Aqua-Shield™ 100

KeeneBuilding.com

INSTALLATION INSTRUCTIONS

Elastomeric Liquid Applied Waterproof Membrane

Aqua-Shield™ 100 is a high-performance waterproofing solution designed for flexibility in a wide variety of applications. Follow these instructions to ensure correct installation, tailored to both single-coat systems for general waterproofing and multi-coat reinforced systems for critical waterproofing applications.

SINGLE-COAT APPLICATIONS

(Without Reinforcement Fabric)

Typical Uses: Single-coat applications are ideal for general waterproofing, such as foundation walls, planter boxes, or other low-risk environments where general waterproofing is required.

HORIZONTAL APPLICATIONS (Single-Coat)

1. Surface Preparation

- Clean the surface thoroughly to remove contaminants like dirt, oil, or grease that may reduce adhesion.
- **Crack Treatment:** For cracks larger than 1/16" but less than ¼", saw-cut to a width and depth of ¼". Fill these cracks with **Aqua-Shield™ 100**, ensuring a smooth, level surface. Cracks smaller than 1/16" can be filled directly with **Aqua-Shield™ 100** without cutting.
- Cracks over ¼" width and depth should first be filled with backer rod, then filled with **Aqua-Shield™ 100**, then covered with a brush of **Aqua-Shield™ 100**, then have embedded into the wet **Aqua-Shield™ 100** a piece of the 12" wide **Aqua-Fleece** reinforcement fabric (ensuring the fabric is fully saturated and covered), and then covered one last time with another brush of **Aqua-Shield 100**.
- Ensure any **tie-rod holes, honeycombs, or voids** in the substrate are filled with a non-shrink grout to provide a uniform surface. This step is critical for ensuring membrane continuity and preventing water migration.
- Allow any patching or filling materials to cure fully before proceeding with membrane application.

2. Application of Aqua-Shield 100

- Using a roller, trowel, or brush, apply **Aqua-Shield™ 100** in a single coat up to **120 mils** thickness. Ensure uniform application across the entire surface, focusing on edges and transitions.
- No reinforcement fabric is required for single-coat applications. Apply in an even, continuous manner to ensure consistent coverage.

3. Curing

- Allow the membrane to fully cure, which typically takes 24 hours under standard conditions (77°F, 50% RH). The product will not shrink, and the wet film thickness will equal the dry film thickness.
- Once fully cured, **Aqua-Shield™ 100** will be ready for the installation of a drainage layer such as **Keene's PCD 025** or **TriDent DD 025**, as well as additional construction activities.

VERTICAL APPLICATIONS (Single-Coat)

1. Surface Preparation

- Ensure the vertical surface is free of contaminants like dirt, oil, or dust that could hinder adhesion.
- **Crack Treatment:** For vertical applications, any cracks greater than 1/16" should be treated similarly to horizontal applications—saw-cut to ¼" and filled with **Aqua-Shield™ 100**. For smaller cracks, apply **Aqua-Shield™ 100** directly. Ensure the surface is smooth, and allow any patching materials to fully cure before application.
- Cracks over ¼" width and depth should first be filled with backer rod, then filled with **Aqua-Shield™ 100**, then covered with a brush of **Aqua-Shield™ 100**, then have embedded into the wet **Aqua-Shield™ 100** a piece of the 12" wide **Aqua-Fleece** reinforcement fabric (ensuring the fabric is fully saturated and covered), and then covered one last time with another brush of **Aqua-Shield™ 100**.

2. Application of Aqua-Shield 100

- Apply **Aqua-Shield™ 100** in a single coat up to **60 mils** using a roller, trowel, or brush. Ensure even coverage across the surface, paying particular attention to corners and transitions, as these are common areas for potential water infiltration.

3. Curing

- Allow the product to fully cure within 24 hours before covering or backfilling. As with horizontal applications, the wet film thickness will match the dry film thickness.
- For vertical applications that will be backfilled, it is recommended to protect **Aqua-Shield™ 100** with a **dimpled drainage board**, such as **Keene's TriDent DD 025** or **TriDent DD 050**, to ensure long-term performance.

© 2024 Keene Building Products™, all rights reserved. Printed in U.S.A. All logos/ images are trademarks of Keene Building Products. Cleveland, OH USA

Info@keenebuilding.com 877 | 514 | 5336

© 2024 Keene Building Products™, all rights reserved. Printed in U.S.A. All logos/ images are trademarks of Keene Building Products. Cleveland, OH USA

Aqua-Shield™ 100

Elastomeric Liquid Applied Waterproof Membrane

MULTI–COAT APPLICATIONS

(With Reinforcement Fabric)

Typical Uses: Reinforced systems are applied in critical below-grade waterproofing or roofing applications, including plaza decks, podiums, roof terraces, green roofs, and IRMA roof assemblies.

HORIZONTAL APPLICATIONS

(Multi-Coat with Reinforcement Fabric)

1. Surface Preparation

- As in single-coat systems, ensure all surfaces are clean and free of contaminants. Clean the surface thoroughly to remove contaminants like dirt, oil, or grease that may reduce adhesion.
- **Crack Treatment**: For cracks over 1/16", saw-cut to ¼" width and depth and fill with **Aqua-Shield™ 100**. Cracks under 1/16" should be filled directly. Use non-shrink grout to fill voids, honeycombs, and other defects.
- Cracks over ¼" width and depth should first be filled with backer rod, then filled with **Aqua-Shield™ 100**, then covered with a brush of **Aqua-Shield™ 100**, then have embedded into the wet **Aqua-Shield™ 100** a piece of the 12" wide **Aqua-Fleece** reinforcement fabric (ensuring the fabric is fully saturated and covered), and then covered one last time with another brush of **Aqua-Shield™ 100**.
- Allow any repairs or fillers to fully cure before proceeding with the primary application of **Aqua-Shield™ 100.**

2. Application of First Coat (60 mils)

- Apply the first coat of **Aqua-Shield™ 10**0at **60 mils** using a roller, trowel, or brush.
- **Embed the reinforcement fabric** into the wet **Aqua-Shield™ 100**, ensuring it is laid smoothly without wrinkles or air pockets. Press the fabric into the membrane to ensure full saturation and adhesion.
- Apply additional material if needed to ensure the desired thickness and complete fabric saturation.

2. Application of First Coat (60 mils)

- After the first coat has cured to a transfer-free state, apply the second coat of **Aqua-Shield™ 100**, bringing the total thickness to **120 mils**. Ensure the reinforcement fabric is fully encapsulated between the two layers.

3. Curing

- Allow the membrane to fully cure within **24 hours**. The wet film thickness equals the dry film thickness, ensuring a solid and durable buildup.

VERTICAL APPLICATIONS

(Multi-Coat with Reinforcement Fabric)

1. Surface Preparation

- Prepare the vertical surface by removing contaminants. Cracks over 1/16" should be saw-cut to ¼", then filled with **Aqua-Shield™ 100**. For smaller cracks, use Aqua-Shield™ 100 without cutting. Ensure that all voids, spalls, and other defects are filled with non-shrink grout.
- Allow the substrate to cure fully before application.

2. Application of First Coat (30 mils)

- Apply the first coat of **Aqua-Shield™ 100** at 30 mils using a roller, trowel, or brush.
- **Embed the reinforcement fabric** into the wet membrane, smoothing out wrinkles and air pockets to ensure full saturation and adhesion. Make sure to focus on transitions and critical areas.

3. Application of Second Coat (30 mils)

- After the first coat has cured, apply the second coat of **Aqua-Shield™ 100** to achieve a total thickness of **60 mils**.
- Ensure uniformity in the second coat, particularly at corners and transitions, where water infiltration is most likely.

4. Curing

- Allow the membrane to cure fully before proceeding with any covering or construction work. The curing process typically takes **24 hours** under optimal conditions.

General Notes

- **Code Compliance:** Always follow local building codes and project specifications when applying Aqua-Shield™ 100 in either single-coat or multi-coat systems. Adhere to all safety standards and regulatory requirements.
- **Application Conditions:** Ideal temperatures for application range from 40°F to 90°F (5°C to 32°C). Avoid applying in rainy or high-humidity conditions to ensure proper curing.
- **Waterproofing in Critical Areas:** For areas requiring additional protection, such as plaza decks, podiums, or IRMA roofs, the reinforced multi-coat system is recommended for long-term durability and performance.

By following these step-by-step instructions, you can ensure that Aqua-Shield™ 100 delivers optimal waterproofing performance, tailored to the specific needs of your project. Keene Building Products notes that these are merely general guidelines to follow when installing the product, and that all end-users should check their local building code and

© 2024 Keene Building Products™, all rights reserved. Printed in U.S.A. All logos/ images are trademarks of Keene Building Products. Cleveland, OH USA

ordinances to ensure that the installations meet all code requirements.

Info@keenebuilding.com 877 | 514 | 5336

© 2024 Keene Building Products™, all rights reserved. Printed in U.S.A. All logos/ images are trademarks of Keene Building Products. Cleveland, OH USA