

Challenge: Air leakage in existing buildings accounts for 25-50% of the energy used for heating and cooling in those buildings; Energy loss also from thermal discontinuities such as missing insulation and thermal bridging

Solution: Drone thermography plus automatic AI based interpretation of thermal imagery → faster, cheaper, more accurate, and wider class of buildings.

Team:

- RDH Building Sciences: Over 250 staff in 9 regions across North America; Over 24 years of extensive experience with all aspects of building energy efficiency evaluation, measurement and design of upgrades with particular focus on the building enclosure.
- Signetron Inc., Berkeley, CA; Over 20 years of experience in 3D outdoor and indoor mapping systems with transitions to Google Earth, and Hilti AG; Over 10 years of experience in developing technologies for improving building energy efficiency; successfully commercialized products on 3D visual building documentation.



3D thermal mapped model of building

