

## **Seitz Elementary**

### **Leadership in Energy and Environmental Design (LEED) Silver Components**

Seitz Elementary is designed to be LEED Silver and would require a minimum of 50 points per the LEED rating system. The LEED components designed in this building include:

- The site allows for 80% of the students to be within 3/4 of a mile of the building, which is considered walking distance.
- The building has bicycle racks and a shower to encourage students and faculty to bike to school. (We do have one shower in the gym unisex restroom. This shower can also be used by Exceptional Students Services or the nurse since it is close by them).
- The parking lot will have designated spots for low emission vehicle parking near the front of the building.
- The parking lot will have 25% fewer parking stalls than recommended to encourage biking/walking/carpooling.
- The site area not developed will be reseeded to native grasses.
- The building will have open space around the building.
- Storm water is allowed to dissipate into the soil before being removed offsite. (Since we have a large site, we can allow a great deal of water the chance to dissipate into the soil before going into the storm sewer system).
- Storm water removed from the site is allowed to naturally clean itself before being removed off site. (When the soils are saturated or during heavy rain, the storm water flows across natural grasses for some distance before entering the storm sewer system. The particulates are filtered from the water during this process; therefore pollutants don't enter the adjacent detention pond).
- A white reflective roof is used to reflect radiant sun rays, decreasing the air conditioning load.
- Concrete paving exceeds asphaltic paving on the site to reflect radiant sun rays and minimize the heat load on the site.
- Interior and exterior lighting is designed to minimize light pollution to the surrounding neighbors.
- Gym, cafeteria, and library are designed to be rented out or used by the public after hours. The rest of the building can be closed off.
- No irrigation on the site, to reduce water consumption.
- Rain water collection from the roof into underground tanks is used to flush toilets and provide water for the cooling tower.
- Building is designed to be 26% more efficient than the current ASHRAE (American Society of Heating, Refrigerating and Air Conditioning Engineers) 2007 standards.
- Building has a collection point for recyclable materials.
- During construction we are working to get 10% of the trash recycled.
- We are working to have construction materials with a minimum of 10% recycled content as an average.
- We are working to have 10% of the construction materials manufactured within 500 miles of the site.
- Install CO2 monitors in every space to monitor CO2 levels and bring in fresh air mechanically, if needed.

- Design all classrooms and core learning spaces with a Noise Reduction Coefficient of 70 or higher, larger spaces such as gyms/cafeterias with a reverberation time of 1.5 or less and design all HVAC systems with a maximum of 45 dBA.
- Protect ductwork during construction to limit dust and debris from getting in the ducts. Contractor will flush out contaminants in the building after construction or do air testing to prove contaminants are not in the building after construction.
- Adhesives, paints, flooring systems, wall systems and ceiling systems are to meet requirements to lessen indoor air contaminants that are odorous, irritating and/or harmful to the occupants.
- Classrooms to have two lighting levels: general illumination and A/V.
- Classrooms have controllers to turn off the lights nearest to the window when day lighting levels are sufficient.
- Classrooms to have occupancy sensors to shut off lighting and HVAC when it is unoccupied.
- Windows provided with operable vents for natural ventilation.
- Designed so 90% of all occupied spaces have direct line of vision to the exterior.
- The "school as a teaching tool" is a concept that could also be used in the curriculum of the school.
- The drop off lane incorporates a designated drop off area for car-pooling for fuel efficient vehicles.

**Seitz Elementary**  
**Anti-Terrorism Force Protection (ATFP) Components**

Seitz Elementary is required by the installation to meet ATFP (UFC 4-010-01) standards. The ATFP standards designed in this building include:

- The parking lots and drives shall be a min. of 82' from any point of the building.
- Drop off lanes shall be a min. of 33' from any point of the building.
- There is to be a clear open area a min. of 33' around the entire building.
- Screen walls are not allowed around HVAC and electrical equipment outside the building.
- Trash enclosures shall be a min. of 82' from the building and open on at least one side.
- Intake louvers shall be a min. of 10' above the ground.
- Glazing and the frames holding the glass shall be designed for a 3-Second Duration Design Loading for Blast Resistance.
- The building is equipped with an emergency air distribution shut-off button to turn off all HVAC systems.
- The building is equipped with a mass notification system tied to Fort Riley.