The Facts on Efflorescence and Fiber Cement Siding

A beautiful product.
A naturally occurring condition.

At CertainTeed, we are as particular about beauty as you are. When you want authentic looks that will last for years, fiber cement siding truly excels. To increase your knowledge about fiber cement siding it’s important to gain an understanding of a naturally occurring condition called efflorescence which may occasionally affect the surface appearance.

What is efflorescence?

Efflorescence is a naturally occurring, white powdery deposit that can appear on cement-based building materials (including bricks, cement walls, grout and fiber cement). It’s the result of a process in which moisture draws salt crystals to the surface, evaporates and leaves a chalky substance behind.

Efflorescence only occurs when all three of the following conditions exist:

1. Water-soluble salts must be present in the building material.
2. There must be enough moisture in the wall to turn the salts into a soluble solution.
3. There must be a path for the soluble salts to get to the surface. (There, the moisture evaporates, leaving behind the salts which then crystallize and cause efflorescence.)

What can be done about it?

Ancient brick masons and modern scientists alike have devoted money, time and effort to eliminating efflorescence. Today, the condition still occurs but there are effective methods for dealing with it.

Proper preparation can reduce the potential for efflorescence. Correct flashing reduces water infiltration and the potential for efflorescence to begin. CertainTeed recommends the use of flashing to ensure a long lasting weather-resistive barrier. Please refer to the “wall preparation” section of the CertainTeed Fiber Cement installation manual for recommended details.

While some efflorescence may weather away naturally on its own, it’s best to take steps to treat it using one of the methods described.

Vinegar and water solution—Efflorescence can be removed by using a dilute solution of household white vinegar and water. A vinegar and water solution is relatively inexpensive, non-toxic, and easy to obtain, mix and apply. Dilution ratio is 20–50% vinegar in water by volume. For most cases of efflorescence a 25% solution works well.

(IMPORTANT: Please follow cleaning instructions as outlined on back)
• Spray all plants and vegetation with water before and after application of the vinegar/water solution.
• Prepare and protect areas that will not be cleaned.
• Wet surfaces to be cleaned with water and let stand for 5–10 minutes prior to treatment.
• Flood the entire surface area to be cleaned with vinegar and water solution.
• Allow the solution to sit on the surface for ten (10) minutes.
• Rinse the treated area with water from the top down.
• For extra tough efflorescence, a second application or light scrubbing may be required.
• Use a soft bristled brush or sponge and lightly scrub the area. Do not aggressively scrub as this may damage the surface of the painted product.
• Rinse thoroughly with water.
• Allow the area to air dry.

If necessary, repeat these steps until you’ve reached the desired outcome.

House washes—Commercially produced house wash solutions are available that also may be used to safely treat efflorescence. Care should be taken to follow manufacturer’s instructions and to ensure the product is suitable for use on fiber cement.

What else should I know about efflorescence?
To recap, efflorescence is the result of a natural process that can occur in cement-based materials. It can happen even though the siding materials have been properly installed. While not considered a warranty issue for these reasons, CertainTeed is still concerned with your ultimate satisfaction.

If efflorescence occurs, it can be remedied with the techniques previously described. It’s also good to know efflorescence does not harm fiber cement siding structurally, nor is the siding hurt by proper surface cleaning.

Properly installed and maintained, fiber cement is an excellent choice, offering realistic wood looks, recycled content, high-performance features, plus an array of design options.

Complete product details, including technical information, installation guidelines and warranties, are available at certainteed.com or call Consumer Services at (800) 999-3654.