

Product Technical Manual

Revision Date:

TDS Number:

Product Name: Dome Roofing Accessory Materials

Version: V 3.0

1.WH-T Series TPO Waterproofing Membrane

Product Introduction

Wanhua WH-T Series TPO Waterproofing Membrane is a thermoplastic polyolefin waterproofing membrane produced through a co-extrusion calendering process, using imported TPO resin as the base material, supplemented with flame retardants, light-shielding agents, antioxidants, light stabilizers, softening agents, reinforcing fabrics, and other additives.

This product is suitable for exposed or non-exposed roof waterproofing layers in buildings, as well as underground waterproofing in structures prone to deformation. It is particularly well-suited for light steel and steel-structured roofs, making it the preferred waterproofing material for large industrial plants, public buildings, and other roofing applications.

Product Type



1.Polyurethane Internally Reinforced Type

2. Backing Type (or Backing-Reinforced Type)

3. Self-Adhesive Type

4. Pre-Applied Self-Adhesive Type

5. Homogeneous Type

Product Features

1. High aging resistance and weather durability

2. Excellent low-temperature flexibility

3. Superior weldability

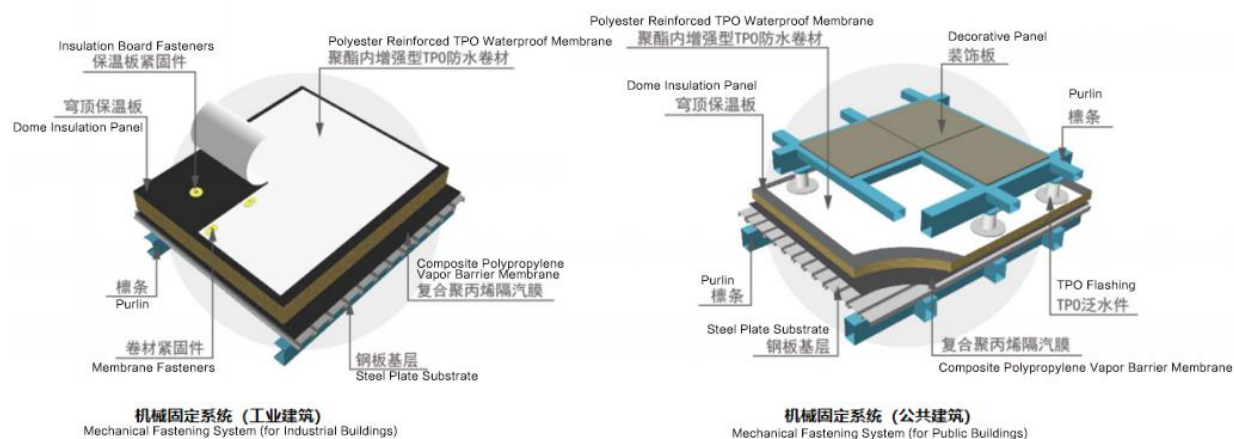
4. Resistance to both static and dynamic punctures

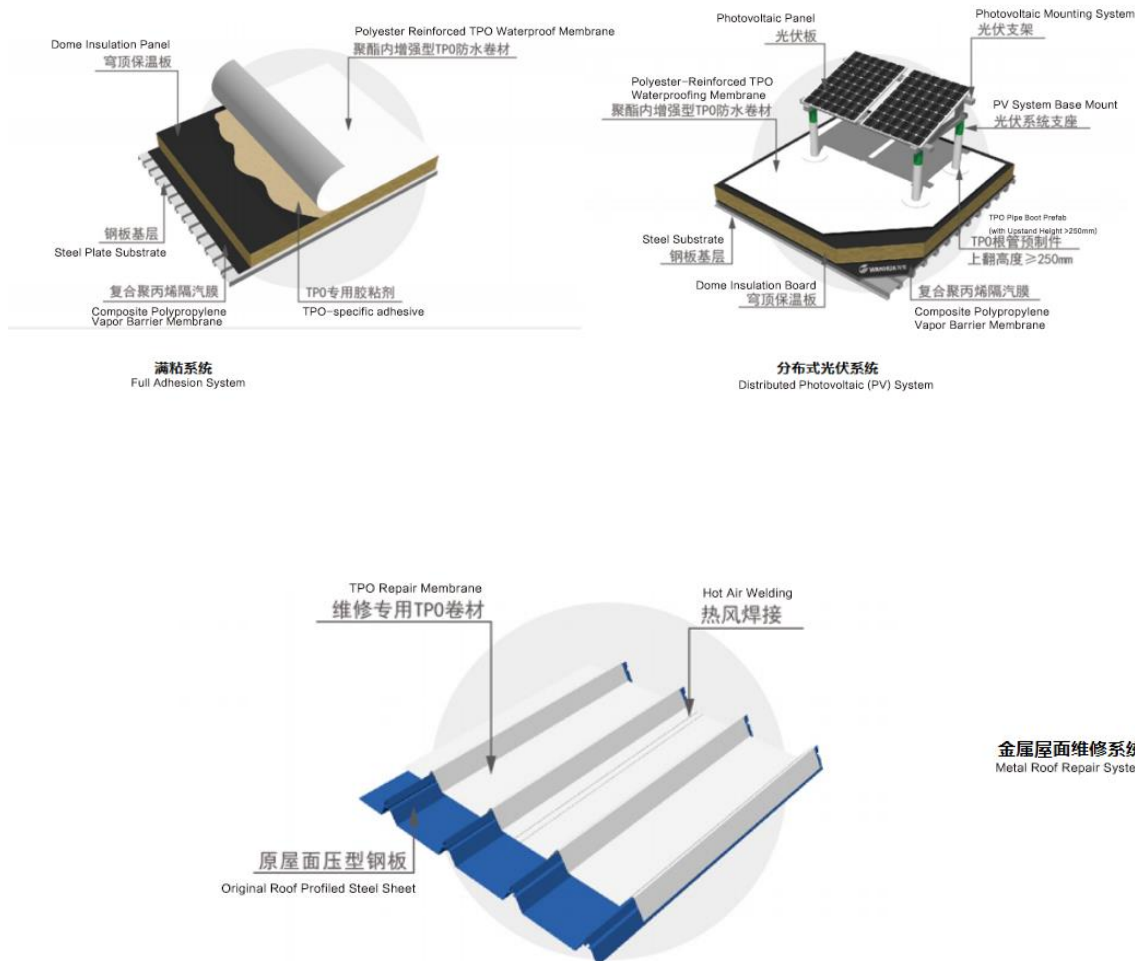
5. Compliance with environmental standards

6. Root penetration resistance & heat/light reflectivity

7. Available in multiple colors for customized solutions

System Technology





2. WH20 Series Moisture & Vapor Barrier Membrane

Product Introduction

Wanhua WH20 Series Moisture & Vapor Barrier Membrane is specifically designed for airtightness and condensation control in building envelope systems. It provides excellent water vapor resistance, protecting the insulation layer and building structure from moisture infiltration caused by warm indoor environments. By blocking vapor penetration, it ensures the insulation material remains dry, maintaining long-term energy efficiency.

Product Features

Airtightness: Excellent vapor barrier performance ensures superior building airtightness.

Watertightness: Exceptional waterproofing performance; can serve as a secondary waterproofing layer for the building envelope when needed.

Durability: Outstanding long-term durability ensures consistent airtight and watertight performance, extending the building's energy efficiency.

Safety: Slip-resistant surface enhances construction safety, with excellent physical properties and an extended workable time during installation.

Product Applications

The WH20 Series delivers exceptional physical properties and outstanding vapor barrier performance, making it ideally suited as a vapor control layer in single-ply flexible roofing systems. When installed beneath the insulation layer, it effectively blocks moisture transmission from building interiors, ensuring long-term thermal efficiency of insulation materials.

For specialized applications such as cold storage facilities, the WH20 Series product must be installed on the warm side (high-temperature surface) of the structure.³.

3. WH10 Series Waterproof & Breathable Membrane

Product Introduction

The WH10 series waterproof and vapor-permeable membrane is installed on the exterior of the insulation layer in building envelope systems. It effectively blocks wind and rain intrusion, reduces air convection, and enhances the watertightness and airtightness of the building envelope. Meanwhile, its excellent vapor permeability

allows rapid dissipation of trapped moisture within the envelope structure, thereby maintaining the durability of the building envelope and ensuring indoor comfort.

Product Features

Airtightness

Excellent wind resistance ensures superior building airtightness, reducing thermal convection and improving energy efficiency.

Watertightness

Exceptional waterproofing performance, suitable as a secondary waterproofing layer for building envelopes.

Vapor Permeability

Facilitates moisture diffusion within the envelope structure, maintaining natural dryness in insulation retrofits.

Durability

Outstanding long-term durability ensures consistent performance in airtightness, watertightness, and vapor permeability, delivering sustained energy savings.

Product Applications

The WH10 series waterproof and vapor-permeable membrane can be widely applied in steel structure industrial buildings and curtain wall systems of public buildings, effectively preventing insulation failure and condensation formation.

For more information, please refer to the Safety Data Sheet (SDS) of our products or contact our Customer Service Center.

The indicators and data provided in this document are based on our current level of technical knowledge and practical experience, and are for reference only. Specific guaranteed indicators are subject to the quality assurance certificate or supply contract.

The user is responsible for testing the products purchased from our company to verify their suitability for their intended processes and applications, and to achieve the desired objectives. Further application and processing of our products are beyond our control. Therefore, our liability for the products provided is limited to the portion delivered by us and used by you. We do not assume responsibility for indirect losses incurred during the production process using our products as raw materials. Our technical support and customer service center are available to provide consultation and technical services related to our products. We welcome your inquiries and communication via mail or phone.

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