

PRINCIPAL DATA

LIBRARY NAME: Biblioteca Penitents
DISTRICT N°: Districte 6 **DISTRICT NAME:** GRACIA
ADDRESS: Pg Vall d'Hebron, 65 **Total area** 1.383 **Library area** 1.383

HOURS: Morning: Tues/Thurs/Fri/Sat, from 10 am to 2 pm

Website: <http://w110.bcn.cat/portal/site/BibliotecaPenitents>

Distribution:

	Use	Surface area
BF	Events hall	
GF	Children's area	
F1	Fiction zone	
F2	Multimedia room, support room, management	

LOCATION**IMAGES**

[How to get there](#)

**SUPPLIES:**

Electricity	Principal	X	Reserve
Gas		-	
Water		X	

PRIMARY ENERGY CONSUMPTION:

	<u>Consumption</u>	<u>Rate</u>	<u>Ratio</u>
Electricity	Consumption 2012 (kWh) 295.637,00	Cost 2012 (€) 49.265,43	(kWh/m ²) 213,77
	Consumption 2011 (kWh) 75.136,00	Cost 2011 (€) 15.241,61	(kWh/m ²) 54,33
Water	<u>Consumption</u>	<u>Rate</u>	
	Consumption 2012 (m ³) 0	Cost 2012 (€) 0	(m ³ /m ²) 0,00
	Consumption 2011 (m ³) 0	Cost 2011 (€) 0	(m ³ /m ²) 0,00

ENERGY MANAGEMENT DATA

The company has an energy manager
 There is an energy-accounting procedure
 There are meters for the main sectors
 There is a centralised Control and Monitoring system
 Previously energy audits have been carried out
 There is an Energy/Emissions reduction plan
 Other services:

Special features:

Access with hallway

Closures

BF - events hall: windows on Avinguda Vall d'Hebron facade with exterior protection and interior curtains; inner courtyard windows with interior protection

GF - reception and periodicals area: windows looking on to Passeig de la Vall d'Hebron unprotected, there is a corridor in front that provides protection; inner courtyard windows with exterior protection; inner courtyard windows without protection

GF - children's area: lower windows with exterior protection; inner courtyard windows without protection

F1 - fiction zone: windows on Avinguda Vall d'Hebron facade with exterior protection and interior curtains; inner courtyard windows without protection

P1 - non-fiction zone: inner courtyard windows without protection

Staircase F1 a F2: inner courtyard windows without protection

F2 - corridor: inner courtyard windows without protection

F2 - Multimedia room lower windows with exterior protection; skylight with interior protective curtains

F2 - support space: lower windows with exterior protection; skylight with interior protective curtains

F2 - management offices: windows looking onto Avinguda Vall d'Hebron with exterior protection; inner courtyard windows without interior protection

Staircase F1 a Fc: inner courtyard windows without protection

Electricity

The lights are switched on and off by the library staff. To carry this out the switch must be pressed on the general distribution board and then the switches distributed on the floor are used

BF - technicians room: general distribution board (4P/160-400A); battery of condensers

F1 - Toilets: sub-distribution board first floor

F2 - management offices: sub-distribution board second floor (4P/C63A); SAI, sub-distribution board SAI (4P/63A); rack

FC - technicians room: air conditioning sub-distribution board (4P/175-250A regulated 250A) + control distribution board SAUTER

FC - exterior: generating unit brand electra molins (65 kVA - 52kW; generating unit brand electra molins (60 kVA - 48kW;

Lighting

BF - corridor: downlight lighting fixtures switch operated

BF - storage area: fluorescent lighting; switch operated

BF - technicians room: fluorescent lighting; switch operated

BF - events hall: downlights; switch operated

BF - events hall - technicians room: downlights; switch operated

BF - toilets - corridor: halogens ; presence detector operated

BF -toilet - wash basin (men+women): halogens ; presence detector operated

BF - cleaners room - corridor: halogens; presence detector operated

BF - cleaners room - refuse zone: halogens; presence detector operated

BF - cleaners room - toilet: halogens; presence detector operated

GF - reception and periodicals area: 2x26W downlight lighting fixtures with electronic reactance; there are 4 exterior lighting sensors (2 street facade + 2 inner courtyard facade)

GF - children's area: 2x26W downlight lighting fixtures with electronic reactance; there are 2 exterior lighting sensors

GF -children's area toilets - corridor: dichroic ; presence detector operated

GF -children's area toilets - minus wash basin: dichroic ; presence detector operated

GF - terrace: lighting system; switch operated

F1 - fiction zone: downlight lighting fixtures; switch operated; there are 2 exterior lighting sensors (1 street facade + 1 inner courtyard facade)

F1 - non-fiction zone: downlight lighting fixtures; switch operated; 3 natural light sensors

F1 - toilets - corridor: halogens ; switch operated

F1 - toilet - wash basin (men+women): halogens ; presence detector operated

F1 - cleaners room: halogens ; presence detector operated

F2 - corridor: downlights; switch operated

F2 - Toilets: halogens ; presence detector operated

F2 - Library staff toilets: halogens ; presence detector operated

F2 - cleaners room: halogens ; switch operated

F2 - management office: downlight lighting fixtures; switch operated; 1 natural light sensor in line with the facade

F2 - Multimedia room downlight lighting fixtures; switch operated;

F2 - support space: downlight lighting fixtures; switch operated;

F2 - management offices: downlight lighting fixtures; switch operated; 1 natural light sensors in line with the facade (street facade+inner courtyard facade)

F2 - terrace: lighting system; switch operated

Air conditioning and heating

Production equipment, there are two heat pumps (one used for cold and the other for heat) brand CARRIER; model 30RQ0182-A0092-PEE

4 pipe Distribution Installation; 4 pipe interior machines except for those in the kitchen which have 2 pipes

Ventilation equipment with 3 UTA (cold and heat batteries) with free-cooling (constant flow)

CL01-PS: brand Servoclima, model CTA-5; cold capacity: 41.6 kW; heat capacity: 28.9 kW; flow 5,037

CL02-PB: brand Servoclima, model CTA-12; cold capacity: 73.1 kW; heat capacity: 59.1 kW; flow 12,000 m³/h

CL03-P1: brand Servoclima; model CTA-12; cold capacity: 83.9 kW; heat capacity: 66.6 kW; flow 11,859 m³/h

There is a control and management system for the building that is programmed to switch on and off the equipment in accordance with the opening times; this system is controlled by the district

The library staff can only control the thermostats on each floor and can only raise or lower the temperature by 2 degrees

There is only 1 thermostat per floor and there are problems with heat related discomfort, above all in the GF - children's area

The seasonal change (summer-winter), is automatic and at times is not sufficient

BF - corridor: ceiling and wall grills; 1 thermostat

BF - storage area: 3 x 4 pipe duct supply air conditioning machines; 1 per corridor+1 store room+ events hall

BF - events hall: ceiling and wall grills;

BF - events hall - technicians room: ceiling grills; 1 thermostat events hall; 1 thermostat events hall-technicians room

GF - reception and periodicals area: distribution carried out via ducts that open onto vertical linear and ceiling grills 1 thermostat for the whole floor

GF - reception and periodicals area: return distribution via linear ceiling grills

GF - children's area: ceiling and wall grills;

F1 - fiction zone: ceiling and wall grills; 1 thermostat for the whole floor

F1 - fiction zone: ceiling and wall grills;

F2 -corridor: ceiling and wall grills; 1 thermostat

F2 - management office: ceiling linear grills and vent; 1 thermostat

F2 - Multimedia room ceiling and wall grills; 1 thermostat

F2 - support space: ceiling and wall grills; 1 thermostat

F2 - management offices: ceiling grills and vent; 1 thermostat (there are 3 machines, only produces cold air because there is the rack)

F2 - office: thermostat (1 machine that produces heat and cold)

Water

Only cold water

Basins with push button taps

Toilets with double flush cisterns

Office, sink with conventional tap

Computers

GF - reception and periodicals area: 2 work computers + 2 consultation computers and 1 photocopier

GF - children's area: 1 work computer + 4 consultation computers + 1 TV

F1 - fiction zone: 2 work computers + 8 consultation computers + 1 printer

F1 - non-fiction zone: 1 TV

F2 - Multimedia room 11 computers

F2 - management offices: 1 work computer + 1 photocopier