

- Unless otherwise directed, install on 16" centers.
- Size as indicated on Drawings.

2.05 METAL FURRING CHANNELS:

- A. Furring channels:**
- Galvanized steel designed similar to USG Metal Furring Channels.
 - Face width 1-3/8", depth 7/8", length 12'-0".
- B. Furring channel clips:**
- Galvanized steel for use in attaching furring channels.
 - Install on alternate sides of the carrying channels. Where clips cannot be alternated, wire tying must be employed.

2.06 COLD-ROLLED CHANNELS:

- A. Description:**
- 16 gauge galvanized steel for use in furring, suspended ceilings, and partition construction.
 - Sizes: 3/4", 1-1/2", and 2" as required by the Drawings.

2.07 METAL TRIM:

- A. Trim:**
- USG #200 series.
 - All metal that shall be concealed when wall is finished out.
 - Sizes to accommodate drywall thickness.
- B. Corner bead:**
- USG "Dura-A-Bead" all metal heavy gauge hot-dipped galvanized steel reinforcement for protecting external corners.
 - Shall be concealed when wall is finished out.

2.08 HANGER AND TIE WIRE:

- A. Soft annealed, low carbon steel wire, zinc-coated.**
- No. 9 gauge for hanger wire.
 - No. 18 gauge for tie wire.

2.09 FASTENERS:

- A. Metal studs:**
- Self-drilling, self-tapping steel screws to comply with ASTM C646.
 - Type S and S12, Pan and Bugle head.
 - Length of screw to be equal to panel(s) thickness plus 3/8".

2.10 JOINT TREATMENT:

- A. All products to comply with ASTM C-475, Joint Treatment Materials for Gypsum Wallboard Construction.**
- Joint reinforcing tape: USG PerF-A-Joint Reinforcing Tape.
 - Joint compounds: USG All-Purpose Joint Compound.

2.11 OTHER MATERIALS:

- A. All other materials, not specifically described but required for a complete and proper installation of gypsum drywall, shall be as selected by the Contractor subject to the approval of the Architect.**

PART 3 - EXECUTION

3.01 GENERAL:

- A. All materials shall be installed in accordance with the manufacturer's current printed directions, approved submittals and the Contract Documents. In the case of a conflict between these instructions, the most stringent condition shall preside.**

3.02 METAL STUD ERECTION:

- A. Install all metal studs and accessory items in strict accordance with the approved submittal of manufacturer's recommendations, anchoring all members in position for long life under hard use.**
- B. Align all partition and wall assemblies to a tolerance of one in 200 horizontally and one in 500 vertically.**
- C. Attach steel runners at floor and ceiling to structural elements with suitable fasteners located 2" from each end and spaced 24" o.c. To suspended ceilings, use toggle bolts or hollow wall anchors spaced 16" o.c.**
- D. Position studs vertically, with open side facing in same direction, engaging floor and ceiling runners. When necessary, splice studs with 8" nested lap and two positive attachments per stud flange. Place studs in direct contact with all door frame jambs, abutting partitions, partition corners and existing construction elements. Where studs are installed directly against exterior walls and a possibility of water penetration through walls exists, install asphalt felt strips between studs and wall surfaces.**
- E. Anchor all studs for shelf-walls and those adjacent to door and window frames, partition intersections, corners and free-standing furring to ceiling and floor runner flanges with metal lock fastener tool or screws. Securely anchor studs to jamb and head anchors of door or borrowed-light frames by bolt or screw attachment. Over metal door and borrowed-light frames, place horizontally a cut-to-length section of runner, with a web-flange bend at each end, and secure to strut-studs with two screws in each bent web. Position a cut-to-length stud (extending to ceiling runner) at vertical panel joints over door frame header. When attaching studs to steel grid system, structural adequacy of grid to support end reaction of wall must be determined.**

3.03 GYPSUM PANEL INSTALLATION - GENERAL:

- A. Install and finish in accordance with ASTM C840 and gypsum wallboard manufacturer's recommendations.**
- B. Install sound attenuation blankets where indicated prior to installing gypsum panels unless blankets are readily installed after the panels have been installed on one side.**
- C. Install ceiling board panels across framing to minimize the number of abutting end joints and avoid abutting end joints in the central area of each ceiling. Stagger abutting end joints of adjacent panels not less than one framing member.**
- D. Install wall/partition board panels to minimize the number of abutting end joints or avoid them entirely. Stagger abutting end joints not less than one framing member in alternate courses of board. At stairwells and other high walls, install panels horizontally with end abutting joints over studs and staggered.**
- E. Install gypsum panels with face side out. Do not install imperfect, damaged, or damp panels. Butt panels together for a light contact at edges and ends with not more than 1/16" of open space between panels. Do not force into place. Do not allow gypsum panels to directly contact concrete or masonry surface. Hold the panels away from these surfaces approximately 1/8".**
- F. Locate both edge and end joints over supports, except in ceiling applications where intermediate supports or gypsum board back-blocking is provided behind end joints. Position adjoining panels so that tapered edges abut tapered edges, and field-cut edges abut field-cut edges and ends. Do not place tapered edges against cut edges or ends. Stagger vertical joints over different studs on opposite sides of partitions. Avoid joints at corners of framed openings where possible.**
- G. Attach gypsum panels to steel studs so that the leading edge or end of each panel is attached to open (unsupported) edges of stud flanges first.**
- H. Attach gypsum panels to framing provided at openings and cutouts.**
- I. Spot grout hollow metal door frames for solid core wood doors, hollow metal doors, and over 32" wide. Apply spot grout at each jamb anchor clip and immediately insert gypsum panels into frames.**
- J. Form control joints and expansion joints at locations indicated and as detailed with space between edges of adjoining gypsum panels, as well as supporting framing (chairs or gypsum panels).**
- K. Cover both faces of stud partition framing with gypsum panels in concealed spaces (above ceilings, etc.) except in chase walls that are braced internally.**
- L. Patch Except where concealed application is indicated on drawings for sound, fire, air, or smoke ratings, coverage may be accomplished with sheets of not less than 8 sq. ft. in area.**
- 2. Fit gypsum panels around ducts, pipes, and conduits.**
- 3. Where partitions intersect open concrete coffer, concrete slabs, and other structural members project below underside of floor/roof slab and cutouts, cut gypsum panels to fit profile formed by coffer, joist, and other structural members; allow 1/4" to 2" wide joints to install sealant.**
- L. Isolate perimeter of non-load-bearing gypsum board partitions at structural abutments, except floors. Provide 1/4" to 2" wide spaces between locations and trim edges with edge trim where edges of gypsum panels are exposed. Seal joints between edges and abutting structural surfaces with acoustical sealant.**
- M. Space fasteners in gypsum panels according to referenced gypsum board application and finishing standard and manufacturer's recommendations.**
- N. Coordinate work with that of other Trades. Neatly cut face boards to fit around penetrations through wall. Provide suitable back-up anchorage as required for the attachment of shelves and cabinetry.**
- O. Screw heads shall provide a slight depression below the surface of the board. Do not install screw closer than 3/8" from edges and ends of the board.**
- P. Treat joints, screw head depressions, or defects incurred during the installation of the gypsum board in prescribed manner with joint treatment.**
- Q. Properly space all fasteners in careful accordance with the manufacturer's recommendations and code requirements with heads driven slightly below the surface for proper cementing but without breaking the paper cover.**
- R. Loosely butt all joints to be taped; firmly butt all joints to be left untreated.**
- S. Stagger all end joints and the joints between panels to achieve a maximum of bridging and a minimum of continued joints.**

3.04 GYPSUM BOARD APPLICATION METHODS:

- A. Single layer application:**
- On ceilings, apply gypsum panels prior to wall/partition board application to the greatest extent possible and at right angles to framing, unless otherwise indicated.
 - Apply gypsum panels either vertically or horizontally. Position all edges over studs for vertical application; all ends over studs for horizontal application. Use maximum practical lengths to minimize end joints. Stagger joints on opposite ends of partition.
- B. Double-layer application:**
- On ceilings, apply base layer prior to applying base layer on walls/partitions; apply face layers in same sequence. Offset face-layer joints at least 10" from parallel base-layer joints. Apply base layers at right angles to framing members unless otherwise indicated.
 - On partitions/walls, apply base layers and face layers vertically (parallel to framing) with joints of base layers located over stud or furring member and face layer joints offset at least one stud or furring member with base layer joints. Stagger joints on opposite sides of partitions.
 - Fasten both base and face layers separately to supports with screws.

3.05 INSTALLING TRIM AND ACCESSORIES:

- A. The Drawings do not support, to show all trim required; verify with the Architect the precise locations and types of trim to be used.**
- B. In addition to locations shown on Drawings, install trim at ceiling angles and around cut-out openings.**
- C. Install all trim in strict accordance with the manufacturer's recommendations, paying particular attention to make all trim installation plumb, level, and true to line, with firm attachment to supporting members.**
- D. For trim accessories with back flanges, fasten to framing with the same fasteners used to fasten gypsum board. Otherwise, fasten trim accessories according to accessory manufacturer's directions for type, length, and spacing of fasteners.**
- E. Reinforce all vertical and horizontal exterior corners with corner bead fastened with 9/16" rosin-coated staples 9" o.d. on both flanges along entire length of bead.**
- F. Metal trim: Where assembly terminates against masonry or other dissimilar material, apply metal trim over panel edge and fasten with screws or 9/16" rosin-coated staples 12" o.c. Install edge trim where edges of gypsum panels would otherwise be exposed or semi-exposed. Provide edge trim type with face flange formed to joint compound.**
- G. Install control joints at locations indicated, and where not indicated according to ASTM C840, and in locations approved by the Architect for visual effect.**

09510 - ACOUSTIC CEILINGS

PART 1 - GENERAL

1.01 SCOPE:

- A. Provide all of the labor, materials, equipment, and services required to furnish and install the acoustical ceilings.**

1.02 QUALITY ASSURANCE:

- A. In addition to complying with all pertinent codes and regulations, comply with all pertinent recommendations published by the Ceilings and Interior Systems Contracting Association and the requirements of ASTM C636 (latest edition).**
- B. Single source responsibility:**
- Obtain each type of acoustical ceiling unit from a single source with resources to provide products of consistent quality in appearance and physical properties without delaying progress of the Work.
 - Obtain each type of suspension system from a single source with resources to provide products of consistent quality in appearance and physical properties without delaying progress of the Work.
- C. Coordinate layout and installation of acoustical ceiling units and suspension system components with other construction that penetrates ceilings or is supported by them, including, but not limited to, light fixtures, HVAC equipment, fire-suppression system components, and partition system.**

1.03 SUBMITTALS:

- A. Prior to installation, submit to the Architect for review the following:**
- Submit manufacturer's project specifications and installation instructions for each type of acoustical panel and suspension system required, including certified laboratory test reports and other data necessary to show compliance with these specifications.
 - Include manufacturer's recommendations for cleaning and refinishing acoustical panels, including precautions against materials and methods which may be detrimental to finishes and acoustical performances.
 - Shop drawings, showing layout of each type of ceiling system in relation to surrounding structure, mechanical work (which shall include, but not be limited to, ductwork and piping), lighting and electrical work, and any other pertinent fixtures and equipment. Drawings shall also show location of accessible panels. The reproduction of Architect Drawings as the basis of these shop drawings will not be acceptable.
 - Physical Samples: Ceiling board and/or tile and exposed grid in finish and pattern proposed to be furnished.
- B. Operations and maintenance manual:**
- Include manufacturer's recommendations for cleaning and refinishing acoustical panels, including precautions against materials and methods which may be detrimental to finishes and acoustical performances.
- 1.04 DELIVERY, STORAGE, AND HANDLING:**
- Deliver acoustical ceiling units to project site in original unopened packages and store them in a fully enclosed space where they will be protected against damage from moisture, direct sunlight, surface contamination, and other causes.
 - Before installing acoustical ceiling units, permit them to reach room temperature and a stabilized moisture content.
 - Handle acoustical ceiling units carefully to avoid chipping edges or damaging units in any way.

1.05 JOB CONDITIONS:

- A. Do not install interior acoustical panel ceilings until space enclosed and weatherproof, and until work have stabilizes completely and until ambient conditions of temperature and humidity continuously maintained at or values near those indicated for final occupancy.**

PART 2 - PRODUCTS

2.01 ACOUSTICAL CEILING:

- ACT-1 Ceiling panel:**
- USG Frost Clima-Plus Tegular No. 414
 - Size: 24" x 24" x 3/4".
 - Edge: Square.
 - Color: White.
 - Suspension system: 15/16" finished to match ceiling tile.
- ACT-2 Ceiling panel:**
- USG Frost Clima-Plus Tegular No. 414
 - Size: 24" x 24" x 3/4".
 - Edge: Square.
 - Color: Black.
 - Suspension system: 15/16" finished to match ceiling tile.

2.02 OTHER MATERIALS:

- A. All other materials, not specifically described but required for a complete and proper installation of the suspended acoustical ceiling, shall be as selected by the Contractor subject to the approval of the Architect.**

3.01 SURFACE CONDITIONS:

- A. Prior to all work of this Section, carefully inspect the installed work of all other Trades and verify that all such work is complete to the point where this installation may properly commence.**
- Do not proceed until all wet work (eg: Concrete and painting) has been completed and thoroughly dried out, unless expressly permitted by manufacturer's printed instructions.
 - Verify that suspended acoustical ceiling may be installed in accordance with the original design, all codes and regulations having jurisdiction, the manufacturer's current recommendations and the approved submittals.
 - In the event of discrepancy, immediately notify the Architect.
 - Do not proceed with installation in areas of discrepancy until all such discrepancies have been fully resolved.

3.02 COORDINATION WITH MECHANICAL AND ELECTRICAL:

- A. Coordinate with the requirements of other Trades. Use all means necessary to interface with adjacent materials.**
- B. Where recessed lighting fixtures are installed in suspension system, consult with the fixture manufacturer prior to preparation of shop drawings so that the work of this Section shall be installed ready to receive the lighting fixtures. Modify the suspension system members adjacent to fixture locations as approved by the Architect and to the extent necessary to accommodate the fixtures.**

- C. In the event lighting fixtures or air distribution or return air equipment other than those specified should be substituted under their respective Sections and/or Drawings and should the substituted fixtures require more extensive modifications, the Contractor shall make such required additional modifications and any additional cost shall be paid by the Contractor.**
- D. Where wide or deep air conditioning ducts above suspended acoustical ceilings interfere with suspension hangers, provide independent framing below the duct work to support the ceiling as an obligation under this Section. Framing shall meet the approval of the Architect. Framing shall be supported from floor or roof structure above and shall in no case be attached to the duct work, piping or conduit.**

3.03 SUSPENDED CEILING INSTALLATION:

- A. Comply with ASTM C 636 as applicable to acoustical panel ceiling systems, except to extent more stringent requirements indicated or required for compliance with governing regulations or fire resistance ratings.**
- B. Suspend ceiling hangers from building structural members only, and only as indicated.**
- Secure to structure, including intermediate framing members, by attaching to metal clips designed for type of member involved, or where possible, by looping and wire-tying directly to members.
- C. Space hangers not more than 4'-0" o.c. along each member supported directly from hangers, unless otherwise shown, and provide hanger not more than 6" from ends of each member. All hanger wires shall be installed straight and true. Splayed or diagonally installed wire is not acceptable.**
- D. For the support of light fixtures, the fixture load shall be supported by supplemental hangers within 6" of each corner, or the fixture shall be supported separately.**

3.04 MOLDINGS:

- A. Cope exposed flanges of intersecting members so that flange faces will be flush.**
- B. Install edge moldings of type indicated at edges of each acoustical panel ceiling area, and at locations where edge of panel would otherwise be exposed after completion of work. Fine C. Secure moldings to building construction by fastening through holes drilled in vertical leg. Space holes not more than 3" from each end and not more than 16" o.c. Draw-up fasteners for tight set against vertical surfaces.**
- D. Miter corners of moldings accurately to provide hairline joints.**
- E. Level moldings with ceiling suspension system, to level tolerance of 1/8" in 12'-0".**

3.05 ACOUSTICAL PANEL INSTALLATION:

- A. Plan each layout to balance board widths at opposite edges of each ceiling area. Avoid use of less-than-half width units wherever possible. Comply with Architect's reflected ceiling plans to greatest extent possible.**
- B. Install acoustical panels in coordination with suspension system, with edges concealing support of suspension members.**
- C. Scribe and cut panels for accurate fit at borders and at interruptions and penetrations by other work through ceilings.**
- For regular or reveal edge panels, cut and reveal or rabbit edges of ceiling tiles at border areas and vertical surfaces.

3.06 CLEANING AND PROTECTION:

- A. Clean exposed surfaces of acoustical panels and of trim, moldings, and suspension members; comply with manufacturer's instructions for cleaning and touch-up of minor finish damage. Remove and replace work which cannot be successfully cleaned and repaired to permanently eliminate evidence of damage.**
- B. Institute required protection for acoustical panel ceilings, including temperature and humidity limitations and dust control, so that work will be without damage or deterioration at time of substantial completion.**

09610 - CONCRETE FLOOR SEALER

PART 1 - GENERAL

- 1.01 SCOPE:**
- A. Provide all of the labor, materials, equipment and services to furnish and install the concrete floor sealer. The product is only for application to those floors that will not receive an additional finish material (e.g.: Tile).**

1.02 SUBMITTALS:

- A. Prior to fabrication, submit to the Owner's Representative for review the following:**
- Manufacturer's literature fully describing each product and its proper installation for this Project.

PART 2 - PRODUCTS

2.01 CONCRETE FLOOR SEALER:

- A. Product/manufacturer:**
- CI Densifier 201 as manufactured by Chemprobe Coating Systems (a Division of Inneco).
 - Or an approved equal.
- B. Description:** Clear, penetrating, water based sealer for densifying and dustproofing.

PART 3 - EXECUTION

3.01 INSTALLATION:

- A. Prepare the substrate the substrate and install the product in strict accordance with the original design and the manufacturer's recommendations.**
- B. Prepare substrate.**
- Surface shall be free of oil, grease and any extraneous matter which could interfere products penetration. Pressure wash the concrete substrate to remove contamination, loose or broken cement paste and aggregate. Remove or rework all loose or broken mortar. After pressure washing, the substrate shall readily absorb water and not show any signs of water beading.
- C. Application:**
- Do not dilute or thin.
 - Apply using a low pressure rotary or gear pump sprayer with a fan tip. Applications using a commercial grade pump up spray tank, roller or brush are also acceptable (depending on the substrate and project circumstances; follow manufacturer's directions). Airless paint sprayers are not acceptable.
 - Allow product to fully cure prior to putting the substrate into service.
 - Application rate of first coat: 300 to 350 sq ft/gallon.
 - Apply using a uniform spray pattern overlapped slightly on each pass. Apply material sufficiently for a wet appearance but do not leave excess material stand in low areas. Broom out or squeeze excess material as soon as possible.
 - After completing the first coat allow at least one hour then apply a second coat at 350 to 400 sq ft/gallon.

09653 - RESILIENT FLOORING

1.01 SUMMARY:

- A. Section Includes:** Resilient tile floor covering and accessories.
- B. Related requirements:**
- Drawings and General Provisions of the Contract (including General and Supplementary Conditions and Division 1 References Section)
 - Section 03: Concrete (subfloors)
 - Section 06: Wood (subfloors)
 - Section 07: Thermal and moisture protection

1.02 REFERENCE STANDARDS:

- A. ASTM International:**
- D 2047 Standard Test Method for Static Coefficient of Friction of Polished-Coated Flooring Surfaces as Measured by the James Machine
 - E 648 Standard Test Method for Critical Radiant Flux of Flooring Systems Using a Radiant Energy Source
 - E 852 Standard Test Method for Specific Optical Density of Smoke Generated by Solid Materials
 - F 137 Standard Test Method for Flexibility of Resilient Flooring Materials with Cylindrical Mandrel Apparatus
 - F 536 Standard Test Method for Size of Resilient Floor Tile by Dial Gage Method
 - F 710 Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring
 - F 925 Standard Test Method for Resistance to Chemicals of Resilient Flooring

- F 963 Standard Test Method for Toy Safety (including Heavy Metal Content)
 - F 970 Standard Test Method for Static Load Limit
 - F 1482 Standard Practice for Installation and Preparation of Panel Type Underlayments to Receive Resilient Flooring
 - F 1514 Standard Test Method for Measuring Heat Stability of Resilient Flooring by Color Change
 - F 1515 Standard Test Method for Measuring Light Stability of Resilient Vinyl Flooring by Color Change
 - F 1861 Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride
 - F 2170 Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using In Situ Probes
- B. European Norms (EN)**
- EN 685 Resilient, Textile, and Laminated Floor Coverings: Classification
- C. Other referenced documents:**
- National Fire Protection Association (NFPA) 253: Standard Test Method for Critical Radiant Flux of Floor Covering Systems Using a Radiant Energy Source
 - LEED-NC, version 2.2

1.03 ADMINISTRATIVE REQUIREMENTS:

- A. Coordination:** install floor covering after finishing operations, including painting and ceiling operations, have been completed.
- B. Preinstallation Meetings:** Meet to confirm project requirements, substrate conditions, manufacturer's installation instructions and warranty requirements in compliance with Division 1 requirements.
- C. Sequencing:** Do not install floor covering over concrete subfloors until substrates have cured and are dry to board and in testing as determined using test methods specified in ASTM F710 and following adhesive manufacturer's instructions.

1.04 ACTION SUBMITTALS:

- A. General:** Submit listed submittals in accordance with Conditions of the Contract and Division 1 Submittal Procedures.
- B. Product Data:** For specified products, submit latest edition of product supplier's technical specifications data (available from www.matsinc.com).
- C. Samples:** Submit selection and application samples showing the required finishes, colors, designs, and texture of flooring, as well as samples of adhesives and applicable accessories such as welding rods, game line paint, etc.
- 1.05 INFORMATION SUBMITTALS:**
- A. Laboratory Tests:**
- Product test reports: As required by Conditions of the Contract and Division 1 Regulatory Requirements Section, submit test certificates from an independent test laboratory showing compliance with specified performance characteristics and physical properties.
 - Credibility and adhesion test reports: Submit test reports confirming adhesive's effectiveness with the product specified.
- B. Manufacturer Instructions:** For specified products, submit latest editions of product supplier's installation and cleaning & maintenance instructions (available from www.matsinc.com).
- C. Sustainable Design Submittals:** For projects requiring LEED submittal based on LEED-NC version 2.2
- Submit documentation substantiating that Floorworks contains a minimum of 26% post-consumer recycled content and therefore contributes to Materials & Resources Credit 4.2.
 - For Floorworks installations: submit documentation substantiating that Mats Inc. Perma-Bond adhesive is GreenLabelPlus certified and therefore contributes to Indoor Environmental Quality Credit 4.1.
 - Submit documentation substantiating that Floorworks is FloorScore™ certified (as of 12/08 this certification is in progress) and therefore contributes to Indoor Environmental Quality Credit 4.3.

1.06 CLOSEOUT SUBMITTALS:

- A. Warranty documentation:** For specified products and accessories, submit product supplier's warranty documents (available from www.matsinc.com).
- B. Sustainable Design Closeout Documentation:** Submit documentation to substantiate implementation of each relevant category of LEED credits.

1.07 QUALITY ASSURANCE:

- A. Manufacturer:** Manufacturer shall be ISO 9001 certified.
- B. Installer:** To be qualified to install the material, installer shall fulfill one of the following requirements:
- Installer shall have a minimum of five years of proven experience in performing work of this section and in installing sheet vinyl floor covering - including heat welding and coving, if applicable --- similar to that required for this project and shall provide a minimum of three references for comparable systems and installations successfully performed by the installer within the last 18 months
 - Installer shall be certified in resilient flooring installation. Acceptable certifications include The International Standards and Training Alliance (NSTALL), The International Certified Floorcovering Installers Association (CFI), and Flooring America University.
- C. Testing Agency:** Agency shall be independent and qualified to perform concrete substrate moisture and humidity testing according to ASTM F710 prior to the flooring being installed.
- D. Preconstruction Testing:**
- Concrete substrate: Reference Standard ASTM F710 for more detail. To partially summarize here, regardless of its age or grade level or history of use, perform the following concrete tests:
- i. Concrete Moisture Test: Perform moisture tests (ASTM F1869 and ASTM F2170) on concrete with a minimum of three tests for the first 1000 square feet and one additional test for each 1000 square feet or fraction thereof. A diagram of the area showing the location and results of each test shall be dated and submitted to the architect, general contractor, and/or end user. If test results exceed the floor covering manufacturer's limits, installation shall not commence until results conform to limits.
- ii. If test results on installations exceed the following limits, installation shall not commence until results conform to limits:
- Perma-Bond/ASTM F 1869S lbs/1000 sq ft/24 hrsASTM F 217075% relative humidityiii. Concrete pH Test: Perform pH tests on concrete. Readings below 7.0 and above 10.0 can adversely affect resilient flooring or adhesives, or both.
- Wood substrate: Per ASTM F1482, wood subfloor/underlayment assemblies shall be double layer construction, with a total thickness of not less than 1"
- i. There shall be a minimum of 18 inches of well-ventilated air space beneath all wood subfloors. Crawl spaces shall be insulated and protected by a moisture vapor barrier.
- ii. Do not install over "sleeper" underlayment systems or wood underlayment installed over concrete.
- iii. Do not install over existing resilient flooring, Luan panels, CCA plywood, fire-rated plywood, plywood with knots, underlayment made of pine or other soft woods, particle board, Masonite™, or other hardboard underlayment, hardboard flooring, treated or otherwise coated
- wood material, or other uneven or unstable substrates. Unacceptable substrates shall be covered using a 1/8 inch or thicker panel underlayment that is warranted by the underlayment manufacturer for use as an underlayment for sheet vinyl floor covering in commercial applications.
- iv. Fasten underlayment panels using underlayment staples or nails. Screws are not recommended.

1.08 DELIVERY, STORAGE, AND HANDLING

- A. General:** Comply with Division 1 Product Requirements Section
- B. Delivery and Acceptance Requirements:** Comply with the product supplier's ordering and lead time requirements to avoid construction delays, and to allow material to acclimatize as required in the specified product's installation instructions. Accept delivery of materials only if they are in unopened, undamaged packaging that bears the name and brand of the manufacturer/product supplier, project identification, and shipping and handling instructions.
- C. Storage and Handling Requirements:** Upon receiving floor covering, immediately remove from pallet and lay on a flat surface. Store tile or plank boxes no more than five boxes high. Store material - including underlayment panels, patching or underlayment compound, floor covering material, adhesive, and welding rods - in the original packaging (as delivered) in areas that are enclosed and weather tight with the permanent HVAC system set at a temperature of between 65F and 80F for a minimum of 48 hours prior to commencement of installation. In addition, comply with storage and handling requirements listed on product packaging, and described in the latest edition of the product's installation instructions (available from www.matsinc.com).
- 1.09 AMBIENT SITE CONDITIONS**
- The permanent HVAC system shall be operational and set at a temperature of between 65F and 80F for a minimum of 48 hours prior to commencement of installation, during the time of installation, and for 48 hours after installation has been completed. Thereafter, minimum temperature shall be 55F. Refer to the latest version of the installation instructions (available from www.matsinc.com) for additional ambient requirements (humidity, completion of related

CONSULTANT:



15 North Avenue North, Hopkins, MN 55343
 Phone: 952.941.8890/www.wilkusarch.com

FLORIDA BOARD OF ARCHITECTS
 CERTIFICATE OF AUTHORIZATION
 #A42603830 EXPIRES 02/26/21

CLIENT:



4300 TBC WAY
 PALM BEACH GARDENS, FL 33410

PROTOTYPE TEMPLATE:

**"NORTHLAKE"
 8 BAY INLINE**
 v.2019.1.08
 EXTERIOR MODIFIED FOR AHJ

PROJECT INFORMATION:

TIRE KINGDOM.
 STORE 937
 SEC OF TAMAMI TRAIL & SUMTER CROSSING DRIVE
 NORTH PORT, FLORIDA 34287

BID SET

01/10/2020

8687828 4080304 4400616
 1142344 929 407 806 000065 0007007

PROJECT NO.: 2018-1035
 DRAWN BY: C.B.
 CHECKED BY: EKB

ISSUE	DATE
PERMIT PLAN REVIEW	12-AUG-2019
BID SET	09-DEC-2019

REVISION
