

# Safeway Stores Prototype

VARIOUS LOCATIONS

## Services

MEP Engineering  
Sustainable Design  
Building Technologies  
Energy Services  
Fire/Life Safety  
Commissioning  
Lighting

## FAST FACTS

### Architect

MulvannyG2 Architecture

### Completion

December 2010

### Building Size

55,000 sf

### Contact

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### LEED®

Upon completion, this  
project will apply to become  
LEED Gold certified.

In 2010, Safeway began integrating building information modeling (BIM) into their design and operations. Because of our building sciences portfolio and a fifteen year history with Safeway that includes over 300 projects, Interface Engineering was the ideal partner to create an MEP model for future stores.

Safeway's stores share similar layouts and components so they were interested in leveraging the similarities to increase their design and construction efficiencies. There was a need to identify collision detection, improve project coordination, and extract information (such as cut sheets and scheduling options) before a project was in construction.

Safeway wanted to create a repeatable model that can be analyzed as a whole to see what happens when you adjust individual elements. They desired a BIM platform where they can easily access rich data about the projects.

Interface Engineering created a prototype model that they would use to design multiple store locations. Knowledge from previous projects helped to identify the key inputs to capture and which relationships to establish to provide meaningful outcomes from the model.

A Revit MEPF project template was created to be used for all new store projects. It helped to streamline the design process, improve schedules, create reusable

models, collaborate with all team members, and identify potential problems prior to construction, ensuring that everyone was informed and working towards their agreed goal. The model also enables Safeway to inventory the parts and systems needed to develop their new stores. This prototype provided not just a one-time solution but a living document that can be used repeatedly to customize store designs and reduce and control construction costs.

## Achieved Efficiencies

Benefits from creating a centralized model and inventories include:

- » Standardized store models and customized families provide streamlined processes, inputs, and efficiencies which improve scheduling, data entry, and forecasting.
- » Improved clash detection and reduced change orders due to better coordination and early integrated design.
- » Automatically adjusted schedules when inputs change because the model's information is all linked together, saving time and improving accuracy.
- » Reduced impact of costs and a shortening of construction time by transferring design and material decisions to the beginning of the project.
- » The BIM model enables Safeway to accurately inventory parts and component systems needed to develop new stores.



(Above) A data-rich BIM model, that can be plugged into other MEP projects, provides comparative information about cost, scheduling, and equipment options. Any change to the model ripples through and updates the outcomes, reducing data entry errors and document coordination mistakes. (Below) One of Safeway's first locations, in Medford, Oregon, developed using a BIM model. (Right) The Longview, Washington store was also designed according to the BIM prototype.

Photography: Mulvanny Gz Architecture

