

SECTION 06 10 00
ROUGH CARPENTRY

PART 1 - GENERAL

1.1 Summary

- A. This work consists of all labor, materials and equipment necessary to complete the work as shown on the Drawings and as specified herein.
- B. Work is limited to replacement of framing and sheathing found to be deteriorated and in unacceptable condition; any Work under this section is to have prior Owner approval for replacement work before any removal. Work under this section to be done on a cost plus basis.

1.2 References

- A. IBC International Building Code, 2003 Edition.

1.3 Workmanship

- C. Only experienced personnel shall be engaged in this work.

1.4 Delivery, Storage and Handling

- A. Deliver the materials to the job site and store in a safe area, out of the way of traffic, shored up off the ground surface and covered to protect from the weather.

PART 2 - PRODUCTS

2.1 Dimension Lumber

- A. Dimension lumber shall be Eastern Spruce, Fir, Pine or other wood approved by the Architect and shall comply with grading requirements of the Northeastern Lumber Manufacturers Association for Common, Number 2 or better, and shall bear the grade stamp.
- B. Wood for pressure treating and special installation shall be southern yellow pine meeting the requirements of the Southern Pine Inspection Bureau (SPIB) for Number 2 or better.
- C. All lumber shall not exceed 19% moisture content.

2.2 OSB Wall & Plywood Sheathing

- A. All plywood shall be 4/5-ply minimum and shall comply with U.S. Product Standard PS-1 for softwood plywood and shall bear the specified grade and stamp of the American Plywood Association.
- B. Unless otherwise shown on the Drawings, plywood and OSB shall meet the following requirements:

<u>Use</u>	<u>Thickness</u>	<u>Grade</u>	<u>Glue</u>	<u>Span Rating</u>
Wall Sheathing	7/16"	Structural 1	Exterior	24/16

2.4 Accessories

- A. Nails shall be new, bright, common nails of appropriate lengths and sizes to adequately join the wood. Use galvanized where exposed to weather or where shown on the Drawings.
- B. Special nails shall be used where shown on the Drawings or as recommended by manufacturer.
- C. Glue shall be an all purpose construction adhesive, suitable for interior and exterior use, as manufactured by DAP, GE, Ohio Sealants, or approved equivalents.

PART 3 - EXECUTION

3.1 Preparation

- A. Carefully select individual lumber pieces so that knots and obvious defects will not interfere with placing bolts or proper nailing.
- B. Cut out and discard defects which render a piece unable to serve its intended function.
- C. Lumber will be rejected by the Architect if it is excessively warped, twisted, bowed, mildewed or molded, as well as if it is improperly installed.

3.2 Erection

- A. All framing work shall produce joints which are tight, true, and well nailed, with members assembled in accordance with the Drawings and with pertinent codes and regulations.
- B. All framing and fastening shall equal or exceed HUD Minimum Property Standards, Manual of Accepted Practices and the requirements of the IBC International Building Code.
- C. Do not shim any framing member.
- D. Install horizontal and sloped members with crown up.
- E. Do not notch, cut or bore members for pipes, ducts, conduits, or for any other reason, except as shown on the Drawings and as approved by the Architect.
- F. Bearing surfaces on which structural members rest shall provide a full, even support.
- G. Provide all shims, blocking and bracing as shown on the Drawings and as approved by the Architect to complete the work.
- H. In addition to normal framing operations, install wood blocking or backing required to support the work of other trades.

3.3 Exterior Wall Sheathing

- A. Unless otherwise specified or approved by the Architect, install plywood or OSB with the face grain perpendicular to framing and center joints over supports. Leave a 1/16-inch gap where adjacent plywood panels meet.
- B. Stagger plywood or OSB joints so that all joints do not lie on the same support.

3.4 Nailing

- A. Use common wire nails except as otherwise indicated. Make tight connections between members. Countersink nail heads on exposed carpentry work and fill holes.
- B. Install fasteners without splitting wood; pre-drill as required.
- C. All nailing shall comply with IBC International Building Code, Recommended Fastener Schedule, unless special requirements are shown on the Drawings or required by product Manufacturer.

END OF SECTION

SECTION 06 20 00
FINISH CARPENTRY

PART 1 - GENERAL

1.1 Summary

- A. Work includes all labor, materials and equipment necessary to complete the finish carpentry work including wood, metal, and vinyl; trim and is non-structural, as shown on the Drawings and as specified herein.

1.2 Submittals

- A. The Contractor shall submit samples of all finish materials to be used to the Architect ten (10) days prior to incorporation into the work. All finish materials to be used in this project shall be reviewed by the Architect, and colors shall be selected by Owner.

1.3 Quality Assurance

- A. Use adequate numbers of skilled workers who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.
- B. All work shall meet Architectural Woodworking Quality Standards Institute.

1.4 Delivery, Storage and Handling

- A. Protect finish carpentry materials during transit, delivery, storage, and handling to prevent damage, soiling and deterioration.
- B. Do not deliver finish trim materials to the site until operations that could damage finish trim materials have been completed in installation areas.

PART 2 - PRODUCTS

2.1 Finish Lumber and Wood Trim

- A. Finish lumber and wood trim shall be Select Finish Grade Pine or Maple. Finish lumber shall be free of knots, pitch pockets, dark streaks and other objectionable defects. Provide the sizes, thicknesses and dimensions as shown on the Drawings or as specified herein.
- B. Moisture content of finish lumber or wood trim not to exceed 19%.

2.2 Exterior Window Trim

- A. Exterior window trim caps used to cover joints at all mulled window connections to be provided by window manufacturer and installed according to manufacturer's recommendations.

2.3 Interior Window Trim

- A. All trim caps used to cover joints at mulled window connections to be continuous Select Finish Grade pine stained and varnished to match aged window trim to remain.
- B. Window sills shall be two piece continuous Select Finish Grade maple with stain and semi-gloss varnish finish. Stain color to be selected by Owner and to match trim to remain in place.
- C. Miter sill horns and secure window sills according to manufacturer's recommendations and requirements. Conceal fasteners where possible.
- D. New window return boards shall be continuous Select Finish Grade maple.

2.4 Fasteners

- A. Nails: Finish nails of the appropriate size shall be used on all finish work and wood trim. Finish nails shall be 4d, 6d, or 8d (or other sizes as appropriate), coated or galvanized for interior work.
- B. Screws to be of the size and type appropriate to the work. Some pre-drilling may be required.

2.5 Glue

- A. Wood glue shall be high quality wood bonding agents such as Elmers' Weldwood or other approved products.

PART 3 - EXECUTION

3.1 Installation

- A. Discard units of material which are unsound, warped, bowed, twisted, or which are of defective manufacture with respect to surfaces, sizes, or pattern.
- B. Install the work plumb, level, true and straight with no distortions.
- C. Nail trim with finish nails of proper dimension to hold the member firmly in place without splitting the wood. On exposed work, set nails for putty.
- D. Use the longest practical trim pieces to insure as few joints as possible. Make joints only where there is solid backing support.
- E. Miter cut all exterior corners and butt joints and provide coping for interior corners as required.
- F. Carefully fit all trim and molding to cover gaps and cracks.

3.2 Finish

- A. Sand all new finished wood surfaces to produce a smooth, uniform surface.
- B. Sand window sills and other trim boards to be reinstalled that have signs of finish deterioration.
- B. Relieve all exposed sharp corners, saw cuts, water stains, and other imperfections.

3.3 Acceptance

- A. All work shall be completed with high quality workmanship as shown on the drawings and according to these specifications.
- B. The Architect shall approve all work. All defective work shall be replaced at no cost to the Owner. Such defects as splits, hammer marks, scratches and tool marks will not be acceptable.

END OF SECTION

SECTION 07 21 00
BUILDING INSULATION

PART 1 - GENERAL

1.1 Summary

- A. This work includes all labor, materials and equipment necessary to insulate building and appurtenances as shown on the plans, indicated on "DETAIL NOTES", and as specified herein.

1.2 Submittals

- A. Contractor shall furnish Architect satisfactory identification of "R" value for all insulation being installed.

PART 2 - PRODUCTS

2.1 Spray Foam Insulation

- A. Pella low-expansion, low-pressure polyurethane
- B. DAP tex brand
- C. Approved Equal

PART 3 - EXECUTION

3.1 Installation

- A. Installation shall be in accordance with manufacturers recommendations.
- B. Apply interior low-expansion, low-pressure spray foam insulation to fill all irregular crevices and small cavities such as gaps between windows and framing, around window or window assembly. Follow manufacturers recommendations and instructions completely.

3.2 Cleanup

- A. Remove all excess material and debris from site.

END OF SECTION

SECTION 07 92 00 SEALANTS AND CAULKING

PART 1 - GENERAL

1.1 Summary

- A. Provide all labor, materials and equipment to complete sealing and caulking as shown on the drawings and as specified herein.
- B. After completion of caulking around the interior and exterior of the first new window installed, contact Architect for inspection and approval of Caulking Work prior to caulking any remaining new windows.
- C. Contractor to provide a clean concave finish to all Caulking Work.

1.2 Scope of Work

- A. Sealing and caulking shall be performed on all exterior joints including but not limited to:
 - 1. Between exterior window finish and brick wall or brick window sills.
 - 2. Joints around interior of windows.
 - 3. Joints between dissimilar building materials such as between window and metal plate support for prow brick, etc., where water might enter.

1.3 References

- A. All sealants and caulking shall comply with ASTM C920, Standard Specification for elastomeric joint sealants and as approved by window manufacturer.

PART 2 - PRODUCTS

2.1 Exterior Caulking

- A. Exterior caulking between prefinished surfaces shall be a one component white silicone joint sealant; "Spectrum 1" by Tremco Sealant Systems, Dow Corning "795 Silicone Building Sealant", or approved equivalent.
- B. Exterior caulking for use on paintable surfaces shall be an acrylic latex white joint sealant; "Tremco Acrylic Latex Caulk", Bostik "Chem-Caulk 600", or approved equivalents.

2.2 Interior Caulking

- A. Interior caulking around new window frame shall be a non-hardening sealant; "Tremco Acoustical Sealant", Bostik "Chem-Caulk 600", or approved equivalents. Color to be clear or selected by Owner.

2.3 Joint Filler

- A. Joint filler for backing caulking shall be non-absorbent precompressed foam sealant; "Will-Seal 150", by Will-Seal Construction Foams, "York-Seal 100" by York Manufacturing, Inc., or approved equivalents.

PART 3 - EXECUTION

3.1 Preparation

- A. All joints and spaces to be caulked shall be dry, clean and free from dust and loose materials.
- B. If necessary mask or otherwise protect adjacent surfaces.

3.2 Installation

- A. All sealants including Vycor and foam rods; and caulking shall be installed according to the manufacturer's recommendations.
- B. Caulking shall be applied with suitable equipment such as with a caulking gun and edging tool.
- C. Use foam backing for joints deeper than 1/2-inch. Pack into joint allowing at least 1/4-inch for caulking.
- D. Caulking shall be applied so that surfaces are slightly concave, tight and smooth. Joints shall be air and water tight.
- E. Remove excess caulking and clean adjacent surfaces with approved cleaners.

END OF SECTION

SECTION 08 52 00 WINDOWS

PART 1 - GENERAL

1.1 Summary

- A. This work shall include all labor, materials and equipment necessary to install windows and accessories as shown on the drawings and as specified herein.
- B. Window units are fixed or a combination of fixed and single hung windows. See Floor Plans, Exterior Elevations, and Window Schedule for new window locations.
- C. Some units have already been updated to new Pella windows and are indicated on plans as being N.I.C. "NOT IN CONTRACT". New windows are to match installed single-hung units with interior natural finished pine and hardware finished- Champagne color.
- D. Existing metal prow roof/ flashing to be removed and replaced with new one piece 16 oz. copper prow roof/ flashing shaped and soldered at corner joints to prevent leaks. New roof cap/ flashing to match existing metal roof cap/ flashing in shape and size. Install new copper prow roof cap/ flashing prior to new window assembly installation. *New prow roof Alternate #3 in nine (9) locations.*

1.2 Submittals

- A. Contractor shall furnish two (2) copies of shop drawings for all windows to the Architect for review 10 days prior to incorporation into the work.
- B. Only reviewed materials shall be incorporated into the work.

PART 2 - PRODUCTS

2.1 Wood Windows

- A. Acceptable Manufacturers:
 - 1. Pella 850 Architect Series Single-Hung and/or Fixed Units.
 - 2. No other approved equivalents for bid purposes.
- B. All windows shall be double glazed, low-E4 with Argon insulate glass with standard insect screens set in white screen frames, where units are operable.
- C. Windows shall be complete with all hardware, weatherstripping including proper installation of Vycor according to manufacturer's specifications, and required mounting clips and anchors.
- D. All windows and screens shall be complete with necessary operating hardware including restrictive size of opening devices on single hung units.
- E. Frames and sashes shall be white aluminum clad wood on exterior to match existing new units and pre-finished natural pine on interior to match existing new units.
- F. Provide side jamb anchor clips where nailing flanges cannot be used due to brick rough opening width.
- G. Mull multiple units together vertically or horizontally (side by side) as indicated in Window Detail 1/2, Detail Notes, and Window Schedule.

PART 3 - EXECUTION

3.1 Preparation

- A. Purchasing of new windows to commence upon award of Contract. Demolition of existing windows and installation of new windows to begin when new windows arrive on site.
- B. Provide necessary flashing (including copper prow roof/ cap flashing if Alternate #3 is accepted) shims and blocking required for proper installation of windows.
- C. Remove wood casings and jamb return boards prior to installation of new windows. Reinstall all trim after window assembly and window installation is complete.

3.2 Installation

- A. Follow manufacturer's recommendations for installation for all window units.
- B. Install all windows plumb, level, square, straight and flush to present a finished appearance and properly working unit.
- C. Install all required trim, jamb extensions and other required accessories as shown on plans, as indicated in specifications, or as required by manufacturer to complete the installation.
- D. Flash, insulate, seal and caulk all windows as recommended by the manufacturer and as approved by the Architect. All window units shall be completely weather tight. See Window Detail Notes.
- E. Insure that windows are not put under strain which may cause breakage of glass or binding of opening units.

3.3 Interior Trim and Moulding

- A. The intent is to reuse existing interior head and jambs returns, window sills, and casing trim that is sound and in tact if no deterioration to existing finish trim is found upon removal for demolition of existing windows. Replace window return trim indicated on plans as being replaced due to deterioration with new 1x Select Finish Grade maple boards.
- B. Inform Owner of any other window sills or trim that is found needing to be replaced. Prior to replacing any window sills or trim not listed for replacement on plans, obtain approval for removal and replacement from the Owner. Work on sills not identified in plans "to be replaced", or other trim items or sub-framing needing to be removed and replaced is to be done on a cost plus basis after prior approval from Owner..
- B. Interior Sills - Select Finish Grade maple shaped, stained, and varnished to match existing.
- C. Apron - none.

3.4 Cleanup and Protection

- A. Clean all window glass completely removing all stickers, paint, dirt, grease, etc. Wash all windows with manufacturer's approved glass cleaner.
- B. Protect all window units replacing any breakage or defective parts until acceptance by Owner.

END OF SECTION

SECTION 09 20 00 GYPSUM BOARD

PART 1 - GENERAL

1.1 Summary

- A. This work includes all labor, materials and equipment necessary to install gypsum board as specified herein including gypsum wallboard to match existing wallboard thickness..
- B. All work under this section is to be done on a cost plus basis; and will only start with prior Owner approval for removal of existing gypsum wallboard and installation of new gypsum wallboard of the same thickness as existing.
- C. Gypsum board Work limited to removal of existing gypsum board to repair any deteriorated blocking or framing at window openings discovered during window removal and requiring replacement. Removal and replacement Work to start only after Owner's approval.

1.2 Handling

- A. Protect gypsum board from moisture, dents and breaks. Use only skilled workmen for installation.

PART 2 - PRODUCTS

2.1 Gypsum Board Panels

- A. Supply gypsum board panels for walls. All panels shall have tapered edges suitable for taping.
- B. Acceptable Manufacturers:
 - 1. U.S. Gypsum.
 - 2. Georgia-Pacific
 - 3. Approved Equivalent

2.2 Joint Materials

- A. Tape shall be of a type recommended as compatible by the panel manufacturer.
- B. Joint Compound to be All Purpose Joint Compound by USG or approved equal.
- C. Materials subject to approval by the Architect.

2.3 Accessories

- A. Fasteners shall be as recommended by the panel manufacturer or shall be sheetrock screws of appropriate length and spacing as recommended by gypsum board manufacturer for fastening to metal stud framing, unless otherwise specified or approved by the Architect.
- B. Other accessories shall be used as appropriate and recommended by the panel manufacturer and approved by the Architect.

PART 3 - EXECUTION

3.1 Coordination With Other Trades

- A. Insure that framing and backup is adequate for installation of panels and other mounted accessories.
- B. Cooperate with other trades to insure that installation of panels does not interfere with electrical or other items.

3.2 Installation

- A. Install all panels level, square and with vertical and/or horizontal joints insuring that all seams are properly backed by framing.
- B. Make all cuts smooth and straight taking care not to damage the panel.
- C. Fasten as recommended by the manufacturer of the panels. Countersink heads slightly below surface without breaking surface paper.
- D. Install metal accessories where required and at transitions in materials where appropriate. Use corner beads, "J" trim, and control joints where needed and as indicated and specified herein.
- E. Unless otherwise shown, or specified by manufacturer- minimum fastener spacing shall be:
Horizontal and vertical screws - 12" o.c.

3.3 Jointing and Finishing

- A. Maintain 55 F, temperature during all jointing work.
- B. Apply joint compound to panel joints, press in joint tape, let dry and cover with a second coat of joint compound. Use wide taping knives to set and smooth. Insure that tape is completely set top and bottom in joint compound and is smooth and wrinkle-free. Feather all angles.
- C. Apply joint compound to all countersunk fastener heads and other depressions.
- D. Allow joint compound to dry then sand between coats. Apply a total of three coats of joint compound allowing successive applications to dry and then be sanded. Completely fill all joint depressions to present a smooth wall suitable for painting or other treatments.

3.4 Cleanup

- A. Insure that all spattering and debris is cleaned up from adjacent areas.
- B. Protect floors, walls and other surfaces from accumulations of joint compound and other materials.

END OF SECTION

SECTION 09 91 00
PAINTING AND STAINING

PART 1 - GENERAL

1.1 Summary

- A. Work includes all labor, materials and equipment necessary to complete painting as shown on the Drawings and as specified herein.
- B. In general, undisturbed existing finished wall surfaces to remain and any damaged areas around windows due to installation of new windows are to be touched up with a closely matching color to existing wall color unless otherwise specified.
- C. Areas requiring painting include but not limited to interior recessed prow walls, ceiling, and sill where indicated on floor plans; and exterior prow metal ceilings above window assemblies.
- D. Items requiring staining to match existing finish trim to remain include new window sills and new window return boards.
- E. All sanded and stained wood to receive three (3) coats of varnish finish.
- F. Also included is touching up of prefinished surfaces as required and/or as approved by the Architect.
- G. Do not paint prefinished surfaces such as prefinished exterior trim, or exterior window cladding.
- H. Window wood sills and trim on windows type "C" not requiring being replaced nor requiring sanding will not require new coats of varnish finish.

1.2 Submittals

- A. Contractor shall submit color samples, and manufacturer's paint specifications to the Owner for review ten (10) days prior to incorporation into the work. Provide three (3) copies of product information.

PART 2 - PRODUCTS

2.1 Paint

- A. All materials shall be top quality products of the type and texture as shown on the Drawings and/or as specified in Part 4 of these specifications. All paint to have low (VOC).
- B. Acceptable manufacturers include: Glidden, Olympic, California, Benjamin Moore, Sherwin Williams, and other approved equivalents.
- C. Provide color charts from the manufacturer's full range of colors for color selections to be made by the Owner. Adjust final color for each room as needed for best match existing painted walls.

2.2 Painting Accessories

- A. Putty shall be as recommended by paint or stain manufacturers and as approved by the Architect.
- B. All nail holes shall receive putty prior to second coat of varnish.

2.3 Primer

- A. Primer for new GWB surfaces to be acrylic latex having low VOC. Type as recommended by paint manufacturer for finish paint selected.
- C. Recoat primed surfaces if and where there is evidence of unsealed areas in first coat.

PART 3 - EXECUTION

3.1 Preparation

- A. Prior to painting insure that all surfaces are clean, finished, and ready for application.

1. Wood Surfaces:
 - a. Sand to smooth finish and clean all dust from surfaces. Fill all nail holes, cracks and other irregularities with approved putty after any required staining and first coat of varnish. Pre-color all putty to be used under natural finish wood.
 - b. Apply prime coat as recommended by manufacturer. Sand lightly where necessary to smooth surface.
 - c. Apply three (3) coats of finish varnish to stained or sanded wood. Use 400 super fine sandpaper to lightly sand between coats of varnish. Remove dust prior to next coat of varnish.
 - d. Window casing trim found in good condition does not require refinishing.
2. Gypsum Board Surfaces:
 1. Prepare as specified in Section 09 20 00 GYPSUM BOARD.
 2. Touch up any surface imperfections with joint compound and allow to dry.
3. Metal Surfaces:
 - a. Clean all grease, rust and dirt from surface. Feather edges of chipped paint on pre-painted items such as existing exterior prow ceiling and existing trim as needed.
 - b. If so approved by the Architect, sandblast or wire brush metal surfaces to obtain a suitable surface for painting. This procedure may be required for refinishing previously painted surfaces which are chipping or peeling.
 - c. Prime unfinished or raw metal surfaces, which are to have paint finish, with approved metal primers.
 - d. Galvanized, aluminum, and prefinished surfaces shall not be painted unless specified in Painting Schedule.

3.2 All Surfaces

- A. Apply paint only to clean, dry surfaces. Do not paint in cold or in very humid conditions.
- B. Use masking tape, drop cloths and other means of protection to adequately protect adjacent surfaces from drips, spatters, and overruns.

3.3 Application

- A. Apply paint as recommended by the manufacturer on properly prepared surfaces according to the paint schedule in Part 4 of these Specifications.
- B. Thoroughly brush or roll all coats to achieve a uniformly smooth coverage.
- C. Allow each coat to dry 48 hours or longer if recommended by manufacturer before applying subsequent coats.
- D. Do not apply paint or varnish when air temperatures are below 45F unless provision for heating is made.
- E. All finishes shall be smooth, free from sanding marks, runs and sags, streaks, brush fibers and other defects. All edges shall be straight and sharp.
- F. Refinish and paint to match any existing adjacent areas which were disturbed as a result of the Work. Remove all paint runs or sags made on finished walls or surfaces.

3.4 Cleanup and Protection

- A. Clean all areas of drippings, spatters, and debris. Remove all masking tape and clean adjacent unpainted areas as required.
- B. Touch up all defective areas to the satisfaction of the Architect.
- C. Protect all surfaces until acceptance by the Owner.

3.5 Touch-Up Materials

- A. Provide Owner with at least one (1) unopened gallon can of all types and colors. Partially used cans shall not be left with the Owner.

PART 4 - SUPPLEMENTAL SPECIFICATIONS

4.1 Paint Schedule

SURFACE	PRIMER	FINISH
Gypsum Board Walls and GWB	1 coat acrylic latex	2 coats acrylic latex-semi gloss with low VOC and odor emission
New interior trim including interior window sills and window returns	Stain to match adjacent trim 1 coat of approved wood primer	3 coats semi gloss polyurethane varnish with low VOC and odor emission (sand w/ 400 super fine sandpaper and clean between coats)
Existing sanded window sills and trim	1 coat of approved wood primer	3 coats semi gloss polyurethane varnish with low VOC and odor emission (sand w/ 400 super fine sandpaper and clean between coats)
Exterior metal prow ceiling	1 coat of Kem Bond metal primer	2 coat system- exterior Industrial Urethane Alkyd gloss black

END OF SECTION