CITY OF WILMINGTON FIRE DEPARTMENT



FIRE STATION 3 114 CINEMA DRIVE

Fire Station No. 3 at Cinema Drive was built to be environmentally responsible and serve as a resource to the community. It is certified a LEED (Leadership in Energy and Environmental Design) Silver level throught the US Green Building Council. Station construction was complete in the fall of 2015. Energy and water efficient features, regionally sourced materials, waste reduction strategies and educational opportunities are a few features community members and fire department staff will experience when visiting the station.



CITY OF WILMINGTON FIRE DEPARTMENT

FIRE STATION 3

LEED SILVER CERTIFICATION



INDOOR ENVIRONMENT

 During build-out of this facility, a plan was implemented to provide proper indoor air quality for construction workers.

This building's lighting and temperatures are controllable at each room to promote productivity, comfort, and wellbeing of building occupants.
The building owner prevents

 The building owner prevents exposure of occupants, indoor surfaces and air distribution systems to environmental tobacco smoke by prohibiting smoking anywhere on the property.

 Monitors are installed in the building to continuously measure fresh air levels to sustain the comfort and wellbeing of building occupants.

wellbeing of building occupants.

• The HVAC systems and the building envelope were designed to exceed national standards for human comfort.

• The paint, composite woods, carpet, vinyl flooring and flooring adhesives installed in this building meet strict guidelines for reductions in the number of air contaminants that are odorous, irritating or harmful to the comfort and wellbeing of both the installers and occupants.

ENERGY, WATER AND ATMOSPHERE

• This building uses solar thermal energy to heat water for showers and to heat the radiant slab located in the fire truck bay.

• The garage is warmed by a radiant floor slab (water heated by solar panels runs through pipes embedded

in the concrete).

 A commissioning authority has verified that this building's energyrelated systems were installed and perform to the owner's requirements.

 With the use of high-performance HVAC systems, the building uses approximately 17% less energy than a traditional building.

traditional building.

• The HVAC systems installed in the building contain no refrigerants that would be considered harmful to the ozone.

• The landscape materials installed on the building site are native to this region and do not require irrigation.

• The plumbing fixtures used in this facility use 41% less water than a traditional building.

BUILDING SITE

 During construction of this facility, a plan was implemented to control soil erosion and to minimize both sediment flow to waterways and airborne dust generation.

• The project is located in an area with existing utilities, is ½ mile from a residential area and is connected to basic services such as banks, restaurants, pharmacies, grocery stores, and fitness centers by way of sidewalks.

• This facility is located within ¼ mile of stops for two bus lines, encouraging the use of public transportation.

the use of public transportation.

• Preferred parking is reserved for low-emitting and fuel-efficient vehicles.

• 5% of the spaces in the parking lot are reserved for carpools and vanpools.

• Bicycle racks and shower/changing rooms are provided to encourage visitors and employees to ride bicycles to the facility.

• The roof on this facility is a light color which reflects light and heat and in turn lowers the cooling load on the building.

MATERIALS AND RESOURCES

• This facility provides recycling collection areas for paper, plastic, cardboard, metals and glass.

50% of the construction waste from this project was recycled or salvaged for repurposing.
20% of the materials used in the

20% of the materials used in the building contain recycled content.
20% of the construction materials used within the building were manufactured within 500 miles of

