

LEED Green Building Rating System v2.0			SUMMARY MATRIX				
Project Name:	Fullerton Arboretum		March 3, 2004		Scores		
Credit ID	Credit Title		Comments	Low	High	Change	
Platinum 52 :: Gold 39 :: Silver 33 :: Certified 26				Total Score:	28	43	3
<b>SUSTAINABLE SITES (SS)</b>				6	10	0	
SS.P01	Erosion and Sedimentation Control	REQUIRED - Erosion Control Plan is in project documents	YES	YES	no		
SS.C01	Site Selection	QUALIFIES - Site not on flood plain, wetland, etc.	1	1	no		
SS.C02	Urban Redevelopment	N/A - Requires 60,000 sf/acre	n/a	n/a	n/a		
SS.C03	Brownfield Redevelopment	N/A - Site is not a brownfield	n/a	n/a	n/a		
SS.C04.1	Alternative Transportation, Public Transportation Access	QUALIFIES - Bus lines to campuses	1	1	no		
SS.C04.2	Alternative Transportation, Bicycle Friendly	UNCERTAIN - Showers in gym must be within 200 yards of project site. Bike racks to be added to plans.	0	0	drwg		
SS.C04.3	Alternative Transportation, Alternative Fuel Refueling Stations	UNCERTAIN - Could be included. Stations to be within site boundary	0	1	drwg		
SS.C04.4	Alternative Transportation, Parking Reductions	QUALIFIES - Only if "future parking" area is excluded.	1	1	no		
SS.C05.1	Reduced Site Disturbance, Protect and Restore Open Space	QUALIFIES - Only if "future parking" area is excluded. Landscape half of remaining area with native/ adapted species.	1	1	no		
SS.C05.2	Reduced Site Disturbance, Maximize Open Space	QUALIFIES - Open space exceeds building footprint	1	1	no		
SS.C06.1	Stormwater Management, Flow Reduction	UNCERTAIN - Requires calculation by civil engineer. Requires no net increase in runoff from pre-existing conditions	0	1	no		
SS.C06.2	Stormwater Management, Flow Treatment	LIKELY - Requires calculation by civil engineer. Requires at least 80% of runoff to be infiltrated	0	1	no		
SS.C07.1	Reduce Heat Islands, Non-Roof Surfaces	LIKELY - Requires area calculation by architect. Requires 30% of impervious area to be light colored or shaded. Exclude DG from calculation	0	1	no		
SS.C07.2	Reduce Heat Islands, Roof Surfaces	N/A - Metal roof does not qualify	n/a	n/a	n/a		
SS.C08	Light Pollution Reduction	LIKELY - Requires point by point photometric calc for site lighting to verify	1	1			
<b>WATER EFFICIENCY (WE)</b>			3	3	0		
WE.C01.1	Water Efficient Landscaping, 50% reduction	LIKELY - Use efficient irrigation equipment and drought tolerant species.	1	1	no (?)		
WE.C01.2	Water Efficient Landscaping, Potable Free System	N/A - No source of non-potable water	n/a	n/a	n/a		
WE.C02	Innovative Wastewater Technologies	NOT APPLICABLE - Reclaimed water not used or available	n/a	n/a	n/a		
WE.C03.1	Water Use Reduction, 20% Reduction	LIKELY - Use low-flow lavs (0.5 gpm) and waterless urinals - yields 41% reduction	1	1	drwg		
WE.C03.2	Water Use Reduction, 30% reduction	LIKELY - Use low-flow lavs (0.5 gpm) and waterless urinals	1	1	drwg		
<b>ENERGY AND ATMOSPHERE (EA)</b>			2	8	0		
EA.P01	Fundamental Building Systems Commissioning	REQUIRED - Owner to hire commissioning agent. Commissioning specs should be included in bid documents	Pre	Pre	specs		
EA.P02	Minimum Energy Performance	REQUIRED/QUALIFIES - Meets Title 24 2001	Pre	Pre	no		
EA.P03	CFC Reduction in HVAC&R Equipment	REQUIRED/QUALIFIES - All new HVAC equipment--no CFCs	Pre	Pre	no		
EA.C01.1a	Optimize Energy Performance, 2.5%-7.5% new (above Title 24)	LIKELY - Meet Title 24	1	1	no		
EA.C01.1b	Optimize Energy Performance, 7.51%-12.5% new	UNCERTAIN - Requires energy model	0	1	no		
EA.C01.2a	Optimize Energy Performance, 12.51%-17.5% new	UNCERTAIN - Requires energy model	0	1	?		
EA.C01.2b	Optimize Energy Performance, 17.51%-22.5% new	UNCERTAIN - Requires energy model	0	1	?		
EA.C01.3a	Optimize Energy Performance, 22.51%-27.5% new	UNCERTAIN - Requires energy model	0	1	?		
EA.C01.3b	Optimize Energy Performance, 27.51%-32.5% new	UNCERTAIN - Requires energy model	0	0	?		
EA.C01.4a	Optimize Energy Performance, 32.51%-37.5% new	UNCERTAIN - Requires energy model	0	0	?		
EA.C01.4b	Optimize Energy Performance, 37.51%-42.5% new	N/A	n/a	n/a	n/a		
EA.C01.5a	Optimize Energy Performance, 42.51%-47.5% new	N/A	n/a	n/a	n/a		
EA.C01.5b	Optimize Energy Performance, 47.51% new	N/A	n/a	n/a	n/a		
EA.C02.1	Renewable Energy, >2.5% Contribution	UNCERTAIN - Consider a PV instillation by an ESCO (energy service company)	0	1	drwg/ spec		
EA.C02.2	Renewable Energy, >7.5% Contribution	NOT APPLICABLE	n/a	n/a	n/a		
EA.C02.3	Renewable Energy, >15.5% Contribution	NOT APPLICABLE	n/a	n/a	n/a		
EA.C03	Additional Commissioning	N/A - Requires commissioning during design	n/a	n/a	n/a		
EA.C04	Elimination of HCFCs and Halons	QUALIFIES - Refrigerant is puron	1	1	no		
EA.C05	Measurement & Verification	N/A - Not appropriate for this building type	n/a	n/a	n/a		
EA.C06	Green Power	UNCERTAIN - Option for the owner	0	1	no		

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<b>MATERIALS AND RESOURCES (MR)</b>			5	7	0
MR.P01	Storage and Collection of Recyclables	REQUIRED - Coordinate with campus recycling, provide space for bins	Pre	Pre	no
MR.C01.1	Building Reuse, Maintain 75% Existing Shell	N/A	n/a	n/a	n/a
MR.C01.2	Building Reuse, Maintain 100% Existing Shell	N/A	n/a	n/a	n/a
MR.C01.3	Building Reuse, Maintain 100% Existing Shell and 50% Non-Shell	N/A	n/a	n/a	n/a
MR.C02.1	Construction Waste Management, Salvage/Recycle 50%	LIKELY - Require in specs	1	1	spec
MR.C02.2	Construction Waste Management, Salvage/Recycle 75%	LIKELY - Require in specs	1	1	spec
MR.C03.1	Resource Reuse, Specify 5%	N/A	n/a	n/a	n/a
MR.C03.2	Resource Reuse, Specify 10%	N/A	n/a	n/a	n/a
MR.C04.1	Recycled Content, Specify 25%	LIKELY - Require in specs. Steel, drywall, insulation, carpet, hardboard	1	1	spec
MR.C04.2	Recycled Content, Specify 50%	UNCERTAIN - Target achievement in specs	0	1	spec
MR.C05.1	Local/Regional Materials, 20% Manufactured Locally	LIKELY - Require in specs. Concrete, landscaping, steel	1	1	spec
MR.C05.2	Local/Regional Materials, 10% Harvested/Extracted/Recovered Locally	UNCERTAIN - Target achievement in specs. Concrete and landscaping	0	1	spec
MR.C06	Rapidly Renewable Materials	N/A - Difficult to achieve	n/a	n/a	n/a
MR.C07	Certified Wood	LIKELY - Specify for at least 50% of wood materials cost	1	1	spec
<b>INDOOR ENVIRONMENTAL QUALITY (EQ)</b>			10	12	0
EQ.P01	Minimum IAQ Performance	REQUIRED - HVAC designer to include in design. Use LEED standards	Pre	Pre	no
EQ.P02	Environmental Tobacco Smoke (ETS) Control	REQUIRED/QUALIFIES - California law. Note outdoor smoking areas	Pre	Pre	no
EQ.C01	Carbon Dioxide (CO2) Monitoring	UNCERTAIN - Consider adding to project--1 sensor per occupied zone, one outside	0	1	drwg/spec
EQ.C02	Increased Ventilation Effectiveness	LIKELY - Requires mechanical engineer to prepare ADPI calculations. Design should qualify.	1	1	no
EQ.C03.1	Construction IAQ Management Plan, During Construction	LIKELY - Require in specs, verify that MERV 13 filters can be used	1	1	spec
EQ.C03.2	Construction IAQ Management Plan, After Construction	LIKELY - Require 2-week building flushout in specs	1	1	spec
EQ.C04.1	Low-Emitting Materials, Adhesives and Sealants	LIKELY - Require low-VOC adhesives and sealants for interior surfaces. Include in specs. Follows local requirements	1	1	spec
EQ.C04.2	Low-Emitting Materials, Paints	LIKELY - Require low-VOC paints for interior surfaces. Include in specs	1	1	spec
EQ.C04.3	Low-Emitting Materials, Carpet	N/A - No carpet in project	n/a	n/a	n/a
EQ.C04.4	Low-Emitting Materials, Composite Wood	UNCERTAIN - Requires all composite wood to be low emitting (plywood, casework, door cores, etc.) Marine grade plywood is ok. Difficult to do both this and certified wood. Check with casework manufacturer	1	1	spec
EQ.C05	Indoor Chemical and Pollution Source Control	LIKELY - Include permanent entryway grates, make janitor sink last point of connection	1	1	drwg
EQ.C06.1	Controllability of Systems, Operable Windows	QUALIFIES - Sufficient operable windows and lighting controls in occupied spaces	1	1	no
EQ.C06.2	Controllability of Systems, Individual Controls	N/A - No non-perimeter spaces	n/a	n/a	n/a
EQ.C07.1	Thermal Comfort, Compliance with ASHRAE 55-1992	LIKELY - Mechanical design to comply with ASHRAE 55.	1	1	no
EQ.C07.2	Thermal Comfort, Permanent Monitoring System	NOT APPLICABLE - Not recommended in this climate	n/a	n/a	n/a
EQ.C08.1	Daylighting and Views, Distribution Quality	UNCERTAIN - Depends on window sizes and visual transmittance	0	1	?
EQ.C08.2	Daylighting and Views, Access to Views	QUALIFIES - All occupied areas have access to views	1	1	no
<b>INNOVATION AND DESIGN PROCESS (ID)</b>			2	3	3
ID.C01.1	Innovation in Design 1: Excellence in Performance WEc3	LIKELY - Use low-flow lavs (0.5 gpm) and waterless urinals	1	1	1
ID.C01.2	Innovation in Design 2: Sustainability Education	LIKELY - Include signage and tour program	0	1	1
ID.C01.3	Innovation in Design 3:	TBD	0	0	0
ID.C01.4	Innovation in Design 4:	TBD	0	0	0
ID.C02	LEED Accredited Professional	QUALIFIES	1	1	1