A. GENERAL REQUIREMENTS

Conform to the provisions of Part I and DIVISION 1.

B. JOB CONDITIONS AND REQUIREMENTS

- 1. Visit the site and become familiar with existing site conditions that affect the Work of the Section. Keep dust build-up to a minimum. Keep streets and driveways clean and free of debris and open for traffic.
- 2. Work of this section must not interfere with the Owner's normal business routine and hours. The Construction Schedule may require after business hours or week-end work. Coordinate schedule with Building Manager and Owner's Project Representative.

C. PROTECTION

1. Temporary Partition:

If required for protection of Owner's property and customers, provide temporary partitions around areas of demolition work. Provide protection as required to keep dust and moisture confined to the immediate work area.

2. Coordination:

Coordinate protection procedures with Owner's Project Representative.

3. Utilities:

Protect and mark any utilities encountered; notify proper authorities and make dispositions as directed, at no additional cost to Owner. Keep existing utilities in continuous operation.

D. OBJECTIONABLE NOISES

Work requiring use of air hammers and other noisy equipment shall be coordinated with Owner's Project Representative at all times. The construction schedule may require after business hours or week-end work.

E. SUBMITTAL

At the conclusion of the project, the Contractor shall be responsible for submitting along with the closeout documents the Frontier Communications Calculated Plant Displaced Form and the Equipment Master Work Sheet. Complete the Description, Quantity, and Unit columns for each item removed from the building or site as part of this project. Mechanical and Electrical shall submit their respective portions of the work on separate forms. Refer to attached copies of this form.

2 PRODUCTS

Not applicable.

3 EXECUTION

A. WALLS & FINISHES

1. Remove existing wood stud and G.W.B. full height wall partition including any sound batt insulation as shown on the Architectural Drawings. Refer to Architectural Drawings for locations.

B. SUSPENDED ACOUSTIC CEILING SYSTEM

1. Remove entire existing suspended ceiling system as shown on the Architectural Drawings. Refer to Architectural Drawings for locations.

C. CABINETS

Remove existing base, counter and upper cabinets as shown on the Architectural Drawings. Refer to Architectural Drawings for locations.

D. CUTTING

All cutting of concrete or masonry shall be performed with carbide-tipped power driven tools. All cuts shall be square and true. <u>No cover-cutting allowed</u>, hand chip to square up corners of openings. Repair over-cuts as directed, and at no increase to contract costs. Core drill circular openings. Use carbide tip drills for smaller holes. Jack and rotary type hammers over 3/8" drive not permitted. Refer to Architectural drawings for locations and details for new work.

E. EXISTING ABANDONED MECHANICAL AND ELECTRICAL ITEMS

Remove existing abandoned mechanical and electrical items as noted on the drawings.

F. OTHER TRADES

Coordinate demolition of electrical and mechanical items with electrical and mechanical sub-contractors. Avoid damage to personnel and public from contact with any existing electrical conduit or wiring.

G. SALVAGE

All items removed, unless requested by the Owner or noted to remain the property of the Owner, shall become property of the Contractor and shall be removed from the site at Contractor's expense.

H. PATCHING AND REPAIR

Patch and repair to match adjacent finishes where existing work is removed and where new work occurs. Extent includes floors, walls, and ceilings for all work in this contract including mechanical and electrical. Make neat repairs with terminal edges parallel to the building major axis. Use materials of matching texture and finish. Seal around ducts and pipes which project through floor slabs and walls, refer to Section 07900.

I. CLEAN-UP

Remove all debris from site after each day's work. Do not allow to accumulate on site. Haul away from site and dispose of at Contractor's expense.

A. GENERAL REQUIREMENTS

Conform to the provisions of Part I and DIVISION 1.

B. WORK INCLUDED

All rough carpentry not included in other Sections. Installation of prefabricated joists.

C. WORK IN OTHER SECTIONS

Temporary facilities, covered in Section 01500.

Concrete forms, covered in Section 03100.

Wood trusses, covered in Section 06191.

Finish lumber, covered in Section 06200.

Thermal insulation, covered in Section 07210.

D. CHANGE ORDER OVERHEAD AND PROFIT

If change orders result in additional cost to subcontractor, the actual cost plus fifteen percent (15%) overhead and profit shall be added to the Contract Sum. If changes result in decreased cost to subcontractor, the actual savings shall be deducted from the Contract Sum.

E. GRADING RULES, governing lumber and millwork:

1. For Soft Woods:

Standard Grading and Dressing Rules of West Coast's Lumberman's Association, latest edition, and as modified hereinafter.

2. Plywoods:

Fir, U.S. Product Standard PS-1-74. S4S, except as otherwise indicated or specified.

F. GRADE MARKING

Each shipment shall include certificate of inspection or grade mark, trade mark, and mill identification mark on each piece of lumber.

G. SURFACE FINISHES

Appropriate for intended use for first-class work. S4S, except as otherwise indicated or specified.

H. MOISTURE CONTENT OF LUMBER

All rough and framing lumber shall be graded S-DRY, kiln dried to a maximum of 19%.

I. STORAGE AND PROTECTION

Protect woodwork from the weather. Protect interior woodwork from moisture and construction operations. Replace all damaged work with new.

J. PRESSURE TREATED WOOD

All wood in contact with concrete or masonry shall be pressure treated Douglas fir.

K. ROUGH HARDWARE

Nails, Spikes, Screws and Bolts:

Standard commercial quality. As necessary for proper installation of carpentry. Sizes and quantities sufficient to draw and hold members securely. Rough hardware exposed on exterior shall be hot-dip galvanized or approved type non-ferrous metal.

L. SUBMITTALS

1. Product Data:

Submit manufacturers' published literature for specified products and accessories as applicable, including manufacturers' specifications, physical characteristics and performance data. Submit as a supplement, manufacturers' instructions and directions for application if not included in manufacturers' published literature. Submit in accordance with Section 01340.

2. MSDS Submittals:

Before any materials are delivered to the site, Material Safety Data Sheets (MSDS) shall be submitted on all materials/products that contain or use chemical solution for treatment or as additives and/or display Hazardous/Warning/Caution information in their products literature or on their labels.

2 PRODUCTS

A. LUMBER - GRADES AND QUALITY

Hem-Fir, except as otherwise specified or noted on drawings.

<u>USE CATEGORY</u>	RULE BOOK CATEGORY*	<u>GRADE</u>
General Framing (2x4 and smaller)	LF	Construction
Plates, Blocking & Nailers (2x4 and sm	naller) LF	Standard
Joists, Rafter, Headers	SJP	No. 1
Plates, Blocking, Nailers (2x6 and wide	er) SJP	No. 3
Beams	BS	Select Structural

*RULE BOOK CATEGORY

LF	Light	Para.	121	
SJP	Structural Joists & Planks	Para.	123	BS
Beams	& Stringers	Para.	130	PT
Posts &	Timbers	Para.	131	

B. PLYWOOD SHEATHING

Roof and wall sheathing shall be C-D INT-APA with exterior glue; thickness and Panel Index as indicated on the drawings and Structural Notes.

C. FASTENINGS

1. Nails for Framing Members:

Standard "common" wire nails; galvanized for exposed work.

2. Miscellaneous Fastenings:

Bore holes for bolts and shanks of lag screws same diameter as metal. Bore holes for threaded portions of screws no larger than base of thread. All screws shall be screwed in place; not driven. Retighten all bolts at latest possible time during life of contract. Provide washers for each screw and bolt head and each nut as follows:

1/2 inch diameter	2" x 2" x 1/4"
5/8 inch diameter	2-1/2" x 1-1/2" x 1/4"
3/4 inch diameter	3" x 3" x 5/16"
7/8 inch diameter	3-1/2" x 3-1/2" x 3/8"
1 inch diameter	3-3/4" x 3-3/4" x 3/8"

D. FRAMING ACCESSORIES

Joist hangers and framing connectors, where indicated, manufactured by Gang-Nail, Simpson, Silver, or as approved in advance by the Architect; types indicated. Secure with nails, screws or bolts recommended by manufacturer or as detailed on the drawings.

3 EXECUTION

A. FRAMING - GENERAL

1. Workmanship:

Select framing members to eliminate defects impairing strength. All work sufficiently straight to permit true flat finished surfaces. Carefully lay out, cut, fit and erect all work. Secure with sufficient nails, spikes or bolts to insure rigidity. Frame as required for work of other trades. Install all work to true lines and dimensions; plumb and level, unless otherwise indicated.

All nailing penetrate into bearing not less than one-half nail length. Drill holes for nailing where necessary to prevent splitting. All framing not specifically shown or specified to be per best standard construction methods. Provide blocking as necessary to securely hold all work to true lines and planes.

2. Anchoring:

a. General:

Rigidly anchor all items as appropriate for conditions. Where items are supported on walls, anchor as necessary to support all possible loads that may be placed thereon. All anchoring concealed insofar as possible. Where bolting is indicated, power-driven anchors, welded studs, and similar items of equal holding power may be submitted for approval. Generally not less than two anchors each member. Generally anchor near each end and at 4-foot spacing between. Not lighter than 3/8 inch bolts for anchoring 2 inch material. Drill holes for expansion type anchors with rotary power-driven carbide tip drills.

b. Types of anchors for various bases:

Use cast or built-in-place anchors where practicable; elsewhere use one of the following: Toggle type for gypsum wallboard. Drilled type concrete anchor bolt, for poured concrete and grouted concrete unit masonry.

B. FRAMING - SPECIFIC REQUIREMENTS

1. Sills on Concrete:

Same width as studs; 2 inches thick; pressure treated. Bolt sills to concrete; conform to Uniform Building Code.

2. Joists:

Set with crown side up; double headers and trimmers. Space double joists at partitions to provide clearance for piping. Lap joists over bearing; spike together with three 16d nails. Toenail joist to bearings with two 16d nails. Nail joists to study with one 16d nail for each 2-inch joist width.

3. Roof and Wall Sheathing:

Plywood roof and wall sheathing nailing with 8d @ 6" o.c. at panel edges, 8d @ 12" o.c. at intermediate supports.

4. Cutting and Notching for Other Trades:

Holes not over 1/3 width of plate may be bored through center of plates. Necessary holes and cuts in beams and joists shall be not greater than 1/5 beam depth. Locate on neutral axis not closer to support than three times beam depth.

C. BLOCKING

Provide solid blocking as necessary for anchoring work of other trades.

D. BUILDING PAPER

1. Extent:

Provide building paper between all untreated wood and masonry or concrete, and all other locations noted on the drawings.

2. Material:

Vaporproof paper, waterproof kraft paper, or approved equal. Joints need not be sealed.

E. MISCELLANEOUS REQUIREMENTS

1. Backing for Anchoring Work Specified in Other Sections:

Install solid wood backing for anchoring other work. Size and thickness sufficient to obtain permanent rigid anchorage. Obtain sizes and locations from trades and contracts involved.

2. Cant Strips, Nailers, and Blocking on Roof:

Construction grade fir, preservative treated in accordance with Section 01340.

A. GENERAL REQUIREMENTS

Conform to the provisions of Part I and DIVISION 1.

B. WORK INCLUDED

All finish carpentry not included in other Section. Installation of all millwork, finish hardware, and similar items.

C. WORK IN OTHER SECTIONS

Temporary facilities, covered in Section 01500.

Rough carpentry, covered in Section 06100.

Finish hardware, covered under Section 08700.

D. CHANGE ORDER OVERHEAD AND PROFIT

If change orders result in additional cost to subcontractor, the actual cost plus fifteen percent (15%) overhead and profit shall be added to the Contract Sum. If changes result in decreased cost to subcontractor, the actual savings shall be deducted from the Contract Sum.

E. GRADING RULES, governing lumber and millwork:

1. For Soft Woods:

Standard Grading and Dressing Rules of West Coast's Lumberman's Association, latest edition, and as modified hereinafter.

- 2. Plywoods: Fir, U.S. Product Standard PS-1-74.
- 3. Cedar siding: WCLIB latest edition.

F. GRADE MARKING

Each shipment with certificate of inspection or grade mark, trade mark, and mill identification mark on each piece of lumber.

G. SURFACE FINISHES

Appropriate for intended use for first-class work. S4S, except as otherwise indicated or specified. Cedar siding: S3S unless otherwise indicated or specified.

H. MOISTURE CONTENT OF LUMBER

Finish lumber: Maximum 12%

I. SUBMITTALS

Before any lumber is delivered to the job site, submit manufacturers' published literature for specified products and accessories as applicable, including manufacturers' specifications, physical characteristics and performance data. Submit as a supplement, manufacturers' instructions and directions for application if not included in manufacturers' published literature. Submit in accordance with Section 01340.

J. STORAGE AND PROTECTION

Protect woodwork from the weather.

See that building is thoroughly dry before finish is placed in it. Protect interior woodwork from moisture and construction operations. Replace all damaged work with new. Deliver no millwork to building until building is enclosed and a minimum temperature of 55 degrees F. is maintained.

2 PRODUCTS

A. LUMBER - GRADES & QUALITY

For wood work scheduled to have "Stain" finish, select woods for uniformity of color in adjacent areas.

3 EXECUTION

A. INSTALLATION OF FINISH LUMBER AND MILLWORK

Install all millwork, cabinets and finish specified or shown on drawings. All work executed by skilled mechanics to Architect's satisfaction. Scribe trim and cabinet work to walls at intersection. Cut openings in cabinets for mechanical and electrical trades. Install running trim in as long lengths as practicable. Make joints tight; glue mitered corners. Set joints in exterior trim in white lead paste. Scribe to abutting surfaces where appropriate. Use finish nails except where screws are shown. Set nail heads for putty stopping. Miter casing and moldings; cut splices at 45 degree angle. Clean up after installation with fine sandpaper or steel wool. Install bevel cedar siding with one 6d galvanized siding nail at each stud.

B. INSTALLATION OF FINISH HARDWARE

Install by skilled mechanics to Architect's satisfaction. Conform strictly with manufacturer's templates and directions. Make mortises accurately to receive hardware. Depth of mortises such that hardware is flush with finish surface.

A. DESCRIPTION

- 1. Section Includes: Furnish and install all finish hardware except as otherwise specified or specifically omitted herein.
- 2. Specific Omissions: Hardware for the following is specified or indicated elsewhere.
 - a. Signs, except as noted.
 - b. Casework.

B. SUBSTITUTIONS

- 1. In general, observe the following guidelines for any proposed substitutions:
 - a. Requests for substitutions must be made in writing 10 days prior to bid date to allow Architect to issue an addendum. If proposing a substitute, submit that product data attached to one showing specified item and indicate savings to be made. No other substitutions will be allowed.

C. SUBMITTALS

- 1. Product Data: For all products specified.
- 2. Door Hardware Sets: Prepared by or under the supervision of Installer, detailing fabrication and assembly of door hardware, as well as procedures and diagrams. Coordinate the final door hardware sets with doors, frames, and related work to ensure proper size, thickness, hand, function, and finish of door hardware.
 - a. Identification number, location, size, hand, fire rating, and material of each door and frame.
 - b. Type, style, function, size, quantity and finish of each hardware item.
 - c. Name, part number and manufacturer of each item.
 - d. Fastenings and accessories.
 - e. Explanation of all abbreviations, symbols, and codes contained in schedule.
 - f. Mounting locations for hardware.

D. QUALITY ASSURANCE

- 1. Qualifications: Observe the following requirements:
 - a. Obtain each kind of hardware (latch and locksets, exit devices, hinges, and closers) from only one manufacturer, although several may be indicated as offering products complying with requirements.
 - b. Hardware supplier shall be a direct factory contract supplier who has in his employment a certified hardware consultant (AHC) who is available at all reasonable times during the course of the Work, and for project hardware consultation to the Owner, Architect, and Contractor.
- 2. Schedule Designations: Except as otherwise indicated, the use of one manufacturer's numeric designation system in schedules does not imply that another manufacturer's products will not be acceptable, unless they are not equal in design, size, weight, finish function, or other quality of significance. See 1.02.A for substitutions.
- 3. Exit Doors: Openable at all times from the inside without the use of a key or any special knowledge or effort.
- 4. Fire-Rated Openings: Provide hardware for fire-rated openings in compliance with NFPA Standard No. 80. This requirement takes precedence over other requirements for such hardware. Provide only such hardware which has been tested and listed by UL for the type and size of door required, and complies with the requirements of the door and the door frame labels. Latching hardware, door closers, ball bearing hinges, and seals are required whether or not listed in the Hardware schedule. In addition, where panic exit devices are required on fire-rated doors, provide supplementary marking on door UL label on exit device indicating "Fire Exit Hardware".

E. DELIVERY, STORAGE AND HANDLING

- 1. Acceptance at the Site: Individually package each unit of finish hardware complete with proper fastening and appurtenances, clearly marked on the outside to indicate contents and specific locations in the Work.
- 2. Deliver packaged hardware items at the times and to the locations (shop or field) for installation, as directed by the Contractor.

F. PROJECT CONDITIONS

- 1. Coordination: Coordinate hardware with other work. Furnish hardware items of proper design for use on doors and frames of the thickness, profile, swing security and similar requirements indicated, as necessary for the proper installation and function, regardless of omissions or conflicts in the information on the Contract Documents.
- 2. Templates: Distribute door hardware templates for doors, frames, and other work specified to be factory prepared for installing door hardware. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing door hardware to comply with indicated requirements.

3. Electrical System Roughing-in: Coordinate layout and installation of electrified door hardware with connections to power supplies, fire alarm system and detection devices, access control, security system, and building control system.

G. WARRANTY

1. Provide guarantee from hardware supplier as follows:

a. Closers: Ten (10) years; except electronic closers which shall be two (2) years.

b. Exit Devices: Three (3) years.

c. Mortise Locksets: Three (3) years.

d. Cylindrical Lockets: Three (3) years.

e. All Other Hardware: One (1) year.

2 PRODUCTS

A. MANUFACTURERS

1. Approval of manufacturers other than those listed shall be in accordance with Article in this Section "Substitutions".

Item	Manufacturer	Acceptable Substitute
Hinges	Hager,	Lawrence, Stanley
	Tectus/Simonswerk	
Locksets	Best	Schlage
Latchsets	Best, Ives	Schlage
Cylinders	Best	None
Electric Strikes	Von Duprin	Folger Adams
Dust Proof Strike	Ives	Hager, Trimco
Exit Devices	Von Duprin	Precision, Corbin Russwin
Silencers/Gaskets	Pemko	National Guard
Astragal	Pemko	National Guard
Kickplates	BBW	Hager
Overhead Stops	Glynn Johnson	A.B.H.
Stops	BBW	Ives
Magnetic Holders	Dorma	Rixson
Thresholds	Pemko	National Guard
Seals and Bottoms	Pemko	National Guard
Closers	Dorma	LCN
Barn Door Hardware	Krownlab	

2. Furnish all items of hardware required to complete the Work in accordance with Specifications and Drawings.

3. Carefully inspect Project for the extent of the finish hardware required to complete the Work. Where there is a conflict between these Specifications and the existing hardware, furnish finish hardware to specification.

B. MATERIALS

- 1. Locksets: All locksets and latchsets shall be as specified. Strikes shall be 16 gauge curved brass, bronze or stainless steel with a 1" deep box construction, and have of sufficient length to clear trim and protect clothing.
 - a. Locks shall have minimum 3/4" throw. All deadbolts shall have one inch minimum throw.
 - b. Comply with requirements of local security ordinances.
 - c. Lock Series and Design: Best 35H.
 - d. Cylinders: Best 7-Pin.
- 2. Hinges: Outswinging exterior doors shall have non-removable (NRP) pin. All hinge open widths shall be minimum, but of sufficient size to permit door to swing 180. Furnish hinges with five knuckles and flush bearing.
 - a. Furnish 2 hinges per leaf to 5'-0" in height, 3 hinges per leaf from 5'-1" through 7'-6" height, and add 1 hinge per leaf for each additional 30 inches in height or fraction thereof beyond 7'-6" in height.
 - b. Provide hinges as required by manufacturer recommendations.
- 3. Exit Devices: Furnish all devices at wood doors with sex bolts unless otherwise specified. Lever handle trim shall match locksets. All Touch Bar type devices shall have deadlocking latchbolt, stainless steel touchpads pads and be non-handed. Device push bar must release with 32 lbs maximum pressure when 250 lbs of pull is applied against the pull side of door.
- 4. Surface Door Closers: Full rack and pinion type with removable non- ferrous cover. Place closers inside building, rooms. Closers shall be non-sized and adjustable.
 - 1. Provide multi-size 1 through 6 at all doors rated or not.
 - 2. Flush transom offset brackets shall be used where parallel arm closers are listed for doors with fixed panels over.
 - 3. Drop brackets are required at narrow head rails.
 - 4. Set exterior doors closers to have 8.5 lbs maximum pressure to open, interior non-rated at 5 lbs, rated openings at 12lbs.
- 5. Kickplates: Provide with four beveled edges, 10 inches high by width less 2 inches on single doors and 1 inch on pairs of doors. Furnish Type "A" screws to match finish.
- 6. Seals: All seals shall be finished to match adjacent frame color. Seals shall be furnished as listed in schedule. Material shall be UL listed for labeled openings.
- 7. Screws: All exposed screws shall be Phillips head.
- 8. Silencers: Furnish silencers on all interior frames, 3 for single doors, 2 for pairs. Omit where any type of seals occur.

C. FINISH

Match building standard unless noted otherwise.

D. KEYING REQUIREMENTS

Coordinate with Owner.

3 EXECUTION

A. HARDWARE LOCATIONS

- 1. Hinges:
 - a. Bottom Hinge: 10 inches from door bottom to bottom of hinge.
 - b. Top Hinge: 5 inches from door top to top of hinge.
 - c. Center Hinge: Center between top and bottom hinge.
 - d. Extra Hinge: 6 inches from bottom of top hinge to top of extra hinge.
- 2. Lock: 38 inches from finished floor to center of lever or knob.
- 3. Push Bar: 44 inches from bottom of door to center of bar.
- 4. Push Plate: 44 inches from bottom of door to center of plate.
- 5. Pull Plate: 42 inches from bottom of door to center of pull.
- 6. Exit Device: 39 and 13/16 inches from finished floor to center of pad.
- 7. Deadlock Strike: 44 inches from floor, centered.

B. INSTALLATION

- 1. Install each hardware item per manufacturer's instructions and recommendations. Do not install surface mounted items until finishes have been completed on the substrate. Set units level, plumb and true to line and location. Adjust and reinforce the attachment substrate as necessary for proper installation and operation.
- 2. Installation shall conform to local governing agency security ordinance.

C. ADJUSTING

Adjust and check each operating item of hardware and each door to ensure proper operation
or function of every unit. Replace units which cannot be adjusted to operate freely and
smoothly.

SECTION 08710, DOOR HARDWARE

2. Ispection: Hardware supplier shall inspect all hardware furnished within 10 days of Contractor's request and include with his guarantee a statement that this has been accomplished. Inspector or Contractor shall sign off the hardware as being complete and correctly installed and adjusted. Further corrections of defective material shall be the responsibility of the Contractor.

A. GENERAL REQUIREMENTS

Conform to the provisions of Part I and DIVISION 1.

B. WORK INCLUDED

All gypsum wallboard and finishes for Walls and Ceilings as scheduled as "GWB" on drawings. Finish shall be smooth; no texture allowed.

C. WORK IN OTHER SECTIONS

Blocking for anchoring work of other trades, covered under Section 05400.

D. CHANGE ORDER OVERHEAD AND PROFIT

If change orders result in additional cost to subcontractor, the actual cost plus fifteen percent (15%) overhead and profit shall be added to the Contract Sum. If changes result in decreased cost to subcontractor, the actual savings shall be deducted from the Contract Sum.

E. STANDARD SPECIFICATIONS

"Recommended specifications for the Application and Finishing of Gypsum Board":, latest edition, as published by Gypsum Association (also published as ANSI 98.1).

F. SUBMITTALS

1. Product Data:

Submit manufacturers' published literature for specified products and accessories as applicable, including manufacturers' specifications, physical characteristics and performance data. Submit as a supplement, manufacturers' instructions and directions for application if not included in manufacturers' published literature. Submit in accordance with Section 01340.

2. MSDS Submittals:

Before any materials are delivered to the site, Material Safety Data Sheets (MSDS) shall be submitted on all materials/products that contain or use chemical solution for treatment or as additives and/or display Hazardous/Warning/Caution information in their products literature or on their labels.

2 PRODUCTS

A. MANUFACTURERS

National Gypsum Co., U.S. Gypsum Co., Kaiser Gypsum Co., Bestwall Gypsum Co., Pabco Products Co., or Gold Bond.

B. GYPSUM WALLBOARD

5/8-inch thick, except where other wise indicated, ASTM C36, Type X, tapered edges, butt joints, U.L. labeled for one hour throughout.

C. SCREWS

For 5/8" single layer: 1-1/4" Type S Bugle Head. For 5/8" double layer: 2-1/4" Type S Bugle Head.

E. METAL TRIM

1. General:

Shapes and sizes shown in Standard Specifications, formed from zinc-coated steel conforming to Fed. Spec. QQ-S-775, class d or e not less than 25 gauge.

2. Corner Reinforcement:

Shape CB-114 x 114.

F. JOINT CEMENT AND REINFORCING TAPE

As recommended by manufacturer for intended purpose.

3 EXECUTION

A. APPLICATION OF WALLBOARD

1. General:

Comply with applicable requirements of Standard Specifications except as herein modified.

2. Placement of Wallboard:

Apply board to ceilings before applying to walls. Apply boards with long edges at right angles to framing members. Use full size sheets of maximum practical lengths insofar as practicable. Place board in moderate contact; do not force into place.

3. Fastening:

Secure with screws not closer than 3/8 inch from edges and ends, using fastening technique as recommended by manufacturer. Do not attach with nails. Maximum spacing: 7 inches on walls; 6 inches on ceilings per building code. Drive fasteners straight; heads slightly below paper surface of wallboard.

4. Metal Trim:

Use metal casing at all joints between wallboard and other materials. Use specified metal trim on all external corners.

B. JOINT TREATMENT

All work shall conform to the recommendations of the wallboard manufacturer. All exposed work shall be free from defects. Tape and cement all joints; reinforce all corners; fill all exposed fastener heads.

Fill all cracks at electrical outlets and similar for fireproofing. Repeat process as many times as necessary for appearance. All exposed joints and fastener heads shall be smooth and flush with surface of board and invisible after painting.

C. TEXTURE

All new wall board walls shall be smooth finish, no texture allowed.

I GENERAL

A. SCOPE

Furnish and install new suspended ceiling system including all accessories to form a complete assembly as scheduled.

B. WORK IN OTHER SECTIONS

- 1. Section 092000 Gypsum Wallboard
- 2. Division 21 Fire Suppression
- 3. Division 23 Heating, Ventilating, and Air-Conditioning (HVAC)
- 4. Division 26 Electrical
- 5. Division 28 Electronic Safety and Security

C. QUALITY ASSURANCE

- 1. Ensure installation of these systems by persons thoroughly experienced with this type of installation and approved by the manufacturer of the systems being installed.
- 2. Comply with the seismic requirements of the 1994 UBC, seismic zone 4.
- 3. Codes and Standards:
 - a. National Fire Underwriters Bureau.
 - b. ASTM C635 metal suspension systems for acoustical tile and lay-in panel ceiling.
 - c. ASTM C636 recommended practice for installation of metal ceiling suspension systems for acoustical tile and lay-in panels.

D. SUBMITTALS

Submit samples of all acoustical materials and suspension systems for review. Submit manufacturer's literature for proposed products.

E. ENVIRONMENTAL REQUIREMENTS

- 1. Do not install acoustical ceilings until building is heated, dust-generating activities have terminated, and overhead mechanical work is completed, tested, and approved.
- 2. Permit wet work to dry prior to commencement of installation.
- 3. Maintain uniform temperatures of minimum 60 degrees F and humidity of 20 percent to 50 percent prior to, during, and after installation.

F. EXTRA MATERIALS

- 1. Furnish 5% additional quantities of each type of tile installed for maintenance purposes. Leave uninstalled and extra stock material at site where directed, in clearly marked sealed cartons.
- 2. Boxes are to be unopened, and properly identified with name of manufacturer, pattern or model number, run number, fire classification, and other pertinent information.

2 PRODUCTS

A. SUSPENSION SYSTEM

- 1. Suspension System: As scheduled or approved. Heavy-duty classification; galvanized cold rolled steel; UL listed as a component of fire rated assembly; factory baked on finished. Furnish all stabilizer bars, splices, edge moldings, hanger wires, and other items as required to complete suspended ceiling grid systems. Expose surfaces to be factory-baked enamel, matte finish.
 - 2. Ensure that the system is in accordance with ASTM C635 for heavy-duty performance requirements. System installed is to be of sufficient strength to

carry imposed loads of ceiling panels, lights, grilles, insulation, etc., and maintain a level system with maximum deflection of 1/360th of the span length.

B. CEILING PANELS

Field verify - match existing.

C. ACCESSORY MATERIALS

- 1. Hangar Wires: Provide 12 gage galvanized annealed steel, pre-straightened wires, 6 inches off point of concentrated loads for lights, etc. and 6 inches off wall angles.
- 2. Edge Angles: Provide 2" edge angles at walls, columns, etc., in same sized and color to match suspension system as required by local code. Include corner transition pieces. Use maximum lengths to minimize joints.
- 3. Install seismic wires for light fixtures and compression struts at the ceiling grid, refer to architectural drawings.

3 EXECUTION

A. INSTALLATION

- 1. Contractor shall notify the Architect five (5) days prior to the installation of suspended acoustical ceiling systems, for review of installation coordination.
- 2. Install wires form structure above Install in conformance with requirements for lateral bracing in the UBC.
- 3. Secure hangar wires to closed eye hooks fastened into structure above. Power actuated anchors are not permitted.
- 4. Provide hangar wires at 4′-0″ oc max. along main runners. Provide four independent wires for each light fixture.
- 5. Except for panels with sprinkler heads projecting through and as otherwise directed, insert ceiling panels into grid members with all panels removable.
- 6. Install grid to produce finished ceiling with a maximum surface deviation of 1/8 inch in 10 feet when tested with a straightedge in any direction.
- 7. Center all mechanical, electrical, fire detection and fire sprinkler devices in the $2' \times 2''$ or tile.
- 8. Do not lower edge trim to receive edge tiles. Route out recess in tile edge face where perimeter cuts are required to rest on wall trim, prime cut edges with flat white paint to match tile color. Uniform face groove appearance is required.

B. ADJUSTMENTS

Adjust sags or twists that develop in the ceiling system.

C. CLEANING

Replace acoustical materials that have become broken, chipped or abraded.