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CONCRETE MASONRY

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Paradise Valley Fire Station, No. 2 Paradise Valley, Nevada

The architect and Town of Paradise Valley expressed a desire for a durable, low maintenance emergency response building. The architectural father/son team of Larry and Lance Enyart of LEA-Architects, LCC in Phoenix, Arizona, chose concrete masonry for the Paradise Valley Fire Station No. 2 for several reasons: durability, thermal mass and noise mitigation. The Design Awards jury awarded this building a Design of Honor because it beautifully incorporated several sizes of concrete masonry units to achieve a subtle yet, interesting variation in texture at the corners of the monochromatic wall.

The 10,100-square-foot (938-square-meter) fire station contains three truck bays, nine firefighter dormitories and an infectious disease room. The Enyarts chose the ground face units for the building because the units complement the exposed aggregate of the ground concrete floor. The rich-colored terra cotta units metaphorically connect the building to the natural backdrop of Camelback Mountain.

According to Larry Enyart, “The concrete masonry used in this public emergency response building conveys an image of timelessness and solidity.” Eight x 8 x 16-inch (203 x 203 x 406 mm) ground face units were used for interior walls because of their high durability. In addition, the walls will not scratch or snag the clothing of the emergency response personnel. The interior masonry walls are heavily insulated and work in harmony with the concrete floors to provide considerable thermal mass for temperature stability and energy conservation. Some of the single-wythe exterior walls are earth bermed to take advantage of the earth’s thermal properties.

Eight x 4 x 16-inch (203 x 102 x 406 mm) smooth face concrete masonry units highlight corner apertures and give the project a sense of scale. The 6 x 8 x 16-inch (152 x 203 x 406 mm) smooth face units used in the project’s two towers further define the void that bisects the towers’ center of mass. The towers serve several purposes; to exhaust diesel fuel, to serve as a communications tower, and to provide a place for rain harvesting.

The privacy walls utilize standard concrete masonry units placed on their sides. According to Larry Enyart, “All materials used in the fire station were selected to achieve LEED certification. This building is completely sustainable.” Even the pervious pavers in the parking lot help to retain rainwater for future use. The building and angular roof provide north facing windows to help with light harvesting, as the northern light does not provide heat gain.

Design Award jurors felt this building stood out for its sustainability and beauty. **CMD**

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