

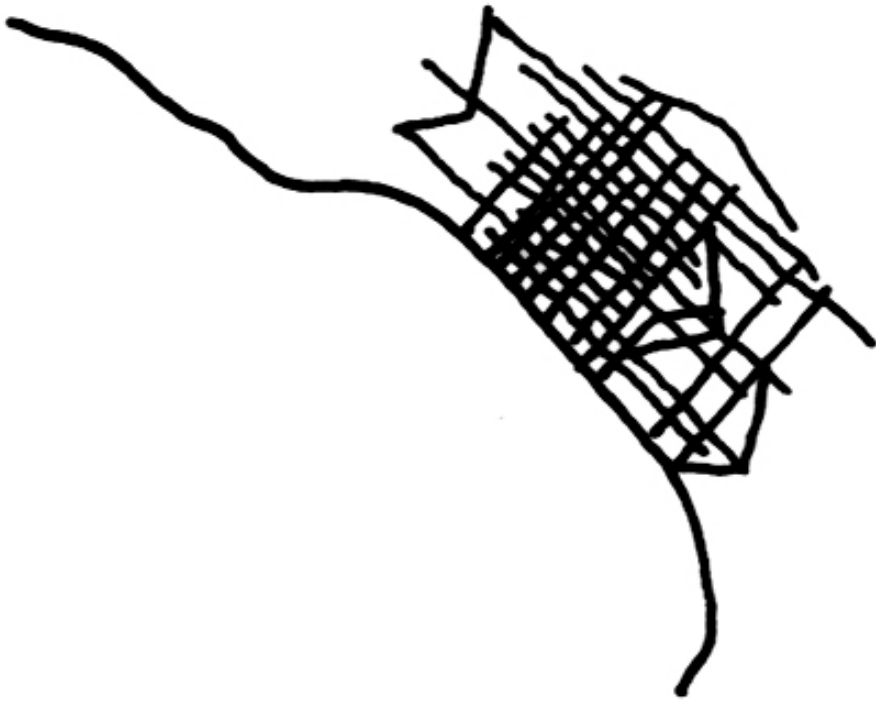
ACHILLION COASTAL PLATFORM
Thessaloniki, Greece
1997



» *image: LIN*

» *TAC-01-ESS-LIN-The sea front of Thermaikos*

ACHILLION COASTAL PLATFORM
Thessaloniki, Greece
1997



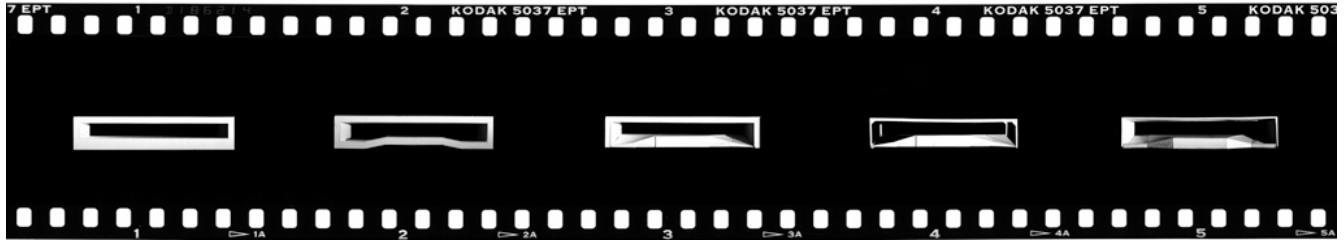
» *image: LIN*

» *TAC-02-ESS-LIN-Urban morphology of the sea front*

ACHILLION COASTAL PLATFORM

Thessaloniki, Greece

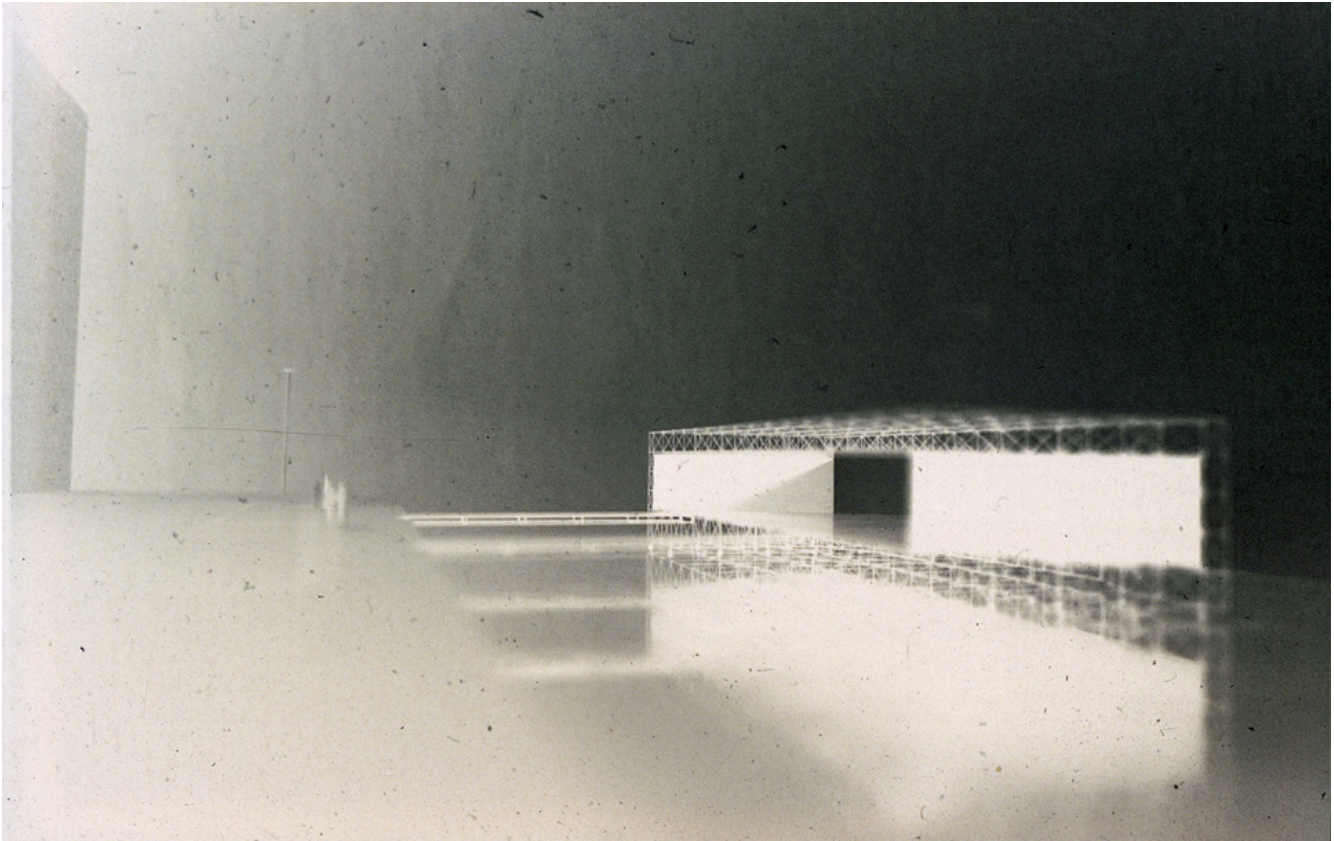
1997



» *image: LIN*

» *TAC-03-ESS-LIN-Sequential framing of the visual plane*

ACHILLION COASTAL PLATFORM
Thessaloniki, Greece
1997



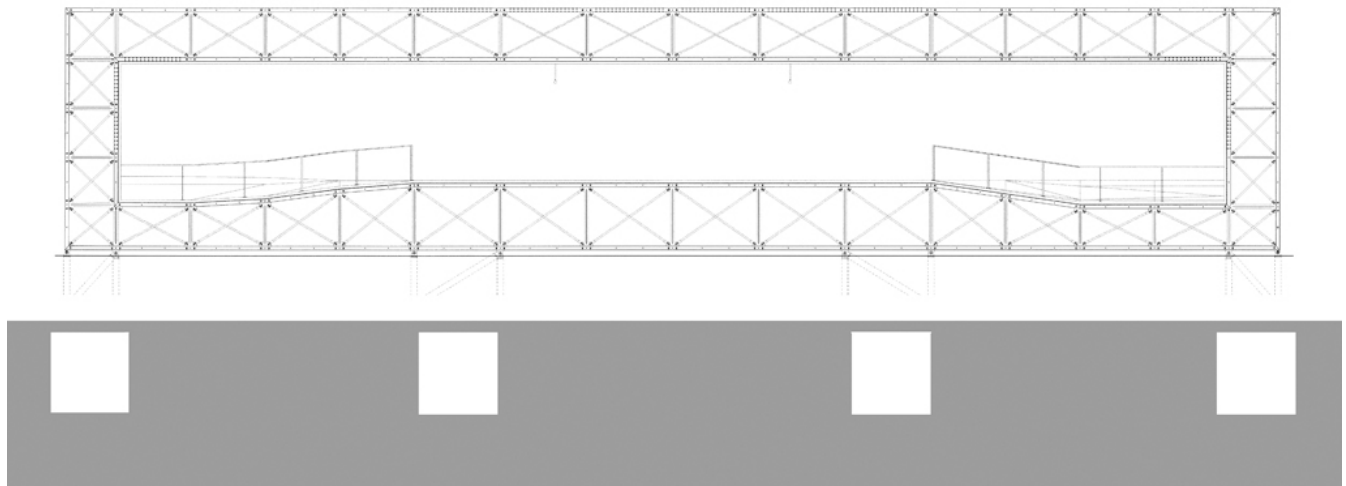
» *image: LIN*

» *TAC-04-ESS-LIN-Detached surface of archillion from the bay*

ACHILLION COASTAL PLATFORM

Thessaloniki, Greece

1997



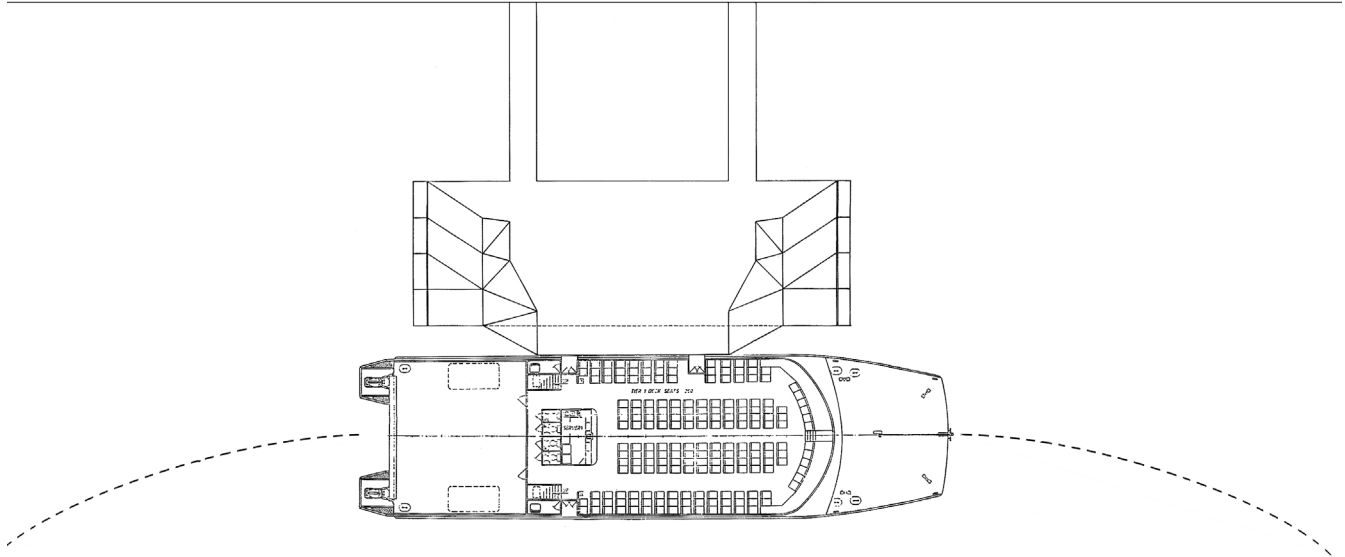
» *image: LIN*

» *TAC-05-ESS-LIN-Cross section showing the floaters*

ACHILLION COASTAL PLATFORM

Thessaloniki, Greece

1997



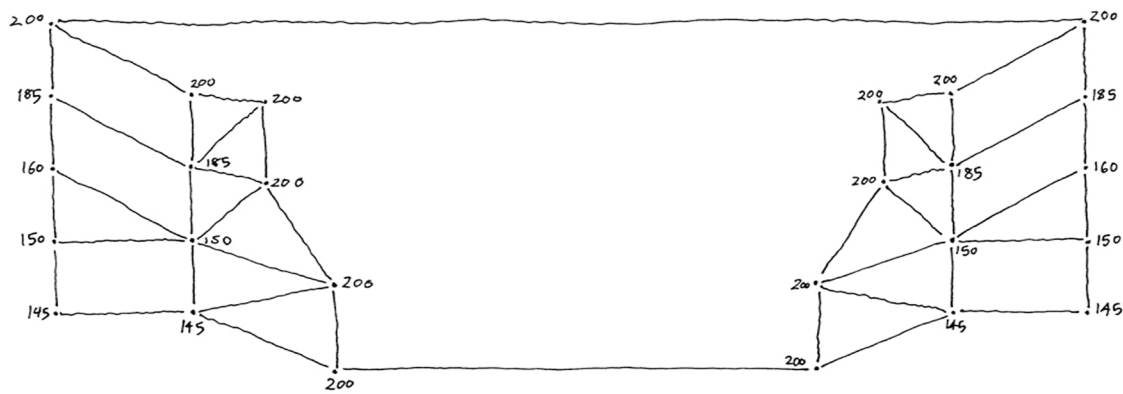
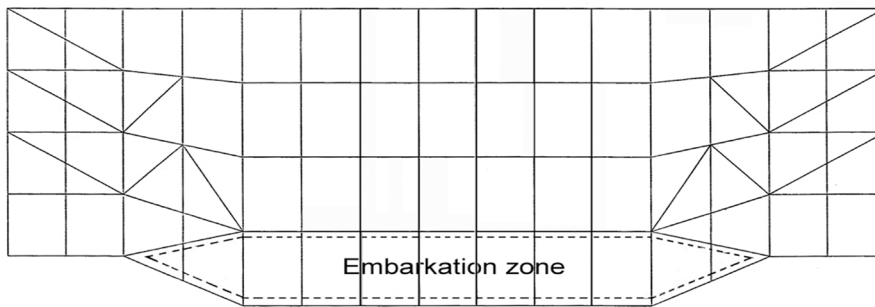
» *image: LIN*

» *TAC-06-ESS-LIN-Plan showing the alignment of the boat and the platform*

ACHILLION COASTAL PLATFORM

Thessaloniki, Greece

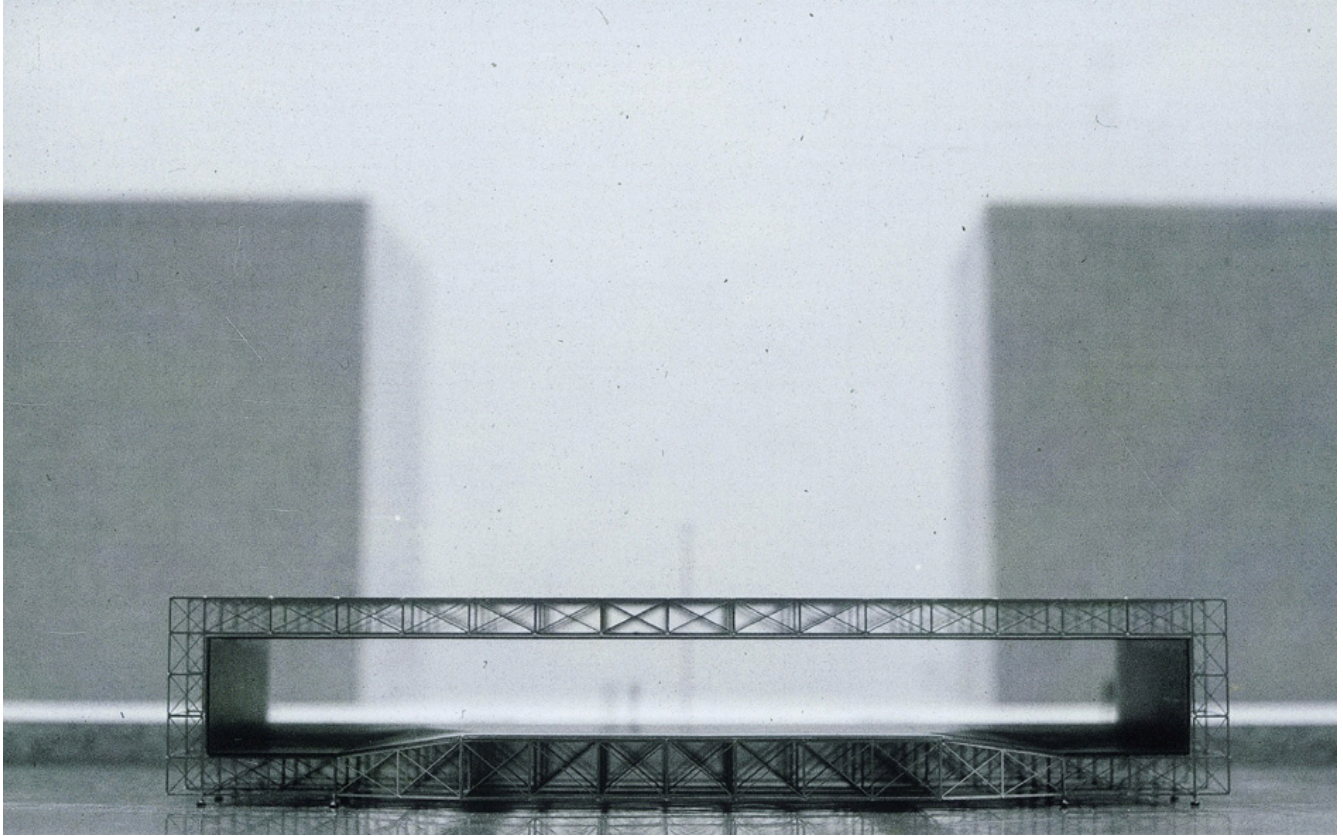
1997



» image: LIN

» TAC-07-ESS-LIN-Detail showing surface division and embarkation

ACHILLION COASTAL PLATFORM
Thessaloniki, Greece
1997



» *image: LIN*

» *TAC-08-ESS-LIN-The structural frame of archillion*

ACHILLION COASTAL PLATFORM
Thessaloniki, Greece
1997



» *image: LIN*

» *TAC-09-ESS-LIN-Spatial frame inside archillion*

ACHILLION COASTAL PLATFORM

Thessaloniki, Greece

1997



» image: LIN

» TAC-10-ESS-LIN-View of proposed location of Archillion

ACHILLION COASTAL PLATFORM

Thessaloniki, Greece

1997

HISTORY

The sea is, for Thessaloniki, a geographical, historical and psychological determinant, a vital and inseparable part of the city's very existence. The Achillion Coastal Platform is one part of an initiative to "provoke spatial episodes on the coast" on the occasion of Thessaloniki's designation as the "European Capital of Culture" in 1997. The city of Thessaloniki has developed as a long strip around the gulf of Thermaikos. The "Spatial Episodes" project consists of a series of playful points along this strip that at the same time function as stations for a public transport system of water vessels to replace the tram system which circulated along the quay at the turn of the century. ACHILLION is one of the eight vaporetto stations along the seafront will link the northwestern port and the airport, located southeast of the city, via passenger ferry.

RELATIONSHIP BETWEEN SEA AND CITY

Thessaloniki is situated around the gulf in the manner of an amphitheatre. The urban fabric of the town center is formed by a grid of axes that run parallel and perpendicular to the gulf, the sea always remaining present in a succession of streets that perspectively "end" in the horizontal surface of the water. The sea and the city interpenetrate and confront each other with the most minimal zone of transition.

FRAME

The interior space of the ACHILLION station has a surface area of 300 m² and possesses a ceiling height of 3 meters. Its roof is perfectly horizontal. The floor surface is flat at its centre and contorts at its edges. The topography of the floor surface contrasts with the perfect horizontality of the roof and constitutes an extension of the terrestrial surface: the flat sea horizon and the shifting topography of the seafloor meet in the same container. A simple wireframe structure wraps around the frame and holds it suspended above the sea.

LIMITS

The embarkation platform, its roof, and its façades form a continuous frame. Inside the structure and exposed to the sea, the visitor is confronted with only isolated views: the sea on one side, and the city on the other. The "suspended site" mimics the nearly absent transition between the city streets and the sea.

ACHILLION COASTAL PLATFORM

Thessaloniki, Greece

1997

FLOATING SYSTEM

The ACHILLION station is not anchored in the bay, but is supported by a system of floaters. The horizontal anchoring is achieved with two foot-bridges and a system of bracing cables. A simple submarine and pneumatic system prevents an accumulation of debris on the water's surface that would be caused by visible floaters,

A corresponding vessel is held under pressure by an electrically-powered air compressor. The size of the vessel allows for the necessary air supply to the pontoons even in the case of a temporary malfunction.

The pontoons are partially filled with water; the level regulated by a simple pneumatic sensor and the aforementioned vessel. As the air within the vessel is compressed and under high pressure, only a short time is needed to fill the pontoons with low-pressure air. A minimum of three pontoons guarantees the structure's stable horizontal position even in the case of an unevenly-distributed weight load.

BOAT BERTING

The eight constructed piers and pavilions are not just eight literal points or locations along the seafront – they are eight stops towards the endeavour to establish urban-maritime communication in the bay of Thessaloniki.

Thus, these pavilions are designed to have multiple functions in the everyday life of the city. The project is intended as an opportunity for eight architects to engage in a creative and combined effort along one continuous route.

STRUCTURE OF THE PLATFORM

The platform has a surface area of 340 m². Its central area is perfectly flat and remains at the level of the quay and of the boat doors. The two lateral extremities decline successively, bringing the surface closer to the level of the sea. The roof covers the platform, apart from the embarkation zone. The shuttle is a 37 m long catamaran-style ferry with a 300-person capacity. The Berthing follows the NW-SE journey, parallel to the quay, utilising an electromagnetic mooring system. The berthing and embarkation zone has a length of 13.5 m with a roof setback of 2 meters.

CONSTRUCTION

The platform is constituted by a two-dimensional frame wrapped in a supporting structure. The frame is composed of the floor, the roof and the two lateral faces. The surfaces are made of beehive-structured composite panels; the supporting structure is constituted of 5 arches assembled to form a casing. The arches are composed of flat aluminum profiles of AlMg5 for the base structure and AlMg4,5Mu aluminium for the roof structure. The structure uses cathodic protection to avoid corrosion.

The outer skin folds inward to the structure and is wrapped within, this construction representing a clear dialectic between the wireframe exoskeleton and the two-dimensional character of the frame.

ACHILLION COASTAL PLATFORM

Thessaloniki, Greece

1997

VOID AS A STAGE

Achillion connects with a very public promenade in the city centre, its proximity to sites of leisure and culture providing an enviably rich environment. Therefore, the platform proposes a free zone open to unexpected situations and chance events, where all are players.

Inside is a threshold, an intermediate space opening onto others – towards gathering or towards dissipation, folding into the scenery of the city or being confronted by the sea – a common space not only of reunion, but also of anticipation.

Tension, hesitation and deliberation accompany the passage from one scene to another: a knot between episodes.

URBAN SITUATION

Archillion is located at the junction of a major transverse axis, Aya Sophia Avenue, with the seaside promenade Palia Paralia. The passage between urban density and the sea is as immediate as it is imperceptible: a strip of ordinary road separates the mass of the buildings from the calm surface of the water. The gulf and the city interpenetrate and confront each other in a sharp yet almost absent transition. Archillion Station tries to reveal this close relationship.