F. Hinges and Butts: ANSI A156.1; comply with following unless otherwise indicated.
1. Manufacturers: Hager Hinge Co., Lawrence Brothers Inc.; McKinney Products Co., Div of ASSA ABLOY; Stanley Hardware Division of Stanley Works.
2. Doors 1-3/4" Thick: 4-1/2" heavy weight, extra heavy weight ball or oilite bearing where over 40" wide.
3. Provide widths sufficient to clear trim projection when door swings 180 degrees.
4. Provide three hinges to 90" high, four hinges to 120" high for each door leaf, unless otherwise indicated.
5. Provide nonferrous butts with non-removable pins at exterior and locked outswinging doors, non-rising at interior doors; stainless steel where labeled; steel butts at labeled interior doors.
6. Provide ball bearing or oilite bearing hinges at doors with closers.
7. Tips: Flat button tips with matching plug unless otherwise indicated.

G. Locking Devices: Provide of metal matching specified finish; interior parts of steel and zinc-dichromate plating, to resist rusting and corrosion; do not supply plastic, die-cast or aluminum mechanisms.
1. Manufacturers: Schlage Lock Co. Div. Allegion; Sargent Manufacturing Co., Division of ASSA ABLOY Group; Best Access Systems a Stanley Company.
a. Keyless Locks: Alarm Lock/Trilogy Electronic Door Locks.
2. Type: Provide keyed locksets with not less than 6 pin tumbler cylinders unless higher level of security is required.
3. Mortise Locksets and Latchsets: ANSI A156.13, Series 1000, Grade 1, Mortise Type.
4. Lockset and Latchset Design: Solid lever with rose, as selected by Architect.
5. Backset: 2-3/4" unless otherwise indicated.
6. Strikes: Furnish standard strikes with extended lips where required to protect trim from being marred by latch bolt; verify type of cutouts provided in metal frames.

H. Cylinders, Keys, and Keying: Hardware manufacturers shall provide for grand master, master key alike or key different keying as directed by Owner.
1. Manufacturer: Provide cylinders by lockset manufacturer unless otherwise indicated.
2. Interchangeable Cores: Provide cylinders with interchangeable cores unless otherwise indicated.
3. Provide cylinders of extruded brass bar material.
4. Provide construction cylinders for doors requiring locking during construction; construction cylinders shall be removed and replaced just prior to Owner occupancy.
5. Submit keys for final use to Owner; provide not less than two keys for each lockset, six of each type and level of masterkey, two grand master keys, and 5% extra blanks.
a. Key fitting rooms alike and provide two keys.
6. Hardware manufacturers shall key and register lock cylinders unless otherwise directed by Owner.
7. Key Control System: Provide key control system with identification and storage capacity suitable for Project.
a. Lock Boxes: Provide Knox type lock boxes where indicated and where required to comply with applicable codes and applicable authorities; types as indicated, as directed by Architect where not indicated.

I. Closers: ANSI A156.4, furnish products of one manufacturer; full rack and pinion type with steel spring and non-freezing hydraulic fluid.
1. Manufacturers: LCN Closers Division Allegion/4000 Series; Norton Division, ASSA ABLOY/7500 Series; Dorma Door Controls/8900 Series Full Cover; Norton/8501; or Stanley/QDC21Fx, SNx689 or D-3551
2. Provide controls for regulating closing, latching, speeds and back check.
3. Arm types shall suit individual conditions, as approved; supply parallel-arm closers at reverse bevel doors and where doors swing full 180 degrees.
4. Mount closers on room side or pull side unless otherwise indicated.
5. Sizes: Adjustable, comply with applicable laws and regulations regarding maximum door opening force.
6. Design: ANSI Modern Type with Cover, unless otherwise indicated.

J. Thresholds, Stops, Trim, and Miscellaneous Hardware. Provide as indicated, as specified, as included in Hardware Schedule, and as required for complete installation.
1. Manufacturers: Glynn-Johnson Co. Div. Allegion; National Guard Products; Pemko Mfg. Co. Div. ASSA ABLOY; Zero International, Inc.; Don-Jo; Trimco; or manufacturers listed on Drawings.
2. Door Stops: Required at all doors; locate as indicated, as required to minimize trip hazard and obstruction as approved and where not otherwise indicated.
3. Weather-Stripping: Provide continuous weather-stripping at top and sides of exterior doors.
4. Fire Rated Gaskets. Provide continuous fire rated gaskets at top and sides of fire rated doors.
5. Pulls: Provide with bolts to secure from opposite door face, provide with pull plates unless otherwise indicated.
6. Kick Plates: Height indicated by 1" less than door width; minimum 0.050" thick; provide as indicated, where not otherwise indicated provide as directed by Owner based on AHC recommendations.

2.2 ACCESSORIES
A. General: Provide complete hardware with accessories as required for doors and applications indicated.
B. Templates: Furnish templates or physical hardware items to manufacturers concerned sufficiently in advance to avoid delay in Work.
C. Reinforcing Units: Furnished by door manufacturer, coordinated by hardware manufacturer.
D. Fasteners: Furnish as recommended by manufacturer and as required to install secure hardware
1. Finish: Match hardware.
2. Furnish screws for items attached to gypsum board sufficiently long to provide secure connection to framing
E. Through Bolts: Through bolts, lock bolts, and concealed nuts are not permitted.
F. Electrical and Mechanical: Make provisions and coordinate requirements for mechanical and electrical devices in connection with hardware.

2.3 FINISHES
A. General: Provide following finishes except where otherwise indicated.
B. Typical: Brushed (US26D) satin chromium plated.
C. Closers: Manufacturer's standard aluminum finish.
D. Thresholds: BHMA 628 (US28), satin aluminum, clear anodized.
E. Kick Plates: BHMA 630 (US32D), satin finished stainless steel.
F. Other Items: Provide manufacturer's standard finishes matching similar hardware types on same door, and maintain acceptable finish considering anticipated use.

PART 3 - EXECUTION

3.1 INSTALLATION
A. Install finish hardware specified under this section; coordinate with manufacturer and installation of doors and frames.
B. Fit hardware prior to painting. Remove for painting of doors and frames before final installation of hardware.
C. Install hardware in accordance with manufacturer's instructions.
D. No extra cost will be allowed because of changes or corrections necessary to facilitate installation of hardware.

3.2 MOUNTING POSITIONS
A. General: Heights given are center line heights from finished floor; comply with following unless otherwise required by applicable codes or regulations.
1. Locks and Latches: 38" to center of lever.
2. Door Pulls: 42" to center of grip.
3. Push Plate: 42"; coordinate with pull location.
4. Push-Pull Bar: 42" to center of bar.
5. Top Hinge: To jamb manufacturer's standard, not greater than 10" from head of frame to center line of hinge.
6. Bottom Hinge: To jamb manufacturer's standard, but not greater than 12-1/2" from floor to center line of hinge.
7. Intermediate Hinges: Equally spaced between top and bottom hinges and from each other.
8. Hinge Mortise on Door Leaf: 1/4" to 5/16" from stop side of door.
9. Dead Bolt: Not more than 44" from floor to operating lever.
B. Standards: Comply with recommendations of Builders Hardware Manufacturers Association, subject to approval, for heights of items not indicated.

3.3 ADJUSTING
A. Qualified hardware supplier's or manufacturer's representatives shall inspect installation and make adjustments.
1. Adjust closers, locks, and critical operational hardware.
2. Deliver instructions for maintenance and future adjustments to Owner's Representative.

3.4 HARDWARE SCHEDULE
A. The Hardware Schedule/Groups shall be prepared by an Architectural Hardware Consultant hired by Contractor.
1. AHC to Examine Drawings and Specifications and furnish proper hardware for door openings.

END OF SECTION

SECTION 08 80 00 - GLAZING

PART 1 - GENERAL

1.1 SUMMARY
A. Section Includes:
1. Glass and glazing materials.
2. Unframed mirrors.
3. Applied window films.

1.2 ACTION SUBMITTALS
A. Product Data: Manufacturer's literature for all materials proposed for use substantiating that glass and glazing materials comply with specified requirements.
B. Samples: 12-inch-x-12-inch piece of window film applied to proposed glass if other than specified product is proposed for use.

1.3 INFORMATIONAL SUBMITTALS
A. Statement of fabricator/installer qualifications for exterior glazing.
B. [Statement of qualifications for applicator of applied film.]

1.4 CLOSEOUT SUBMITTALS
A. Extended warranty for insulating glass.
B. [Cleaning and maintenance instructions for applied window films.]

1.5 QUALITY ASSURANCE
A. Installer Qualifications:
1. Glazing: An experienced installer who has completed glazing similar in material, design, and extent to that indicated for project and whose work has resulted in construction with a record of successful in-service performance.
2. [Applicator of Applied Window Film: Approved by film manufacturer.]
B. Fire-Rated Door Assemblies: Assemblies complying with NFPA 80 that are listed and labeled by testing and inspecting agency acceptable to authorities having jurisdiction for fire ratings indicated, based on testing according to NFPA 252.
C. Safety Glass: Comply with the applicable requirements of the laws, codes, ordinances and regulations of federal and municipal authorities having jurisdiction wherever requirements conflict the more stringent shall be required. Obtain approvals from all such authorities.
D. Glazing Publications: Comply with published recommendations of glass product manufacturers and organizations below, unless more stringent requirements are indicated. Refer to these publications for glazing terms not otherwise defined in this section or in referenced standards.
1. GANA Publications: GANA's "Glazing Manual" and "Laminated Glass Design Guide."
2. SIGMA Publications: SIGMA TM-3000, "Vertical Glazing Guidelines."

1.6 WARRANTY
A. Manufacturer's Special Warranty on Insulating Glass: Written warranty, 10 years from date of Substantial Completion, made out to Owner and signed by insulating- glass manufacturer agreeing to furnish replacements for insulating-glass units whose hermetic seal has failed within specified warranty period.

PART 2 - PRODUCTS

2.1 DESIGN AND PERFORMANCE criteria
A. General: Provide and install watertight and airtight glazing systems capable of withstanding thermal movement and wind and impact loads without failure of any kind, including loss or breakage of glass, failure of seal or gaskets, exudation of glazing sealants, and excessive deterioration of glazing materials.
B. Glass design, glass thicknesses and heat treatments indicated are minimum requirements. Glazing details shown are for convenience of detailing only and are to be confirmed by the contractor relative to cited standards and final framing details. Confirm glass thicknesses and heat treatments, verified by analysis, as required to meet the performance and testing requirements specified in division 8.

2.2 GLASS MATERIALS
A. Annealed Float Glass: ASTM C1036, Type I, Class 1, Quality q3 or better.
B. Heat-Strengthened and Tempered Float Glass: ASTM C1036, Type I float glass as specified above and conforming to requirements of ASTM C1048 and as specified.
1. Heat-Strengthened Glass: Provide glass complying with ASTM C1048 Kind HS. Surface compression range shall be between 4,000 psi (27.6 MPa) and 7,000 psi (48 MPa).
2. Fully Tempered Glass: Provide glass complying with ASTM C1048 Kind FT and meeting the requirements of ANSI Z97.1. Surface compression shall be equal to or greater than 10,000 psi (69 MPa).
C. Wired Glass: ASTM C1036, Type II (patterned and wired glass, flat), Class 1 (clear), quality q8 (glazing); 6.4 mm thick, of form and mesh pattern indicated below.
D. Low Iron: Clear, water white float glass with a minimum 91 percent light transmission for 6mm thickness; "Starphire" by PPG or "UltraWhite" by Guardian Industries.
E. Clear Mirror Glass: ASTM C1503, Select quality, 6.0 mm thick.
1. Provide silver coating, copper-protective coating, and 1-mil-thick mirror backing paint.
2. Comply with CS 27.
3. Exposed edges ground smooth, chamfered, and polished
4. Seam interior edges, bottom and top.
F. Insulating Glass: Certified under IGMA-approved program and meeting Test Class CBA requirements when tested in accordance with ASTM E773 and ASTM E774.
1. Units shall be fabricated from float glass as specified herein and as scheduled.
2. Provide tempered glass for both lights of glass where indicated or required by code.
3. Spacer Color: Black.

2.3 GLASS TYPES
A. GL-1: Insulating Glass at Exterior Vertical Glazing.
1. Exterior Glass Ply: 1/4 inch (6mm) thick, clear, tempered, Low Iron
2. 1/2 inch air space
3. Interior Glass Ply: 1/4 inch (6mm) thick, clear, tempered, Low Iron
4. Overall Unit Thickness: 1 inch.

2.4 GLAZING MATERIALS
A. Sealants for Glazing:
1. Interior Locations, If Not Dry Glazed:
a. Typical: One-part, gun grade; Tremco "Mono," Pecora "60 Plus" or accepted equal.
b. At Fire-Rated Condition: Glazing compound as approved by the glass manufacturer to meet requirements for the required fire rating.
2. Exterior Locations: One-part, gun-grade silicone; Momentive Performance Materials "SCS-1200," Dow Corning "999 Building Sealant," or accepted equal.
a. Color: Black.
3. Silicone Sealant at Butt Glazing:
a. Structural Applications: "Dow-Corning "795," Momentive Performance Materials "Silglaze II SCS2800," or accepted equal.
b. Non-structural Applications: "Dow-Corning "795," Momentive Performance Materials "SCS2800 Silprut," or accepted equal.
c. Color: Black, Clear]
B. Joint Backer: Diameter sized at least 25 percent larger than joint width; type and materials as recommended in writing, by glass and sealant manufacturer.
C. Silicone Glazing Materials: Provide silicone setting blocks, jamb blocks, and sealant joint backer or spacers in lieu of neoprene, if recommended by sealant manufacturer, for compatibility with sealant. Corners, sizes, profiles, and other as specified for neoprene glazing materials.
D. Glazing Blocks and Spacers: Closed-cell neoprene complying with ASTM C509, in black color.
E. Lock-Strip Gaskets: Neoprene extrusions in size and shape indicated, fabricated into frames with molded corner units and zipper lock strips as standard with framing or entrance manufacturer, complying with ASTM C542, black.
F. Glazing Tape:
1. Typical: Butyl rubber type, black color; Pecora "Extru-Seal Tape G-66," Tremco "440 Tape," or equal.
2. Fire-Rated Glass: Closed-cell PVC or as otherwise approved by glass manufacturer for required fire rating.

2.5 ADDITIONAL MATERIALS
A. [Applied Solar Film: Clear, "PR 70" Prestige Series by 3M Window Films, or accepted equal meeting the following physical and performance criteria.
1. Thickness: 2 mils.
2. Physical Properties when Film is Applied to 1/4 Inch (6.4mm) Thick Clear Glass:
a. Visible Light Transmission (ASTM E903, ASTM E308): 68 percent when measured with an integrating sphere spectrometer and calculated using standard source for average daylight.
b. Visible Reflection - Exterior (ASTM E903): not more than 9 percent.
c. Visible Reflection - Interior (ASTM E903): not more than 9 percent.
d. Ultraviolet Rejected (ASTM E903): not less than 99.9 percent.
3. Infrared Energy Rejected (ASTM E903): not less than 97 percent.
4. Luminous Efficacy: Not less than 1.17
5. Shading Coefficient at 90 Degrees (Normal Incidence) (ASTM E903): Not less than 0.58.
6. Total Solar Energy Rejected (TSER) at 90 Degrees (Normal Incidence) (ASTM E903): Not less than 50 percent.
7. Total Solar Energy Rejected (TSER) at 60 Degrees (ASTM E903): Not less than 59 percent.]
B. Mirror Channels: Stainless steel, Type 302 or 304, minimum 22 gage with No. 8 mirror polished finish (629), matched set of bottom and top channels only, width to match glass thickness.
1. Finish: No. 8 mirror polished finish or ANSI/BHMA 629.
2. Fasteners: Concealed, of type suitable for required use.
C. Mirror Adhesive: "Mirro-Mastic" by Palmer Products Corp., "Super-Gum Grip" by Somer and Mac Industries, Inc., or as recommended by mirror manufacturer for specific job conditions and mounting surface and warranted for 5 years.

2.6 FABRICATION
A. Tempered glass shall be horizontally tempered with roller ripples in horizontal direction. Where required, include an inconspicuous but visible permanent identifying label on each pane in accordance with ANSI Z97.1. Label shall be located upright and in lower corner of glass after installation.
B. Glazing framing dimensions shall provide for necessary minimum bite on glass, minimum edge clearance, and adequate sealant thicknesses, with reasonable tolerances. Provide correct glass size for each opening, within tolerances and necessary dimensions established.
C. Factory-label each pane of glass. Do not remove labels until final acceptance is obtained.
D. Mirrors: Field measure at Fitting Room walls to assure a tight fit on inside and an even fit at outside corner from top base line.

PART 3 - EXECUTION

3.1 MIRRORS
A. Install where shown on Drawings using mirror adhesive over minimum 80 percent of backing and in accordance with manufacturer's recommendations with a continuous support channel at top and bottom only to support mirror except as follows:
1. Attachment: As indicated on Drawings.
2. Mirrors at Fitting Rooms: Continuous support channel at top and bottom sealed with sealant at all perimeters.
3. Installed mirrors shall comply with 16 CFR 1201, ANSI Z97.1 for impact testing as a Category I or II as required by installation.

3.2 GLAZING
A. Comply with combined written instructions of manufacturers of glass, sealants, gaskets, and other glazing materials, unless more stringent requirements are indicated, including those in referenced glazing publications.
B. Glazing channel dimensions, as indicated on drawings, provide necessary bite on glass, minimum edge and face clearances, with reasonable tolerances. Adjust as required by Project conditions during installation.
C. Install setting blocks in sill rabbets, sized and located to comply with referenced glazing publications, unless more stringent requirements are recommended by glass manufacturer. Place blocks to allow water passage to weep holes.
D. Provide edge blocking to prevent glass lites from moving sideways in glazing channel, sized and located to comply with the glass manufacturer's recommendations and the requirements in referenced glazing publications.

3.3 APPLIED FILMS
A. Apply in accordance with manufacturer's specifications.
B. Film edges shall be cut neatly and square to a uniform distance of 1/8 inch to 1/16 inch of the window seating device.
C. Within 30 calendar days of application, film shall show no moisture dimples when viewed under normal viewing conditions.

END OF SECTION

SECTION 08 71 15 - LOW ENERGY DOOR OPERATORS

PART 1 - GENERAL

1.1 SUMMARY
A. Section Includes: Provide low energy automatic door operators for swinging doors, with accessories as required for complete operational installation; system to open and close door upon receipt of an actuating signal.
B. Related Sections:
1. Section 08 41 00: Entrances and storefronts, including standard hardware.
2. Division 26: Final electrical connections.

1.2 ADMINISTRATIVE REQUIREMENTS
A. Coordination: Coordinate low energy door operators with doors, frames, door hardware, and surrounding construction.
B. Pre-Installation Meeting: Convene not less than one week prior to commencing work of this Section. Require attendance of those directly affecting work of this Section.
1. Review installation procedures and coordination required with related work.

1.3 SUBMITTALS
A. Product Data: Furnish manufacturer's literature and maintenance data.
B. Shop Drawings: Indicate pertinent dimensioning, general construction, materials and finishes, component connections, anchorage methods and locations and hardware; indicate exposed fasteners for specific approval.
1. Templates and Diagrams. Furnish templates, diagrams, and data necessary for proper installation of closers to fabricators of related work and coordinate.
C. Samples: Furnish samples of each exposed finish.

1.4 QUALITY ASSURANCE
A. Installer Qualifications: Firm with minimum five years successful experience installing door operator units similar to type specified and acceptable to operator manufacturer.

PART 2 - PRODUCTS

2.1 SYSTEMS MANUFACTURERS
A. Horton Automatics/Series 7000; LCN/4600 Series Electrically Powered Auto-Equalizer; Dor-O-Matic, Inc./Senior-Swing Automatic Operation; Tormax Automatic/iMotion 1301.

2.2 MATERIALS
A. System Description: Provide low energy automatic door operators for swinging doors, with accessories.
B. Regulatory Requirements: Comply with applicable codes.
1. Power Failure: Doors shall not exceed 50 pounds force to set door in motion and shall not exceed 5 pounds force for pushing or pulling doors open when force applied to latch side of door.
C. Performance Criteria: Provide operators complying with applicable portions of ANSI A156.19, designed for doors of types indicated to receive operators.
D. System Description: Provide low energy automatic door operators for swinging doors, with accessories as required for complete operational installation; system to open and close door upon receipt of an actuating signal.
E. Low Energy Door Operators: Complete operator system including door operator, controls, and attachment system designed for type of doors indicated and complying with requirements of ANSI A156.19 for low energy power operated door operators.
F. Control: As indicated, as selected by Architect from manufacturer's full range of flush wall mounted push-button control units where not otherwise indicated.
1. Provide controls on each side of every door with an operator, number, size, type, and locations as indicated and as required by applicable codes and regulations to ensure access for persons with disabilities.

2.3 FABRICATION
A. Fabrication: Provide each automatic door operator as complete, shop fabricated unit.
1. Complete the fabrication, assembly, finishing, application of hardware and other work before shipment, to greatest extent possible.
2. Disassemble only to extent necessary of shipment and installation.
B. Complete cutting, fitting, forming, drilling and grinding of metal work prior to cleaning and finishing. Remove burrs from cut edges and ease edges and corners to radius of approximately 1/64".
C. Conceal fasteners unless otherwise approved by Architect.
D. Reinforce work as necessary for performance requirements, and for support to structure.
E. Separate dissimilar metals with bituminous paint or preformed separators to prevent corrosion; separate metal surfaces at moving joints with non-metallic separators to prevent "freezing" of joints.
F. Finishes: Custom painted finish to match Section 08 41 00 - Entrances and Storefronts finish.
1. Preparation: Prepare surfaces for finishing in accordance with paint manufacturer's recommendations.
G. Special Features:
1. Safety reversing clutch for obstructed closing and with checking for both opening and closing cycles.
2. Interlocks: Electrical interlocks which prevent operation of doors when locked or latched.

PART 3 - EXECUTION

3.1 EXAMINATION
A. Examine areas and conditions under which automatic doors are to be installed; do not proceed with work until unsatisfactory conditions have been corrected.

3.2 INSTALLATION
A. Comply with manufacturer's recommendations and installation instructions for installation.
B. Set units plumb, level and true to line, without warp or rack of frames or doors; anchor securely in place. Separate aluminum from sources of corrosion or electrolytic action at points of contact with other materials.

3.3 ADJUSTING
A. After operation of completed installation equivalent to three days use, readjust door operators and controls for optimum operating condition and safety. Lubricate operating equipment.

END OF SECTION

SECTION 08 83 00 - FRAMELESS MIRRORS

PART 1 - GENERAL

1.1 SUMMARY
A. Section Includes: Provide frameless mirrors with accessories as required for complete installation.

1.2 REFERENCES
A. Glass Association of North America (GANA): Glazing Manual and Sealant Manual.

1.3 SUBMITTALS
A. Product Data: Furnish for mirror glass.
B. Samples: Furnish samples of mirror glass with finished edges and corners.

1.4 WARRANTY
A. Correction of Work Period: Extend to not less than two years. Replace mirrors which exhibit signs of desilvering or signs of distortion.

PART 2 - PRODUCTS

2.1 SYSTEMS MANUFACTURERS
A. Oldcastle Glass; PPG Industries, Inc.; Guardian Industries Corp.

2.2 MATERIALS
A. System Description: Provide frameless mirrors with accessories as required for complete installation.
B. Frameless Mirrors, ASTM C1038, mirror quality q1 or q2, clear float glass; nominal 1/4" thick; full silver coating, copper coating and organic coating; factory treated and sealed after cutting and finishing.
1. Edges: Provide edges designed to eliminate cutting potential at edges and corners commonly referred to as arrised edges, as approved by Architect.
C. Mirror Attachment:
1. Bottom Supports: NAAMM No. 8 mirror polished or comparable mirror polish stainless steel angles, minimum 0.05" thickness; provide felt pads for setting mirrors on angles; provide concealed fasteners.
2. Adhesive: Nontoxic type as recommended by mirror manufacturer for specific conditions and mounting surfaces, and warranted for 5 years, not less than Palmer Products/Mirro-Mastic or Somer and Mal Industries/Super-Gum Grip.

PART 3 - EXECUTION

3.1 INSTALLATION
A. Comply with GANA Glazing Manual and mirror manufacturer instructions.
1. Do not allow glass to touch metal surfaces.
B. Provide ventilation to coating.
C. Set or trim felt to face of mirror.

3.2 CLEANING
A. Remove nonpermanent labels immediately after installation.
B. Remove and replace mirrors which are broken, chipped, cracked, abraded or damaged during construction period, including natural causes, accidents and vandalism.

END OF SECTION

DIVISION 09 - FINISHES

SECTION 09 21 00 - GYPSUM BOARD ASSEMBLIES

PART 1 - GENERAL

1.1 SUMMARY
A. Section Includes: Provide gypsum board systems including gypsum board, light gage metal framing, suspension system for gypsum board systems, joint treatment, acoustical accessories, trim and general accessories for complete installation.
1. Provide cementitious backer units for fiberglass w[illegible] cementitious backer units for tiling are in Section 09 30 00 - Tiling
B. Cold-formed metal framing, 18 gage and heavier, is in Section 05 40 00 - Cold-Formed Metal Framing, thermal insulation is in Section 07 21 00: Thermal insulation, gypsum sheathing for EIFS is in Section 07 24 00 - Exterior Insulation and Finish System.

1.2 ADMINISTRATIVE REQUIREMENTS
A. Coordination/Scheduling Requirements: Provide special engineering to ensure compliance with applicable codes and Contract Documents.
1. Provide special engineering for metal framing system to ensure wall framing heights exceeding manufacturer's published tables based on specified deflection limits.
B. Coordination, Openings: Obtain dimensions and locations from other trades and provide openings and enclosures for accessories, specialties, equipment, and ductwork.

1.3 SUBMITTALS
A. Product Data: Furnish manufacturer's literature for framing, insulation, gypsum board, and acoustical accessories.
B. Manufacturer's Certification: Furnish manufacturer's certification indicating products comply with Contract Documents and applicable codes.
C. Installer Qualifications: Submit if requested by Architect.
D. Delegated Design Certificates: Submit certification signed by structural engineer, licensed at Project location, indicating compliance with Contract Documents and code requirements.

1.4 QUALITY ASSURANCE
A. Installer Qualifications: Gypsum board installer with not less than five years successful experience installing commercial quality gypsum board assemblies with fire ratings, acoustical ratings, and No. 4 and No. 5 finishes.
B. Mock-Up: Provide Level 4 finish mock-up not less than 100 square feet in location acceptable to Architect. Approved mock-up may be incorporated into Project.

1.5 PROJECT CONDITIONS
A. Do not begin installation of interior gypsum board until space is enclosed, space is not exposed to other sources of water, and space is free of standing water.
B. Maintain areas to receive gypsum board at minimum 50 degree F for 48 hours prior to application and continuously after application until drying of joint compound is complete; comply with ASTM C840.
C. Immediately remove from site gypsum board for interior use exposed to water, including gypsum board with water stains, with signs of mold, and gypsum board with mildew.

PART 2 - PRODUCTS

2.1 SYSTEMS MANUFACTURERS
A. United States Gypsum Co., USG Corp.; National Gypsum Co.; Georgia-Pacific Corp.; Pabco Gypsum, Canadian Gysum Company (CGC); Westroc Industries, Ltd.; Temple-Inland.

2.2 MATERIALS
A. System Description: Provide gypsum board assemblies including gypsum board, light gage metal framing, suspension system for gypsum board systems, joint treatment, acoustical accessories, and general accessories.
1. Systems Responsibility. Provide products manufactured by or recommended by manufacturer of gypsum board to maintain single-source responsibility for system.
B. Performance Requirements: Perform gypsum board systems work in accordance with recommendations of ASTM C754 and ASTM C840 unless otherwise specified.
1. Loads: Comply with International Building Code requirements for design of framing for gypsum board systems.
2. Deflection: Maximum L/240 typical, L/360 where tile is indicated.
C. Regulatory Requirements:
1. Fire-Rated Assemblies. Provide systems listed in applicable code or by Underwriter's Laboratory, Gypsum Association (GA) File No's in GA-600 Fire Resistance Design Manual or as listed by applicable authorities.
2. Seismic Requirements: Comply with code requirements for bracing where Project is within a seismic zone.
D. Framing: Comply with ASTM C754, 20 gage and lighter unless otherwise indicated; provide gages as recommended by manufacturer for spans and loads indicated and as required by applicable codes.
1. Studs: ASTM C645, screw-type Cee-shaped; thickness or gage identification color coded per ASTM C955.
2. Shaft Walls: Cee-T or Cee-H shaped studs.
3. Runners: Match studs.
4. Furring Members: ASTM C645, screw-type, hat-shaped.
5. Sound Rated Assemblies: Provide resilient channels where indicated and where required to provide required sound transmission classifications.
6. Channels: ASTM C754.
7. Hangers: ASTM A641, Class 1 wire not less than sizes in Table No. 5 of ASTM C754 and as required by applicable codes; hanger rods, flat hangers, and angle-type hangers as required.
8. Suspension System: ASTM C635, suspension system composed of main beams and cross furring members interlocking to form supporting network; recommended by gypsum board system manufacturer.
9. Fasteners and Anchorages: As recommended by gypsum board system manufacturer.

REMODEL STORE

OLD NAVY

GAP INC.
STORE DEVELOPMENT
FOLSOM STREET
SAN FRANCISCO, CA 94105

REPS. I.D. 0000013184

STORE NUMBER: 5724

STORE LOCATION: BUCKHEAD STATION
1 BUCKHEAD LOOP NE
ATLANTA, GA 30326

DESIGN TYPE: P3
GENERATION: 18Q12
PROTOTYPE DATE: 08/31/17
OPENING: 2018

CONSULTANT INFO.

PROFESSIONAL STAMP:

ARCHITECT INFO:

brr
ARCHITECT OF RECORD:
BOYD W. RAU
6700 ANTIOCH PLAZA
SUITE 200
MERRIAM, KS 66204
www.brrarch.com
TEL: 913-262-9095
FAX: 913-262-9044

ISSUE TYPE:

BID/PERMIT	01/05/18

REVISIONS:

DRAWN BY: CAR
A/E JOB NUMBER: 65013029

TITLE SHEET:
SPECIFICATIONS

SHEET NUMBER:
A13-10