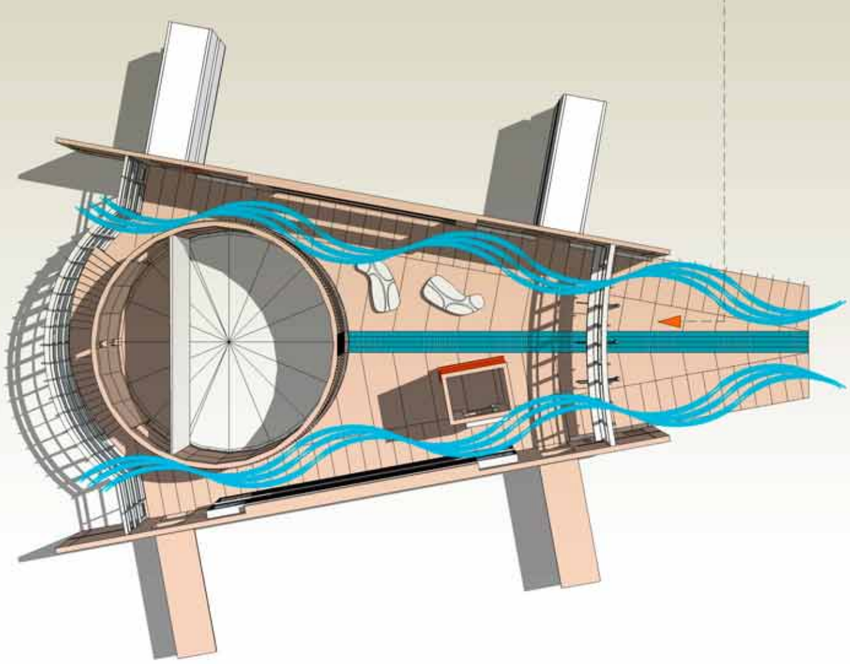
LPA

Chabot College Instructional Office Building

HAYWARD, CA



- 24% ENERGY REDUCTION OVER 2005 TITLE 24
- ENERGY STAR RATED COOL ROOF
- NATURALLY VENTILATED LOBBY
- HIGH EFFICIENCY ENVELOPE
- AIR HANDLING UNITS W/ DEMAND VENTILATION CONTROLS
- RESPECT TO SOLAR ORIENTATION
- TEMPERATURE AND LIGHTING CONTROLS IN ALL ROOMS
- NATURAL LIGHT TO 95% OF OCCUPIED SPACES

DESCRIPTION:

The new two-story 36,000 SF structure will house Division Suites, Adjunct Faculty Offices, Full Time Faculty Offices and Meeting Rooms, providing much needed collaborative learning and teaching environments. The IOB will enclose a new courtyard between two existing buildings that will funnel prevailing breezes across a permeable paving walk towards its two-story naturally ventilated lobby. Hold-open doors at ground level on the west face and high operable windows located on the east side will promote a natural flow of outside air through the space. A concrete “drum” placed in the back of the lobby and veiled by an east facing window wall, will act as a heat-sink to further promote natural heating and cooling of the space. IOB is designed to receive a LEED® Silver Certification from the USGBC.

energy

DESIGNED TO EARN THE ENERGY STAR

The estimated energy performance for this design meets US EPA criteria. The building will be eligible for ENERGY STAR after maintaining superior performance for one year.

ENERGY STAR Challenge Criteria:

- Energy Use Intensity (EUI) = 89.7 kBtu / SF / yr
- Percent CO_2 reduction = 69%
- ENERGY STAR design rating = 99

Savings Statistics (compared to an average building EPA rating of 50)

- Energy savings = 7,222,710 kBtu
- CO_2 savings = 293.9 tons CO_2