

Site plan  
總平面

Total floor area (gross): 1 487m<sup>2</sup>  
 Total floor area (net): 1 091m<sup>2</sup>  
 Plot size: 5 016 m<sup>2</sup>  
 Greening rate: 0.43  
 Plot rate: 0.24  
 Building density (FAR): 0.30  
 Volume (gross): 5 328m<sup>3</sup>  
 Story: 1  
 Cost (incl. equipment): €870 000

總樓面面積 (毛): 1 487平方米  
 總樓面面積 (淨): 1 091平方米  
 地塊面積: 5 016平方米  
 綠化率: 0.43  
 容積率: 0.24  
 建築密度: 0.30  
 體量 (毛): 5 328立方米  
 樓層: 1  
 費用 (包括設備): 870 000歐元

## Painters' Cooperative Graz - Reorganization and Extension

### 油漆工協作的格拉茨——重建與擴建

**Design company:** Bernhard Hafner Architect

設計單位: Bernhard Hafner設計公司

The existing production facility of the Painters' Cooperative Graz, used for the production and sales of paints and accessories was technologically outdated in need of reconstruction. No investments had been made for decades. Finished products and materials were transported across an open courtyard between two existing buildings. One of them, a truck garage of prefabricated construction, was adapted to house new production equipment including three silos housed in an addition penetrating the roof. The other, three contiguously built hall type structures dating from different periods, were emptied and renovated for sales and storage. The front construction field was torn down and replaced by a frame-structure into which a glass prism was so placed as to show that another design solution for it is possible. It rises above the roof of the sales building, features a terrace in front and serves as frontispiece at the entry to the lot. A new tract replaces a minor addition existing at the rear. The second, quite different attention getter is the silo housing on the opposite side. All buildings have facades with air circulating between panelling and insulation. Panelling consists of enamelled, point-supported plate glass separated by small gaps for air circulation. Existing coupled windows of the production building integrate into it. There, enamel coating does not exist. Insulated glass 6/16/6 mm of sizes of 2-3 by 1 m, point supported every meter by special stainless steel fittings, is used. Except for small plates holding glass in place, no structural support is visible from the outside. Inside, wing rods of either compression or tension loads are used instead of profile steel. A 13 m high, suspended, point-supported glass-curtain through which the silos may be seen, is technologically the most demanding part of construction. It was jointly developed by the architect and the engineer and proved to be both the most cost-efficient and attractive solution. The glass prism features similar glazing backed by load-bearing circular tubes for statics. The new painters' production facility attracts without bold advertising. Lighting enhances the view in the evening and at nights.

油漆工協作的格拉茨現有的生產設施，即用于塗料生產與銷售的設施和附件，其技術已經過時，需要更換。已經有幾十年沒有人對此進行投資了。成品和材料在兩座現有的建築之間的開放庭院傳送。該項目涉及兩個部分：銷售區和生產區。一個預制結構的貨車庫適合于新的設備生產。設備包括設置穿過屋頂新建部分的三個筒倉。另外，三個連續建造的廳類結構可以追溯到不同的時期，現在將它們改建成銷售區和儲藏區。前部建造區被拆除，在原地建造了一個框架結構，並在這個結構裏面放上一個玻璃棱柱，從而展示了另一種設計方法。它從銷售區建築的屋頂升起，這樣從前面看它可以作為一個平臺，成為這個地塊的正門。一塊新地塊取代了原有建築后面的一個小的建結構。另一個吸引我們注意力的不同之處是對面的筒倉。所有的建築都有供鑲板和絕緣板之間空氣流通的立面。鑲板由彩飾的，靠點支撐的玻璃構成。玻璃板之間有小的縫隙，可用于空氣流通。生產建築原有的連結窗與其結合為一個整體。沒有彩飾塗的6/16/6毫米的絕緣玻璃每隔一米都有一點被特制的不銹鋼裝置支撐。除了固定玻璃的小板之外，我們從外部看不到任何支撐物。內部使用拉力或壓力的翼杆而不是型鋼。通過一個13米高，懸着的玻璃幕牆可以看到筒倉。這在技術上是整個建築要求最高的一部分。這個建築是建築和工程師共同努力的結果，整個建築被證明是最節省的，而且采用了最有吸引力的方

法。從靜力學的角度上看，玻璃棱柱具有支撐荷載的圓形管的特征。新的油漆工生產設施沒有經過大膽的廣告宣傳却能吸引人。燈光改善了夜景。









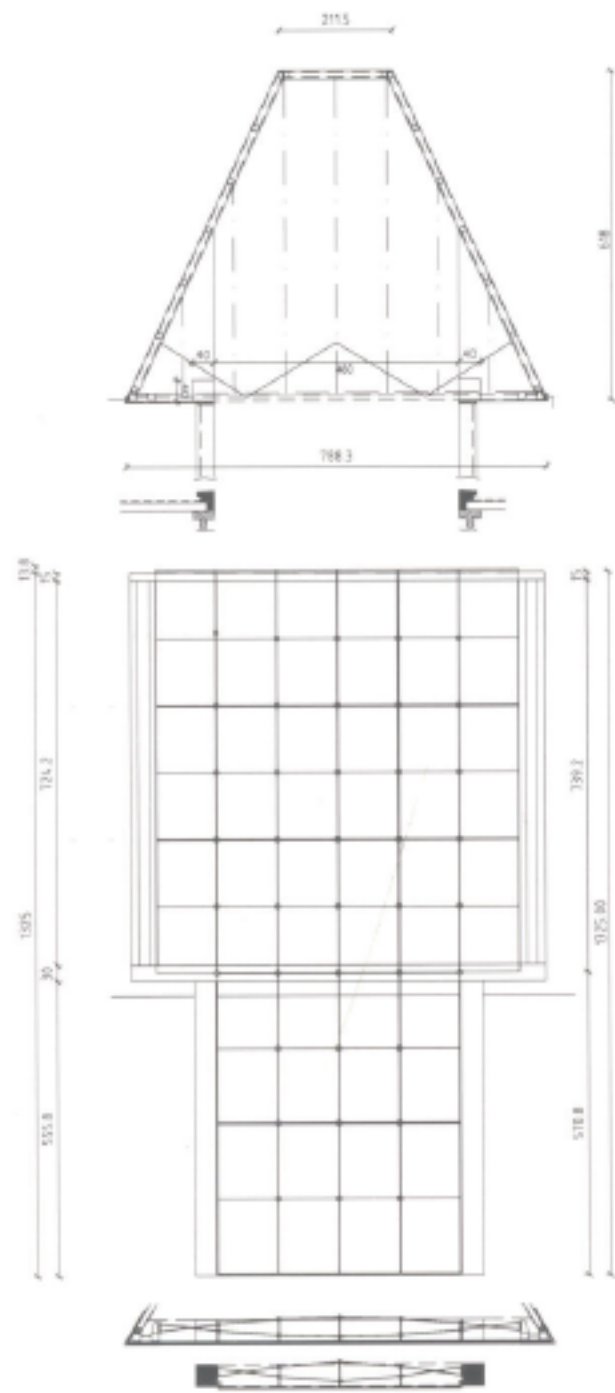




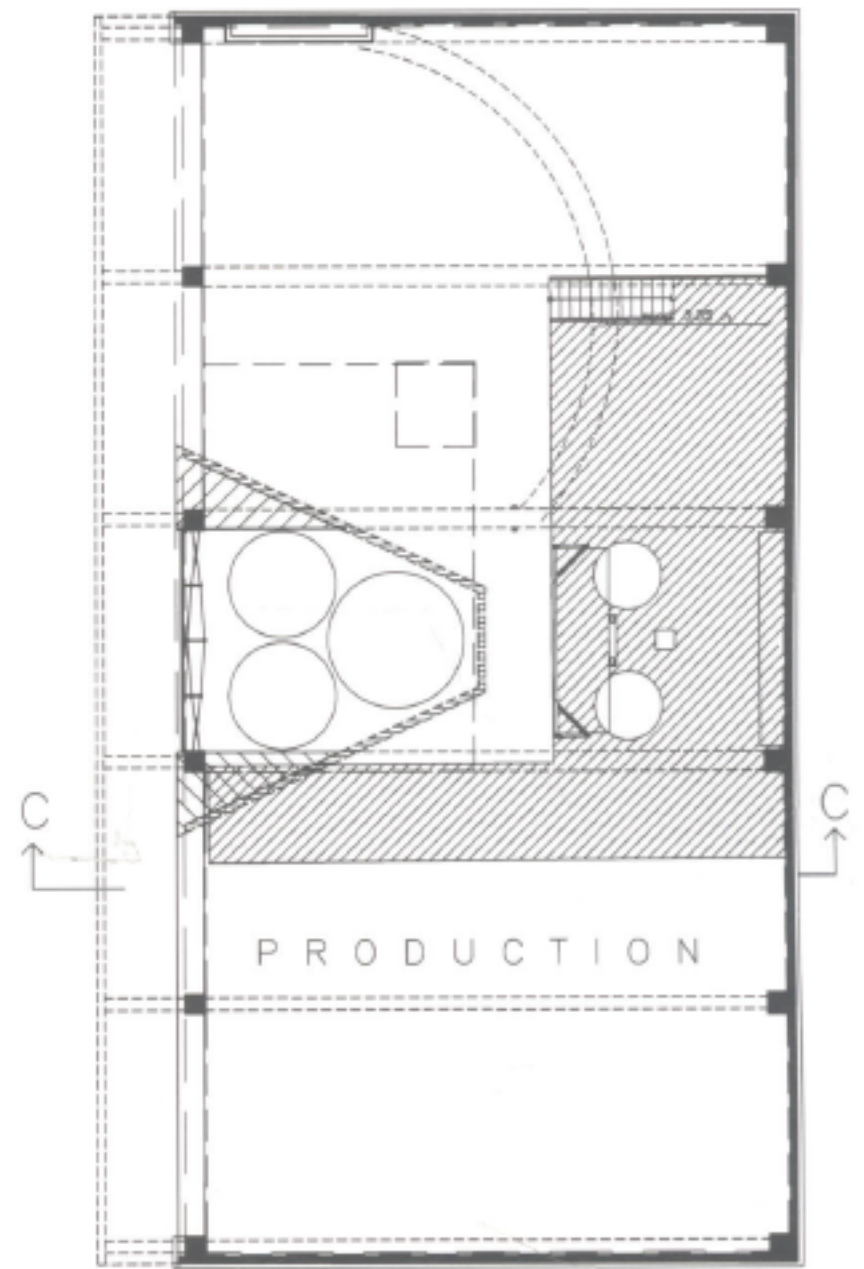




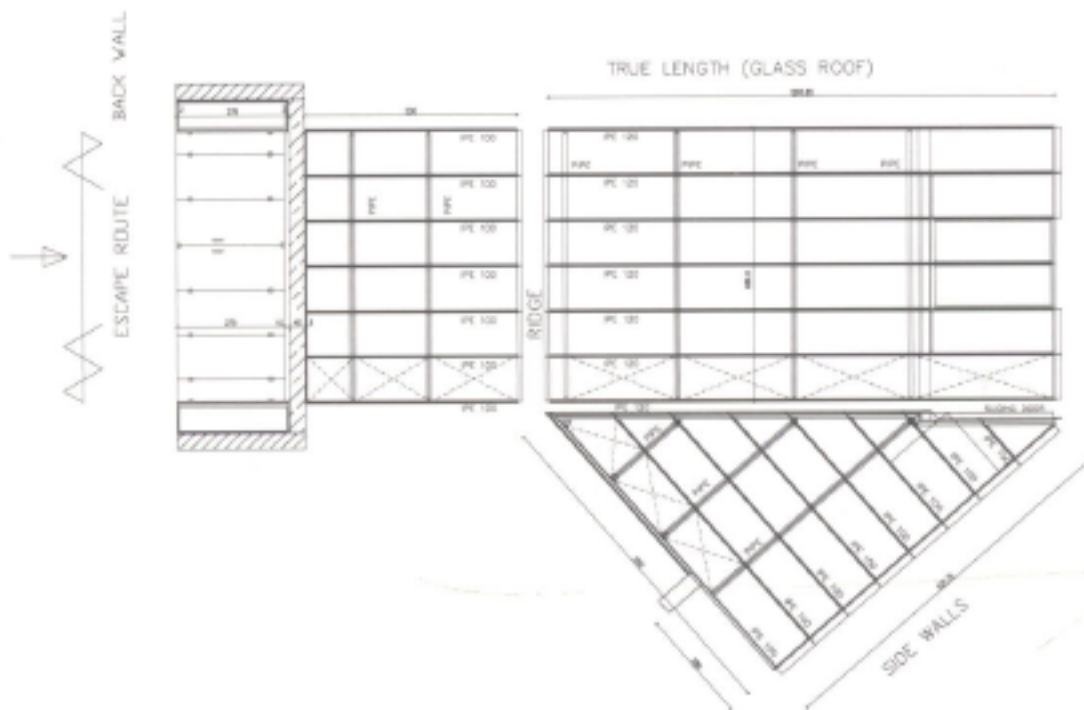




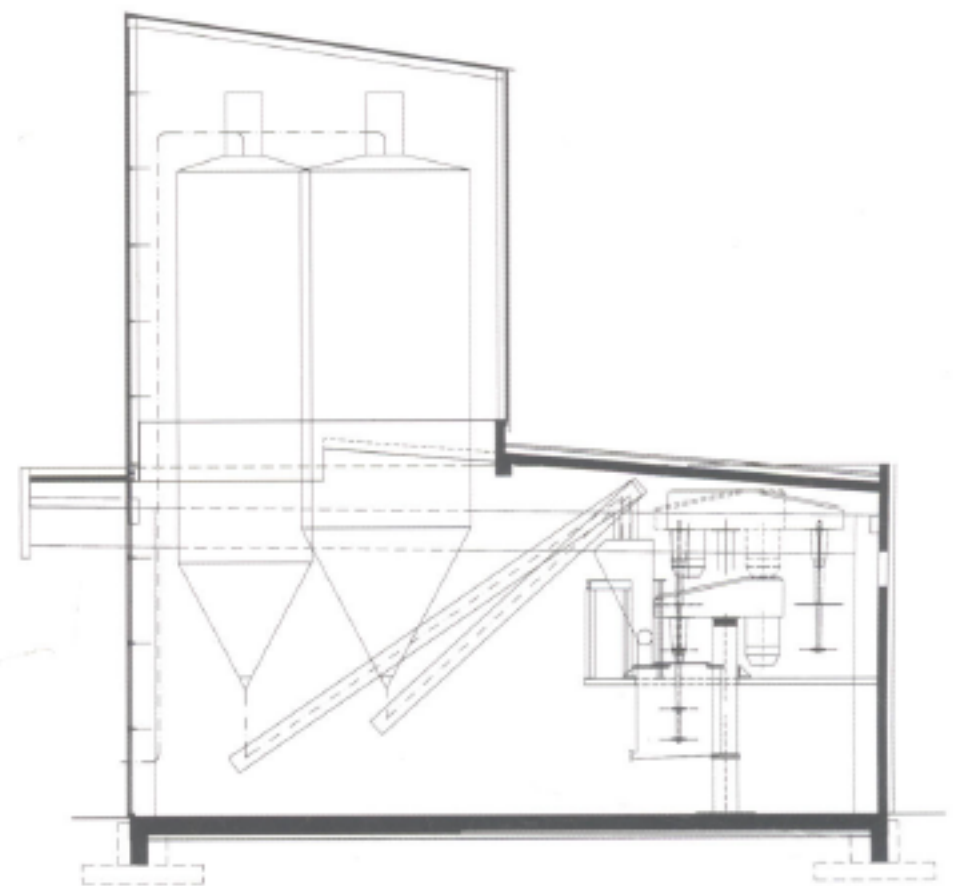
Tension / compression facade construction  
外壓力分析圖



Production plan  
廠房平面圖



Roof plan  
屋頂平面圖

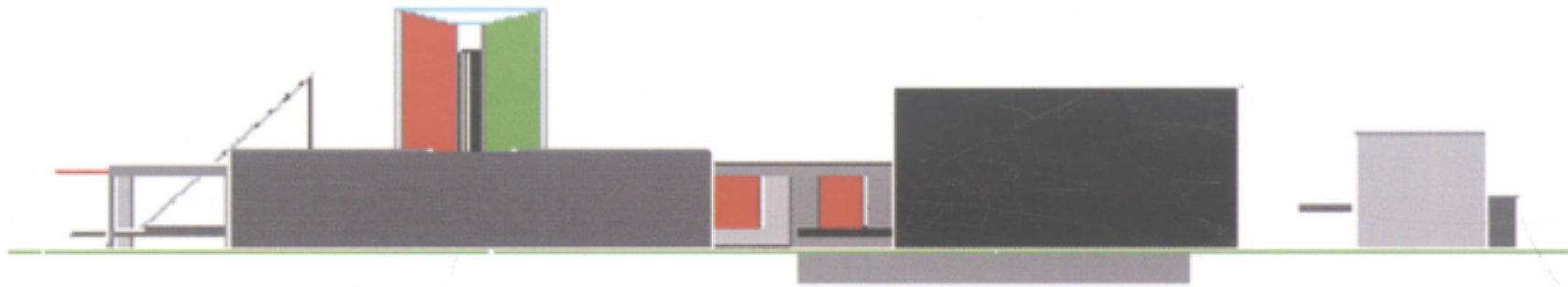


Section  
剖面圖

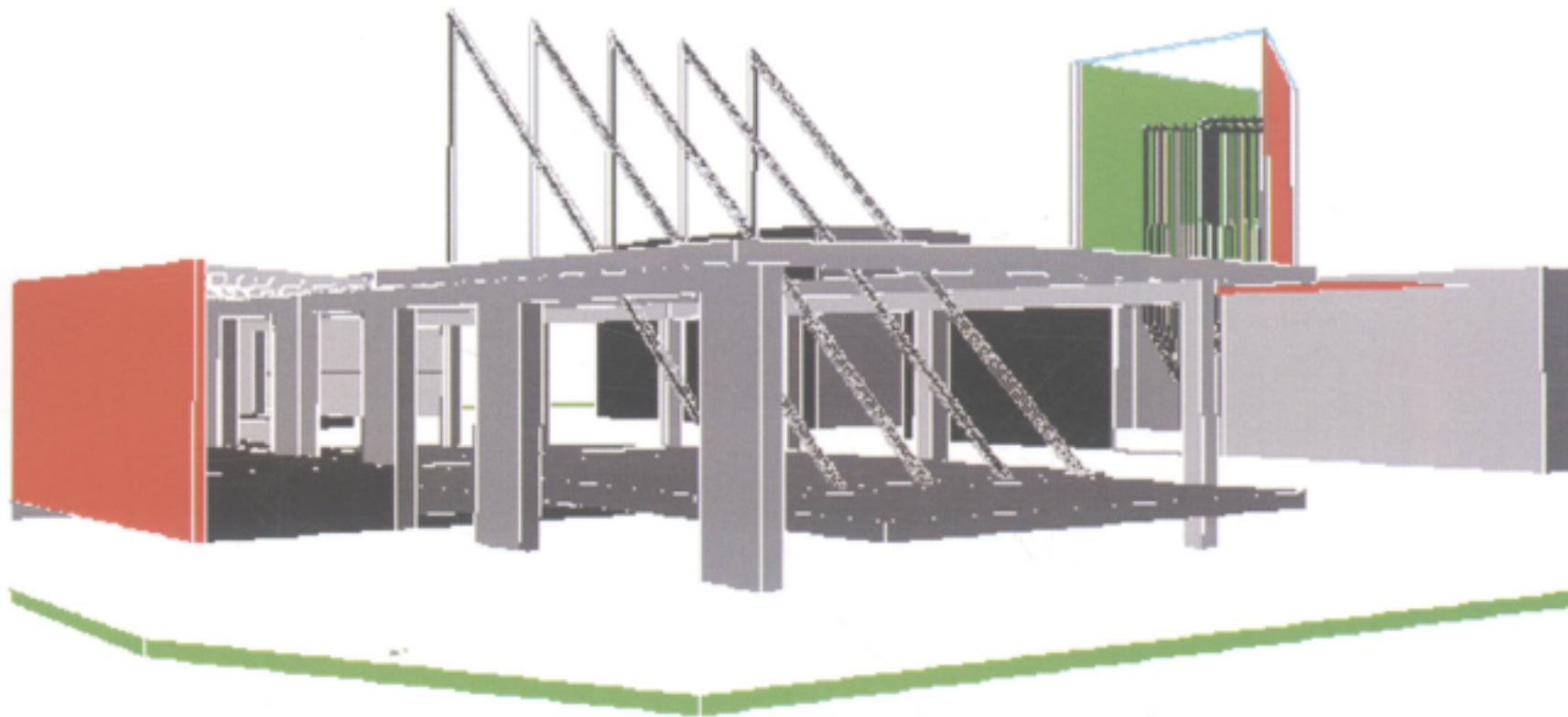




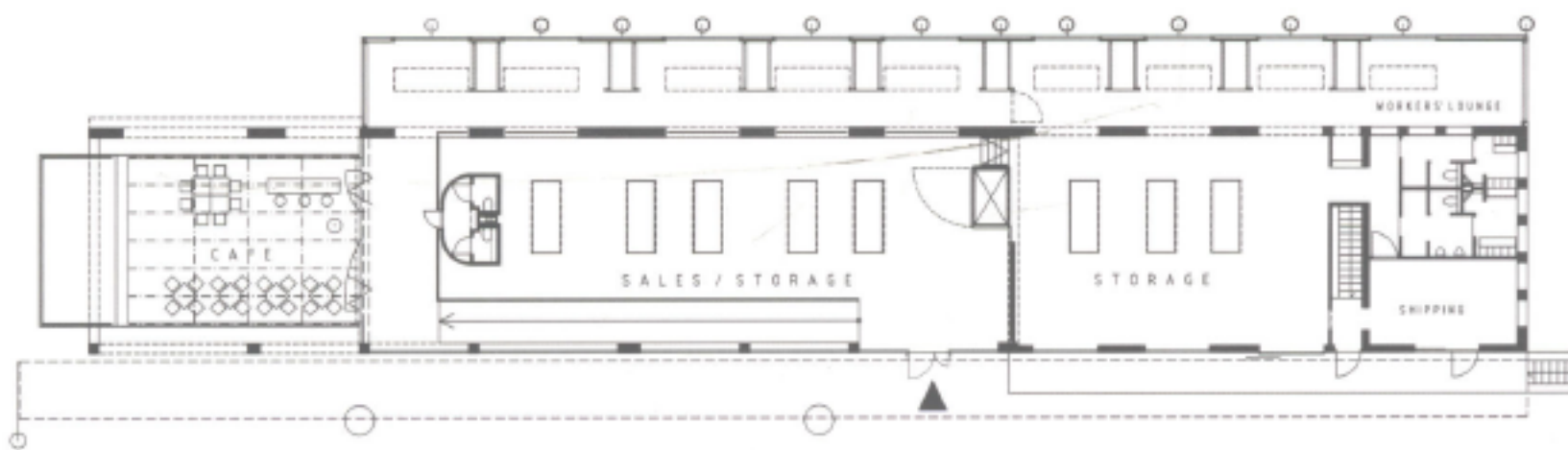
View from west  
西側視角



View from east  
東側視角

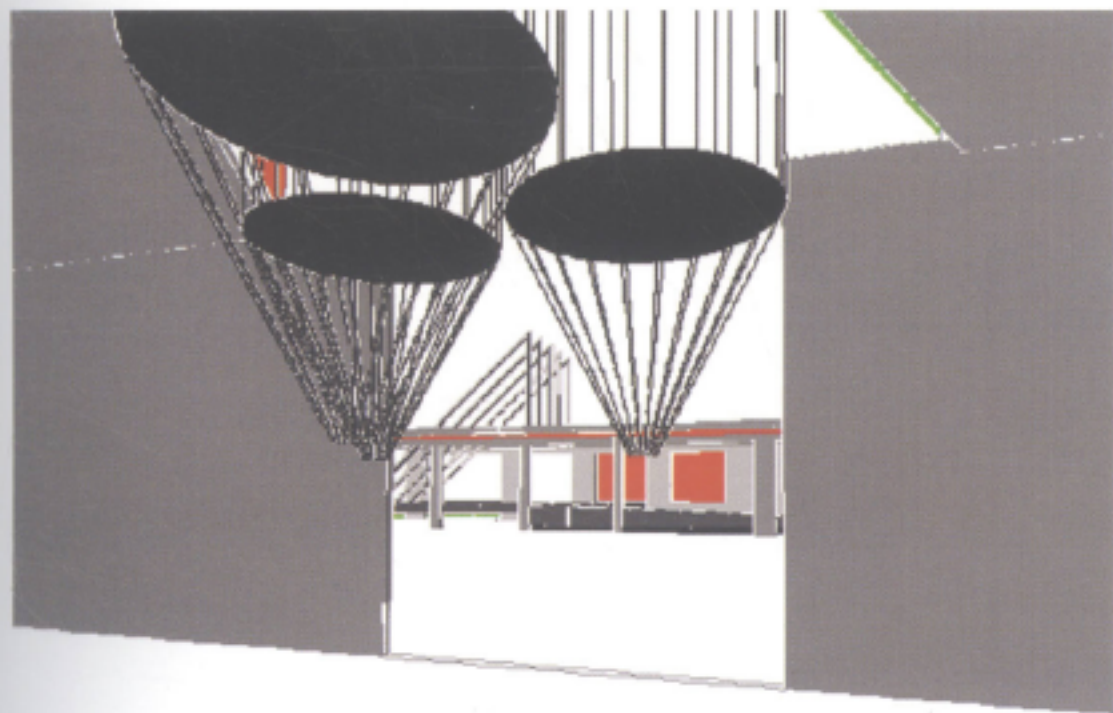


View from southwest  
西南側視角

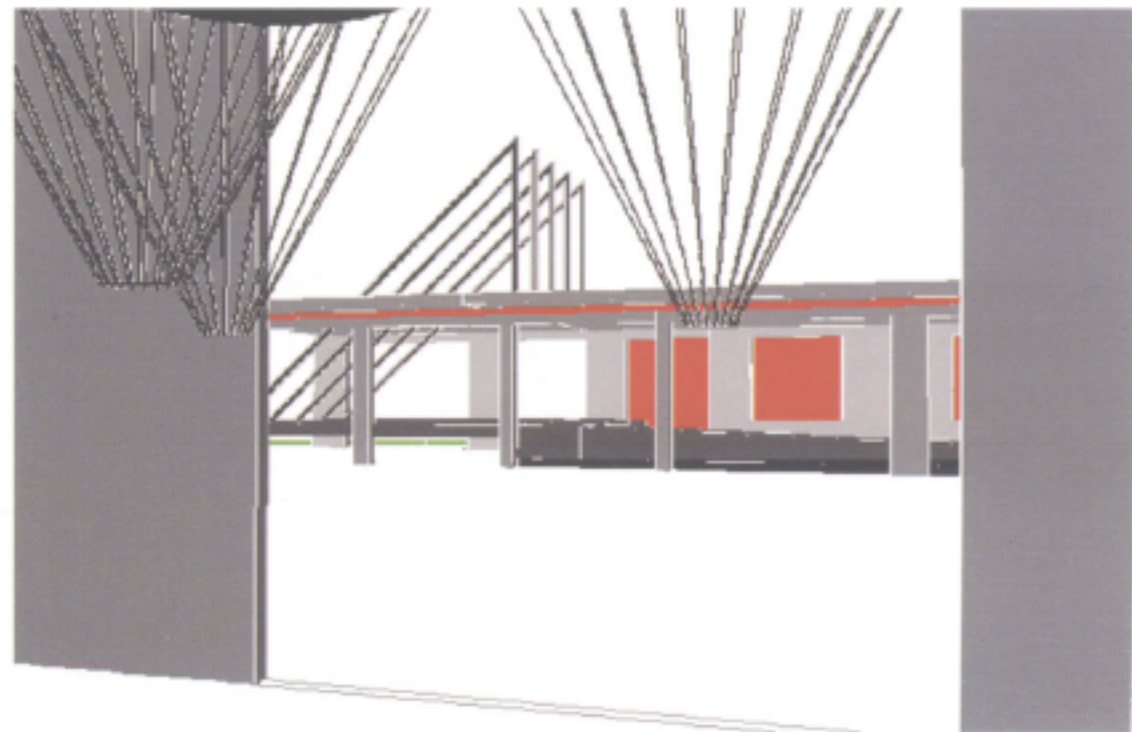


Ground floor sales tract  
底層平面圖





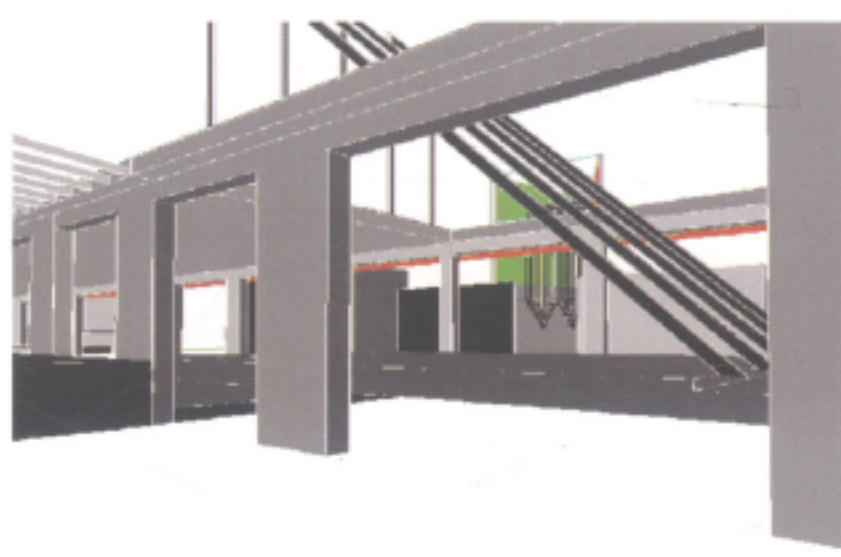
View from production  
廠房視角



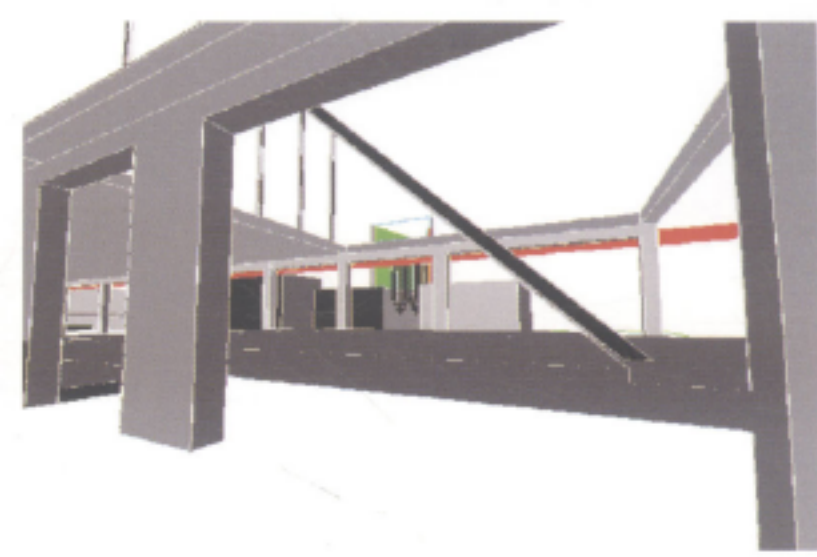
View from production  
廠房視角



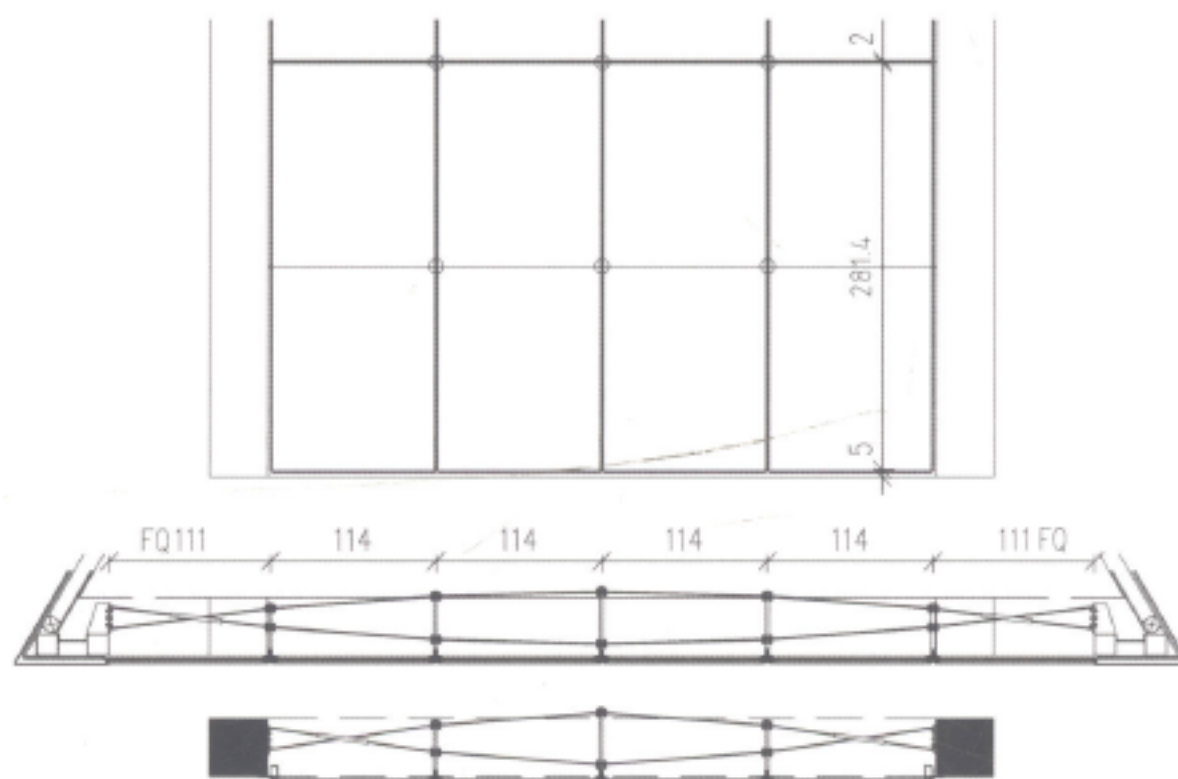
View from southwest  
西南側視角



View from outside of cafe  
咖啡廳外部視角



View from the cafe  
咖啡廳視角



Tension/compression facade construction  
外立面壓力分析結構流線圖