AFC FIELD REPORT:
Red Fire Alarm/Control Cable™

RED FIRE ALARM/CONTROL CABLE ENHANCES SAFETY AT REFURBISHED, HISTORIC HIGH SCHOOL

The safety of 500 students, the preservation of the historic Fairhaven, Massachusetts High School, built in 1906, and the need to install mechanically protected cable above plaster ceilings and through enclosed walls, led an electrical contractor to select 30,000 feet of Red Fire Alarm/Control Cable™ (FACC) from AFC Cable Systems.

Dykeman Electric Company, Inc., East Providence, R.I., won the electrical contract for a $19.4 million, three-phase renovation and addition to Fairhaven High School, and began work in January 1997. The project is funded by a $2.5 million municipal bond, property-tax revenue, and a 78-percent reimbursement of total project costs from the Massachusetts School Buildings Assistance Bureau.

"...you just pull it through, make the connection, and you're done," Story said.

Phase one, addition of 95,000 square feet, was completed by early 1998. This comprised 21 classrooms, 20 administrative offices, a gymnasium, associated athletic and locker rooms, and other public areas.

Phase two encompasses renovation of the 78,000 square foot, four-story main building, erected 92 years ago. Phase three calls for the demolition of the existing annex building and the construction of the 12,500 square foot auditorium and band room. The projected completion date is February 1999.

The project will "dramatically upgrade educational offerings through increased technology and more writing, science and language labs," according to town officials quoted in the local newspaper, the NEW

BEDFORD STANDARD-TIMES. The school is spending $400,000 on computer technology, $60,000 on new library books and $12,000 on greenhouse windows for science labs.

The newspaper also quotes officials as saying the rehabilitation will preserve the "19th century architectural dignity" of the building, given to the town by railroad magnate Henry Huttleston Rogers nearly one century ago. The project enjoys strong community support, including that of the High School Alumni Association and local Historical Commission, which do not want the historic building to be overshadowed by the addition.

"This is one of the finest historical buildings and one of the oldest buildings we have worked on," said Ramesh Motwani, president, Eastern Contractors, Framingham, MA, general contractors for the project.

From an electrical standpoint, Roger Story of I.B.E.W. Local 223, Dykeman Electric's foreman, calls it a medium-sized job, but said, "It was more than medium-sized difficulty, however, because of the need to work with and preserve a nearly century-old structure. We selected flexible, armored cable for all the interior wiring because we had to fish it above plaster ceilings and down solid plaster walls. This type of renovation is faster and easier with armored cable because you just pull it through, make the connection, and you're done," Story said. "You're pulling the protective cladding through with the cable, rather than having to install it first, then pull conductors through."

Fully plenum rated, FACC was fished above plaster ceilings at the Fairhaven High School in Massachusetts.

"The red stripe makes this cable easy to spot on the job," said Kratschman.

Barry Kratschman, Dykeman Electric's project manager, said they selected AFC's FACC for fire alarm circuits for its ease of installation and that it is the only armored cable UL approved as fire alarm cable with a red stripe. FACC is a fully plenum rated Type MC (metal-clad) cable, ideal for applications such as this, where cable must be fished into existing walls and mechanical protection is required for safety. The cable's red stripe allows for easy identification, thereby eliminating costly errors in the warehouse and the field.

Approved for places of assembly (Article 518 of the NEC), FACC complies with NEC Articles 334, 725, and 760, and is one, two and three hour through-penetration, fire wall rated by UL.

The cable serves pull stations, smoke detectors, and the central alarm at Fairhaven High School. Dykeman Electric specified 14 AWG and 16 AWG FACC cable with twisted shielded pairs and 14-gauge cable with standard conductors.

"The red stripe makes this cable easy to spot on the job," Kratschman said, "and its performance enables us to take advantage of its ease of installation."

AFC Cable Systems acknowledges New Bedford, MA, STANDARD–TIMES reporting for much of the information on the architectural and design details and the financing of this project. Newspaper articles referenced in this piece are available on its Internet site at www.s–t.com

AFC
CABLE SYSTEMS

272 Duchaine Blvd. • New Bedford, MA 02745 • www.afcweb.com • 800-757-6996 • Fax: 508-998-1447