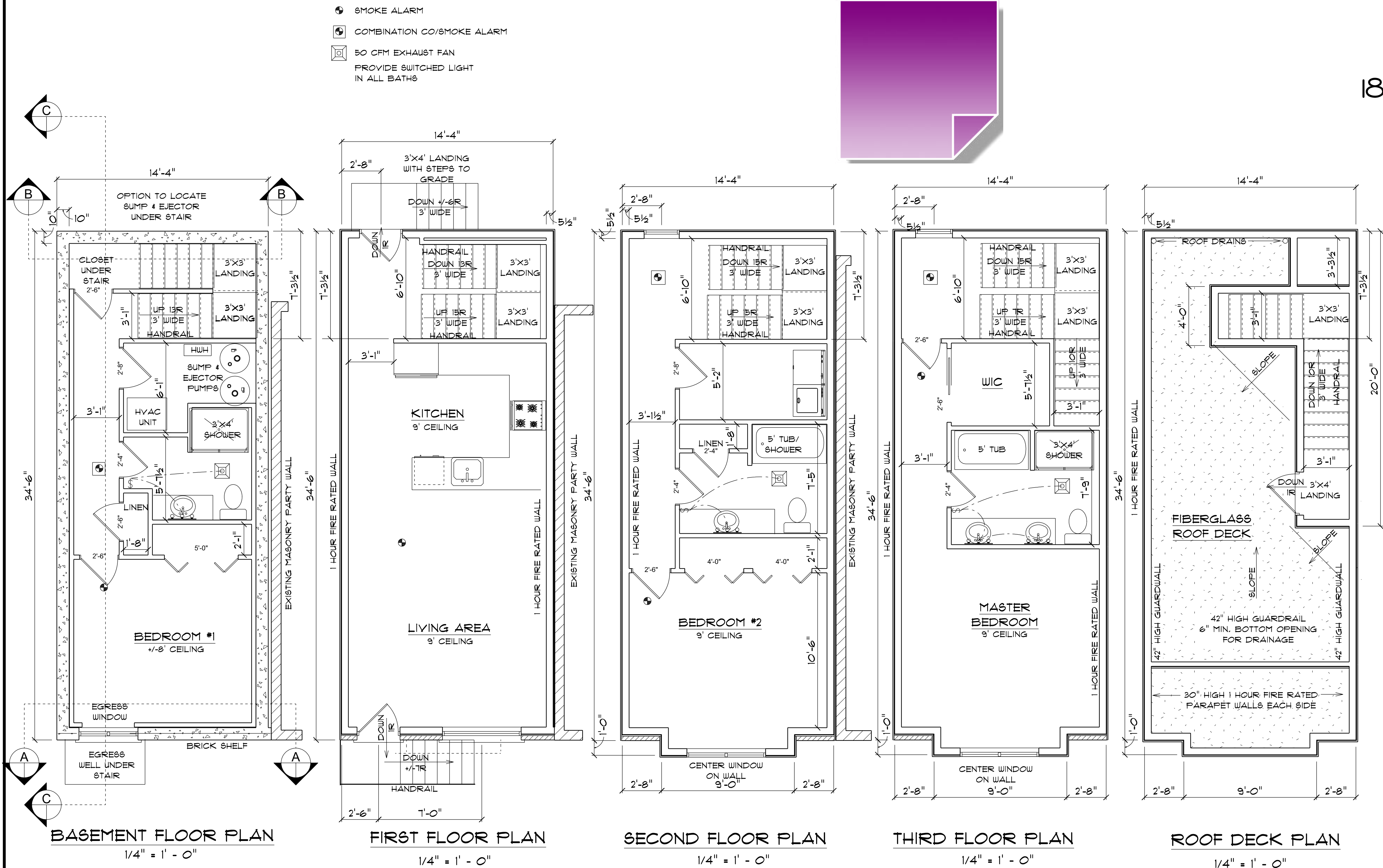
# NEW 3 STORY ATTACHED SINGLE FAMILY DWELLING

1810 N. MARSTON STREET, PHILADELPHIA PA

## SPECIFICATION

FOLLOW IRC 2015 CODE REQUIREMENTS

1. GENERAL NOTE Field verify existing conditions to include foundation, walls, joists, steps, windows, and all heights. Contact this office with any modifications, alterations or deviations from these plans. Intent is to build a new three story single family dwelling unit on the existing vacant lot.
2. DEMOLITION None required.
3. EXCAVATION Contact PA One Call prior to any excavation. Excavate to a depth of +/-8" below grade and undisturbed soil. Verify existing foundation length and depth along left side existing two story rowhome. Contact this office for any foundation modifications required.
4. FOUNDATION Install concrete footings with four #4 rebar on chairs. Use 3,000psi min. Install new 10" poured concrete walls with #4 horizontal reinforcing at 12" from top of wall and same at remaining third points. Install #6 rebar at 31" oc for 9' concrete walls with #8 maximum unbalanced back fill per table R404.1.2(4) or no vertical reinforcing if unbalanced back fill is 7' or less. Install 1/2"x12" HDG anchor bolts, two per plate with 7" minimum embedment at 60"oc maximum and 12" from all corners. Install interior perforated perimeter drain to sump pit with sealed lid and/or separate 4" rain pipe with stub in the floor for future fan and venting. Install exterior 4" perimeter foundation drain in stone with geo-tech fabric and sleeve thru footing to sump pit. Install waterproofing on exterior walls selected by owners(Rubber-wall, Mar-flex 5000 or approved equal. Install 4" stone with 6 mil vapor barrier and 6" lap joints on 3.5" concrete slab for basement floor. Install new concrete footings and foundation for front and rear exterior concrete steps and landings.
5. FRAMING All lumber shall be #2 grade or better hem-fir. Install 2x6 pressure treated plates with sill seal for new walls. All fasteners or connectors in contact with the new ACQ pressure treated lumber shall be Simpson Zmax or HDG as specified in ASTM A-153 class D specifications for the increased corrosive properties of the new lumber. Install 3x4 exterior walls on first floor, 2x4 exterior walls on second and third floor, 2x4 interior walls, joists and rafters at 16" oc. Glue and nail 3/4" CDX or OSB floor sheathing. Install 7/16" wall sheathing and 7/16" fire resistant roof sheathing. Install Simpson H2.5A hurricane clips. All headers shall be 2x10 with 1/2" CDX plywood and double jack studs on openings greater than 71" wide. Provide all soffits and chases for new utilities and ductwork. All joists and rafters shall have 1-1/2" minimum bearing. All headers and beams over 71" shall have double 2x4 jack studs with blocking down to masonry foundation. All wood shall be 8" minimum from any earth. Double a ll floor joists at walls above. Posts may be composed of multiply studs and blocking down to foundation. Center all doors and windows as shown on plans. Notch rim joist for all point load columns. Provide fire caulk at all floor and ceiling penetrations in framing and holes through returns. A UL listed fire rated caulk shall be used. Provide fire stops and blocking as required by code. Follow continuous sheathing method in accordance with section R602.10 of the IRC 2006. Use only 2.0E - 3,100 Fb LVL, Microlam or Versalam beams - parallams or gluelams are not acceptable.
6. WINDOWS Install new vinyl windows with Low-E glass as mfg by Simonton or approved equal. Install tempered safety glass on all windows over tubs or in stairways. Windows greater than 9sf and less than 18" from floor shall be tempered or within 24" of any door swing. Maintain 24" sill height AFF on any window with more than 71" drop to grade or surface outside.
7. DOORS Install new 6 panel hollow core pre-finished interior doors with necessary hardware centered on walls or at corners as shown. Install new insulated exterior doors to be mfg by Thermatru with 0.35 maximum U-factor. Install tempered safety glass shower doors.
8. ROOFING Install fiberglass decking with necessary flashing at parapet walls and pilot house. Per mfg specifications to rear scupper drainings. Provide necessary blind flashings and aluminum capping on all walls. Provide a minimum of 2 roof drains to storm system from all roof areas.
9. EXTERIOR FINISHES Install vinyl siding per 2015 IRC section 703.6. Owners to select all colors and styles. Provide brick veneer over split face block or limestone with necessary flashing, weep holes and attachments.
10. ELECTRICAL Provide all electrical in accordance with the IRC 2015 and local codes. Include outlets at 12' oc max and 15" from floor. All decorative lighting is provided by owners. Provide interconnected battery backup hardwired smoke detectors in each bedroom, 3rd floor hall, 2nd floor hall and first floor hall and basement. Install 50cfm exhaust fans in bath with venting per code and mfg specifications ducted thru wall or roof but not into soffits. Install all electric required for HVAC equipment, washer, dryer, hot water heater and kitchen appliances. Provide a minimum of two circuits in kitchen with dedicated circuit for refrigerator and garbage disposal. All kitchen, laundry, exterior and bath circuits shall be GFCI protected. All other circuits shall be arc fault protected. Recessed lighting in attics or in contact with insulation shall meet ASTM 283E for air tightness. Provide exterior rated outdoor receptacles within 25' of any exterior mechanical equipment. Per section N1104.1 of the IRC 2009 a minimum of 75% of the lamps in permanently installed lighting fixtures shall be high-efficacy lamps. Install all tamperproof outlets. Install switch and vanity light along with 50 CFM minimum exhaust fans in all baths that do not have a window.
11. PLUMBING Install Schedule 40 PVC waste lines and PEX supply lines. Follow Philadelphia plumbing code. Provide exterior hose bibs per owner's locations. Install washer pan. Connect rain gutters and downspouts to the existing storm water system located in the street.
12. HVAC Install new system for entire house with a 8.7 minimum HSPF or gas furnace with a 90 AFUE. All mastic tapes used on any duct connection shall be UL 181 listed and no standard duct tape shall be acceptable. Install 4" minimum dryer venting to exterior with 26 gage round metal duct terminated thru exterior wall with a minimum of three screws per connection and penetration of less than 1/8" accordance with section M1502 of the IRC 2015 vented thru exterior side wall. Provide metal fire stops at all floors and ceiling for flues and b-vents. All flexible gas piping shall be installed in strict conformance with the manufacturer's specifications and have mfg's recommended accessories( i.e. nail plates, termination outlets, etc). Provide programmable thermostat with readings set for final inspection
13. RESIDENTIAL SPRINKLER SYSTEM Provide installation of residential 13D sprinkler system in accordance with NFPA 72.
14. INSULATION Provide R49 fiberglass insulation or R38 insulation in flat ceilings with R11 rigid foam on roof, R20 on exterior walls and R10 or R13 on basement walls. Follow 2018 IECC table R402.1.2.
15. INTERIOR FINISHES Provide 1/2" gypsum board on all walls and ceilings. Install 5/8" Type X gypsum board on all side walls. Tape and scribe to smooth finish. Provide moisture resistant gypsum board in bath areas but not behind tubs or showers. Provide cement board behind showers or tubs for tile per section R 72.4.2 of the IRC 2015.
16. TRIM Provided by owners.
17. STAIRWAYS Handrails shall be continuous with returns. Install new pine or oak stairway to second and third floors and basement in accordance with section R311.7 of the IRC 2015 code to include continuous handrails with returns and 36" high guardrails.
18. PAINTING Apply prime coat and two finish coats using MAB or approved equal.
19. FLOORING Provided by owner.
20. KITCHEN Install new cabinets, countertops and appliances provided by owners.
21. MISCELLANEOUS Relocate any utilities as necessary.
22. CLEAN-UP Remove all construction debris.



### FIREBLOCKING DETAILS

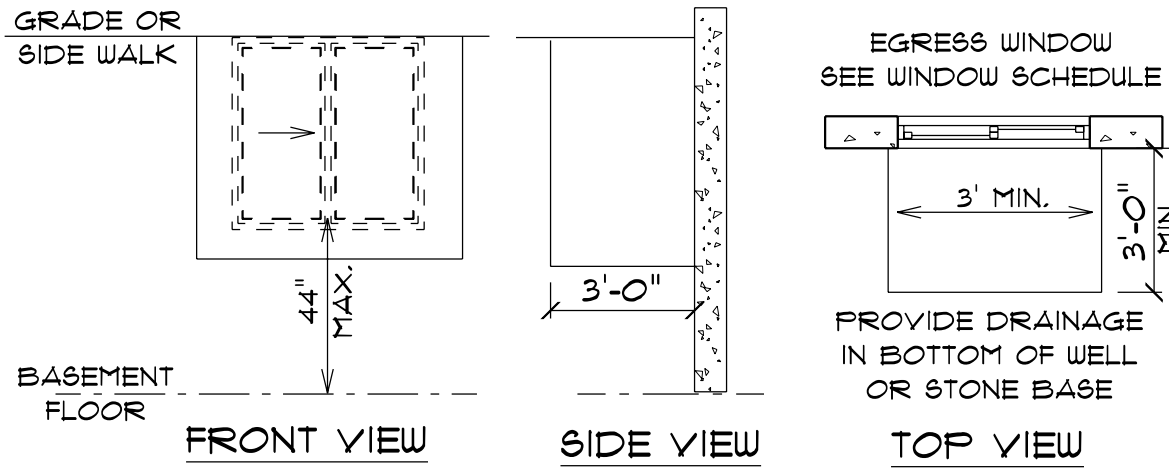
Install firestops on all perimeter walls with 3/4" CDX plywood and approved fire caulk. Fireblock at the top plate to the existing foundation wall using 2x lumber, 1/2" gyp. bd., mineral wool or fiberglass insulation (must be tight fitting and secondarily in place), 3/4" CDX plywood or non-combustible caulk. All soffits, egress windows, concealed spaces, pipes and ducts shall be fireblocked.

Fireblocking can consist of 2" nominal lumber, two layers of 1" nominal lumber on snap joints, one layer of 3/4" plywood, with joints backed by 3/4" plywood, 3/4" particle board, 1/2" gypsum board or 1/4" cement based mill mineral wool or glass fiber shall be permitted for compliance with the 10' horizontal fireblocking in walls constructed using parallel rows of studs or staggered studs.

### PLANS APPROVED

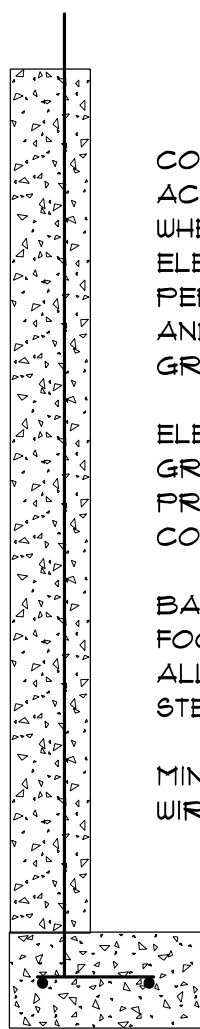
10/02/20  
CITY OF PHILADELPHIA  
DEPARTMENT OF LICENSES & INSPECTION  
Samia Akhtar  
PA UCC CERT # 006493

Applied Electronically by L&L User:



EMERGENCY ESCAPE WINDOW WELLS PER SECTION R310.2The minimum horizontal area of the window well shall be 9 square feet, with a minimum horizontal projection and width of 36 inches. The area of the window well shall allow the emergency escape and rescue opening to be fully opened. Exception: The ladder or steps required by Section R310.2.1 shall be permitted to encroach a maximum of 6 inches into the required dimensions of the window well. Window wells with a vertical depth greater than 44 inches shall be equipped with a permanently affixed ladder or steps usable with the window in the fully open position. Ladders or steps required by this section shall not be required to comply with Sections R311.7 and R311.8. Ladders or rungs shall have an inside width of at least 12 inches, shall project at least 3 inches from the wall and shall be spaced not more than 18 inches on center vertically for the full height of the window well. Bars, grilles, covers, screens or similar devices are permitted to be placed over emergency escape and rescue openings, bulkhead enclosures, or window wells that serve such openings, provided the minimum net clear opening size complies with Sections R310.1.1 to R310.1.3, and such devices shall be releasable or removable from the inside without the use of a key, tool, special knowledge or force greater than that which is required for normal operation of the escape and rescue opening. Emergency escape windows are allowed to be installed under decks and porches provided the location of the deck allows the emergency escape window to be fully opened and provides a path not less than 36 inches in height to a yard or court.

### EMERGENCY EGRESS WINDOW WELL PER R310.2



CONTRACTOR TO PROVIDE CONCRETE ENCASED ELECTRODE IN ACCORDANCE WITH NFPA 70A AND ALL APPLICABLE CODES. WHEN CONCRETE FOOTING IS IN DIRECT CONTACT WITH EARTH. ELECTRICAL CONTRACTOR TO PROVIDE GROUNDING ELECTRODES PER NFPA 70A 250.52 AND BONDING AS REQUIRED BY NFPA 70A AND ALL APPLICABLE CODES FOR A COMPLETE AND PROPER GROUNDING ELECTRODE SYSTEM.

ELECTRODE TO EXTEND ABOVE TOP OF WALL TO BE BONDED TO GROUNDING ELECTRODE SYSTEM. PROVIDE ACCESS PANEL FOR INSPECTION WHEN ELECTRODE IS CONCEALED IN WALL OR CEILING

BARE #4 REBAR CONNECTED TO 20' LONG SECTION AT BOTTOM OF FOOTING ALL REBAR 6PLICES TO BE BONDED TOGETHER BY STANDARD STEEL WIRE TIES

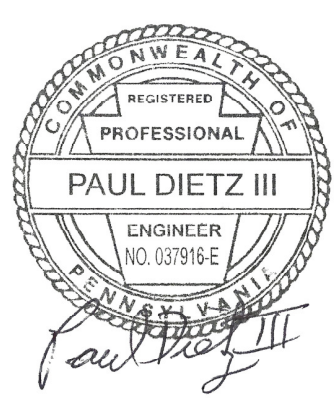
MINIMUM 20' LONG BARE #4 REBAR AT BOTTOM OF FOOTING WITH WIRE TIED 6PLICES

### GROUNDING DETAIL

### DESIGN LOADS - IRC 2015 CHAPTER 3 USE GROUP R3 CONSTRUCTION TYPE 5B

Use	Live load
Attics without storage	10psf
Balconies & decks	60psf
Guardrails and handrails	200lb
Guardrail in-fill components	50psf
Rooms other than sleeping room	40psf
Sleeping room	30psf
Stair	40psf
Ground snow load	30psf
Wind load	115MPH - 3 sec gusts
Soil bearing capacity per report	1,500psf

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PAUL DIETZ, III P.E.

## Here's The Plan, LLC

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PLANS, SPECIFICATIONS, SECTION

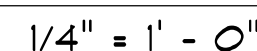
DRAWN BY: R.A.

DATE: MARCH 17, 2020

REV. DRAWING NUMBER

A1 of 4





	DESCRIPTION	U-Factor	R.O.	MFG.	QTY
A	Sliding unit to meet 5.7sf egress	0.35 max.	64" x 66"	SIMONTON	2
B	Insulated exterior door	0.35 max.	38" x 82"	SIMONTON	1
C	Sliding unit - TEMPERED	0.35 max.	64" x 66"	SIMONTON	1
D	Sliding unit to meet 5.7sf egress	0.35 max.	50" x 50"	SIMONTON	1
E	Casement unit	0.35 max.	32" x 54"	SIMONTON	2
F	Insulated exterior door - full view	0.35 max.	34" x 82"	SIMONTON	2

**HANDRAIL W/ BALUSTERS**  
Must be able to resist a 200lb. load in direction of travel.

**SUPPORTS**

**1-1/2" GRASPABLE HANDRAIL WITH RETURNS**

**BALUSTERS 4" SPACE MAX**

**80" MIN.**

**36" MIN. GUARDRAIL**

**3.5"**

**2 1/4" MIN. HANDRAIL**

**HEADROOM**

**8.25" MAX RISER**

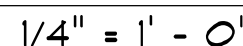
**6" SPHERE MAX.**

**CLOSED RIBBONS**

**2X12 STRINGERS**

**APPROVED FOR PERMITS & INSPECTIONS**

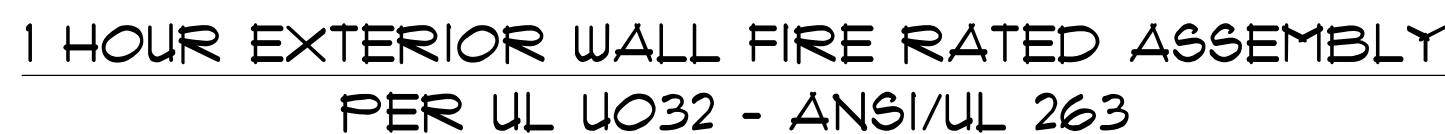
**06493**

$$3/8'' = 1' - 0'$$


GUARDRAILS SHALL BE PROVIDED ON ALL WALLS, BALCONIES, RAMPS OR PORCHES LOCATED MORE THAN 30" ABOVE THE FLOOR OR GRADE BELOW. GUARDS SHALL BE NOT LESS THAN 36" IN HEIGHT. OPEN SIDES OF STAIRS WITH A TOTAL RISE OF MORE THAN 30" ABOVE THE FLOOR OR GRADE BELOW SHALL HAVE GUARDS NOT LESS THAN 34" IN HEIGHT MEASURED VERTICALLY FROM THE NOSING OF THE TREADS. REQUIRED GUARDS SHALL HAVE INTERMEDIATE RAILS OR BALUSTERS WHICH DO NOT ALLOW PASSAGE OF A SPHERE 4" OR MORE IN DIAMETER EXCEPT THE TRIANGULAR OPENINGS FORMED BY RISERS, TREAD AND BOTTOM RAILS OF A GUARD AT THE OPEN SIDE OF A STAIRWAY ARE PERMITTED TO BE OF SUCH A SIZE THAT A SPHERE 6" CANNOT PASS THROUGH.



For wind speeds greater than 100, nails for attaching panel roof sheathing to intermediate supports shall be spaced 6" oc minimum 48" distance from ridges, eaves and gable end walls and 4"oc to gable end wall framing.



REV.	DRAWING NUMBER A2 of 4
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PLANS, SPECIFICATIONS, SECTION