Blindside Waterproofing

Blindside waterproofing is considerably more complex than traditional below-grade waterproofing because the process is "reversed" and waterproofing is installed before the foundation is poured. In addition, applications can go many levels deep.

Structures are increasingly being built on less desirable land. Typically, blindside projects are required in high-density areas where property lines, nearby structures and terrain limit excavation, access and result in congested jobsites. They also generally include tunnels where even partial excavation is cost-prohibitive.

In some cases, blindside waterproofing may be selected primarily to limit excavation or substantially reduce the area that must be disturbed to build and waterproof a subterranean foundation. By minimizing excavation and reducing the developed footprint of a building, LEED credit for Sustainable Sites – Site Development can be achieved in part through the use of the appropriate system and methods.

Paraseal® LG Waterproofing System Performance Makes it the Solution of Choice

Bentonite systems have a proven track record extending half a century or more. Tremco’s Paraseal LG Multiple-Component Sheet Membrane Waterproofing System is specially designed for blindside installations such as lagging, under floor slabs and in elevator pits, providing outstanding protection against water intrusion in areas of high water heads, construction traffic, form release agents, multiple exposures to inclement weather and extremely abrasive concrete pours.

Paraseal LG consists of a self-sealing, expandable layer of granular bentonite laminated at the rate of up to one pound per square foot to an impermeable, high-density polyethylene (HDPE) sheet. Together with a protective layer of spun polypropylene, this multi-layer, redundant system forms a tough, high performance membrane which is extremely durable and capable of withstanding even shotcrete applications directly on the face of the membrane.

Terminations, Connectivity to Above-Grade Waterproofing is Critical

Continuity throughout the building envelope is critical, so detailing and integration of the vertical building façade system and the below-grade waterproofing system is of paramount importance. A failure in one component can and does affect other components in the building.

Moisture often accumulates at or near the grade line of the building at façade terminations. In order to ensure long-term durability of the structure, connectivity and compatibility of the transition interface must be addressed to ensure long-term performance.

For blindside applications, Paraseal LG and accessories such as the Para-term Bar used with Vulkem® 116 or other Tremco sealants tested and approved for compatibility would provide a secure, extremely durable and long-lasting termination. A flashing would then be applied over any exposed Paraseal for additional protection.

With a comprehensive product offering from the foundation to the roof, Tremco Commercial Sealants & Waterproofing is able to ensure continuity, compatibility and performance over the long term.
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Complex and Grueling Demands Require the Right Materials and Know-How

Membranes:
Paraseal LG Composite Sheet Membrane Waterproofing System is a multi-layer sheet membrane system consisting of a self-sealing, expandable layer of granular bentonite laminated at the rate of up to one pound per square foot to an impermeable, high-density polyethylene (HDPE) and protected by a layer of spun polypropylene.

Paraseal GM/LG Composite Sheet Waterproofing System and Gas Membrane is a system utilizing the Para JT Tape to install the multi-layer sheet membrane, forming a superior barrier to both water and aliphatic gases.

For hydrostatic and gas vapor barrier conditions, contact your local Tremco field sales representative or Technical Service.

Detailing, Connections and Drainage:
Para JT Tape is an adhesive joint tape compound formulated with cross-linked polymeric elastomers. It is installed within the Paraseal GM/LG membrane sheet overlaps where it remains protected while providing a flexible, waterproof and gas-proof seal.

Superstop Resealable Bentonite Waterstop Material is a multiple composite used to seal cold joints in concrete, combining the strength and toughness of conventional waterstop with the self-sealing ability of bentonite to prevent water migration in joints.

TREMDrain™ is a prefabricated drainage material and protection board consisting of a formed polystyrene core covered on one side with a high strength, spun-bound polypropylene filter fabric which allows water to pass into the drainage core while restricting the movement of soil particles. It is designed primarily for vertical and selected horizontal installation at shallower depths where moderate compressive strengths and flow capacity are adequate.

TREMDrain 1000 is designed for vertical and selected horizontal installations requiring high compressive strength and where high flow capacity is necessary.

TREMDrain TotalDrain is a two-part system that provides both water collection plus a high profile section for water flow around the perimeter of the structure, replacing the perforated pipe/aggregate collection system. The high profile drainage section includes a transition section to connect with TREMDrain or TREMDrain 1000.