HOME BUILDERS & REMODELERS ASSOCIATION OF CONNECTICUT, INC.
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Your Home Is Our Business

February 19, 2016

To: Senator Catherine A. Osten and Representative Philip J. Miller, Co-Chairs
Members of the Planning & Development Committee

From: Bill Ethier, CAE, Chief Executive Officer
Bob Wiedenmann, Jr., President, Sunwood Development Corp. and Chairman, HBRA of CT Government Affairs Committee

Re: **HB 5180, AAC Documentation of Concrete Foundation Applications**

The HBRA of Connecticut is a professional trade association with about eight hundred (800) member firms statewide employing tens of thousands of CT's citizens. Our members are residential and commercial builders, land developers, remodelers, general contractors, subcontractors, suppliers and those businesses and professionals that provide services to our diverse industry and to consumers. We build between 70% to 80% of all new homes and apartments in the state each year and engage in countless home remodeling projects.

The HBRA of CT opposes this bill as written and any other proposal that would impose new requirements on residential foundation concrete pours. We further urge you to adopt the approach taken by Canada to address the serious "crumbling concrete" issue.

HB 5180 would condition the issuance of a certificate of occupancy for all new homes on the provision of the names of the individuals or entities that poured the foundation and the date of such pours. **If a bill is to move forward, we suggest the documentation be of the entity that supplied and delivered the concrete, not the installers.**

We strongly oppose other proposals that would impose much more costly requirements, including the licensing of concrete installers, utilization of third party inspectors on home building sites, and concrete tests that are typically used on commercial building concrete pours. **None of these new requirements on residential foundation concrete pours is justified by the evidence and do not address the problem.** Crumbling concrete issues are a serious matter for those affected homeowners. While the exact cause remains under investigation, as well as in litigation, **the installation process on home construction sites is not the issue. Any such claim that it is makes no sense**. Residential concrete foundation pours are done and have been done the same way across the state and, indeed, across many states. **If it was the result of how home foundation pours are performed, there would be ample evidence of crumbling concrete issues virtually everywhere.** Yet, there is no evidence of which we are aware that such issues are occurring beyond certain geographic areas of Connecticut (except for issues in Canada, Ireland and UK; see link in Fn.1 on pg 2) and, further, beyond those pours that used a particular company's concrete.

Therefore, any requirements on home builders and their installers would address the wrong issue and would result in imposing unnecessary delays and costs on all new homes going forward. Rather, we understand the issue involves the use of a particular gravel that contained the natural mineral pyrrhotite. We do not know if the particular

concrete company that used this gravel could have known that years later this mineral would cause failures in their concrete. If they are still using the same gravel[1] now, however, for their concrete mix, that's a different issue and needs to be addressed. But, the cause of the problems that have appeared in home foundations seem to be related to this mineral and therefore is **akin to a natural disaster**. **This is how Canada treated the issue, which led our northern neighbor to do two things that we urge be Connecticut's solution.**

First, Canada, specifically Quebec, recognized the natural cause of the problem, treated the damages as a natural disaster and appropriated funds to fix the problems. Connecticut should find the money to help affected homeowners, using either escheat funds or pursuing federal disaster relief funds. **Second**, it's our understanding that Canada has adopted or is in the process of adopting new standards for aggregate (or gravel). We should do the same and require concrete companies to ensure that pyrrhotite is not contained in the gravel they use.

Putting aside the lack of evidence that there's a universal issue with how home foundations are poured, treating home foundations in the same way as commercial pours is also not warranted because of valid differences between residential and commercial pours. Most home foundations pours do not require inspections as the structural loads in a house just are not that big. Soil and wind pressures exerted on home concrete foundations are far less than the maximum tolerances of the foundations.

Further, our State Building Code addresses foundations just like the code does for framing, drywall, roofing, mechanical and just about everything else in home construction. Local building inspectors, while they do not inspect the actual pours, visually inspect the soil conditions prior to pouring the home foundation footings. They inspect the rebar (iron rods) in foundation walls prior to pouring the walls (using rebar is a recent new code requirement). And, they inspect footing drains and foundation water proofing prior to backfill operations.

Typically for a residential foundation pour, no delivery tickets are required to confirm the type of mix or any additives that may be used.[2] We trust the batch plant to send the concrete requested. Neither slump tests nor strength tests[3] are required or typical on residential pours because batch concrete delivered to sites is universally very good. Typically, water does need to be added on site to the concrete mix, particularly for home foundation walls because the walls are much thinner than commercial or other pours. Residential foundation walls are typically 10" thick and 8' high. It's extremely difficult to fill this space without creating voids unless water is used. But again, this has been a longstanding and widespread practice and there's no evidence of issues outside of the area where the problem has occurred. **Therefore, please do not support the bill as drafted and in its place substitute the solutions adopted in Canada. Thank you for this opportunity to testify on this important issue.**

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[1] Concrete is a mixture of powdered cement and water, which forms a paste, and further mixed with sand and gravel (i.e., stones) of various sizes, depending on the demands of the order. The mixture is done at a concrete mixing, or batching, plant, then loaded onto the familiar round concrete trucks and delivered to a construction site. See http://www.pyriteproblem.com/ for research on the pyrrhotite problem.

[2] Additives can be requested that either slow or quicken drying and setting time for the concrete, usually as a result of weather conditions.

[3] A slump test pours the concrete into a cone, which is then placed upside down; the cone is removed and the concrete should not slump. A strength test places the concrete in a tube and after a period of time, up to 28 days in some cases, is tested by exerting pressure on the tube to see when it breaks. This unnecessary test would cause intolerable and expensive delays on a home construction site. **Further, these tests would not have revealed the pyrrhotite issue and would not have prevented the problems from occurring**.