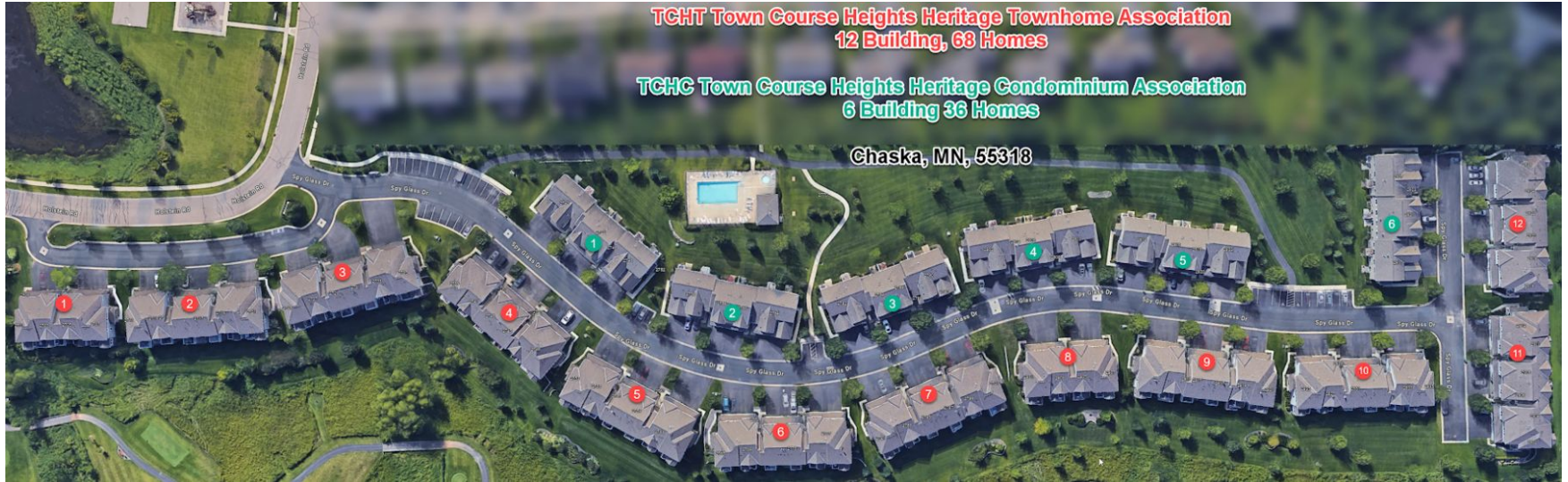


# Town Course Heights Heritage Townhome Association



**Moisture Intrusion Issue**

# Backstory

In December of 2023 Atlas was asked to investigate the leak point at three addresses on building 2 of the community map. Homes 2711, 2713, and 2719 Spy Glass Dr were having water intrusion.

A tech was dispatched to the community and the PVC belly band and trim around the windows were inspected and believed to be the source of the water intrusion as well as missing deck ledger board flashing.

While on-site we noticed multiple layers of caulking had been applied to the seems and transitions of PVC trim in the areas of the leak. This was another companies previous attempt to address the issue.

Select sections of trim were removed to ensure there was a moisture barrier wrap installed behind the siding and trim. There was a moisture barrier present but water was finding its way behind it and causing damage to the exterior sheathing. At this point we knew the issue was too large to address with a single service call. The trim boards were reinstalled and an email was sent to the Community Manager with our findings.

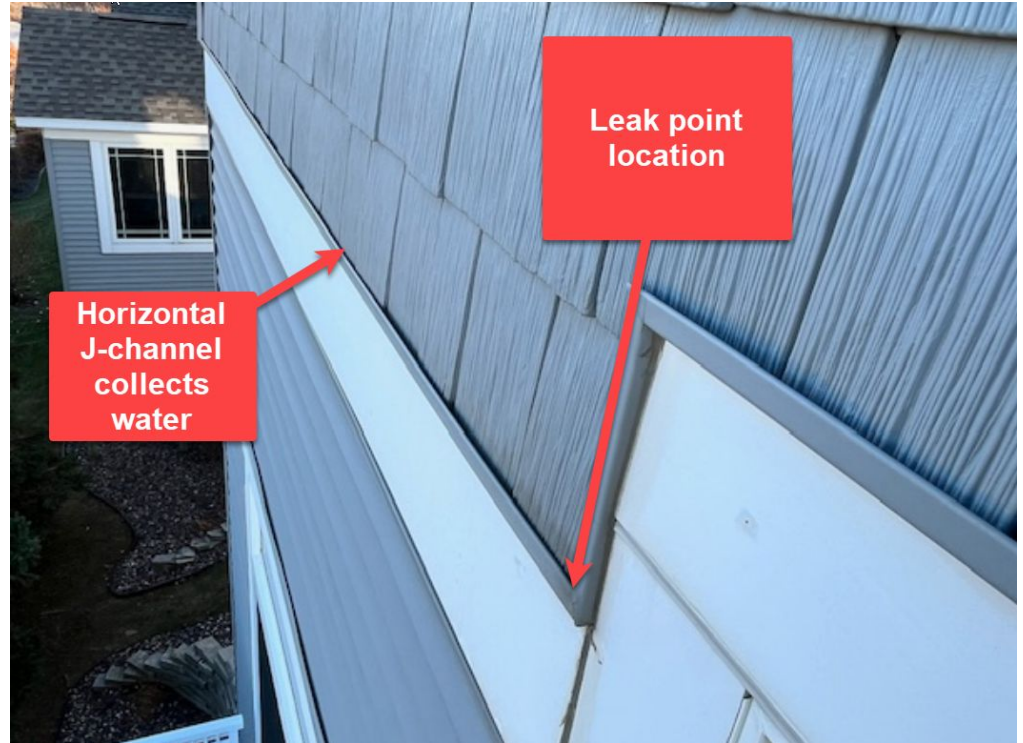
# PVC Belly Band and Window/Door Trim





# Collecting water & leak points

On the top side of the belly band a piece of J-channel was installed to hold the first row of shake siding. This J-channel collects water and has to find a way out. Where the J-channel butts into the window trim is an ideal location for water to get behind the siding and begin the path of getting behind the moisture barrier.



# What is a belly band

A belly band is a horizontal decorative trim that wraps around a building, typically at the height of the first or second floor.

Belly bands can be used for both aesthetic and performance reasons. They can:

- **Separate materials:** Belly bands are often used to separate two different siding board thicknesses or to separate standard lap or panel siding from shake.
- **Add depth:** Belly bands can add depth and interest to a home's exterior.
- **Create visual breaks:** Belly bands can create visual breaks between levels.
- **Connect siding styles:** Belly bands can connect different siding styles.
- **Make trim pop:** Belly bands can make trim pop and create a symmetrical and clean look.

# Back elevation belly band



# Issues with belly band

The belly band is a 1"x 8" PVC trim board and is not a typical vinyl siding accessory. The same materials were used to trim around the windows and doors for aesthetics. The belly band was installed in a location that intersects with the most of the upper windows and was notched as needed to fit around the frame of the window.

This horizontal surface collects water and it eventually finds its way behind the moisture barrier where the belly band meets the vertical window trim. It's a small amount of water but over time it led to severe rot to the exterior sheathing and in some cases the structural framing.

# Belly Band Location Change





## Work completed to building 2 (2711-2721 Spy Glass)

In the spring of 2024 the Board of Directors approved the recommended scope of work to remove and replace the moisture barrier and vinyl siding on the back elevation and install a belly band and window/door trim that is used with vinyl siding. The location of the belly band was also changed to limit the need to notch it around the windows.

After removing the siding and moisture barrier the extent of the rot was exposed. In select locations, the moisture had completely rotted the exterior sheathing and portions of the structural framing. As part of the work, all rotted sheathing and framing was cut out and replaced before installing the new moisture barrier and siding.

# Sheathing Rot Photos

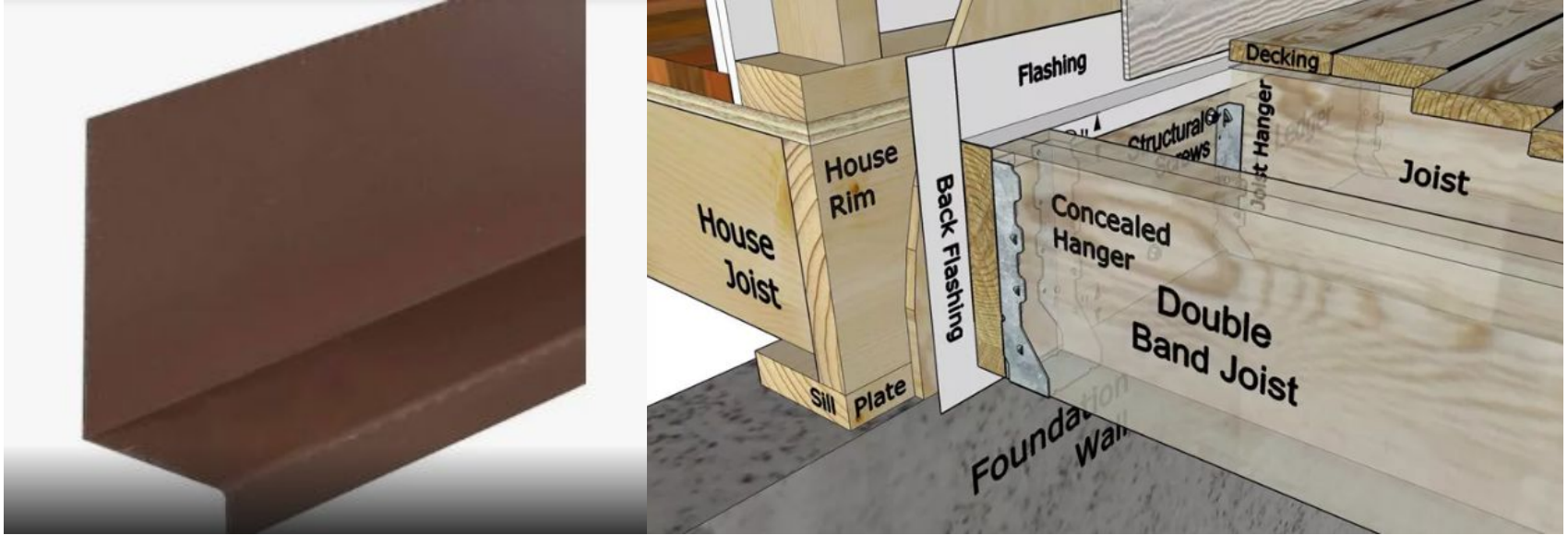


# Framing Rot & Repairs Photos





# Ledger flashing detail





# Missing Deck Ledger Board Flashing

On select decks the appropriate ledger board flashing was not installed. This was and is allowing moisture to get behind the moisture barrier and cause rot to the sheathing. As part of the project all decks were inspected and ledger flashing was installed to those that did not have it installed.



# 2025 Back Elevation Project

After completing the work on building 2, the Board of Directors requested a proposal to complete the same scope to the rest of the buildings. Because this design is consistent with the rest of the buildings, water intrusion is likely present on all buildings. The problem will not be exposed inside the home until all of the sheathing has rotted and the water enters the building envelope and begins to cause damage to the structural framing. If the issue isn't corrected, the structural integrity of the building may become compromised and the cost to repair will increase significantly. The purpose of the 2025 project is to correct these design flaws and ensure the appropriate flashing is present to prevent moisture from entering the building envelope.

# Warranty On Work

Atlas will provide a 10-year warranty on workmanship from the date of project completion.

Norandex warrants to you, the owner of the property at the time the Products were installed, that the Products are free from defects in material and workmanship in the course of manufacture, and that the finish on the Products will not chip, peel, flake or blister under conditions of ordinary wear if installed according to our specifications.

Siding purchased by or installed upon property owned by corporations, governmental agencies, partnerships, trusts, religious organizations, schools, condominiums or cooperative housing arrangements, or installed on apartment buildings or any other type of building or premises not used by individual homeowners as their residences, will be warranted for a period of fifty (50) years, non-prorated, following the installation of the siding, and is transferable under the terms and conditions of this Warranty.

[https://www.norandex.com/media/2060/abcnorandexstandardwarranty4\\_23\\_digital.pdf](https://www.norandex.com/media/2060/abcnorandexstandardwarranty4_23_digital.pdf)

# Why not the rest of the building?

Because this belly band is present on all elevations why isn't all of the siding getting replaced?

In a world where money doesn't matter, all of the siding would be replaced.

Atlas pulled some siding on the other elevations throughout the community and did not find the same damage that was present on the back. Not every building was inspected but due to the extent of the damage found on building 2 and those inspected, it's reasonable to assume that all buildings have similar damage as the design is consistent throughout.

To keep costs down, the Board decided to address the back elevations now to eliminate the need for more costly repairs in the future.



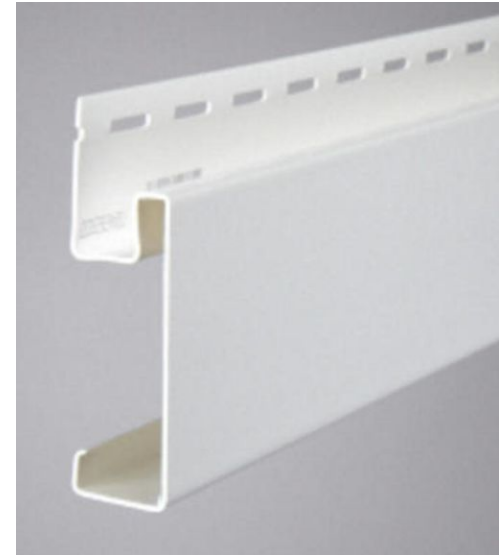
# Current Trim Boards and Belly Band

The current belly band, window and door trim is a dimensional PVC trim board that is not typically integrated with vinyl siding. The product is a quality, low maintenance material but does not include a hidden nail strip and channel to receive and hide the cut edge on the siding and requires a separate J-channel.



# What Will Be Done Differently

In place of the PVC trim boards a vinyl band board and lineal trim will be installed in place of the PVC. These products will produce a similar look but are designed to be integrated into a vinyl sided home or building.



## What Will Be Done Differently

In place of the J-channel that collects water on the top side of the belly band, a starter fastening strip will be installed to hold the bottom row of shake siding. This will eliminate the channel that holds water and exits at the seams and corners.



# Summary



With these small changes and attention to detail, the final product will produce a monolithic water tight siding system. The changes will keep the aesthetics all of the owners are accustomed to. The same high quality Norandex Great Barrier lap siding and Rustic Hill shake siding will be installed.



Questions?



<https://Atlasmn.com/project-blogs/>