

## ***The Catalog of TISS Products***

### **Preface:**

Kermanian Sefidbam Company with years of experience in manufacturing and distributing the new generation of humidity insulation, fiber insulation, tile adhesive, waterproof mineral face and all concrete additives is the biggest and most equipped factory in the southeast of the country. This company, with TISS brand, takes advantages of their experts knowledge, as well as local and foreign research achievements and tries to make efficient products based on global standards. So, its continuous effort led to the certificate ISO 14001, ISO 9001, OHSAS 18001 in the year 1390

Working with different representatives, the factory is proudly distributing its products all over the country. The large number of customers and welcoming different products of Kermanian Sefidbam Company shows the superiority of its products to those of other colleagues in this part.

It is hoped after using various products of the company, you join the large family of its customers and our products can provide your satisfaction.

## Concrete Plasticizers

### **Plasticizer (Tiss R300)**

Plasticizer and concrete strength increaser

Consumption: 0.5% to 1.5 % by the weight of cement

### **Super Plasticizer (Tiss R301)**

Plasticizer and concrete strength increaser – water reducer

Consumption: 0.5% to 1.5 % by the weight of cement

### **Retarder Super Plasticizer (Tiss R302)**

slump maintaining Plasticizer and concrete strength increaser – water reducer

Consumption: 0.5% to 1.5 % by the weight of cement

### **Ultra Super Plasticizer (Tiss R304)**

slump maintaining Plasticizer and concrete strength increaser – Intense water reducer

Consumption: 0.2% to 0.8 % by the weight of cement

### **Retarder Ultra Super Plasticizer (Tiss R305)**

slump maintaining Plasticizer and concrete strength increaser – Intense water reducer

Consumption: 0.2% to 0.8 % by the weight of cement

### **Concrete Retarder (Tiss R325)**

Plasticizing and increasing the initial setting time of concrete for using in the summer and warm weather

Consumption: 0.3% to 1.5 % by the weight of cement

### **Concrete Fast hardener (Tiss R326)**

Concrete water reducer and concrete setting in minimum possible time

Consumption: 2% to 5 % by the weight of cement

## Ready to Use Mortars

### **Normal Grout ( Tiss Grout 1000)**

If you need a plastic state, mix each kilogram of grout with 130cc to 140cc water and use.  
If you need a liquid state, mix each kilogram of grout with 145cc to 190cc water and use.

### **Expansive Grout ( Tiss Grout 1001)**

If you need a plastic state, mix each kilogram of grout with 130cc to 140cc water and use.  
If you need a liquid state, mix each kilogram of grout with 145cc to 190cc water and use.

### **Expansive Grout ( Tiss Grout 1002)**

If you need a plastic state, mix each kilogram of grout with 125cc to 135cc water and use.  
If you need a liquid state, mix each kilogram of grout with 140cc to 155cc water and use.

### **Expansive Grout ( Tiss Grout 1003)**

If you need a plastic state, mix each kg of grout with 1250cc to 135cc water and use.  
If you need a liquid state, mix each kg of grout with 140cc to 155cc water and use.

### **Tiss Self-Leveling Mortar ( Tiss Self-Leveling 1015)**

Consumption: Depending on the porosity and roughness of the surface, 4.5 kg self-leveling mortar is needed to cover a square meter with a 4 to 6 mm thick layer.

### **Colored Industrial Hard Flooring ( Tiss Hard Floor Top 1030)**

Ready to use mortar with high compressive strength to use for parking floors and factory shed floors

1.5 to 2 kg colored industrial hard flooring is needed to cover a square meter with a 1 mm thick layer. It is suggested to use 6.5 to 7 kg colored industrial hard flooring per 1 square meter.

**Waterproof colored pointing powder ( Tiss Tile Grout 1010)**

For pointing tiles and ceramic in pools, bathrooms, kitchens, and mosaics on roofs. This product is completely Insulated.

Mix materials and water with a ratio of 1 to 3 by using an electric mixer

**Two-Component Repairing Mortar (Tiss Plaster 1040)**

Ready to use mortar to repair old concretes, concrete columns and stands- filling and repairing honeycombed concrete – excellent sticking to the old concrete

**Waterproof Ready to Use plaster (Tiss Plaster 1041)**

Ready to use mortar- completely waterproof- resistant to positive and negative pressure of water- to insulate pools, septics, underground walls and elevator hoistways

Consumption: Depending on the area of work 8 to 10 kg for every square meter by using a trowel

**Waterproof Ready to Use plaster ( Tiss Apex 1042)**

Ready to use mortar- completely waterproof- resistant to positive and negative pressure of water- to insulate pools, septics, underground walls and elevator hoistways

Consumption: Depending on the area of work 2 to 4 kg for every square meter by using a brush

**Concrete Surface Hardener( Tiss HS 1020)**

Ready to use product for dry strewing on the surface of frash concrete in order to enhance abrasion resistance consisting of very hard mineral aggregates, cement and chemical additives that increases resistance of the surface against heavy vehicles and forklift trucks crossing, atmospheric factors, erosion, and penetration of liquids

Consumption: It depends on the type of using implemented floor. For light using 5 to 7 kg and for heavy using 7 to 9 kg for every square meter

## Micro Silica Gel

### **Filler Micro Silica Gel ( Tiss GMS 330)**

Increasing concrete compressive strength -reducing concrete permeability

Consumption: 1% to 5 % by the weight of cement

### **Micro Silica Gel ( Tiss GMS 331)**

Increasing concrete compressive strength -reducing concrete permeability

Consumption: 1% to 5 % by the weight of cement

### **Fiber Micro Silica Gel (Tiss GMS 332)**

Increasing compressive and bending strength and abrasion resistance of concrete –intensive reducing of the negative effects of salt water, humidity, cold and hot cycles on concrete

Consumption: 1% to 5 % by the weight of cement

### **Multi-Purpose Micro Silica Gel (Tiss GMS 333)**

Increasing compressive and bending strength and abrasion resistance of concrete –intensive reducing of the negative effects of salt water, humidity, cold and hot cycles on concrete

Consumption: 1% to 5 % by the weight of cement

### **Power Gel (Tiss GMS 336)**

Improving the rheological properties in plastic state and increasing the efficiency and quality of concrete by increasing compressive, bending and tensile strength of concrete to make it powerful, waterproof and impermeable

Consumption: 1% to 3 % by the weight of cement

### **Colored Micro Silica Gel (Tiss GMS 350)**

Increasing compressive and bending strength and abrasion resistance of concrete – All the concrete will be colored by adding colored micro silica gel to the mixer

Consumption: 1% to 3 % by the weight of cement

## Concrete Antifreeze

<b>Reinforced Concrete Antifreeze( TISS AF 311)</b>
<b>Reinforced Concrete Antifreeze( TISS AF 313)</b>
<b>Non-reinforced Concrete Antifreeze( TISS AF 314)</b>
<b>Non-reinforced Concrete Antifreeze( TISS AF 315)</b>
The consumption of cement depends on cement characteristics as well as ambient temperature and cement content. You can see the following table as a help to test.

<b>temperature range</b>	<b>cement content: 300</b>	<b>cement content: 350</b>	<b>cement content: 400</b>
0 to -5	2.5% by weight of cement	2% by weight of cement	1.5% by weight of cement
-5 to -10	3.5% by weight of cement	3% by weight of cement	2% by weight of cement
-10 to -15	5% by weight of cement	4% by weight of cement	3% by weight of cement

## Liquid Humidity Insulation

### **Tiss White Insulation (Tiss White liquid Insulation 200)**

1. Humidity insulation of roofs, foundations, walls faced to the rain, bathrooms, swimming pools, sauna, Jacuzzi, kitchens and mosque domes
2. Covering the tar layer of the roof to increase the tar layer longevity about three times and preventing it from softening in heat and wasting energy
3. Thermal insulation of cooling rooms, factory sheds, aviculture, cooler channels and connexes
4. Preventing the rotting of gable roof ceiling, factory sheds, aviculture and factories until 30 years
5. For insulating walls and ceiling and preventing heat exchange inside the building in tropical areas

Consumption: 1.5 kg for every square meter

### **Tiss Roof Insulation (Tiss Roof Insulation 260)**

1. Humidity insulation of roofs, foundations, walls faced to the rain, bathrooms, kitchens and mosque domes
2. Covering the tar layer of the roof to increase the tar layer longevity about three times and preventing it from softening in heat and wasting energy
3. For insulating walls and ceiling and preventing heat exchange inside the building in tropical areas

Consumption: 3 kg for every square meter

### **Tiss Fiber Insulation (Tiss Fiber Insulation 210)**

A new and unique product for insulating expansion-compression joints of the building, swimming pools, bridges, foundations, bathrooms, garden walls and all types of plasters and cement boards with 50years useful life

Consumption: 2.5 to 3 kg for every square meter

### **Tiss Metal Insulation (Tiss MI 250)**

A new and unique product for insulating metal roofs, iranit, galvanized sheets and sandwich panels

Consumption: 600 to 1000 g for every square meter

### **Tiss Solid Insulation (Tiss SLI 230)**

This product is mainly used to insulate the gable roof ceilings, iranit and cement ceilings, and as well as shear walls

Consumption: 1 kg for every square meter

### **Tiss Water Insulation (Tiss BI 270)**

This product is mainly used on knauf walls and plasters. It is used as humidity insulation of kitchen and bathroom walls .

## **Acoustical and Thermal Insulation**

### **Light Mix (Tiss Light Mix 220)**

It is a coverage on the basis of polymeric resin and porous micron grains which is used instead of plaster dust or cement work under the plaster layer. A layer with 2.5 to 3 cm thickness makes the heat and sound transfer about zero. It is a good alternative to rock wool and glass wool and does not have their harms. This material is fireproof and does not burn.

## **Primer**

### **Tiss Primer (Tiss Primer 800)**

It is used to insulate walls, concrete structures, plasters, cement boards, bathroom and kitchen walls, furring for implementing water based paints, solar tiss and insulation on every surface with high permeability and no surface adhesion.

High adhesion to paints or tile adhesives which are implemented on it.

Consumption: 250 to 350 g for every square meter

### **Paint Furring Primer (Tiss Primer 810)**

Applicable on walls, concrete structures, plasters, cement boards and in various colors  
For furring and implementing the facade and water based paints on it

Consumption: 200 to 300 g for every square meter

**Tiss Isopasta (Tiss Ep 820)**

It is a black and polymer- based product with an excellent coverage for insulating foundation, water saving reservoirs - amplifier of chemical and mechanical properties of concrete- strengthening against sulfate attack

Consumption: 0.5 to 1 kg for every square meter

**Paints****Excellent Plastic Paint (Tiss Paint 760)**

Made of excellent materials- excellent covering- completely washable

**Excellent Half Plastic Paint (Tiss Paint 770)**

Made of excellent materials - excellent covering -can be cleaned by a handkerchief

**Acrylic Paint (Tiss Paint 780)**

Made on the Basis of international standards- excellent covering- completely washable- fixed and with no change color- in two types of semi glossy and opaque

**curb Paint (Tiss Paint 785)**

Based on the water-based acrylic resin –excellent adhesion to cement surfaces and curbs – fixed color – waterproof – resistant against Exfoliating - curb protection against environmental factors and abrasion - excellent covering

Consumption: 250 g for every square meter

**Paint Furring Putty (Tiss Paint Putty 790)**

## Facing

### **Kenitex (Tiss Kenitex 700)**

excellent covering – completely washable after *implementation* - *High color durability*

Consumption: 1 kg for every square meter

### **Acrylic Facing Paint (Tiss Face Paint 710)**

Completely waterproof – washable – in various colors – based on acrylic resin – high resistance against environmental factors

Consumption: 700 g for every square meter

### **Mineral Facing (Tiss Solar 720)**

Completely waterproof - based on polymeric resins and mineral aggregates – normal color

Consumption: 3 to 4 kg for every square meter – implementation by a trowel

### **Golden Facing (Tiss Golden 730)**

A decorative view- water resistant- based on polymeric resins and mineral powders - normal color - in various colors

Consumption: 1.2 to 1.5 kg for every square meter – implementation by strewing

### **Diamond Facing (Tiss Diamond 740)**

A decorative view - Completely waterproof and insulaed - based on polymeric resins and mineral powders - normal color - in various colors – for Interior and exterior views - washable

Consumption: 1.2 to 1.5 kg for every square meter when implementation is by strewing 2 to 3 kg for every square meter when implementation is by a roller

### **Silver Facing (Tiss Silver 750)**

A decorative view- water resistant- based on polymeric resins and mineral powders - - in various colors – can be implemented by a trowel instead of fine plaster

Consumption: 4 kg for every square meter – implementation by a trowel

## **Building Adhesives**

### **Pasty Tile Adhesive (Tiss Tile Adhesive 500)**

For gluing tile and ceramic on walls and floors – excellent adhesion

### **Fiber Tile Adhesive (Tiss Fiber Tile Adhesive 520)**

For gluing tile, ceramic and stone on walls and floors - extremely high adhesion

### **Plus Tile Adhesive (Tiss CFP 560)**

For gluing small and medium size tiles on cement boards, plasters and all prefabricated walls – as a mortar at the junction of prefabricated walls to each other – completely waterproof

### **Flex Tile Adhesive (Tiss CFF 570)**

Wall and floor tile adhesive - For gluing large size tiles on cement boards, plasters and all prefabricated walls – as a mortar at the junction of prefabricated walls to each other – completely waterproof

### **Pool Tile Adhesive (Tiss TP 580)**

For gluing large, medium and small size tiles on cement boards, plasters and all prefabricated walls - This tile adhesive is also a humidity insulation for swimming pools, bathrooms and water reservoirs. It's the only humidity insulation tile adhesive in Iran.

### **Super Tile Adhesive (Tiss TS 590)**

For gluing large size tiles on cement boards, plasters and all prefabricated and concrete walls - as a mortar at the junction of prefabricated walls to each other – completely waterproof - *The best option for gluing porcelain tiles*

**Floor Tile Adhesive (Tiss TF 530)**

Powdery floor tile adhesive - For gluing tile and ceramic on the floor - excellent adhesion to the surface

**Heblex Adhesive (Tiss HB 600)**

cement- based and polymeric heblex adhesive for pasting heblex components , light and ordinary wall blocks – in white and gray color

**Sealing Concrete Adhesive (Tiss Water Bond 540)**

Depending on the amount of of adhesion required, type of granulating, and mixing design of concrete mortar, replace water at a rate of 15 to 20 percent and add it to dry components of concrete or mortar -usable in concrete placing of swimming pools, architectural fountains, septic, manholes and wherever waterproof concrete is needed

**Normal Concrete Adhesive (Tiss Bond 550)**

Depending on the cement content used in concrete, the amount of normal concrete adhesive can be from 5 to 20% by weight of cement.

For increasing concrete strength, connecting new concrete to the old one, and reducing the damaging effects of the environment, and heat and cold cycles on concrete.

**Tiss Waterproof Fiber Putty (Tiss Fiber Putty 910)**

For covering and sealing the seams, sinking of internal and external bolts, plastering knauf and cement boards for filling expansion-compression joints, swimming pools, bridges and water channels- for filling and sealing concrete interstices used in bridges, columns and floors

## Special Building Products

### **Mold Oil (Tiss Oil 1100)**

Depending on the mold kind and site conditions the consumption will vary

Common consumption is 1 liter for every 15 to 35 square meter

### **Curing (Tiss Cure 1110)**

By Spraying it on the surface of wet concrete, the evaporation of water from the concrete will be prevented. It will increase concrete strength and prevent concrete surface cracks.

### **Planting Paste of bars (Tiss B 1120)**

Planting Paste of bars is a two component epoxy resin-based product for planting bars in floors and walls, and for installing pieces and fixing them , and has high compressive,bending and tensile strength.

### **Tissue (Tiss T 1150)**

With 2.5 – 4 – 10 mm mesh

## Some of the Projects which have been done with Co- Operation of Kermanian Sefidbam Company

- International Exhibition of Southeast
- Mahan Air Company in Kerman
- Imam Hassan Askari Mosque in Yazd
- Maskan Mehr Farhangian and Golbahar Project in Zarand, a city in Kerman Province (totally 9300 m<sup>2</sup>)
- Maskan Mehr Project, a Justice Oriented Project of Benefactors, in Kerman (totally 32500 m<sup>2</sup>)
  
- Maskan Mehr Project of Police 110 in Kerman (totally 11000 m<sup>2</sup>)
- Bahramjerd Bridge in Kerman
- A 800-meter- long Bridge in Rigan City of Kerman Province

- The project of Insulating Iranit Roofs of Residential Houses in the Copper Complex of Sarcheshmeh
- A 23-floor Project of The First Tower Company ( Mr. Aalem Zade)
- Payambar Aezam Project, a 7000 - Residential Unit Project in Hormozgan
- A sealing Project of Water and Sewage Station in Kerman
- A sealing Project of the Subground Walls in Razi Insurance Central Building in Kerman
- An insulating and Anti-acid Project of the Panel Ceiling of Copper Refinery in Sarcheshmeh
- Insulating the 19th Phase of The South Pars Company in Assaluyeh with Area of 20000 m<sup>2</sup>

## Epoxy grout ,TG 1004

### Description

**Tiss epoxy grout 1004 is a three – component product based on epoxy resins which forms a mortar with high flexibility and strength after mixing . Considering to be high mechanical and chemical strengths for the heavy operations and installing super heavy machinery which need a high cohesion and very high compressive and flexural strengths , it is suitable .**

### Standards

**Producing this product is according to the standards of ASTM D648, ASTM C579, ASTM C58, ASTM C307.**

### Applications

- Installing base plate of the columns and a variety of column plate
- Installing a variety of bars and anchor bolt
- Filling the voids under frame and base plates
- Installing a variety of exact and super heavy machinery and equipments

- Installing plates exposed to very high stress and tension
- Fixing the industrial machinery with dynamic load on the foundation
- Fixing the crane runways
- Bedding the warehouses with high traffic

#### Advantages

- Having very high chemical and mechanical strength -
- Abrasion and corrosion resistant in contacting with acids and bases -
- Gain of strength quickly in initial 24 hours -
- Very high cohesion to concrete and steel -
- Superior tensile, flexural and compressive strength -

#### How to use -

Components B and C are completely mixed by a mixer until completely uniformed. -  
Then component A containing aggregates is slowly added to the mixture and mixed. After mixing, it is immediately poured in the place considered.

#### Packing type

-In packing 20 kg including three components as follows:

- component A in 16 kg bags
- component B in 3 kg containers
- component C in 1kg containers

#### Important points

Epoxy grout must not be performed in the temperature under 10° c . When performing in the temperature under 10° c , it is better to use synthetic surface heating .

#### Maintenance conditions

**Store in temperature of 10-35 °c, protected from light**

**Maintenance period**

**In initial packing for 9 months**

**Technical characteristics of Tis epoxy grout 1004**

cm <sup>2</sup> /kg1088	1- day strength
cm <sup>2</sup> /kg1140	3 - day strength
cm <sup>2</sup> /kg1204	7-day strength
cm <sup>2</sup> /kg450	Tensile strength
cm <sup>2</sup> /kg285	Flexural strength
Concrete failure	Concrete cohesion
cm <sup>2</sup> /kg2/2	Specific weight
2-4 hours considering ambient temperature	Initial set
4-7 days considering ambient temperature	Final strength time

### **Tiss EP 820 Iso Pasta**

T.EP 820 Iso Pasta is a polymer-based product based on acrylic resins. It is completely consistent with concrete and prevents sulfate formation and penetration of moisture into the concrete. Acrylic resins have ionic nature. After drying, they make a completely waterproof coating on concrete that has the breathable property and concrete can completely do hydration in all circumstances. In spite of other products in market which are produced from tar,

not capable of penetrating the concrete surface and separated from the surface by negative moisture pressure, this product integrates with the concrete surface and can tolerate both positive pressure and negative pressure.

**Applications:**

- Insulation of tanks, tunnels and concrete sealing structures
- Insulation of concrete structures exposed to cavitation and sulfate attack
- Insulation of foundations
- Enforcement of concrete structure against acidic and alkaline environment

**Advantages:**

- The sharp decline in permeability and increase in concrete durability
- Excellent coating
- Easy performance
- Preventing the penetration of aggressive agents such as chloride and sulfates
- Flexibility to the temperature of zero degree Celsius

**Technical Specifications:**

<b>Appearance</b>	Liquid
<b>Color</b>	Black
<b>Density</b>	1.7 ± 0.05 gr/cm <sup>3</sup> at the temperature of 2 ± 22 degrees celsius
<b>Thermal Stability</b>	85 ± 5 C
<b>PH</b>	7.3 ± 0.1
<b>Percent of Solids</b>	65%
<b>Diffusion</b>	In three performance groups of 3kg at each square meter

<b>Chlorine</b>	Without chlorine ion
<b>Nature</b>	Ionic
<b>The Minimum Coat Formation Temperature</b>	0 C
<b>Material Formation Base</b>	Acrylic resin

<b>Layers</b>	<b>Thickness</b>	<b>Consumption</b>	<b>Drying Time</b>
1 <sup>st</sup> layer	1.1 mm	1.7 kg	60 min
2 <sup>nd</sup> layer	0.5 mm	0.8 kg	30 min
3 <sup>rd</sup> layer	0.4 mm	0.6 kg	30 min

### **Application Methods:**

Before using Iso Pasta mix it completely. Use it on the considered surface by brush or roller. If you use airless pump you can dilute it with water.

### **Maintenance Conditions:**

Keep it at +5 to +35 degrees Celsius. Keep away from freezing and direct sunlight.

### **Maintenance Time:**

In the original and unopened package for 12 months

### **Packing:**

25 kg bucket

### **Waterproof Fibrous Putty Tiss SP 280**

Sedimentation primer is produced from a combination of waterproof polymeric resins and regarding its inside yarn ,it has a high bending strength and is a very ideal option for filling expansion points.

### **Application cases:**

\* For covering seams and external screws of various cement board walls

- \* Lavatory floor
- \* Around water and sewage pipes
- \* The space between galvanized sheets
- \* Filing and caulking the roof surface cracks
- \* For wall priming

**Advantages:**

- \* Seamer putty is waterproof and very resistant against fraction and it is homochromatic with cement yarn sheets
- \* It is washable and has the capability of sticking to all surfaces (metal, plaster, cement, stone and PVC).
- \* Applicable by lick and trowel

**Utilization rate:**

It depends on beneath surface and seams and cavities' dimensions

**Utilization method:**

Beneath surface should be void of dust and oil and Sleazyingredients, the surface should be washed and completely dried. Pick up some putty with spatula and dispread it on the surface and cover the considered seams and cracks with it.

**Maintenance conditions:**

Keep it in the temperature +5 to +35 °C, away from frigidity and direct sunlight.

**Maintenance time:**

In the primary and unopened packing is maintainable for 12 months.

**Packing:**

5 and 30 kg buckets

## **Fibrous Insulator Tiss FI 210**

It is a new and unique product for isolation of building, pool, lavatory and various filets and cement boards' expansion joints.

### **Application cases:**

- \* For isolation of roof, foundation of expansion points of building, pool and bridges, building foundation , lavatories , cellar view and walls , gardens' partitions, various fillets and cement boards
- \* Isolating lift pits
- \* Isolating sewage layers and transmission layers

### **Advantages:**

- \* Capability of sticking to all surfaces (metal, plaster, cement, stone and PVC)
- \* Capability of fastening vertical and horizontal walls to each other and absence of fraction in the connection site of two partitions
- \* Extra pastiness of various tile glues on it
- \* High flexibility and resistance against fraction
- \* Easily applicable by lick, spatula and trowel

Due to conformity with cement fibrous plane and complete covering is utilizable for external and internal seams and screws of various cement boards

- \* Capable of coloring

### **Consumption amount:**

Proportionate to the beneath surface in each m<sup>2</sup>, 2 to 2.5 kg fibrous insulator is used to create minimum 1.5 to 2 mm thickness in the surface. On the fillets and cement boards, in each m<sup>2</sup>, 0.5 kg is used to make 350 micron thickness.

**Utilization method:**

Before utilization, the beneath surface should be void from every kind of dust, oil and Sleazy particles and should be completely washed and dried. The fibrous insulator is administered on the surface by various types of trowel and spatula. During the fibrous insulator administration, it is better to draw a trowel soaked in water on the surface for the surface uniformity and flatness. Depending on the environment temperature, minimum package time is 24 and maximum is 72. On the cement surface, it is better to administer a primer (300 g in each m<sup>2</sup>) on the surface before using fibrous insulator.

**Note:** fibrous insulator shouldn't be absolutely diluted during administration and it should be administered in the temperature less than 5° C and or higher than 35°C.

**Maintenance conditions:**

Keep it in the temperature +5 to +35 °C away from frigidity and direct sunlight

**Maintenance time:**

In the primary and unopened packing, it is maintainable for 12 months.

**Packing:**

5 and 25 kg buckets

**Expanding Grout Tiss .G 1002****Description:**

This product is a fixed dried and ready to use Grout. Regarding to its special structure and its constituent Ingredients , it is used in cases where it is required that a mortar without condensation fill the distance between two near element and no space remains like the distance of pillar plate and its underneath plane.

Ready Grout, after administration will become solid rapidly, and will be exploitable and it has good resistance against static pressures and high temperatures and it won't face any crack and condensation.

**Standard:**

Production of this product is according to (ASTM-C827-28ASTM-C476-ASTM-C1107)

-Application:

Making consumable mortar in steel foundation of buildings and heavy machinery

-performing injection operation in dams and tunnels.

-performing amendment operation, amendment of concrete structures that should prevent concrete from condensation and mortar making.

- using in base plate of pillars

-anchor bolt planting

-performance of foundation of heavy machinery

-filling holes and cracks

**ADVANTAGES:**

-having controlled expansion without condensation

-ease of mixing with water and high flow

-high compressive strength in short and long periods

-possibility of administration in high thickness with workshop method

**TECHNICAL FEATURES:**

Kind of cement: Portland

The biggest size of silica=3mm.

Used additives for expansion: aluminum powder

Used additives for improvement of high pressure compressive strength and flow: lubricant powder

Appearance:

-powder and silica and fiber

-color=cinereous.

Ion chlorine=does not have.-

Specific weight at doughy mood: 2200kg/m<sup>3</sup>

Specific weight at flow mood: 2000kg/m<sup>3</sup>

Specific weight powder mood: 1400kg/m<sup>3</sup>

Amount of water usage for each pocket: 25kg, 3/5 liter

Amount of water usage for each pocket in doughy mood,3 liter

**Compressive strength:**

1 day: 50 kg/cm<sup>2</sup>

7days:90 kg/cm<sup>2</sup>

28days:120kg/cm<sup>2</sup>

Necessary time for expansion: starting 20minute, ending2; 30minute

Prescription: this product is used in two moods; doughy and fluent in demanding to doughy plastic mood, for each Grout kg will be mixed with 125cc-135cc water

**Report of GROUT Compressive strength experiment 1002**

Cubic sample:

Cement kind: Portland

Maintenance terms: Temperatures between 5-35°C, keep away from direct sun ray for a long time

Maintenance duration:

In primary package that is not opened for 9months

Packaging: in 25kg packages

### **Waterproof plasters 1044 (Tiss Plaster)**

Fully waterproof mortar which is ready to use and resistant against positive and negative water pressure is used for the insulation of swimming pools, septic and manholes, basement walls, elevator pits.

#### **Application**

- To caulk the roof, basement walls and walls facing the rain
- For sealing various fountains, ponds storing oil, petrol, diesel and oil, floor of seats instead of asphalt and insulation
- To caulk the swimming pools and agricultural pools, water supply of telecommunications, sewage and septic (at the junction of two horizontal and vertical walls, the muscles must be stretched)

#### **Advantages**

- Waterproof and can be washed with the excellent resistance to abrasion
- Resistance against positive and negative pressures
- Quick launch
- Affordable
- Resistant to sun and different weather conditions.
- The easy resilience
- Can be used to replace Mosaic

#### **Consumption instruction**

- The two components of product are mixed perfectly with each other, the individual bags are prepared and consumed, and then the next bag is used.
- It is better to do this by an electric whisk and it is prepared in a bowl like a half barrel or a wheelbarrow to not be wasted the liquid component, if you require the smoother product, you can add 500 cc of water per 25 kg of the product.

- To run on the rooftops per square meter, the 2 kg thickness of mortar is used per one mm. For more strength and durability, it is proposed to be used a 10 x 10 mm mesh layer on the drawn surface and after casting a layer of waterproof mortar on it, you can smooth it up to a minimum thickness of 5 mm by the metal trowel. After applying, a curing layer (200 grams per square meter) is applied on the surface.
- To apply for the pool, the recommended thickness is at least 10 mm mortar. Per square meter per one mm, 2 kg of this product is used.
- It is better both on the roof and the pool, 2 days after the plaster or cement substrate, the mortar is used to bind the two layers together. At run time, the temperature should not be less than + 5 ° C and above +30° C.

### **Physical properties**

First component is the powder – and the second is liquid

### **Maintenance conditions**

The materials should be kept away from freezing and direct radiation of the sun's rays.

Storage temperature: + 5 ° C to +35 ° C

### **Maintenance term**

In the unopened original packaging for 12 months

### **Package type**

- The powder component in bags of 25 kg
- The liquid in the bucket of 5.5 kg

## **Two-component repair mortar 1040 (Tiss Plaster)**

Ready to use mortar is to repair the old concrete, concrete columns and foundations and to fill and repair any type of grubby concrete with excellent adhesion to old concrete.

This mortar has two components of powder and resin that has good compressive and tensile strength and is easily applicable on all interior and exterior concrete surfaces such as buildings and structures.

### **Advantages**

- Ability to perform the waterproof reconstructive operations simultaneously
- The sharp decline of cracking
- High resistance to water penetration and climatic factors
- High workability and flexibility
- Appropriate Chemical, pushing and wear resistance
- Good adhesion to concrete surfaces, especially subsurface

### **Indications**

- Restoration and repair of all concrete structures, bridges, swimming pools and water resources
- To modify cracking, fractures and cuts of the walls and concrete surfaces
- To caulk the tiled subsurface of the bathrooms in buildings

### **Methods and consumption**

First, the two components of product are mixed perfectly together; the individual bags are prepared and consumed. It is better to use an electric whisk in order to mix them. If you require the smoother product, you can add 500 cc of water for every 25 kg of the product.

The subsurface is completely clean and free of dust and loose and flaky layers

Since the applied layer very thin and is used only for repair, and the curing and maintenance is extremely important, after applying, 250 ml of curing is applied on the surface per square meter.

### **Technical specifications**

Technical specification	powder	Resin
Physical state	powdery	liquid
color	gray	milky
Special weight	1.6 gr/cm <sup>3</sup>	1gr/cm <sup>3</sup>
chloride	Not	Not

### **Maintenance conditions**

It is stored away from sunlight and moisture and freezing in the temperature of +5°C to +35 °C

### **Maintenance term**

In the unopened original packaging for 9 months

### **Packing**

Powder component: 25 kg bag

Liquid component: 6 kg bucket

The Waterproof Powder of Tiss WP 337 Concrete

This is a kind of powder with characteristics of sealing, hydrophobic, lubricant, improving the rheological properties of concrete and complete blockage of the fine pores. It is the best option for making concrete or sealing mortar.

Applications:

- To waterproof the concrete pools, water tanks, septic tank
- To waterproof the concrete of water and wastewater refineries
- Sealing of underground constructions and foundations
- Protecting and sealing water canals

Advantages:

- To waterproof the mortar and concrete
- To protect concrete and reinforcement against corrosion
- To make all sections of concrete impermeable
- Ease of implementation

The Usage Amount:

- 1 to3% of used cement

The Usage Method:

- After complete mixing add the waterproof powder to the ready concrete; or, before adding water it should be added to dry mortar mixture and be combined with it.

Maintenance Conditions:

- Keep it between +5 to +35 degrees Celsius temperature and away from direct sunlight and moisture

Maintenance Time:

- In unopened and original package, it can be maintained for 9 months

Packing:

- 5kg bag

TISS .joint sealant920

For sealing joints seams and splits in door and window frames window sills prefab elements stairs skirting boards corrugated sheeting chimneys ducts and guttering .Also for sealing cracks in walls.

Adheres to brick concrete plaster work wood glass ceramic tiles metals and rigid PVC Application :Make joint clean dry and free from dust and grease .Apply sealant evenly in to the joint and smooth with a wet putty knife or wet finger .After 1 hour a skin is formed which can be painted over .Fully set after 1\_2 weeks .Keep joint dry for at least 8 hours. Important :Application temperat are:5\_40 °c .Do not use in rain .Wet stains :remove with water. Dry stains :remove mechanically .Minimal storage life:24 months (stored dry at max 20 °c)if left unopened.