

Branch Circuit Assemblies

ATLANTA HIGH-RISE APARTMENTS POWERED BY
AFC/UNI-FAB BRANCH CIRCUIT ASSEMBLIES

Phase II of Park Towers, in Sandy Spring, Georgia, was the ideal project for pre-fabricated branch circuit assemblies, says Richard Phillips, project manager for Atlanta electrical contractor, Inglett and Stubbs.

Phillips used more than 9,600 AFC/Uni-Fab pre-fabricated 15 and 20-amp branch circuit rough-in assemblies from AFC Cable Systems' Uni-Fab Division to wire the 300 apartments in Park Towers. The assemblies included over 100,000 feet of metal-clad electrical cable.

The 34-story Park Towers apartment community is located in a choice spot just off Atlanta's Interstate 285 beltway. The \$37 million development project is situated next to Phase I of Park Towers, which was completed in 1991. Phase II

began in the spring of 1997 and is scheduled to be completed in March 1999.

Ideal Solution

"When it comes to apartment complexes, this was one of the largest we've ever worked on," Phillips stresses. "Projects where you have a great deal of repetition are ideal for pre-fabricated wiring solutions like AFC's Uni-Fab. These factory-built circuit assemblies probably saved us about 15 to 25 percent on labor and installation time."

The pre-fabricated AFC/Uni-Fab branch circuit assemblies were used by Inglett and Stubbs to power wall outlets, light switches, overhead lighting fixtures, ovens, washers, and dryers. Each assembly included everything necessary for instal-

lation, including an assembly box, plaster ring, bracket, flexible metal-clad power cable, and snap-together connectors - an average of 15 parts. Contractors have the option of ordering the outlets and switches as pre-installed or ready-to-install, depending on their needs. Because there was a possibility that the drywall process used in Park Towers could damage pre-installed outlets and switches, Inglett and Stubbs ordered their branch circuits as ready-to-install devices.

Eliminates Guesswork

Each branch circuit assembly was manufactured in a controlled environment to precise specifications developed by AFC/Uni-Fab's design department, based on architectural plans provided by Inglett

and Stubbs. "We try to design our systems to eliminate any guesswork on the part of the contractor," explains Mark Richmond, head of AFC/Uni-Fab's engineering group. "Ideally, the contractor shouldn't have to go into our assembly box."

"It would have taken us about six weeks to develop the circuit design for a project this size," Phillips explains. "While many of the apartments are similar, they are not all identical. With Uni-Fab, the price of the system includes circuit design. We provided Uni-Fab with our floor plans and they created the circuit design for us. Some design changes had to be made on the first few floors. Uni-Fab's engineering group made the changes and reworked some assemblies. Everything went very smoothly after that."

According to field superintendent Jimmy Harper, the AFC/Uni-Fab pre-manufactured assemblies enabled his crew to concentrate on the installation and electrical connections rather than on building the assemblies in the field. "We saved a lot of time at every step of the project," Harper says. "If we hadn't used a modular system like this, we would have had to build everything on site. You also eliminate a lot of wasted material with a modular system because everything is pre-measured and pre-cut."

Harper also noted that AFC/Uni-Fab provided the circuit design for the 450,000 sq. ft. building, another big time savings. "It's not only faster to install, but we didn't have to take the time to design the electrical circuits—AFC/Uni-Fab did it for us," Harper explains. "The building itself is concrete construction with metal stud walls



Uni-Fab pre-fabricated branch circuit assemblies save on labor and installation time.

and drywall finish. Each circuit assembly comes in a box with a tag that corresponds to the circuit plan created by AFC/Uni-Fab. We simply unpack the assembly, match the tag to the plan, attach the junction box and run the flexible cable back to the power panel. The metal-clad cable also eliminates the need for plastic protectors in each metal stud knockout."

The Park Towers apartment project features 83 one-bedroom, 181 two-bedroom, and 36 three-bedroom apartments, priced to appeal to middle-income residents. The building features private balconies, air conditioning, appliances, a swimming pool, fitness center, covered parking, and access to public transportation. The community of Sandy Springs, population 80,000, is a growing residential area just north of Atlanta along Highway 400.

Inglett and Stubbs is a well-known Atlanta electrical contractor whose high-profile projects include the Atlanta Olympic Stadium (now Turner Field), the Georgia Dome, and the new Atlanta Arena, now under construction. The Atlanta Arena will replace the former Omni Arena, and will

serve as home to the Atlanta Hawks pro basketball team and the Atlanta Thrashers pro hockey team.

Circuit Details Handled At Factory

Each Park Towers apartment is equipped with its own power panel. Each apartment room uses several AFC/Uni-Fab branch circuit assemblies connected in series. "We use an open/closed box design where every other assembly box is shipped with a loosened, but attached plaster ring," Richmond

explains. "The contractor threads the cable from the pre-fabricated 'closed' box through the wall studs and connects it to the 'open' box. We split the circuitry at the factory so the contractor doesn't have to worry about that. Where a circuit splits, we use a larger assembly box to accommodate the split."

AFC/Uni-Fab pre-fabricated enclosures and wiring assemblies are becoming increasingly popular, especially in light of widespread shortages of skilled labor and tighter construction schedules. According to Richmond, the national average to install one rough-in assembly in the field ranges from approximately 45 minutes to one hour. He says the average time to install a Uni-Fab pre-fabricated assembly is about six to seven minutes.

"Most projects today run on a fast-track schedule," Phillips stresses. "Anything that can save time, saves money, too. Not only is it faster to install pre-fabricated circuits, but it takes less manpower. I can put one or two guys in an apartment and know they can get the job done faster than a larger crew building circuits from scratch in the field."