



Termite Resistance of Stone Wool Insulation

ROCKWOOL Technical Innovations has recently completed third party testing at the University of Hawai'i to determine the termite resistance of stone wool insulation. The insulation samples were tested to AWPA E1-09, "American Wood Protection Association Standard Method for Laboratory Evaluation to Determine Resistance to Subterranean Termites". The test involves exposing insulation samples to 400 Formosan subterranean termites for a 28-day period then measuring weight loss of the material, termite mortality rates and visually evaluating damage to the sample. The results are then compared to a control sample of Southern Yellow Pine untreated and Southern Yellow Pine treated for termite resistance with ACQ, type D.

The results of the test, which are shown in the table below, indicate that the stone wool insulation proved to be termite resistant per this rigorous test making the material appropriate for use under conditions of very heavy termite hazard.

The observations made by the laboratory during the test noted that the termites initially investigated the stone wool but then covered it with sand within the first week which is an avoidance behaviour evidenced by termites that want to isolate something undesirable, such as an unacceptable food material.

A Summary of Results:

| | Weight Loss % | Termite Mortality Rate | Mean Visual Rating (scale of 1-10) |
|-----------------------------|----------------------|-------------------------------|---|
| Stone Wool | 1.22% | 27.4% | 9.6 |
| Untreated wood wafer | 50.92% | 2% | 2.4 |
| Treated wood wafer | 4.85% | 38.6% | 8.6 |

Samples following 28 day exposure:

Stone Wool



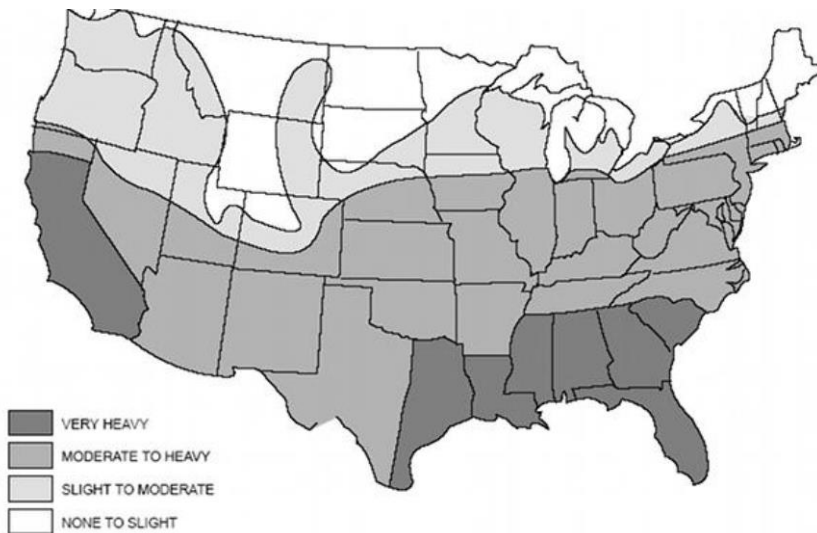
Untreated Wood



Treated Wood



Regarding the relevance and use of this information, both the IRC and IBC address the use of foam plastic insulations in areas where the probability of termite infestation is 'very heavy' and restrict its use when installed on the exterior face or under interior or exterior foundation walls or slab foundations located below grade. To use foam plastics in these applications and geographies, it is required that all structural members are made of non-combustible materials or pressure preservative treated wood, or an approved method of protecting the foam plastics and structure from termite damage is used. Included below is a map below highlighting the locations in which this is applicable.



If you have any questions, please contact the undersigned.

Thomas Hackett
Group Product Manager
905-691-7933 thomas.hackett@rockwool.com