

Beverly Cinema

Champaign, Illinois

Architect: Gaylord Swisher, Savoy, IL
Client/Contractor: O'Harrow Construction Company, Jackson, MI



Range of Services

- ▶ Structural design of lateral load resistance system with light-gage metals and tie-downs into the foundation
- ▶ Design of steel entry area

Project Overview

This 12 theater complex has a structural steel framework for gravity loads, made up of open-web steel joists, hot-rolled beams and girders, joist-girders and wide flange columns. The lateral load resistance system utilizes the exterior walls composed of light-gage metal studs that are metal diagonal strapped to create "x" bracing to transfer roof diaphragm shears down to the foundation. See image 1. Overturning forces are transferred into the foundation by means of steel tie-downs. Image 2 illustrates a diagonal strap connection to the foundation where the concrete foundation wall does not extend to the end of the superstructure wall. Image 3 illustrates the tie-down connection at that location, which required pouring extra concrete to correct that condition.



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