Co|Lab & Mass Timber Construction

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DISCUSSION TOPICS

- Introduce Co|Lab
- Highlight Building
  - Under Construction
  - Final Product
- Share Takeaways
WHAT IS CO|LAB?

- 8,600 SF innovation lab
- Supports HITT’s R&D Program
  - Materials, Approaches, Technology
- Host events, tours, and projects
  - HITT project mockups & R&D
- Platform for Collaboration
  - Internal & External
VALIDATED BY CERTIFICATIONS

ACHIEVED
LEED v4
Platinum
BD+C

Pursuing
ILFI ZERO ENERGY
On-site PV solar
12 month performance

Pursuing
ILFI Petal
Materials
Place
Beauty
THE WHY

LABOR SHORTAGE
Driving productivity
Workforce development

SAFETY CONCERNS
Encouraging a culture of safety

INNOVATION GAP
Less than 1% of revenues spent on R&D

FLOOD OF TECHNOLOGY
Venture capital flooding the market with new innovations
IT TAKES A VILLAGE

MEANINGFUL CHANGE

HITT
ARCHITECTS
SUBCONTRACTORS
CLIENTS
PHYSICAL
State-of-the-art facility
Testing new or different design strategies
Push the envelope in AEC community

CULTURAL
Inspire innovative thinking
Educate stakeholders
Discover alignment and develop partnerships
ABOUT THE BUILDING
TAKEAWAYS
JURISDICTIONS/CODE

- Code hurdle not what it was
  - Virginia Construction Code 2017 (~IBCC)
  - Sit down during schematic
- Inspectors
- Education
DESIGN PROCESS

- EARLY COORDINATION
- Bring in subs early – design/build
- REVIT model translated into language that CNC machines can use for fabrication
- Leverage fabricator’s in house engineers
- Wood ≠ Steel
Hybrid Erection Teams – Timber/Steel
DETAILS

- Exposed versus not
- Connections
- External design review
TOLLERANCES

- Connections
- Customization
CLOSING

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