GENERAL

The building shall be designed such that there is maintained an absolute nimum of 107'-5" x 68'-1" from face-of-column to face-of-column on the sales floor.

FOUNDATIONS

The concrete foundations shall be designed, detailed and constructed to vide for the safe, serviceable support of the pre-manufactured metal building struire and all prescribed loads applied thereto. The foundations shall conform to the latt editions of all applicable standards of the American Concrete Institute (ACI), the bding code(s) enforced by the Authority Having Jurisdiction and these requiremts.

The soils supporting the foundation shall be prepared and compacted in ¿ordance with a geotechnical testing based investigation and site specific recommentations provided by a Professional Engineer registered to practice in the State whethe project is located.

The slab on grade shall not be utilized to resist horizontal thrust forces at a base of the pre-engineered building frames. Tie beams below and separate from a building slab may be utilized.

The bearing materials shall be free of organic, expansive or corrosive maial, and shall support the foundation in accordance with the following twenty five yr criteria:

- Maximum differential movement due to either settlement or heave sh not exceed 1/2" over a distance of 50 feet
- Maximum total movement due to either settlement or heave shall not ceed 1".

The foundations shall be of sufficient depth to bear below local frost dept/here exposed, attain minimum design bearing pressure, achieve sufficient protion from settlement or heave, and where adjacent to existing construction, avoid alication of lateral earth pressure to adjacent construction.

SLAB ON GRADE

The subgrade for the slab on grade shall be compacted and prepared in *e*ordance with a geotechnical testing based investigation and site specific recommeations provided by a Professional Engineer registered to practice in the State whe the project is located. The subgrade shall provide a minimum of 100 pounds i cubic inch (pci) modulus of sub-grade reaction and shall be proof-rolled to ensuthat there are no pumping or soft zones.

The slab on grade shall conform to the latest editions of all applicable started of the American Concrete Institute (ACI), the building code(s) enforced by th uthority Having Jurisdiction and these requirements. The slab on grade shall be a nimum of 4" thick and reinforced with a minimum 6" x 6" x W1.4 x W1.4 welded w fabric located in the center of the slab. The concrete for the slab on grade shall ntain a minimum of 564 lbs per cubic yard of Portland Cement. Fly ash is not allow in the concrete mix design. The concrete aggregate shall meet ASTM C33, shall well graded, and contain a nominal maximum aggregate size of at least 3/4".

Except at doors at the perimeter of the facility, the slab on grade shall be ideated from the building columns and any perimeter grade beams or walls. The sl on grade shall receive a hard steel trowel finish. Saw-cut contraction joints a nimum of 1/4 the depth of the slab shall be provided in both principal directions acrosse entire floor slab, spaced no further than 13 feet on center and providing panels wan aspect ratio no greater that 1.5:1. Refer to Control Joint Spacing Plan on set S3 The joints shall be cut within 12 hours of initial concrete placement and folling 90 days the joints shall be filled flush with Polyurea joint filler, then shaved. Fowing finishing, the slab shall be cured with either "Retro-guard Heavy Duty Stainhibitor & Sealer" or shall receive a water cure for a minimum of 7 days. The slab shibe protected from the effects of heat or wind as necessary to avoid any curling the slab segments.

The slab shall conform to the following flatness and levelness criteria:

Flatness Levelness Tolerance Band for Entire Floor

No more than 1/8"+/- over any 10et No more than 1/8"+/- over any 20et +/- 0.375 inch

Failure to achieve the above criteria shall be cause for replacement of the ending segments or grinding/polishing at no cost to the Owner or Tenant.

POLISHED CONCRETE FLOOR SUMMARY

- A. This section includes the following:

 - 3. Application of Retro Guard.

 - 5. Mandatory pre-slab meeting.
- B. Related Work: 1.Section 03300 Cast-In-Place Concrete
- C. CORPORATE ACCOUNT MANAGER: CURTIS TURNBULL PHONE: 888-942-3144 EMAIL: corporateaccounts@retroplatesystem.com
- A. Pre-Installation Conference: Conference by at least:
 - **B. Flatwork Contractor**
 - C. Landlord's Representative
 - **D. Prime Contractor**
 - E. Applicable Subcontractors F. Certified Applicator
- B. Product Variations: Retroplate
- C. Fly Ash and Fiber Mesh:

QUALITY ASSURANCE

- A. Installer Qualifications:

- B. Manufacturer's Qualifications:
- C. Protection:
- A. All Hydraulic powered equipment must be diapered to avoid staining of the concrete.
- B. No trade will park vehicles on the inside slab. If necessary to commune their scope of work, drop cloths will be placed under vehicles at all times.
- C. No pipe cutting machine will be used on the inside floor slab.
- D. Steel will not be placed on interior slab to avoid rust staining.
- E. All equipment must be equipped with non-marking tires.
- F. Do not drag or drop equipment or material across the slab which w will scratch or chip it. G. Protect the floor from drywall mud splatters.

DELIVERY, STORAGE AND HANDLING

- Maintain record of container numbers.

1. Grinding & Polishing of Concrete 2. Application of Retroplate 99 Densifier 4. Installation of standard gray Polyurea joint fill.

***ALL APPLICATORS ARE TO BE APPROVED IN WRITING ON A ADVANCED FLOOR PRODUCTS PART 2 - PRODUCTS LETTERHEAD REFERENCING DOLLAR GENERAL

1.Schedule and conduct pre-installation conference at Project st site to establish guidelines and expectations for scheduling of floor treatment application, de legree of polish, concrete finish specification, floor flatness, and similar issues. Ensure attended and ndance at Pre-Installation

A. Dollar General Project Manager

1. The variegated colors and appearance are unique to each coloncrete surface and depend on the chemical composition, mix design, porosity, age, texture e and color of the concrete substrate. Mottling and wide variations in color and intensity r remain on the surface, the penetration of the Retroplate may appear sit be blocked. Concrete from significantly different from adjacent areas, when treated with Retroplate.

Fly Ash and Fiber Mesh are not allowed in Concrete.

1. Use a Dollar General certified installer with adequate number of of skilled workman who are approved in writing by the manufacturer for Dollar General projects, NO EXCEPTIONS. Applicator shall be familiar with the specified requirements and to the methods needed for proper performance of work of this section. Applicator must h have availability of proper equipment to perform work within scope of this project on a tir timely basis. Applicator should have successfully performed a minimum of 5 projects of at least 6000 square feet each.

1. Provide letter of certification from Advanced Floor Products stat ating that installer is certified for Dollar General Projects. Not all applicators are approved.

No satisfactory chemical or cleaning procedure is available to re remove petroleum stains from the concrete surface. Prevention is therefore essential.

A. Deliver materials in original containers, with seals unbroken, bearing manufacturer labels indicating brand name and directions for storage.

B. Dispense special concrete finish material from factory numbered a and sealed containers.

PROJECT CONDITIONS

- A. Environmental limitations: Comply with manufacturer's written instructions for substrate conditions affecting topping performance.
 - 1. Concrete must have an average Floor Flatness rating of at least 35 +/- 5.
 - 2. Concrete must have an average Floor Levelness rating of at least 30 +/- 5.
 - application of Retro Plate can begin.
 - 4. Application of Retro-Plate shall take place prior to installation of equipment, thus providing a complete, uninhibited concrete slab for application.
 - 5. Close areas to traffic during floor application.
 - during store completion.

MATERIALS AND MANUFACTURERS:

- A. HARDENING/SEALING AGENT (No substitution): 1.Retroplate 99 manufactured by Advanced Floor Products, Inc., P.O. Box 50533, Provo, Utah 84605.
 - Curtis Turnball: 888-942-3144
 - Corporateaccounts@retroplatesystem.com
 - A.Performance Criteria:

 - resistance.

 - violet & water spray.

filled at the discretion of the certified installer. 3. Retroguard Heavy Duty Stain Inhibitor and Sealer. (No substitution). 4. Ameripolish "Edge Tint" (Midnight Black).

B. DIAMOND GRINDING AND POLISHING DISCS: substitutions.)

RELATED MATERIALS:

- A. Water.
- 1. Potable and on site.

PART 3 - EXECUTION SURFACE CONDITIONS:

- unsatisfactory conditions are corrected.
- Section, Cast-In-Place Concrete, and Project Conditons above.
- C. Prior to application, verify that floor surfaces are free of construction latent's. ONCE RESPONSIBLE FOR THE SPECIFICATIONS TO BE MET.

WORKMANSHIP AND CLEANING:

- A. The premises shall be kept clean and free of debris at all times.
- B. Remove spatter from adjoining surfaces, as necessary.
- C. Repair damages to surface caused by cleaning operations.
- D. Remove debris from jobsite in accordance with local regulations.

SPECIFIC QUALIFICATIONS / EXCLUSIONS: procedures for performing work properly.)

- A. No other trades will be allowed in the area being worked on due to possible safety and floor contamination.
- B. The areas to receive the Retroplate 99 System will be delivered to the applicator in clean and and equipment, it will be done at time and materials.
- C. PROTECTION OF THE FLOOR FOLLOWING THE APPLICATION OF THE RETROPLATE 99 SYSTEM AND POLISHING IS THE RESPONSIBILITY OF THE OWNER.

temperature and moisture content, ambient temperature and humidity, ventilation, and other

3. Concrete must be cured a minimum of 28 days or as directed by the manufacturer before

6. The completed Retroplate slab will be covered to prevent damage by the other trades

7. Landlord will be responsible for providing a dumpster for disposal of products.

i. Abrasion Resistance: ASTM C779 - Up to 400% increase in abrasion

ii. Impact Strength: ASTM C805 - Up to 21% increase impact strength. iii. Ultra Violet Light and Water Spray: ASTM G23-81 - No adverse effect to ultra

iv. Reflectivity: Up to 30% increase in reflectivity. 2. Polyurea joint filler to be used in all control joints. Standard gray color. All joints are to be

Only grinding and polishing discs distributed by Advanced Floor Products are to be used. (No

A. Temporary power for grinding and polishing equipment will be provided by installer.

A. GC or rep. to examine substrate, with installer present, for conditions affecting performance of finish. Correct conditions detrimental to timely and proper work. Do not proceed until

B. GC or rep. to verify that base slab meets finish and surface profile requirements in Division 3

APPLICATOR ACCEPTS THE FLOOR THEY AND THEY ALONE ARE SOLELY

(NOTE: This section, though not mandatory, will greatly improve the understanding and necessary

swept condition. All equipment and supplies will be removed prior to turning the space over to the applicator. If the applicator is required to clean the space, and/or move other's supplies, staging

CONCRETE SUMMARY

