

# DURA-CAP



WITH DURA-CAP, YOU GET SUPERIOR STRENGTH, A SMOOTH SURFACE AND FAST, CLEAN INSTALLATION. DURA-CAP DELIVERS DEPENDABLE AND ENVIRONMENTALLY FRIENDLY VALUE — PROJECT AFTER PROJECT.

## TACKLE TOUGH FLOOR CHALLENGES WITH DURA-CAP<sup>®</sup>

When concrete or steel decking needs topping, no product outperforms Dura-Cap<sup>®</sup> Floor Underlayment. With up to 4,000 psi (27.6 MPa) compressive strength, Dura-Cap is one of the strongest underlayments in the construction industry. It pours smoother, dries with greater abrasion resistance, and has all the fire and sound control advantages of original Gyp-Crete<sup>®</sup> Floor Underlayment.

Batch mixed on the job and pumped into place by authorized applicators, Dura-Cap is the perfect topping for precast, cast-in-place concrete, or steel decking. Dura-Cap also smooths old or uneven concrete floors.

Dura-Cap takes foot traffic in 90 minutes. With proper ventilation, virtually any floor covering can be installed just 5–7 days later — hardwood floors, ceramic tile, or pavers. Glue-direct, thin-pile carpeting will look better, too, thanks to Dura-Cap's remarkably smooth surface.

Dura-Cap is always a "green" building material, manufactured with recycled content. It is GREENGUARD Indoor Air Quality<sup>®</sup> and Children & Schools<sup>SM</sup> Certified.

### THE VERSATILE SOLUTION

- Cap uneven, rough, spalled concrete floors
- Repair rain/freeze damaged to new concrete
- Fill "birdbaths" in concrete floors
- Top precast plank
- Top corrugated steel deck over light-gauge steel framing
- Cover old floor coverings, including vinyl asbestos tile
- Provide fire and sound control over wood frame construction
- Can be featheredged
- Accepts virtually all floor coverings
- From Maxxon<sup>®</sup>, the "green" floor specialists

### QUALITY ON EVERY POUR

With more than 3.5 billion square feet of installation experience, Dura-Cap dealers know how to deliver quality. Each job is tested on site for flow and mix consistency, and in our lab for compressive strength to meet specification.

## RETAIL FLOOR RENOVATION



BEFORE



AFTER

### PREPARATION

Building interior should be enclosed and maintained at a temperature above 50 °F (10 °C) until structure and subfloor temperatures are stabilized. The subfloor must be broom clean and contaminant free. Before pouring Dura-Cap, the subfloor is coated with a company-approved primer.

### INSTALLATION METHODS

The minimum thickness of Dura-Cap varies with the type of floor system. Dura-Cap can be featheredged over concrete substrates. Over wood frame construction, the minimum thickness is 3/4" (19 mm). It can be poured before or after drywall. Over galvanized corrugated steel deck, poured 1" over the top of the flutings, average pour thickness is 1 1/8".

Continuous ventilation and adequate heat should be provided to rapidly remove moisture from the area until the underlayment is dry. The general contractor must supply mechanical ventilation and heat if necessary (see drying conditions sidebar). Under the above conditions, drying time is usually 5–7 days.

Dura-Cap requires a floor covering. Contact your authorized dealer for recommendations for adhering floor goods. Or call or write for a copy of the Maxxon brochure *Procedures for Attaching Finished Floor Goods to Maxxon Underlayments*. It is the responsibility of the floor goods installer to determine the compatibility of their product with a particular floor underlayment.

### LIMITATIONS

1. The typical maximum depth of Dura-Cap is 3" (76 mm). For depths greater than 3" (76 mm), contact an authorized applicator.
2. Dura-Cap may be scheduled before or after installation of drywall.
3. All materials above crawl spaces must be protected by a vapor barrier.
4. During construction, place temporary wood planking over the underlayment wherever it will be subjected to heavy wheeled or concentrated loads.

5. Dura-Cap is not designed to be installed on or below grade, except over well-drained structural substrates.
6. The structural floor should be adequate to withstand design loads with deflection limitations of L/360. The structural subfloor and floor joist must both comply with manufacturers' maximum span criteria. Typically a deflection limitation of L/360 is adequate for Maxxon underlayments. Some floor coverings may require a stiffer floor system. Maxxon underlayments are non-structural and therefore cannot be expected to reinforce structurally deficient subfloors. Necessary allowances should be made for expected live, concentrated, impact, and/or dead loads including the weight of finished floor goods and setting beds.
7. Dura-Cap should not be used for exterior application, or where it will come in prolonged contact with water.
8. Dura-Cap should not be directly applied to a plastic vapor barrier.
9. Maxxon underlayments are "breathable" and not a vapor barrier. The general contractor, architect, specifier, or building owner shall test slabs-on-ground or elevated slabs for MVER (ASTM F1869-09) or RH (ASTM F2170). If the MVER or RH of the concrete substrate exceeds the floor covering manufacturer's respective requirements for the finished flooring system, the concrete must be treated with a damp proof membrane, such as Maxxon DPM or Maxxon MVP, before installation of a Maxxon underlayment.

### ACOUSTICAL PERFORMANCE

The acoustical performance of Dura-Cap is similar to Gyp-Crete® Floor Underlayment. Contact Maxxon Corporation for reports.

### CODE LISTINGS

ICC-ES Legacy Report ESR-2540, ICC-ES Legacy Report #90-31. GREENGUARD Indoor Air Quality® and Children & Schools<sup>SM</sup> Certified.

### DRYING CONDITIONS

Maxxon gypsum underlayments are inorganic and provide no source of nutrients to sustain mold growth. Prolonged contact of moisture with other construction materials, however, can result in mold growth. To avoid growth of mold on construction materials such as wallboard, drywall compound and even dust, it is vital to maintain a low relative humidity both before and after placement of Maxxon gypsum underlayments. The general contractor must provide and maintain correct environmental conditions to keep the building clean and dry, and protect against infestation of moisture from a variety of potential sources. Moisture can be introduced by other trades through spillage, tracked in mud and rain, plumbing leaks, etc. Often stored in damp conditions, building products may arrive on site laden with moisture that releases after installation. Outside sources such as rain, snow, wind, etc. can also increase moisture levels. Controlling moisture levels in the building, through appropriate trade sequencing and prevention of potential damage by other trades, is the responsibility of the general contractor. The general contractor must supply mechanical ventilation and heat if necessary. These controls fall under the scope of work of the general contractor — not Maxxon Corporation or the Maxxon gypsum underlayment installer.

### TESTING

Compressive strength testing must be performed in accordance with modified ASTM C472-79. Before independent sampling, contact the Maxxon Quality Assurance Department to ensure that proper procedures are followed.

### WARRANTY

Maxxon Corporation warrants Dura-Cap Floor Underlayment to be free from manufacturing defects as defined in this warranty. Manufacturing defects are considered to be those defects that occur due to the quality of the Dura-Cap ingredients or from the manufacturing process itself. This warranty does not include labor costs and other costs or expenses associated with the removal or installation of Dura-Cap. Because Maxxon Corporation does not perform the actual Dura-Cap installation, it cannot be held responsible for the results of the application. Maxxon Corporation specifically disclaims problems that occur due to weather conditions, structural movement, structural design flaws and application techniques. This warranty is in lieu of all other warranties expressed or implied including the warranty of merchantability and fitness of purpose and of all other obligations or liabilities on Maxxon Corporation's part. Maxxon Corporation neither assumes nor authorizes any person to assume for Maxxon Corporation any liability in connection with the sale and installation of Dura-Cap Floor Underlayment.

### SAMPLE USGBC LEED® CREDIT AREAS\*

Project	Credit	Category	How Requirement is Fulfilled
Indoor Environmental Quality	IEQ 3.2	Air Quality Before Occupancy	GREENGUARD Certified (Testing MUST be performed before claiming credit)
	IEQ 4.3	Low Emitting Materials: Floor System	GREENGUARD Children & Schools <sup>SM</sup> Certified
Materials & Resources	MR 2	Construction Waste Management	Recyclable packaging and shipping materials
	MR 4	Recycled Content	Fly Ash
	MR 5	Local/Regional Materials	Manufactured in Blue Rapids, KS 66411; Las Vegas, NV 89036; Camden, NJ 08103; Job Site Manufactured with Local Sand & Water
Innovation & Design Process	ID 1	Sound Control	Enhanced Acoustical Living Environment

\*Credits will vary depending on project type and Maxxon products used. Contact Maxxon Corporation for complete information.

### TECHNICAL DATA

<b>Compressive Strength</b> .....	Up to 4,000 psi (27.6 MPa) when tested in accordance with modified ASTM C472. Static loading to 4,000 psi (27.6 MPa)
<b>Density</b> .....	115 lbs pcf (1842 kg/m <sup>3</sup> )
<b>Thermal Resistance</b> .....	R-Value
1" (25 mm) .....	0.202
<b>Coefficient of Conductivity (K)</b> .....	4.76 Btu•in/h•ft <sup>2</sup> •°F (.6854 W/[m•°C])
<b>Specific Heat</b> .....	.229 Btu/(lb•°F) at 85 °F (.9595 kJ/[kg•°C] at 29.44 °C)
<b>Fire Performance</b> ASTM E-84	
Fuel Contribution.....	0
Smoke Density .....	0
Flame Spread .....	0
<b>VOC Emissions</b> .....	GREENGUARD Children & Schools <sup>SM</sup> Certified

### FIRE RATINGS

UL Design														ULC Design		
G524	J917	J958	L006	L211	L506	L513	L520	L528	L536	L543	L552	L563	L583	L599	L003	M501
G560	J919	J966	L201	L212	L507	L514	L522	L529	L537	L544	L555	L564	L585	M500	L201	M503
G561	J920	J991	L202	L501	L508	L515	L523	L530	L538	L545	L556	L573	L588	M503	L511	M513
G563	J924	J994	L206	L502	L509	L516	L524	L532	L539	L546	L557	L574	L589	M504	L512	M514
G566	J927	K906	L208	L503	L510	L517	L525	L533	L540	L547	L558	L575	L592	M505	M500	M517
G571	J931	L004	L209	L504	L511	L518	L526	L534	L541	L549	L560	L579	L593	M508		
G574	J957	L005	L210	L505	L512	L519	L527	L535	L542	L551	L562	L581	L594	M511		

Warnock-Hershey Design Number WHI 694-0029 Factory Mutual Design Number FC378 PFS Design Number FC452 \*All tests were conducted with ASTM E 119 procedures.



# DURA-CAP®

## Floor Underlayment

For more info: 800-356-7887 • Email: info@maxxon.com  
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The GREENGUARD INDOOR AIR QUALITY CERTIFIED® Mark is a registered certification mark used under license through the GREENGUARD Environmental Institute.



The Maxxon Green Mark Maxxon products with this symbol are LEED®-compliant and may help contribute toward points for LEED® project certification.