



Airport Heights Multifamily Housing

OUTLINE SPECIFICATION
COOK INLET HOUSING AUTHORITY

Background

The purpose of this document is to provide contractors with important design and construction information relevant to CIHA's needs and expectations. These design standards were developed through feedback from across CIHA's departments and staff and are based on CIHA's current operational needs as well as experiences and lessons learned on past developments.

This is a living document. It is intended to provide a starting point and guidance to design consultants, contractors, and partners as they work with CIHA to design and build a residential development. As you review this document, you are encouraged to inquire about any standard or instruction that may not be clear, or that you disagree with or believe may not comport with a project's particular design strategy, project philosophy, or prior direction.

Design and construction methodologies change over time, and we expect this document to similarly be modified to keep up with the changing times and CIHA's development needs. Thank you in advance for closely reviewing this document before you construct the project, and for your meaningful feedback to ensure not only that this project is a success but also leaves a legacy for the success of future projects.

General

Require a schedule of values with all ITB's conforming to the General Requirements

CIHA encourages contractors to provide 'as equal' substitutions for products and services encompassed within the bid documents, which satisfy the design intent, regulatory codes & standards, specified warranty requirements, and the owner's operations, maintenance procedures, and schedule. All substitutions are required to be clearly identified and submitted for review as a "substitution" during the product submittal process, or as identified in the General Conditions. The general contractor is responsible for achieving the BEES energy rating as well as the BEES certification for the cost reduction of \$40 / month annually. (Refer to version 2.17.0.0.)

The Contractor will be responsible for all costs associated with the substitutions that require additional design and engineering due to the change in the basis of design and all construction cost(s) associated.

Contractor is required to turn over spare parts as appropriate and per industry standard, and excess materials (such as flooring, 5-10%) of a reasonable amount are turned over to CIHA.

Division 01: General Requirements

014100 Regulatory Requirements

All locally adopted Applicable Codes, Laws, Ordinances, and Local Amendments.

IECC 2018 and ASHRAE 62.2 2016 with AHFC's Alaska-Specific amendments dated November 28, 2018, and comprising the Building Energy Efficiency Standards (BEES) Certification.

Fair Housing Act

Section 504 Uniform Federal Accessibility Standards

ADA (for common areas)

Division 03: Concrete

033000 Structural Concrete

As specified in the engineered and approved design.

Slab on Grade Flatwork Finishes shall be 'Troweled', conforming to ACI 301.

This would be for all concrete to remain exposed, slabs to receive resilient floor coverings and for any flatwork to receive bearing pads.

Exterior Site Concrete Finishes shall have a 'Broom Finish', conforming to ACI 301. Finish with a 'Medium' texture, using poly fiber bristles or equal. Exact coarseness of the broom finish shall match the approved site mock-up.

All concrete floors must be tested per the latest edition of ASTM F 2170. A minimum of three tests must be conducted for areas up to 1,000 SF and one additional test for each additional 1000 SF. IRH levels recorded from ASTM F 2170, not to exceed allowable levels as published by the selected floor covering manufacture.

035400 Gyp-Crete

Install per drawings and manufacturer's recommendations.

Sound reduction mat underlayment: Install per manufacturer's recommendations, including installation of perimeter isolation strips, at the perimeter of all areas receiving sound reduction mat including but not limited to, doorframes and around any penetrations through the installation. Adhere all sound reduction mat and perimeter isolation strips to the underlying surface areas.

Division 05: Metals

051200 Structural Steel Framing

As specified in the approved structural engineered drawings. Install in

accordance with the approved structural engineered drawings.

Division 06: Wood, Plastics, and Composites

061000 Rough Carpentry

In accordance with approved structural engineered drawings, provide conventional wood frame rough carpentry.

Wood Products

In accordance with approved structural engineered drawings, provide wood and lumber products as specified on the drawings.

061623 Subflooring

All floor sheathings to be APA rated plywood sheathing, exterior grade or Oriented Strand Board (OSB) as specified by the structural engineer; however, underlayment will be required for all areas to receive sheet vinyl (or similar type flooring) where OSB underlayment is used.

061626 Underlayment

APA rated underlayment, approved for use under sheet vinyl, resilient tile or similar type flooring as recommended by the flooring manufacturer.

Wood Subfloors: APA rated underlayment-grade panel, approved for use under sheet vinyl, resilient tile or similar type flooring as recommended by the flooring manufacturer. Underlayment should be installed per the manufacturer's installation instructions and carry a written warranty covering replacement of the entire flooring system.

Concrete Subfloors: New Concrete subfloors should meet the guidelines of the latest edition of ACI 302 and ASTM F710. Reference section 033113. Substrates shall be smooth, structurally sound, dry, clean and free of all foreign material such as dust, wax, solvents, paint, grease, oils, old adhesive residue, **curing and hardening/ curing compounds, sealers** and other foreign material that might prevent adhesive bond.

- Perform Bond testing to determine compatibility of adhesive to the substrate. Shaw 9050 primer can be utilized to promote adhesion.
- Where concrete surfaces require additional leveling to meet overall floor flatness values of FF 36/ FL 20, grinding or Hydraulic Cement-based Self-Leveling Underlayment can be used. All cement-based underlayment will require a proper floor primer, prior to underlayment applications. Install cement-based self-leveling underlayment per manufacturer's recommendations.

- 061633 Wood Board Sheathing, roofs and walls
 APA rated sheathing, exterior grade OSB, or in accordance with the approved structural engineered drawings. Install sheathing in accordance with the approved structural engineered drawings. Allow 1/8" spacing at panel ends and panel edges, or as recommended by the panel manufacture.
- 061713 Laminated Veneer Lumber (LVL)
 All LVL sizes and ratings are to be in accordance with the approved structural engineered drawings.
- 061733 Wood I-Joists
 As specified in the approved structural engineered drawings. Install in accordance with the approved structural engineered drawings and manufacturer's recommendations.
- 064300 Wood Stairs
 Provide in accordance with the approved structural engineered drawings. Economy Grade, Nominal Wood members meeting or exceeding AWI standards for Stairwork and Rails. Stair construction to include but not be limited to stringers, skirt boards, treads, risers, starter boards, nosing and trims. Ensure all tread materials will comply with flooring manufacturer recommendations for underlayment material(s).
- All stairwork shall conform to all applicable codes, ordinances and general requirements.
- 064316 Interior Wood Railings
 Architectural grade lumber on all handrails, wall caps, and other wood stair trim, metal mounting hardware is to be satin nickel finish. All joints/seams shall have a wall bracket
- 064613 Wood Door and Window Casings
 Door Casing – Architect of Record & CIHA shall approve style and profile.
 Window Sill – Windowsills are required on all windows where the sill is within 50" of the finished floor, material is to be painted MDF. No unit windowsills shall be lower than 32" AFF.

064619 Wood Base
Architect of Record & CIHA shall approve style and profile.

064810 Interior and Exterior Wood Door Frames
Paint grade, finger joint pine door jambs.

Division 07: Thermal and Moisture Protection

071000 Fluid-Applied Waterproofing
Hot Fluid-Applied Rubberized Asphalt Waterproofing on all exterior foundation walls.

072000 Board Insulation
Foundations & Underslab – Exterior rated Extruded Polystyrene (XPS), as specified in the contract documents and as required to achieve the proposed BEES rating.

Fiberglass Insulation

Framed walls – R Values as specified in the contract documents and as required proposed BEES rating.

Sprayed Foam Insulation

Walls & Ceiling – As specified to achieve the proposed BEES rating with a minimum density of 2 pounds per cubic foot. If spray foam is part of the insulation strategy, provide material specifications in prior to construction.

072600 Vapor Retarders
For walls, a minimum of 6 mil clear polyethylene or as specified to achieve BEES rating. For underslab, a minimum of 10 mil polyethylene or as specified to achieve BEES rating. The vapor retarder shall be continuous, and all joints shall overlap by 6 inches and be sealed and taped. Vapor retarders shall be sealed at all penetrations, edges and at perimeter of walls

Radon Prevention: Reference Section 312113

072700 Plastic Weather Barriers
Tyvek “DrainWrap” or approved equal, installed in accordance with manufacturer recommendations for sequencing of weather barrier assembly with installation of

windows, doors, louvers and flashings to provide a weather-tight assembly. Use manufacturer's approved tapes and sealants.

072727 Self-Adhering Water-Resistive Air Barrier

Install a continuous Vaporshield or equivalent product in accordance with manufacturer's recommendations, using approved tapes and sealants. Where exterior rainscreen assemblies are being installed, provide Vaporshield "RevealShield SA" or approved equal, installed in accordance with manufacturer recommendations for sequencing of weather barrier assembly with installation of windows, doors, louvers and flashings to provide a weather-tight assembly. Use manufacturer's approved tapes and sealants.
Color: Black

074213 Metal Siding

Metal siding to be as specified per the contract documents. Metal panel orientation as per the exterior elevations. Minimum panel thickness to be 22 gauge. Panels, trims, flashing, and closures should be sourced from a single manufacturer. Provide factory finish. Color to be selected from the manufacturer's full range of colors.

074233 Phenolic Wall Panels

Phenolic wall panels to be as specified per the contract documents. Phenolic panel layout as per the exterior elevations. Obtain each type of panel and all related accessories through a single source manufacturer. Minimum panel thickness to be 8mm. Exterior phenolic panels should include a fire resistance classification meeting or exceeding code requirements.

075000 Flat Roofs

EPDM or TPO roofs fully adhered or mechanically fastened are acceptable. The roof membrane shall be fully adhered in all applications. Insulation values as specified to achieve the proposed BEES rating. Roof assembly shall be a single-sourced roof system. Warranty shall include both a 10-year minimum Material Warranty and a 20-year minimum System Warranty.

076010 Foundation Insulation Flashing

22 ga. Kynar pre-finished steel flashing covering all foundation foam. Flashing to include fastening reglet, cleat, or termination bar in accordance with approved architectural documents, completing the assembly. Color to match per contract drawings. Submit samples to architect / owner for review / approval.

- 076500 Flexible Flashing at Windows and Doors
Grace Vycor Plus or VaproShield Reveal Flashing self-adhering flexible flashing or approved equal at all window and door openings.
- 077000 Manufactured Scuppers and Downspouts
Provide welded scupper, collector boxes, and downspouts. Provide minimum 22ga steel for scuppers and collector boxes. Downspout and outlet diameter as per contract documents. Provide minimum wall thickness of 0.125" for downspouts. Provide Kynar 500 finish. Color to be selected from manufacturer's full range of colors.
- 079000 Elastomeric Joint Sealants
Use Tremco Acoustical Sealant or approved equal in conjunction with vapor barriers at all lapped seams, at the perimeter of walls and ceilings, at all window and door perimeters, and at all penetrations. Use DOW, Sika or approved equal Silicone Sealant with all exterior openings, penetrations, and weather barriers. Use Tremco, Sika, or approved equal Semi-Self-Leveling polyurethane sealant for sidewalk transitions to building entries.

Division 08: Openings

- 081113 Hollow Metal Doors
Heavy-duty Seamless panels, with welded edges. Provide minimum 18-gauge panels, factory primed, ready for field paint. Color as per schedule in the contract documents. Polystyrene core with maximum 0.20 U-value at exterior doors. Provide factory prep and bore for lock set and balance of door hardware.
- 081400 Wood Swinging Doors
Standard construction, Commercial Series wood veneer, flush panel door. Factory prepped and bored for lock set and balance of door hardware. Particleboard core at non-rated doors, mineral core at rated doors. Veneer finishes as scheduled in the contract documents.
- 081473 Sliding Wood Doors
Closet Doors - When openings are wider than standard hinged door widths, use bi-pass doors made from the door blanks specified for the hinged doors. A valance painted the same color as the trim shall be installed to conceal the track at the header.

083100 Access Doors and Panels

Recessed, wall and ceiling-mounted, factory-fabricated heavy-duty steel door and frame. Minimum 14-gauge material. Provide fully assembled units with corner joints welded, filled, and ground flush, square, and without rack or warp. Where indicated in the contract documents, provide latch/lock for high security units. Where required to be fire-rated, provide units matching rated assembly. Rated units to be insulated with a double-surface panel.

084113 Aluminum-Framed Doors

Provide factory-fabricated and factory-finished Full Lite, Wide Stile Aluminum Storefront doors, rated for High Traffic Applications. Stile width 5". Finish to be Class I anodized. Color as selected by Architect from the manufacturer's full offering. Provide high-thermal-performance, thermally-broken units at all exterior locations.

Basis of Design: Trifab 451T, by Kawneer.

1" IGU, center-glazed, with 4 1/2" mullion depth and 2" horizontal sightlines. Anodized Aluminum Finish. Final Color Selection from the Manufacturer's full range of color options.

To include integrated entrance framing.

Entrance Doors: Thermally broken Entrance Door; Basis of Design: Insulclad 560 by Kawneer with 10" optional bottom rail.

Use manufacturer standard door hardware for Single Acting swing Doors.

085313 Vinyl Windows

Operable - Vinyl slider style windows w/ limiters attached to 2nd floor and above windows, Lo-E, argon filled, minimum U-Factor of 0.28 (or as specified to achieve proposed BEES rating).

Fixed - Vinyl fixed window, Lo-E, argon filled, minimum U-Factor of 0.28 (or as specified to achieve proposed BEES rating).

087000 Door Hardware

Door hardware Basis of Design Manufacturer to be Schlage, unless otherwise noted. Provide all ingress/egress door functions and sequence of operations based on the use of the facility, and as indicated in the door hardware schedule within the contract documents. Door hardware as outlined below. Refer to

contract documents for hardware groups.

- All door hardware is required to meet UFAS requirements for accessibility.
- Office, Janitor Closet, Mechanical/Electrical Rm. Hardware – Schlage C keyway, locking lever handle equipped with removable 6pin cores (LFIC).
- Unit Entry Door Hardware – Schlage, lever handle passage with keyed deadbolt, color to be satin nickel, lock core, Schlage, 6-pin “C” key way, and stainless steel kick plate on unit entry side of door. All locking doors keyed the same for each apartment.
- Passage Locksets (non-locking) – Schlage lever handle, color to be satin nickel.
- Privacy Locksets (bathroom and bedroom) – Schlage lever handle, color to be satin nickel.
- Satin Nickel colored door stops at all swing doors.

Division 09: Finishes

092900 Gypsum Board

Install wall board to rough framing in all areas in accordance with all applicable codes, including GA 253 and GA 254, for Fire Resistance GWB installations. Fire tape wall joints and corners in sufficient layers to provide a seamless smooth wall surface, apply square wall corners, square window corners, apply “light orange peel” spray texture to all walls and ceilings, excluding incidental mechanical and electrical areas. Those areas to receive Level 4 finish and base paint wall color.

096513 Rubber Base and Transitions

Tarkett brand or approved equal 4” rubber base on all vinyl floor surfaces.
Tarkett brand or approved equal rubber floor transitions.

096519 Resilient Tile Flooring

Vinyl Plank Flooring (no laminate flooring allowed)
Provide Luxury Vinyl Tiles and Vinyl Planks with polyurethane-coated wear layer. Provide material in 20mil thickness when available in scheduled finish. All products shall meet composition, size, thickness, squareness, flexibility, residual indentation, resistance to chemicals, resistance to heat and resistance to light requirements of ASTM F1700 for Solid Vinyl Tile, Class III, Type B – Embossed Surface.

Approved flooring as per material and finish schedule within the contract documents.

099000

Painting

Exterior Painting

When pre-finished siding is selected, the only exterior paint shall be any exterior door(s).

Interior Painting

- Wallboard Priming: Apply PVA primer to all newly installed wallboard areas, including garage.
- Wall and Ceiling Finish: Apply Whisper White semi-gloss for walls and flat for ceilings or approved equal); to all newly installed wallboard areas, including garage, color will be determined from a light tint base, application on wall & ceiling is to be applied with an airless paint sprayer (2 coats) and back rolled with a paint roller.
- Millwork Preparation: Applied trim millwork is to have all nail holes filled with spackle that is flush and sanded smooth, all seams of millwork, door jambs, and window casing to be caulked with a latex painters caulk, caulk will not be allowed to be used as a nail hole filler.
- Millwork Finish: All millwork is to be painted with a primer. The millwork is to be painted with enamel trim and millwork paint, and is to be applied with an airless paint sprayer (2 coats), with the final finish smooth, free of runs, debris, and imperfections.
- Interior Doors: All interior doors are prefinished natural wood and will not be painted in this work, door jamb and trim are to be painted in accordance with the Millwork Finish specifications above.
- Exterior Man Doors: All exterior fiberglass man doors are to be painted on the interior surface with two coats of the wall paint specified above. The exterior shall be painted with two coats of enamel paint (color to be selected by the architect).
- Finish Work: All tub surrounds and counter backsplashes are to be caulked with clear silicone, include final touch up painting and caulking of walls, millwork, door jambs and window casing that may have been marred, scratched or where the paint has other imperfections.

Division 10: Specialties

- 102000 Toilet, Bath Accessories
- Bath Hardware - (each bathroom minimum) All bath hardware to be from same series and match in design, finish and style, and be consistent throughout the project.
 - Towel bar - minimum length, 30" wall mounted, chrome finish
 - Towel ring - located near the lavatory, wall mounted, chrome finish
 - Toilet roll holder at each water closet, wall mounted, chrome finish
 - Shower / Bath Rods - Heavy duty, bolt to wall shower and bath rods. Chrome color
 - Bathroom Mirror - Minimum 36" wide mounted with metal j-trim, bottom of mirror no higher than 40" off the floor.
 - UFAS units – Provide and install all grab bars, shower seats, shower controls and other equipment as required by UFAS.
 - All other bathrooms (non-UFAS) – provide and install backing for future grab bars to comply with The Fair Housing Act.
- 101419 Letters and Signage
- Provide all apartment address numbers and apartment unit entry numbers as identified by Architectural. Numbers shall be in owner-approved material and in a color that contrasts to the adjacent material color(s). Submit shop drawings, design samples and color(s) to Owner for review and approval.
- 102213 Standard Duty Wire Mesh Storage Units
- Provide one storage unit per residential unit. Install signage/numbers on storage units sequentially before occupancy. Refer to Architectural for layout. Basis of Design: Store-More Bulk Storage Lockers
- Panels Shall be 10-gauge steel wire crimped and woven in to 2" x 2" opening rectangular mesh, securely welded into a frame of 1 1/4" x 1 1/4" x 1/8" steel angle factory punched with 7/8" x 7/16" slotted holes to accept 3/8" mounting hardware. Panels four to six feet wide shall have one 1/4" x 3/4" flat stiffener, wider panels receive two 1/4" x 3/4" stiffeners. All panels shall be fastened to posts with 3/8" x 3" plated bolts and nuts.
 - Hinged Doors Shall be constructed of the same materials as the panels with two 1/4" x 3/4" horizontal stiffeners across the width, and two diagonal 1/4" x 3/4" stiffeners from center to the corner. Hinged doors shall be equipped with padlock lugs (cylinder lock optional), three 4" x 4" spun pin hinges, and pick plate/slam bar assembly.
 - Posts Shall be made of 2" x 2" x 14-gauge steel tubing. Base plates of 2" x 7" x 1/4" steel flat with two 7/16" round holes for anchoring, shall be welded

to each tube. Posts are factory drilled with 1/2" holes to accept hardware for mounting panels.

- Hardware Shall be 3/8" standard thread grade two plated nuts and bolts. Floor anchors are 3/8" wedge type-provided.
- Finish non-plated parts receive one coat of gray acrylic enamel. Touch up paint included with each shipment

102630

Wall and Door Protection

Provide Stainless Steel Corner Guards

Size: 2" x 2" x 4'-0"

Location: At all common area corners / per architectural drawings

104000

Fire Extinguishers

Provide Multipurpose Dry Chemical Type Fire Extinguishers, Class and Size as required per current editions of the IBC, IFC, and NFPA 10. Extinguishers to be carbon steel, with baked polyester powder coat. Color, red.

Fire Extinguisher Cabinets

Provide recessed type cabinet enclosure with right-angle inside corners and seams, and with formed perimeter trim and door stiles. Cabinets should include full-height rectangular glass lite, tempered. Where cabinets are required to be rated, provide listed and labeled cabinet units in accordance with ASTM E814. Installation for rated cabinet units as per contract documents.

105000

Closet and Utility Shelving

Shelving may be painted MDF or Melamine finish, all shelves are to be installed in one piece with no seams where possible. All exposed cut edges are to be finished to match the shelf. Minimum shelf width is 15" where possible, in reach-in closets where the door header is in close proximity of the shelf (approx. 72" AFF) shelf width is to be 12". Closets shall have a shelf and rod combination, pantries and linen closets are to have a minimum of (5) adjustable shelves. Rods shall be adjustable in UFAS units to allow for a high and low adjustment. Shelves can rest on ledger boards or be part of a closet system. Where walls have an accent color, paint standards and cleats mounted to that wall the same wall color.

For bedroom closets within a UFAS unit, install half of the closet at the standard shelf height and the other half at a minimum of 42" off the floor. See CIHA for detail.

Tenant storage: one storage unit per residential unit. Install letters on storage units sequentially before occupancy.

105500 Mailboxes and Rent Drop Boxes

Mailboxes for large multifamily developments (e.g. Loussac Place, Grass Creek North, Coronado Townhomes, Ridgeline Terrace) shall be front loading “cluster box” type units that are USPS approved. One parcel box shall be provided for every five (5) resident compartments. There shall be an outgoing designated mailbox for each cluster box. Mounting heights shall be in accordance with UFAS and Fair Housing Act.

Mailboxes for multifamily and senior buildings shall be recessed mounted and front loading with the same specifications as above. Mounting heights shall be in accordance with UFAS and Fair Housing Act.

Contact USPS to coordinate location of mailboxes and Mode of Delivery.

Rental Drop Box where occurs shall be located at the front of the building and shall be an adjustable “through-the-wall” type that is lockable, located such that it drops into a CIHA office, unless otherwise indicated. They shall also include a baffle to prevent theft.

Division 11: Equipment

113000 Kitchen Appliances (*armor braided hose connections for all appliances*)

- Refrigerator - Energy Star qualified, top freezer model, minimum 21 cu. ft. with ice maker, color white.
- Refrigerator (UFAS unit) – Energy Star qualified, side by side model, 22 cu. ft. with ice maker or top mount freezer model that meets UFAS color white.
- Dishwasher - Energy Star qualified, 24” built-in dishwasher with front controls, maximum 63 dBA sound rating, color white. Avoid using 18” dishwashers. Explore studios not having dishwashers
- Dishwasher (UFAS unit) - Energy Star qualified, 24” wide x 32-1/2” tall UFAS compliant built-in dishwasher, stainless steel tub, color white. Avoid using 18” dishwashers. Explore studios not having dishwashers.
- Range – 30” free standing electric range, 4.8 cu. ft., electric coil cooktop surface, electric oven with glass door front, self-cleaning function, bottom sliding drawer, color white. Be sure adjacent upper cabinets are not too close to range such that melting of the cabinet material occurs. We have had issues with edge banding melting on upper adjacent cabinets (e.g. Creekview Plaza

- 49).
- Range (UFAS unit) – 30” drop-in electric range, electric coil cooktop surface, electric oven, 4.5 cu. ft., self-cleaning function, color white. Include trim/finish accessories e.g. filler plates/guards for a complete installation. Provide a continuous backsplash if specified accessories do not include rear splash guard. Fixed appliances are to have hardwire electrical connection. Be sure adjacent upper cabinets are not too close to range such that melting of the cabinet material occurs. We have had issues with edge banding melting on upper adjacent cabinets (e.g. Creekview Plaza 49).
 - Range hood – Broan minimum two speed, ducted, washable aluminum filter, rocker type fan and light switches, color white. Remote switch for UFAS unit. If hood is used for intermittent local exhaust it shall be rated for sound at a maximum of 3 sones, unless their maximum rated airflow exceeds 400 cfm.
 - Contractor shall test run all appliances after installation.

Laundry Appliances (all units) (*armor braided hose connections for all appliances*)

- Washer – Top load Energy Star qualified, minimum 3.6 cu. ft. capacity, color white.
- Washer (UFAS unit) – Front load Energy Star qualified, 4.1 cu. ft. capacity, color white.
- Dryer – Front load dryer, compatible with the selected washer, 7.0 cu. ft. capacity, color white. Discuss with CIHA whether gas or electric.
- Dryer (UFAS unit) – Front load dryer with controls on front, 7.4 cu. ft. capacity, color white. Discuss with CIHA whether gas or electric.

118000 Facility Fall Protection

Provide personal fall protection system(s) in accordance with current OSHA and ANSI requirements, where access to any roof opening, or roof-mounted equipment is within 10'-0" of the leading edge of the building parapet, and that parapet is less than 42".

Division 12: Furnishings

122000 Horizontal Louver Blinds

At all windows, 1", at least 8-gauge aluminum slats, with cord lift and adjustable slat opening, color shall be from the manufacturer's standard "off white" color pallet. Break large windows into 2 blinds for easier tenant operation. Consider

top-down bottom-up blinds in select units in properties in less ideal locations
(ie, ground floor units)

Vertical vinyl blinds with horizontal valance at sliding glass doors.

122413 Roller Shades

Provide Manually operated-fabric Roller Shades; Basis of Design: Mecho-5.

- Shade Type: Single Roller with Light Filtering Fabric.
- Drop Position: Regular Roll.
- Mounting: Wall-mounted regular roll with fascia and end caps.
- Size: As indicated on the drawings
- Brackets and Mounting hardware as recommended by the manufacturer for mounting indicated and to accommodate shade fabric roll-up size and weight. Include Fascia Accessories. Color to be selected from manufacturer's full range.

123000 Manufactured Wood Cabinets

Minimum Cabinet Specifications

- Door- Solid maple with clear natural finish with recessed panel.
Retractable doors for UFAS sink base. 30" clear opening width for UFAS required work surface in kitchen. Bathrooms: can have retractable doors.
- Drawer Front- 3/4" solid maple.
- End Panels- Nominal 1/2" thick maple veneer.
- Edge banding (if used) – no edge banding shall be closer than 18 inches to stovetop to prevent melting.
- Shelves- Nominal 5/8" thick melamine veneer banded front edge, adjustable shelves in standard wall and base cabinets.
- Cabinet Toe Board- Nominal 1/2" thick, melamine.
- Toe kick – clear, natural finish maple, solid or veneer.
- Drawer Box- Nominal 1/2" thick melamine, four-sided drawer box.
- Drawer Guides: High quality epoxy coated steel, side-mounted guides, self-adjusting in mounting brackets, built-in stop, self-closing and stay-closed features with a 75 lb. rated load capacity.
- Hinges: Heavy-duty, high-quality steel, adjustable concealed hinge with self-closing feature.
- Drawer and Door Pulls: 4" wire pulls, brushed satin or nickel.
- Build out cabinet depth over refrigerator to allow for easier access.
- MOUNTING HEIGHT OF UPPER CABINETS TO comply with UFAS. If we have a pantry, then we can mount at standard height.
- Kitchen desk/extra workspace height 34" including valance and grommets for

power cords – According to design

- 123661 Plastic Laminate Countertops
Selection shall be from manufacturer's standard plastic laminate colors. Countertops shall be a "one piece unit" (i.e. countertop and backsplash one unit, no seams or joints). Note: CIHA will often elect to fabricate and install solid surface countertops as an alternate during construction. Consider reducing the profile of countertops from 1 ½" to 1" to make accommodate UFAS requirements from finished floor to sink rim easier.
- 124000 Stainless steel Corner Guards
Install stainless steel corner guards at all common area corners. 2"x2"x4' minimum height.
- 125000 Message Board/Monitor Mounting
Provide and install Pop Out locking mounting brackets, where indicated on the drawings, which allow monitors to be pulled out for access to data/power connections without removing the monitor from the mounting bracket. Mounting brackets should allow the monitor to set flush with recessed alcoves. Basis of Design (Leyard Planar #VMTMXL).

Division 14: Conveying Equipment

- 142000 Elevators
CIHA prefers the OTIS Gen2 Underslung Series with Regeneration Drive Elevators. An equivalent belt driven elevator is acceptable provided CIHA approves the "or equal" substitution. Contractor shall be responsible for any and all costs associated with the elevator, including required additional design and engineering due to a change in the basis of design upon approval of an equal substitution. Elevators should include hanging hardware in the elevator cab and one set of new protection blankets to be turned over to the Owner at project completion. When selecting interior cab finishes, consider that our residents use shopping carts to bring items to their unit. Finishes should be durable (CIHA recently used 5WL stainless steel for the wall panels) and stainless-steel handrails should be located on back and both side walls.
- 142000 Elevator Pit Discharge
As a Basis of Design, elevator pits are to be equipped with a sump pump in the elevator pit where susceptible to the incursion of ground water. The sump pump and discharge requirements shall comply with the latest Anchorage Municipal

Codes and Requirements. An oil detection system is to be provided for hydraulic elevators to shut down the pump when oil is detected. Applicable codes include but not limited to AMC: 23.75.2.2; 23.07.040G; 26.50.050.

142000 Elevator Key Box Requirements

All developments where an elevator is to be installed, the contractor is responsible to provide the materials necessary to satisfy The Municipality of Anchorage, AO 2020-85 which includes the 2018 International Fire Code (IFC) and local amendments. IFC Section 606.7 to include requirements for a key box to be provided near elevators. This key box is dedicated to providing emergency responders immediate access to necessary keys and tools to facilitate effective and efficient response to emergencies involving or requiring the use of elevators.

Division 21: Fire Suppression

210000 Fire Suppression

- Provide a complete wet pipe automatic fire sprinkler system.
- A dry pipe system shall be installed in the trash chute.
- Wet Pipe Sprinkler Piping to be Black Steel Piping.
- Roll Grooved, Threaded, Flanged or Welded Connections.
- Dry Pipe Sprinkler Piping to be Galvanized Sch 40.
- Wet Fire Sprinkler Heads to be TYCO TY-FRB or equal.

Division 22: Plumbing

Refer to contract documents.

Division 23: Heating, Ventilating, and Air Conditioning (HVAC)

Refer to contract documents.

Division 26: Electrical

262713 Electricity Metering

Electrical equipment shall be in accordance with the NEC, NEMA and UL. Electrical design shall comply with the locally adopted electrical code. The design must include the ability for each apartment to be individually metered and house meters for common area equipment (i.e. elevators, common area and site lighting, mechanical room equipment, etc.).

- 262726 Wiring Devices
Wiring devices to be installed at all locations in accordance with the NEC and locally adopted amendments.
Additional required locations

Wiring Device Specifications

- Wall Plates – Thermoplastic, white color, standard size for each corresponding wiring device or combination of wiring devices.
- Clear covers over furnace switches.

- 262773 Door Chimes – Must have a separate door chime system for each living unit with doorbell ringers at all exterior entry doors within the unit (this applies to townhome, duplex, three-plex, etc. type housing only). Install chime in living space (i.e. kitchen, living room, adjacent hall to living spaces). All UFAS units to have sight/sound doorbell systems

Division 28: Electronic Safety and Security

283146 Smoke and Carbon-Monoxide Detection

- In accordance with the NEC and local amendments, provide a 120-volt hardwired, interconnected smoke and carbon-monoxide detection system. The signaling devices shall be white in color.
- **Within UFAS units and TBD (TBD) other Non-UFAS Unit** – Provide smoke and carbon monoxide detection per the above specification, which includes sight and sound signaling devices. At a minimum horn/strobe devices should be located in all bedrooms and common area rooms such as kitchen and living room as well as common areas in multifamily buildings as required by code.
**Consult with CIHA to determine how many additional Non-UFAS units need to include sight and sound signaling devices.

Entrance System for Multi-family Buildings

- Aiphone GT series with video and intercom capability. One located at main entrance, one in each unit and one in the community director's office.

Card Access System for Multi-family Buildings

- Lenel OnGuard access system, provide blank key fobs three times the number of units (e.g. 40 unit building = 120 blank key fobs). Goal is for system to be compatible with other CIHA facilities.

Division 31: Earthwork

312113 Radon Prevention

Use specified Dragowrap or approved equal vapor intrusion barrier under slab to include smoke test per contract documents.

Division 32: Exterior Improvements

323000 Site Improvements

- Provide ADA/UFAS-compliant dumpsters, dumpster enclosures and gates.

328000 Irrigation Systems (where applicable)

- Hunter Industries spray sprinklers, drip irrigation components, controllers, fittings and other applicable components. All irrigation piping shall be of HDPE SDR-11 material. ASTM D2239 SDR 11.5 polyethylene pipe rated for 100 psi for lateral irrigation pipes in sizes of 1.5" or less.
- All lawn areas shall be irrigated and designed for full coverage using adjustable nozzle pop-up spray sprinklers capable of delivering water quantities of a minimum of 1.5"/hour. The landscape bed irrigation system shall be designed with the most effective delivery of a minimum of 1 gallon/hour for small shrubs and 2 gallon/hour for large shrubs using drip irrigation with emitters, micro nozzles, bubblers or spray sprinklers.
- Contractor is responsible for furnishing and installing the connection, irrigation metering, back-flow prevention and irrigation controllers for the irrigation system. Line voltage power will be made available for the controllers.
- Contractor shall provide full winterization for the system and system start-up the following spring. Contractor shall provide 4 hours minimum training for Owner's maintenance staff as part of these processes.
- Contractor shall provide a maintenance & operation manual with the necessary documentation for the proper operation of the system as well as an as-built of the system and irrigation zones.

3290000 Landscape

- Landscaping (shrubs, trees, etc.) cannot touch the building; otherwise it is a Uniform Physical Condition Standards (UPCS) violation.