

SPECIAL CONCRETE FINISH CONCRETE SURFACES SILANE / CONCRETE STAIN / NON-SACRIFICIAL ANTI-GRAFFITI SYSTEM SPECIFICATION

APPLICATION TREATMENT SOLUTION

WEATHER LIMITATIONS

THE TREATMENT SOLUTION SHALL BE APPLIED WHEN THE AMBIENT AIR AND CONCRETE SURFACE TEMPERATURES ARE BETWEEN 10 DEGREES C (50 DEGREES F) AND 35 DEGREES C (100 DEGREES F) UNLESS OTHERWISE RECOMMENDED BY THE MANUFACTURER. THE TREATMENT SOLUTION SHALL NOT BE SPRAYED WHEN BLOWING WINDS OR OTHER CONDITIONS TO PREVENT PROPER APPLICATION.

THE SOLUTION SHALL NOT BE APPLIED TO CONCRETE SURFACES WHEN THE RATE OF EVAPORATION FROM THE SURFACES EXCEEDS 980 G/M2/H (0.20 LB/FT2/HR) AS DETERMINED IN ACCORDANCE WITH SUBSECTION 512.362, RATE OF EVAPORATION LIMITATIONS.

APPLICATION EQUIPMENT

SPRAY EQUIPMENT FOR THE APPLICATION OF THE TREATMENT SOLUTION SHALL BE A LOW PRESSURE AIRLESS TYPE SPRAYER WITH A MAXIMUM APPLICATION PRESSURE OF 105 KPA (15 PSI). HORTICULTURE TYPE SPRAY BAR UNITS SHALL BE USED FOR TREATMENT OF BRIDGE DECKS OR OTHER LARGE HORIZONTAL SURFACES.

HAND HELD SPRAYERS MAY BE USED FOR TREATING VERTICAL SURFACES OR SMALL HORIZONTAL SURFACES AS APPROVED BY THE ENGINEER.

APPROVAL OF THE SPRAY EQUIPMENT MUST BE OBTAINED FROM THE ENGINEER PRIOR TO INITIATING APPLICATION WORK.

APPLICATION

SURFACE TREATMENT OF NEW CONCRETE WILL BE PERMITTED WHEN THE CONCRETE HAS ATTAINED THE SPECIFIED DESIGN STRENGTH AS VERIFIED BY FIELD CURED CYLINDERS.

ALL CONCRETE SURFACES SHALL BE SUBSTANTIALLY DRY PRIOR TO APPLICATION OF THE TREATMENT SOLUTION. THE ENGINEER WILL DETERMINE WHEN THE SURFACES ARE SUFFICIENTLY DRY.

THE TREATMENT SOLUTION SHALL BE USED AS SUPPLIED BY THE MANUFACTURER AND SHALL NOT BE DILUTED OR ALTERED IN ANY WAY. THE SOLUTION SHALL BE SPRAYED ON TO THE CONCRETE SURFACES AT THE MANUFACTURER'S RECOMMENDED RATE OF COVERAGE.

WATER SHALL BE LIGHTLY APPLIED TO TREATED SURFACES 12 TO 24 HOURS FOLLOWING TREATMENT.

WHEN THE CONTRACT CALLS FOR THE APPLICATION OF BOTH A WATER REPELLENT TREATMENT AND A SPECIAL SURFACE FINISH, THE PENETRATING WATER REPELLENT SHALL BE APPLIED FIRST. THE SPECIAL SURFACE FINISH SHALL NOT BE APPLIED UNTIL SEVEN DAYS OR ACCORDING TO MANUFACTURER'S RECOMMENDATIONS AFTER THE APPLICATION OF THE TREATMENT SOLUTION.

TRAFFIC LIMITATIONS

TRAFFIC WILL NOT BE PERMITTED ON TREATED SURFACES UNTIL THE SOLUTION HAS COMPLETED PENETRATED AND THE TREATED SURFACE IS DRY. THE ENGINEER WILL DETERMINE WHEN THE SURFACES ARE SUFFICIENTLY DRY.

APPLYING COLOR STAIN SYSTEM

CLEAN SURFACE PRIOR TO APPLICATION OF STAIN MATERIALS TO ASSURE THAT SURFACE IS FREE OF LAITANCE, DIRT, DUST, GREASE, EFFLORESCENCE, PAINT, WATER OR OTHER FOREIGN MATERIAL. FOLLOWING MANUFACTURER'S INSTRUCTIONS FOR SURFACE PREPARATION. DO NOT SANDBLAST. PREFERRED METHOD TO REMOVE LAITANCE IS PRESSURE WASHING WITH WATER, MINIMUM 3000 PSI (A RATE OF 3 TO 4 GALLONS PER MINUTE), USING FAN NOZZLE PERPENDICULAR TO AND AT A DISTANCE OF 1 OR 2 FEET FROM SURFACE. IF DETERGENTS OR DE-GREASERS ARE USED IN THE CLEANING PROCESS THE SURFACE MUST BE RINSED THOROUGHLY WITH POTABLE WATER.

PERFORM PH TEST PER ATSM D4262 PRIOR TO COATING SURFACE, IF THE PH EXCEEDS 9 AN ACID-ETCH MAY BE ADDED TO THE POWER WASH STREAM TO REDUCE THE PH. IF AN ACID-ETCH IS USED THE SURFACE SHALL BE RINSED WITH POTABLE WATER, NO SOONER THAN 1 HOUR AFTER THE ACID-ETCH, PRIOR TO RE-TESTING THE PH LEVEL. REPEAT THE PROCESS UNTIL THE PH LEVEL DOES NOT EXCEED 9.

PERFORM CHLORIDE TEST USING CHLOR*TEST BY CHLOR*RID COMPANY. SKAT TEST BY KTA TATOR OR APPROVED EQUAL. IF THE CHLORIDE LEVEL EXCEEDS 50 CHLORIDE LEVEL AND THE SURFACE SHALL BE RE-TESTED. REPEAT PROCESS UNTIL CHLORIDE LEVEL DOES NOT EXCEED 50 PPM.

APPLICATION TREATMENT SOLUTION (CONTINUED)

APPLICATION OF COATING

DO NOT APPLY COATING IF SURFACE IS WET DUE TO RAIN OR OTHER PRECIPITATION. ALL WET SURFACES SHALL BE GIVEN A 24 HOUR PERIOD TO DRY BEFORE COATING. COMPLETED SURFACE SHALL BE FREE OF BLEMISHES, DISCOLORATION, SURFACE VOIDS AND UNNATURAL FORM MARKS.

ALL CONCRETE SURFACES THAT ARE TO BE STAINED AND ANY PATCHING THAT HAS BEEN DONE IN THESE AREAS SHALL BE AT LEAST 28 DAYS OLD.

COATING SHOULD ONLY OCCUR WHEN THE OUTSIDE TEMPERATURE AND CONCRETE SURFACE TEMPERATURE IS 10 DEGREES C (50 DEGREES F) AND RISING. IF THE TEMPERATURE IS AT 10 DEGREES C (50 DEGREES F) AND FALLING ALL STAINING SHOULD CEASE. COATING SHOULD NOT BE APPLIED AT TEMPERATURES ABOVE 35 DEGREES C (100 DEGREES F).

IF THE SURFACE IS CONTAMINATED BETWEEN COATS IT SHALL BE RE-CLEANED AS DEFINED IN SURFACE PREPARATION, PRIOR TO APPLICATION OF THE NEXT COAT.

APPLY FIRST COAT OF THE CONCRETE STAIN EVENLY. DO NOT EXCEED A SPREAD RATE OF 7.35 SQUARE METERS / LITER (33.28 SQUARE YARDS / GALLON).

THE FIRST COAT OF THE CONCRETE STAIN SHALL BE THOROUGHLY CURED BEFORE THE SECOND COAT OF THE CONCRETE STAIN IS APPLIED. THE MINIMUM TIME FOR CURING IS 12 HOURS

INSPECT SURFACES TO BE COATED AFTER SURFACE IS CLEANED AND AFTER EACH COATING FOR COMPLIANCE WITH THIS SPECIFICATION.

USE RUBBER ROLLERS OR OTHER APPROVED PROTECTIVE DEVICES ON SCAFFOLD FASTENINGS.

PROTECTION

PROTECT ALL PORTIONS OF THE STRUCTURES, WHICH ARE NOT TO BE COATED INCLUDING SUPERSTRUCTURES, SUBSTRUCTURES, SLOPE AND HIGHWAY APPEARANCES FROM SPLATTER, SPLASHES, AND OVERSPRAY, OR WHERE OTHER DAMAGE DURING COATING AND POWER WASHING OPERATIONS COULD OCCUR.

PROTECT ALL CITIZENS AND PRIVATE PROPERTY FROM SPLATTER, SPLASHES, AND OVERSPRAY INCLUDING BUT NOT LIMITED TO BUILDINGS, PEDESTRIANS, AND VEHICLES, AND TO PREVENT SPREADING OR FALLING OF ABRASIVE AND DEBRIS ON THE TRAVELED PORTION OF THE PAVEMENT.

SUSPEND WORK IF PROTECTION IS UNSATISFACTORY.

REMOVE ANY ABRASIVE MATERIAL AND DEBRIS DEPOSITED ON THE PAVEMENT, SHOULDERS, OR SLOPE PAVING BEFORE REOPENING WORK AREAS TO TRAFFIC.

CLEAN UP. CLEAN UP USING H&C D-100 SOLVENT, XYLENE OR TOLUENE (OR EQUAL).

SAFETY PRECAUTIONS

FOLLOW SAFETY PRECAUTIONS PER MANUFACTURER'S PRODUCT DATA SHEETS AND MATERIAL SAFETY DATA SHEET.

METHOD OF MEASUREMENT.
SPECIAL CONCRETE FINISH APPLIED TO CONCRETE SURFACE AREAS NOTED ON THE PLANS HAVE BEEN CALCULATED BY THE SQUARE YARD.

BASIS OF PAYMENT

SPECIAL CONCRETE FINISH APPLIED TO CONCRETE SURFACE AREAS NOTED ON THE PLANS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD. PLAN QUANTITY SHALL BE PAY QUANTITY. ONLY AREAS ADDED OR DELETED FROM PLAN QUANTITY SHALL BE MEASURE FOR PAYMENT.

CONTRACTOR WILL SATISFY HIMSELF PLAN QUANTITIES ARE CORRECT BEFORE STARTING WORK. ONCE WORK BEGINS, ONLY CHANGES TO CALCULATED PLAN QUANTITIES AGREED UPON BY ENGINEER AND CONTRACTOR SHALL BE ALLOWED.

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OKLAHOMA CITY BOULEVARD OKLAHOMA CO.

DESIGN	KBA	MMPC	OKLAHOMA DEPARTMENT OF TRANSPORTATION SPECIAL CONCRETE FINISH NOTES SHEET 2 OF 2 STATE JOB NO. 17428(88) SHEET NO. 139
DRAWN	ISFM	RWH	
CHECKED	KBA		
APPROVED			
SQUAD	MacArthur		