SECTION 03 54 00 - Cast Underlayment

FLOOR UNDERLAYMENT

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\*\* NOTE TO SPECIFIER \*\* Maxxon Corp.; cementitious underlayment.
This section is based on the products of Maxxon Corp., which is located at:
920 Hamel Rd. P. O. Box 253
Hamel, MN 55340
Toll Free Tel: 800-356-7887
Tel: 763-478-9600
Email: [request info (info@maxxon.com)](https://admin.arcat.com/users.pl?action=UserEmail&company=Maxxon+Corp.&coid=34073&rep=&fax=&message=RE:%20Spec%20Question%20(03540mci):%20%20&mf=)
Web: <http://www.maxxoncorporation.com>
 [ [Click Here](https://www.arcat.com/arcatcos/cos34/arc34073.html) ] for additional information.
Gyp-Crete was only the beginning.
Maxxon, The Floor Specialists, is recognized as the pioneer and leader in floor technologies. From the original Gyp-Crete® Floor Underlayment, Maxxon's comprehensive product line has expanded to include gypsum and self-leveling underlayments, sound control mats, and several other specialty products including a low density deep fill.
Ideal for renovation, commercial, multifamily, or single-family applications, Maxxon can solve any floor challenge. Maxxon Underlayments can be installed in wood frame, concrete construction, or over corrugated steel deck in steel frame construction.
Maxxon gypsum underlayments, Level-Right, and Acousti-Mat Sound Control Mats are GREENGUARD Gold Certified. Maxxon products offer the complete package with fast installation, proven performance, and may also help contribute toward points for LEED® project certification.
New Product Highlights:
In an effort to reduce consumer confusion, the Acousti-Mat line naming conventions have been altered to feature straightforward product descriptions and reflect the way the AEC community discusses sound control...by thickness! To simplify product selection and leverage awareness of the Acousti-Mat brand name, Maxxon has established new naming conventions for the product line. Effective August 1st, 2018, the following naming conventions have taken effect:
All Maxxon entangled mesh mats will be known as Acousti-Mat®.
Each mat will be distinguished by thickness expressed as a fraction.
The High Performance (HP) upgrade will be retitled as "Premium". It will continue to be available as an option on the 1/4", 3/8" and 3/4" sound mats.
Please review the new product names:
Acousti-Mat 1/8.
Acousti-Mat 1/4, Acousti-Mat 1/4 Premium.
Acousti-Mat 3/8, Acousti-Mat 3/8 Premium.
Acousti-Mat 3/4, Acousti-Mat 3/4 Premium.
Acousti-Mat: Quiet Confidence.
There is a new option for deep fill applications where system weight is a consideration. Level-Right® LDF is a revolutionary, lightweight product made from Portland cement and a proprietary expanded polystyrene foam aggregate. The aerated foam aggregate gives the cement a range of unique properties, making it perfect for deep fill applications.

1. GENERAL
	1. SECTION INCLUDES

\*\* NOTE TO SPECIFIER \*\* Delete items below not required for project.

* + 1. Gypsum Floor Underlayment.
		2. Gypsum Pourable Thermal Underlayment.
		3. Gypsum Underlayment for Corrugated Steel Deck Construction.
		4. Cementitious self-leveling floor underlayment.
		5. Cementitious self-leveling wearing surface.
		6. Cementitious patching compound.
		7. Cementitious lightweight aggregate fill.
		8. Underlayment primers.
		9. Spray-applied cleaners.
		10. Isolating barriers.
	1. RELATED SECTIONS

\*\* NOTE TO SPECIFIER \*\* Delete any sections below not relevant to this project; add others as required.

* + 1. Section 03 54 00 - Cast Underlayment0 - Cast Underlayment.
		2. Section - 0 - Expansion Joint Cover Assemblies.
		3. Section 09 30 00 - Tiling.
		4. Section 09 60 00 - Flooring.
		5. Section 09 67 13.33 - Conductive Elastomeric Liquid Flooring.
		6. Section 09 80 00 - Acoustic Treatment.
	1. REFERENCES

\*\* NOTE TO SPECIFIER \*\* Delete references from the list below that are not actually required by the text of the edited section.

* + 1. International Code Council (ICC): ICC-ES ESR-2540; Maxxon Gyp-Crete Basic; Maxxon Gyp-Crete 2000 Multifamily; Maxxon Gyp-Crete Radiant; Maxxon Gyp-Crete High Performance; Maxxon Commercial Pro Level-Crete; Maxxon Commercial Pro Level-Right.
		2. ASTM International (ASTM):
			1. ASTM C109M - Standard Test Method for Compressive Strength of Hydraulic Cement Mortars (Using 2-in. or 50-mm Cube Specimens).
			2. ASTM C190 - Method of Test for Tensile Strength of Hydraulic Cement Mortars.
			3. ASTM C348 - Standard Test Method for Flexural Strength of Hydraulic-Cement Mortars.
			4. ASTM C472 - Standard Test Methods for Physical Testing of Gypsum, Gypsum Plasters and Gypsum Concrete.
			5. ASTM C882 - Standard Test Method for Bond Strength of Epoxy-Resin Systems Used With Concrete By Slant Shear; Level-Right FS-10 only.
			6. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials.
			7. ASTM F1869 - Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride.
			8. ASTM F2170 - Standard Test Method for Determining Relative Humidity in Concrete Floor Slab.
			9. ASTM F2419 - Standard Practice for Installation of Thick Poured Gypsum Concrete Underlayments and Preparation of the Surface to Receive Resilient Flooring.
			10. ASTM F2678 - Standard Practice for Preparing Panel Underlayments, Thick Poured Gypsum Concrete Underlayments, Thick Poured Lightweight Cellular Concrete Underlayments, and Concrete Subfloors with Underlayment Patching Compounds to Receive Resilient Flooring.
	1. SUBMITTALS
		1. Submit under provisions of Section 01 30 00 - Administrative Requirements.
		2. Product Data: Manufacturer's data sheets on each product to be used, including:
			1. Data substantiating compliance with specified physical properties.
			2. Storage and handling requirements and recommendations.
			3. Surface preparation instructions and recommendations.
			4. Details of terminations and interfaces with other materials.
			5. Installation requirements and methods.
		3. Installer's Qualifications: Submit in writing by Maxxon Corporation that installer is a manufacturer-authorized applicator.
	2. QUALITY ASSURANCE
		1. Manufacturer Qualifications: Company specializing in providing products of the type specified in this section, with minimum of 5 years documented experience with products in use.
		2. Applicator Qualifications: Authorized by manufacturer, using manufacturer approved mixing and pumping equipment.
	3. DELIVERY, STORAGE, AND HANDLING
		1. Materials shall be delivered in their original, unopened packages, and protected from exposure to the elements.
		2. Damaged or deteriorated materials shall be removed from the premises.
		3. Store products in manufacturer's unopened packaging until ready for installation.
	4. PROJECT CONDITIONS
		1. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's recommended limits.
1. PRODUCTS
	1. MANUFACTURERS
		1. Acceptable Manufacturer: Maxxon Corp., which is located at: 920 Hamel Rd. P. O. Box 253; Hamel, MN 55340; Toll Free Tel: 800-356-7887; Tel: 763-478-9600; Email: [request info (info@maxxon.com)](https://admin.arcat.com/users.pl?action=UserEmail&company=Maxxon+Corp.&coid=34073&rep=&fax=&message=RE:%20Spec%20Question%20(03540mci):%20%20&mf=); Web: <http://www.maxxoncorporation.com>

\*\* NOTE TO SPECIFIER \*\* Delete one of the following two paragraphs; coordinate with requirements of Division 1 section on product options and substitutions.

* + 1. Substitutions: Not permitted.
		2. Requests for substitutions will be considered in accordance with provisions of Section 01 60 00 - Product Requirements.
	1. MATERIALS

\*\* NOTE TO SPECIFIER \*\* Selection Chart: Maxxon Underlayments provide varying strengths based on your project needs. Applications range from multifamily housing, office buildings, retail facilities, sports complexes and more. They are ideal for use over wood and concrete subfloors as well as corrugated steel deck. Fast setting, quick application; for light trade traffic within hours. Delete system and options not required.
\*\* NOTE TO SPECIFIER \*\* Delete paragraphs below not required for project.

* + 1. Gypsum Floor Underlayment: Maxxon Gyp-Crete Basic Floor Underlayment.
			1. Material: Gypsum Underlayment.
			2. Dry Density: Approximately 110 pcf (1760 kg per cu m).
			3. Compressive Strength, per ASTM C472, at 28 days: 2200 psi (15 MPa).
			4. Surface Burning Characteristics, per ASTM E 84:
				1. Flame Spread: 0.
				2. Fuel Contribution: 0.
				3. Smoke Development: 0.
			5. ICC-ES Listing: ESR-2540.
			6. GREENGUARD Standards: GREENGUARD Gold Certified.
			7. Primer: Maxxon Floor Primer.
			8. Sealer: Maxxon Overspray.
			9. Sand Aggregate:
				1. Material: Washed masonry or plaster sand.
				2. Particle Size: 1/8 inch (3.2 mm) or less.
				3. Maxxon Sand Specifications 101.
			10. USGBC LEED Credit Contribution:

\*\* NOTE TO SPECIFIER \*\* Delete if not applicable or required for project.

* + - * 1. MR Credit 3: Building Product Disclosure and Optimization - Sourcing Raw Materials.
				2. EQ Credit 2: Low Emitting Materials.
				3. EQ Credit 4: Indoor Air Quality Assessment.
				4. EQ Credit 9: Acoustic Performance.
				5. Contact Maxxon Corporation for specific details.

\*\* NOTE TO SPECIFIER \*\* Delete if not applicable or required for project.

* + 1. Gypsum Floor Underlayment: Maxxon Gyp-Crete 2000 Multifamily Floor Underlayment.
			1. Material: Gypsum Underlayment .
			2. Dry Density: Approximately 115 pcf (1840 kg per cu m).
			3. Compressive Strength, per ASTM C472, at 28 days: up to 3200 psi (22 MPa).
			4. Surface Burning Characteristics, per ASTM E84:
				1. Flame Spread: 0.
				2. Fuel Contribution: 0.
				3. Smoke Development: 0.
			5. ICC-ES Listing: ESR-2540.
			6. GREENGUARD Standards: GREENGUARD Gold Certified.
			7. Primer: Maxxon Floor Primer.
			8. Sealer: Maxxon Overspray.
			9. Sand Aggregate:
				1. Material: Washed masonry or plaster sand.
				2. Particle Size: 1/8 inch (3.2 mm) or less.
				3. Maxxon Sand Specifications 101.

\*\* NOTE TO SPECIFIER \*\* Delete if not applicable or required for project.

* + - 1. USGBC LEED Credit Contribution:
				1. MR Credit 3: Building Product Disclosure and Optimization - Sourcing Raw Materials.
				2. EQ Credit 2: Low Emitting Materials.
				3. EQ Credit 4: Indoor Air Quality Assessment.
				4. EQ Credit 9: Acoustic Performance.
				5. Contact Maxxon Corporation for specific details.

\*\* NOTE TO SPECIFIER \*\* Delete if not applicable or required for project.

* + 1. Gypsum Floor Underlayment: Maxxon Gyp-Crete High Performance Floor Underlayment.
			1. Material: Gypsum Underlayment.
			2. Dry Density: Approximately 115 pcf (1840 kg per cu m).
			3. Compressive Strength, per ASTM C472, at 28 days: 4000 psi (28 MPa).
			4. Surface Burning Characteristics, per ASTM E 84:
				1. Flame Spread: 0.
				2. Fuel Contribution: 0.
				3. Smoke Development: 0.
			5. ICC-ES Listing: ESR-2540.
			6. GREENGUARD Standards: GREENGUARD Gold Certified.
			7. Primer: Maxxon Floor Primer.
			8. Sealer: Maxxon Overspray.
			9. Sand Aggregate:
				1. Material: Washed masonry or plaster sand.
				2. Particle Size: 1/8 inch (3.2 mm) or less.
				3. Maxxon Sand Specifications 101.

\*\* NOTE TO SPECIFIER \*\* Delete if not applicable or required for project.

* + - 1. USGBC LEED Credit Contribution:
				1. MR Credit 3: Building Product Disclosure and Optimization - Sourcing Raw Materials.
				2. EQ Credit 2: Low Emitting Materials.
				3. EQ Credit 4: Indoor Air Quality Assessment.
				4. EQ Credit 9: Acoustic Performance.
				5. Contact Maxxon Corporation for specific details.

\*\* NOTE TO SPECIFIER \*\* Delete if not applicable or required for project.

* + 1. Gypsum Floor Underlayment: Maxxon Gyp-Crete Radiant Floor Underlayment.
			1. Material: Gypsum Underlayment.
			2. Dry Density: Approximately 115 pcf (1840 kg per cu m).
			3. Compressive Strength, per ASTM C472, at 28 days: up to 3000 psi (21 MPa).
			4. Surface Burning Characteristics, per ASTM E 84:
				1. Flame Spread: 0.
				2. Fuel Contribution: 0.
				3. Smoke Development: 0.
			5. ICC-ES Listing: ESR-2540.
			6. GREENGUARD Standards: GREENGUARD Gold Certified.
			7. Primer: Maxxon Floor Primer.
			8. Sealer: Maxxon Overspray.
			9. Sand Aggregate:
				1. Material: Washed masonry or plaster sand.
				2. Particle Size: 1/8 inch (3.2 mm) or less.
				3. Maxxon Sand Specifications 101.

\*\* NOTE TO SPECIFIER \*\* Delete if not applicable or required for project.

* + - 1. USGBC LEED Credit Contribution:
				1. MR Credit 3: Building Product Disclosure and Optimization - Sourcing Raw Materials.
				2. EQ Credit 2: Low Emitting Materials.
				3. EQ Credit 4: Indoor Air Quality Assessment.
				4. EQ Credit 9: Acoustic Performance.
				5. Contact Maxxon Corporation for specific details.

\*\* NOTE TO SPECIFIER \*\* Delete if not applicable or required for project.

* + 1. Gypsum Floor Underlayment: Maxxon Commercial Pro Level-Crete Floor Underlayment.
			1. Material: Gypsum Underlayment.
			2. Dry Density: Approximately 125 pcf (2000 kg per cu m).
			3. Compressive Strength, per ASTM C472, at 28 days: up to 4500 psi (31 MPa).
			4. Flexural Strength: Tensile Strength, per ASTM C 348, at 28 days: 1660 psi (11.4 MPa).
			5. Tensile Strength, per ASTM C 190, at 28 days: 515 psi (3.5 MPa).
			6. Surface Burning Characteristics, per ASTM E 84:
				1. Flame Spread: 0.
				2. Fuel Contribution: 0.
				3. Smoke Development: 0.
			7. ICC-ES Listing: ESR-2540.
			8. GREENGUARD Standards: GREENGUARD Gold Certified.
			9. Primer: Maxxon Floor Primer.
			10. Sealer: Maxxon Overspray.
			11. Sand Aggregate:
				1. Material: Washed masonry or plaster sand.
				2. Particle Size: 1/8 inch (3.2 mm) or less.
				3. Maxxon Sand Specifications 101.

\*\* NOTE TO SPECIFIER \*\* Delete if not applicable or required for project.

* + - 1. USGBC LEED Credit Contribution:
				1. MR Credit 3: Building Product Disclosure and Optimization - Sourcing Raw Materials.
				2. EQ Credit 2: Low Emitting Materials.
				3. EQ Credit 4: Indoor Air Quality Assessment.
				4. EQ Credit 9: Acoustic Performance.
				5. Contact Maxxon Corporation for specific details.

\*\* NOTE TO SPECIFIER \*\* Delete if not applicable or required for project.

* + 1. Cementitious Underlayment, Maxxon Commercial Pro Level-Right System.
			1. Material: Hydraulic cement.
			2. Dry Density: Approximately 125 pcf (2003 kg per cu m).
			3. Compressive Strength, per modified ASTM C 109M, at 28 days: 5500 psi (38 MPa).
			4. Flexural Strength: ASTM C 348, at 28 days: 1260 psi (8.7 MPa).
			5. Tensile Strength, per ASTM C 190, at 28 days: 720 psi (5 MPa).
			6. Surface Burning Characteristics, per ASTM E 84:
				1. Flame Spread: 0.
				2. Fuel Contribution: 0.
				3. Smoke Development: 0.
			7. ICC-ES Listing: ESR-2540.
			8. GREENGUARD Standards: GREENGUARD Gold Certified.
			9. Concrete Primer: Maxxon Floor Primer.
			10. Sealer: Maxxon Overspray.
			11. Sand Aggregate:
				1. Material: Washed masonry or plaster sand.
				2. Particle Size: 1/8 inch (3.2 mm) or less.
				3. Maxxon Sand Specifications 101.

\*\* NOTE TO SPECIFIER \*\* Delete if not applicable or required for project.

* + - 1. USGBC LEED Credit Contribution:
				1. MR Credit 3: Building Product Disclosure and Optimization - Sourcing Raw Materials.
				2. EQ Credit 2: Low Emitting Materials.
				3. EQ Credit 4: Indoor Air Quality Assessment.
				4. EQ Credit 9: Acoustic Performance.
				5. Contact Maxxon Corporation for specific details.

\*\* NOTE TO SPECIFIER \*\* Delete if not applicable or required for project.

* + 1. Cementitious Underlayment, Maxxon Commercial Level EZ System.
			1. Material: Polymer Modified Cementitious Underlayment
			2. Compressive Strength, per modified ASTM C 109M, at 28 days: 4500 psi (31.0 MPa).
			3. Flexural Strength: ASTM C 348, at 28 days: 1000 psi (6.9 MPa).
			4. Concrete Primer: Maxxon Acrylic or Aquafin SLU Primer.
			5. Sand Aggregate:
				1. Material: Washed masonry or plaster sand.
				2. Particle Size: 1/8 inch (3.2 mm) or less.
				3. Maxxon Sand Specifications 101.

\*\* NOTE TO SPECIFIER \*\* Delete if not applicable or required for project.

* + 1. Maxxon Commercial EZ Crete: For leveling, smoothing, and repairing interior gypsum, concrete, and lightweight concrete subfloors prior to the installation of finished floor coverings.
			1. Code Compliance:
				1. ICC ESR 2540.
				2. UL ER 8477-01.
				3. HUD1286e.
			2. Compressive Strength; Modified ASTM C109: Minimum 3,500 psi (24.1 MPa)
			3. Installation Depths:

\*\* NOTE TO SPECIFIER \*\* For deeper pours, contact Maxxon Corporation.

* + - * 1. Over Concrete: 3/8 to 3 inches (10 to 76 mm).
				2. Over Wood: 3/4 to 3 inch (19 - 76 mm).
			1. Dry Density: 115 to 125 lbs per cu ft (1842 to 2002 kg per cu m)
			2. Fire Performance per ASTM E84:
				1. Flame Spread: 0.
				2. Fuel Contribution: 0.
				3. Smoke Development: 0.
			3. Coverage per 50 lb. bag:
				1. 3/8 inches (10 mm): 13.9 sq ft (1.29 sq m)
				2. 1/2 inches (13 mm): 10.4 sq ft (0.97 sq m)
				3. 3/4 inches (19 mm): 6.9 f sq ft (0.64 sq m)

\*\* NOTE TO SPECIFIER \*\* Delete if not applicable or required for project.

* + - 1. USGBC LEED Credit Contribution:
				1. MR Credit 3: Building Product Disclosure and Optimization - Sourcing Raw Materials.
				2. EQ Credit 2: Low Emitting Materials.
				3. EQ Credit 4: Indoor Air Quality Assessment.
				4. EQ Credit 9: Acoustic Performance.
				5. Contact Maxxon Corporation for specific details.
		1. Lightweight Fill: Maxxon Commercial Low Density Fill.
			1. Function: Low density fill for deep fill applications.
			2. Material: Polymer modified Portland cement and a proprietary expanded polystyrene foam aggregate.
			3. Dry Density: Approximately 28 to 32 lbs per cu ft (449-513 kg per cu m).
			4. Compressive Strength, per ASTM C 109: up to 400 psi (2.8 MPa).
			5. Flexural Strength per ASTM C 78: 119 psi (10 MPa).
			6. Modulus of Elasticity, per ASTM C 649: 1.1 GPa.
			7. Freeze/Thaw per ASTM C 666: No loss at 300 cycles.
			8. R-value: 1.8 per inch.

\*\* NOTE TO SPECIFIER \*\* Delete if not applicable or required for project.

* + - 1. USGBC LEED Credit Contribution:
				1. MR Credit 3: Building Product Disclosure and Optimization - Sourcing Raw Materials.
				2. EQ Credit 2: Low Emitting Materials.
				3. EQ Credit 4: Indoor Air Quality Assessment.
				4. EQ Credit 9: Acoustic Performance.
				5. Contact Maxxon Corporation for specific details.
		1. Concrete Patching: Maxxon Commercial Gyp-Fix EZ: Patch and skim coat for repairing imperfections in various subfloors.
			1. Subfloor: Interior gypsum, concrete, and wood.
			2. Code Compliance:
				1. ICC ESR 2540.
				2. UL ER 8477-01.
				3. HUD1286e.
			3. Dry Time: Approximately 40 minutes.
			4. UL fire resistance-rated patch.
			5. Easy to mix and apply.
			6. Exceptional bond to all primed subfloors.
			7. Can be featheredged.
			8. Compressive Strength; Modified ASTM C109: Minimum 4,000 psi (27.6 MPa).
			9. Working Time: 20 minutes.
			10. Initial Set: 40 minutes.
			11. Flooring Install: 60 minutes or less for skim coat, depending on thickness.
			12. Coverage per 50 lb. bag:
				1. Thickness: 1/16 inch (1.6 mm): 62 sq ft (5.8 sq m).
				2. Thickness: 1/8 inch (3 mm): 31 sq ft (2.9 sq m).
			13. Fire Performance per ASTM E84:
				1. Flame Spread: 0.
				2. Fuel Contribution: 0.
				3. Smoke Development: 0.

\*\* NOTE TO SPECIFIER \*\* Delete if not applicable or required for project.

* + - 1. USGBC LEED Credit Contribution: Contact Maxxon Corporation for specific details.
				1. MR Credit 3: Building Product Disclosure and Optimization - Sourcing Raw Materials.
				2. EQ Credit 2: Low Emitting Materials.
				3. EQ Credit 4: Indoor Air Quality Assessment.
				4. EQ Credit 9: Acoustic Performance.
		1. Gypsum Primer: Maxxon Commercial Fortify Primer: High strength gypsum primer. Consolidates old, soft, or dusty gypsum underlayments, strengthening and readying surface to accept an underlayment. Can also be used to prime lightweight concrete.
			1. Application: Multifamily and wood frame construction.
			2. Subfloor: Interior compromised gypsum, lightweight concrete.
			3. Repair, rather than replace old underlayments. Single component product.
			4. Percent Solid: 30 percent.
			5. VOCs: Less than 1 g/L.
			6. First Coat Dry Time at 70 degree F (21 degrees C) 50 percent Humidity: 4 hours.
			7. Second Coat Dry Time at 70 degree F (21 degrees C) 50 percent Humidity: 60 minutes.
			8. Foot Traffic: When 2nd coat is dry.
			9. Coverage: 80 sq ft per gal (1.96 sq m per L).
		2. Concrete Primer: Maxxon Commercial MVP One Primer: Residential and commercial construction. For use over concrete slabs up to 100 percent relative humidity, 25 lbs. (11.3 kg) per 1000 sq ft (92.9 sq m). MVER and pH of 14.
			1. Subfloor: Interior concrete subfloors below, on, or above grade.
			2. Concrete profiling not required. Unique formulation penetrates clean, porous concrete.
			3. Ready-to-use. Apply with roller. Can be installed in 30 to 60 minutes after second coat.
			4. Zero VOC. Water-based and non-toxic.
			5. Perm Rating per ASTM F3010: Less than 0.10. Meets or exceeds ASTM E96.
			6. MVER per ASTM F1869: Up to 25 lbs. (11.3 kg) per 1000 sq ft (92.9 sq m).
			7. Relative Humidity per ASTM F2170: Up to 100 percent.
			8. Percent Solid: 25 percent.
			9. Color: Milky white wet. Dries clear.
			10. Dry Time: 30 to 60 minutes per coat.
			11. Application Temperature: 45 to 100 degrees F (7 to 38 degrees C).
			12. Alkalinity Resistance per ASTM D1308-20: Pass.
			13. Concrete Bond Strength: Greater than 250 psi (1.7 MPa).
			14. Coverage: 200 to 250 sq ft per gal (6.13 sq n per L)
		3. Epoxy Coating for High Moisture and ph Level Concrete: Maxxon Commercial MVP Two-Part Epoxy: Commercial construction.
			1. Subfloor: Interior concrete subfloors below, on or above grade.
			2. Perm rating (ASTM E96): Less than 0.10.
			3. ASTM F3010: Meets requirements.
			4. Cure Time: As little as 4 hours.
			5. Low viscosity promotes superior penetration and adhesion.
			6. MVER per ASTM F1869: Up to 25 lbs. (11.3 kg) per 1000 sq ft (92.9 sq m).
			7. Relative Humidity per ASTM F2170: Up to 100 percent.
			8. Permeance per ASTM E96: 12 mils (125 sq ft per gal): 0.01.
			9. Alkalinity Resistance: Up to 14 pH.
			10. VOCs: 0 g/l
			11. Color: Amber. Dries translucent.
			12. Tensile Strength per ASTM D638: 5500 psi (38 MPa).
			13. Installation Temperature: 45 to 95 degrees F (7 to 35 degrees C)
			14. Working Time: 20 minutes at 77 degrees F (25 degrees C)
			15. Curing Time: 4 hours at 77 degrees F (25 degrees C)
			16. Coverage: 125 sq ft per gal (3.06 sq m per L)
		4. Maxxon Commercial Multi-Use Acrylic Primer: Used to seal porous concrete, precast concrete, lightweight concrete, old gypsum underlayments and wood floors before application of Underlayments. It can also be used as a primer over Underlayments before the installation of glue down finished floor goods.
			1. Penetrating sealer over most substrates.
			2. Reduces porosity which allows proper open time and increases bond for Underlayment. Adds strength and durability.
			3. Low odor.
			4. Low VOC.
			5. Property: Liquid.
			6. Color: White, dries transparent Nonvolatile Content 49 to 51 percent.
			7. pH: 7.5 to 8.5.
			8. Viscosity, Brookfield, RVT, No. 4 at 20 rpm, 25 degrees C, (cps): Less than 200 MPa.
			9. Tg: 72 degrees F (22 degrees C).
			10. Coverage per Gallon:
				1. Priming for Maxxon Underlayment: 2,100 sq ft per gal (51.54 sq m per L).
				2. First Coat: 1,500 sq ft per gal (36.81 sq m per L).
				3. Second Coat: 600 sq ft per gal (14.72 sq m per L).
				4. Priming for Maxxon Underlayment over MVB: 600 sq ft per gal (14.72 sq m per L).
				5. Sealing Maxxon Underlayment for Floor Goods Adhesive: 2,100 sq ft per gal (51.54 sq m per L).
		5. Spray-Applied Concrete Cleaner: Maxxon Commercial Profile. Virtually all above, below, and on-grade concrete-based construction applications. For dust-free environments where mechanical profiling is not feasible.
			1. Subfloor: Interior old, new, compromised and chemically-abated concrete.
			2. Cleans and profiles old, new, compromised and chemically-abated concrete to a CSP of 1 to 2 inch (25 to 51 mm) approximately 2 hours and up to 3 to 4 inches (76 to 102 mm) with a second application.
			3. Single component. Ready to use.
			4. Muriatic / HCl-free formulation
			5. Hand-held spray application; no shotblasting required.
			6. Biodegradable; self-neutralizing; water cleanup.
			7. VOCs: 0 g/L.
			8. Color: Translucent yellow liquid.
			9. Dwell Time: Approximately 2 hours to CSP 2.
			10. Application Temperature: 40 to 90 degrees F (4.4 to 32 degrees .C).
			11. pH: 2.
			12. Coverage: 225 to 250 sq ft per gal (5.5 to 6.1 sq m per L).
		6. Isolating Barrier: Maxxon Commercial Isolate: Isolates asbestos, chemically-abated slabs, and surface alkalinity up to a pH of 14. Above, below, and on-grade concrete-based construction applications.
			1. Subfloor: Interior on-grade and below-grade concrete slabs, existing floor coverings.
			2. Moisture Vapor Barrier: Reduces MVER to less than 3.
			3. For use on well bonded VAT, VCT, ceramic tile, and on slabs contaminated by polychlorinated biphenyls (PCBs).
			4. Can be capped in as little as 6 hours after installation.
			5. Roller-applied.
			6. Relative Humidity Limits: Up to 100 percent
			7. MVER Limits:
				1. One Coat: 14 lbs MVER
				2. Two Coats: 19 lbs. MVER
			8. VOCs: Less than 35 g/L
			9. Color: Red matte finish.
			10. Pot Life at 73 degrees F (22.8 degrees C): 40 min.
			11. Dry Time: 4 to 6 hours.
			12. Recoat Time: Next day if two coat system needed.
			13. Trade Traffic: After 24 hours.
			14. Application Temperature: 40 to 90 degrees F (4.4 to 32 degrees C)
			15. Coverage: 150 sq ft per gal (3.7 sq m per L).
		7. Maxxon Commercial MVP SMART Primer:
			1. Spray applied concrete curing agent and moisture barrier. A permanent, non-film forming membrane helps to cure concrete, and provide long-term moisture and pH mitigation that protects slab toppings, coatings, and finished floor surfaces. Prepares floor to receive Maxxon Commercial underlayments. Part of the Maxxon SMART System, a fast and easy way to expedite concrete construction while eliminating moisture emissions.
				1. Complies with ASTM C1315.
				2. Accepts light trade traffic up to 9 months.
				3. Biodegradable and eco-friendly.
				4. Ready to use single component and easy hand spray application.
				5. Retains concrete profile after installation.
				6. Waterproofs the concrete top down.
				7. Non-film forming; pore filling and reacts with concrete.
				8. VOC: 0g/L.
				9. Color: White. Dries clear.
				10. Dry Time: 30 min to 2 hours.
				11. Application Temperature: 40 to 90 degrees F (4 to 32 degrees C).
				12. Moisture Mitigation: Up to 100 percent RH and 10 MVER.
				13. pH: Up to 14.
				14. Coverage: 175 sq ft per gallon (4.29 sq m per Liter).
		8. Alkali Silica Reaction Surface Treatment: Maxxon Commercial ASR Barrier: Spray applied surface treatment for concrete slabs suffering from Alkali Silica Reaction (ASR). Blocks formation of bond-breaking efflorescence on slab's surface, extending life of floor coverings.
			1. Inhibits formation of efflorescence and osmotic blistering.
			2. Ready to use. Spray applied.
			3. Allows direct placement of underlayments and coatings.
			4. Retains concrete profile after installation.
			5. VOC: 0 g/L
			6. Color: White. Dries clear.
			7. Dry Time: 30 min to 2 hours
			8. Application Temp: 40 to 90 degrees F (4 to 32 degrees C).
			9. Moisture Mitigation: up to 100 percent Relative Humidity and 10 MVER.
			10. pH: up to 14.
			11. Coverage: 200 to 225 sq ft per gal.
		9. Mix Designs: Mix proportions and methods shall be in strict accordance with product manufacturer recommendations.
1. EXECUTION
	1. EXAMINATION
		1. Do not begin installation until substrates have been properly prepared.
		2. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding
	2. PREPARATION
		1. Clean surfaces thoroughly prior to installation.
		2. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
		3. Concrete shall be structurally sound and free of mud, oil, grease, and other contaminating factors. Shot blast or scarify as required by manufacturer.
		4. Fill cracks and voids with a quick setting patching or caulking material where leakage of topping could occur.
		5. Prime concrete using the manufacturer approved primer in accordance with manufacturer's instructions according to the porosity of the concrete. Provide multiple coats if necessary.
		6. Allow joints to continue through the underlayment at the same width,
	3. INSTALLATION
		1. Install in accordance with manufacturer's instructions.
		2. Application shall not begin until the building is enclosed, including roof, windows, doors, and other fenestration. Install after drywall installation unless tenant finish requirements identify partitioning after the pour.
	4. PROTECTION
		1. Protect installed products until completion of project.
		2. Protection from Heavy Loads: During construction, place temporary wood planking over toppings wherever they will be subject to heavy wheeled or concentrated loads.
		3. Touch-up, repair or replace damaged products before Substantial Completion

END OF SECTION