

Live Music and Room Acoustics

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Sound Physics

Frederick Loewe Performance Hall



- Rectangular, like most recital halls
- Small chamber music performs on wood stage
- Jazz bands perform on carpet
- Seats are chairs with fabric on seats and backs
- Panels on walls move depending on type of music played

Memorial Chapel

- American Baptist (Protestant) services
- Presidential Inaugurations
- Special ceremonies
- Redlands Symphony Orchestra
- Orchestra, Band, Choir concerts
- Feast of Lights
- Organ recitals
- President's Honor Recital

Memorial Chapel Interior



Walt Disney Concert Hall



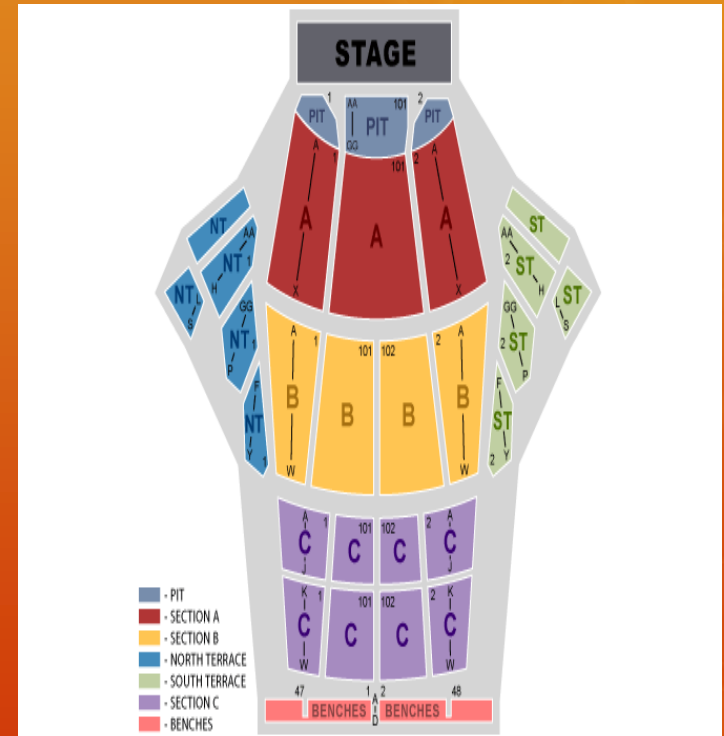
- Home of LA Philharmonic
- Modified vineyard
- About seven levels of seating around almost all sides of the stage
- Hardwood paneled

Greek Theatre (Griffith Park)

Picture of it



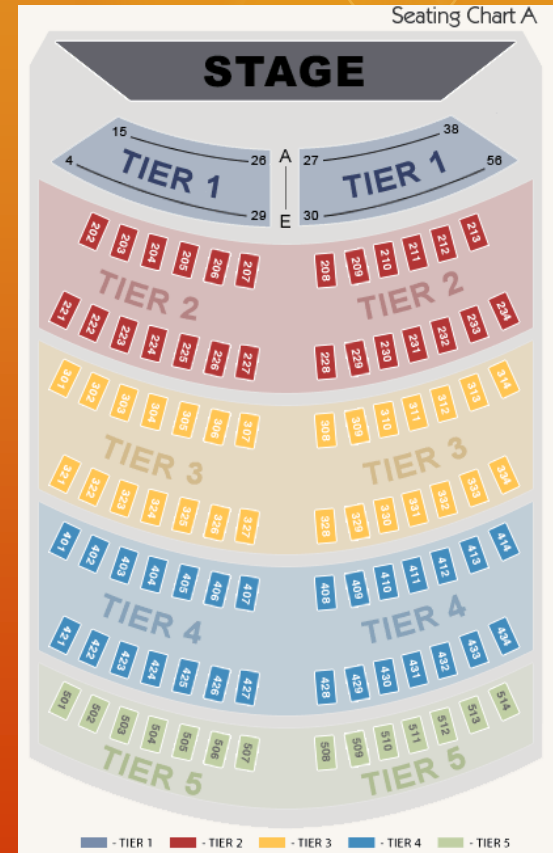
Seating plan



Music and Acoustics in the Greek

- In Griffith Park, away from traffic and noise
- Outdoors with straight wall behind performers to reflect sound to the audience
- Trees and a hill behind seats
- Sound waves diminish with distance, so seats farther away are raised higher
- Seats are covered with a rather hard red material to make up for not having indoor walls
- Capacity: 5,900
- This place is mostly for popular and rock music

City National Grove of Anaheim



Music and Acoustics in the Grove

- Originally an awards-show themed restaurant
- Tables are set up for meetings and parties
- Concerts are standing room only
- Floor rises on regular “stairs” separated by short walls
- This place is mostly used for pop/rock, mainstream rock, hard rock and metal
- Angels Stadium is just a short walk away

Cerritos Center: Arena

Photo



Description

- Capacity 1716
- Largest configuration
- For most popular contemporary music

Cerritos Center: Concert

Photo



Description

- Capacity 1491
- For large symphony orchestras
- Modeled after concert halls in Europe
- Shoebox format

Cerritos Center: Lyric

Photo



Description

- Capacity 1415
- Used most often
- For less-popular contemporary music, musicals, opera, dance
- Proscenium arch

Cerritos Center: Recital

Photo



Description

- Capacity 1331
- Smallest configuration
- Stage is moved forward, closer to the audience
- For single classical performers and chamber music

Cerritos: A Multiform Venue

- Can be reconfigured into five different arrangements (one of which I omitted), depending on acoustics needed and degree of intimacy
- Seats move on casters
- Opera boxes allow more people to get closer to stage

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