

# Additive manufacturing and bio-fabricated materials for structural applications and sustainable construction

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# Additive Manufacturing

- 3D Printing Structural Applications in Concrete and Composite Materials

3D2BGreen

- 3DP Green Concrete
- Marine Structures



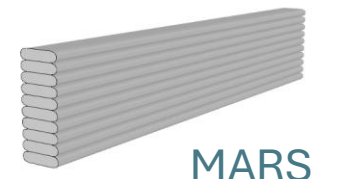
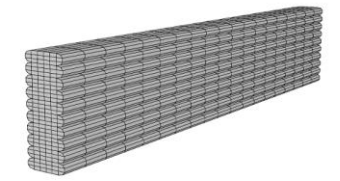
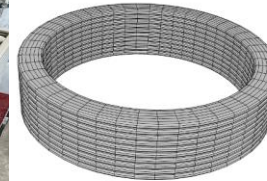
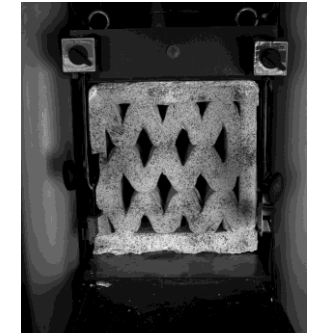
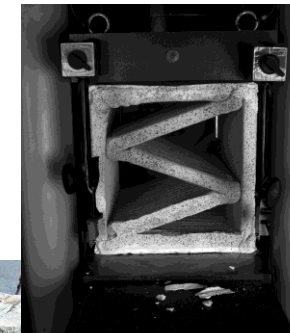
GHENT  
UNIVERSITY

RESOURCEFULL

Witteveen  
Bos  
BESIX

3D4WALL

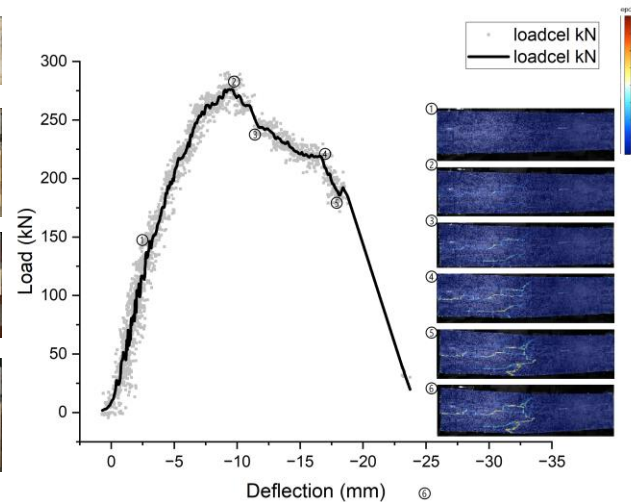
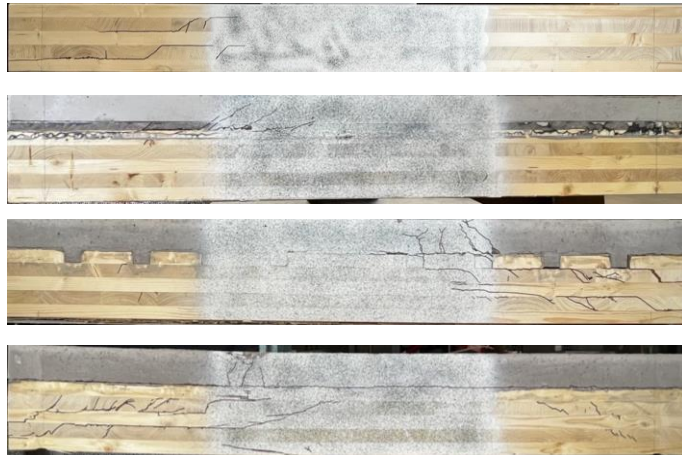
- 3DP Infill Designs
- Buildability Model



MARS

# Hybrid Structures & Bio-Materials

- Timber-Concrete Composite Structures
- Hybrid Wall with bio-insulation





# NEB Calls

- **HORIZON-NEB-2025-01-PARTICIPATION-03: Beautiful, sustainable and inclusive street furniture for the transformation of neighbourhoods**
  - ✓ KUL LWW Group: 3D printing, infill design, mechanical and durability testing, buildability model
  - ✓ Existing partnerships: urban furniture, green concrete, recycled materials, additive manufacturing
  - Looking for: architectural design, LCA, social sciences and humanities (SSH), procurement
- **HORIZON-NEB-2025-01-BUSINESS-01: Renovating the built environment through design for adaptability and disassembly**
  - ✓ KUL BWK: structural design and analysis for disassembly and reuse, demo site ConstrucThor
  - ✓ Existing partnerships: universities/companies in Belgium, Italy, France, Czech Republic, Hungary
  - Looking for: architectural design, LCA, social sciences and humanities (SSH), market uptake
- **HORIZON-NEB-2025-01-REGEN-02: Bio-fabricated materials for sustainable and beautiful construction**
  - ✓ KU Leuven: bio-based materials, structural and thermal analysis, robotics
  - ✓ Existing partnerships: universities/companies in Belgium, Netherlands