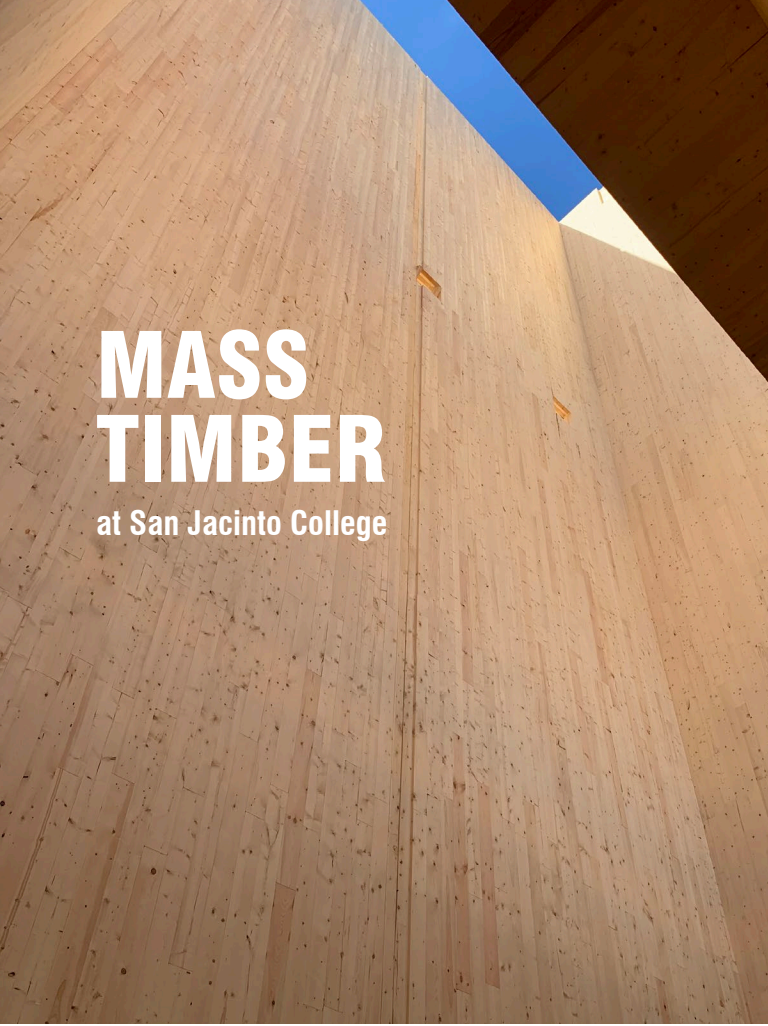


MASS TIMBER

at San Jacinto College

SAN JACINTO COLLEGE

Kirksey ARCHITECTURE

TELLEPSEN

Mass timber framing after week 2 of erection.

what is it?

MASS TIMBER

is a large solid wood framing member that is composed of smaller dimensional lumber that is either secured with glue, dowels or nails.
The members are used as structural elements for floor, roof, column, beam or wall applications within a building.

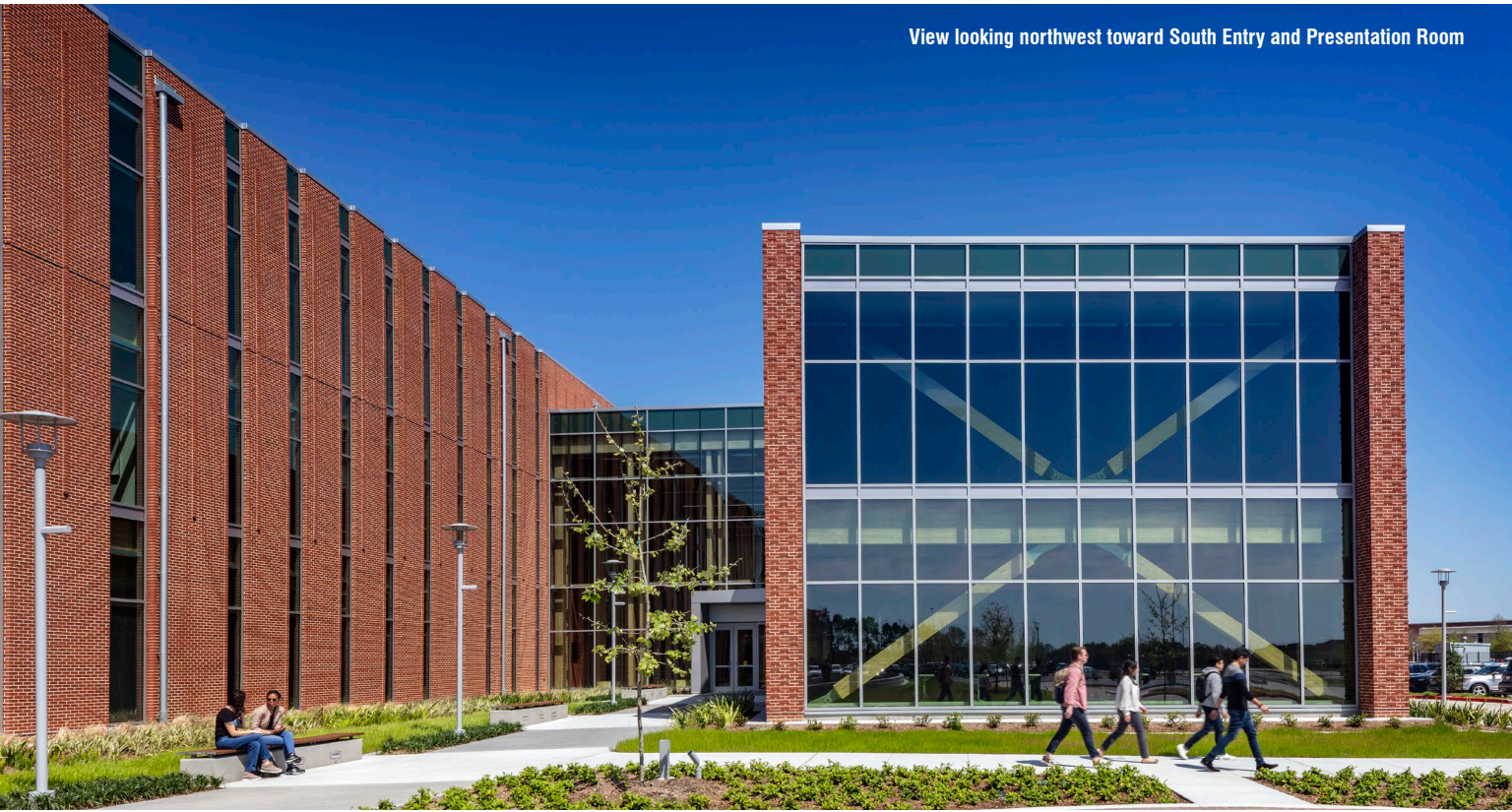
why?

MASS TIMBER

- Quiet construction site
- Less construction time
- Renewable material
- Lighter foundation loads
- Carbon storage
- Biophilia

Framing at second floor deck.

San Jacinto College Central Campus
New Classroom Building



View looking northwest toward South Entry and Presentation Room

The nation's largest MASS TIMBER academic building on a college campus.

San Jacinto College
New Classroom Building

FUN FACTS:

- Mass timber is 5x lighter than concrete and 15x lighter than steel. SJCC building was able to reuse existing foundations due to the lighter structure.

- The structural material used is a renewable resource and is FSC* certified. The species is Black Spruce from Canada.

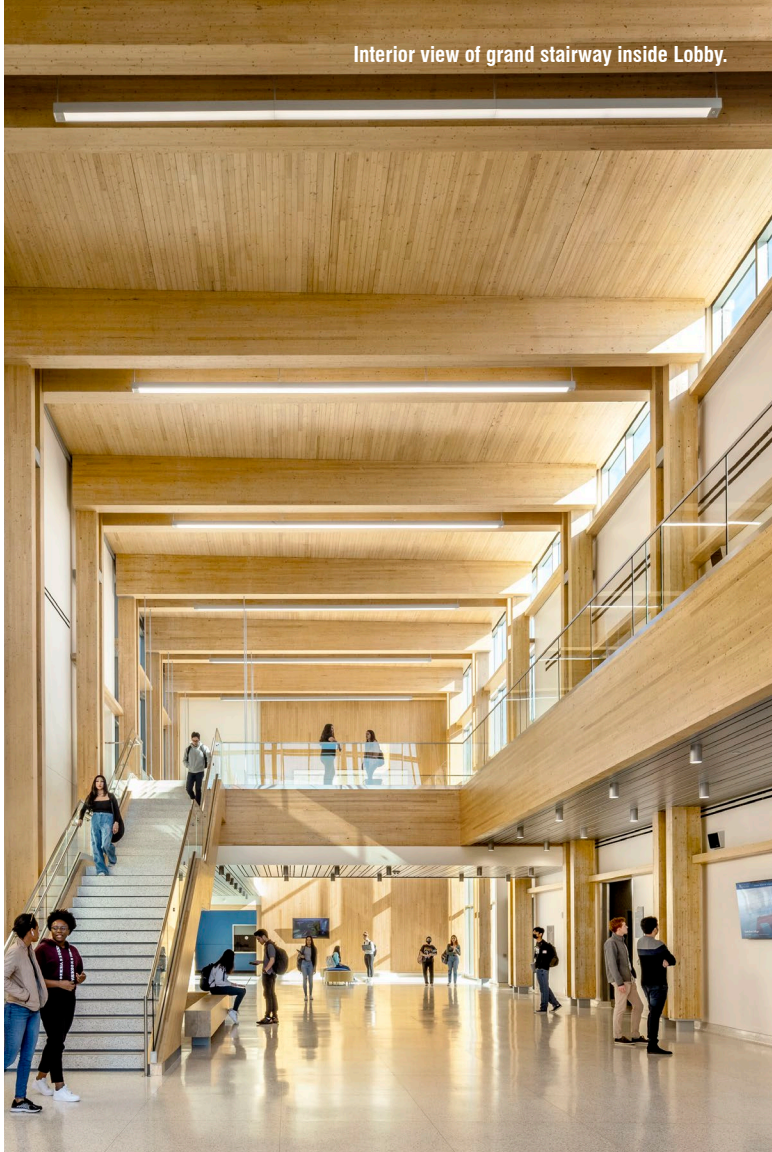
- The mass timber members traveled by train to the Port of Houston and then by freight trucks to the site. This was the most carbon friendly option.

- Through the use of mass timber, the building has less than half of the embodied carbon of a standard educational building.

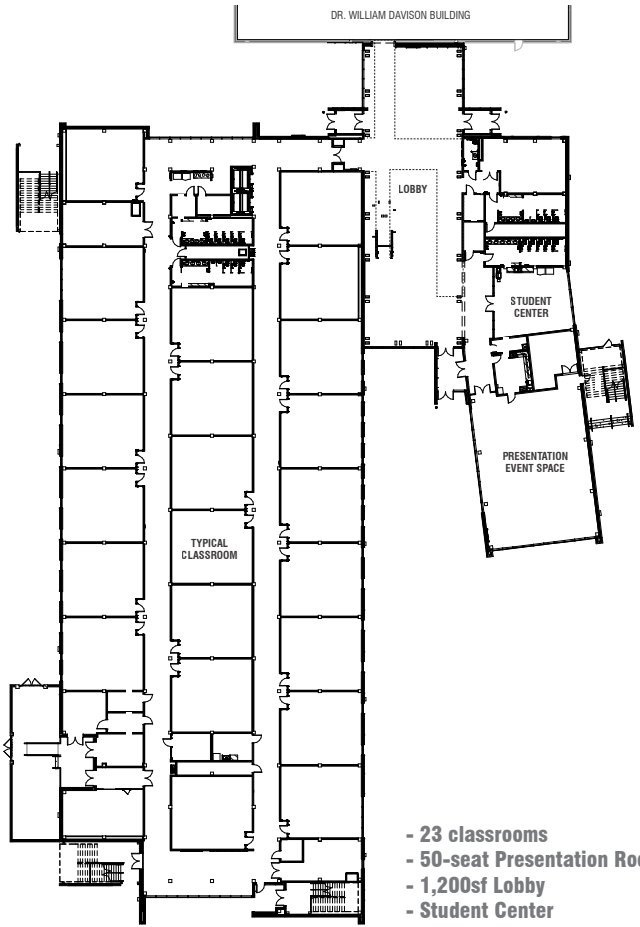
- Wood has a comfortable surface temperature and the ability to compensate for rapid fluctuations in temperature and humidity.

- The beam structure in the lobby help conceal lights and sprinkler lines as well as become an architectural feature.

**Forest Stewardship Council certified wood product.*

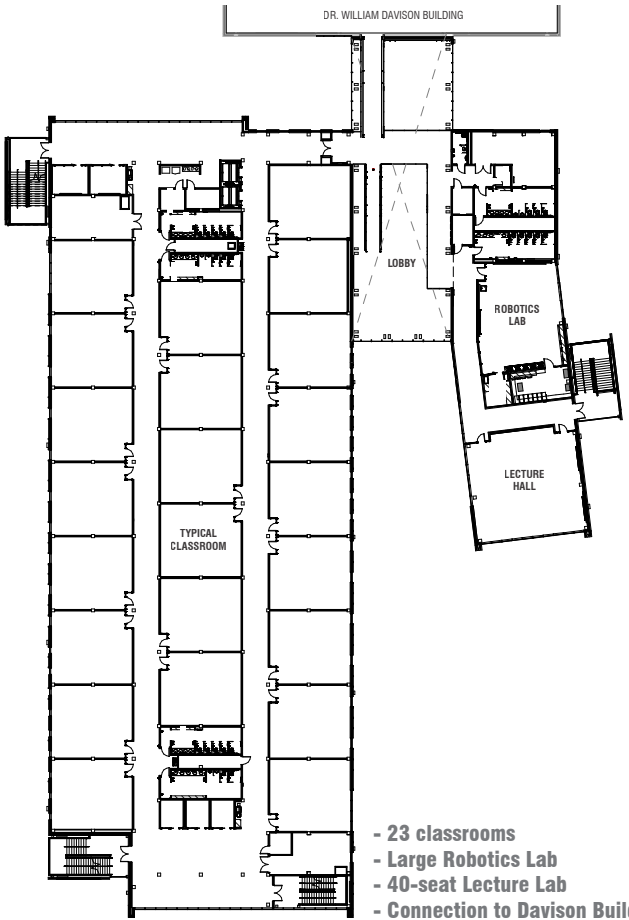


Interior view of grand stairway inside Lobby.



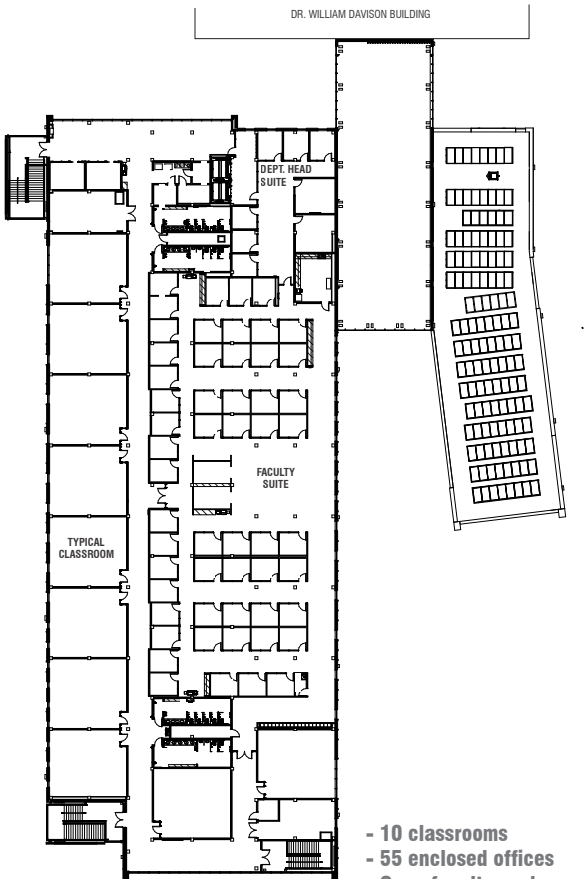
- 23 classrooms
- 50-seat Presentation Room
- 1,200sf Lobby
- Student Center

First Floor Plan



- 23 classrooms
- Large Robotics Lab
- 40-seat Lecture Lab
- Connection to Davison Building

Second Floor Plan



- 10 classrooms
- 55 enclosed offices
- Open faculty work area
- Department Head Suite

Third Floor Plan

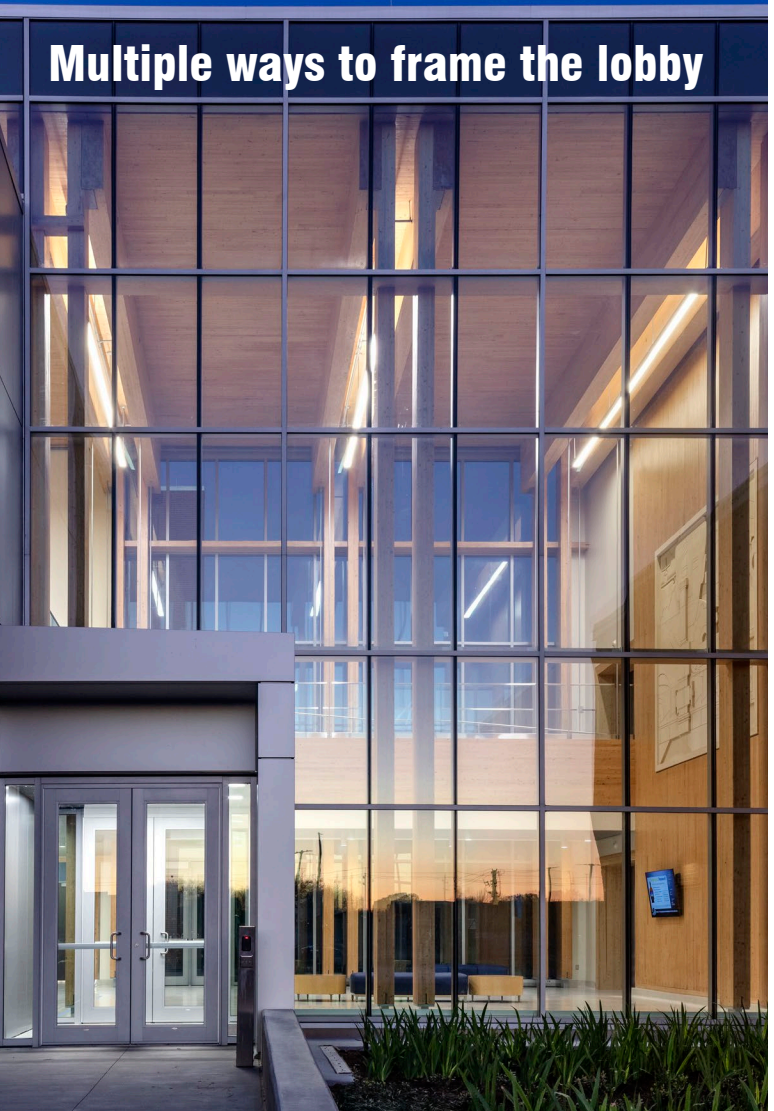
122,142 GSF of classrooms, collaboration spaces, multi-use event Lobby, faculty offices, and educational branding throughout.

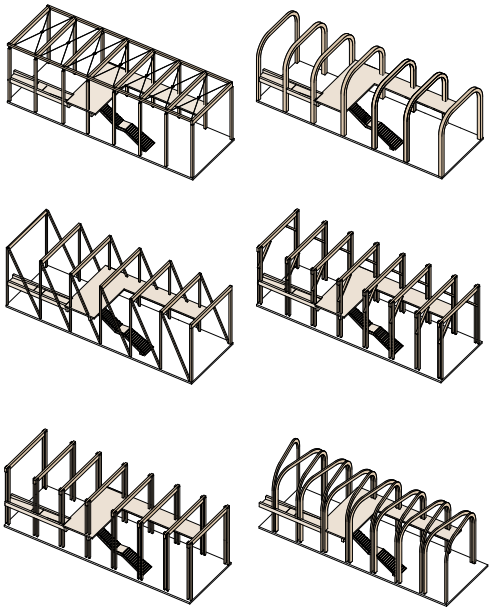
This project uses 412 glulam columns, 511 glulam beams, 4 glulam lateral braces, 339 floor and roof CLT panels and 14 vertical wall CLT panels.

The mass timber structure with prefabricated connections took 14 weeks to erect

View of East elevation of 3-story classroom wing before Lobby framing has begun.

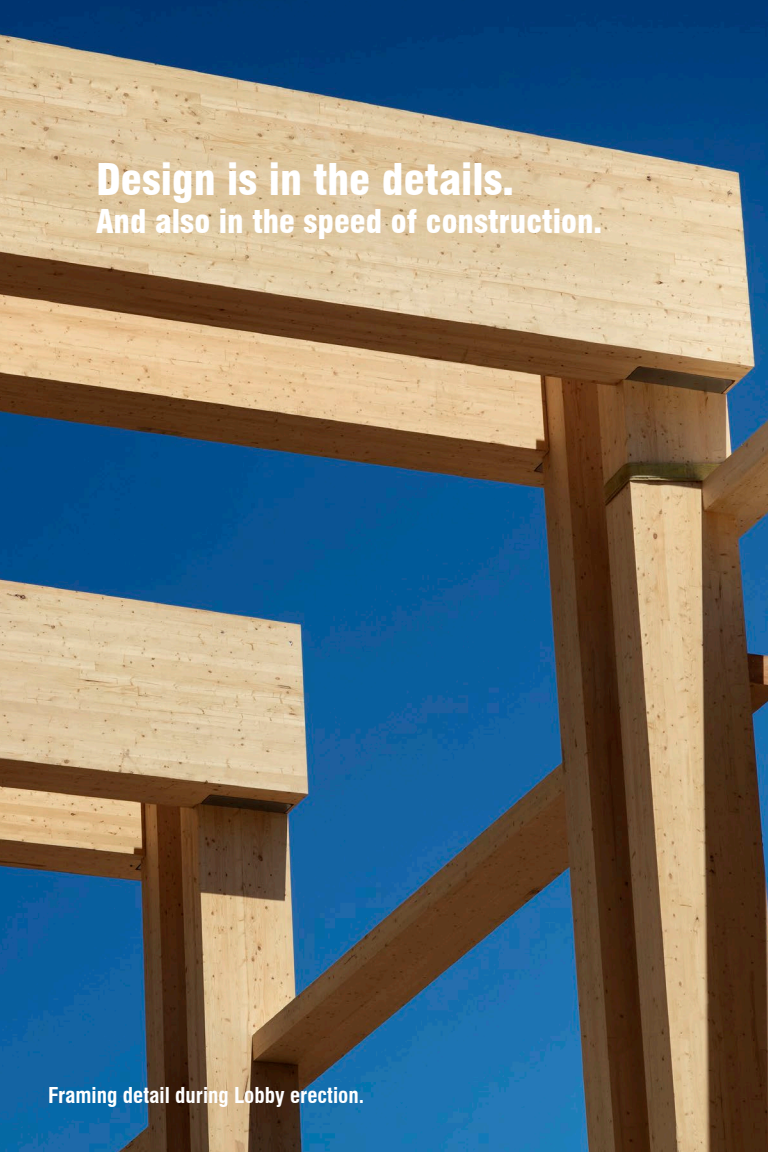
Multiple ways to frame the lobby



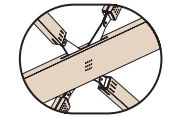


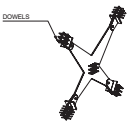
East entrance adjacent to Davison Building.

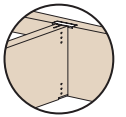
Design is in the details.
And also in the speed of construction.

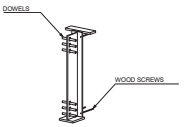


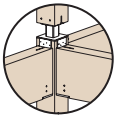
Framing detail during Lobby erection.

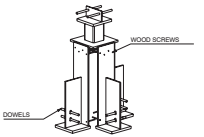


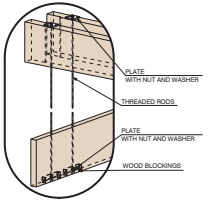


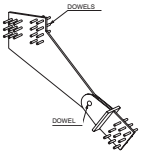


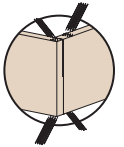


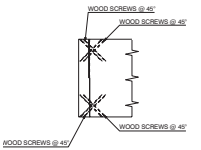


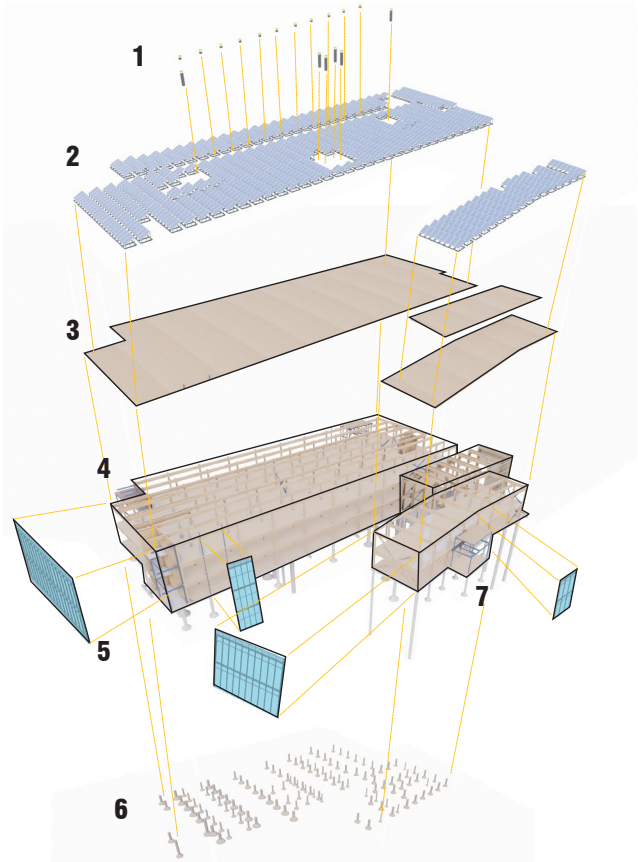










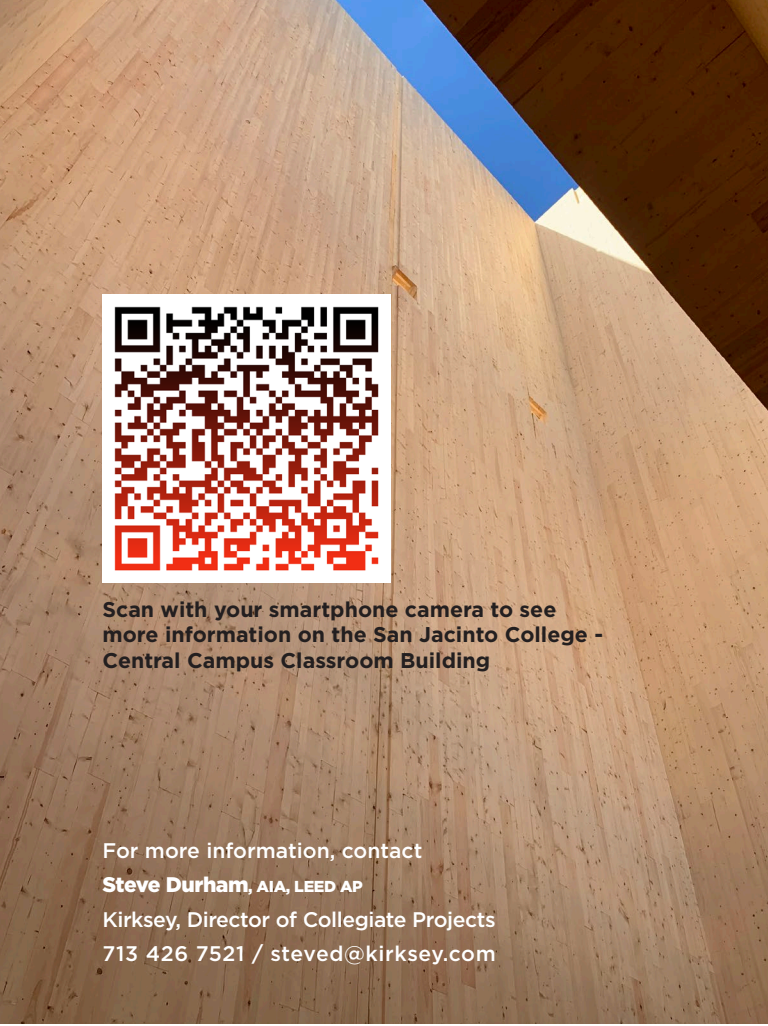


Framing detail at cantilevered upper floor framing.

1 Tubular Daylighting Systems
2 Photovoltaic Structure
3 Mass Timber CLT: Roof
4 Mass Timber CLT: Floor Deck/ Shafts
Glulam: Columns/ Beams
5 Electrochromic Glazing
6 Reusing Existing Foundations
7 Collecting Grey water

Sustainable features

Erection crews framing in the thrid floor CLT deck.



Scan with your smartphone camera to see more information on the San Jacinto College - Central Campus Classroom Building

For more information, contact

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