



engineering center
rochester, michigan

john conley | lighting + electrical

general building statistics |

occupant | Oakland University, School of Engineering and Computer Science

occupancy or function types | 2 Buildings separated by firewall; Building A is MBC TYPE IIB, NFPA TYPE II(000) and Building B is MBC TYPE IB, NFPA TYPE II(222)

size | 136,653 GSF

levels | 5 all above grade

dates of construction | January 2013 – September 2014

estimated cost | \$57 Million Construction Cost

project delivery method | Design-bid-build

architects + engineers | SmithGroupJJR

construction manager | Walbridge Aldinger Company

architecture |

The new Engineering Center is a state-of-the-art facility for research and education within the School of Engineering and Computer Science and consolidates four departments under one roof. This building is designed to foster curiosity, research enthusiasm and student collaboration.

lighting + electrical |

The lighting and electrical systems consist of:

- Low voltage LED and FL fixtures with clean aesthetic
- Primary service 13.2KV down to 480/277V 3PH, 4W from a substation transformer.
- Step-down transformers per floor 480Y/277V down to 208Y/120V 3PH, 4W
- Rooftop natural gas generator which provides 480V power to the emergency panels

mechanical |

The main mechanical systems are located on the penthouse level and include two centrifugal chillers both with a nominal capacity of 290 tons, two turbogenerators, and the main air handling unit supplying 5200 CFM to the building.

structural |

The structural system of the building consists of:

- Concrete footings and slabs
- Steel decking
- A framework of steel beams and columns
- Reinforced CMUs on the lower level perimeter



Figure 1 South Lobby perspective | SmithGroupJJR

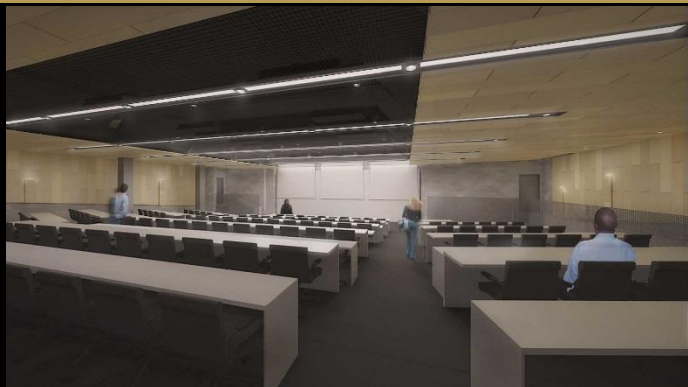


Figure 2 Lecture Hall perspective | SmithGroupJJR