
Course Title: **2026 Home Builder Update - Tuesday April 28 2026**

BUILDER PAIN POINTS (PROBLEM to SOLUTION)

Duration: 1 full day (8 hours)

Target Audience: Licensed residential builders, contractors, and site supervisors

Objective: Equip builders with knowledge, skills, and practical tools to meet Step Code Levels 3–5 efficiently and cost-effectively

Each module divided for information guided toward:

- 🔨 **Builder Focus**
- 📐 **Designer Focus**
- 🏛️ **Code Official Focus**

Module 1: Introduction to BC Step Code

Topics Covered:

- What is the BC Energy Step Code?
- Performance-based vs prescriptive code
- Step Code Levels 3, 4, and 5 overview
- Local Salmon Arm requirements and CleanBC alignment

Learning Outcomes:

- Understand Step Code purpose and benefits
- Identify the difference between Step 3, 4, and 5

Module 2: Understanding Step Code Metrics

Topics Covered:

- Airtightness (ACH50) targets by level
- Envelope performance (insulation, windows, thermal bridging)
- Energy Use Intensity (EUI) and Total Energy Demand Intensity (TEDI)
- Mechanical systems efficiency requirements

Learning Outcomes:

- Interpret Step Code performance metrics
- Translate metrics into practical building practices

Module 3: Barrier Identification & Solutions

Topics Covered:

- Cost and affordability considerations
- Skilled labor requirements
- Coordination and sequencing challenges
- Supply chain limitations for high-performance materials

Learning Outcomes:

- Recognize common barriers for Step 3–5 compliance
- Apply strategies to reduce risk and cost

Module 4: Part 9 Lateral Loads & Bracing — Simplified

Topics Covered:

- Wind vs seismic — what actually governs most houses
- Key Part 9 bracing requirements
- Common overbuilding vs underbuilding mistakes
- Inspection red flags

Learning Outcomes:

- Draw simple diagrams (don't overcomplicate engineering theory)
- Highlight cost impacts of getting it wrong
- Tie everything back to "pass first inspection"

Module 5: Live Demo — Part 9 Bracing Calculator

Topics Covered:

- How the calculator works
- Inputting a real project example
- Interpreting results
- Common user mistakes

Learning Outcomes:

- Do this step-by-step, slow and practical
- Use a typical builder scenario (not edge cases)
- Encourage photos/screenshots

Module 6: Envelope and Airtightness Best Practices

Topics Covered:

- Air barrier strategies and continuity
- Window and door detailing
- Rim joist, attic, and penetration sealing
- Blower door testing: procedures, timing, and common failures
  Hands-on Component:
- Mock-up of window and air barrier installation
- Airtightness testing demo or video

Learning Outcomes:

- Apply Step Code–compliant envelope and airtightness practices
- Reduce rework and inspection failures

Module 7: Mechanical Systems & Cooling

Topics Covered:

- Heat pumps, ventilation, and single-zone cooling
- Proper sizing and installation
- Energy efficiency vs comfort considerations

Learning Outcomes:

- Select and install mechanical systems appropriate for Step 3–5
- Balance efficiency, cost, and comfort

Module 8: Energy Poverty & Affordability

Topics Covered:

- Energy cost implications for homeowners
- Balancing performance with affordability
- Design strategies to lower operational costs

Learning Outcomes:

- Design Step Code–compliant homes without pricing out buyers
- Understand local energy poverty context in Salmon Arm

Module 9: Step 3 / 4 / 5 Comparison & Project Planning

Topics Covered:

- Comparison of cost, complexity, and performance
- Project planning for each level
- Early coordination with trades and designers

Learning Outcomes:

- Determine the most suitable Step Code level per project
- Plan projects to achieve compliance efficiently

Module 10: Case Studies & Local Examples

Topics Covered:

- Step 3–5 homes built in Interior BC
- Lessons learned and best practices

Learning Outcomes:

- Apply lessons to local construction projects
- Recognize practical solutions and pitfalls

Module 11: Workshop & Q&A

Activities:

- Small group problem-solving: resolving common construction challenges
- Q&A with instructor and peers

Learning Outcomes:

- Build confidence in implementing Step Code standards
- Gain practical tips from real-world scenarios

Supplemental Materials

Work book

- Step Code cheat sheets (airtightness, envelope, mechanical)
- Blower door testing checklist
- Air barrier detailing diagrams
- Step 3 / 4 / 5 comparison handout