PRODUCT DESCRIPTION:

EPOXAL 100FM is a two-component, 100% solid, thermosetting elastomeric, flexible hybrid epoxy membrane. It is designed to perform where greater elongation, higher impact resistance and increased flexibility is required. To be used in conjunction with other NPC coatings.

PRODUCT FEATURES:

- High tear resistance, tensile strength
- Very good low temperature performance
- Good moisture and chemical resistance
- Excellent thermal-shock and freeze-shock properties.
- Zero VOC product

TYPICAL USES:

- Mechanical Rooms
- Food Production Areas
- Showers
- Laboratories
- Secondary Containment
- Crack Isolation
- Suspended Slabs, Interior and Exterior
- Areas Receiving Daily Wash-Down
- Kitchens

PRIMERS:

- Prime with Epoxal 100WH, Epoxal 100 Primer, Epoxal 100DCP or Epoxal 100CC.

TECHNICAL DATA

POT LIFE:	35 minutes @ 22°C(72°F) (decreases at higher temperatures)
COLOUR:	Clear Amber
SHEEN:	Gloss
PACKAGING:	3.5 Litre or 3.5 Gal. Units.
MIXING RATIO:	2.5:1 Packaged in kits Resin to Catalyst (by vol.)
VOLUME SOLIDS :	100%
THEORETICAL COVERAGE:	1604 sqft/US Gal @ 1 mil DFT
RECOMMENDED DFT:	25 to 35 mils
CURE TIME @23°C(73°F):	Recoat 10-12 hr Light Traffic 24 hrs Full Cure 7 days
MIXED VISCOSITY @ 24°C(75°F):	2350 CPS
CLEAN UP:	**NPC** Epoxal Thinners

PERFORMANCE DATA

Typical Performance After 7 Days Cure @25°C(77°F)

TENSILE STRENGTH	2570 psi
TENSILE MODULUS	82,150 psi
TENSILE ELONGATION	90%
IMPACT inch/lb Monocoat	>160
with 10 mils Epoxal 100WH topcoat	100
HARDNESS	65(SHORE D)

NOTE: The above described data is solely based on lab testing done under strictly controlled conditions. Ambient temperature was used for all testing. No warranty can be given as to the accuracy of this information as it will depend

upon conditions at actual project location, which are beyond our control.

SURFACE PREPARATION:

New Concrete Preparation:

All surfaces to be coated must be clean, dry and free of all contaminants. New concrete must be cured a minimum of 28 days with no more than 3% moisture content. Any curing or hardening compounds, form oils, release agents or laitance must be removed by means of mechanical abrasion. Shot blasting or diamond grinding are the recommended methods. These two means of mechanical abrasion will clean the surface and open the pores of the concrete to allow maximum penetration of the primer. Ensure the methods of mechanical abrasion are dust-free.

Existing Concrete Preparation:

Ensure all loose concrete is removed, using a scarifier, diamond grinder, bush hammer or other methods. Remove any contamination, including grease and oil using an industrial cleaner. (Consult your NPC representative for recommended cleaners) Prepare the entire floor by method of a shot blaster, or diamond grinder. Patch any uneven or damaged concrete using "NPC Epoxal 100 Patch" or consult your NPC representative for further instructions.

Existing coated surfaces must be intact and tightly bonded to substrate below. If stability of existing coating is in question, test a small section and check for lifting. Hard or glossy surfaces must be abraded to improve adhesion performance. *NPC will not warrant the application of Epoxal coatings over an existing paint or urethane.*

Wood Preparation:

All wood surfaces to be coated must be clean, dry and free of all contaminants. The wood surface must be very rigid, with no possible movement. Fill any voids, or seams with NPC "Epoxal 100 Patch"

PRIMING:

Epoxal 100WH is a suitable primer for most applications over concrete. If a lower viscosity primer is required to ensure maximum bond strength, we recommend Epoxal 100 Primer. If the concrete substrate has recently been subjected to moisture, we recommend Epoxal 100 DCP. *(Please consult your NPC representative for further details about Epoxal 100 DCP.)*

Apply all of the for mentioned primers at a spread rate of 4-6 mils. If the spread rate is less than 4 mils, the substrate may not be properly sealed. If the spread rate is greater than 6 mils it increases the probability of bubbles caused by out gassing.

MIXING:

See Epoxal 100 WH product data for prime coat and topcoat mixing instructions.

Premix the Part A (resin) component of the mixture thoroughly. Epoxal 100FM is supplied in 3.5 gallon and 3.5L units, both of which can be mixed in the original container by adding the Part B into the Part A. Ensure Part A is premixed, then mix Part B into Part A using a clean jiffy mixer. ***Always mix the two components for a full 3 minutes with a jiffy mixer.***

APPLICATION:

Primer:

See Epoxal 100 WH product data for primer mixing and application instructions.

For a proper bond Epoxal 100FM membrane coat must be applied within 24-48 hours after the completion of the prime coat, depending on temperature.

Membrane Coat:

Step 1. Mix Epoxal 100FM according to instructions provided.
Step 2. Pour the mixed material on the prepared floor immediately.
Step 3. Spread over the desired area using a rubber squeegee or flexible trowel to achieve a uniform thickness of 25 mils minimum. Brush any edges around walls or permanent objects.
Step 4. Saturate a medium nap roller and back roll the material to remove any squeegee lines and provide an aesthetically pleasing finish.
Step 5. Allow coating to cure.

Top Coat:

See Epoxal 100 WH product data for topcoat mixing and application instructions.

For a proper bond Epoxal 100WH topcoat must be applied within 24 hours after the completion of the membrane coat, depending on temperature. If this window is surpassed, mechanical abrasion must be used to prepare the coating before any further coats.
NPC recommends a topcoat of Epoxal 100WH at a thickness of 10-12 mils to provide a smooth uniform coat.

CURING:

At a temperature of 23^0C(73^0F), **EPOXAL 100FM** will be tack free within 10-12 hours. It will support light traffic at 24 hours and will reach full cure within 7 days. The product will reach its full chemical resistance in seven days.