

PROJECT PROFILE

American Dream

Special Inspection Services for Smoke Control System | East Rutherford, NJ



CLIENT

American Dream

BACKGROUND

The American Dream is a three million-square-foot retail and entertainment complex that will be the third largest in North America when it opens in the spring of 2019. The facility includes more than 450 stores and restaurants, a theme park, indoor ski slope, water park, ice rink, performance theater, aquarium, movie theater, and miniature golf course.

Nine smoke control zones serve the large, interconnected atrium-type spaces. Individual smoke control zone exhaust volumes range from 50,000 to 230,000 cfm. Make-up air is provided from adjacent smoke zones.



ENGINEERS Architects Materials scientists The size and nature of the American Dream entertainment complex posed unique scheduling and testing challenges to meet the client's planned opening date. Testing coordination involved multiple parties over a period of months to ensure that all of the smoke control equipment was installed correctly, functioned property, and was compliant with applicable codes and standards.





SOLUTION

WJE provided third-party special inspection services for the smoke control system at the American Dream project. In this role, WJE attended construction meetings and conference calls in order to maintain regular and clear communication among the owner, design team, contractors, and authority having jurisdiction. WJE performed construction site inspections for twenty-four smoke exhaust fans, six stairway pressurization fans, twenty rooftop units, two air handling units, thirty exhaust fans, and two make-up air units along with the associated air inlets and outlets, ducts and dampers, and firefighter smoke control panel. WJE also observed the automatic and manual operation of the smoke control equipment on both normal and standby power.

Coordination with all of the project stakeholders was a key factor in the success of the American Dream project. WJE met with authorities and the design team to discuss and confirm the system acceptance test criteria at the outset of the project. In addition, WJE met with the contractors and subcontractors to review test preparations and site conditions. These early preparation activities allowed WJE to develop and implement an appropriate and efficient test plan that made it possible for the client to occupy the building on schedule.