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## Stucco Privacy Wall Inspection

Inspection Date:

June 29, 2015



On June 4, 2009 this inspection firm conducted an inspection of the privacy wall that runs along Glisan Street. During that inspection the inspector found that the wall had some damages in the foam EPS as well as other abnormalities due to the age of the wall system.

During the 2009 inspection, the inspector contacted the contractor who constructed the wall system. After interviewing the contractor the inspector was informed that the wall was constructed with a foam EPS core that is wrapped with a wire mesh that is used as a form, and also a lath for the stucco to key into during the application of the foam EPS.

The foam panels were fastened to the vertical steel poles that were set into concrete piers much like a fence post.

After the panels were installed, the contractor then applied a scratch coat of stucco compound over the foam EPS panels. This was followed by the installation of a brown coat. Foam EPS shapes were then installed to the brown coating and a fiberglass mesh was embedded in a stucco compound over the foam EPS shapes onto the main wall area. The fiberglass mesh is used to prevent any type of cracking at these junctures.

The following step was the installation of a colored and textured top coating that was applied over the entire wall system.

During that examination the inspector found that there was soils backfilled up against the side of the wall area.

After examining the wall, the inspector found some voids where he was able to view the underside of the wall area. During that examination the inspector found at the bottom of the wall area was not finished and the foam EPS is exposed.

Also during that examination the inspector found insect movement around the wall and evidence that the insects were burrowing inside the foam EPS at the bottom of these wall areas.

At the time of that inspection this inspection firm recommended certain repairs to be performed to the privacy wall to help extend its life expectancy.

At the before mentioned date, this inspector returned to the site to examine the wall system. Upon initial examination the inspector found that the wall system was repaired as per the recommendations stated in the 2009 inspection report with the exception of addressing the bottom termination edge of these walls.

During this inspection, the inspector will be examining the wall system for any type of defects and make recommendations for repairs to help maximize a life expectancy of this wall system. This report is as follows:

Figure 1 Westside of Wall Area



This is a photograph of the Western side of the wall area.

The following photographs are closer views of this area.

Figure 2 Westside of Wall Area



The inspector examined the foam EPS shapes that were attached to the wall system and found some areas where the fiberglass mesh was exposed.

Inspector recommends fully embedding all fiberglass mesh in a base coating of stucco compound.

This should be performed in all areas where any fiberglass mesh is exposed.

Figure 3 Westside of Wall Area



The inspector examined the Western termination end and found vegetation growing up against the side of the stucco wall system.

Any vegetation contact with the wall can cause damages in time.

This inspection firm recommends removing all vegetation from any contact with the wall system.

Figure 4 Westside of Wall Area



This is a photograph showing the base of the wall system.

The inspector found that there was soils backfilled up against the wall system in all areas.

The problem with this detail is that insects can enter inside the wall area undetected and can cause problems from nesting inside the stucco system.

Another problem is that soils will cause moisture to contact with the wall system and could cause damages to the metal lath system in time.

Figure 5 Westside of Wall Area



This is a photograph showing some cracking in the foam EPS top capping.

During the installation of the stucco system, the installer possibly did not lap the fiberglass mesh correctly which could cause this type of cracking.

This inspection firm recommends addressing any cracking in the top capping such as this by performing the following:

- The affected area should be ground down so the base coating is exposed.
- A fiberglass mesh should be bridged through the cracked area and embedded in a base coating of

stucco compound.

A finished and colored top coating should be installed over the affected area.

Note: The inspector found that this wall system has been painted. It may be recommended to paint the repaired areas to match the existing.

Figure 6 Eastside of Wall Area



This is a photograph that shows the aesthetic columns that were installed adjacent to the roadway that enters into the HOA property.

Manufacturer's installation specifications for the installation of the foam EPS shapes to a stucco system state that the shapes should have a 1 inch rise for every 2 inches of run.

The installer of the stucco system applied these shapes and left the top surface flat. Since these columns are constructed with masonry units, wood rot from moisture migration is not considered to be a factor. It is however recommended to apply an approved sealer to the top surface of the

foam EPS shapes to help prevent any type of moisture migration into the stucco system. It is also recommended to thoroughly caulk and seal between the foam EPS shape and any attached hardware such as lighting.

Figure 7 Eastside of Wall Area



This is a photograph showing the Eastern side of this wall area.

The following photographs are closer views of this area.

Figure 8 Eastside of Wall Area



This is a photograph showing the Eastern termination of this wall system. As stated, all vegetation should be removed. Most damaging are blackberry bushes.

Figure 9 Eastside of Wall Area



This is a photograph showing the interior area of the wall system.

The inspector found irrigation heads for vegetation along the interior area of this wall system.

It is highly recommended that all irrigation be directed so that it is not emitting any moisture onto the wall system.

Figure 10 Eastside of Wall Area



This is a photograph showing the bottom termination edge of the wall system. As stated the wall system was constructed with foam EPS panels and it was finished with a stucco system.

One of the biggest concerns with this inspection firm, is that there could be damages to the wall system from insect movement and moisture.

The impact point for these problems is at the bottom termination edge of the wall system.

There are two options to help minimize any damages to the wall system and extend its life span to its maximum potential.

- 1. All irrigation heads should be redirected so they are not emitting water on the wall system. A pest-control agency should be retained to conduct regular treatments along the wall areas to help prevent any insect movement inside the foam EPS panels.
- 2. A more invasive approach would be to remove the soils from around the wall area and dig down approximately 1 foot underneath the wall system. The bottom termination edge of the wall system should be completely finished with a base coating of stucco compound where the wire lath is fully embedded. A landscaper's fabric would then be set down into the trench area and followed with the installation of a 1 1/2 inch round drainage rock.

This secondary option would help maximize the life expectancy of this wall system for decades.

## Report Summary

After conducting a thorough examination of this wall system the inspector found that the wall system appeared to be in good condition and did not show any signs of fatigue or a break down in the stucco system.

To help maximize the life expectancy of this wall system, this inspection firm recommends the following:

- 1. All vegetation should be removed so it is not in contact with the wall system.
- 2. Any cracking in the foam EPS shapes should be repaired as per the recommendations stated earlier in this report.
- 3. The foam EPS shapes should be properly sealed and caulked at the termination columns adjacent the entrance road into the HOA property.
- 4. All irrigation water should be directed so that it is not in contact with the stucco wall system.
- 5. It is the recommendation to obtain the services of a pest-control agency to regularly treat around the wall areas for any type of insect movement or perform repairs to the bottom termination edge of the wall areas as per the recommendations stated earlier in this report.

This concludes this examination of the stucco wall system at the before mentioned property. If any interested parties have any questions or concerns about this report or the findings from this inspection firm, they may contact this office at 503-260-7224 or at cascadeinspectionsnw@gmail.com

By signing below the inspector states that the conditions shown in this report were present at the time of this inspection.

Randy Magley

Cascade Inspections Northwest