



# MH 1708 Estimating Workflow – AI Training Guide (Trainer Notes Edition)

This enhanced version adds **Trainer Notes** for each module, aligning key timestamps, performance insights, and improvement prompts to support structured AI fine-tuning and estimator onboarding.

---



## Overview

**Purpose:** Train AI systems and new estimators to understand, replicate, and optimize your full takeoff and pricing workflow using standardized logic, terminology, and structure.

**Training Source Videos:** 1. *Building the Second Floor – Framing & Design Insights* 2. *Second Floor Joist System Overview and Planning* 3. *Roof Takeoffs and Elevation Planning* 4. *Inputting Pricing for the 1708 Exterior Unit* 5. *MH 1708 Elevation A Siding Takeoff*

**Trainer Focus:** - Evaluate estimator speed, accuracy, and consistency across modules. - Highlight areas for automation or process improvement. - Annotate AI learning opportunities for visual, auditory, and behavioral cues.

---



## Module 1 – Setup & Calibration

**Video Reference:** *Second Floor Joist System Overview* (0:00–1:45)

**Trainer Notes:** - **Timestamp 00:10–00:30:** Emphasize importance of setting correct scale early — include visual cue overlay for  $\frac{1}{8}'' = 1'$ . - **Timestamp 01:00–01:30:** Reinforce naming convention steps (Elevation A/B) — recommend macro for auto-tagging imported plan sheets. - **Improvement Cue:** Use a quick template check before scaling to eliminate double handling. - **AI Training Cue:** Tag mouse movement near scale bar and verbal confirmation of scale for reinforcement.

**Performance Metric:** Setup time under 3 minutes, zero re-scaling corrections.

---



## Module 2 – Floor & Wall Framing

**Video Reference:** *Building the Second Floor – Framing & Design Insights* (00:00–08:00)

**Trainer Notes:** - **Timestamp 00:45–01:30:** Highlight efficient use of joist layout — consider pre-saved assemblies for 2x12 @16" O.C. - **Timestamp 02:00–03:00:** Note rimboard validation — recommend VBA button for “check rimboard consistency.” - **Timestamp 04:10–06:20:** Reinforce blocking logic — show example macro for 48" O.C. auto-fill. - **Improvement Cue:** Encourage batch labeling (joists, rimboard,

blocking) before hardware placement. - **AI Training Cue:** Annotate cursor behavior and voice commands ("add blocking," "verify hanger").

**Performance Metric:** Maintain takeoff accuracy within ±1% for deck square footage.

---



## Module 3 – Roof Framing & Sheathing

**Video Reference:** *Roof Takeoffs and Elevation Planning* (00:00–20:00)

**Trainer Notes:** - **Timestamp 01:00–03:00:** Reinforce dual roof elevation logic (A/B packs) — potential automation using roof-pack templates. - **Timestamp 05:00–07:30:** Tag scaling correction — trainer should pause video and emphasize why confirming scale first avoids rework. - **Timestamp 08:00–12:00:** Call out FRT plywood placement; introduce visual overlay for fire-treated zones. - **Timestamp 16:00–19:00:** LS50 spacing demonstration — add diagram in training overlay for A/B/D/F spacing differences. - **Improvement Cue:** Convert LS50 spacing logic into a formula-driven macro linked to roof type. - **AI Training Cue:** Pair voice and mouse input for pattern recognition of pitch, soffit type, and hardware placement.

**Performance Metric:** LS50 and A35 callouts match plan spec within 100% accuracy.

---



## Module 5 – Pricing Integration

**Video Reference:** *Inputting Pricing for the 1708 Exterior Unit* (00:00–48:00)

**Trainer Notes:** - **Timestamp 00:00–02:00:** Highlight export filter logic — show difference between interior vs exterior data cleanup. - **Timestamp 03:30–08:00:** Recommend pre-built Excel formula library for ReadyFrame, quantities, and extensions. - **Timestamp 18:00–24:00:** Note manual re-entry of repeat materials — suggest central "Material Map" reference workbook. - **Timestamp 40:00–45:00:** Verify consistency in unit pricing; trainer demonstrates Power Query merge of multiple takeoff sheets. - **Improvement Cue:** Introduce color-coded validation rule for missing pricing. - **AI Training Cue:** Label cursor hover events over pricing cells and verbal confirmations ("Exterior only," "ReadyFrame at .45").

**Performance Metric:** Manual entry time reduced by 30%; zero missing unit price cells.

---



## Module 6 – QA & Continuous Improvement

**Video Reference:** Apply across all videos (post-export phase)

**Trainer Notes:** - Build a **QA Summary Worksheet** for every project: auto-log scale errors, naming mismatches, and hardware count variance. - **Timestamp 05:00+ in each video:** Capture AI learning moments where corrections occur (scale adjustment, hardware check). - **Improvement Cue:** Encourage on-screen error correction with commentary for reinforcement learning. - **AI Training Cue:** Flag corrections, highlight tool panels, and log before/after states for contextual model training.

**Performance Metric:** Zero missed hardware after final QA check; automated QA triggers generated via Power Automate.

---



## Trainer Implementation Workflow

1. Watch each recording once fully, then annotate timestamps with errors or inefficiencies.
  2. Capture 5-10 microlearning clips (2-4 minutes each) with specific improvement demonstrations.
  3. Link each clip to AI tag categories (`joist_logic`, `roof_pitch_detection`, `pricing_cleanup`, etc.).
  4. Export transcript snippets with visual annotation for dataset training.
  5. Review every 10 projects to retrain AI and update QA dashboards.
- 



## Long-Term Vision

- Each training video doubles as an AI dataset and an onboarding module.
  - Trainers refine efficiency per estimator by comparing timestamps and completion duration.
  - The AI will eventually detect and correct errors during live takeoff sessions.
- 

**Author:** Corey Boser

**Version:** v1.1 – Trainer Notes Update

**Date:** October 2025