



Opera Houses

Wortham Theater Center

Houston, Texas

Acoustical design of the Wortham Theater Center's two performance spaces—the 2,200 seat Brown Theater and the 1,100-seat Cullen Theater—was specifically tailored to the requirements of the renowned Houston Opera and Houston Ballet. Innovative features of the Brown include a box tier level that floats over the orchestra level to enhance sound in that area, walls and ceilings shaped to optimally blend voice and pit orchestra, and a proscenium that encloses sound technology needed for contemporary opera productions.



Harrison Opera House

Norfolk, Virginia

In renovating the Harrison Opera House—home of the Virginia Opera—JaffeHolden's designers successfully strove to maintain the auditorium's superb acoustical quality. Preserving reverberation time—which, before the hall's renovation, had been 1.2 seconds—was especially important. The task was accomplished by introducing a series of side boxes that created intimacy while enhancing sound diffusion. Performers and opera-goers alike have cheered the renovated hall's sound.



Detroit Opera House

Detroit, Michigan

Rather than building a new venue, the Michigan Opera Theatre decided to restore a 1920s-era vaudeville and movie palace, the Grand Circus Theater, to its former magnificence. JaffeHolden acousticians advised the company every step of the way—assessing whether the transformation from movie house to opera house could be successfully performed and then determining all the changes needed to meet opera's special needs. The result? An auditorium whose acoustics are "exquisite," according to the company's managing director.

