

Heavy Timber Engineering Lessons

In most of North America, building with timber, in contrast with lumber, has not been common since the second half of the 19th century when balloon framing became the popular alternative. Balloon framing, so called because it was thought that it might blow away in the next big wind storm, as would a balloon, was faster, cheaper and easier. One of its recognized advantages was that carpenters did not need to serve long apprenticeships to become accomplished in it. As the use of timber framing waned, the knowledge gleaned over many centuries was lost due to irrelevancy. Likewise, in most universities in North America, structural engineering curriculums eliminated courses in timber engineering, preferring to focus on the much more prevalent materials used in construction today: concrete and steel. With the return of a segment of the building community to log building and timber framing since the 1970's, we have all needed to learn how to use this warm, attractive material in the modern building environment. This seminar, really just a survey of situations to avoid, covers a number of the important lessons that timber builders should know. In the end, we need to more fully understand the natural material that we use to craft structures and buildings that meet our modern clients' expectations.