σύγχρονες κατασκευές από τεχνητό ξύλο



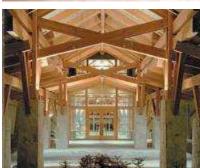
















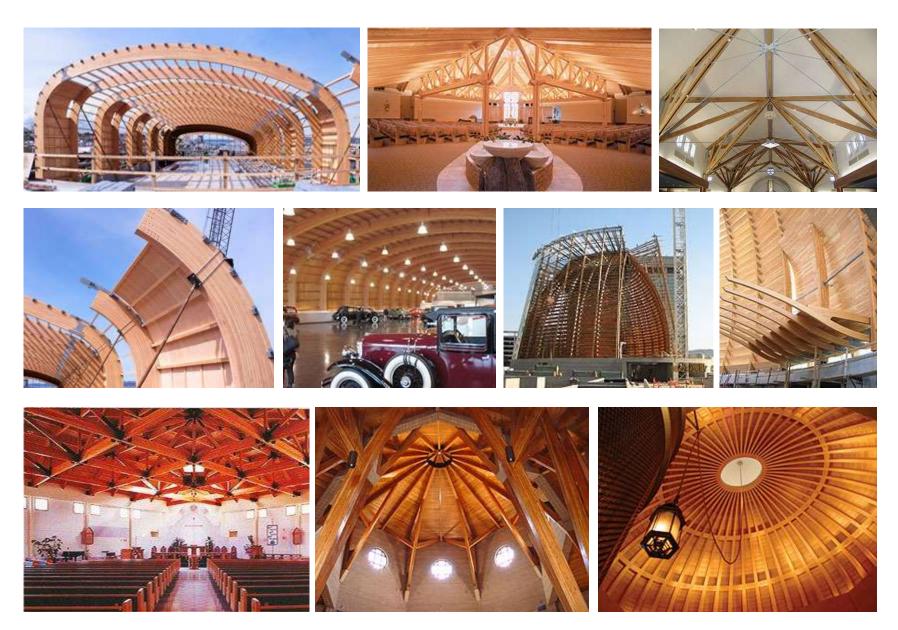




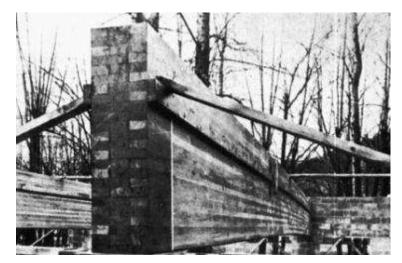


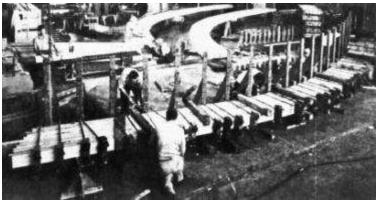


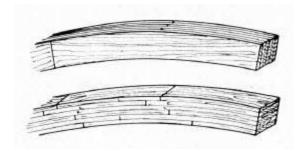
Δημήτρης Αντωνίου, Αρχιτέκτων ΕΜΠ, ΜΑ., ΜRE., Επίκουρος καθηγητής Οικοδομικού Σχεδιασμού – Τμήμα Αρχιτεκτόνων Παν. Πατρών



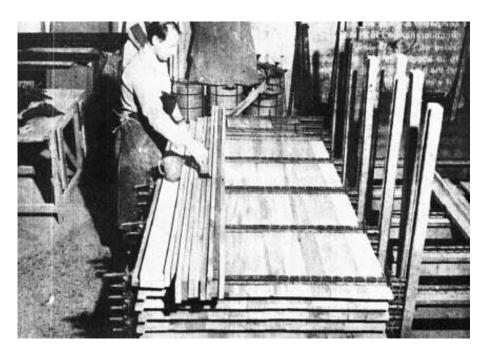
Συγκολλητή δομική ξυλεία (CLT –Cross Laminated Timber)







Συγκόλληση σανίδων κατά δύο τρόπους για την απόκτηση καμπύλων δοκών (τόξων)



Τα πλεονεκτήματα της συγκολλητής ξυλείας απέναντι στην ατόφια (φυσική) είναι τα εξής:

- Κατασκευάζεται με μεγάλη ποικιλία διαστάσεων διατομής και μήκους που δεν εξαρτώνται από τις διαστάσεις του κορμού από τον οποίο προήλθαν τα ξύλα.
- Μπορεί να πάρει κι άλλες μορφές εκτός από την ευθύγραμμη (τόξα, τρίγωνα κλπ.)
- Έχει μεγαλύτερη αντοχή στη θλίψη, στον εφελκυσμό και στην κάμψη.
- Δεν στρεβλώνεται και δεν συρρικνώνεται από την απορρόφηση υγρασίας.
- Τα ελαττώματα του ξύλου δεν επηρεάζουν ουσιωδώς τις άλλες ιδιότητές της.



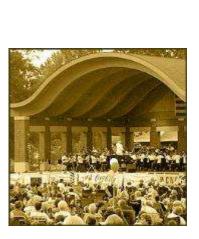


















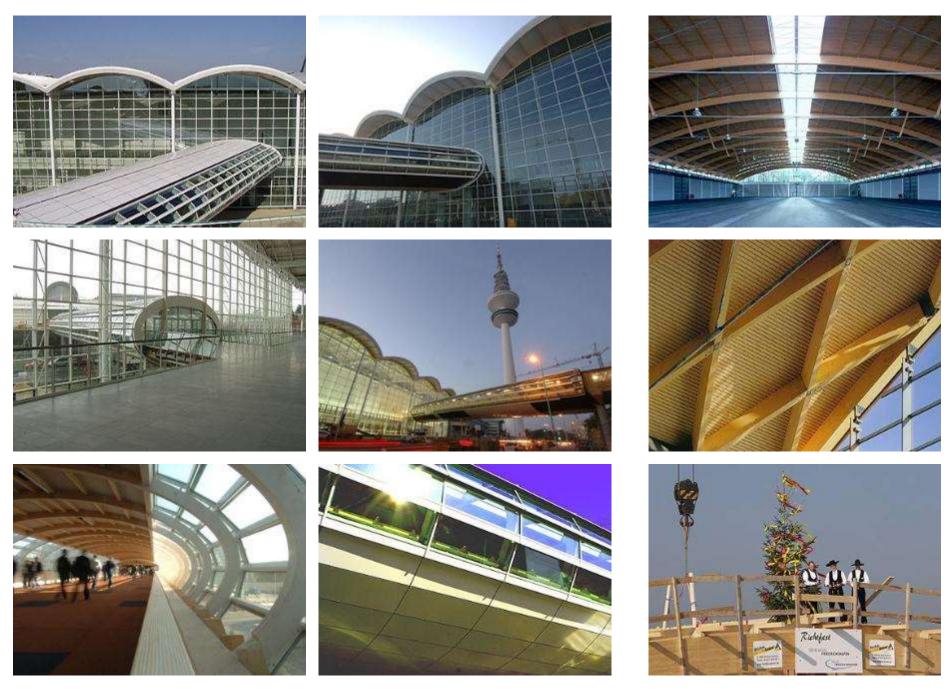






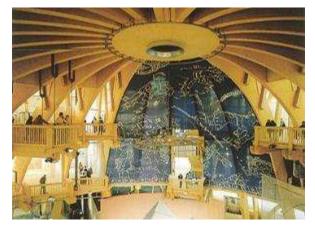






elevated bridge in Hamburg, 2006

exhibition hall, 2002









The Millennium Tower, the highest wooden tower in the world, was built in Magdeburg, Germany for the 1999 Federal Garden Show.







Elephant Park, Cologne Zoo, 2003





Metropol Parasol, Seville, Spain. World's largest wooden structure

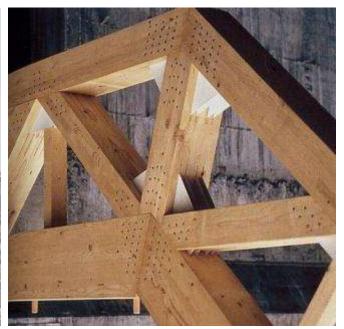






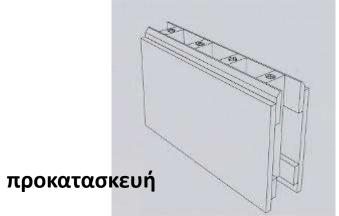


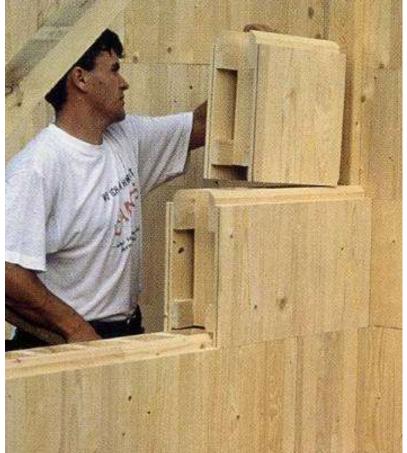


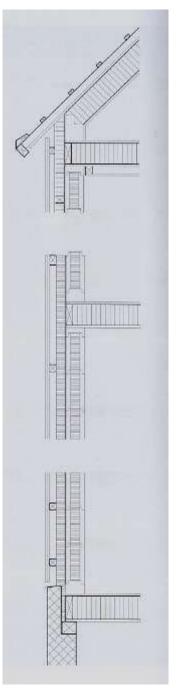


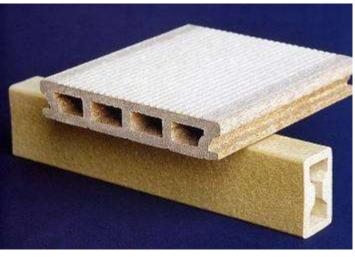










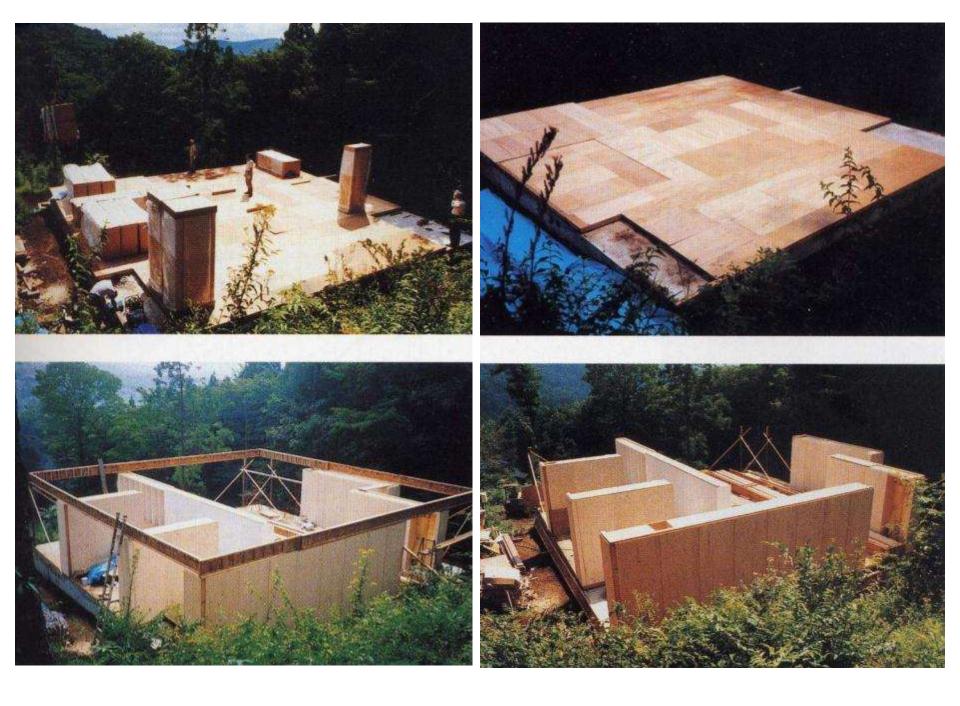






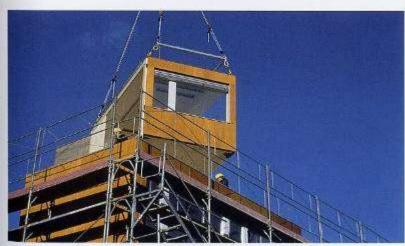
One of the biggest differences (and a difference with farreaching consequences) is the means of production, that is, the actual process of "producing" the building. Whereas in traditional construction, houses are built piece by piece and successively finished on site, timber construction and its building systems call for prefabrication of entire components (normally wall and ceiling parts) in the factory using a basic system and industrial equipment.



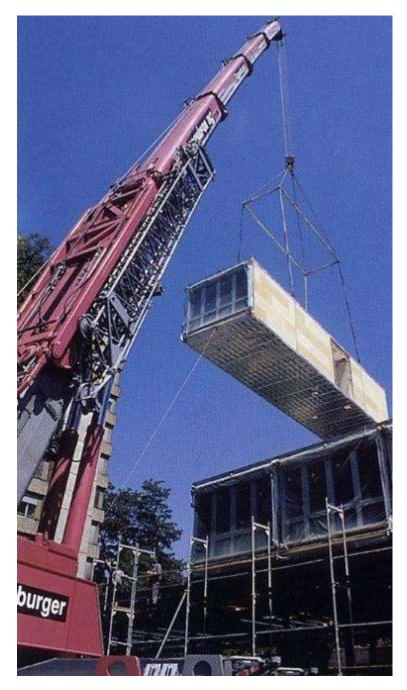


The three-story research and development building constructed in 1998 for Schindler in Ebikon (Lucerne Canton) consists of 66 wooden "boxxin" modules designed by the Zurich architects Kündig & Bickel. This building block system is based on a single module (3.5 m x 3.5 m x 7.5 m) plus a small number of additional components. Efforts to define both the structural relationship between the system's components and their joints played a formative role in its development.









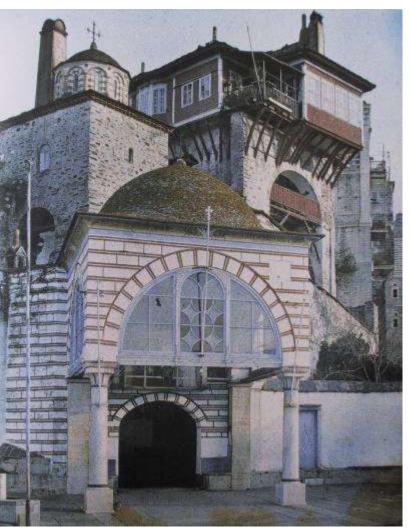












Βατοπέδι - καμένη πτέρυγα

