Saint-Gobain WEBER

# **Building Waterproof Product Catalog**

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# **SAINT-GOBAIN**

# **About Saint-Gobain**

The Saint-Gobain Group was established in France in 1655 and has a history of over 350 years. Its operations span more than 70 countries, specializing in designing, producing, and distributing high-performance materials, such as glass, stoneware, piping, ceramics, and adhesives, offering innovative solutions for consumers. These materials and solutions are prevalent in various aspects of construction, transportation, infrastructure, and industrial applications, deeply intertwined with our daily lives.

In 2022, it ranked 252nd in the Fortune Global 500 and has been continuously selected as one of the top 100 innovative companies worldwide over the past decade. In 2022, its turnover was approximately 51.2 billion euros.

With a vision to become the global benchmark in lightweight and sustainable construction, Saint-Gobain designs, produces, and distributes materials and services for the construction and industrial markets. Saint-Gobain's integrated solutions support the renovation of public and private buildings, lightweight construction, and decarbonization of construction and industry. Emerging from sustained innovation efforts, they offer outstanding sustainability and performance. The mission of the Saint-Gobain Group, 'MAKING THE WORLD A BETTER HOME,' guides the group's commitments.



## **CATALOGUE**





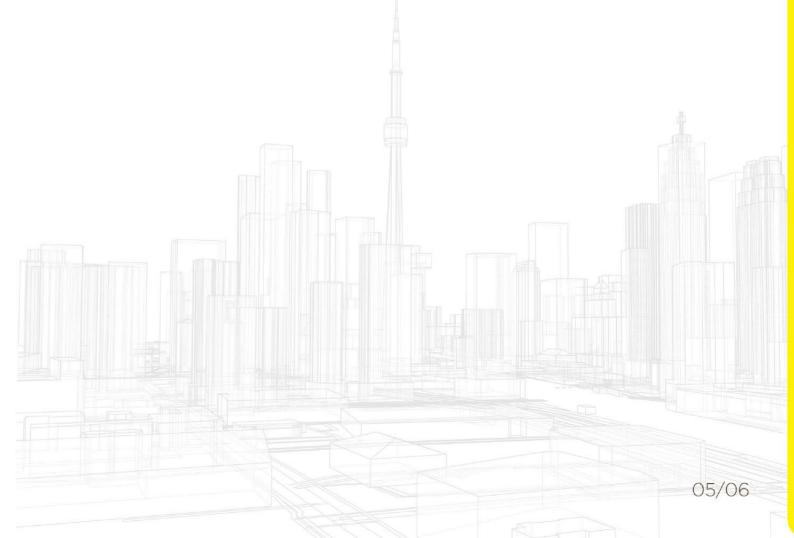








	General purpose	Weberdry TPO-R   Weberdry TPO SA   Weberdry PVC-R Weberdry TORCH-ON   Weberdry TPO R-CP   Weberdry S3000 S
Roof	Planting	Weberdry TPO GR Weberdry PVC GR
	Renovation	Weberdry TPO SA Weberdry TPO R-CP
	Тор	Weberdry TPO GR Weberdry PVC GR
<b>E</b> Fundation	Bottom	Weberdry TPO Pre Weberdry HDPE Pre
	Side	Weberdry TPO SA Weberdry HDPE SA





## **Weberdry TPO R**





Considering the characteristics of waterproofing materials aging and performance degradation after exposure to the solar in roofing scenarios, the optimized formula and process of Weberdry TPO R offers superior aging resistance compared to waterproofing materials used in general applications. It fully meets the request in areas with harsh climatic conditions, prolonged solar exposure regions.

#### **Product specification**

Туре	Thickness (mm)	Width (m)	Length (m)	Overlapping method	Category	Standard
PR/H/FB	1.2/1.5/1.8	2.0	20	Welding	TPO	ASTM D6878 GB 27789-2011

#### **Product features**

- Modified formula with excellent material toughness and mechanical strength;
- Chlorine-free formula for environmental protection;
- · Resistant to chemical corrosion;
- Excellent light reflectivity (design value > 78%), UV-resistant, helping to lower room temperature, reduce electricity consumption, and alleviate urban heat island effect;
- Artificial climate aging duration tested to be > 8000H;
- FM certification: Passed the highest testing standards in the USA/internationally.

## **Technical specification**

Item	Inde	Test method	
item	H(Homogenous)	P(Reinforced)	rest method
Tear strength, N/mm	200N	200N	ASTM D6878-17/ASTM D751-19
Breaking strength ≥	1200N	1200N	ASTM D6878/D6878M-17/ASTM D751-19
Elongation at break, %	500%	15%	ASTM D6878/D6878M-17/ASTM D751-19
Puncture resistance ≥	1	2080N	ASTM E154/E154M-08a(2019)
Low temperature flexibility	-29°C,no cracks	1	ASTM D1970/D1970M-15

## **Weberdry TPO R-CP**





Thermoplastic polyolefin (TPO) waterproofing membranes are prefabricated through a heat-press lamination process with galvanized steel sheets. The corrugated steel plate on the bottom surface of the product provides structural functionality for the roof, while the TPO membrane on the top surface significantly enhances the waterproofing and corrosion resistance of the roof steel sheet. This product can be welded with TPO membranes, transforming rigid waterproofing into flexible waterproofing, solving waterproofing and sealing problems in certain detailed nodes (such as pipe penetrations, ridges, skylights, and ventilators) that are difficult to address with traditional metal roofs. At the same time, it can greatly reduce the construction time of waterproof layers, making it a time-saving and reliable waterproof and corrosion-resistant building material.

#### **Product features**

Integrated composite:

The product is prefabricated and composite with the waterproof layer tightly bonded to the steel plate. The lap joint of the steel plates adopts heat welded method, connecting the roof steel plates into a structural integrity, with excellent waterproofing and sealing properties;

Green and energy saving:

White-colored TPO membrane can reflect sunlight, reducing the roof temperature;

Weather-resistant and corrosion-resistant:

TPO membrane exhibits excellent aging resistance and corrosion resistance, with a service life of over 25 years when exposed;

Labor and time saving:

Without applying waterproofing membranes on-site, it saves labor and shortening the construction period.

## **Product specification**

	Upper sheet	Steel plate
Material	Material Thickness (mm)	Thickness (mm)
TPO	0.8/1.2/1.5/1.8	0.5/0.6

**Type 840** 



Unfold width	Plain width	Wave NO	Wave height	Wave distance	Lapping wave	Purline distance
1000mm	840mm	5	24mm	210mm	1mm	1500mm

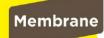
**Type 470** 



Unfold width	Plain width	Purline distance
600mm	470mm	1500mm

## **Comprehensive Comparison**

	Service Life	Waterproof Performance	Corrosion Resistance	Dustproof Performance	Post-Installation Maintenance	Total Cost
Weber TPO R-CP	≥25 years	Welded Waterproof Joints	Physical Corrosion Barrier	Fully Enclosed Dust Containment	Easy-field Repairability	Low
Conventional Metal Cladding	10 years	Drainage- dependent Seams	Non-protected Corrosion System	Non-dustproof Seams	Complex Failure Remediation	High





## **Weberdry TPO GR**





The specialized TPO membrane with plant root-puncture resistance is suitable for green roofs and basement ceiling slabs. It has a physical root-blocking feature, preventing the waterproof layer from being penetrated and damaged by plant roots, ensuring stable and reliable performance.

#### **Product specification**

Туре	Thickness (mm)	Width (m)	Length (m)	Overlapping method	Category	Standard
PR/H/FB	1.2/1.5/1.8	2.0	20	Welding	TPO	GB 27789-2011 ASTM D6878 GB/T 35468

#### **Product features**

- Excellent resistance to root penetration, suitable for construction in complex environments;
- Outstanding welding performance, ensuring fully sealed material joints for root-proof waterproofing;
- · Resistant to mold and microbial growth;
- Improved rainwater management;
- · Resistant to acid, alkali, salt, and oil corrosion.

## **Weberdry TPO-Pre**





The waterproofing membrane is developed to cater to the anti-adhesive system for pre-applied purposes. Under the force of gravity, the concrete slurry and the elastomeric layer of the membrane undergo cross-linking and meshing, resulting in physical adsorption and mortise-and-tenon effect during the cement curing process. Eventually, they firmly bond together to form a reliable complete adhesion.

### **Product specification**

Туре	Finish	Thickness (mm)	Width (m)	Length (m)	Overlapping method	Category	Standard
Pre	Sand	1.2/1.5	1.0	20	Welding	TPO	ASTM*

\*Refer to related TDS or ASTM test report

#### **Product features**

- The waterproof structure formed by the roll material and concrete layer is reliable and non-leaking;
- It has a soft texture, adheres better to the node base, and is resistant to high temperature and corrosion:
- It is resistant to water and aging, making it very suitable for complex underground environments and green roofs.

## **Weberdry TPO SA**





Weberdry TPO SA, is a waterproofing material enhanced with a self-adhesive layer. With its broad application scenarios, it simplifies the installation method. Combining the advantages of both, once Weberdry TPO SA is installed, it ensures that there are no gaps between the material and the building structural layer, offering excellent bonding strength and preventing water migration.

#### **Product specification**

Туре	Thickness (mm)	Width (m)	Length (m)	Overlapping method	Category	Standard
SA	1.2/1.5	1.0	20	Welding	TPO	GB 27789-2011 ASTM D6878

#### **Product features**

- Helps mend damages in the architectural structural layer (less than 2mm);
- Provides solid and reliable bonding, ensuring airtight and watertight properties;
- Homogeneous structural layer;
- Cold application process with a high tolerance in installation.

### **Technical specification**

Item	Index	Test method
Tear strength, N/mm	60	ASTM D624-00(2020)
Tensile strength, Mpa	15	ASTM D412-16(2021) Method A
Elongation at break, %	500	ASTM D412-16(2021) Method A
Puncture resistance, N	350	ASTM E154/E154M-08a(2019) Section 10
Low temperature flexibility	-29°C, no visual cracks	ASTM D1970/D1970M-21 Section 7.6

## **Technical specification**

Item	Index	Test method
Tear strength, N/mm	60	ASTM D624-00(2020)
Tensile strength, Mpa	15	ASTM D412-16(2021) Method A
Elongation at break, %	500	ASTM D412-16(2021) Method A
Puncture resistance, N	350	ASTM E154/E154M-08a(2019)section 10
Low temperature flexibility	-29°C, no visual cracks	ASTM D1970/D1970M-21 Section 7.6





## **Weberdry PVC-R**





The material is soft and easily to be applied. It is a high-polymer waterproofing material made primarily from polyvinyl chloride (PVC), supplemented with various special additives and anti-aging agents, and produced with advanced technology.

#### **Product specification**

Туре	Thickness (mm)	Width (m)	Length (m)	Overlapping method	Category	Standard
PR/H/FB	1.2/1.5/2.0	2.0	20	Welding	PVC	GB 12952-2011 ASTM D4434

#### **Product features**

- More convenient construction in low-temperature environments;
- Good dimensional stability, suitable for areas with significant temperature variations:
- Resistant to chemical corrosion;
- Very convenient for detail processing.

## **Technical specification**

#### Implement standard:GB 12952-2011

ltem	Index				
rearr	H(Homogenous)	L(Back-fleece)	P(Reinforced)		
Right-angled tear strength ≥	50	-	*		
Trapezoid tear strength≥	-	150	250		
Elongation at break, %	200	150	**		
Impact resistance	0.5kg/m,imperneable				
Low temperature flexibility	-25°C,no cracking				

## **Weberdry PVC GR**





Weberdry PVC GR uses polyvinyl chloride as raw material, adding specified additives and anti-aging agents, produced by advanced equipment and technology. The product has excellent tensile strength, high elongation, and great physical resistance to root puncture.

### **Product specification**

Type	Thickness (mm)	Width (m)	Length (m)	Overlapping method	Category	Standard
PR/H/FB	1.2/1.5	2.0	20	Welding	PVC	GB 12952-2011 GB/T 35468-2017

#### **Product features**

- Great resistance to root penetration;
- Excellent tensile strength, elongation rate and dimensional stability after heat treatment;
- Great flexibility at low temperature and weather resistance;
- High compression resistant strength;
- Remarkable anti-corrosion ability make it possible to apply to the special site;
- Good plasticity make it easy to operate the details.

## **Technical specification**

Standard: GB/T 35468-2017 "Weather-Resistant Puncture-Proof Waterproofing Sheets for Green Roofs"

		Index	
High-temperature corrosion resistance	Contact peel strength		0 or 1
	Untreated (N/mm),	welding	>3.0 or membrane failure
Contact peel strength	Plastic waterproofing membrane	adhesion	>1.5
	Retention rate after heat aging	(%)	≥80 or membrane failure

Item		Index			
		Н	L	Р	
Upper resin la	ayer thickness (mm) >	-	*	0.4	
	Maximum tension (N/cm) ≥	-	120	250	
Tensile performance	Tensile strength (MPa) ≥	10.0	(*)	:•:	
rensile performance	Elongation at max tension (%) ≥	=:		15	
	Elongation at break (%) ≥	200	150		
Dimensional change after heat treatment (%) ≤		2.0	1.0	0.5	
Low-temperature flexibility			No cracks at -25°C		





## **Weberdry HDPE SA**

Fundation | I Side



Weberdry HDPE SA butyl self-adhesive HDPE waterproof membrane is waterproofing material developed by Keshun special for undergrade consturction. This membrane include HDPE film, butyl self-adhesive layer and release liner. This membrane can be wet applied and dry applied with concrete; 24 hours after applied, it can be full bonded by dry applied method on concrete. Excellent water tightness, air tightness of butyl can stop water channeling.

### **Product specification**

Туре	Thickness (mm)	Width (m)	Length (m)	Overlapping method	Category	Standard
PR/H/FB	1.2/1.5	1.0	20	Self adhesive	HDPE	ASTM*

\*refer to related TDS or ASTM test report

#### **Product features**

- Widely adaptive temperature, good stable bonding and easy to repair;
- Strong adhesive effect, easy to stick and hard to peel off;It can heal the damage and water seepage point smaller than 2mm;
- Excellent water tightness and air tightness:
- No bitumen inside, environment friendly;
- Cold construction work, easy application and reliable.

## **Technical specification**

Implemented standard: GB/T 18173.1-2012<High polymer waterproof materials Sec 1 >; GB/T 23260-2009 <Waterproof membrane with self-adhesive layer>

Item	Index
Tensile strength/Mpa,23°C	≥16
Elongation at break/%,23°C	>550
Adhesive peeling strength(sheet to sheet),N/mm	≥1.5
Impermeability(0.3Mpa,30mins)	No leakage
Low temperature bending	-35°C no cracks
Tear strength,N/mm	≥60

## **Weberdry HDPE Pre**





A multi-layer composite waterproofing material designed to meet the needs of underground construction areas using the pre-laying method. The structural layer is composed of polyethylene, high molecular self-adhesive membranes, and more.

#### **Product specification**

Туре	Finish	Thickness (mm)	Width (m)	Length (m)	Overlapping method	Category	Standard
Pre	Sand /Acrylic	1.2/1.5	1.0	20	Self adhesive	HDPE	ASTM*

\*Refer to related TDS or ASTM test report

#### **Product features**

- The material has good extensibility and puncture resistance;
- After pre-laying and anti-adhesion, it forms a full bonding layer with the poured main body:
- The material is resistant to salt and alkali and has anti-corrosion properties;
- It has good chemical properties;
- It has a water migration resistance of 0.8MPa/35mm for 4 hours;
- The material itself will not cause any pollution to any groundwater content/flow system.

## **Technical specification**

ltem	Index	Test method
Tensile strength, MPa	25	ASTM D412, modified
Peel Adhesion to concrete, N/mm	1.0	ASTM D903, modified
Elongation at break, %	500	ASTM D412, modified
Puncture resistance ≥	1000	ASTM E154
Hydrostatic pressure resistance	0.7MPa, 1h No water leakage	ASTM D5385-1993, modified





## **Weberdry TORCH-ON**





The material is made from asphalt raw materials supplemented with styrene-butadiene-styrene (SBS) and elastomer resin as modifiers, produced through a special process. This high-polymer modified asphalt material, reinforced with a strengthening matrix and equipped with different surface layer materials, is a traditional waterproofing material.

#### **Product specification**

Туре	Finish	Thickness (mm)	Width (m)	Length (m)	Category	Standard
1/11	PE/Sand/ Slate	3.0/4.0	1	10	Polymer modified bitumen	ASTM D6164 GB 18242-2008

#### **Product features**

- With different surface layer materials, it can be flexibly used in non-exposed, semi-exposed, and exposed areas;
- Good dimensional stability, suitable for areas with significant temperature variations:
- Strong weather resistance;
- Cost-effective.

## **Technical specification**

Item	Index	Test method
Low temperature flexibility	-23°C,no visual cracks	ASTM D543-20, ASTM D1970
Puncture resistance	>1000N	ASTM E154/E154M-08a(2019)
Tear strength	≥100N	ASTM D1004-13
Tensile strength	≥3.0Mpa	ASTM D412-16 Method A
Elongation at break	>30%	ASTM D412-16 Method A

## Weberdry S3000 S





Weberdry S3000 S is a self-adhesive waterproofing material made from cross-linked high-density polyethylene film and pressure-sensitive reactive adhesive through a special process. It offers convenient installation.

## **Product specification**

Туре	Finish	Thickness (mm)	Width (m)	Length (m)	Overlapping method	Category	Standard
1/11	Cross-laminated	1.2/1.5	1	20	0.15 11		ASTM D5147
1/11	PE	2.0	1	15	Self adhesive		GB 23441-2009

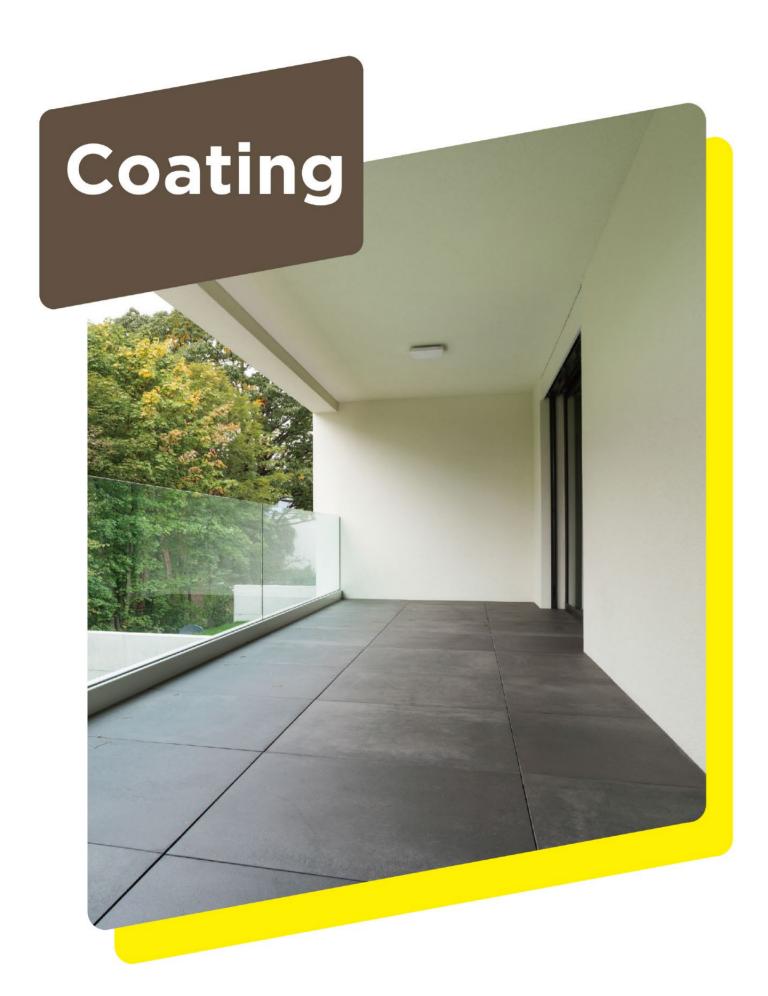
#### **Product features**

- Two version, Single/double-side, adhesive modified bitumen membrane;
- Excellent dimensional stability and UV resistance;
- Balanced material elongation rate and tensile strength values;
- Helps repair damages in the building structural layer (less than 2mm) with outstanding water-tightness;
- Can offset structural deformation stress to a certain extent;
- Suitable for repair projects of concrete structures.

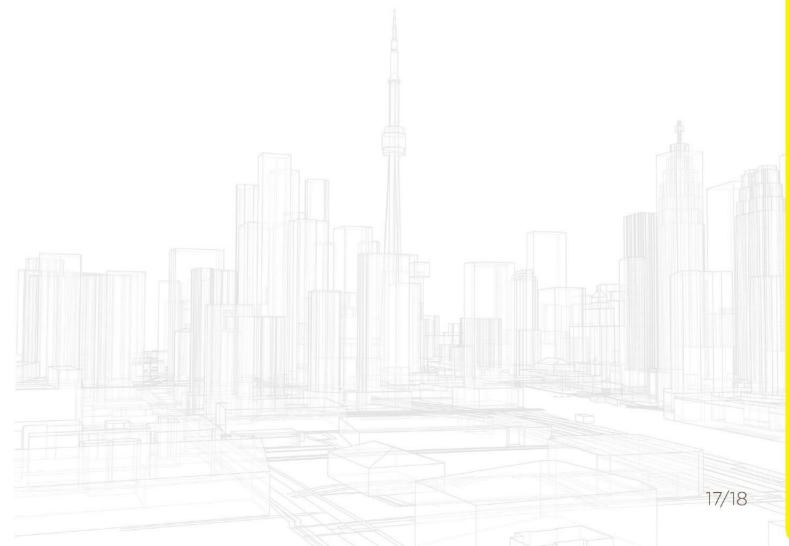
## **Technical specification**

Item	Index	Test method
Puncture resistance	≥200N	ASTM E154/E154M-08a(2019)
Tear strength	>20N/mm	ASTM D624-00(2012)
Tensile strength	≥2 Mpa	ASTM D412-16
Elongation at break	≥200%	ASTM D412-16
Low temperature flexibility	-29°C,no cracks	ASTM D1970/D1970M-15





	General purpose	Weberdry 600   Weberdry 611   Weberdry 612   Weberdry 620
Roof	Balcony	Weberdry 201
	Renovation	Internor HP Weberdry 401
<b>E</b> Fundation	Bottom	Weberdry 302
(A) Interview	Bottom	Weberdry 101
Interior	Side	Weberdry 301   Weberdry 101
Railway/ Bridge	Substrate	Weberdry 109









#### Recommend usage

0.15-0.25kg/m<sup>2</sup> for 1mm thickness, if mix with sand or power 0.3-1kg/m<sup>2</sup>.

#### **Product packaging**

20kg/set (A:16kg/pail; B:4kg/pail)

Polyurea special primer is a solvent-based two-component coating mainly composed of epoxy resin. It is specifically developed as a primer for polyurethane coatings on concrete substrates and can be used in combination with powder and quartz sand for repair and leveling of the base surface.

#### **Product features**

- Low viscosity, strong penetration, good combination with concrete;
- Good sealing ability and effectively insulate moisture to reduce the bubble and pinhole formation on polyurea coating;
- Chemical bonding with polyurea to provide a good adhesion of concrete and polyurea.

#### Construction conditions

- The concrete surface should be smooth and free of defects, with a strength not lower than the strength grade required by the structural design. Remove any substances that hinder adhesion;
- The peel strength of the concrete substrate must reach at least 1.5 MPa after treatment.
- Under normal circumstances, the moisture content of the concrete should be below 7%-8%.
- The water vapor permeability is less than 1.56 kg/(100m<sup>2</sup>·24h).

## **Product specification**

Item		Index	Test standard
Tack free drying time/h		≤4	GB/T 1677-2008
Fully	Fully drying time/h		GB/T 1677-2008
So	Solid content /%		JC/T 2252-2014
	Dry condition /MPa	≥2.5	JC/T 2252-2014
Adhesion strength	Retention rate after dip in water /%	>70	JC/T 2252-2014

## Weberdry 611





## Recommended usage

 $2.4 kg/m^2$  for 2mm thickness polyurea film

#### **Product packaging**

420kg/set (A:220kg/pail, B:200kg/pail)

Spray Polyurea Coating is a type of elastic polyurea material that is formed by spraying a mixture of semi-prepolymer, polyether, and chain extender using professional equipment. This material is solvent-free, pollution-free, easy to apply, with continuous, dense, and seamless coating. It also has high strength, corrosion resistance, and excellent physical properties and stability.

#### **Product features**

- Protection:provide a smooth, continuous, and seamless protective layer without joints or seams;
- Eco-Friendly:Solvent-free formulation;
- Fast Cure:Rapid curing minimizes down-time and allows for a swift return to service;
- Tough Shield: High durability and resistance to abrasion, impact, and chemicals;
- Strong Bond:Excellent adhesion to various surfaces, ensuring long-lasting performance;
- Flexible Defense: Maintains flexibility in extreme temperatures, accommodating structural movement;
- Chemical Resilience:Resists various chemi cals, making it suitable for corrosive environments

#### **Construction conditions**

- Firm and smooth without any impurities;
- Moisture content should be lower than 6%:
- Environmental temperature should be between 5-35°C;
- Humidity should be between 30-80%.

#### Construction method

- Surface requirement: The concrete surface should be cleaned, repaired, leveled, and
  polished to a certain roughness. Ensure that the concrete is cured, with a strength
  of C25 or above, and a moisture content of less than 6%;
- After the surface is properly treated, the next process should be carried out quickly;
- Components A and B of the coating should be mixed evenly before use, and it is recommended to mix them while using if conditions permit;
- A:B = 1:1 (volume ratio), the addition of diluent is not allowed;
- Environmental temperature and humidity requirements: The construction environment temperature should be between 5-35°C, and the surface temperature should be at least 5°C higher than the air dew point temperature; the humidity range should be between 30-80%;
- Ventilation conditions: Ventilation should be maintained during construction, but construction should not be carried out in strong winds.

## **Product specification**

Item	Index	Test standard
Gel time/s	≤45	
Tack free drying time/s	≤120	
Hardness (shore A)	≥90	
Tensile strength/MPa	≥16	CD (T. 2744C 2000
Elongation at break/%6	≥450	GB/T 23446-2009
Tear strength /N/mm	≥50	
Adhesive strength/MPa	≥2.5(Or substrate destroyed)	
Wear resistance /[(750g/500r)mg]	≤30	
Impact resistance/(kg"m)	≥1.0	

Coating







### Recommended usage

Normally, it is about  $0.5 - 2kg / M^2$ , and the thickness of one-time construction is about 0.2 - 1.0 mm.

#### **Product packaging**

20kg/pail

Single-component hand-painted polyurea coatings have high mechanical properties and elasticity, good weather resistance, and match the modulus of concrete. After forming a film, it still has an elongation of at least 100% under conditions of long-term freezing at low temperatures of -45°C. It can be used for functional elastic coatings such as exposed waterproofing, protection, and corrosion resistance, especially suitable for waterproofing of highly deformed joints and stress-concentrated detail areas, and for waterproofing projects that require long durability.

#### **Product features**

- · Single component, curing with the moisture of the air, easy to construct;
- The coating is compact without joint;
- The one time construction thickness can be 0.5-1.0mm and not easy to flow in vertical construction;
- Good water resistance, good wear resistance and excellent elasticity;
- Good weather resistance and corrosion resistance;
- · Do not content heavy metal, green and environmental protection;
- The coating serve for a long time in the temperature range of 35°C, -80°C,.

#### **Construction conditions**

- · Do not mix and stir with cement mortar;
- Do not immerse it in thick or hot strong acid liquid for a long time;
- In general, do not construct when the base temperature is lower than + 5°C, or the base temperature is higher than + 50°C; do not construct when the base temperature is 3°C lower than the site temperature;
- Do not construct under conditions where there is dew on the base, or reverse water pressure emerges from the concrete base, or there is clear water on the base

#### **Construction method**

- After base course treatment, the product should be applied through spraying, roller painting, brushing or blade coating in 2 to 6 hours after primer construction in summer, or 6 to 18 hours after primer construction in winter;
- Use out the product within 1 hour after its opening;
- After construction, the product needs about 3 to 4 hours for surface drying, and 6 to 24 hours for solid drying, depending on the temperature and humidity on the construction site, and thickness of the construction. During its curing, keep it from trampling and exposed water;
- The product can be applied for multiple layers according to the expected thickness
  of installation whenever necessary;
- Do not apply for the next layer until the previous layer has realized solid drying.
- Don't apply a layer thicker than 1.0mm, otherwise the curing effect will be poor.

#### **Product specification**

Item	Index	Test standard
Density, g/ml	1.030.1	
Surface drying time , TFT, h	< 3	
Fully drying time , h	< 6	
Tensile Strength, Mpa	≥15	0/5/5/1004
Elongation at break, %	≥300	Q/ SJSJK004 JC/T2435-2018 type II
Low temperature -45°C elongation, %	≥100	
Tear strength, N/mm	≥ 40	
Drawing adhesive strength (with primer ), MPa.	≥ 2.5	
Peel adhesive strength (with primer),N/mm	≥ 2	

## Weberdry 620





#### Recommended usage

Normally, the recommended usage is 0.15-0.3kg/m². The thickness of one construction is 0.15-0.25mm, and the thickness can be increased by multiple times construction. It is not allowed construct the thickness more than 0.25mm in one time.

### **Product packaging**

20kg/set (A: 15kg/pail, B: 5kg/pail)

Polyurea weather resistant topcoat is a type of polyaspartic polyurea coating. The film of the coating does not contain photochromic and chromogenic groups, which completely avoids the drawback of aromatic isocyanate polymer being UV resistant and prone to yellowing. It can be used on concrete, steel structures, polyurea coating surfaces, landscape waterways, water amusement parks, building roofs, etc. It can also be used for waterproofing and sealing treatment in home interiors, such as balconies, bathrooms, kitchens, window frames, and exterior walls.

#### **Product features**

- Excellent weather resistance performance and not easy to yellowing, can expose for a long time;
- · Good water resistance and good wear resistance with certain elasticity;
- The film is full of color and brilliance:
- Easy to construction.

#### **Construction conditions**

- Strong and smooth with no impurities;
- Moisture content should be less than 6%:
- The environmental temperature should be between 5~35°C;
- Humidity range should be between 30~80%.

#### Construction method

- According to the weight ratio of coating A:B = 3:1, accurately weigh and mix the ingredients, mechanically stir for 2-3 minutes, and use after thorough and uniform mixing;
- The mixed materials should be used within 30 minutes. The higher the on-site temperature, the shorter the service life. Use a small amount and mix according to the actual on-site conditions. No diluent is required. It can be applied by spraying, brushing, or rolling:
- This product can be applied in multiple coats according to the construction requirements. In general, the second coat can be applied after the first coat reaches dry-to-touch. If used on a polyurea base, construction should be carried out within 12-24 hours after polyurea spraying is completed.

#### **Product specification**

Item	Index	Test standard
Tack free drying time/h	≤2	GB/T 1728-1989
Fully drying time/h	<24	GB/T 1728-1989
Wear resistance (750g, 500r)/mg	≥40	GB/T 1768-1979
Adhesion (concrete substrate)/MPa	≥2.5	JC/T 2252-2014
Water resistance(720h)	No blistering, no wrinkling, no peeling, no obvious discoloration	JC/T 2252-2014
Anti-artificial climate accelerated test(1500h)	No obvious color change and powder, no bubbles and cracks.	GB/T 9274-1988







The coating is a two-component waterproofing material composed of acrylic emulsion, cement, and a variety of inorganic powders. Its performance varies depending on the material ratio between Component A and Component B, categorized as Type II, and Type III.

#### **Product features**

- Good waterproofing performance with lower cost;
- Environmentally friendly, it is water-based material;
- High film strength and good ductility;
- Good adhesion to the base, it can be applied on wet substrate(no floating water) directly;
- Type I products have excellent flexibility and good low temperature resistance, and
- Type II and Type III products have excellent bonding strength and impermeability;

Weberproof 201 acrylic polymer cementitious waterproof coating is made up by acrylate emulsion, cement and inorganic materials. The product is classified into type I, type II and type III according to their different performance.

### Recommended usage

The usage for 1.0mm thickness coating about:

Type I:  $1.8 \text{ kg/m}^2$ ;

Type II:1.9 kg/m<sup>2</sup>;

Type III:  $2.0 \text{kg/m}^2$  (The actual amount should be calculated according to the site base surface.)

### **Product packaging**

Type I:Liquid 20kg/pail+ Powder 24kg/bag Type II:Liquid 20kg/pail+ Powder 30kg/bag Type III:Liquid 10kg/pail+ Powder 25kg/bag Mix ratio:Liquid:Powder=1:1.2 Mix ratio:Liquid:Powder=1:1.5 Mix ratio:Liquid:Powder=1:2.5

## **Technical specification**

Standard: GB/T 23445-2009

N	Index			
ltem	T .	11	III	
Solids content%≥		70		
Tensile strength/Mpa ≥	1.2	1.8	1.8	
Elongation at break,%≥	200	80	30	
Bending resistance at low temperature	-10°C,no gash	-	-	
Impermeability 0.3Mpa,30min		Impermeable		
Adhesive strength on moisture base surface/Mpa >	0.5	0.7	1.0	
Impermeability(Mortar dorsal surface)/Mpa ≥	*	0.6	0	

## **Internor HP**





### Recommended usage

No need to add water, theoretically 3-5m²/kg of base treatment agent can be coated. (The actual amount depends on the condition of the base layer and the thickness of the coating.)

#### **Product packaging**

18kg/pa

Internor HP Primer is a new type of high permeability material composed of polymer emulsion and multifunctional additives. It is featured by good sealing, excellent permeability, high interface strength, and excellent adhesion to membrane. Internor HP does not form a film when bonded to the base surface, and does not hinder the penetration of the butyl self-adhesive layer to the base. It can be the primer for butyl rubberized waterproof membrane and non-asphalt rubberized waterproof membrane.

#### **Usage method**

The base layer should be clean and dry, free of oil stains, wax stains and other floating loose objects. It is sufficient to apply 1-2 times without revealing the bottom. After it is completely dry, the next process can be carried out.

#### **Product features**

- Good sealing;
- Excellent permeability;
- · High interface strength;
- Excellent adhesion to the membrane.

#### **Technical specification**

#### Standard: JG/T 468-2015 "Primer for Walls"

Item	Index
Minimum film formation temperature/°C	<10
Tensile bonding strength ratio/%	≥150
Retention rate of tensile bonding strength after immersion/%	≥80
Surface drying time/min	≤90
Non-volatile content/%	≥8.0

Coating





The non-asphalt non-curing modified rubber waterproof coating is a red "non-asphalt-based" waterproof coating made of special rubber and resin, various high-molecular elastic materials, and special additives. The product does not contain asphalt and has stable performance, reliable waterproofing, and is a new type of single-component environmentally friendly waterproofing material. It does not cure after long-term exposure to air, maintains a viscous gel-like state in the application state, has strong self-healing ability, and is instantly sticky upon contact. It can solve the problems of cracking of the waterproof layer caused by stress transferred from the base layer or premature aging under high-stress conditions. The product can solve the difficulties in edge sealing when single construction of polymer waterproof membranes and the difficulty in compounding existing polymer waterproof membranes with waterproof coatings. At the same time, the viscosity of the material can fill and repair the capillary pores and cracks in the base layer, solving the problem of water seepage in the waterproof layer.

#### **Product features**

- Excellent creep properties;
- Excellent performance of the construction;
- Excellent bonding performance;
- Excellent temperature adaptation;
- Excellent durability;
- Excellent self-healing;
- Excellent environment protection performance.

#### Recommended usage

The usage for 1.0mm thickness coating is about 1.2-1.35kg/m $^2$  (The actual amount should be calculated according to the site base surface.)

#### **Product packaging**

20kg/pail

## **Technical specification**

Implemented Standard: Q/SDKS 101-2021

ltem		Index	
		N	S
Flash point/°0	C >	20	00
Solid content/	% <i>≥</i>	9	8
A dhasiya mramartian	Dry base	100% cohesion disruption	
Adhesive properties	Wet base		
Elongation/mm ≥		15	
Low temperature elongation(5 $^{\circ}$ C)/mm $\geq$		2	0
Low temperature flexibility		-25°C, no	breaking
Heat resistance/°C		70	90
		No slide, flowing or sagging	
Low temperature stress relax	cation (5°C)/% ≤	3	5

#### Implemented Standard: JC/T 2428-2017

	Item	Index
Elongation/mm		≥15
H+i 70% 100h	Elongation/mm	≥15
Heat aging 70°C, 168h	Low-temperature flexibility	-15°C, no breakage
	Appearance	No change
Acid resistance	Elongation/mm ≥	15
	Change in mass/%	± 2.0
	Appearance	No change
Alkali resistance	Elongation/mm ≥	15
	Change in mass/%	± 2.0
	Appearance	No change
Salt resistance	Elongation/mm ≥	15
	Change in mass/%	± 2.0

## Weberdry 301



A new type of composite waterproof material developed by the technology of strengthening the cohesive force of high-strength fiber. The product is specially added with anti-cracking fiber, which can effectively enhance the comprehensive and anti-folding force of the coating, and can directly paste the Weberdary 301 design concept: the product adds fiber reinforced materials, so that the product has strong adhesion; in the product of the extramural and comprehensive test, the product is broken by pressure, and the fiber material in the product plays a bonding role. As one of the selling points of this product, filamentous fiber can represent the characteristics of the product more.

#### **Product features**

- Effectively enhance the cohesion, by using the technology of high strength fiber strengthening the cohesion;
- High product strength and take effect quickly, which making the waterproof coating stronger and effectively preventing the brick-off phenomenon caused by the waterproof layer falling off;
- Stronger adhesion, the coating film with fiber after it is actually dried, so that the tiles are bonded more firmly;
- Flexural resistance, compression resistance, impact resistance. It can effectively prevent
  the coating from cracking, and has a long service life.

### Recommended usage

 $1.5-2.0 kg/m^2$  for 1mm-thickness film (The actual amount should be calculated according to the site base surface.)

### **Product packaging**

25kg/pail

## **Technical specification**

Standar	d: JC	/T 9	84-201	1

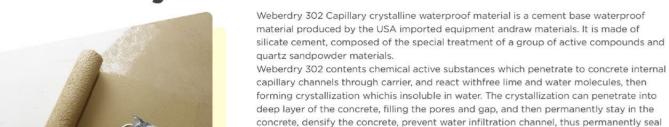
News	Index
Item	Type I
Flexibility, Lateral Deformation Capability/mm >	2.0
Bonding strength/Mpa, no treatment≥	0.7
Compressive strength MPa ≥	12.0
Breaking strength/Mpa≥	4.0
Alkali resistance	No cracking or peeling
Heat resistance	No cracking or peeling
Frost resistance	No cracking or peeling
Shrinkage/% ≤	0.3

Coating

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eberdry

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the concrete.

#### **Product features**

- It can be applied on both the upstream and downstream surfaces of concrete structures;
- Especially suitable for wet base construction;
- Permanent activity, can naturally heal fine cracks below 0.4mm;
- Protect steel bars and prevent them from corroding;
- It can protect the concrete structure from the corrosion of waste water, sea water and chemicals and solvents;
- Enhance the strength of the concrete structure and prevent the damage to the concrete caused by the freeze thaw cycle;
- Because of its unique permeability, there is no need to set up a protective layer after construction.

#### Recommended usage

1.5kg/m² for 1mm-thickness film. (the actual amount depends on the condition of the base layer and the thickness of the coating)
Mix ratio: Water: Weberdry 302: (0.22-0.27):1 (by weight)

## **Product packaging**

20kg/pail

## Technical specification

Standard:	GB18445-201
Standard:	GD10443-20

Item	Index
Fineness, 0.63mm residue on sieve/%	≤5
Chloride ion content/%	≤0.10
Breaking strength/MPa,28d	≥2.8
Compressive strength/MPa, 28d	≥15.0
Wet-based adhesive strength/MPa,28d	≥1.0

## Weberdry 101





Weberdry 101 Single-component moisture cured polyurethane waterproof coating can be applied on and complicated projects with its unique mechanism of reaction by at mospheric moisture and the NCO end group of the PUP to form a seamless, strong bonding, elastic and flexible waterproof film.

#### **Product features**

- Ready to use: it is pre-packaged, eliminating the need for complex mixing that can lead to quality issues;
- Durable: It offers stable performance with resistance to aging, acids, alkalis, fatigue, and extreme temperatures:
- Eco-friendly;
- Easy installation: excellent leveling properties. Upon application, it reacts with
  moisture in the air to create a seamless, tough, and highly elastic waterproof film;
- Versatile: It can be combined with high-polymer membranes and self-adhesive modified bitumen waterproof membranes to create a comprehensive waterproofing system.

#### Recommended usage

1.6-1.8kg/m² for 1mm-thickness film (the actual amount depends on the condition of the base layer and the thickness of the coating)

#### **Product packaging**

25kg/pail

## **Technical specification**

ASTM

Item	Index	Test Method
Tension strength	500%	ASTM D412 modified
Elongation at break	2.0MPa	ASTM D412 modified
Peel Adhesion To Concrete	1.0 N/mm	ASTM D903 modified
Hydrostatic pressure resistance	0.6MPa, 1h No water leakage	ASTM D5385-1993, modified
Low temperature crack bridging	No effect	ASTM C836-06
Low temperature flexibility	No cracking	ASTM D1970-01

<sup>\*</sup>Test values shown in above are subjected out testing done in the lab.



Railway/Bridge | Substrate



Weberdry 109 polyurethane waterproof coating for railway & bridge is a kind of coating with two components chemicals, component A is a pre-polymer polymerized by polyester and is socyanate, component B is colorful liquid made up of reinforcing agent, plasticizer, accelerating agent, which is researched special for railway & bridge and its standard reach and exceed than railway required.

#### **Product features**

- Remarkable tensile rate and high elongation rate, can perfectly bonding with substrate and adapt to the concrete deformed;
- Excellent low temperature resistance and water impermeability good wear, acid, and alkali resistance:
- No solvent added during construction, safe and environmental friendly, fast cured, fully meet construction progress requirements.

#### Recommended usage

 $1.3-1.5 kg/m^2$  for 1mm-thickness film(the actual amount depends on the condition of the base layer and the thickness of the coating)

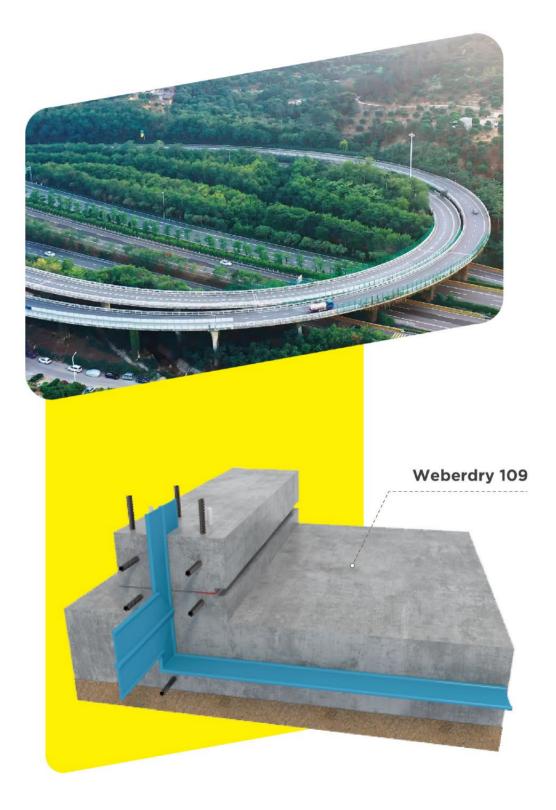
#### **Product packaging**

60kg/set: A 20kg/pail, B 20kg\*2 pail

## **Technical specification**

Implemented Standard: TB/T2965-2018 "Concrete Deck Waterproof Layer of Railway&Bridge"

Item	Index
Tensile Strength(MPa)	>6.0
Tensile strength retention	Heating treatment≥100%
	Alkali treatment≥70%
	Acid treatment ≥80%
Elongation at break,no treatment	≥450%
Low temperature bendability,no treatment	-35°C,no cracks
Surface drying time(h)	<4
Actual drying time(h)	≤24
Impermeability 0.4Mpa,2h	No leakage
Heating expansion rate	≥-4.0%,≤1.0%
Alkali resistance	Saturated Ca(OH)2 solution,500h, no cracks,no peeling of
Solid content	>98%
Adhesive strength on wet substrate/Mpa	>0.6
Adhesive strength on concrete/Mpa	≥2.5
Tear strength N/mm	≥35.0
Peeling strength from concrete N/mm	>3.5



### SUPPORTING SYSTEMS

## **Tightening and sealing systems**







fastener



buildings

casing



retaining gasket

(rigid substrate

layer)

Rock wool fixed

tube



expansion

screws







Non-perforated Perforated coiled retaining gasket material retaining (soft substrate gasket layer)







fixing













casing with an



for mechanical depression bars

Prefabricated internal corner

Prefabricated

diagonal casing





Prefabricated

external corner







Prefabricated air exhaust foundation system support rib

Equipment

Walkway board

## **Prefabricated functional systems**









Roof bridge Lining purlin support



Lightning arrester support



Steam discharge



Aluminum base of equipment





Safety anchor fixing bolt



### **Construction tools**











Double-weld welding machine

Vacuum leakage

detection hood

Hand-held welding machine

welding machine







Non-punching welding machine

## Top-level raw materials











We use international top-class raw materials including Basell, DOW, BASF, Dupont, Sinopec, etc.

## Advanced manufacturing equipment









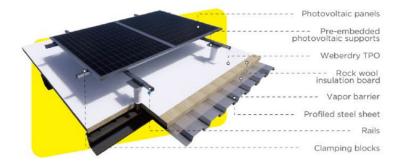
Produced by Amat assembly line

## Membrane

#### **Metal Roof Mechanical Fixing System**

- · Single-layer roof application
- · Pre-installed photovoltaic supports
- · Convenient construction

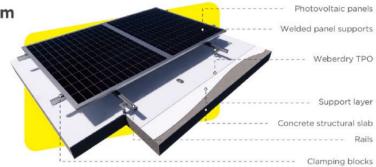
Applicable product structures: H/P



#### **Concrete Roof Mechanical Fixing System**

- · Single-layer roof application
- · Photovoltaic supports do not penetrate the waterproofing layer
- · Excellent waterproof integrity

Applicable product structures: H/P

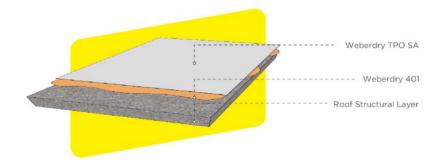


#### **Roofing Renovation System**

·Optimized Non-Penetrating Mechanical Fastening System ·Aesthetically Enhanced Roof Surface

·More Uniform Wind Load Distribution ·High Construction Efficiency

Applicable to concrete roofs, light steel roofs, aluminum panels, and wooden board roofs.



#### Loose-lay system

During the installation of the waterproofing membrane, the membrane is only fixed at certain peripheries using adhesive/metal bars, leaving the rest unfixed. The membranes are welded together using hot air and rely on the upper load to resist wind uplift.

- · Suitable for various base layers;
- · Fast installation;
- · Low installation cost.

This method is applicable for green roofs, drivable roofs, walkable roofs, and non-walkable roofs that are topped with pebbles or prefabricated blocks.

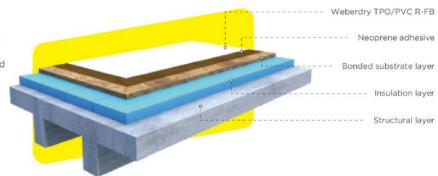


#### **Full Bonding System**

When installing the waterproofing membrane, a special TPO adhesive is used to bond the entire membrane to the base layer, with the overlapping edges being welded using hot air.

- · Suitable for roofs with complex structures
- · Strong wind load resistance
- · Full bonding prevents water migration

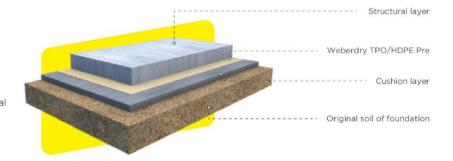
This method is suitable for concrete roofs and light steel roofs with rigid insulation boards.



#### Pre-applied system

When installing a waterproof coiled material, have it overhead paved above the cushion layer and connect the overlapping edges by means of adhesive or welding with hot air. Steel bar binding and concrete pouring can be done directly after the installation, needing no protection layer construction.

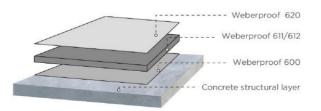
- $\cdot$  The waterproof layer is directly adhered to the structural layer;
- Providing reliable waterproofing without the need for a construction protective layer;
- $\cdot$  Saving construction costs and time.



This method applies to the bottom slabs of basements and the side walls without construction space.

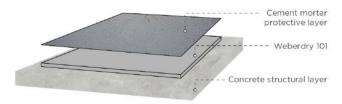
### Coating

#### Weber CPC system



\*Perfect waterproof product portfolio

#### Weber Sc system



\*Cover the coating application surface in a physical way, and provide a balanced coating application scheme

#### REFERENCES



Xiamen International Conference & Exhibition Center



Taiyuan Xiaohe International Conference & Exhibition Center north and south clusters

- Xi 'an International Football Center
- Guizhou Tongren Olympic Sports Center
- Beijing Jiaotong University Comprehensive Gymnasium



Plants of Suzhou Santen Pharmaceutical Factory



Chengdu Tongwei Jintang Solar Power Base

- Wuhan New Energy and Intelligent Connected Automobile Innovation Industrial Park
- Lanxi semiconductor laser and chip industrialization project
- Sino-German(Jingdezhen) Industry 4.0 Intelligent Manufacturing Base

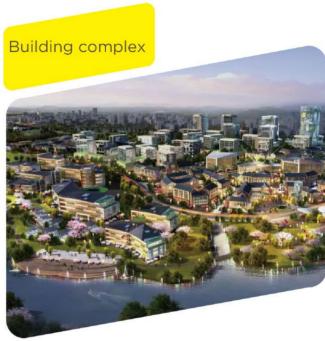


Huawei Ulangab Data Center



Alibaba Zhangbei Cloud Computation Center

- Shanghai Technology Innovation Center Micro-satellite Modular Intelligence project
- Sichuan Chengdu Financial Innovation Center
- Chengdu China Merchants Bank Financial Back-office Service Center



Sichuan Chengdu OCT Jin Xiu Tian Fu



Xinzheng International Airport Phase III Cargo Area

- Guangfo Metro Linyue Section TOD Comprehensive Development
- Sichuan Chengdu Tianfu New District Vocational School
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