XINIUPI RUBBER-STATE WATERPROOFING PASTE

西牛皮橡胶态防水膏

MANUFACTURER: XINIUPI WATERPROOFING TECHNOLOGY CO., LTD.
制造商：西牛皮防水科技有限公司

3 major waterproofing challenges for detailed engineering nodes that common waterproof materials struggle to address

普通防水材料难以解决的工程节点防水3大难题

Difficult to form a long-term sealed bond with concrete.

This is especially true in cases where the base surface is damp during tight construction schedules, as it can easily debond from the substrate and cause water leakage.

难与混凝土形成长期密封粘结。尤其是赶工期过程中基面潮湿的情况下易与基层脱粘导致渗漏。

Weak adhesion to multiple materials.

Loses grip on metal, PVC pipes, and membranes.

难与多种材质界面有效密封粘结。尤其是与金属塑料如PVC管等各种卷材界面粘结不牢固。

Runs at pipe joints.

Requires 3+ coats to reach required thickness.

在管根节点部位施工时，易流淌。施工现场各类管根节点部位施工时需要涂刷3遍以上才能达到设计的厚度要求。

Waterproofing sealant with National Double Award technology

一款应用了荣获"国家双奖"技术的密封防水产品

CPS Reactive Adhesion Products and Technology Awarded National Double Award

CPS反应粘产品与技术荣获国家双奖

National Key New Product

国家重点新产品

Guo ke Fa Ji. [2014] No. 303　国科发计〔2014〕303号


国 家 重 点 新 产 品

证　书

项目名称：CPS反应粘结型湿铺（I型）防水卷材　项目编号：2014GR609014

承担单位：广西金雨伞防水装饰有限公司　发证时间：二〇一四年十月

批准机关：科学技术部　有 效 期：三 年

China Patent Excellence Award

中国专利优秀奖

Guo ZHI Fa GUAN zi. [2014] No. 63　国知发管字〔2014　63号


国家知识产权局

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中国专利优秀奖

名　称

专利号　ZL200910114456.X

发明人

中华人民共和国国家知识产权局

中华人民共和国国家知识产权局局长

北京　2014 年 11 月

A landmark product representing the breakthrough progress in China's waterproofing material interface bonding technology Awarded by four national ministries and commissions in 2014

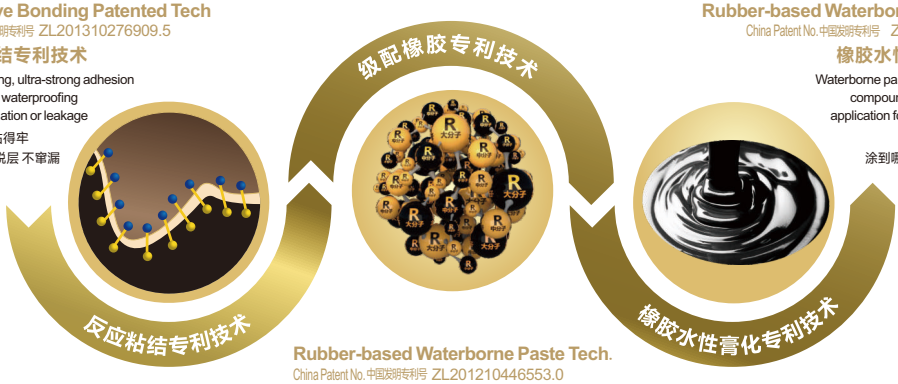
代表我国防水材料界面粘结技术取得突破进展的标志性产品

2014年获国家四部委联合授予

Three Core Technologies Solve Critical Waterproofing Challenges

三大技术解决工程节点防水难题

CPS Reactive Bonding Patented Tech
China Patent No. 中国发明专利号 ZL201310276909.5
CPS反应粘结专利技术
Delivers long-lasting, ultra-strong adhesion
for multi-substrate waterproofing
Free from delamination or leakage
让防水层粘得久粘得牢
多界面可粘结 不脱层 不窜漏



Rubber-based Waterborne Paste Tech.
China Patent No. 中国发明专利号 ZL201210446551.1
橡胶水性膏化专利技术
Waterborne paste-form waterproofing
compound forms instantly upon
application for effortless application
让防水膏呈水性膏状
涂到哪成型到哪 便捷好施工

Rubber-based Waterborne Paste Tech.
China Patent No. 中国发明专利号 ZL201210446553.0
级配橡胶专利技术
Endow the waterproofing layer with super flexibility
It resists cracking, prevents leakage,
and remains intact even if the base surface cracks
让防水层超强柔韧
不怕裂不渗漏 不受基面开裂的破坏

A waterproof product widely recognized in numerous countries and regions

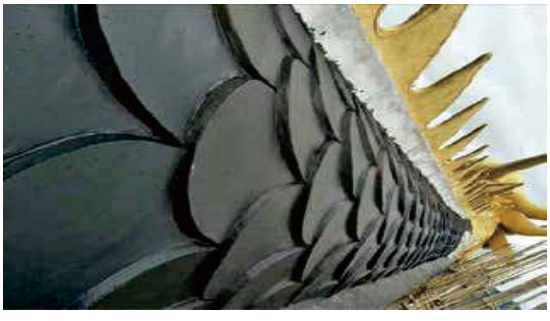
一款在众多国家和地区备受认可的防水产品

At the 2013 International Roofing & Waterproofing Expo in San Antonio, U.S. industry experts gave thumbs-up to Xiniupi Rubber-state Waterproofing Paste, praising its perfect fit for American users' needs - easy application and exceptional waterproofing performance.

2013年美国圣安东尼奥国际屋面防水展，美国同行对西牛皮橡胶态防水膏竖起大拇指，认为这款产品符合美国民众的需求——施工简单、防水效果突出。

An indispensable product for engineering waterproofing

一款工程防水必不可少的产品



In 2018, China's longest elevated dragon-shaped structure was constructed in Yuqing, Guizhou, where the waterproofing engineering adopted Xiniupi Rubber-state Waterproofing Paste - praised for its easy application and superior waterproofing performance.

2018年，中国最长的飞龙项目在贵州余庆建设，项目防水工程选用了施工简单、防水效果好的西牛皮橡胶态防水膏

XINIUPI RUBBER-STATE WATERPROOFING PASTE

西牛皮橡胶态防水膏

01 Product Introduction 产品简介

西牛皮橡胶态防水膏是一种水性橡胶基复合型防水密封材料，适用于工程各类节点，以及建筑混凝土基面的大面积密封防水。

本产品融合了西牛皮密封防水核心技术：反应粘粘结技术、级配橡胶技术、橡胶水性膏化技术，突破传统防水材料的特性和功能，呈黏性膏状，与混凝土、金属、塑料等多种材质界面均能形成牢固粘结，达到蠕变抗裂的密封防水效果，解决了因结构复杂、界面多样的窜漏水难题。

- **密封防水效果突出：**
  能与混凝土、塑料和金属等多种材质界面长效粘结，具有橡胶弹性，密封防水效果好。
- **施工操作简单：**
  开桶即用，直接涂抹，可在潮湿基面施工。

Xiniupi Rubber-state Waterproofing Paste is a water-based rubberized composite waterproof sealing material, suitable for various engineering joints and large-area sealing and waterproofing on concrete substrates in construction.

This product integrates Xiniupi's core sealing and waterproofing technologies: Reactive Adhesive Bonding Technology, Graded Rubber Technology, and Rubber Aqueous Paste Technology. It breaks through the limitations of traditional waterproofing materials by presenting as a viscous paste that forms a strong bond with interfaces of various materials, including concrete, metal, and plastic, achieving a sealed and waterproofing effect that resists cracking through creepage. It effectively resolves leakage issues caused by complex structures and diverse interfaces.

- **Outstanding Sealing and Waterproofing Performance:**

  Forms long-lasting bonds with various material interfaces, including concrete, plastic, and metal. Exhibits rubber-like elasticity for superior sealing and waterproofing effects.

- **Easy Application:**

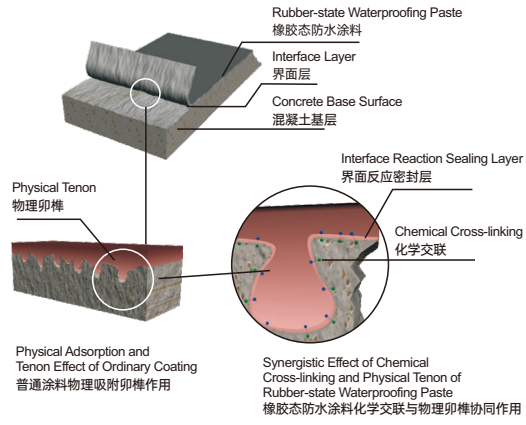
  Ready to use straight from the bucket - just apply directly. Can be applied on damp substrates.

02 Product Technology
产品技术

CPS Reactive Adhesion Technology CPS反应粘技术

The invention patent for CPS Reactive Adhesion Technology (Patent No.: 200910114456.X) won the China Patent Excellence Award in 2014, which was the first China Patent Award ever received in the field of concrete sealing and waterproofing. The product based on this patented technology represents a revolutionary breakthrough in concrete sealing and waterproofing, filling the gap in this field and solving the global challenges in concrete sealing and waterproofing.

It is a technology that enables synchronous curing, reaction and bonding between joint waterproofing sealant, waterproofing membrane and cement, making them integrate with concrete, thus achieving firm, irreversible and comprehensive sealing and waterproofing for concrete.



Schematic Diagram of CPS Reactive Adhesive Interface Adhesive Technology

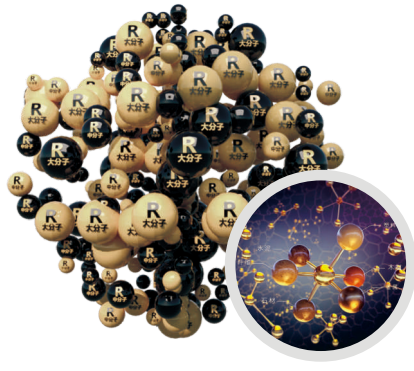
CPS反应粘界面粘结技术原理图

CPS反应粘技术发明专利(专利号200910114456.X)，2014年获得中国专利优秀奖，这是混凝土密封防水领域首次获得的中国专利奖。该项专利技术产品是对混凝土密封防水革命性的突破，填补了该领域的空白，解决了世界混凝土密封防水的难题。

CPS反应粘技术让橡胶态防水涂料或防水卷材通过化学交联与物理卯榫的协同粘结作用，跟混凝土“长”在一起，实现了对混凝土粘结牢固不可逆的全面密封防水。

Graded Composite Bonding Technology 级配复合粘结技术

Graded Composite Bonding Technology is a technology specifically designed to solve the sealing and bonding of interfaces with multiple materials like plastics and metals at engineering joint positions. This technology enables the large, medium, and small functional active molecules with different structures in the sealant to diffuse, infiltrate, permeate, and adsorb on the interfaces of plastic pipes, metals, etc., through graded composite action, forming a "self-assembled suction cup-type" interface structure. Thus, it achieves a firm bonding and sealing effect, solves the problems that common waterproofing materials are difficult to bond or not bond with multiple interfaces such as plastic pipes and metals, and are easy to debond, realizing the effect of simultaneous bonding, sealing, and waterproofing between the sealant and various material interfaces.



级配复合粘结技术可使橡胶态涂料中不同结构的大、中、小功能活性分子，通过级配复合作用，在塑料管、金属等界面扩散浸润渗透吸附，形成“自组装吸盘式“的界面结构，从而达到牢固的粘结密封效果。特别是针对旧混凝土不仅可以起到修复微缺陷的作用，还可以堵塞微渗孔，形成钉子效应，显著提高粘结密封效果，与不同基面的粘结。

Rubber-based Waterborne Paste Technology 橡胶基水性膏化技术

Rubber-based Waterborne Paste Technology combines rubbers with different properties and functional polymers through multiple processes such as compounding and emulsification, and then turns them into a waterborne paste material via a special pasting technology. With appropriate viscosity, it can be directly applied and constructed on vertical surfaces, pipe root nodes and other parts to form a seal. Its core advantage is that the material is a paste-like rubber composite, which will form an interpenetrating network structure during the drying and curing process, exhibiting the elasticity and flexibility of rubber, and achieving an outstanding sealing and waterproofing effect.

橡胶基水性膏化技术通过复配、乳化等多种工艺将不同特性的橡胶和功能高分子进行复合,再经特殊膏化技术制成水性膏状材料，黏稠度适宜，可直接在立面、管根节点等部位涂抹施工，成型密封。其核心优点是材料为膏状的橡胶复合物，在干燥固化的过程中会形成网络互穿结构，呈现出橡胶的弹性和柔性,密封防水效果突出。

03 Product Features
产品特点

RUBBER-STATE Properties
Addressing 3 Core Waterproofing Limitations
橡胶态3大特性 解决3大传统防水难题

粘 Adhesion

Reactive Bonding | Sealed Waterproofing | Delamination-Free | Leakage-Proof

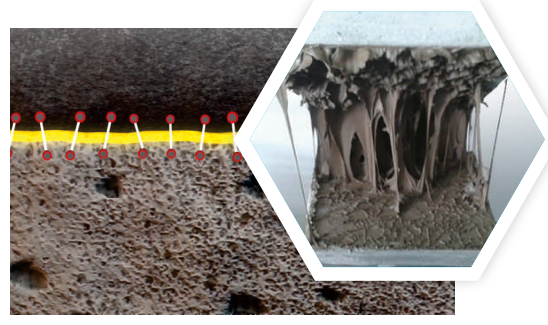
反应粘结 密封防水 不脱层 不窜漏

Reactive Bonding: Strong & Long-Lasting Bond to Cement

反应粘结: 与水泥粘得牢粘得久

CPS Reactive Bonding Technology enhances material penetration and adhesion to concrete, creating irreversible sealing that prevents delamination and water channeling.

CPS反应粘界面粘结技术使胶料对混凝土界面的渗透性更强，粘结力更大、更稳定，且粘结不可逆，使防水层能与基面完全密封，解决了防水层粘不住、易脱层，导致窜漏水的难题。

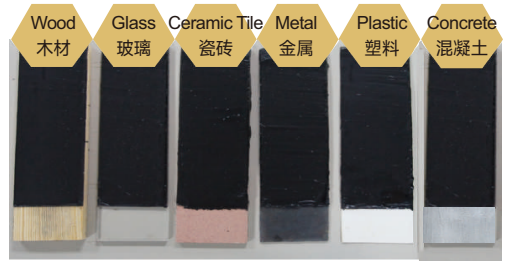


Multi-interface bonding: Strong adhesion to wood, stone, plastic, etc.

多界面粘结: 与木材石材塑料等强力粘结

Graded Composite Bonding Technology enables rubber-state coating molecules to penetrate and adhere to plastic/metal interfaces, achieving simultaneous multi-material bonding and sealing - solving common delamination issues.

级配复合粘结技术使橡胶态涂料活性分子在塑料、金属等界面渗透吸附，实现多材质同步粘结密封，解决普通材料脱粘难题



弹 Elastic

Graded Rubber | Creep-Resilient | Crack-Proof | Leak-Free

级配橡胶 蠕变弹性 不怕裂 不渗漏

High-Elastic Creep: Crack-resistant, leak-proof waterproofing

高弹蠕变: 防水层不怕裂不渗漏

Xiniupi Rubber-state Waterproofing Paste absorbs substrate movement stress through elastic creep, while its high elongation accommodates all deformations without cracking - solving traditional waterproofing's leakage issues.

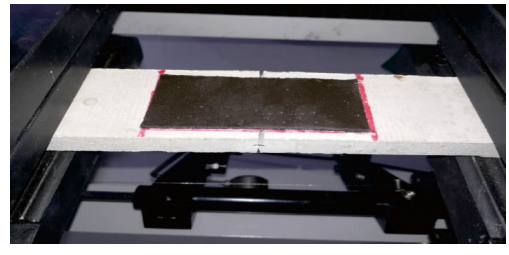
西牛皮橡胶态防水膏通过弹性蠕变释放基层变形应力，其高延伸性适应各种变形而不开裂，解决传统防水层易裂渗漏问题。

Flex-Crack Defense: Withstands repeated stretching, lasts longer

柔韧抗裂: 抗疲劳拉伸 寿命长

Joint Movement Test: The 1.5mm rubber-state coating endured 1,000 stretch cycles (0.2-0.5mm crack width at 1Hz) without cracking/delamination.

接缝变形测试：1.5mm厚橡胶态防水层在0.2-0.5mm裂缝宽度、1Hz频率下，经1000次伸缩循环后无开裂、脱粘等破坏。



Note: The joint deformation capacity refers to the performance of the waterproofing layer to withstand repeated stretching/compression caused by the cracking and deformation of the substrate, without debonding or separation.

注：接缝变形能力指防水层耐受基层开裂变形反复拉伸/压缩，且不脱粘不分离的性能。

易 Easy

Water-Based & Eco-Friendly | One-Coat Thick-Build Application | Easy Installation

水性环保 多道厚涂一次成型 易施工

Easy Application: Achieves thick-layer build-up in one pass, eliminating multi-layer delamination risks.

易涂刷: 多道厚涂一次成型 避免多道分层

Xiniupi Rubber-State Waterproofing Paste is a water-based material that allows single-application thick-layer coating, conforming seamlessly to substrates. It eliminates the needfor multiple layered applications, preventing interlayer delamination and saving labor/time.

With high solid content and low shrinkage, it forms a superior, dense, and continuous layer.

Compared to conventional products, the same weight of coating covers a larger area at equal thickness.

西牛皮橡胶态防水膏为水性材料，可随形随涂，多道厚涂一次成型，避免多道分层分时涂刷，形成分层隔离，费时费工。

且该产品涂料固含率高，体积收缩小，形成性能优异的、致密连续的固体膜层，同等重量的涂料，形成同厚度的防水层面积更大。

04 Product technical indicators
技术指标

Compliance Standard: Q/XNP 19 - 2021 "Architectural Waterproofing Sealant" (Enterprise Standard)
执行标准：企业标准《建筑防水密封膏》Q/XNP 19 - 2021

Mechanical Performance Characteristics of Xiniupi Rubber-State Waterproofing Paste
西牛皮橡胶态防水膏物理力学性能

Serial Number 序号	Item 项目		Technical Indicator 技术指标	
			I	II
1	Surface drying time (h) 表干时间/h		⩽ 2.0	
2	Complete drying time (h) 实干时间/h		⩽ 5.0	
3	Solid content (%) 固体含量/%		⩾ 70	
4	Heat Resistance (80°C, 5h) 耐热性（80°C，5 h）		No flow, slip, or dripping 无流淌、滑动、滴落	
5	Low-Temperature Flexibility 低温柔性		−10°C, no cracks -10°C，无裂纹	−20°C, no cracks -20°C，无裂纹
6	Bond strength (MPa) 粘结强度 / MPa	With dry cement mortar 与水泥砂浆干燥基面	⩾ 0.5	
		With damp cement mortar 与水泥砂浆潮湿基面	⩾ 0.3	
		With plastic substrate 与塑料基面	⩾ 0.5	
7	Water impermeability (0.3MPa, 30min) 不透水性（0.3 MPa · 30 min）		Watertight 不透水	
8	Water penetration resistance (0.6MPa) 抗窜水性（0.6 MPa）		No water penetration 无窜水	
9	Stress relaxation (%) 应力松弛 /%		⩽ 35	
10	Thermal aging (70°C) 热老化（70°C）	Low-temperature flexibility 低温柔性	−8°C, no cracks -8°C 无裂纹	−18°C, no cracks -18°C 无裂纹
		Bond strength with dry cement mortar (Mpa) 与水泥砂浆干燥基面粘结强度 / Mpa	⩾ 0.5	
		Water impermeability (0.3MPa, 30min) 不透水性（ 0.3 MPa · 30 min ）	Watertight 不透水	

05 Application Method
施工方法

Method 1 方法1

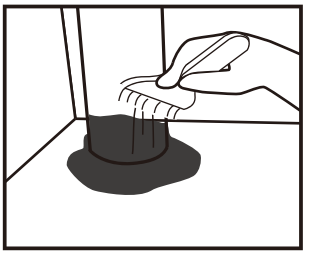
Detail Joint Sealing Construction Process:

Joint cleaning → Waterproofing paste application → Curing and protection

细部节点密封施工工艺流程:

节点清理→节点涂刷防水膏→养护与保护

Joint Cleaning
节点清理



Waterproofing Paste Application
节点涂刷防水膏

Curing and Protection
养护与保护

Construction Steps:

1.Joint cleaning: Remove surface laitance, dust, oil stains, etc. from the joint area;

2.Waterproofing paste application: Apply waterproofing paste evenly on the joint area without missing spots, with thickness meeting relevant specification requirements;

3.Curing: After application, before the waterproofing paste completely cures, stepping or water immersion is prohibited. Watertightness tests and subsequent construction are not allowed.

施工步骤:

1.节点清理：将节点部位表面浮浆、粉尘、油污等清理干净；

2.节点涂刷防水膏：节点部位涂刷防水膏，防水膏涂刷均匀不露底，厚度满足相关规范要求；

3.养护：施工完毕后，防水膏干固前，禁止踩踏或泡水，不能做闭水试验和后续施工。

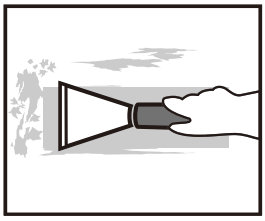
Method 2 方法2

The technological process for large-area construction treatment of roof renovation:

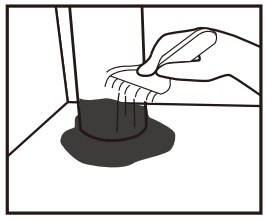
Substrate treatment → Waterproofing paste application → Large-area waterproofing paste application (primer coat first then finish coat) → Curing and protection

屋面修缮大面积施工工艺流程:

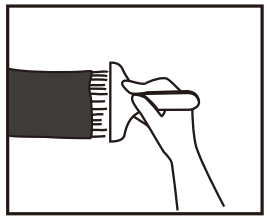
基层处理→节点涂刷防水膏→大面积刮涂防水膏(先底涂后面涂)→养护与保护



Substrate Treatment
基层处理



Waterproofing Paste Application
节点涂刷防水膏



Large-area Construction
大面积施工

Curing and Protection
养护与保护

Construction Steps:

1.Substrate treatment: Clean oil stains, dust and laitance from substrate. Repair uneven surfaces.

2.Waterproofing paste application: Apply Waterproofing paste evenly on joint areas without missing spots, with thickness meeting specification requirements.

3.Large-area waterproofing paste application:

①Primer coat: For large-area construction, first apply a uniform primer coat (mixing ratio by weight: water:waterproofing paste = 1:(1-2), mix evenly). Ensure full coverage without misses.

②Finish coat: After primer dries (typically about 30 minutes), apply waterproofing paste evenly over primer coat.

4.Curing: After application, before Waterproofing paste completely cures, stepping or water immersion is prohibited. Watertightness tests and subsequent construction are not allowed.

施工步骤:

1.基层处理: 把基面油污、粉尘、浮浆清理干净,基面凹凸处需修补平整 。

2.节点涂刷防水膏:节点部位涂刷防水膏,防水膏涂刷均匀不露底,厚度满足相关规范要求。

3.大面积涂刮涂防水膏:

①底涂:大面积施工时,在基面上先均匀滚涂一层底涂料,确保不露底即可【底涂料配置方法:按重量比,水:防水膏=1:(1 - 2)混合搅拌均匀制得】;

②面涂:待底涂层干固后(一般情况下底涂料干固需约30分钟),在底涂层上均匀涂刮防水膏。

4.养护:施工完毕后,防水膏干固前,禁止踩踏或泡水,不能做闭水试验和后续施工。

06 Scope of Application
适用范围

1. Sealing and waterproofing for building details, structure joints, and component connections, such as the sealing treatment of pile heads, pipe penetrations, water outlets, and waterproof layer overlaps.
2. Renovation projects of existing roofs and large-area waterproofing maintenance.

1. 建筑细部节点及构件连接处密封防水，如桩头、穿墙管、落水口及防水层搭接处密封处理。
2. 既有屋面修缮工程和大面积防水维修。

Roof Joint Waterproofing
屋面节点防水

Bathroom Waterproofing
卫生间防水

Large-area Waterproofing
屋面大面积防水

Pipe Penetration Joint Sealing with Waterproofing Paste
管根节点使用防水膏密封处理

Pile Head Joint Sealing Treatment
桩头节点密封处理

Detailed Waterproofing Treatment for Sidewall Tie-Rods Using Waterproofing Paste
侧墙对拉螺栓使用防水膏细部节点处理

07 Precautions
注意事项

1. The optimal application temperature for this product is 5℃ to 35℃.
2. Before the sealant dries, do not step on it or immerse it in water. Watertightness tests and subsequent construction are prohibited.
3. After the waterproofing paste has dried, inspection and acceptance should be promptly organized, followed by the application of a protective layer.
4. Precautions for vertical surface construction: When applying a protective or decorative layer on vertical waterproof/damp-proof surfaces, load-bearing structures must be installed. The waterproof/damp-proof layer must not serve as a load-bearing layer.

1. 本产品最佳施工温度 5°C ~ 35°C。
2. 防水膏干固前，禁止踩踏或泡水，不能做闭水试验和后续施工。
3. 待防水涂料干固后，应及时组织验收，并做保护层。
4. 立面施工注意事项：在立面防水防潮层上做保护层或装饰层时，需设置持力构造，防水防潮层不能作为受力层。

08 Transportation and Storage
运输与存储

1. This product is water-based and non-flammable/non-explosive hazardous material. It can be transported as ordinary goods.
2. Products should be stacked separately according to different types and specifications, and should not be mixed.
3. Avoid compression, direct sunlight, rain exposure, and package damage.
4. Transportation and storage temperature should be maintained at 5℃~40℃. When temperature falls below 5℃, appropriate insulation measures must be taken to prevent freezing, demulsification, or frost damage.

1. 本产品为水性产品，非易燃易爆危险品材料，可按一般货物运输。
2. 产品应按不同类型、规格分别堆放，不应混杂。
3. 避免挤压、日晒雨淋，避免包装破损。
4. 运输与贮存温度为 5°C~40°C。低于 5°C时，应采取相应的保温措施，防止结冰、破乳、冻坏。

09 Shelf Life
保质期

Under normal storage and transportation conditions, the unopened product has a shelf life of 12 months from the date of production.

产品在正常贮存、运输条件下，自生产之日起，未启封时，保质期为 12 个月。

国家双示范企业科技成果

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