

Emergency Training Building

WEST CAMPUS



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Emergency Training Building (Federal Emergency Management Agency Safe Shelter)

The Emergency Training Building is a multipurpose structure primarily used for classes and training for Del Mar College (DMC) students in the police, fire, emergency medical services and occupational safety training programs. The structure can also be used for community events, such as graduation ceremonies.

During declared emergencies or natural disasters, such as a tornado or hurricane, the facility becomes the City of Corpus Christi's Emergency Management Center, providing safe space for first responders.

The interior includes a 15,931 square-foot tornado/hurricane safe-room built to withstand winds up to 200 miles per hour, an emergency operations room and a training room.

The facility has an occupancy capacity of 797 people, and FEMA requires that 80 percent of the interior space accommodate sleeping cots, so the inside is open by design.

With a redundant power and heating, ventilation and air conditioning (HVAC) system, the facility is an ideal home for DMC's data center and its critical computer equipment. The data center was previously located in San Antonio.



- Campus: West
- Size: 20,000 gross sq. ft.
- Estimated cost: FEMA: \$4.3 million; DMC: \$1,197,500
- Final cost: FEMA: \$4,271,465; DMC: \$1,060,440
- Completion/occupancy date: 8/5/16
- Coordinating architect: WKMC Architects



Fun facts:

- The facility is one of three Federal Emergency Management Agency (FEMA)-approved safe shelters in the area.
- The dome-shaped roof is a signature of FEMA safe shelters.
- Constructing the roof was like building an upside-down pool, in which crews dig the pool, pour a liner, install a rebar skeleton and then use a concrete mixture known as Shotcrete to spray the walls.
 1. First, crews secured the circular outer wall with enormous ring beams and stress cables to hold the building together like a belt. Then everything was boarded up.
 2. A fabric rubber was stretched across the top of the outer wall by hand, air-blowing machines were put in place and an airlock was installed.
 3. The powerful air-blowing machines inflated the dome with 2.5 inches of air pressure, or 13.5 pounds per square foot.
 4. Inflation took just 15 to 20 minutes and could only be performed when winds blew less than 10 miles per hour to avoid the fabric becoming ripped.
 5. After inflation, crews installed the interior, including spraying insulation, adding rebar every nine inches and then caking the walls and ceiling with Shotcrete.



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