FLOW KING 100 MVB™
MOISTURE VAPOR BARRIER
100% SOLIDS VAPOR BARRIER EPOXY

MVP COATINGS

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DESCRIPTION

MVP COATINGS MOISTURE VAPOR BARRIER IS A 100% SOLID, TWO COMPONENT MOISTURE VAPOR BARRIER EPOXY COATING, DESIGNED TO BE USED AS A MOISTURE VAPOR RETARDER FOR ALL MOISTURE SENSITIVE AREAS SUCH AS CONCRETE , METALLIC EPOXY, NEAT SYSTEMS, FLAKE FLOORS AND A VARIETY OF FINISHED FLOOR COVERINGS SUCH AS VINYL TILES AND SHEETING, HARD WOOD. IT CAN BE USED AS A PRIMER AND BASE COAT. MVP MOISTURE VAPOR BARRIER CONTROLS VAPOR EMISSION RATES UP TO 25 LB/24 HR /1000 SF AND 99% RH WHILE PROVIDING EXCELLENT BONDING PROPERTIES.

PRIMARY APPLICATIONS

- ✓ PRIMER OVER A PREPPED CONCRETE SURFACE
- ✓ BASE COAT FOR METALLIC EPOXY FINISHES
- ✓ RESTAURANTS
- ✓ PHARMACEUTICAL
- ✓ RESIDENTIAL HOMES
- ✓ GARAGES
- ✓ RETAIL SPACES
- ✓ CAFES
- ✓ AIRPLANE HANGARS
- ✓ ALL MOISTURE SENSITIVE FLOORING

ADVANTAGES

- ✓ 100% SOLIDS
- ✓ NO SOLVENT ODORS
- ✓ MEETS USDA and FDA CRITERIA
- ✓ SUPERIOR BOND TO DRY CONCRETE
- ✓ DENSE SURFACE RESISTANT TO BACTERIA & MOISTURE
- ✓ EXCELLENT ADHESIVE PROPERTIES ALLOW APPLICATION ONTO MANY DIFFERENT TYPES OF SUBSTRATES

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TEL: 833.873.6871 – **FAX:** 323.484.5540

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TECHNICAL DATA

PACKAGING	COLOR
3 GALLONS (2 GAL PART A : 1 GAL PART B)	CLEAR , WHITE , MEDIUM GREY , LIGHT GREY
RECOMMENED THICKNESS	
CLEAR — PRIMER: 200 SQ. FT. WFT 8 MILS – FOR FULL MVB PROTECTION IT MUST BE PUT DOWN AT 80-100 SF PER GALLON AT 16-20 MILS. THIS CAN BE ACHIEVED WITH 2 COATS	**PRODUCT QUALITY AND STORAGE**: SHIPPING AND STORAGE TEMPERATURES FOR PART-A AND PART-B IS BETWEEN 40 F - 90 F AT OR BELOW 50% RELATIVE HUMIDITY, AVOIDING FREEZING TEMPERATURES. IF SHIPPING OR STORAGE TEMPERATURES SHOULD FALL BELOW 65°F (18°C), SOME CRYSTALLIZATION COULD RESULT. UNLESS PROPER ACTION IS TAKEN TO RE-FORM THE ORIGINAL SOLUTION, SUBSEQUENT DIMERIZATION WILL PROCEED QUICKLY AND WILL DETERIORATE THE ASSAY OF THE PRODUCT. NEVER STORE DIRECTLY ON CONCRETE SURFACE, ALWAYS STORE ON PALLETS. DO NOT OPEN UNTIL READY TO USE AND KEEP CONTAINERS SEALED TIGHTLY.
MIX RATIO BY VOLUME	
2 PART A : 1 PART B	

**NOTE: COVERAGE RATES FOR ALL PRODUCTS ARE APPROXIMATE AND VARY BASED ON THE TYPE OF SUBSTRATE, SUBSTRATE POROSITY AND ROUGHNESS AND SIZE OF BROADCAST AGGREGATE.*

GEL TIME	VOC (G/LITRE)	VISCOSITY @ 75°
35-40 MIN @ 77	25 G/L	**MIXED**
SOLIDS (ASTM D 2697)	**RECOMMENDED THINNER**	1800-2200 CPS
100%	XYLENE	**MOISTURE VAPOR BARRIER**
SUBSTRATE TEMPERATURE		**68°**
RE-COAT TIME (MIN-MAX)		8-24 HRS
CURING DETAILS	**TACK FREE**	8-12 HRS

PHYSICAL PROPERTIES

HARDNESS (SHORE D) (ASTM D2240)	BOND RESISTANCE (PSI) (ASTM D-4541)
85-90	>300 PSI CONCRETE FAILURE
TENSILE STRENGTH (ASTM D 638)	**PERMEABILITY (%)** (ASTM D-570)
6,500 PSI	0.3%
ABRASION RESISTANCE (ASTM D-4060)	**TENSILE STRENGTH (PSI)** (ASTM D-638)
.10 G (C1S17/1000 CYCLES/1000G)	5500 PSI
COMPRESSIVE STRENGTH (PSI) (ASTM D-695)	**ELONGATION (%)** (ASTM D-638)
9000-10000	6-7%
RESISTANCE TO MOLD GROWTH (ASTM D-3273)	**RESISTANCE TO FUNGI GROWTH** (ASTM G-21)
RATED 10 (HIGHEST RESISTANCE)	RATED 0 (NO GROWTH)

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SURFACE PREPARATION

CONCRETE SHOULD BE CURED FOR A MINIMUM OF 30 DAYS PRIOR TO PRODUCT APPLICATION AND HAVE AT LEAST 3000 PSI COMPRESSIVE AND 220 PSI TENSILE STRENGTH.

SURFACE PREPARATION IS THE ESSENTIAL FIRST STAGE TREATMENT OF A SUBSTRATE BEFORE THE APPLICATION OF ANY COATING. THE PERFORMANCE OF A COATING IS SIGNIFICANTLY INFLUENCED BY ITS ABILITY TO ADHERE PROPERLY TO THE SUBSTRATE MATERIAL. IT IS GENERALLY ESTABLISHED THAT CORRECT SURFACE PREPARATION IS THE MOST IMPORTANT FACTOR AFFECTING THE TOTAL SUCCESS OF SURFACE TREATMENT. SURFACES WILL BE CLEAN, DRY, AND SOUND, THE PRESENCE OF EVEN SMALL AMOUNTS OF SURFACE CONTAMINANTS, DUST, EFFLORESCENCE, LAITANCE, SALTS, CURING COMPOUNDS, DIRT, OIL, FORM RELEASE AGENTS, AND OTHER FOREIGN MATTER CAN PHYSICALLY IMPAIR AND PREVENT COATING ADHESION TO THE SUBSTRATE. A PRIMER SHOULD BE USED TO REDUCE OUT-GASSING IN POROUS SUBSTRATES TO PROMOTE ADHESION.

GRIND OR SHOT BLAST CONCRETE BETWEEN CSP 3 – 4 PROFILE.

GRINDING IS PERMITTED ONLY IN AREAS THAT ARE INACCESSIBLE TO SHOT BLASTING EQUIPMENT.

EMISSION TESTING: ALL AREAS TO BE TREATED MUST BE TESTED IN ACCORDANCE WITH ASTM F-2170 (STANDARD TEST METHOD FOR DETERMINING RELATIVE HUMIDITY IN CONCRETE FLOOR SLABS USING IN SITU PROBES). ANHYDROUS CALCIUM CHLORIDE TESTS (ASTM F-1869-11) MAY BE USED ONLY WHERE HVAC IS ON 24X7 AT LEAST ONE WEEK BEFORE AND DURING TESTS AND ONLY BY APPROVAL OF MVP COATINGS, INC. NEW CONCRETE: TESTING SAMPLE CORES OF CONCRETE SLAB FOR PRESENCE OF SEALERS OR OTHER BOND BREAKERS IS STRONGLY RECOMMENDED. TO OBTAIN WARRANTY, FILL OUT WARRANTY APPLICATION. FLOOR AREA, LOCATION OF TESTS, AMBIENT TEMPERATURES AND HUMIDITIES DURING TESTS SHOULD BE RECORDED AND MAPPED, WITH AT LEAST ONE TEST PERFORMED FOR EACH 1000 SQ. FT. OF FLOOR SURFACE TO BE TREATED.

CONCRETE: ALL SURFACE MUST BE CLEAN, SOUND, SOLID, OPEN PORE AND ABSORPTIVE. SLAB MUST BE AT LEAST 4" THICK AND ANY DISTINCT LAYER AT LEAST 2" THICK TO BE CONSIDERED STRUCTURALLY SOUND. REPAIR AND LEVELING LAYERS CONTAINING LATEX OR OTHER COMPONENTS GENERALLY PREVENT ABSORPTION AND PROPER BOND AND SHOULD BE REMOVED. SURFACE SHOULD BE MECHANICALLY PREPARED TO ACHIEVE A SURFACE PROFILE OF ICRI CSP 2-5 (INT. CONCRETE REPAIR INST.) BEAD OR SHOTBLAST STRONGLY PREFERRED. ACID ETCHING IS NOT PERMITTED, NOR CHEMICAL REMEDIATION OF ANY ADHESIVE RESIDUES. SURFACE MUST BE CLEAN, COMPLETELY FREE OF DUST, DIRT, PAINT, SEALER OR ANY CONTAMINANT WHICH MIGHT INTERFERE WITH PENETRATION OR BOND. DO NOT APPLY TO FLOORS WHICH HAVE SEALERS OR BOND BREAKERS APPLIED UNLESS COMPLETELY REMOVED. QUICK TESTS TO HELP DETERMINE CLEAN, OPEN AND ABSORPTIVE CONCRETE USE WATER DROPS. IF DIME SIZE WATER DROPS PLACED AT SEVERAL LOCATIONS ON PREPARED FLOOR DO NOT READILY ABSORB INTO CONCRETE WITHIN 30 SECONDS OR BEADS UP, SURFACE IS NOT SUFFICIENTLY ABSORPTIVE. IN ALL CASES, THOROUGH VACUUMING (WITH DUST CONTAINMENT FILTER)

IS NEEDED BEFORE APPLICATION. CLEANING WITH PRESSURE WASHER MAY BE ADVISABLE IN SOME CASES.

APPLICATION METHOD

THROUGHOUT THE APPLICATION THE SURFACE MUST BE CLEAN AND DRY.

FOR OPTIMUM RESULTS PROCEED WITH APPLICATION WHILE AIR TEMPERATURES ARE BETWEEN 5O F (7.22° C) AND 9O F (35° C). ENSURE THAT THE OUTSIDE TEMPERATURE IS 50°F AND AT LEAST 5° F ABOVE THE DEW POINT AND RISING. APPLY WHILE THE OUTSIDE TEMPERATURE IS DESCENDING, HIGH OR LOW TEMPERATURES AND HUMIDITY CAN SIGNIFICANTLY AFFECT THE CURE TIME AND POT LIFE.

MATERIALS SHOULD BE PRECONDITION TO A MINIMUM OF 50°F PRIOR TO USE. THOROUGHLY MIS THE PART A COMPONENT SEPERATELY USING PADDLE MIXERS AND A DRILL FOR A MINIMUM OF 1 MINUTE TO PLACE THE SOLIDS CONTENT EVENLY IN SUSPENSION. POUR COMPONENT B INTO COMPONENT A USING THE PROPER MIXING RATIO OF 2A:1B BY VOLUME.

MIX BOTH COMPONENTS FOR AT LEAST 1 MINUTE USING A DRILL AT LOW REVOLUTION (330 – 450 RPM) TO REDUCE TRAPPING OF AIR. WHILE MIXING, SCRAPE BOTTOM AND WALLS OF CONTAINER AT LEAST ONCE TO ENSURE A HOMOGENEOUS MIX. ONLY PREPARE QUANTITY THAT MAY BE APPLIED DURING POT LIFE.

APPLY MIXED PRODUCT ON THE PREPARED SURFACE TIGHTLY (THIN FILM) USING A RUBBER RAKE AND PASS A ROLLER TO OBTAIN A UNIFORM COATING. AVOID CREATING PUDDLES.

APPLY COATING TO PRIMER WHEN SURFACE IS DRY TO THE TOUCH.

RECOAT WINDOW IS BETWEEN (8) AND (24) HOURS AT 68°.

WILL REQUIRE MECHANICAL ABRASION ONCE IT EXCEEDS THE RECOAT WINDOW.

CLEANING

ALL SPILLED MATERIAL, UNUSED CONTENTS OF CONTAINERS, EMPTY CONTAINERS AND SECONDARY CONTAINMENT SPILLS AND LEAKS MUST BE CLEANED UP IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS. CLEAN ALL TOOLS AND MATERIALS WITH THE CLEANER/THINNER FOR EPOXIES.

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RESTRICTIONS

- ✓ THIS PRODUCT IS BEST APPLIED AT A TEMPERATURE RANGE OF 59°F-86°F. WITH MAX RH OF 85%
- ✓ SUBSTRATE TEMP MUST BE 59°F
- ✓ HUMIDITY CONTENT OF SUBSTRATE MUST BE >4% WHEN COATING IS APPLIED
- ✓ DO NOT APPLY ON POUROUS SURFACES WHERE A TRANSFER OF HUMIDITY MAY OCCUR DURING APPLICATION
- ✓ AVOID EXTERIOR USE ON SUBSTRATES GROUND LEVEL
- ✓ PROTECT FROM HUMIDITY, CONDENSATION AND CONTACT WITH WATER DURING 24 HOUR INITIAL CURING PERIOD
- ✓ SURFACE MAY DISCOLOR IN AREAS EXPOSED TO REGULAR UV LIGHT
- ✓ EXCESSIVE MOISTURE VAPOR IN CONCRETE SLABS MAY CAUSE THE COATING TO DELAMINATE, DISCOLOR OR CAUSE IMPROPER CURING
- ✓ HIGH/LOW TEMPERATURES AND HUMIDITY CAN AFFECT POT LIFE AND EXTEND THE CURE TIME
- ✓ SUBSTRATES THAT HAVE BEEN PREVISOULY COATED ARE SUBJECT TO ABSORPTION, WHICH MAY AFFECT THE ADHESION OF A NEW COATING.
- ✓ ADHESION TO SUBSTRATE SHOULD BE TESTED AT LEAST 7 DAYS PRIOR TO STARTING ANY COATING PROJECT
- ✓ DO NOT OPEN CONTAINERS UNTIL READY TO USE AND KEEP SEALED TIGHTLY
- ✓ IT IS THE RESPONSIBILITY OF THE END USER TO CHECK THE SUITABILITY OF THIS PRODUCT AND THE SUBSTRATE PRIOR TO ITS APPLICATION. MVP COATINGS, INC. ASSUMES NO LIABILITY FOR SUBSTRATE DEFECTS.

HEALTH AND SAFETY

IN CASE OF SKIN CONTACT, WASH WITH WATER AND SOAP. IN CASE OF EYE CONTACT, IMMEDIATELY RINSE WITH WATER FOR AT LEAST 15 MINUTES. CONSULT WITH A DOCTOR. FOR RESPIRATORY PROBLEMS, TRANSPORT VICTIM TO FRESH AIR. REMOVE CONTAMINATED CLOTHES AND CLEAN BEFORE REUSE. COMPONENTS A AND B CONTAIN TOXIC INGREDIENTS. PROLONGED CONTACT OF THIS PRODUCT WITH THE SKIN IS SUSCEPTIBLE TO PROVOKE AN IRRITATION. AVOID EYE CONTACT. CONTACT WITH MAY CAUSE SERIOUS BURNS. AVOID BREATHING VAPORS RELEASE FROM THIS PRODUCT. THIS PRODUCT IS A STRONG SENSITIZER. WEAR SAFETY GLASSES AND CHEMICAL RESISTANT GLOVES. A BREATHING APPARATUS FILTERING ORGANIC VAPORS APPROVED BY THE NIOSH/MSHA IS RECOMMENDED. PREDICT SUITABLE VENTILATION. CONSULT THE MATERIAL SAFETY DATA SHEET FOR FURTHER INFORMATION.

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PREOFESSIONAL USE ONLY

READ AND UNDERSTAND ALL THE INFORMATION CONTAINED IN THE PRODUCT TECHNICAL DATA SHEETS, SDS SHEETS AND PRODUCT LABELS PRIOR TO STARTING ANY PROJECT. NOTHING CONTAINED IN ANY OF MVP COATINGS™, INC. MATERIALS RELIEVES THE END USER OF THE OBLIGATION TO READ AND FOLLOW THE WARNINGS AND INSTRUCTIONS FOR EACH OF MVP COATINGS™, INC. PRODUCTS.

SPECIFICATION AND FIELD ASSISTANCE:
CONTACT MVP COATINGS, INC. FOR ASSISTANCE. JOBSITE VISITS BY MVP COATINGS™, INC. EMPLOYEES OR ITS INDEPENDENT AGENTS ARE SOLELY FOR DETERMINING QUALIFICATION FOR WARRANTY.

WARRANTY STATEMENT

MVP COATINGS™ WARRANTS PRODUCTS TO BE FREE FROM MANUFACTURING DEFECTS AND DEFECTIVE RAW MATERIALS FOR A PERIOD OF 1 YEAR. LIABILITY FOR PRODUCTS PROVEN DEFECTIVE IS LIMITED TO REPLACEMENT OF THE DEFECTIVE PRODUCT.

NOT NCLUDED IN THE WARRANTY IS DAMAGE DUE TO STRUCTURAL DESIGN DEFICIENCIES INCLUDING BUT NOT LIMITED TO SLAB CRACKING, GOUGING OR OTHER DAMAGE DUE TO EQUIPMENT, DELAMINATION CAUSED BY VAPOR TRANSMISSION, OR OTHER ELEMENTS BEYOND THE SCOPE OF PROTECTION OF THIS SYSTEM.

THE INFORMATION AND RECOMMENDATIONS CONTAINED IN THIS DOCUMENT ARE BASED ON RELIABLE TEST RESULTS ACCORDING TO THE MANUFACTURER OF THE PRODUCT. THE DATA MENTIONED IS SPECIFIC TO THE MATERIAL INDICATED. IF USED IN COMBINATION WITH OTHER MATERIALS, THE RESULTS MAY BE DIFFERENT. IT IS THE RESPONSIBILITY OF THE USER TO VALIDATE THE INFORMATION THEREIN AND TO TEST THE PRODUCT BEFORE USING IT. MVP COATINGS, INC. ASSUMES NO LEGAL RESPONSIBILITY FOR THE RESULTS OBTAINED IN SUCH CASES. MVP COATINGS, INC. ASSUMES NO LEGAL RESPONSIBILITY FOR ANY DIRECT, INDIRECT, CONSEQUENTIAL, ECONOMIC OR ANY OTHER DAMAGES EXCEPT TO REPLACE THE PRODUCT OR TO REIMBURSEMENT THE PURCHASE PRICE, AS SET OUT IN THE PURCHASE CONTRACT.

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