

# Dass

IMPLEMENTING SPORTSWEAR BRANDS

## Promoting Sustainability through our offices



**Educational Program, Dass Argentina**  
Florencio Sánchez 3032, San Isidro.





Front



Interiors



Interiors

## Executive summary

Dass Group has a commitment to develop a sustainable strategy and thus implemented the LEED certification system for sustainable buildings. Our priority is to provide an excellent service and innovative products through our whole value chain: factories, sales team, human and professional qualities, but above all by our commitment to the environment. That is why the Group is very enthusiastic in addressing the construction of the commercial offices in Buenos Aires according to LEED standards. It's important to highlight that, the decision to develop a LEED certified building has been made by the President and the Executive Board of Dass Argentina, as well as the planning process, coordination and implementation was in charge of the Department of Institutional Affairs.

### · *Dass Creation Center*

The DCC is the Group's brain and headquarter, and has the most modern biomechanics lab in Latin America. It has the ultimate and highest quality standards known in the industry and basically, it is where all Dass's products are developed.

But over all, it is a very open, natural and comfortable place to work. The infrastructure strategy is that every new office building or store constructed by the Group tries to maintain the Headquarters DNA, full of life, green spaces and trees.

## Overview

The project consists in the construction of an office building for the commercial unit of Grupo Dass in San Isidro, Buenos Aires.

San Isidro is a municipality in Greater Buenos Aires. It is located near Buenos Aires, where it ranks as Argentina's most affluent neighborhood, in addition to Palermo. The centre of San Isidro is an historic area with cobbled streets and old single-story houses. At its heart is Plaza Mitre, with the neo-gothic San Isidro cathedral of 1898 rising above. The sloping plaza, also home to the recently opened Rugby Museum, hosts an antiques and crafts fair. The plaza leads down to the Río de la Plata, where the riverside park is popular with mate drinkers and tourists. The city is called the "National Capital of Rugby" in Argentina, due to being the cradle of many important players and hosting the national rugby union's derby match between CASI and SIC.

San Isidro is served by two rail lines, the Mitre Line and the "Tren de la Costa" (Train of the Coast in English), at the San Isidro R station, a vintage 1891 built in the style of British sta-

tions, in its facilities are located a shopping arcade, cinemas, and restaurants. The station is located barely 200 meters from the Cathedral of San Isidro. Many large houses surround the historic centre and line the riverside.

The Commercial Office of Grupo Dass is located just one block from the San Isidro Hippodrome, which is one of Argentina’s most important racecourses and covers a large part of the area inland from the city. Built in striking 1930s architectural style, the racecourse has faced tough times since the economic crises of the late 20th and early 21st centuries.

## Introduction

This manual describes the most important features of the commercial building in San Isidro, Buenos Aires, developed by Grupo Dass. Since its design, it has been conceived to reduce the environmental impact while its being constructed as well as the daily use by the employers, partners and suppliers.

- PROJECT AND CONSTRUCTION TEAM: ESTUDIO NICOLAS SUBÍAS – ARCHITECT.
- HVAC CONSULTANT: ROBERTO SELENTANO.
- LANDSCAPE CONSULTANT: MARIANA HOGG – DISEÑO DE JARDINES.
- LEED CONSULTANT AND COMMISSIONING: ESTUDIO GRINBERG – INGENIEROS CONSULTORES.

This building implemented design guidelines and construction standards under LEED for New Construction, version 2009, in order to achieve certification by the end of the work process. While there are many aspects that are taken into account to award this certification, sustainability strategies are established primarily within the following five categories:

1. Sustainable sites.
2. Efficient water use.
3. Energy efficiency and care of the atmosphere.
4. Use of materials and resources.
5. Indoor environmental quality.

## Sustainable Sites

**Environment:** The architects tried to keep the scale of the block and took as reference the height of the two buildings on the side. Looking at the office from the front, the building is developed

with changes in height, gradually falling to the left side where the ex-stud is.

**Pollution prevention for work activities:** during the construction process of the building an ESC plan was implemented to prevent both the accumulation of sedimentation in storm drains and air pollution with dust and particles was implemented.

**Site selection:** the plot was selected in a dense urban area with proximity to basic services and public transport to avoid the use of private motor vehicle.

**Alternate transportation:** in addition to public transport systems, and to encourage the use of alternative transport minimizing the use of polluting private vehicle, bicycle racks and changing rooms for staff use were added. The bicycle racks are located at the sidewalk in front of the building.

**Heat Island effect:** in order to avoid overheating of the building and its environment (heat island), outdoor flooring materials have been chosen to reflect solar radiation.

## Efficient Water Use

**Reduced water consumption:** efficient appliances were selected to reduce the use of potable water in the building, for example dual-flush toilets and automatic faucets for lavatories. This reduces the use of potable water for sanitation by 24%.

**Landscaping and water saving:** the use of native and adapted plants requires significantly less water than other non-native species. In this case temporary irrigation system will be used for plant establishment and will gradually remove within a year of installation. The landscaped areas are designed to survive just with rain water.

**Landscaping and Trees:** the landscape design for Dass Argentina is based on water efficient landscaping using no potable water or irrigation for the planting area and a drip subsurface system for the turf grass area. The orientation, sun and wind exposure were taken into account to develop an adequate plan design as well as the shade from trees and buildings.

The existing *Quercus palustris* that grew for years in the plot, was respected and included in the architectural and landscape design since the beginning, giving it a good pruning and maintenance work.

Temporary irrigation systems will be used for plant establishment and will gradually be removed within a year of installation. This system will work with captured rainwater that will work with a drip system that can significantly reduce or completely eliminate the amount of potable water used for irrigation. The installation of this drip system costs less and has lower water use and maintenance requirements. The rainwater system capacity meets all of the required thresholds on an average monthly and annual basis, ensuring maximum potable water savings. Mulch and compost is used to conserve water and help foster optimal soil conditions, keeping landscape areas to conserve moisture and prevent evaporative water loss from the soil surface

to reduce the need for supplemental irrigation during dry periods.

The area covered with conventional turf grass is minimized using it only in recreational areas for functional benefits. This area uses a drip subsurface system that applies water slowly using 30% to 50% less water than sprinklers.

The use of native and adapted plants will foster a self-sustaining landscape that requires minimal supplemental water only during summer months directly to the roots of plants. The use of native plants also attracts native wild life and thus creates a garden site integrated with its natural surroundings.

The landscape design uses native plants that are climate tolerant and can survive on natural rainfall. They were chosen to easily adapt to the site and balancing the amount of species selected discourage diseases or insect infestations.

These selected species belong to the Pampa Area with a warm temperate climate and sufficient rain during the whole year mainly during autumn and spring.

**Innovative Wastewater Technologies:** the building has a grey water system to capture and re-use rain water. The collected water is used to discharge toilets.

## Energy and Atmosphere

**Energy efficiency:** energy consumption of the building is 18% lower than similar buildings (as set out by the standard ASHRAE 90.1-2007). Among other reasons, this saving is due to:

- Materials selection maximizing efficiency of the enclosure (glazing, insulation, roofs, etc)
- Lighting fittings selected to reduce energy consumption by over 45%.
- The HVAC system incorporated high-efficiency equipment.

**Refrigerants:** the HVAC system incorporated ecological refrigerant systems that minimize global warming and possible damage to the ozone layer.

**Commissioning:** during the project and construction work, an energy systems auditing team was incorporated in order to confirm the systems were working properly after installation, and to check that the construction matched the teams and, especially, DASS's project objectives.

**Led Lighting:** the project introduces led light because the reduce consumption and also reduces the emission of heat from electrical appliances though, has less impact on the climate, requiring less energy for the same.

**Efficient HVAC system:** The architects used Daikin VRV equipment (variable refrigerant volume). The Daikin VRV is an intelligent air conditioning system with variable flow control refrigerant. It allows you to keep an individual control of areas in each room and floor of a commercial building.

## Material and Resources

**Recycling:** the architects reused some things from the original stud. For example, the big wooden slide doors were recycled to be used as doors and tables. The wooden ceiling of the old stud was recycled for the roof of new stud. The roof tiles are the originals stud tiles from the old construction.

**Separation bins and collection of recyclables:** the building has a space on the ground floor easily accessible from the parking lot dedicated to the collection and storage of recyclable materials (paper, cardboard, glass, plastic, and metal). In addition, the offices are provided with differentiated bins facilitating the separation of waste.

**Materials with recycled and regional content:** for the building's construction, the main used materials were those located on a radius of 800 km.

**Rapidly Renewable Materials:** a bamboo flooring was installed in the project.

## Indoor Environmental Quality

**Control smoke in the environment:** this building is not just a smoke-free building, but smoking is prohibited anywhere on the property, including outdoor spaces. The project includes signage indicating this policy that minimizes the possible entry of contaminated air into the building, maximizing the quality of indoor air.

**Outside air flows:** the HVAC project complies with the standard ASHRAE 62.1-2007, ensuring the minimum indoor air quality required by the occupation of each space.

**Paints with low emission of volatile organic compounds:** the use of this type of paints ensures that, as the building is used, the least amount of VOCs will be emitted to the environment, minimizing the effects they may have on the health of users.

## Innovation and Design

**Building as an educational tool:** through this manual and exclusive signage, the building will allow employees and visitors to understand which the sustainable features of the building are incorporated.