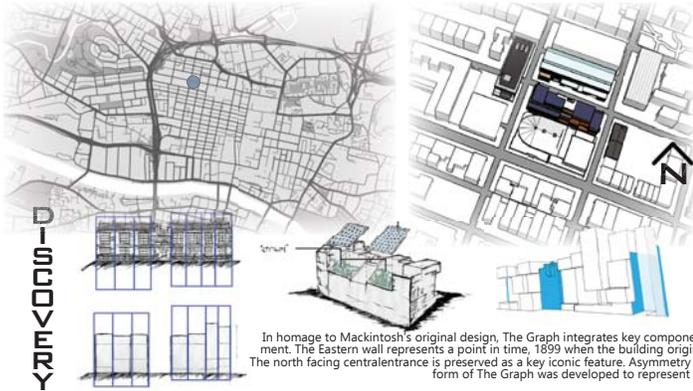




For over 100 years the Mackintosh building on the Glasgow school of art campus stood as an icon for Glasgow architecture. Tragically, the building was labeled a complete loss in 2018 following a tragic fire. A marriage of art and art school, The Graph is a response to the question of how to replace the Mackintosh building with a sympathetic, carbon appropriate twenty-first century building. The Graph is a timeline, originally opened in 1899 the Mackintosh building was a silent observer to the biggest threat to life as we know it "Anthropogenic Climate Change." Integral to the façade is a stark reminder of just how much the climate has already changed. The color-coded graph spans the life of the original Mackintosh building 1899-2018.

# GLASGOW SCHOOL OF ART: SCOTLAND

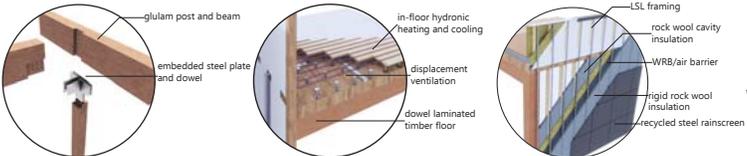


Walkscore **98**
  
 3 MIN
   
 8 MIN

Glasgow is excellent to get around on foot. The city hosts hundreds of streetside rental bikes, with the nearest location being a three minute walk from campus. A main public transportation hub is a short eight minute walk to the southwest of the site.

In homage to Mackintosh's original design, The Graph integrates key components of the original façade into the modern replacement. The Eastern wall represents a point in time, 1899 when the building originally opened, and our measurement of time begins. The north facing central entrance is preserved as a key iconic feature. Asymmetry was critical to the original Mackintosh design and the form of The Graph was developed to represent this original pattern.

## MATERIALS AND STRUCTURE



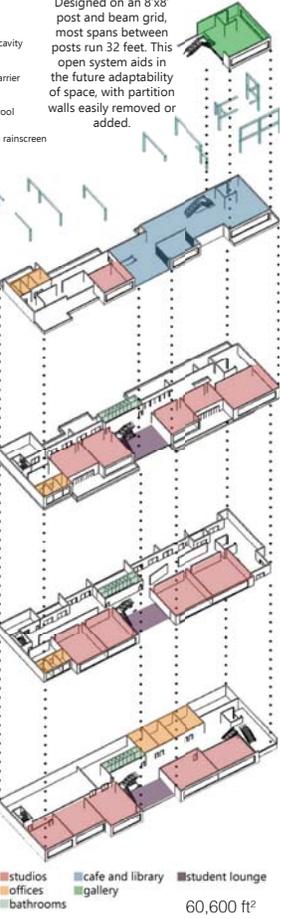
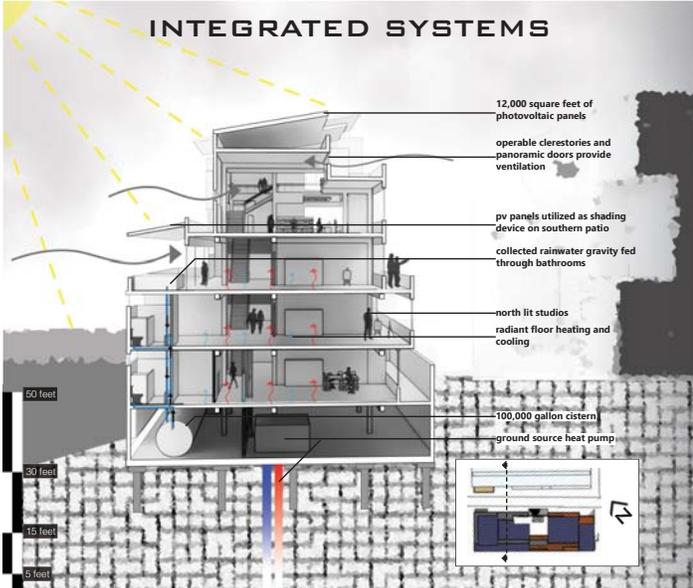
Designed on an 8'x8' post and beam grid, most spans between posts run 32 feet. This open system aids in the future adaptability of space, with partition walls easily removed or added.

The main goal behind the structure was to use mass timber, with dowel laminated timber being the main spanning element. This helps to drastically reduce the amount of glue in the overall structure. Cross laminated timber is used sparingly and intentionally, and the post and beams are made of glue laminated timber.



While keeping the original east facade, main entrance stair and facade, we intend on reusing the remaining stone as much as possible.

## INTEGRATED SYSTEMS

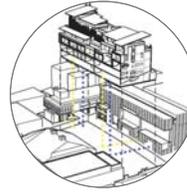
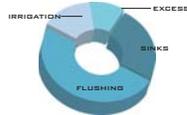


# INTEGRATION AND WELLNESS



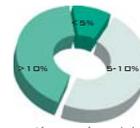
400 feet from southwest corner, Pitt Street

470,000 GAL  
COLLECTED ANNUALLY



The Graph aims to be not simply carbon neutral, but carbon negative. Solar PV provides energy well in excess of site use. This combined with sequestered carbon in the mass timber structure the project shows the potential for designing buildings that help solve the problem of climate change, and not just reduce the contribution to it. 35,000 gallons of excess water and 30,000 kWh of excess electricity will be shared among the other buildings of the campus through existing infrastructure.

270,000 KWH  
GENERATED ANNUALLY



net free area of occupied spaces



public southern patio



cafe



southwest corner



view of reid building from gallery



northeast corner



student lounge



library and gallery