## Longman Lindsey



## 37 Warren Street – New York

Architect: Handel Architects Client: Fisher Brothers Completion: 2014

A fitness center was installed on the ground floor of 37 Warren Street, a historic Tribeca loft building. Because the fitness center has residential units directly above it, the expertise of our office was requested to identify appropriate isolation measures.

We performed a standard airborne noise transmission test to quantify the level of airborne attenuation provided by the base building structure between the proposed fitness center and the residences above. We also performed a subjective weight drop test to measure the impact of structure-borne transmission in the residences due to heavy weight drops, footfall, etc. We paid special attention to floor and ceiling construction as well as pipe penetrations through the slab between the fitness center and residences.

Our acoustical recommendations included fully containing the activity and noise within the fitness center with a 'room within a room' construction, including a secondary slab supported on vibration isolators, isolated walls, and a sound rated door between fitness center and retail lobby.