The State of PHIUS and the
Passive House Building Energy Standard in North America

On August 17, Dr. Wolfgang Feist of the German Passivhaus Institut took an unfortunate and somewhat bewildering action: He wrote a letter to the North American Passive House Community severing ties with PHIUS, and in the process, made several claims that can most charitably be characterized as inaccurate.

We cannot explain Dr. Feist's broadside attack on PHIUS, an act that at its face is an act of sabotaging the Passive House Building Energy Standard in North America—not of advancing it. We will not speculate on his motivations.

We can tell you that PHIUS has met PHI and its sometimes inscrutable demands much more than halfway for years. Those often-capricious, bureaucratic and cumbersome demands have stunted rather than promoted growth of the standard here in the United States. An itemized response to some of the particularly inaccurate and the most egregious statements will be issued by PHIUS in short order.

First, though, we'd like to set the record straight on broader terms—about the past, present, and future of PHIUS and Passive House for North American Passive House stakeholders.

The Bottom Lines

- Annual Heat Demand: ≤ 4.75 kBTU/(ft2yr) (15 kWh/m2a) or –
  Peak Heat Load: ≤ 3.17 BTU/(ft2hr) (10 W/m2)
- Annual Cooling Demand: ≤ 4.75 kBTU/(ft2yr) (15 kWh/m2a)
- Total Source (Primary) Energy: ≤ 38.1 kBTU/(ft2yr) (120 kWh/m2a)
- Air Leakage: ≤ 0.6 ACH @ 50 Pascals - Measured by blower-door test

That's the Passive House Building Energy Standard. That's what all this should be about, not politics or territory or units. That has always been and always will be PHIUS' stance.

The standard belongs to no one or no organization. It is not exclusive to any language. And like every important technical advance, it has evolved as the product of the work of a community of people—including the work of forward thinkers in North America back in the 1970s. It must continue to evolve.

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That evolution necessarily will vary from region to region in accordance with unique local conditions, customs, and markets. It has to; otherwise it will go the way of earlier promising efforts in North America.

PHIUS was established in 2007 to promote the Passive House Building Energy Standard in the United States and Canada, to uphold the standard through certification of professionals and projects, advance the knowledge and methods to attain that standard in North America through research, and to train professionals to design and build to the standard in North America.

Every step has been taken with the knowledge and encouragement of PHI, which encouraged PHIUS' efforts and welcomed the assistance and the expertise of PHIUS and the North American community of pioneers.

Long before 2007, Katrin Klingenberg—the German-born PHIUS co-founder—was promoting the standard even when the established North American building science community regarded it as foreign quackery. She persisted. She built her own house to Passive House standards in Urbana, Ill., and the Passive House building energy standard has grown by leaps and bounds in the United States. Awareness of Dr. Feist's contributions and of PHI has grown, too, almost exclusively as the result of Klingenberg's—and later PHIUS's—efforts.

Today the Passive House Building Energy Standard is taken seriously and its champions, including PHIUS are working hard to institutionalize it in policy, code, and incentive programs.

Legitimacy: Professional and Project Certification

Legitimacy begins and ends with the knowledge and skills to design and build structures that meet the cold hard performance requirements summarized earlier. Legitimacy doesn't live in Darmstadt , it doesn't have an address, or a country, or even a continent.

Legitimacy is performance.

PHIUS has been teaching a North-American focused consultant's curriculum since 2008. At the start, there was no English-language curriculum, and PHI was happy to have PHIUS develop one at its own expense. Along the way, PHIUS also developed—entirely at its own expense—a side-by-side inch-pound version of the PHPP software to help

adoption rates in the United States. There is no question that these efforts sped adoption—and sales of the PHPP, from which PHI profits—here in the United States.

Because PHIUS had developed a curriculum that was necessarily somewhat distinct from the European courses at the time, it also began issuing a unique North American certification and certification mark. PHI explicitly—though only verbally—on multiple occasions acknowledged the side-by-side existence of the PHIUS and the PHI certifications without objection. Then efforts were made by PHIUS to align the two certifications and to afford the stakeholders the option to obtain both certifications. PHIUS approached the PHI to become a licensed exam host. The condition was that PHI would issue its certification independently, and had the right to independently grade exams that were administered by PHIUS.

This was cumbersome for PHIUS but at the time, it seemed worthwhile for the sake of solidarity. As time went on, PHI's requirements grew more burdensome:

- PHI developed a Europe-wide curriculum in partnership with European Partners called CEPH (Certified European Passive House Course), it asked PHIUS to begin teaching that metric curriculum without being able to make changes to it. After careful consideration PHIUS declined, because teaching the CEPH curriculum would not take advantage of what had been learned from practice and from teaching in North America.
- PHI insisted that the CEPH exam was applicable as is (rather than a North American-focused version PHIUS had been administering—and which had been accepted by PHI). Though fundamental passive building energy principles are universal, in practice, things can vary as much as climate zones do. As a result, the gap between North American training and the CEPH test continues to grow.
- PHI continued to deliver the metric exam only 2 days before the exam date and not five as stated in the contract—this was too little time to translate the test into metric and rewrite the answers. Furthermore, unit translation was only part of the challenge—one-for-one translation, in terms of building terms and conventions—created another level of potential confusion that had to be addressed as a separate step.

On behalf of its constituents, who understandably were perplexed by all this, PHIUS concluded that this was an untenable situation. In July, PHIUS informed PHI that PHIUS would no longer administer the CEPH exam.

For existing and aspiring Passive House Consultants, here's the bottom line:

- **If you're a Certified Passive House Consultant now, you will remain so.**
- **PHIUS will continue to issue its North American Passive House Consultant certification as it always has—and which PHI has recognized until now—moving forward.**
- **PHIUS will offer a standardized North American Certified Passive House Consultant exam that will test for understanding and mastery of the Passive House Building Energy Standard, its underlying physics and methodology and practical application of the standard in North American climate zones with North American building practices.**
- **PHIUS-certified consultants who wish to attain the European certification may still do so, separately, by taking the CEPH exam. PHIUS will no longer administer that exam, but other organizations that teach the CEPH curriculum here in the United States will administer the CEPH test.**
- **For those who have the CEPH certification and want the PHIUS North American designation, PHIUS will offer a shortened version of the North American exam.**

In terms of project certification:

- **PHIUS will continue to certify projects to the Passive House Building Energy Standard as it always has—and as PHI has always approved of.**
- **PHI will, unfortunately, no longer license PHIUS as a PHI-approved certifier. That means that if North American designers and builders want PHI's blessing, they will have to submit their project separately directly to PHI, in addition to PHIUS.**

PHIUS believes the last point is a ludicrous situation, one created unnecessarily and arbitrarily by PHI. In his letter, Dr. Feist inaccurately portrayed difficulties with one project certified by PHIUS as a rationale for withdrawing its license to certify projects. The inaccuracies will be outlined later in a separate document.

But, it's important to note: **Dr. Feist and PHI long ago lost control of the European certification process and with it lost its legitimacy on this issue.** Though numbers like

"20,000 and more" are loosely thrown around when quantifying passive projects in Europe, a tiny, tiny fraction of that number has been certified.

That's exactly the mistake PHIUS is committed to avoiding.

Legitimacy Starts Here

Here's a simple fact, one in evidence to anyone who attended the 2010 North America Passive House Conference in Portland, Oregon:

- North America presents unique challenges—from extreme cold in some regions to latent humidity loads in others.
- The North American Passive Building Energy community is meeting those challenges in innovative ways that only they can.

Once more for good measure:

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The beauty of the standard is that is clear-cut. A building performs to these standards, or it does not. A professional has the training and knowledge to meet the standards or (s)he doesn't.

- **PHIUS has had the capacity to certify professionals and projects since 2008, and has grown that capacity. Nothing of substance has changed.**
- **PHIUS will continue to rigorously certify projects, and engage certifiers with the knowledge needed to do a credible job of it in North America.**

A Disappointing Break, but a Necessary One

Dr. Feist's letter is not only inaccurate, it's destructive, disappointing and hurtful to those of us who have worked closely with him, promoted his reputation and his work here in the United States and Canada, and shared great amounts of information about implementation here in North America.

In countless ways, PHIUS—and before PHIUS Katrin Klingenberg personally—ran interference for Dr. Feist in an environment he clearly does not understand. On countless occasions, PHIUS has absorbed the aggravation of its constituents about arbitrary policies

and decisions on the part of Dr. Feist and PHI. The efforts seemed to be met by an increasing intransigence about things as fundamental as accommodating the use of inch-pound units in the United States.

In some quarters, persuading people about the value of the Passive House Building Energy Standard is difficult. Prospective homeowners, trades people, builders and architects are understandably skeptical. Adding any additional barriers to adoptions unnecessarily makes absolutely no sense.

To be sure, PHIUS has always appreciated and always will value Dr. Feist's work—and we know it will continue. We will continue to work with the international community, and make no mistake: our colleagues in the United Kingdom, in the Southern Hemisphere, in Asia and around the globe are also making great strides, and we maintain happy and healthy relationships with them.

As unfortunate as Dr. Feist's letter and PHI's behavior has been, we see this as an opportunity. We look forward to devoting all our energies exclusively to working with the North American green building and building science communities to advance research, development and implementation of the Passive House Building Energy Standard in North America.

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