# **IASO**<sup>®</sup> Better Outside



## LECLERC COMMERCIAL CENTRE

#### PROJECT DESCRIPTION

In the commercial centre of Leclerc en Les Portes du Valois, three skylights were built as well as three coverings to access the building. Outdoor, a monolayer ETFE coveringsand inside, ETFE cushion skylights are light sources that give richness to the interior decoration of the commercial centre.

In the accesses of the building, the transparent domes are constructed with an ETFE singlelayer sheet system. By day, natural light floods the interior space, at night it lights up and turns into a large lamp visible from the parking area.

#### **CHARACTERISTICS**

Material	ETFE film
Application	Comercial centre
Surface	540m²
Location	Le Plessis Belleville
Year	2010

#### **TECHNICAL DATA**

In the building: ETFE triple-layer cushions of  $250\mu m$  printed /  $100\mu m$  /  $250\mu m$  transparent. In the accesses: monolayer with ETFE sheet of  $250\mu m$  transparent.

#### IASO puffy cushion system

It is constructed with two or more closed ETFE laminates in its perimeter and supported with a perimeter anchorage system. Requires an air inflation system in low humidity and at low pressure (250 Pa), which is produced by a unit consisting of fans and air distribution ducts.

IASO solar control system cushions, which by movable intermediate layers and with an upper layer and printed

intermediate to modify the passage of light and solar radiation.

#### What is its dimension?

Normally the circular or square geometry cushions have maximum dimensions of 7.5m and rectangular cushions should not exceed 4.5m. The cushion length can reach 40m. The dimensions can be increased by introducing reinforcement with mesh wire or other materials.



#### What anchoring system is used?

The cushions are set at the perimeter contour through a system of extruded aluminium profiles. The air tightness of the system is ensured by rubber gaskets.

### What are its design possibilities?

Applications with ETFE sheets allow for unique and imaginative shapes in coverings as well as facades. It enables making imaginative and unique shapes and geometries. The main support structure must be able to be inspired by the planned design of the ETFE enclosure, collaborating with it as it were.







