



Affordable Housing Development Program
**Rehabilitation Contractor's
Application Package**

August 2013

Contains:

- Application
- Policies and Procedures Manual
- Housing Quality Standards

FOR MORE INFORMATION CONTACT:

Mr. Ed Brown, Project Manager
Community Development & Housing Department
City of High Point
211 South Hamilton Street, Room 312
High Point, NC 27262
(336) 883-8522

Part One

Contractor's Application Form

A department Project Manager shall undertake evaluation of a contractor's application.

- Complete, Sign and Return Pages 3 through 6
- NC General Contractor License [**Attach Copy**]
- NC Lead Certifications: Firm Supervisor Worker [**Attach Copy**]
- EPA/NC Renovation, Repair and Painting Certification: Firm Renovator [**Attach Copy**]
- City of High Point Business License [**Attach Copy**]

CITY OF HIGH POINT
Community Development & Housing Department

<h1 style="margin: 0;">Contractor Application</h1>
--

DATE _____

BUSINESS NAME _____

BUSINESS ADDRESS _____

OWNER NAME _____

OWNER HOME ADDRESS _____

FEDERAL TAX I.D. # _____ SOCIAL SECURITY # _____

BUSINESS TELEPHONE # _____ HOME TELEPHONE # _____

MOBILE PHONE # _____ FAX # _____

NC STATE LICENSED GENERAL CONTRACTOR? YES ___ NO ___

NC STATE STATE GENERAL CONTRACTOR LICENSE NUMBER _____

NC LEAD CERTIFICATIONS: FIRM _____ SUPERVISOR _____ WORKER _____

EPA/NC RR&P CERTIFICATION: FIRM _____ WORKER _____ - _____

DESCRIPTION OF SERVICES OFFERED BY YOUR BUSINESS
Make any comments in reference to your performance or special abilities here:

REFERENCES:
YOU MUST LIST LAST FOUR JOBS COMPLETED.

Please Provide Name, Address, Contact Person & Phone Number, Type of Construction Job and Job Completion Date. *All References Will Be Contacted.*

(1)

Customer Name _____

Address _____

Contact Person _____

Phone Number _____

Completion Date _____

Type of Construction Job _____

(2)

Customer Name _____

Address _____

Contact Person _____

Phone Number _____

Completion Date _____

Type of Construction Job _____

(3)

Customer Name _____

Address _____

Contact Person _____

Phone Number _____

Completion Date _____

Type of Construction Job _____

(4)

Customer Name _____

Address _____

Contact Person _____

Phone Number _____

Completion Date _____

Type of Construction Job _____

I have received and reviewed the Community Development & Housing Department Contractor's policy Manual and agree to abide by the program provisions and policies therein.

Signature of Contractor Applicant

Date

Part Two

Policies and Procedures Manual

City of High Point
Community Development & Housing Department

Contractor
Policies & Procedures
Manual

Community Development & Housing Department
City of High Point
211 South Hamilton Street
Suite 310
High Point, NC 27262
(336) 883-3349

I: GENERAL BACKGROUND

The City of High Point Community Development & Housing Department, supported by federal, state and local funds, operates a number of on-going city-wide housing development and improvement initiatives. Towards this end the department provides loans and technical assistance to qualified eligible homeowners and owner-investors with construction rehabilitation, complying with the principles and standards of federal, state and local regulations (including compliance with Workmen Compensation laws, insurance, and applicable building codes.) During a typical year, the department may be involved in the improvement of 30-50 owner-occupied and investor-owned housing units, costing between \$10,000-\$50,000 to rehabilitate. Contracts are awarded through a competitive bidding process to pre-approved qualified contractors. The department welcomes applications from well-qualified, professional general contractors to undertake these projects.

All lead-based paint activities performed, including waste disposal, shall be in accordance with applicable Federal, State, or local laws, ordinances, codes or regulations governing evaluation and hazard reduction. In the event of discrepancies, the most protective requirements prevail. These requirements can be found in: OSHA 29 CFR 1926—Construction Industry Standards, 29 CFR 1926.62—Construction Industry Lead Standards, 29 CFR 1910. 1200—Hazard Communication, 40 CFR Pt.261—EPA Regulations, HUD Title X parts 1012-1013.

ELIGIBILITY REQUIREMENTS

To be pre-approved to bid on housing rehabilitation projects, a contractor must meet the following requirements:

Experience:

Approved contractors shall have demonstrated, to the satisfaction of the Community Development & Housing Department, that they have suitable construction experience, including a NC General Contractors License, *Limited*, to conduct major repairs on residential and/or multi-family projects.

Credit History:

Approved contractors shall demonstrate a good and reliable credit history. Prospective contractors shall report any liens or judgments filed or pending.

Insurance:

Contractors shall maintain adequate general liability insurance coverage. Failure to provide a signed statement from an insurance carrier, demonstrating required coverage, will terminate a contractor's approved status.

Contractors shall carry:

- Workmen's Compensation Insurance, \$500,000 minimum.

- General Liability Insurance:
 - Bodily injury: \$100,000 per occurrence/\$500,000 aggregate, (including accidental death).
 - Property Damage: 100,000 per occurrence/\$500,000 aggregate.

References:

Applicants shall submit a list of references who can verify the ability, experience, and professionalism of the applicant.

Probation Period:

Newly approved contractors must demonstrate their ability to successfully complete one project before being awarded other projects All newly approved contractors shall, for a period of six months, be limited to one job award only. During a bid opening, once a Probation Contractor has won a job, any subsequent pending bid will be void.

Privilege License:

Approved contractors must be licensed to do business in the City of High Point and must present a copy of their privilege license.

III: SPECIAL CONDITIONS

New Contractors:

Newly approved contractors must demonstrate their ability to successfully complete one project before being awarded other projects. Therefore, once a contractor is awarded their first project, they will not be allowed to begin another project until successfully completing the first project. If a contractor working on their first project is low bidder on another project, the homeowner shall have the option of waiting until the first project is completed, or selecting the next lowest bid. However, if the next lowest bid is not acceptable, the homeowner shall wait for the lowest bidder to successfully complete his first project.

Established Contractors:

No contractor shall work on more than two (2) projects at the same time. If a contractor already working on two projects is low bidder on another project, the homeowner shall have the option of waiting for that contractor to complete one project or selecting the next lowest bid. However, if the next lowest bid is unacceptable, the homeowner shall wait for the lowest bidder.

IV: APPLICATION PROCESS

The Community Development and Housing Department shall issue an application package to prospective contractors with the following requirements:

- Application forms must be completed and signed.
- Include business name and owner name.
- Include federal tax number.

- Include business, home and mobile numbers.
- Description of services offered.
- Include the last four contracts/jobs completed.
- Names, addresses and telephone numbers for all references.
- Any relevant CDBG experience in other cities.
- Proof of City of High Point privilege license.
- A copy of your Certificate of Insurance.
-

A department Project Manager shall undertake evaluation of a contractor's application. If approved, the contractor will be provisionally added to the Housing Improvement Program's List of Approved Contractors

V: PERFORMANCE EXPECTATIONS

General:

The success of the Housing Improvement Program depends to a great extent on the performance of the contractors who work on rehabilitation projects. For this reason, approved contractors shall be held to a high standard of performance. Contractors shall provide high quality work and shall exhibit a high degree of professionalism. They shall also submit to the reasonable requirements of investor-owners, as well as homeowners and tenants, who may be living in dwellings during the course of rehabilitation. Contractors shall show respect for property owners, tenants, and city staff, and shall be shown respect in return. All approved contractors shall be provided a copy of the City of High Point's Minimum Housing Code, as well as a copy of the Housing Improvement Program's General Specifications for Housing Rehabilitation, and project work-write-ups. These documents should be used as sources of information for the contractor during the rehabilitation process.

Completion Schedules:

All projects shall be completed within twenty-eight (28) calendar days from the project start date established in the owner/contractor agreement, unless the contractor has been granted an extension by the Community Development Project Manager. Extensions may be granted for delays caused by weather, injury, illness, death, or other unexpected occurrences. In order to be assured of an extension, the contractor or investor/owner must notify the Community Development Inspector/Estimator at the time of a delay. Completion schedules for multi-unit investor projects shall be negotiated between the investor/owner and the Inspector/Estimator. If a project is not completed within the allotted time, including any extensions, then the contractor of record or the investor shall be charged \$100 per calendar day until the job is completed. A project is considered completed, and the one-year warranty begins, when the dwelling receives a Certificate of Compliance from the Inspector/Estimator.

Stop Work Orders:

Upon the issuance of a Stop Work Order by the Community Development Project Manager, no contractor shall do any work on a project without consulting the Project Manager.

Warranties:

All contractors are expected to honor a one (1) year warranty, including labor and materials, on all work completed on program projects. When necessary, they are expected to respond to questions and complaints about their work. They are expected to approach any remedial work as seriously as the approach original work.

Reasons for Removal:

Contractors will be removed from the Approved Contractors List for the following reasons:

- ◆ Failure to meet the project schedule established at the pre-construction conference and set forth in the contract documents.
- ◆ Failure to respect the property owner and/or the owner's property.
- ◆ Performing poor quality work to trade specifications, as determined by the Community Development Project Manager.
- ◆ Using substandard materials or installation techniques not meeting the standards of the General Specifications for Housing Rehabilitation.
- ◆ Failure to honor warranty work in a prompt and satisfactory manner, as determined by the Project Manager.
- ◆ Failure to submit valid bids on a regular basis without an explanation to the Project Manager.
- ◆ Failure to recognize financial obligations incurred in connection with the conduct of their work.
- ◆ Failure to maintain the required insurance coverage.

Having been removed from the Approved Contractor's List, a contractor shall receive written notification of removal. Contractors may appeal their removal to the Community Development & Housing Department.

VI: THE BIDDING PROCESS

The bidding process for the Community Development & Housing Department Housing Rehabilitation Program is as follows:

- ◆ An Invitation To Bid is sent to all approved contractors, informing them of the date for the Bidders Meeting (usually includes a site review) and the Bid Due date and time.
- ◆ Contractors shall bid on the prepared Work-Write-Up.
- ◆ Contractors or their representative shall attend the Bidder's Meeting in order to be eligible to bid.
- ◆ All bids shall be submitted to the assigned Housing Rehabilitation Project Manager by the established Bid Opening date and time, but the contractor need not be present at the bid opening.
- ◆ No bid may be changed or corrected after the Bid Opening.

- ◆ All bids will be considered firm contract prices, and contractors will be held to their total bid price.
- ◆ Where, in the case of a contractor winning multiple bids shall create an inordinate delay and/or causes hardship to a homeowner/investor, the Community Development & Housing Department shall have the discretion of awarding the bid to the next lowest acceptable bid.
- ◆ Prior to being awarded a bid, a contractor shall have the Work Write Up reviewed by the Community Development Project Manager. The total bid price shall equal the sum of the line items located within the Work Write Up.
- ◆ If the total bid price does not equal the sum of the line item bids, the Community Development & Housing Department shall (1) reserve the right to review the intent of the bid document with the contractor, (2) have the bid declared invalid and award the project to the next lowest acceptable bidder, or (3) award the bid.
- ◆ If awarded a bid, a contractor has one (1) business day from date of notification to refuse or accept the project. If refused, the project will be awarded to the next lowest acceptable bid.

VII: PAYMENT POLICY AND PROCEDURES

- ◆ Contractors shall submit Invoice Forms to the Community Development Project Manager.
- ◆ The Project Manager reviews the form and inspects invoiced work.
- ◆ If work is acceptable the Project Manager shall process for payment.
- ◆ Payments shall be made within two (2) business weeks.
- ◆ At the successful completion of all work, owner shall sign Owner Acceptance Form and contractor must sign Lien Waiver Form.
- ◆ Ten percent of the project contract amount shall be retained by the Community Development & Housing Department for a period of 60 days following project completion.
- ◆ If, in the opinion of the Project Manager, no unresolved problems have developed during the 60-day waiting period, the contractor may invoice for the final 10% payment.
- ◆ If problems have developed, contractor shall correct those problems to the satisfaction of the Project Manager before receiving his final payment.

Part Three

Housing Quality Standards

**COMMUNITY DEVELOPMENT & HOUSING DEPARTMENT
CITY OF HIGH POINT**

HOUSING QUALITY STANDARDS

AFFORDABLE HOUSING DEVELOPMENT PROGRAM

JULY 2011

TABLE OF CONTENTS

1. FOUNDATION.....	17
2. SITE IMPROVEMENTS.....	17
3. FLOORING	18
4. EXTERIOR WALLS	18
5. EXTERIOR DOORS.....	19
6. STORM DOORS	19
7. WINDOWS	19
8. PORCHES.....	20
9. GUTTERS AND DOWNSPOUTS	20
10. ROOFING	20
11. HEATING EQUIPMENT.....	20
12. MOISTURE AND THERMAL CONTROL	21
13. PLUMBING	22
14. ELECTRICAL SERVICE	23
15. PEST CONTROL	24
16. EXTERIOR PAINTING	24
17. INTERIOR ROOMS.....	Error! Bookmark not defined.
18. OTHER WORK.....	26

JOB START-UP REQUIREMENTS

1. Provide approved porta-jon with weekly maintenance at job site.
2. Provide approved means of temporary power at job site by starting date of job.

1. FOUNDATION

FOUNDATIONS

The sizing of and type of concrete materials selected for footings, foundation walls, piers, retaining walls and curtain walls shall be determined by the NC State Building Code. However, it is a requirement of the Infill Housing Quality Standards that all masonry/concrete foundation walls shall be veneered with brick and mortar. Foundation coatings of stucco, paint, or other exterior coatings shall not be permitted.

VENTS

Install cast aluminum, screened and automatically dampered foundation vents.

2. SITE IMPROVEMENTS

GRADING

Grade soil to a minimum clearance of 6" between siding and grade. Form a swale to divert surface water away from foundation. Seed all areas of disturbed soil with Fescue grass seed, fertilize and cover with straw.

CONCRETE DRIVEWAY

Concrete driveways shall be 4" minimum thickness with wire reinforcement. Wire mesh reinforcement shall be **6/6 10-10 welded steel wire** fabric, conforming to ASTM-A-185. Sides and ends shall be lapped at least 6". Use only transit mixed 3,000 PSI grade concrete. **Concrete shall not be poured when the surrounding air temperature is below 40 degrees F.** Groove the driveway every 10 feet. Install 1/2" expansion joints every 20 feet. Round the edges of the driveway and complete with a light broom finish.

CONCRETE SIDEWALK

For sidewalks, form and pour a 3' wide, 4" minimum thickness concrete sidewalk. Surface finish driveways and sidewalks to a light broom finish. Use only transit mixed 3,000 PSI grade concrete. **Concrete shall not be poured when the surrounding air temperature is below 40 degrees F.** Groove the walkway every four lineal feet. Round the edges of the walkway and complete with a float and broom finish.

CONCRETE STEPS

Size the steps to be uniform in width and height with risers that do not exceed **8-1/4"** and that treads are not less than **10-1/4"**. Surface to have a light broom finish and rubbed finish after the forms are removed. **Concrete shall not be poured when the surrounding air temperature is below 40 degrees F.**

LANDSCAPING

Yard areas that are to be seeded shall be loosened to a depth of two inches. Apply **Kentucky Tall Fescue** at the rate of 1/2 pound per 100 square feet. Apply **10-10-10 fertilizer** at the rate of 2 pounds per 100 square feet. Apply **straw** at the rate of 1/2 bale per 100 square feet. Materials shall be distributed uniformly over the areas to be seeded.

3. FLOORING

UNDERLAYMENT

Underlayment shall be **3/8" thick AC exterior** plywood panels and shall be nailed with steel flat countersunk headed nails, slightly recessed and spaced not more than 6" on center along panel edges and not more than 8" on center along panel interior. (A screw schedule may be substituted at the contractor's discretion.) Fill and sand underlayment so as to provide a smooth and even base. Underlayment shall be installed on the inside of any closets that can be accessed from the room.

VINYL FLOORING

Install cushioned **Armstrong "Solarian"** series (or equal) vinyl sheet floor covering over clean floor. use water resistant adhesive recommended by flooring manufacturer and apply in accordance with manufacturer's instructions. Sheet vinyl flooring is to be installed in a manner which will minimize the need for seams. Seams shall be placed in inconspicuous locations, away from heavy traffic areas. All seams shall be in accordance with the manufacturer's instructions and seams are to be sealed using seam-sealer recommended by the manufacturer. Fitting and cutting shall be done carefully so as to produce an "invisible" seam. use aluminum edge trim at doors only. Install shoe molding around the perimeter of floor and finish to match. Floor covering shall include the inside of any closets that can be accessed from the room. Submit vinyl samples for approval. Allowance for vinyl sheet floor covering shall be not less than **\$13.50 per sq. yard**. Vinyl pattern and color to be selected from available Armstrong Solarian stock.

CARPET

Carpet padding and carpet shall comply with FHA standards UM-44A.

- (a) Padding shall be **1/2" thick** FHA approved foam; and
- (b) Carpet shall be FHA approved **sculptured** or **plush nylon** with a minimum pile yarn weight of **28 ounces per square yard**.

Use tack strips along all walls to be carpeted. Cut off doors as required to clear carpet. Care shall be exercised when cutting doors to prevent splintering or damage to the doors. Install metal carpet strips where carpet abuts other types of flooring surfaces. Carpet shall be installed in closets of rooms where carpet is specified. All carpet laying work is to be done by professional carpet installers. Seams shall not be permitted in the standard running length of the carpet. Carpet shall be laid in a manner which will minimize the need for seams. Required seams shall be placed in inconspicuous locations, away from heavy traffic areas.

Installed allowance for carpet and pad shall not be less than **\$16.00 per sq. yard**.

4. EXTERIOR WALLS

VINYL SIDING

Vinyl siding shall be "**Alcoa**", "**Reynolds**", "**Georgia-Pacific**" or "**Certainteed**", (or approved equal). Color and style shall be selected by the owner. Siding shall have a manufacturer's **life**

time warranty. Siding shall have a minimum thickness of .040". Install vinyl siding with 3/8" Styrofoam plastic insulation board. Siding shall be installed according to the manufacturer's instructions. Wrap all exterior fascias, soffits, rakes, front porch ceiling and columns, window frames and sills with color coated aluminum. Nails shall not be driven tight. Nails shall be aluminum. Use light blocks at all exterior light locations. Caulk all seams and cracks with color-matched latex caulk. All siding installed shall be manufactured in accordance with the BOCA Research Report #NER 460.

5. EXTERIOR DOORS

Note: Key all installed locks the same if two or more exterior door locksets or deadbolts are installed.

EXTERIOR DOOR

Install a 1-3/4" thick, 24 gauge galvanized steel veneered **RB Reliabilt** (or equal), insulated core, six panel exterior door, with reinforced lock block, frame and casing. The door shall be hung on three 4" brass plated butt hinges and install a pick resistant entrance type lockset and single cylinder entrance type dead bolt. Install a brass plated door stop on the baseboard. Door is to be installed complete with vinyl beaded weather stripping and an aluminum threshold with vinyl insert. Door may come with or without glass in the top portion. Door shall be factory primed and come with a **five year** manufacturer's warranty. All exterior doors shall have a solid platform of concrete or approved decking at every exterior entrance.

DEADBOLT LOCKS

Deadbolt locks (**Kwickset, Weiser or Schlage**), are to have case hardened rim and throw bolt at least 1" long. Locks on solid doors are to have a thumb-turn on the inside. Locks on doors with glass windows shall be keyed on both sides.

6. STORM DOORS

STORM DOOR

Install a aluminum framed, color finished **Larson #15861 or Croft #266** (or equal) storm door, complete with all hardware, mechanical closure, vinyl sweep, storm check, one screen and two glass panels. Extruded door stiles shall be a minimum of 1" thick for continuous hinge and 1-1/4" thick for three hinge, with top rail and stiles a minimum of 1-1/2" wide. Storm doors to be furnished in white or brown.

7. WINDOWS

WINDOWS

Provide for **Croft Series 96 or WeatherLok #660** (or equal) windows that are constructed of vinyl double hung, double glazed window and frame, with tilt-out sashes and all code required hardware. Windows shall be colored vinyl with half screens. Windows shall be installed strictly in accordance with the manufacturer's instructions. Fill all voids with insulating foam and a continuous 6 mil polyethylene vapor retarder between framing and casing. Installation shall include all exterior and interior trim. Install an aluminum framed screen and locks. Caulk all window frame seams and joints with a color-matched caulk.

8. PORCHES

WOOD DECK

All materials used for decks shall be pressure treated wood. The complete outer band will consist of 2" x 8" lumber. Joists will be 2" x 6" lumber. Posts are to be 4" x 4" lumber embedded in 12" of concrete. Joist hangers or ledger strips shall be used for all joist ends. Joists shall be on 24" centers. Flooring shall be 2" x 6" or 5/4" deck planking. All nails shall be galvanized. Care shall be exercised during nailing to avoid "split outs". Deck construction must be in accordance with the North Carolina Building Code, Volume VII.

9. GUTTERS

GUTTER SYSTEM

Install pre-finished, seamless aluminum gutters on all horizontal fascias, with adequate downspouts for proper drainage. Gutters are to be secured with spikes and sleeves set no more than 24" on centers. Install precast concrete (not plastic) splash blocks at the base of each downspout.

10. ROOFING

SHINGLE ROOFING

Install 1 layer of 15 lb. builders felt with a 2" top lap and a 4" side lap. Install three self-sealing 215 lbs/square **fiberglass reinforced asphalt shingles** conforming to Federal Specifications SS-S-001534 (Class A, Type 1). Install to the manufacturer's instructions. Drip edge shall be installed around the entire perimeter of the roof edge. Install stepped metal flashing and counter flashing at all chimneys. Flash all plumbing vents, valleys and junctions of roof to walls. Install with galvanized or aluminum nails. Provide a **20 year material warranty** and a one year written warranty on the labor.

SOFFIT VENTS

Under eaves venting to be aluminum pre-painted 8" by 16" vents or continuous strip vent. Mandatory specifications for ventilation is 1 sqft free area per 150 sqft attic floor.

GABLE VENTS

Install A type gable vents, wood or pre-painted aluminum. Prime and paint two coats to match existing. Mandatory specifications for ventilation is 1 sqft free area per 150 sqft attic floor.

11. HEATING EQUIPMENT

NOTE: All electrical hook-up and control wiring, fuel piping, duct and furnace installation shall be in accordance with the NC State Building Code. All system design and mechanical work shall be performed by a licensed heating contractor and warranted to meet performance, general, material and workmanship specifications. All work is to be made without damage to structural members, walls, ceilings or floors.

NOTE: All low voltage wiring shall be protected with an approved conduit installed between the foundation wall and the gas pack, furnace or condensing unit.

FORCED AIR HEATING AND AIR CONDITIONING

Install a forced air electric or gas heat and electric cool system with an AFUE minimum rating of 78% for heat and 10 SEER for cooling. The system shall have sufficient size and capacity to maintain an inside temperature during the heat cycle of 70 degrees F. when the outside temperature is at 10 degrees F. and maintain an inside temperature during the cool cycle of 78 degrees F. when the outside temperature is at 95 degrees F.

Supply and return plenum for the unit shall be of sufficient length to extend through the foundation wall a minimum of 12" beyond the wall. Any opening made in the masonry foundation wall for the plenum shall be braced and supported with steel angle irons of appropriate size. Adequate supplemental floor supports shall be provided for floor joists bearing on framing across the opening. The plenum shall be protected with a metal flashing that covers the plenum on three sides. The flashing shall extend from the package unit to the foundation wall and shall be attached with sheet metal screws at the unit and caulked with an approved caulking material at the joints.

The air duct design shall utilize a main trunk. Do not install a "spider" design air duct system. New duct installation shall have a minimum of R-8 duct insulation with a vinyl vapor barrier. Seams shall be stapled and sealed vapor tight. Install the filter in an interior wall for easy access by the owner. Adjust, balance and control the system to provide the uniform distribution of heated and filtered air to all rooms. Restore ground area around exterior units to provide for positive drainage away from the equipment and the house.

12. MOISTURE AND THERMAL CONTROL

VAPOR BARRIER

Remove all debris from crawl space and install a 6 mil. polyethylene vapor barrier on ground. Lap seams 12" minimum and lay vapor barrier flat. Cover 85% of the total area. NOTE: Do not install vapor barrier until after termite treatment.

FLOOR INSULATION

Install R-19 kraft faced fiberglass roll insulation with vapor barrier facing up toward the floor. Hold the insulation in place with tiger teeth or staples.

ATTIC INSULATION

Insulate the attic to a minimum of R-30 blown in place cellulose or fiberglass insulation. Display an attic insulation certification card on a roof rafter in the attic directly above the attic access scuttle to verify the R value.

DRYER VENT

Install outside venting for the clothes dryer, using aluminum metal flexible dryer vent hose with a dampered exterior weather cap.

13. PLUMBING

NOTE: The design and installation of all new plumbing and fixtures shall comply with the provisions of the NC State Building Code. All plumbing work shall be performed with a permit and by a licensed plumber. All work is to be made without damage to structural members, walls, ceilings or floors.

PLUMBING MATERIALS

Plumbing materials shall comply with and be installed in accordance with the North Carolina State Plumbing Code. All piping shall be installed in a manner which will not cause critical damage to structural members. Sewer and waste lines shall be PVC plastic pipe with compatible fittings. Include connections for the washer/dryer area. Use solvents recommended by the pipe manufacturer. Supply (water) lines shall be type L hand drawn and code approved plastic tubing with wrought copper fittings. Fixture supply lines shall be rigidly mounted plastic pipe with shutoff valves. Do not use lead-based solder with non-corrosive flux. Water lines may be neoprene in lieu of copper. Grade and seed all areas of disturbed soil with Fescue grass seed, fertilize and cover with straw.

KITCHEN SINK

Install a stainless sink, self rimming 2 basin **Sterling #26150** (or equal) sink, with 7" deep bowls complete with basket strainers and spray nozzle. Install sink complete with drain piping and trap assemblies and 2 supply lines with individual cut-off valves.

KITCHEN SINK FAUCET

Install a chrome plated all metal single level **Delta #300WF** (or equal) kitchen faucet, drain piping and trap assemblies and 2 supply lines with individual cut-off valves.

VANITY

Install a white lavatory on an **all wood** cabinet base. Install a chrome plated all metal single handle lavatory **Delta 2522 MPU or Peerless 9605** faucet (or equal) with pop-up drain stopper, drain and trap assembly and 2 supply lines with individual cut-off valves.

FIBERGLASS BATHTUB

Install a one piece white 5' **Aqua-Glass, Eljer "Melbourne", American Standard "Pembroke II" or Universal Rundle #6823** (or equal) fiberglass bathtub with shower, double chrome plated all metal handle filler valve with shower diverter and pop-up drain stopper. Tub surround to have an integrally molded soap dish and grab bar. Install a chrome plated or polished aluminum shower curtain rod. Shower head is to be rated at 3 G.P.M. or less.

TOILET

Install a white, water saver type, **Elger "Patriot" or American Standard "Cadet"** (or equivalent) water closet in bath. Install a new wax seal. Install a supply line with cut-off valve.

WATER HEATER

NOTE: This is a NCHFA Required Specification.

Install a **5 year warranted** electric or gas water heater and a cold water shut off valve. Water heater to have a minimum 40 gallon capacity and be equal to that manufactured by Rheem or

Envi-ro-temp (or equal). **All water heaters shall be the “Energy-Miser” dual element type.** Upright types installed inside of houses shall have extension piping added to the relief valve to direct relief to underneath the house. Low-boy types that can be mounted under the structure shall be placed on a 4” thick concrete slab. If the heater is installed in an unheated space, install additional R-11 insulation over sides (and top of electric tank) and install 1/2” wall thickness foamed plastic insulation over the supply piping. Do not cover valves, controls, access panels to heating elements or junction boxes. Provide all electrical, venting, gas or plumbing connections as applicable.

14. ELECTRICAL SERVICE

WIRE ELECTRICAL SYSTEM TO CODE

The design, construction, installation, adjusting and labeling of all electrical equipment, devices and accessories shall comply with the provisions of the current edition of the National Electrical Code (NEC). All electrical work shall be performed under a permit and by a licensed electrical contractor. This installation is to be made without damage to structural members, walls, ceilings or floors.

All major appliance outlets (including the washer/dryer connection) and other equipment shall be on separate grounded circuits.

All rooms shall have the minimum number of receptacles, as per the NEC, and a switched light fixture. Install switched light fixture at all exterior entrances. Install a door chime at the front entrance.

Use only GFCI’s in bathrooms, laundry rooms and kitchens within 5’-0” of plumbing or other path to ground.

Wiring shall be concealed to the maximum possible. Use non-metallic sheathed cable with copper conductors. All branch circuit wire gauges shall be in accordance with the National Electric Code.

200 AMP SERVICE

Install a 200 amp minimum service panel, main disconnect, and circuit breakers. Panel to have main disconnect breaker and accommodate 20 circuit breakers. All major appliances are to be on separate circuits. Provide circuit index on service panel door showing which lines are served by each breaker.

BATHROOM FAN

Install a **Fasco TC667W** or **Broan 679** (or equal) exhaust fan with wall mounted switch. Exhaust fan shall be ducted outdoors with a 4” minimum diameter insulated duct and a dampered and flashed vent. Exhaust fans shall be rated at 70 CFM minimum.

DUCTED RANGE HOOD

Install a white 30” ducted range hood with separately switched two speed fan and light. Exhaust fans shall meet NC Building Code for minimum CFM rating. Duct outdoors using a 4” minimum diameter insulated duct or exhaust direct through the exterior wall. The unit must have a dampered vent. Kitchen hood vents must be vented to the outside by a “B” labeled pipe having a 1 inch clearance from all combustibile material.

15. PEST CONTROL

TERMITE EXTERMINATION

Treatment is to be done by a professional pest control operator, properly licensed and bonded. Soil treatment shall be applied to dry soils during clear weather after all grading is completed. Exterminate structure for termites and powder post beetles, using **Dursban TC** (or equal), applied according to the manufacturer's specifications. Exterminator shall provide to the contractor a certificate of treatment and a one year termite and powder post beetle extermination warranty.

16. EXTERIOR PAINTING

Caulk all cracks and seams on building components as required to stop air infiltration including siding, trim, and around doors and window frames. Prime any bare wood with oil or latex based exterior primer. Do not apply exterior paint in damp or rainy weather. Do not apply exterior paint when the temperature is below 45 degrees F. All color selections are to be made by the owner from samples furnished by the contractor.

PAINT FOR HOUSE AND TRIM

Prime all bare wood. Paint all exterior fascias, soffits, rakes, porch ceiling(s) and columns, and all miscellaneous exterior woodwork (not covered with vinyl or aluminum) with two coats of exterior latex house paint. Paint the outside of exterior doors, jambs and casings; the outside of window sash, frames, sills and casings; and access door and frame with two coats of exterior latex enamel. Paint all non-brick foundations with two coats of exterior latex house paint. A white fiber stucco coating of "**Surewall**" (or equal) may be applied in lieu of painting. **NOTE:** Clean all paint from window glass and loosen all windows that are stuck with paint.

17. INTERIOR ROOMS

SHEETROCK WALLS

Wallboard shall be gypsum wallboard with tapered edge complying with ASTM C-79. Wallboard shall be installed at right angles to the supporting structural members in as long a length as possible. Wallboard shall be nailed with ringed and coated drywall nails 1-1/4" long. Nails shall be driven with their shanks perpendicular to the face of the wallboard and seated below the surface of the board without breaking the paper. Nails shall be driven at least 3/8" from the panel ends and edges. Use double nailing, with pairs of nails spaced 12" on center and 2" apart. Use single nailing around the perimeter of the panel, spaced 7" on center. Install with gun applied wallboard adhesive.

Tape, apply joint compound as required, let dry, sand and prepare for painting. A minimum temperature of 55 degrees F. shall be maintained in those areas where the work is being performed until the joint compound is completely dry. Over joints the tape is to be embedded in joint compound and covered with a thin layer of compound. A second and third coat shall be applied. Each coat shall be dry before applying the next coat. Each coat shall be feather edged and extended beyond the previous coat approximately 2". Cover nails with three applications of joint compound, allowing time to dry between each coat. The finish coat shall be sanded lightly and any imperfections corrected before painting. Caution shall be used to avoid "roughing" of the wallboard surface.

Inside corners shall be reinforced with tape embedded in joint compound. Outside corners shall be protected by galvanized wallboard corner beads. Corner beads shall be finished with two coats of joint compound.

SHEETROCK CEILING FINISH

On blown textured ceilings, Kilz (or equivalent) shall be used as a primer. Add paint to stipple material at the rate of one gallon per bag of mix. **Note: Ceilings in bathrooms and kitchens are to have a smooth flat finish only.**

LOCKSET

Install a **Kwikset, Weiser or Schlage** (or equal) privacy lockset on bedroom and bath doors.

INTERIOR ROOMS

Install a 1-3/8" **Premdor Interior Door Series** (or equal) six panel moulded hollow core entry door, jamb with colonial trim and hardware in the existing opening. Install a **Kwikset** (or equal) privacy lockset on bedroom and bath doors; and a **Kwikset** (or equal) passage lockset on closet or laundry room doors.

PAINTING

All paint and other "finish" materials **shall be of best quality as shown in Table A** (or of equal quality if some other brand is used). All paint is to be delivered to the job site in manufacturer's sealed containers. Each container shall be labeled, giving manufacturer's name, type of paint, instructions and color. Paint shall be used without thinning. Paint to be applied in dry weather, to dry surfaces, within an air temperature of 50 degrees to 95 degrees F.

Finished work shall be uniform, of approved colors, smooth and free from runs, sags, defective brushing and rolling. All edges of paint adjoining other materials or colors shall be sharp and clean. If thinners are required (as with professional spray apparatus) use only solvents or thinners of type and in quantity as recommended by the applicable paint manufacturer.

Paint walls of the room and closet with two coats of flat interior latex paint. Paint the kitchen and bath walls with two coats of interior latex enamel. Paint doors, jambs, the inside of window sash and all wood trim with two coats of interior latex semi-gloss enamel. Clean all paint from window glass and loosen all windows stuck with paint. Paint ceiling of the room and closet with two coats of flat interior latex ceiling paint.

KITCHEN CABINETS AND COUNTER TOPS

Cabinets shall comply with the requirements of the American National Standards Institute ANSI A 161.1 "Recommended Minimum Construction and Performance Standards for Kitchen Cabinets". **Cabinets shall be all wood construction** and installed level, plumb and true, in accordance with the manufacturer's specifications. Cabinets shall be attached with screws to studs or other framing members. Trim out all "open" spaces between cabinets and walls with prefinished trim (which is to be provided by the manufacturer so as to match the installed materials). All cabinets are to be new and color matched. Salvage materials are not acceptable. **Cabinets are to be of the "Forsyth" series as manufactured by Marsh** (or equal).

Countertop shall be factory constructed, post formed prefabricated high pressure laminate with roll backsplash and end caps without seams. When countertops exceed 12' and two pieces must be used, the joint shall not be close to the sink area. Countertop to be approximately 25" deep including backsplash.

BATHROOM MEDICINE CABINET

Install a **recessed** medicine cabinet with a mirrored door over the lavatory.

BATHROOM ACCESSORIES

Install **two 24” towel bars and one toilet paper roll holder**. Accessories shall be chrome plated metal.

18. OTHER WORK

HOUSE NUMBERS

Install 4” brass metal house numbers on house within 4’ of the front door. The color of the numbers shall contrast brightly with the background surface color.

MAILBOX

Install a brass mailbox on the front exterior wall of the house within 4’ of the front door.

CLEAN-UP

Clean up all construction debris and maintain a neat, clean and safe worksite until the project is completed and all remaining debris is removed from the premises.

TABLE A: Acceptable Paints by Brand Name

TYPE	PITTSBURGH	GLIDDEN	SHERWIN WILLIAMS	LOWES	DURON
flat ceiling paint	Ceiling White 50 Series	Ceiling White 3200	C99 Ceiling White	Valspar 12 Year Series	Ultra Deluxe Flat
latex interior flat wall paint	Wall Hide 8 Series	Spread Satin 3400 Series	C99 Flat Latex	Valspar 12 Year Series	Ultra Deluxe Flat
latex interior semi-gloss enamel	Speed Hide 6510 Series	Spread Latex 3700 Series	C99 Latex Semi-Gloss	Valspar 12 Year Series	Ultra Deluxe Semi-Gloss

Paint brands omitted from the above list does not indicate that other brands are not acceptable, however brands not listed above must be approved by the Project Manager prior to use.