



2017 TFG
Conference

Architecture as Craft

Robin Johnson

Robin Johnson Architect

Empire, MI

In January of 2016 and 2017, with support from the Michigan Barn Preservation Network and the National Barn Alliance, students in Andrew University's "Architecture as Craft" program experienced one of the best teaching tools for empirical learning: working directly with scale replicas of timber framed barns. The 1848 3-bay pitched-purlin Midwest Barn and the 4-bay Dutch barn taught students construction sequencing and post and beam structural systems, and gave them an introduction to the craft of timber framing and American vernacular timber frame barns.

Assembled and disassembled multiple times within an afternoon, the models helped the students accelerate their understanding of structure – faster than previously seen in the 12 years of the architecture program. The barn models encourage a quick uptake on how timber frame structure works: how tenons on both ends of a brace and require an open joint to be installed; how different wood species are efficiently employed; and how large American barns were (and are) put together with careful teamwork among the builders.

Timber framing is a perfect transition from the conventional 2x wood construction introduced early in the program to the post and beam structures of steel and concrete introduced in the third year. The whole package – barn and lectures – are fast becoming an indispensable part of Andrews University's "Architecture as Craft" studio, which this session will review and discuss.

About the Speaker

Robin Johnson

Robin Johnson holds an undergraduate degree in architecture and a Master of Architecture degree from the University of Michigan. Professor Johnson participates in reviews of student architectural work at the university level in a number of states, in addition to presenting at conferences and workshops that further sustainable forestry practices, timber frame construction, and promotion of sustainable land use in residential development in Ireland.

She has worked for 28 years as a licensed professional architect in Illinois and Michigan, working on a wide range of award-winning projects for a handful of small firms, each focusing on finely-crafted, well-resolved design solutions. Her solo practice has focused on locally-harvested timber frame construction, recycled components, passive solar, and highly efficient envelopes, as well as now-simple tech bustling systems like cob construction.