

One of BIM's strong points is the ability for the construction team to coordinate all of the buildings' system and trades.



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BIMiit @ ILLINOIS INSTITUTE OF TECHNOLOGY
MEMBERS OF NECA



"Building digitally first"



THE BIM USER GUIDE

With the purpose of the IPRO, IPRO 338 has produced a booklet. The booklet would act as a practical guide for Building Information Modeling and for the electrical contractor. The IPRO BIMiit team was split into three sub teams: content, benefits, and implementation. The research conducted by teams are recorded in the BIM user guide and will be presented as a solution to the Electrical Contractors Association.

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IPRO338

IMPROVING ELECTRICAL EFFICIENCY WITH
BIM: BUILDING INFORMATION MODELING

BUILDING INFORMATION MODELING

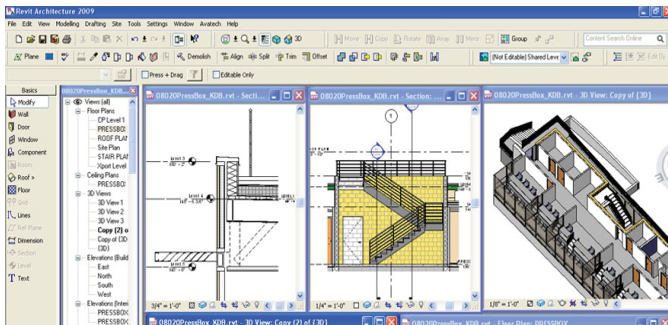
INCREASING ELECTRICAL EFFICIENCY

"The process of modeling and communication the structure of a building in detail to benefit the entire building lifecycle. BIM facilitates the exchange and use of building information in digital format."

-Tekla

WHAT IS BIM?

BIM IS NOT A SOFTWARE.
BIM IS AN IDEOLOGY; SOFTWARE CREATES BIM.



BUILDING INFORMATION MODELING, BIM, IS A BUILDING DESIGN METHODOLOGY CHARACTERIZED BY THE CREATION AND USE OF COORDINATED, INTERNALLY CONSISTENT COMPUTABLE INFORMATION ABOUT A BUILDING PROJECT DESIGN AND CONSTRUCTION FIELDS.

BACKGROUND



IPO338 **BIMiit** TEAM IS SPONSORED BY THE ECA: ELECTRICAL CONTRACTORS ASSOCIATION. MEMBERS OF THE ECA ARE EXPERIENCED CONTRACTORS IN THE ELECTRICAL CONSTRUCTION INDUSTRY THROUGHOUT CHICAGO, WHO OFFER AND PROVIDE QUALITY AND COST EFFECTIVE SERVICES. IPO338 **BIMiit**'S PURPOSE IS TO IDENTIFY STRATEGIES THAT IMPROVE EFFICIENCY OF ELECTRICAL CONTRACTING PROJECTS THROUGH THE UTILIZATION OF BIM: BUILDING INFORMATION MODELING.

PROJECT OBJECTIVES

- SUMMERIZE MAIN SOURCES OF INEFFICIENCY IN THE ELECTRICAL CONTRACTING FIELD
- TO CREATE AN INFORMATIONAL GUIDE TO HELP ELECTRICAL CONTRACTORS UNDERSTAND BIM
- DEVISE AND IMPLEMENT A PLAN FOR DISTRIBUTING THE TEAM'S RECOMMENDATIONS FOR IMPROVING EFFICIENCY TO ELECTRICAL CONTRACTORS

WHY BIM?

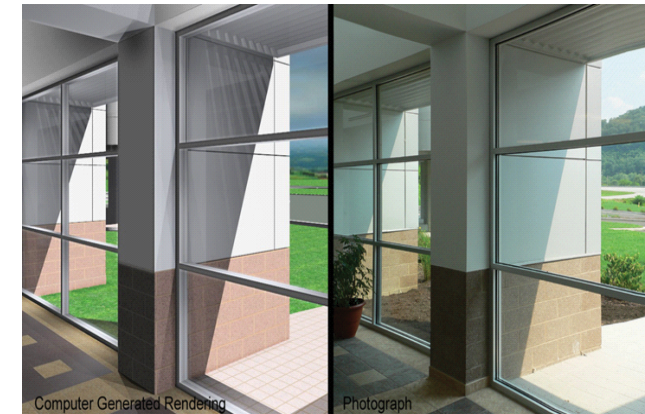
IT IS ESTIMATED BY THE NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY THAT THE CONSTRUCTION INDUSTRY LOSES ABOUT \$16 BILLION PER YEAR BECAUSE OF INTEROPERABILITY COSTS. BIM PROVIDES THE EFFICIENCY NECESSARY TO GREATLY REDUCE THESE LOSSES BY BY ACTING AS A COMMUNICATION TOOL FOR EVERYONE THAT IS INVOLVED IN THE PROJECT.

BIM ALLOWS EASY IMPLEMENTATION OF PREFABRICATED PRODUCTS, CLASH DETECTION, TOTAL STATION LAYOUT, AND SMOOTH COMMUNICATION.

REDUCES THE NUMBER OF DRAFTSMEN BY ALLOWING MULTIPLE PROJECTS AT A TIME

BIM HAS THE ABILITY TO PLACE COMPONENTS AND EDIT THEM AS THE PROJECT PROGRESSES, WHICH SAVES A LARGE AMOUNT OF TIME.

BIM INSTANT SCHEDULE SHEETS COUNT AND ACCOUNT FOR EVERY ITEM, AND ARE FORMATTED, AND READY TO BE PLACED INTO THE DRAWING SET.



Computer Generated Rendering

Photograph

SOFTWARES THAT CREATE BIM

Revit
Architecture



THE ECA: Members of ECA are experienced contractors in the electrical construction industry throughout Chicago who provide quality and cost effective services.