Invitation for Bid Residential Property Rehabilitation 134 Parsonage Street



Redevelopment Authority of the City of Pittston 35 Broad St.

Suite 202

Pittston, PA 18640

The Redevelopment Authority of the City of Pittston (RDA) is hereby soliciting competitive bids for the rehabilitation of their residential rental property located at 134 Parsonage Street. Attached is the Violation Report from the City of Pittston Codes Officer. Work to be completed including, but is limited to numerous window replacements, flooring replacements, new siding, replacement of ceiling tiles, replacement of hard-wired smoke detectors and replacement of the rear porch. The successful bidder ("Bidder") will be required to furnish all material, equipment, supplies, applicable taxes, insurance, bonding (if applicable), permits, and licenses to complete the project.

General Bid Information:

Bid Title	134 Parsonage Street Rehabilitation
Bid Type	Construction
Bid Issued	7/13/20
Publication Date	7/14/20
Bid Due Date	7/30/20 3:00pm
Pre-Bid Meeting *	7/23/20 10AM at 134 Parsonage
	Street, Pittston, PA 18640

^{*} Masks are required for the Pre-Bid meeting.

Instruction for Submitting Bids:

Submittal Address	Pittston Redevelopment Authority 35 Broad St. Suite 202	
Submittal Copies	Pittston, PA 18640 One (1) Original	
Submittal Envelope Requirements	Bids must be sealed and have the following information visible on the outside of the envelope: Bid Title Name of Your Company Address Phone Number	
Late Submittals	Bid received after the time and date stated in the Bid Due Date section shall be returned unopened.	

How to Obtain Bid Documents:

10 11 10 C C C C C C C C C C C C C C C C		
Physical Address	Pittston Redevelopment Authority	
	35 Broad St.	
	Suite 202	
	Pittston, PA 18640	
Website	www.pittstoncity.org	

Questions about the Bid or Request for Information:

Primary Contact	Mary Kuna
	570-654-4601 Ext 237
	mkuna@pittstonrda.com
Question/RFI Due Date	Please submit questions as soon as
	possible. No questions regarding the
	specifications will be responded to
	after the above date. All pertinent
	questions will be responded to in
	writing no later than July 22, 2020.

INSTRUCTIONS TO BIDDERS:

- Required Bid Items/Work Write Up: Bidders are asked to break down each item
 and cost as noted in the attached violation report. They are asked to provide a
 write up of the proposed work to be done and any specifics they consider
 pertinent to the project.
- 2. <u>Pre-Bid Conference</u>: A mandatory pre-bid conference will be held July 20th, 2020 at 10AM at 134 Parsonage Street.
- 3. <u>Certificate of Insurance:</u> Contractor must submit a certificate of insurance listing the City of Pittston, and The Redevelopment Authority of the City of Pittston as additionally insured prior to issuance of a Contract.

The contractor must have Contractor's General Liability Insurance, including Contractual Liability Insurance and Completed Operations Insurance. The minimum amounts are as follows:

- \$1,000,000 Combined Single Limit General Liability
- \$2,000,000 General Aggregate
- Workman's Compensation (Statutory limits as required by the
- Commonwealth of PA)
- \$1,000,000 Pollution Liability
- **4.** <u>W-9:</u> Contractor must submit a W-9 Request for Taxpayer Identification and Certification with their bid proposal.
- 5. Performance Bond: If this box □ is checked and your Bid exceeds \$25,000, a Performance Bond is required prior to issuance of a Contract. The successful Bidder shall be required to submit the Performance Bond as specified in the Contract Documents. The required Bond shall be calculated on the maximum Total Bid Price. A Bidder's failure to submit the Bond requested shall result in rejection of their Bid.
- 6. <u>Timeline:</u> All work is expected to be completed within 120 days of contract execution. Extensions may be provided as mutually agreed upon in writing and specified in the contract.

- 7. <u>Required Progress Inspections:</u> RDA staff will monitor the progress of the job through visits.
- 8. <u>Company Debarment/Suspension:</u> Upon receipt of bids, the RDA will reject any bidder that has been debarred by the Commonwealth of Pennsylvania Department of General Services or the United States Department of Labor.
- 9. <u>Equal Opportunity:</u> The contractor shall take affirmative action to ensure employees and applicants for employment are treated without regard to their race, color, religion, sex, national origin, age or disability.
- 10. <u>Conflicts of Interest:</u> In order to avoid conflicts of interest in awarding contracts or making purchases of property or service under this program:
 No contract or procurement will b made with any organization, in which any person in an administrative capacity may benefit.
 No contract or procurement will be made to any organization, in which an immediate family member of a person in an administrative capacity may benefit.

No employees or board shall solicit or accept gratuities, favors, or anything of monetary value from contractors, providers, or potential subcontractors.

Attachments

- 1. Bid Form (PLEASE RETURN WITH SUBMISSION)
- 2. Agreement Terms (PLEASE RETURN WITH SUBMISSION)
- 3. W-9 (PLEASE RETURN WITH SUBMISSION)
- 4. Pittston Notice of Violation Report
- 5. Contractor's Note
- 6. General Bid Specifications

Agreement Terms

- 1. If awarded the Contract, the undersigned hereby agrees to sign said Contract and furnish the necessary Performance Bond and Insurance Form within twenty (20) Calendar days after the Notice of the Award of this Contract.
- 2. The undersigned has checked carefully all the above figures and understands that the Redevelopment Authority of the City of Pittston will not be responsible for any errors or omissions on the part of the undersigned in making up this Bid.
- 3. The Redevelopment Authority of the City of Pittston reserves the right to reject any or all Bids, to waive any irregularities or informalities not affected by law, to evaluate the Bids submitted and to award the Contract according to the Bid which best serves the interests of the Authority.
- 4. All pages of this Bid Form/Packet must be completed and signed in ink. The Bid will be awarded to the lowest responsive, responsible Bidder.

Bidder's Name:	Initials:

BID FORM

Bidder's Name:	_ Title:
Contact Person (if different from Bidder):	
Address:	
Telephone:	
Fax:	
Email:	
Contractor License # (if applicable):	

PLEASE REVIEW THE INSPECTION REPORT CAREFULLY BEFORE BIDDING.

REPLACEMENT IS TO BE SIMILAR IN STYE-MINIMUM MID-GRADE QUALITY. RDA TO SELECT PAINT COLORS.

			112
ltem	Standard	Amount	Contractor Bid Price
Sidewalks	5000lbs concrete mix. minimum 4" thick, meets PennDOT requirments	Approx. 240 SF	\$
Exterior siding, flashing, soffits and insulation underlayment	ASTM standard for insulated vinyl siding (ASTM D7792)		\$
Replace front porch	Exterior Pressure Treated Lumber		\$
Remove unused oil tanks			\$
Remove rear egress three story two level porches and replace with landings and stairs	Exterior Pressure Treated Lumber, Handrails and Roof Supports		\$
Replace rear entry doors	Steel Security Door	5	\$
Replace second floor front entry door	Steel Security Door	1	\$
Paint all exterior doors and window frames			\$
Replace all damaged interior doors			\$
Paint Interior Walls and Ceiling			\$
Patch Walls where needed			\$
Repair interior handrails where needed	Handrails must comply with 2015 IRC		\$
Replace damaged ceiling tiles			\$
Repair all damaged light fixtures			\$
Pressure test water lines			\$
Replace knob and tube wiring in basement where visible			\$
Missing and damaged smoke alarms must be replaced			\$
Replace any missing or damaged cabinet doors in the kitchen			\$
Replace broken windows	With same or similar existing brand and style as adjacent windows	Front Left and Front Right Broken Window (2)	
		Back Right Bedroom (2)	TOTAL WINDOW REPLACEMENT COST
		Replace Kitchen Window (1)	
		Replace Pantry Window (1)	\$
Replace vinyl kitchen floor, cover base and carpet throughout	Vinyl floor- Style Selections 4X36 Plank Flooring (or similar)	Approx. 2,415 SF Carpet	TOTAL FLOORING REPLACEMENT COST
	Carpet- Stainmaster Essentials Soft Winner Interior (or Equivalent)	Approx. 366 SF Vinyl	\$
		***************************************	-

Signature:		
Printed Name:	Date:	
Attested By:		
Printed Name:	Date:	

Pittston City Residential Home Rehab Inspection Report

Completed on 5/13/20, 10:16 AM

Document No. 134 Parsonage Street

Audit Title Renovations 134 Parsonage Street

Location
134 Parsonage St
Pittston PA 18640
United States
(41.33053096952516, -75.78262668183807)

Conducted on 5/12/20, 3:26 PM

City of Pittston Inspection

Question	Response Details	
Location	134 Parsonage St Pittston PA 18640 United States (41.33053096952516, -75.78262668183807)	
Date & Time	5/12/20, 1:27 PM	
Access Granted By	Owner	
Type of Inspection	Initial	
INSPECTION REPORT		
§301 - §302 Exterior Property Violations	§302.3 Sidewalks & Driveways	
Comments	Sidewalks need to be replaced. 5000 lb concrete mix, minimum 4" thick. Must meet pen-dot requirements.	
Pictures		
§303 Swimming Pool, Hot Tub &/or Spa Violations	No	
§304 Exterior Structure Violations	§304.2 Exterior Paint/Finish, §304.6 Exterior Walls, §304.7 Roofs & Drainage, §304.9 Exterior Overhangs, §304.10 Exterior Stairs, Decks, Porches & Balconies, §304.12 Exterior Handrails, §304.13 Windows & Skylights, §304.14 Window Screens, §304.15 Exterior Doors	
Comments	Exterior siding, flashing, soffits and insulation underlayment needs to be replaced. ASTM standard for insulated vinyl siding (ASTM D7793)	
	Replace broken windows and repair remaining widows and screens add egress bedroom window. Egress minimum net clear opening of 5.7 square feet.	
	Replace front porch remove unused oil tanks. Exterior pressure treated lumber.	
	Replace rear egress three story two level porches 42' wide x 8' deep, 2 flights of stairs with handrails and roof supports. Exterior pressure treated lumber.	

	Replace 5 rear entry doors and one second floor front entry door. Steel security doors Paint exterior door and window frames.
	Paint exterior door and window frames.
Siding Type	Aluminum
Approximate age of siding	50 years or older
Roof	Asphalt
Approximate Age of Roof	25-30 years old
§305 Interior Structure Violations	§305.3 Interior Surfaces, §305.4 Interior Stairs & Walking Surfaces, §305.5 Interior Handrails, §305.6 Interior Doors
Comments	Replace all damaged interior doors.
	Paint interior walls and ceilings, patch walls where needed.
	Repair interior handrails where needed. Handrails must comply with 2015 IRC
	Replace damaged ceiling tiles.
	Replace vinyl kitchen floor, cove base, and carpet throughout.
§401 - §403 Light &/or Ventilation Violations	§402.1 Habitable Space Lighting
Comments	No electricity at dwelling at time of inspection.
Pictures	
§501 - §507 Plumbing, Fixtures & Drainage Violations	§502.1 Required Dwelling Unit Facilities, §505.4 Water Heater, §506.2 Sewage Pipe Maintenance
Comments	Water service was not active at time of inspection. Water lines and water heater need to be tested once water is turned back on. Water line pressure test should be conducted prior to water service being activated.
Water Heater Type	Natural Gas

Heating System Type		Natural Gas			
§601 - §607 Mechanical &/or Electrical Violations			§602.1/2 Required Heating Facilities, §604.1 Required Electrical Facilities		
Comments		Gas and electrical service not active at time of inspection. Boiler needs to be tested once water and gas is active. Unable to inspect electrical receptacles for proper installation. Numerous junction box's are missing covers in basement. Knob and tube wiring needs to be removed, and replaced with romex where present. Any additional knob and tube wiring that is concealed needs to be replaced. Pressure test water lines. Replace knob and tube wiring in basement where visible.			
Electrical Service Type		Breake	Breakers		
Wiring Type	MATERIAL PROPERTY AND	Rome	Romex and knob and tube		
§701 - §704 Fire Safety Vio	lations	§704.2/3/4 Smoke Alarms			
Comments		Missing and damaged smoke alarms need to be replaced.			
§108 Unsafe/Unsanitary Pro Occupancy / Condemned)	perty (Unfit for	Currently unlivable due to lack of utilities.			
Maximum Occupant Load		7			
Additional Comments		No			
Inspection completed by	Harry Smith		5/13/20 10:16 AM		

City of Pittston - 35 Broad Street, Pittston, PA 18640 - 570.654.0513

NOTICE: SOME REPAIRS MAY NEED PERMITS. CONTACT THE CITY OF PITTSTON CODE ENFORCEMENT OFFICE TO DETERMINE WHAT REPAIRS REQUIRE PERMITS.

The scope of this report is a limited visual inspection of the general systems and components of the building and property to identify any item listed in the report which may be in need of correction.

This report is not a warranty or guarantee (expressed or implied) that the items are defect free, or that latent or concealed defects do not exist, may have existed in the past, or may exist or become evident in the future, or that the defects we have referenced in this report are the only defects that exist. This report is not a statement of suitability for future expansion or use.

To avoid damage claims and other risks, inspectors do not climb to inspect or walk roofs. Roofs, chimneys, gutters and roof penetrations are observed from the ground, which imposes obvious limitations on this part of the inspection.

Any area which is not exposed to view, is concealed, or is inaccessible because of soil, walls, floors, carpets, ceilings,

furnishing or any other thing is not included in this inspection. The inspection does not include any destructive testing or dismantling.

(Rev. August 2010)

Department of the Treasury

Request for Taxpayer Identification Number and Certification

Give Form to the requester. Do not send to the IRS.

Interna	il Ravenua Sarvica					
	Name (as shown o	on your income tax return)				
d	Business name/dis	srogardad antity nama, if different from above				
age			Exemplions (see instructions):			
Print or type Specific Instructions on page		s box for factoral tax classification:				
	Individual/sole	e proprietor C Corporation S Corporation Partnership Trusvestate	Exampl payes code (if any)			
	☐ Hankad Kabill	illy company. Enter the tax clessification (C=C corporation, S=S corporation, P=partnership) >	Examplion from FATCA reporting			
P	Limited Habin	ny company, and into tax diastillocation (5-5 dispersion)	code (II any)			
rit Fact	Other (see In	- Leading the state of the stat				
Fig. 1	Address (number,	sirest, and apt. or suite no.) Requester's name	and address (optional)			
ec.	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					
S	City, state, and Zif	Picode				
See	,					
	List account numb	per(s) here (optional)				
	Taxpa	yer Identification Number (TIN)	acurity number			
Calar	TINI in the an	antontiate hay the tial provided mist match the hatte divolt utilitie rights with				
1.1	Lallan note prot	olding. For Individuals, this is your social security number (SSN). However, for a prietor, or disregarded entity, see the Part I instructions on page 3. For other	- -			
antiti	es, it is your ample	over Identification number (EIN). If you do not have a number, see How to get a	_			
TIMO	n page 3.	ranto de la constanta de la co	or Identification number			
Nota	. If the account is i	In more than one name, see the chart on page 4 for guidelines on whose				
numi	per to enter.	•	-			
भण्ड	THE Cartif	ication				
	Certifier penalties of perior					
4 11	a number choun	on this form is my correct taxpayer identification number for I am waiting for a number to be	leaued to me), and			
		the state of the s	a politied by the intelligit payering			
	arvica (IRS) (nat La	BU SCOIGGE IO DECKND MIDIOIGIES AS A LEAGUE OF A PAINT OF A PAINT OF A LANGA FOR	(c) the IRS has notified me that I am			
n	o longer subject to	backup withholding, and				
3.1	am a U.S. citizan c	r other U.S. person (defined below), and				
		y	does not apply. For mortgage			
beca	iusa you nave lalle	d to report all interest and dividends on your lex letters. To real salute to an industrial	rettrament arrangement (IRA), and			
Inter	est paid, acquisitio raily, navmants oli	on or abandonment of secured property, cancellation of debt, contributions to an individual her.than interest and dividends, you are not required to sign the certification, but you must	provide your correct TIN. See the			
Instr	Instructions on page 3.					
Sig			•			
Her						
-		and a large state of the state	ra of affectively connected income, and			

General Instructions

Section references are to the internal Revenue Code unless otherwise noted. Future developments. The IRS has created a page on IRS.gov for information about Form W-9, at www.lrs.gov/w9, Information about any luture developments affecting Form W-9 (such as legislation anacted after we release II) will be posted on that page.

Purpose of Form

A person who is required to the an information return with the IRS must obtain your A person who is required to the an information return with the three must obtain you correct taxpayer identification number (TIN) to report, for example, income paid to you, payments made to you in sattlement of payment card and linit party network transactions, real satata transactions, mortgage interest you paid, acquisition of abandonment of secured property, cancellation of debt, or contributions you made

Use Form W-9 only if you are a U.S. person (including a resident allen), to provide your correct TIN to the person requesting it (the requester) and, when applicable, to:

- 1. Dertify that the TIN you are giving is correct (or you are waiting for a number
- 2. Certify that you are not subject to backup withholding, or
- Claim exemption from backup withholding if you are a U.S. exempt payes, if applicable, you are also sertifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the

withholding tax on loreign partners' shere of effectively

4. Certify that FATCA code(s) entered on this form (if any) indicating that you are exempt from the FATOA reporting, is correct.

Note, If you are a U.S. person and a requester gives you a form other than Form W-9 to request your TiN, you must use the requester's form if it is substantially almilar to this Form W-9.

Definition of a U.S. person. For lederal tax purposes, you are considered a U.S. person if you are:

- An Individual who is a U.S. citizen or U.S. resident allen.
- A partnership, corporation, company, or association created or organized in the United States or under the layer of the United States,
- · An estate (other than a foreign estate), or
- A domestic trust (as defined in Regulations section 301.7701-7).

Special rules for partnerships. Partnerships that conduct a trade or business in Special rules for partnerships. Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax under ascilon 1448 on any foreign partners' share of effacilities on one death taxable income from such business. Further, in certain cases where a Form W-9 has not been received, the rules under section 1448 require a partnership to presume that a partner is a foreign person, and pay the section 1448 withholding tax. Therefore, if you are a U.S. person that is a partner in a partnership conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid section 1448 withholding on your share of partnership income.

CONTRACTOR'S NOTE

CONTRACTORS ARE NOT TO ADD OR DELETE FROM SPECIFICATIONS

All contractor-generated debris must be cleaned up and legally disposed of! FINAL PAYMENT WILL NOT BE MADE UNTIL ALL DEBRIS IS REMOVED FROM THE JOB SITE—THIS INCLUDES DUMPSTERS.

All permits and fees are to be included in the total prices. Permits are the responsibility of the general contractor unless arrangements have been made with a sub-contractor.

All contractors, by bidding this job, are acknowledging that they understand and are aware of the procedures set forth by the Redevelopment Authority of the City of Pittston pertaining to the adhereance of the one year completion warranty.

The manufacturer's instructions for all materials and equipment that are supplied and installed on this job are to be strictly adhered to.

If applicable, all contractors must supply a roof warranty from the roof manufactor at the termination of the job. He/she must provide a three year return warranty in case of a leak that occurs during this three year period of time, providing it is not due to damage from an act of God or a tree falling on the home. The last payment will not be made by the Redevelopment Authority unless this is adhered to.

ALL WORK MUST CONFORM TO ACT 45, THE UNIFORMED CONSTRUCTION CODE AND CURRENT IRC AND LOCAL ORDINANCES.

Redevelopment Authority of the City of Pittston 35 Broad Street – Suite 202 Pittston, PA 18640

General Bid Specifications 134 PARSONAGE STREET REHABILITATION

This General Bid Specification is to be given to all contractors who are bidding on HOME Rehabilitation projects. They will govern all areas of construction for all projects administered by this agency. The City of Pittston has adopted the Pennsylvania Uniform Construction Code by ordinance, in any instances this specification manual is less than that of The City of Pittston Codes the greater shall be followed.

GENERAL BID SPECIFICATIONS

PURPOSE	I
GUARANTEES	П
PERMITS and FEES	III
PROTECTION of PROPERTY and WORKERS	IV
MEASUREMENTS	V
SUPERVISION	VI
MATERIALS	VII
LABOR	VIII
INSPECTION and PAYMENT	IX
INSURANCE	X
INDEX FOR TECHNICAL SPECIFICATIONS	XI

I. PURPOSE

The purpose of the General Bid Specifications (GBS) is twofold; first they provide details on materials, quality standards, and equivalent requirements, as well as installation or performance procedures and standards: second, by establishing these standards, all bids should be based on similar materials and methods. Of equal importance, they will eliminate lengthy job descriptions on individual Work Write Up that accompanies each project. The standards and installation instructions contained in the GBS in some cases exceed the requirements of the City of Pittston Codes, in those cases, the higher standard shall apply. In no case are the standards in the GBS below the City of Pittston Codes.

Contractors are warned that no changes, alterations, or substitutions to work specified on Work Write Up shall be acceptable to Redevelopment Authority of the City of Pittston (RDA) unless such alterations are contained in a fully executed and official Change Order which requires the written approval of the RDA. Any work not related to that, which was contracted and approved by RDA, shall not be performed until all contracted work and accompanying Change Orders, if any, are completed and have passed inspection.

II. GUARANTEES

Unless otherwise specified, all workmanship and materials shall be guaranteed for a period of one year. All printed guarantees must be submitted to the RDA at time of installation.

Note: Since RDA cannot be present on all jobs at all times, the materials and methods used may pass final inspection, when in fact they are sub-standard if this is found to be true the contractor will be responsible to bring the deficient materials or standards up to standards.

Example: All stucco must be applied over wire mesh.

If an unscrupulous General Contractor applied stucco directly over brick, and cracks appear two years later, the General Contractor will be responsible for repairs. The warranty will go into effect only when the job is performed correctly.

III. PERMITS and FEES

No work shall commence until the General Contractor has obtained all necessary permits and Notice to Proceed order. The General Contractor shall be responsible for procuring any and all inspections and /or certificates required. The General Contractor shall be responsible for obtaining any and all information necessary to complete the job in accordance with local codes, i.e. elevations for curbs and sidewalks, etc. Note about value of work reported on permit: must be in accordance with City Ordinance.

IV. PROTECTION of PROPERTY and WORKERS

The General Contractor shall provide protective measures as necessary to comply with OSHA regulations as pertain to residential construction. The General Contractor shall inform any and all subcontractors of the Federal Guidelines concerning the use of lead base paint.

The General Contractor shall insure that all necessary precautions are being taken to minimize damage to adjacent areas and neighboring properties, i.e. drop cloths, trash chutes.

The General Contractor shall collect and remove all debris resulting from work under this contract. The premises shall be broom cleaned after each day's work. The General Contractor will be held responsible for all damages resulting from improper protection. There shall be no extra cost to the RDA.

All contractors and sub contractors shall be registered with the State of Pennsylvania and have certificates on file with RDA.

All contractors who disturb the required minimum number of painted surfaces must have certificates showing EPA Lead Renovator training.

V. MEASUREMENTS

All measurements and sizes on Work Write Up are approximate. The General Contractor is responsible for field measuring all dimensions. Submission of a bid shall be evidence that the General Contractor has examined the property in question and assumes all responsibility for conforming to the specifications set forth.

VI. SUPERVISION

The General Contractor shall supervise and direct the work, using his best skill and attention. The General Contractor shall be solely responsible for all construction means, methods, and techniques, sequences, and procedures, and for coordinating all portions of the work under contract. The General Contractor shall maintain a qualified foreman on the job at all times.

VII. MATERIALS

The General Contractor shall guarantee that all materials and equipment used in the work will be new unless otherwise specified in the Work Write Up, and that all work will be of good quality, free from defects and in conformance with the General Bid Specifications and local building codes. All work not so conforming to these standards may be considered defective. Any substitution, for brand name items as called for in the GBS or Work Write Up, shall be approved by the RDA in advance.

VIII. LABOR

All work shall be performed in the best and most professional manner by mechanics skilled in their trades. Any mechanics considered by RDA to be unskilled may be dismissed from the work upon notice from RDA; all workmanship will be of the highest quality. The General Contractor shall be solely responsible for contracting with competent and licensed Contractors when such license is required.

IX. INSPECTION and PAYMENT

The Rehabilitation Inspector or designate of RDA and / or the agent of the City of Pittston shall do progress inspections of the contract work. The Rehabilitation Inspector shall perform the final inspection. When the Rehabilitation Inspector is satisfied that an appropriate amount of work and materials is complete, she / he may authorize a partial payment. These inspections must be completed before any payment will be released.

The final inspection will be made with the General Contractor or their agent only when all work is completed as called for in the Work Write Up. And after the Pre-final punch list has been given to Rehabilitation Department

as complete. Should there be any item not satisfactorily completed, the General Contractor or their agent will be given a final punch list to complete. No re-inspection will be made until all items on list are completed.

X. INSURANCE

- A. The contractor will be required to provide insurance of the prescribed type and minimum amounts as set forth in the Contractor's Agreement. All required insurance policies shall be maintained in full force until all work under this contract is complete and evidenced by formal acceptance in writing by the Redevelopment Authority of the City of Pittston.
- B. If s/he has not already done so, the contractor to whom the contract is awarded must furnish insurance certificates evidencing that s/he has provided the required coverage to RDA of the City of Pittston within in twenty (20) calendar days of the date of official notice of award of contract. S/he may be required at a later date and upon specific request by RDA of the City of Pittston to furnish certified copies of any or all insurance policies related to protection for work under the contract. RDA of the City of Pittston will not be liable for the payment of any premiums under the foregoing and certificates or policies shall be endorsed to that effect.
- C. The certificate of insurance must indicate the insurance company, which is providing the coverage. Said company must be authorized to do business in the state of Pennsylvania (protected by the Insurance Guarantee Fund) and be an A-rated insurance company to be acceptable. Neither approval by RDA of the City of Pittston nor a failure to disapprove insurance certificates by the contractor shall release the contractor from full responsibility for all liability.
- D. Required Minimum Coverage: The contractor must have Contractor's General Liability Insurance, including Contractual Liability Insurance and Completed Operations Insurance. The minimum amounts are as follows:

\$1,000,000 Combined Single Limit General Liability \$2,000,000 General Aggregate Workman's Compensation (Statutory limits as required by the Commonwealth of PA \$1,000,000 Pollution Liability

RDA and the City of Pittston have to be added to contractor's policy as an additional insured by endorsement.

Redevelopment Authority of the City of Pittston 35 Broad Street – Suite 202 Pittston, PA 18640

General Bid Specifications 134 PARSONAGE STREET REHABILITATION

This General Bid Specification is to be given to all contractors who are bidding on 134 Parsonage Street Rehabilitation project. The City of Pittston has adopted the Pennsylvania Uniform Construction Code by ordinance, in any instances this specification manual is less than that of The City of Pittston Codes the greater shall be followed.

GENERAL BID SPECIFICATIONS

PURPOSE	I
GUARANTEES	П
PERMITS and FEES	Ш
PROTECTION of PROPERTY and WORKERS	IV
MEASUREMENTS	V
SUPERVISION	VI
MATERIALS	VII
LABOR	VIII
INSPECTION and PAYMENT	IX
INSURANCE	X
INDEX FOR TECHNICAL SPECIFICATIONS	ΧI

I. PURPOSE

The purpose of the General Bid Specifications (GBS) is twofold; first they provide details on materials, quality standards, and equivalent requirements, as well as installation or performance procedures and standards: second, by establishing these standards, all bids should be based on similar materials and methods. Of equal importance, they will eliminate lengthy job descriptions on individual Work Write Up that accompanies each project. The standards and installation instructions contained in the GBS in some cases exceed the requirements of the City of Pittston Codes, in those cases, the higher standard shall apply. In no case are the standards in the GBS below the City of Pittston Codes.

Contractors are warned that no changes, alterations, or substitutions to work specified on Work Write Up shall be acceptable to Redevelopment Authority of the City of Pittston (RDA) unless such alterations are contained in a fully executed and official Change Order which requires the written approval of the RDA. Any work not related to that, which was contracted and approved by RDA, shall not be performed until all contracted work and accompanying Change Orders, if any, are completed and have passed inspection.

II. GUARANTEES

Unless otherwise specified, all workmanship and materials shall be guaranteed for a period of one year. All printed guarantees must be submitted to the RDA at time of installation.

Note: Since RDA cannot be present on all jobs at all times, the materials and methods used may pass final inspection, when in fact they are sub-standard if this is found to be true the contractor will be responsible to bring the deficient materials or standards up to standards.

Example: All stucco must be applied over wire mesh.

If an unscrupulous General Contractor applied stucco directly over brick, and cracks appear two years later, the General Contractor will be responsible for repairs. The warranty will go into effect only when the job is performed correctly.

III. PERMITS and FEES

No work shall commence until the General Contractor has obtained all necessary permits and Notice to Proceed order. The General Contractor shall be responsible for procuring any and all inspections and /or certificates required. The General Contractor shall be responsible for obtaining any and all information necessary to complete the job in accordance with local codes, i.e. elevations for curbs and sidewalks, etc. Note about value of work reported on permit: must be in accordance with City Ordinance.

IV. PROTECTION of PROPERTY and WORKERS

The General Contractor shall provide protective measures as necessary to comply with OSHA regulations as pertain to residential construction. The General Contractor shall inform any and all subcontractors of the Federal Guidelines concerning the use of lead base paint.

The General Contractor shall insure that all necessary precautions are being taken to minimize damage to adjacent areas and neighboring properties, i.e. drop cloths, trash chutes.

The General Contractor shall collect and remove all debris resulting from work under this contract. The premises shall be broom cleaned after each day's work. The General Contractor will be held responsible for all damages resulting from improper protection. There shall be no extra cost to the RDA.

All contractors and sub contractors shall be registered with the State of Pennsylvania and have certificates on file with RDA.

All contractors who disturb the required minimum number of painted surfaces must have certificates showing EPA Lead Renovator training.

V. MEASUREMENTS

All measurements and sizes on Work Write Up are approximate. The General Contractor is responsible for field measuring all dimensions. Submission of a bid shall be evidence that the General Contractor has examined the property in question and assumes all responsibility for conforming to the specifications set forth.

VI. SUPERVISION

The General Contractor shall supervise and direct the work, using his best skill and attention. The General Contractor shall be solely responsible for all construction means, methods, and techniques, sequences, and procedures, and for coordinating all portions of the work under contract. The General Contractor shall maintain a qualified foreman on the job at all times.

VII. MATERIALS

The General Contractor shall guarantee that all materials and equipment used in the work will be new unless otherwise specified in the Work Write Up, and that all work will be of good quality, free from defects and in conformance with the General Bid Specifications and local building codes. All work not so conforming to these standards may be considered defective. Any substitution, for brand name items as called for in the GBS or Work Write Up, shall be approved by the RDA in advance.

VIII. LABOR

All work shall be performed in the best and most professional manner by mechanics skilled in their trades. Any mechanics considered by RDA to be unskilled may be dismissed from the work upon notice from RDA; all workmanship will be of the highest quality. The General Contractor shall be solely responsible for contracting with competent and licensed Contractors when such license is required.

IX. INSPECTION and PAYMENT

The Rehabilitation Inspector or designate of RDA and / or the agent of the City of Pittston shall do progress inspections of the contract work. The Rehabilitation Inspector shall perform the final inspection. When the Rehabilitation Inspector is satisfied that an appropriate amount of work and materials is complete, she / he may authorize a partial payment. These inspections must be completed before any payment will be released.

The final inspection will be made with the General Contractor or their agent only when all work is completed as called for in the Work Write Up. And after the Pre-final punch list has been given to Rehabilitation Department

as complete. Should there be any item not satisfactorily completed, the General Contractor or their agent will be given a final punch list to complete. No re-inspection will be made until all items on list are completed.

X. INSURANCE

- A. The contractor will be required to provide insurance of the prescribed type and minimum amounts as set forth in the Contractor's Agreement. All required insurance policies shall be maintained in full force until all work under this contract is complete and evidenced by formal acceptance in writing by the Redevelopment Authority of the City of Pittston.
- B. If s/he has not already done so, the contractor to whom the contract is awarded must furnish insurance certificates evidencing that s/he has provided the required coverage to RDA of the City of Pittston within in twenty (20) calendar days of the date of official notice of award of contract. S/he may be required at a later date and upon specific request by RDA of the City of Pittston to furnish certified copies of any or all insurance policies related to protection for work under the contract. RDA of the City of Pittston will not be liable for the payment of any premiums under the foregoing and certificates or policies shall be endorsed to that effect.
- C. The certificate of insurance must indicate the insurance company, which is providing the coverage. Said company must be authorized to do business in the state of Pennsylvania (protected by the Insurance Guarantee Fund) and be an A-rated insurance company to be acceptable. Neither approval by RDA of the City of Pittston nor a failure to disapprove insurance certificates by the contractor shall release the contractor from full responsibility for all liability.
- D. Required Minimum Coverage: The contractor must have Contractor's General Liability Insurance, including Contractual Liability Insurance and Completed Operations Insurance. The minimum amounts are as follows:

\$1,000,000 Combined Single Limit General Liability \$2,000,000 General Aggregate Workman's Compensation (Statutory limits as required by the Commonwealth of PA \$1,000,000 Pollution Liability

RDA and the City of Pittston have to be added to contractor's policy as an additional insured by endorsement.

XI. INDEX FOR TECHNICAL SPECIFICATIONS

Section	Title
1.0	General
2.0	Site work
3.0	Concrete
4.0	Masonry
5.0	Metals
6.0	Carpentry
7.0	Roofing and Siding
8.0	Windows and Doors
9.0	Finishes
10.0	Specialties
11.0	Plumbing
12.0	Heating
13.0	Electric

1.0 GENERAL

1:1 Security

1:2 Salvage

1:3 Signage

1:4 Property Maintenance During Construction

1.0 GENERAL

1:1 Security

The general contractor will be responsible for the security of all materials, equipment, and buildings while under contract to perform work on said property, except in cases where property is occupied by owner. Contractor shall not be responsible for said items upon installation in occupied building. In situations when RDA is considered owner of property the contractor shall be responsible for said items until completion of contract and release after final inspection.

1:2 Salvage

The general contractor will be responsible for any and all items listed in the Scope of Work and/or shown on sketch plans that will be removed and retained for use and installation on project at a future time. All items shall be secured and protected from being damaged or stolen. Any item which is to remain and be reused that has been taken from project site the General Contractor is solely responsible to replace.

1:3 Signage

The general contractor shall have secured the RDA sign in a highly visible area. Any contractor may post their signs as long as they met all city regulations, are not offensive in nature and in no way block or denounce RDA in any way.

1:4 Property Maintenance During Construction

The projects General Contractor shall be responsible for the proper maintenance of the property from the date of proceed to work order to the final inspection and Certificate of Occupancy is obtained. This meaning that all weeds and rubbish shall be removed in a timely fashion. When a project occurs during the winter months all sidewalks and access areas shall be cleared of fallen snow within 4 hours.

2.0 SITEWORK

2:1	Demolition Work
2:1.1	Demolition
2:1.2	Removal
2:1.3	Clean up
2:2	Earthwork
2:2.1	Fill
2:2.2	Landscaping
2:2.2a	Sod/Seeding
2:2.3	Pest Control
2:3	Roads and Walks
2:3.1	Curbs
2:3.2	Concrete Paving
2:3.3	Brick Pavement
2:3.4	Bituminous Paving
2:4	Site Improvement
2:4.1	Fencing
2:4.1a	Chain Link (Cyclone)
2:4.1b	Wood Fencing

2:1 Demolition Work

2:1.1 Demolition

The contractor will be responsible for the safe removal of any demolition area. The contractor shall be responsible for the safety of his/her workers and the residents of the neighborhood. Any conditions deemed unsafe by RDA or by any other agencies shall cease immediately, until the proper precautions are taken to continue the work in a safe manner. Any material that contains a high amount of dust or air borne irritant shall be placed in plastic bags within the structure. Any part of the structure which is to be reapplied shall be kept in a manner as to not deteriorate this material.

2:1.2 Debris removal

All debris is to be removed by or to an appropriate waste disposal facility. Any Contractor whom chooses to use a dumpster will be responsible for obtaining the required permits from the Pittston City administrative office, located at 35 Broad Street, Pittston. These dumpsters are intended to only contain construction debris from RDA properties being rehabilitated. The use of the dumpster shall be monitored. The dumpster shall be covered and secured at all times. The dumpster shall also be removed on a timely basis as not to inconvenience any resident for an unreasonable time period. At no time will a final check be issued while a dumpster is still on site or in street containing debris associated with this project.

2:1.3 Clean up

Each property shall remain in a manner so as the site is not unsafe to work. Any all conditions that are considered unsafe shall be corrected before any further work can continue. The premises shall be kept clean and shall be cleaned on a daily basis.

The structure shall be thoroughly cleaned before RDA will take possession. This is to include windows, any cabinetry, and flooring. All hardware is to be free of paint, tape or any other construction marks. No debris shall ever be placed on neighboring properties at anytime for any reason.

2:2 Earthwork

2:2.1 Fill

Fill shall be free from topsoil, vegetable matter, roots, debris, (wood, glass, plaster etc) and all other deleterious materials. Stumps, roots, brush, shall be remover prior to filling. Final grade shall be set to slope away from buildings and adjacent dwellings.

2:2.2 Landscaping

All landscaping which is specified shall be disease -resistant and shall thrive in the climate zone. All plantings shall be guaranteed for a period of one year. Any area planted shall have a layer of aged mulch applied with a depth of 2" minimum.

Any and all landscaping shall compliment the structure.

2:2.2a Sod/Seeding

Area to receive sod or seeding shall have a minimum six inches (6") screened topsoil in place. Sod shall be laid in place, trimmed to fit area, rolled, compacted, watered, and fertilized to guarantee two (2) cuttings of two inches (2"). minimum. Seeding shall be spread to manufactures recommended volume per square foot, watered, fertilized, and mulched to guarantee two (2) cuttings of two inches (2") Minimum prior to issuance of final check.

2:2.3 Pest Extermination

Termite treatment, when specified, shall include all structures on property be treated. The treatment will be that treatment recommended by a bonded licensed exterminator to rid structures of all type termites and roaches. Treatment will be administered by a licensed exterminator and shall be guaranteed for one (1) year minimum. Chemicals used shall be those that will cause the least inconvenience to the property owner and neighbors. Any damage to structure, interior or exterior or to property contents shall be repaired or replaced. Extermination shall also remove and/or rid property and buildings of other pest, rodents, and creatures where there is evidence of infestation. Upon completion of job and before issuance of final check, no evidence of rodent or insect infestation may be present.

2:3 Roads and Walks

2:3.1 Concrete Curbing

All curbs and copings shall be a minimum eight inches (8") wide, two feet (2') in depth with expansion joints at a maximum distance of ten feet (10').

2:3.2 Concrete Paving / Walkways

Refer to section 3:1, concrete slabs.

2:3.3 Brick Pavement

All brick pavement shall be laid in a bed of screenings set to a uniform grade and compacted with a hand tamper. All vent boxes, water stops, curb stops will be adjusted up or down according to grade so that upon completion the tops are level with the bricks. Only whole brick shall be used except around said boxes and vents, header brick shall be used in back of curbing and along property lines. Tamp brick to a uniform grade, fill joints with sand or approved material and sweep clean.

2:3.4 Bituminous Paving (blacktop)

The area for installation of Bituminous paving shall be cleared of all course debris, grass, vegetation, and top soil. Surface shall have a minimum of three inches (3") of 2A modified installed and compacted, base coat of three inches (3") of BC/BC, compacted, and one- and one-half inches (1 ½") ID2 topping, rolled compacted. Grade will be set so as to have all run off pitched away from buildings and direct it to drainage run off area. This will only apply to Bituminous paving for recreation and off-street parking for residential property. Bituminous Paving shall not be used for curbing or sidewalks.

2:4 Site Improvements

2:4.1 Fencing

Certain fencing not permitted in Downtown Business District

2:4.1a Chain link (cyclone)

Chain link (Cyclone) fencing shall be Hot Dipped Galvanized #9 wire with galvanized post and fasteners. Corner, end, and gate post will be two-inch (2") diameter minimum. Intermediate post shall be one- and one-half inch (1 ½") diameter minimum. All post will be anchored in concrete, set plumb, and straight true lined. Entrance gates will be three foot (3") wide minimum and include hinges and latching device. All chain link fences shall have a top rail included with installation.

2:4.1b Wood Fencing

Wood fencing shall be secured with 4x 4 Treated lumber footed within a minimum of 12" circular footer no less than 24' from surface. These shall be at a maximum distance of 8'. The fencing shall be secure with galvanized 10pd nails or 3-1/2" hot dipped zinc coated deck screws with no less than 4 per panel. The fence type shall be picket in style and at a height of 6' from finished height of soil unless otherwise specified.

3:0 CONCRETE

3:0	General
3:1	Concrete
3:1.1	Concrete General Specifications
3:2	Cast in Place Concrete
3:2.1	Footings
3:2.2	Piers and Bases
3:2.3	Slabs
3:2.4	Steps
3:3	Pre-cast Concrete
3:3.1	Steps

3:0 GENERAL

- 3:0.1 All concrete construction shall comply with the IBC or IRC adopted and Pittston City Ordinance. Concrete delivered by transit mixed or in "mixed on site" type delivery vehicles will give a receipt showing the specifications of the concrete, such as: compressive strength, amount of water, if any additional water was added after the truck arrived on site and any additives. The air entrainment additive requirement must be indicated on the delivery receipt or RDA must assume there was no additive. This delivery receipt must be available to RDA and a copy submitted with the draw request containing the concrete.
- 3:0.2 Basement walls, foundations, & other concrete not exposed to weather shall be a minimum of 2,500 PSI *
- 3:0.3 Basement slabs and interior slabs on grade, except garage floor slabs shall be a minimum of 2,500 PSI *
- 3:0.4 Basement walls, foundation walls, exterior walls and other vertical concrete work exposed to the weather shall be 3,000 PSI *
- 3:0.5 Porches, carport slabs exposed to the weather, sidewalks and garage floor slabs shall be 3,500 PSI *, **

^{*}All concrete shall be air entrained. The total amount of air content (percent by volume of concrete) shall not be less than 5% or more than 7%

^{**} Shall comply with ACI 318

3:0.6 Exterior Concrete Slabs on Grade

3:0.7 Garage and Carport Slabs

Slabs shall be a minimum six inches (6") in thickness with a base of a minimum of 4" of 2A stone compacted and having wire reinforcing mesh included in the concrete which conforms to the general standards of Section 3:0.5 The mesh shall be 4"x 4". The surface shall be sloped to facilitate the movement of liquids towards the main vehicle entry.

3:0.8 Sidewalks

Slabs shall be a minimum five inches (5") in thickness without reinforcing mesh or reinforcing bars. Slabs shall be a minimum four-inch (4") thickness with reinforcement mesh (6 x6). Expansion joints shall be place at distance of no greater than five (5) feet apart. Concrete shall conform to standards set in Section 3:0.5

3:0.9 Porches and Entrance Slabs

Shall be a minimum of four-inch (4") thickness. Slabs hall be anchored or supported at foundation wall by anchors, piers, or corbels built with wall. Outer edge of slab shall be supported on foundation wall or grade beam and piers when soil conditions are susceptible to frost action. Surface of all slabs will be sloped to drain away from foundation walls. Slabs with spans in excess of three feet six inch (3'-6") shall be reinforced with wire mesh and/or #3 reinforcing bars.

Curing

- a. All concrete shall be adequately cured. During curing process at no time shall concrete be allowed to become dry, or be exposed to excessive high temperatures, it is recommended keeping surface wet and/or covered with wet burlap.
- b. All concrete placed in cold weather condition will be protected from freezing. Concrete shall be protected until firmly set but not less than two (2) days. Concrete shall not be put in place unless temperature is thirty-two degrees (32) and rising or according to limitations in the building code for cold weather concrete work.
- c. Curing compounds shall not be utilized on concrete floor areas that are to receive resilient flooring if curing compound will have an adverse effect on the bonding of flooring.

Finishing (slabs)

- a. Upon placement of concrete, surface shall be screeded to its proposed elevation. While concrete is still plastic, concrete will be screeded a minimum of three (3) times to ensure all course aggregates are below finished surface. Surface shall be float finished with wood, cork, magnesium, or steel float, or with power trowels.
- b. Concrete surfaces that will require a paint finish or that of an adhesive base application shall be steel trowel finished. Dry cement powder shall not be applied on surface to take up excess water to speed finish.

3:1. CONCRETE

3:1.1 General Specifications

No concrete shall be placed over grass, roots, or foreign materials.

All reinforcing rod shall be preformed as specified per A.S.T.M. Designation A305

All concrete slabs will be separated from other construction by one half inch (1/2") asphalt impregnated expansion joint material

Fill shall be clean, free of deleterious materials, and compacted.

Concrete forms shall be removed after concrete has fully set, all voids in exposed concrete surfaces will be filled with a sand and cement mixture and finished to a uniform texture.

Sidewalks shall have control cut joints installed every five (5) feet, minimum one-half inch (1/2") in depth or in a configuration approved by the municipality.

3:2 CAST in PLACE CONCRETE

3:2.1 Footings

Concrete footings shall have minimum compression strength of 2,500 P.S.I. at twenty-eight (28) days. Footing size shall be ten inches (10") in depth and sixteen inches (16") in width for one (1) story dwelling. Steel reinforcing bars composed of two (2) ea. Number five (#5) bars shall be installed in footer, deformed steel bars shall be twenty thousand (20.000) P.S.I. with a minimum lap of twenty (20) bar diameters, bars will be two inches (2") from edge of concrete and two inches (2") from bottom of concrete. Concrete footers shall not have cold joint unions, all break in pours will be bulk headed, keyway, and have reinforcing bars protruding the minimum lap diameter. All footings shall be set deep enough to be below frost line for geographic area.

3:2.2 Piers and Bases

All piers shall be of one-piece, reinforced concrete, three thousand (3000) P.S.I. and a dimension of eight inches by eight inches (8"x 8") square or a diameter of eight inches (8"). Bases will be a minimum of four inches (4") in thickness sixteen inches by sixteen inches (16"x 16") or larger. Bases will be set on firmly compacted soil strong enough to support its imposed load. Spacing of piers and bases shall not exceed a distance of eight feet (8') center to center. All shims utilized shall be of a decay resistant material and shall not exceed one- and one-half inch (1 ½") in thickness.

3:2.3 Slabs

Concrete slabs shall be a minimum four-inch (4") thickness, concrete with reinforcing of six inch by six-inch (6"x 6") number ten (#10) wire mesh. All fill shall be leveled and tamped to a uniform grade. Top of concrete slab shall be a minimum of four inches (4") above existing ground surface, slabs poured in living area of dwellings will have six (6) mil. Moisture barrier applied over area to receive concrete slab with a minimum six-inch (6") lap. Concrete slabs shall be constructed in accordance with ACT 302, Recommended Practices for Concrete Floor and Slab Construction except if other wise shown on drawings.

A 6 mil (.006 inch) polyethylene vapor retarder with joints overlapping no less than 6" (six inches) shall be placed between floor slab and prepared base. The exceptions to this rule are unheated separated garage areas, driveways, walkways and other areas which will not likely be heated at a later date.

Slabs shall be anchored and/or supported at foundation walls by anchoring devices, piers, or corbels built with wall. Outer edge of slab shall be supported on a foundation wall, grade beam, and/or piers if soil is susceptible to frost action. Slab will be sloped to drain away from building, and/or foundation. Concrete slab shall be protected until adequately cured.

3:2.4 Steps

Steps shall be properly formed, no riser height shall exceed 7 3/4" with the variation in risers being no greater than 3/8", a minimum tread width of ten inches (10"). Concrete shall be a minimum of 3500 P.S.I., and set over an approved footer. Brick, stone, broken concrete debris may be used as a fill material. All tread surfaces shall be of a non-skid finish. All steps shall have handrail installed. Basement stairs that are not exposed to weather shall conform to Section 3:0.2. Exterior stairs shall conform to Section 3:0.5.

3:3 Pre-cast Concrete

3:3.1 Steps

Pre-cast steps shall be installed and anchored on, 3500 P.S.I. concrete slab, minimum four inch (4") thick with reinforcing wire. Slab shall extend three inches (3") on sides and rear of steps and twenty-four inches (24") beyond front of steps. Step pad shall be isolated from concrete sidewalk with approved expansion joint material.

4.0 MASONARY

4:1	Block and Tile Masonry
4:1.1	Block Walls
4:2	Walls
4:3	Patching Openings
4:3.1	Block Walls
1:3.2	Brick Walls
1:4	Cleaning and Repairing

4:0 MASONRY

4:1 Block and Tile Masonry

4:1.1 Block Walls

Masonry wall – size of CMU needs to be sized on a case-by-case basis. Masonry lintels cast in place shall have two (2) number four (#4) deformed steel reinforcing bars and filled with two thousand five hundred (2,500) P.S.I. (see 3:0.2) concrete minimum. Precast masonry lintels shall be of size required to conform with wall width. All lintels will bear on masonry walls a minimum four inches (4") each side, cast in place or precast type. All out side corners shall be constructed with corner masonry units, and all door and window openings shall be constructed with jamb masonry units.

4:2 Walls

All mortar joints, head and bed, shall be cleaned of all loose and deteriorated mortar cement, joints will be tuck pointed with approved mortar mix. All joints shall be kept wet during application of mortar mix, all chipped masonry units shall be patched with mortar cement, all structurally damaged masonry units shall be removed and new units installed. Strike all mortar joints to match existing, remove all excess mortar and brush clean.

4:3 Patching Openings

4:3.1 Block Walls

Block units shall be of same width as wall they are repairing, mortar joints shall match bond course of existing units. When at all possible, block shall be toothed to tie new and old together. No pieces of block masonry units less than four inches (4") in length shall be installed in patch area. Strike all head and bed joints to match existing bond, remove all excess mortar and brush clean. In situations where

patched area shall receive stucco scrape all excess mortar from joints and follow General Bid Specification section 9.0 finishes for stucco.

4:3.2 Brick Walls

Brick units shall be of same dimension as wall they are repairing, mortar joints shall match bond course of existing units. When at all possible brick shall be toothed to tie new and old together. No piece of brick shall be less than four inches (4") in length shall be installed in patch area. Strike all head and bed joint to match existing bond, remove all excess mortar and brush clean. In situations where patched area shall receive stucco scrape all excess mortar from joints and follow General Bid Specifications section 9.0 finishes for stucco.

4:4 Cleaning and Protecting

When possible all brick and masonry shall be cleaned with pressure washer using only water. If a chemical is needed to remove dirt, mortar or paint it shall be a Biodegradable, water soluble solution, which is appropriate for the masonry to be cleaned. Any and all vegetation shall be protected from damage or replaced. When surface is cleaned and free of any undesirable imperfections it shall be sealed with a Liquid Penetrating Sealer intended for use on masonry, brick and concrete surfaces, This shall also be water based and have no environmentally unstable chemicals. All Sealants shall be applied as per manufactures suggestions. Any and all precautions recommended by manufacturer shall be adhered to by contractor.

5.0 METALS

5: 1	Steel Wall Framing
5:1.1	General
5:1.2	In-Line Framing

- 5:2 Misc. and Ornamental Metals
- 5:2.1 Handrails, Columns, and Post
- 5: 1 Steel wall framing

5:1.1 General

Elements shall be straight and free of any defects that would significantly affect structural performance. Cold-formed steel shall comply with the requirements of this section.

5:1.2 In-line framing (interior framing)

Bottom and top plates of steel framing shall be min. of 20-gauge track. Studs shall be place at 16" on center. Headers constructed of C-track shall be attached to king studs with a min of 1 ½ times the typical nailing practice as studs. These members shall have a jack stud of the same dimension as the king stud directly below the C-track and shall have cripple studs placed in C track as to continue 16" O.C. pattern through out. When Gypsum is to be attached it shall be done so with a minimum of 6 screws per edge and 12 per field and in accordance with ICC Codes. Any and all utility holes which are to be utilized shall have protective rings installed before utility service is to be feed through.

- 5:2 Misc. and Ornamental Metals
- 5:2.1 Handrails, Columns, and Post

Metal handrails shall be constructed of one- and one-half inch (1 ½") diameter galvanized iron or aluminum pipe. Railing shall be securely installed to a minimum live load of 200 psf.

Hand railing shall not be less than thirty-four (34") inches or greater than 38" high to top of railing from tread nosing or slope of ramp

Maximum newel spacing shall be four (4") inches center to center. This will be the situation on any and all porches stoops or landing which are of a height greater than 24" from ground level.

Ornamental metal railings may be an adjustable type, custom made, or welded iron. Railing will be prime coated and include all necessary hardware to properly secure to wall, floors, or columns. These shall be finished with an exterior semi gloss metal paint.

Ornamental steel and aluminum columns, tubular and square, shall be primed coated, and shall be attached securely in place with manufactures recommended anchors at top and bottom. These shall be finished with an exterior semi-gloss metal paint.

6.0 CARPENTRY

6:0.1	General Specifications
6:1	Rough Carpentry
6:1.2	Floors
6:1.2a	Joist-Wood
6:1.2b	Sheathing
6:1.2c	Exterior
6:1.2d	Repairs
6:1.3	Walls
6:1.3a	Framing
6:1.3b	New Stud Walls
6:1.4	Roofs
6:1.4a	Framing
6:1.4b	Sheathing
6:1.4c	Sheathing Replacement
6:2	Finish Carpentry
6:2.1	Cabinets
6:2.2	Counter Tops
6:2.3	Moldings
6:2.3a	General Specifications
6:2.3b	Base and Shoe Moldings
6:2.3c	Replacing Moldings
6:2.4	Columns and Handrails
6:2.4a	Columns

6:2.4b	Handrails
6:2.5	Stairs
6:2.6	Soffits and Eaves
6:2.6a	Framing
6:2.6b	Repairs
6:2.7	Louvers and Vents
6:2.7a	Roof Ventilation
6:2.7b	Vent Clearance
6:2.7c	Crawl Space
6:3	Insulation and Weather Stripping
6:3.1	Wall Insulation
6:3.1a	Frame Walls
6:3.1b	Masonry Walls
6:3.2	Insulation
6:3.2a	Blown Insulation
6:3.2b	Batten Insulation
6:3.2c	Basement Insulation
6:4.2d	Weather Stripping

6:0 CARPENTRY

6:0.1 General Specifications

All wood in contact with concrete, earth, or within twelve inches (12") shall be of decay resistant grade material containing no arsenic or chromium with a water repellant. All wood framing will begin a minimum of eight inches (8") above finished ground surface.

All interior woodwork and trims shall be of a number two (#2) grade or better, Ponderosa Pine, Clear Ship Grade Pine, or other specified approved materials.

All stud walls shall be framed sixteen inches (16") on center, all load bearing wall shall be double top plated having no plates end in the center of a span (between studs). All plate ends shall be centered above a wall stud. Plate ends of top shall not center on same stud as plate ends of bottom.

All girders, beams, headers, and all other structural support members shall be designed and constructed to support all dead and live loads imposed on them.

6:1 Rough Carpentry

6:1.2 Floors

6:1.2a Joist- Wood

All floor joists shall be supported at each end by either a two by two-inch (2"x2") ledger strip securely anchored or metal joist hangers of appropriate size, Toe Nailing only will not be acceptable. Splicing of floor joists between supports will not be permitted; floor joist shall be properly reinforced. Remove deteriorated floor joists and replace with number two (#2) Yellow Pine, Douglas Fir or other specified grade of materials the same dimension. All floor joists shall have a bearing of not less than one- and one-half inches (1 ½") on wood or metal and a minimum of three inches (3") on masonry. Top edge of joist shall be positioned so it will provide an even surface after the installation of the sub flooring and / or finish flooring. Notches for piping at the top and bottom of joist will not be located in the middle of the span. Holes in joist for piping and / or electrical wiring shall not be located closer than two inches (2") from top or bottom of floor joist. Diameter of hole shall not exceed one third (1/3) the depth of joist. All floor joists shall be leveled as close as job conditions permit.

Joists under bearing partitions shall be of adequate size to support the load.

6:2.1b Sheathing

New Floors- Sheathing applied directly over floor joist shall be D.F.P.A. underlayment grade plywood, three fourth inch (3/4") thickness, Group One

(1), interior, for use under resilient flooring and / or carpet.

Existing Floors- Sheathing applied over existing flooring shall be D.F.P.A. underlayment grade plywood one fourth inch (1/4") thickness, Group One (1), interior, for use under resilient flooring and / or carpet. Existing sub flooring shall be spot repaired and nailed where necessary

with galvanized, or coated nails, sub flooring materials shall be of similar thickness and width and provide a level and even surface for flooring applications.

6:1.2e Exterior

Exterior porches and enclosed utility or storage rooms flooring shall be one inch by four-inch (1"x 4") Tongue and Groove sheathing boards, C grade or better. Wooden floors less than nine feet (9') in length shall have flooring extend from main structural building to outer extent of porch, no splicing of boards will be permitted. Widths of porches in excess of nine feet (9') will be permitted to have one splice per run, no splice piece shall be less than four feet (4') in length, end joints of splices shall be staggered so as not to have joints side by side. All exterior tongue and groove flooring shall be primed painted on both sides, ends, and edges before installation.

6:1.2d Repairs

All rotten, damaged, or loose sub flooring shall be replaced before the installation of a finished floor covering. Spot repairs on tongue and groove flooring shall be made so that end joints occur over a floor joist, adjacent end joints shall be staggered. Flooring material shall match existing flooring in size, quality, and finish unless other wise specified. Flooring material and floor covering shall extend into closets and storage areas. Any flooring sub material shall be applied with ring shank nails and/or screwed securely in place with an application of adhesive applied to top of joist to prevent squeaking.

6:1.3 Walls

6:1.3a Framing

Plywood sheathing one half inch (1/2") thickness minimum or one inch by six-inch (1"x 6") tongue and groove sheathing boards placed diagonally at forty-five (45) degree angle, shall be installed on all outside corners being repaired. All studding shall be sixteen inches (16") on center.

Load bearing walls shall have top plates doubled, all headers over doors, windows, and openings shall be doubled, follow specifications per City of Pittston Building Codes.

ALL FRAMING SHALL COMPLY WITH APPLICABLE BUILDING CODES.

6:1.3b New Stud Walls

Studding for one (1) and two (2) story buildings shall be two by six-inch (2"x 6") minimum six-inch (6") face shall be perpendicular to wall length. Studding shall be spaced sixteen inches (16") on center, bottom, or sill plate shall be pressure treated lumber when installed on masonry or concrete base.

6:1.4 Roofs

6:1.4a Framing

All framing shall comply with applicable building codes and the City of Pittston.

Damaged, broken, or deteriorated rafters will be replaced, rafter size and dimension shall be of same size as rafter removed. No splicing of rafter is permitted unless specified other wise. Deteriorated or damaged rafter tails shall be cut back flush with exterior wall line, rafter tail shall be same dimension material, face nailed or scabbed onto rafter a minimum distance of six inches (6") inside outer wall edge

Approved Trusses May be utilized when specified. These trusses must be accompanied by an engineered drawing. The bracing required by such drawing should be installed as detailed.

Collar ties shall be installed on all new rafter installation, ties shall be either one inch by six-inch (1"x 6") pine or fir material, or pre manufactured metal bridging specified for rafter center to center spacing, secured in middle of rafter length.

Ridge board shall be installed on all framed rafter construction, Ridge board shall be a minimum one inch (1") thick and shall be in width equal to the plumb cut of rafters it is joining together.

Ceiling joist shall be nailed to rafters at each end where ever possible. Ceiling joist shall be continuous or joined only over a partition wall. Ceiling joist shall provide a continuous tie from one (1) side of building to the other side of building.

Fascia boards shall be of a sufficient length to span a minimum of three (3) rafter spaces.

6:1.4b Sheathing

Plywood sheathing shall be standard CDX grade, D.F.P.A. exterior grade, four feet by eight feet (4'x 8'), one half inch (1/2") minimum. Plyclips shall be installed on all spans eighteen inches (18") or greater. Strip sheathing shall be a minimum dimension of one inch by four inches (1"x 4") with all end joints being made at center line of rafter. Sheathing supporting verge rafters shall extend back on main roof a minimum four feet (4').

6:1.4c Sheathing Replacement

Sheathing shall be a minimum thickness of one-half inch (1/2"), exterior grade plywood or three fourth inch (3/4") tongue and groove roofer boards. All wood shall span a minimum of three (3) rafters with end joints staggered.

Minimum Plies

1 / 2 inch	4 or 5 plies
5 / 8 inch	5 plies
3 / 4 inch	5 plies

Minimum Plywood Thickness

Center to Center	Plywood Size
16 inch or less	1 / 2 inch
14 to 24 inch	5 / 8 inch with ply clips

24 to 36 inch 3 / 4 inch with ply clips 36 inch and over *

3 / 4 inch with ply clips

Add purlins or rafters and apply appropriate material.

*Use one ply clip for span of eighteen inches (18") to twenty-four inches (24"), all spans greater shall have two (2) ply clips between each rafter

6:2 Finish Carpentry

6:2.1 Cabinets

Base cabinets shall have all wood doors, stiles, and drawer fronts with finish applied. Base cabinets shall be secured to walls with screws and to each other at stiles with screws countersunk. Base cabinets shall be secured together to form a smooth, flush front surface when completed. Base cabinets shall be level and tops even to receive counter top. All exposed end cabinets shall have finish applied.

Wall cabinets shall have all wood stile and doors with finish applied. Wall cabinets shall be secured to walls with screws and to each other at stiles with screws, countersunk. Wall cabinets shall be secured together to form a smooth, flush front surface when completed. Base cabinets shall be plumb and level with tops set at a level height. Wall cabinets sixteen inches (16") and less in width shall have a minimum of two (2) screws per cabinet securing them to wall. Wall cabinets seventeen inches (17") and wider shall have a minimum of four (4) screws per cabinet securing them to wall. All exposed end cabinets shall have finish applied.

6:2.2 Counter Top

Counter top shall be approximately twenty-five inches (25") in width and a four inch (4") high back splash. Top shall be covered with an approved laminate (Formica Brand or approved equal), minimum 0.052 thickness, all ends shall have laminate cap installed. Counter top shall be secured to base cabinet with screws a maximum distance of every four feet (4').

6:2.3 Moldings and Trim

6:2.3a General

All moldings and trim shall be installed with all corners and junctures mitered. Wood moldings and trim shall have all nails set and puttied before painting, pre finished moldings and trim shall be secured with color coded nails to match. Moldings and trims of man-made materials shall be installed with manufactures recommended adhesive or glue.

6:2.3b Base and Shoe Moldings

a. Clamshell Base Molding b. Vinyl Base Molding(cove)

d. Square Cut Base Molding e. Standard to match existing

c. Colonial Base Molding

f. Shoe Molding

All base and shoe moldings shall be of a clear grade wood. Finger joint grade shall be permitted only in cases when moldings will be painted. Base moldings will be installed in all rooms of dwelling and shoe moldings shall be installed in rooms that have resilient type floor covering after floor covering has been installed.

6:2.3c Replacement of Moldings

Repairing damaged or installing new floor covering, all moldings shall be removed and when possible saved for reinstallation. Replacement moldings shall match style and color of existing as closely as possible.

6:2.4 Columns and Handrails

6:2.4a Columns

Wood columns shall be a minimum four inch by four inch (4"x 4") and shall set on an approved galvanized stainless steel or aluminum base foot anchored to floor system, column shall be attached to structural member at top. Decorative columns may be used when specified and shall be structurally capable of supporting load weight imposed on them.

6:2.4b Handrails

Shall be installed to a minimum live load of 200 psf.

Handrails shall be of wood, (hard or soft grade) and be a minimum of one- and one-half inch (1 ½") in diameter. Handrail shall extend a minimum distance from nose of bottom step to nose of top step. Handrail shall be secured with brackets anchored to wall; brackets shall be secured to solid blocking installed behind finish surface of wall. Install brackets maximum of five feet (5') center to center, paint handrail a minimum of two (2) coats oil base paint. Metal decorative railing may be used when specified.

6:2.5 Stairs

Wood stairs shall be constructed of two inches by twelve-inch (2"x 12") stringers (stair horse). The maximum riser height is 8½ inches. There may be no more than a 3/8-inch variation in riser height within a flight of stairs. The riser height is to be measured vertically between leading edges of the adjacent treads. The minimum tread depth is 9 inches measured from tread nosing to tread nosing. All tread material shall be one-inch (1") thick and all risers shall be minimum three fourth inch (3/4") thickness. Exterior wooden stairs will be constructed of treated lumber only.

6:2.6 Soffits, Fascia, and Rake Boards (Overhang)

6:2.6a Framing

Overhangs shall be constructed with minimum size structural material of two inch by four-inch (2"x 4") lumber. Outlookers shall be spaced a maximum of twenty-four inches (24") center to center. Soffit shall be minimum one fourth inch (1/4") exterior plywood, type AC, Group 2 unless otherwise specified. Soffit shall be ninety (90) degree to building wall and be of width from outside rafter to building wall and finished at building with molding strip. Ventilation louvers shall be installed in soffit, vents will be a minimum size of three inches (3") wide and twelve inches (12") in length, spaced three feet center to center, constructed of non corrosive material (aluminum, vinyl, or plastic). Soffits may be constructed of aluminum or vinyl material using appropriate J Channels. Fascia shall be constructed of a minimum one-inch thick white

pine board, and a height equal to plumb cut of rafter and shall have a one fourth inch (1/4") reveal below face of soffit. Soffits that will receive gutter and down spout shall have a subfascia constructed of two by (2"x). Rake boards shall be one inch (1") white pine board a minimum of four inches (4") in width. All exposed wood shall be painted two (2) coats, one (1) primer coat and one (1) finish coat. Fascia and rake boards may be capped with aluminum or vinyl.

6:2.6b Repairs

Remove deteriorated section of wood and reconstruct section to match remaining structure. Replacement rafter tails shall be same size material as original rafter, replacement rafter tail shall extend a minimum four feet (4') in from edge of building wall.

6:2.7 Louvers and vents

6:2.7. a Roof Ventilation

Ventilation is required when roofing materials are replaced or when possible to allow air flow through area. Ventilating opening shall be provided with corrosion-resistant wire, with 1/16 inch minimum to ¼" maximum openings.

The total net free ventilating area shall not be less than 1/150 of the area of the space ventilated except that the reduction of the total area to 1/300 is permitted provided that at least 50% and not more than 80% of the area is provided by ventilators in accordance with Pittston City Building Code.

6.2.7.b Vent Clearance

Where eave or cornice vents are installed, insulation shall not block the free air flow. A minimum of 1-inch space shall be provided between the insulation and the roof sheeting at the location of the vent.

6:2.7c Crawl Spaces

Crawl Space, the space between the bottom of the floor joist and the earth under the dwelling, shall be equipped with a sufficient number of ventilation openings through the foundation and or skirting to insure proper and ample ventilation. The minimum total area of ventilation opening shall be proportional on the basis of 1 square foot for each 150 square feet of under-floor area. One such ventilation opening shall be within three feet (3') of each corner of dwelling crawl space. Openings shall be covered with a corrosive resistant mesh, opening in mesh shall not be greater than one quarter inch (1/4") and no smaller than one eighth inch (1/8") in dimension. Useable crawl space under dwelling shall be provided with a minimum of one (1) access panel not less than eighteen inches (18") by twenty-four inches (24"). Access opening panel shall be constructed of a durable decay resistant material and include all hardware to secure panel in opening.

6:3 Insulation and Weather Stripping

Insulation shall meet R- factor and type specified in ICC Energy Conservation Code.

6:3.1 Wall Insulation

6:3.1a Frame Walls

New frame walls shall have a minimum total wall insulation level of R-21. Insulation shall be installed between studs, have vapor barrier facing living space, and be installed as recommended by manufacture.

6:3.1b Masonry Wall

Masonry wall insulation shall be a minimum three fourth inch (3/4") fiberglass or rigid styrofoam board firmly fitted between framework. Insulation shall have a vapor barrier covering, installed toward living space and shall have a minimum R-10.

6:3.2 Insulation

6:3.2a Blown Insulation

Insulation shall be of an approved type, properly tested and warranted to meet all applicable safety and health standard requirements. Blown insulation in walls shall be installed to completely fill void from bottom plate to top plate the width of studding. Blown insulation in ceiling and or attic floor area shall be installed to a minimum depth necessary to meet current code mandated insulation value.

6:3.2b Batt Insulation

Ceilings shall have minimum fiberglass batt insulation with a total R- Value equal to current energy code requirements. Insulation shall be installed between joists, have vapor barrier facing living space and installed as recommended by manufacture. Access covers to attic shall have equal to current energy code requirements batt insulation permanently attached to attic side of cover. If insulation is able to be installed above wall top plates, the insulation values in 6:4.2b may be reduced to equal to current energy code requirements.

6:3.2c Basement Insulation

Ends of floor joist shall be insulated with a minimum of R-21 insulation. Any and all windows shall have weather stripping and allow no flow of air from the outside when closed. Insulate joist cavities of first floor framing equal to current energy code requirements.

6:3.2d Weather Stripping

All exterior doors shall either have or have installed weather stripping including a sweep. Any remaining original windows shall have no air flow allowed when unit is closed.

7.0 ROOFING and SIDING

7:0.1	General Specifications
7:1	Roofing
7:1.1	Roll Roofing
7:1.1a	Rubber Roofing
7:1.1b	S.B.S. Roofing
7:2.1	Metal Roofing
7:2.1a	Philadelphia Gutter
7:2.1b	Roof Coatings
7:2.2	Shingles
7:2.3	Flashings
7:2.3.1	Crickets and saddles
7:2.3.2	Sidewall flashings
7:2.3.3	Other flashings
7:3	Siding
7:3.1	Fiber Cement Siding
7:3.2	Aluminum and Vinyl Siding
7:3.3	Lap Siding
7:3.4	Novelty Siding and Trims
7:3.5	Siding and Trim Replacement / Repair
7:4	Soffit and Fascia
7:4.1	Framing
7:4.2	Aluminum and Vinyl Covering
7:5	Gutters and Downspouts
7:5.1	General Specifications

- 7:5.2 Aluminum and vinyl gutters
- 7:5.3 Gutter guards

7:0 ROOFING AND SIDING

7:0.1 General Specifications (Roofing)

Roofing work shall be performed in accordance with all applicable City of Pittston Building Codes. No roof will be installed over old roofing materials, sheathing shall be nailed with a coated or galvanized ring shank nail where required, and damaged or deteriorated sheathing shall be repaired, end joints shall be made on center of rafter. Sheathing supporting verge rafters shall extend back on to roof a minimum of four feet (4'). Drip edge shall be installed on all roof edges and all roofing nails shall be corrosive resistant. Flashing, step flashing, counter flashing, and crickets shall be installed and or utilized around chimneys, roof openings, in valleys, and where roofs terminating against building walls. All valleys shall be done with flashing that is hidden by over lapping shingles cut to meet valley, in accordance with the Pittston City Building Code. Vent stacks and Pipes extending through roof shall have appropriate size vent boot installed to provide water tight seal all areas of this vent shall have a bead of sealant applied before application to prevent ay and all water from getting under boot.

7:1 Roofing

7:1.1 Roll Roofing (Double Coverage)

Roll roofing shall be installed over a minimum of one (1) layer of number fifteen (#15) felt paper. An ice barrier of a self-adhering polymer modified bitumen sheet along eaves in lieu of normal underlayment in accordance with the Pittston City Building Code. Starter strip shall be nailed every two inches (2") along all edges and a maximum of five inches (5") apart utilizing the number five (#5) dice pattern. Blind nailer adhesive shall be applied in accordance with manufactures recommended quantity per square foot. Lap joints shall have a minimum overlap of nineteen inches (19") and shall not be faced nailed. Stagger lap joints a minimum of six feet (6'). Double coverage roofing shall be rolled to assure roofing material lays flat and obtains a uniform bond with adhesive, lap joints shall be weighted down for a time period long enough to guarantee bonding.

7:1.1a Rubber Roofing

Installation of all rubber roofing shall be in accordance with manufactures specifications. All seams shall have a minimum coverage of 3" per side of seam. All area in which the roofing material end shall have a termination strip applied. This strip shall have all nails covered with a sealant and be weather resistant.

7:1.1b S.B.S. Roofing

Base membrane shall be laid over underlayment with a minimum three-inch (3") edge lap and a minimum six-inch (6") end lap, approved fasteners shall be used to mechanically fasten membrane. Fasteners shall be nine inches (9") on center at side laps with two equidistant rows eighteen inches (18") on center over entire base membrane. Install Tarmac finish membrane with recommended bonding method, stagger laps between base and finish membrane. Complete flashing details per specifications and top dress finish surface where required.

7:2.1 Metal Roofing

Remove existing roof that is deteriorated, repair sheathing and rafters. Install metal starter strip on verge rafter and roof indicated sections with 5-V-Crimp Metal roofing and F.H.A. type metal drip edging.

7:2.1a Philadelphia Gutter

Philadelphia gutter shall be constructed of forty (40) pound tin. Remove roofing materials to wood decking, repair defective materials, apply Ice and water shield type underlayment, asphalt felt shall not be used under tin applications. Install tin gutter. Maximum distance between seams shall be eight feet (8'), Tin shall run up under roofing and siding a minimum of eight inches (8"). Tin to run from wall and or roofing to outer edge over gutter shall be one piece with machine bends. Roofing mastic, adhesives, or sealers shall be used on any joints. Tin shall be primer and finished coated. Install leaf guard at downspout entrance.

7:2.1b Roof Coatings

Coating metal roofing, gutters, and valleys: Scrape and wire brush entire area, remove peeling paint, rust, corrosion, and excessive build up of roof cement and coatings. Apply one coat anti-corrosive metal primer with zinc chromate and or red oxide base to all bare and corroded metal. Patch small holes and open seams with approved caulk or roof cement. Larger holes shall be patched with asphalt impregnated membrane cloth and roof cement. Apply two (2) coats of fiber base asphalt coating material.

7:2.2 Shingles

All shingles shall be Class A rated. Tab or architectural shingles shall be a minimum warranty of 30 years by manufacturer. Specifications:

See Ice Barrier at 7:1.1

- A. Felt paper, minimum number fifteen pound (15lb) saturated felt, installed in accordance with the Pittston City Building Code. Metal drip edge, along eaves and rakes nailed every four inches (4").
- B. Flashing, Minimum forty-pound (40lb) seamless coated tin or PVC coated aluminum for valleys and chimneys, aluminum for counter and step flashing.
- C. Painting, Two coats Tinner's Red on all tin flashing
- D. Starter Course, as per manufacturer's instructions. Overhang, three eight-inch (3/8") minimum at eaves and rakes
- E. Valley flashing shall be twenty-four inch (24") wide minimum, open valley width shall be four inches (4") wide at top and increase at a rate of one eight inch (1/8") per foot of valley run unless otherwise specified.
- F. Wall Step Flashing, Provide a minimum three-inch (3") head lap, four inches (4") up wall. covered by counter flash or siding, and three inches (3") under shingle
- G. Projecting pipes / vent stacks, Flash with one (1) piece sheet metal, rubber boot, or two (2) piece flange and sleeve. Extend minimum six inch (6") on to roof area around all sides, secure and seal with approved sealant or mastic.
- H. Chimney flashing pitch area, high side a minimum four inch (4") on chimney and under shingles. Low side on joint and minimum four inch (4") over shingle and up chimney. A minimum three-inch (3") head lap flashing shall be embedded one inch (1") into masonry and secured in place with portland cement mortar or approved fasteners.

Shingles shall run a true horizontal line, meet at a uniform line above dormers and at ridge line. Shingles shall be fitted around all protruding members and be sealed to guarantee a water tight seal. Ridges shall have cap shingles installed, and shingle runs terminating at adjacent roofs shall be sealed with roof cement and have division cap installed. Valley shingles shall be cut to a straight line from top to bottom. Shingles along rakes and eaves shall not be smaller than six inches (6") in width. All installations to be in accordance with manufacturer's specifications.

7:2.3 Flashings

7:2.3.1 Crickets and saddles

A cricket or saddle shall be installed on the ridge side of any chimney greater than 30 inches wide. The material composing the saddle or cricket shall be sheet metal or of the same material as the roof covering.

7:2.3.2 Sidewall flashings

Flashing against vertical sidewall shall be by step-flashing method.

7:2.3.3 Other Flashing

Flashing against a vertical wall, as well as soil stack, vent pipe and chimney flashing shall be applied per manufacturer's printed instructions. At NO TIME shall flashing be re-installed if any signs of deteriorations are present.

7:3 Siding

7:3.1 Fiber Cement Siding

Can be applied in available styles using the manufactures printed installation Instructions. This product shall be painted only on face side to allow for the product to breathe. This product will be primed and painted within a maximum of 24 months after installation. This product shall also carry a Class A fire rating.

7:3.2 Aluminum and Vinyl Siding

Aluminum siding shall be of a minimum twenty-four thousandth (0.024) thickness unless otherwise specified in work write up. Vinyl siding shall be of a minimum thirty-five thousandth (0.035) thickness unless otherwise specified in work write up. Siding shall be installed over a vapor barrier or manufacturer's recommended insulation board in accordance with Pittston City Building Code. Siding installation shall include all J Channels around windows and doors, inside and outside corners, starter strips, and finish trim moldings. Cap sills, window and door trims with baked enamel aluminum coil stock, minimum nineteen thousandth (0.019) inch thickness unless otherwise specified in work write up, caulk around all windows and doors. All coil stock shall be bent with aluminum break. Replace all deteriorated wood and fasten all loose sheathing. Irregular and uneven surfaces shall be furred and or shimmed to form a smooth continuous wall area. Use aluminum nails to fasten siding, nails shall be a length sufficient enough to penetrate sheathing a minimum of one inch (1"). Trim nails shall be aluminum and be color coded to match trim.

Siding shall run level and true; siding panel lines shall match at all inside and outside corners. Siding shall be cut and fit to allow for thermal expansion and contraction, stagger lap joint a minimum of four feet (4') and a minimum of two (2) panels between vertical joints. No piece of siding less than two feet (2') in length shall be installed except when finishing siding at peak of eaves.

7:3.3 Lap Siding

Lap siding shall be a minimum seven sixteen inches (7/16") in thickness, pre finished masonite panels. Siding shall be fastened with corrosion resistant nails, all ends shall be attached together with H moldings and sealed with an exterior sealant. Lap siding shall not be installed within eight inches (8") of finished earth grade.

7:3.4 Novelty Siding and Trim

Novelty siding and trim (horizontal, vertical and diagonal) shall be installed by same standards as aluminum and vinyl sidings. All joints shall be cut and fitted tight, adjacent end joints shall be staggered. Siding shall be installed over vapor barrier and with non corrosive nails. Novelty siding shall blend and conform with all other structure finishes.

7:3.5 Siding and Trim Replacement

Replacement of damaged siding and trim shall match existing style, size, and color as closely as possible. Installation shall conform to same specification and standards as aluminum and vinyl siding.

7:4 Soffit and Fascia

7:4.1 Framing

Enclose all eaves, gable ends, and overhangs of dwelling. This shall be done with three eight inch (3/8") exterior plywood, type AC Group 2, unless otherwise specified in Work Write Up fastened to underside of rafter and installing a fascia board. Enclosure of structure shall allow for cross ventilation of space enclosed, installation of gable vents, and/or soffit vents shall be installed as per manufacturers printed instructions.

7:4.2 Aluminum and Vinyl covering

Soffit overhang shall be constructed of either baked enamel aluminum or vinyl materials over wood structural frame. Aluminum soffit material shall be perforated (ventilated) shall be a minimum nineteen thousandth (0.019) thickness and include all required trim. Vinyl soffit material shall be perforated (ventilated) shall be a minimum thirty-five thousandth (0.035) thickness and include all required trim. Sub-fascia board shall be installed and covered with baked enamel aluminum or vinyl a minimum twenty-four thousandth (0.024) thickness, and fastened with color coded aluminum pails.

7:5 Gutters and Down spouts

7:5.1 General Specifications

Maximum spacing distance for hanger shall be two feet (2') on all gutters. Down spout supports shall be a maximum spacing distance of six feet (6'). All down spouts not connected to storm water collection system shall have a splash block provided.

7:5.2 Aluminum and Vinyl Gutters

Baked enamel aluminum or vinyl gutter shall be installed over a fascia board or backstop with approved hangers. Down spouts shall be attached to exterior of building, sealed and fastened to gutter with aluminum pop-rivets or screws. Gutter shall be sloped (pitched) to prevent water from ponding or laying in gutter. K style gutter shall not be installed without the installation of a structural fascia backing board.

7:5.3 Gutter Guards

Gutter guards (if specified) shall be attached to all gutter systems, these shall be either a galvanized mesh or plastic in nature. These shall be installed as per the manufacturer's instructions.

8.0 WINDOWS and DOORS

8:0.1	General Specifications
8:0.2	Trim
8:0.3	Repair
8:1	Doors
8:1.1	Interior Doors- General Specifications
8:1.1a	Interior Flush Doors
8:1.1b	Other
8:2.1	Exterior Doors-General Specifications
8:2.1a	Exterior Flush Doors
8:2.1b	Combination Doors
8:2.1c	Panel Doors
8:2.1d	Aluminum and Vinyl Storm Doors
8:2.2e	Other
8:3	Special Doors
8:3.1	Attic access
8:3.2	Hatchway
8:0	WINDOWS AND DOORS
8:0.1	General Specifications

All replacement and new construction windows shall be Vinyl Double Hung, Energy Star labeled windows having Low-E Glass and Argon Gas with a maximum Glazing *U*-Factor of .30. Windows shall have tilting sashes unless otherwise stated in specifications. All replacement windows shall have insulation placed in weight pockets and weights and ropes/chains must be removed.

All windows and doors shall be installed with a drip cap and sill, windows and doors shall be caulked and sealed at time of installation. Windows shall be equipped with a positive locking device, screen, and permanent weather stripping. Doors shall be equipped with an appropriate security set and dead bolt assembly, keyed alike and jamb, stop, sill and hinges. In the event more than one door is being replaced all security sets and dead bolts will be keyed alike. Window stools shall be of wood.

8:0.2 Trim

When installing replacement windows remove the trim only when it is deteriorated and needs replacement. Existing trim (stops) in good condition and of a type to be considered irreplaceable (birch, oak, mahogany), such trim shall be carefully removed and installed after the installation of the windows and or doors. New molding and or trim shall match existing as closely as possible.

8:0.1 Repair

Installing and or repairing windows and doors the contractor shall repair all surrounding area affected, the repair work shall be finished so as to conform to the surrounding finishes. Broken and or missing sash cords shall be replaced, broken glass panes shall have new glass installed. Doors shall operate without binding, dragging, or sticking.

8:1 Interior Doors

8:1.1 Interior Doors General specifications

Interior doors shall be complete with all required hardware, butt hinges, knob assembly, jamb, and stops. Door trim shall be installed on both sides and a door bumper stop shall be includes for all doors. When possible, the original doors shall be refinished. If new doors are needed all doors through out the structure shall match. If new construction doors are to be installed then a 1 3/8" hollow masonite 6 panel door shall be permitted. Any other types need to be approved in writing BEFORE installation. All mechanicals of door must perform correctly without binding.

8:1.1a Interior Flush Doors

Interior door shall be one and three eight inch (1-3/8") hollow core, Lauan, or Birch finish unless otherwise specified. All bare wood to be coated with two coats poly urethane clear coat.

8:1.1b Other

Other types as specified in Work Write Up (example- metal or plastic)

8:2 Exterior Doors – General Specifications

Exterior doors shall be complete with all required hardware using security length screws, three butt hinges, keyed knob assembly, jamb, weather stops, and sill. Door shall be trimmed interior and exterior sides, and shall receive finish of paint or stain, and varnish. All exterior doors will have a bumper installed; solid panel doors shall be equipped with an observation scope. All exterior doors shall be solid core wood veneer or fiberglass or metal with insulated core.

8:2.1a Exterior Flush Door

Exterior flush doors shall be one- and three-quarter inch (1-3/4") thickness

8:2.1b Wood storm doors

Exterior wood storm doors shall be one- and three-quarter inch (1-3/4") thickness, solid or panel lower half, window and screen inserts upper half. Door shall be of a stain and varnish finish grade.

8:2.1c Panel Doors

Panel doors shall be one- and three-quarter inch (1/3/4) thickness. Number of panels shall be specified in Work Write Up.

8:2.1d Aluminum and Vinyl Storm Doors

Aluminum and Vinyl storm doors shall be a minimum one and one quarter inch (1-1/4") thickness. Storm door shall be pre hung and equipped with closer, storm chain, and latching assembly.

8:2.1e Other

Other type doors as specified

8:3 Special doors

8:3.1 Attic Access

Attic access panel or door shall be trimmed to conform to surrounding finish. The cover shall be a minimum three fourth inch (3/4") finish grade plywood, good face side. Exposed finish shall match ceiling and surrounding finishes

8:3.2 Hatchway

Hatchway (basement door) assembly doors shall be constructed of twelve (12) gauge steel. Assembly shall have factory baked on primer finish and shall be furnished and installed with all hardware including interior latching device. Hatchway assembly shall be secured to concrete or masonry with appropriate fastening hardware. Assembly shall be painted two (2) coats finish paint inside and outside.

9.0 FINISHES

9:1	Floor Finishes
9:1.1	Wood
9:1.1a	Hardwood Flooring
9:1.1b	Pine Flooring
9:1.1c	Replacing
9:1.1d	Refinishing
9:1.2	Vinyl
9:1.2a	Sheet Vinyl
9:1.3	Carpet
9:1.4	Ceramic Tile
9:2	Wall Finishes
9:2.1	Repairs
9:2.1a	General Repairs
9:2.1b	Plaster and Drywall (sheet rock)
9:2.2	Drywall
9:2.2a	Drywall on studding
9:2.2b	Drywall on Furring
9:2.3	Ceramic Tile
9:2.4	Paneling
9:2.5	Stucco
9:3	Ceiling Finishes
9:3.1	Repairs
9:3.1a	General Repairs
9:3.1b	Plaster and Drywall Repairs

GENERAL BID SPECS - 134 Parsonage Street

9:3.2	Drywaii
9:3.2a	Drywall on Framing
9:3.2b	Drywall on Furring
9:3.2c	Drywall on Drop Ceilings
9:3.3	Suspended Ceilings
9:3.4	Drop Ceiling
9:4	Painting
9:4.1	General Specifications
9:4.2	Exterior
9:4.3	Interior
9:0	FINISHES
9:1	Floor Finishes
9:1.1	Wood
9:1.1a	Hardwood Flooring
	Hardwood flooring shall be select grade Red Oak, White Oak, Birch, or Maple Flooring. Flooring shall be a minimum twenty-five, thirty-seconds, inch (25/32") by two and one quarter inch (2-1/4"), end matched, tongue and grooved, sanded, sealed, with two (2) coats varnish. Flooring shall be completed with shoe molding and base molding finished to match floor finish.
9:1.1b	Pine Flooring
	Pine wood flooring shall be nominal size one inch by four-inch (1"x 4") tongue and groove, C grade pine wood, sanded, sealed with a minimum two (2) coats varnish. Flooring shall be completed with shoe molding and base molding finished to match floor finish.
9:1.1c	Replacing
	Replace damaged and exceptionally worn flooring, sand, seal, stain to match as closely as possible, and apply two (2) coats varnish. Minor blemishes shall be filled with a hard wood filler putty, sanded, sealed, and finished to match flooring
9:1.1d	Refinishing

Floor is to be sanded so as to remove all existing stains and polyurethane.

9:2.1b Plaster and Drywall (Sheetrock) Repair

Plaster cracks shall be raked clean, holes shall have all loose and damaged plaster removed and like material used for repair. Damaged or deteriorated drywall shall be cut out of wall and like materials shall be used for repair. Vertical joints shall be made over center of stud, horizontal joints larger than sixteen-inch (16") stud spacing shall have wood support backer installed. Joints shall be taped and bedded a minimum three (3) coats.

9:2.2 Drywall

9:2.2a Drywall on studding

Interior stud walls shall be finished with one half inch (1/2") drywall, all joints shall be taped with maximum joint size of one quarter inch (1/4"), bedded, and sanded to a smooth flush surface. Joint shall have a minimum three (3) coats of compound, third coat being a skim coat applied after primer paint coat to correct any blemishes found. Moisture resistant drywall (green board) shall be installed in areas exposed to higher levels of moisture (bathrooms, kitchen sink and counter top areas). The installation of drywall in conjunction with new windows, the extension jambs and trim casing shall be eliminated and returns shall be constructed of drywall. All outside corners and openings without doors shall be finished with corner bead and spackled.

9:2.2b Drywall on furring strips

Interior furred wall shall be finished with a minimum one-half inch (1/2") drywall, all joints shall be taped with maximum joint size of one quarter inch (1/4"), bedded, and sanded to a smooth flush surface. Joints shall have a minimum three (3) coats compound, another application may be required to correct any blemishes found. Furring strips shall be a maximum spacing of sixteen-inch (16") center to center with furring strip at top and bottom extreme of drywall. Furring strips shall be one inch by three inches (1"x 3"), no piece of furring less than forty-eight inches (48") in length shall be installed. Furring shall be shimmed to construct wall smooth and continues surface. Moisture resistant drywall (green board) shall be installed in areas exposed to a higher level of moisture (bathroom, kitchen sink and counter top areas. The installation of drywall in conjunction with new windows, the extension jambs and trim moldings shall be eliminated and returns shall be constructed of drywall. All outside corners and openings without doors shall be finished with metal corner bead and compounded.

9:2.3 Ceramic Tile

Apply cement board to area using manufactures standards create a smooth surface, install tile using thick bed method. Tile shall be equal to or exceed the standard grade requirements of the U.S. Department of Commerce. Tile joints shall be set level and plumb, corners and end line of tile shall be bull nose tile.

Thin Set- Apply ceramic tile to new moisture resistant drywall or existing drywall sealed with a primer sealer using thin set method (organic adhesive) to indicated wall area, trim all corners and end line of tile with bull nose tile. Wall tile shall be equal or exceed the standard grade requirements of The U.S. Department of Commerce. Wall tile shall be of a standard grade.

Counter tops which are to have ceramic tile applied is be applied shall have flat level surface with an under-layment of ¼" cement board. The back splash shall be no less than 4" in height with a bull nose finish.

9:2.4 Paneling

Paneling shall be of a pre-finished type of either pre-stained lauan or veneered wood. Installation shall include matching inside, outside corners, door, and window trims, cove, and base moldings. Installation of paneling in conjunction with new windows, paneling shall return to window jambs, and install window sills of wood or marble as specified. All installation shall conform to manufactures recommendations

9:2.5 Stucco

Stucco applied over frame construction shall first have a vapor barrier applied, second apply metal galvanized reinforcement wire. First coat of stucco shall be applied with sufficient material and pressure to form a full lock onto metal lath, cross rake for second coat bonding. Second coat shall be applied after first coat has dried and set to a hard-firm surface, bring out to grounds and straighten to a true surface with rod and darby without use of additional water, leave surface rough enough for third coat to adhere to. Third (finish) coat shall be of texture and color specified or to match existing as closely as possible. Window sills, when specified, shall be wrapped with vapor barrier and galvanized metal lath and stucco to match. All corners shall be wrapped with corner beads. Stucco finish shall extend a minimum six inches (6") below finish earth grade. Existing masonry and brick walls shall be cleaned, sand blasted, or chemical treated, and shall have galvanized metal lath secured with galvanized or corrosion resistant fasteners, new wall masonry and brick walls shall have galvanized metal lath secured with galvanized or corrosion resistant fasteners and stucco applied by above procedure.

9:3 Ceiling Finish

9:3.1 Repairs

9:3.1a General Repairs

Repairing existing ceilings all loose and damaged material shall be removed and area prepared and new material shall be installed to match and blend in with the surrounding ceiling finish as closely as possible.

9:3.1b Plaster / Drywall

Plaster cracks and holes shall be raked and cleaned of all loose and damaged material, patch area shall be repaired with patching plaster and finished to a texture surface to match surrounding finish as closely as possible. Drywall shall have all damaged area cut out and removed. Cuts shall be made on center of joist, new drywall installed, taped and spackled to form a surface to match existing.

9:3.2 Drywall

- a. Minimum one-half inch (1/2")
- b. Five eights inch (5/8") Type X where required by the Pittston City Building Code

9:4 Painting

9:4.1 General Specifications

All surfaces, interior and exterior for painting shall be clean of all loose, blistering, scaling, paint, dirt. Sand and or wire brush all rough surface. Water stained and painted surfaces which may bleed through new paint shall have a primer sealer applied first. Drop cloths and or protective covers shall be utilized to protect owner possessions and adjacent properties.

Interior paints are to be:

Ceilings are to be flat latex in antique white unless specified otherwise. Walls are to be of a semi gloss latex unless otherwise specified. Bathrooms, kitchens, and laundry rooms shall have an anti-fungal Paint additive applied in accordance with manufacturer's specifications. Trim to be a gloss latex unless otherwise specified.

All paints are to have a minimum of 2 coats applied. This can be done by roller or sprayer. Any area which is applied with a sprayer needs to then be back rolled.

9:4.2 Exterior

Scrape all loose, blistering, and dirt materials from area specified for paint application. Wire brush and sand all rough edges, putty, caulk all open seams, gaps, holes, and openings not serving a functional purpose, remove all matter that would adversely affect the application of primers and or paints. Prime all bare wood and metal, a minimum two coats oil base paint shall be applied to wood (unless otherwise specified) and metals and latex to masonry and brick. Follow manufacturer's recommendation for application of paints and or paint products. All windows specified for painting shall have top and bottom sashes movable prior to painting and shall be free moving after painting. The finished product shall be free of splatters, runs, drips, and brush markings. Two color line separations shall be neat and straight, colors shall not bleed into each other.

Concrete, masonry, and brick surfaces shall be scraped and wire brushed of all loose paint, mortar, and dirt. Cement mortar patch all broken and or damaged areas and fill all joints where mortar is missing. Extremely damaged and or broken units shall be replaced with materials of same size and material structure. Alkali resistant masonry epoxy-based sealer shall be applied to extremely porous areas.

9:4.3 Interior

Surface shall be cleaned of all loose paint, wallpaper and repaired to specification and procedures of material structure, use spackle on plaster base materials, wood putty and wood dough wood surfaces. Sand rough surfaces to a smooth surface, primer all raw wood, drywall, and plaster. Apply minimum two (2) coats latex paint, closets doorways, frames, and trim are considered part of any room which they located. Cupboards, corner cabinets, and built in shelves, are shall be considered part of room, open walls in cupboards and bookshelves shall be considered part of room walls. Wood work is defined to include baseboard, moldings, trim, doors, frames, window, (sash, sill, and frame), and any permanently installed wooden fixture.

All kitchen and bathroom walls shall be painted with an anti-fungal semi-gloss paint, all woodwork shall be painted with semi-gloss or high gloss paint.

Texture ceilings- Latex paint shall be added to texture coat and ceiling have a minimum two (2) coats texture paint. Spray acoustic (popcorn) ceilings- Spray ceiling with heavy textured acoustic and finish with vinyl added.

11.0 PLUMBING

11:1 General Specifications

11.0 PLUMBING

11:1 General Specifications

All plumbing shall comply with the current local Plumbing, Mechanical, and Electric Codes of the City of Pittston. All tubs, sinks, lavatories, water heaters, and water closets shall be installed complete from nearest fitting to include faucets, traps, supply and return header pipes, stops, diverter valves, copper and brass stubs, hose bibs, water closet in and out parts. Shower installation shall include head and supply lines and shall be equipped with separate shut off valves and a shower rod (Hallmark or approved equal). All tub and lavatories shall be equipped with pop up type drains. Plumbing shall also include a washing machine hook up which has a shut off valve and water hammer arrestor device.

- A. Electric water heaters shall be installed complete with their own separate circuit and circuit breaker from electric panel. Heater will be equipped with pressure blow off valve and piped to six inches (6") of floor.
- B. Gas water heaters shall be installed complete with gas line, gas shut off valve and approved vent stack. Heater will be equipped with pressure blow and expansion tank off valve and piped to six inches (6") of floor.
- C. Washing machines shall have vent and drain with all necessary waste lines, hot and coldwater lines, hose bibs, and one grounded duplex 110-volt electric outlet within two feet (2') of machine location.

Setting new fixtures in bathrooms and kitchens the plumber shall be responsible for any broken and leaking water lines and drains in conjunction with said fixture installation.

Under floor plumbing shall include hot and cold-water lines and drains from basement (cellar), shutoff valves shall be installed under kitchen sink, in bathrooms and powder rooms, also at tub.

12.0 HEATING

12:1 General Specifications

12:0 HEATING

12:1 General Specifications

All heating systems shall conform to the current applicable plumbing, electrical, energy and mechanical codes by the City of Pittston.

If ducting is installed while remodeling activities are in progress, all duct openings, such as, but not limited to: register openings in floors, walls, basements, etc. shall be protected from dust and debris entry by fully masking said openings so that no dust or debris is present when system is energized.

- a. Fuel oil fired unit, indicated model shall be installed and tested for proper operation. All existing flues, draft controls, thimbles, fuel lines, thermostats and stacks shall be replaced with new installation unless otherwise specified. Electric connections shall be included with forced air fan models. Unit shall be connected to a separate electric circuit and circuit breaker from panel. Chimney shall be inspected and cleaned with new installation.
- b. Gas fired unit, indicated unit shall be installed in area designated and tested for proper operation. Gas fired units shall be vented, and installation shall be performed by a licensed and approved technician. Electrical connections shall be included on models requiring connection and connected to a separate circuit and circuit breaker from electrical panel. Chimney shall be inspected and cleaned with new installation.
- c. Electric, indicated models shall be installed in area designated and tested for proper operation. Individual heater units shall be connected to a separate circuit and circuit breaker from electric panel. All electric heaters shall be equipped with forced air fans.

General purpose circuits shall be fifteen (15) and or twenty (20) ampere and protected at said ampere. Appliance circuits shall be twenty (20) ampere capacity with ground and protected at said ampere unless otherwise noted.

13:4 Installation

New Services shall be a minimum one hundred amperes (100 amp), entrance cable, and panel box.

Panel box shall be equipped with a minimum twenty (20) circuit capability.

Main breaker shall be rated at a minimum one hundred (100) amperes.

All installation shall be in accordance with the N.E.C.

A wall switch shall control all new light fixtures.

New bathroom and kitchen receptacles shall be Ground Fault Protected as specified in the N.E.C.

Feeder shall be sized as required by the N.E.C.

13:5 Inspection

Electrical inspection shall be secured from an approved electrical inspection agency.

13:6 Guarantee and Test

Electrical installation shall be free from short circuits and improper grounds. Panel shall be tested with main disconnect from the feeder, branches connected, switches closed, all fixtures in place, permanently connected, lamps removed or omitted from sockets. Feeder shall be tested with the feeder disconnected from branch circuit panel. In no case shall the insulation resistance to ground be less than one margin. Failures shall be corrected in a manner satisfactory to the inspector.

Upon completion and acceptance of electrical work there shall be a one (1) year written guarantee that work performed is free of defects in workmanship and materials.