

# Door Panels Management

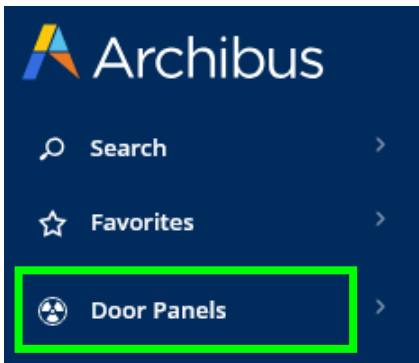
## How to fill the door panels (door safety data sheet)

### 1. Login

Cristal-Fiche de porte is the platform that allows the management of the door safety data sheets <https://cristal.epfl.ch>. Only COSECs can edit the door safety data sheets.

On the home page, on the left side, there is a tab named “Door Panels” (Fig.1)

Fig. 1



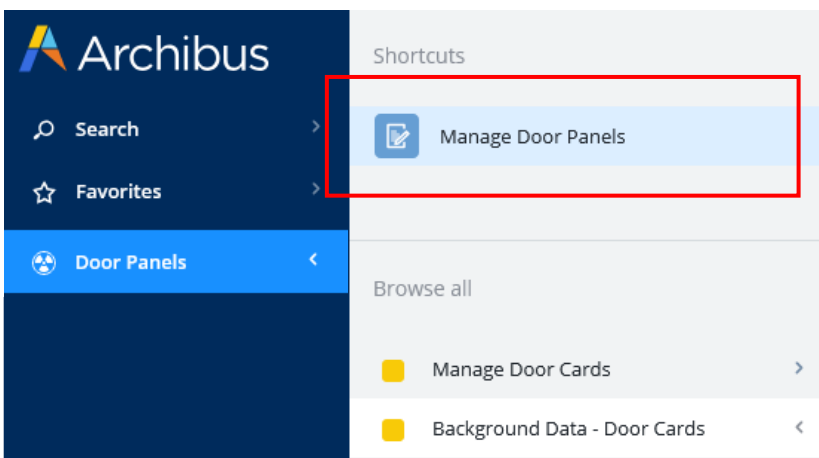
Note: It is highly recommended to clear the browser cache. The platform is not performing correctly on Safari

### 2. Door panels tabs

Two tabs are visible after clicking “Door Panels” (Fig.2):

- a) **Manage Door Cards.** This tab will be used to create/modify the door panels
- b) **Background Data -Door Cards.** This tab will be used to fill in information for contact people on Main pages

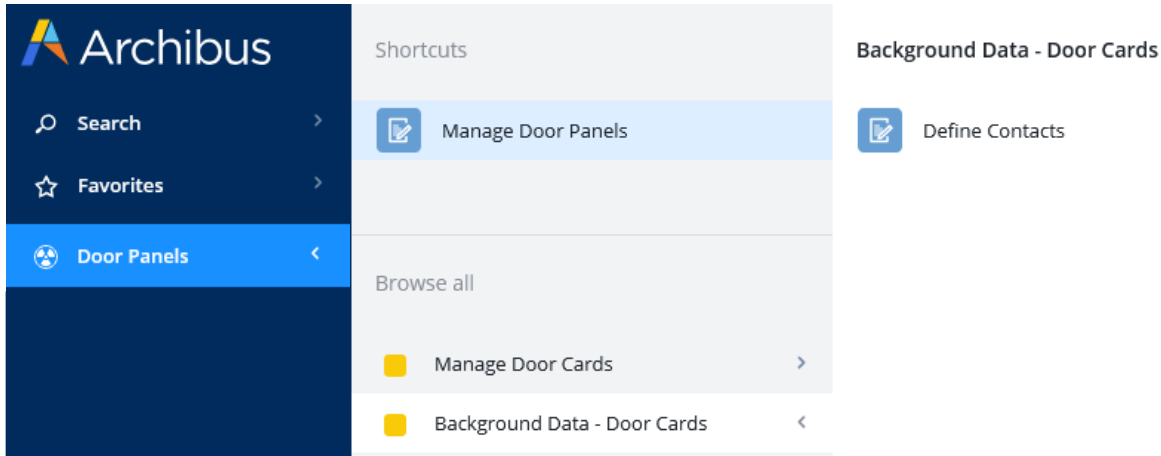
Fig. 2



### 3. Contact information

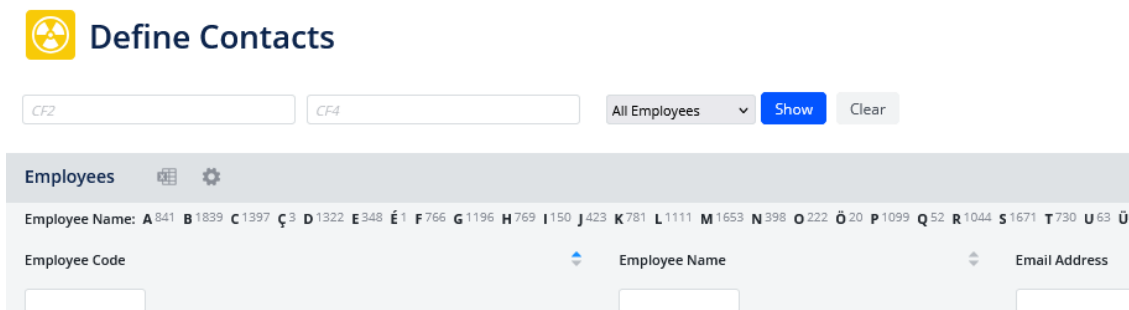
To fill information for the contacts, click on tab “Background Data - Door Cards” and after on “Define Contacts” (Fig.3)

Fig. 3



On the “Define Contacts” page, EPFL employees can be searched using various criteria, including their SCIPER number, surname, or email address (Fig.4).

Fig. 4



After searching, click on the name of the person whose information should be updated.

On the “Contact Info” (Fig.5):

- Add mobile phone number. If the EPFL internal number is forwarded on the mobile phone of the person, simply add the EPFL internal number.
- Indicate if the person is COSEC and/or unit responsible. Indicate in both fields “No”, if the person is neither COSEC nor unit responsible.
- Click on save

Fig. 5

Save Close

**Contact Info**

Email Address

Phone - Work

Phone - Mobile

COSEC No

Lab Manager Yes

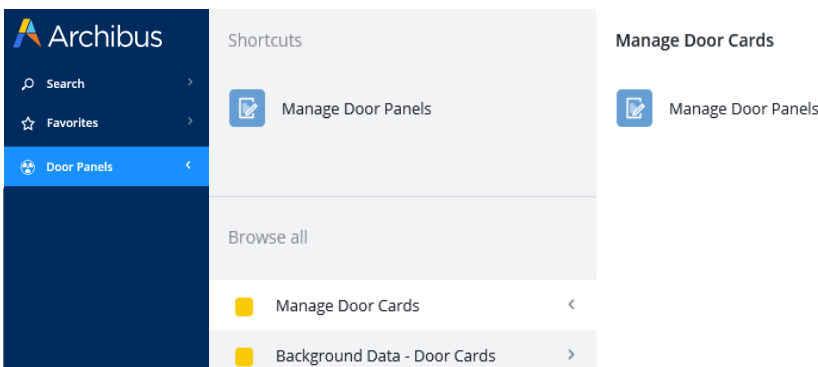
Add phone number

Unit responsible

#### 4. Hazards information on door panel

To add/modify information on a door panel click on the shortcut **“Manage Door panels”**. It is also possible to click on the tab **“Manage Door Cards”** and after on **“Manage Door panels”** (Fig.6).

Fig. 6



The **“Manage Door panels”** page is divided in three boxes (Fig.7):

Fig. 7

**Manage Door Panels**

Rooms

Door CODE: BC<sup>1</sup> BS<sup>1</sup> Up All<sup>2</sup>

Door CODE	DIN S-Type Wording	Free Title	CF2	CF4	COSEC	Main Cl
BCH 4414	LABO DE CHIMIE	LABO DE CHIMIE	16000 - 5B	0647 - LCSO		
BS 190	FORMATION CONTINUE	FORMATION CONTINUE	11500 - VPO-SE	1962 - OHS-GE		

1. Room “box”

Room: Associated hazards - BS 190

Product Name	Hazard Classification Class	Hazard Classification Category	Quantity	Quantity Units	Comments
Visible	05. Rayonnement Laser	Laser 1 ou 2	0		

3. Room hazards “box”

Search Danger

2. Hazards “box”

Hazards

- 01. Atmosphère explosive
- 02. Source radioactive non scellée
- 03. Source radioactive scellée
- 04. Radiation ionisante
- 05. Rayonnement Laser
- 06. Danger biologique
- 07. Nanoparticules
- 08. Champ magnétique
- 09. Laboratoire Pb/Se/As
- 10. Matière explosive
- 17. Gaz sous pression hors armoire
- 21. Alimentation gaz
- 25. Gaz sous pression dans armoire

**4.1. The “Room box”**

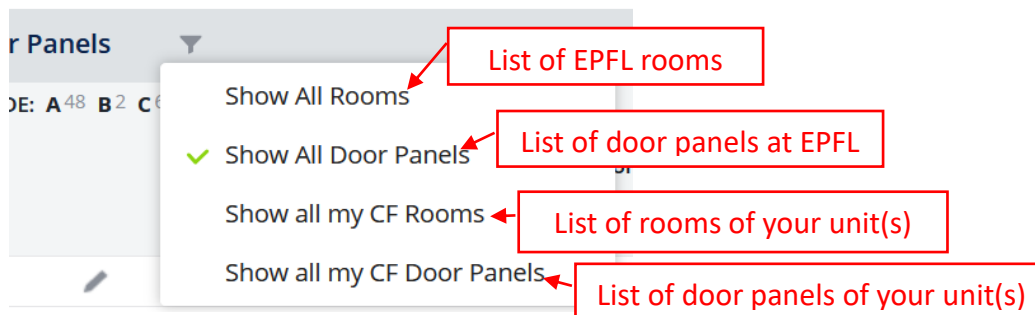
This box is used to search for the room(s) for which a panel needs to be created or modified. Each COSEC will see automatically a list of all rooms that are affiliated to his/her unit(s), including office rooms.

You can change the list of rooms displayed by using the funnel symbol (Fig. 8). You will have the possibility to choose between: the list of all EPFL rooms, the list of all EPFL door panels, the list of all rooms affiliated to your unit(s) and the list of all door panels affiliated to your unit.

*Fig. 8*



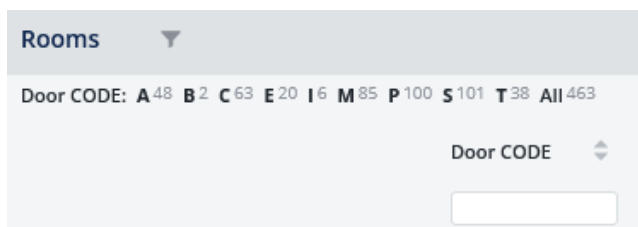
**Manage Door Panels**



By choosing the list “all rooms” or “all door panels”, the COSECs can create/modify also door panels of rooms that are not affiliated to their units (for example in case of shared rooms that belong to departments or faculties)

Room can be searched using the door code (Fig.9).

*Fig. 9*



*Note: Be attentive to use the official room designation by respecting space between letters and numbers.*

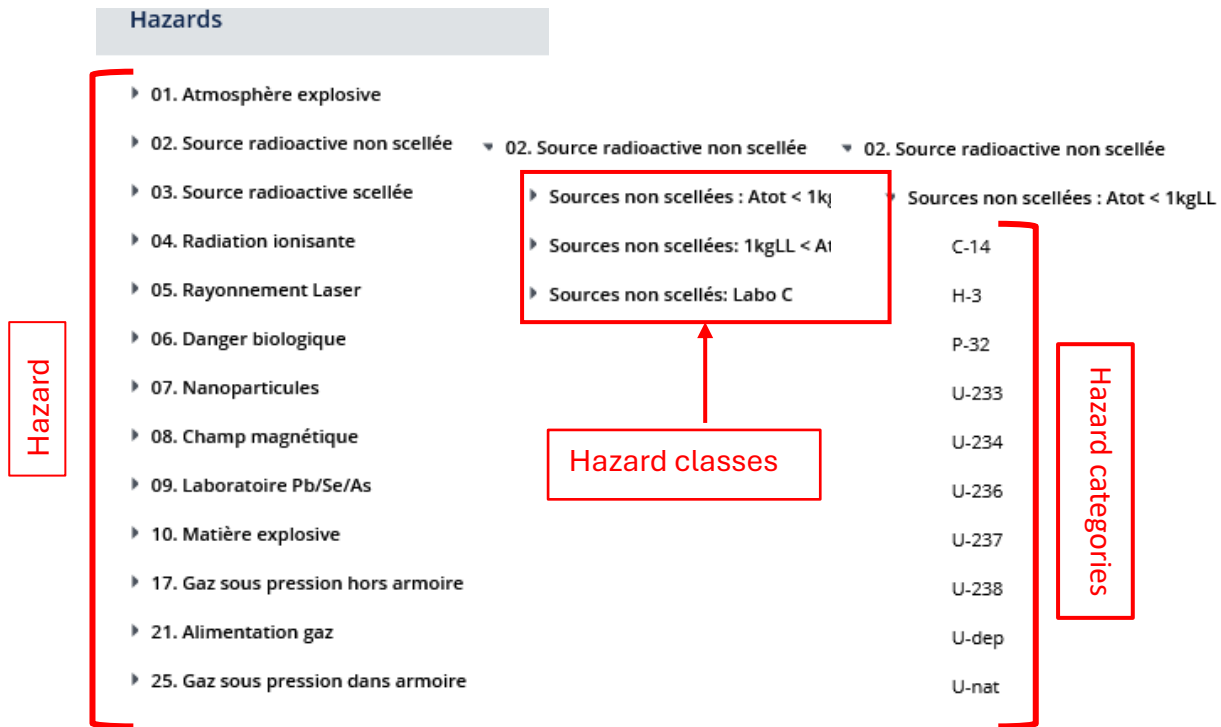
### 4.2. Hazard box

In this section, there is the list of hazards to be chosen to create/modify a door panel.

Each hazard is subdivided into one or more classes.

Each class is then subdivided into one or more categories (see example of the hazard “**Unsealed radioactive sources**” hazard in Fig. 10)

Fig. 10

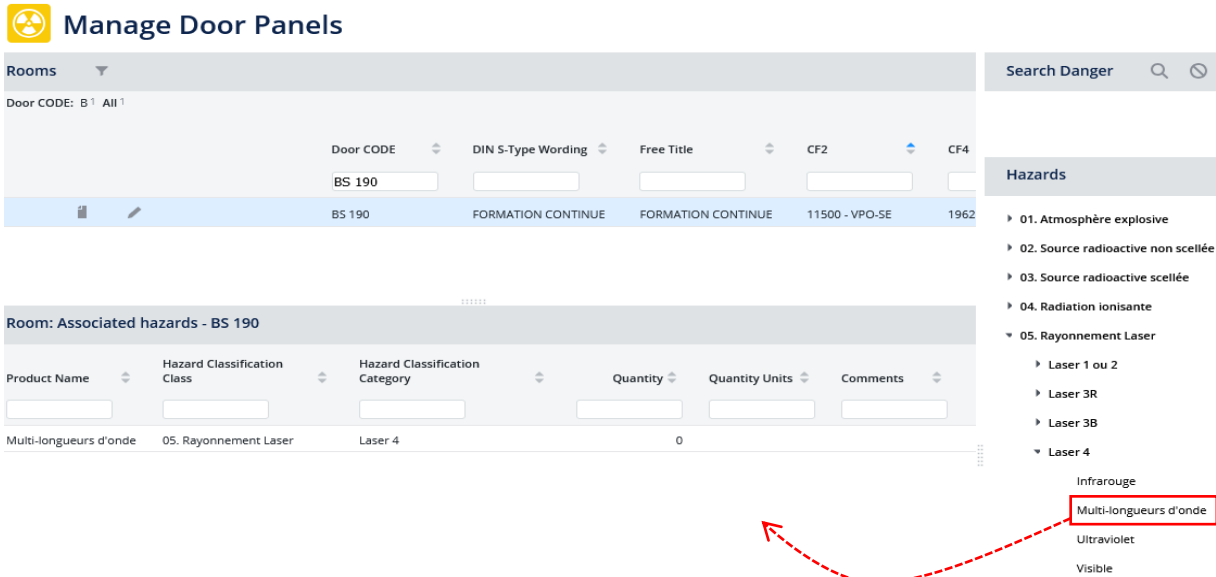


### 4.3. Procedure to add a hazard in a door panel

To indicate a danger in a door panel (Fig. 11):

- a) Select the room on the “**Room box**”
- b) Select the class hazard category in the “**Hazard box**”
- c) Drag and drop the chosen category into the “**Room hazard box**”
- d) When requested, give the required information and save

Fig. 11



### 5. List of hazard and hazard classes

Table 1 summarizes the hazards and hazard classes available on the platform. In the platform, the **names of hazards, classes and categories are written in French**. To help non-French speakers, a translation of the terms relating to hazards and hazard classes is available in Table 1. The column “Categories: action” indicates if a category (other than “drag and drop”) requires further information to give.

Table 1

Hazard (Fr-En)	Hazard class (Fr-EN)	Categories: action
1. Atmosphère explosive Explosive Atmosphere	Atmosphère explosive Explosive Atmosphere	Drag and drop category
2. Sources radioactive non scellée Unsealed radioactive sources	Sources non scellées: Atot < 1kgLL Unsealed sources: Atot < 1kgLL	Drag and drop category
	Sources non scellées: 1kgLL < Atot < 1LA Unsealed sources: 1kgLL < Atot < 1LA	
	Sources non scellées: Labo C Unsealed sources: C Lab	
3. Source radioactive scellée Sealed radioactive sources	Sources scellées: Atot < 1LA Sealed sources: Atot < 1LA	Drag and drop category

Hazard (Fr-En)	Hazard class (Fr-EN)	Categories: action
	Sources scellées: Atot > 1LA Sealed radioactive sources	
4.Radiation ionisante Ionizing Radiation	Rayons X _ Blindage absent X-rays: shielding absent	Drag and drop category
	Rayons X _ Blindage partiel X-rays: partial shielding	
	Rayons X _ Blindage total X-rays: total shielding	
5.Rayonnement Laser Laser Radiation	Laser 1 or 2	Drag and drop category
	Laser 3R	
	Laser 3B	
	Laser 4	
6.Danger biologique Biological hazard	NSB1 (P1)      BSL1	Drag and drop category
	NSB1 (P1-GM)      BSL1 GM	
	NSB2 (P2)      BSL2	
	NSB3 (P3)      BSL3	
7. Nanoparticules Nano Hazard	Nano 1	<ul style="list-style-type: none"> <li>• Drag and drop category</li> <li>• Indicate type of particles</li> </ul>
	Nano 2	
	Nano 3	
08. Champ magnétique Magnetic fields	Champ magnétique Magnetic fields	Drag and drop category
09. Laboratoire Pb/Se/As Laboratory Pb/Se/As	Laboratoire Arsenic Laboratory working with Arsenic <sup>1</sup>	Drag and drop category
	Laboratoire Plomb Laboratory working with Lead <sup>1</sup>	
	Laboratoire Sélénium Laboratory working with Selenium <sup>1</sup>	
10. Matière explosive Explosive compounds	Matière explosive Explosive compounds	<ul style="list-style-type: none"> <li>• Drag and drop category</li> <li>• Indicate approximate total amount in the room</li> </ul>
17. Gaz sous pression hors armoire	Comburant      Oxydizer	• Drag and drop category
	Corrosif      Corrosive	

<b>Hazard (Fr-En)</b>	<b>Hazard class (Fr-EN)</b>	<b>Categories: action</b>
Pressurized gas not stored in EI90 cabinet	<b>Inerte</b> Inert	<ul style="list-style-type: none"> <li>• Indicate number of cylinder(s)</li> <li>• List gas name</li> </ul>
	<b>Inflammable</b> Flammable	
	<b>Toxique</b> Toxic	
<b>21. Alimentation gaz</b> Distribution (supply) of gas	<b>Comburant</b> Oxydizer	<ul style="list-style-type: none"> <li>• Drag and drop category</li> <li>• List gas name</li> </ul>
	<b>Corrosif</b> Corrosive	
	<b>Inflammable</b> Flammable	
	<b>Toxique</b> Toxic	
<b>25. Gaz sous pression dans armoire</b> Pressurized gas stored in EI90 cabinet	<b>Comburant</b> Oxydizer	<ul style="list-style-type: none"> <li>• Drag and drop category</li> <li>• Indicate number of cylinder(s)</li> <li>• List gas name</li> </ul>
	<b>Corrosif</b> Corrosive	
	<b>Inerte</b> Inert	
	<b>Inflammable</b> Flammable	
	<b>Toxique</b> Toxic	
<b>29. Danger électrique</b> Electrical Hazard* <i>* Drag this hazard only if terminal and connections may be touched</i>	<b>Basse tension</b> Low voltage	<ul style="list-style-type: none"> <li>• Drag and drop category</li> <li>• Indicate voltage</li> </ul>
	<b>Haute tension</b> High voltage	
<b>30. Liquide cryogénique</b> Cryogenic liquid	Volume ≤ 30L	Drag and drop category
	Volume > 30L	<ul style="list-style-type: none"> <li>• Drag and drop category</li> <li>• Indicate total volume of fully filled dewar(s)</li> </ul>
<b>31. Matière corrosive</b> Corrosive Compounds	<b>Quantité &lt; 1 [L, Kg]</b> Amount < 1 [L, Kg]	Drag and drop category
	<b>Quantité 1-5 [L, Kg]</b> Amount 1-5 [L, Kg]	
	<b>Quantité &gt; 5 [L, Kg]</b> Amount > 5 [L, Kg]	<ul style="list-style-type: none"> <li>• Drag and drop category</li> <li>• Indicate approximate total amount in the room</li> </ul>
<b>32. Matière inflammable</b> Flammable Compounds	<b>Quantité &lt; 25 [L, Kg]</b> Amount < 25 [L, Kg]	Drag and drop category
	<b>Quantité 25-100 [L,Kg]</b> Amount 25-100 [L,Kg]	



Hazard (Fr-En)	Hazard class (Fr-EN)	Categories: action
	Quantité >100 [L, Kg] Amount >100 [L, Kg]	<ul style="list-style-type: none"> <li>• Drag and drop category</li> <li>• Indicate approximate total amount in the room</li> </ul>
33. Matière comburante Oxydizer Compounds	Quantité < 1 [L, Kg] Amount < 1 [L, Kg]	Drag and drop category
	Quantité 1-5 [L, Kg] Amount 1-5 [L, Kg]	
	Quantité > 5 [L, Kg] Amount > 5 [L, Kg]	<ul style="list-style-type: none"> <li>• Drag and drop category</li> <li>• Indicate approximate total amount in the room</li> </ul>
34. Matière toxique / CMR Toxic and/or CMR Compounds	Quantité < 5 [g, mL] Amount < 5 [g, mL]	Drag and drop category
	Quantité 5-50 [g, mL] Amount 5-50 [g, mL]	
	Quantité > 50 [g, mL] Amount > 50 [g, mL]	<ul style="list-style-type: none"> <li>• Drag and drop category</li> <li>• Indicate approximate total amount in the room</li> </ul>
35. Surface chaude Hot Surface	Surface chaude Hot Surface*  *Refers to temperature of <u>not isolated</u> surface. Not to be used to indicate heating plates	Drag and drop category
51. Installation sous haute pression High Pressure installation  <u>Select this hazard only if a high-pressure system is present in the lab</u>	litre.bar >10*  *Not to be used to indicate hydraulic presses	<ul style="list-style-type: none"> <li>• Drag and drop category</li> <li>• Indicate gas name</li> </ul>
52. Champ électromagnétique variable Electromagnetic fields	Champ EM variable Electromagnetic fields	Drag and drop category
53. Basse température Low temperature	Basse température Low temperature*  *Refers to temperate/cold room	Drag and drop category

Hazard (Fr-En)	Hazard class (Fr-EN)	Categories: action
54. Bruit Noise	Bruit      Noise	Drag and drop category
55. Rayonnement optique incoherent Incoherent light source	Infrarouge      Infrared	Drag and drop category
	Ultraviolet	
	Visible	
56. Danger Mécanique Mechanical hazard	Eléments en mouvement Moving elements	Drag and drop category
	Usinage      Machining	
58. Batterie Battery	Li: E_tot <100 Wh	<ul style="list-style-type: none"> <li>• Drag and drop category</li> <li>• Indicate number of batteries per range of total energy (E_tot)</li> </ul>
	Li: E_tot ≥100 Wh	
	Pb: E_tot <100 Wh	
	Pb: E_tot ≥100 Wh	
70. Local technique Technical room	This section has been created for the “Facilities Operations” personnel and must be used only for technical rooms. It is not adapted to describe hazard in laboratories or workshops.	

<sup>1</sup>Following classification of Hygienists team

**Abbreviations**

Radioactive sources

Atot : Total activity of unsealed radioactive sources

LA: Activity above which an authorization is required to handle the sources

LL: release limit

Biosafety

BSL: biosafety level

GM: genetically modified

Battery

Li: Lithium

Pb: Lead

E\_tot: total energy in the room
















































**6. Signs and access instructions automatically assigned**




































































Based on hazard classes reported in the “Room hazard box”, the platform will automatically assign:























- a) Hazard pictograms. A maximum of four hazard signs will be displayed on the door panel. If more than 4 hazard classes are present in the “Hazard room box”, the system will choose those with higher priority
- b) Obligation/Interdiction signs and access authorization.








































In table 2, the list of hazard classes with corresponding signs and instructions.

































Table 2

Hazard class	Signs automatically indicated	Access authorization
<b>Explosive Atmosphere</b>	     	
<b>Unsealed sources:</b> Atot < 1kgLL	  	
<b>Unsealed sources:</b> 1kgLL < Atot < 1LA	  	
<b>Unsealed sources:</b> C Lab	    	
<b>Sealed sources:</b> Atot < 1LA	 No mandatory and/or obligation signs automatically indicated.	
<b>Sealed sources:</b> Atot > 1LA	 	
<b>X-rays:</b> shielding absent	 	
<b>X-rays:</b> partial shielding	 	
<b>X-rays:</b> total shielding	 No mandatory and/or obligation signs automatically indicated.	
<b>Laser 1 or 2</b>	A hazard sign is not required. No mandatory and/or obligation signs automatically indicated.	
<b>Laser 3R</b>	A hazard sign is not required. No mandatory and/or obligation signs automatically indicated.	
<b>Laser 3B</b>	  	
<b>Laser 4</b>	  	
<b>BSL1</b>	A hazard sign is not required.  	

Hazard class	Signs automatically indicated	Access authorization
<b>BSL1 GM</b>	A hazard sign is not required.  	
<b>BSL2</b>	    	
<b>BSL3</b>	      	
<b>Nano 1</b>	Hazard sign not required.  	
<b>Nano 2</b>	     	
<b>Nano 3</b>	      	
<b>Magnetic fields</b>	   	
<b>Laboratory working with Arsenic</b>	   	
<b>Laboratory working with Lead</b>	   	
<b>Laboratory working with Selenium</b>	   	
<b>Explosive compounds</b>	  	
<b>Oxydizer gas</b> Not stored in EI90 cabinet	  No mandatory and/or obligation signs automatically indicated.	
<b>Corrosive gas</b> Not stored in EI90 cabinet	  No mandatory and/or obligation signs automatically indicated.	
<b>Inert gas</b> Not stored in EI90 cabinet	 No mandatory and/or obligation signs automatically indicated.	

<b>Hazard class</b>	<b>Signs automatically indicated</b>	<b>Access authorization</b>
<b>Flammable gas</b> Not stored in EI90 cabinet	 No mandatory and/or obligation signs automatically indicated.	
<b>Toxic gas</b> Not stored in EI90 cabinet	 No mandatory and/or obligation signs automatically indicated.	
<b>Oxydizer gas</b> Distribution	 No mandatory and/or obligation signs automatically indicated.	
<b>Corrosive gas</b> Distribution	 No mandatory and/or obligation signs automatically indicated.	
<b>Flammable gas</b> Distribution	 No mandatory and/or obligation signs automatically indicated.	
<b>Toxic gas</b> Distribution	 No mandatory and/or obligation signs automatically indicated.	
<b>Oxydizer gas</b> Stored in EI90 cabinet	 No mandatory and/or obligation signs automatically indicated.	
<b>Corrosive gas</b> Stored in EI90 cabinet	 No mandatory and/or obligation signs automatically indicated.	
<b>Inert gas</b> Stored in EI90 cabinet	 No mandatory and/or obligation signs automatically indicated.	
<b>Flammable gas</b> Stored in EI90 cabinet	 No mandatory and/or obligation signs automatically indicated.	
<b>Toxic gas</b> Stored in EI90 cabinet	 No mandatory and/or obligation signs automatically indicated.	

Hazard class	Signs automatically indicated	Access authorization
<b>Low voltage</b>	 No mandatory and/or obligation signs automatically indicated.	
<b>High voltage</b>	 No mandatory and/or obligation signs automatically indicated.	
<b>Cryogenic liquid</b> Volume ≤ 30L	A hazard sign is not required. No mandatory and/or obligation signs automatically indicated.	
<b>Cryogenic liquid</b> Volume > 30L	 No mandatory and/or obligation signs automatically indicated.	
<b>Corrosive Compounds</b> Amount < 1 [L, Kg]	Hazard sign not required.  	
<b>Corrosive Compounds</b> Amount > 1 [L, Kg]	  	
<b>Flammable Compounds</b> Amount < 25 [L, Kg]	Hazard sign not required.  	
<b>Flammable Compounds</b> Amount >25 [L,Kg]	  	
<b>Oxydizer compounds</b> Amount < 1 [L, Kg]	Hazard sign not required.  	
<b>Oxydizer compounds</b> Amount >1 [L, Kg]	  	
<b>Toxic/CMR Compounds</b> Amount < 5 [g, mL]	Hazard sign not required.  	
<b>Toxic/CMR Compounds</b> Amount > 5 [g, mL]	  	
<b>Hot Surface</b>	 No mandatory and/or obligation signs automatically indicated.	
<b>High Pressure installation</b> litre.bar >10*	 No mandatory and/or obligation signs automatically indicated.	

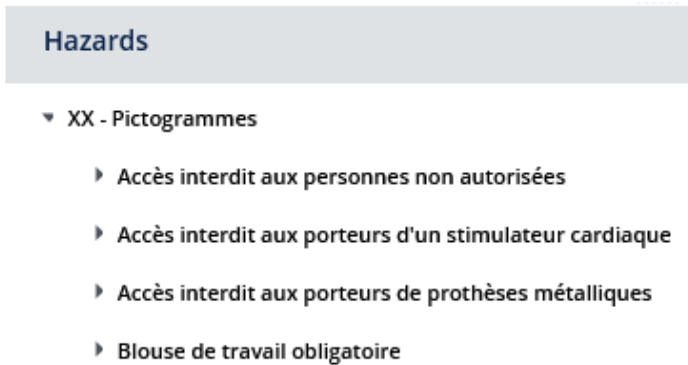
Hazard class	Signs automatically indicated	Access authorization
Electromagnetic fields	  	
Low temperature*	 No mandatory and/or obligation signs automatically indicated.	
Noise	 	
Infrared light source	  	
Ultraviolet light source	  	
Visible light source	  	
Moving elements	 No mandatory and/or obligation signs automatically indicated.	
Machining	 	
Battery Li: E_tot <100 Wh	A hazard sign is not required. No mandatory and/or obligation signs automatically indicated.	
Battery Li: E_tot ≥ 100 Wh	 No mandatory and/or obligation signs automatically indicated.	
Battery Pb: E_tot <100 Wh	A hazard sign is not required. No mandatory and/or obligation signs automatically indicated.	
Battery Pb: E_tot ≥ 100 Wh	 No mandatory and/or obligation signs automatically indicated.	

**7. Obligations and interdiction signs**

In addition to the automatically assigned signs, other pictograms can be displayed. A maximum of six mandatory signs (blue circle with white design) can be displayed on a panel. Similarly, a maximum of six prohibition signs (red circle with backslash) can be displayed on a panel.

To add more signs, click on “XX – Pictogrammes” in the “Hazard box” (Fig. 12), choose the pictogram and drag and drop it on the “Room hazard box”

Fig. 12



The list of available interdiction signs and mandatory signs are described in table 3 and 4 respectively.

Table 3





























Prohibition Sign	Description	Prohibition Sign	Description
	Accès interdit aux personnes non autorisées No access to unauthorized personnel		Accès interdit aux porteurs d'un stimulateur cardiaque. No access for people with active implanted cardiac device.
	Flamme nue interdite No open flame		Accès interdit aux porteurs de prothèses métalliques. No access for people with metallic implants.
	Substances inflammables interdites No flammable compounds		Objets métalliques interdits. No metallic articles or watches.
	Défense d'éteindre avec de l'eau Do not extinguish with water		Utilisation de téléphones portables interdite. No activated mobile phones.
	Bijoux interdits No jewelry allowed		Cheveux longs non attachés interdit Long untied hair forbidden
	Interdiction de manger ou de boire Consumption of food or drink forbidden		



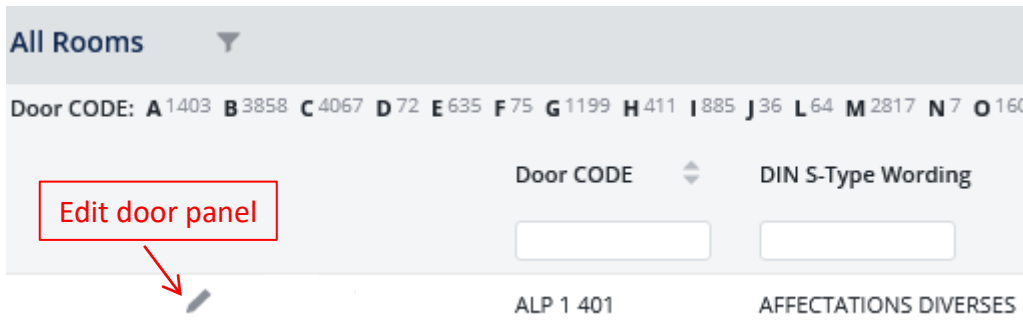
Table 4

Mandatory Sign	Description	Mandatory Sign	Description
	<b>Blouse de travail obligatoire</b> Mandatory lab coat.		<b>Protège-face obligatoire.</b> Mandatory face shield.
	<b>Combinaison de travail obligatoire.</b> Mandatory protective suit.		<b>Protège-face et protection oculaire obligatoire.</b> Mandatory face shield and eye protection.
	<b>Protection oculaire obligatoire.</b> Mandatory eye protection.		<b>Gants de protection obligatoire.</b> Mandatory protective gloves.
	<b>Protection de l'ouïe obligatoire.</b> Mandatory ear protection.		<b>Casque de protection obligatoire.</b> Mandatory protective helmet.
	<b>Charlotte obligatoire.</b> Mandatory hair cap.		<b>Sur-chaussures obligatoires.</b> Mandatory over-shoes.
	<b>Chaussures de sécurité obligatoires.</b> Mandatory safety shoes.		<b>Protection respiratoire obligatoire</b> Mandatory respiratory protection
	<b>Protection des voies respiratoires obligatoire</b> Mandatory airways protection (with a filter cartridge respiratory mask)		<b>Protection contre les chutes obligatoire.</b> Mandatory protection against falling.
	<b>Port de dosimètre</b> Mandatory dosimeter		<b>Chaussure antistatique obligatoire.</b> Antistatic footwear mandatory
	<b>Protection oculaire opaque obligatoire</b> Mandatory opaque eye protection.		

**8. Create the door panel: contact parts**

Once hazards have been assigned to a room by drag and drop the categories, it will be necessary to add information like contact names and create the PDF. To do that, click on the pencil icon as indicated in figure 13.

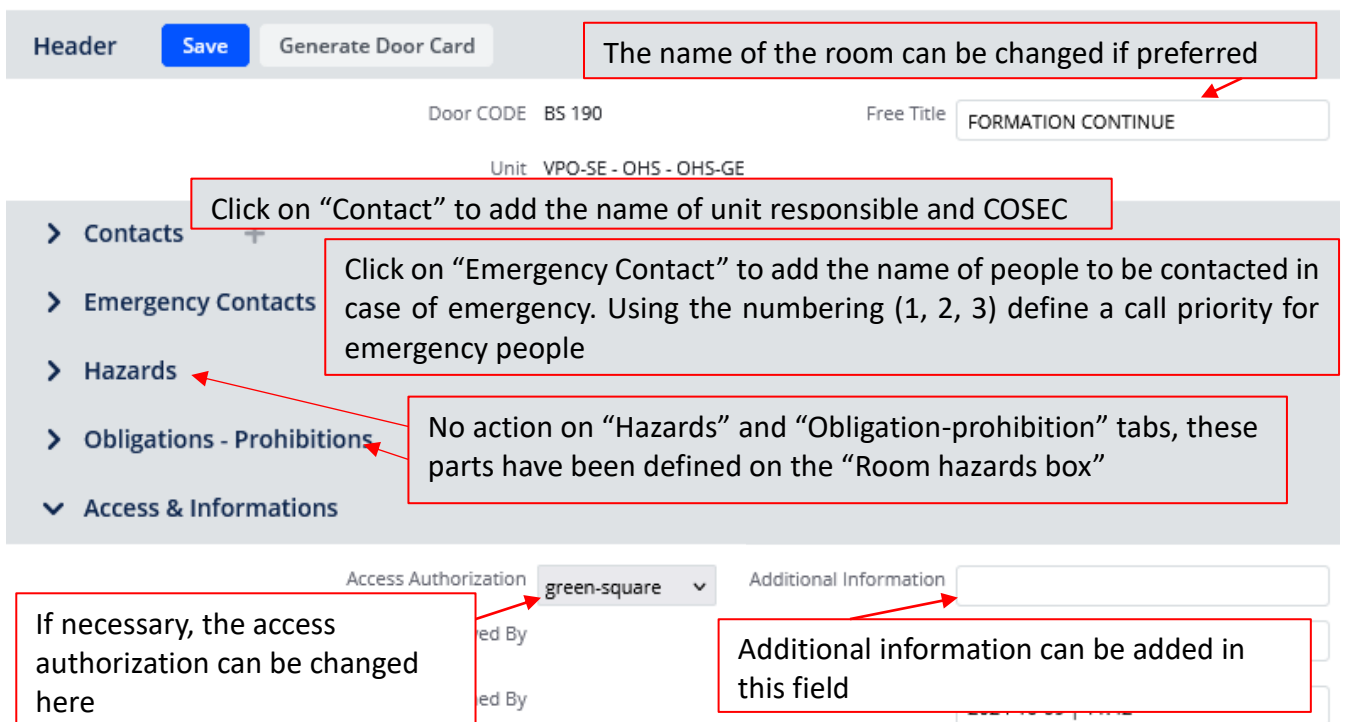
Fig. 13



A pop-up window will open, and the following information can be added (see Fig. 14):

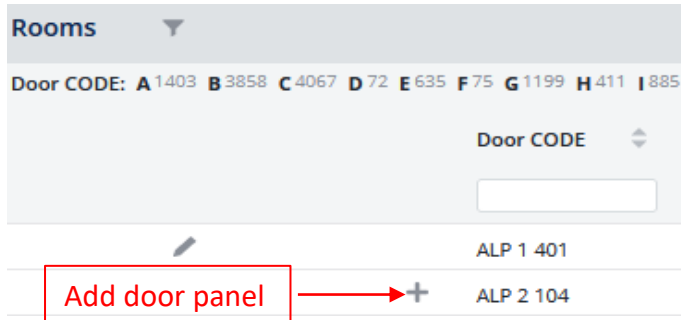
- 1) Unit responsible and COSEC names
- 2) Emergency contacts
- 3) Name of the room (it is possible to define the type of work done in the room (ex: Cell culture, Microscopy room, ...))
- 4) If necessary, the type of access for external members of the group (for example cleaning personnel) can be changed
- 5) Additional information can be added in the specific field

Fig. 14



After adding the required information, click on Save.  
The PDF file of the door panel can be created by clicking on “Generate Door Panel”.

Fig. 15



In case the panel needs to be created for the first time and there are no hazards in the room, the pencil icon is not visible. In this case, click on the icon “plus” to add contacts information and to create the PDF file of the door panel (Fig. 15)

### 9. Access authorization

As indicated in chapter 6 and table 2, the platform Cristal will automatically assign the access authorization based on the hazards indicated on the door panel:

- a) The green square (Fig.16) is automatically assigned when there is no specific authorization to access the room
- b) The orange diamond-shaped (Fig.16) indicates that personnel external to the unit must be trained before accessing this room. In this case cleaning personnel need to be trained before getting access.
- c) The red circle (Fig. 16) indicates forbidden access for personnel external to the unit. This means that no cleaning will be carried out by housekeeping personnel.

Fig. 16



The authorization access automatically assigned can be changed in the door panel windows (see Fig. 12).

*Note: It is only possible to increase the level of access restriction (i.e. if the system automatically assigns the orange access, it is not possible to change it to the green one)*