



Hybrid Buildings Seminar

# Hybrid – what does it mean?

02 November 2023  
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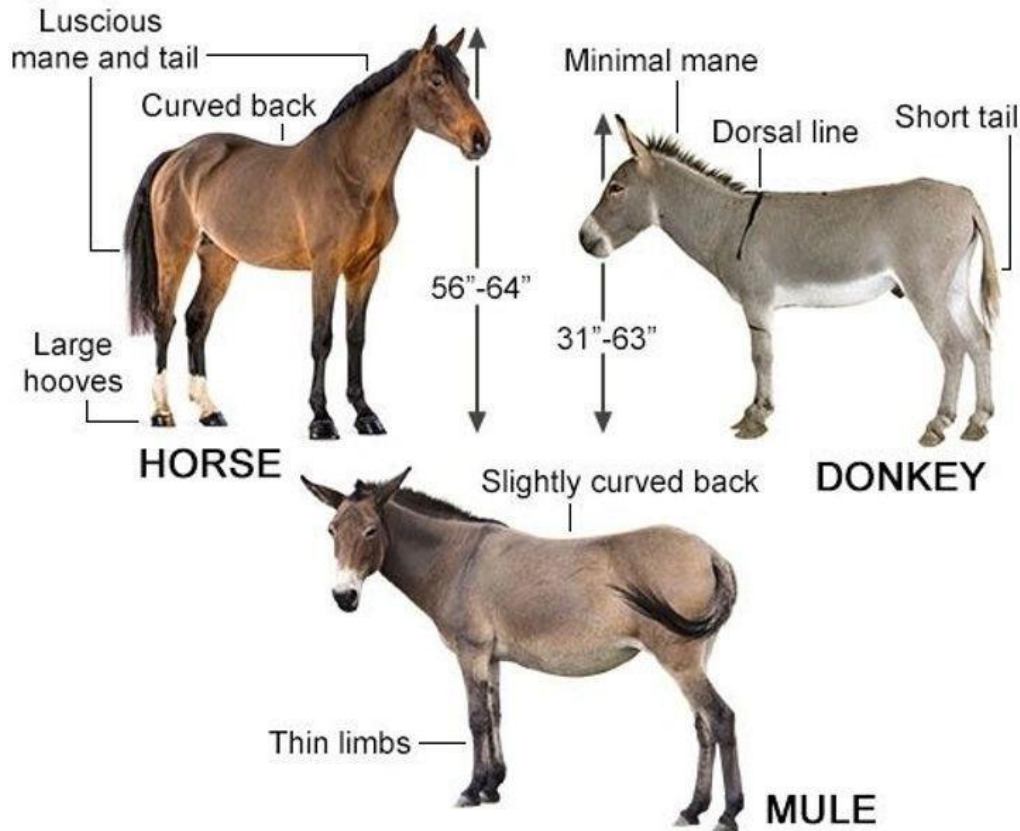
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New Zealand Forest Service

# Hybrid – what does it mean?

From Latin *ibrida* / *hybrida*  
cross-breed / of mixed origin



# Hybrid definition



1.

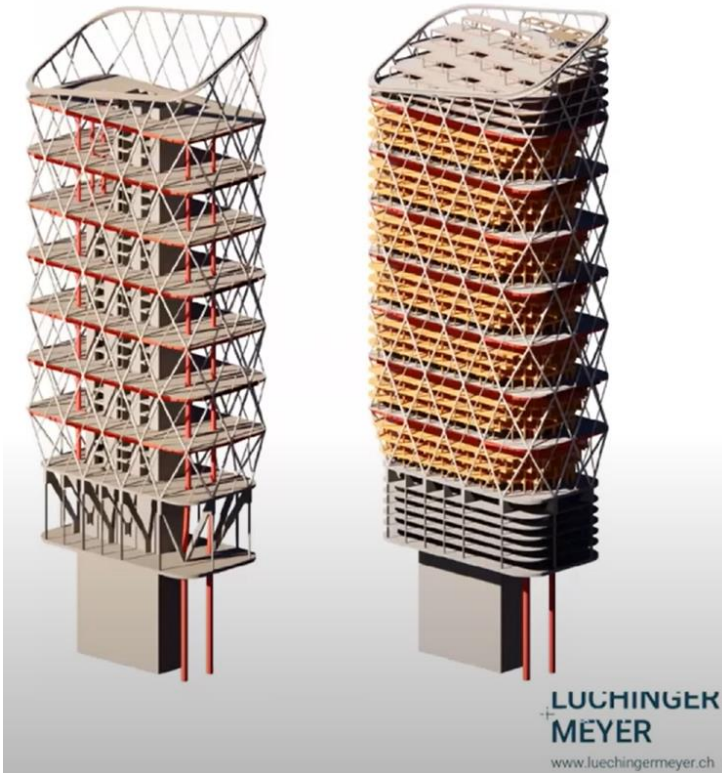
The offspring of two animals or plants of different species, or (less strictly) varieties; a half-breed, cross-breed, or mongrel.

2. *transferred* and *figurative*.

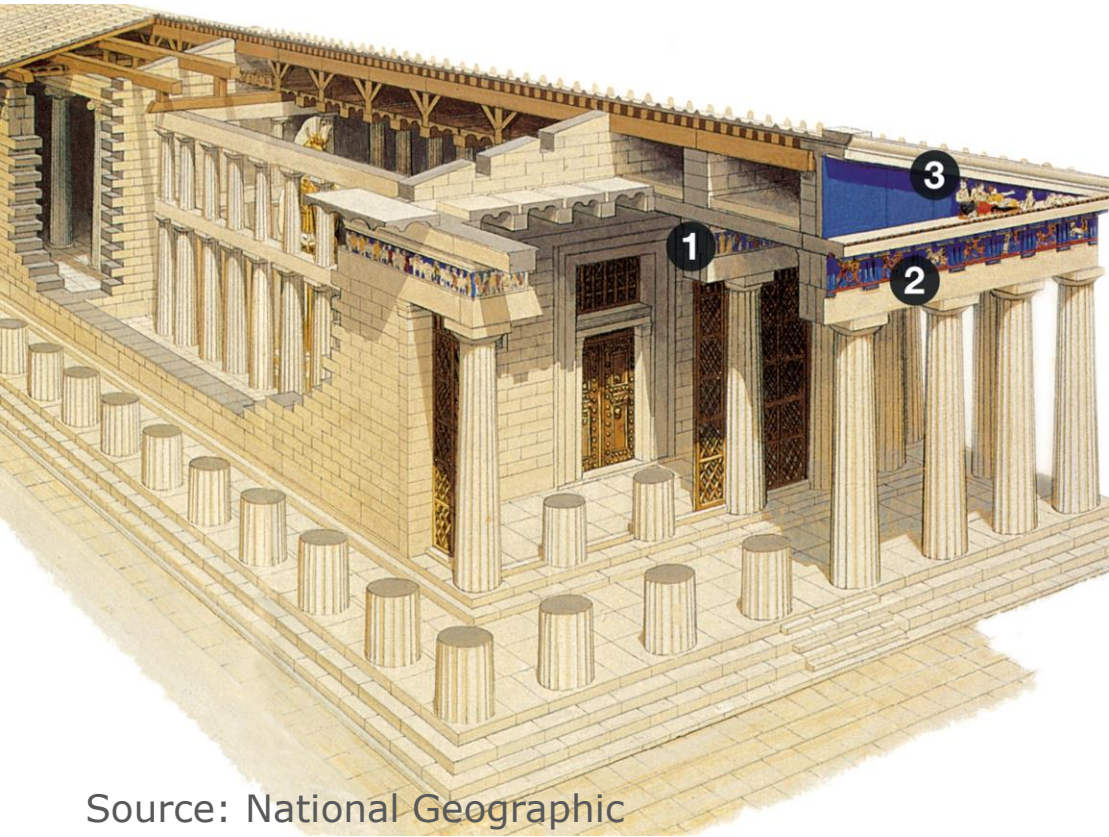
Anything derived from heterogeneous sources, or composed of different or incongruous elements;



# Hybridisation approaches --- Products / Systems



# Hybrid systems

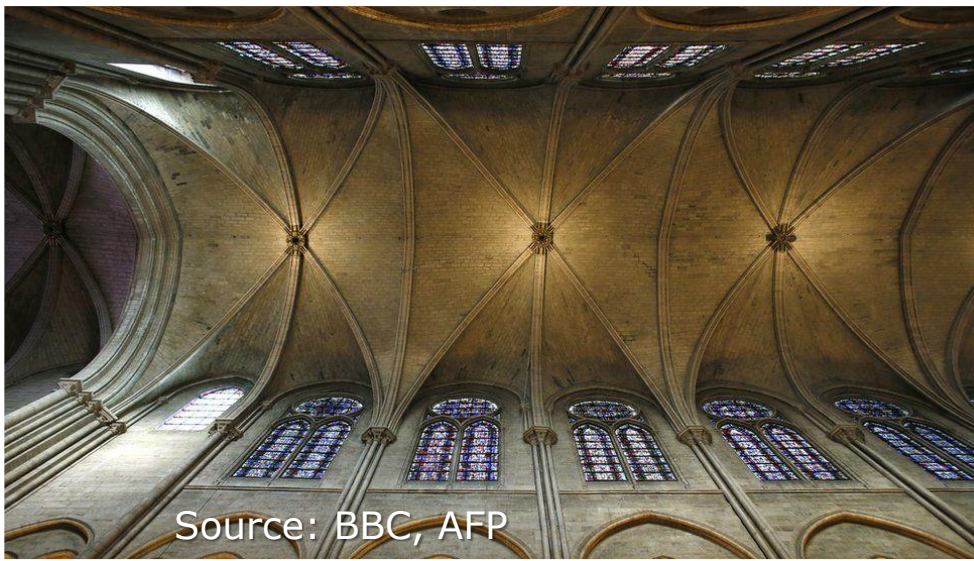
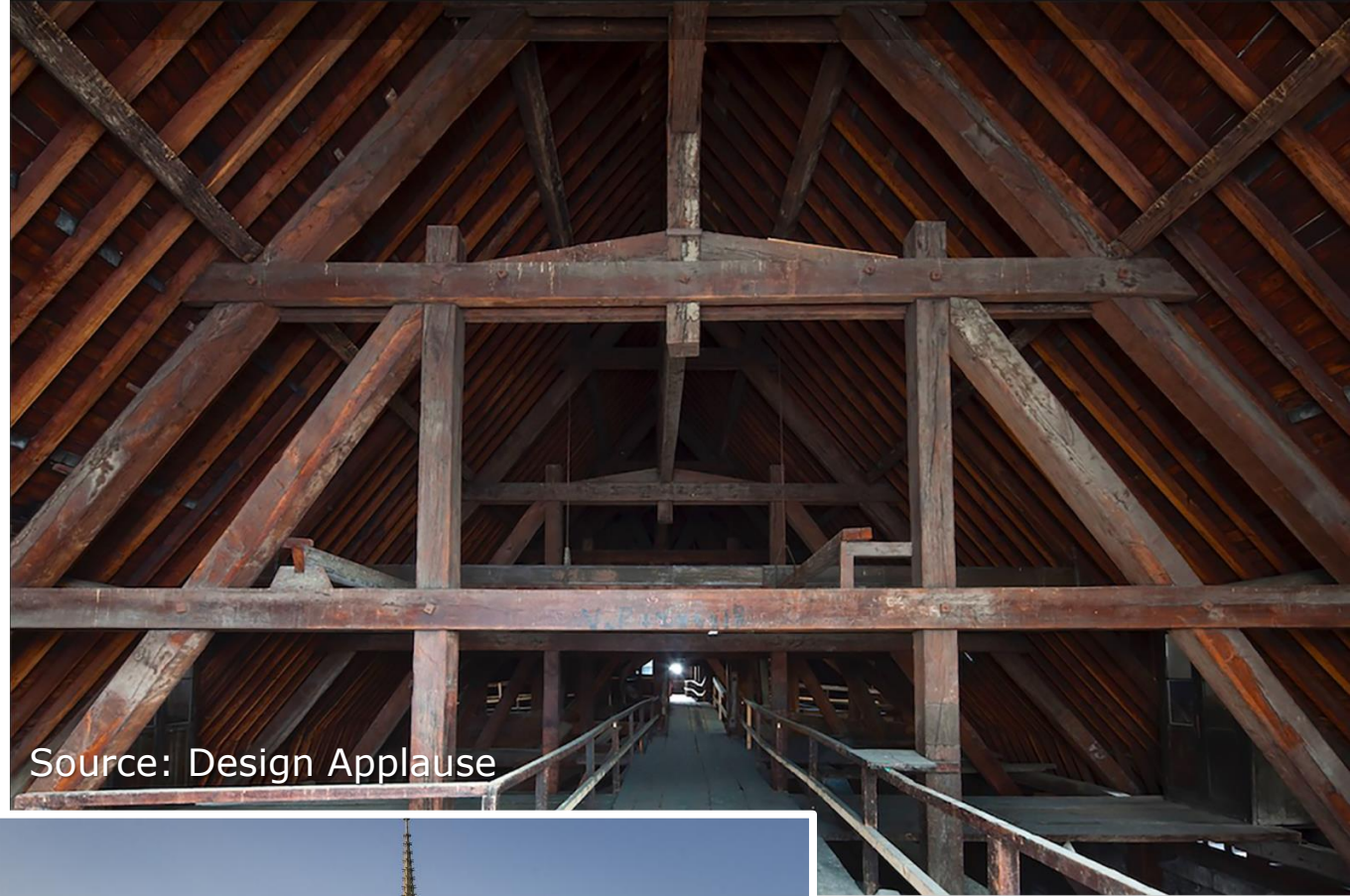
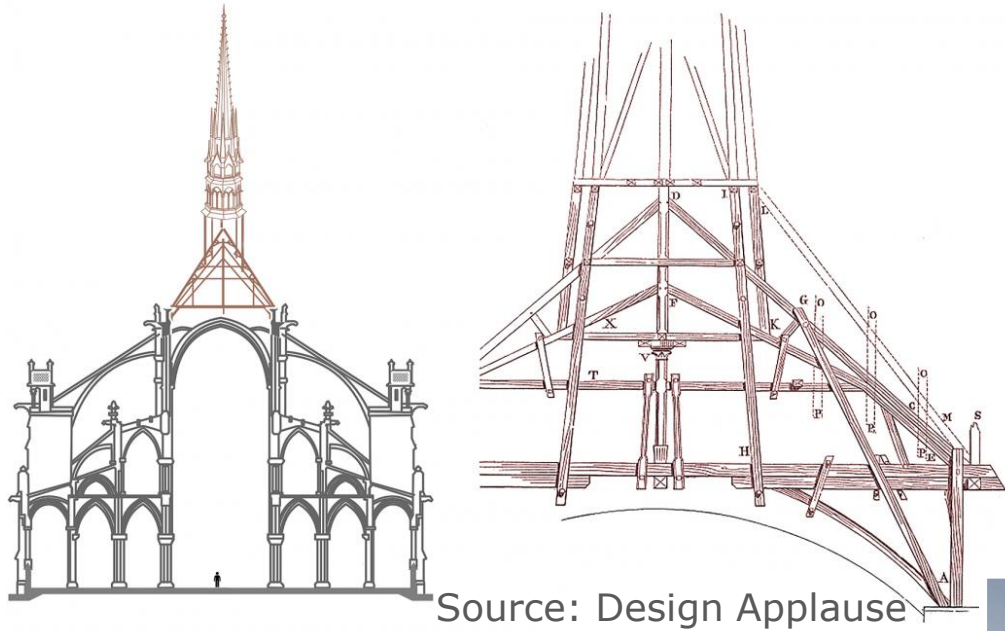


Source: National Geographic



Source: The Arch Insider

# Hybrid systems



# Hybrid systems



Source: Forbes



Heddal Stave Church  
Photo: Christian Barth  
Source: Wikipedia



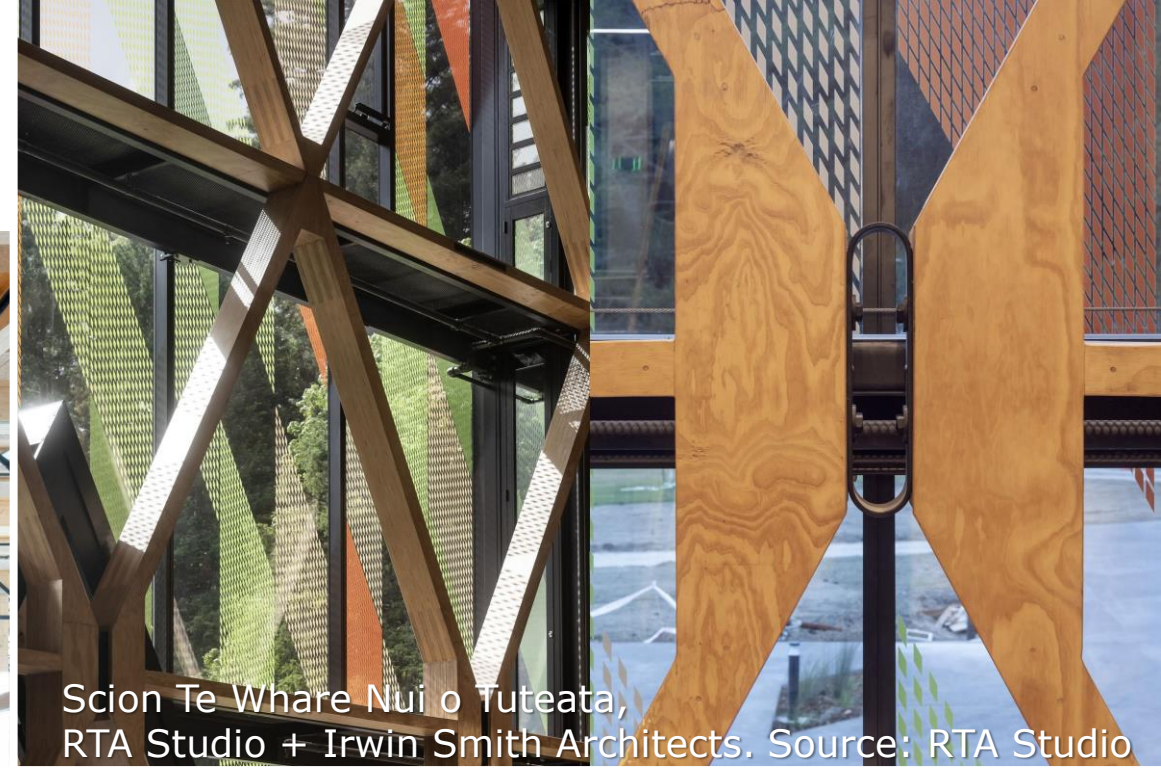
Heddal Stave Church - A.D. 1200 (823 years ago)  
Photo: Micha L. Rieser  
Source: Wikipedia



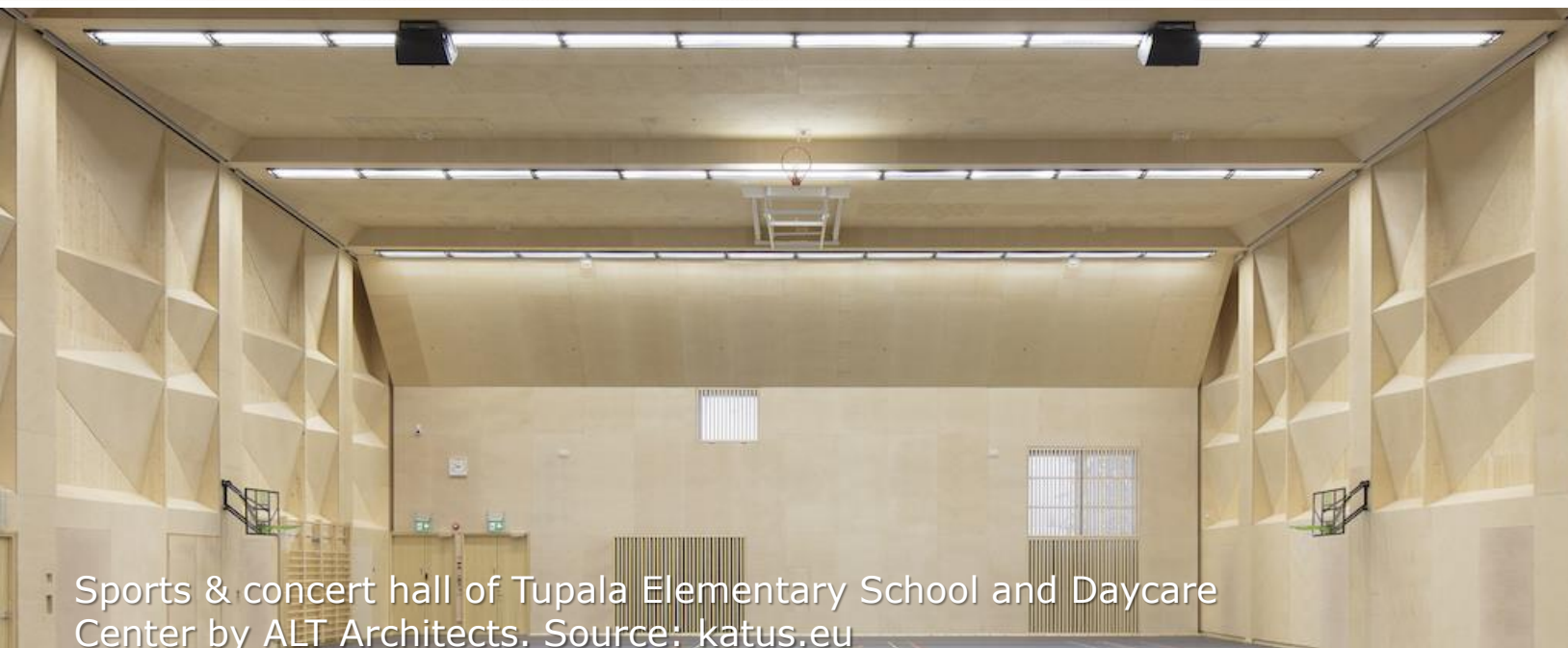
# How hybrid is hybrid?



Sara Kulturhus Centre by White Arkitekter.  
Photo by Åke Eson Lindman



Scion Te Whare Nui o Tuteata,  
RTA Studio + Irwin Smith Architects. Source: RTA Studio



Sports & concert hall of Tupala Elementary School and Daycare  
Center by ALT Architects. Source: katus.eu





# NZ Examples



## 9 | Hybrid building award

Any building type where timber is used as a structural material, but is not the main structural material (i.e. the use of mass timber flooring panels in a commercial multi-store steel building, timber extensions on existing steel or concrete buildings).



# 2023 Timber Design Awards Finalists

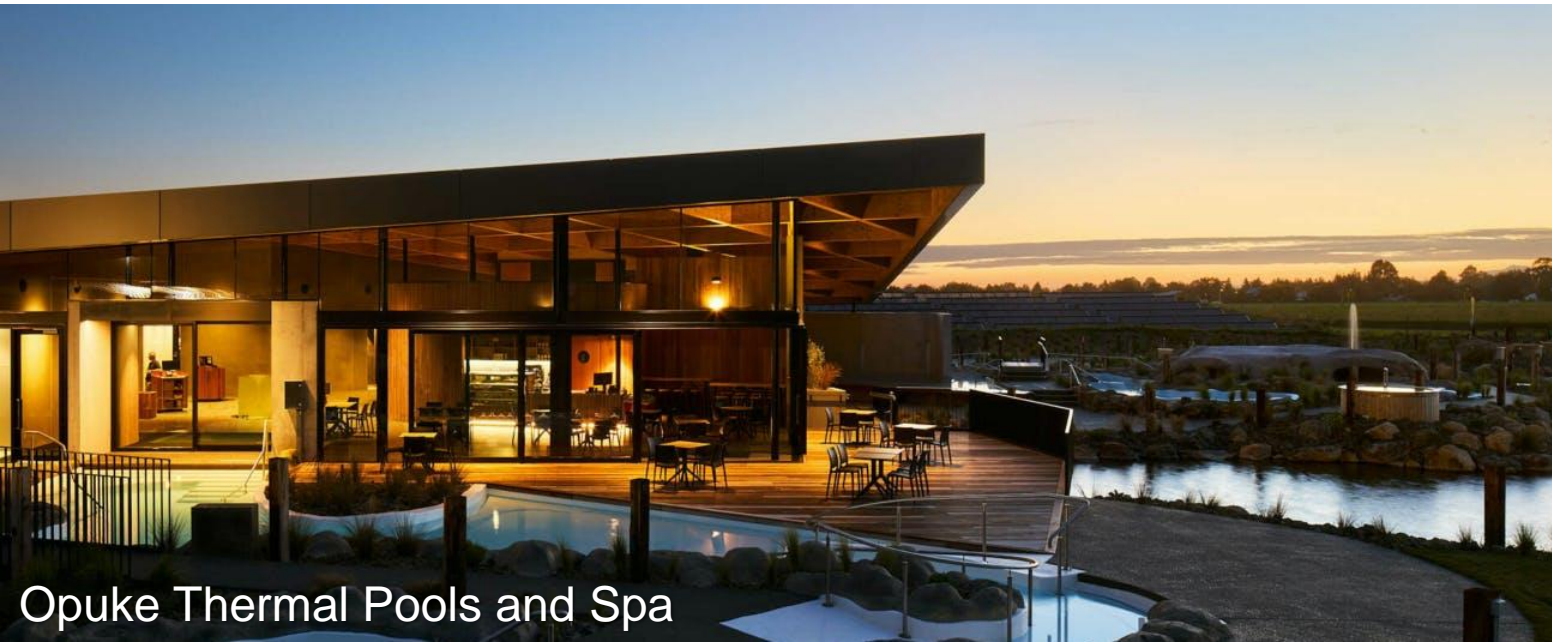


BBI Warehouse



Te Rauhitanga – Landcare Research

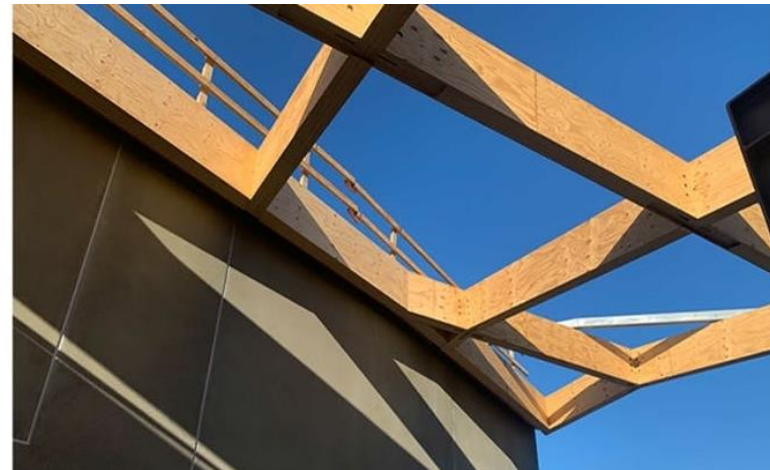
# 2023 Timber Design Awards Finalists



Opuke Thermal Pools and Spa



Dowie Rose House



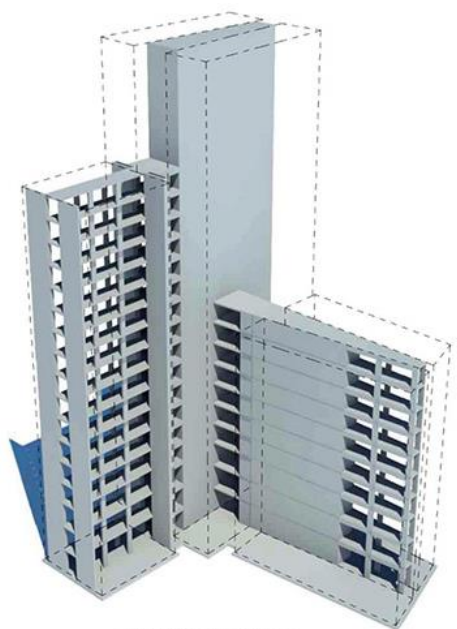
# HOHO WIEN Vienna, Austria



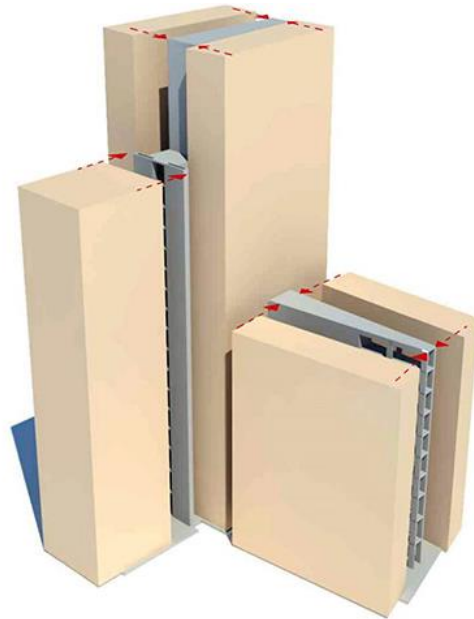
Photo source: [www.housingevolutions.eu](http://www.housingevolutions.eu)

# HOHO WIEN Vienna, Austria

## Shell & Core system



CONCRETE CORE



ATTACHED WOODEN STRUCTURE

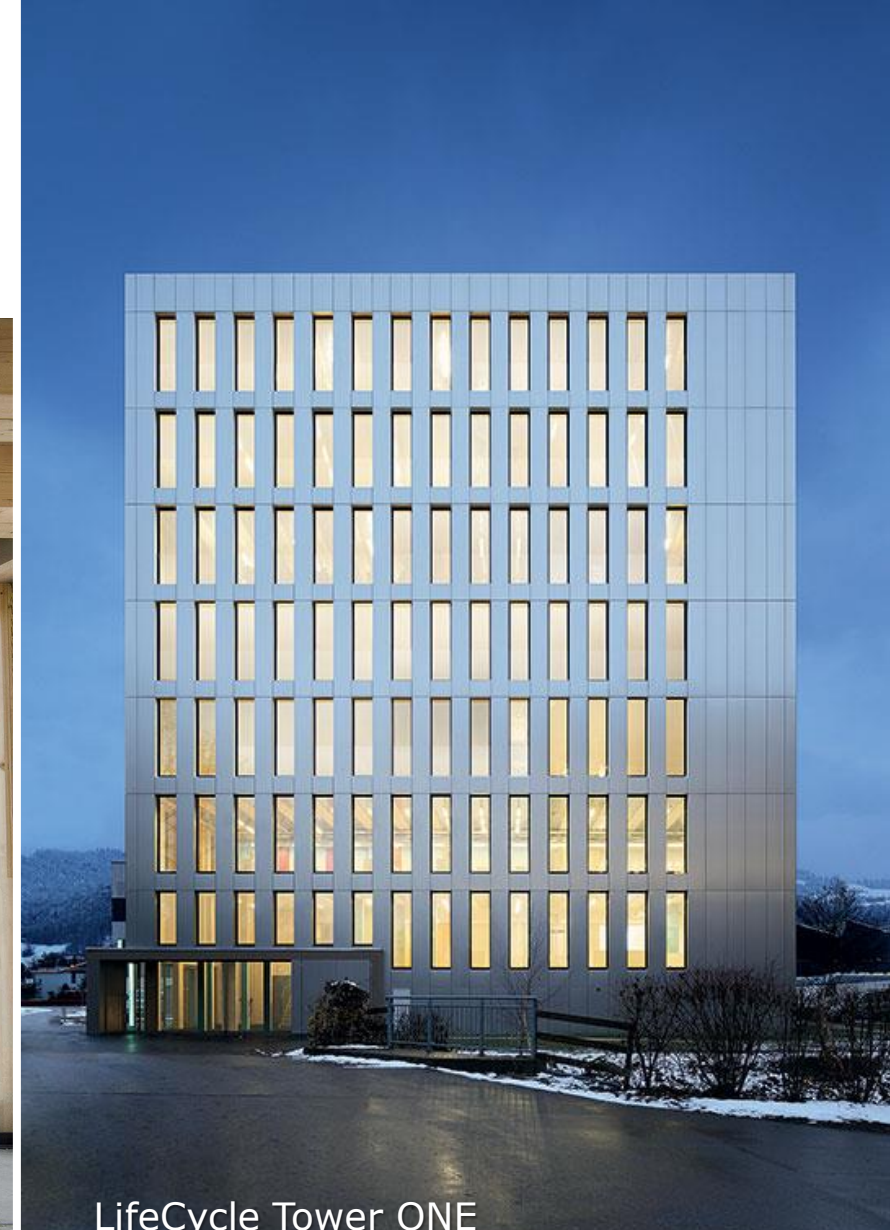
Sources: RLP Rudiger Lainer + Partner  
<https://anc.masilwide.com/>



Photos: Cetus.at+Thomas Lerch

# LifeCycle Tower ONE, Dornbirn, Austria

## System & Components



LifeCycle Tower ONE  
CREE HQ, Austria – Source: CREE



Source: URSA

# LifeCycle Tower ONE, Dornbirn, Austria

## System & Components





# Atlassian HQ, Sydney, Australia

## System & Components

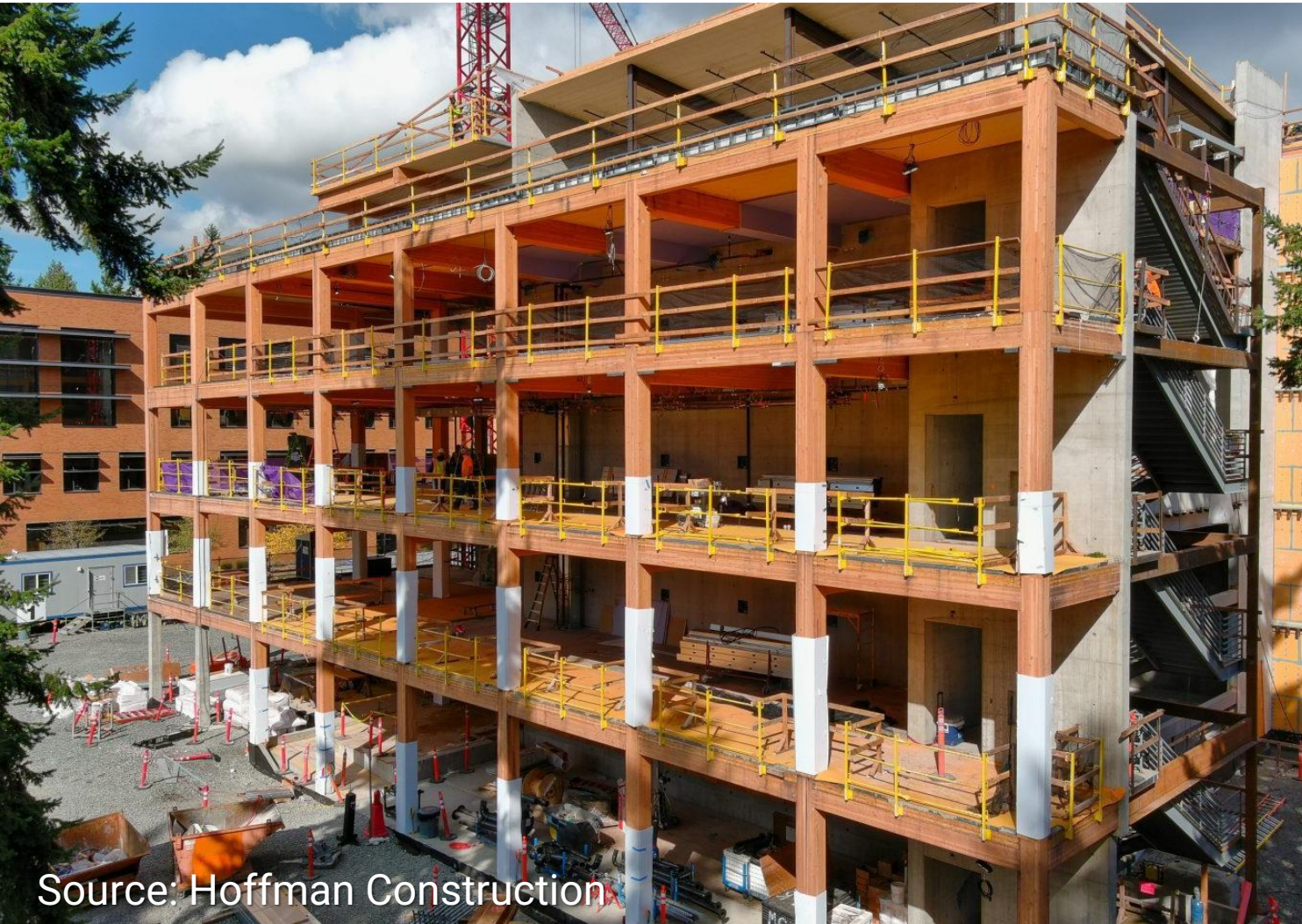


Source: SHoP Architects



# Founders Hall, Seattle, Washington

## System



Source: Hoffman Construction

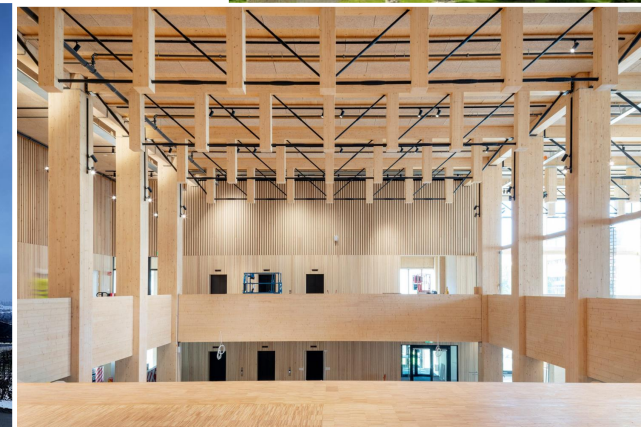
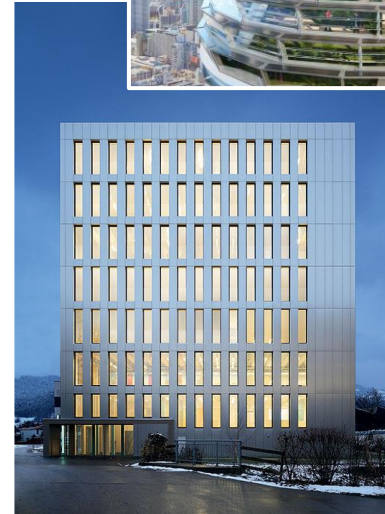


Source: Holmes

# What did all those example had in common?

Use of hybrid solutions to achieve better performance e.g.

- Structural performance
- Durability (e.g. moisture, fire)
- Sustainability (e.g. low-carbon)
- Aesthetic quality
- Speed of construction (e.g. prefabrication)
- Cost



# What is the meaning of hybrid?

Moving from any form of material and structural dogmatism:

Enabling the freedom to find solutions and achieving broader goals

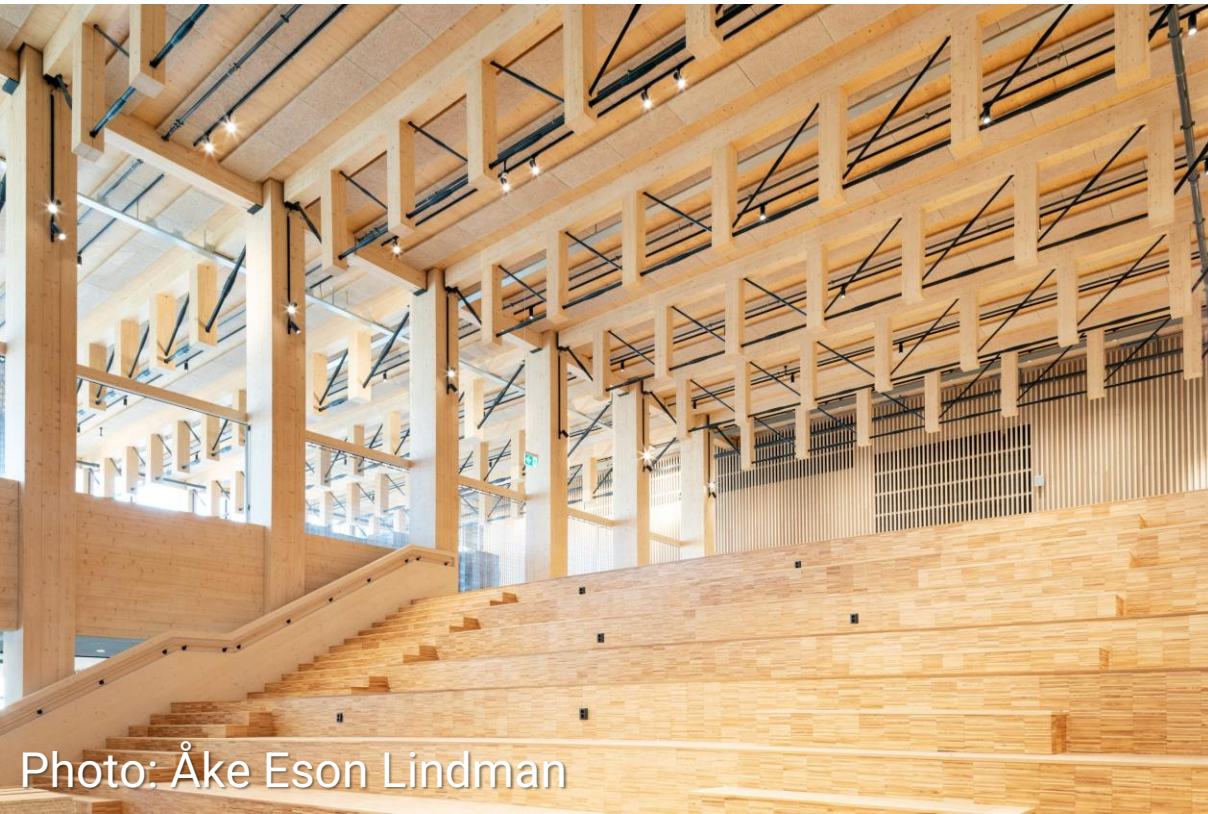


Photo: Åke Eson Lindman



Photos: Holmes

# The meaning of hybrid



Designing synergies and cooperation between building materials, products and systems to achieve desirable outcomes

Using the best material and solution for the purpose - not the easiest

Paradigm shift for materials e.g. moving from volume to value

# QUESTIONS ?

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