DETAILS FOR THE NW
4 YEARS, 5 WALLS, 6 PROJECTS

SAM HAGERMAN
Hammer & Hand

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Courtland Place

A fun carpenter’s puzzle with a minimal budget

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Courtland Place

- Small budget
- Readily available materials
- Larsen truss w/ blown-in fiberglass
- Complex carpentry
- Biased toward labor-intensive solutions over high-cost materials
Courtland Place
Glasswood Commercial Retrofit

Passive House retrofit of a commercial building

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Glasswood Commercial Retrofit

- Reuse and reinforce existing building
- Add secondary interior wall
- Prosoco R-Guard + VaporShield
- OSB with SIGA tape
- 2” EPS exterior insulation
- 7” dense-packed cellulose (original plan was high-density mineral wool)
Glasswood Commercial Retrofit

- Cascadia 300 Series Window
- Trim
- Shim
- Liquid Applied Flashing @ RO
- 2x4 Service Cavity
- Cor-A-Vent SV-5
- Gypsum Wall Board
- SureFlash
- High Density Cellulose
- OSB Air Barrier
- Existing 2x4 Stud Wall filled with High Density Cellulose
- Structural Plywood Sheathing
- 2" EPS Foam
- 1x4 Rain Screen Battens
- Exterior Gypsum
- WRB
- Siding
Glasswood Commercial Retrofit
Karuna House

A high design, high performance showcase

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Karuna House

• 2x6 wall integrated into steel skeleton
• Prosocho R-Guard on ply
• 5.5” dense-packed cellulose
• 6” foil-faced polyiso exterior
• Stucco or FSC® cedar cladding on rainscreen
Maple Leaf and Puget

Moving toward standard practice

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Maple Leaf & Puget

- Standard materials & established trade practices
- 2x8 wall for thicker wall cavity
- 7.25” dense-packed fiberglass insulation
- Polyiso exterior insulation (4” at Maple Leaf, 3” at Puget)
- Zip sheathing at Maple Leaf, Prosoco R-Guard on ply at Puget
- Moderate cost for exterior insulation and lengthy fasteners for siding
- Time to build closely tracks standard construction
Pumpkin Ridge Passive House

“Let’s do all cellulose!”

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Pumpkin Ridge Passive House

- All cellulose insulation – 15” thick
- 2x6 wall framing with Larsen truss using I-Joists
- Agepan exterior sheathing layer w/ seams sealed with liquid-applied membrane
- Low cost, offset by ongoing savings on utility bills
Pumpkin Ridge Passive House
Pumpkin Ridge Passive House
Pumpkin Ridge Passive House
Bonus: Madrona Passive House

Bring on the mineral wool!
Bonus: Madrona Passive House

- 3.5” mineral wool on exterior
- 2x6 wall with dense-packed cellulose
- Zip sheathing
Bonus: Madrona Passive House

- Drywall
- R21 High Density Cellulose
- 2x6 Stud Wall
- ZIP System Sheathing
- Mineral Wool, 2” and 1.5” Layers
- 1x4 Rainscreen
- 1x6 Knotty Cedar

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