- THE DETAIL IS OF THE INNER COURTYARD FACADE

- THE FACADE IS LINED WITH SQUARES OF MARBLE, HELD BY DELICATE METAL ARMATURE SET AMONGST A SIMPLE GRID FRAME THAT REPEATS THEIR SHAPE.

- THIS FACADE FORMS A TRANSLUCENT SCREEN THAT LETS LIGHT INTO THE SURROUNDING OFFICE CORRIDORS WHICH ARE OFFSET FROM THE FACADE TO ALLOW FOR MAINTENANCE.

- THE OFFICES ARE LINED WITH TRANSLUCENT PARTITIONS THAT FILTER NATURAL LIGHT IN THROUGH THE FACADE.

- ENVELOPE:
THE FACADE ACTS AS A SECOND SKIN TO THE BUILDING, HELD OUTSIDE THE EXTERIOR WALL BY FRAMES CANTILEVERED FROM THE FLOOR STRUCTURE. THIS FACADE PROVIDES A LEVEL OF SEPARATION TO THE OUTDOORS AND PLAYS A ROLE IN THE COMFORT OF THE OCCUPANTS. IT PROVIDES NATURAL LIGHT TO FILTER THROUGH THE ENVELOPE AND MINIMISE DIRECT SUNLIGHT AND HEAT GAIN ONTO THE GLAZED FACADE BEHIND.

- VISUAL:
PROVIDING A SEPERATION OF SYSTEMS THROUGH THE LAYERING OF FACADES ACTS AS A COMPOSITIONAL TECHNIQUE OF VISUAL INTEGRATION FOR THE BUILDING. THIS METHOD ALLOWS THE ARCHITECT TO PROVIDE AN EFFECTIVE AND ECONOMICAL WAY OF MAINTAINING THE ENVELOPES OF THE BUILDING THAT IS CONCEALED FROM THE OUTSIDE.

- THE FACADE PROVIDES A VISUAL AESTHETIC TO BOTH THE INTERNAL AND EXTERNAL EXPERIENCE OF THE BUILDING.
- The detail is extracted from the curved northern facade.

- These details showcase the use of a connecting structural element supporting the external horizontal mullions and the double glazed windows weight.

- There are two parts of the horizontal connection. The first is clamped on the 114 dia. circular hollow section, while the second is bolted to a groove located on the back of the horizontal mullion. This creates a pivoting point located in the middle of the horizontal connection that allows for a small rotation tolerance which helps connection to the curved northern facade.

- The whole building through materials and different systems use advanced technology while generally giving an industrial aesthetic. The exposure of the horizontal connection continues and corresponds to these values.
- Screen panel from the southern facade.
- The panel has a series of apertures which automatically respond by opening and closing to vary the amount of internal light that penetrates the facade. The substructural panel is framed by the primary steel structural frame.
- All the facades of the building are generally transparent, so the integration of these mechanical apertures are vital in controlling internal temperature for the occupants.
- One of the main objectives for the building was to enhance the French understanding of Arab culture. The mechanical panel creates a direct reference to this objective by using a pattern common on Arab timber building screens.
- Relates to the envelope system via a mechanical application which is integrated into the detail.
- Physical: integrated with a series of layers in the mechanical aspect. These panels are divided and supported by a structural steel grid and are then encased behind a glass facade. Visual: is enhanced through the exposure of mechanism where the inter-relationship between the various layers of metallic elements are obvious.
- Performance: dynamic integration relates to the mechanised facade that responds to the change in lighting conditions and adjusts apertures to create a cohesive environmental response.
- The Southern facade is where the diaphragm sunscreen is located.

- The detail shows the air conditioning and services vent along the facade.

- The vents move throughout the ceilings of the Institute in a grid format.

- Because of the structure of the building and its use of the tubular steel trusses, the vents needed to cater for the size of the trusses and the services.

- The exposed trusses along the middle of the wall are also used as a support for the motors of the diaphragms.

Scale 1:20
INSTITUT DU MONDE ARABE (IMA)

- COMPETITION BRIEF: ARCHITECTS WERE ASKED TO DEVELOP A PROGRAM TO ENCOURAGE KNOWLEDGE AND UNDERSTANDING IN FRANCE OF THE ARAB WORLD, ITS LANGUAGE CIVILISATION AND DEVELOPMENT. WITH DESIGNATED SQUARE METERAGE ALLOCATED TO PROGRAMMATIC AREAS.
- WON BY JEAN NOUVEL WHO UNLIKE THE OTHER ARCHITECTS CREATED A SMALL FOOT PRINT WITH A TALLER STRUCTURE TO FREE UP THE GROUND PLANE.

- NINE STOREY BUILDING.
- PROGRAM INCLUDES A LIBRARY, MUSEUM, INFOMATION CENTRE, EXHIBITION AREAS, NEWS ROOM, AUDITORIUM, RESTUARANT.
- DIVIDED IN TO TWO SECTIONS 1) CURVED NORTHERN FACADE FOLLOWS THE LA SEINE RIVER 2) SOUTHERN FACADE CONTINUES THE STREET ALIGNMENT MADE BY THE JESSIEU UNIVERSITY.
- THE CLIENT WAS AN EXECUTIVE COMMITTE OF TWELVE, SIX FRENCH, SIX ARAB.
- LAND WAS PROVIDED BY FRANCE AND THE CONSTRUCTION COSTS WERE TO BE FINANCED BY ARABIA.

- 1980 : IMA OFFICIALLY FOUNDED
- 1981 : SITE WAS SELECTED, IMA COMPETITION LAUNCHED AND CONCLUDED.
- 1983 : COMMENCEMENT OF CONSTRUCTION.
- 1986 : CONSTRUCTION FINISHED.
- 1987 : OPENING OF IMA.

- THE SITE IS FLAT AND SITS ONLY FIVE METRES HIGHER THAN THE LA SEINE WATER LEVEL.
- IMA MEASURES SEVENTY SEVEN METRES LONG, THIRTY FIVE METRES WIDE AND THIRTY TWO HIGH.
- TOTAL SITE AREA IS TEN THOUSAND SQUARE METRES AND ONLY SEVEN THOUSAND TWO HUNDRED AND FIFTY SQUARE METRES WERE USED FOR THE GROUND FLOOR AND BASEMENT.

- CLIMATE, PARIS IS AT THE JUNCTION OF MARINE AND CONTINENTAL CLIMATE REGIONS. PREDOMINATELY OVERCAST WITH POLLUTION LEVELS OF UP TO TWENTY TIMES THE NORMAL LIMIT, THEREFORE AIR CONDITIONING AND HEATING FACILITIES WERE A MUST FOR A BUILDING OF THIS HEIGHT.