

Comments Submitted to Oregon's
Construction Claims Task Force by
Kenneth Nota on behalf of
Dryvit Systems, Inc.
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My name is Kenneth Nota, I am Vice President and General Counsel for Dryvit Systems, Inc., the leading manufacturer of exterior insulation and finish systems in North America. I've worked at Dryvit for the past 15 ½ years. I am here today as a member of Dryvit's executive committee at the request of Peter Balint, Dryvit's President and CEO. Mr. Balint wanted to be here himself but could not due to a prior commitment. I would like to thank the Construct Claims Task Force for the opportunity to speak at this meeting.

I will limit my comments to three areas. First, I want to address what Dryvit's experience has taught us about the cause and nature of construction defect claims leading to water intrusion problems. Next, I want to share with the task force what Dryvit has done and is doing as a material manufacturer to help address some of these issues. Finally, I'll state Dryvit's recommendations for the Task Force to consider.

Over the course of the past 10 years, Dryvit has had the opportunity to review third party inspection reports on well over 1000 homes relating to concerns about water intrusion. I personally have reviewed hundreds of these reports in my capacity at Dryvit. Our review of these reports, and our own experience in investigating and researching water intrusion/construction defect claims revealed the following facts:

- Water intrusion problems can and do exist on buildings regardless of the cladding type, whether brick, stucco, wood, EIFS or some other cladding and that they occur much more frequently on residential construction. This fact has been confirmed by the National Association of Homebuilders;
- The problems usually result from:
 - improper or omitted flashings at roofs, windows, decks, chimneys, and other key points;
 - improperly installed windows or installation of windows not suitable for the environment;
 - improperly installed roofing materials; and
 - omitted sealants at termination, dissimilar materials and penetration.

- The presence of these types of construction defects often result from:
 - lack of proper integration of the various building envelope components;
 - lack of sufficient construction details, specifications and instructions;
 - lack of clearly defined scopes of work for various contractors;
 - lack of coordination between the sub-contractors to insure proper sequencing, integration and responsibility for work;
 - lack of job site supervision to insure this needed level of cooperation and integration; and
 - lack of sufficient number of skilled laborers.

However, notwithstanding these issues, the damages associated with these defects are usually localized and can be repaired and stopped when the root cause, e.g., an omitted piece of flashing, is corrected. In fact, the reports we have reviewed, and our observations of project where the cladding has been removed, reveal that on average 5% or less of the wall space shows any evidence of water intrusion, and actual structural damage is even less. Again, based on discussions we have had with the National Association of Homebuilders, their conclusions about the amount of damage is the same as ours. The damage is usually immediately below where the construction defect occurs, for example, below a missing roof diverter flashing or below a leaking window. Localized effective repairs can be made, and preventative measures can be taken to avoid future problems.

Dryvit's experience in the commercial market is quite different. In 35 years, we estimate that there are at least 350,000 commercial buildings clad with Dryvit EIFS, alone. In fact, EIFS has the highest market share of the commercial, opaque wall cladding space when compared with other claddings. However, our claims experience and history is very different in that market. Less than 1/10th of one percent of the estimated commercial projects in the past 35 years has resulted in a litigation claim. And of the ones that did, very few had any problems you could attribute to the EIFS product or its installation. A better than 99% claims free rate in the commercial market is outstanding. The reason for the difference between the number of commercial buildings experiencing some type of problem versus residential, can be linked back to the root causes of the problems, I've identified above. Unlike residential projects, commercial projects usually have design professionals actively involved in the project. General contractors are on-site supervising work. The sub-contractors have well defined scopes of works

and tend to be bigger, more experienced companies. There is coordination between the trades and sequencing of construction is controlled by the general contractor and meetings are regularly held with the sub-contractors. Code compliant materials are used. All of these factors lead to a better designed and constructed building and consequently many fewer claims.

Based on our 36 years of cladding experience, Dryvit believes it sets the gold standard for cladding manufacturers through the products it makes, the quality assurance programs it follows and the services it offers. Dryvit has literally invested millions of dollars in testing its products through third party testing agencies, including extensive test with the Oak Ridge National laboratories. We have actively supported and promoted the AWCI (American Wall & Ceiling Institutes, eifs contractors training and insurance program and have invested over a million dollars in that endeavor. We have invested millions in our own Research and Technology development and today, Dryvit offers a wide range of exterior insulation and finish systems to address a variety of design preferences for both residential and commercial application.

- Dryvit's residential systems include:

- Dryvit's Residential MD System® that incorporates a secondary weather barrier, a drainage mat, drainage strips and all the benefits an EIF System has to offer; and
- Dryvit's Sprint™ MD System®, that incorporates the same features and benefits of the Residential MD System but uses a polyisocyanurate board instead of expanded polystyrene.

- Dryvit's commercial systems include:

- Dryvit's Outsulation® System, a traditional eif system that is often adhesively attached to the substrate, but can also be mechanically attached.
- Dryvit's Outsulation Plus System that builds on the Outsulation System by adding a troweled or roller applied weather resistive barrier applied to the approved substrate.
- Outsulation MD Systems, adds to Outsulation Plus a means for even greater drainage capabilities through the use of expanded polystyrene insulation board that has vertical grooves cut into the back side that faces the substrate;
- Infinity PE Systems®, a patented system that provides for pressure equalization between the cavity of the system and the outside surface of the wall to neutralize the force of negative air

pressure that can suck moisture through openings in the cladding.

As the above examples point out Dryvit EIFS and even those of other manufacturers cannot be defined by a reference to one particular type of system, one particular type and method of application or one particular market. There are many different systems and applications to meet design preferences and budget needs.

Dryvit also offers an unparalleled array of support for its products including:

- Downloadable written specifications, application instructions and typical details for all its systems and products. This information is available on line at www.dryvit.com, on a CD Rom or by calling our customer service department at 1-800-556-7752. I would request that the task force members visit our website to learn more about eifs.
- Free technical and customer services support is available on-line or through our 1-800 number, where callers can speak directly to one of Dryvit engineers. Our technical staff has about 70 years of collective experience.
- Free project plan and specification reviews relating to eifs;
- Free water vapor transmission analysis;
- Free Dryvit product and system application seminars and programs for eifs installers;
- Basic application instructional videos;
- Regionalized field service representatives available to assist on site should issues develop;
- Knowledgeable and experienced independent distributors and training programs for distributors;
- Support of the AWCI EIFS Smart training program and AWCI insurance program;
- Comprehensive third-party fire, weather and performance testing of our products and systems;
- Development of Dryvit's Aquaflash material for enhanced flashing and protection of window openings;

- Approvals by model building codes including Dade County approval;
- ISO 9001-2000 certification for all our plants and corporate headquarters, including research and development;
- Regular information updates through application bulletins; and
- Comprehensive product warranties

As mentioned above, Dryvit has also worked extensively with the renowned Oak Ridge National Laboratory to further test its EIFS. ORNL testing shows that EIFS is by far the best cladding choice from an energy usage point of view. Dryvit is also concerned with fire safety and has undertaken extensive fire testing of its products. Dryvit's is the only eifs manufactured to have developed a system to pass the Factory Mutual 50' inside corner fire test – ANSI/FM 4880. Therefore, we have no doubt that eifs in general and Dryvit eifs in particular are a wonderful product for the Oregon market, both commercial and residentially.

Based on our experience and observations in both the commercial and residential markets we would make the following recommendations to the task force to help avoid construction defect claims:

- Require the plans and specification for each project to include sufficient details to properly address the integration of various building envelope components;
- Require construction contracts to clearly set out the scope of work for each contractor or subcontractor;
- Require wrapping and flashing of windows and door openings or self flashing windows;
- Require contractors and sub-contractors to possess necessary state licenses;
- Require every project to have a qualified, registered supervisor at the job site to insure proper sequencing and coordination of the sub-contractor work, proper integration of building envelope components, and compliance with project plans, specifications and local building codes. The supervisor should be employed by either the design professional for the project or the general contractor/builder and included in the price of their contracts;
- Require material suppliers to make available typical details, application instruction and specifications for their products and test data for their products;

- Encourage the use of energy efficient construction; and
- Require all building materials to conform with local and/or national model code requirements.

With regard to some of the recommendations the task force has already received regarding building materials, Dryvit does not support the proposition that a remote material supplier should be responsible for certifying the proper installation of building envelope components on every project completed in this state that its products happen to be installed on. This recommendation is not practical, workable, nor economical and improperly shifts the responsibility for good construction practices to the wrong entity. And it shifts it to the entity in the worst position to do it. It is doubtful that any material supplier could do business in Oregon under such standards. According to the facts stated by the Task Force, in 2004 there were over 27,000 residential permits alone issued in the State of Oregon. That's over 500 job starts per week. Remote manufacturers have no control over what jobs are done, what the different components of a building will be, when work starts and stops, the sequence of work, etc. In fact, particularly, in the residential market, manufacturers usually won't know their product is being used on a particular project. Collectively, manufacturers would have to employ thousands of "inspectors" to be available at any given time on any given job site, just when it so happens their materials are being installed. How often should they be there, who pays for this service, and how is it monitored or policed? While Dryvit supports on site supervision, it must come from one of the two parties that have overall responsibility for the design and/or construction of the project; either the architect or the general contractor. This is totally consistent with their traditional roles. What is needed is to enforce these concepts.

It is also our position that the selection of the cladding should also be the responsibility of the design professional. Manufacturers should supply, as Dryvit does, information, specification and testing data for their products and the architect should make a determination as to the suitability for their specific project needs. Dryvit's eifs do conform to the model building codes and we have several options available. We trust that this fact, combined with the project designers input is an adequate means to insure the proper materials for that specific projected are used. To the extent that this Task Force was to recommend new standards, they should be performance based and fact based standards and should not be designed to proscribe the use of any particular cladding. The standards should address the broad range of products used in the building envelope construction without discrimination. And the standard must address the constructions practices described above which are the root cause of most building defect claims.

Conclusion

It is Dryvit's position that at the end of the day, what is critical to the performance of a building envelope is proper design and integration of the various building envelope components such as roofs, flashings, windows, doors, claddings and penetrations, and on-site supervision the general contractor or design professional to insure proper coordination between the various trader, proper execution of the plans and completion of the work. This is a universal truth, regardless of cladding type.