## **INSIDE WIRING**

On January 10, 2000, the Federal Communications Commission (FCC) released a Third Report and Order establishing minimum telephone inside wiring quality standards to promote consumer access to existing and advanced telecommunications services. (Docket No. 88-57, RM-5643, FCC 99-405)

The Commission's new rules require that copper inside wiring be at a minimum, solid, 24 gauge or thicker, twisted pairs, marked to indicate compliance with the electrical specifications for Category 3, as defined in the ANSI/EIA/TIA Building Wiring Standards.

Telephone inside wiring refers to the wiring located on the customer premises side of the telephone network. With the rapid increase in the installation of additional phone lines to accommodate Internet, fax and voice traffic, the FCC has recognized the need to establish minimum quality standards for telephone inside wiring to ensure consumer access to advanced broadband services. The FCC anticipates that the standard will be adopted by building-industry organizations and reflected in local building codes. The rule, which applies to new and retrofit telephone-wire installations made after July 8, 2000, is aimed at assuring that all inside wiring can meet the demands of voice, video and data transmissions now and for the foreseeable future.

It is hoped that these new rules will reduce instances of communication problems, such as static, signal degradation, and cross-talk between separate lines. With an increasing amount of customers complaining about unsatisfactory Internet connection speeds, failures to connect, and unwanted disconnects, some experts contend that over 90 percent of connectivity problems experienced by subscribers are due to conditions along the path of the "last mile" to and in the customers home. (See http:// www.millkern.com/billboard/bbl120.html.) The maintenance of building or home inside wiring is, in most jurisdictions, entirely the responsibility of the tenant or homeowner. The local telephone company will not, without charge, diagnose and repair problems with inside wiring. While simple voice communication may be acceptable on inferior wire, problems such as low connection speeds, poor throughput, and frequent dropped calls can result from using material that doesn't meet the new standard set by the FCC.

Following the receipt of numerous consumer complaints about inferior phone wiring, Building Industry Consulting Services International (BICSI) petitioned the FCC in 1995 for new standards for inside wiring. Anecdotally, it was reported that lamp cord and bell wire were being used for home telephone hookups. By working together, it is the hope of the Florida Public Service Commission and the Department of Community Affairs that dissemination of information about the new FCC standard on inside wiring can lead to less complaints by consumers, fewer lawsuits by disgruntled home owners, and most importantly, that all Floridians can enjoy quality telecommunication. It is our intent that by promoting this new standard, building code inspectors and installers will be made aware of the importance of following the FCC guidelines for inside wiring. Since all wiring, jacks and other attachments beyond the network interface device (NID) are considered "customer premise equipment" and are the responsibility of the customer, we hope the FCC guidelines (see the text box) will help to avoid future telecommunication problems.

Telecommunications is an important part of the Florida economy, both as a jobsproducing industry and as a developer of economic infrastructure. We can not afford to use substandard material in the construction of this infrastructure - the information superhighway.



Why should we worry about inside wiring for telecommunications? It's not a health and safety issue. Or is it? For an ever increasing number of Floridians that telecommute, use tele-education, or rely on telemedicine services, telecommunications has quickly become a health and safety issue. To ensure quality communications, it is critically important that the proper inside wiring be used in both residential and commercial construction.

he Florida Public Service Commission and the Department of Community Affairs applaud the FCC's effort to encourage builders to install higher quality wiring. This will help to ensure that consumers have access to the ever-increasing number of communications services. With your help, we intend to inform installers, builders, remodelers and consumers of the new requirement.

The Florida Public Service Commission and the Department of Community Affairs are conducting a campaign to inform building code inspectors about the new standard.



## INSIDE WIRING

## Did you know?

The Federal Communications Commission has established a new minimum standard for inside telephone wire.