INSTALLATION OF WATERPROOFING MEMBRANE SYSTEMS

ROBERT REA
WATERPROOFING MEMBRANES

COLD LIQUID APPLIED MEMBRANE
(COLD APPLIED)

ROLL APPLIED MEMBRANE
(ROLL APPLIED)

HOT LIQUID APPLIED MEMBRANE
(HOT APPLIED)

~ 120 INSTALLED

~ 430 INSTALLED

~ 12 INSTALLED
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`

/kleen/
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 SPEC 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 APPLIQUING – 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 MUST 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
TAPPING AND PAPER
TAPPING AND PAPER
TRAFFIC

(COLD APPLIED)  (ROLL APPLIED)  (HOT APPLIED)

CAN HANDLE SOME TRAFFIC
WITH TOP-COAT AND AGGREGATE SPREAD/EMBEDDED INTO SURFACE

PREFERABLY NO TRAFFIC
BUT LOOKING AT POSSIBLE 24 HOUR WINDOW, WE HAVE APPROVED SOME ON A PROJECT BASIS

DO NOT OPEN TO TRAFFIC
TEMP TRAFFIC SIGNALS ARE BENEFICIAL
PAVING

(COLD APPLIED)

(ROLL APPLIED)

(HOT APPLIED)

HEAVY TACK
PLACE IN 2 LIFTS WHEN 2.5” OR MORE
MTV OR PICK UP MACHINE
CAN WINDROW ON BDM

LIGHT TACK TO AVOID RUN OFF
PLACE IN 2 LIFTS WHEN 2.5” OR MORE
MTV RECOMMENDED
AVOID WINDROW ON BDM

DO NOT TACK
PLACE IN 2 LIFTS WHEN 2.5” OR MORE
MTV RECOMMENDED
AVOID WINDROW ON BDM
HAVE BLOTTERING 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!