



Owner

Houston Airport System

Client

Houston Airport System

Services

Buildings

Completion

2015

Continued growth of the Houston Airport System led to expansion of the organization's administrative headquarters at the International Airport Houston. DECON developed the structural component for the Project Definition Document (PDD) for the three buildings.

Building 300 – The PDD led this two-story, 30,550 SF office building to be designed with a traditional composite steel floor framing system comprised of a stay-in-place metal form deck with a concrete slab topping. A similar system was to be used on the roof deck, with 2 1/2" metal deck and rigid insulation. Gravitational loads were taken by ordinary steel frames with spans ranging from 30 FT to 47 FT. HSS-type columns and wide flange beams support steel bar joists holding the metal deck floor and roof.

Auditorium - This two-story, 10,800 SF multi-use auditorium building at the south side of Building 300 featured long-span steel joist girders. HSS steel columns framed the main span of the 80 FT joist girders. The frames have full and partial moment connection to support vertical gravitational loads as well as horizontal solicitations.

Building 400 – The PDD called for this one-story, 37,300 SF data center to have tilt up concrete walls to support the perimeter roof deck and be supported internally by conventional steel frames made of steel wide flange beams and HSS columns with spans ranging from 25 FT to 37 FT. The roof was to be designed with steel stay-in-place metal form deck with concrete slab topping.