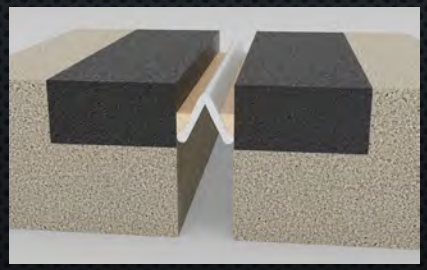
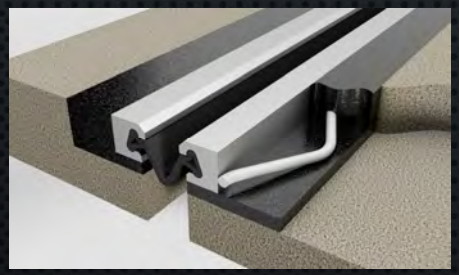
INSTALLATION
OF
WATERPROOFING MEMBRANE SYSTEMS

ROBERT REA





DECK PREPARATION
INSTALLATION
TRAFFIC
PAVING

WATERPROOFING MEMBRANES

COLD LIQUID APPLIED MEMBRANE
(COLD APPLIED)

ROLL APPLIED MEMBRANE
(ROLL APPLIED)

HOT LIQUID APPLIED MEMBRANE
(HOT APPLIED)

INSTALLATION

(COLD APPLIED)

HIGH BUILD ELASTOMER SPRAY ON SYSTEM

PRIMER/BASE COAT/TOP COAT WITH AGGREGATE

AMBIENT TEMP APPLICATION

(ROLL APPLIED)

BITUMINOUS SYSTEM

PREFORMED ROLLS

PRIMER BASE

AMBIENT TEMP APPLICATION

(HOT APPLIED)

HIGH BUILD BITUMINOUS SPRAY ON SYSTEM

USES FABRIC

APPLIED AT 300 F

2 KEYS TO PERFORMANCE

1. NO MOISTURE & CLEAN/SOLID SUBSTRATE
2. SUFFICIENT OVERLAY THICKNESS (2" MIN)

DEFINITION OF CLEAN

clean

/klēn/

adverb

1. so as to be free from dirt, marks, or unwanted matter.
   "the room had been washed clean"

'CLEANED TO THE EXTENT THAT THE PRESCRIBED CLEANING METHOD HAS REMOVED EVERYTHING THAT PARTICULAR METHOD IS CAPABLE OF'

2 TYPES ARE SPECIFIED

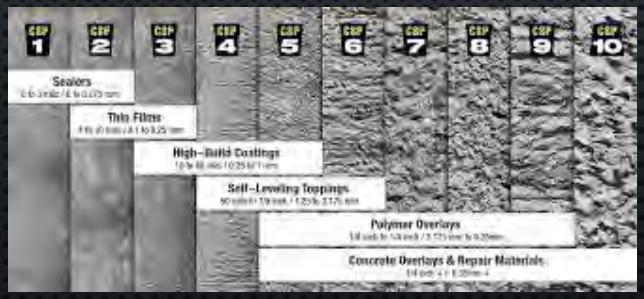
1. ABRASIVE BLASTING (SHOT OR SAND)
2. WATER BLASTING WITH HIGH TEMP AND PRESSURE

DECK MILLING

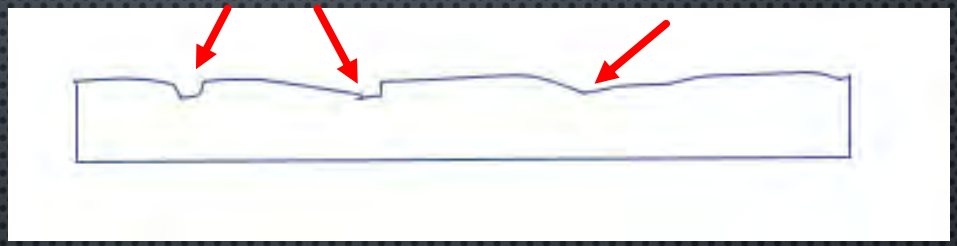
- DON'T MILL TO 'CLEAN' THE DECK
- DON'T MILL ENTIRE DECK TO CORRECT 'TEXTURE'
- DON'T MILL WHENEVER POSSIBLE – NEED TO KEEP CONCRETE COVER OVER DECK STEEL
- PARABOLIC DECKS ARE EXTREMELY DIFFICULT TO MILL – NOTED IN THE PLANS IN CASE THERE IS EXISTING OVERLAY THAT NEEDS TO BE REMOVED

SURFACE TEXTURE

- CSP REQUIREMENTS ARE NO LONGER PART OF THE SPECS FOR ANY (COLD, ROLL, HOT)
- 3/16" SURFACE SMOOTHNESS DEVIATION (ROLL)



SURFACE TEXTURE (GROOVES)



ROLL APPLIED

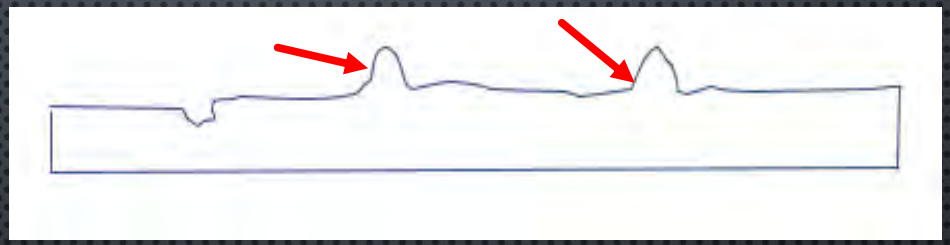
3/16" MAX FOR GROOVES

FILL WITH MANUFACTURERS LEVELING COMPOUND

SPRAY APPLIED – (COLD AND HOT)

FOR SPRAY APPLIED FILL THEM WHILE APPLICATING – THESE ARE HIGH BUILD SYSTEMS

SURFACE TEXTURE
(PEAKS)



ROLL APPLIED

3/16" MAX FOR PEAKS

SQUEEGEE COVER/SMOOTH WITH MANUFACTURERS LEVELING COMPOUND

GRIND, TIGHT BLADE, ETC
TRY NOT TO MILL ENTIRE DECK

SPRAY APPLIED – (COLD AND HOT)

FOR SPRAY APPLIED COVER THEM WHILE APPLICATING – THESE ARE HIGH BUILD SYSTEMS

EXAMPLES

DECK WAS MILLED AND WILL BE SANDBLASTED

EXAMPLES

DECK HAD SOME TACK ON IT, POWERWASHING WAS THE SPEC

EXAMPLES

DECK WAS MILLED, POWER WASHED AND PRIMED

EXAMPLES

'PATTIES' NEED TO BE BLADED OFF

EXAMPLES

ALL WHITE CURING COMPOUNDS <u>MUST</u> BE REMOVED

INSTALLATION

(COLD APPLIED)

VERY MOISTURE SENSITIVE
(MOISTURE TEST)

USE ADVANTAGE OF THE HIGH BUILD SYSTEM

REQUIRES ABRASIVE BLASTING PREP

TAPE AND PAPER AREAS NOT TO RECEIVE LIQUID POLYMER

(ROLL APPLIED)

MOISTURE SENSITIVE
(MOISTURE TEST)

AVOID WRINKLES

COMPRESSION ROLL FOR ADHESION

(HOT APPLIED)

NO SURFACE MOISTURE OR DAMPNESS (VISUAL)

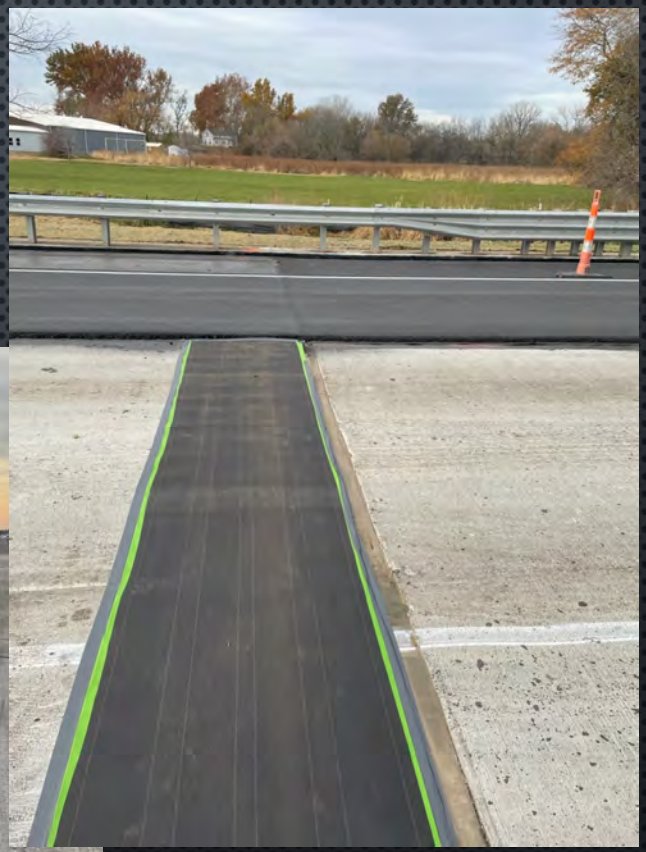
USE ADVANTAGE OF THE HIGH BUILD SYSTEM

ROLL OUT FABRIC IMMEDIATELY

AVOID WRINKLES

TAPE AND PAPER AREAS NOT TO RECEIVE LIQUID BINDER

TAPING AND PAPER



TAPING AND PAPER

TRAFFIC

(COLD APPLIED)

CAN HANDLE SOME TRAFFIC

WITH TOP-COAT AND AGGREGATE SPREAD/EMBEDDED INTO SURFACE

(ROLL APPLIED)

PREFERABLY NO TRAFFIC

BUT LOOKING AT POSSIBLE 24 HOUR WINDOW, WE HAVE APPROVED SOME ON A PROJECT BASIS

(HOT APPLIED)

DO NOT OPEN TO TRAFFIC

TEMP TRAFFIC SIGNALS ARE BENEFICIAL

PAVING

(COLD APPLIED)

HEAVY TACK

PLACE IN 2 LIFTS WHEN 2.5" OR MORE

MTV OR PICK UP MACHINE

CAN WINDROW ON BDM

(ROLL APPLIED)

LIGHT TACK TO AVOID RUN OFF

PLACE IN 2 LIFTS WHEN 2.5" OR MORE

MTV RECOMMENDED

AVOID WINDROW ON BDM

(HOT APPLIED)

DO NOT TACK

PLACE IN 2 LIFTS WHEN 2.5" OR MORE

MTV RECOMMENDED

AVOID WINDROW ON BDM

HAVE BLOTTING SAND ON SITE

PAVING

(COLD APPLIED)

NO PAVING TEMP ISSUES

(ROLL APPLIED)

BITUMINOUS BASE

SENSITIVE TO HEAT

PAVE IN COOLER TEMPS WHEN POSSIBLE

MORNING PAVING IS BEST

ONLY PULL ONE 12 FOOT LANE AT A TIME, NO SHOULDER

MINIMIZE WINDROW TIME WHEN WINDROWING IS USED

(HOT APPLIED)

BITUMINOUS BASE

SENSITIVE TO HEAT

LEAVE OVERNIGHT TO LET BITUMEN 'SET UP'

PAVE IN COOLER TEMPS WHEN POSSIBLE

PAVE DAY FOLLOWING PLACEMENT WHENEVER POSSIBLE

ONLY PULL ONE 12 FOOT LANE AT A TIME, NO SHOULDER

MINIMIZE WINDROW TIME WHEN WINDROWING IS USED

Thank You !