

FRAME HOUSE

Vancouver, BC | Completed

Role of the firm: Structural Engineer of Record

Area: 2,800 sq. ft. home + 600 sq. ft. laneway house

Architect: Measured Architects

A harmonious blend of light wood and structural steel forms the backbone of Frame House, a 2,800 sq ft home and 600 sq ft laneway house in Vancouver, BC. The project includes several atypical features including a rooftop terrace and pool. Balancing the weight and location of the pool posed an interesting challenge, especially with a limited lateral system on the main floor due to an open plan. To bear the vertical load of the weight, nail-laminated timber (NLT) and a steel frame had to be intricately integrated into the wood stud system for support.

Careful consideration also had to be given to the cantilevered steel staircase that accesses the rooftop patio. It needed weatherproofing due to high exposure, including limiting on-site welding to allow for continuous hot dip galvanizing coverage.

Externally, the vertical slat system acts as a versatile veil, allowing the family to interact with the street on their own terms. We modeled and designed the system to be solid and weatherproof, but light enough to slide along its tracks. The playful home also features trapeze netting connecting the children's bedrooms instead of a traditional hallway.

