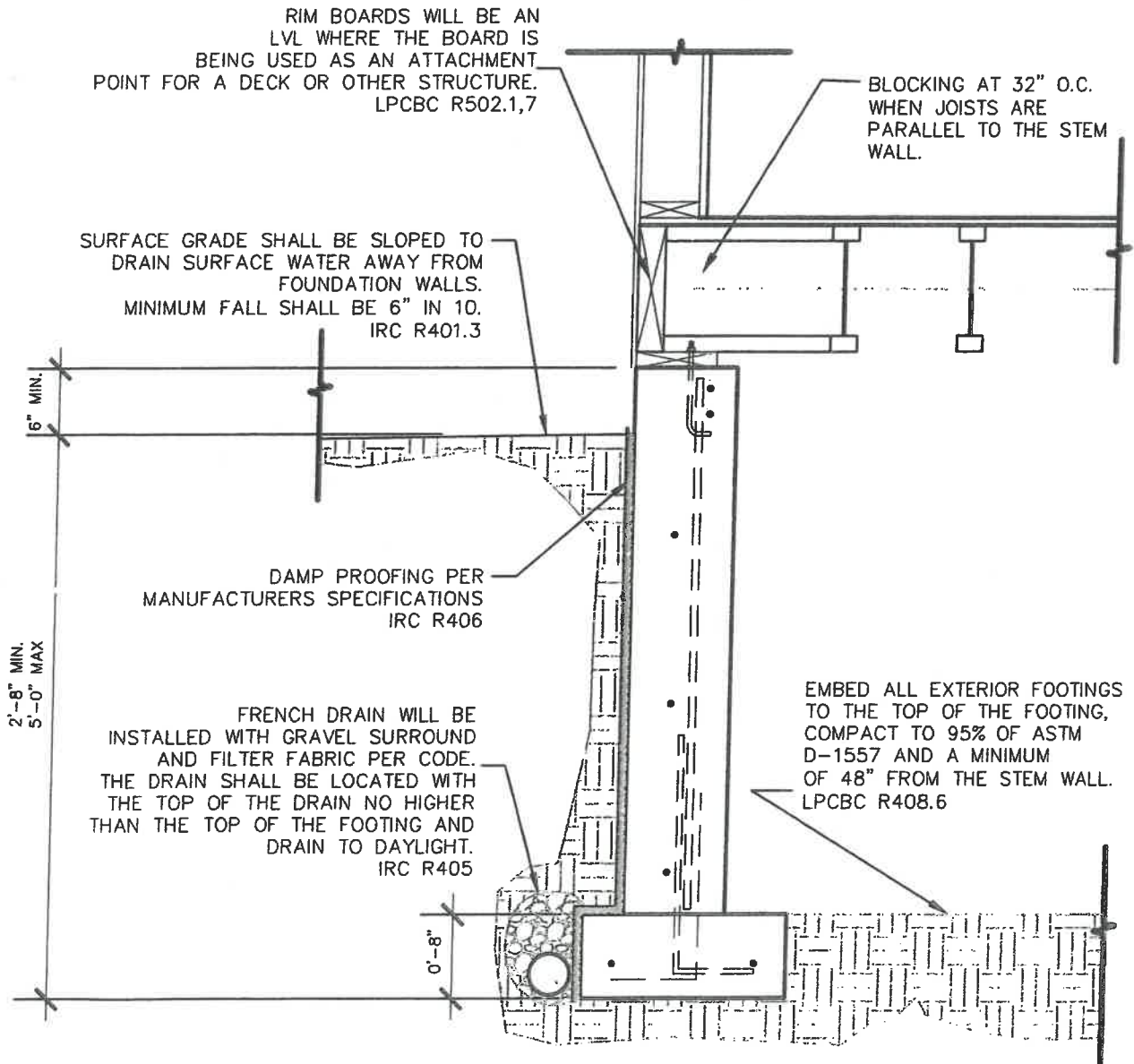


NEW INSPECTION ITEMS.

AS PART OF THE NEW BUILDING CODE IMPLEMENTATION THE ITEMS BELOW WILL BE REVIEWED AS PART OF OUR INSPECTION PROCESS. AN INSPECTION COULD BE REQUIRED WHEN THE INSTALLATION OF THE FRENCH DRAIN AND THE INTERIOR BACK FILL IS COMPLETE AND BEFORE THE FLOOR DECK IS INSTALLED AT THE INSPECTOR'S DISCRETION. THE RIM BOARD INSPECTION WILL BE PART OF THE FRAMING INSPECTION.



Notes:

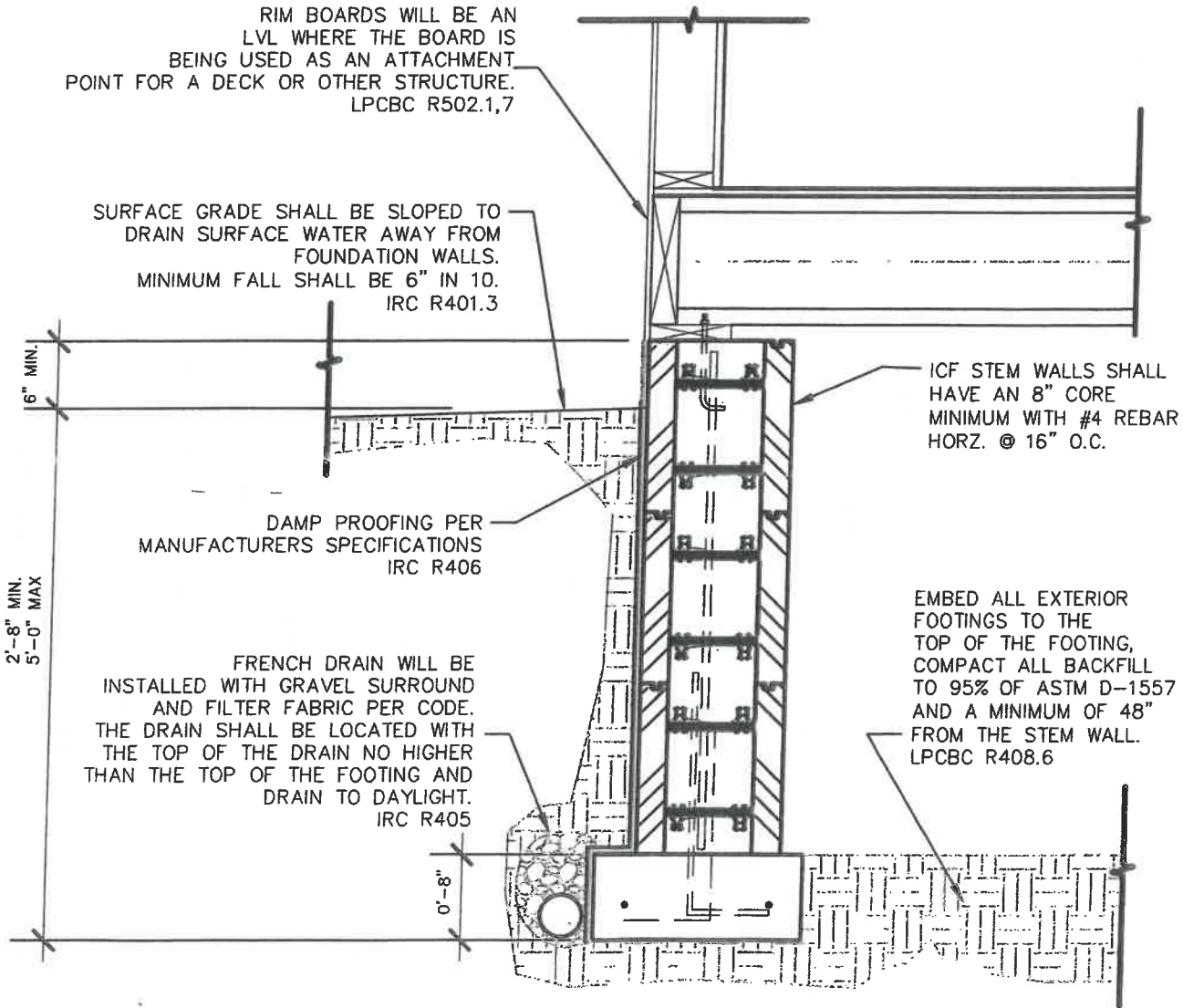
- CONC. STRENGTH = 3000 PSI @ 28 days
- REINFORCEMENT = GR 40 (fy=40,000 psi) MIN.
- ALL CONC. SHALL BE CONSOLIDATED BY MECH. VIBRATION.
- MINIMUM REINFORCEMENT LAP LENGTH = 24"
- **COMPACT ALL BACKFILL TO 95% OF ASTM D-698**
- ALL FDNS SHALL BEAR ON DENSE UNDISTURBED NATIVE SOIL.
- REINFORCEMENT SHALL BE CONTINUOUS AROUND ALL CORNERS.

LA PLATA COUNTY BUILDING DEPARTMENT FOUNDATION DETAILS

MINIMUM REQUIREMENTS
ONE & TWO STORY RESIDENTIAL

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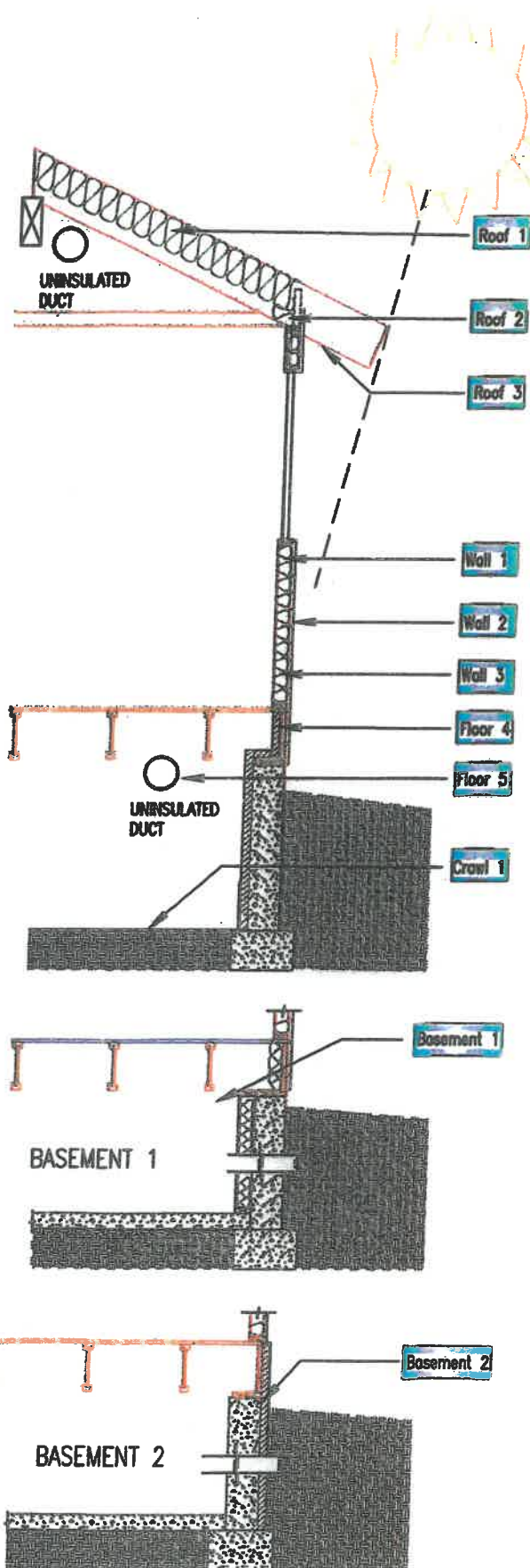


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**LA PLATA COUNTY
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Code Compliant Options



Roof 1 Spray foam insulation must meet prescriptive R values unless it has an ICC approved performance based testing. No venting required

Roof 2 Energy heel for truss applications

Roof 3 Overhangs sized for shading in summer and solar gain in winter

Roof 4 Flash & Batt

Roof 3" closed cell Min.

Walls 1 ½" closed cell Min.

Wall 1 Spray foam insulation must meet prescriptive R values unless it has an ICC approved performance based testing. No venting required

Wall 2 Continuous rigid foam insulation stops thermal bridging

Wall 3 Advanced framing

Conditioned Crawl

Floor 4 R-10 continuous insulation inside or outside foundation wall. If crawl space communicates with living space foam insulation on inside must have ignition barrier. See R408.3

Floor 5 Ducts in conditioned space not required to be insulated.

Crawl 1 6 mill plastic or equivalent required on crawl floor.

Conditioned Basement

Basement 1 R-13 cavity insulation

Basement 2 R-10 continuous insulation

LPCBD ENERGY REQUIREMENTS

REQUIRED ENERGY CODE

Roof 1 Venting required at soffit and ridge or gable. 2015 IRC 806.

Roof 2 R-38 required. Baffle over insulation to maintain space

Roof 3 Ducts >3" required to be insulated to R-8.

Ducts <3" required to insulated R-6.

Wall 1 Insulated header

Wall 2 Window u value .35

Wall 3 R-20 insulation required

R-13 plus R-5 continuous alternate

Wall 4 All joints, holes or penetrations open to unconditioned space in building envelope shall be caulked, gasketed, weather-stripped or other-wise sealed in a approved manner.

Ventilated Crawl

Floor 1 R-30 insulation required in contact with sub-floor

Floor 2 Venting required 2015 IRC R408.2

Crawl 1 Ducts >3" required to be insulated to R-8. Ducts <3" required to insulated R-6.

Conditioned Crawl

Floor 4 R-10 continuous insulation on foundation wall. No venting required. See R408.3

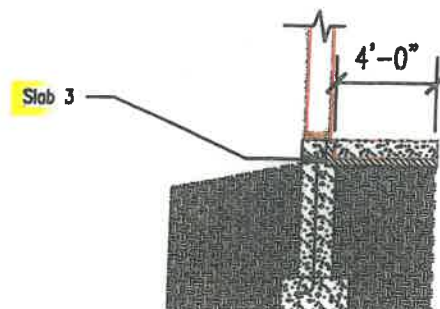
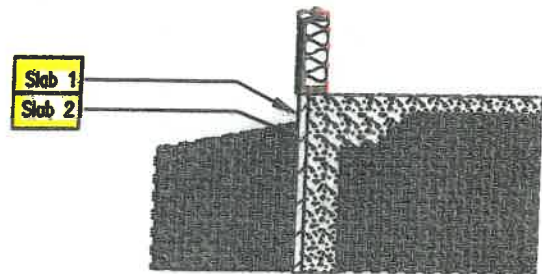
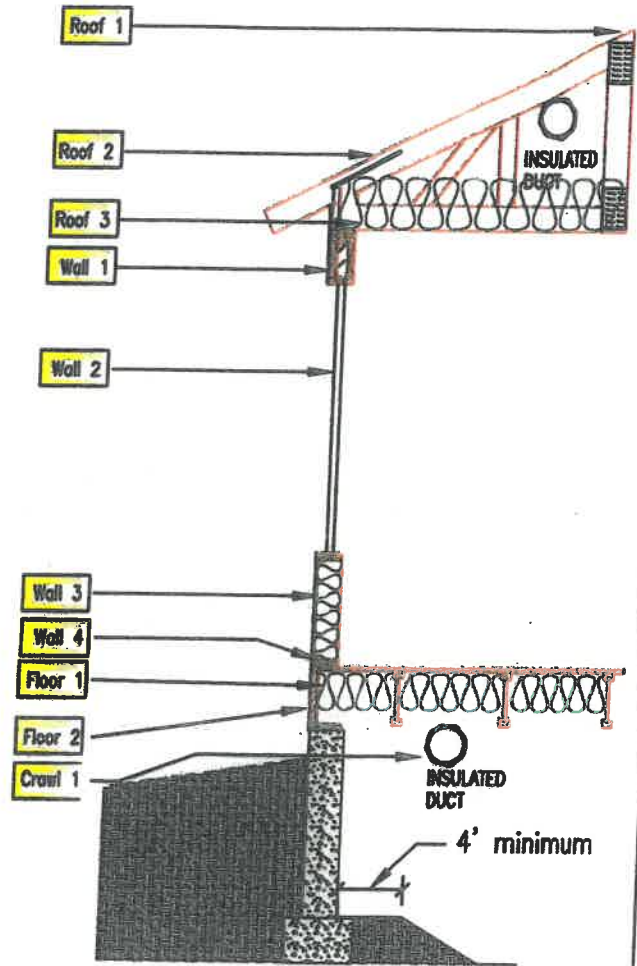
Floor 5 Ducts in crawl space not required to be insulated.

Slab Insulation

Slab 1 Foam insulation must be protected to 6" below grade.

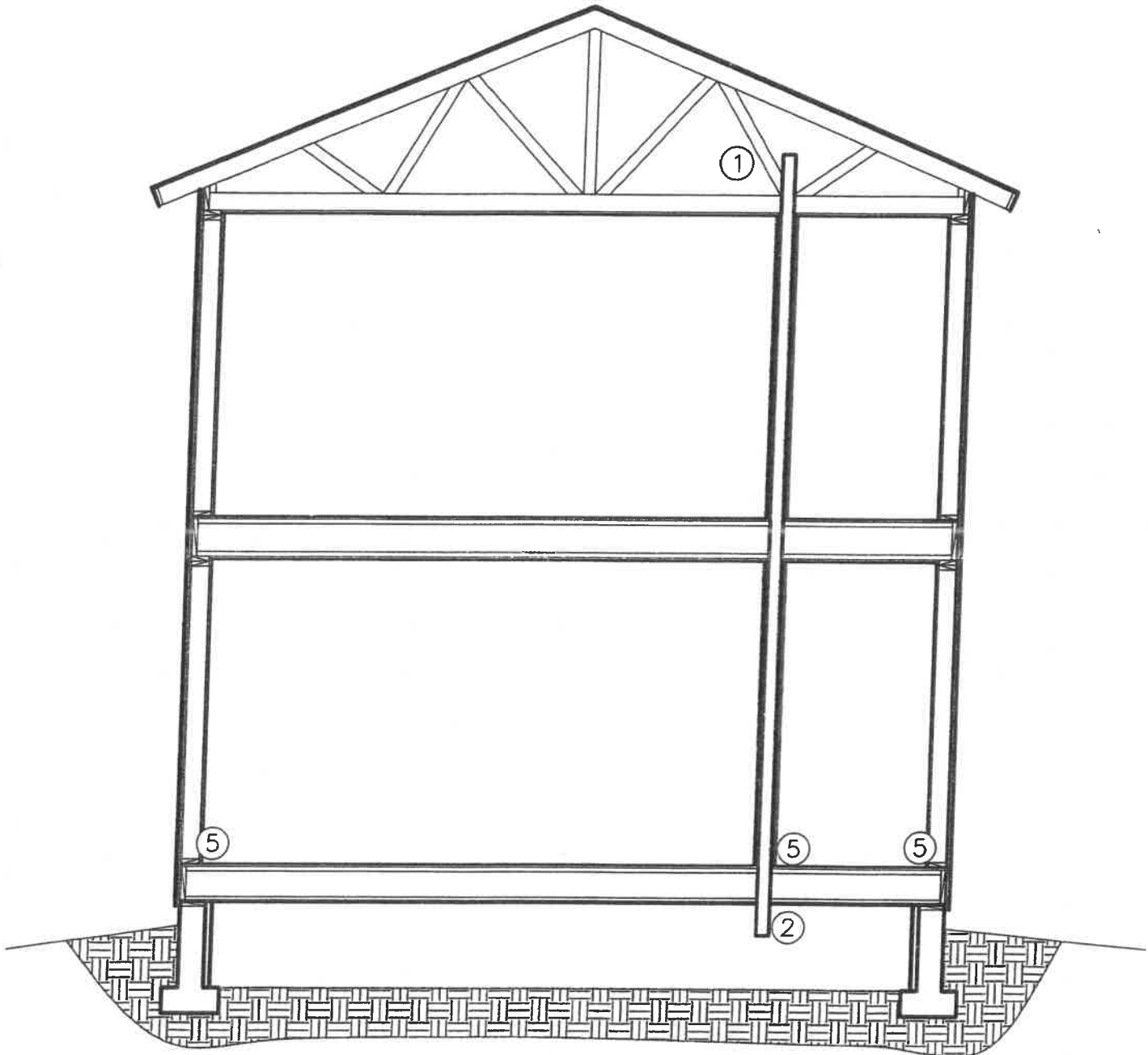
Slab 2 R-10 required from top of slab to footing.

Slab 3 R-10 required form top of slab to 2' under slab along perimeter. Heated slabs require R-10 from top and under entire slab.



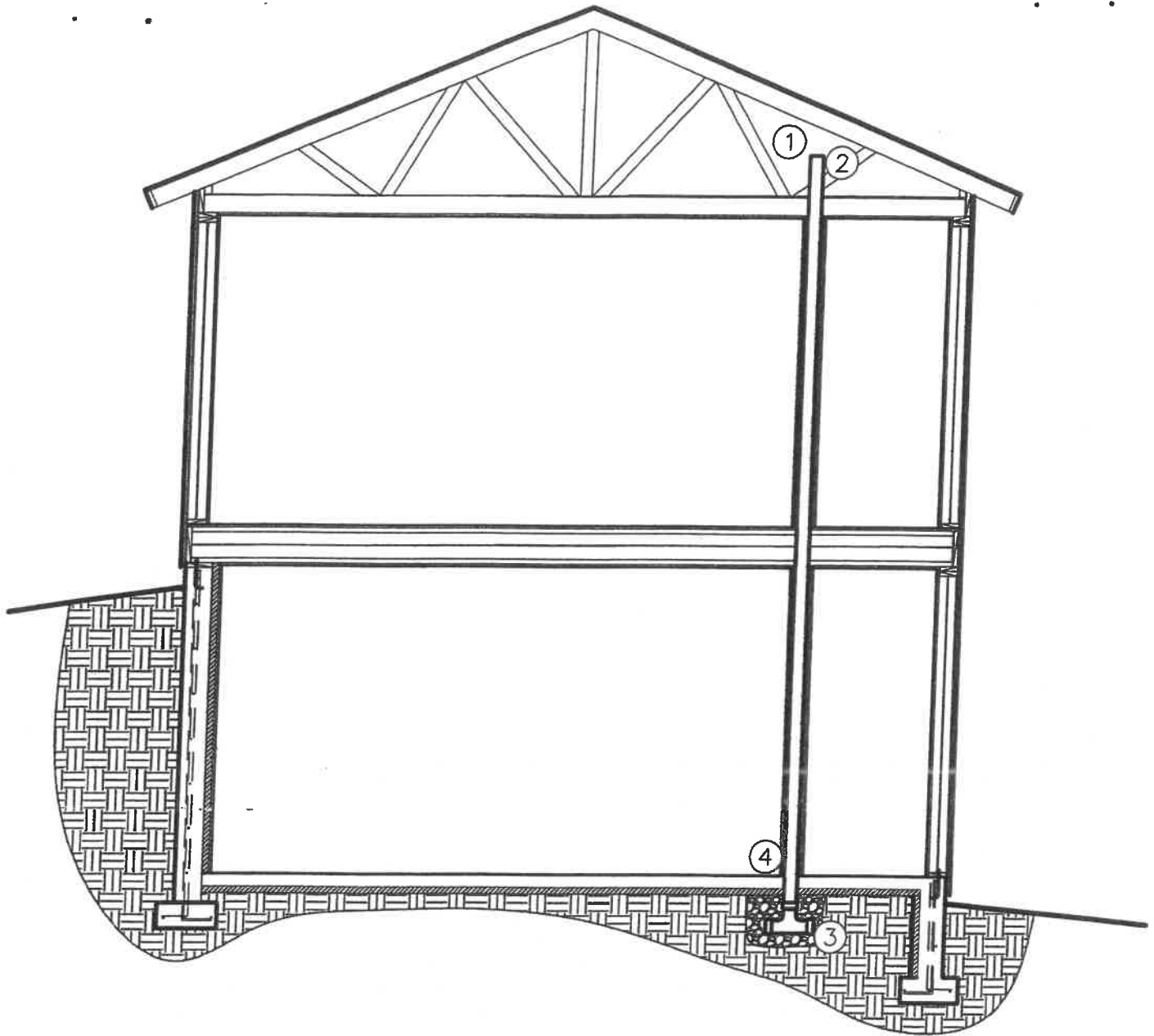
PASSIVE RADON CONTROL METHODS

LPCBC 2015 IRC Appendix F Section AF101.1



KEYED NOTES

- ① PREWIRE POWER SUPPLY FOR RADON FAN
- ② 4" ABS OR PVC PIPE
- ③ GLUED 4" "T" WITH GRAVEL
- ④ SEAL PENETRATIONS IN SLAB
- ⑤ SEAL PENETRATIONS IN FLOOR



La Plata County Radon Code

Appendix F: Passive Radon Control Methods

Section AF101.1 is deleted and replaced with the following:

AF101.1 General. A pre-installation radon system shall be installed consisting of a 4" PVC or ABS vent pipe for future venting purposes running from the crawl space and terminating in the attic at an easily accessible location with 24" clear work area. A prewired power connection from crawlspace to attic shall also be installed. For slab construction, the pipe shall terminate under the slab with a glued "T". The pipe will be extended into attic and shall be installed if, after construction is complete, radon is found in the home. All pipes and electric plugs shall be marked "For radon mitigation use only."

The remainder of the Appendix is to be used as a guideline for a full Radon Mitigation System as required by the Owner/Contractor.



REQUIREMENTS FOR CONDITIONED CRAWL SPACES

R408.3 Unvented crawl space. Ventilation openings in under-floor spaces specified in Sections R408.1 and R408.2 shall not be required where the following items are provided:

- 1. Exposed earth is covered with a continuous Class 1 vapor retarder. Joints of the vapor retarder shall overlap by 6 inches (152 mm) and shall be sealed or taped. The edges of the vapor retarder shall extend at least 6 inches (152 mm) up the stem wall and shall be attached and sealed to the stem wall or insulation.**
- 2. One of the following is provided for the under-floor space:**
 - 2.1. Continuously operated mechanical exhaust ventilation at an air changes per hour (ACH) rate of at least 1 cubic foot per minute (0.47 L/s) for each 50 square feet (4.7 m²) of crawl space floor area, including an air pathway to the common area (such as a duct or transfer grille), and perimeter walls insulated in accordance with Table 402.1.1 and Section 4.2.2.9 of the 2009 International Energy Conservation Code. Humidistat control is acceptable in lieu of continuous operation of the exhaust system as long as the ACH requirements are met. The foundation crawlspace shall have a vapor barrier installed according to table 402.2.9 of the 2009 International Energy Conservation Code.**
 - 2.2. Conditioned air supply sized to deliver at a rate equal to 1 cfm (0.47 L/s) for each 50 ft² (4.7 m²) of under-floor area, including a return air pathway to the common area (such as a duct or transfer grille), and perimeter walls insulated in accordance with Section N1102.2.11;**
 - 2.3. Plenum in existing structure complying with Section M1601.5, if under-floor space is used as a plenum.**

2009 IECC Air Sealing Checklist

Builder: _____

Job: _____

COMPONENT	REQUIREMENTS	Needs Fixed	OK	N/A
<p>Framing</p> <p>Air-Barriers</p> <p>Air-Sealing</p>	<p>A1) All exterior wall cavities have an air-barrier (House-wrap, foam board, OSB, etc) on all six sides, including knee walls (walls facing attic space). Knee walls have top-plates installed.</p>			
	<p>A2) Showers/tubs on exterior walls have insulation behind them and an interior air barrier between the tub/shower and wall studs (drywall, foam board, house-wrap).</p>			
	<p>A3) Corners and headers are built so that they can be filled with insulation. (Ex: 3-stud corners, "ladder-Ts", "California corners") Seal framing in corners top to bottom.</p>			
	<p>A4) Caulk/foam or otherwise seal sill plate to sub-floor, as well as top-plates together.</p>			
	<p>A5) Air barrier installed in dropped ceiling/soffit to prevent air leakage from the attic into wall cavities. Block and seal the soffit at the ceiling level or in each connected wall cavity.</p>			
	<p>A6) Duct shafts, chases, and flue shaft openings to unconditioned space are blocked with solid material at the top-plates and sealed to framing with foam or caulk.</p>			
	<p>A7) Window & door jambs are sealed to framing with minimal expansion foam or caulk.</p>			
	<p>A8) Air sealing is provided between the garage and conditioned spaces by placing solid blocking in the garage rim and sealing it to the surrounding framing with foam or caulk.</p>			
	<p>A9) All electrical, plumbing, and HVAC penetrations to outdoors are sealed with caulk or foam.</p>			
	<p>A10) Air barrier installed in common wall between dwelling units & top-plates air-sealed together.</p>			
<p>Insulation Quality</p>	<p>B1) Exterior walls are filled with insulation, with no air pockets or empty spaces between building exterior air barrier and interior drywall.</p>			
	<p>B2) Batt insulation is split around wires and pipes, or sprayed/blown insulation fills exterior wall cavities completely.</p>			
	<p>B3) Rim joists are insulated and include an air-barrier facing outdoors. Attic-facing rim joists and rim joists for cantilevers must be blocked with solid material and sealed to the surrounding framing.</p>			
	<p>B4) Batt insulation in floors is installed to maintain permanent contact with underside of subfloor with wire-ties or other method, OR cavities are completely filled with blown-in insulation. Air barrier is installed at any outside edges of insulation facing attic space or outdoors.</p>			
	<p>B5) Foundation walls and slabs are insulated from top-down to 2 ft below grade and is permanently attached to foundation walls.</p>			
	<p>B6) Batts in narrow cavities are cut to fit, or narrow cavities are filled with blown insulation or foam.</p>			
	<p>B7) Attic access, knee wall door, or drop-down stair is sealed with weather stripping, is insulated to the same R-value as surrounding area, and can be fastened shut.</p>			
	<p>B8) Crawlspace have 6 mil thick vapor barrier installed over entire ground, seams sealed together, as well as to foundation walls and support pillars.</p>			
<p>Recessed Lighting</p>	<p>C1) Recessed lights are IC-rated and air-tight (ICAT labeled) and sealed to drywall, except lights inside conditioned space.</p>			
<p>Ventilation</p>	<p>D1) Bath & dryer exhaust fans are vented directly to outdoors & include backdraft damper. Exhaust ducts are as straight as possible, with no 180° turns, and are secured to fan housing with metal tape and/or a fastener.</p>			
	<p>D2) Mechanical ventilation for fresh air is installed so that intake pipes are at least 5 ft away from sources of pollution.</p>			
<p>Fireplaces</p>	<p>E1) Fireplace exterior walls are insulated and include an air barrier (house wrap, drywall, Thermax, plywood), sealed to framing. Tape or seal any seams in air barrier.</p>			
	<p>E2) Fireplace chase is blocked and sealed at the ceiling level to prevent air leakage. Flue pipe is sealed to metal collar and collar sealed to OSB with fire-rated caulk.</p>			
<p>Duct Sealing</p>	<p>F1) Boots that penetrate the building envelope are sealed to subfloor and/or drywall to prevent leakage.</p>			
	<p>F2) The plenum, filter box, trunk lines, duct collars and other joints are sealed with mastic, silicone, or UL-rated metal tape.</p>			
	<p>F3) Panned returns are sealed to surrounding framing with silicone or duct mastic. End plates are installed at both ends of the pans and sealed to the framing with silicone or duct mastic.</p>			

Rating Company: Building Performance Rater Signature: _____ Inspection Date: _____