

Systems, Interfaces, and Interactions

LIAM O'BRIEN, PH.D. BUILDING ENGINEERING

PRINCIPAL INVESTIGATOR, Human Building Interaction Lab

Podcast Companion Document



ABOUT LIAM O'BRIEN

Prof. O'Brien is currently the principal investigator of the Human Building Interaction Lab at Carleton University. The HBI Lab includes a team of about 15 researchers with diverse backgrounds in civil, mechanical, and electrical engineering, architecture, and psychology, who focus on design and control of energy-efficient buildings, with a specialization in occupant behavior. He also held leadership positions on three International Energy Agency Tasks and two NSERC Strategic Research Networks.

BACKGROUND

O'Brien has worked with approximately twenty industry and government partners and raised over \$3-million in the past five years. He has authored or co-authored over two hundred peer-reviewed publications and co-edited two books on net-zero energy buildings and occupant research methods, and is currently completing his third book, which is focused on occupant-centric building design.

This episode talks about the importance of interface features and how occupants and operators can change personal behaviors to improve their comfort levels.

WHERE TO LEARN MORE

To learn more about what was discussed in this episode of the Building HEROes Podcast, please use these additional resources.

- [IE EBC Annex 79](#)
- [Building Interfaces \(chapter 9\)](#)
- [Oh behave! Survey stories and lessons learned from building occupants in high-performance buildings](#)

IMPORTANT TIMESTAMPS

2m50s: Introduction to the Human Building Interaction Lab.

9m00s: The complexity of building systems and those effects.

15m35s: Highlight of a favorite project at the HBI Lab.

22m45s: Interface usability factors and standardization.

27m30s: IEA Annex 66 and 79: What they are, what's to come, and their importance.

32m45s: How do I get involved with the Annex?

34m25s: Occupant Centric Design: Key topics and why this issue is important.

39m00s: Closing comments from Liam.

