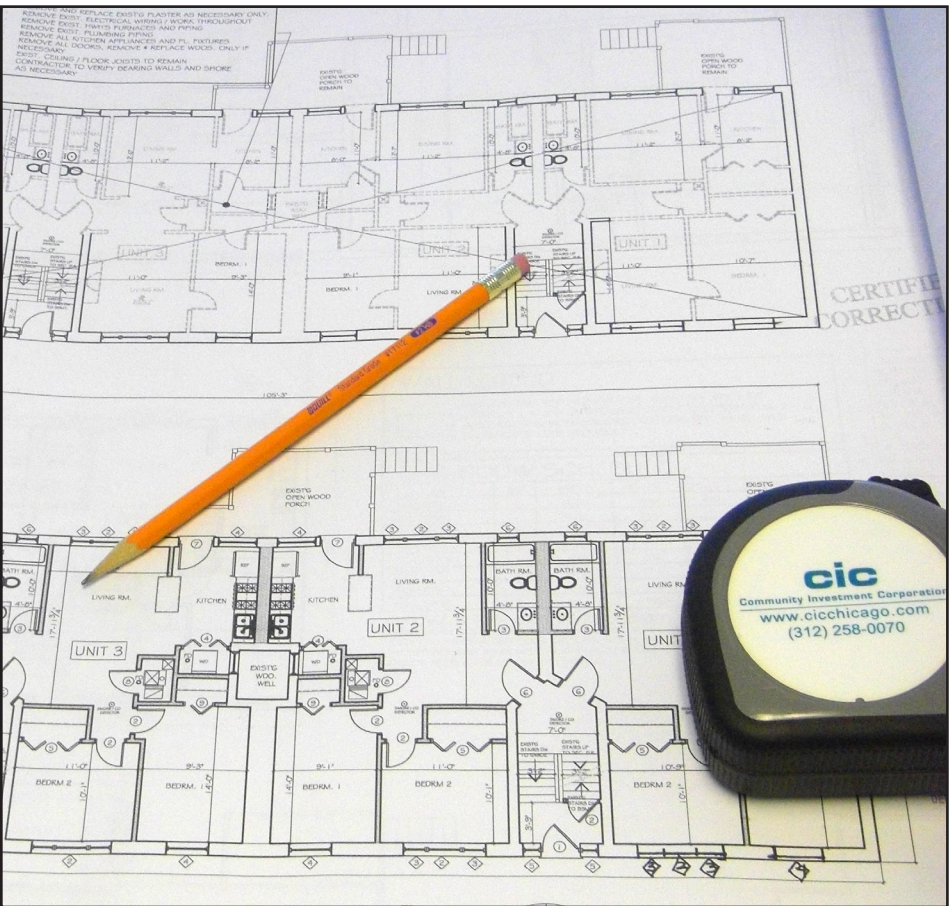




**Community Investment Corporation**



**REHAB  
PERFORMANCE  
STANDARDS**

## REHAB PERFORMANCE STANDARDS

### Table of Contents

I.	REHAB PERFORMANCE STANDARDS OVERVIEW .....	1-3
II.	MASONRY: CLEANING, TUCKPOINTING, LINTELS ...	3-5
III.	WINDOWS .....	5-8
IV.	BUILDING ENTRY DOORS .....	8
V.	PORCHES .....	8-11
VI.	ROOFING .....	12-14
VII.	EXTERIOR PAINTING .....	14
VIII.	ELECTRICAL.....	14-15
IX.	DOMESTIC HOT WATER .....	15-16
X.	CENTRAL HEATING SYSTEMS .....	16-17
XI.	INDIVIDUAL FORCED AIR FURNACES .....	17-18
XII.	UNIT FINISHES .....	19

## Community Investment Corporation

### REHAB PERFORMANCE STANDARDS

These performance standards are intended to help you successfully rehab an apartment building. We recommend that you give them to your general contractor and request that they also be passed along to the subcontractors.

#### I. REHAB PERFORMANCE STANDARDS OVERVIEW

##### BUILDING CODES

All rehabilitation work must comply with the local building code and applicable zoning ordinances. As a result of the rehab work, all open building code violations shall be corrected and the owner shall be responsible for having all court suits dismissed prior to the final construction payout.

##### PERMITS AND LICENSES

All rehabilitation work must be performed after applicable building permits have been issued, where such permits are required.

General repair permits may be issued for some interior and exterior repairs; these generally do not require drawings. Plumbing, heating, electrical and masonry work require appropriate permits, and sometimes drawings.

CIC requires certain limited drawings in order to define the work if any changes to apartment layouts are proposed, if structural repairs are required, or if individual apartment heating systems are to be installed to replace a central heating system. If a change in the number of apartments is proposed, or if basement apartments are to be added where no basement apartments existed before, drawings are required as well. All necessary permits for these types of work must be obtained and provided to CIC.

Masonry repairs and replacement of steel lintels (other than tuckpointing) must be performed by licensed masonry contractors. All electrical work and all plumbing work, regardless of scope, is required to be performed by licensed contractors. The local/municipal license numbers of contractors must be stated on the permit application.

## DRAWINGS

When full architectural drawings are required for permits, they must also be submitted to CIC. Such drawings used to obtain permits must be prepared by a licensed architect. However, layouts drawn by electricians and heating contractors may be accepted by the issuing department for those specific permits.

Additionally, CIC also requires drawings when, in our opinion, the scope of the proposed work is more clearly defined by drawings than by narrative description.

## EPA RENOVATE, REPAIR, PAINT RULE

Beginning April 22, 2010, any renovation, repair and painting activities that disturb more than six square feet of paint on the interior, or 20 square feet of paint on the exterior, or that involves windows in residential facilities built before 1978, must be done by Certified Renovators or by workers trained by Certified Renovators. The work must be done with EPA-mandated lead-safe work practices.

## GENERAL

**The following shall be considered required minimum performance standards. They are not intended to cover all conditions or materials or to replace those required by code authorities.** The establishment of these provisions shall not relieve the borrower from investigating all conditions and conforming to all applicable regulations.

Where these specifications are in conflict with the requirements of code authorities, the codes shall govern. Where these specs are in conflict with those prepared by the architect of record, then the more stringent of the requirements shall be followed. In all respects, the borrower is responsible to provide materials and workmanship which are usual and customary and which comply with recognized standards for the work and trades involved.

## II. MASONRY: CLEANING, TUCKPOINTING, LINTELS

### A) CLEANING

**Remove graffiti using the gentlest means possible.** Hand scrubbing with detergents and hose-stream water is desirable and usually effective. Use chemicals specifically formulated for the removal of graffiti, only after water and detergents have been proven unsatisfactory. Chemicals such as those manufactured specifically for this purpose shall be used in strict compliance with the printed instructions of the manufacturer. Mask and protect windows and other building materials and landscaping.

Pressure washing of masonry to remove dirt or graffiti may injure those surfaces. When pressure washing is used, low-pressure water jets should not exceed 500 PSI. Steam cleaning should be avoided even when pressures do not exceed 10 to 30 PSI. Sandblasting and any other abrasive cleaning are unacceptable methods of cleaning and graffiti removal. **Sandblasting masonry is not permitted.**

## B) TUCKPOINTING

The tuckpointing contractor will clearly **identify the specific surfaces of the building to be tuckpointed**. The contractor will state the areas to be tuckpointed in square feet or percentage of wall area. All of the joints in the locations and areas defined will be tuckpointed fully (100%). **The statement “as required” is not an acceptable description of the scope of work.** Walls which are weathered or deteriorated to a mortar depth of ¼ inch or more, require tuckpointing. All loose mortar must be removed from the existing joints. Joints are to be struck flush or tooled concave, and not beaded or feathered over the faces of the bricks.

Mortar must be of the highest quality and appropriate to the masonry being repointed. Mortar shall be composed of ASTM (American Society of Testing Materials) regulated materials and mixed, prepared, and placed in compliance with printed instructions. All tuckpointing shall comply with the recommendations of the Brick Institute of America, Masonry Advisory Council of Illinois, or other recognized masonry industry standard.

Tuckpoint deteriorated chimneys and replace any missing chimney caps. Take down or seal off tops of unused chimneys.

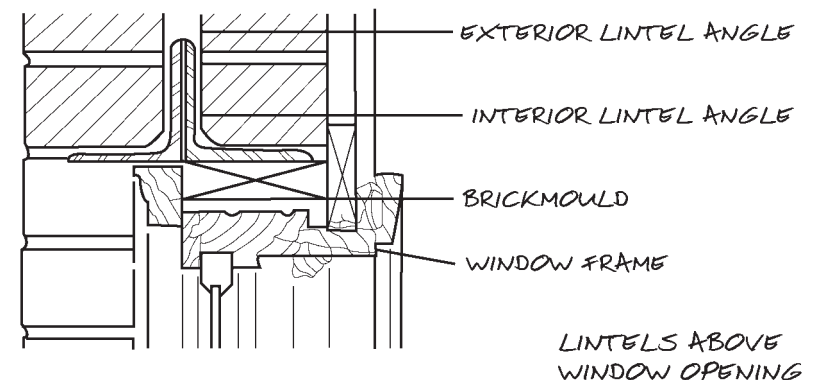
Remove and repair loose and deteriorated parging. Tight materials may remain with remaining open joints being tuckpointed. Damaged or spalled brick must be replaced rather than parged.

Refer to roofing specifications for treatment of masonry parapet walls and copings.

All open and worn joints in limestone parapet copings and window sills must be repointed.

## C) LINTELS

The contractor’s proposal shall include specific locations, quantities and sizes of lintels to be replaced. Replace deteriorated steel lintels where there is spalled brick or stepped cracks above the heads of openings, and where deflection of more than ¼” from the horizontal bearing surface has occurred. Remove and replace all damaged brick and loose mortar above and at bearing ends. Replacement lintels shall match existing thickness, profile and length, but shall have minimum 4” bearing at each end. Where multiple lintels occur over single or ganged windows, remove and replace **deteriorated interior lintels** as well. Cutting torches shall not be used to remove existing lintels where brick or windows could be damaged. New steel lintels shall be factory primed, then coated with at least one field coat of paint before installation in the wall. Lintels shall be flashed with asphaltic membrane or equal and rope “wicks” shall protrude from the mortar.



## III. WINDOWS

### A) FIXED GLAZING

When replacing existing double-hung windows, use either single-hung windows or double-hung windows with insulating glass.

Fixed glazing shall not be used to replace existing operable sash unless drawings with light and ventilation schedules meeting code requirements are submitted for review.

Glass block is fixed glazing. It shall not be used to replace existing operable sash in bathrooms unless bathrooms are equipped with exhaust fans that provide the code-required CFM ventilation.

## B) FIRE-RATED WINDOWS

Repair and retain existing hollow metal windows required for fire protection adjoining stairs and porches. If replacement is necessary, use fire-rated windows with safety glazing.

## C) PERFORMANCE STANDARDS

Provide the following information about the proposed windows: manufacturer name, model name, model number, material description, AAMA (Architectural Aluminum Manufacturers Association) rating, and test certification. **Windows shall have a minimum rating of H-C35 if aluminum (preferred), or H-R40 if vinyl, per AAMA standards.** If not certified by AAMA, the manufacturer of the window shall provide test results showing comparable performance. Aluminum windows are preferred; vinyl windows may be submitted for review with all of the above data.

All windows require insulating glass in their construction and insect screens in the operable portions of all openings.

## D) SASH LOCKS

In addition to sash locks, install special sash limit locks (burglar catches) for security on windows within 20 feet of ground level, within 10 feet of adjacent roofs, within 10 feet of adjacent stairs or porch access, and as otherwise required by code.

## E) CAPPING

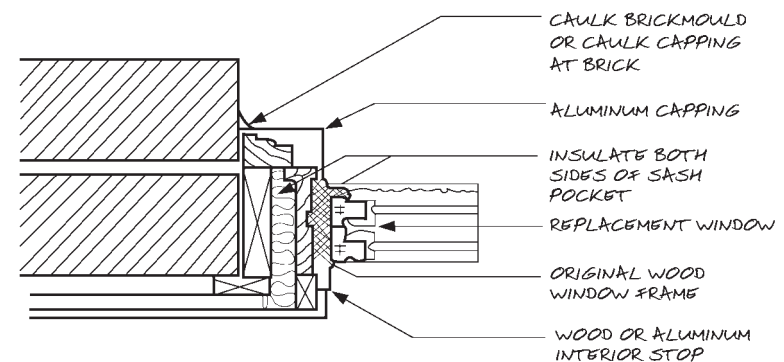
Exterior brick moulds and wood sills shall be covered with aluminum coil stock “capping” (or panning with extruded shapes) accurately formed in a break and installed without oil-canning or other surface deformations, or fastener damage.

**Capping shall not cover the steel lintel over the window opening. The lintel shall remain exposed for observation and periodic maintenance.**

Sealant shall be applied in one of the following two ways: 1) before applying capping around opening, scrape loose caulking and paint from brick moulds and sills and apply sealant to keep out air and water; or 2) after installing the capping apply sealant around the entire sheet metal capping where it meets the brick.

## F) INSULATION

The sash weight pockets of existing double hung windows and the perimeter of the opening between the new sash and the existing frame shall be completely filled with insulation material. This insulation may be properly fitted batts or non-expanding spray extruded material (preferred) to result in no air infiltration.



WINDOW JAMB DETAIL



## G) INTERIOR STOPS

Replacement window installation shall include removal and replacement of the interior wood stops with new wood or aluminum stops. The reuse of existing interior wood stops will be permitted only when the final result is neat, workmanlike, and finished in appearance.

## H) WINDOW INFILL

Basement windows, ice and milk doors, and transoms, may be removed and replaced with blank infill panels where allowed by code. Where allowed by code, panels shall be made of painted plywood (exterior grade/exterior glued), or "Panel 15" (aluminum-clad plywood or similar product). Brick or glass block may be required by code and are acceptable to CIC. Note that boilers, furnaces and gas-fired water heaters require combustion air. Combustion air openings shall be provided in sizes as required by code.

**Within the city of Chicago, basement window infill must be brick or glass block to meet code.**

## IV. BUILDING ENTRY DOORS

Building entry doors and vestibule doors are to be equipped with closers. Provide electric latches connected to the intercom system. Use tempered glass at doors and sidelights as required by code. Describe if doors will be wood or steel with glass, or if they will be aluminum and glass "store front" assemblies.

## V. PORCHES

### A) DRAWINGS

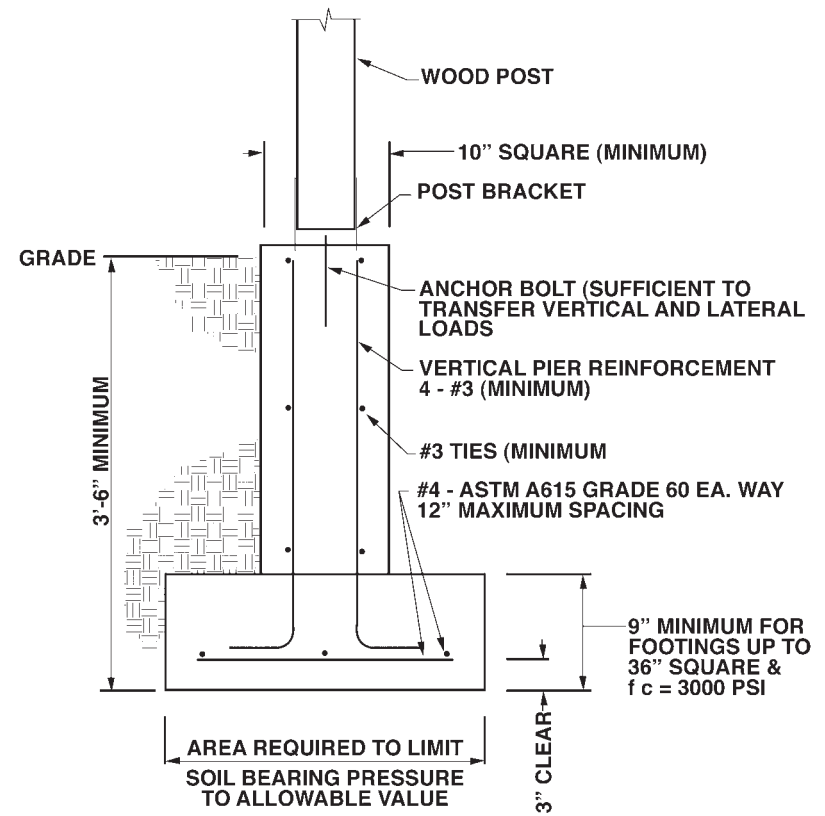
Submit drawings for any porch construction. The construction of the porches shall include the minimum requirements below unless the code requires more stringent practices.

### B) LUMBER QUALITY

Porches shall be constructed of factory pressure-treated wood. Minimum standards require Southern Pine, #2 Grade. Use the best material commercially available; select members free of warping, checks or splits. Before completion of the work, replace all warped, checked, or split columns, beams, stringers and railings.

### C) BEARING

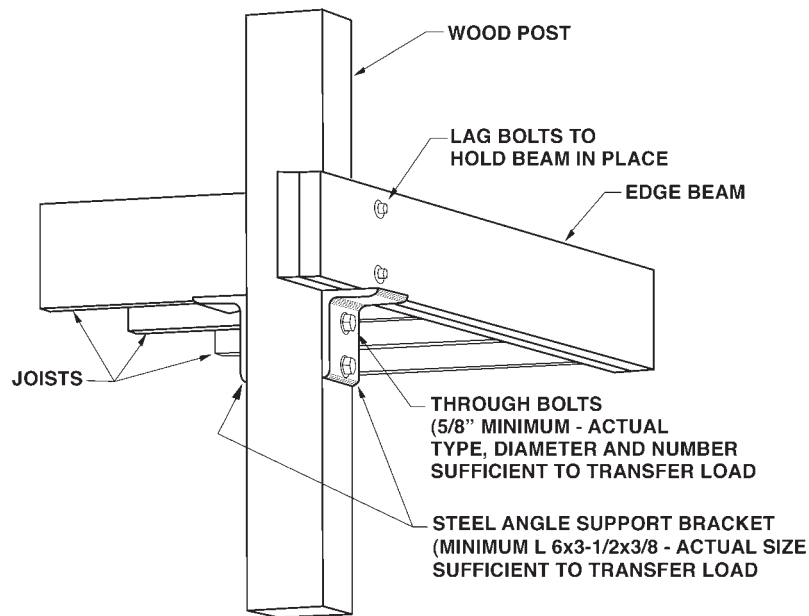
Porch columns shall bear on concrete foundations which bear on footings 3'- 6" below grade or on masonry area well walls which have foundations 3'- 6" below grade.



Provide concrete starter step (one full riser high) on which lowest stringers and newel posts shall bear.

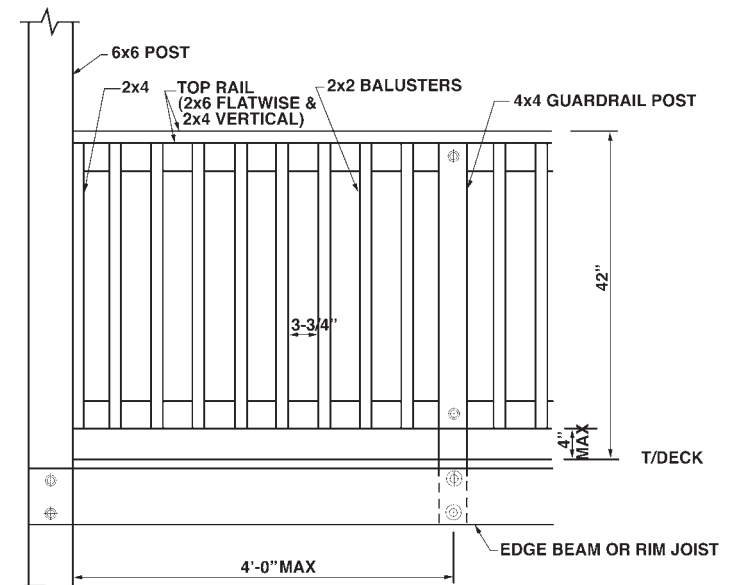
#### D) CONSTRUCTION DETAILS

Pitch porch decks away from the building exterior walls and doors for drainage. Column joints shall be constructed with half-lap joints, and all column joints shall be through-bolted. Where allowed by code, beams (look-outs) shall be fire cut at the masonry pockets in the building walls with 4" minimum bearing, and they shall be tied to masonry with strap anchors. Beam pockets shall be filled with grout. Where ledgers are used to support joists from masonry walls, these shall be bolted to the masonry and joists shall be connected to the ledgers with appropriately sized joist hangers.



#### E) STAIRS

All risers shall be the same height from grade to top floor. All stairs shall be closed with solid risers. Stair construction workmanship shall be consistent with the best-recognized carpentry practices. Stair width shall be 36" minimum. Tread depth shall be 10" minimum and riser height shall be 8" maximum.



#### F) RAILINGS

Provide porch and stair railings and guards at locations and heights **required by code**. Porch guardrails shall be at minimum 42" high. Provide 42"-high minimum guards around basement area wells and provide handrails at all basement stairs. Handrail height on stairs shall be 32" unless otherwise required by code. Handrails shall be no larger than 2"x 4" stock.

## VI. ROOFING

### A) GENERAL

Reroofing work may include either modified bitumen or EPDM roof membrane over base sheet. In most cases, built-up roofing is outdated and should no longer be used. Within the city of Chicago, the particular product proposed must meet the emissivity and reflectivity standards in the Chicago Energy Code. Workmanship shall conform to the best practices of the industry.

### B) TEAR OFF

Tear off existing roofing materials down to the wood or concrete deck if there are more than two (2) layers of existing roofing present. If the extent of replacement or repair of existing wood decking or roof joists is unknown, the contractor shall state in the proposal the cost of this work in \$/SF or \$/LF to establish justification for a change order during construction.

### C) DRAINAGE

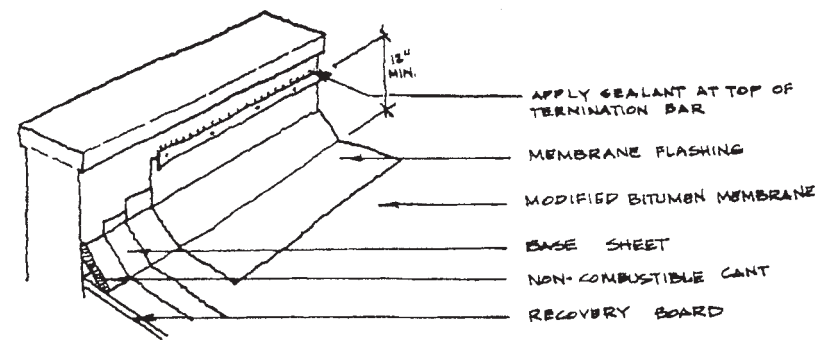
Provide positive drainage of roof decking before starting the installation of the membrane. Provide recovery board (e.g., "Fescoboard") under roof membrane base sheet in strict accordance with the requirements of the roofing system manufacturer.

### D) FLASHING

Remove all flashings from the roof side of the parapets. If bituminous materials are installed up parapets and under or over the copings, these materials shall be removed. Tuckpoint the roof side of the parapets fully from roof deck to top of parapet after removal of roofing and flashings. Remove and replace all broken and deteriorated bricks and mortar. Rebuild parapets if brickwork has opened and has been displaced by freeze-thaw recycling of trapped water. Parapets shall be smooth and solid

before application of roofing and flashings. Remove and re-set loose coping tiles and repoint. Replace all broken vitreous tiles. Similarly repair, replace or re-set limestone copings if any.

Install **non-combustible cant strips** at the transition from roof to parapet walls, and install **aluminum termination bars** to parapet walls to terminate flashings 12" above the roof deck. Attach termination bars with anchors and apply sealant continuously on the top edge at completion. Where parapets are less than 12" in height, the termination bars may be eliminated at those areas, and flashings shall extend up over the parapet walls to be covered by vitreous coping tile.



FLASHING AT MODIFIED BITUMEN ROOF

### E) ROOF VENTS

Provide roof vents as required by code and in strict accordance with the roofing system manufacturer's printed instructions.

### F) ROOF COATING

Apply a locally-approved reflective coating according to the manufacturer's printed instructions over modified or built-up roof surface upon completion in order to extend membrane life and to enhance energy efficiency.



## G) GUTTERS AND DOWNSPOUTS

Replace damaged sheet metal gutters and downspouts with appropriately sized material.

## VII. EXTERIOR PAINTING

The contractor shall conform to manufacturer's printed instructions in the preparation and application of all painting materials.

The contractor shall paint only after preparing the work by cleaning and removing loose paint by scraping. New metals require a prime coat and a topcoat. Existing metal requires spot priming and a top coat. New wood requires a prime coat and a topcoat. Existing wood requires spot priming and as many coats as is necessary for complete coverage.

New steel lintels shall be shop primed and receive one field coat of paint **before installation in masonry**.

All painting and paint prep shall be in compliance with the latest requirements of local or federal authority.

## VIII. ELECTRICAL

### A) LOAD CALCULATIONS AND SHOP DRAWINGS

Provide load calculations to justify the size of the new building service. Provide a diagram of entrance service drop and conductor sizes with disconnect switch, meter fittings and apartment breaker panels.

### B) CIRCUITS

Upon completion each apartment shall be equipped with a **minimum** of three (3) branch power and lighting circuits of 15

amps each and one (1) appliance branch circuit of 20 amps (#12 AWG) supplying at least two (2) duplex receptacles in the kitchen. Circuits for furnaces and air conditioning units shall be in addition to these. The location and number of receptacles in each room and the distances permitted between them shall be as required by code. Provide ground fault protection in kitchens, baths and laundry areas and provide lighting in closets, all as required by code.

### C) GROUNDING

An electrician shall be responsible to maintain ground connections during removal and replacement of plumbing service to the building and to conform to code requirements for grounding at completion.

## IX. DOMESTIC HOT WATER

### A) SIZING HEATER

Provide adequate hot water capacity for apartments and laundry facilities whether by central or individual hot water heaters

### B) FLUES

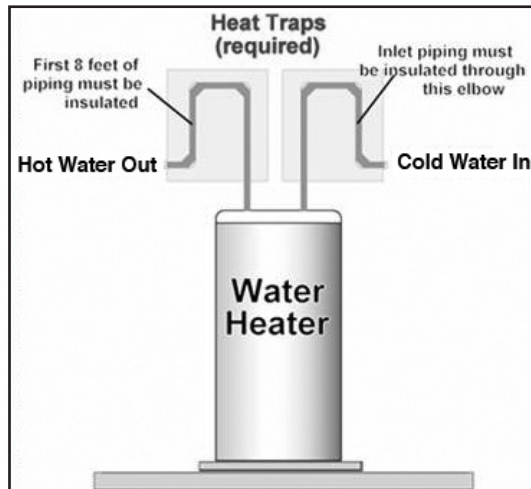
The proposal shall specify flue type as required for heater and the location of the flue and/or flue liner or PVC lines to walls or roof. Contractor shall be responsible to satisfy code requirements for the placement of the flue(s). Electronic flue dampers are recommended to increase energy efficiency but must meet code requirements.

### C) SAFETY FEATURES

Provide containment pans with drains under water heaters located in apartments. Install temperature and pressure relief valves and drain lines. Install black iron piping, manual shut off valves, and dirt legs on gas supplies.

## D) HEAT TRAPS

Heat traps shall be installed on water heaters as required by local energy codes.



## X. CENTRAL HEATING SYSTEMS

### A) SIZING BOILERS

When central boiler replacement is required, provide adequate steam or hot water capacity for the building distribution to comply with the comfort requirements set in the code.

### B) ENERGY EFFICIENCY

Provide an energy efficient boiler control system with, at a minimum, an outside temperature sensor, multiple indoor sensors to calculate average building temperature, nighttime setback, and a remote return line aquastat.

Electronic flue dampers are recommended to increase energy efficiency, but must meet code requirements.

## C) CHIMNEY

Make all necessary corrections and repairs to the existing chimney and/or prepare for and install flue liner.

## D) RADIATORS

Make repairs or replace radiators throughout. Where radiators are replaced they shall be of sufficient capacity to provide code-required comfort levels. Replace faulty or leaking radiator valves. Replace radiator air vents and return line vents (steam systems) and balance the entire system during operation to provide orifices of proper speed for even heat distribution.

## XI. INDIVIDUAL FORCED AIR FURNACES

### A) SIZING FURNACES

When individual forced air furnaces are added in a building, provide CIC with a copy of the required permit drawings showing size and location of supply and return ductwork, flues and combustion air, as well as a heat loss schedule. Submit the manufacturer's selection chart indicating the furnace size(s) chosen.

Provide humidifiers for all furnaces when required by code. Provide drain lines if required for type of humidifier.

### B) ENERGY EFFICIENCY

Properly sized furnaces improve energy efficiency. Do not oversize furnaces. Ductwork connections must be properly sealed to prevent air loss. Ductwork located in unfinished attics should be insulated. Provide combustion air for furnaces as required by code.

## C) FLUES

Make all necessary corrections and repairs to the existing chimney and/or prepare for and install flue liner, or provide a separate B-vent. For high efficiency furnaces, PVC lines may be provided as permitted by code. Identify specific location and height of PVC lines at exterior walls or roof.

## D) DUCTWORK

Provide **sheet metal ductwork** in accordance with SMACMA standards and building code requirements. Provide fire dampers as required by code where ductwork penetrates firewalls. Enclose all ductwork in drywalled soffits and extend the soffits so that the registers are located at the exterior walls of rooms, preferably above the window.

## E) SAFETY FEATURES

Provide dirt legs on gas lines. Seal flue at chimney. Close off openings in ceilings where B-vents penetrate floor or roof construction. Furnaces should be set on non-combustible construction. Furnaces in basements should be set on concrete pads or raised on concrete blocks.

## XII. UNIT FINISHES

### A) FLOORS

At the end of the rehab project, all floors shall be level, without major deflections and without any trip hazards.

### B) INTERCOM SYSTEMS

All intercom systems shall be operable with two-way voice and electronic door release.

### C) KITCHENS

Each kitchen shall have a minimum of five linear feet of base and wall cabinets and countertop. If replacing cabinets, the replacements must be hardwood face frame and door construction.

### D) BATHROOMS

Tub surrounds shall be constructed of water resistant material. Ceramic tile installed on a cement board substrate is the preferred material, but other high-quality water resistant materials may be acceptable.

### E) TRIM

Window stools shall be made of a water-resistant material.

## energy savers

Energy Savers lowers operating costs of apartment buildings by reducing energy usage. Average energy savings are 30% per year. CNT Energy partners with CIC to provide free energy analysis of most multifamily buildings. Call CIC for information on energy analysis and financing, or go to:

[www.cicchicago.com/energy-savers](http://www.cicchicago.com/energy-savers)

### QUALIFICATIONS

The property must be:

1. An apartment building with five or more units;
2. Located in the cities of Chicago or Rockford; or the Illinois counties of Cook, Lake, Kane, DuPage, Will, McHenry, or Kendall; and
3. In need of energy-related repairs.

### ELIGIBLE ENERGY ITEMS

These include but are not necessarily limited to:

- Air-sealing and insulation
- Installation of high-efficiency heating plants (or high-efficiency individual furnaces)
- Replacement of hot water tanks
- Entry door replacement
- Installation of low-flow plumbing fixtures
- Window replacement with a more efficient product.

### FINANCING

To finance the project through CIC, a second mortgage lien will be placed against the property. The first mortgage lien must allow the subordinate loan to be secured with a subordinate mortgage. Financing through CIC is not required. For latest information on terms and interest rates, call CIC at **312.258.0070**.

## CIC Offers You More!

CIC provides combined permanent and construction financing to rehab multifamily apartment buildings with five or more units in Cook, DuPage, Kane, Lake, McHenry and Will counties in Illinois. There are many good reasons to take your deal to CIC.

### *Our in-house financing, construction reviews, closing and servicing functions...*

- Help borrowers understand their financing options
- Give direction to first-time property buyers
- Help link borrowers with government agencies and programs
- Inspect the borrower's building
- Review the scope of work
- Expand and refine scope of work required for the building
- Evaluate the financial condition and reputation of the contractor
- Help review and prepare construction documents.

CIC's closing staff prepares all required documents, lowering legal costs to borrowers.

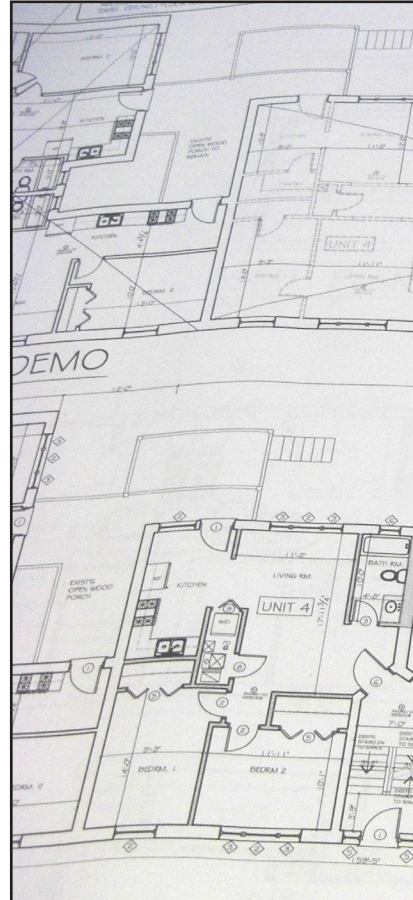
The experienced CIC servicing staff maintains frequent contact with borrowers and can assist you with various issues that may arise during the construction phase, including property management, insurance and taxes. You will find more information about loan terms, including construction loans, on the CIC website.



**Community Investment Corporation**

[www.cicchicago.com](http://www.cicchicago.com) • 312.258.0070

**Community Investment Corporation, Chicagoland's leading multifamily rehab lender, provides mortgage financing to buy and rehab apartment buildings with five or more units in the six-county Chicago area. CIC also offers Energy Savers loans and property management training.**



**Community Investment Corporation**

222 S. Riverside Plaza, Suite 2200

Chicago, IL 60606-6109

312.258.0070

[info@cicchicago.com](mailto:info@cicchicago.com)

[www.cicchicago.com](http://www.cicchicago.com)