Session Structure

- 15 Min. Intro (5 min from each Owner)
- 35 Min. Q&A from Moderator & Audience
- FIN
Owners: Stuart & Marcella Bernstein
Architect/Designer: FGY (Design) & EID (Arch of Record)
Engineer/s: Meline Engineering
PH Consultant: Prudence Ferreira & Dan Johnson
Contractor: Smith-Hyder Construction
PHPP Info:
- Heating Demand: 5.72 kBTU/ft²yr
- Heating Load: 2.54 BTU/ft²yr
- Primary Energy: 34 kBTU/ft²yr
- Infiltration: 0.6 ACH₅₀
- Other: LEED Platinum, No VOC paints, Greywater, Net Positive Energy, Non off-gasing furniture.

Bldg Info:
- TFA: 5341 sf
- Total Area: 6830 sf (2,012 sf Footprint)
- # Bedrooms: 6
- 2-story + Basement

Project Stats
Mechanical System:
• Heat Pump: 2537 kWh/yr (2.3 COP)
• Ventilator: Zehnder ComfoAir 550 HRV
• Water Heater: Daiken Altherma

R-Values (hr*ft²°F/BTU)
• Exterior Walls: R-28
• Floor/Slab: R-9
• Roof: R-34
• Overall Window: R-6
Magic Community
Hilary Hug
Owner: Magic
Architect/Designer: John Northway, Alena Campagna, Tony Carrasco, Grace Lee, Kathleen Liston, Pearl Renaker, Roy Pertchik, and Joshua Moore
PH Consultant: Pearl Renaker
Contractor: Dan Fulga
Structural Engineers: Jo Crosby, Ph.D., P.E. - geotechnical; Dan Dyckman, P.E. - grading/drainage; Bijan Aalami, Ph.D., M.ASCE (ADAPT Corporation) - structural concrete; Jim Dillingham, P.E. (D&Z Engineering)) and Mark Brehmer P.E. (D&Z Engineering) - structural wood and steel
PHPP Info:
• Heating Demand: 4.38 kBTU/ft²yr
• Heating Load: 2 BTU/ft²yr
• Primary Energy: 38 kBTU/ft²yr
• Infiltration: 0.6 ACH50
• Other: Reused Brick, re-milled lumber, used appliances, LED fixtures, low-flow fixtures

Bldg Info:
• TFA: 5208 sf
• Total Area: 6500 sf (3,012 sf Footprint)
• # Bedrooms: 8
• 1-story + Basement

Project Stats
Mechanical System:
• Heat Pump: Mitsubishi Mini-Splits (x3)
• Ventilator: Zehnder ComfoAir 550 HRV
• Water Heater: Heat Pump
• Other:

R-Values (hr.ft²F/BTU)
• Exterior Walls: R-23
• Floor/Slab: R-22
• Roof: R-38
• Overall Window: R-4

Assemblies
Owner: Sven Thesen and Kate Kramer
Architect/Designer: Arkin Tilt Architects
Engineer/s: Dan Johnson
PH Consultant: Dan Johnson
Contractor: Joshua Moore

Project Team
PHPP Info:
• Heating Demand: 3.94 kBTU/ft²yr
• Heating Load: 3 BTU/ft²yr
• Primary Energy: 27 kBTU/ft²yr
• Infiltration: 0.6 ACH₅₀
• Other: Air Admittance Valves, “White” Roof

Bldg Info:
• TFA: 2113 sf
• Total Area: 2492 sf
• # Bedrooms: 5
• 2- Story
• Other: LEED Platinum, Zero Net Energy,
Mechanical System:
- Ventilator: Venmar EKO 1.5
- Water Heater: Air/Air heat Pump
- Other: Radiant Floor Heating, 7 kW PV, LED Lighting

R-Values (hr.ft^2F/BTU)
- Exterior Walls: R-28/24
- Floor/Slab: R-18
- Roof: R-45
- Overall Window: R-7
Water
• Dual chamber ultra-low flow toilets
• 0.5 gpm sinks & 1.5 gpm showers
• 1st CA kitchen sink graywater system

Other
• 1st residential curbside charger (2, Level 2 & 2, Level 1 capacity)
• Tempered use of recovered materials
• Edible pets
Question & Answer Time

- Stuart Bernstein
- Hilary Hug
- Sven Thesen