



Testimony of Brian Pallasch
Executive Vice President & CEO
Before the
Massachusetts Joint Committee
on Telecommunications, Utilities and Energy

July 17, 2023

RE: S. 2127 - An Act relative to healthy and sustainable schools – SUPPORT with changes

Chairman Barrett and members of the Joint Committee on Telecommunications, Utilities and Energy:

On behalf of the over 3,500 members of the International Institute of Building Enclosure Consultants (IIBEC), and especially our 75 members in Massachusetts, IIBEC appreciates the opportunity to comment on S. 2127 - An Act relative to healthy and sustainable schools.

IIBEC members work for a diverse group of design and construction industry companies, including hundreds of engineering firms, architecture companies, consultants, contractors, and product manufacturers. They specialize in design, investigation, repair, and management of roofing, exterior wall, and waterproofing systems. IIBEC members act as advocates for the building on behalf of the owner or manager and ensure the building enclosure or roofing projects meet standards, codes, and warranty and functionality requirements. As such, they are well qualified to speak on the merits of this legislation.

IIBEC members applaud the sponsor for including a requirement that all schools receive an energy audit, which includes an evaluation and inspection of the building's envelope. Today's building enclosure systems are much more complex than those of yesteryear. Modern systems are multi-layer and must withstand design loads such as those related to hurricane, fire, wind, all while meeting performance requirements to improve energy efficiency, reduce air leakage, and manage moisture movement. These challenges require that building enclosure professionals design systems according to the latest codes and ensure that designs are constructed correctly in the field.

IIBEC and its members have worked in collaboration with other state legislatures on these issues to support and improve legislation as it moves through the process. A particularly relevant example of this support is when the IIBEC Virginia Chapter assisted legislators in improving language related to placing solar panels on school roofs. The chapter made two important recommendations that are applicable to this legislation.

1. The cost of removing solar panels and equipment from a roof is extremely expensive, so make sure the building's roof will perform as intended for at least the life of the renewable energy system placed upon it.
2. As such, when placing solar panels, roof replacements are almost always required to ensure the roof's service life matches that of the solar panels. This can become barrier to placing solar panels quickly because roof procurements are typically a lengthy process that usually do not coincide with the energy efficiency project's timeline and/or do not have approval or funding. (To give perspective, a roof replacement project on a school can take a year for funding and another year for design and construction, where the construction is usually limited to the summer months in order to not disrupt student learning.)

Based on IIBEC-member experience, they have three recommendations for the committee:

Recommendation 1: Include language requiring independent, third-party design professionals to conduct inspections and any design work related to the project.

IIBEC advocates for the use of independent design consultants with no financial interest in products specified and installed on all publicly funded construction projects. This policy not only protects the designer and all parties from perceived conflicts but, when necessary, also results in a project designed with the products that meet the needs of the building's enclosure. Independence ensures that the consultant's priorities are aligned with those of the owners to the greatest extent possible.

Recommendation 2: Insert language stating that a roof inspection shall determine the expected service life of the roof system in relation to that of the renewable energy system and provide corrective action if required.

IIBEC members have reported that removing solar generation equipment from a roof is expensive and the cost is usually more than the lifetime savings generated from the units. For this reason, a best practice is to inspect roofs to determine if the expected lifespan is approximately the same or longer than the lifespan of the renewable-energy-generation equipment. Depending on the condition of the roof, a full replacement may be required prior to the renewable energy equipment being installed. As mentioned previously, the schedule for a public-school roof replacement can take years.

Recommendation 3: Require the use of credentialed professionals on building enclosure projects.

IIBEC further recommends that public entities require the use of credentialed professionals when designing and constructing building enclosure projects. IIBEC credentials represent the pinnacle of roofing, waterproofing, exterior wall, and building enclosure commissioning professionalism. The Registered Building Enclosure Consultant (RBEC®), Registered Roof Consultant (RRC®), Registered Waterproofing Consultant (RWC®), and Registered Exterior Wall Consultant (REWC®) programs distinguish professionals with proven standards of education, experience, and ethics. The requirements for attaining these designations are stringent and take considerable time and effort to fulfill.

These credential programs have proven beneficial by distinguishing between those who have proven an advanced level of competence from those that have not, to the benefit of the contractor

or owner. For more information, or to locate credentialed building enclosure professional in Massachusetts, please visit <https://consultant.iibec.org/>. While public entities may not be able to require a credential, it is our understanding they may include bonus points in the selection process for holding a credential.

Thank you for your consideration of these common-sense recommendations that will ensure the legislation creates a successful program.

If IIBEC can be of any service to the committee going forward, please do not hesitate to reach out to us.

Sincerely,

A handwritten signature in black ink, appearing to read "Brian", with a stylized flourish at the end.

Brian Pallasch, CAE
CEO/EVP