

HERITAGE HOME PROGRAM (HHP)
**A Linked Deposit Program of the Cuyahoga County Treasurer and
the Cleveland Restoration Society**

Cleveland Restoration Society
3751 Prospect Avenue, Cleveland, Ohio 44115
(216) 426-3116
Fax: (216) 426-1975

BID SPECIFICATIONS

HHLF funds cannot be used to fund the purchase or installation of the following items:

- Vinyl siding
- Vinyl windows
- Swimming Pools
- Hot tubs
- Decks

Appropriate permits shall be secured through the Building Department of the city that the work is being completed in and the contractor shall be registered with such Building Department in order to secure permits.

**ALL REHAB AND INSTALLATION MUST BE PER CITY BUILDING CODES
AND MANUFACTURER’S SPECIFICATIONS.**

**PROJECT COSTS EXCEEDING CONTRACT AMOUNT ARE TO BE PAID BY
HOMEOWNER(S).**

These specifications are copyrighted by the Cleveland Restoration Society (CRS) © 2018.

TABLE OF CONTENTS

Article I. DOORS & WINDOWS	2
Section 1.01 WINDOW FRAME, TRIM, & SASH REPAIRS (No New Jamb Liners)	2
Section 1.02 NEW WINDOW UNITS	4
Section 1.03 GLASS BLOCK WINDOWS	4
Section 1.04 LEADED GLASS REPAIR	6
Section 1.05 NEW DOORS AND FRAMES	6
Section 1.06 EXISTING WOOD DOOR, FRAME AND TRIM REPAIR	7
Section 1.07 ALUMINUM STORM WINDOWS AND DOORS	8
Section 1.08 WOOD STORM DOORS	9
Section 1.09 BUILDERS HARDWARE	10

Article I. DOORS & WINDOWS

Section 1.01 WINDOW FRAME, TRIM, & SASH REPAIRS (No New Jamb Liners)

(a) MATERIALS

- (i) Wood to Replace or Repair Damaged Exterior Sill (Where Designated): Fir or Cedar. Match all the dimensions of the old (thickness, width, angles, length) exactly.**
- (ii) Fasteners for New Wood Sills: Stainless screws**
- (iii) Wood to Replace Damaged Jambs: Arkansas or “Hard” pine, 3/4" thick, to match existing width. If jamb liners are not to be used, match grooves for parting beads and window stops.**
- (iv) Wood to Replace Missing/Damaged Exterior Trim: Pine, D-Select or better. Match thickness and width of existing.**
- (v) Mouldings: Match existing or pattern indicated. Where no pattern is indicated, obtain approval from the CRS Preservation Specialist for the use of the closes available stock or sound salvaged moulding.**
- (vi) Wood Preservative: Cuprinol Clear.**
- (vii) Sash Corner Irons: L-shaped galvanized.**
- (viii) Parting Stop (if required): Arkansas or “Hard” pine, ripped to the proper size.**
- (ix) Sash Lock (where missing/damaged): “Amerock” or approved equal.**
- (x) Glass: Single-strength, B or better grade.**
- (xi) Putty: Sterling oil-based glazing compound, or approved equal.**
- (xii) Caulking: DAP acrylic-latex.**
- (xiii) Primer and Finish Paint: See *Error! Reference source not found.* **Painting.****
- (xiv) Stain (for jambs): Cabots OVT, color 0120 Tile Red, or 0185 Barn Red, or approved equal.**

(b) WORKMANSHIP

- (i) Frame Repairs**
- (ii) Window Sill Replacement: Cut out and carefully remove the designated sill. Cut the new sill to the exact same size, fasten angled blocks to the studs below for support if existing support is insufficient, saturate new sill with wood preservative, slide into place, and securely fasten into place.**
- (iii) Jamb Repair: Do all of the following required for each jamb:**

- 1) **Refasten Loose Pocket Covers:** Where pocket covers are loose, re-secure with larger flat-head screws.
 - 2) **Replace Missing or Broken Pocket Covers:** Make new pocket covers that fit snugly. Match original grooves and fasten with screws.
 - 3) **Reinforce Cracked Jambs:** Where jambs are cracked or split, glue and draw together with long screws driven in from inside or outside; or approved equal.
 - 4) **Replace Rotted or Missing Portion:** Cut out rotted portions, trim edges of missing portions, and replace with new patch, glued and screwed into place.
 - 5) **Install New Parting Stop:** Replace missing, broken, or wrong-sized parting stop with new or sound salvaged pieces.
 - 6) **Re-fasten Loose Pulleys:** Where pulleys are loose, re-fasten with larger screws set where necessary, into new plugs inserted into enlarged or split out holes.
 - 7) **Replace Sash Cord:** Replace missing, broken, or frayed sash cord with new. Where weight is missing, and extra will be allowed for providing a salvaged weight of the proper size.
- (iv) **Jamb Replacement:** Carefully remove and save interior trim. Remove indicated jambs without damage to other pieces. Install new jambs using blocking and screws. If new balances are not being used, avoid installing blocking or fasteners where they will interfere with weights or cords. Re-install interior trim. Re-install parting stops, window stops, pulleys, cords and weights.
- (v) **Trim Repairs:**
- 1) **Exterior Trim:** Replace missing/indicated window trim and mouldings with new pieces. Secure edge of trim at window jamb with screws. Where top trim is to be replaced, replace top flashing as well.
 - 2) **Interior Trim:** Remove all nails, tacks, staples, curtain and shade hardware, and other such items from window trim. Fill all holes and other damaged areas.
- (vi) **Sash Replacement:**
- 1) **New Sash:** Where indicated, replace missing or damaged sash with new custom-made sash. Sash shall match original thickness, be made of preservative-treated pine (or approved equal) with the same glass size, number of lights, and profile as the original; plows to accept cords (where they exist) or bored to receive a spring-loaded side-mounted catch. If a stock sash is available that meets the above requirements it may be substituted for the custom-made sash, with prior approval of the Homeowner and CRS Historic Preservation Specialist. Contractor must submit complete manufacturer's specs with bid.
 - 2) **Sash Fitting:** New sash shall be fitted with a maximum 1/16" space at the sides, top and bottom and so that they align with a maximum 1/8" difference at the meeting rail. Install and adjust the sash lock and where present originally, the side-mounted catch.
 - 3) **Painting:** see other document for exterior painting.

(vii) **Sash Repair, Preparation, and Painting:**

- 1) **Sash Preparation:** Remove all deteriorated putty and broken glass. Remove all paint from flat surfaces and sand.
- 2) **Loose Corners on Sash:** Reinforce loose corners with corner irons, or approved equal.
- 3) **Re-glazing:** Prime sash including rabbets before re-glazing. Apply bed of glazing compound to rabbets and press glass into place. Secure with glazing points. Putty rabbets with an even angle. Putty shall not be visible from the inside of sash.
- 4) **Cracks in Sash:** Fill with acrylic caulking after priming.
- 5) **Priming and Painting:** Prime all sash with one coat of tinted primer. Prime corner irons with metal primer. Paint all sash with one coat finish paint. See Error! Reference source not found. "Painting".
- 6) **Cleaning:** Remove all paint drips and putty residue from glass.

(viii) **Jamb Preparation and Staining:**

- 1) **Jamb Preparation:** Scrape and sand off all loose paint from jambs.
- 2) **Staining:** Apply at least one coat of stain to all jambs and parting stops.

Section 1.02 NEW WINDOW UNITS

(a) MATERIALS

- (i) **Window Units:** Stock or custom set-up units with custom modifications as listed in window schedule or specifications.
- (ii) **Building Paper:** 15lbs roofing felt or house wrap.
- (iii) **Nails:** Hot-dipped galvanized.
- (iv) **Flashing:** Coated aluminum, minimum .032"

(b) WORKMANSHIP

- (i) **Tarpaper:** Apply strips of tarpaper, at least 8" wide, over the sheathing on the sides and top of the opening to protect the area at the joint between trim and siding.
- (ii) **Installation of the Units:** Place window unit in opening: position so that sides are plumb and sills are level and frame is square, keep interior flush to receive casing, then securely nail into place around the exterior trim. Extend exterior jamb, if needed, to receive casing. Where indicated in the schedules, provide new interior trim. Otherwise, re-install existing trim.
- (iii) **Flashing:** Fabricate and install head flashing over top of trim. Flashing shall extend up behind siding at least 3" and down over face of trim at least 1/4".

Section 1.03 GLASS BLOCK WINDOWS

(a) MATERIALS

- (i) **Glass Block:** "Decora" style hollow units constructed of insulated, obscured glass for exterior use that has been permanently sealed with a heat fused joint. Individual units shall be pre-assembled in a factory to fit existing openings and transported to the site ready for installation.

- (ii) **Vents:** Combustion air inlets (hopper vents) manufactured exclusively for glass block window installations. Color to match mortar color. Each window unit shall have a combustion vent, with the exception of one that may hold a dryer vent.
- (iii) **Mortar:** Cementitious mortar that shall be tinted beige or off-white. Use of white mortar is prohibited.
- (iv) **Caulk:** Vulkem, or an approved polysulfide equal of exterior grade, shall be used for sealing joints. 100% silicone for the top. Color of both shall match mortar.

(b) WORKMANSHIP

- (i) **General:** It is the Contractor's responsibility to ensure that all materials are delivered, stored, protected and handled carefully at all times. Inspect window units for damage prior to installation. All measurements included in this specification shall be verified by the Contractor in the field. A manufacturer's warranty shall be presented to the Owner upon completion of the job for at least ten (10) years for window unit assembly and at least five (5) years for glass block units, against defective materials or workmanship.
- (ii) **Demolition:** Remove existing windows and any supports or framing. Ensure that masonry in opening is well pointed and solid.
- (iii) **Installation:** Begin installation by ensuring that glass block windows will fit in existing openings. Proceed as following:
 - 1) Place two (2) ½" wooden shims approximately three (3) inches from the bottom corners on the bottom ledge. Apply enough mortar to sill that will create a ½" gap around the window without covering top of shim.
 - 2) Insert window unit into opening and ensure that it is plumb. Tightly fit two (2) shims between the top of the window and the opening. Check to make sure the window is plumb and parallel with the inside and outside walls, and that the reveal is uniform all the way around before installing mortar around right and left sides.
 - 3) Allow mortar to harden for (2) hours before removing shims. Fill all holes with mortar. Blend to match texture and tooling of surrounding joint.
- (iv) **Caulking:** Fill side and bottom joints with a neat, smooth bead of caulk. Allow twenty-four (24) hours before filling top of window. Insert foam caulking backer rod with ½" of where the caulk joint will finish out. Fill remaining space with caulk completely. Remove any excess from faces of glass block units with lacquer thinner.

(c) SCOPE OF WORK

- (i) **NOTE:** Installation of glass block is permitted for basement windows only. Work shall be carried out according to the materials and workmanship specifications listed above.

Section 1.04 LEADED GLASS REPAIR

(a) MATERIALS

- (i) Glass: The Original glass should always be retained, but when replacement is needed, match existing glass panels in texture, pattern and color. Notify Owner and CRS if any changes in glass will be made prior to work starting.**
- (ii) Cames: Match existing materials.**
- (iii) Sealant: High quality “neutral cure” silicone.**

(b) WORKMANSHIP

- (i) Sash Repair and Preparation**
- (ii) Sash Preparation: Remove sash and board up opening. Remove all deteriorated sealants and loose paint. Sand and prime.**
- (iii) Glass and Cames: Remove all bulges; replace perimeter lead came and all deteriorated cames; re-solder all broken solder joints and reinforce as needed; repair/replace all broken glass to match existing (see “Material” above).**
- (iv) Glass panel: Install leaded glass into bed of sealant. Properly clean all glass and excess sealant.**

Section 1.05 NEW DOORS AND FRAMES

(a) MATERIALS

- (i) Doors (any and all exterior doors will be CRS approved)**
- (ii) Wood, Fire-Rated: Birch face, incombustible mineral core, prepped for hardware, bearing appropriate label. Minimum 3 hinges per door.**
- (iii) Wood, Flush, Non-Fire Rated: Birch face, solid stave wood core, thickness as indicated. Minimum 3 hinges per door.**
- (iv) Wood, Hollow Core: Birch face. Minimum 3 hinges per door.**
- (v) Steel, Exterior, 6-Panel Design: Min. 24 gauge, baked-on primer, full insulation, and thermal break required, prepped for specified hardware: submit for approval.**
- (vi) Steel, Exterior, Flush Design: Min 18 gauge, galvanized, full insulation and thermal break required, prepped for specified hardware.**

- 1) **Windows: Insulated glass in steel doors only. Single pane or insulated glass in wood doors. All windows set in caulk. Follow OBBC Glazing guidelines for type, size and safety.**
- (vii) **Frames**
 - 1) **Steel, Exterior Door Frame: Min. 16 gauge steel, galvanized, knock-down or pre-hung, at least 3 anchors per side, adjustable aluminum threshold, fully weather-stripped, shop primed.**
 - 2) **Wood Door Frame: Pine, 3/4", width as required, with 3/8"x1-5/6" stop or approved equal. Split jambs are not acceptable. Finger jointed jambs for painting only. New door units may be pre-hung.**
 - 3) **Attic Access Door: Hinged steel panel, with screwdriver-operated cam locks, to be covered with plasterboard or gypsum board: J.L. Industries (Bloomington, MN) Model CT or approved equal.**
 - 4) **Roof Scuttle: Site fabricated of 3/4" CDX plywood and 2x4s, covered with roofing, with matching curb at least 8" high. Min 2'-0"x3'-0" overall.**
- (b) **WORKMANSHIP**
 - (i) **General: Condition doors to average prevailing humidity in installation area prior to hanging.**
 - (ii) **Installation: Install doors to comply with manufacturer's instructions and A.W.I. standards. Align and fit pre-hung units to walls with uniform clearances of 1/8" at jambs and heads, 1/16" per leaf at meeting stiles for pairs of doors, and 1/4" from bottom of doors to top of finish floor. Where threshold is shown or scheduled, provide 1/4" clearance from bottom of door to top of threshold. Bevel doors 1/8" in 2" on both sides and machine doors for hardware if required. Hinges mortised into jamb and door. Install shims and securely nail jamb by the striker plate and hinges.**
 - (iii) **Operation: Contractor shall refit/rehang doors which do not swing or latch smoothly or are hinge bound. Replace any doors that are damaged during installation.**
 - (iv) **Hardware, Jamb, and Trim Repair, and Weather-stripping: Refer to appropriate sections of this specification. Dean bolt striker screws shall be long enough to penetrate through jamb and into rough framing.**
 - (v) **Painting: Wood door face and edges should be sanded and ready for stain or paint.**

Section 1.06 EXISTING WOOD DOOR, FRAME AND TRIM REPAIR

- (a) **MATERIALS**
 - (i) **Stock for Replacing Damaged Jambs: Pine, fir, or other approved softwood, thickness to match that of the jamb.**
 - (ii) **Wood for Door Repairs: Wood of the same species and thickness as the door.**
 - (iii) **Glue for Interior Jamb and Door Repairs: Elmer's Carpenter's Glue, "Titebond," or approved equal.**
 - (iv) **New Sills for Exterior Doors: Oak, width to match existing.**
 - (v) **New Door Trim: Kiln dried pine, D-Select or approved equal. Match existing width.**

- (vi) **Hinges:** Refer to “Builders Hardware.”
- (vii) **Weather-Stripping for Exterior Doors: Sides and top:** 7/8” aluminum with vinyl bulb seal, “Pemko” 160 or approved equal, screw in place. On door bottom, use adjustable rubber or felt door sweep.
- (viii) **Wood Preservative:** Cuprinol Clear.
- (ix) **Impact-Resistant Filler:** “Bondo” or similar 2-part polyester or epoxy filler.
- (b) **WORKMANSHIP**
 - (i) **Unused Hardware:** Remove all hardware that is not to remain in use. Fill all empty holes and mortises.
 - (ii) **Door & Jamb Repair:** Where damage is extensive, replace damaged jamb with new jamb to match. Repair all door mouldings.
 - (iii) **Old Hinge & Striker Plate Mortises: Holes from Old Locks & Locksets in Jamb & Doors:** Clean out holes and mortises, fill with impact resistant filler.
 - (iv) **Sill Replacement:** Remove existing sill. Provide solid support beneath new sill. Caulk or glue to prevent air infiltration. Fasten with screws, set in and filled.
 - (v) **Exterior Trim Replacement:** Shim 3/4" stock to match existing 7/8". Replace top flashing where top trim is being replaced. Repair all loose or damaged trim moulding, replace missing or unrepairable mouldings with closest stock. Submit for approval.
 - (vi) **Hinge Replacement:** Replace broken or damaged hinges with new.
 - (vii) **Door Re-hanging:** If door is not operating smoothly, closing tightly, or has large gaps at top or bottom; adjust hinge(s), add strip(s) at top or bottom, plane edge(s) of door, and adjust passage set (or lockset) and strike so that the door works easily with a uniform space of about 1/16” at the hinge side and 1/8” on the other three sides.
 - (viii) **New Lockset and/or Deadbolt:** Install new lockset and deadbolt, as listed in specifications, following all manufacturer’s directions. On completion, they shall work easily and latch snugly. Coordinate with “Builders Hardware.”
 - (ix) **New Doorknobs:** Where knobs are missing or damaged, install new brass-plated spun steel knobs with threaded spindles and matching roses.
 - (x) **Old Hardware:** Clean and repair existing hardware that is to remain, as listed in specifications.
 - (xi) **Badly Weathered Areas on Door and Jamb (if required):** Sand smooth and treat with preservative.
 - (xii) **Weather-stripping for Wood Exterior Doors:** Install the weather-stripping around all four edges of the door. Adjust so that the door seals tightly yet operates easily. Securely screw door sweep in place on inside face.
 - (xiii) **Painting:** See other document for exterior painting. Sand and seal all edges of door. Make ready for stain or paint.

Section 1.07 ALUMINUM STORM WINDOWS AND DOORS

(a) MATERIALS (with CRS approval)

- (i) **Samples:** Submit manufacturer’s product literature for style and color samples subject to approval by the Homeowner and CRS Program Associate.

- (ii) **Storm Windows:** Factory fabricated vertical operating triple-track aluminum storm windows made from solid extrusion with a minimum wall thickness of .045 min. Include an adjustable bottom expander, center mullion bar, and a fabric screen. “Seaway” or equivalent.
- (iii) **Storm Doors:** Aluminum combination, with aluminum bottom panel and glass/screen upper panel, with baked-enamel finish. Include basic latch, hydraulic pump, crash chain, fabric screen, and an adjustable door sweep for bottom of door. “Seaway” or equivalent.
- (iv) **Caulking:** Acrylic latex or approved equal. Color to match windows and doors.

(b) WORKMANSHIP

- (i) **Field Measurement:** Manufacturer’s representative shall take field measurement prior to fabrication of window and door units.
- (ii) **Window Installation:** Comply with manufacturer’s instruction for installation. Set storm window and door units plumb, level and without distortion securely fastened to blind stop. Align storm window meeting rails with wood sash meeting rails. Caulk sides and top of storm window before installation. Caulk sill after installing, with at least two drainage slots left clear for drainage. Adjust inserts, screws and hardware to provide a tight fit at contact points. Upon completion all storm sashes and screens shall slide freely and latch snugly for a good, draft-resistant seal and shall be removable from inside.
- (iii) **Door Installation:** Comply with manufacturer’s instruction for installation. Set door units plumb, level, and without distortion. Securely fastened to brick mold. Caulk edges of door. Securely attach hydraulic pump to a solid jamb or blocking. Adjust frame, pump, and latch for a proper closing and fit.
- (iv) **Cleaning:** Upon completion all storm window glass and wood window glass shall be cleaned completely of caulking, paint, and dirt.

Section 1.08 WOOD STORM DOORS

(a) MATERIALS

- (i) **New Doors:** Match existing or specified new design. Submit for approval.
- (ii) **Stock for Replacing Damaged Jambs:** Pine, fir, or other approved softwood, thickness to match that of the jamb.
- (iii) **Wood for Door Repairs:** Wood of the same species and thickness as the door.
- (iv) **Glue for Exterior Jamb and Door Repairs:** Waterproof glue, epoxy or resorcinol (Elmer’s waterproof glue)
- (v) **New Sills for Exterior Doors:** Oak, width to match existing.
- (vi) **New Door Trim:** Kiln dried pine, D-Select or approved equal. Match existing width.
- (vii) **Hinges:** Refer to “Builders Hardware.”
- (viii) **Weather-stripping for Exterior Doors:** Sides and top: 7/8” aluminum with vinyl bulb seal, “Pemko” 160 or approved equal, screwed into place. On door bottom, use adjustable rubber or felt door sweep.

(ix) Wood Preservative: Cuprinol Clear

(x) Impact-Resistant Filler: “Bondo” or similar 2-part polyester or epoxy filler.

(b) WORKSMANSHIP

- (i) Unused Hardware: Remove all hardware that is not to remain in use. Fill all empty holes and mortises.**
- (ii) Door & Jamb Repair: Where damage is extensive, replace damaged jamb with new jamb to match. Repair all door mouldings.**
- (iii) Old Hinge & Striker Plate Mortises: Holes from Old Locks & Locksets in Jambs & Doors: Clean out holes and mortises, fill with impact resistant filler.**
- (iv) Sill Replacement: Remove existing sill. Provide solid support beneath new sill. Fasten with screws, set in and filled.**
- (v) Exterior Trim Replacement: Shim 3/4” stock to match existing 7/8”. Replace top flashing where top trim is being replaced. Repair all loose or damaged trim moulding, replace missing or unrepairable mouldings with closest stock. Submit for approval.**
- (vi) Hinge Replacement: Replace broken or damaged hinges with new.**
- (vii) Door Re-hanging: If door in not operating smoothly, closing tightly, or has large gaps at top or bottom; adjust hinge(s), add strip(s) at top or bottom, plane edge(s) of door, and adjust passage set (or lockset) and strike so that the door works easily, with a uniform space of about 1/16” at the hinge side and 1/8” on the other three sides.**
- (viii) New Lockset and/or Deadbolt: Install new lockset as listed in specifications following all manufacturer’s directions. On completion, they shall work easily and latch snugly. Coordinate with “Builders Hardware.”**
- (ix) New Doorknobs: Where knobs are missing or damaged, install new brass-plated spun steel knobs with threaded spindles and matching roses.**
- (x) Old Hardware: Clean and repair existing hardware that is to remain, as listed in specifications.**
- (xi) Badly Weathered Areas on Door & Jamb (if required): Sand smooth and treat with preservative.**
- (xii) Weather-stripping for Wood Exterior Doors: Install the weather-stripping around all four edges of the door. Adjust so that the door seals tightly, yet operates easily. Securely screw door sweep in place on inside face.**

Section 1.09 BUILDERS HARDWARE

(a) MATERIALS

- (i) Samples: Submit samples of all hardware prior to installation for approval by the Homeowner and HHP Associate.**
- (ii) Exterior Doors:**
 - 1) Lockset: Schlage FB150V PLY605, polished brass.**
 - 2) Door Frame Reinforcer: MAG P/N 2261 (or equivalent) PBV 2-3/4”**
 - 3) Hinges: 3 pair Stanley 4”x4” butts, brass-plated.**
- (iii) Strikes: Provide manufacturer’s standard wrought box strike for each keyset or lockbolt, finish to match hardware. Latchbolt strikes shall have a curved**

lip extended to protect frame. Provide frame reinforce.

(iv) Finish: All units to have bright brass finish, unless noted otherwise. Provide matching finishes for hardware units at each door opening to the greatest extend possible.

(v) Keying: Key per Homeowner's specifications.

(b) WORKMANSHIP

(i) General: Exterior doors and entrance doors to apartments to receive new keysets and deadbolts as indicated above.

(ii) Installation: Install each hardware item in compliance with manufacturer's written instructions. Do not install surface mounted items until finishes have been completed on substrate.

(iii) Adjusting: Adjust and check each item of hardware and each door to ensure proper operation. Replace units which cannot be adjusted for intended operation.

(iv) Protection: Protect all hardware from damage by wrapping with paper or other approved means, until final acceptance by homeowner.