



REHABILITATION PROJECT SPECIFICATIONS AND STANDARDS

ALL work is to comply with the current approved version of the International Property Maintenance Code (**IPMC**) and the International Residential Code (**IRC**).

This document outlines the project specifications and standards to which all work must be performed.

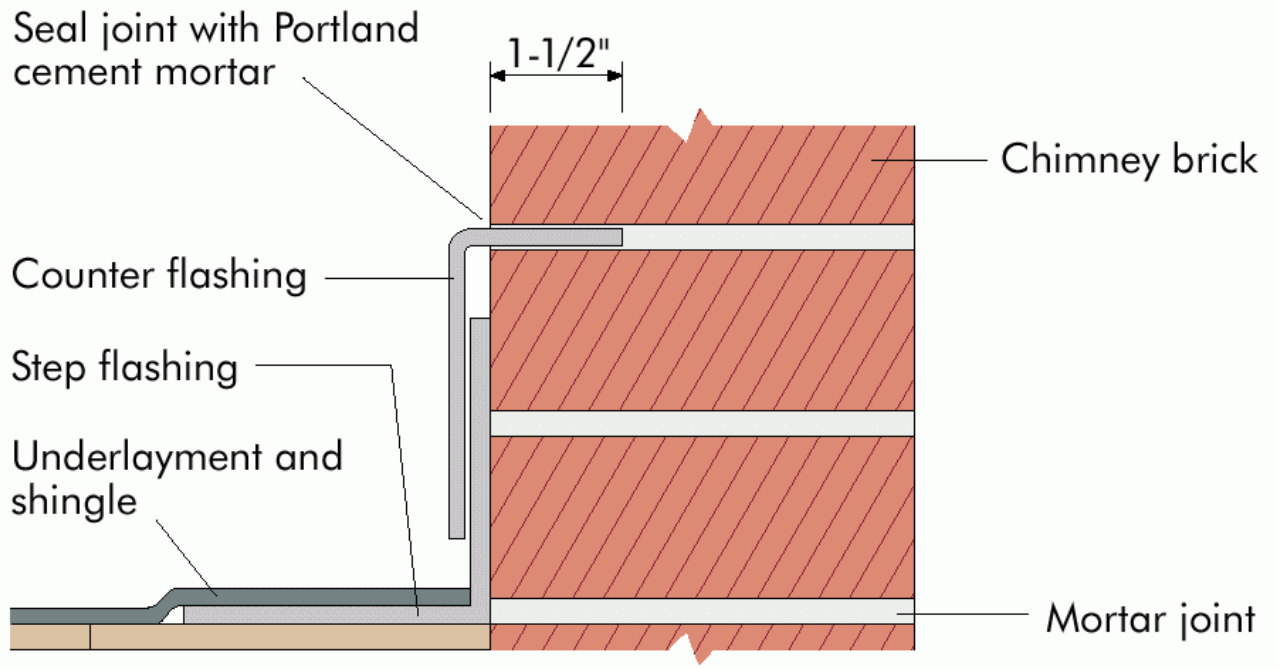
PROJECT SPECIFICATIONS:

ROOFING

A. ROOF MATERIALS

- a. All existing roofing material will be removed to bare wood.
- b. Damaged or rotten roof decking will be replaced with like material.
- c. Use approved manufacturer underlayment; identified in the scope of work.
 - i. Synthetic underlayment.
- d. Install new shingles that are a minimum Lifetime fiberglass/asphalt, architectural shingles.
 - i. IKO Cambridge, or equivalent.
- e. Install a SBS Modified Bitumen on pitches of less than 2/12. Apply a layer of base with 1 layer of modified bitumen (granular).
 - i. GAF Liberty SBS or equivalent
- f. If shingles are specified on a roof pitch under 3/12, ice and water shield must be installed on the entire roof.
- g. When applicable install EPDM 45mil Rubber Roofing with a minimum ½” fiber board underlayment. This includes the use of manufacture approved installation materials and stainless-steel termination bars where applicable.
- h. Install ice/water shield at all eaves and valleys.
 - i. Install a minimum of 2 rows at all eaves and one in all valleys.
- i. Replace all flashing, with roofing tin (not aluminum). I.e.: Step, wall, pitch change
 - i. Install new valley tin to reinforce all valleys; this should be a minimum of 14” tin
 - ii. All flashing details must confirm with the manufacture’s installation instructions.
- j. Install Ridge ventilation system
 - i. ShingleVent II or equivalent
 - ii. Install metal turtle back vents only when ridge vent is not applicable
- k. All Drip edge will be replaced with wide (2 ¼”) aluminum drip edge.
- l. Provide kick out flashing were necessary.
- m. Install a cricket or saddle in all dead valleys if one doesn’t currently exist.
- n. Contractor is to replace ALL penetrating flashing with metal vent boots on all roof penetrations.
- o. RACE inspection is required upon removal of existing roofing materials, installation of new underlayment, and any other inspections as deemed necessary.
- p. New sheeting will be used as an underlay when existing sheeting is deemed by RACE and the Contractor to be damaged, rotted or otherwise un-repairable.
- q. All products are to be installed in accordance with manufacture installation instructions.
- r. A five-year guarantee against leakage is to be provided to the homeowner.

COUNTER FLASHING DETAILS



CLOSE UP OF FLASHING DETAIL

Asphalt-saturated felt underlayment turned up vertical walls approx. 3" to 4"

Flashing placed just upslope from exposed edge of shingle – extends approx. 4" over underlying shingle and approx. 4" up vertical wall

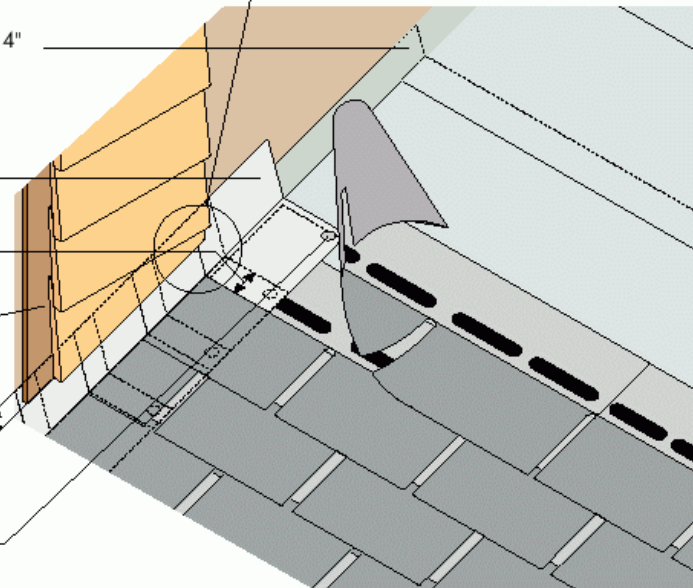
Approx. 2" head lap

Siding/cladding – maintain 2" above the roof surface

Wall cladding/siding serves as counter flashing and should overlap step flashing a min. of 2"

Place nails high, so nails are overlapped by the next upslope step flashing

Minimum 1" above roofing material



SIDING, SOFFIT, FASCIA, AND GUTTERS

A. SIDING

- a. Siding will be vinyl, 8” double 4” type .040 and will include all necessary accessories as per the manufacturer’s recommendations. Product must be from reputable manufacturer such as Mastic or equivalent. Proof of specifications is required via purchase receipt.

Lead safe work practices must be used when applicable.

- i. Mastic Ovation or equivalent
- b. Cover building with house wrap and tape all seams or cover building with ¼ inch fanfold and tape all seams especially under all windowsills as per manufactures specifications.
 - i. Tyvek (housewrap) or equivalent
 - ii. Polar House Wrap ¼” Weather All PRO or equivalent
- c. All trim accessories shall match siding color and texture (unless approved).
- d. Matching split blocks, siding blocks, electrical outlets, etc. must be used
- e. Install duct seal around all siding penetration, i.e.: electrical cable, large plumbing pipes
- f. If CDBG or HOME funding is being used, Install 4” house address per City of Erie’s Uniform Construction Code.

B. REPAIR

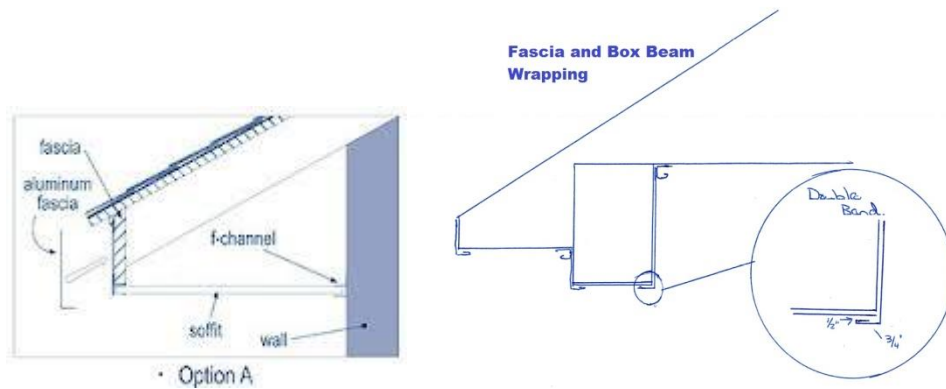
- a. If the existing exterior siding is not consistent in type or style, the contractor is to match the greater of the existing siding or move siding to allow for consistent styles following window/door installation.
- b. All materials to be installed according to manufacturer’s specifications and all local building codes.
- c. In addition, repair or replace all deteriorated or damaged wood trim with lumber of the same size, style, and shape to the extent possible prior to installing siding.

Mounting Blocks: (examples)



C. SOFFIT and FASCIA

- a. Tyvek house wrap is to be installed per LSWP when applicable.
- b. All damaged or deteriorated wood located at the fascia, soffits, rakes, and molding is to be replaced with dimensional pine stock to provide an adequate support and nailing surface.
- c. All soffit material is to be of the solid type, unless directed by RACE.
 - i. Use Universal Triple 4" solid soffit or equivalent
 - ii. Installation of perforated or vented soffit is only permissible when not an LBP activity.
- d. All exposed edges of aluminum wrapping will have double bent edges for rigidity.
- e. All existing gutters are to be detached and reset if fascia is being wrapped.
- f. **Lead safe work practices must be used**



D. GUTTERS & DOWNSPOUTS

- a. Replacement gutters and downspouts are to be new seamless style. The new gutters are to be 5" K- style or equal, .027ga. aluminum seamless, with necessary downspouts and accessories. All joints are to be screwed.
- b. All horizontal joints are to be sealed against leakage. Downspouts are to be installed at each corner and major offset; secured with mounting straps installed a minimum of 48" o/c.
- c. All NEW gutters must be installed with a hidden hanger system @ 24" o.c. or suspended hangers depending on roof/fascia style.
- d. Downspouts, elbows, extensions and concrete splash blocks are to be installed insuring storm water is properly directed away from the structures foundation walls per City of Erie's Uniform Construction Code and with a minimum of 3 feet extension away from the structure, so as not to create a nuisance or encroachment.



WINDOWS

A. BASEMENT WINDOWS:

- a. All basement windows units are to be glass block with a 6" x 16", vinyl, tilt out, double-glazed window insert with screen.
- b. Install new glass block basement windows, manufactured to fit existing window size. Windows may be shrunk only at the direction of an RACE inspector when situation deem necessary.
- c. Replace all damaged or deteriorated wood with dimensional treated lumber necessary to provide for proper installation of the window units. The mortar for installation of the basement windows will be type N.
- d. If no dryer vent currently exists through rim board or base of house, a dryer vent will be installed in the glass block window closest to the dryer. If dryer vent currently exists through the rim board or base of house, glass block window need not include dryer vent except at the request of homeowner. Dryer vent location must be code compliant.
- e. Contractor is to reinstall customer dryer vent.
 - i. Vent must be code compliant 4" straight metal duct with UL approved seam tape.
- f. Basement windows must be installed at or above grade.
 - i. Absolutely no mortar or dirt should be placed against the face of the block.
 - ii. If a window needs to be installed below grade contractor is to furnish a composite window well and secure to existing foundation with appropriate fasteners.



B. REPLACEMENT WINDOWS:

- a. Installation of new windows include the replacement of all damaged or deteriorated wood with dimensional pine stock necessary to provide for proper installation of the window units.
 - i. Fill all voids with closed cell, minimal expanding, and polyurethane insulating foam sealant.
- b. All non-basement window units are to be double hung, solid vinyl, fusion welded, double pane glass, low-e, argon gas, with at least ½ screens. Must meet northeast regions energy standards. (unless otherwise specified)
- c. Windows located in bathrooms will include tempered, privacy glass. Furthermore, any window which fits any one of the following items must be tempered.
 - i. Any Window or sidelight within 24 inches horizontally of a door must be tempered.
 - ii. Any Window or Sash that is 9 square feet or more AND is 18 inches or less from a floor must be tempered.
 - iii. Any Window on a Staircase Landing or within 60 inches a staircase tread must be tempered.
- d. Install trim material as needed for proper installation of the window.
- e. Paint all trim around the windows. If clear coated, contractor is to match existing finish of window trim material.
- f. Caulk exterior perimeter of windows between j-channel and wrapping, to provide a weather tight envelope.
- g. Caulking will be 100% silicon
 - i. Quad exterior grade or equivalent
- h. Color to be white unless otherwise specified.
- i. Remove storm windows only from windows to be replaced. Contractor shall give Homeowner the option to keep old storm windows.
 - i. If homeowner does not want storm windows, contractor will dispose.
- j. Window Awnings or other obstacles will be detached & reset as needed to provide for proper installation of windows/wrapping.



EXTERIOR WINDOW WRAPPING:

- a. Window wrapping is to be .024-gauge aluminum coil stock.
- b. Wrapping must be fastened using aluminum or stainless-steel nails.
- c. All wrapping is to be installed using standard trade practices.
- d. All edges are to be caulked.
- e. Caulking will be 100% silicon
 - i. Quad exterior grade or approved equal.
- c. Wrap all sides of window frames unless specified.
- d. Color to be white or brown unless otherwise specified.
- e. Old window wrapping will always be removed and replaced.
 - a. Only RACE inspector can make exceptions.
- f. Contractor is to install a drip cap over all windows as another part of the window wrapping. This will ensure a weather tight enclosure.
 - a. RACE inspector will make the determination if the existing siding prevents a drip cap from being installed the



EXTERIOR DOORS AND LOCKSETS

B. EXTERIOR DOORS:

- a. All doors will be sized 6'8" standard size. Size of door opening may be adjusted to accommodate new door and frame assembly. Exceptions will be determined by RACE on a case by case basis.
- b. New doors are to be fiberglass, pre-hung units with 3 light, 9 light half glass or fan light hinges, threshold, brick mold.
- c. All doors are to have jambs and thresholds sized to fit the existing opening.
- d. Fill all voids with a closed cell, minimal expanding, and polyurethane insulating foam sealant.
- e. Doors shall close tight. Replace all damaged or deteriorated wood with dimensional pine stock necessary to provide for proper installation of the door units.
- f. Threshold shall be embedded in 100% silicon supported and sealed.
- g. Include interior casing that matches existing trim patterns as close as possible on all doors where needed.
- h. Caulking will be 100% silicon
 - i. Quad exterior grade or equivalent.
- i. All exterior wrapping will terminate at the jamb and allow for the future installation of a standard storm door.

EXISTING SCREEN/STORM DOORS WILL NOT BE RE-INSTALLED AS PART OF THIS SCOPE OF WORK DUE TO POTENTIAL RE-SIZING OF EXTERIOR DOOR FRAME

LOCKSETS:

- j. Approved locksets are those manufactured by Schlage and Kwikset
 - i. Schlage Model # FB350 V or equivalent
- k. Lock-set and deadbolt protection must be installed correctly with all security features (no exceptions).
- l. All plates must be mortised into the door jamb in a workman like manner.



INTERIOR DOORS

A. INTERIOR DOORS:

- a. Doors shall be hollow core, composite interior doors hung on existing jambs, replace with flush face or six panels (homeowner choice).
- b. All doors will be sized 6'8" standard height.
 - i. Box top of frame if higher than door.
- c. Use standard passage locksets and privacy locksets.
- d. Doors will be painted or stained with one primer and two coats of medium grade interior latex semi-gloss paint or medium grade stain w/sealant.
- e. Replace jamb stops with new to match existing
- f. All materials used should be trim grade.
- g. Repair or replace any damaged casing around doors. Match existing trim patterns and material as close as possible.
- h. Complete jamb replacement will include a door with jambs of custom width to match opening.
- i. All trim installed to facilitate either lead safe or replacement work must be of same material as existing and be finished to match.



CABINETS AND COUNTERTOPS

REQUIREMENTS

- A. All kitchens shall be designed in manner to allow space for a 30” oven/range, microwave/hood combo, 24” built-in under cabinet dishwasher, and 22 cubic foot refrigerator.
- B. There shall be minimum 30” tall upper cabinets over all base cabinets in the kitchen.
- C. All full baths shall have minimum 2-door cabinet base with drop in sink.
- D. All countertops shall be at minimum plastic-laminate as described below.
- E. Cabinet frames shall be made of all solid hardwood. The doors are to be no less than 3/4” thick hardwood frames with hardwood plywood panels. All tops, bottoms, side panels, shelves and drawers shall be a minimum of 3/8” thick cabinet grade plywood.

CABINETS AND COUNTERTOPS

- A. Wood Cabinets for Transparent Finish:
 - a. Face Style: Raised Panel/Shaker style w/flat panel.
 - b. Cabinet Style: Face Frame.
 - c. Door and Drawer Fronts: Wood stiles and rails.
 - d. Door and Drawer Fronts: Hardwood or Veneer-faced plywood
 - e. Face Frame Finish: Wood.
 - f. Exposed Cabinet End Finish: Wood or Veneer Laminate
 - g. Exposed Wood: Clear solid wood or hardwood plywood with Grade A faces, selected for compatible color and grain as chosen by Owner.
 - h. Door and Drawer Pulls: Surface mounted decorative pulls as chosen by Owner.
 - i. Hinges: Concealed butt hinges.
 - j. Drawer Guides: Epoxy-coated-metal, self-closing drawer guides with nylon-tired, ball bearing rollers.
 - k. Drawer Sides and Backs: Solid-hardwood lumber.
- B. Plastic-Laminate Countertops and Splashes:
 - a. Laminate Grade: NEMA LD 3 HGS for flat countertops, HGP for post-formed countertops.
 - b. Substrate: Particleboard, ANSI A208.1, Grade M-2
 - c. Backing: Plastic-laminate backer sheet, MENA LD3, Grade BKL
 - d. Edge Treatment: Same as laminate cladding on horizontal surfaces.
 - e. Splash Height: 4 inches
 - f. Splash Thickness: 3/4-inch nominal thickness
 - g. Splash Top-Edge Detail: Straight, slightly eased at corner
 - h. Seams: Fabricate countertops without field joined seams.

TOILET AND BATH ACCESSORIES

REQUIREMENTS

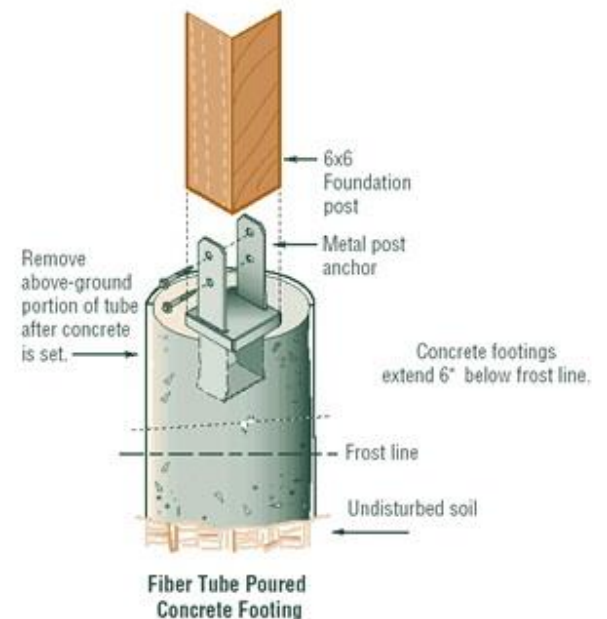
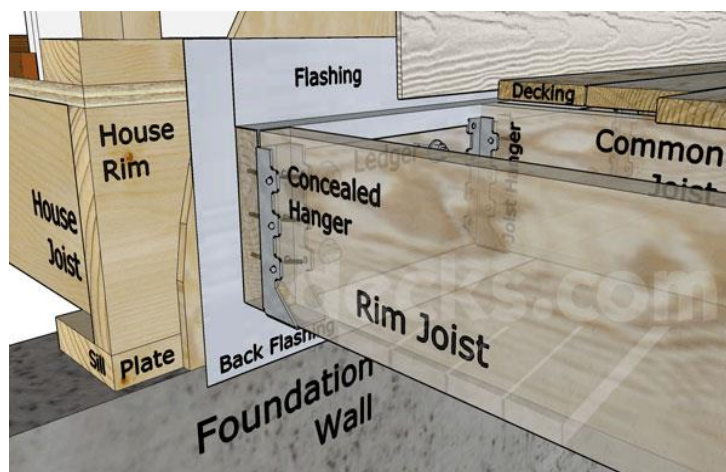
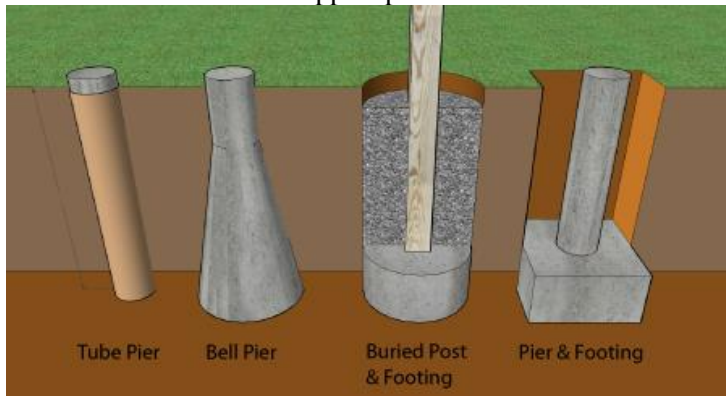
- A. All bathrooms shall have at least one towel bar, one toilet paper holder, and one medicine cabinet. Additionally, each shower and/or tub/shower combo shall have at least one towel bar and one soap dish integrated into the tile work.
- B. Tub/shower combos will have a curtain rod installed.
- C. Each bathroom shall have a vanity mirror at least twenty-four (24) inches wide x thirty-six (36) inches high.

PORCH AND DECK CONSTRUCTION/REPAIR

All Lumber shall be #1 pressure treated lumber.

A. PORCH / DECK CONSTRUCTION:

- a. Porch/Deck support footers will be 12" sonotubes filled with reinforced concrete installed in accordance with local code.
- b. All posts are to be attached to footers with a Simpson ABU post base and 5/8" wedge anchor. (5/8" embedded j-bolts are also acceptable) Post will be anchored in the center of all footings.
- c. All ledgers must be connected as per local code with back flashing and z-flashing that extends a minimum of 4" above the deck.
- d. Joists are to be sized to meet code and installed using code approved hangers and fasteners.
- e. All decking is to be treated 5/4" decking material pre-drilled and attached with exterior grade screws.
- f. All decks should pitch away from the structure in accordance with local code.
- g. Lattice and supporting lumber will be treated or vinyl (as outline in the scope of work). Lattice will be supported at both top and bottom with an intermediate support placed at 4-foot on center and will be at least 1/2 inch in thickness. Bottom support will be full length and properly secured at ground level to prevent movement.
- h. All material and fasteners used must be exterior grade.
- i. All new framing and connectors must comply with local building codes.
- j. All existing porch roof structures will be stabilized and straightened prior to the installation
- k. of new support posts.



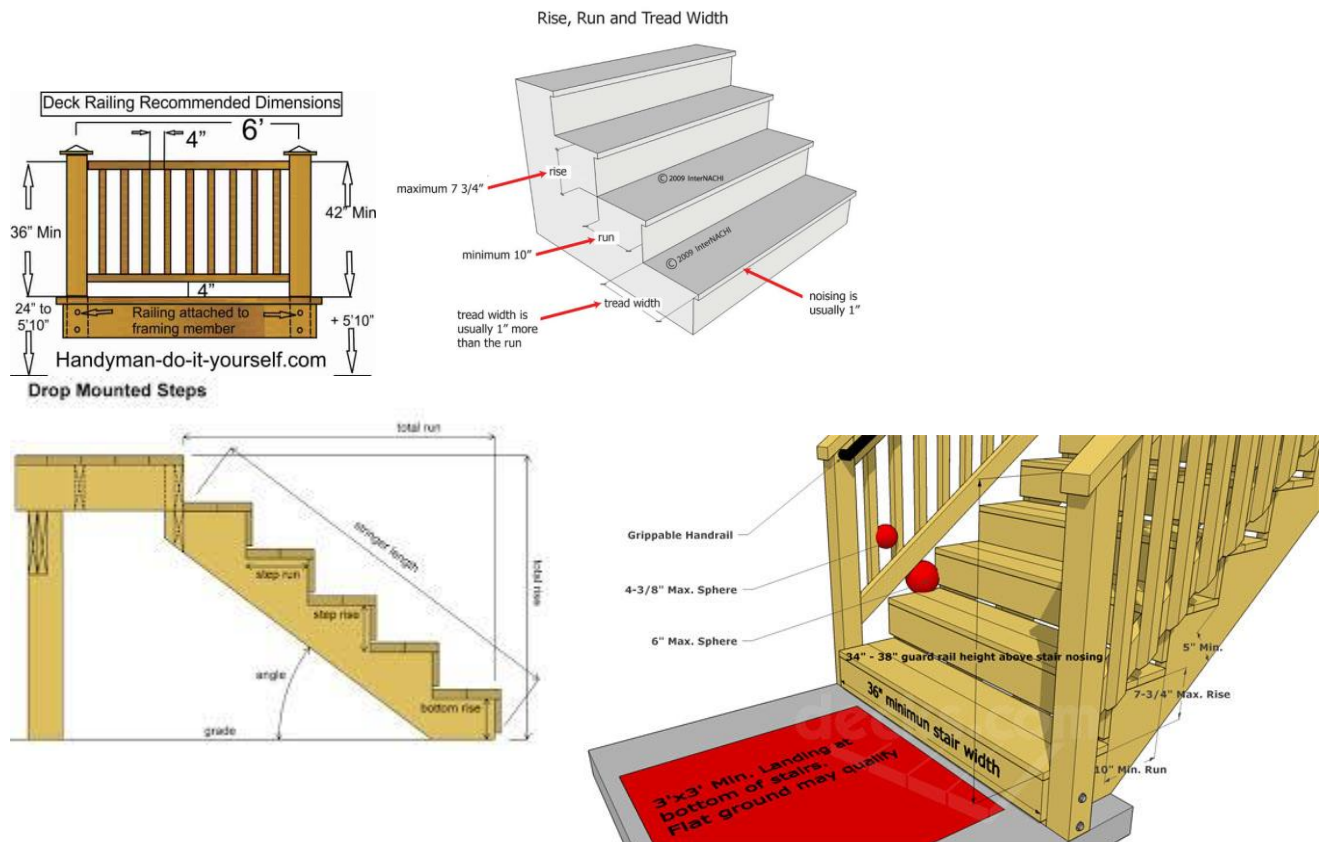
STAIRS

A. INTERIOR STAIRS & HANDRAILS:

- If required, Code compliant handrail is to be installed in all stairwells.
- All interior handrails shall be returned to the wall at both ends.
- Handrails shall be provided at least on one side of the stairway installed 34" to 38" measured vertically from the sloped plain to the nose of the tread
- If required, Basement and attic stairs are to be covered with vinyl stair tread -24" wide, 1/4" thick. Treads are to be fully glued in place.
- If required, new stairs are to be constructed with 2"x12" stringers, 2"x12" treads and 1x8" risers. All material is to be glued and screwed together.
 - Newly built stairs are to comply with local code.

B. EXTERIOR STAIRS & HANDRAILS:

- Construction will be of treated lumber, 4 x 4 posts, 2 x 12 cutout stringers, 2 x 12 treads, 1x8 risers, 2 x 4 rails and 2 x 2 balusters spaced to not allow the passage of a 4" sphere.
- Risers will be closed and meet current code standards.
- Posts located at the base of stairs must be place in the ground to a depth acceptable with local code utilizing the buried post and footing method (outlined in the picture above- 8" footing min).
- All construction will be properly secured and fastened to provide the intended protection per City of Erie Uniform Construction Code.
- All stairs will include a code compliant graspable handrail utilizing exterior grade hardware and materials per local code.



INTERIOR PAINTING AND PLASTER REPAIR

A. PAINT STABILIZATION, PAINTING, & PLASTER REPAIR

- a. All surfaces are to be wet scraped as needed to remove loose surface material.
- b. Any area to receive plaster repair should be finished to a smooth, blemish free condition.
- c. All surfaces that are to receive paint are to be primed then top coated with two top coats of a medium grade interior paint.
 - i. Paint is to be even in finish with no color differential.
- d. All interior trim is to be painted with a semi-gloss paint.
- e. Client shall be given a choice 1 wall color (per room if entire room is being painted) and 1 trim color (not just white or brown).
 - i. Contractor may choose to allow homeowner more than one wall color.
- f. Clear coat shall be used on trim and floors when existing surface is unpainted or has been previously varnished or clear coated.
- g. The use of any clear finish on floors must be approved for such installation.

B. WALL/CEILING OVERLAY

- a. Overlay with minimum 3/8" Drywall, using screws long enough to secure to existing framing.
 - i. Unless otherwise specified in the scope of work.
- b. All corners, edges and seams are to be finished to a smooth blemish free finish.
- c. Ceilings are to be textured with either a stipple or single knockdown texture.
 - i. Homeowner is to have a choice on ceiling texture.
- d. Popcorn ceiling finish will not be permitted

FLOORING

A. FLOORING

Vinyl

- a. Cap floor with 1/4-inch luan and install new medium grade sheet vinyl flooring minimum 1/8th inch thickness.
- b. All vinyl is to be full glue; floating vinyl floors are not acceptable.
- c. Base shoe is to be installed around the perimeter of all vinyl floors.
- d. Mop base may be installed in bathrooms if baseboards don't exist.
 - a. 100% silicone caulking is to be used around all door jambs and other penetrations.
 - b. Homeowner will have choice of in stock colors and textures.
 - i. Contractor should provide at least 8 choices to the homeowner

Carpeting

- c. Install medium grade carpet and separate 6 lb foam padding.
- d. Install carpet using tack strips around the perimeter of the room and tightening the carpet with a carpet kicker.
- e. Seal all seams and provide transition strips as needed.
- f. Repair sub floors as needed.
- g. Install transition strips at all doorways.
- h. All carpet installed on stairs is to follow the contours of those stairs.
- i. Homeowner will have choice of in stock colors and textures.
 - i. Contractor should provide at least 8 choices to the homeowner

CABINETRY

A. Cabinets and Countertops

REQUIREMENTS

- a. Comply with KCMS A161.1 Provide cabinets with KCMA's "B\Certified Cabinet" seal affixed in a semi-exposed location of each unit.
- b. Comply with KCMA A161.2 for plastic-laminate countertops.
- c. All kitchens shall be designed in manner to allow space for a 30" oven/range, microwave/hood combo and a 36" Standard refrigerator.
- d. There shall be minimum 30" tall upper cabinets over all base cabinets in the kitchen.

- e. All full baths shall have minimum 2-door cabinet base with cultured marble sink.
- f. All countertops shall be at minimum plastic-laminate.
- g. Cabinet frames shall be made of all solid hardwood. The doors are to be no less than 3/4" thick hardwood frames. All tops, bottoms, side panels, shelves and drawers shall be a minimum of 3/8" thick cabinet grade plywood.

INSTALLATION

- a. All cabinets shall be anchored with screws to wall framing (**NAILING IS NOT ACCEPTABLE**). If wall framing is not available the Contractor shall install the necessary blocking prior to the drywall being installed.
- b. Install cabinets with no variations in flushness of adjoining surfaces by using concealed shims. Where casework abuts other finished work, scribe and cut for accurate fit. Provide filler strips, scribe strips, and moldings in finish to match casework face.
- c. Install cabinets without distortion so doors and drawer's fit openings properly and are aligned.
- d. Install level and plumb to a tolerance of 1/8 inch in 8 feet.
- e. Fasten base cabinets to adjacent unit and to structural members of wall construction. Fasten wall cabinets through back, near top and bottom, at ends and not less than 24 inches o.c.
- f. Fasten wall cabinets through back, near top and bottom, at ends and not more than 16 inches o.c. with No. 10 screws sized for 1-inch penetration into wood framing or blocking.
- g. Cabinets: Install so doors and drawers are accurately aligned. Adjust hardware to center doors and drawers in openings and to provide unencumbered operation.
- h. Fasten plastic-laminate countertops by screwing through corner blocks in base units into underside of countertop. Spline and glue joints in countertops and use concealed mechanical clamps.
- i. Anchor countertops securely to base units. Seal space between backsplash and wall with silicone caulking.

THERMAL INSULATION

A. Walls and Ceilings

- a. All ceilings in conditioned spaces shall contain blown insulation with a minimum value of R-30.
- b. All wood framed exterior walls shall contain batt insulation with a minimum value of R-13 for 4" walls.
- c.

ELECTRICAL

A. Electrical System

- a. Install all branch circuit wiring, fixtures, and devices throughout the dwelling unit as required by RACE scope of work
- b. All new electrical work is to comply with City of Erie and NEC. This work is to comply with the current version of the International Property Maintenance Code (IPMC) or International Residential Code (IRC).
- c. All new service panels should be no less than 100 Amp, three wire, code approved panel.
- d. All new wiring is to be installed inside of walls, except where may be cost prohibitive, such as ceilings. In the event that wiring is to be installed through conduit outside of wall or baseboard rather than inside of wall, prior approval by RACE, contractor, and homeowner must occur.
- e. Closets with existing light fixtures are to be made safe and code compliant by installing new incandescent or fluorescent fixtures as clearances allow.
- f. Bathrooms will have moisture ventilation installed; this unit must be properly vented to the exterior of the home.
 - a. NuTone 70 CFM Bath Fan with Light or equivalent.
- g. If CSST or similar type gas lines must be bonded with a minimum #6 copper wire.

PLUMBING

A. Plumbing System

- a. Install new supply lines, drain lines, p-traps, shut-off valves, and fixtures as outlined in RACE scope of work

- h. All new plumbing must comply with City of Erie, International Property Maintenance Code (IPMC) and/or International Residential Code (IRC).
- b. A rigid overflow pipe is to be installed (code approved material) on all water heater pressure relief valves. This pipe is to extend to within 6" of the floor. Install new flue connector on hot water tank.
- c. Code approved outside frost resistant hose bibs are to be installed (per scope).
- d. Water heater is to be minimum 40-gallon, gas. Vent is to be code compliant material properly vented to the exterior.
 - i. Mechanical permit required for new gas water heater.
- e. All old and unused; drain, supply and gas lines are to be removed from the home.

HVAC

A. Furnace

- a. Remove existing and install a new 93% AFUE- (energy star only), gas fired furnace. Include all required gas plumbing and electrical circuitry. Include filter boot on cold air return.
- b. Install digital setback type thermostat.
- c. Install manually operated dampers to allow proper balancing of system. Use existing ductwork and floor registers.
- d. Install additional heat runs as needed to insure heating of all rooms.
- e. NOTE: When installing a new furnace, a mechanical permit must be pulled.

SMOKE DETECTORS

A. Smoke Detector Location

- a. Install 10-year lithium battery powered smoke detectors per the City of Erie's Uniform Construction Code.
- b. Install 10-year lithium battery powered carbon monoxide detectors per the City of Erie's uniform Construction Code.