

NIPPOCEM STANDARD 701 (formerly known as Nippon CM Standard)

Updated Nov'24

DESCRIPTION

NippoCEM STANDARD 701 is two component, green label and SPAN certified acrylic polymer modified cementitious waterproof slurry. It seals pores and voids of all masonry and concrete to prevent water ingress.

Uses:

NippoCEM STANDARD 701 is suitable for below ground tanking waterproofing and aboveground wet areas waterproofing applications such as:

- Pile head and foundations
- Basement walls
- Portable water tank, water reservoirs
- Bathrooms, toilets, kitchen, yards, sauna and other wet areas
- Lift pits, scupper drains, sumps pits
- Swimming pools, infinity pools and overflow channels
- Ponds and fountains

ADVANTAGES

- Good waterproofing performance
- Breathable
- Good adhesion to wet surface and green concrete
- Excellent resistance to soil chemicals, chlorides, sulphates, dilute acids and alkalis.
- Anti-carbonation and anti-chloride ion diffusion
- Non-toxic, ideal for portable water
- Green label certified, SPAN certified

Product Type	Product	Pack Size	Finishing	Substrate
Cementitious Waterproofing	NippoCEM STANDARD 701	Part A: 5kg/pail Part B: 20kg/bag	Grey cement finish	Concrete

Application Data

Application temperature, °C	: 5 to 45
Service temperature, °C	: -5 to 80
*Theoretical coverage, kg/m ² /coat	: 1.0

Typical Technical Data

Pot Life at 30°C, minutes	: 45
Specific Gravity	: 1.60-1.80
Drying Time, hours	: 2-3
Toxicity (MS1583/BS6920)	: Non-Toxic
Adhesion to Concrete, N/mm ² (ASTM D4541)	: > 1.0
Positive water pressure resistance, bar (DIN 1048)	: 5
Water absorption, %	: < 1
Portable water compliance (BS 6920/MS 1583-1)	: Compliance
Shelf Life	: 12 months

**All values given are subject to 5-10% tolerance*

Application Method

Substrate Preparation

Concrete Substrate

The substrate must be thoroughly clean and dry, free from dust, algae, mildew, fungal, grease and oil. All the contaminants, previous waterproofing and impurity must be removed till bare substrate. Any cracks, honey combs, water leakage area should be repaired by **Nippon Paint Repair System** (for more detail, please refer to Nippon Paint Technical Department) before the waterproofing work proceed. The substrate must be sound and dry with no rising damp. The concrete surface should be flat and free from holes and undulations. Any holes and undulations should resurface with **Nippon Paint Scratch Coat System**. The surface should be clean smooth and cast to fall to allow water run-off.

Mixing

Pour the **NippoCEM STANDARD 701 (Part A) - the liquid part** into a suitable sized container and slowly add the **NippoCEM STANDARD 701 (Part B) - the powder part** to the liquid, and mix using a slow speed drill at 300-400 rpm fitted with suitable paddle until a lump free creamy consistency is obtained. Do not mix more material than that can be used within 20 minutes. Do not add water to the mixture.

Application

Pre-wet the substrate surface with clean water. Apply the first coat at a rate of 1kg/m²/coat with a soft bristled brush or roller. Once the first coat is touch dry, apply the second coat at a rate of 1kg/m²/coat. The second coat shall be applied at right angle to the first coat.

Right Angle and Corner Treatment

Right angle and corner should have 25mm **NippoBOND** modified cement sand angle fillet. For angle treatment with reinforcement, apply a layer of **NIPPON PAINT CM MAT**, an alkali resistant mat, onto the first coat of **NippoCEM STANDARD 701** while still wet. Apply second and third coat of **NippoCEM STANDARD 701** at a rate of 1kg/m²/coat.

Protection

The membrane shall be protected from damaged due to ongoing construction activities or backfilling aggregates by either 50mm cement sand protection screed.

Recommended Waterproofing System

Concrete Substrate (Standard)

Waterproofing First Coat	: NippoCEM STANDARD 701	1.0 kg/m ² /coat
Waterproofing Second Coat	: NippoCEM STANDARD 701	1.0 kg/m ² /coat

Concrete Substrate (Reinforcement)

Waterproofing First Coat	: NippoCEM STANDARD 701	1.0 kg/m ² /coat
Reinforcement	: NIPPON PAINT CM MAT	1 layer
Waterproofing Second Coat	: NippoCEM STANDARD 701	1.0 kg/m ² /coat
Waterproofing Third Coat	: NippoCEM STANDARD 701	1.0 kg/m ² /coat

Environmental Conditions During Application

- Apply temperature: 15-35°C. Do not apply when the surface to be coated is less than 30°C above the dew point.
- The humidity for application is 30-80%.

Storage and Transportation

This product should be stored in original container in a shaded or cool and adequate ventilation warehouse. The storage temperature should be 15-35°C. This product should be away exposure from rain, UV, sunlight, source of flame and heat. When transporting, care must be taken. Failure to comply with the recommended storage may result in considerable premature deterioration of the product and shorten its shelf life.

Cleaning

Clean up equipment or tools with water immediately after use.

Safety Precautions

- Keep part A and part B tightly closed in original packed bag and container.
- Away from direct exposure to sunlight.
- Always use protective hand gloves, goggles and dust mask when handling or applying the product.
- Dispose of any waste in accordance with the appropriate Environment Quality Regulations.

Note

*Theoretical Coverage is based on a mathematical formula and does not consider Loss Factor.

$$\left[\frac{\text{Volume Solid \%} \times 10}{\text{Dry Film Thickness } (\mu)} \right] = \text{m}^2/\text{lit}/\text{coat}$$

This theoretical coverage rate has been calculated from the volume solids of the material and is related to the amount of coating applied onto a perfectly smooth surface without wastage. Variables like porosity of substrate, application method, dilution ratio, dry film thickness, opacity and so on will affect the loss factor and can vary from 30% - 50% or even more. For a practical coverage rate, due allowance should be made for atmospheric conditions, surface roughness, geometry of the article being coated, the skill of applicator, method of application etc. when estimating quantities required for a particular job.

The above information is given to the best of our knowledge based on laboratory tests and practical experience. However, since we cannot anticipate or control the many conditions under which our products may be used, we can only guarantee the quality of the product itself. We reserve the right to alter the given without prior notice.