

**NOTES**

- Installation should be completed by an individual familiar with the construction and operation of the luminaire.
- Installation of luminaire must be in accordance with nation and local building and electrical codes.
- Carefully read and follow all warnings and instructions before installing or servicing the luminaire.
- Instructions do not cover all details and all possible product configurations
- Do not restrict luminaire ventilation.
- Ensure LED luminaire is not covered with material that will prevent convection or conduction cooling.
- Do not exceed luminaire's maximum ambient temperature.
- Ensure LED luminaire has the correct polarity before installation.
- Based on maximum voltage restrictions for class 2 circuits in Canadian Electrical Code, the output cannot be accessible. This product has accessible output terminals. This product complies with this requirement since the installation instruction requires installation in Restricted Access Area.

**WARNINGS**

**Electric shock:**

- Disconnect or turn off power before installing or servicing luminaire.
- All electrical wiring to be completed by a qualified licensed electrician in accordance with local and National/Canadian Electrical Code.
- Ensure supply voltage corresponds with the correct ballast/driver voltage.
- Avoid exposing wiring to metal edges and sharp objects.
- Ensure that the luminaire is properly grounded to prevent electric hazards.

**Fire:**

- Keep flammable and combustible materials away from the light source and/or lens.
- Use correctly rated supply conductors as indicated by product labeling.

**Burn:**

- Allow luminaire to cool before handling luminaire.

**Personal Injury:**

- Wear safety glasses and gloves when handling the luminaire to avoid physical injury.
- Avoid direct eye contact with light source.
- Always support the weight of the luminaire.

Manufacturer is not responsible for any injuries due to the improper installation or handling of its products.

**VRU & MBH1 Series Luminaire Warning and Cautions (not applicable to CRU & MSU):**

- Failure to follow all these warnings may result in injury or death.**
- The VRU series fixtures are only for use in supervised behavioral health spaces. For spaces with a risk of ligature, refer to the VRUo-LRC series Anti-ligature fixture.
- This fixture is not for use in spaces where continual /frequent abuse is possible. It is also expressly **not** for use in confinement, correctional facilities, prisons, or similar spaces where residents are present.
- Professionals familiar with intentional ligature, self-harm, or abuse hazards must perform fixture selection and installation. If this fixture is determined to not be adequate for the hazard present within the space, discontinue use of the fixture or space until corrected.
- Failure to correctly fill seams with a site-approved security caulk/compound between the luminaire and the ceiling may increase the hazard, causing injury or death.
- Do not operate the fixture or occupy spaces when this fixture is damaged or not fully assembled.
- Before occupancy, all aspects of this fixture and its installation shall be thoroughly reviewed and tested for ligature concerns.
- Particular care is to be taken in tightening doorframe screws; when complete, doorframe screws must be double-checked. Caution: Do not overtighten screws. ) Damage may result. Torque door-frame screws to **10** inch-lbs ( **1.13** Nm )

## **Hard Ceiling Flange**

**Note:**  
The models requires an accurate cutout of the luminaire opening. It is essential that the opening room side edge be flat to ensure the integrity of the seal.

Use 1-5/8 Unistrut (not included) or equivalent support beams on all four sides above the opening edge. The support structure should be suitably rigid and secured to support the weight of the luminaire. (*Minimum thickness of ceiling and framing is 1 1/2", maximum is 2 3/4"*).

Only qualified electricians should make the electrical connections and should ensure that all Building and Safety code requirements are observed.

CRU & MSU when supplied with white + red or white + green LEDs, are to be separately switched externally. Also they are NOT to be operated simultaneously.

### **Here are the steps to install the fixture in a hard ceiling (flanged method):**

1. Prepare a mounting surface that can support the weight of the fixture according to applicable building codes. Use 1-5/8 Unistrut (not included) or equivalent support beams on all four sides above the opening edge. The support structure should be suitably rigid and secured to support the weight of the luminaire. (Minimum thickness of ceiling and framing is 1 1/2", maximum is 2 3/4").
2. Check the ceiling cutout size listed here or on the fixture's catalog page.
3. Create a rectangular ceiling cutout with right angles and vertically flat.
4. Reinforce the ceiling cutout from above using structural materials that can support the fixture's weight under all loads.
5. Rough in supply conduit according to the NEC and local requirements using minimum 90C supply wiring materials. Do not make a connection until step 13.
6. Lift the fixture into the ceiling cutout and adjust the swing-style mounting brackets so that the swing arm is fully extended and overlaps the ceiling structural channels (by others).
7. After you are sure that all four bracket arms are supporting the fixture, tighten each bolt arm evenly, drawing the fixture up into the ceiling. Stop when the flange is 1 inch below the ceiling.
8. Apply provided gasket to the top surface of the fixture flange in a continuous manner. Do not overlap joints.
9. Alternately: Caulk the flange of the fixture to the ceiling using site-approved materials (provided by others). Continue tightening until the fixture is flush with the ceiling.
10. Remove excess caulk from the flange and ceiling.
11. Make electrical connections using listed connectors insulated to 600V. Secure or position splices and wires away from reflector mounting points.
12. Replace the reflector and secure it by tightening screws.
13. Secure the doorframe hinge cables to the housing using two studs and nuts provided.
14. Tightly secure the doorframe using a screwdriver.
15. Remove any protective films from the outer surfaces as provided.
16. Energize the fixture with rated voltage from a protected branch circuit.
17. Do not open or service the fixture while energized. Always disconnect power from the supply before servicing.
18. Do not operate the fixture when damaged or not completely sealed.

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### Tools Required



**DANGER** 

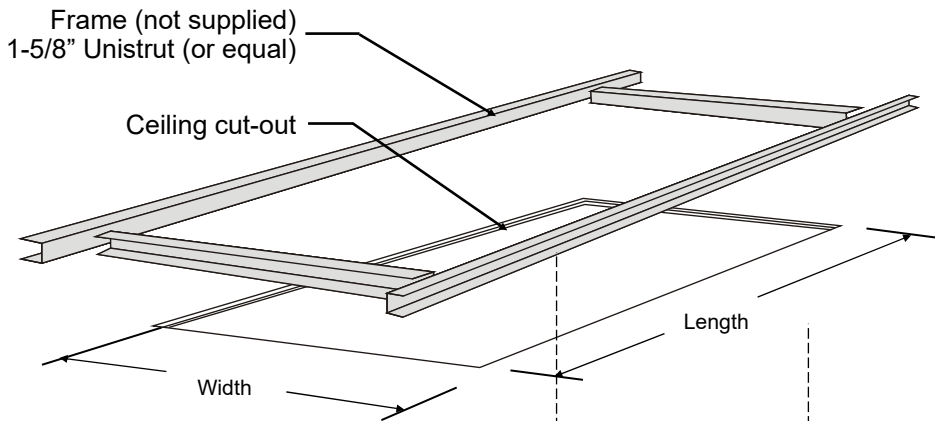
**RISK OF FIRE, ELECTRIC SHOCK, OR PERSONAL INJURY**

- This fixture is not to be used to support your body weight. When accessing the plenum through the opening, do not put weight on the fixture. Do not step on the fixture or rest body weight on the fixture.
- When opening plenum access door **do not touch LEDs or put stress on wiring or connections.**
- When closing plenum access door, make sure that wiring is properly routed, and all hardware is securely tightened. Do not overtighten.

**Here are the steps to install the fixture in a T-Bar Grid Ceiling:**

1. Prepare a mounting structure or Grid that can support the weight of the fixture according to applicable building codes.
2. Check the ceiling grid size. It is standard for 15/16", 1" or 1.5" wide T-bar. Please specify other sizes when ordering.
3. Remove the door and lens assembly and set aside. (hinge cables detach at the housing without tools)
4. Insert the fixture through the ceiling opening and lay it centered on the T-Bar.
5. Adjust the swing style mounting brackets on the housing to meet the T-bar.
6. Use the holes in the mounting bracket to attach seismic support cables according to local codes if required. Note: This and all other hardware should be plated or stainless steel if installed in a wet or damp location.
7. Rough in supply conduit and connections according to the NEC and local requirements using minimum 90C supply wiring materials.
8. Replace the reflector and secure it by tightening screws or nuts.
9. Install only the rated lamps as marked on the fixture.
10. Reconnect hinge cables to housing and secure door assembly by starting door screws by hand, at first, to prevent cross-threading. Tightly secure the door and lens assembly using a screwdriver. Do not exceed 10 inch-pounds.
11. Remove any protective films from the reflective or outer surfaces as provided.
12. Energize the fixture with rated voltage from a protected branch circuit.
13. Do not open or service the fixture while energized. Always disconnect power from the supply before servicing.
14. Do not operate the fixture when damaged or not completely sealed.
15. Cleaning can be performed using ordinary detergent-based cleaning agents and cloth or paper towels. All cleaning is to be done de-energized.

**Hard Ceiling Flange Cont'd**



Ceiling Cut-Out Dimensions:

Size	Width	Length
1x2	10-7/8 in.	22-7/8 in.
1x3	10-7/8 in.	34-7/8 in.
1x4	10-7/8 in.	46-7/8 in.
2x2	22-7/8 in.	22-7/8 in.
2x4	22-7/8 in.	46-7/8 in.

