

2.3 FABRICATION

- A. Fabricate blinds to fit within openings with uniform edge clearance of 1/2 inch.
- B. At openings requiring multiple blind units, provide separate blind assemblies with space of 1/2 inch between assemblies, occurring at window mullion centers.

3 PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify that openings are ready to receive the work.

3.2 INSTALLATION

- A. Install blinds in accordance with manufacturer's instructions.
- B. Secure in place with flush countersunk fasteners.
- C. Adjust blinds for smooth operation.

...END OF SECTION



D. Cabinet Style: IXL "Branford" flat panel in frame design, Honey Oak finish.

2.2 CONSTRUCTION

- A. Face Frame: Solid hardwood.
- B. End Panels: 1/2" particleboard with hardwood veneer on exposed faces.
- C. Back Panels: 1/8" hardboard.
- D. Doors: Solid hardwood stiles and rails with w 1/4" flat panel.
- E. Drawer Fronts: Solid hardwood.
- F. Drawers: Hardwood plywood box construction.
- G. Shelves: 1/2" particleboard.

2.3 HARDWARE

- A. Drawer and Door Pulls: Brushed aluminum wire handles on 4 inch centers.
- B. Hinges: Concealed, self-closing.
- C. Drawer Glides: Side mounted, self-closing, 75 lb. capacity.

2.4 FACTORY FINISHING

- A. Exposed To View Surfaces Stain, seal and varnish.
- B. Interior Surfaces: Woodgrain printed vinyl surfacing.

2.5 COUNTERTOPS

- A. Surface: High pressure plastic laminate, grade PF42.
- B. Configuration: Square front edge, integral cove, square backsplash.
- C. Substrate: Particleboard.

3 PART 3 EXECUTION

3.1 EXAMINATION AND PREPARATION

- A. Verify adequacy of backing and location of mechanical and electrical outlets.
- B. Provide supplementary support framing.

3.2 INSTALLATION

- A. Set and secure casework in place rigid, plumb, and level.
- B. Provide cutouts for plumbing fixtures, appliances, and other fixtures and fittings.





- B. Washer, accessible: Maytag MAH14PS, Front loading, coin-operated, free standing type, extra large capacity, variable water level control, 5 wash cycles, 2 wash/spin speeds, self cleaning filter, white color.
  - C. Dryer: Maytag MLG15PD, Front loading, coin-operated, LPG free standing stackable pair, large capacity, 3 cycles, 3 heat selections, removable lint screen, white color.
- 2.3 REFRIGERATOR AND RANGE
- A. Refrigerator: GE Model TBX16DR 15.6 cubic capacity, free standing type, self defrosting, double door with freezer compartment over, with adjustable wire shelves, meat keeper and crisper, almond color.
  - B. Range: GE Model JBP26VWR electric free standing type, top controls, two 6" and two 8" top burners, self-cleaning oven below with top and bottom elements, with two chromed steel racks, white glass oven door with vision panel, interior oven light, storage drawer, almond color.
  - C. Range, accessible: GE Model JBS04P electric free standing type, front controls, four top burners, oven below with top and bottom elements, with two chromed steel racks, solid door, interior oven light, storage drawer, almond color.

2.4 EXHAUST HOOD

- A. Exhaust Hood: Broan Model 41000 vent free range hood with Microtek system filter, two speed fan, light, almond color.

2.5 DISPOSER

- A. Disposer: In-Sink-Erator "Badger 1" plumbed as per manufacturer's specifications to kitchen sink and dishwasher.

2.6 DISH WASHER

- A. Dish Washer: GE Model GSD2200ZAD electric built in 5 cycle /8 option heated dry on/off under cabinet dishwasher. Plumb to kitchen sink and disposer.

3 PART 3 EXECUTION

3.1 EXAMINATION AND PREPARATION

- A. Verify that openings and utility services are ready to receive work and opening dimensions are as instructed by the manufacturer.

3.2 INSTALLATION

- A. Install equipment in accordance with manufacturer's instructions.
- B. Set and adjust units level and plumb.
- C. Activate units to confirm correct operation.
- D. Turn refrigerators on to moderate temperature setting.







- E. Fasteners, Screws, and Bolts: Hot dip galvanized steel, tamper-proof.

## 2.2 FABRICATION

- A. Form surfaces flat without distortion. Weld and grind joints smooth.
- B. Shop assemble components and package with anchors and fittings.
- C. Back paint components to prevent electrolysis.
- D. Provide steel anchor plates, adapters, and anchor components for installation.
- E. Hot dip galvanize exposed and painted ferrous metal and fastening devices.

## 2.3 FINISHES

- A. Anchors: Galvanize to 1.25 oz./sq yd.
- B. Ferrous Metals - Shop Primed: Pretreat and clean, spray apply one coat primer and bake.
- C. Enamel: Pretreat, one coat primer and two coats baked enamel.
- D. Chrome/Nickel Plating: ASTM B456, Type SC 2 polished finish.
- E. Stainless Steel: No. 4 satin luster finish.

## 3 PART 3 EXECUTION

### 3.1 EXAMINATION AND PREPARATION

- A. Verify exact location of accessories for installation.
- B. Deliver inserts and rough-in frames to site. Provide templates and rough-in measurements as required.

### 3.2 INSTALLATION

- A. Install fixtures, accessories and items in accordance with manufacturers' instructions.
- B. Install plumb and level, securely and rigidly anchored to substrate.

### 3.3 SCHEDULES

ITEM	MANUFACTURER	MODEL NO.
Grab Bars	Bobrick	B-6206.99 series
Medicine Cabinet	NuTone	CSD309/CBMSM19
Mop and Broom Holder	Bobrick	B-223x24
Paper Towel Holder	Bobrick	B-262
Robe Hook	NuTone	HM 681
Shower Curtain Rod	NuTone	HM 382
Soap Dispenser	Bobrick	B-4112
Stainless Steel Mirror	Bobrick	B-165 1836



- D. Brackets: Manufacturer's standard surface mounted bracket for extinguishers not indicated to have a cabinet.

## 2.2 POSTAL SPECIALITIES

### A. Manufacturers:

1. American Device Mfg. Co.
2. Auth-Florence Manufacturing Co.
3. Bommer Industries Inc.
4. Cutler Manufacturing Corp.

- B. Mailboxes: Horizontal style, front loading, key locking, for exterior application, in configuration indicated.

1. Quantity: 66 compartments.
2. Finish: satin anodized aluminum.

## 2.3 CLOSET SHELVING

### A. Manufacturers

1. Clairson International/ClosetMaid
2. Schulte Corp.

- B. Shelving: Steel wire shelving with manufacturer's standard PVC or epoxy coating and standard installation hardware.

## 3. PART 3 EXECUTION

### 3.1 EXAMINATION AND PREPARATION

- A. Verify that surfaces and internal wall blocking are ready to receive work and opening dimensions are as instructed by the manufacturer.

### 3.2 INSTALLATION - FIRE EXTINGUISHERS

- A. Install extinguishers in accordance with manufacturer's instructions.
- B. Mount units to conform to ADA requirements, with top less than 48" above floor.
- C. Install units level and plumb in wall openings.

### 3.3 INSTALLATION -- POSTAL SPECIALITIES

- A. Install postal specialties in accordance with USPS requirements and manufacturer's instructions.
- B. Install units level and plumb in wall openings.

### 3.4 INSTALLATION -- CLOSET SHELVING

- A. Install shelving in accordance with manufacturer's instructions.





## 3.4 CLEANING

- A. As work proceeds, promptly remove finishes where spilled, splashed, or spattered.

## 3.5 SCHEDULE - INTERIOR SURFACES

Surface	Finish	System	Product	Coats
Concrete	Sealer	Sealer	Glid Seal 19228	1
Drywall	Eggshell	Primer	ICI Ultra-Hide PVA Primer Sealer 1030-1200	1
		Finish	ICI Ultra-Hide Latex Eggshell Enamel 1412-XXXX	2
Drywall	Flat	Primer	ICI Ultra-Hide PVA Primer Sealer 1030-1200	1
		Finish	ICI Ultra-Hide Flat Enamel 1210-XXXX	1
Metal	Semigloss	Primer	ICI Devflex Acrylic Primer 4020-1000	1
		Finish	ICI Devflex Acrylic Semi-Gloss Enamel 4208-XXXX	2
Wood	Semigloss	Primer	ICI Ultra-Hide Acrylic Wood Primer 1020-1200	1
		Finish	ICI Ultra-Hide Latex Semi-Gloss Enamel 1416-XXXX	2
Wood	Clear	Primer	ICI Woodpride Urethane Satin 1908 reduced 25%	1
		Finish	ICI Woodpride Urethane Satin 1902	2

## 3.6 SCHEDULE - EXTERIOR SURFACES

Surface	Finish	System	Product	Coats
Metal	Gloss	Primer	ICI Devflex DTM Flat Primer 4020-1000	1
		Finish	ICI Devflex Acrylic Gloss Finish 4206-XXXX	2
Wood	Satin	Primer	ICI Ultra-Hide Durus Acrylic Latex Primer 2010-1200	1
		Finish	ICI Dulux Professional Finish 2402-XXXX	2

...END OF SECTION

- C. Accessory Materials: Linseed oil, shellac, turpentine, paint thinners and other materials required to achieve the finishes specified, as recommended by coating manufacturer..

## 2.2 FINISHES

- A. Refer to schedule at end of section for surface finish schedule.

## 3 PART 3 EXECUTION

### 3.1 EXAMINATION AND PREPARATION

- A. Verify that substrate conditions are ready to receive Work.
- B. Measure moisture content of porous surfaces using an electronic moisture meter. Do not apply finishes unless moisture content is less than 12 percent.
- C. Correct minor defects and clean surfaces which affect work of this section.
- D. Remove electrical plates, hardware, light fixture trim, escutcheons, and fittings prior to preparing surfaces or finishing.
- E. Gypsum Board Surfaces: Fill minor defects with latex compounds. Spot prime defects after repair.
- F. Galvanized Surfaces: Remove surface contamination and oils and wash with solvent. Apply coat of etching primer.
- G. Concrete and Unit Masonry Surfaces Scheduled to Receive Paint Finish: Remove foreign matter. Remove oil and grease with a solution of tri-sodium phosphate, rinse well and allow to dry.
- H. Uncoated Ferrous Surfaces: Remove scale by wire brushing, sandblasting, clean by washing with solvent. Apply treatment of phosphoric acid solution. Prime paint after repairs.
- I. Shop Primed Steel Surfaces: Sand and scrape to remove loose primer and rust, hand or power tool clean, clean surfaces with solvent. Prime bare steel surfaces.
- J. Interior Wood Items Scheduled to Receive Paint Finish: Wipe off dust and grit prior to priming. Seal knots, pitch streaks, and sappy sections with sealer. Fill nail holes and cracks after primer has dried; sand between coats.
- K. Interior Wood Items Scheduled to Receive Transparent Finish: Wipe off dust and grit prior to sealing, seal knots, pitch streaks, and sappy sections with sealer. Fill nail holes and cracks after sealer has dried; sand lightly between coats.
- L. Exterior Wood Scheduled to Receive Paint Finish: Remove dust, grit, and foreign matter. Seal knots, pitch streaks, and sappy sections. Fill nail holes with tinted exterior caulking compound after prime coat has been applied.
- M. Exterior Wood Scheduled to Receive Transparent Finish: Remove dust, grit, and foreign matter, seal knots, pitch streaks, and sappy sections with sealer. Fill nail holes with tinted exterior caulking compound after sealer has been applied.

B. Clean and vacuum carpet surfaces.

...END OF SECTION



7. Tufted Stitches per Inch: 9
8. Yarn Weight: 30 oz/SY (1,017 grams/m<sup>2</sup>)
9. Finished Pile Thickness: .200 inch (5.06mm) (ASTM D-418)
10. Density: 5,400
11. Weight Density: 162,000
12. Secondary Backing: ActionBac®
13. Special Treatment: Fluorochemical
14. Width: 12 feet (3.66m)
15. Flammability: Class 1
16. Smoke: Less than 450-flaming
17. Static Generation: Less than 3.5 kv (AATCC-134)
18. ADA Compliance: Compliant for accessible routes
19. Warranties: 5 year wear, 3 year warranty against manufacturing defects, lifetime static.

**B. Carpet Type B:** Dense textured loop, 30 oz. 100% solution dyed nylon, "Xtra Terrestrial" manufactured by J & J Commercial.

1. Yarn: 100% Nylon: J&J Encore® SD Ultima®, Bulked Continuous Filament
2. Dye Method: Colorloc® Plus – Solution Dye Technology
3. Surface Texture: Dense Textured Loop
4. Patterning Technique: Technoweave® II
5. Pattern Repeat: 7/16" W x 7/16" L approximate (1.11 cm x 1.11 c)
6. Gauge: 1/10 (3.94 rows/cm)
7. Tufted Stitches per Inch: 10
8. Yarn Weight: 30 oz/SY (1,017 grams/m<sup>2</sup>)
9. Finished Pile Thickness: .131 inch (3.33mm) (ASTM D-418)
10. Density: 8,244
11. Weight Density: 247,320
12. Secondary Backing: ActionBac®
13. Special Treatment: Fluorochemical
14. Width: 12 feet (3.66m)
15. Flammability: Class 1
16. Smoke: Less than 450-flaming
17. Static Generation: Less than 3 kv (AATCC-134)
18. ADA Compliance: Compliant for accessible routes
19. Warranties: Lifetime stain removal, lifetime wear, 3 year warranty against manufacturing defects, lifetime static, lifetime colorfastness to light, lifetime colorfastness to atmospheric contaminants.

**C. Cushion:** Synthetic fiber. (At all Units other than H.C. Units)

1. Nominal Thickness: 3/8 inch.
2. Weight: 32 oz./sq. yd.
3. Density: 7.1 lb/cu ft
4. Critical Radiant Flux: Conform to ASTM E648, greater than 0.45 watts/sq cm., Class I.
5. Certification: FHA/HUD Material Release 1049 B Class I.

## 2.3 ACCESSORIES

- A. Sub-Floor Filler: Type recommended by flooring material manufacturer.
- B. Tackless Strip: Carpet gripper, of type recommended by carpet manufacturer to suit application, with attachment devices.
- C. Seam Sealer: At all glue down applications

11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

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- b. Azrock Industries Inc.
- c. Kentile Floors Inc.
- d. Mannington Mills Inc.
- e. Tarkett Inc.

### 2.3 ACCESSORIES

- A. Subfloor Filler: Type recommended by floor material manufacturer.
- B. Primers and Adhesives: Waterproof, type recommended by floor material manufacturer.
- C. Base: Vinyl top set coved :
  - 1. Height: 4 inch.
  - 2. Thickness: 0.080 inch thick.
  - 3. Finish: Satin
  - 4. Length: Roll.
  - 5. Manufacturers:
    - a. Armstrong World Industries Inc.
    - b. Azrock Industries Inc.
    - c. Johnsonite
    - d. Kentile Floors Inc.
    - e. Tarkett Inc.
- D. Moldings and Edge Strips: Vinyl, manufactured by Johnsonite.
- E. Sealer and Wax: Types recommended by floor material manufacturer.

### 3 PART 3 EXECUTION

#### 3.1 EXAMINATION AND PREPARATION

- A. Verify that concrete floors are dry to maximum moisture content of 7 percent, and exhibit negative alkalinity, carbonization, and dusting.
- B. Fill minor low spots and other defects with subfloor filler.
- C. Clean substrate.
- D. Apply primer as required to prevent "bleed-thru" or interference with adhesion by substances that cannot be removed.

#### 3.2 INSTALLATION - SHEET AND TILE MATERIAL

- A. Install in accordance with manufacturer's instructions.
- B. Spread adhesive and set flooring in place. Press with heavy roller to attain full adhesion.
- C. Install tile flooring with joints and seams parallel to building lines, with grain running in one direction. Allow minimum 1/2 full size tile width at room or area perimeter.
- D. Install sheet flooring with seams parallel to width of room. Provide minimum of 1/3 full roll width. Double cut sheet and continuously seal with heat weld and butt joints hairline.



1. Standard Type: ASTM C36
2. Fire Rated Type: ASTM C36 fire resistive, UL rated.
3. Moisture Resistant Type: ASTM C630

## 2.2 ACCESSORIES

- A. Acoustic Insulation: ASTM C665, preformed mineral wool, friction fit type, unfaced, 2.5 inches thick.
- B. Acoustic Sealant: Non-hardening, non-skinning, for use in conjunction with gypsum board.
- C. Corner Beads: Metal.
- D. Edge Trim: GA-201 and GA-216, Type LC bead.
- E. Joint Materials: ASTM C475 GA-201 and GA-216, reinforcing tape, joint compound, adhesive, and water.
- F. Fasteners: ASTM C1002 Type S12 hardened screws.
- G. Adhesive: ASTM C557.

## 3 PART 3 EXECUTION

### 3.1 INSTALLATION - ACOUSTIC ACCESSORIES

- A. Install resilient channels at maximum 24 inches oc. Locate joints over framing members.
- B. Place acoustic insulation in partitions tight within spaces, around cut openings, behind and around electrical and mechanical items within or behind partitions, and tight to items passing through partitions.
- C. Install acoustic sealant within partitions in accordance with manufacturer's instructions.

### 3.2 INSTALLATION - GYPSUM BOARD

- A. Install gypsum board in accordance with GA-201, GA-216, GA-600 and manufacturer's instructions.
- B. Fasten gypsum board to furring or framing with screws.
- C. Place control joints consistent with lines of building spaces as directed, spaced as recommended by manufacturer.
- D. Place corner beads at external corners. Use longest practical length. Place edge trim where gypsum board abuts dissimilar materials.
- E. Seal cut edges and holes in moisture resistant gypsum board and exterior gypsum soffit board with sealant.

### 3.3 JOINT TREATMENT

- A. Tape, fill, and sand exposed joints, edges, and corners to produce smooth surface ready to receive finishes, minimum of three coats.



















1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200

201

202

203

204

2 PART 2 PRODUCTS

## 2.1 SUPPLIERS

- A. Suppliers: Products of one or more manufacturers are listed in the Hardware Schedule to establish quality and performance characteristics. Products of other manufacturers may be accepted subject to review by Architect.

## 1. Manufacturers of Locksets:

- a. Corbin
- b. Sargent
- c. Schlage.
- d. Yale.

## 2. Manufacturers of closers:

- a. Dorma.
- b. LCN.
- c. Norton.
- d. Rixson.
- e. Sargent.
- f. Yale.

## 3. Manufacturers of hinges:

- a. Hager.
- b. Stanley.

## 4. Manufacturers of thresholds and weatherstripping.

- a. National Guard Products.
- b. Pemko.
- c. Reese.
- d. Zero.

## 5. Manufacturers of panic sets:

- a. Dorma.
- b. Sargent.
- c. Von Duprin.
- d. Yale.

## 6. Manufacturers of door trim and accessories:

- a. Hiawatha.
- b. Ives.
- c. Rockwood.

## 2.2 KEYING

- A. Door Locks: Master keyed. Include construction keying.
- B. Supply 3 change keys for each lock and 5 master keys, each tagged. Provide keys of nickel silver only.





2. Verify rough opening or masonry opening is square and dimensions are correct.
3. Verify sill plate is level.
4. Verify wood frame walls are dry, clean, sound and well nailed, and/or glued, free of voids and without offsets at joints. Ensure that nail heads are driven flush with all surfaces in opening and within 3" of rough opening.

### 3.2 PREPARATION

- A. Unpack window and all parts. Inspect window, verify that window is not damaged and all parts are included before disposing of carton.
- B. Close and lock operating sash.

### 3.3 JOINING SYSTEMS

- A. Assemble joining system where required for window combinations according to window manufacturer's instructions.
- B. Apply corrosion resistant coating to cut ends and field drilled holes in steel reinforcement member.
- C. Apply head flashing with silicone sealant at each vertical mullion head joint.
- D. Attach end brackets to rough opening as recommended by window manufacturer.

### 3.4 INSTALLATION

- A. Install window units, hardware, operators, accessories and other window components according to window manufacturer's installation instruction sheets.
- B. Set units plumb, level true to line, without warp or rack in frames or sash.
- C. Install batt insulation in shim space around window perimeter to maintain continuity of building insulation. Do not use expanding foam insulation.
- D. Extend vapor barrier to interior face of window frame and attach.

### 3.5 EXTERIOR FINISHING

- A. Hold back exterior siding or other finish materials from edge of window  $\frac{1}{4}$ " to allow for expansion and contraction and the installation of a proper sealant joint with backing materials.
- B. Seal perimeter of window after exterior finish is applied in accordance with the requirements of Section 07900.
- C. Application of Vinyl Trim Strip to Wood Filler for Support Mullion:
  1. Install according to window manufacturer's installation instruction sheets.

- c. Visible Light Transmittance (Vtc): 83%.
- d. Ultra-Violet Transmittance (Tuv): 62% +/- 1%.
- e. Krochmann Damage Weighted Fading Function (Tdw): .65%.

## 2.4 HARDWARE

### A. Double-Hung Window Hardware:

1. Standard Sash Lock/Keeper: Cam-operated injection molded glass reinforced polyester sash locks with integral color: white.
2. Standard Sash Lift: Provide one polystyrene DP50 sash lift with integral color: white.
3. Balances: Fit top and bottom sash with balances consisting of spring power with cord take-up drum and 100-lb. test nylon cord. Design balances to assure easy operation of double-hung units.

## 2.5 JOINING SYSTEMS

### A. Joining Systems:

1. Narrow Wood Fillers: Wood members treated with water repellent preservative after machining in accordance with WDMA I.S. 4.
2. Steel Reinforcement Members: 4" x 3/16" thick hot rolled steel plate conforming to ASTM A 36 with zinc plating and yellow chromate conversion coat. Predrill holes for attachment to window frames.
  - a. Gusset Plates: Galvanized steel plates which attach to wood frame for attachment to rough opening.
  - b. Corrosion Resistant Coating: Corrosion resistant coating as recommended by window manufacturer and provided by window installer for treating cut end and drilled holes at steel reinforcement members.
3. Fasteners: Corrosion resistant screws as provided by window manufacturer for fastening reinforcement members and gusset plates to wood window frame. All other fasteners are provided by window installer.
4. Head Flashing: 8" long sheet vinyl. Color to match window exterior.
5. Silicone Sealant: Silicone sealant recommended by window manufacturer.
6. Vinyl Trim Strips: As recommended by window manufacturer for each joining method used. Color to match window unit exterior color.

## 2.6 ACCESSORIES

- ### A. Insect Screens: Provide venting sash with an insect screen, including attachment hardware.
1. Frames: 0.020" rolled aluminum frame with chromate conversion coating. Provide matching corner locks and latch retainers.

- C. Contract Closeout Submittals: Submit the following under provisions of Section 01700 - Contract Closeout:
1. Owner's Manual: Submit bound manual clearly identified with project name, location and completion date. Identify type and size of window units installed. Provide recommendations for periodic inspections, care and maintenance. Identify common causes of damage with instructions for temporary patching until permanent repair can be made.
  2. Warranty: Manufacturer's warranty documents.

#### 1.5 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company having at least 25 years experience in the manufacture of vinyl clad wood window products:
1. Provide reference list of at least 3 projects of similar scale and complexity successfully completed during the past three years.
  2. Provide project names, locations, completion dates, names and telephone numbers of General Contractor's and Owner's contact person.
- B. Installer Qualifications: Company experienced in the installation of vinyl clad wood window products:
1. Installer to provide a reference list of at least 3 projects of similar scale and complexity successfully completed during the past three years.
  2. Provide project names, locations, completion dates, names and telephone numbers of General Contractor's and Owner's contact person.
- C. Safety Glazing: Comply with safety glazing requirements of CPSC 16CFR 1201. (Where required by code.)
- D. Insulating Glass Units: Provide insulating glass units permanently marked with certification label of Insulating Glass Certification Council (IGCC) indicating compliance with Class CBA.

#### 1.6 DELIVERY, STORAGE AND HANDLING

- A. In addition to general delivery, storage and handling requirements specified in Section 01600, comply with the following:
1. Deliver materials to job site in sealed, unopened cartons. Protect uncartoned set-up multiple units from rubbing.
  2. Identify each carton with material name, date of manufacture and lot number.
  3. Store windows and accessories off ground, under cover, protected from weather and construction activities.

#### 1.7 PROJECT CONDITIONS

4. ASTM D 4216, Specification for Rigid Poly(Vinyl Chloride) (PVC) and Related Plastic Building Products Compounds.
  5. ASTM E 90, Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions.
  6. ASTM E 283, Test Method for Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors.
  7. ASTM E 330, Test Method for Structural Performance of Exterior Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Difference.
  8. ASTM E 413, Classification for Rating Sound Insulation.
  9. ASTM E 547, Test Method for Water Penetration of Exterior Windows, Curtain Walls, and Doors by Cyclic Static Air Pressure Differential.
  10. ASTM E 773, Test Method for Seal Durability of Sealed Insulating Glass Units.
  11. ASTM E 774, Specification for Seal Durability of Sealed Insulating Glass Units.
  12. ASTM F 588, Test Methods for Resistance of Window Assemblies to Forced Entry Excluding-Glazing.
- D. Consumer Product Safety Commission (CPSC):
1. CPSC 16CFR-1201 - Safety Standard for Architectural Glazing Materials.
- E. National Fenestration Rating Council (NFRC):
1. NFRC 100, Procedure for Determining Fenestration Product Thermal Properties.
  2. NFRC 200, Procedure for Determining Solar Heat Gain Coefficient.
- F. Window and Door Manufacturers Association (WDMA). (formerly National Wood Window & Door Association (NWWDA)):
1. AAMA/NWWDA 101/I.S. 2-97, Voluntary Specifications for Aluminum, Vinyl (PVC) and Wood windows and Glass Doors.
  2. WDMA Industry Standard I.S. 4, Industry Standard for Water-Repellent Preservative Treatment for Millwork.
- 1.3 SYSTEM DESCRIPTION
- A. Performance Requirements: Provide Vinyl clad wood windows to comply with the minimum performance requirements specified in WDMA Industry Standard I.S. 2. [DP20], except where more stringent requirements are specified.
1. Air Infiltration: When tested in accordance with ASTM E 283 at a static pressure of 1.57 psf, total air infiltration to average less than or equal to 0.15 cfm per square foot of unit.

### 2.3 DOOR FACING

- A. Face Panel: Hardboard, smooth, embossed with six panel design two sides, 1/8 inch thick.
  - B. Adhesive: NWWDA, Type I.
- ### 2.4 FRAMES
- A. Interior Door Frames: Split jamb wood frames suitable for paint finish with BROSCO 8710 casings both sides.

### 2.5 FABRICATION

- A. Fabricate non-rated doors in accordance with NWWDA I.S.1 requirements.
- B. Fabricate doors with hardware reinforcement blocking in place.
- C. Factory machine doors for finish hardware.
- D. Factory fit doors for frame opening dimensions identified on shop drawings.

### 2.6 FINISH

- A. Finish doors in accordance with Section 09900 – Painting.
- B. Seal door top and bottom edge with paint finish to match door facing.

## 3 PART 3 EXECUTION

### 3.1 INSTALLATION

- A. Install doors and frames in accordance with manufacturer's instructions NWWDA I.S.1 requirements.
- B. Coordinate installation of doors with installation of hardware specified in Section 08710.
- C. Adjust door for smooth and balanced door movement.

### 3.2 INSTALLATION TOLERANCES

- A. Conform to NWWDA requirements for fit and clearance tolerances and maximum diagonal distortion.
- B. Maximum Diagonal Distortion: 1/8 inch measured with straight edge, corner to corner.

...END OF SECTION



- E. Door Core: polyurethane foam.
  - F. Thermal Insulated Door: Total insulation R value of 10.
- 2.2 ACCESSORIES
- A. Lights: Tempered insulating glass.
  - B. Silencers: Resilient rubber fitted into drilled hole.
  - C. Weatherstripping; Integral compression type at jambs and head, bulb and fin at bottom.
  - D. Primer: Zinc chromate type.

2.3 FABRICATION - DOORS

- A. Astragals for Double Doors: Aluminum, T shaped, specifically for double doors.
- B. Fabricate doors with hardware reinforcement welded in place.
- C. Attach appropriate label to each fire rated door.

2.4 FABRICATION - FRAMES

- A. Fabricate steel frames knock-down for field assembly . .
- B. Fabricate wood frames fully assembled with prehung doors.
- C. Fabricate frames with hardware reinforcement plates welded in place.
- D. Prepare frame for silencers and install.
- E. Attach appropriate label to each fire rated frame.

2.5 FINISH

- A. Steel Sheet Galvanized to ASTM A525 G60).
- B. Primer: Air dried.

3 PART 3 EXECUTION

3.1 INSTALLATION

- A. Install doors and frames in accordance with SDJ-100.
- B. Coordinate installation of doors and frames with installation of hardware specified in Section 08705.
- C. Coordinate with gypsum board wall construction for frame anchor placement.
- D. Install door louvers plumb and level.







1. Colors as selected.
  2. Applications: Use for:
    - a. Interior wall and ceiling control joints.
    - b. Joints between door and window frames and wall surfaces.
    - c. Other interior joints for which no other type of sealant is indicated.
- D. Type D - Bathtub/Tile Sealant: White silicone; ASTM C920, Uses M and A; single component, mildew resistant.
1. Applications: Use for:
    - a. Joints between plumbing fixtures and floor and wall surfaces.
    - b. Joints between kitchen and bath countertops and wall surfaces.
- E. Type E - Acoustical Sealant: Butyl or acrylic sealant; ASTM C920, Grade NS, Class 12-1/2, Uses M and A; single component, solvent release curing, non-skinning.
1. Applications: Use for concealed locations only:
    - a. Sealant bead between top stud plate and structure and between bottom stud plate and floor.
- F. Type F - Interior Floor Joint Sealant: Polyurethane, self-leveling; ASTM C920, Grade P, Class 25, Uses T, M and A; single or multi- component.
1. Colors as selected.
  2. Applications: Use for:
    - a. Expansion joints in floors.
- G. Type G - Concrete Paving Joint Sealant: Polyurethane, self-leveling; ASTM C920, Class 25, Uses T, M and A; single or multi- component.
1. Color as selected.
  2. Applications: Use for:
    - a. Joints in sidewalks and vehicular paving.

## 2.2 ACCESSORIES

- A. Primer: Non-staining type, recommended by sealant manufacturer to suit application.
- B. Joint Cleaner: Non-corrosive and non-staining type, recommended by sealant manufacturer, compatible with joint forming materials.
- C. Joint Backing: Round foam rod compatible with sealant D1667, closed cell PVC oversized 30 to 50 percent larger than joint width.
- D. Bond Breaker: Pressure sensitive tape recommended by sealant manufacturer to suit application.



- B. Mastic Sealer: Type recommended by insulation manufacturer for bonding edge joints and filling voids.

### 3 PART 3 - EXECUTION

#### 3.1 PREPARATION OF SUBSTRATE

- A. General: Comply with manufacturers' instructions for preparation of substrate to receive single ply membrane system.
- B. Verify that penetrations, expansion joints, and blocking are in placed and secured and that roof drains are properly clamped into position.
- C. Clean substrate of dust, debris, and other substances detrimental to FSR system work. Remove sharp projections.
- D. Install flashings and accessory items as shown, and as recommended by manufacturer if not shown.
- E. Prime substrate where recommended by manufacturer of materials being installed.
- F. Prevent compounds from entering and clogging drains and conductors and from spilling or migrating onto surfaces of other work.

#### 3.2 INSULATION INSTALLATION

- A. General: Extend insulation full thickness in two layers, or in multiple layers over entire surface to be insulated, cutting and fitting tightly around obstructions. Form cant strips, crickets, saddles, and tapered areas with additional material as shown and as required for proper drainage of membrane.
- B. Stagger joints in one direction for each course. For multiple layers, stagger joints in both directions between courses with no gaps, to form a complete thermal envelope.
- C. Do not install more insulation each day than can be covered with membrane before end of day or before start of inclement weather.
- D. Secure roof insulation to substrate with adhesive as specified by manufacturer for wind class indicated, but in no case provide less anchorage than required by FM "Loss Prevention Data Sheet 1-28."

#### 3.3 MEMBRANE INSTALLATION

- A. General: Start installation only in presence of manufacturer's technical representative, and install roofing system components in strict accordance with membrane manufacturer's specifications and shop drawings.
- B. Fully Adhered Membrane: Install membrane by unrolling over prepared substrate, lapping adjoining sheets as recommended by manufacturer, and bonding and sealing seams. Install adhesive as recommended by manufacturer. Install flashings and counterflashings as shown or recommended by manufacturer.

**Part II**  
**Division 14**  
**Conveying Equipment**

**Part II**

**Division 15**

**Mechanical**