

# **HOME LPA REHABILITATION STANDARDS**

**Part 2 of 2**

Presented by:  
**ICF Consulting, Inc.**

For:

**New York State**

**Division of Housing and Community Renewal  
Office of Community Development**

Facilitator:

**Gerry Diaz**

**Presentation prepared by Community Revitalization Training Center**

- Phones
- Restrooms
- Schedule and breaks
- Interactive format
- Sticky questions

# Course Goals

**Upon completion of the training, participants will be able to:**

- Describe procedure for determination of a rehabilitation scope of work and feasibility of the project
- Describe the content and language of quality specifications
- Implement procedures for construction quality control
- Document inspection findings to support quality control

# Introductions

**Please stand and tell us:**

- Your name, organization and title
- Your most memorable experience involving the quality of rehab construction



# Course Schedule

## Morning

Registration and Welcome  
Introduction, Expectations, Goals,  
Overview  
Developing a Scope of Work –  
Lecture/Discussion  
HOMEfires Vol. 3, No. 1  
Feasibility Determination –  
Discussion/Brainstorm  
Feasibility Policy – Exercise and  
Debrief  
*-Break-*  
Quality Specifications  
*-Lunch-*

## Afternoon

Specification Writing  
Quality Control – Recognizing  
Quality – Slides/Discussion  
*-Break-*  
Specifications and Quality Control –  
Exercise and Debrief  
Quality Control Inspection and  
Documentation – Simulated  
Inspection Exercise  
Exercise Debrief  
Evaluation  
*-End-*

# Terminology of Housing Rehabilitation

1. Building Codes
2. Program Rehabilitation Standards
3. Housing Codes
4. Scope of Work
5. Specifications
6. Rehabilitation Feasibility
7. Risk Assessment
8. Energy Audit

# Terminology of Housing Rehabilitation

## EXERCISE:

- In your table group appoint a recorder to write your group's definition of the assigned term on transparency.
- Appoint a reporter to present your group's definition.
- We will take 8 minutes.

# **Improving Rehabilitation Construction Quality**

- HUD CPD Notice 90-33

## **Appendix 1**

# **Nine Elements of a Rehab Construction Quality Control System**

## **1. Property Owners Guidebook**

- Educate the property owner about the realities of the rehab process
- Delineate the roles and expectations for all parties

# Nine Elements (cont)

## 2. Rehab Standards and Specifications

- Written performance standards for each program defining minimum standards to be met after rehab
- Written technical specifications defining repair methods and materials required to meet the performance standards

# Nine Elements (cont)

## 3. Work Write-Ups

- Clearly written and well organized
- Precise definition of work to be done
- Include technical specifications (may be by reference)
- Readily understood by all parties

# Nine Elements (cont)

## 4. Cost Estimates

- Professionally derived
- Based on the scope of work and technical specifications

# Nine Elements (cont)

## 5. Contractor Selection Procedures

- Written procedures for selecting contractors
- Define who is responsible for contractor selection
- Outline bidding requirements
- List minimum qualifications for contractor participation

Procurement of services – 24 CFR 85.63 vs.  
Common Rule

# Nine Elements (cont)

## 6. Property Inspection Policies

- Written policies defining roles and responsibilities of inspectors
- How and when inspectors will be scheduled
- Method for quality control monitoring

# Nine Elements (cont)

## 7. Contract and Accompanying Construction Documents

### Contracts should include:

- Roles and responsibilities of all parties
- Construction schedule
- Contract price
- Provisions for inspections and payments
- Provisions for holdback of funds
- Change order procedures
- Dispute resolution procedures

# Nine Elements (cont)

## 7. Contract and Accompanying Construction Documents (cont)

### Contracts should include:

- Warranty terms and conditions
- All essential construction documents including work write-up and technical specifications
- Provisions for termination for cause and convenience
- Davis-Bacon requirements

# Nine Elements (cont)

## 8. Pre-Construction Conferences

- On site with contractor, homeowner and program representative
- Address scope of work, schedule, special conditions and any other questions from any of the parties

# Nine Elements (cont)

## 9. Complaint Resolution Procedures

- Established, equitable process for dispute resolution
- Neutral third party, preferably an established service

# Minimum Rehabilitation Standards

## Federal Requirements

**HOME** funds require compliance with:

- Local written rehabilitation standards
- And, with applicable state and local code requirements
- Or, if no local codes apply, one of the National Model Codes or the HUD FHA Minimum Property Standards

ICC – International Property Standards

BOCA – National Building Code

ICBO – Uniform Building Code

BCCI – Standard Building Code

CABO – One and Two-Family Dwelling Code

ICC – International Residential Code for One and Two-Family Dwellings

FHA – Minimum Property Standards

At 24 CFR 200.925 (Multi-family)

Or 24 CFR 200.926 (1 & 2 Unit Dwellings)

# Minimum Rehabilitation Standards

## Federal Requirements (cont)

**CDBG** funds have less stringent code and standards requirements:

- CDBG rehabilitation activities, qualified under the “Slum and Blight” National Objective (25 CFR 570.208(b) (1-2) require:

Under the Area Basis Criteria the unit to be rehabilitated must be substandard by application of the local housing quality standard meeting or exceeding Section 8 HQS. Deficiencies from standard must be corrected before non-critical items are addressed in the rehabilitation.

Under the Spot Basis Criteria rehabilitation must address only conditions that are detrimental to health and safety or necessary to meet other Federal requirements

- CDBG allows special purpose rehabilitation activities such as accessibility improvements, emergency repair, weatherization and roof repair programs which do not “standardize” units.

# Minimum Rehabilitation Standards (cont)

## Other Compliance Issues

Other requirements and standards may apply to a property to be rehabilitated. They may include requirements resultant from concerns having to do with:

- Environmental review
- Historic properties
- Flood plain management
- Wild and scenic rivers
- Coastal zone management
- Noise abatement and control
- Airport clear zones and accident potential areas
- State and local statutes
- Lead-Based Paint Poisoning and Prevention Act and 24 CFR Part 35
- Federal fire alarm and sprinkler requirements
- Accessibility

# Code Associations

## ICC

International Code Council

(includes BOCA, CABO, ICBO, SBCCI)

5203 Leesburg Pike, Suite 600

Falls Church, VA 22041

703-931-4533

[www.iccsafe.org](http://www.iccsafe.org)

# **New York State Codes**

## **Appendix 2**

# **HOMEfires – Vol. 3, No. 1**

## **January 2001**

- Written rehabilitation standards
- Property standards
- How do they differ

### **Appendix 3**

# Property standards are:

- Housing quality standards
- Used to determine decent, safe and sanitary conditions
- Inspection standards for judging the actual physical condition of a property
- Used as an inspection baseline
- Used to determine deficiencies
- Used to determine scope of rehabilitation necessary

# Written Rehabilitation Standards

- Establish standards for the rehabilitation work that will bring substandard housing into compliance with the property standard
- Prescribe methods and materials and work quality to be used in rehabilitation
- Sometimes referred to as “specs” or specifications

# Written Rehabilitation Standards (cont)

- Include general specifications/ performance standards
- Include details such as grade of lumber and number of nails to be used
- Provide a common basis for contractor bids

# Written Rehabilitation Standards (cont)

- Help determine cost reasonableness
- Help assure high quality work
- Are required to be adopted by each PJ under the HOME Final Rule

# Building Codes

- Are legal regulations adopted by the jurisdiction (City, County, State)
- Govern standards for new construction for new and old buildings, including homes
- May include chapters governing the “rehabilitation” of “existing buildings”

# Building Codes (cont)

- May include property standards or “existing building” codes
- May include a “rehabilitation” code

# Building Codes (cont)

- HUD's Nationally Applicable Recommended Rehabilitation Provisions (NARRP 1997) and the HUD PDR publication "Smart Codes in Your Community" may provide guidance

# Types of Codes and Standards

- There are a number of different codes and standards that may apply to your construction program, including:
  - ✓ Housing Standards/Housing Code
  - ✓ Building Codes
  - ✓ Rehabilitation Code
  - ✓ Rehabilitation Standards

# Other Federal Codes and Standards

- The following may be applicable:
  - ✓ Accessibility requirements
  - ✓ Environmental review
  - ✓ Lead-based paint regulations
  - ✓ Historic preservation
  - ✓ Energy conservation
  - ✓ Manufactured housing standards
- These can be included in Methods and Materials Specifications

# Inspection and Construction Standards

To operate quality rehabilitation programs, we must define inspection and construction standards, including:

- A housing quality standard (or “housing code”) for inspecting existing housing and identifying deficiencies that must be addressed to meet the requirements of the HOME program. This would include requirements beyond the jurisdiction’s code, such as, for large rental properties, Section 504 accessibility.

# Inspection and Construction Standards (cont)

- A protocol for lead paint risk assessments on pre-1978 properties where paint will be disturbed.
- A building code that establishes the standards for all new work on existing structures. In the absence of a state or local code, the HOME Program requires the use of a national model code or FHA minimum property standards.

# Inspection and Construction Standards (cont)

- Rehabilitation standards or performance standards that specify the types and quality of repairs, equipment, installation, and finish materials that will be provided by the program. This would include any special guidance required for contractors that is not included in the building code. This might also specify any work that might not be eligible under the program.

# The IRC

is compatible with all the international codes (I-codes):

- Building code
- Electrical code
- Energy conservation code
- Existing building code
- Fire code
- Fuel gas code
- Mechanical code
- Performance code
- Plumbing code
- Private sewage disposal code
- Property maintenance code
- Urban wildland interface code
- Zoning code

# The IRC (cont)

- Model code development process was initiated in 1996
- Included representatives from: ICC, BOCA, CABO, SBCCI
- Intended to be the successor to previous property maintenance codes
- A new edition is promulgated every three years
- Current edition is 2006

# The IRC (cont)

## Are:

- Available for adoption by local jurisdictions (with modifications)
- Kept up-to-date through an open code development process in which all interested parties may participate
- Intended to protect public health, safety and welfare
- Intended to incorporate provisions which do not unnecessarily increase construction costs; not restrict new or varying materials or methods of construction

# Scope of Work

## **Definition:**

A list of the work to be done to bring a property into conformance with applicable standards and the owner's allowed requirements.

# Scope of Work

## Exercise:

- How do you determine the scope of work for a property in your program?
- List the steps.
- How might you improve the process?

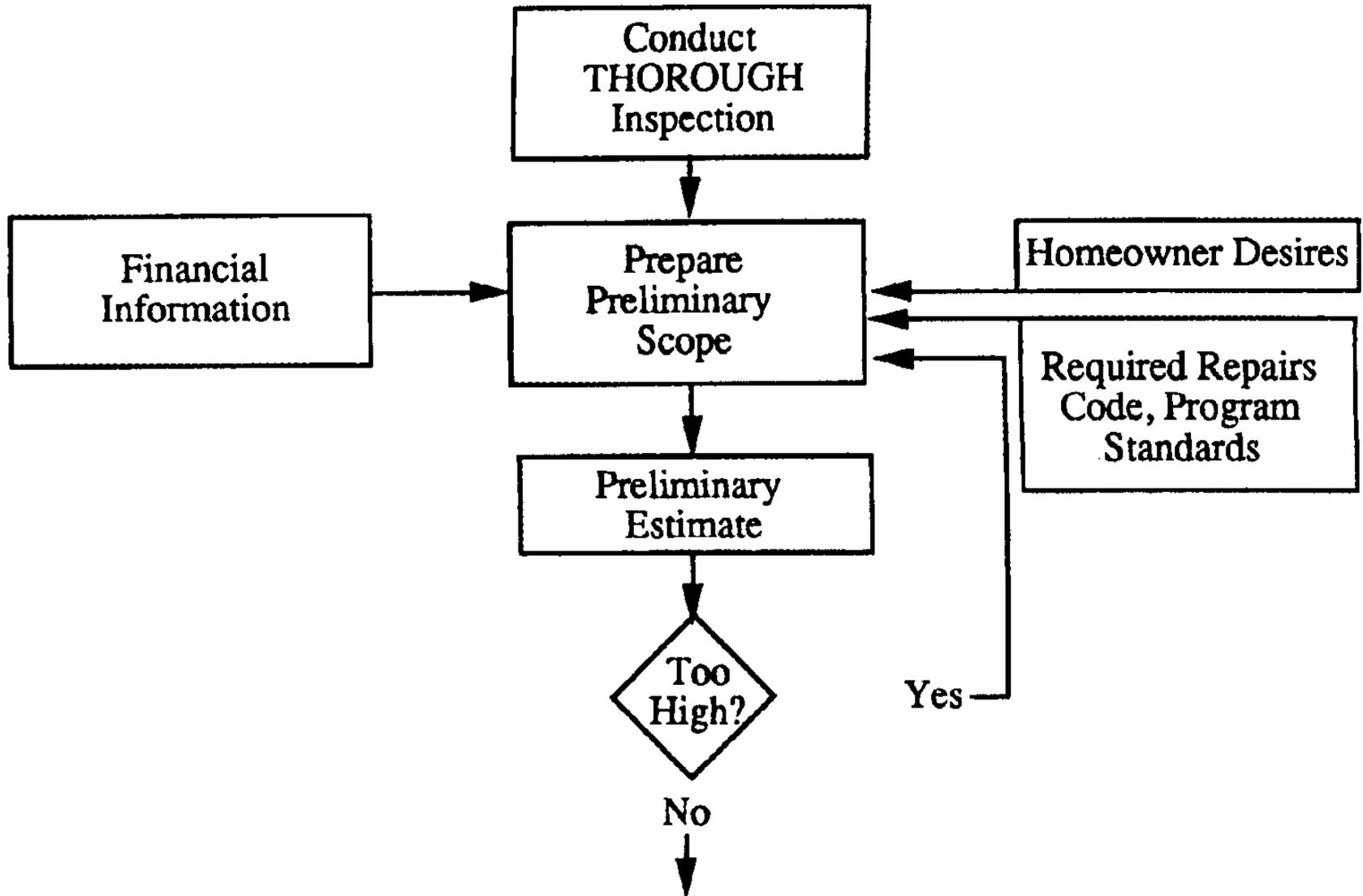
# **SPECIFICATION AND FEASIBILITY PROCESS**

# Specification Writing is a Process

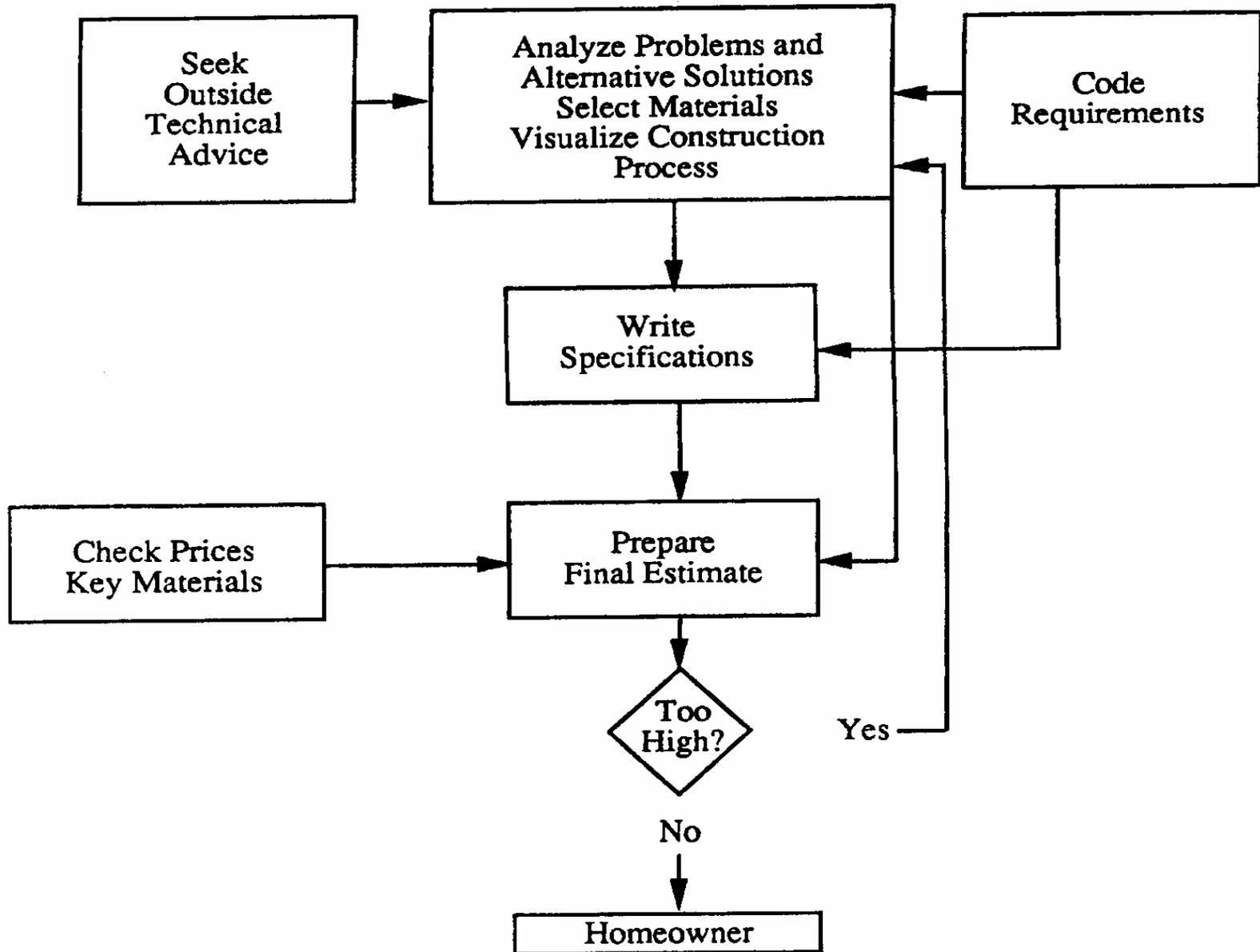
## **After conducting a thorough inspection:**

1. Prepare outline of preliminary scope of work
2. Prepare preliminary estimate
3. Analyze problems in terms of causes, alternative solutions, and selection of materials
4. Visualize the work process construction tradespeople will undertake to complete the work
5. Write the specification
6. Prepare final estimate
7. Revise scope of specifications if estimate is too high
8. Meet with homeowner for review and revision

# THE SPECIFICATION WRITING PROCESS



# THE SPECIFICATION WRITING PROCESS



The process is not always this  
simple – See **Appendix 4**

# Feasibility

- Trying to rehab a property that is not feasible within our resources is disastrous!
- What problems are created?

# Rehabilitation Feasibility

## Brainstorm

- What makes a property infeasible for rehabilitation?

# Brainstorm

- Elements of a feasibility policy

# **SPECIFICATION WRITING**

# Specification Writing

## Definition of specifications:

The American Heritage Dictionary defines specifications as: “Usually plural. A detailed and exact statement of particulars; especially, a statement prescribing materials, dimensions, and workmanship for something to be built, installed, or manufactured.

# Introduction To Specification Writing

## Seven C's of Specification Writing:

1. **Command** (use imperative mood)
2. **Clear** (avoid ambiguity)
3. **Concise** (use word conservation)
4. **Correct** (proofread)
5. **Consistent** (no contradictions)
6. **Composition** (format)
7. **Complete** (use Spec Writer's Checklist)

# **Introduction To Specification Writing (cont)**

**Information provided by specifications:**

## **The Specifications Writer's Checklist**

1. Scope of work
2. Construction method
3. Quantity
4. Quality
5. Location
6. Coordination of trades
7. Installation of performance standards
8. Reference to Performance Manual

# Introduction To Specification Writing (cont)

## Types of specifications:

1. Descriptive
2. Performance
3. Reference
4. Proprietary....with variations
5. Cash allowance

# **Introduction To Specification Writing (cont)**

## **Formats for specifications:**

1. Room-by-room approach
2. Trade-by-trade approach

# **The Language of Specifications**

The contractor should brush his teeth every day.

The contractor shall brush his teeth every day.

Install a combination storm door at front entrance.

Install right hand combination  
storm/screen door at front entrance.

Storm door: Sears model SDX45

Color: White

Install new forced air furnace.

Remove existing furnace and install gas fired furnace. Connect to existing ductwork.

Furnace: Crane, Series 2400

Size: In accordance with Manual J calculations as supplied by contractor

Replace any missing or damaged floor tile with new tile to match existing.

Replace approximately 6 square feet of defective or missing floor tile in proximity of sink. Tile to match existing as closely as possible.

Any new wood should be painted 2 coats of Benjamin Moore oil-based or equal.

Paint all surfaces of all new wood on rear porch with one coat Benjamin Moore Moorwhite Primer and all exposed surfaces with 2 coats Benjamin Moore High Gloss Enamelized House Paint.

New 40-gallon Rheem 5-year warranty,  
gas HWH to be installed in basement.

Install 40-gallon gas hot water heater in basement near existing chimney.

Hot water tank: Rheem 5-year warranty model #HP205.

Install new standard size bathroom vanity.

Install 24 inch vanity in upstairs bathroom.

Vanity: Excel, Avon model A-116-24

Electrician should install duplex receptacles in master bedroom per code.

Install 2 ivory duplex receptacles, one on east and one on west wall of master bedroom.

Install 2 smoke alarm detectors per code.

Install 2 ceiling-mounted, battery-operated smoke detectors: one over stairwell in second floor hall and one in first floor hall near dining room entrance.

Alarms: First Alert Model 1000-B

Replace existing gutters and downspouts to service entire roof area of building and porches.

Replace all existing gutters and downspouts with .032 inch seamless, K-style aluminum gutters and downspouts with white, baked enamel finish. (Approximately 180 linear feet)

Strip and sand either side of existing front door to be smooth for paint.

Strip and sand all sides of existing front door.

Install approximately 8 new aluminum combination window units on north and east side windows.

Storm windows: Season-All Chatham model #S119 with baked enamel finish.

Install 8 aluminum combination storm window units on north and east windows as per elevation sketches

Storm windows: Season-All, Chatham model #S119 with white baked enamel finish.

Provide and install approximately 12 feet of 1 x 4 inch base moulding on north living room wall.

Install approximately 12 feet 5 inches of 4 inch ranch style pine base moulding on north living room wall cope corner joints.

Install 32” electric range with timer, window in oven door, and bottom storage drawer, General Electric or equal.

Install 30 inch electric range as per drawing.

Range: General Electric model #1000.

# Scope of Work - Exercise

## Bathroom rehab

- We will conduct an inspection of the bathroom slides
- Work in your table group to list on transparency a scope of work to rehab the bathroom to meet the HUD Housing Quality Standards
- Appoint a recorder and a spokesperson
- We will take 10 minutes

# HUD HQS

- Review bathroom requirements

## Appendix 5 - HQS















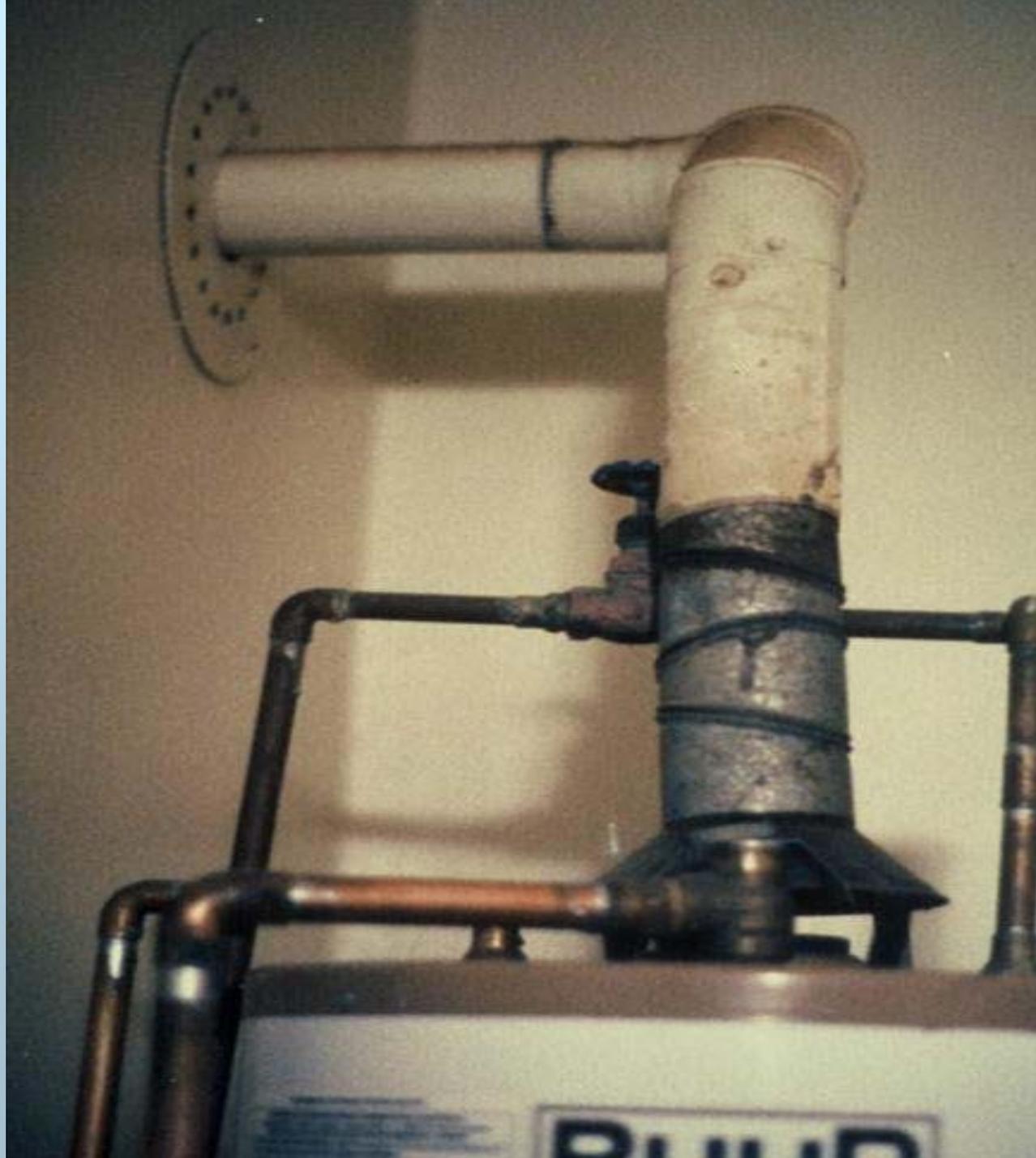






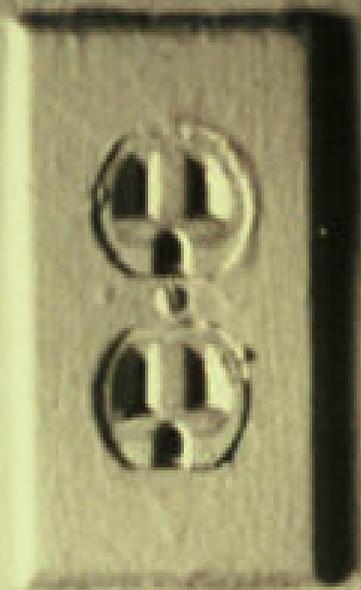


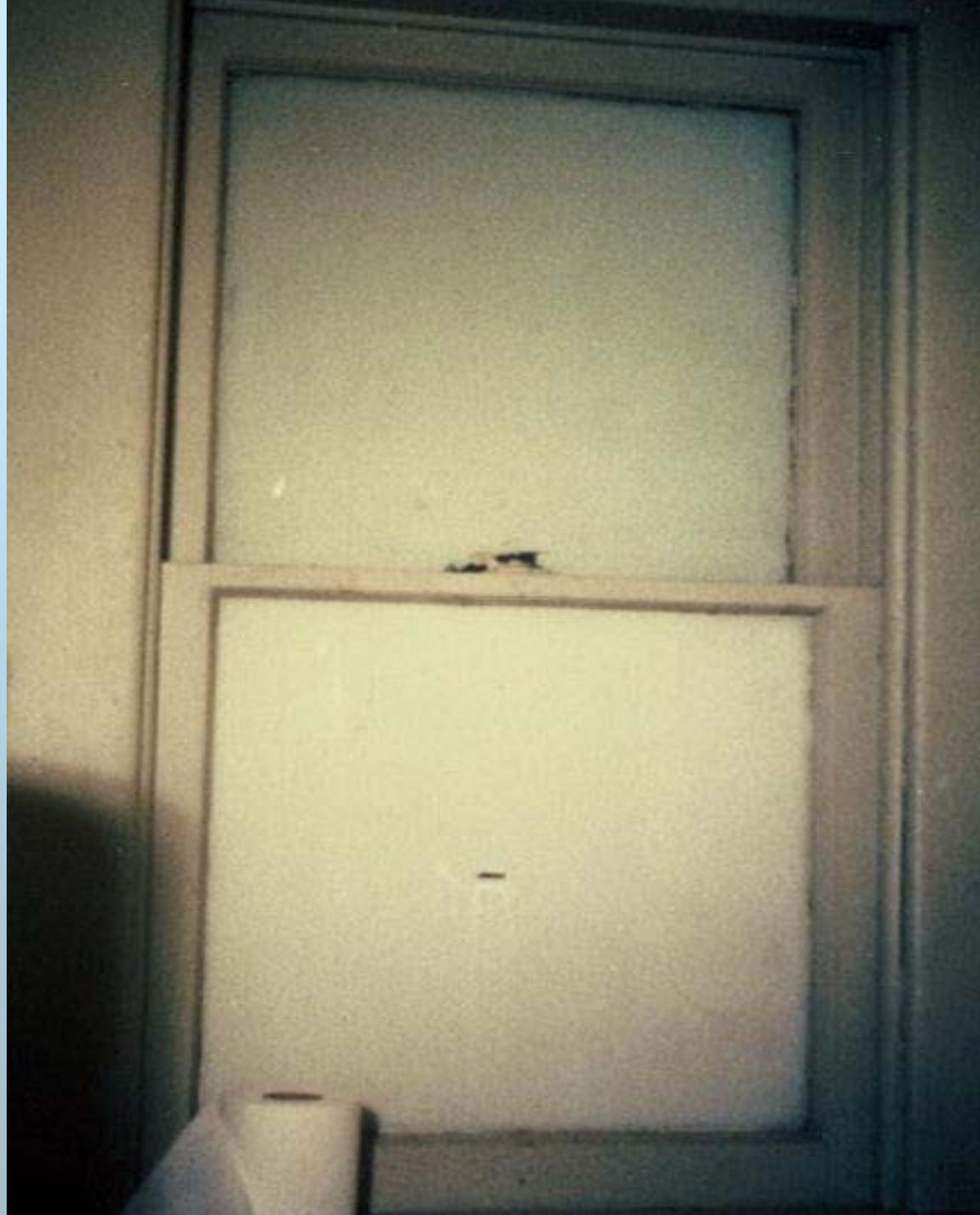






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# Performance Manual

## A. Definition/ Purpose

1. Intent
2. Content
3. Example

# **Construction Specification Institute (CSI)**

CSI MasterFormat handout

# Performance Manual (cont)

## A. Definition/ Purpose (cont)

4. CSI 16 Division format
  - Division 1 General Conditions
  - Division 2 Site work
  - Division 3 Concrete
  - Division 4 Masonry
  - Division 5 Metals
  - Division 6 Carpentry
  - Division 7 Moisture control
  - Division 8 Doors/windows and glass
  - Division 9 Finishes
  - Division 10 Specialties
  - Division 11 Equipment
  - Division 12 Furnishings
  - Division 13 Special equipment
  - Division 14 Conveying system
  - Division 15 Mechanical
  - Division 16 Electrical

# Without Performance Manual

## Water Heater

Install one 52-gallon quick recovery electric water heater in laundry room near washer. Tank shall have a 5-year warranty. Install shut-off valve on the cold water line. Install an R-7 insulation wrapper on the tank.

# Performance Manual

## 15.091 Water Heater Package

Package shall include a new glass-lined quick recovery water heater, size as specified in the work list. Heater shall be equipped with a shut-off valve on incoming water line. A pressure and temperature operated relief valve of 150 psi and 210°F rating with a discharge pipe of uniform diameter to the outside of the dwelling with a visible terminus or to within 6” of a concrete floor having drainage shall be installed. Install fuel piping, draft and vent or wiring as appropriate to type. Heater shall have a 5-year warranty on tank and shall be UL listed or AGA approved. Tank shall have a minimum R-7 insulation or a designated heater insulation kit of R-7 shall be installed per its manufacturer’s instructions.

# Specification as Listed in the Work List (Write-Up)

## Laundry Room

### 15.091 Water Heater Package

Install 52-gallon electric water heater package to the south of the washer in the corner of the room.

# Specification Writing - Exercise

- Write specifications to accomplish one item of your bathroom scope of work on transparency
- Use the Specification Writer's Checklist and the Seven C's
- Note what should be referenced in performance specifications
- Appoint a recorder and spokesperson
- We will take 10 minutes

# Recognizing Quality

- Recognizing quality and insisting upon quality yields quality work

Slides: Quality Finish Carpentry

# Carpentry – Notes

# **SPECIFICATION AND QUALITY CONTROL**

- The work write-up specifications guide inspections for payment

See example work write-up – **Appendix 6**

# Quality Control Exercise - A

- Work in your table groups
- Choose two specifications from the area of the house assigned to your group
- During inspection for payment of the selected line items, what would you look for?
- List the inspection check points for each selected line item
- Appoint a spokesperson to report your results

# Areas

- Basement
- Living room 1<sup>st</sup> floor
- 1<sup>st</sup> floor hallway
- 1<sup>st</sup> floor bath
- 1<sup>st</sup> floor bedroom (front)
- 1<sup>st</sup> floor bedroom (rear)
- Upper unit living room (w/closet)

# Quality Control Exercise - B

## Simulated Inspection

- We will view slides of work the contractor requested payment for

# Exercise

## Simulated Inspection

- For the trade items assigned to your group, judge each as either:
  - Pass / Payment due
  - Fail / Don't pay

# Exercise

## Simulated Inspection

- For each failed item, list what is wrong in an inspectable manner
- Avoid ambiguity
- Be prepared to report your results as we view the slides a second time