



SPARTAN Construction Materials Limited

NeoForce KA/KR - 690

Spray applied pure polyurea waterproofing membrane

Description

NeoForce KA/KR-690 is two components, solvent free, pigmented, and spray applied quick set elastomer.

General Recommended / Use

NeoForce KA/KR-690 system adopts the Polyamine and Amine chain extender as the resin; thus, it can be cured extremely fast without adding the catalyst.

It can provide a fast and environmental friendly solution for the waterproofing, flooring project within commercial building and apartment house.

Features and Benefits

- Extremely Fast Setting
- High build performance
- Can be applied on vertical surface
- Easy and fast application
- Water vapour permeability
- Excellent mechanical strength
- Crack bridging
- Resistant to standing water
- Elastic at extreme low temperatures
- Solvent free – Environmental friendly

Physical Properties

	NeoForce KA -690	NeoForce KR-690T
Appearance	Light yellowish liquid	Colored Liquid
Viscosity(cps,25C)	500 ~ 1500	300 ~ 800
VOC (%)	100	100
Mixing ratio (v/v)	100	100
Gel Time (sec.)	3 ~ 5 seconds	
T.F.T (sec)	5 ~ 15 seconds	
Curing time (min)	3 ~ 5 minutes	
Tensile strength (kg _f /cm ²)	17~20	
Tear strength (kg _f /cm ²)	60~90	
Elongation (%)	200~320	
Hardness (Shore A)	95 ± 5	
Mixing Ratio		
By weight	1.05:1	



SPARTAN Construction Materials Limited

NeoForce KA/KR - 690

Spray applied pure polyurea waterproofing membrane

Properties

NeoForce KA/KR-690 has an excellent tensile and tear strength with remarkable abrasion resistance. The fast reactivity resulted it's can only be applied with a compatible two component spraying machine.

Chemical resistance

Acetic Acid (10%)	No visible damage
Ethyl Acetate(10%)	No visible damage
NaCl (10%)	No visible damage
H ₃ PO ⁴	No visible damage
KOH (10% - 20%)	No visible damage
NH ₄ OH (10% -25%)	No visible damage
NaOH (10% -50%)	No visible damage
Aceton	No visible damage
Sucrose (10%)	Slight discoloring
MEK	Slight swelling
DMF	Not recommended
Motor oil	No visible damage
Hydraulic oil	No visible damage
HCl (5%)	No visible damage
HCl (10%)	Slight discoloring
HCl (18%)	Slight swelling
HCl (36%)	Not recommended

Surface preparation

The substrates have to be firm, dry and load-bearing, free of any loose particles as well as substrates which impair adhesion such as oil, grease, rubber skid marks, paint or other unexpected contaminants. Pre-treatment of the substrate by grit or shot blasting, high pressure water jetting, grinding or scarifying is only necessary when the primer or scratch primer is very dirty or exceed the re-coating time interval.

After pre-treatment of the substrate the bond strength of the substrate must be achieve 1.5MPa. The substrate to be coated should be protected properly to against rising damp.

Surrounding area must be protected carefully to prevent overspray by masking proper materials, such as paper or plastic.

Primer

Make sure the approved primer Neodex T-117 has cured to the 'tack-free' state before to apply of NeoForce KA/KR-690.

Membrane

1.5kg - 2kg of the NeoForce KA/KR-690 are normally recommended to obtain a thickness of 1.5mm per square meter, subjected to the actual site condition.

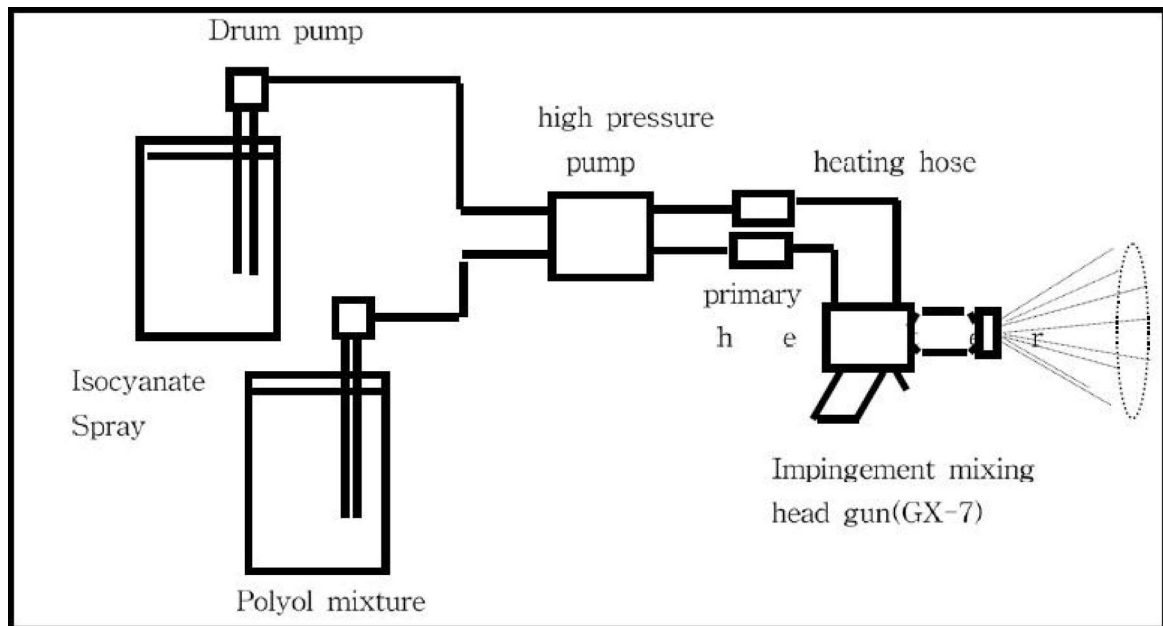


SPARTAN Construction Materials Limited

NeoForce KA/KR - 690

Spray applied pure polyurea waterproofing membrane

Application diagram



Cleaning

The machine must be cleaned with proper cleaner, recommends SPARTAN DOP or DPM (sets of houses storage tank). Cured or solid material should be removed mechanically.

Packaging

NeoForce KA/KR-690 supplied in 210kg drums – Part A and 200kg drum – Part B.

Shelf Life

Under dry conditions and the temperature range between 15-30°C. Do not expose to direct sunlight. Under such conditions the material would has a shelf life of 12 months.

Precautions

NeoForce KA/KR-690 is non-hazardous to human in cured condition. Wear suitable safety gloves, goggles and protective coating. Avoid inhaling the fumes and contact with the skin directly. When working with the product. Do not eat, smoke or wok near a naked flame.