



Engineering & Solutions for
Spaces & Environments

BEST FAÇADE WORKSHOP

Edimetal

Building and Maintaining

13th November 2007

Dulce Vilaça e Tiago Pinto



Engineering & Solutions



- Certification ISO 9001 since 1996
- Young management team
- Continuous investment in the reinforcement of its technical and industrial capacities
- Edimetal materializes the most innovative architectural ideas

Engineering & Solutions

Edimetal scope of supply

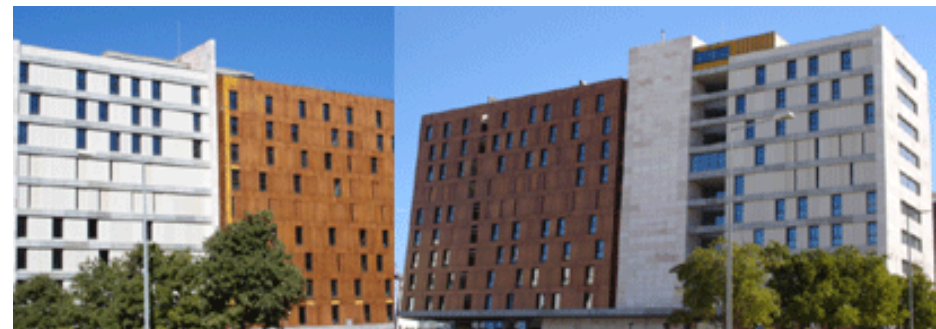
- Windows and Doors
- Ventilated Façades
- Curtain Wall Solutions
- Roof Glazing
- Spider Glass Solutions
- Sun Breakers
- Corporate Image
- Interiors



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Engineering & Solutions

- Edimetal is specialized in the engineering, production, installation and maintenance of special solutions in buildings namely using using special materials such as
 - Aluminium, Steel and Stainless steel,
 - Glass,
 - Wood,
 - Phenolics ,
 - Composite Materials (such as Alucobond or Corian),

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- Renewable Energy Solutions
 - Solar Panels
 - PV Systems

Engineering & Solutions



Our Values

DEVELOP

- Project Development Support on
- Thermal Efficiency consequences
 - Glass Solutions
 - Technical consultancy on best solutions
 - Construction Consequences
 - Life Cycle
 - Application of different materials and its combination



MAKE

- Materialization of solutions
- Responsibility
- Concretization of different project phases
- Certification



CAPACITIES

- High Skills Technicians
- Multidisciplinary teams
- Qualified partners
- High production capacity



Double Skin Façades - Experience

Zen Tower



Sotto Mayor Palace



Atrium Saldanha



Caixa Geral Depósitos



Villa Rica Hotel



FAÇADES

Special Project Façades

Suspended Façade - Sheraton Hotel Porto



Alfrapark



BCP – Tagus Park



Special Solutions - Freeport Leisure Portugal



Revilla Building



FAÇADES

Spider Glass Solutions

Freeport Leisure Portugal



Freeport Leisure Portugal



Numismatics Museum





DSF CONSTRUCTION CHALLENGES

- Project details
- In site challenges
- Alternative solutions

DSF Construction Challenges

Project details

- Exterior glass definition
 - Wind pressure
 - Thermal and solar performance glass
 - Tempered glass / HST
 - Fireman entrance



DSF Construction Challenges

Project details

- Supporting structure for exterior glass
 - Metal structure
 - Aluminium frame

DSF Construction Challenges

Project details



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DSF Construction Challenges

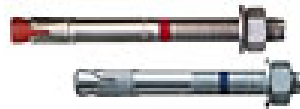
Project details



DSF Construction Challenges

Project details

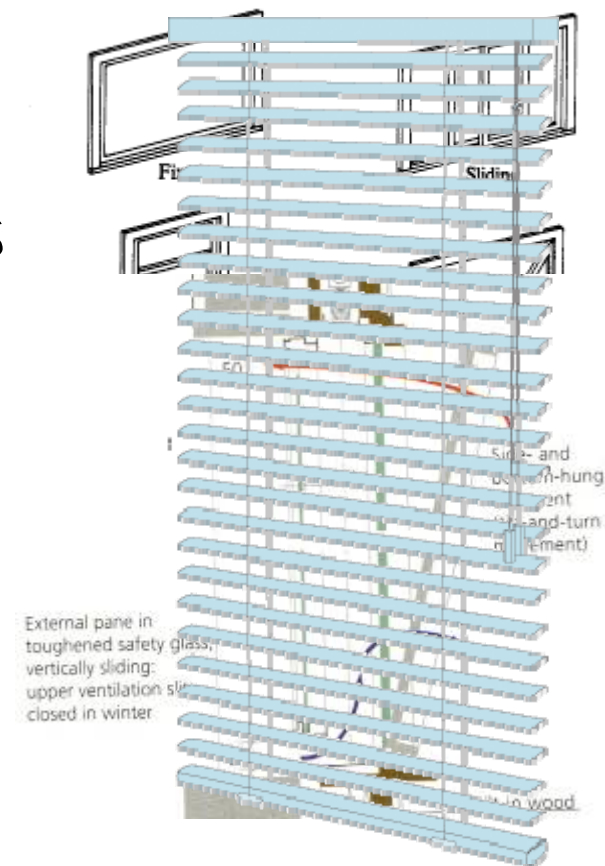
- Fixation needs



DSF Construction Challenges

Project details

- Internal skin definition
 - Opening / external access
 - Air renovation
 - Persian blinds



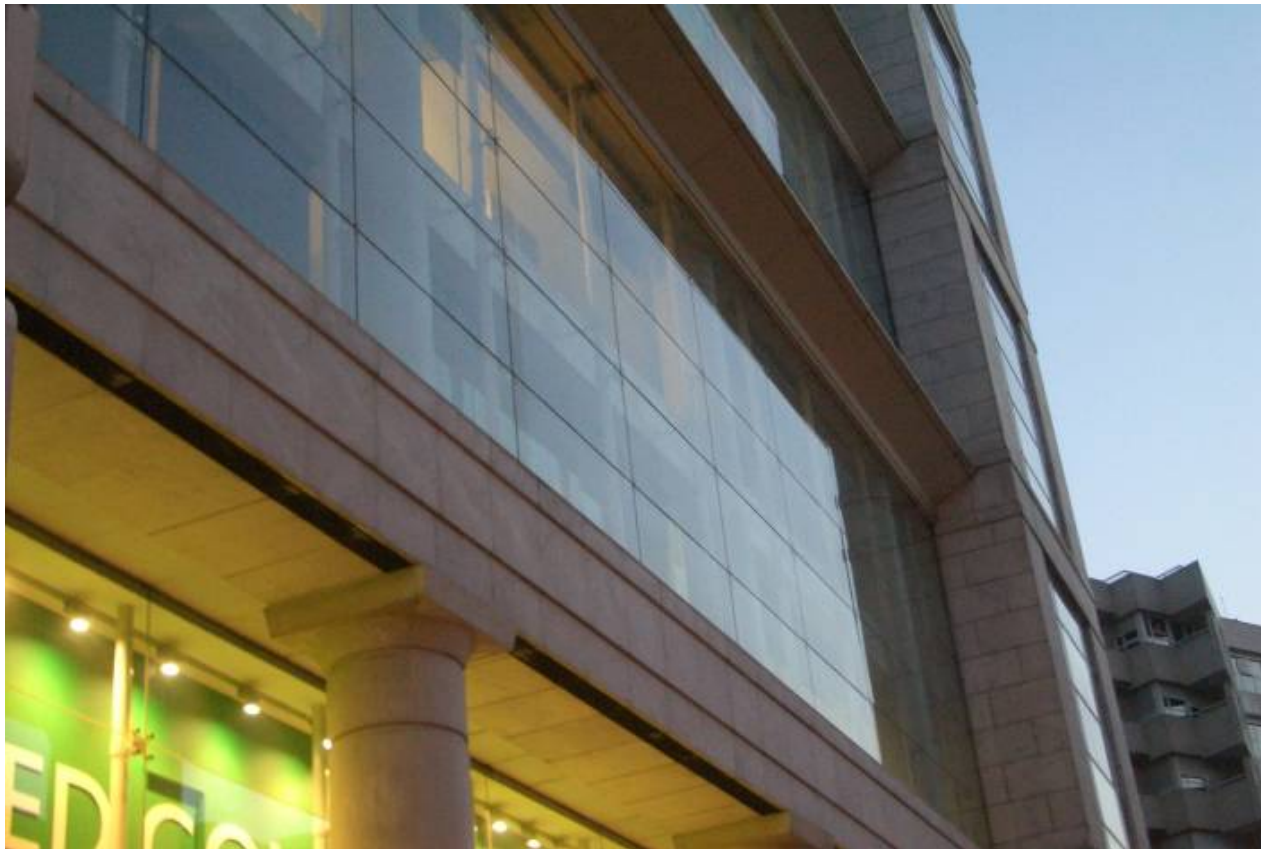
DSF Construction Challenges

Project details

- Ventilated cavity
 - Air supply
 - Air exhaustion

DSF Construction Challenges

Project details



DSF Construction Challenges

Project details



DSF Construction Challenges

Project details



DSF Construction Challenges

In site challenges

- Access to the facade
 - Assembly process

DSF Construction Challenges

In site challenges













DSF Construction Challenges

In site challenges

- Water tightness details



DSF Construction Challenges

Alternative solutions

- Art's Building
- BCP Tagus Park
- Alfrapark

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Alternative solutions

- Art's Building



DSF Construction Challenges

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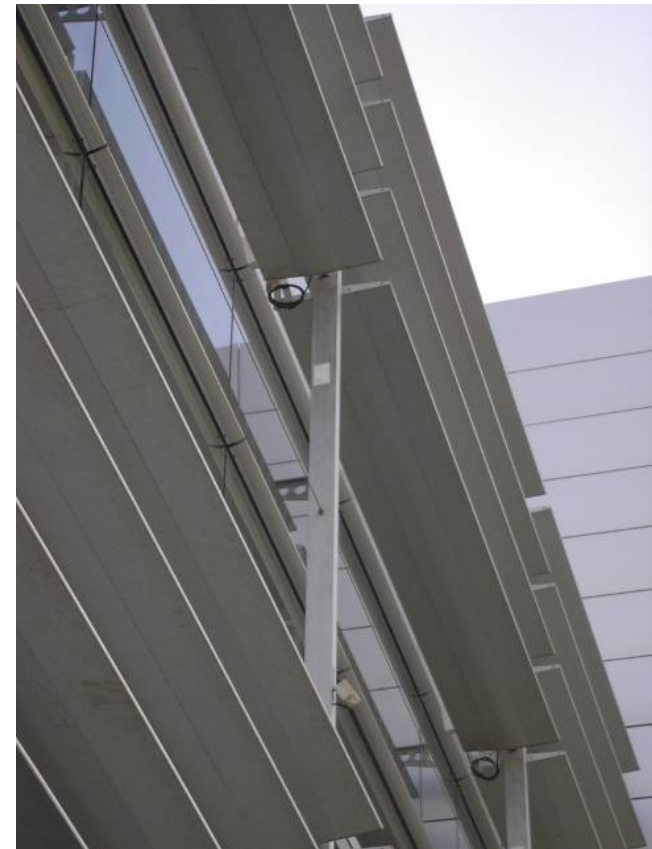
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Double Skin Maintenance

Façade Maintenance

The Needs

- Preventive Maintenance
 - Cleaning and Lubricating
 - Ventilation Openings
 - Screwing

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Façade Maintenance

The Needs

- **Preventive Maintenance**
 - Cleaning and Lubricating
 - Ventilation Openings
 - Screwing
- **Corrective Maintenance**
 - Broken Glasses
 - Result of the bad use
 - Equipments (Blinds system or other)

Façade Maintenance

The Needs

- Preventive Maintenance
 - Cleaning and Lubricating
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Façade Maintenance

What can be done?

- Maintenance Manuals
- Regular Preventive Maintenance Operations
- Avoid Glass Failure
 - Heat Soak Test
 - Treated Edges
- Maintainability Concept
 - Define Maintenance Solutions during the concept development
 - Define access to the elements requiring regular maintenance
 - Dimension of the glasses
 - Necessity of Cleaning and lubricating
 - Cleaning between two skins

Thank You Very Much

Contact Us

edimetal@edimetal.pt

www.edimetal.pt

