ADVENTURES in Mass Timber and Light-Frame Hybrid Systems in Multi-Family Buildings: THE CANYONS

Disclaimer: This presentation was developed by a third party and is not funded by WoodWorks or the Softwood Lumber Board.

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Tallest Mass Timber Structure in the United States.
...as of now
The Canyons
Kaiser + Path
Summer 2020

THE BIG PICTURE
1 Level Below Grade
First Canyons CLT Flies In
3rd Floor CLT
3rd Floor Wall Framing
Prefabrication of Stud Packs
Moisture Concerns
The Canyons
THE MONEY
### Building Value vs Building Cost.

The Canyons – CLT vs Light Framing

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<th>COST</th>
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Building Value vs Building Cost.

The Canyons – CLT vs Light Framing
Partial Change to Light Framing

- Delete 139V CLT at 10’ spans  
  save $320,000
- Savings in Plumbing  
  save $49,600
- I-Joist framing at all 10’ spans  
  add $223,200
- Additional soffits (frame/gwb/paint)  
  add $179,200
- 3 weeks added general conditions  
  add $48,800

SUB TOTAL ADD $81,600

- 3 weeks added carrying costs  
  add $60,000

TOTAL BUILDING COST ADD $141,600

Building Value vs Building Cost.

The Canyons – CLT vs Light Framing

SOURCE: KGI Internal
Total Change to Light Framing

- Delete all CLT  save $1,194,500
- Savings in Plumbing  save $49,600
- I-Joist framing throughout  add $440,500
- Additional soffits (frame/gwb/paint)  add $344,000
- 5 weeks added general conditions  add $81,000

**SUB TOTAL BUILDING COST SAVINGS**  $378,600

- 5 weeks added carrying cost  add $100,000

**TOTAL BUILDING COST SAVINGS**  $278,600

Building Value vs Building Cost.

The Canyons – CLT vs Light Framing

SOURCE: KGI Internal
Total Change to Light Framing

- **TOTAL BUILDING COST SAVINGS** save $278,600

Value Lost

- Ceiling height reduced 6” or building height decreased by 30”
- Potential to lose a floor. We are at max height limit.
- Loss of exposed wood ceilings.
- Lower lease rates
- Market differentiation

Building Value vs Building Cost.

The Canyons – CLT vs Light Framing
Total Change to Light Framing

- **TOTAL BUILDING COST SAVINGS** save $278,600

Value Lost

- $0.12 / sf apartment lease reduction (3 ½%)  
- $7,668 / monthly gross rental income reduction  
- $92,255 / year gross rental income reduction

Building Value vs Building Cost.

The Canyons – CLT vs Light Framing

SOURCE: KGI Internal
Total Change to Light Framing

- **TOTAL BUILDING COST SAVINGS** save $278,600

Value Lost

- $0.12 / sf apartment lease reduction (3 ½%)
- $7,668 / monthly gross rental income reduction
- $92,225 / year gross rental income reduction
- **$1,752,843 value loss at sale** (5.0% cap, year 0)

Building Value vs Building Cost.

The Canyons – CLT vs Light Framing

SOURCE: KGI Internal
Building Value vs Building Cost.

The Canyons – **CLT WINS !!**
A Drag Race: CLT vs PT Concrete

L2 Post-Tension Concrete Slab
Day 1

L4 Cross-Laminated Timber Panels & Light Frame Walls
Day 1

The Canyons
Portland, OR
thank you

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Come Build With Us
www.kaiserpath.com

Interested in The Canyons
www.thecanyonspdx.com

It’s Built for Speed . . .
Watch the Concrete vs CLT Drag Race:
www.kaiserpath.com/why-wood