



# NSG

NSG Specialized and Engineering Group has been active since 2000, aiming to establish a knowledge-based and effective organization in the advancement and development of the construction industry. By localizing modern technologies in our beloved country, Iran, we have always been at the forefront in offering new generations of waterproofing and moisture insulation products, concrete and mortar additives, various resins, and construction adhesives. Most of our products are made using nanotechnology and are water-based, serving as ideal replacements for traditional cumbersome and hazardous methods.

From the outset, NSG has focused on nurturing technical and specialized personnel, relying on human capital knowledge, utilizing modern scientific and engineering solutions, and equipping advanced laboratories in our factories. We have strived to supply both industrial and household needs simultaneously, thereby creating a new turning point in the company's growth and securing a significant share of the market for adhesives and moisture insulation products. The company's activities are not limited to selling and distributing products in the market. Instead, its distinctive feature lies in offering services such as project consulting and evaluation (needs assessment, providing efficient methods, and helping select suitable products for each project), technical and financial estimation (approximate cost estimation, detailing required actions and operations for each project), dispatching technical ambassadors, executive supervisors, and operational teams across the country, providing necessary equipment, products, and materials for projects, executing projects from start to finish (from design and construction to waterproofing, reinforcement, and renovation) along with official insurance and warranty, providing after-sales services and customer support through educational sessions and technical consulting. The scope of the company's activities extends beyond these services. It is also active in sales and agency grants, product distribution across the country, exporting goods to other countries, supporting sales centers and equipping their advertising, continuously monitoring the market, having a strong presence of the R&D team in the market, expanding the product portfolio, and creating a platform for selling new products. The company, by focusing on market and people's needs (for household use), the engineering community, and the construction industry, has always sought to meet these needs without sparing any effort.

We hope that with the grace of God and your support, our valued and loyal customers, we can take a significant step towards elevating the construction industry and increasing your satisfaction.

**It is worth noting that all brands of this company are registered as trademarks with the General Directorate of Intellectual and Moral Property. Therefore, any form of simulation, copying, or forgery will be dealt with through judicial and legal action.**



**NSG** Peace In The Rain With Products



## Quality Management System Policy

The specialized and engineering group of Noavaran Sanaat Padab (NSG) has defined its organizational pillars, which are aimed at the growth and enhancement of the company and achieving customer satisfaction, as follows:



### Mission

- Offering waterproofing products and various nano-based construction adhesives, facade insulation resins, and concrete additives by utilizing cutting-edge global technologies.
- Using the finest and highest-quality raw materials while adhering to environmental standards.
- Providing engineering services based on current knowledge and leveraging credible scientific resources in the field of civil engineering and construction in Iran and worldwide.



### landscape

The largest manufacturer of specialized water-based and eco-friendly construction adhesives, utilizing the latest cutting-edge technologies and unparalleled quality in Iran and worldwide



### The company's values

Customer-centricity, transparency, human dignity, enthusiasm for service, change, and innovation



### The company's overall objectives

- Development and Empowerment of Human Capital
- Expansion of the operational infrastructure of processes
- Enhancing Customer Satisfaction
- Enhancement of product quality, sales services, and support
- Expansion of domestic and international markets
- Expansion of the product portfolio and achievement of sales objectives

**This company, by creating a suitable and desirable environment, has defined its quality policy which is aligned with the establishment and observance of the clauses of the ISO 9001:2015, ISO 10002:2018, and ISO 10004:2018 standards, as follows:**

- Attention to the needs and expectations of the company's customers while complying with legal requirements
- Enhancing the capability level of the after-sales service network in providing high-quality services to customers.
- Enhancing customer satisfaction by focusing on quality, timely supply of products, and providing services
- Establishing and maintaining effective communication with customers to identify improvement opportunities from the customer's perspective
- Enhancing the level of capability and increasing the enthusiasm of human resources to achieve grand objectives
- Strengthening customer-centric culture and responsiveness of all company departments to customers
- Continuous improvement of business processes with regard to the company's risk management, change, knowledge, and technology.

Ultimately, the quality management system is reviewed at specified intervals to assess the improvement of its effectiveness. May the name of Noavaran Sanaat Padab Company always shine as a pioneering company in producing high-quality specialized adhesives for construction and providing distinctive technical services by experienced engineers and expert consultants in both domestic and international markets.





# NSG Products at a Glance

## Z90

Sealing & Resin as a Substitute for Bitumen & Traditional Insulation (Sealing Adhesive)

## B70

Sealing & Increased Adhesion Coefficient (Mortar Adhesive & Additive)

## N50

Sealing & Reinforcement (Concrete Adhesive & Additive)

## P100

Facade Resin & Sealer (Resin for Wood, Brick, Stone, and Facades)

## PADAB

Sealing & Waterproofing Without the Need for Demolition (Hydro-Active Gel)

## SQ2000

Negative Moisture Control (Crystallizing Agent)

## MA700

Instant Control of Running Water (Rapid Setting Compound)

## SH7

Concrete Water Reducer & Plasticizer (Superplasticizer)

## SI30

Increased Adhesion Coefficient & Filling of Concrete & Mortar Surface Pores (Silica, Substitute for Stone Powder)

## P.P

Increased Tensile & Flexural Strength & Prevention of Cracks in Structures (Concrete Fibers)

## PLC

Control of Tensile Stress, Flexural Stress, & Stresses Caused by Temperature Fluctuations (Lighting)

## WS30

Sealing of Construction & Expansion Joints (Waterstop)

## PBP

Installation of All Types of Flooring with High Adhesion Coefficient (Powdered Tile Adhesive)

## D10

Sealing and Joint Filling (Grout Powder)

Instagram



Telegram



Online Store



Website



Connect With Us



NSG Peace In The Rain With Products

A product for sealing and resin (definite alternative to bitumen and traditional insulators)

### Introduction

A milky liquid with 100% sealing properties, which is a definite substitute for bitumen and traditional insulators, and becomes completely colorless after use on the surface. This product is based on acrylic resins and is made using nano technology and can be used on all types of permeable surfaces that have not been previously covered with petroleum based derivatives. In addition to being environmentally friendly, Z90 resin and sealing glue is highly resistant to detergents, UV rays and CO2 gas and does not allow the growth and penetration of moss, algae and bacteria on the insulation surface.

### Advantages

Ease of implementation, no need for cement and plaster mortar, can be applied by brush and gun, reducing the thickness of the insulation layer and no restrictions on the implementation in walls and heights, no sweating and sag of the sealing layers over time, no vulnerability and perforation due to the natural stresses of the structure, reduction of labor and material costs, ability to be combined with a variety of acrylic paints (water-based), approved by laboratories under the supervision of the Ministry of Health for use in drinking water tanks.

### How to use

**General method of product implementation: (implementation methods may be different according to the place of implementation)**

Solution A: In all stages, one unit of sealing glue and Z90 resin is combined with one unit of water, and this combination is called solution A for short.

**A: 100% sealing of cement surfaces (Method 222)**

- 1- Apply solution A with a brush on the surface of both hands until the previous layer dries
- 2- Combine one unit of cement and two units of sieved stone powder (micronized silica Si30) separately and add it to solution A. Then apply the smooth slurry obtained with a brush on the surface, with both hands, until the previous layer dries. (Maximum thickness allowed 5 mm)
- 3- Repeat the first step again

**B: Combination with color**

If you want to paint the structure, you can use the combination of three units of acrylic paint (water base) and solution A in the third step

**C: Sealing and resin facade**

Apply solution A completely with a brush or pump on the surface with both hands

**Note:** According to the place of implementation, the amount of porosity in the surface & the amount of permeability, the number of times of execution may be different & required to be tested

**D: Sealing and repair of strapping (Method 111)**

Perform each step of method 222 with only one hand and only on the place of the lacerations with a narrow brush.

**Note:** Make sure that none of the above steps should be performed using the traditional method of grouting (that is, spreading grout over the entire surface)

**Approximate consumption of the product**

For each square meter of sealing, 600 cc

For each square meter of resin, 300 cc

Z90



Note: Please read the full description and implementation tips related to Z90 resin and sealing glue on the [NSGco.ir](http://NSGco.ir) website



Noavaran Sanaat Padab  
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**NSG**

(A product designed for waterproofing and increasing the adhesive strength of mortar to surfaces.)

### Introduction

It is a milky-white liquid with sealing and adhesive properties, used for mixing into grout or mortar with a maximum thickness of 5 centimeters. It is based on acrylic resins and manufactured using nanotechnology. It is used in the construction of various cementitious mortars and grouts, such as mortar for installing stone, tiles, and mosaics; substrate preparation for screeding and creating slopes on walls and floors of parking lots, roofs, bathrooms, and restrooms; grout and fine topping mortar for swimming pools, saunas, and jacuzzis; concrete tanks and septic tanks; potable water tanks and fish ponds; roof gardens, terraces, and more.

### Advantages

Increasing the bond strength & preventing corrosion of rebar & metal components involved in cement mortars, preventing cracking in cement structures affected by temperature fluctuations and freeze-thaw cycles, creating density in the mortar, repairing and filling voids on the mortar surface, balanced drying speed, and approved by laboratories under the supervision of the Ministry of Health for use in drinking water reservoirs.

### How to use

#### General Method of Product Implementation:

(Implementation methods may vary depending on the location of execution).

##### A: Grout or Slurry

Combine one part B70 adhesive and mortar additive with three parts water to create a slurry or grout. A suitable dry mix for this slurry or grout would consist of one part cement and two parts sieved stone powder (micronized silica SI30).

##### B: Cement Mortar

Combine one part B70 mortar adhesive and additive with three parts water to create a repair mortar or for rendering purposes. A dry mix of one part cement and five parts double-washed sand (free from soil) is the most suitable composition for rendering mortar.

##### Approximate consumption of the product

For every square meter of mortar with a thickness of one centimeter, 300 cubic centimeters

**1 L****4 L****10 L****20 L**

Please refer to the [NSGco.ir](http://NSGco.ir) website for comprehensive details and implementation guidelines regarding B70 adhesive and mortar additive.



**N50****Concrete Adhesive and Additive****(A product for reinforcing and waterproofing concrete and mortar)****N50****Introduction**

It is a milky-colored liquid with simultaneous hardening and waterproofing properties, used for mixing into concrete or mortar at unlimited thicknesses. This product, which is based on acrylic resins and manufactured using nanotechnology, is used in the construction of concrete and cement structures, concrete mixtures, the creation of various repair mortars, stone and ceramic installation mortars, and repair mortars for cement and concrete surfaces.

**Advantages**

Increasing the tensile and flexural strength of cement structures, enhancing the level of convergence, bonding, and adhesion of the constituent parts of concrete, increasing the density and reducing the permeability of waterproof concrete, significantly increasing abrasion and traffic resistance, suitable for use as a midsection layer in various mortars and concretes (of any thickness), and certified by laboratories under the supervision of the Ministry of Health for use in drinking water reservoirs.

**How to use**

**General Method of Product Implementation:**  
(Implementation methods may vary depending on the location of execution).

**A: Repair Grout and Mortar**

Combine one part of N50 bonding agent & concrete admixture with three parts water to create a slurry. The slurry should consist of one part cement and two parts screened rock powder. Micronized silica (SI30) is the most suitable dry mix for repair mortar .

**B: Cement Plaster Mortar**

Combine one part of N50 bonding agent & concrete admixture with five parts of water to create a cement slurry. A mixture of one part cement and five parts double-washed sand (free from soil) is the most suitable dry mix for cement slurry .

**J: Concrete Pouring/Placement**

Mixing in the truck mixer must be done at high speed for 10 minutes, with a bonding agent and concrete admixture N50 (between 1% and 2% of the cement weight) and twenty units of water .

**Approximate Product Consumption Rate**

For every cubic meter of concrete with a cement content of 350 kg/m<sup>3</sup>: 7 liters of admixture are required.  
For every square meter of mortar with a thickness of one centimeter: 250 cc of admixture are required.

**1 L****4 L****10 L****20 L**

Please refer to the [NSGco.ir](http://NSGco.ir) website for complete details and application notes regarding **N50** concrete adhesive and additive.



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# P100

## Facade Sealing Resin and Adhesive

(A product for resin, wood, brick, stone, and facades)

### Introduction

It is a milky-white liquid with 100% waterproofing properties & high viscosity that becomes completely colorless after application to the surface. It is based on acrylic resins and manufactured using nanotechnology. After drying, it becomes completely hard & lacquer-like. This product can be applied to all permeable surfaces where the final surface is not oil-based, such as cement, concrete, stone, plaster, brick, wood, etc. (the final layer thickness is 200 to 300 microns). It is used on surfaces where more gloss and shine are desired. In humid and tropical areas, it is recommended to use this product as a final layer for resin and facade waterproofing instead of Z90 waterproofing adhesive. In addition to being environmentally friendly, P100 facade waterproofing resin and adhesive is fragrant and highly resistant to detergents, UV rays, and CO2 gas, and it does not allow the growth and penetration of moss, algae, and bacteria on the insulated surface.

### Advantages

Resin and waterproofing can be applied simultaneously on various surfaces and facades. It can be applied in humid and damp areas due to its relatively fast drying time and its hard, lacquer-like finish (non-sticky after application). It creates shine and gloss on surfaces & is non-corrosive against acid rain. The layers will not be destroyed or flaked when exposed to direct sunlight. It is compatible with all types of acrylic paint (water-based) and has approval from laboratories under the supervision of the Ministry of Health for use in drinking water reservoirs.

### How to use

#### General Product Installation Method:

**(Installation methods may vary depending on the location of implementation.)**

One unit of facade sealing resin and P100 adhesive is mixed with four units of water. For simplicity, this mixture will be referred to as Solution B.

(The amount of water mixed will vary for each surface, depending on its absorption rate.)

#### A: Resin Coating and Waterproofing of Façade

Apply solution B to the surface using a brush or spray gun in two coats, allowing the previous coat to dry completely before applying the next. (The number of coats may vary depending on the absorbency of the surface and the desired level of gloss.)

#### B: Mixing with Acrylic Paint

Combine one unit of component B with three units of acrylic paint. (For dark colors, apply one coat evenly; for light colors, apply two coats, allowing the previous coat to dry completely before applying the next. This ratio may vary depending on the type of paint.)

#### Approximate Product Consumption Rate

For every square meter of resin and waterproofing applied, use 100 cc

Approximate Product Composition Ratio

One part P100 facade resin and sealant + four parts water

(This ratio may vary depending on the absorbency of the surface)

P100

300 cc

1 L

4 L

10 L

20 L

Please study the complete details and executive points related to **P100** facade sealing resin and adhesive on the **NSGco.ir** website.



**NSG** Peace In The Rain With Products

(a product for sealing and sealing without the need for destruction)

### Introduction

The ready-to-use paste is milky colored with 100% sealing properties, which is a definite substitute for traditional grouts and is used for repairing and repairing joints (without the need for destruction), sealing and sealing stones, mosaics, tiles and ceramics, around sinks, toilets, bathrooms, kitchens, swimming pools, saunas, jacuzzis, terraces, and all water catchment places where the joints are damaged and have moisture problems.

PADAB sealing paste, which is based on acrylic resins and made using nano technology, can penetrate any type of seams and joints, and also has excellent adhesive strength on all types of surfaces (even iron, wood and glass). This product is fragrant and environmentally friendly, and after being applied, it is highly resistant to various household and industrial detergents, acid, UV rays, and CO2 gas, and does not allow the growth and penetration of moss, algae, and bacteria on the insulating surface. It also easily tolerates positive and negative water pressures.

### Advantages

A definitive alternative to traditional grouts with a long lifespan, no need for destruction, high hardness against wear, quick and easy implementation, applicable by the public and no need for expert personnel, no corrosion and discoloration over time, free from any skin and inhalation complications, saving time and money, very high resistance to water and moisture penetration, aromatic and hygienic, approved by laboratories under the supervision of the Ministry of Health for use in drinking water tanks

### How to use

This paste is used to repair, repair and seal all joints and seams of stone, tile, ceramic, brick, wood, etc. In places such as kitchen, living room, swimming pool, sauna, jacuzzi, around the sink, water pipes and so on. is used

**General method of product implementation:**

**(Executive methods may be different according to the place of implementation)**

**A: Sealing and repairing cracks up to 2 mm thick**

Inject the paste between the bandages & cleaned areas & smooth it with your fingertip or spatula. After 10 to 20 minutes, depending on the humidity and temperature of the environment, the PADAB waterproofing paste reaches its initial setting and starts to harden. In this interval, clean the areas around the straps or the spots that are unintentionally smeared with the paste with a razor or damp cloth. After 7 to 12 hours (depending on the humidity and temperature of the environment), this paste is completely dry and the desired area can be washed. If possible, do this when you don't need the venue for the next 12 hours

**B: combination with color (colored stringing)**

If you need to change the color of each tube, combine PADAB waterproofing paste in a separate container with the desired base water color

**C: Sealing and repairing cracks in thicknesses of 2 to 5 mm**

Perform step A up to a thickness of 5 mm. After 10 to 20 minutes, cracks may appear on the applied surface (due to the high thickness). At this stage, use PADAB waterproofing paste to repair all surface cracks

Note: Please read the full description and implementation tips related to **PADAB** waterproofing paste on the [NSGco.ir](http://NSGco.ir) website



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**SH7****Superplasticizer****(A product for workability enhancement and water reduction in concrete)****SH7****Introduction**

A chlorine-free liquid with lubricating properties, reducing water in concrete and dispersing cement particles, is used to improve the quality and performance of concrete without reducing its strength, thereby maintaining its cohesion. Additionally, after use in concrete, it increases slump and produces self-leveling concrete. This material, based on polycarboxylate ether, effectively disperses cement particles at the start of hydration (due to its electrostatic charge) and its molecular chains strongly prevent the re-aggregation of cement particles. This behavior results in the permanent maintenance of cement particles in a separate & dispersed state, creating a fluid concrete with a very low water content.

**Advantages**

Maintaining compressive strength at different concrete ages, reducing water mixture by up to 30% with constant workability, enhancing the adhesion of concrete to rebar and steel, facilitating pumping and reducing vibration time, increasing the impermeability of concrete, reducing the water-to-cement ratio and saving water and cement consumption, improving concrete performance, maintaining slump over an extended period, increasing the flexural strength of hardened concrete, increasing the slump of concrete at a constant water-to-cement ratio, and maintaining the slump of concrete at a lower water-to-cement ratio.

**How to use**

Concrete placement in cold weather, used in ready-mix and precast concrete industries, self-compacting concrete construction, high-speed concrete placement, producing concrete with high early strength and long-term durability, manufacturing floor screeds, and casting components with densely reinforced rebar.

**General method of product installation:**

Mixing should be done for 10 minutes at high speed.

It is recommended that site tests be conducted before application to determine the exact amount of Superplasticizer required.

**Approximate Product Consumption Rate**

Between 0.2% and 1% of the weight of cement

note: Never add this product to dry materials.



Please study the comprehensive details and execution guidelines for Superplasticizer **SH7** on the **NSGco.ir** website.

**NSG** Peace In The Rain With Products

(Product for controlling negative moisture)

### Introduction

A powder with waterproofing properties that is applied as a coating on cementitious surfaces by creating cement crystals in structures experiencing negative moisture in an integral manner. This powder, based on cement and mineral fillers, is produced using nanotechnology. After mixing with water, it penetrates concrete or cementitious surfaces and forms crystals resistant to moisture ingress through a chemical reaction in the pores and voids of the concrete. This product is not merely a surface coating; rather, due to the reaction of its components with moisture and water, it creates a compact and integral structure with the concrete, serving as one of the auxiliary systems in the waterproofing and protection of concrete structures. The SQ2000 crystalline powder is highly resistant to CO<sub>2</sub> gas and negative water pressure, and it is environmentally friendly.

### Advantages

Usable in the construction of waterproofing mortar, ease & variety in application (via shotcrete, brush & spray), prevention of negative moisture penetration, resistant to chemicals, prevention of concrete degradation against weathering, no disruption to the structural breathing system, possessing permanent protective properties through the creation of a living waterproofing system (constantly reacting with water and lime present in cement), applicable on various cement and concrete surfaces including uneven surfaces, no need for primer and substrate preparation (a non-smooth and clean surface is sufficient), with high penetration depth in the concrete surface.

### How to use

#### General method of product installation:

(Installation methods may vary depending on the location of application).

Mix the SQ2000 crystalline powder & water in the specified ratios below, & apply it to the surface using a brush or spray gun. For proper curing, keep the application area consistently moist by spraying water for up to 3 days.

#### Approximate Product Consumption Rate

For each layer with a thickness of 0.8 mm, 1200 to 1500 grams per square meter.

#### Approximate composition of SQ2000 crystallizing powder:

Application using a brush 2 parts SQ2000 crystallizing powder + 1 part water.

Execution using pump 2 units of crystallizing powder SQ2000 + 1.5 units of water.

Preparation of a paste mortar 3 parts of crystallizing powder SQ2000 + 1 part water.

note: When using the product, be sure to wear gloves

Please refer to [NSGco.ir](http://NSGco.ir) for comprehensive details and application guidelines regarding SQ2000 crystalline powder.



10 kg



Noavaran Sanaat Padab  
Construction & Engineering Company

**NSG**

(A product for immediate control of running water)

### Introduction

It is a powder with waterproofing and rapid blocking properties designed to stop the flow of running water. It is used in various locations on concrete surfaces, cement walls, and all surfaces exposed to the pressure of surface and groundwater. This powder, based on cement and mineral fillers and manufactured using nanotechnology, quickly achieves its final set after mixing with water, effectively blocking the entry points of running water in the concrete.

MA700 rapid-setting mortar is highly resistant to CO<sub>2</sub> gas and negative water pressure, and it is also environmentally friendly.

### Advantages

Prevents visible water flow, chemically resistant, possesses negative and positive waterproofing properties, does not adversely affect concrete, prevents concrete decomposition and deterioration against weathering, does not interfere with the structural breathing system, can be applied to various cementitious and concrete surfaces, even uneven surfaces, requires no primer or underlayment (a non-polished and clean surface is sufficient), achieves initial set in less than one minute and blocks water flow immediately after application.

### How to use

It is used in tunnels, elevator pits, negative floor walls, public parking lots, swimming pools, gardens, drinking water reservoirs, septic manholes, and reservoirs where access from inside the structure is not possible, concrete water and sewage pipes and fittings, between different layers of concrete and brick, as well as in all places adjacent to the flow of groundwater and surface water.

#### General Method of Product Implementation:

(Implementation methods may vary depending on the location of implementation.)

Combine 6 units of MA700 rapid-setting powder with one unit of water to achieve a stiff paste. Then, manually or using a trowel, apply the mixture into the crack from which water is escaping. Firmly hold it in place by hand for one minute until the water flow ceases.

Note: MA700 rapid-setting mortar requires curing within the first five minutes, and its setting process essentially occurs in running water. Therefore, if there is a slight flow of water in the crack you intend to fill, you must continuously drip water onto the mortar while your hand is holding it in place, starting from the moment you apply the paste into the crack. Continue this for up to one minute to ensure it reaches its final set.

#### Approximate Product Consumption Rate

It varies depending on the structural conditions of the building and the presence of water entry points (or water ingress points).

Note: When using the product, be sure to wear gloves.

Please refer to the [NSGco.ir](http://NSGco.ir) website for complete details and implementation tips regarding MA700 instant plugging powder.



5 kg



(A product replacing stone powder with high adhesion coefficient)

### Introduction

It is a powder composed of crushed quartz particles based on mineral fillers. After being mixed into mortar, it significantly increases adhesion. It also has high resistance and stability against acids and bases. It has a hardness of 7 on the Mohs scale and a specific gravity of 2.65 kg/l. It is produced in four types: super-premium, micronized (or flour-like), fine-grained, and sugar-like.

### Advantages

Enhancement of mechanical strength and ductility after mixing with liquids and solids, increased thermal resistance, improved quality, reduced final material cost, increased adhesion coefficient, and high resistance to impact and abrasion

### How to use

It is used in all fields of the construction industry, including facade construction, blockwork, production of various mortars and concrete, production of concrete flooring, production of epoxy flooring, sandblasting, cementing, and more. Its types include:

#### (A) Super Deluxe:

This product is used to fill extremely fine pores on the surface of concrete and mortar, increase the adhesion coefficient, and significantly reduce permeability. It is utilized in combination with waterproofing adhesive and Z90 resin to create the mortar used in the insulation layer (Method 222). Additionally, it can be combined with B70 mortar adhesive and additive to produce the mastic for the insulation layer's substrate.

#### B) Micronized or Powdered:

It has common properties with super premium silica, but differs in that its grain size is coarser and its purity percentage is lower.

#### C) Fine Grain:

It is used to create a rough bonding surface and increase the adhesion coefficient in areas where tiles, ceramics, stones, etc., are directly installed on the insulation layer.

#### D) Sugar Sand

To reduce the fineness modulus (FM) in coarse sands, which ultimately leads to a paste-like state in concrete and mortar, it is utilized. The production of epoxy flooring in ramps and inclined areas that require increased friction, the preparation of silica sand pieces and bricks, and use on concrete or mosaic flooring to enhance their resistance to weight pressure, impact, etc., are other applications of this product.

Using SI30 silica instead of stone powder, on one hand, increases the density of the final insulation layer, thereby minimizing permeability. On the other hand, it significantly enhances the adhesion coefficient of the insulation layer, eliminating the possibility of peeling and separation from the surface.

#### Approximate consumption rate

For every square meter, 1 kilogram

#### The approximate composition

Two units of silica SI30 + one unit of cement

Please refer to [NSGco.ir](http://NSGco.ir) for detailed guidelines and operational notes regarding silica SI30 products.



(a product designed to control tensile and bending stresses caused by temperature fluctuations).

### Introduction

It is made of fiberglass and functions similarly to metal mesh reinforcement in structures. Due to its flexibility, light weight, resistance to tensile and flexural stresses, and control over expansion and contraction caused by temperature fluctuations, it is a very ideal option for strengthening & reinforcing the external surfaces of concrete, cement mortars, and gypsum plasters. The PLC mesh weighs 75 grams per square meter and has 5x5 millimeter openings.

### Advantages

Preventing cracks in the insulation layer, reinforcing connections and intersections of walls and construction joints, strengthening various fillets at the edges of surfaces, leveling the repair site of cracks and repair points, reinforcing the outer surface of the structure in areas with structural vibrations, facilitating the implementation of the insulation layer by creating a suitable contact surface at the joints and connections.

### How to use

The connection point of metal and PVC pipes with concrete or cement surfaces, creating uniformity on uneven surfaces such as floor drain openings to the structure's surface, flooring and fillet construction of pools and Jacuzzis; sanitary facilities, roofs and tanks, helping to implement the insulation layer in all snowy places and exposed to temperature fluctuations such as roofs and terraces.

#### General Method of Product Implementation:

(Implementation methods may vary depending on the location of execution.)

##### A: Use in Repair Mastics

After applying the first coat of patching mastic using an N50 concrete adhesive and additive, or a B70 mortar adhesive and additive, adhere the mesh to the surfaces. Once dry, fill the mesh openings by applying the second coat of mastic.

##### B: Use in Isolation Mastics

After applying the first layer of sealing mastic using a sealant and Z90 resin, adhere the mesh to the surfaces and construction joints. Once dry, fill the mesh openings by applying the second layer of mastic.

#### Approximate Product Consumption Rate

Appropriate to the dimensions of each structure

Note: Please read the complete explanations and executive points related to **PLC** mesh on the [NSGco.ir](http://NSGco.ir) website.



**NSG** Peace In The Rain With Products



(a product designed to control tensile and bending stresses caused by temperature fluctuations).

### Introduction

Colored glass fibers are made of polypropylene chips and are used to increase the flexural and tensile strength of structures and to prevent the formation of surface and deep cracks in concrete, cement, and gypsum mortars. The shrinkage of concrete and mortar after drying and reaching final setting leads to changes in their volumetric dimensions, causing numerous surface & deep cracks. By using a small amount of P.P. concrete fiber during concreting and cement work, these cracks are significantly reduced.

### Advantages

Controlling tensile and flexural stresses caused by temperature fluctuations, preventing cracking in concrete and cement mortars, increasing resistance in repair mortars and stress points in the structure, reducing the specific weight of concrete, increasing the safety factor of concrete against static and dynamic loads, creating isotropic conditions and reducing the brittleness of concrete, increasing the ductility of concrete, absorbing impact energy, eliminating the need to add extra water to the concrete (due to its hydrophobic properties)

### How to use

Construction of precast concrete components (such as concrete blocks, cement blocks, and concrete walls), prefabricated gypsum and cob components, shotcrete application on curved surfaces (like tunnels), reducing the thickness of concrete slabs while maintaining their strength, construction of impact-resistant structures such as shelters and explosive storage facilities, construction of airport runways, concrete dam bodies, protective walls & nuclear reactor buildings, production of various repair mortars, stabilization of rock slopes and retaining walls, foundations for large industrial motors and machinery like turbines and diesel generators, manufacturing of prestressed concrete beams and fender piles.

#### General Product Installation Method:

**(Installation methods may vary depending on the location of implementation.)**

At any time, 1 gram of P.P. (Polypropylene) concrete fiber can be added to the mixer with one liter of water. (If the fibers are added to the water at the end, they must be placed inside the mixer and mixed for 3 to 4 minutes afterward to achieve a homogeneous mixture.)

When using ready-mix concrete, gradually introduce the P.P. concrete fibers into the truck mixer. Continue high-speed mixing until you are confident that the fibers are completely dispersed throughout the concrete.

#### Approximate product consumption rate

0,5 to 2 kilograms per cubic meter

Important Note: Never add fibers to dry materials.

Please refer to the [NSGco.ir](http://NSGco.ir) website for comprehensive details and implementation guidelines regarding P.P concrete fibers.



1 kg



Noavaran Sanaat Padab  
Construction & Engineering Company

**NSG**



(a product designed to control tensile and bending stresses caused by temperature fluctuations).

### Introduction

The flexible waterproofing strip is made of PVC, with a thickness of 3 mm and a width of 30 cm, used for sealing concrete joints and seams. It is available in two types: flat and ribbed. The flat waterstop is suitable for construction joints, while the ribbed waterstop is suitable for expansion joints.

### How to use

The WS30 waterstop is used to maintain structural integrity, seal joints, & areas where concrete pouring is interrupted, as well as fixed and moving joints.

#### General method of product installation:

(Installation methods may vary depending on the location of application).

The placement of the waterstop is at the interface between the first and second concrete pours, positioned so that half of its width is embedded in the initial concrete and the other half in the secondary concrete. The waterstop is fixed between the reinforcement mesh. Furthermore, a clip can be used to ensure that it remains in place.

#### Approximate consumption rate of WS30 waterstop

Proportional to the dimensions of the structure per meter

#### Packaging Dimensions

Length: 25 meters, Width: 30 centimeters



Pitted



Smooth

Note: For comprehensive details and execution guidelines regarding WS30 waterstops, kindly refer to the [NSGco.ir](http://NSGco.ir) website.



(A high-adhesion product for installing various types of flooring)

### Introduction

It is a powder based on cement and polymer additives with a specific gravity of 1.55 kg/liter, which is used to install various types of flooring and can withstand the weight of materials up to 40 kg/square meter.

### How to use

PBP powdered tile adhesive is used due to its high adhesion to surfaces, eliminating the need for additional support when installing various types of tiles, ceramics, stones, and bricks, especially in environments exposed to water and moisture such as bathrooms, restrooms, swimming pools, and saunas.

#### Approximate Product Consumption Rate

Three units of PBP powdered tile adhesive with one unit of water.

Suitable installation surfaces include: concrete, cement-sand mortar, glazed tiles, treated woods with a firm, level underlayment (without blistering and free of any petroleum-based materials).

Also, to increase resistance & waterproofing, a mixture of one unit of adhesive and N50 concrete additive + three units of water can be used. Initial set time is 3 hours and final set time is 7 days

#### Approximate Product Composition Ratio

For smooth surfaces: 2 kilograms per square meter.

For rough surfaces: Between 5 to 10 kilograms per square meter with a thickness of 3 to 6 millimeters.



Note: Refer to the [NSGco.ir](http://NSGco.ir) website for comprehensive instructions and application tips regarding PBP powder tile adhesive.



**D10****Grout Powder****(Waterproofing and joint sealing product)****Introduction**

This is a powder with high sealing and adhesive properties, used for grouting, repairing joints, and filling thin spaces between tiles, ceramics, stones, and bricks. It is made from a base of cement, mineral fillers, and polymer additives, has a specific gravity of 1.55 kg/liter, and is suitable for grouting joints with a width of approximately 3 to 6 millimeters. Additionally, after hardening, it exhibits very high resistance to standard stresses, surface erosion, dampness, and humidity. (To increase resistance and waterproofing, a mixture of one part N50 concrete adhesive and additive + three parts water can be used.) The initial setting time is 3 hours, and the final setting time is 7 days

**How to use****Method of Application****Approximate Consumption Rate of the Product**

For each square meter, 250 grams (of tiles and ceramics with dimensions of 20 x 20 cm)

For rough surfaces: between 5 to 10 kilograms per square meter, with a thickness of 3 to 6 millimeters

**approximate mixing ratio of the product**

two parts D10 grout powder + one part water

**D10****5 kg****10 kg**

Please refer to the [NSGco.ir](http://NSGco.ir) website for comprehensive instructions and application tips regarding **D10** joint filling powder.

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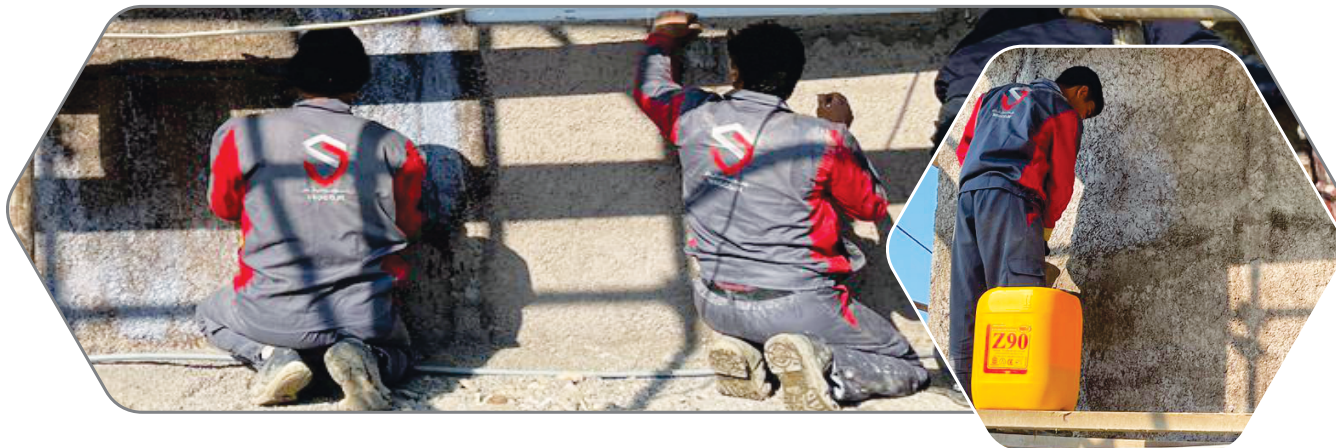
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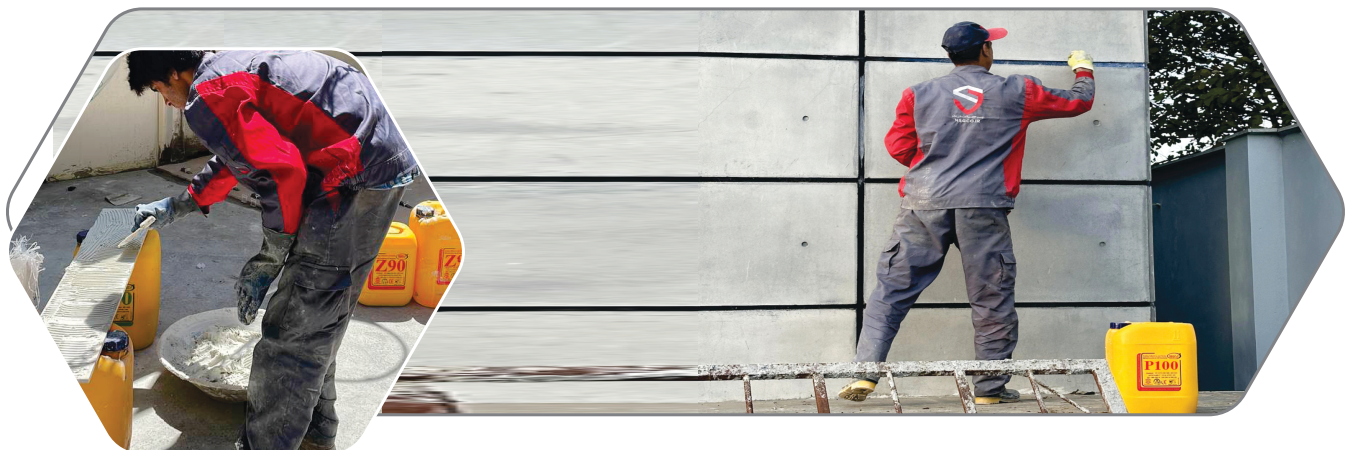
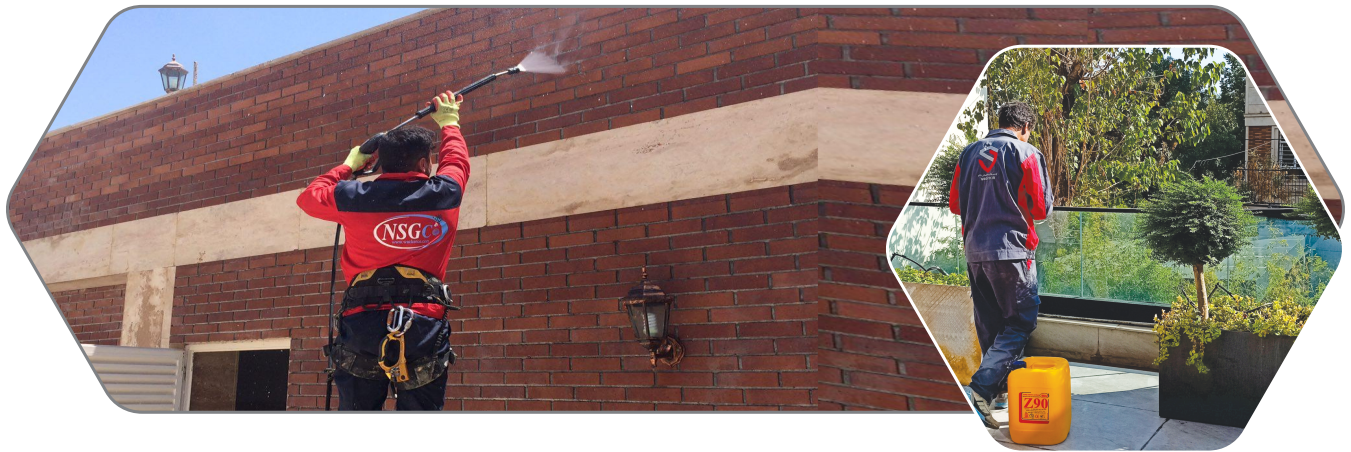
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Construction & Engineering Company  
**NSG**

**Some of the projects implemented by the experienced staff of the technical and engineering unit of the company**

province	subject
((Tehran))	Isolation of shear walls and retaining walls of Saman al-Hajj housing cooperative
((Khorasan Razavi))	Isolation of Darvishi Hotel lobby fountain
((Khorasan Razavi))	Isolation of the motor house of Salman Tower
((Isfahan))	Isolation of sports complex and central kitchen of Kausar Hotel
((Isfahan))	Negative pressure sealing of the retaining walls of the Emerald Twin Towers
((Mazandaran))	Isolation of the Roof Garden Tower of the Middle East Diamond Diamond Motel
((Khorasan Razavi))	Resin facade of Quds Hotel Mashhad (Mamut company)
((Tehran))	Isolation of bathrooms and central kitchen floor of Parsian Azadi Hotel
((Tehran))	Isolation of Evin Hotel toilets
((Khorasan Razavi))	Isolation of bathrooms in Ayan and Narjestan hotels
((Khorasan Razavi))	Isolation of the fountain and jacuzzi of the Azadi Hotel in Mashhad (Sadarat Bank)
((Khorasan Razavi))	Khayyam hotel laundry isolation
((Tehran))	Implementation of concreting and flooring of Hyperstar commercial office complex
(( Isfahan))	Isolation of launch stations of Absar Water Park
((Tehran))	Implementation of floor construction and isolation of Nutlabar Andrezgo
((Tehran))	Shemron kebab kitchen insulation
((Tehran))	Implementation of flooring and kitchen isolation of Tabrizian restaurant
((Tehran))	Isolation of the pond and fountain of the Iranian Hall garden
((Tehran))	Isolation of the water tank of the big city car wash
((Tehran))	Isolation of the elevator shaft and the side walls of the negative floors of the Zafar commercial office project
((Tehran))	Isolation of the entrance area of the 240-unit Darabad complex
((Tehran))	Isolation of the elevator shaft of Armeh Sazeh Novin Company
((Qazvin))	Implementation of foundation waterproofing concrete and retaining walls of Iran Khodro Takestan Company
((Bushehr))	Insulation of the roof of phase 12 of South Pars Asalouye (Kison Company)
((Bushehr))	Reinforcement of concreting and isolation of concrete buildings of phase 2 and 3 refineries in South Pars Asalouye
((Bushehr))	Isolation of the second refinery (water transfer channel and electrical room) phases 2 and 3 of South Pars Asalouye
((Khorasan Razavi))	Isolation of the hot water pool of Maqsood Chinese factory
((Khorasan Razavi))	Implementation of flooring and isolation of Sabah Qochan dairy factory
((South Khorasan))	Murgh Mader water tank isolation
((Tehran))	Sealing the negative pressure of the wall of the sports hall and the roof of the Mega Motor Company server
((Alborz))	Mapna locomotive resin
((Tehran))	Implementation of concrete pool waterproofing and retaining walls of sports complex of Sapco company
((Tehran))	Septic isolation of wastewater of Sabzi Iran Company
((Tehran))	Isolation of fountains and hot and cold ponds of Setsa company
((Tehran))	Isolation and infrastructure of Padir company roofs
((Qazvin))	Isolation of drinking water tank of Rasen Bazar Development Company
((Tehran))	Isolation of the elevator shaft and the negative floor wall of Ghadir Tower (Sadarat Bank)
((Tehran))	Isolation of Burj Sepidar fountain
((Tehran))	Sealing the negative pressure of the elevator shaft of the Mehrpham project
((Tehran))	Elevator pit, jacuzzi pool and water feature of Neday Niavaran project
((Tehran))	Isolation of the roof garden of the Zafaranih complex
((Tehran))	Isolation of the facade of Mes tower
((Tehran))	Roof insulation and sanitary facilities of Naft complex

