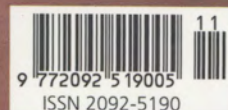


Cultural and Public
Schools in Shadows and Wind
A Curious Museum Trio by Toyo Ito

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Queens Theater in the Park

Caples Jefferson Architects





This project has received several awards including the 2010 New York Construction Cultural Project of the Year, a Queens Chamber of Commerce Award and a NOMA National Award of Excellence in Architecture.

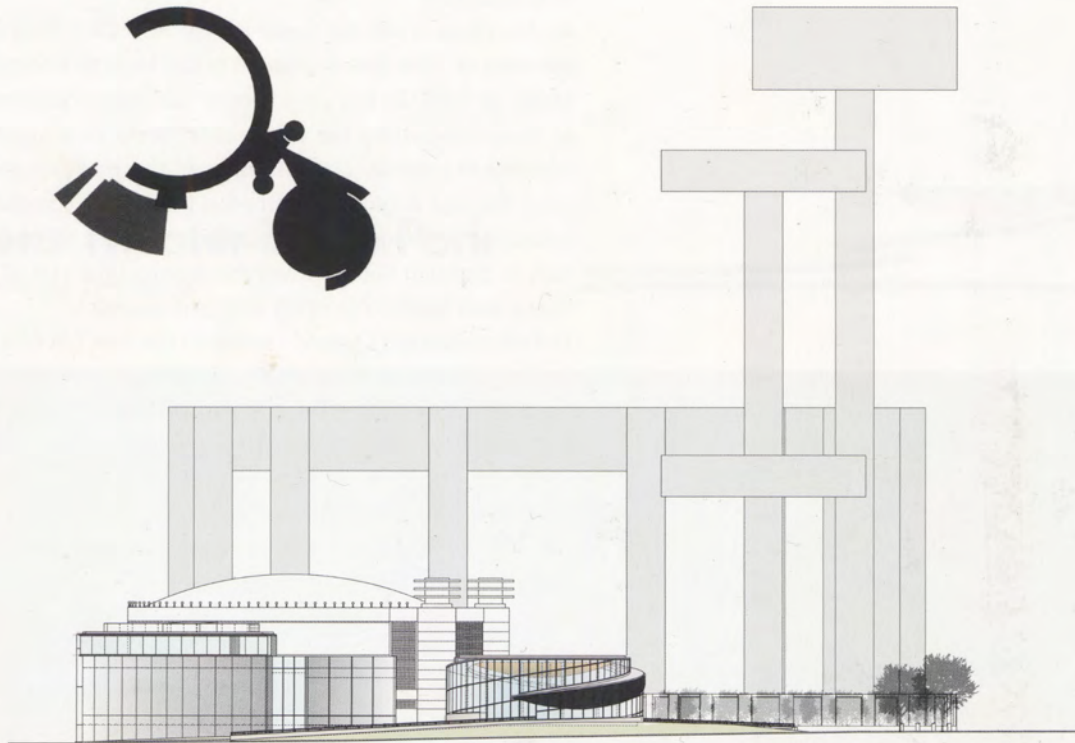
As described in the AIA Guide to New York City: "One of the few pavilions of 1964 that attempted to use fresh technology as generator of form. In this case tubular perimeter columns (as well as those supporting the observation deck) were slip-formed of concrete in a continuous casting operation that proceeded vertically. The roof, originally sheathed in translucent colored plastic, is a double diaphragm of radial cables separated by vertical pencil rods to dampen flutter. It was the architectural star of the fair; a happy park building working with park space.

The reconstructed Queens Theater in the Park has brought sleek architecture and new vigor to this under-utilized complex."

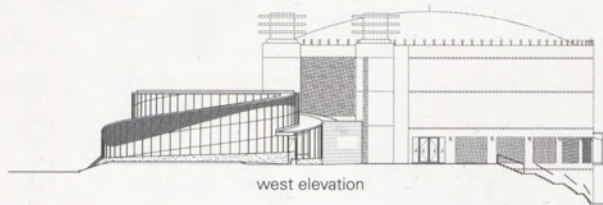
- p. 773, *Queens Theater-in-the-Park/originally Theaterama, 1964, Philip Johnson and Richard Foster, architects. Reconstruction, 1993, Alfredo De Vido. Expansion and reconstruction, 2006.*

We see this as a place of reconnections, additions that build upon the playful circular geometries of the original 1964 Philip Johnson World's Fair complex. Our new nebula room is a transparent viewing pavilion from which to appreciate the park's dreams of futures past, the Unisphere and the Johnson observatory towers and pavilions still in search of rescue. It is a party room for the Borough, whose rich materials and sunset colors are understood as festive by a wide cross-section of the 109 ethnic cultures that are the glory of Queens. The new structure is a 600-person reception room for the borough, standing on axis with the giant oval of Johnson's New York State Pavilion. The challenge was to create the impression of round spiraling forms while living within a budget that permitted only large flat glazed units. Using the principles of Gestalt psychology and the art of perspective, we designed a structurally glazed wall with metal fins projecting at each vertical joint. The effect of the fins is to drive the mind's eye to focus on the vanishing perspective that results from seeing them vanish around the curve. The spiraling slope of the "horizontal" mullions further intensifies this perception of curved movement in space. The design of the curtain wall utilizes a broad array of contemporary technologies including low emulsion coatings to reduce solar heat gain, silicone sealant joints in lieu of metal mullion caps, gas-filled insulating units to reduce heating costs, and laminated glass outer lights to increase unit size and provide vandalism resistance. Digital design and fabrication techniques enabled fabrication of over 5,000 separate and unique glass panels that work in concert to create the illusion of perfect roundness. Caples Jefferson Architects

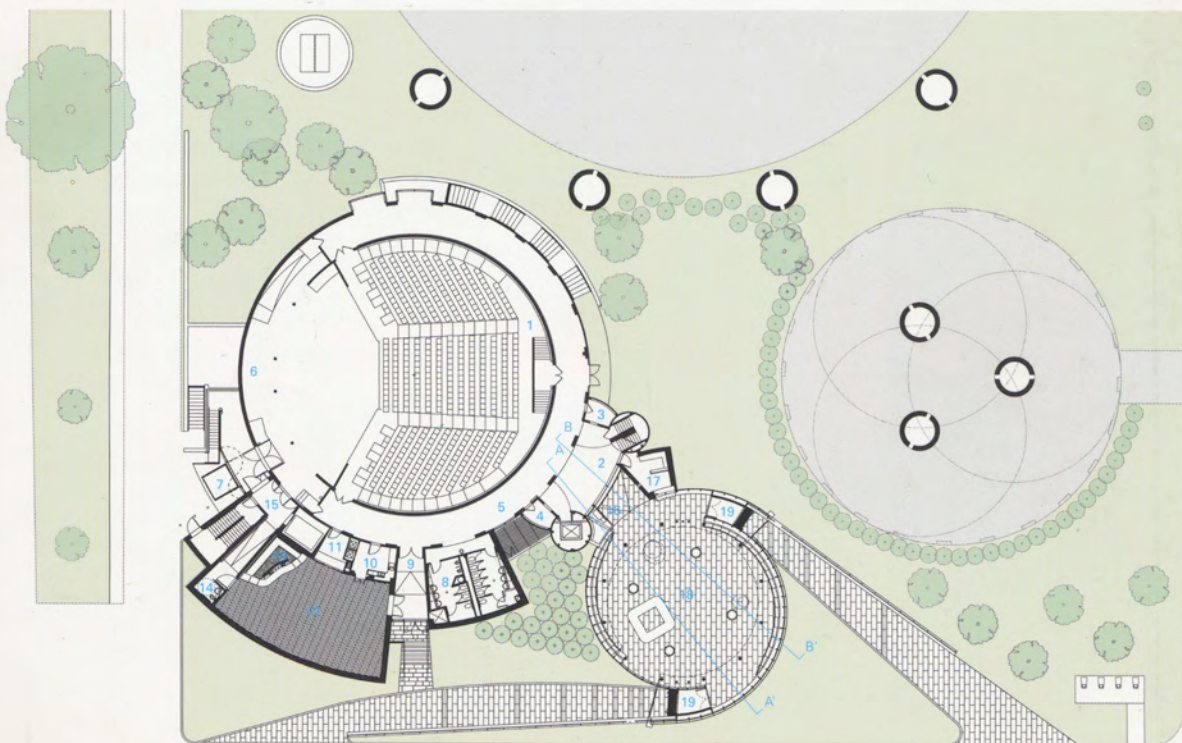




north elevation



west elevation



first floor



0

10

20m

1. theater
2. high lobby/safe area
3. concession
4. manager's office
5. lobby corridor/safe area
6. backstage
7. loading dock
8. toilet
9. cabaret lobby/safe area
10. food service
11. cabaret
12. bar
13. actor toilet
14. stage vestibule
15. low lobby
16. box office
17. entry lobby/safe area
18. vestibule
19. loading dock



퀸즈 극장과 성운의 방

필립 존슨과 리처드 포스터가 설계한 뉴욕 파빌리온은 1964년 뉴욕 세계 박람회가 열렸던 뉴욕 퀸즈 플러싱 메도우 공원에 자리 잡고 있다. 진동을 완화시키는 방사상 모양의 케이블과 이중 칸막이 구조로 되어 있고, 반투명 착색 플라스틱 지붕으로 덮여 있었지만, 지금은 남아 있지 않다. 파빌리온의 지지대와 퀸즈 전망대 세 개는 하늘을 향해 뻗은 가느다란 파이프형 콘크리트 뼈대만 남아 있다. 뉴욕 AIA 가이드북에서는 이 파빌리온을 '발전기 모양의 독특한 형태를 한 건물로, 당시의 첨단기술을 적용한 몇 안 되는 전시관 건물 중 하나' 라고 소개하고 있다.

파빌리온과 퀸즈 전망대 바로 옆에는 전시관인 '씨어터라마(Theaterama)'가 있었다. 이를 1993년 알프레도 데 비도가 재건축하고, 2006년에 케이플스 제퍼슨 아키텍츠가 다시 재건축 및 증축을 시작해 2010년에 '퀸즈 극장'과 '성운의 방'으로 새로 태어났다. 현대식 건축양식을 바탕으로 설계한 이곳은 사용하지 않는 주변 구조물들에 활력소가 되고 있다.

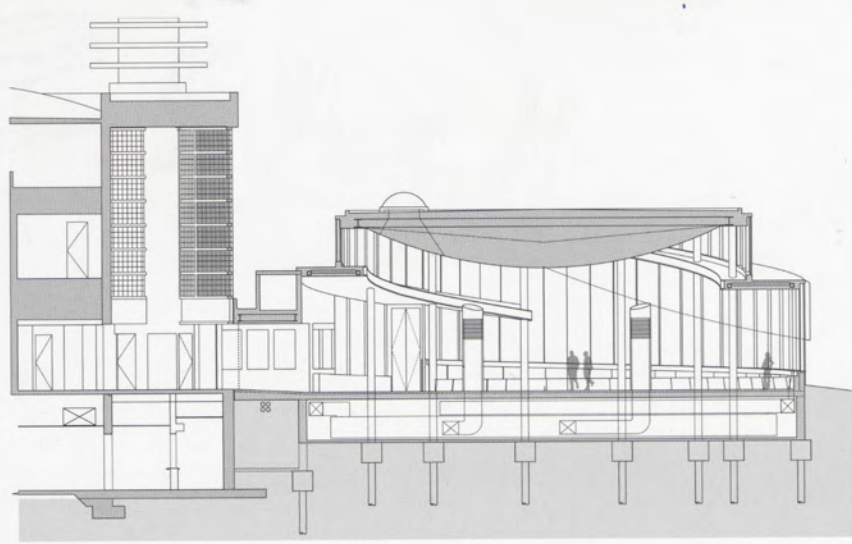
생동감 있는 뉴욕 파빌리온의 건축학적 개념과 필립 존슨의 독창적인 아이디어를 바탕으로 증축된 '성운의 방'은 유리벽으로 된 전시관이다. 이곳에서는 지구를 상징하는 공원의 조형물인 유네스피어, 퀸즈 전망대, 주변 경관을 한눈에 감상할 수 있다.

벽의 나선형 경사는 곡선의 움직임을 부각시켜 공간을 더욱 생동감 있게 만든다. 완전한 원형공간으로 보이도록 약 5,000개의 독특한 유리판을 디지털 설계 방식을 활용하여 조립했다. 각각의 유리판을 별개가 아닌 하나의 유리로 여기고, 수직의 접합부에 철제 안정판을 설치해 벽면을 만들었다. 특히, 건물의 곡선 부분에서 흔히 볼 수 없는 안정판을 사용하여 하중을 훨씬 덜 받게 하고, 난방 비용을 절감할 수 있게 했다. 안정판, 저농도 도료, 지붕, 가스 단열장치로 건물이 받는 빛의 양을 늘리고, 파손 방지를 위한 합판유리를 사용하는 대신에 실리콘 방수제로 이음새를 다듬는 등 첨단기술을 보다 폭넓게 활용했다.

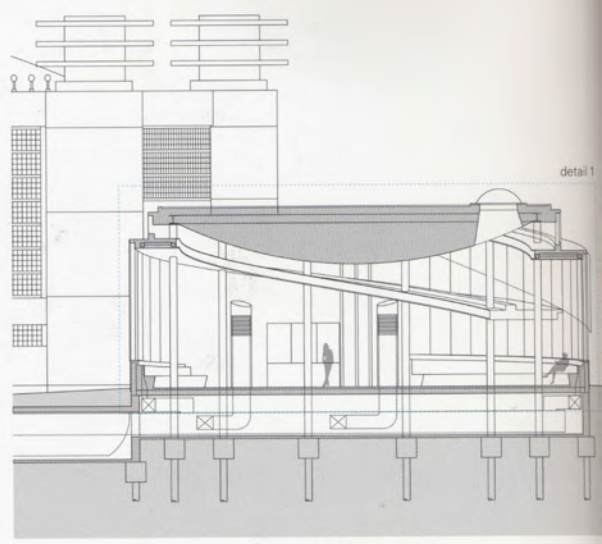
600명을 수용할 수 있는 공간은 뉴욕 시민을 위한 연회나 파티공간으로도 이용된다. 저녁이 되면 유리벽으로 들어오는 노을빛이 멋스럽게 어우러져 많은 민족이 모여 사는 퀸즈 지역만의 축제분위기를 연출한다. 케이플스 제퍼슨 아키텍츠

Project: Queens-Theater-in-the-Park
 Architect: Everardo Agosto Jefferson, Sara Elizabeth Caples
 Construction manager: Hill International
 Structural engineer: GACE
 Mechanical engineer: Northstar
 Electrical engineer: Interphase
 Lighting engineer: L'Observatoire, Berg Howland Associates
 Joint Venture Architect: John M.Y. Lee, Michael Timchula
 Landscape architect: EKLA
 General contractor: C & L Contracting
 Client: Queens Theater-in-the-park, NYC Department of Cultural Affairs, NYC
 Department of Design & Construction
 Location: New York, USA
 Site area: 1,077.68m²
 Materials: plaster, marble, copper
 Completion: 2010.8
 Photograph: 
 Courtesy of the architect (©Nic Lehoux) - p.124, p.128, p.129, p.130
 Courtesy of the architect (©Julian Oliva) - p.127

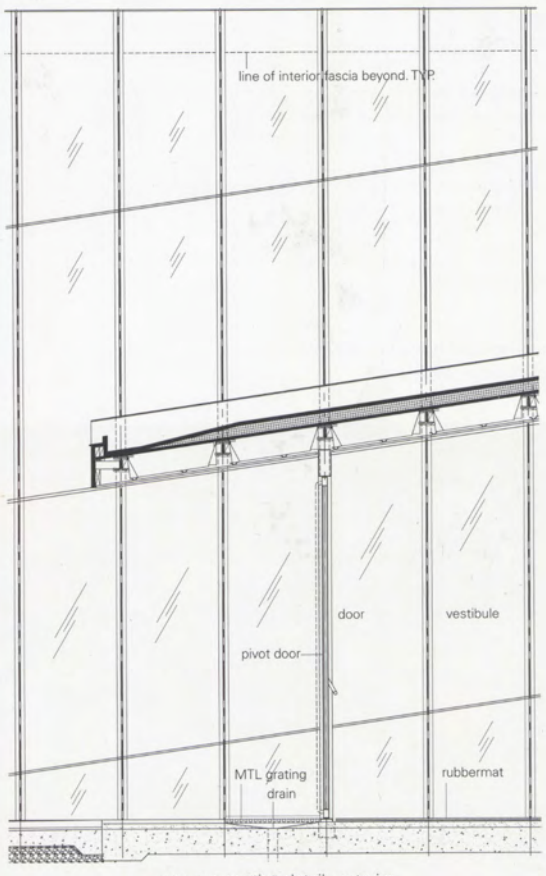




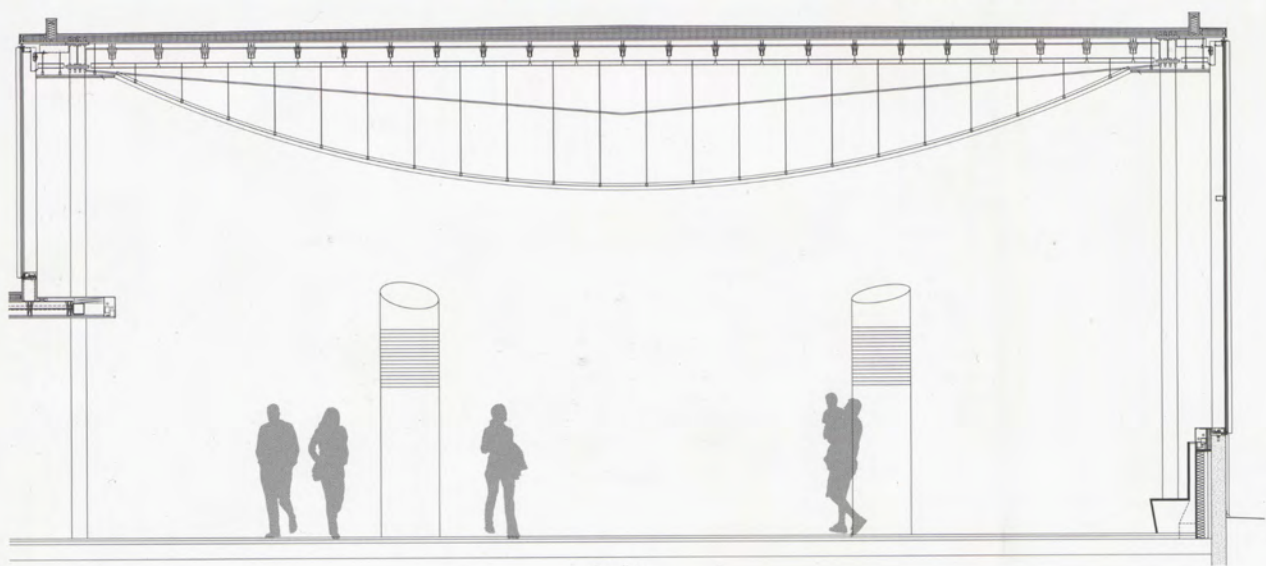
section A-A'



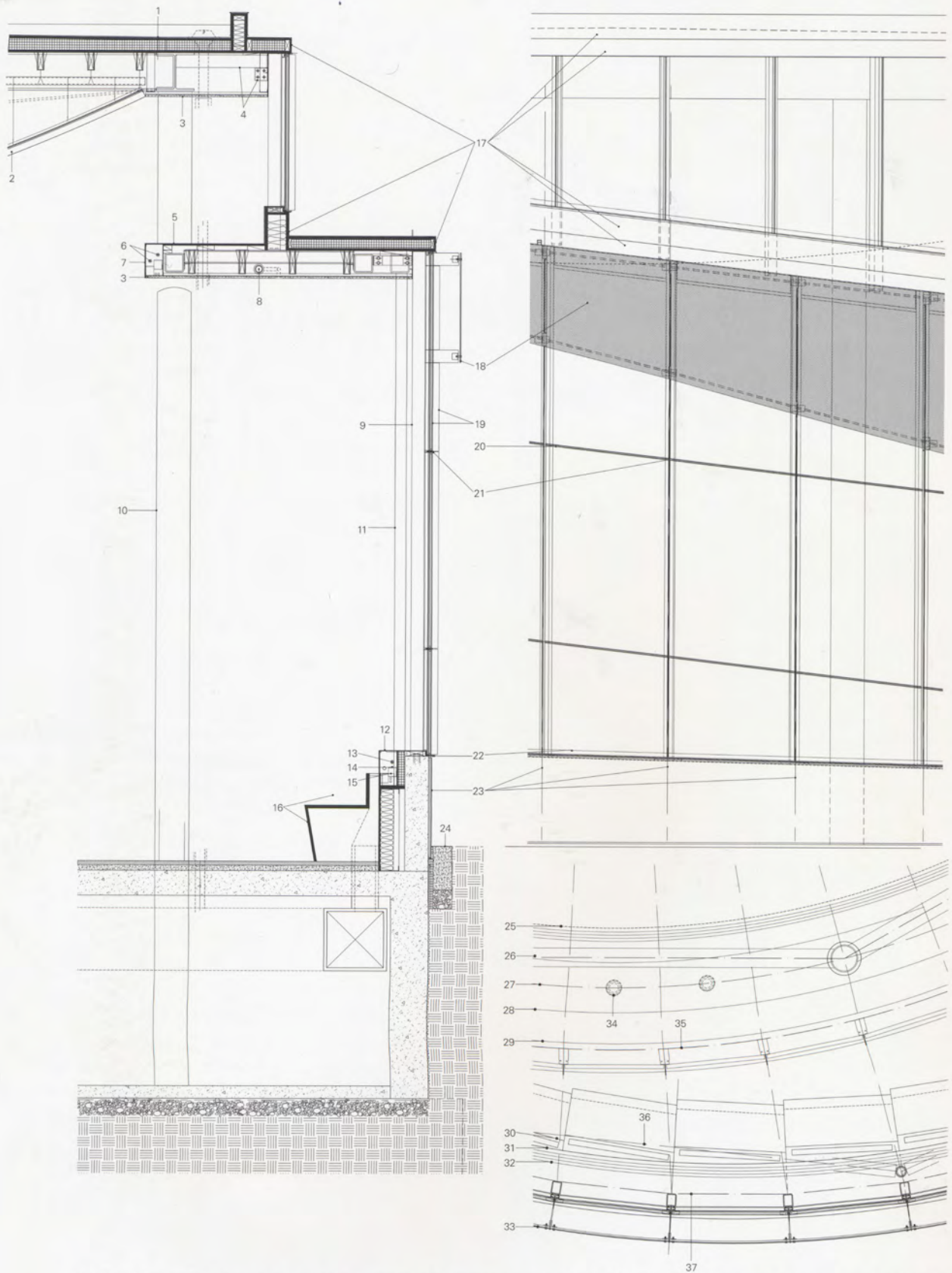
section B-B'



entrance section detail_exterior



detail 1



1. roof: TZAC copper flat seam roofing 2. main ceiling: acoustic plaster over sound insulation attached to ganged gypsum inverted dome framing system. vertical support @2'-0" O.C. MIN. 3. pigmented PL skim coat over 5/8" GWB at soffit under main roof structure 4. TS 4x4 welded to beams at bottom of flange, TYP 5. sheet metal continues interior of spiral room 6. cold cathode tube, TYP. Behind acrylic cover 7. acrylic cover, curved, TYP 8. sprinkler pipe, TYP. 9. 3"x4" PTD. steel mullion tube supporting aluminum glazing system. prefinished 10. 8" NOM. diameter fire-trol column 11. 3" DIA. steel pipe column at

spiral grid 12. aluminum window sill, curved 13. cold cathode tube W/clear acrylic cover curved. 14. CC lamp holder, TYP 15. CC ballast at every 2 lamp holder, TYP 16. modularized wood bench. supply air diffuser at the back of the bench, TYP 17. TZAC copper flat seam roofing and fascia, TYP 18. metal screen supported by steel mullion 19. curtain wall: double glazing W/PVB laminated glass attached to aluminum. 20. 1/4"x2" aluminum. bar BTWN glass break, TYP. 21. steel plate welded to vertical mullion glass support at mullion 22. curved aluminum sill W/drip edge slope 1" rise per bay 23. 1" acrylic stucco over 8" cast-in-

place concrete, TYP 24. stucco control joint at spiral mullion polar grid, TYP 25. line of fascia edge @ spiral roof and main roof above R=21'-11" 26. beam grid @ spiral roof & main roof 27. radial grid of main column R=23'-6" 28. line of dome edge @ upper roof above R=24'-2" 29. inner edge of upper mullion sill R=25'-0" 30. 25. modularized plywood bench. supply air diffuser slot at the back of the bench, TYP 31. aluminum. spiral window sill. 3 point curve @ 9" offset from each 3 mullions 7 1/2" offset 32. line of cold cathode tube under sill 33. woven mesh SS. Sunscreen. PTD. steel plate support welded to steel mullion, TYP

entrance & lobby detail