

Harris County Sheriff's 911 Call Center

Houston, Texas

Client:
Kirksey

Project Team:
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Date:
2015

Fee:
\$32,000

The new 42,000-sf Harris County 911 Call Center is located in the Aldine area, is designed to serve the Houston area for the next 25 years. The call center is part of a larger planned development of the 90-acre East Aldine District's Town Center. The building and building systems will be designed to operate before, during, and after a hurricane with winds up to 155 mph. A 400 foot communications tower and an innovative geothermal HVAC system are also featured, along with an on-site Low Impact Development system for storm water retention. All exterior walls are to be site cast tilt up concrete, insulated and weathertight. The exterior wall insulation is to a code minimum of R-19 using 6" metal stud with Batt Insulation or enhanced level of R 7.6 ci using rigid insulation. Supporting foundation piers to be per soils report and structural engineering recommendations were also installed.

The roof assembly consisted of temporary roof membrane adhered to concrete deck and overlaid with insulation and cover board system and two ply modified bitumen membrane system. The roof deck composition that was installed included a concrete deck with a single layer of torch applied modified bit, adhered rigid insulation and two layers of torch applied modified bit. This assembly provides an enhanced protection against wind uplift during a storm event. The roof insulation was installed to meet a code minimum of R-20 ci and Enhanced level or R-25 ci. The Antenna enclosure on the roof was designed to per structural requirements to withstand an enhanced wind speed of 155 mph or less.

