



**Lonsdale Building Inspections Department
415 Central Street W.
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(507) 744-2327 fax (507) 744-5554**

2006 RESIDENTIAL CONSTRUCTION CHECKLIST

The following checklist has been designed to aid contractors in obtaining inspection approval. The items represent various common code requirements and City policies/procedures. Contractors must provide containment for their construction debris.

FOOTINGS INSPECTIONS

1. Job site address must be posted.
2. Permit card must be posted on-site and made available to the inspector.
3. Approved plans and survey must be on-site.
4. Engineer's soil report must be available (when requested by the inspector).
5. Excavation and formwork must be completed in accordance with approved plans and survey. Pad footings must be formed up.
6. Loose soil and debris must be removed from footing formwork.
7. Survey stakes, hubs and property irons must be in place and visible.
8. Frost blankets are required to be on-site during cold weather conditions.
9. Footings under steps are required.

POURED WALL INSPECTION

1. Horizontal rod must be set and tied prior to pouring.

FOUNDATION INSPECTIONS

1. All foundations designed to hold over 8 1/2 feet of unbalanced backfill must be engineered.
2. Foundation reinforcement must be per engineered design, the State Building Code, or IBC Chapter 18, 1303.1900, for conventional foundation construction.
3. All foundations must be insulated with a minimum of an R-5.
4. Foundation systems require drain tile on the exterior.
5. All foundations must be inspected prior to backfill and after damp proofing, drain tile and insulation is installed.
6. Minimum width of a hollow masonry unit on bearing walls shall be 6 inches for 1-story, 8 inches for 2-story or 10 inches for 3-story buildings.
7. Remove all excess fill from the site.

FRAMING INSPECTIONS

1. Half-inch anchor bolts are required with 7 inches minimum embedded into masonry 6 feet O.C. with at least two bolts per sill plate, 1-foot maximum from ends.
2. Rock construction entry and erosion control requirements shall be in place in accordance with the approved erosion control survey.
3. Rough-in electrical work must be completed, inspected and approved. Rough-in plumbing and mechanical work may be completed, inspected and approved prior to the framing inspection or concurrently with framing.
4. Exterior fiberboard sheathing must be properly nailed. (3 inches O.C. at exterior edges and 6 inches O.C. at intermediate supports.)
5. Signed, engineered truss drawings and layouts must be on-site.
6. Exterior wood members used in the structural support of balconies and porches must be approved wood of natural resistance to decay or treated wood. These members include posts or columns, beams, joists and decking.
7. Holes bored in stud-bearing walls may not exceed 40% of the stud width. Holes bored in non-bearing walls may not exceed 60%.
8. Notches in the top or bottom of joists may not exceed 1/6 the depth of the joist.
9. Notches in joists may not be located in the middle third of the span.
10. Holes may not be located within 2 inches of the top or bottom of the joist, and may not exceed 1/3 the depth of the joist.
11. Ends of joists must have 1 ½ inch of bearing on wood and 3 inches on masonry.
12. Trimmer and header joists must be doubled when the span of the header exceeds 4 feet, unless using an engineered product.
13. Ends of header joists more than 2 feet long and tail joists over 12 feet long must be supported by joist hangers.
14. Where wood members are joined together, the connection must occur directly over a post with minimum bearing 1 ½ inches.
15. Provide solid blocking at bearing points to the foundation.
16. Top plates notched or cut must be sheathed or fastened with a 16-gauge, 1 ½ inch wide metal tie across each side of the opening.
17. 2 X 4 center bearing stud partition must be provided with 2-inch blocking when not covered.
18. Plywood subfloor must be properly nailed. (6 inches O.C. at edges and 10 inches O.C. at intermediate supports.)
19. Floor framing shall be nailed to the sill plate in accordance with IBC 2304.9.1. In addition, approved metal angle clips or foundation straps shall be used to fasten floor joists or blocking to the sill plate at intervals not exceeding 6 feet. These clips shall not be less than 18 gauge and be fastened to both the joist and plate with at least three (3) 8d common nails in each leg.
20. Where foundation walls are parallel to floor framing, solid blocking shall be installed at anchor bolt locations in the first 2 joist or floor truss spaces.
21. Cantilevers must have a sealed wind wash barrier.
22. Stairways must be constructed having not more than a 7¾-inch maximum rise and a 10-inch minimum run.

23. Stairways must have headroom clearance of not less than 6 feet 8 inches.
24. Fire stopping must be installed at all interconnections between concealed vertical and horizontal spaces, such as soffits and drop ceiling, at 10-foot intervals.
25. Engineered, pre-manufactured roof trusses shall not be cut or notched.
26. Where required, proper framing hangers must be installed at joists, beams, trusses and girder trusses.
27. Attic access opening must be provided not less than 22" x 30", with minimum clear height of not less than 30 inches.
28. Provide attic ventilation equal to 1/150th attic area. If 50% or more is provided in the upper portion of roof and remainder is provided in soffit vents, it may be reduced to 1/300th attic area.
29. Protection against wind wash must be in place at the edge of attic insulation and cantilevered floors or bay windows.
30. Each bedroom must have at least one escape window with the following dimensions:

Width – 20 inches minimum clear opening.
Height – 24 inches minimum clear opening.
Total opening – 5.7 square feet minimum.

Sill height – not more than 44 inches above the floor.
Decks, overhangs, etc, over egress windows must have a minimum 48 inch clearance above grade.

31. Glazing in an individual fixed or operable panel that meets all of the following conditions must have safety glazing:

Exposed area of an individual pane greater than 9 square feet (0.84m²).
Exposed bottom edge less than 18 inches (457 mm) above the floor.
Exposed top edge greater than 36 inches (914 mm) above the floor.
One or more walking surfaces within 36 inches (914 mm) horizontally of the plane of the glazing.

32. Windows that enclose a tub must be "Approved" safety glazing.
33. An approved exterior house wrap must be installed.

INSULATION INSPECTION

1. Approved roof covering materials must be installed.
2. Framing work must be completed, inspected and approved.
3. All fire stops are to be sealed on interior and exterior walls.
4. Vapor barriers must be minimum 4-mill thick and continuous with joints overlapped, taped and sealed.
5. Insulation must be installed around all exterior window and doorframes per manufacturer's specifications.
6. Floor insulation must be a minimum of R-30 on all exterior projections, such as cantilevers.

7. Full width insulation chutes must be installed in each rafter space.

FIREPLACE INSPECTION

1. Rough in and final are the minimum required inspections. Other inspections may be required.
2. An air test at 25 PSI for 12 hours is required at rough-in inspection.
3. Manufacturer's installation/operation manual must be attached to each factory built fireplace.
4. Copper gas lines must be protected from dissimilar materials.
5. Nail plates applied to protect gas lines.

REQUIREMENTS FOR WALLBOARD – NO INSPECTIONS REQUIRED

1. Water resistant rock shall not be applied over a vapor barrier.
2. When fastening sheetrock to a wall in the vertical position with studs at 16 inches O.C., screws must be 16 inches center to center. If studs are spaced 24 inches O.C., then screws must be at 12 inches center to center.
3. When fastening sheetrock in a horizontal position, such as a ceiling, and studs or joists are spaced 16 inches O.C., screws must be 12 inches O.C. When joists are spaced 24 inches O.C., screws must be at 12 inches O.C.
4. Screws shall be long enough to penetrate 5/8 inch into the wood framing.
5. If ring shank nails are used, maximum spacing is 7 inches O.C. in the horizontal portion and 8 inches O.C. if sheetrock is in the vertical position.
6. Fasteners shall not be placed less than 3/8 inch from the edge.
7. Fasteners shall not be applied in such a manner as to fracture the face paper.

FINAL INSPECTIONS

1. Electrical work must be completed, inspected and approved. Plumbing and mechanical work may be complete, inspected and approved prior to the final or in conjunction with the final inspection.
2. Final grade prior to landscaping must be approved by the City Engineer. Submit an as-built survey to City Hall located at 415 Central St. W.
3. Minimum 4-inch high house numbers must be installed.
4. Exposed polyethylene vapor barriers must be of an "Approved" flame retardant material, or protected by not less than 1/2 inch thick gypsum wallboard.
5. Provide 6-inch wood to earth separation.
6. **Enclosed** space under stairs must be protected on the enclosed side with 5/8-inch thick gypsum wallboard under stairs and supporting walls. Seams must fall over framing members.
7. The top of handrails on stairs must not be less than 34 inches nor more than 38 inches above the nosing of the treads.
8. Handrails must be continuous the full length of the stairs, having ends which are returned to the wall.
9. Stairways having four or more risers must be installed with at least one handrail.

10. Landings more than 30 inches above grade or floor below must be protected with a guardrail not less than 36 inches in height, with spindle spacing so that a 4-inch sphere cannot pass through the spacing.
11. Smoke detectors shall be hard-wired to commercial power supply with battery backup. Smoke detectors shall be located in each sleeping room and in corridors leading to sleeping rooms. Detectors shall sound an audible alarm in all sleeping areas of the dwelling unit in which they are located. When ceiling height of an adjacent room to a hallway serving the bedroom exceeds 24 inches, a smoke detector shall be placed in the hallway and the adjacent room. Smoke detectors shall be located on every floor and in the basement. In levels separated by walls or doors restricting the flow of smoke from the lower level to the upper level will be considered separate floors.
12. The separation wall between the house and garage must be installed with materials approved for one-hour fire resistive construction ($\frac{1}{2}$ inch Type "X" gypsum wallboard, a $1 \frac{3}{8}$ inch tight-fitting solid wood core or a 20-minute rated steel, insulated door.) If the garage ceiling is sheet rocked with $\frac{1}{2}$ inch Type "X", the walls supporting the roof trusses must be sheet rocked with $\frac{1}{2}$ inch Type "X" drywall. In all cases, the firewall must be fire taped if the joints do not fall over a framing member.
13. Exterior door, window and other openings exposed to the weather must be flashed in such a manner as to make them waterproof.
14. Foundation insulation exposed to the weather must be protected from sunlight and physical damages. Minimum of R-5 for the full height of the foundation.
15. Attic insulation certification report must be posted with permit cards.
16. Water meter must be sealed with the MXU (Multiple Transceiver Unit) installed using the wire issued by the **City of Lonsdale Public Works Department**. The department is located at 635 Industrial Drive SE or call (507) 744-2397.
17. Erosion control must be in place.
18. Curb box must be raised to finish grade.
19. Hard surface driveway shall be installed with a maximum width of 24 feet at the front property line.
20. Natural gas connected when available in street.
21. Accesses for "P" traps for bathtubs and whirlpool electrical pumps installed.
22. Patio doors blocked or guardrail installed.
23. Construction debris removed for site.
24. Exterior concrete steps must be flashed properly.
25. A clean furnace filter installed.
26. Secure sump cover; sump pump shall be hard piped to the exterior.

NOTE: The City of Lonsdale may issue a Temporary Certificate of Occupancy to allow for the installation of driveways, trees and landscaping.

This construction checklist should only be used as a guide as each construction site is unique and is site specific. In the event you have questions that are not covered in this handout, please call me at 507-364-5345.

James Filipek, Building Official