



Electronic Architecture—Concert Halls

Midland Center for the Performing Arts

Midland, Michigan

The 1500-seat multi-use auditorium has a single level rake and continental seating with a sound transparent ceiling and walls. The acoustic problems associated with the space included a lack of intimacy, reverberation and warmth. The Electronic Reflected Energy System (ERES) solution was ideal for the venue as it could be installed without visual intrusion due to the open ceiling and side wall areas. The result was an increase in reverberation time from 1.4 to 2.3 seconds which added early reflections to increase intimacy and low frequency energy to increase the sense of warmth in the room.



Uihlein Hall, Marcus Center for the Performing Arts

Milwaukee, Wisconsin

Uihlein Hall, originally built in 1969, serves as the home of the Milwaukee Symphony, the Milwaukee Ballet, the Florentine Opera as well as touring Broadway productions and a variety of contemporary music entertainers. In 1995 when the hall was about to undergo a renovation, the main goal was to preserve the acoustics that the Florentine Opera loved while helping the Symphony obtain the presence, envelopment and liveness that the hall lacked for their orchestral concerts. The only solution was to utilize an Electronic Reflected Energy System (ERES). The result was a beautiful sounding room for both opera productions and symphonic music.



Bloomington Center for the Performing Arts

Bloomington, Illinois

This 80 year old former Masonic Temple is the home of various civic organizations including "The Passion" which has over 100 roll drops for an elaborate Easter production. The acoustics of the room, however, were not conducive to quality orchestral events as the volume and reverberation are too low. Jaffe Holden designed an electronic architecture solution. This, combined with added absorption to calm the room for amplified shows, has resulted in a room with a reverberation time of 1.8 seconds. Jaffe Holden also designed a new orchestra shell and consulted on the entire new mechanical system.



Hall A – Tokyo International Forum

Tokyo, Japan

Hall A, with 5000 seats, is the largest of the four performance venues in the Tokyo International Forum. This room incorporates a sophisticated electronic architecture system that combines the JaffeHolden Electronic Reflected Energy System (ERES) with the Yamaha Corporation's Active Field Control (AFC) System. The result is a beautiful sounding concert hall in a room that is 120 feet wide and 150 feet long from the stage edge. Speakers are located above the sound transparent ceiling, in the side glass walls, above the proscenium and in the under balcony ceiling. Hall A is a true multi-use room. The electronic architecture system allows the reverberation time of the room to range from

