ENGINEERING TRACE

Rosebud House

Measure the house and garage separately

Open Source Ecology published the SH4 production CAD and the Maysville cost record. The earlier SH2 foundation plan and sections provide the basis for the reinforcement example.

The SH4 Revit federation opens in 3D. Its two linked models contain 70 structural-package elements and 1,847 architectural-context elements. Both links were reopened at their original coordinates.

Measurement register

SH4 house foundation — **10.477 m³**

Revit foundation family checked against the production solid.

SH4 garage foundation — **5.823 m³**

Separate family and BOQ line. The two production foundations total 16.300 m³.

SH2 uniform slab — **4.833 m³**

32 × 16 ft at 4 in thick. Earlier reference design.

SH2 perimeter thickening — **3.039 m³**

Nominal concrete below the slab. Check local threshold profiles.

SH2 slab reinforcement — **48 bars · 310.286 m**

Native #4 bars with illustrative ¾-inch end cover. Reopened geometry and scheduled length agree. The gross drawing allowance is 312.115 m before end deductions.

SH2 perimeter steel — **112.166 m**

Four nominal continuous #4 runs. Corner bars, laps and bent bars require detailing for fabrication.

SH2 carport piers — **7 supports**

Six 16-inch and one 22-inch pier on the later markup. Depth and base profile remain open.

Pricing basis

At the 2025 Maysville benchmark of US$118.95/yd³, the house allowance is US$1,630.06 and the garage allowance is US$905.98. Together they give US$2,536.04 for production foundation concrete. A current quote and its inclusions are still needed.

Revision and decision

Carry the two SH4 foundation lines into a preliminary estimate. Keep SH2 steel, local thickenings and carport supports on their own reference basis.