### **California Academy of Sciences**



Immersed in the Golden Gate Park of San Francisco, the new seat of the California Academy of Sciences re-organizes the famous natural collections, paying great attention to environmental sustainbility, symbolically condensed in the green roof of the building: it looks as a piece of the park has been cut away and lifted ten meters above the ground.

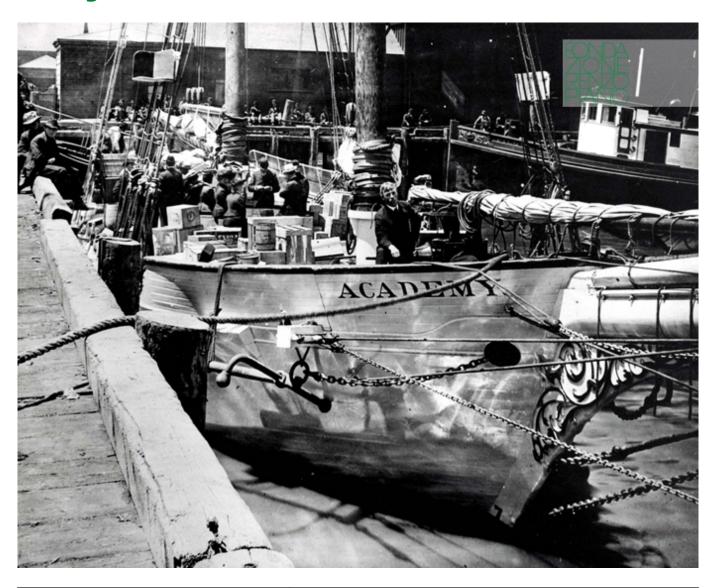
### **Dati Progetto**

Design	2000 - 2005
Construction	2005 - 2008
Site area	43000 m2
Total area	41000 m²
Height	19,3 m max
	11,3 canopy
Floors	3 + 2 basements
Roof	18302 m2, 60000 photovoltaic cells producing 213000kWh energy (around 5% of the builing)
Awards and certification	LEED Platinum

#### **Credits**

Client	California Academy of Sciences
	- Camornia Academy of Sciences
Architect	Renzo Piano Building Workshop, architects in collaboration with Stantec Architecture (San Francisco)
Consultants	Ove Arup & Partners (engineering and sustainability); Rutherford & Chekene (civil engineering); SWA Group (landscaping); Rana Creek (living roof); PBS&J (aquarium life support systems); Thinc Design, Cinnabar, Visual-Acuity (exhibits)
General contractor	Webcor Builders

# **Immagini**



Subject	Schooner Academy. It was used by scientists until the late Nineteenth century in the summer, to collect new plant and animal species in the Galapagos rather than in Madagascar, while in winter it docked in San Francisco, becoming a museum
Date	-
Image Code	Sfr_580
Author	-

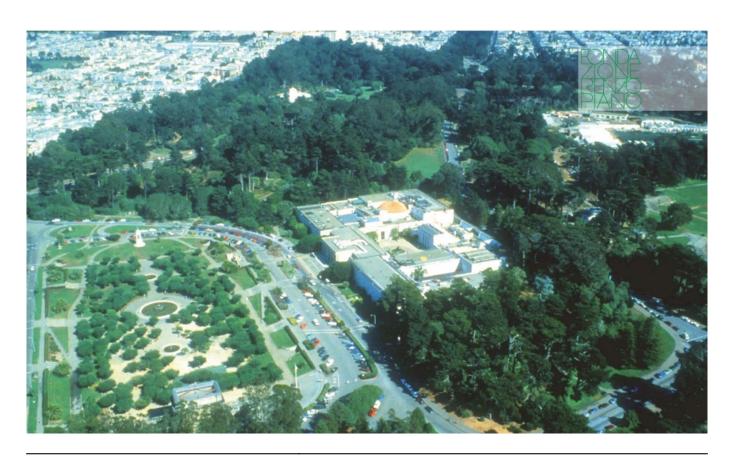


Copyright California Academy of Sciences



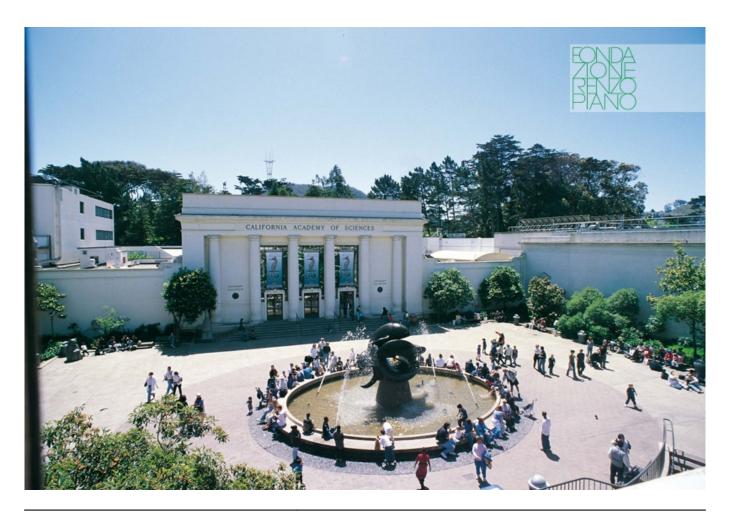


Subject	
	Historical image of the building damaged by the 1989 Loma Prieta earthquake
Date	(1989)
Image Code	Sfr_599
Author	-
Copyright	California Academy of Sciences



Subject	Aerial view before the new CAS
Date	
Image Code	Sfr_081
Author	
Copyright	RPBW - Renzo Piano Building Workshop Architects





Soggetto	Vista della piazza antistante l'edificio principale
Data	
Codice Immagine	Sfr_556
Autore	
Copyright	RPBW - Renzo Piano Building Workshop Architects



Subject	Explanation of the green roof used for the new building
Date	-
Image code	Sfr_113
Author	<del>-</del>
Copyright	RPBW - Renzo Piano Building Workshop Architects





Subject	Mock-Up of the green roof
Date	-
Image code	Sfr_123
Author	-
Copyright	RPBW - Renzo Piano Building Workshop Architects



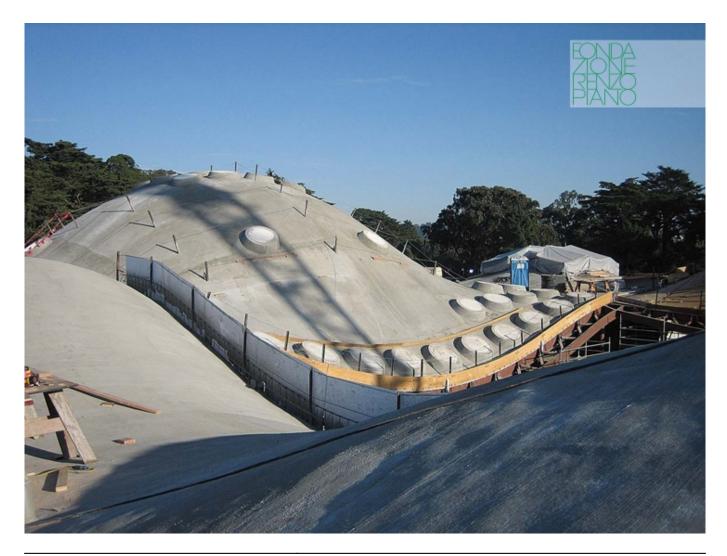
Subject	Mock-up of the green roof
Date	-
Image code	Sfr_120
Author	-
Copyright	RPBW - Renzo Piano Building Workshop Architects



Subject	Construction phase of the roof
Date	2007
Image code	Sfr_166
Author	-
Copyright	RPBW - Renzo Piano Building Workshop Architects



Subject	Construction phase of the roof
Date	2007
Image code	Sfr_165
Author	-
Copyright	RPBW - Renzo Piano Building Workshop Architects



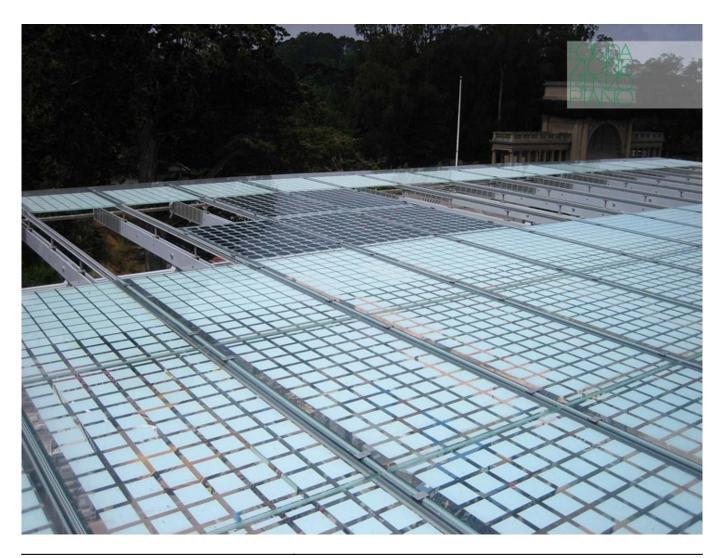
Subject	Construction phase of the roof.
Date	2007
Image code	Sfr_172
Author	-
Copyright	RPBW - Renzo Piano Building Workshop Architects



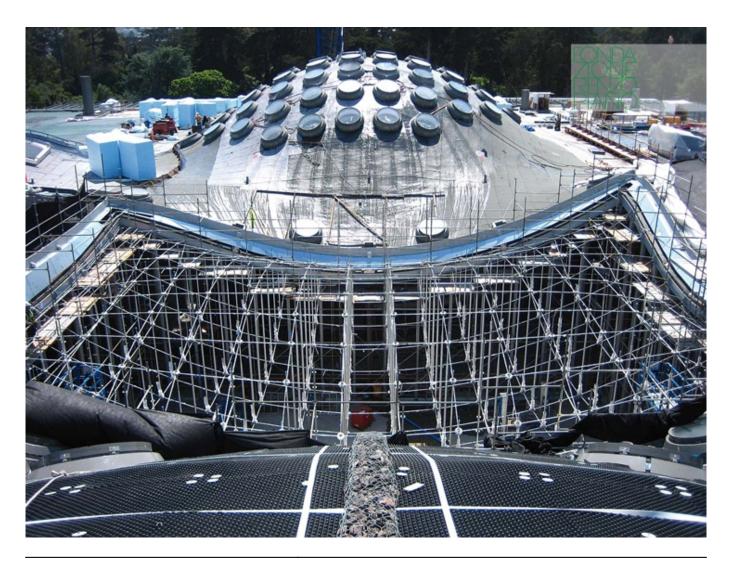
Subject	Construction phase of the roof.
Date	2007
Image code	Sfr_153
Author	-
Copyright	RPBW - Renzo Piano Building Workshop Architects



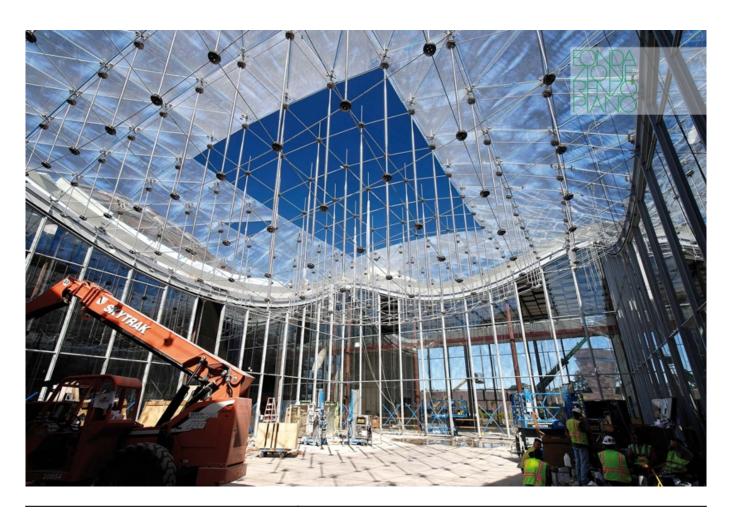
Subject	Construction phase
Date	-
Image code	Sfr_199
Author	-
Copyright	RPBW - Renzo Piano Building Workshop Architects



Subject	Construction phase of roof with photovoltaic panels
Date	-
Image code	Sfr_200
Author	-
Copyright	RPBW - Renzo Piano Building Workshop Architects



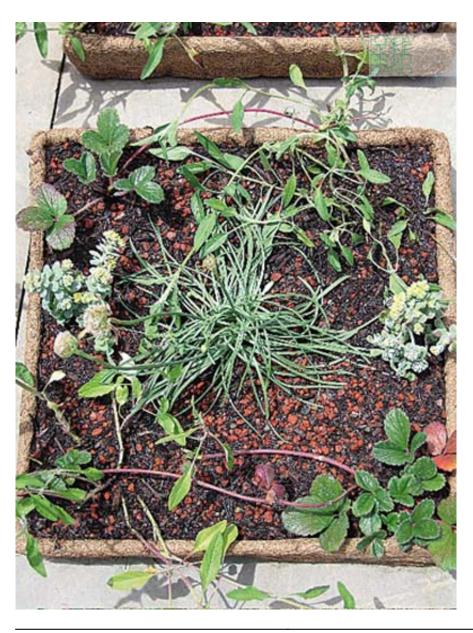
Subject	"Spider web", a delicate steel structure that covers the Piazza. During the day, its reticular structure opens to allow the air in for ventilation and at night, when the temperature drops, the mesh closes
Date	-
Image code	Sfr_206
Author	-
Copyright	RPBW - Renzo Piano Building Workshop Architects



Subject	"Spider web", a delicate steel structure that covers the Piazza. During the day, its reticular structure opens to allow the air in for ventilation and at night, when the temperature drops, the mesh closes
Date	-
Image code	Sfr_207
Author	-
Copyright	RPBW - Renzo Piano Building Workshop Architects



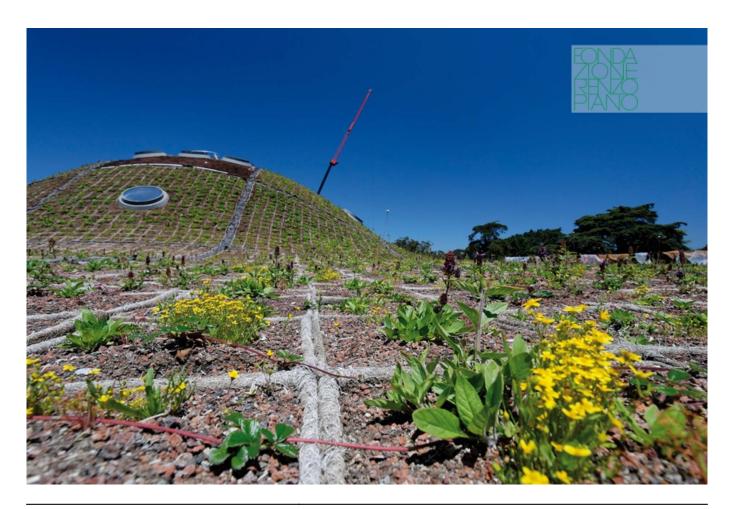
Subject	One million seven hundred thousand species were planted on the roof of the museum, all placed in "trays" of an organic material that disappear and become ground after rooting
Date	2007-04-18
Image code	Sfr_179
Author	-
Copyright	RPBW - Renzo Piano Building Workshop Architects



Subject	The species planted on the roof of the museum have been placed in "trays" of an organic material
Date	2006-07
Image code	Sfr_143
Author	-
Copyright	RPBW - Renzo Piano Building Workshop Architects



Subject	Roof detail under construction
Date	2007-05-25
Image code	Sfr_176
Author	-
Copyright	RPBW - Renzo Piano Building Workshop Architects



Subject	Roof detail under construction
Date	2007-06-07
Image code	Sfr_191
Author	-
Copyright	RPBW - Renzo Piano Building Workshop Architects





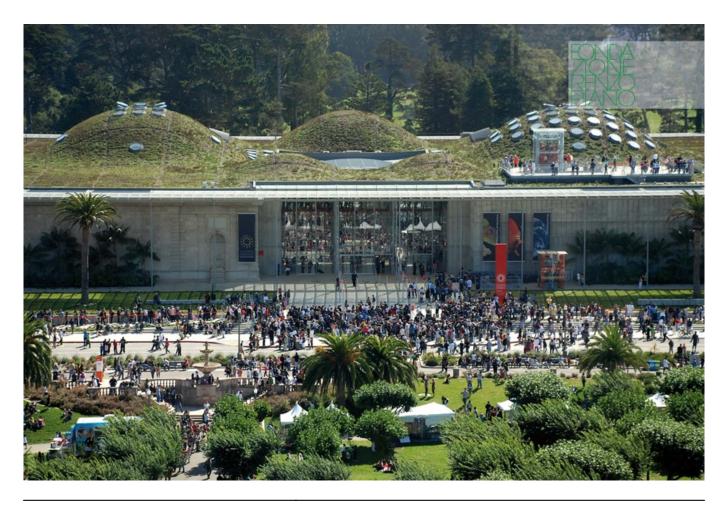




Subject	The building before, during and after the reconstruction
Date	-
Image code	Sfr_214
Author	Terpeluk, Brett
Copyright	RPBW - Renzo Piano Building Workshop Architects



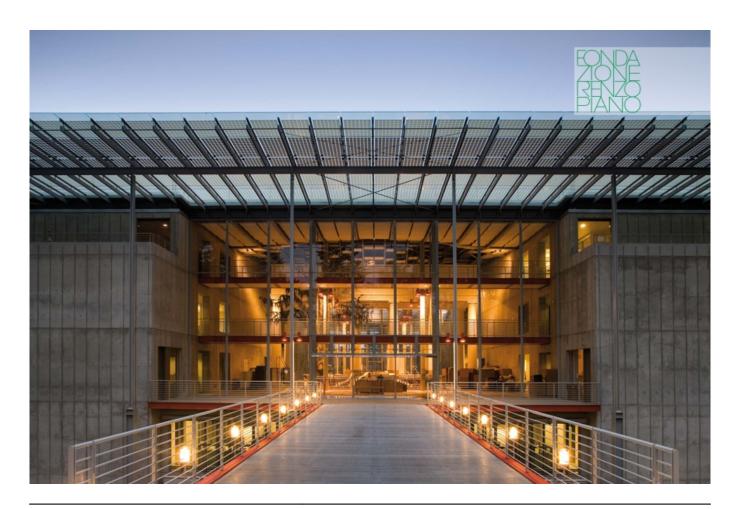
Subject	Aerial view illustrating the hills on the new Academy's living roof
Date	2008-10-01
Image code	Sfr_530
Author	Fox, Tom_SWA Group
Copyright	RPBW - Renzo Piano Building Workshop Architects



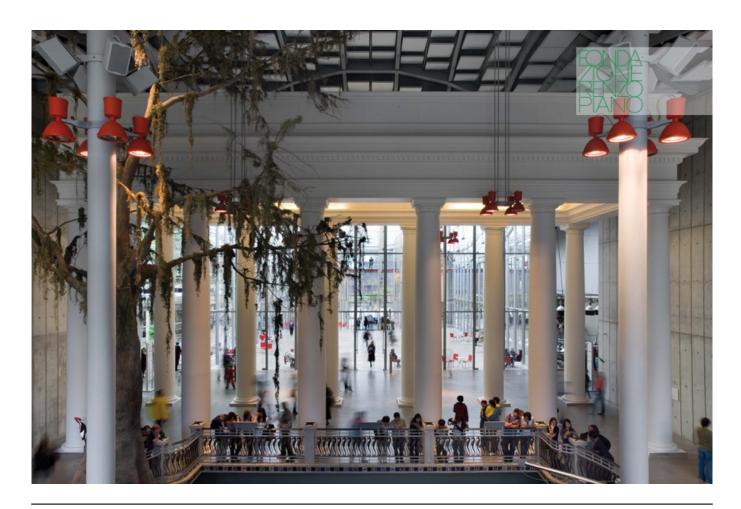
Subject	View of front entrance (towards South)
Date	2008-09-27
Image code	Sfr_464
Author	Ishida, Shunji
Copyright	RPBW - Renzo Piano Building Workshop Architects



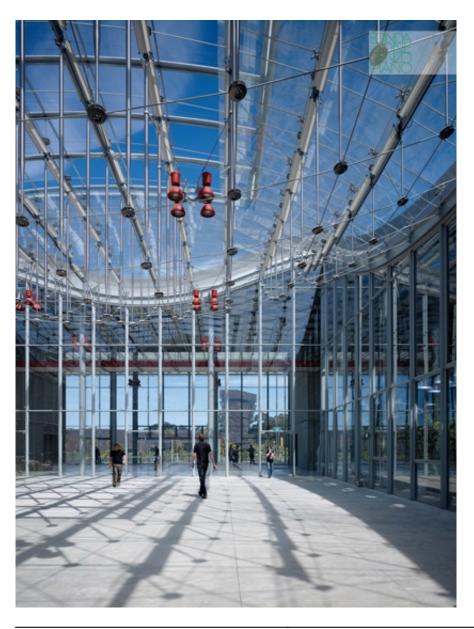
Subject	East side view
Date	2008-09-01
Image code	Sfr_391
Author	Tim Griffith Photographer
Copyright	Tim Griffith Photographer



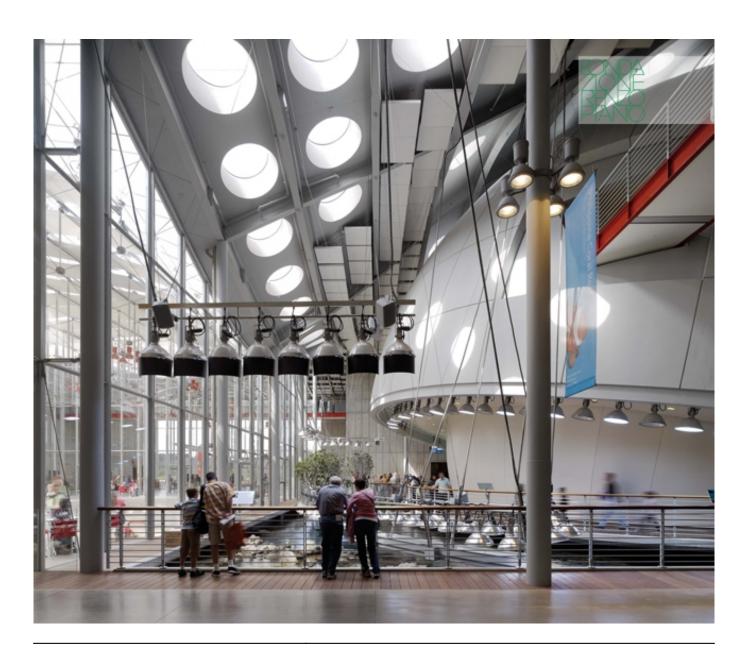
Subject	View towards north - Entrance to research and administration functions
Date	2008-09-01
Image code	Sfr_506
Author	Lehoux, Nic
Copyright	RPBW - Renzo Piano Building Workshop Architects



Subject	Steinhart Columns - The original entrance to Steinhart Aquarium was recreated, including the popular Swamp tank, which will house alligators and alligator snapping turtles
Date	2008-09-01
Image code	Sfr_414
Author	Lehoux, Nic
Copyright	RPBW - Renzo Piano Building Workshop Architects



Subject	View of the Piazza which is open at the center, is a key part of the building's natural ventilation
Date	2008-09-01
Image code	Sfr_379
Author	Tim Griffith Photographer
Copyright	Tim Griffith Photographer



Subject	View of a portion of planetarium - The 90-foot planetarium dome is cantilevered out over the Philippine Coral Reef - the world's deeest living display of corals
Date	2008-09-01
Image code	Sfr_385
Author	Tim Griffith Photographer
Copyright	Tim Griffith Photographer



Subject	View of Rainforest - Visitors meet rainforest residents from Borneo, Costa Rica and the Amazon
Date	2008-09-01
Image code	Sfr_381
Author	Tim Griffith Photographer
Copyright	Tim Griffith Photographer

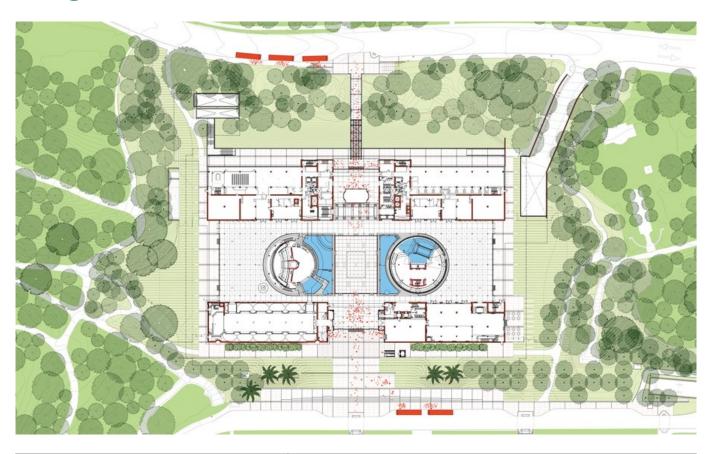


Subject	Living Roof detail - Skylights in the roof allow sunlight to reach the living rainforest and coral reef. They also open automatically to allow heat to escape
Date	2008-09-27
Image code	Sfr_431
Author	Lee, Justin
Copyright	RPBW - Renzo Piano Building Workshop Architects

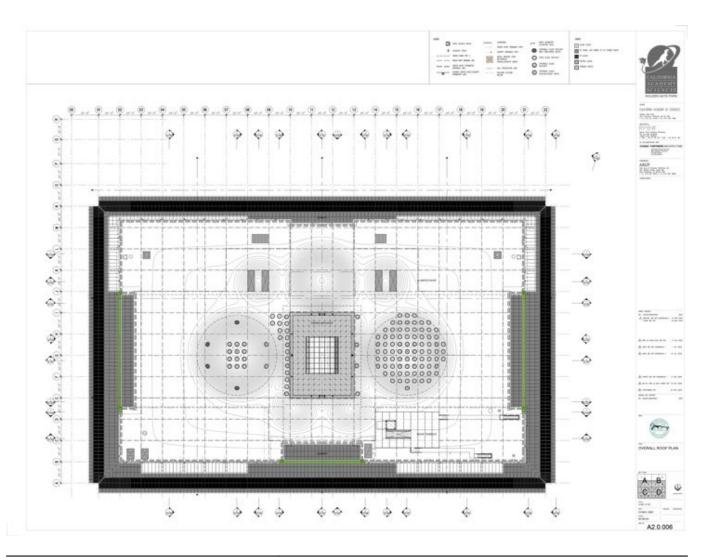


Subject	Detail of living roof (aerial view)
Date	2008-10-01
Image code	Sfr_534
Autore	Fox, Tom_SWA Group
Copyright	RPBW - Renzo Piano Building Workshop Architects

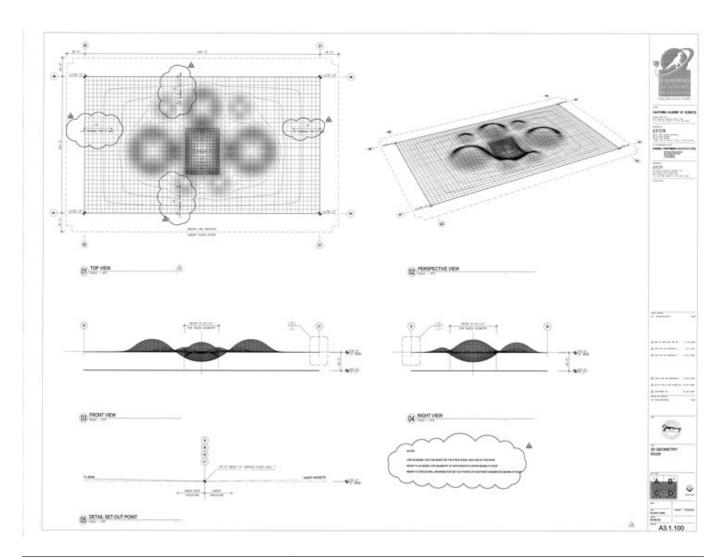
# Disegni



Title	Site plan
Scale	NTS
Date	2000-2008
Drawing number	-
Drawing code	SFR_DW_006
Author	Renzo Piano Building Workshop
Copyright	Renzo Piano Building Workshop

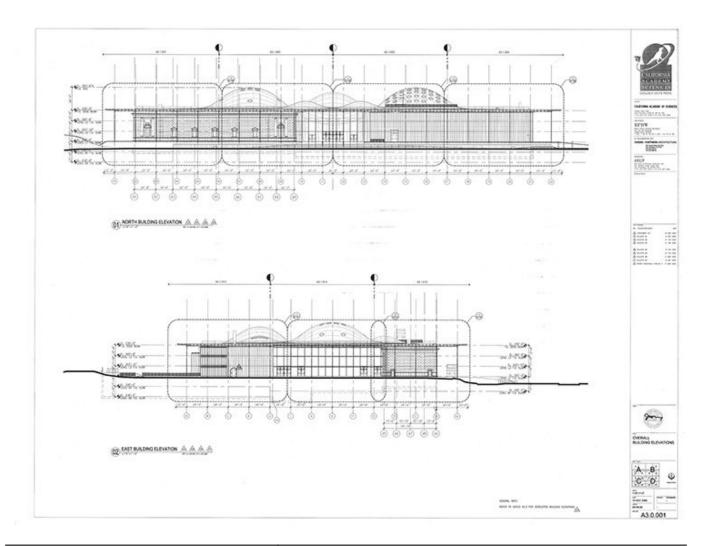


Title	Overall Roof Plan
Scale	1/16"=1'-0"
Date	2005/11/23
Drawing number	A2.0.006
Drawing code	SFR_DW_181
Author	Renzo Piano Building Workshop
Copyright	Renzo Piano Building Workshop



Title	3D Geometry Roof
Scale	NTS
Date	2005/11/23
Drawing number	A3.1.001
Drawing code	SFR_DW_022
Author	Renzo Piano Building Workshop
Copyright	Renzo Piano Building Workshop





Title	Overall Building Elevations
Scale	1/16"=1'-0"
Date	2006/05/10
Drawing number	A3.0.001
Drawing code	SFR_DW_020
Author	Renzo Piano Building Workshop
Copyright	Renzo Piano Building Workshop
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Title	Elevatione Music Concourse - North Elevation
Scale	3/32"=1'-0"
Date	2008/01/01
Drawing number	-
Drawing code	SFR_DW_181
Author	Renzo Piano Building Workshop
Copyright	Renzo Piano Building Workshop

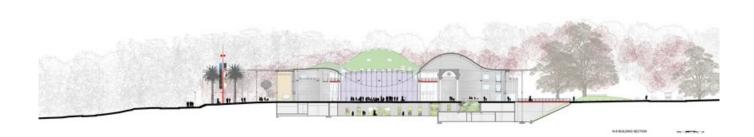


Title	Elevation Shakespeare Garden - West Elevation
Scale	NTS
Date	2005/05/05
Drawing number	-
Drawing code	SFR_DW_003
Author	Renzo Piano Building Workshop
Copyright	Renzo Piano Building Workshop





Title	Elevation Middle Drive - South Elevation
Scale	NTS
Date	2005/05/05
Drawing number	-
Drawing code	SFR_DW_002
Author	Renzo Piano Building Workshop
Copyright	Renzo Piano Building Workshop



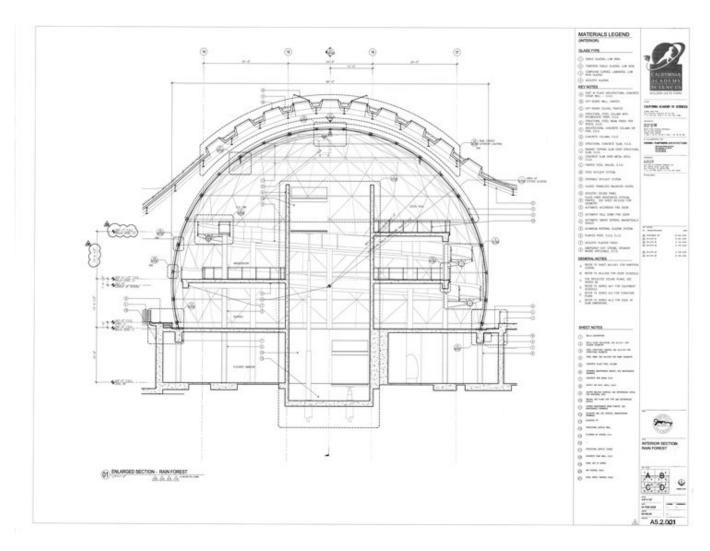
Title	North South building section
Scale	3/32"=1'-0"
Date	2008/01/01
Drawing number	-
Drawing code	SFR_DW_179
Author	Renzo Piano Building Workshop
Copyright	Renzo Piano Building Workshop



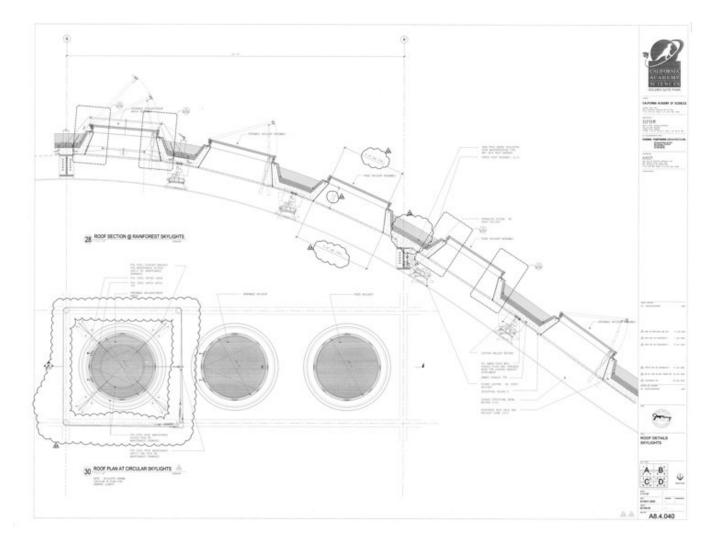
Title	North - South Building Section
Scale	NTS
Date	2007/05/15
Drawing number	-
Drawing code	SFR_DW_001
Author	Renzo Piano Building Workshop
Copyright	Renzo Piano Building Workshop



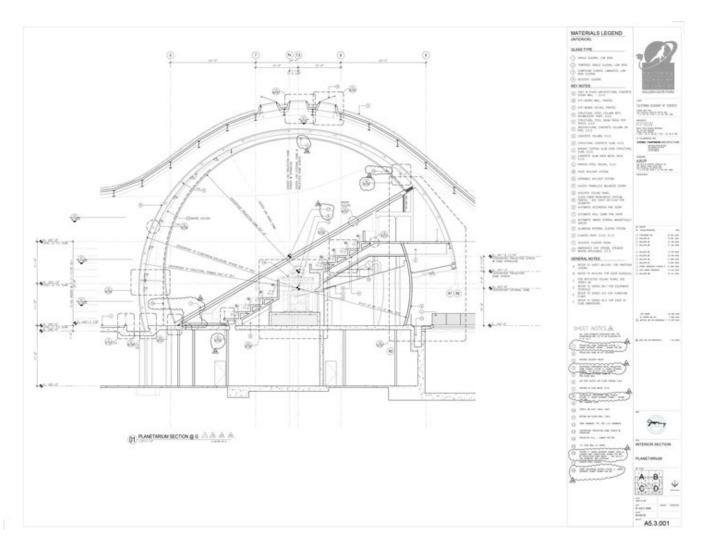
Title	East West building section
Scale	3/32"=1'-0"
Date	2008/01/01
Drawing number	-
Drawing code	SFR_DW_178
Author	Renzo Piano Building Workshop
Copyright	Renzo Piano Building Workshop



Title	Interior Section Rain Forest
Scale	1/4"=1'-0"
Date	2006/02/04
Drawing number	A5.2.001
Drawing code	SFR_DW_048
Author	Renzo Piano Building Workshop
Copyright	Renzo Piano Building Workshop



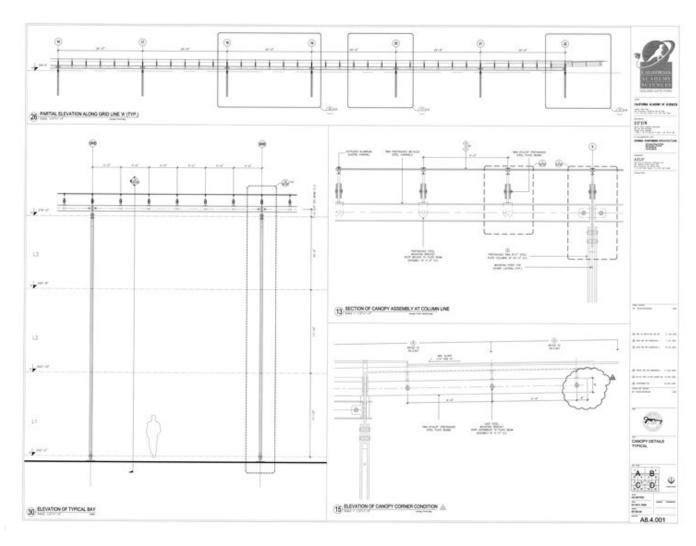
Title	Roof Details skylights
Scale	1"=1'-0"
Date	2005/11/23
Drawing number	A8.4.040
Drawing code	SFR_DW_149
Author	Renzo Piano Building Workshop
Copyright	Renzo Piano Building Workshop



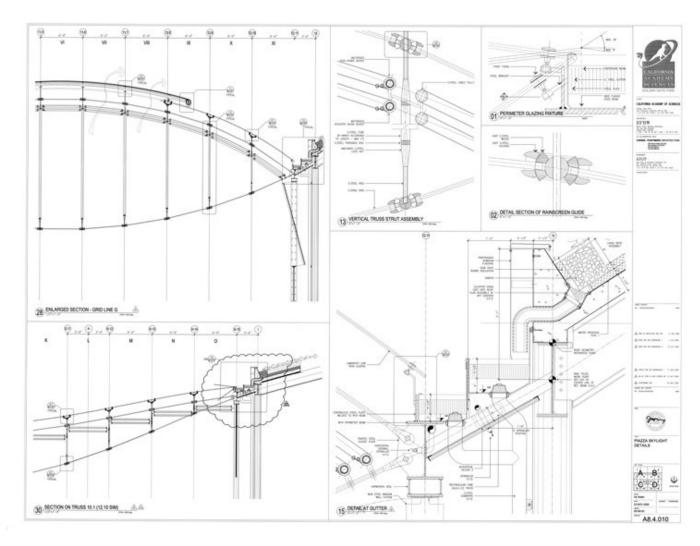
Title	Interior Section Planetarium
Scale	1/4"=1'-0"
Date	2006/07/07
Drawing number	A5.3.001
Drawing code	SFR_DW_053
Author	Renzo Piano Building Workshop
Copyright	Renzo Piano Building Workshop



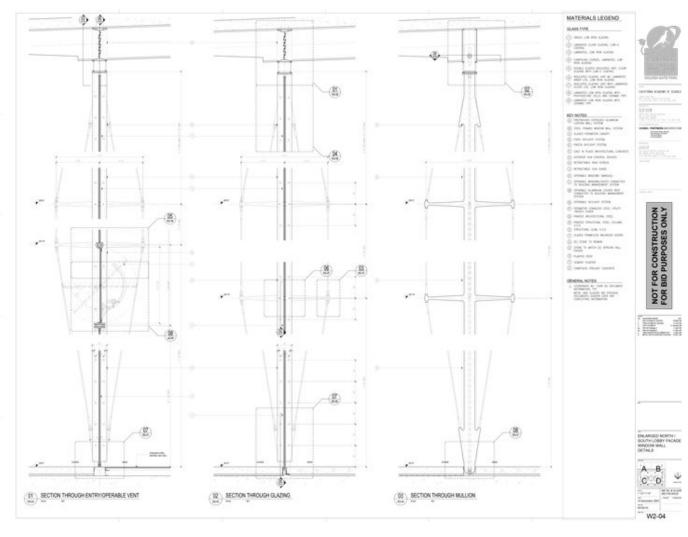
Title	Section of glass canopy with photovoltaic cells
Scale	1/4"=1'-0"
Date	2008/01/01
Drawing number	-
Drawing code	SFR_DW_182
Author	Renzo Piano Building Workshop
Copyright	Renzo Piano Building Workshop



Title	Canopy details typical
Scale	as indicated
Date	2005/11/23
Drawing number	A8.4.001
Drawing code	SFR_DW_073
Author	Renzo Piano Building Workshop
Copyright	Renzo Piano Building Workshop



Title	Piazza Skylight Details
Scale	as indicated
Date	2005/11/23
Drawing number	A8.4.010
Drawing code	SFR_DW_144
Author	Renzo Piano Building Workshop
Copyright	Renzo Piano Building Workshop



Title	Enlarged North/South Lobby facade - Window wall details
Scale	1-1/2"=1'-0"
Date	2003/12/19
Drawing number	W2-04
Drawing code	SFR_DW_160
Author	Renzo Piano Building Workshop
Copyright	Renzo Piano Building Workshop
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## Modelli



Title	Roof geometry study model
Date	2002-03-01
Model Code	SFR_MD_002_T
Scale	1/32"=1'-0"
Model Author	RPBW - Renzo Piano Building Workshop Architects



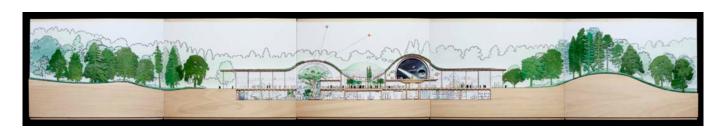
Title	Roof massing study model
Date	2003-01-01
Model Code	SFR_MD_003_T
Scale	1/32"=1'-0"
Model Author	RPBW - Renzo Piano Building Workshop Architects



Title	Conceptual model
Date	2000-09-01
Model Code	SFR_MD_030_T
Scale	1/32"=1'-0"
Model Author	RPBW - Renzo Piano Building Workshop Architects



Title	Ground floor bas relief
Date	2000-11-01
Model Code	SFR_MD_014_T
Scale	1/20"=1'-0"
Model Author	RPBW - Renzo Piano Building Workshop Architects



Title	Ground floor study model
Date	2002-05-02
Model Code	SFR_MD_013_T
Scale	1/20"=1'-0"
Model Author	RPBW - Renzo Piano Building Workshop Architects



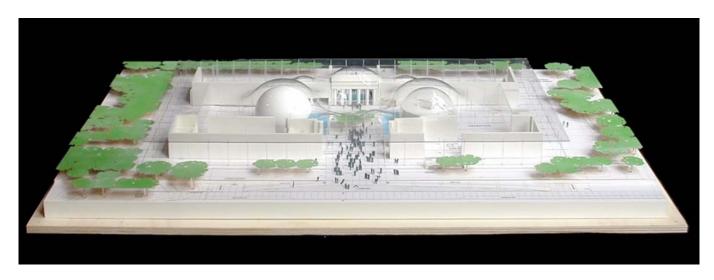
Title	E-W Section on aquarium and rainforest
Date	2000-11-01
Model Code	SFR_MD_006 a-e_F
Scale	1/8"=1'-0"
Model Author	RPBW - Renzo Piano Building Workshop Architects



Title	E-W Section on aquarium and planetarium
Date	2001-04-01
Model Code	SFR_MD_007a-e_F
Scale	1/8"=1'-0"
Model Author	RPBW - Renzo Piano Building Workshop Architects



Title	E-W Section on planetarium and rainforest
Date	2002-03-12
Model Code	SFR_MD_005 a-e_F
Scale	1/8"=1'-0"
Model Author	RPBW - Renzo Piano Building Workshop Architects



Title	Ground floor with transparent roof model
Date	2003-01-01
Model Code	SFR_MD_076_T1
Scale	1/16"=1'-0"
Model Author	RPBW - Renzo Piano Building Workshop Architects



Title	Piazza presentation model
Date	2004-07-23
Model Code	SFR_MD_070_T
Scale	1/4"=1'-0"
Model Author	RPBW - Renzo Piano Building Workshop Architects



Title	Coconuts nest
Date	
Model Code	SFR_MD_040_T
Scale	1'-0"=1'-0"
Model Author	RPBW - Renzo Piano Building Workshop Architects



Title	Jeans insulation
Date	2008-01-01
Model Code	SFR_MD_024 B_T
Scale	1'-0"=1'-0"
Model Author	RPBW - Renzo Piano Building Workshop Architects