DIVISION 9

SECTION 9250 GYPSUM BOARD WALL CONSTRUCTION

FIRE-RESISTANCE RATINGS: Provide gypsum drywall work with ratings indicated and conforming to assemblies tested and listed by recognized authorities. An ANALYSIA SIN THIS SECTION SHALL BE ASBESTOS FREE.

CEILING SUPPORT MATERIALS:

MAIN RUNNERS: Steel; channels, hot or cold-rolled, size per ASTM C 754.

HANGER WIRE: ASTM A 641, soft, class 1 galvanized HAT-SHAPED FURRING CHANNELS: ASTM C 645

Where shown as "Resilient", provide manufacturer's special type designed to reduce sound transmission.

FURRING MEMBER: ASTM C 645; 25-gauge C-shaped studs.

<u>DIRECT SUSPENSION SYSTEK:</u> Zinc-coated or painted steel system of furring runners, furring tees and accessories designed for concealed support of screw attached gypsum drywall ceilings.

WALL/PARTITION SUPPORT MATERIALS:

STUDS AND RUNNERS: ASTM C 645, 0.017911 base metal thickness unless otherwise indicated.

FURRING MEMBERS: ASTM C 645, 0.0179" base metal thickness. hat shaped.

DRYWAIL MATERIALS (ASBOSTOS FREE):

EXPOSED GYPSUM BOARD: ASTM C 36. Provide type X where indicated and where required in fire resistance rated assemblies.

LONG EDGES: Standard taper. THICKNESS: 1/4, 1/2, 5/8" unless otherwise indicated. (refer to plans for sizes)

GYPSUM BACKING BOARD FOR MULTI-LAYER APPLICATIONS: ASTM C 442 or A 36.

WATER-RESISTANT GYPSUM BACKING BOARD: ASTM C 630

EXTERIOR GYPSUM BOARD: ASTM C 931.

ABUSE RESISTANT GYPSUM BOARD:

TRIM ACCESSORIES: provide manufacturer's standard metal trim accessories of the beaded type with face flanges for concealment in joint compound except where semi-finishing or exposed type is indicated. Provide comer beads, L-type edge trim beads, U-type trim beads, special L-kerf edge trim-beads, and one piece control beads.

GYPSUM BOARD FASTENERS: Type recommended by gypsum board mfr., except as otherwise indicated.

JOINT TAPE: ASTM C 475, paper reinforcing tape

JOINT COMPOUND (ASBOSTOS FREE): ASTM C 475. of the type indicated. Provide vinyl-tape power for interior work. Provide water-resistant type manufactured by United States Gypsum Co. for use with water-resistant backing board. Do not bridge building expansion joints with support systems. frame both sides of joint with furring and other supports as indicated.

WALL/PARTITION SUPPORTED SYSTEM:

Install steel studs with bottom and top runners tracks anchored to substrates. Isolate system from building structure to prevent transfer of loading and deflection into metal support system, both vertically and horizontally. Frame door and other openings with studs and runners and gauge, number and arrangement to comply with manufacturer's recommendations for size of opening, weight of doors and height and stud size, unless otherwise indicated. Install supplementary framing, runners furring, blocking and bracing at openings and terminations in gypsum drywali and where required for support of other, work which cannot be adequately supported on gypsum board alone.

DRYWALL INSTALLATION AND FINISHING

Install gypsum boards in lengths and directions which will minimize number of end joints, and avoid end joints in central area of ceilings. Install walls and partitions with exposed gypsum boards vertical, joints offset on opposite sides of partitions. Otherwise, install boards with edges perpendicular to supports, with end joints staggered over supports, except where recommended in a different arrangement by mfr. Form control joints with ½" space between boards. Install acoustical sealant at base of space, and apply trim accessory at face.

SECTION 9250 GYPSUM BOARD WALL CONSTRUCTION

DIVISION 9

ACOUSTICAL SEALANT: Where work is indicated as "sound retarding" or shown with an STC rating, apply acoustical sealant as recommended by mfr. Screw gypsum board to wood supports. Screw both layers to supports where double-layer work is indicated or otherwise required.

DRYWALL FINISHING: Except as otherwise indicated apply joint tape and joint compound joints (both directions) between gypsum boards, Apply compound at accessory flanges, penetrations, fastener heads and surface defects. Install compound in 3 coats (plus pre-fill of cracks where recommended by mfr.); sand after last 2 coats.

RESILIENT FLOOR TILE: Refer to Room Finish Schedule for location.

SUBMITTALS: with manufacturer's product data and installation instructions, submit samples of each type, color, and pattern of resilient flooring and accessories.

<u>COLORS AND PATTERNS:</u> Provide a four color scheme per Wing, three from manufacturer's standard colors and patterns, and one from manufacturers premium pattern

MATERIALS:

Vinyl composition Tile 1/8" x 12" x 12", SS-T312B. Type IV Composition 1- asbestos free.

MANUFACTURER: Provide products of one of the following manufacturers or other approved equal.

Armstrong Azrock Flintkote Kentile Ruberoid

Rubber Wall Base: FS SS-W-40, Type I; 4" high; 1/8" gauge; with matching end stops and preformed corners units; standard top set cove; unless otherwise indicated. Length of base shall be continuous in roll stock. Pre-cut 4' lengths shall not be accepted. Color as selected by Architect **Metal edge strip**: E:xtruded aluminum mill finish, 1" wide.

Adhesives - As recommended by manufacturer- asbesios free

Installation:

In strict accordance with manufacturer's printed specifications for types of materials, projections, and intended use. Install after all other trades, including painting, have completed their work.

Examine all work over which tile is to be placed and report to the Contractor any and all conditions which affect the satisfactory execution of the work or endanger its permanency. Sweep floor clean before placing tile and base, removing all pebbles and obstructions that might cause uneven or unsatisfactory laying. Clean floors and apply leveling compound and substrate primer if required, in accordance with flooring manufacturer's instructions. Place resilient flooring continuously under locations of movable partition systems. Lay tile flooring from center marks established with principal walls; adjust as required to avoid use of cut units less than 1/2 tile wide at perimeters. Match tiles for color and patterns by using in manufactured and packaged sequence

Direction of tile grain: "checkerboard".

Apply wall base in lengths as long as practicable to walls, columns, and all permanent fixtures where indicated. Mitered outside corners not acceptable.

On masonry or other irregular surfaces, fill voids behind base and along top edge with manufacturer's recommended adhesive filler.

Install metal edge strips using countersunk stainless steel anchors.

Replace all broken or damaged tile immediately prior to completion of the building.

Clean floors and accessories after installation and apply protective polish in accordance with flooring manufacturer's instructions.

MATERIALS:

Multi-Functional and Sports Flooring "Replay" by Johnsonite or approved equal. 3/8" thick square edge glue down roll (48").

Material:

Recycled truck tire crumb rubber encapsulated in a urethane binder.

Back of Tile:

Rough back.

Wear Warranty:

2 year.

Location of Flooring:

Wing "G", Gym. Room No 725G. Boys/ Girls Weight Room

DIVISION 9

STANDARDS: Mortar and grout materials and installation standards of the American National Standards Institute (ANSI) and Standard Specification for Ceramic Tile ANSI A137.1 apply to the work, except as otherwise indicated.

SUBMITTALS: With manufacturer's product data and installation instructions for tile work, submit 3 samples of each type, color, and texture of tile mounted on 12" square backing with joints grouted.

<u>COLORS, TEXTURES AND PATTERNS:</u> Provide & install as manufactured by Dal-Tile, Co. 1-800-388-0327, or approved equal. Pattern will be provided during construction phase.

<u>SIZES AND THICKNESSES:</u> As indicated or, if not indicated, as selected by Architect from manufacturer's standard sizes, thickness, and colors.

Wall Tile @ Reception:

1"x1" - Mosaic Glass Tile by Daltile or approved equal. Provide a full set of colors.

Wall Tile @ Reception:

8"x8" x5/16" – Daltile glossy finish & Satin finish (Two color scheme)

Floor Tile @ Reception:

1'x1'x 3/8" granite tile.

Wall Tile @ Restrooms:

4-1/4"x4-1/4"x5/16" - Daltile glossy type III (Two color scheme)

(one Group 1 field- 90%; one Group 2 accent-10%;).

Floor Tile @ Restrooms:

18"x 18"x 1/4" Daltile Capriccio (or approved equal) Glazed Porcelain floor tile -

Submit full line samples for color selection during Submittal phase.

TILE GRADE: "Standard Grade" unless otherwise indicated.

UNGLAZED CERAMIC MOSAIC TILE: Factory-mounted flat tile and as follows:

TRIM SHAPES: Same material, size, color, and texture as field tile (bull nose, cove base, etc.) Type: Porcelain. 2" x 2" Location: Floor, Wearing Surface: slip resistant with abrasive content Face: Plain with modified square edges.

GLAZED WALL TILE: Factory-mounted flat tile and as follows: Face: plain with cushion edges TRIM SHAPES: Same material, size, color, and texture as field tile bull nose, cove bases, etc.

PORTLAND CEMENT MORTAR: ANSI A108.1, materials and installation. DRY-SET MORTAR: ANSI A118.1.

LATEX-PORTLAND CEMENT MORTAR: ANSI A118.4.

Prepackaged dry mortar mix with re-emulsifiable powder as additive, for mixing with water only. Grout Color: White

CHEMICAL RESISTANT EPOXY MORTAR: ANSI A118.3

ONE-PART MILDEW-RESISTANT CILICONE SEALANTS: ASTM C 920, Type s, NS, Class 25. uses NT. G, A and 0 (for use in joints in non traffic areas).

METAL EDGE STRIPS: Stainless steel or zinc alloy, 1/8" wide at top edge.

INSTALLATION: Comply with ANSI A108.1 and 108.4 through A108.10, as applicable for type of tile, setting materials, grout and methods of installation indicated. Comply with manufacturer's instructions for application of propriety materials.

JOINT PATTERN: Use grid pattern with 1/16" joints, unless otherwise indicated. Sealing tile joints is work of this section.

EDGE STRIPS: Provide at exposed edge of tile meeting carpet, wood, or resilient flooring, unless otherwise indicated.

<u>CLEANING AND PROTECTION:</u> Clean tile in accordance with applicable ANSI standard for type of tile and method of installation used and manufacturer's instructions. Apply heavy kraft paper or other heavy protective covering to prevent surface damage.

DIVISION 9

GENERAL (non-asbestos):

Acoustical Panel and Tile Standard:

Acoustical suspension System Standards: ASTM C 635 for materials. ASTM 636 for installation.

Surface Burning Characteristics: 25 or less for flame spread, 50 or less for smoke developed, per ASTM E 84.

Fire-Resistance Ratings: As determined per ASTM E 119 and as indicated by reference to design designations in UL "Fire Resistance Directory".

Submittals: In addition to submission of product data for each type of acoustical ceiling unit and suspension system required, submit the following:

6" square samples of each type of acoustical unit required. Set of 12" long samples of exposed runners & moldings.

Deliver extra materials to Owner. Furnish extra materials matching products installed and equaling 2.0% of Acoustical units and exposed suspension members installed. Package materials in protective covering and identify with appropriate labels.

Products: Mineral Composition Panels - Modulated, Cast or molded: with Standard washable Painted Finish:

ACOUSTICAL CEILING PANELS: Refer to drawings. Room Finish Schedule.

Materials: Armstrong, USG Corp. or equal

LOCATION	PANEL		NRC	FIRE RATING	SUSPENSION SYSTEM
Lobby, Reception, & Hallways (Area 1)	Ultima Health Zone #1938 2'x4'x3/4" Fine Texture	Tegular	70	Class A Pre	elude 15/16" Aluminum grid
Office, Elec. Rms.,	Optima #3252	Tegular		.95 Class A	Prelude XL 15/16" Aluminum
CT Scan, Control Rms. Ultra Sound, Dexa 1 & 2, MRI Rm. & Stor. (Area 1)		(2x4x3/4")			

All other Areas of work match existing ceiling type, color, & style Match existing ceiling grid color & style

Metal Direct-Hung Suspension Systems: Direct-hung systems roll-formed from pre-finished cold-rolled steel sheet, with hanger wire attachment devices and edge moldings and trim. Non-Fire Resistance-Rated Exposed Single Web Steel Suspension System w/ 15/16" Wide Exposed Faces: Structural Classification: Intermediate-Duty System. Finish: Painted, white. Fire Resistance Rated Exposed Double Steel System with 15/16" Wide exposed Faces: Structural Classification: Intermediate -Duty System Finish: Painted, white.

Access: Downward, with sizes for modules formed by main runners and cross tees and for initial direct access openings as indicated.

Manufacturer: Subject to compliance with requirements, provide products of one of the following: Armstrong World Industries, Inc., Donn Corporation or approved equal.

Tolerance: 1/8" in 121 - 0" level tolerance.

Pattern: One-way, align joints.

Suspension System: Secure to building structure, with hangers spaces 4 -0" along supported members.

Edge Moldings: Secure to substrate with screw anchors spaced 16" o.c. Miter comer joints. Cope exposed edges of intersecting exposed suspension members to produce flush intersections. Install acoustical tile with spline (or suspension flange) or tongue and groove at each joint. Place compression springs 12" o.c. in edge moldings of suspended tile systems. Cement acoustical tile to dry substrates to comply with manufacturer's instructions.

PART 1 - GENERAL: Resilient Flooring- Vinyl Sheet Flooring

1.01 SUMMARY

- A. Section Includes:
 - Flooring and accessories as shown on the drawings and schedules and as indicated by the requirements of this section
- B. Related Documents
 - 1. Drawings and General Provisions of the Contract (including General and Supplementary Conditions and Division 1 sections) apply to the work of this section.
- C. Related Sections:
 - Other Division 9 sections for floor finishes related to this section but not the work of this section
 - 2. Division 3 Concrete; not the work of this section
 - 3. Division 6 Wood and Plastics; not the work of this section
 - 4. Division 7 Thermal and Moisture Protection: not the work of this section

1.02 REFERENCES

- A. Armstrong Flooring Technical Manuals
 - Armstrong Flooring Guaranteed Installation Systems manual, F-5061
 - 2. Armstrong Flooring Maintenance Recommendations and Procedures, manual, F-8663
- B. ASTM International:
 - ASTM E 648 Standard Test Method for Critical Radiant Flux of Floor-Covering Systems
 Using a Radiant Heat Energy Source
 - ASTM E 662 Standard Test Method for Specific Optical Density of Smoke Generated by Solid Materials
 - 3. ASTM F 710 Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring
 - 4. ASTM F 1482, Standard Guide to Wood Underlayment Products Available for Use Under Resilient Flooring
 - 5. ASTM F 1861 Standard Specification for Resilient Wall Base
 - 6. ASTM F 1869 Standard Test Method for Measuring Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride
 - 7. ASTM F 1913 Standard Specification for Vinyl Sheet Floor Covering Without Backing
 - 8. ASTM F 2170 Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using in situ Probes
- C. National Fire Protection Association (NFPA).
 - NFPA 253 Standard Method of Test for Critical Radiant Flux of Floor Covering Systems
 Using a Radiant Heat Energy Source
 - NFPA 258 Standard Test Method for Measuring the Smoke Generated by Solid Materials

1.03 SYSTEM DESCRIPTION

- A. Performance Requirements: Provide flooring which has been manufactured, fabricated and installed to performance criteria certified by manufacturer without defects, damage, or failure.
- B. Administrative Requirements
 - 1. Pre-installation Meeting: Conduct an on-site pre-installation meeting to verify project requirements, substrate conditions manufacturer's installation instructions and manufacturer's warranty requirements. Comply with Division 1 Project Management and Coordination (Project Meetings) Section
 - 2. Pre-installation Testing: Conduct pre-installation testing as follows: [Specify testing (i.e. moisture tests, bond test, pH test. etc)

- C. Test Installations/ Mock-ups: Install at the project site a job mock-up using acceptable products and manufacturer approved installation methods, including concrete substrate testing. Obtain Owner's and Consultant's acceptance of finish color texture and pattern, and workmanship standards.
 - 1. Mock-Up Size: 6' x 6'
 - 2. Maintenance: Maintain mock-up during construction for workmanship comparison; remove and legally dispose of mock-up when no longer required.
- D. Sequencing and Scheduling
 - 1. Install flooring and accessories after the other finishing operations, including painting, have been completed. Close spaces to traffic during the installation of the flooring.
 - Do not install flooring over concrete slabs until they are sufficiently dry to achieve a bond with the adhesive, in accordance with the manufacturer's recommended bond, moisture tests and pH test.

1.04 SUBMITTALS

- A. Submit shop drawings, seaming plan, coving details, and manufacturer's technical data, installation and maintenance instructions (latest edition of <u>Armstrong Flooring Guaranteed Installation Systems</u> manual, F-5061.) for flooring and accessories.
- B. Submit the manufacturer's standard samples showing the required colors for flooring, welding rods, and applicable accessories.
- C. Submit Safety Data Sheets (SDS) available for flooring products, adhesives, weld rod, patching/leveling compounds, floor finishes (polishes) and cleaning agents.
- D. If required, submit the manufacturer's certification that the flooring has been tested by an independent laboratory and complies with the required fire tests.
- E. Closeout Submittals: Submit the following:
 - Operation and Maintenance Data: Operation and maintenance data for installed products in accordance with Division 1 Closeout Submittals (Maintenance Data and Operation Data) Section. Include methods for maintaining installed products, and precautions against cleaning materials and methods detrimental to finishes and performance.
 - 2. Warranty: Warranty documents specified herein

1.05 QUALITY ASSURANCE

- A. Single-Source Responsibility: provide types of flooring and accessories supplied by one manufacturer, including leveling and patching compounds, and adhesives.
- B. Select an installer who is competent in the installation of Armstrong resilient sheet flooring [using heat-welded seams][using Armstrong Flooring S-761 Seam Adhesive method].
 - 1. Engage installers certified as Armstrong Commercial Flooring Certified Installers
 - 2. Confirm installer's certification by requesting their credentials
- C. Fire Performance Characteristics: Provide resilient vinyl sheet flooring with the following fire performance characteristics as determined by testing material in accordance with ASTM test methods indicated below by a certified testing laboratory or other testing agency acceptable to authorities having jurisdiction:
 - 1. ASTM E 648 Critical Radiant Flux of 0.45 watts per sq. cm. or greater, Class I
 - 2. ASTM E 662 (Smoke Generation) Maximum Specific Optical Density of 450 or less

1.06 DELIVERY, STORAGE, AND HANDLING

- A. Comply with Division 1 Product Requirements Sections
- B. Comply with manufacturer's ordering instructions and lead time requirements to avoid construction delays.

- C. Deliver materials in good condition to the jobsite in the manufacturer's original unopened containers that bear the name and brand of the manufacturer, project identification, and shipping and handling instructions.
- D. Store materials in a clean, dry, enclosed space off the ground, protected from harmful weather conditions and at temperature and humidity conditions recommended by the manufacturer. Protect adhesives from freezing. Store flooring, adhesives and accessories in the spaces where they will be installed for at least 48 hours before beginning installation.

1.07 PROJECT CONDITIONS

A. Maintain a minimum temperature in the spaces to receive the flooring and accessories of 65°F (18°C) and a maximum temperature of [100°F (38°C)][85°F (29°C)] for at least 48 hours before, during, and for not less than 48 hours after installation. Thereafter, maintain a minimum temperature of 55°F (13°C) in areas where work is completed. Protect all materials from the direct flow of heat from hot-air registers radiators or other heating fixtures and appliances. Refer to the <u>Armstrong Flooring Guaranteed Installations Systems</u> manual, F-5061 for a complete guide on project conditions.

1.08 LIMITED WARRANTY

- A. Resilient Flooring: Submit a written warranty executed by the manufacturer, agreeing to repair or replace resilient flooring that fails within the warranty period.
- B. Limited Warranty Period: 10 years
- C. The Limited Warranty shall not deprive the Owner of other rights the Owner may have under other provisions of the Contract Documents and will be in addition to and run concurrent with other warranties made by the Contractor under the requirements of the Contract Documents.
- D. For the Limited Warranty to be valid, this product is required to be installed using the appropriate Armstrong Flooring Guaranteed Installation System. Product installed not using the specific instructions from the Guaranteed Installation System will void the warranty.

1.09 MAINTENANCE

- A. Extra Materials: Deliver extra materials to Owner Furnish extra materials from same production run as products installed. Packaged with protective covering for storage and identified with appropriate labels.
 - 1. Quantity: Furnish quantity of flooring units equal to 10 %of amount installed.
 - 2. Delivery, Storage and Protection: Comply with Owner's requirements for delivery, storage and protection of extra material

PART 2 - PRODUCTS

2.01 MANUFACTURER

- A. Resilient sheet flooring, wall base, adhesives and accessories:
- Armstrong Flooring Inc., 2500 Columbia Avenue. Lancaster, PA 17603, www.armstrongflooring.com/commercial
- 2. Manufacturer must have a headquarters in the United States of America
- Acceptable manufacturers: Mannington Tarkett Congoleum

2.02 RESILIENT SHEET FLOORING MATERIALS

A. Provide Homogeneous Sheet Vinyl Flooring GolorArt™ Medintone™ with Diamond 10™ Coating manufactured by Armstrong Flooring Inc.

- Description: An unbacked, nonlayered, homogeneous sheet vinyl flooring. Protected by a diamond-infused UV-cured polyurethane finish, the colors and pattern detail are dispersed uniformly throughout the thickness of the product. Color pigments are insoluble in water and resistant to cleaning agents and light.
- Homogeneous sheet flooring shall conform to the requirements of ASTM F1913 Standard Specification for Vinyl Sheet Floor Covering Without Backing
- 3. Pattern and Color: submit for Width 6 ft 7 in (2.0 m).
- 4. Length: up to 65.6 lineal feet (20 meters)
- 5. Thickness: 0.080 in. (2.0 mm)
- B. Vinyl Weld Rod:
 - [Provide patterned vinyl weld rod as produced by Armstrong Flooring Inc., and intended for heat welding of seams. Color shall be compatible with field color of flooring or as selected by Architect to contrast with field color of flooring. Color selected from the range currently available from Armstrong Flooring Inc.]
- C. Seam Adhesive:
 - Provide Armstrong Flooring S-761 Seam Adhesive at seams as recommended by the resilient flooring manufacturer.

2.03 PRODUCT SUBSTITUTION

A. Substitutions: submit an equal for approval

2.04 WALL BASE MATERIALS

- A. For integral flash cove base: Provide integral flash cove wall base by extending sheet flooring 6 in. up the wall using adhesive, welding rod, and accessories recommended and approved by the flooring manufacturer.
- B. [For top set wall base: Provide 1/8 in. (3.2 mm)] thick, 6 in. (15.24 cm)] high Armstrong Flooring Color-Integrated Wall Base with a matte finish, conforming to ASTM F 1861, Type TP Rubber, Thermoplastic, Group 1 Solid, Style B Cove

2.05 ADHESIVES

- A. Provide Armstrong S-599 Vinyl Sheet Flooring Adhesive Premium Commercial for field areas and Armstrong S-580 Flash Cove Adhesive at flash coving as recommended by the flooring manufacturer.
- B. For non-heat welded seams: [Provide Armstrong Flooring S-761 Seam Adhesive at seams as recommended by the resilient flooring manufacturer]

2.06 ACCESSORIES

- A. For patching, smoothing, and leveling monolithic subfloors (concrete, terrazzo, quarry tile, ceramic tile, and certain metals), provide Armstrong S-184 Fast-Setting Cement-Based Patch and Underlayment.
- B. For sealing joints between the top of wall base or integral cove cap and irregular wall surfaces such as masonry, provide plastic filler applied according to the manufacturer's recommendations.
- C. Provide top edge trim caps anodized aluminum for integral flash cove as approved by the Architect.
- D. Provide a fillet support strip for integral cove base with a minimum radius of 1 in. (2.54 cm) of plastic.
- E. Provide transition/reducing strips tapered to meet abutting materials.
- F. Provide threshold of thickness and width as shown on the drawings.

- G. Provide resilient edge strips of width shown on the drawings, of equal gauge to the flooring, homogeneous vinyl or rubber composition, tapered or bullnose edge, with color to match or contrast with the flooring, or as selected by the Architect from standard colors available.
- H. Provide metal edge strips of width shown on the drawings and of required thickness to protect exposed edges of the flooring. Provide units of maximum available length to minimize the number of joints. Use butt-type metal edge strips for concealed anchorage, or overlap-type metal edge strips for exposed anchorage. Unless otherwise shown, provide strips made of extruded aluminum with a mill finish.

PART 3 - EXECUTION

3.01 MANUFACTURER'S INSTRUCTIONS

A. Compliance: Comply with manufacturer's product data, including technical bulletins, product catalog, installation instructions, and product carton instructions for installation and maintenance procedures as needed.

3.02 EXAMINATION

- A. Site Verification of Conditions: Verify substrate conditions (which have been previously installed under other sections) are acceptable for product installation in accordance with manufacturer's instructions (i.e. moisture tests, bond test, pH test, etc.).
- B. Visually inspect flooring materials, adhesives and accessories prior to installation. Flooring material with visual defects shall not be installed and shall not be considered as a legitimate claim.
- C. Examine subfloors prior to installation to determine that surfaces are smooth and free from cracks, holes, ridges, and other defects that might prevent adhesive bond or impair durability or appearance of the flooring material.
- D. Inspect subfloors prior to installation to determine that surfaces are free from curing, sealing, parting and hardening compounds; residual adhesives: adhesive removers; and other foreign materials that might prevent adhesive bond. Visually inspect for evidence of moisture, alkaline salts, carbonation, dusting, mold, or mildew.
- E. Report conditions contrary to contract requirements that would prevent a proper installation. Do not proceed with the installation until unsatisfactory conditions have been corrected.
- F. Failure to call attention to defects or imperfections will be construed as acceptance and approval of the subfloor. Installation indicates acceptance of substrates with regard to conditions existing at the time of installation

3.03 PREPARATION

- A. Subfloor Preparation: Smooth concrete surfaces, removing rough areas, projections, ridges, and bumps, and filling low spots, control or construction joints, and other defects with Armstrong Flooring [S-184 Fast-Setting Cement-Based Patch and Underlayment][S-194 Cement-Based Patch, Underlayment and Embossing Leveler / S-195 Underlayment Additive] as recommended by the flooring manufacturer. Refer to Armstrong Flooring Guaranteed Installation Systems manual, F-5061 and ASTM F 710 Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring for additional information on subfloor preparation.
- B. Subfloor Cleaning: The surface shall be free of dust, solvents, varnish, paint, wax, oil, grease, sealers, release agents, curing compounds, residual adhesive, adhesive removers and other foreign materials that might affect the adhesion of resilient flooring to the concrete or cause a discoloration of the flooring from below. Remove residual adhesives as recommended by the flooring manufacturer. Remove curing and hardening compounds not compatible with the adhesives used, as indicated by a bond test or by the compound manufacturer's

- recommendations for flooring. Avoid organic solvents. Spray paints, permanent markers and other indelible ink markers must not be used to write on the back of the flooring material or used to mark the concrete slab as they could bleed through, telegraphing up to the surface and permanently staining the flooring material. If these contaminants are present on the substrate they must be mechanically removed prior to the installation of the flooring material. Refer to the <u>Armstrong Flooring Guaranteed Installation Systems</u> manual, F-5061 and ASTM F 710 Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring for additional information on subfloor preparation.
- C. Moisture Testing: [When using S-599 Adhesive. perform subfloor moisture testing in accordance with [ASTM F 2170, Standard Test Method for Determining Relative Humidity in Concrete Slabs Using in-situ Probes][ASTM F 1869.Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride] and Bond Tests as described in publication F-5061 Armstrong Flooring Guaranteed Installation Systems, manual, to determine if surfaces are dry: free of curing and hardening compounds, old adhesive, and other coatings; and ready to receive flooring. [Internal relative humidity of the concrete shall not exceed 85%.][MVER shall not exceed 5 lbs./1000 sq. ft./24 hrs.] On installations where both the Percent Relative Humidity and the Moisture Vapor Emission Rate tests are conducted, results for both tests shall comply with the allowable limits listed above. Do not proceed with flooring installation until results of moisture tests are acceptable. All test results shall be documented and retained]
- D. Moisture Testing: [For High-Moisture Installation Warranty when using Armstrong Flooring S-543 Adhesive), perform subfloor moisture testing in accordance with [ASTM F 2170, Standard Test Method for Determining Relative Humidity in Concrete Slabs Using *in-situ* Probes][ASTM F 1869, Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride] and Bond Tests as described in publication F-5061, Armstrong Flooring Guaranteed Installation Systems, manual, to determine if surfaces are dry; free of curing and hardening compounds, old adhesive, and other coatings; and ready to receive flooring. [Internal relative humidity of the concrete shall not exceed 90%.][MVER shall not exceed 5 lbs./1000 sq. ft./24 hrs.] On installations where both the Percent Relative Humidity and the Moisture Vapor Emission Rate tests are conducted, results for both tests shall comply with the allowable limits listed above. Do not proceed with flooring installation until results of moisture tests are acceptable. All test results shall be documented and retained].
- E. Moisture Testing: [For Spray Adhesive High-Moisture Installation Warranty, using Armstrong Flooring Flip™ Spray Adhesive, perform subfloor moisture testing in accordance with ASTM F 2170, "Standard Test Method for Determining Relative Humidity in Concrete Slabs Using *in-situ* Probes" and Bond Tests as described in publication F-5061, "Armstrong Flooring Guaranteed Installation System," manual to determine if surfaces are dry; free of curing and hardening compounds, old adhesive, and other coatings: and ready to receive flooring. Internal relative humidity of the concrete shall not exceed 93%. Do not proceed with flooring installation until results of moisture tests are acceptable. All test results shall be documented and retained].
- F. Concrete pH Testing: Perform pH tests on concrete floors regardless of their age or grade level. All test results shall be documented and retained.
- G. Wood subfloors: Armstrong resilient floors are recommended on suspended wood subfloors with a 1/4" underlayment (see product installation systems for exceptions) and a minimum of 18" of well-ventilated air space below. Armstrong Flooring does not recommend installing resilient flooring on wood subfloors applied directly over concrete or on sleeper-construction subfloors. Loading requirements for subfloors are normally set by various building codes on both local and national levels. Trade associations such as APA—The Engineered Wood Association provide structural guidelines for meeting various code requirements. Subfloor

panels are commonly marked with span ratings showing the maximum center-to-center spacing in inches of supports over which the panels should be placed.

- Refer to the <u>Armstrong Flooring Guaranteed Installation Systems</u> manual, F-5061 for additional information.
- H. Wood subfloors Surface Cleaning: Make subfloor free from dust, dirt, grease, and all foreign materials:
 - Check panels for sources of discoloration such as contamination from paint, varnish, stain overspray or spills, plumbing sealers, asphalt, heater fuel, markers or potential staining agents such as wood or bark not visible on the surface, edge sealers, logo markings, printed nail patterns and synthetic patches.
 - 2. Remove old adhesive.
 - 3. Cover adhesive, oil or wax residue with an appropriate underlayment. If the residue is tacky, place a layer of felt or polyethylene sheeting over it to prevent a cracking sound when walking on the floor.
 - 4. Remove all paint, varnish, oil and wax from all subfloors. Many buildings constructed before 1978 contain lead-based paint, which can pose a health hazard if not handled properly. State and federal regulations govern activities that disturb lead-based painted surfaces and may also require notice to building occupants. Do not remove or sand lead-based paint without consulting a qualified lead professional for guidance on lead-based paint testing and safety precautions. Armstrong Flooring does not recommend the use of solvents to remove paint, varnish, oil, wax or old adhesive residues because the solvents can remain in the subfloor and negatively affect the new installation. Whenever sanding, be certain the work site is well ventilated and avoid breathing dust. If high dust levels are anticipated, use appropriate National Institute for Occupational Safety and Health (NIOSH) designated dust respirator. All power sanding tools must be equipped with dust collectors. Avoid contact with skin or eyes. Wear gloves, eye protection and long-sleeve, loose fitting clothes
 - For additional information on the installation and preparation of wood and board-type underlayments see the current edition of ASTM F1482, "Standard Practice for Installation and Preparation of Panel Type Underlayments to Receive Resilient Flooring."
 - Vacuum or broom-clean surfaces to be covered immediately before the application of flooring.

3.04 INSTALLATION OF FLOORING

- A. Install flooring in strict accordance with the latest edition of <u>Armstrong Flooring Guaranteed</u> <u>Installation Systems</u> manual, F-5061 Failure to comply may result in voiding the manufacturer's warranty listed in Section 1 08.
- B. Install flooring wall to wall before the installation of floor-set cabinets, casework, furniture, equipment, movable partitions, etc. Extend flooring into toe spaces, door recesses, closets, and similar openings as shown on the drawings.
- C. If required, install flooring on pan-type floor access covers. Maintain continuity of color and pattern within pieces of flooring installed on these covers. Adhere flooring to the subfloor around covers and to covers.
- D. Scribe, cut, and fit or flash cove to permanent fixtures, columns, walls, partitions, pipes, outlets, and built-in furniture and cabinets.
- E. Adhere flooring to the subfloor without cracks, voids, raising and puckering at the seams, Roll with a 100-pound (45.36 kilogram) roller in the field areas. Hand-roll flooring at the perimeter and the seams to assure adhesion. Refer to specific rolling instructions of the flooring manufacturer.

- F. Lay flooring to provide a minimum number of seams. Avoid cross seams, filler pieces, and strips. Match edges for color shading and pattern at the seams in compliance with the manufacturer's recommendations.
- G. Install flooring with adhesives, tools, and procedures in strict accordance with the manufacturer's written instructions. Observe the recommended adhesive trowel notching, open times, and working times.
- H. [Prepare heat-welded seams with special routing tool supplied for this purpose and heat weld with vinyl welding rod in seams.] [Prepare sealed seams with special seam adhesive supplied for this purpose.] Use methods and sequence of work in conformance with written instructions of the flooring manufacturer. Finish all seams flush and free from voids, recesses, and raised areas.
- I. Provide integral flash cove wall base where shown on the drawings, including cove fillet support strip and top edge cap trim. Construct flash cove base in accordance with the flooring manufacturer's instructions. Heat-weld seams as specified for those on the floor.

3.05 INSTALLATION OF ACCESSORIES

- A. Apply top set wall base to walls, columns, casework, and other permanent fixtures in areas where top-set base is required. Install base in lengths as long as practical, with inside corners fabricated from base materials that are mitered or coped. Tightly bond base to vertical substrate with continuous contact at horizontal and vertical surfaces.
- B. Fill voids with plastic filler along the top edge of the resilient wall base or integral cove cap on masonry surfaces or other similar irregular substrates.
- C. Place resilient edge strips tightly butted to flooring, and secure with adhesive recommended by the edge strip manufacturer. Install edge strips at edges of flooring that would otherwise be exposed.
- D. Apply butt-type metal edge strips where shown on the drawings, after flooring installation. Secure units to the substrate, complying with the edge strip manufacturer's recommendations.

3.06 CLEANING

A. Perform initial and on-going maintenance according to the latest edition of <u>Armstrong Flooring Maintenance Recommendations and Procedures manual</u>, F-8663.

3.07 PROTECTION

A. Protect installed flooring as recommended by the flooring manufacturer against damage from rolling loads, other trades, or the placement of fixtures and furnishings. (See Finishing The Job in the latest edition of Armstrong Flooring Guaranteed Installation Systems manual, F-5061.)

END OF SECTION

SCOPE OF WORK

The work done by the Painting Contractor shall include the Furnishings of all material, labor, tools and equipment required to complete the surface preparation, the painting, and the finishing of the buildings, as specified herein.

See drawings and schedules for type and location of various surfaces requiring paint or finishing.

Field painting will not be required on items specified to be completely finished at factory or any non-ferrous metals, unless specifically designated.

Do not include prime coats on ferrous non-structural metal delivered with prime or shop coats, already applied. However, all abrasions on such prime coats shall be touched up with primers.

WORKMANSHIP AND APPLICATION

All work shall be done in a workmanlike manner by skilled mechanics and executed in accordance with manufacturer's printed instructions.

All materials shall be properly applied, and shall be free from runs or sags.

No exterior paint shall be applied in temp, below 50 Deg F and all surfaces shall be thoroughly dry. Follow manufacturer's printed recommendations for drying time before succeeding coats may be applied.

No interior painting or finishing shall be permitted until the Architect so authorizes. Follow manufacturer's printed recommendations for drying time before succeeding coats may be applied.

Varnishes and enamels shall be lightly sanded and then dusted before succeeding coats may be applied.

Paint one coat on the top and bottom edges of all doors, both metal and wood after doors have been fitted.

SURFACE PREPARATION

Preparing Block and Concrete construction

Poured concrete or precast concrete surfaces should cure 6090 days; block construction for 30-60 days before painting; upon prevailing climatic conditions. Before painting new concrete surfaces, the presence of form release agents and laitance deposits must be considered. In the event form oils or waxes are present, sand-blasting or a thorough washing with a detergent solution will be necessary to assure good adhesion.

Laitance must be removed by wire brushing or Brush-Off Blast Cleaning. Poured concrete floors must be etched with a 10% solution of muriatic acid in water to dissolve the laitance and open the pores to allow the penetration of the coating. Caution: Wear rubber boots and gloves, work goggles and protective clothing.

Peeling and scaling, is often caused from painting over heavy chalk deposits that have not been properly removed. Remove this substance with high pressure spray equipment. If mildew is present, it can be killed and removed at the same time with a mildewcide solution.

Efflorescence is a white deposit that frequently appears on exterior or interior masonry. To remove, first dampen the wall with water, then scrub the surface with a 10 % solution of muriatic acid. Caution: Wear rubber boots and gloves, work goggles and protective clothing. After treatment, thoroughly flush the surface with clean water to remove all acid.

The painting contractor shall be wholly responsible for the finish of his work, and shall not commence any part of it until the surface is in proper condition. If painting contractor considers any surface unsuitable for proper finish of his work, he shall notify the Architect of this fact, and shall not apply any until the unsuitable surfaces have been made satisfactory, or the Architect has instructed him to proceed.

All knots or sappy spots shall be sealed before painting. After interior prime coats have been applied, all remaining necessary puttying or spackling of nail holes, cracks and blemishes shall be done. All patch areas shall then be primed. All metal surfaces shall be solvent cleaned to remove grease and oil before painting. Also, all metal surfaces shall have loose rust and scale removed before painting. New galvanized iron surfaces shall be primed with Sherwin-Williams Galvite Primer B5OW3 or approved equal after thorough cleaning as described above.

MATERIALS

All materials used under painting contract shall be manufactured by The Sherwin-Williams Company, or approved equal, and shall be delivered to the job site in the original sealed containers.

COLORS AND SAMPLES

Paint colors shall be selected by Architect. The Architect will furnish the painting contractor with color chips and a painting schedule showing where the various colors will go. Before any work is done, the contractor will then prepare color and texture samples on the job for the Architect's approval.

INSPECTION

Notify the Architect so that each coat of material is inspected and approved by the Architect before the application of each succeeding specified coat, otherwise no credit for the coat applied will be given, and the contractor automatically assumes responsibility to recoat the work in question.

PROTECTION OF PROPERTY

The painting contractor shall be responsible for the condition of building in his charge. He shall protect adjacent work and materials from soiling or damage as well as his own.

When work is completed, the painting contractor shall remove all surplus materials, scaffolds, etc. from the premises, and shall clean off all misplaced paint, varnish, etc. so as to leave the premises in good condition.

SCHEDULE OF PAINTING

Interior Wood Trim - 4 coats - Stain Varnish satin Finish

- First Coat-SW Wood Filler, if open grain wood
- 2. Second Coat-SW Oil Stain A48 Series
- 3. Third Coat & Fourth Coat-SW Satin Polyurethane Varnish A67FI

*Note: On Close Grain Wood, paste wood filler may be eliminated.

Interior Dry Wall - 3 coats - satin Enamel

- 1. First Coat-SW Pro Mar 200 Latex Wall Primer B28W200
- Second and Third Coats-SW Pro Mar 200 Latex Eg-Shell B2OW200

Interior Metal - 2 coats - Satin Enamel

- 1. First Coat-Shop Primed
- Second Coat-SW Kem Kromik Metal Primer B5ON2
- 3. Third Coat-SW Pro Mar 200 Alkyd Eg-Shell Enamel B33W200

Interior Concrete Masonry Units

- Prime Coat-SW Heavy Duty Block Filler B42W46
- 2. Second and Third Coats-SW Pro Mar 200 Alkyd Eg-Shell Enamel B33W200

Exterior Dry Wall

- 1. Prime Coat-SW A-100 Exterior Primer Y24W20
- 2. Second and Third Coats-SW A-100 Flat House Paint

Exterior Exposed Steel - 3 coats

- 1. Prime Coat-SW Kem Kromik Metal Primer B5ON2 (Delete if shop primed)
- 2. Second and Third Coats-SW Industrial Enamel B54 Series

Exterior Concrete Masonry Units

- Prime Coat-SW Heavy Duty Block Filler B42W46
- 2. Second and Third Coats-SW A-100 Gloss House Paint

Interior & Exterior, Concrete Floors - 2 coats

If smooth hard-trowelled, should be etched with 10 % solution of Muriatic Acid, then flushed with water and allowed to dry thoroughly.

- Prime Coat-SW Acrylic Floor Enamel A24 series
- Second and Third Coats-SW Acrylic Floor Enamel A24 Series

PART 1 - GENERAL

1.01 SUMMARY

A. Cubicle Curtain & overhead metal Track system

1.02 REFERENCES

A. National Fire Protection Association (NFPA)

1.03 SYSTEM DESCRIPTION

- A. Performance Requirements: Provide curtains that conform to the following requirements of regulatory agencies and the quality control of Clickeze, InPro Corporation.
- 1. Fire Performance Characteristics: Provide curtains that are fire retardant or fire resistant.

1.04 SUBMITTALS

- A. Product Data: Manufacturer's printed product data for each type of curtain specified.
- B. Fabric Samples: Swatch cards of fabric samples illustrating fabric color and weave.
- C. Manufacturer's Care Instructions: Printed care instructions for each curtain.

1.05 DELIVERY, STORAGE AND HANDLING

- A. Deliver materials in unopened factory packaging to the jobsite
- B. Inspect materials at delivery to assure that specified products have been received.
- C. Store in original packaging in a climate controlled location away from direct sunlight.

1.06 PROJECT CONDITIONS

A. Environmental Requirements: Products must be installed in an interior climate controlled environment.

1.07 WARRANTY

A. Standard Clickeze Limited Lifetime Warranty against material and manufacturing defects.

PART 2 - PRODUCTS

2.01 MANUFACTURER

A. Acceptable Manufacturer Clickeze, InPro Corp. or approved equal.

PO Box 406 Muskego, WI 53150 USA; Telephone: 800-222-5556; Fax: 888-715-8407, www.inprocorp.com

2.02 MATERIALS

- A. Cubicle Curtain
- 1. Fabric: Provide 100% polyester curtains. Fabric is to be opaque, washable, flame retardant and closely woven.
- 2. Open Mesh Cloth: Provide curtain heading of open weave nylon mesh material with 1/2" holes to permit air and steam circulation. Mesh is to be flame retardant, washable and dry-cleanable.
- B. Cubicle Tracking System
- 1. ULTRA-CUBE, heavy duty extruded aluminum cubicle track with clear anodized aluminum or white baked acrylic enamel finish. Dimensions: height 1 1/8" (29mm), width 1 1/4" (32mm).
- C. Track Components
- Track Attachment: Provide appropriate attachment accessories as required for ceiling grid members.
- 2. Tegular Gridclip: Tegular edge grid clip; CE9271 standard CES9273 swivel, CE9275 suspended support set.
- 3. Track Splice: To fit track section, with finish matching that of the track
- D. Safety Loading Unit: (ULTRA-CUBE only) Provide loading unit to splice fit with track section. Unit includes durable hinge, locking mechanism and wand operation.
- E. Latch Suspension Support Set; (ULTRA-CUBE only) Provide support set installed above latch assembly on suspended

ceiling where angle bracket cannot be used.

2.03 FINISH AND COLOR

- A. Cubicle Curtain Fabric: Selection to be made by Architect.
- B. Open Mesh Cloth: Provide curtain heading of mesh material in a color selected by the architect from manufacturer's standard selection.
- C. Adjustable Chain Wand: Provide 24" (609mm) long adjustable chain wand to move curtain.

2.04 FABRICATION

- A. Curtain
- 1. Curtain Width: Manufacture curtains of one piece, sized to 10 percent wider than the track length but no less than 1 foot extra fullness.
- 2. Curtain Height: Specify height. Bottom of cubicle curtains hang 12" 14" above floor.
- 3. Curtain Heading: Manufacture with or without heading of open mesh cloth, to the same width as the curtain fabric. Include 4-ounce nickel-plated grommets, 6" on center for carriers.
- 4. Seams
- a. Cubicle Curtain: Bottom hem shall be double-fold and 1 1/4" wide. Curtains shall be seamless if possible or lock stitch seams in two rows. Turn seam edges and lock stitch. Sewing thread to be triple-ply twisted nylon.

PART 3 - EXECUTION

3.01 EXAMINATION

A. Examine areas and conditions in which cubicle

tracking system will be installed.

- 1. Complete all finishing operations, including painting, before beginning installation of cubicle tracking system materials.
- 2. Verify that surfaces and above ceiling supports are ready to receive work.

3.02 PREPARATION

A. General: Prior to installation, clean substrate to remove dust, debris and loose particles.

3.03 INSTALLATION

- A. General: Locate the cubicle track as indicated on the approved detail drawing for the appropriate substrate and in compliance with the Manufacture's installation instructions.
- B. Installation of Cubicle Tracking Systems:
- 1. Install cubicle track, secure, rigid, and true to ceiling line.
- 2. Slide carriers onto the track.
- 3. Install end cap or stop device.
- 4. Secure or suspend track to ceiling system. Install with mechanical fasteners or Gridclips.
- 5. Install curtains on carriers ensuring smooth operation.

3.04 CLEANING

A. At completion of the installation, remove any debris and clean surfaces in accordance with the Manufacturer's clean-up and maintenance instructions.

SUBMITTALS: In addition to manufacturer's product data and installation instructions, submit the following:

Shop Drawings for each type of specialty sign required. Include plans, elevations, and sign lettering layout; show anchorages and accessory items. Samples of each sign form and material showing finishes, colors, surface texture and qualities of manufacturer.

Manufacturers: Subject to compliance with requirements, provide products of one of the following:

CCSW PO Box 2189 Corpus Christi, TX 78403 Ph # (512) 884-4801 or approved equal.

Cast Bronze Plaque: 36"x30" polished bronze double border with pebble texture oxidized interior and concealed mounting. Lay-out will be provided during construction phase

Cast Aluminum Letters: 18" ht. with baked enamel finish & titled as follows: (Lay-out will be provided during construction phase.) – Submit letter style, colors, mounting type, etc. for approval.

Name of Building 18" ht. letters – @ 1 exterior sign. Name of Clinic – 8" ht. letters - @ 1 interior sign

High Pressure Plastic Laminate: Raised or engraving stock with two tone laminate (Wilson Arts) face and core plies in contrasting colors, in finishes and color combinations as selected by Architect.

Sign Size: Refer to sizes listed below. 3/4" radius at corners Beveled edges. Character Proportion. Letters and numbers on signs shall have width-to-height ratios between 3:5 and 1.1 and a stroke width-to-height ratio between 1:5 and 1:10.

Raised or Indented Characters or Symbols with Braille: Letters, numbers, symbols, or pictographs on signs shall be raised or incised at least 1/32 inch (80 mm'). Characters or symbols shall be at least 5/8 inch (16 mm) high. Indented characters or symbols shall have a stroke width of at least 1/4 inch (6mm).

(NAME)	(QUANTITY)	(SIZE)	
Unisex	1	6"x8"	· · · · <u> · · · · · · · · · · · · · ·</u>
Office	1	6"x8"	
Dressing Rm.	1	6"x8"	Type B- Interior VisiTouch DuraDot ADA
CT. Scan	1	6"x8"	
Electrical Rm.	2	6"x8"	
Control Rm.	2	6"x8"	
Mechanical Rm.	1	6"x8"	
Ultra Sound	1	6"x8"	
Storage	2	6"x8"	Type B- Interior VisiTouch DuraDot ADA
Janitor Storage	1 .	6"x8"	
Hallway	5		
Staff Restroom	1		
Dexa 1	1		
Dexa 2	1		
Women	1		
Men	1	6"x8"	
MRI Rm.	1	6"x8"	

(EXTERIOR)

Installation: Locate sign units and accessories where shown and scheduled, using mounting method of the type described and to comply with manufacturer's instructions. Install sign units level, plumb and 3t the height indicated.

Wall Mounted Panel signs: Attach panel signs-- to wall surfaces using the Methods indicated below:

Screw Mounted: Install with (4) 1" S.S. screws (provide inserts where required) one at each corner of sign.

Mounting Height and Location. Room identification signs shall be mounted on the wall surface on the handle side of doors (nearest adj. wall if not possible) at 60 inches (152 cm) above the floor and within 8 inches (20 cm) from the outside edge of the door frame. Where it is appropriate for tactile signage to be used for purposes other than room or space identification, the characters and symbols shall be placed to the left of the feature to be identified.

SUBMITTALS: Submit product data and finish samples.

MANUFACTURERS: Subject to compliance with requirements, provide products as follows:

J.L. Industries

FIRE EXTINGUISHERS: Provide fire extinguishers, cabinet and accessories for each fire extinguisher.

Multi-Purpose Dry Chemical Type: UL-rated 4-A: 60-B.C. 10 lb. nominal capacity, in enameled steel container.

Extinguishers – Typical 10lb. – Cosmic 10E
Extinguishers in Kitchen Areas – 2 gallon – Saturn 25
Semi-Recessed Cabinets – 1017F – 13
Wall Brackets – MB 818

Quantity: Refer to Drawings. Unless otherwise specified provide one fire extinguisher for each 75' feet.

FIRE EXTINGUISHER CABINETS: Provide the following (manufacture's standard accessories) accessories for each fire extinguisher.

Semi-Recessed Cabinet Type: Cabinet box partly recessed in wall. #1017F-13

Bubble Type Door Style: one-piece molded plastic.

Fastener Bracket: Quick release fastener anchored to cabinet – MB 818

Factory Finishing of Fire Extinguisher Cabinets: Comply with NAAMM "Metal Finishes Manual" to provide uniformly finished products. Provide color as indicated, or if not indicated, as selected from manufacturer's standard colors.

Color Anodized Finish: AA-MI2C22A42 (non specular mechanical finish as fabricated, medium matte etched finished with 0.4 mil min. thick anodic coatings)

Installation: In accordance with manufacturer's directions for type of mounting required at height and locations indicated, or if not indicated, to comply with applicable regulations of governing authorities.

Identify Fire Extinguisher in Cabinets with lettering spelling "FIRE EXTINGUISHER" printed on door by process indicated below, as selected by Architect from manufacturer's standard letter sizes, styles, colors and layouts.