



Cannabis playbook for operating a safer and more secure cannabis facility

**Helping deliver regulatory compliance to the
legal cannabis industry**



Empowering Trust®

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SECTION 1

Safety, security and sustainability in the legal cannabis industry: our expertise in addressing uncertainty in emerging markets

Since 1894, UL has helped enable the possibilities of the moment while looking ahead to safeguard the unknowns of tomorrow. As trusted partners who advance safety, sustainability and security, we help stakeholders build a better world.

We employ exacting scientific processes and the highest ethical principles to help create a better world. As safety challenges and concerns expand to include sustainability, well-being, connected technologies and security, we provide broad leadership, deep expertise and vital services to enable these transformations.

This holds true with the legal cannabis industry. UL was approached by regulators, fire fighters, suppliers, governments, cannabis companies and equipment manufacturers to help define the safety and security of cannabis growing and processing facilities. To support our mission, we use our expertise and knowledge to help strengthen the safety, security and sustainability of the legal cannabis industry by delivering:

- Global conformity testing, inspection, audit, certification and verification services
- Creative solutions to help protect the environment, communities, workers and emergency responders
- Insightful educational and advisory services
- Innovative digital solutions to manage supply chain integrity and risk
- Rigorous and comprehensive technical guidance

The purpose of this guide is to demonstrate to participants and stakeholders tied to the legal cannabis industry how UL can assist stakeholders in creating safe and secure business operations while adhering to local cannabis regulatory and code requirements.



SECTION 2

Understanding Canadian legislative framework – A framework

A brief history on cannabis legalization in Canada

In 1923 Canada added cannabis to the Confidential Restricted List under the Narcotics Drug Act Amendment Bill. In 2001, Health Canada moved to legalize cannabis for medical purposes with the Marihuana for Medical Purposes Regulations that were replaced in 2014 with the Access to Cannabis for Medical Purposes Regulations.

“In a survey conducted by the United Nations in 2011 it was revealed that 12.6% of the [Canadian] population, roughly 4.39 million adults, used cannabis at least once in the calendar year, while the estimate for those aged between 15 and 24 was 26.3%. Considering the massive size of the cannabis market, **prohibition has kept the drug industry illegal and, more importantly, deregulated.** This makes for risk-premiums that create a monopolized market with high barriers to entry, which in turn, leads to increases in violence, organized crime and the diversion of limited government resources to prosecuting drug users, i.e., nonviolent crimes.”¹

Fast forward to April 2017, when a bill was proposed to legalize the use of recreational cannabis by individuals 18 and older. Provinces are permitted to further restrict possession, sale and use. In June 2018 the bill was passed and on Oct. 17, 2018, adult recreational use of cannabis

became federally legal in Canada. The Canadian Cannabis Act “creates a legal and regulatory framework for controlling the production, distribution, sale and possession of cannabis in Canada.”²

As expected, the use of cannabis for recreational purposes became legal across the country on that date under the Cannabis Act. Persons aged 18 or older (dependent on province or territory regulations) can possess up to 30 grams of dried cannabis or equivalent non dried form in public. In October 2019, Cannabis 2.0 came into effect in Canada, legalizing additional cannabis-related products such as edibles, beverages, oils and creams. Giving adults legal access to a broader range of cannabis products helps achieve the government’s objective of displacing the illegal market and keeping profits out of the hands of criminals and organized crime.

Cannabis regulations in Canada touch many different parts of everyday life and provide rules around what’s allowed and what isn’t. Canada operates under a federated system, meaning that the federal government is in charge of some things, while other decisions are left to each individual province/territory or municipality.

Figure 1: Summary of roles and responsibilities related to cannabis

Federal	Provincial	Municipal
<ul style="list-style-type: none"> • Cannabis licensing • Criminal law • Packaging, labelling, display and promotion • Health and safety requirements • Types of products allowed for sale • Law at the border • Seed-to-sale tracking • Minimum legislation for sale, age and distribution • Medical cannabis 	<ul style="list-style-type: none"> • Selecting type of distribution model • Licensing the distribution and retail sale • Issues of local concern, e.g., age limits, number of plants that an individual can possess, etc. • Workplace safety • Offences for youth possession • Home cultivation • Personal possession • Building, fire, electrical, etc., code development and implementation 	<ul style="list-style-type: none"> • Zoning by-laws • Retail locations • Nuisance concerns • Business licenses • Public consumption, i.e., Smoke Free Places Act and by-law enforcement • Enforcement • Code compliance, permits and inspections (in most jurisdictions)

Source: Legal Info Nova Scotia, “Cannabis in Canada: Municipal, Provincial & Federal Responsibilities” <https://www.legalinfo.org/legal-information-topics/cannabis-in-canada-municipal-provincial-federal-responsibilities>

¹ “The Economic Case for Marijuana Legalization in Canada”. Journal of Alternative Perspectives in the Social Sciences. 5 (1): 96–100. 1 December 2012.

² <https://www.legalinfo.org/legal-information-topics/cannabis-in-canada-municipal-provincial-federal-responsibilities>

1. Federal

Start with Health Canada

Health Canada, a federal department, is the general overseer of cannabis policy in Canada and ensures quality control, seed-to-sale tracking, issuing licenses for growing and production and maintaining the medical market.

To begin operating in the legal cannabis industry in Canada, you must have a license from Health Canada to:

- Grow cannabis commercially (large or small scale)
- Process cannabis into finished products (including packaging and labelling)
- Sell cannabis for medical purposes
- Conduct tests on cannabis
- Conduct research with cannabis

Information describing applications requirements from Health Canada can be found on the “Application requirements for cannabis cultivation, processing and medical sales licences” page. To understand what type of license to apply for, see Figure 2 below.

Figure 2: Federal cannabis license types

I want to...			The license I need to apply for...	This allows me to...
grow cannabis	on a large scale?	→	STANDARD CULTIVATION	produce dried and fresh plants, seeds
	on a small scale (≤ 200 m²)?	→	MICRO-CULTIVATION	produce plants and seeds in area up to 50 m²
	for starting material (plants and seeds)?	→	NURSERY	
make cannabis products	on a large scale?	→	STANDARD PROCESSING	manufacture cannabis products
	on a small scale (using ≤ than the equivalent of 600kg dried cannabis/year)?	→	MICRO-PROCESSING	
sell cannabis for medical purposes		→	SALE FOR MEDICAL PURPOSES	sell cannabis to registered clients
do testing of cannabis		→	ANALYTICAL TESTING	do any testing (i.e., third party)
do research with cannabis		→	RESEARCH	do research and development

Source: Government of Canada, “Application requirements for cannabis cultivation, processing and medical sales licences” <https://www.canada.ca/en/health-canada/services/drugs-medication/cannabis/industry-licensees-applicants/licensing-summary/guide.html#5>

Cannabis Resources

Cannabis in Canada

<https://www.canada.ca/en/services/health/campaigns/cannabis.html>

Cannabis Act

<https://laws-lois.justice.gc.ca/eng/acts/C-24.5/>

Cannabis regulations

<https://laws-lois.justice.gc.ca/eng/regulations/SOR-2018-144/>

Cannabis licensing application

<https://www.canada.ca/en/health-canada/services/drugs-medication/cannabis/industry-licensees-applicants/licensing-summary/guide.html#5>

Canada has developed the **Cannabis Tracking and Licensing System (CTLS)** to enable interested parties to submit an application. This system allows entrants to the industry to submit and view the progress of applications online. It also allows participants in the industry to submit amendments to licenses and inventory reports.

The Health Canada cannabis tracking system:

- Enables the tracking of cannabis
- Prevents legal cannabis from being diverted to the illegal market
- Prevents illegal cannabis from being introduced into the legal market

Most applications submitted via CTLS require completion of the following sections:

- 1. Proposed license holder** – An application can be created for an individual or an organization. A responsible person must be designated for all applications.
- 2. Mailing address** – The Canadian address where the applicant would like to receive official mailed correspondence, e.g., the license when issued.
- 3. License class and subclass** – The applicant must select the license classes and subclasses for which they are applying.
- 4. Site details** – Based on the license class, certain information is required for each site.

Complete site address: Include Canadian address as well as latitude and longitude.

Site survey: A building location survey, location certificate or similar document, prepared and certified by a person qualified to do so in the jurisdiction where the site is located, such as a qualified land surveyor. The survey must accurately depict the site at the date of submission.

Aerial view: A clear and legible aerial view of the proposed site and surrounding lots to within 500 metres. The aerial view must accurately depict the site at the date of submission.

Production capacity: An estimate of the proposed annual production amount, e.g., kilograms per year, number of plants or seeds per year, etc., for each applicable cannabis class as found in Schedule 4 of the Act.

Areas (buildings and rooms, and outdoor areas) and activities: Each outdoor area (if applicable) and indoor area (building or part of building) including rooms must be named and the names included in the application. The names used to identify each area must match all other information submitted, e.g., on the site plan. All activities conducted, and the room in which they are conducted must also be identified, e.g., operations area [either cultivation or non cultivation], testing area, storage area, sales with possession area, sales without possession area, etc. There is no requirement to identify areas and rooms in the CTLS in which no activities related to cannabis will take place, e.g., lavatory or transitory areas, e.g., hallways. However, these areas and rooms should still be identified on the floor plan(s). More than one activity can occur in each area. Additional information may be requested to assess how the proposed activities meet all regulatory requirements.

Cannabis Tracking and Licensing System

<https://www.canada.ca/en/services/health/publications/drugs-health-products/getting-started-cannabis-tracking-licensing-system.html>

Applying for a cannabis license

<https://www.canada.ca/en/health-canada/services/drugs-medication/cannabis/industry-licensees-applicants/licensing-summary/guide.html#5>

5. **Site personnel** – The applicant must identify individuals that must have a Cannabis Tracking and Licensing System (CTLS) account and security clearances. The individuals will differ, based on the license class or subclass as well as the type of license holder. The applicant must ensure that each person identified has the knowledge, qualifications, experience and ability to fulfill their responsibilities, as applicable.
6. **Site ownership** – The site owner must be identified or a site owner consent form must be completed if the site is owned by another individual or corporation.
7. **Notice to local authorities** – Applicants must provide a written notice to local authorities located in the area of the proposed site, and submit a copy of this notice as part of their application. More specifically, the notice must be provided to a senior official of the following:
 - a. Local government
 - b. Local fire authority
 - c. Local police force or Royal Canadian Mounted Police detachment (RCMP) responsible for providing policing services to that area
8. **Physical security (including organizational security plan)** – The requirements for an organizational security plan apply to all license classes, but the physical security requirements differ, depending on the license class and subclass, if applicable.
9. **Good production practices (GPP)** – The applicant is required to provide a good production practices report that clearly demonstrates how the GPP requirements will be met.
10. **Record keeping** – There are regulatory requirements for record keeping and reporting that must be met by a license holder:
 - a. Record keeping attestation
 - b. Key investor reports
 - c. Detailed description of the record keeping methods proposed for additional requirements for sale for medical purposes (sale for medical purposes license only)

Cannabis Tracking and Licensing System

<https://www.canada.ca/en/services/health/publications/drugs-health-products/getting-started-cannabis-tracking-licensing-system.html>

Applying for a cannabis license

<https://www.canada.ca/en/health-canada/services/drugs-medication/cannabis/industry-licensees-applicants/licensing-summary/guide.html#5>

DID YOU KNOW?

UL is a leader in helping companies secure their buildings and facilities, and the legal cannabis industry is no different.

See Section 3 to learn more about our cannabis facility audit service that will review your operation and help you identify and address regulatory compliance risks that may exist at your cannabis facility.

GPP is the standard that Health Canada has adopted as part of the licensing process. However, to export product to European countries, Canadian producers may want to follow Good Manufacturing Practices (GMP) that require producers to control environmental variables along with conducting quality checks throughout the manufacturing process.

2. Legal cannabis in the provinces and territories

Once an operation has received a Health Canada license to operate in the legal cannabis industry, cannabis business owners/operators need to move on to the provincial/territory government to apply for proper business licenses.

Receiving a license from Health Canada is the first part of complying with regulations. Your cannabis business is still a business and you need to adhere to not only the provincial/territorial requirements as they relate to cannabis but also general business regulations – from general safety concerns to building construction to workplace health and safety.

The federal Cannabis Act allows for the legal use of cannabis and defines minimum requirements that cannabis operations must meet. Provinces/territories have the following responsibilities for cannabis operations:

- Selecting type of distribution model
- Licensing the distribution and retail sale
- Workplace safety

REMEMBER: Receiving your license to operate in the cannabis industry from Health Canada is not the only requirement that you need to meet to begin operating in the legal cannabis industry. Your business must work with provincial or territorial governments to meet requirements for operating as a business.



Figure 3: Provincial cannabis distribution models

Provinces	Government-operated stores	Private licensed stores	Online
Alberta		•	Alberta Cannabis
British Columbia		•	BC Cannabis Stores
Manitoba		•	
New Brunswick	•		Cannabis NB
Newfoundland and Labrador		•	Cannabis nl
Northwest Territories	•		NWT Liquor and Cannabis Commission
Nova Scotia	•		NSLC Cannabis
Nunavut	•		
Ontario	•		OCS - Ontario Cannabis Stor
Prince Edward Island	•		PEI Cannabis
Quebec	•		
Saskatchewan		•	
Yukon	•		

Provinces/territories using a private distribution model have an application process for cannabis operations. While each province has its own requirements, below are a few general steps to follow:

- 1. Municipal assessment** – More details follow in the section related to municipalities and cannabis. In general municipalities may have by-laws or zoning restrictions relating to retail cannabis stores that impact your eligibility for a license. It is recommended that you contact your municipal government to determine local requirements prior to the submission of your application.
- 2. Online/paper-based application** – Review each province/territory requirements as there may be more than one set of applications. For example, Ontario requires applications for retail operator license, retail store authorization and retail store location.
- 3. Review of premises** – A preliminary review of your business plan and application, along with a site visit by a regulatory authority can happen at any time. Areas of review include:
 - Floor/site plans
 - Personal and financial documents
 - Records review
 - Life safety and security systems

DID YOU KNOW?

UL can help assist in understanding the regulatory requirements for your retail operation with our cannabis facility audit service. UL's cannabis facility audit focuses on the safety and security of employees and your operation by leveraging our experience working with regulatory authorities to help you understand how to comply with local regulations.

Cannabis facility audit service

www.ul.com/cannabis

Occupational health and safety (OH&S)

Safety in the workplace is a paramount concern for most businesses. The cannabis industry is no different, given the amount of hazards that can be present. In an industry that can combine agricultural, pharmaceutical, chemical and consumer goods production processes, the potential for risky situations is always present.

In Canada, occupational health and safety is the jurisdiction of the provinces and territories. At the provincial and territorial level, the government department responsible for OH&S varies with each jurisdiction. Usually it is called a ministry or department of labour. In some jurisdictions, it is a workers' compensation board or commission that is responsible for occupational health and safety. Each provincial or territorial department is responsible for the administration and enforcement of its occupational health and safety act and regulations. For the name of each department see the chart below:

Figure 4: Occupational health and safety responsibility by province

Alberta	British Columbia	Manitoba	New Brunswick
Occupational Health and Safety 866.415.8690 www.alberta.ca/occupational-health-safety.aspx	WorkSafeBC 888.621.7233 www.worksafebc.com	SAFE Manitoba 866-929-7223 Safemanitoba.com	WorkSafeNB 800.999.9775 www.worksafenb.ca
Newfoundland and Labrador	Northwest Territories and Nunavut	Nova Scotia	Ontario
Occupational Health and Safety Branch, Service NL 800.563.9000 www.workplacenl.ca	Workers' Safety and Compensation Commission of the Northwest Territories and Nunavut 800.661.0792 www.wscn.nt.ca	Occupational Health & Safety Division 800.952.2687 www.gov.ns.ca/lae/ohs/	Ministry of Labour, Training and Skills Development 877.202.0008 www.ontario.ca/page/ministry-labour-training-skills-development
Prince Edward Island	Quebec	Saskatchewan	Yukon
Safe Workplaces 800.237.5049 www.wcb.pe.ca	Commission des normes, de l'équité, de la santé et de la sécurité du travail (CNESST) 844.838.0808 www.csst.qc.ca	WorkSafe Saskatchewan 800.667.7590 www.worksafesask.ca	Occupational Health and Safety Branch 800.661.0443 Wcb.yk.ca

Canadian Centre for Occupational Health and Safety

<https://www.ccohs.ca/oshanswers/information/govt.html>

DID YOU KNOW?

There are numerous policies regarding employee conduct and cannabis in the workplace, but very little is written on employee safety in a cannabis workplace. UL can provide a starting point to help you create a safe and secure work environment for your employees while maintaining the integrity of the end product. UL offers over 1,000 online employee safety training courses covering a comprehensive suite of health and safety topics.

Employee health and safety (EHS) training

<https://www.ul.com/offerings/online-employee-health-and-safety-ehs-training>

3. Operating a cannabis business in provinces and territories

While the provincial governments have a specific set of cannabis-related requirements, any cannabis operation still runs like a traditional business and needs to adhere to provincial codes or regulations, including building, fire and electrical codes.

Building codes: Each province or territory adopts a building code based on the National Building Code of Canada. As a model code, the National Building Code has no legal status until it is adopted for use by individual provinces and territories.

Fire codes: Similar to provincial building codes, the Fire Code is a model code that becomes law only when enacted by provincial regulation. These regulations may or may not include amendments depending on the province.

Electrical codes: The electrical code references electrical product standards which, in conjunction with the electrical code, form the basis for the Canadian electrical product and installation safety scheme. The Canadian Electrical (CE) Code and referenced product standards are adopted through regulation by all provinces and territories. This adoption is what makes the CE Code enforceable by an authority having jurisdiction (AHJ).

Figure 5: Applicable provincial/territorial codes

Alberta	British Columbia	Manitoba	New Brunswick	Newfoundland and Labrador
Building code	Building code	Building code	Building code	Building code
Fire code	Fire code	Fire code	Fire code	Fire code
Electrical code	Electrical code	Electrical code	Electrical code	Electrical code
Northwest Territories	Nova Scotia	Nunavut	Ontario	Prince Edward Island
Building code	Building code	Building code	Building code	Building code
Fire code	Fire code	Fire code	Fire code	Fire code
Electrical code	Electrical code	Electrical code	Electrical code	Electrical coe
Quebec	Saskatchewan	Yukon		
Building code	Building code	Building code		
Fire code	Fire code	Fire code		
Electrical code	Electrical code	Electrical code		

4. Municipal

Each municipality in Canada is empowered to make rules that are directly linked to its jurisdictions. These types of things include:

- Selecting type of distribution model
- Business licensing
- Enforcement of provincial building codes
- Retail location requirements, i.e., each cannabis point of sale must be a defined distance from a school, etc.

Providing a detailed review of the cannabis-related regulations for each of the 3,572 municipalities among the 10 provinces and three territories is too complex for this document. Please refer to Figure 3 for links to each provincial cannabis site for information on individual municipalities.

A very good roadmap for municipalities and cannabis is a **Municipal Guide to Cannabis Legalization**, developed by the **Federation of Canadian Municipalities**.

Zoning and land use

The location, scale and density of cannabis facilities as well as retail locations has real impacts on local communities. Commercial cultivation presents challenges ranging from outdoor odors to use of public water and energy utilities.

First and foremost, similar to obtaining a provincial cannabis license, if a business obtains a federal license under the Cannabis Act, it may still be subject to provincial/territorial or local government regulations dealing with land use management. Municipalities have authority over land use regulation and have the power to prohibit and regulate certain uses through zoning by-laws.

Licensed producers are required to obey municipal zoning by-laws. A chief building official will refuse to issue a building permit for any proposed construction or new development that does not comply with the provisions of a zoning by-law.

Industrial vs. agricultural zones

Producing cannabis for nonmedical use at a commercial scale is an activity that has some similarities to certain agricultural uses carried out in greenhouses that are often but not always in agricultural zones. However, it's not so straightforward to simply apply existing regulations for fruit and vegetable greenhouse operations to cannabis production.

Municipal councils across Canada continue to have conversations to determine if a cannabis operation requires changes or amendments to existing zoning by-laws, an entirely new specific-use category or if it can simply be classed within existing definitions for industrial or agricultural zone.

Municipal Guide to Cannabis Legalization

<https://fcm.ca/sites/default/files/documents/resources/guide/municipal-guide-cannabis-legalization.pdf>



There are additional areas of interest for municipalities to consider:

- **Utility usage:** Cannabis production needs a supply of water for irrigation, electricity for lighting and energy for heating. The availability of adequate utilities is a basic land use management consideration.
- **Security:** Based on the size or value of the crop being cultivated, operators need to give serious thought regarding heightened security based on the location of a specific operation.
- **Facility safety:** Extraction of CBD, for example, can involve the use of butane, which is explosive at ordinary temperatures. This is an industrial activity that may be appropriate only in industrial zones or in buildings with particular design and construction characteristics.

Retail location requirements

Municipalities can use local land use regulations to prevent the clustering of too many of one kind of business. They can also keep similar types of businesses or activities in one place and/or away from other land uses. Common candidates for such treatment are so-called “adult” businesses, arcades, pawnshops and thrift stores.

The Association of Canadian Cannabis Retailers provides a helpful resource for information on cannabis retail in Canada.

License to operate or business regulations

Local municipalities may establish specific regulations for certain types of businesses. Types of regulations may cover the days and hours of operation of the business, age of individuals permitted on the premises, recordkeeping, and the display and advertising of products at the premises.

Typical business regulations for cannabis retail businesses might include:

- Requiring the applicant to submit certain documents such as a security plan, proof of a security alarm contract, 24/7 contact information, a list of employees and a police information check.
- Prohibiting minors on the premises, limiting the hours of operation and requiring security measures.
- Prohibiting consumption on the premises.
- Restricting the sale of other products on the premises.
- Prohibiting the display and advertising to minors.
- Requiring that a minimum number of employees with specific qualifications be on premises when open.
- Restricting advertising and signs visible from the outside of the premises.
- Requiring a transparent storefront.
- Requiring measures to prevent nuisances.

DID YOU KNOW?

The need for plant oil extraction is increasing, and often the extraction process itself creates hazardous conditions. UL offers safety certification of plant oil extraction equipment, evaluated to the requirements of UL 1389, Outline of Investigation for Plant Oil Extraction Equipment. For more information please visit www.UL.com/cannabis.

Association of Canadian Cannabis Retailers

<https://accres.ca/regulations/>

Cannabis facilities and outdoor odours

Odour issues rank among top concerns for municipalities and ultimately are difficult to regulate and remediate. While odours are hard to quantify and harder to prove their source, they still result in annoyance complaints from nearby residents.

The characteristic odour associated with cannabis is attributed to the release of chemical compounds into the air known as volatile organic compounds (VOCs).

Current practices recommend the use of appropriate ventilation and filtration systems at cannabis production/cultivation facilities to mitigate the release of substances that may result in odours. Health Canada recommends an air filtration system using a H13 high-efficiency particle air (HEPA) filter.

SECTION 3

Support services for the legal cannabis industry

UL addresses uncertainty in emerging markets by providing a full suite of services including testing, certification, inspection, auditing, advisory services and training to a wide variety of industries.

We now provide the legal cannabis market access to our comprehensive service portfolio across the entire supply chain. From horticultural lighting equipment to oil extraction equipment to building safety and security systems, UL provides safety services to inform and protect businesses. Our comprehensive software can help you source optimal materials and ingredients, meet sustainability goals and deliver transparency to your stakeholders about your supply chain and the goods you provide to your buyers. Our digital tools can also help enable secure and safe transactions to protect your brand and customers. In addition we offer safety and compliance training, which will help demonstrate your dedication to safety, security, and sustainability to your customers, code authorities, and stakeholders. We continue to work with manufacturers to test and certify the products used in legal cannabis operations where safety and security is paramount.

In the following section we'll showcase the services that members of the legal cannabis supply chain can utilize to develop a safer, more secure and more sustainable operation. From facility audits to testing, inspection and certification of equipment used in cannabis facilities, these can help you access the global market, comply with regulations and mitigate safety, security and sustainability risks in the legal cannabis and CBD industry.

DID YOU KNOW

In addition to the possibility of outdoor air quality concerns, your facility may have risks related to indoor air quality. UL offers indoor air quality certification, providing assessments to detect recognized and common sources of indoor air quality problems where they occur. Once certified, you receive the UL GREENGUARD® Certification Mark.

<https://www.ul.com/resources/indoor-air-quality-certification>.

Public Health Ontario created an evidence brief related to odours from cannabis production

<https://www.publichealthontario.ca/-/media/documents/eb-cannabis-production-odours.pdf?la=en>

Cannabis facility audit – providing safety and security insight to a legal cannabis operation

Our starting point is UL's cannabis facility audit. This service is based on the first Standard developed specifically for the legal cannabis industry, CAN/ULC-S4400, the Standard for Safety of Premises, Buildings and Equipment Utilized for the Cultivation, Production and Processing of Cannabis. To read a free online version of the Standard, visit [shopulstandards.com](https://shop.ulstandards.com) and search for S4400. You will need to create an account on the site if you haven't done so already.

The cannabis facility audit service helps businesses in the legal cannabis industry understand and navigate requirements associated with construction and operation of a cannabis facility. As the legal cannabis market matures, the rules of engagement, standards and regulations will continue to shift. As a result, so will an organization's ability to succeed.

Think of it as a single resource audit program to assist an operation by enabling safety and security compliance for a cannabis business.

Why will the facility audit help a legal cannabis or CBD operation?

It aims to help:

- Address knowledge gaps in the regulatory framework and to achieve compliance with CAN/ULC-S4400
- Document the compliance with legislated requirements and recognized standards
- Provide the public with peace of mind on facility conditions



UL services for the legal cannabis and CBD industry

Below is a list of products or systems that may be found within a cannabis facility. We have listed the applicable standards to those products or systems as a resource for your use. For more details on these and others, visit [UL.com/cannabis](https://ul.com/cannabis).

We have included links to more information on the UL Product iQ™ database that identifies the companies whose products that have been certified by UL to the applicable standards.

To access the information in Product iQ, you will need to register and sign-in prior to reading the material. The website is free to use and can be accessed at ProductIQ.UL.com.

Product/system	Standard	Standard name or comments	Product iQ link to UL Certified Products	Additional information
Cannabis facility audit	CAN/ULC-S4400	Standard for Safety of Premises, Buildings and Equipment Utilized for the Cultivation, Production and Processing of Cannabis	NA	LINK
Carbon dioxide extinguishing system	NFPA 12	Carbon Dioxide Extinguishing Systems	LINK	LINK
Dry chemical extinguishing system	NFPA 17	Dry Chemical Extinguishing Systems	LINK	LINK
Gaseous agent extinguishing system	NFPA 2001	Standard on Clean Agent Fire Extinguishing Systems	LINK	LINK
Water spray fixed system	NFPA 15	Standard for Water Spray Fixed Systems	LINK	LINK
Flammable gas/vapour detection system	CAN/ULC-S588	Standard For Gas and Vapour Detectors and Sensors, Including Accessories	LINK	
	CAN/CSA-C22.2 No. 60079-29-1:17, Explosive atmospheres – Part 29-1:	Gas detectors – Performance requirements of detectors for flammable gases		
Alarm and electronic security systems	CAN/ULC-S60839-11-1	Standard for Alarm and Electronic Security Systems – Part 11-1: Electronic Access Control Systems – System and Components Requirements	LINK	
	IEC-60839-11-2	Standard for Alarm and Electronic Security Systems – Part 11-2: Alarm and Electronic Security Systems – Part 11-2: Electronic Access Control Systems – Application Guidelines		
Automatic water fire sprinkler system	NFPA 13	Installation of Sprinkler Systems	LINK	LINK
Blackout screens	CAN/ULC-S109	Standard Method for Flame Tests of Flame Resistance of Fabrics and Films	LINK	LINK
Carbon dioxide and carbon monoxide detection system	CAN/ULC-S588	Standard for Gas and Vapour Detectors and Sensors, Including Accessories	LINK	LINK
Combustible storage, use and handling	National Fire Code of Canada (NFCC) and National Building Code of Canada (NBCC)	Provincial and territorial regulations typically adopt an edition of the NFCC and NBCC. Verify the local regulations and code versions in effect.	NA	See Section 3, Figure 5 for applicable Code links
Compressed gas cylinder storage	National Fire Code of Canada (NFCC) and National Building Code of Canada (NBCC)	Provincial and territorial regulations typically adopt an edition of the NFCC and NBCC. Verify the local regulations and code versions in effect.	NA	
Compressed or liquefied carbon dioxide storage, installation, use and handling	NFPA 55	Compressed Gases and Cryogenic Fluids Code	NA	LINK
	National Fire Code of Canada (NFCC)	Provincial and territorial regulations typically adopt an edition of the NFCC. Verify the local regulations and code versions in effect.		See Section 3, Figure 5 for applicable Code links

Product/system	Standard	Standard name or comments	Product iQ link to UL Certified Products	Additional information
Egress: exit door marking	National Building Code of Canada (NBCC)	Provincial and territorial regulations typically adopt an edition of the NFCC and NBCC. Verify the local regulations and code versions in effect.	LINK	See Section 3, Figure 5 for applicable Code links
Egress: means of egress	National Building Code of Canada	Provincial and territorial regulations typically adopt an edition of the NFCC and NBCC. Verify the local regulations and code versions in effect.	LINK	See Section 3, Figure 5 for applicable Code links
Electrical equipment and devices	CSA C22.1	Canadian Electrical Code. Additional product standards and local electrical regulations may apply.	NA	See Section 3, Figure 5 for applicable Code links
Electronic security	UL 2900-2-3	Outline of Investigation for Software Cybersecurity for Network – Connectable Products, Part 2-3: Particular Requirements for Security and Life Safety Signaling Systems	LINK	LINK
Emergency lighting	National Fire Code of Canada (NFCC) and National Building Code of Canada (NBCC)	Provincial and territorial regulations typically adopt an edition of the NFCC and NBCC. Verify the local regulations and code versions in effect.	NA	See Section 3, Figure 5 for applicable Code links
Extraction booths or pods (other than CO ₂ or nonhazardous)	UL/ULC 1389 and CSA C22.1 (CEC)	Standard for Plant Oil Extraction Equipment for Installation and Use in Ordinary (Unclassified) Locations and Hazardous (Classified) Locations	LINK	LINK
Extraction methods	ULC TG-44002	Safety of Cannabis Oil Extraction Processes	NA	LINK
Facility risk level	CAN/ULC-S4400 Part 3	Standard for Safety of Premises, Buildings and Equipment Utilized for the Cultivation, Processing and Production of Cannabis, Part 3	NA	LINK
Fire alarm installation (per NBCC)	CAN/ULC-S524 CAN/ULC S537	Standard for Installation of Fire Alarm Systems Standard for Verification of Fire Alarm Systems	NA	LINK
Fire alarm maintenance (per NFCC)	CAN/ULC S536	Standard for Inspection, Testing and Maintenance of Fire Alarm Systems	NA	LINK
Flammable solvent (new or used) storage and use	National Fire Code of Canada (NFCC)	Provincial and territorial regulations typically adopt an edition of the NFCC and NBCC. Verify the local regulations and code versions in effect.	NA	LINK
Hazardous material storage, use and handling	National Fire Code Canada (NFCC)	Provincial and territorial regulations typically adopt an edition of the NFCC and NBCC. Verify the local regulations and code versions in effect.	NA	LINK
Horticultural lighting	UL 8800	Standard for Horticulture Lighting Equipment and Systems	LINK	LINK
Intrusion alarm systems	CAN/ULC-S302	Standard for the Installation, Inspection and Testing of Intrusion Alarm Systems	LINK	
Intrusion detection system	CAN/ULC-S302	Standard for the Installation, Inspection and Testing of Intrusion Alarm Systems	LINK	

Product/system	Standard	Standard name or comments	Product iQ link to UL Certified Products	Additional information
Monitoring Facility Requirements	CAN/ULC-S301	Standard for Security Signal Receiving Centres Configurations and Operations	LINK	
	CAN/ULC S561	Standard for Security Signal Receiving Centres Configurations and Operations		
Moveable partitions or temporary walls	CAN/ULC-S102 or equivalent	Standard Method of Test for Surface Burning Characteristics of Building Materials and Assemblies, maximum Flame Spread 150	LINK	
Odour control	UL 867	Electrostatic air cleaners	LINK	LINK
	UL 867A	Outline of Investigation for Commercial / Industrial Indoor Air Quality Systems, Ozone Generating Type		
	CSA 22.2 No. 187	Electrostatic air cleaners		
	UL 586	High efficiency particulate air filter		
Safety way guidance system	CAN/ULC-S590	Standard for Design, Installation, Inspection, Testing and Maintenance of Safety Way Guidance Systems	LINK	
Threat risk assessment	CAN/ULC-S4400	Standard for Safety of Premises, Buildings and Equipment Utilized for the Cultivation, Production and Processing of Cannabis	NA	LINK
	ANSI/ASIS/RIMS RA.1-2015	Risk Assessment Standard and Federal Cannabis Regulation, Directive on Physical Security Requirements for Controlled Substance and Drugs Containing Cannabis		Health Canada link related to physical security measures requirement LINK
Ventilation for indoor air quality	National Building Code of Canada (NBCC)	Provincial and territorial regulations typically adopt an edition of the NBCC. Verify the local regulations and code versions in effect. Also refer to environmental and occupational health and safety regulations.	NA	See Section 3, Figure 5 for applicable Code links
Video surveillance equipment, enclosures and mounting brackets	CAN/CSA C22.2 No. 62638-1	Standard for Audio/Video, Information and Communication Technology Equipment – Part 1: Safety requirements	NA	
Video surveillance system	CAN/ULC-S316 or IEC 62676-4	Standard for Performance of Video Surveillance Systems or Standard for Video Surveillance Systems for Use in Security Applications – Part 4: Application guidelines	NA	
Waste product storage, use and handling	National Fire Code of Canada (NFCC)	Provincial and territorial regulations typically adopt an edition of the NBCC. Verify the local regulations and code versions in effect. Also refer to environmental and occupational health and safety regulations.	NA	See Section 3, Figure 5 for applicable Code links

**If you need help, have questions or don't
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