

# Project Profile



## USG® Drywall Suspension System

**Application/Building Type:**

Corporate/Office Environments

**Project Name:**

Harris County Criminal Justice Center

**Location:**

Houston, Texas

**Architect:**

Pierce Goodwin Alexander & Linville

**General Contractor:**

Manhattan Construction Company

**Subcontractor:**

Marek Brothers

**Featured Product:**

USG® Drywall Suspension System



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### Innovative Drywall Suspension System Makes Its Case in High-Profile Houston Courthouse

“Good job, Tim and Company.” Architects usually don’t put nice things on punch lists, which is why Matatall Marek beams with excitement. Telling the tale to a writer one blistering hot day after work, he gulps his beer, drops the sweaty mug on the table and leans forward to explain what it means.

“Every superintendent gets a punch list,” he says. “But we get a plaque!”

Matatall and his crew deserve the commendation. The Marek Brothers’ team worked eight- to 10-hour days for 18 months installing 60,000 square feet of drop drywall ceiling construction and building 90,000 lineal feet of interior walls. Along with field personnel from Manhattan Construction Company, the general contractor, Matatall coordinated a peak labor pool of 122 men and escorted architects, attorneys and judges on countless walk-throughs.

And nowhere—not in 43 courtrooms and not on any of 21 total floors - have the architects to date found a flaw in the ceilings. No errors. No mistakes. Nothing but “Beautiful!” for the punch list.

Matatall gives much of the credit to the [USG drywall suspension system](#) from USG Corporation.

“Let me tell you,” Matatall says, “this new ceiling system has made my life easier.”

### Quite a Courthouse

Construction of the Harris County Criminal Justice Center, a \$70-million high-rise on the north end of downtown Houston, began in 1997. The 800,000-square-foot building is home to the Harris County District Attorney’s office, the Criminal Courts Administrator, 11 floors of courtrooms and associated judges’ chambers and support facilities.

Joseph W. Santamaria, AIA, associate principal at Houston’s Pierce Goodwin Alexander & Linville (PGAL) Architects, the designers of the building, describes the building as post-modern with classical overtones. Its exterior features buff-colored precast concrete panels with notched corners, punched windows and curtain walls. The dignified interior hallways and courtrooms feature Rojo Alicante marble wall tiling and a combination of sapele, makore, Honduran mahogany and olive ash veneer paneling.

Naturally, the ceilings needed to match the level of elegance found throughout the building. So, the architects called for curved ceilings. They span 24 feet across the 36-foot-by-48-foot courtrooms, peaking at 13 feet and centered between side soffits that house electrical conduit and HVAC ductwork. A large ceremonial courtroom on the 20th floor measures 50 by 80 feet, with radius ceilings that peak at 17 feet.

Santamaria says the original specification called for glass-fiber reinforced gypsum (GRG) ceiling panels. The drop-in panels were to be prefabricated for the job in 4- and 5-foot sections, suspended on site, and taped and floated together. However, Saied Alavi, project manager at Marek Brothers, proposed bending black iron and building drop drywall ceilings instead. The GRG ceilings, in his opinion, would end up being costly and cumbersome and wouldn’t necessarily finish uniformly.

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“We architects tend to think of them as foolproof,” Santamaria says. “But I guess sometimes those things don't fit together real well and require a lot of on-site remedial work to make their appearance acceptable.”

Marek Brothers offered a credit to the job if they could install a suspended gypsum board ceiling. PGAL Architects agreed to switch, but only on the condition that the courtroom and elevator lobbies be mocked-up first. The architects wanted to analyze the ceilings before approving them for the rest of the building. Groin vaults in the elevator lobbies were finished to perfection (pictured on front page).

### **A Better System Arrives**

About this time, the [USG drywall suspension system](#) was introduced to the market. It's a system that offers a better, faster and less expensive way to install drop drywall ceilings by dramatically reducing the time spent measuring, bending, cutting and connecting components. Curved main tees, available in both vault and valley shapes and ranging from 2 feet 6-9/16 inches to 19 feet 1-3/16 inches, snap quickly together (pictured on front page). Cross tees snap into pre-notched slots in the main tees, making much wiring tying and screw attachment virtually unnecessary.