

# GARE MARITIME

# TECHNICAL MANUAL

JANUARY 2023

# GARE MARITIME - TECHNICAL MANUAL









This "Design Manual EVENTS" contains the constructive and technical parameters to be taken into account for the development of temporary installations in the central spaces of the Gare Maritime.

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# A. PROJECT PRESENTATION DESIGN CONCEPT

#### Gare Maritime: A city with a roof

The principal idea of the project is to make a city quarter with a roof, with a mixed program of working, shopping, entertaining, eating, drinking, ... through public and private spaces and events.

Gare Maritime becomes a vivid part of the city by the placement of 12 new volumes under the existing and renovated early 20th century shell.

These 12 new volumes follow on one hand the wider urban context in terms of urban fabric, and on the other hand they take into account the dimensioning and scale of the existing structure.

The 12 volumes are placed at the perimeter of the existing structure to keep a maximum visibility of the historic structural elements of the building.

Ten volumes are placed along the east and west facade of the existing structure, two smaller volumes are positioned against the short facade at Rue Picard.

The open space, not occupied by the new volumes, is organized threefold. In first place a monumental central event space below the high pitched roof for very diverse events.

On the east and west sides of this central space, are designed green boulevards that function as the main circulation arteries through the vast space, and allow at the same time for cozier places of rest.

In north-south direction in between the new building volumes are transversal streets with a width of approximately 7m, giving access to the different functions, and at the same time connection the project to the developments and city surrounding Gare Maritime.

This combination of a early 20th century station hall with contemporary additions will make Gare Maritime a unique project; and not only a pleasant space for daily users, but also an attractive spot in the city of Brussels.



#### New Volumes: Dimensions

The volumes follow the basic column span of the existing structure (12m) with three bays (length of 36m in total); the volumes take the depth of one high (26m) and one low (12m) pitched roof. Important to note is the visual and constructive disconnection between the existing structure and the new volumes.

#### New Volumes: Organization

The large volumes have a ground floor, first floor and a "creative attic", a duplex with mezzanine below the high roof.

A central core accomodates a generous staircase, elevator, sanitary and shafts. A series of stairs on the lateral elevations outside the new volume allow for fire escape and secundary circulation.

The different volumes are connected to each other on the first floor as a bridge over the transversal streets. These connector spaces can be used in various ways.

#### New Volumes

The volumes have two types of facades. The two lower levels are enclosed by a wooden curtain wall with transparant glazing; large protruding and retracting boxes on groundfloor animate the green boulevards, and allow for the placement of necessary doors and shopfronts. The two upper levels are enclosed by a steel silver coloured curtain wall with transparent glazing for its juxtaposition against the existing steel roof structure. The curtain walls follow the 1m20 grid on all elevations.

#### New Volumes: Materials

The volumes are realized in CLT (Cross Laminated Timber), i.e. columns, floor slabs, beams, core walls, with the exception of the ground floor concrete slab. Retail spaces are handed over broom clean (see Design Manual for extensive description).

Office spaces are handed over finished with raised floor and active/passive ceiling (see Design Manual for extensive description).

# B. GENERAL AREA GREEN BOULEVARD & RETAIL STREET



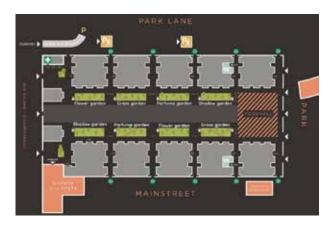
Forest bathing at a micro-level, that's possible along the green boulevards in Gare Maritime. Here, you'll find ten inner gardens with high-growing trees. All the different plant species grow and bloom with the seasons. There are four themes to discover in this green zone.

For more informations: www.tour-taxis.com/ex-plore/gare-maritime-the-gardens/

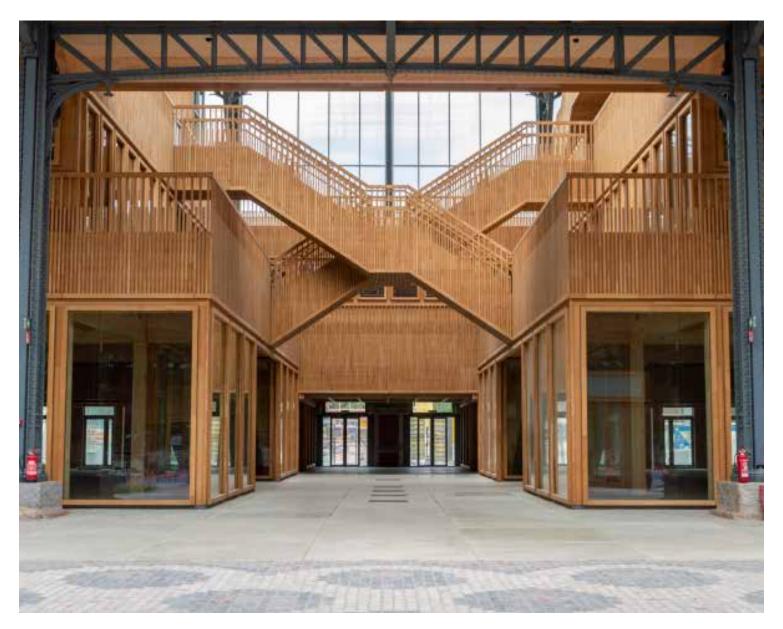
Please note, during event period, it is not allowed to place lighting within the gardens in order to preserve the photosynthetic process.

No cables can pass through the gardens and plantations. Care must be taken to ensure that they are placed close to the gardens. A fine of up to €100.00 excl. VAT may be imposed for non-respect.

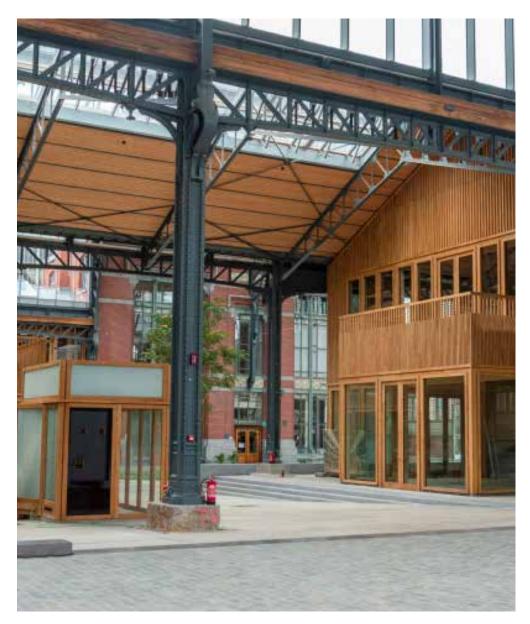
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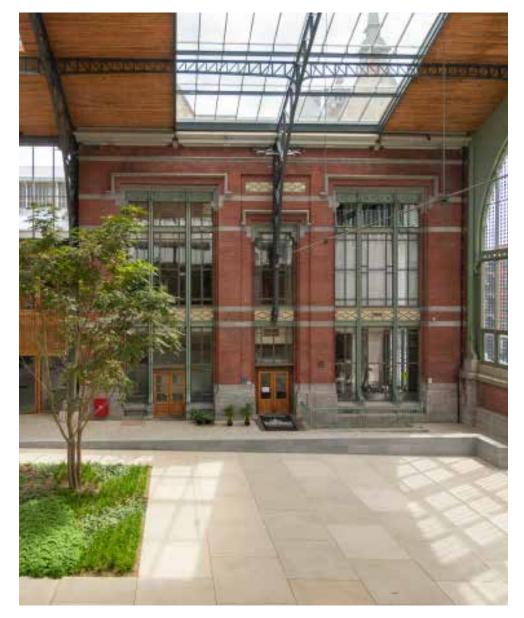


# TRANSVERSAL STREET

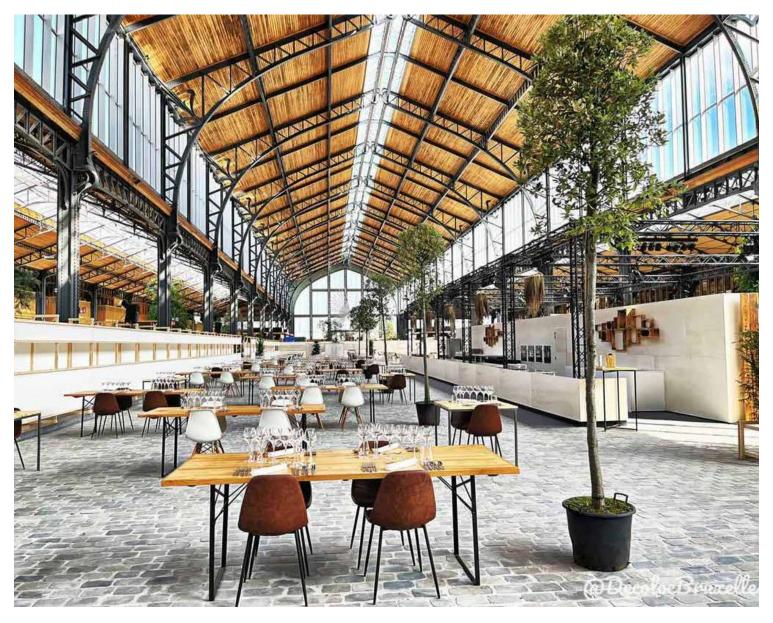


# PICARD SQUARE



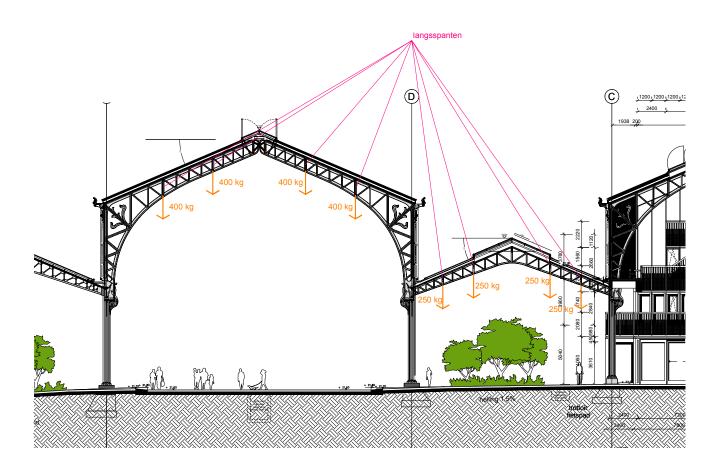


# CENTRAL HALL



# C. TECHNICAL SPECIFICATIONS

## STRUCTURE -- HANGING LOADS



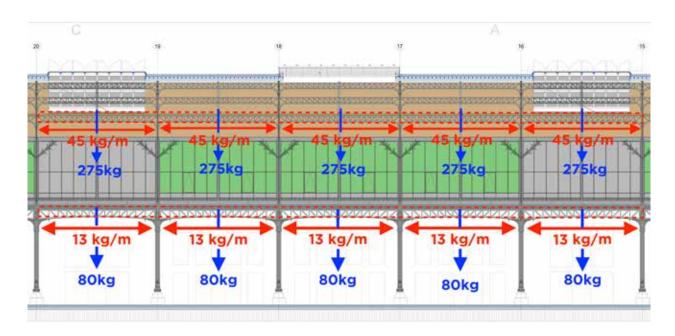
Possible hanging loads from main portal frames (every 12m lengthwise) - see drawing.

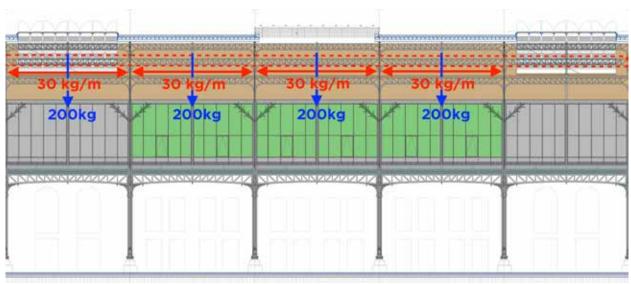
Hanging loads are deduced from allowance 10kg/m² on original plans.

Newly installed technical installations per area have to be taken into account of calculation of the hanging loads.

Note: It is prohibited to drill holes in the steel structure or stone stand.

#### STRUCTURE -- HANGING LOADS





#### REMARKS

On the longitudinal spans only a distributed load OR punctual load is allowed shown on the illustration. It is absolutely forbidden to combine the distributed load with a punctual load.

Hang items only on the junctions of the framework

Suspensions (at two points for example) that would not pull vertically, but also cause horizontal reactions must be checked separately.

The load capacity of the decking through the green beds is 500 kg (mobile load).

## STRUCTURE -- LOADS



The maximum permissible load on the floor plates are as follows:

#### Axle loads:

- Road freight: 18t
- Forklift on pneumatic tyres: 12t

#### Point loads:

- Centre: 9.5t

- Side-central: 5.5t

- Corner: 7,5t

Central hall: 40t

Wooden footbridges: 500kg

External dock: 500 kg

Floor inside the modules: 500 kg

#### important remarks:

- All vehicles must be equipped with white wheels. & electrical
- All doors are made of wood. Care must be taken not to knock them.

# STRUCTURE -- DOORS



Different accesses are possible depending on the space reserved for your event. Please take into consideration the size of the doors for your deliveries.

We insist on the importance of protecting the floor plates. Especially during your set-up and dismantling. To guarantee the safety of all, the presence of a steward is required.

**Entrance Etang** 

Entrance Picard 11

H: 4,50m W: 5,85m Entrance Picard 9

H: 4,75m W: 3,70m Entrance Picard 7

H: 5,00m W: 5,85m Entrance Picard 5

H: 3,75m W: 3,75m









Entrance Mainstreet H: 2,40m W:1,20m

m H: 2,40m n W:1,20m



## SERVICES -- ELECTRICITY



Kiosk



Technical Pillar





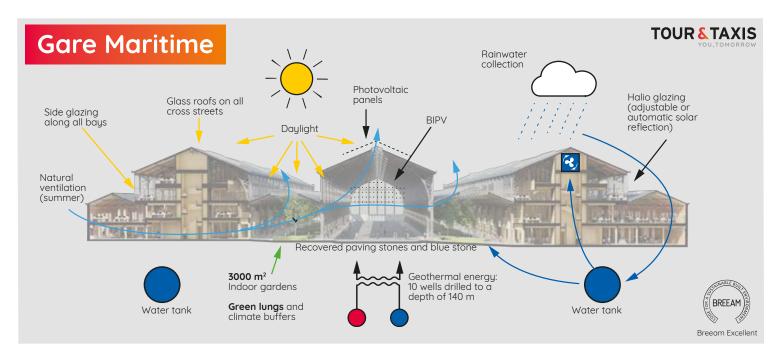




# SERVICES -- WATER



#### VENTILATION AND HEATING





Flame retardant treatment of steel columns

Historic wooden roof underlayment sanded and locally replaced

Canopies are integrated in the roof

7,500 m<sup>2</sup> of historical paving stones removed and then ground into smooth platinum paving stones

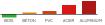
350 m<sup>2</sup> of stone tiles recovered from historical underpasses and reused



10.000 m3 wooden constructions

Mechanically connected CLT elements

Finishing of the interior oak facades (EU origin)



Certified wood





· Heat and cold generated

by geothermal energy

evaporation of water to

Adiabatic cooling:

In enclosed spaces:

Avoids the emission of 3.500 tonnes of CO2



Natural ventilation

In the halls: (summer) · Air-conditioned ceilings

cool the air



10,000 panels photovoltaics on a surface area of 17,000 m<sup>2</sup>

Production of 3,000 MWh/year = consumption of 850 households

Building Integrated Photovoltaic (BIPV) in the south facades



200,000 tonnes of soil evacuated by ship

2 rainwater tanks of 1.300 m3. 2 m wide and 200 m long:

- · Rinsing the toilets
- Watering of green spaces





3000 m<sup>2</sup> indoor thematic gardens

100 trees planted

Green lungs and climate buffers

The Gare Maritime don't have heating system.

The building is self-regulating.

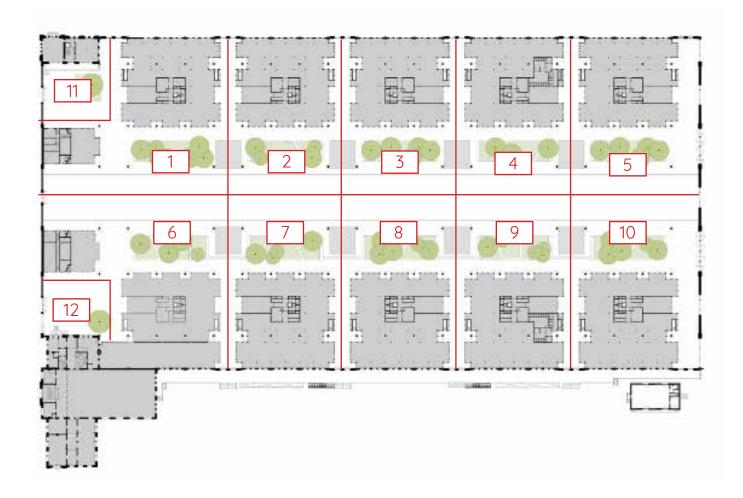
Depending on the temperature, the central flaps can be opened. This is also the case in case of an alarm. It is therefore important to ensure that no valuable items are placed directly under the flaps.

The ventilation systems are subject to regular inspections.

It is imperative to inform us of any use of smoke and/or independent heat sources.

The alarm sensors are extremely sensitive. It will be necessary to deactivate the sensors

## SERVICES -- LIGHTING



The overall lighting is divided in 12 groups and can be controlled based upon the different programmed scenarios. All lighting except the ground spots in the central hall is dimmable.

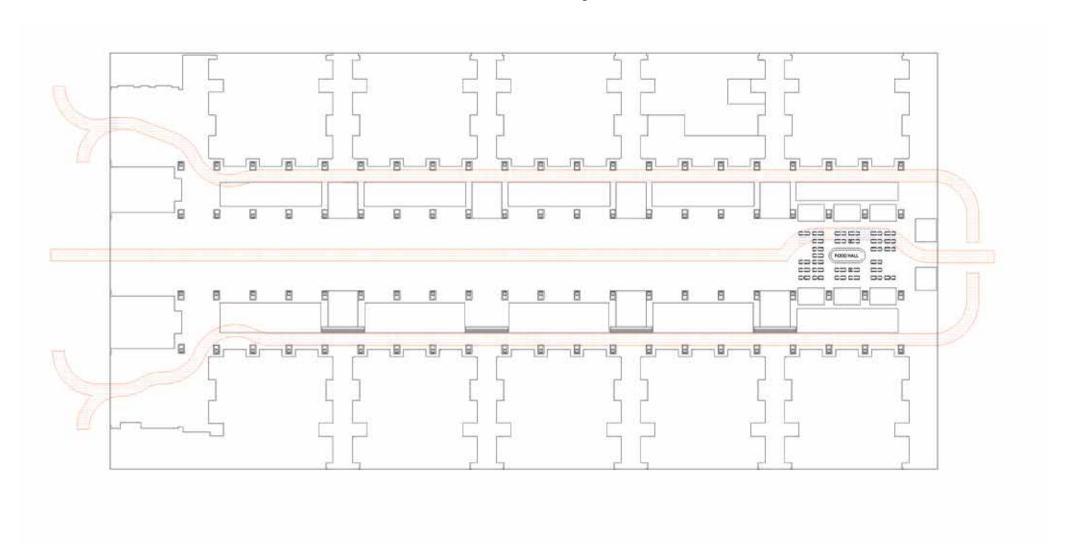
The overall lighting switches automatically on via a lighting sensor.

A specific scenario for a dedicated event can be programmed upon request.



# SECURITY - ACCESS

It is imperative that firemen's accesses remain free. Please take this into account for each of your installations.



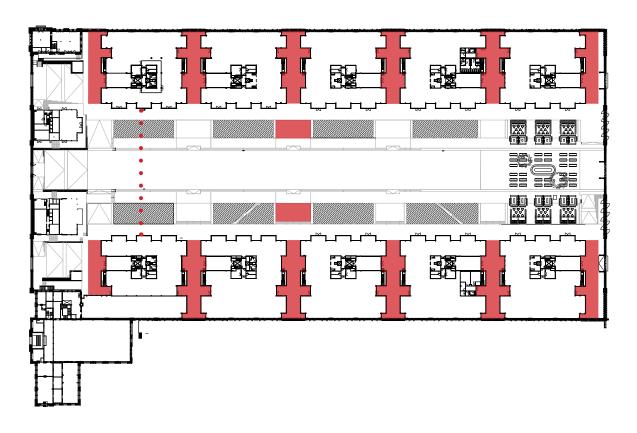
# SECURITY - ACCESS

#### **EMERGENCY ACCESS**

The Gare Mritime is permanently occupied, apart from visitors, by the occupants of the offices and retail spaces.

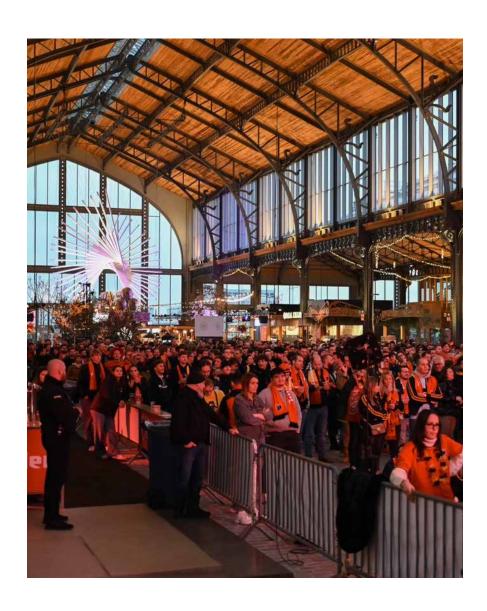
It is therefore imperative that the emergency exit are always free and accessible. It is also imperative that the entrance doors and windows are not obstructed.

The areas indicated must remain free at all times.



Remarks: between modules 1-6, cables for the tightrope walking courses are permanently placed. Height: 5m.

These cannot be removed. Except in exceptional cases and at a cost of 1200,00€.



#### SCHEDULE - TIMETABLE

The Gare Maritime is accessible 24 hours a day.

Only the entrance doors may vary:

- From 07:00 to 22:00: all doors are accessible.
- From 10:00 pm to 7:00 am: only the doors located Rue Picard 11 are open.

A security guard is present to control access.

#### NOISE STANDARDS

The environmental permit of the Gare Maritime imposes not to exceed:

Before 08:00 pm : 75dBAfter 08:00 pm : 85dBAfter 10:00 pm : 95dB

Regular checks are carried out on the site.

Important remark: All sound checks must be done between 18pm and 7am.

For more information: https://document.environnement.brussels/opac\_css/elecfile/GUIDE\_SON\_FR.pdf?\_ga=2.177630381.964435329.1661516693-1071940318.1661516693



#### D. RENTAL CONDITIONS

#### RENTAL PRICE:

For more information contact M. Jean Vandamme: jean.vandamme@tour-taxis.com

#### **IMPORTANT DOCUMENTS:**

- Rental charges
- Parking & deliveries Regulations
- Catering Food Market
- Signage & communication

#### **GUARANTEES**

In order to cover a part of the charges arising from the event (principally energy consumption, security, cleaning), the renter will transfer a provisional amount corresponding to the space used, on the Owner's account.

All prices are exclusive of VAT and subject to modification.

Options are granted for a period of 30 days unless a written exclusion to this is given. Written confirmations alone will be accepted.

You may confirm this option within the 30 days.

Without confirmation, the option will expire at the end of 30 days.

All of these conditions are included in a contract for use, sent to each client for signature before his event.

The renter recognizes to have taken knowledge of the:

- Present document
- Rules of the Order of the Interior
- plan established by the fire department
- internal prevention plan

And to respect them.

#### E. DO'S AND DON'TS

#### Reminder of the points to which it is imperative to pay particular attention:



Events must be set up and dismantled between 18:00 and 6:00 The delivery docks can support a maximum weight of 500kg.

All vehicles must be equipped with white wheels.

All installations must respect the safety distances reserved for the fire brigade, according to the internal emergency plan



For all deliveries that have to enter the Gare Maritime via the Picard 7-11 entrances, it is imperative to protect the floor with a carpet (or other) on the ground - and then remove it.

The floor must be protected for any catering installation



It is not allowed to place lighting within the gardens in order to preserve the photosynthetic process. No cables can pass through the gardens and plantations. Care must be taken to ensure that they are placed close to the gardens. A fine of up to €100.00 excl. VAT may be imposed for non-respect.



Smoking is not permitted on the premises of the Gare Maritime.

Any smoking area must be located outside the Maritime Station, along Mainstreet, at module 6-7.

It is imperative to inform us of any use of smoke and/or independent heat sources. The alarm sensors are extremely sensitive. It will be necessary to deactivate the sensors.











