

CASE STUDY NO. 3

S-2100 & S-3000 WALL PANELS



New York State Police Academy | Albany, New York

OVERVIEW

The New York State Police Academy was originally constructed in 1967 with minimal concern around acoustic performance. The primary goal of this renovation was to use the full knowledge of acoustical design, materials and technology to create a space that users could enjoy for many years into the future.

The project combined WoodTrends Topline planks and WoodTrends Standard panels in addition to Sound Quality fabric wrapped acoustical wall panels for a combined total of 5,696 square feet of product. The renovation project was designed to create aesthetically pleasing finishes along with exceptional acoustic performance.

PRODUCT

The wall and ceiling materials included reflective and absorptive types of WoodTrends wood veneer planks and Sound Quality fabric wrapped panels. The thickness of the elements varied from 3/4" to 4" however, the vertical plane on the face of the walls remain unchanged due to the concealed blocking being varied in depth. Sound Quality S-2100 High Impact Fabric wrapped fiberglass insulation boards were used to be absorbent where necessary but also S-3000 Reflective Fabric wrapped sheets of solid Medium Density Fiberboard (MDF) were used to act as a reflective surface, allowing a seamless transition between the two variations on the same surface.



Both Topline planks and Standard panels were used having a cherry wood veneer in addition to using solid cherry millwork trims throughout the project to create a timeless look. The absorptive Topline planks have a perforation spacing of 14/2 (14mm wood and 2mm groove space) with 2" of fiberglass insulation mounted behind, thus achieving an NRC rating of .75. The design pattern of a 3/4" black reveal between the wood veneer panels required the panels to be fabricated with a variety of recessed edge profiles to meet several types of wall conditions.

Four extraordinarily large and reflective wood veneer ceiling clouds were designed to hang above the center stage. These clouds were constructed at 8' wide by 16' long. With the clouds having both convex and concave curves, it required complex and custom fabrication.

INSTALLATION

The early stages of the project required the space to be "gutted" which revealed that the 22 foot high masonry block sidewalls were not adequately braced to meet current code requirements. The design team was able to incorporate steel columns for the wall bracing to be hidden inside the new wood veneer pilasters on the two sidewalls.

The four large wood veneer ceiling clouds had to be made and delivered in four individual sections versus pre-assembly off site. This was necessary to access the inside of the building for final assembly.

