

Concealed UV Disinfecting Lighting System

Disguised Damage-Resistant Defense



Our compact, virtually invisible UV Disinfecting Lighting System preserves the integrity of architectural or interior designs, without sacrificing security and performance. We are the very first to offer concealed, UV disinfecting systems ... in fact, we invented it! With over two decades of experience developing and manufacturing unique concealed fixtures, Concealite remains the top choice for design professionals.



Check out the Concealed UV Disinfecting System at Concealite.com



Our compact, virtually invisible Disinfecting Lighting System enclosures, powered by Violet Defense Technology, preserve the integrity of architectural or interior designs, without sacrificing security and performance. We are the very first to offer concealed, UV disinfecting systems ... in fact, we invented it! With over two decades of experience developing and manufacturing unique concealed fixtures, Concealite remains the top choice for design professionals.

Aesthetics

Typical UV disinfection lighting fixtures are obtrusive and interrupt the aesthetic beauty of interior designs. Concealite has applied their patented concealed technology to the Puro™ Helo F1 UV Disinfection Lighting (powered by Violet Defense Technology), offering a beautiful and vandal-resistant alternative to visible surface mount disinfection lighting. Only when the commercial or residential Puro™ Helo F1 UV Disinfection Lighting is activated, does the UV disinfection light become visible and rotates 180 degrees to begin disinfecting. The result is a clean, almost invisible installation, that does not conflict with your interiors.

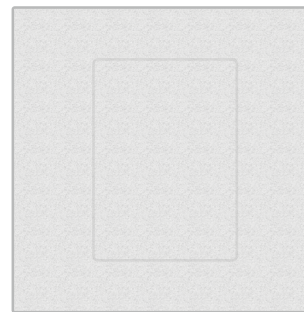


PURO™
Hel
F1

SAMPLE INSTALLATIONS

Our UV fixtures can be customized to match your installation by our use of UV printing technology to transfer your wall or ceiling pattern onto each unit's door and/or door flange (if using a flange).

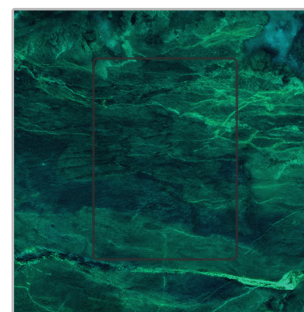
PAINT



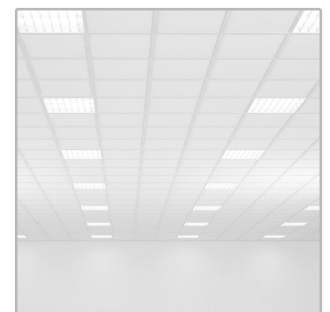
BRICK



MARBLE



DROP CEILING



UV Disinfection

The Puro™ Helo F1 UV Disinfection Lighting uses Broad Spectrum UV-C, UV-B and UV-A light to kill bacteria and viruses. It has a single UV Light Engine with pulsed Xenon lamp for up to a 10' x 10' ft coverage area.

Architectural Features

- Designed for commercial and residential applications.
- Standard, white powder coat finish; units may be customized in the field using paint, wallpaper, or applique finishes.
- No minimum order for factory custom powder coat finish (U.S. RAL # Required).
- Compact, completely self-contained units.
- Enclosures are vandal-resistant.
- Designed for wall or ceiling installations, including gypsum board, plaster, concrete, brick, marble, wood, metal or acoustical tile.
- Fully automatic operation. Door is operated by a 12VDC motor, with an integrated gear head operated by the buildings' 120VAC, 60hz branch circuiting.
- UV lighting systems can be manually controlled or integrated into building management control networks via CAT5 cable system.

The above are just a few wall/ceiling patterns. We can match any wall or ceiling pattern for installation so that our product blends seamlessly with your scheme.



UV Series

**Disguised.
Damage-Resistant.
Defense.**

Concealed UV Disinfecting Lighting System

Installation

This fixture utilizes a recessed flange for flush mounting in either a wall or ceiling. The door, UV disinfection lamp, and motor drive assembly is inserted into the recessed enclosure. The assembly is then secured in place with two (2) concealed bolts that allow for adjustment to the wall or ceiling thickness. For complete installation and operation instructions, please refer to the instruction sheet included with each unit. Available in gypsum board (G), suspended ceiling (S) and surface mount (SM).

New Projects

For new projects, a single enclosure is mounted before the wall or ceiling material is installed.

Retrofit/Remodeling Projects

For retrofit/remodeling applications a multi-section (suffix RB) enclosure is available. See options and technical data section for details.

Power Input: 120VAC, 60HZ, 3.9 AMPS

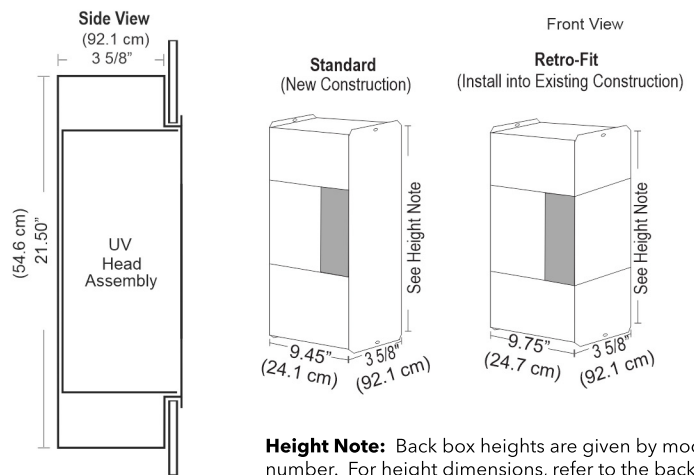
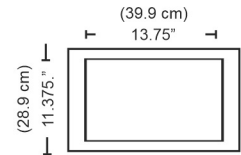
Product Specifications

The concealed UV unit shall be Concealite Series and will be installed in accordance with Article 700 of the National Electrical Code. The standard unit shall be a white powder coat finish and can be custom finished (contact factory for information or option). The unit will be stored in a retracted position during non-activated conditions. Upon activating the UV lamp lighting system, the unit will be deployed into the open position and the UV lamp system energized. Deactivation of the UV lighting system will cause the unit to retract to the stored position and de-energize the UV lighting system. Motor shall be a 12 Volt sealed permanent magnet type with a 30-year service life. The electronics shall be a solid-state design.

UV Unit Dimensions



Note:
Unit requires finished opening of 9.50" H x 12.50" W.
Unit depth of 3 3/8" allows for installation into ceilings.



Height Note: Back box heights are given by model number. For height dimensions, refer to the back.

Ordering Information

Example = UV - G - B - FMS

Series

UV

Mounting

- G** - Gypsum Board - Recessed
- S** - Suspended Ceiling - Recessed
- CB** - Concrete Block Wall Recessed (8" x 16" Block)
- SM** - Surface Mounted
- O** - Other - Marble, Tile, Wood, Metal (specify)

Operational Modes

- B** - BACnet integration Mode
- M** - Manually Commissioned Mode

Options

- F** - Flangeless
- FMS** - Flush Mounting System - Gypsum Board (Flange Mounting)
- RB** - Retro Fit Back Box (see Back Box Dimensions)
- TBAR** - T-Bar mounting Kit - Suspended Ceiling
- DL** - Damp Location
- CF** - Custom Finish (Note: U.S. RAL# Required)
- CCEA** - City of Chicago Environmental Air (formerly Chicago Plenum)
- EM** - Emergency Battery Back-Up
- RSM** - Remote Status Monitoring: Red = Do Not Enter, Green = Enter



Control Options

Controlled Through BACnet (B)

The unit can be switched on/off through the facility BACnet. Programming is done through the Building Automation Software (BAS) system dashboard.

Manually Controlled (M)

The unit can be manually switched on/off for a single default or commissioned cycle through a switch or a remote-controlled power input. The unit can be ordered for manual commissioning or integration into the facility Building Automation System (BAS). Manual commissioning can be done with the assistance of a local rep using a setup wizard. Units integrated into BACnet are programmed through the BAS dashboard.

Safety and Occupancy Sensors

The redundant safety systems ensure the unit will not activate while the room is occupied and will immediately suspend operations if motion is detected in a previously unoccupied room. If interrupted, the unit will resume its programmed cleaning cycle once motion is no longer detected.

Operational Modes

The unit can be ordered to operate in either a BACnet integrated mode (B) or a manually commissioned mode (M). The modes are configured at the factory and cannot be changed on the device.

BACnet Integration Mode

Disinfection-on-Demand operation is programmed through the Building Automation Software (BAS) through BACnet.

The cycle time, cycle repeat, cycle schedule, motion sensor settings, unit on/off, and initial activation are controlled through the system dashboard.

Devices ordered with the BACnet Integration Mode (B) must be initially activated through the BAS software to operate.

NOTE: By default, this mode will have safety features DEACTIVATED.

UV Disinfecting Fixture

The Puro™ Helo F1 UV Disinfection Lighting disinfects a whole room ... delivering disinfection from both wall and ceiling locations above. It emits broad spectrum UV light to eliminate up to 99.9% of the bacteria, viruses, and fungi in a space. In rooms that have been cleaned of mold, the unit will help control return growth, if used routinely.

Please contact us for assistance in positioning UV Series units for all your project floor plans.

Powered by Violet Defense Technology

Broad Spectrum UV-C, UV-B and UV-A light kill bacteria and viruses.

Single UV Light Engine with pulsed Xenon lamp for a 10' x 10' ft coverage area.

Remote Status Monitoring

Remote mounted, single gang LED indicator cover plate:
Red = Do Not Enter, Green = Enter





Puro™ Helo F1 UV Disinfection Lighting Specifications

Illumination

Light Source: Proprietary Pulsed Xenon Lamp
Flash Interval: 1 UV Flash every 6 seconds
Wavelengths: UV-C (200-280nm) Germicidal; UV-B (280-320nm) Germicidal; UV-A (320-400nm) Antibacterial
Range: 10' x 10' typical (100 sq feet)
UV Bulb Rated: 2 Million UV Flashes

Electrical System

Input Voltage: 110VAC
Max Current: 3.5 Amps
Total Power: 480 watts, 30-minute cycle
Power Connection: 2 Wire & Ground

Physical

Weight: 6 lbs
Housing/Finish: Brushed Aluminum
Optics: Single patented UV Light Engine with transmissive UV lens and pulsed Xenon UV lamp
Beam Angle: 170°

Environment

Ambient Operating Temperature: 41°F to 104°F
Ambient Operating Humidity: < 80% RH non-condensing

Certifications and Qualifications

Safety: TUV Certified, tested to UL 61010-1:2012
FCC: Compliant with Part 15 Class A
RoHS: Compliant
FDA: Materials are cleared for use in food and medical areas.
EPA: Registered

Warranty

Warranty: 1 year

Installation Wiring

All units ship with back box enclosure for 120VAC, 60HZ input terminations.

Wi-Fi Smart Power Input

The unit may also be powered by a Bluetooth-controlled smart unit ... eliminating the need to install a switch ... and, instead, use a smartphone-based application to turn the unit on/off through the smart outlet.

Cycle	Time	Aprox. Bulb Life
Standard	30 min/day	18.3 years
Deep	1 hr/day	9.1 years
Terminal	2 hr/day	4.6 years

Certifications

- This device is TUV Certified, tested to UL 61010-1:2012 specifications.
- Tested to be compliant with FCC Part 15 Class A.
- Internal components of this device are UL Listed or UL Recognized.

The Manufacturer is registered with the US Environmental Protection Agency (EPA). Clinical laboratory testing has been performed at independent labs.

Notes ...

1. Disinfection is a function of device run time and the distance to the UV light source.
2. Operating Life is dependent on frequency and duration of disinfection cycles.

CAUTION: IF THE FIXTURE EXHIBITS UNDESIRABLE OPERATION (BUZZING OR FLICKERING), OR IF THE UNIT'S LED STATUS INDICATOR IS FLASHING RED, IMMEDIATELY TURN OFF POWER AND CONTACT MANUFACTURER.

INDOOR USE ONLY. This unit must be ordered for integration into a building automation system via BACnet or for manual commissioning. Units are not interchangeable.