KHS&S’ Web site rightfully boasts the technical challenges it overcame in constructing compound radius vaulted ceilings using laser technology and flexible track high above the floor of one of Florida’s busiest shopping malls.

But what challenges did KHS&S, and other contractors who have completed mall projects, deal with behind the scenes? What challenges are peculiar to malls? The KHS&S Web site hints at one key issue with renovations of existing malls: “To allow the mall to remain open dur-
ing renovation, all construction began at 10 p.m. and was cleared and stored before 8:30 a.m. daily.”

**What Are You Doing Tonight?**

As Vince Kirby, project manager at KHS&S Orlando pointed out, the first hurdle to overcome was finding “people willing to work at night and clean the site every morning.”

Gary Elledge, project manager for Brady Company in Anaheim, Calif., has the same perspective: “Finding 50 guys willing to change their whole lifestyle, working at night and off-hours, is a hurdle. Fortunately, we had 30 loyal employees who were willing to make the sacrifice, and then we looked through union halls and went through quite a few guys before we achieved a stable crew. We paid them a couple of dollars an hour extra for swing shift and also paid our regular guys $20 a day for accommodations, as they were away from home.”

Dennis Mehrer, vice president of Troy Metal Concepts in Wixom, Mich., paid “$3 to $5 per hour premiums to employees,” but mentioned that the real hit “was if the employees work one afternoon or night shift, then they are not available for the opposite shift the next day. We tried to keep guys on one shift all week.”

**What’s with the Dirt and the Noise?**

“Working in any operating mall,” adds Mark Nabity, president of Grayhawk, LCC, in Lexington, Ky., “presents a challenge in dealing with dirt and debris so that it is not visible or impacting the mall operations. Every morning, we’d come off work to do a full cleanup.”

Mehrer relates, “The place had to be immaculately clean before the mall opened—no dust or debris at all. We had a crew that dusted and mopped the last couple of hours of the day, and the general contractor had a crew that went behind us to put the spit-shine on surfaces.”

Minimum impact is sometimes extended to mean being completely invisible, as in the case of the mall the Brady Company of Anaheim, Calif., worked on in Palm Desert. Project Manager
Gary Elledge states, “Containing all the dust and mess and cleaning it up every day before the mall opened was very important to the mall management, as was not making any obstacles for the buying public. We worked exclusively off scissor and boom lifts; scaffolding inside the mall was out of the question because it would deter shoppers from coming in. It is pretty tough working on nothing but scissor lifts and boom lifts when you are used to working on the ground or with scaffolding. It slowed down production, but we predicted that during the estimating phase.

“We had to protect storefronts from dust and debris as we hung drywall, taped or demo’ed. On the first night, dust floated right into those stores that only had chains across the entrance. Several owners called the mall management complaining of their products being covered in dust. We closed that can of worms by rolling Visqueen around a 2x4 and screwing that to the wall above each storefront, so we would just roll it down every night and then back up again in the morning.”

Roy Vernor, office manager at Fireproof Coatings in Encinitas, Calif., notes night work is generally demanded at high-end malls. For those contractors allowed to work in the mall during the day, as Nabity reports, “Noise was typically taken to night-time working. Such factors need to be accounted for during the bid process, also bidding for the unexpected, because they can be costly: Tempo-
rary partitions, staggered work hours and dealing with issues of tenants who have the authority to shut down your work during the daytime if it becomes too noisy or dirty, even if it is for another tenant.”

Apart from not getting up the noses of tenants or mall management, it makes sense to work at night. Mehrer points out: ‘Anytime we work in an existing mall, it benefits us to work on off-hour shifts when the public is not wandering around and being a distraction. We had one project, Somerset South, in which they added a whole second story to an existing mall. The project ran for a long time, and we did it on off-hours so as not to disturb the mall customers and vendors.”

What Goes In Must Come Out

Mehrer does make it clear that working at night has a downside. “The primary challenge is moving your equipment and material in and out with limited access, without disturbing the customers and without damaging existing finishes. We scheduled our deliveries for before 9 a.m. or after 10 p.m., coordinating with mall security and maintenance for access. Ensure material handling costs are covered, as they will be higher than on a project with access during business hours.”

Anthony Martinelli of Toro Acoustical in Ridley Park, Pa., puts it more strongly: “The loading and unloading of equipment, tools and materials at a certain time after the mall closes and before it opens again always turns into a nightmare.” What kind of a nightmare? Elledge describes a typical night’s work: “Half the crew would spend the first hour every night moving material near the doors of the mall while the other half would bring out the scissor and man lifts. By 9:30 each night, after the retail
workers left the mall, we would then move the material and lifts into place inside the mall and by 10:30 p.m., we would start performing work that would actually make us money, as opposed to just covering our costs. We were then able to work for about six hours before we had to start moving lifts and material out of the building.”

Richard Seate, director of business development at Precision Walls in Raleigh, N.C., offers one shortcut to the nightly logistics grind: “We devised a way to store part of our materials on the scaffolding system, which itself requires more planning so it can be engineered to support crews as well as dead loads of materials stored on them.”

**Oops, Sorry About That**

Naturally, moving materials, equipment and tools in and out opens up another problem, as Elledge explains: “When we bid the job, we put in a cost for incidentals. I had looked over the mall and thought of all the possible items that could bite us in the butt. Driving a 50-foot boom from one end of the mall to the other, past all these little kiosks, tent stores, light posts and other obstacles in the way—what were the odds of doing that every night without damaging anything? As it turned out, those tents cost about $11,000, and we ran into a couple of them with boom lifts. One night we were welding above one, and the sparks went through the protective cover we had set up and burnt the tent and some merchandise. We hit a couple of lamp poles and had to buy new ones. We broke a couple of cover plates in front of the escalators. The money that we threw into the incidentals cost was right on target, as we spent almost every dime of it.”

Even more critical, of course, for those mall jobs done during the day, is safety of the “civilians.” As Bradley Baker, president of Triangle Plastering Systems in Mesquite, Texas, states: “With remodeling, you have to deal with people coming and going by blocking off and even covering areas.”

Adds Nabity: “We built temporary barricades at storefronts to enclose a work area, and used safety fencing outside as well as barricading, routing traffic with signs and even personnel directing traffic.”

Seate’s company uses “Various nettings along the sides of the scaffolding to prevent any debris or construction materials from falling into customer areas. We’ll also use different types of prod-
Instead of loose screws that can slip through netting, for instance, we’ll use ones that are pre-made into plastic strips.”

Night and Day

Some renovation situations call for day and night work. Martinelli reports: “Some mall management firms and operations managers are easier than others. They want the stores open as soon as possible, but then many of them don’t give you much help. Often you can’t work in a mall until it closes because they don’t want to hear screw guns and saws during the day. We try to work during the day whenever possible, saving the loud work, like shooting track, for night.”

Steven Regalbuto, senior project manager at Raymond Interior Systems in Orange, Calif., brings up one issue in such an arrangement: “The existing mall at Mission Viejo was kept open through construction on the expansion and renovation project. We deployed day and night crews with nights for the areas that were open to customers and days for the new construction areas being built. The challenge was getting night crews operational, as well as information sharing between day and night crews. The day crew had exposure to the GC’s management team, the architects and through daily meetings, so I would go in and get the night crew up to speed and turn around and keep the GC’s management team briefed on the night crew’s experiences so the team could resolve those issues, and I would then relay their data to the night crew.”

What Did You Want, Now?

A key element in any mall environment is tenant owners, and Kirby tells the story of KHS&S’ experience with their different needs in the Millennium Mall. “The tenant work involved very different requirements for each tenant. The Gap stores, Tiffany and Crate and Barrel generally deal with the same contractors and subs who are up to speed on their customers’ needs—they know where all the problems are buried and how to get the tough work done and still make a bit of money. Not knowing what was wanted on a day-to-day basis made it harder for us to stay competitive and be profitable.

“In the case of Crate & Barrel, wood is really important to them, so we picked up a lot of wood finishes for the flooring, wall panels and ceilings. Even though the wood looked immaculate, they picked it apart while going through the punch list, because they were looking for certain things that they had not told us about before. Having full boards everywhere, with each wall starting and stopping with full boards, not partials, was key.

“Tiffany on the other hand, was real big on the drywall finishes being as smooth and slick as could be. We thought we had a great product for them until they took out their special lighting and broadcast all the shadows. Tiffany did
not want shadows anywhere and were not happy with the usual finishing of areas that were actually lit by permanent lighting. We had to Level 5 finish, skim all the walls and ceilings."

“Fortunately, the GC knew what the Gap owner wanted, and the punch list had a few small items that we breezed through. There were the usual late changes three quarters of the way through the job—the city requires an additional access panel, so we need to change the rated walls—but these things are common on these jobs. Regardless of how much work an architect puts into a project prior to the start of work, there are always more changes on the fly with themed projects such as malls, because things don’t work out as exactly expected or the owner wants a different look. So we establish some kind of unit pricing, an hourly rate that is agreed upon with the GC and owner, prior to any extra work being done. While contracts invariably forbid any extras until a change-order is in hand, the pressure to get the item done now and ‘We’ll sign the ticket’ means the contract is rarely followed. Agreed-upon unit pricing or hourly rates therefore protects us more.”

**Keeping Things Moving**

A challenge that many contractors mentioned was the subject of schedules: “The schedules are terrible on these mall jobs, worse than any other kind of job,” complains KHS&S’s Kirby, “with everybody working on top of everybody else in the same small spaces and time frame. And sometimes the quality of subs on tenant jobs is poor: They are not there on a regular basis, not keeping up with the schedule, or messing up the work we have already done.

“Our biggest focus is to stay productive early on in the schedule for framing, hanging and finishing, because when it comes to the end of the job, the deadlines don’t slip much and we are left to pick up the slack as one of the last people to leave. Many people have to be there for these deadlines to be met, and these need to be met on a weekly basis. When one little guy holds up the job, we talk to the general and baby-sit the sub as much as we can. I don’t want to tread on any toes, but even the GCs need help on these smaller jobs—they bring one guy in from out of town who doesn’t know who to contact in the area, so we play their role quite a bit to get the job done.

“We need to hold up our end and to broadcast widely and early on if another sub is holding up the show. At the end of any job, one’s abil-
the end to say, ‘I am not done because so-and-so did not, etc.’ You don’t have leverage anymore. And if it is not in writing, whatever delay you are reporting on, it did not happen.”

Elledge was luckier with his general: “Another obstacle we had to fight, of course, was the other subs, but we had a good management team who scheduled the work.”

As Chip Anderson, executive vice president at Applied Finish Systems in Houston, Texas, points out, ultimately, “Mall projects turn fast as the retailers want to start selling, creating some time constraints.” Beth Mattson said it best in her 1998 article “On the fast track,” in Shopping Center World: “Contractors are under intense pressure to deliver retail projects in a shorter time frame, and they’re shaving weeks, even months, off traditional construction schedules. Retail has always been time sensitive, but never more so than today. The demand for malls and stores to be up and running in time for peak shopping seasons and grand opening celebrations leaves little room for delays. Moreover, retailers and developers are facing their own pressures to produce quick returns.”

Which brings us to the last peculiarity of mall work: Kirby notes, “If you have the luxury of doing both the tenant spaces and the concourse, you will have picked up the gaps between the tenant
and the owner. But when you are dealing with other contractors working for tenants, responsibility for the gaps between the owner’s demising wall and the storefront bulkheads may fall between cracks—Who is responsible for final finishing, insulation, where the drywall starts and stops, etc.? Sometimes you also run into material losses, things walking off the job site. Some small contractors may have taken a job too cheap, or they are doing anything to make a buck. You don’t meet that in the commercial market.”

For Seate, the challenge with having one contractor for the shell and numerous contractors for tenant build-outs is coordinating the schedule, staging and performing the work so the shell can be worked on without cutting across the tenant build-outs below, each of which is working on a different schedule.

Keeping projects on track is not a problem peculiar to mall work, but renovations on existing malls, working around shoppers, irritated store owners, mall management and fellow contractors crammed into small spaces are certainly hurdles to factor in when bidding and taking on such projects, especially when it means crews work at night and spend hours cleaning and moving and removing materials. But forewarned is forearmed. The rewards are obviously there, and it never hurts to have a high-profile mall in your portfolio.

About the Author
Steven Ferry is a freelance writer based in Clearwater, Fla.