Eighteen contractors around the country canvassed for the challenges they faced on drywall jobs, boiled the issues down to three basic areas:

Complexity of design with different elevations and curvature—stepped soffits, dropped ceilings, suspended walls, etc. Track benders, of course,
Some architects have made it more difficult than need be, or as a Washingtonian phrases it, he sometimes encounters “architect fascination with design that may not be quite real.”

“Every job is challenging and unique,” asserts an Illinois contractor, “each job has a different design and has to be put up differently. It’s all in the details.”

The sheer size of the job, creating an ongoing logistics and coordination effort. An English contractor, for instance, had “One hundred blokes working six days a week for five years” on a project in an office building above a railway station in London. One interesting solution for distributing drywall sheets on site was “We shrink-wrapped the plasterboard into bundles of 20, loaded them onto pallets, which we had stuck wheels onto, and pushed them around each floor. When emptied, these doubled up as cooking benches for the lads.”

Collapsed schedules, usually owner-driven, as an Iowan points out: “One out-of-town GC was on a schedule that he created, which left us trying to accommodate his needs while having to live here with the consequences of this project for years to come. We wanted to make it as professional as we could, not take the shortcuts he was forcing on us with his timesaving. For instance, the man came in during wintertime. Instead of installing heaters to heat the frozen ground, he poured the concrete on top of the frost. We had to bring in our experienced guys to put up the drywall, in an effort to compensate for the amount of upheaval we estimated would occur during freezes and thaws. We had to take many extra measures like this that we had not planned on during the bidding process. We alerted the owner and while he was understanding, he was the one in a hurry to see the building finished.”

**On a Scale of 10, It’s an 8**

One particular job that stood out for its technical challenges was the Jude Collins
Smith Museum, which according to the Alabaman who worked on it, had “multidirectional and waved ceilings on a slope (that did not touch the walls) that we had to frame—TrackBender came in real handy for that job!

“The building also had a drywall reveal for the base all the way around the building—keeping that margin all the way through was no small feat. We had a starter strip that we used, gauging blocks, and set the drywall down in it. The walls were really high, as well, with a Level 5 finish that was made more difficult by the light pouring down on them.

“On a scale of one to 10, I would say this was an eight in difficulty, and we had priced it at a six. We didn’t lose money on it on the $800,000 bid, but it was more difficult than we had envisioned.”

**The Native American Connection**

It is of interest that two contractors had met their match in terms of challenges while working on projects involving Indian reservations.

The first, a Californian, is working on a casino, hotel and parking structure requiring about 1.6 million board feet. “From the estimating standpoint, the drawings were not as complete as we are used to reviewing. They were actually conceptual drawings that were not only pretty vague, but the design has also continued to evolve. I am not sure who was in error, but they waited so long on
bidding out the project that they had to get something going and the architect was not as far along as he should have been. It puts us in the position of making assumptions and hoping more of them are right than wrong. The project has a guaranteed maximum price, so we have to document anything we feel is above and beyond the original bid. And that’s a battle. We’ve actually had to hire an architectural firm and a structural engineer to determine the cuts through the walls, structural wind loads and live and dead loads, and everything else on the exterior."

The other job, a hospital with more than a half-million square feet of drywall and 50,000 square feet of exterior sheeting, had a similar problem. As the contractor from Iowa states, “The types of products they specified were not the norm. The insulation was special; the vapor barrier that they requested was at least twice as thick as we normally use. We’ve done other hospitals and nothing has been as critical as these specifications. They were using a new architect who does all the work for the reservation. The design was overkill, really, with the architects planning with ‘It’s nice to build it this way,’ without thinking through ‘How do you build it this way?’”

As already mentioned, the Californian project is “a large and fast track job—they want it all done in eight months, and they only just brought an electrician on board—so we’ll
probably end up on shift work to meet the deadline. The time crunch demands a lot of people and coordination—it’s pretty intense, the challenge being how to produce good quality work and be safe while still meeting the schedule.”

The Iowan project is no different in this regard: “Because of the schedule, we’ve had to keep 30 men per day on it, a lot of Saturdays, too. The coordination, the design, the time frame—just about everything that could be thrown at us, has come our way on this project.”

And another of the barriers he encountered was . . .

**Bureaucracy**

“It’s a government job—tons of paperwork and red tape from the Corps of Engineers, the Bureau of Indian Affairs, the Winnebago and the Omaha Tribal Councils, not to mention the usual requirements of the architectural firm, the general contractor, OSHA, etc. It’s a wonder we got anything done at all! My advice to anyone contemplating this kind of project is to read the contract carefully—read it at least half a dozen times.

“And then there was the requirement that a certain percentage of the people we employ on the job has to come from the reservation. Some of the men are sufficiently experienced to do the job. It has been more an issue of getting them there every day for the last two years!”

“The Corps of Engineers is meant to be in charge but they don’t have any quality control supervising, so it has been virtually up to us. The inspection for performance of work has been left to the GC. We had a situation with the partition walls intersecting with the outside walls, for instance. They wanted the entire building to be a fire-rated wall system. Well, the only way you can do that is by extending the partition walls to the outside wall. Quality control rejected the idea because of the terminal transfer of temperature. They told us to stop at the intersection of those walls. The design had a 2.5-inch metal stud wall set
back an inch from the outside wall, virtually as a facing wall, which they wanted for the terminal barrier.

“We need those firewalls and you didn’t pull those firewalls all the way through!”

Payback

While these are the kind of barriers the contractors could do without, the ones they have accepted readily as challenges were the technical issues of putting into the real world the dream of the owners. As the Iowan continues, “While this project is like battling a seven-headed monster, it is at the same time a unique, entertaining and fun project with interesting elements that we have enjoyed exposing ourselves and our people to.

WHAT’S NEW IN DRYWALL?

Of the contractors surveyed, some had worked with new drywall tools or material recently. Their comments were as follows:

“We have a lot of barrel ceilings where we used the Flex Track system. Saved us about 50 percent on labor time and well worth the slightly increased cost of the materials. We are also using mud runners to apply drywall paste, which has saved us time. Most of the big projects we now use taped-on corners, which saves us 30 percent in time.” (Iowa)

“We’ve tried the new wall liner that USG has brought out for mold. We’ve not been too successful in persuading people to buy into it, to pay the extra money, but at least we are covered in having given them the option.” (California)

“We recently purchased some lasers that measure height (automatically shooting a vertical and horizontal line at the same) for varied wall heights when we’re framing up a wall.” (Arizona)

Several contractors in England and stateside beat the drum about the newer self-feeding electric screw guns. “They reduce labor time by about 70 percent,” claims a Georgian.
“As a tribal hospital, there are religious elements concerning the spirit world, for instance. We have built a spirit room—designed after the fact, predictably—with many radiuses, arches and angles, as well as unusual materials, such as a flexible, wood-slat ceiling with acoustics above it. We installed a special black insulation above the slats to create the dark effect they wanted. It’s a very interesting room.

“All the radiuses allowed us to use a lot of Flex Tracks and flexible metal stud framing systems that are out there, from quarter-inch high-flex boards to radius bendable tracks. It was neat, because we had to run square angles into the radius angles to accomplish the right look. It has been rewarding to see it all come together.

“And while we have had to draw some personnel from the reservation and that has been problematic in part, the other way of looking at it is that we have been running an apprenticeship program for the local tribes and we hope to see some new people in the trade as a result.

“Whether or not we walk away from this project with any sort of a profit remains to be seen. It’s not looking good at this time and it’s not going to resolve without fights and headaches about the changes—that’s what it will come down to.”

For the Californian project, “the coffered ceilings at different elevations and a lot of ornamental drywall with many different shapes, curves and radiuses—the many architectural features that one is used to seeing in casinos—are what this project is all about.”

Challenges come in all shapes and sizes, some desirable, some that amount to nothing more than headaches because of shortfalls by others; but in the game of building, and drywall in particular, that’s what it is all about.

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