

IHS Northern California Youth Regional Treatment Center: Sustainability Profile



Building owner: Indian Health Service
Location: Davis, California
Climate zone: 3B-Dry (Woodlands, Scrub)
Project size: 32,000 square feet
Elevation: 95 feet above sea level
Completion date: March 2021



Energy Savings: Buildings 'A' and 'B' are estimated to be 34.8% and 40.4% respectively better than ASHRAE 90.1-2013 baseline standards for an estimated average savings of \$22,954 in annual energy consumption.



Water Savings: Primarily through the use of low flow fixtures with automatic controls, potable water consumption is reduced in Bldg. 'A' by 38% and Bldg. 'B' by 51% from the baseline (usage).



Indoor Environmental Quality: The design increases access to daylighting having positive human behavioral and health effects to reinforce circadian rhythms (sleep cycles). In addition, it has been known to also increase healing times in hospitals, improve students performance and increase productivity in the work place.

Sustainability Feature: The primary building shell or "envelope" is comprised of Structurally Insulated Panels (SIPS) providing an 80% and 67% R-Value improvement over minimum code requirements. This improvement includes the roof and wall insulating materials to resist heat flow for improved energy efficiency.



Building 'C' - Cultural



Building 'A1' - Main Entrance

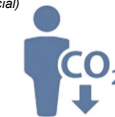
LEED® Facts	
NCYRTC Davis, Yolo County, CA	
LEED v4 BD+C (Campus Approach) Certification Awarded October/2021	
Silver	Building 'A': 54 Building 'B': 56
Innovation & Design	2 / 6
Location & Transportation	1 / 32
Sustainable Sites	8 / 10
Water Efficiency	8 / 11
Energy & Atmosphere	22 / 33
Materials & Resources	4 / 13
Indoor Environmental Quality	7 / 16
Regional Priority	4 / 4
* Out of a possible 110 points	



Design Project

"as designed" Building A only (commercial)

99
(Metric Tons CO₂e)
"green house gases"



Median Property**

"other properties"

148
(Metric Tons CO₂e)
"green house gases"

63
(Site EUI kBtu/ft²/yr)
"energy consumption at the site"



94
(Site EUI kBtu/ft²/yr)
"other properties energy consumption at their site"

159
(Source EUI kBtu/ft²/yr)
"energy consumption at power plant"



237
(Source EUI kBtu/ft²/yr)
"energy consumption at power plant"

81 Score

"overall design out of 100"
Statement of Energy Design Intent



50 Score

"typical design out of 100"
Statement of Energy Design Intent

** Measure of how well property is performing relative to similar properties in the U.S.



Building 'A2' - Gym