- Inbound/Outbound window placement
- Window buck & air sealing
- Weep holes
Program:
- Traditional farmhouse
- Single level living potential
- Garage connection
- River views
- Walk-out basement to accommodate slope
ENVELOPE SYSTEMS:
Foundation:
8” (R-30) EPS under 4” concrete slab
Concrete footing/ foundation wall with 2” XPS
Wall:
2x4 stud with R-20 batt insulation
Double stud wall with airtight drywall
Dense pack cellulose
Rigid insulation w/ spray foam at rim joists
Taped plywood sheathing with Mento membrane WRB
Strapping
Hardi prefinished clapboard siding
Roof:
Raised heel truss with 6’ or 9’ plate height
Intello vapor/air control layer
Loose blown cellulose
Stick framed screen porch

HVAC:
Venmar HRV (156 cfm) with 6” metal duct
5 heat pump heads w/ 1 outdoor compressor
Woodstove
Heat pump hot water heater
Bathroom electric radiant floors under tile

RIVER VIEW
WALL SECTION - DOUBLE STUD
HERS: 33, 12 with PV
(Home Energy Rating System)

Net-Zero operation with mostly wood heat.

Square Feet: 3756 sf w/basement, Volume: 31,021 cu ft
Blower Door: 203 cfm50, .4 ACH50

Predicted energy use:
48.8 MMBtu/yr w/o PV production ($2237),
20.2 MMBtu ($1000) with 6.6kw PV panels

Actual Energy Use:
51 MMBtu/yr, 15 kbtu/sf/yr,
Electric: 5303 kwh, $1200
1.5+/- cord wood (22 MMBtu/cord),

PV Production:
7227kwh
Keep poly flat to ensure tape adherence

Find the easiest method
Keep poly down until roof is on

Cut poly as close to sheathing as possible
Try to create flat surfaces for ease of taping
RIVER VIEW

AIR SEALING AT ROOF TO WALL CONNECTIONS
Go over install procedures thoroughly
Air tight drywall method can work well
Caulking
Can spray foam
Figure out roof panel layout with pv layout/roof penetrations in advance
Help out mechanical/plumbing contractors

Options on duct work