

CASE STUDY

Material Testing Lab

Chicago is home to an internationally recognized consultant in structural systems and their component materials. Engaged in developing, testing, and designing structural systems for construction, this company provides field and laboratory analysis for major projects throughout the world.

Testing procedures require accurate control and monitoring of unique environmental chambers, including high-temperature steam chests, Logan freeze-thaw boxes, steam-laden curing rooms, and other test conditions emulating the harsh environments in which their projects exist. Over the past several years company engineers have called on ECC Controls to replace a variety of out-moded individual control mechanisms, and to integrate the new test controls into a network of distributed, direct-digital controllers.

Ease of use, repeatability, reliability, and management reporting are the key goals set before ECC's system designers as this system is developed. The response is durable systems that satisfy these requirements.

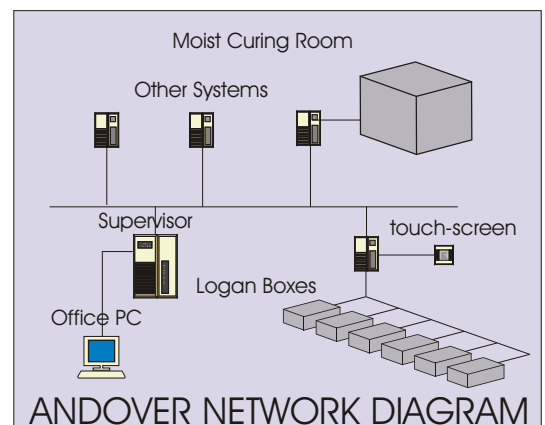


This system controls these Logan boxes through freeze-thaw cycles of various frequencies and durations, with remote monitoring and graphical reports.

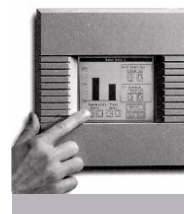
The networked Andover Controls system at this site extends to include control of major mechanical and HVAC equipment for their 60,000sf Laboratory and Office Complex. The process engineers continue to envision new ways to gain control over their world, and ECC Controls designs the solutions, expanding the system first installed in 1984.



This northern Illinois company performs specialized structural tests on a wide variety of construction materials.



Freeze-thaw cycle profile can be customized to meet specific test parameters, as shown above.



LCD operator consoles provide a menu-driven graphical interface, using touch-screen technology to take commands and display status.