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**CONTRACTOR RULES AND REGULATIONS**

**GENERAL INFORMATION**

1. Tenants may not make any modifications, alterations, additions, or repairs to their leased premises and may not install any furniture, fixtures, or equipment in their leased premises which is in violation of any applicable Building and/or Fire Code governing their leased premises or the Project.
   a. The Tenant must obtain prior approval from Management of any such alterations, modifications, and additions and shall deliver record plans thereof to Management, upon completion, except as otherwise permitted in the Tenant’s lease.
   b. Such alterations include but are not limited to any communication equipment and associated wiring which must meet fire code. The contractor conducting the modifications must be a licensed and insured contractor must obtain all necessary permits and approvals prior to commencing the modifications, and is subject to all rules and regulations of Management while performing work in the Building.
2. The Building Management must be contacted prior to the performance of any work.
   a. The Building Management reserves the right to approve, deny, or terminate work for any reason.
   b. All Contractors shall provide working drawings and permits to the Building Management prior to the performance of any work.
3. All Contractors and Tenants shall name building ownership and management as additionally insured per the attached requirements prior to performing any construction work.
4. A contractor is required to provide a list of names and telephone numbers to use in the event of an emergency.
a. In the event of an emergency, the contractor should notify Security immediately (313) 373-3333 who will contact the building management.

5. All extraordinary costs associated with plan review, such as consultant fees, shall be billed to the contractor or tenant.

6. The Contractor will be responsible for the removal, cleaning, reinstallation, and replacement (if damaged) of all existing project materials.
   a. No materials may be removed without the written authorization by Building Management. If removed, the materials must be kept in a secure area.

7. The Contractor is responsible for complete removal and capping of unused or abandoned conduit, cable, ductwork, structural components, partitions, or other materials.
   a. No existing unused structure may be left abandoned without written authorization by the Building Management.

8. The Building Management is solely responsible for the issuance of keys.
   a. General Contractors or workmen who require access to keyed areas, i.e., water/slop sink, electrical closet, telephone closet, will be required to present a valid form of identification (driver’s license) to be retained in exchange for disbursement of key(s).
   b. All Contractors must coordinate the keying of doors under the supervision of the Building Engineer. Building standard hardware is to be used without exception.

9. Management shall have the authority to approve the proposed location of any safes, heavy furniture, or other unusual equipment.

BUILDING PROTECTION SYSTEMS

1. Before any demolition or construction work begins, it must be determined whether such work will affect the Life Safety System, Building Management System (BMS), or any other building system.
   a. If it is determined that such demolition or construction work may adversely affect any system, it will be necessary for the Contractor to modify the plans to meet building specifications.

2. The Engineers are to remove the system from service and restore it to service upon completion of the activity.
   a. Service must be restored daily.
   b. Contractor assumes the liability for all events resulting from the disconnection of affected systems.

3. Under no circumstances will the Building allow the fire alarm system to be shut down overnight, on weekends, or on holidays.
   a. Forty-eight (48) hours written notice to the Building is required before any work affecting the fire alarm system is undertaken. The notification form is available at the Building Management.
4. The General Contractor is responsible for notifying the Building Management two (2) weeks before proposed electrical shutdowns which might affect existing tenants, which will then be coordinated by GC and Property Management and will only take place with approval from the Building Management.

5. The General Contractor will provide an adequate number of fire extinguishers in the work area throughout the construction period.

6. All hot work including but not limited to: Brazing, Grinding, Soldering, Thawing Pipe, Torch Applied Roofing, and Welding must be approved by the Building Management in advance.
   a. All approved hot work must be accompanied by a Hot Work Permit.
CONSTRUCTION OPERATIONS

1. Delivery of construction material needs to be building specific.
   a. Notification of all deliveries must be provided to the Building Management not less than 24 hours prior.
   b. All contractors must use the service elevator for all vertical transportation.
   c. No materials may be delivered through the passenger elevator.
2. The Contractor must have its own supervisor on-site at any time material is delivered or moved.
   a. The Building Management will not coordinate any deliveries or be responsible for signing or accepting any materials.
3. Deliveries and movement into and through the Building must be done after normal business hours, i.e., between 5:30 pm and 7:30 am, Monday through Friday.
   a. Exceptions to this rule may be approved by Building Management.
4. Significant movement in or out of the building of furniture, office equipment or any other bulky or heavy materials shall be restricted to such hours as Management shall reasonably designate.
   a. Management will determine the method and routing of the movement of such items as to ensure the safety of all persons and property concerned and Tenant shall be responsible for all cost and expenses associated there within.
   b. Advance written notice of intent to move such items must be made to Management not less than 48 hours prior to scheduled move.
   c. For non-significant movement in or out of the Building of portable items which do not require use of dollies or other moving equipment, notice to Management shall not be required.
5. Demolition and removal of trash must be done after normal business hours, i.e., between 5:30 pm and 7:30 am, Monday through Friday.
   a. Exceptions to this rule must be approved by Building Management in writing.
6. Any large dumpsters for the removal of construction debris are the responsibility of the General Contractor and must be scheduled with Building Management.
   a. Dumpsters shall be placed at the loading dock or approved designated areas.
   All dumpster areas must be kept neat and orderly.
   b. Dumpsters shall be removed promptly upon request.
   c. If dumpsters are to be placed directly on asphalt, the General Contractor must supply wood to go under the wheels to protect that area.
   d. The General Contractor shall be responsible for all damages caused by the dumpster.
7. The General Contractor and all subcontractors will use rubber wheeled carts when moving material through the Building or removing trash from the Building.
   a. If Building Management approves metal-wheeled moving devices, floors must be protected and any damage is the responsibility of the contractor.
8. Sidewalks, doorways, vestibules, halls, stairways, elevator lobbies and other similar areas in common areas of the Building shall not be used for storage of materials or
disposal of trash, be obstructed by Contractor, or be used for any other purpose other than entrance to and exit from the Tenant’s leased areas and the Building and for going from one part of the Building to another part of the Building.

9. Plumbing fixtures shall be used only for the purposes for which they are designed, and no sweeping, rubbish, rags, or other unsuitable materials shall be disposed into them.
   a. Damage resulting to any such fixtures proven to result from misuse by any contractor shall be the liability of the General Contractor.

10. Protection of all public corridor and elevator surfaces is the responsibility of the General Contractor.
   a. Masonite floor protection and cardboard protection will be required throughout the job.
   b. Protection devices must be removed daily to facilitate cleaning, unless otherwise approved in writing by Building Management.

11. The Contractor is responsible for having “walk-off” mats at the exit(s) from the tenant construction area. If necessary, mats are to be wetted to reduce the tracking of dust and debris outside the construction area.

12. The General Contractor is responsible for vacuuming public corridors as necessary (at least daily).

13. Under no circumstances will construction debris be allowed to remain in the building longer than twenty-four (24) hours.
   a. The site area should be kept clean and organized at all times.
   b. Exceptions to this rule must be approved by Building Management.

14. The contractor is responsible for storing and securing all construction tools and materials. Storage space may be leased through the Building Management (if available).

15. Corridor doors which lead to common areas of the Building (other than door opening into the elevator lobby on floors leased entirely to a Tenant) shall be kept closed at all times.

16. Professional behavior is expected in an occupied building at all times.
   a. Smoking is not permitted in the Building per City ordinance.
   b. Inappropriate language or comments will not be tolerated.
   c. Any construction worker caught stealing, drinking alcohol or under the influence of any illegal substance will be banned from the site.

17. While on site, construction workers will be confined to the construction area only.
   a. Building security guards and Building Management will periodically inspect all area of the building.
   b. Any construction workers found in an unauthorized place may be subject to dismissal from the job site.

18. Consumption of food and beverages on the job site is permitted. However, all remnants must be properly disposed of daily to avoid any nuisance issues.
   a. No cooking of any kind will be allowed on the site.

19. Radios and other noise will be kept to a reasonable level so as not to disturb tenants and their guests.
20. Core boring of all floors, setting anchors or any other disruption (sound, smell, vibration, etc.) shall be done after normal building hours, i.e., between 5:30 pm and 7:30 am, Monday through Saturday at the approval of Building Management.
   a. Exceptions must be approved by Building Management.
   b. Contractor is responsible for all cleaning associated with this work.
21. Lights shall remain on in the construction area upon completion of the day’s activities.
22. Contractor must reserve the freight elevator for use by requesting same through the Building Management.
23. Building Management does not provide an elevator operator.
   a. Contractor must provide an elevator operator when required.
   b. Any cost associated with the use of the freight elevator shall be contractor’s expense.
24. Contractor and Construction personnel will not be permitted to park on site unless prior approval is received from Building Management in writing.
FORMS

PROJECT COMPLETION

1. Contractor is responsible for balancing the HVAC systems to satisfaction of the Engineering Manager and must provide a written report of the balance test results.
   a. Any additional work done by the building engineering staff will be charged back to the contractor.
   b. Contractor must have an independent firm test and balance the space at Contractor's expense.
2. The General Contractor is responsible for delivering the site at completion in a clean and ready condition.
3. Upon completion of any particular construction project, stairwells and elevator lobbies must be repainted or touched-up as necessary at contractor’s expense.
4. Landlord reserves the right to alter or rescind any of these rules and regulations and to make such other and further rules and regulations as its judgment shall, from time to time, be needful for the safety, protection, care and cleanliness of the Building, the operation thereof, the preservation of good order therein and the protection and comfort of the tenants and their agents, employees, and invitees, which rules and regulations, when made and written notice thereof is given to a tenant, shall be binding upon it in like manner as if originally herein prescribed.
5. General Contractor shall be responsible for the observance of all of the foregoing rules and regulations by of its or its subcontractor’s employees, agents, clients, customers, invitees, licensees and guests.

ACKNOWLEDGED AND ACCEPTED
this ____ day of ______, 20__

COMPANY NAME

By: _____________________________
Its: _____________________________
HOT WORK PERMIT

Date _________________ Time_________________________

Name and Company of Person(s) Performing Work:
__________________________________________________________________________

Building: _____________ Specific Location of Work _________________________________

Yes  No
☐ ☐ Cutting or welding permitted in an area that has been made fire safe.
☐ ☐ All movable fire hazards in the vicinity have been taken to a safe place.
☐ ☐ Guards/tenting used to contain the heat, sparks and slag if fire hazards cannot be removed.
☐ ☐ Smoke Detectors in the immediate work area are covered to prevent false alarms.
☐ ☐ Floor or wall openings or cracks, open doorways and windows protected or closed.
☐ ☐ Fire extinguisher available for instant use.
☐ ☐ Fire watch in areas where other than a minor fire might develop such as around combustible material.
☐ ☐ Floors swept clean of combustible material for a radius of 35'.
☐ ☐ Combustible floors have been kept wet, covered with damp sand or protected by fire resistant shields.
☐ ☐ Welding/cutting done only in areas authorized by management. No welding/cutting in sprinkled building when sprinkler system is impaired or in presence of explosive atmosphere, or in area of storage of readily ignitable material, unless previously approved by the Bedrock Property Manager.
☐ ☐ Cutter/welder is trained in safe operation of equipment and the safe use of the process.
☐ ☐ Any on-site contractors advised about flammable material or hazardous conditions of which they may not be aware.
☐ ☐ If welding or cutting containers, ensure that container is thoroughly cleaned and ventilated, and any pipelines or connections to containers disconnected or blanked.
☐ ☐ PPE used as needed—e.g., eye protection, helmet, protective clothing, respirator, and gloves.
☐ ☐ Warning sign posted to warn other workers of hot metal.
☐ ☐ Appropriate ventilation provided.

____________________________________
Authorized Signature – Property Manager
THIS RELEASE AND WAIVER OF LIABILITY, ASSUMPTION OF RISK AND INDEMNITY AGREEMENT (this “Waiver”) IS A LEGALLY BINDING EXPRESS STATEMENT OF ASSUMPTION OF RISK AND A RELEASE AND WAIVER OF LIABILITY AND INDEMNITY AGREEMENT.

In consideration of being permitted to use certain equipment as listed on Exhibit A attached hereto (the “Equipment”) of Bedrock Management Services LLC, a Michigan limited liability company, or any of its affiliates (collectively, “Bedrock”) or the owner(s) of the real property where the Equipment is at any time located or the Services (as defined below) are performed (collectively, “Owner”), in connection with providing certain services (the “Services”) to Bedrock and/or Owner, the undersigned, in his or her individual capacity and on behalf of __________________ (the “Company” and collectively with the undersigned in his or her individual capacity, the “Releasing Parties”) agree to the following terms and conditions:

1. The Releasing Parties hereby forever release, waive and discharge Bedrock and Owner and each of their respective parents, subsidiaries, affiliates, related companies, predecessors, successors, current and former agents, partners, officers, members, managers, directors, insurers, attorneys, employees, volunteers, representatives, equity holders, mortgagees, tenants, invitees and assigns (collectively, the “Released Parties”) from any and all claims, demands, and causes of action arising from or relating to providing the Services or using the Equipment, whether such claims, demands, and causes of action result from passive or active negligence or from some other cause.

2. THE RELEASING PARTIES UNDERSTAND THAT USING THE EQUIPMENT TO PROVIDE THE SERVICES IS INHERENTLY DANGEROUS AND COULD LEAD TO SERIOUS INJURY OR DEATH. THE RELEASING PARTIES KNOW, UNDERSTAND, AND APPRECIATE THESE AND ALL OTHER RISKS THAT ARE INHERENT IN USING THE EQUIPMENT TO PROVIDE THE SERVICES AND THE RELEASING PARTIES HEREBY PERSONALLY ASSUME ALL SUCH RISKS, WHETHER FORESEEN OR UNFORESEEN.

3. The Releasing Parties hereby agree, jointly and severally, to fully indemnify and hold harmless the Released Parties from any and all claims, actions, suits, costs, losses, expenses, damages, and liabilities, including all reasonable attorney’s fees and costs, incurred, brought, or threatened against the Released Parties in connection with using the Equipment or providing the Services. For the avoidance of doubt, Releasing Parties, jointly and severally, shall repair and replace the Equipment, in amount equal to the full replacement value of the Equipment, in the event that Equipment sustains any harm, loss or damage. The Company shall at all times during performance of the Services or use of the Equipment comply, at its sole cost, with the insurance requirements attached as Exhibit B.

4. The Releasing Parties hereby agree that (i) the Company and (ii) the undersigned in his or her individual capacity (including his or her spouse, children, heirs and personal representatives) shall not sue or institute any lawsuit or any other proceeding against the Released Parties or any other party in connection with using the Equipment or providing the Services.

5. The Releasing Parties agree that this Waiver is intended to be as broad and inclusive as permitted by the laws of the state in which the Services are provided or the Equipment is used. The Releasing Parties agree that in the event that any clause or provision of this Waiver shall be held
invalid by any court of competent jurisdiction, the invalidity of such clause or provision shall not otherwise affect the remaining provisions of this Waiver, which shall continue to be enforceable and the parties specifically direct any such court to amend or revise this Waiver so that the intention of the parties to eliminate or reduce the liability of the Released Parties is realized to the extent legally permissible.

Dated: ________________________________

Entity Name (if applicable): ________________________________

Signature: ________________________________

Printed Name: ________________________________

Title (if applicable): ________________________________
Exhibit A

The Equipment
EXHIBIT B TO RELEASE AND WAIVER OF LIABILITY, ASSUMPTION OF RISK, AND INDEMNITY AGREEMENT

1. **Workers’ Compensation (Statutory) & Employers Liability $1,000,000**
   a. Waiver of Subrogation
   b. 30 Days’ Notice of Cancellation

2. **Commercial General Liability**
   a. $2,000,000 General Aggregate
   b. $1,000,000 Each Occurrence
   c. $1,000,000 Personal & Advertising Injury
   d. Occurrence Form (not Claims Made)
   e. Waiver of Subrogation
   f. Additional Insured Wording
   g. Additional Insured Endorsement
   h. 30 Days’ Notice of Cancellation

3. **Professional Liability**
   a. $1,000,000 aggregate and per occurrence
   b. Waiver of Subrogation
   c. Coverage Maintained for 3 Years Following Substantial Completion
   d. 30 days’ Notice of Cancellation

4. **Business Auto Liability**
   a. $1,000,000 CSL per occurrence
   b. Any Auto
   c. Waiver of Subrogation
   d. Additional Insured Wording
   e. 30 Days’ Notice of Cancellation

Additional Insureds: The description of the certificate shall state that the Bedrock Management Services LLC and the Owner(s) of the real property where the Equipment is located or Services are performed, and their respective affiliates, including all units, divisions, and subsidiaries, and any other party reasonably requested by Bedrock (collectively, “Additional Insureds”) are included as additional insureds on a primary and non-contributory basis under all policies except workers compensation and professional liability insurance. Additionally, the endorsement for the CGL shall state the Additional Insureds “are included as additional insureds on a primary and non-contributory basis.”

Waiver of Subrogation: The description of the certificate shall state (in addition to the Additional Insured statement above): “All policies provide waiver of subrogation in favor of [INSERT NAME OF OWNER] and Bedrock Management Services LLC, and their affiliates, including all units, divisions and subsidiaries and other Additional Insureds.”

* Insurance Carriers must carry A.M. BEST rating of A-, VII, or better on all coverages.
* Excess liability must state what coverage it may be applied to if not shown in the umbrella form.

Certificate Holder - Owner of the real property is where the Equipment is located or Services are performed.
BUILDING STANDARDS

The following is a general guideline for criteria in designing or building common areas or tenant spaces in Bedrock properties. Please note that different building and tenants may require modification, which must be approved in advance, by the Landlord.

OFFICE SPECIFICATIONS

DOORS

Interior or Exterior - Suite Entry
1. 3'-0" x 7'-0" x 1 ¾" thick – Recommended that doors are not typically larger than 7’ high (No spec sheet available)

Hallway, Mailroom or Utility Doors
1. Standard commercial metal steel door.
2. Where standard finishes are wood grain in the common area, a powder coating must be applied to match others. Below are sample finishes and a product we recommend:
   https://www.specifyqpc.com/textures/ (No spec sheet available)

Interior Flush Hardwood Doors
Solid core doors for transparent finish must comply with the following requirements:
1. Species/Cut
   a. Faces: red oak, rift cut
   b. Match: slip and running
   c. Veneer Grade: B
2. AWS Grade: Custom, with edge type D - solid wood
3. Performance Duty Level: Standard Duty
4. Construction: 5 plies
5. Core: Particleboard per ANSI A208.1 LD-2
6. Bonding: Stiles and rails bonded to core, then entire unit abrasive planed before veneering
7. Blocking: Provide solid wood blocking with improved screw holding capabilities of same thickness as core and of the following minimum dimensions
   a. Top Rail: 5 inches
   b. Bottom Rail: 5 inches
   c. Lock Block: 5 inches by 18 inches
d. Mid Rail: 5 inches
8. Provide exposed edges and other exposed solid wood components of same species; cut and train match as the face veneer.

**Doors at Mechanical, Electrical, and Stair Locations**
1. Hollow metal painted to match adjacent wall color.

---

**FRAMES**

**Wood Frames**
1. Corridor frames should be wood with wood casing to match existing except at Mechanical, Electrical, and Stair locations where 2” metal face frame painted to match adjacent walls is preferred.

**Steel Frames**
1. Preferred vendor is Laforce
2. Frames for interior tenant spaces, color to match adjacent wall is preferred.
   a. Painted prefinished standard colors or primed, upcharge for premium or custom colors. (No spec sheet available)

**Aluminum Frames**
1. We do not recommend aluminum frames.

---

**INTERIOR LATCHSETS**

Doors with lever sets all need to come from manufacturer with removable cores for rekeying. (No spec sheets available)

1. (Assa Abloy) Yale - 4700 (LN) Series - PB Pacific Beach Lever Trim
   Brushed stainless finish or to match precedent
2. (Ingersoll Rand) Falcon - T-Series - Q Quantum Lever Trim
   [http://w3.securitytechnologies.com/IRSTDocuments1/FA_5161_T_Series_Catalog.pdf](http://w3.securitytechnologies.com/IRSTDocuments1/FA_5161_T_Series_Catalog.pdf)
LOCKSETS

Interior Lockset
1. As above with locking function. In Brushed aluminum or to match existing building.

Entry Lockset
1. When establishing a new system Bedrock prefers to use the BEST key 7-pin system. The preferred vendor is Livingston. However, in cases where a building is already on a system, we will tend to replicate that system throughout. The decision is typically made by the property manager for the specific site. The following criteria applies:
   a. Hinges
      i. One hinge per 30” of door height or fraction thereof.
      ii. McKinney #T2714 –US10B
      iii. McKinney #TA2714 (ball bearing) - US10B
      iv. Hager 1279 and BB1279
      v. Stanley F179 FBB179
         (No spec sheets available)
   b. Doorstops
      i. Rockwood #409 wallstop US10B
      ii. Rockwood #440 floorstop US10B
      iii. Bums #510 and #575
         (No spec sheets available)
   c. Door Closers
      i. (Ingersoll Rand) LCN 4000 series
         (No spec sheet available)
   d. All doors used for large deliveries, by a freight elevator or in a corridor, must have brushed aluminum kick plates installed in the corridor.
KITCHENS

**Garbage Disposal**

**Kitchen sinks are required to have a garbage disposal.**

1. Insinkerator – Badger 5XP
   https://www.insinkerator.com/resources/media?key=0d754ad2-e33a-4e35-98d5-3aa9248ab124&languageCode=en&countryCode=US&type=document

**Kitchen Sink:**

1. Elkay Gourmet (Lustertone) Sink DLFR191810

**Faucet**

1. Finish should be polished chrome or brushed aluminum.
   http://www.moen.com/arbor/chrome-one-handle-high-arc-pulldown-kitchen-faucet/_/R-CONSUMER%3A7594C

**Filter**

1. Made by EverPure

FINISHES

**Flooring**

1. **Carpet:** 26 oz. nylon loop carpet equal to Shaw ‘Synergy II’ (Squares preferred over broadloom)
2. **Vinyl Tile:** 12” square vinyl composition tile equal to Armstrong Standard Excelon. Contractor must apply a minimum of two coats of matte finish wax. QL/FOC common area.
3. **Base:** 4” high, 1/8” thick, rubber cove base, equal to Johnsonite.

**Paint**

1. Ceiling and Bulkheads
   a. Flat Acrylic Finish: 2 finish coats.
i. Primer: Latex-based, interior primer applied at spreading rate recommended by Manufacturer to achieve a total dry film thickness not less than 1.5 mils (0.031 mm.).
   1. Moore: Not Required
   2. PPG: Not required except where Manor Hall Paint is required to achieve color indicated. Provide Speedhide Primer 6-2 under Manor Hall finish coats.
   3. SW: Not required except where Duration Home Paint is required to achieve color indicated. Provide Premium Wall and Wood Primer B28W8111 under Duration Home finish coats.

b. First and Second Coats: Flat acrylic-latex, interior enamel applied at spreading rate recommended by manufacturer to achieve a total dry film thickness not less than 9.2 mils.
   i. Moore: Aura Matte Waterborne 522 (49 g/L) provide Color Foundation 521 (less than 49 g/L) where required to obtain Architect's selected color.
   ii. PPG:2-110 Wall Supreme Interior Flat High Build Wall and Ceiling Paint (43 g/L). Provide Manor Hall Flat Acrylic Latex 86-6 Series for all colors requiring ultradeep base.
   iii. SW: ProMar 200 XP Interior Latex Flat B30-3200 (49 g/L). Provide Duration Home Matte Latex A96-1200 Series for all colors requiring ultra deep base.

2. Walls
   a. Lo-Lustre Acrylic-Enamel Finish: 2 finish coats. (Walls)
      i. Primer: Latex-based, interior primer applied at spreading rate recommended by manufacturer to achieve a total dry film thickness not less than 1.2 mils (0.031 mm.).
         1. Moore: Not Required
         2. PPG: Not required except where Manor Hall Paint is required to achieve color indicated. Provide Speedhide Primer 6-2 under Manor Hall finish coats.
         3. SW: Not required except where Duration Home Paint is required to achieve color indicated. Provide Premium Wall and Wood Primer B28W8111 under Duration Home finish coats.

   b. First and Second Coats: Low-luster eggshell, acrylic-latex, interior enamel applied at spreading rate recommended by manufacturer to achieve a total dry film thickness not less than 9.2 mils.
      i. Moore: Aura Eggshell Waterborne 524 (47g/L) provide Color Foundation 521, (less than 49 g/L) where required to obtain Architect's selected color.
ii. PPG: 6-431 Speedhide High Build Interior Enamel Eggshell 100 percent Acrylic. (93 g/L). Provide Manor Hall Eggshell Acrylic Latex 89-6 Series for all colors requiring ultra-deep base.

iii. SW: ProMar 200 XP Latex Eg-Shel B20-3200 (49 g/L). Provide Duration Home Satin Latex A97-1200 Series for all colors requiring ultra-deep base.

3. Idea Paint
   a. [link to GSI-Guide-Spec_CREATE-White.pdf]
   b. Wall Coverings MUST wrap to an inside corner, and be adhered with removable glue.

**Ceiling Grid**

1. Always continuous whenever possible for flexibility in moving walls, unless otherwise required by tenant or for fire rating.

**Ceiling Tile**

   [link to Armstrong ceiling data sheet]
   (No spec sheet available)

2. Tenant Spaces: Armstrong, Dune 2 x 4 Second look #2712.

**Window Blinds**

Window blinds are building specific. Please check with the property manager prior to selecting, but typically blinds are:

1. Rollershade: 85% dark
2. Alternative colors, regardless of style, must be pre-approved by Bedrock.

**Light Fixtures**

Lighting must typically be “up-down” in any elevator cab, common area or tenant spaces, (indirect/direct) and dimmable in conference rooms and in open areas. (No spec sheet available)

The following applies in tenant spaces with ceiling grids and as a point of reference for alternatives: (no spec sheets available for the following)

1. 2x2 Light Fixture – Utility Refer to PBA specifications (Core and Tenant)
   a. [link to T8 Lamps spec sheet]

2. 2GT8-3-U31-FW-A12125-MVOLT-Ballast Option
   a. 2x4 Light Fixture - Utility Refer to PBA specifications (Core and Tenant)

3. Down Light (Upgrade)
   a. Lithonia LF8N Compact Fluorescent Downlighting LF8N-2/26DTT-F8B3W White Baffle-MVOLT-Options

Wall Washer (Upgrade)
1. Lithonia LF8N Compact Fluorescent Downlighting LF8N-2/26DTT-F8W1 White wallwash-MVOLT-Options (No spec sheet available)

Switches
1. White Thermoplastic with white device, or brushed aluminum where applicable. Leviton Decora® products are preferred.
   https://store.leviton.com/collections/decora (No spec sheet available)

Outlets
1. White Thermoplastic with white device - Leviton Decora® products are preferred.
   https://store.leviton.com/collections/decora-receptacles (No spec sheet available)

Patio Heaters
1. Sunglo model A242 free-standing heater.

COMMON AREA SPACES

Drinking Fountains
1. Refrigerated Units
   a. Elkay SwirlFlo® ADA Single GreenSpec Refrigerated Fountain (Model LRPBG RNMV8K) - Water Filter Water Sentry VII
      http://www.elkay.com/wcsstore/lkdocs/spec-sheets/spec12-65_lrpbgmm(v)8k.pdf
   b. Elkay SwirlFlo® ADA Single GreenSpec Refrigerated Fountain (Model LRPBG RNM28K) - Water Filter Water Sentry VII #51299C
c. Elkay Filtered EZH2O® Bottle Filling Station with SwirlFlo® Green Single Refrigerated Fountain - Water Filter Water Sentry VII #51300C (Model LZWS-SFG RN8K)  

2. Non-Refrigerated Units  
   a. Elkay SwirlFlo® Drinking Fountain – Fully exposed wall mount (Model EDFPB114C) - Water Filter Water Sentry VII  
      http://www.elkay.com/edfb114c
   b. Elkay Two-Level SwirlFlo® – Wall Mount (Model EDFPBM117C/EDFPB117C) - Water Filter Water Sentry VII  
   c. Elkay Single SwirlFlo® Drinking Fountain with Bottle Filling Station (Model EZWS-EDFPBM114K) - Water Filter Water Sentry VII  

Exit Sign  
   1. Edge Lit Exit Sign with Aluminum Housing - Green Lettering (ELRT-G)  

Emergency Light  
   1. If needed, Barron Lighting – Exitronix LL90 Series (finish: white)  
      http://barronltg.com/resources/02_exitronix-literature/01_web-specs/ll90.pdf

Fire Panel  
   1. Must have graphic display and zone capabilities per SMART specs and bypass functionality.

Fire Alarm Devices and Pull Stations  
   1. Devices must be white. If the color needs to be an alternate, prior approval is required from Bedrock.
   2. Pull stations must be a single action pull level, cast metal and red for the basis of the design.
   3. Pull Station Covers – Weather Stopper without Horn with Spacer (STI-3150)  
      http://www.sti-usa.com/series/weather-stopper/?goto_model=12809

Janitorial Sink  
   1. Mustee Durastone, 24" x 24" x 10" White Mop Sink Kit, 10" Bowl Depth #63M  

Plumbing  
   1. Refer to PBA specifications (Core and Tenant).
   2. Any water filters must be commercial grade.
Umbrella Holder
Blomus Stainless Steel umbrella Stand – Vents, SKU: 65157
(This product can be ordered from TPG)

Stairwell Lighting
Lithonia Lighting W-Series 4’ LED #WL4

Exterior Lighting / Signage Timer
Please refer to smart specs for exterior integration specs. Only in the event that this is not feasible landlord may approve the following timer at its sole discretion.
1. Tork EWZ120

PUBLIC RESTROOMS

Countertops
1. Countertops are required – no freestanding sinks, unless the restroom is too small to accommodate a counter. In this case, as smaller wall mounted unit must be approved by Landlord. Any trash receptacles must be under or next to the sink and the hand towel dispenser to limit drips on the floor.
2. Tops must allow for a silver, under counter waste receptacle underneath that is completely accessible for emptying.
3. If there are more than three sinks, C-Fold towels should be above counter mounted (preferably under a mirror) in front of the opening for the trash. They CANNOT be flush with the counter, (inset into the counter).
4. Finishes are to be polished chrome or brushed aluminum.

Trash Receptacle
1. SimpleHuman Semi-round Open Trash Can – 60 Liter Brushed Stainless Steel
   http://www.simpルhuman.com/60-litre-semi-round-open-can-brushed-stainless-steel
   (No spec sheet available)
2. Where a trash receptacle will not fit in a restroom, a recessed, chrome or brushed aluminum receptacle may be installed within 2-3’ from the sink. The point is to avoid carrying wet hands across the floor, wherever possible. In some
cases, this can be combined with a C-fold towel dispenser, if the Enmotion ‘handsfree’ dispenser will not fit appropriately.

3. **Under Counter Trash Receptacles**: If under counter trash receptacles will not work, then stand-alone cans are permitted. For high volume restrooms that require a heavy-duty receptacle, we prefer a Rubbermaid Crowne Collection AOT15SA Open Top in Satin Finish (Brushed Aluminum look). [http://www.rubbermaidcommercial.com/rcp/products/detail.jsp?rcpNum=FGAOT15SA](http://www.rubbermaidcommercial.com/rcp/products/detail.jsp?rcpNum=FGAOT15SA)

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**Wet Walls**

1. Should use large tile with a lot of room for grout.
2. The tile should start the base of the floor, and stretch to the height of the ceiling.

**Toilets**

1. Preferred flush valve is Sloan Solis Solar Powered Flushometer, specification sheets are attached for the single and dual models.
2. All devices must be hard wired or solar powered - no batteries.

**Urinals**


**Stall Partitions**

1. Preference is stainless steel. Stall doors must have a coat hook on the inside of the stall in both men’s and women’s restrooms, at the top of the door.
2. ADA stalls must have additional coat hook within ADA guidelines.
Stall Hooks
1. Surface-mounted utility hook – Bobrick Model B-670
   a. One hook should be installed on each stall. The ADA stall should have a hook at standard height and one at ADA height
   b. The finish should match kick plates and other bathroom hardware to stay consistent
      http://www.bobrick.com/washroomaccessories/Pages/ProductDetails.aspx?ProductNumber%3DB-670

Toilet Seat Covers
1. Kimberly Clark #9512 Stainless Steel Personal Seat Cover Dispenser.
2. Non-tear toilet seat covers are required in every restroom.

Toilet Paper Dispensers
1. Should be up and down orientated, not side-to-side.
2. Dispenser should be 3’ off the ground.
3. There is one standard spec option:
   a. Bobrick Surface-mounted Multi-roll Toilet Tissue Dispenser (B-2888)
      http://www.sheinson.co.il/appMdlFiles/DCatalog_downloads/B-2888_td.pdf

Sink

Faucet

Soap Dispensers
1. Must be above counter with foam soap – ‘hands free’; Batteries are prohibited, unless hard wiring absolutely will not work.
2. All devices must be hard wired. Soap containers must be easily accessible and not blocked in any way below the counter.
3. Dispenser should be finished in polished chrome or brushed aluminum.
4. The Standard is the Technical Concepts OneShot Foam Automatic Soap Dispenser #FG 750339
5. Enriched Foam Hand Soap W/ moisturizers # FG 750517 (No spec sheet)
6. A/C Adaptor #490071 kit eliminates the need for batteries with One Shot Counter Mounted Systems
   http://www.rubbermaidcommercial.com/rcp/products/detail.jsp?rcpNum=490071

**Hands Free Towel Dispensers**
1. Must be hard wired with stainless steel finish.
2. The standard is #59466 Enmotion with AC Adapter, Recessed towel dispensers in stainless.
   http://catalog.qppro.com/catalog/6357/10024?filter=FULL
3. Automatic hand dryers are not preferred. If a must, Dyson Airblade dB is acceptable.

**Mirrors**
1. No hanging fixtures above mirrors.
2. Individual mirrors are preferred over each sink.

**Grout**
1. Polymer modified grout, which meets ANSI A118.7. These types of grouts have very high cement content and do not require sealer. You get a fuller grout joint and the stain resistance of epoxy at a fraction of the cost. Regardless, the grout will eventually discolor so it is best to stick with dark colors on the floor. Glass tile is set with a specialty white mortar but does not require white grout. Toilet room floors should be waterproofed. Decision should always be discussed.

**Feminine Products**
1. Installation of feminine product dispensers is not preferred, however, if requested, use American Specialties Modess 08642.
   http://www.americanspecialties.com/datasheets/08642.pdf
2. The standard disposals is Single – Bobrick B-270
   http://www.bobrick.com/washroomaccessories/Pages/ProductDetails.aspx?ProductNumber%3DB-270

**Baby Changing Station**
1. If needed, the preference is Bradley Stainless Steel Baby Changing Station (Model 962)
Scent Dispenser

1. The preference is Microburst 3000 LCD Dispensers in the chrome finish. Mount near ceiling away from any fixtures. 

RESIDENTIAL SPACE

Lockers

Legacy Lockers P-4 Black Standard configuration, Lock: Performance Hasp, Width: 15”, Depth: 20”

STOR-MORE Bulk Storage Lockers Welded Wire Galvanized Steel

Huntington Cleaners Dry Cleaning Locker: 30”W x 83.5”H x 21.5”D

Bike Racks

DERO Rolling Rack

DERO Decker

DERO Fixit

DERO Duplex

Pet Grooming Station

Flying Pig Grooming 50" Professional Stainless Steel Dog Pet Grooming Bath Tub W/ Ramp

Flying Pig Grooming: Tub Kit Faucet, Sprayers, Shampoo Rack

Dog Waste Station

BOW WOW Waste: Waste Station - Single Dispense Bag

Mailboxes

Versatile 4C-Mailboxes: Standard engraving, k91910 Lock, Color: Black PMS Black 6c

Floors

323 Smart Step w/ Arrow Trax: Entrance Floor Mat

Door Access Controls

SARGENT ASSA ABLOY - IN120: Cylindrical Lock

Commend 7” Touchscreen Intercom Station TS8107V

Commend 10” Touchscreen Intercom Station TS 8110V
RETAIL SPACE

**Sink**

**Toilets**
1. All retail toilet specifications are the same as public restroom toilet specifications.
2. Preferred flush valve is Sloan Solis Solar Powered Flushometer, specification sheets are attached for the single and dual models.
   a. Solan Solis Solar Powered Dual Flush for toilet
   b. Solan Solis Solar Powered Single Flush for urinal
      [https://specifications.sloan.com/sloan-spec/template/spec-template/fixtureId/1638](https://specifications.sloan.com/sloan-spec/template/spec-template/fixtureId/1638)
3. All devices must be hard wired or solar powered - no batteries.
4. Toilets are to be standard height, ‘wall mounted’, and not too low to the ground. The Kohler Kingston K-4325 is preferred.
5. If the toilet must be floor mounted, the Kohler Highcliff K-96057-L is preferred.

**Urinals**
1. Kohler Bardon K-4991- ET is preferred.

**Stall Partitions**
1. Preference is stainless steel. Stall doors must have a coat hook on the inside of the stall in both men’s and women’s restrooms, at the top of the door.
2. ADA stalls must have additional coat hook within ADA guidelines.

**Faucet**
1. All retail toilet specifications are the same as public restroom toilet specifications.
2. The standard is the American Standard Selectronic – 6055.105.002
Fire Alarm Devices and Pull Stations

1. Devices must be white. If the color needs to be an alternate, prior approval is required from Bedrock.
2. Pull stations must be a single action pull level, cast metal and red for the basis of the design.
3. Pull Station Covers – Weather Stopper without Horn with Spacer (STI-3150)

Parking Garages

Security Standards for Parking Garages

Installation of security related items are bid by a set of approved security vendors, all based on an overall security design done by Rock Security. All work is required to be warranted for a min of 1 year.

Security Cameras

We use a Security Camera Design software when developing a camera layout. The software allows us to use floor plans of the parking garage to determine the placement of the cameras to obtain the highest level of camera coverage. The Cameras used in these deployments are the latest and greatest continually vetted by Rock Security.

Interior Cameras (Typical Locations)

- In parking areas
- Elevator Lobbies
- License plate Cameras (entry and exit)
- Stairwells
- Pedestrian Entrances
- IT rooms
- Emergency Phones

Exterior Cameras

- Pedestrian Entrances
- Drive Lanes
- Surrounding area over the Garage

Video Management System

- Milestone X Protect

Video Retention

- 30 Day Retention
- 8 Frames per second – High Resolution
- Recorded locally at the property
- Accessible by Rock Security Command Center Remotely
Access Control System - System Galaxy

Card Readers - HID Multi Class Readers (Prox)

- Offices
- IT Lan Closets
- All critical areas
- Electrified Door Hardware on doors with card readers.

Emergency Phones

- Blue Light Phones - Commend Products

Alarm Systems

- Installed if needed

Security Staffing (Securitas)

- Foot Patrol
- Vehicle Patrol
- Security Escort Services

Rock Security Command Center Monitoring

- Live 24/7 Monitoring
- Emergency Phones
- Security Cameras
- Access Control
- Alarm Systems

Standard Garage Drive Lane & Pedestrian Entrance/Exit Equipment

All parking related equipment, technology, budgets and bids are vetted and submitted for approval by our parking management team “Ultimate Parking Management” (UPM). Ultimate Parking Management is contracted to manage and operate our parking garages with oversight from Bedrock Parking and Property Management Teams.

Drive Lane Entrance/Exit Equipment

- Barrier Gates
  - Amano McGann AMG-1750 Barrier Gates with Folding Arms
- Revenue Control / Access Reader
  - Amano McGann Opus 2700 with Credit Card Option
- After Hours Access Badge Reader (if required)
  - ID ProxPro Proximity
Perimeter Gate/Grill
  ➢ Marathon / ASI Model 109-LP Direct Drive – High Speed

Clearance Bars
  ➢ Style: (I-Beam)

Vehicle Entrance Customer Assistance Video Intercoms
  ➢ Commend Video Intercom

Parking Booth
  ➢ Par-Kut Attendant Booth

Drive Lane Arming Loop
  ➢ Traffic & Safety Preferred Contractor

Entrance / Exit License Plate Camera
  ➢ Axis Q3505-VE Network Camera / Rock Security Command Center

Pedestrian Entrance / Exit Equipment
  o Pedestrian Entrances Video Intercom
    ➢ Commend Video Intercom
  o Pedestrian Entrances Badge Access
    ➢ HID Badge Reader / System Galaxy
  o Automatic Door Openers

"Standard Garage Light Fixtures"

Description / Manufacture / Model
  o Interior Lights
    ➢ Cree 50Watts VG LED

Staircase Lights
  ➢ Cree LS4 / with Battery Backup Feature
- Elevator Lobby Lights
  - Cree LS4
- Perimeter/Light fixture design vary based on location
- Emergency Lights
  - Built in battery backup feature or Emergency wall pack
  - Emergency Exit Signage

"Standard Garage Signage"

Garage Signage includes all the Following: (Signage Designs Are Handled by Andrea Kaczmarek)

- Rate Signs
- Floor Level Indicator
- Wayfinding/Directional Signage
- Perimeter Signage
- Speed Limit
- Elevators / Stairs
- Emergency Shelter Signage
- Restroom
- Access & Payment Equipment Labels / Instructions
- Emergency Procedures / Security Contact Information
- Designated Smoking and Non Smoking Locations
- Handicap Parking
- Reserved Parking
- Expected Mother Parking
- Extra Small / Compact Car Parking Signage
- Designated Motorcycle Parking
- Storage & Mechanical Room
- LED Pedestrian Crosswalk Display w/Audible Alert Signal
- LED Drive Lane Signage
- LED Illuminated Exterior Garage

“Standard Garage Technology”

Manufacturer/Supplier & Preferred Installer

- Access Control System
  ➢ System Galaxy
- Card Access
  ➢ HID Reader Multi Class Readers
- Network
  ➢ Primary & Secondary Supporting Networks – Preferred Contractor – Hake Industries
- Integration Lighting Controls
  ➢ Hepta / Bedrock Building System
- Commend / Intercom
  ➢ Preferred Contractor – SDS (Secured Data Services)
- Video Management
  ➢ Milestone X Protect
“Standard Garage Elevator Service”

**Elevator Requirements**
- Otis Elevator is the Preferred Service Providers
  - Minimum Speed Requirement - 350 Feet Per Minute

“Standard Routine Maintenance & Cleaning”

**Description/Scope of Work**
- Generator Maintenance / Inspections
- Parking Lane Equipment Preventative Maintenance
- Hi-Speed Rolling Gate Inspections
- HVAC Preventative Maintenance
- Walk-Off Mats
- Restrooms / Main Lobby Cleaning
- Interior / Exterior Window Cleaning
- Elevator Service Inspection/ Preventative Maintenance Checks
- Fire Life Safety Inspection

“Standard Trash Receptacles”

**Description/Model**
- Interior - Trash Can
  - Ex-Cell VCT - 33 PERF SS
- Exterior - Trash Can
  - Landscape Forms - Austin Litter Receptacle
o Interior Garage Sweeper
  ➢ Billy Goat

o Dumpster
  ➢ Dumpster Sizes Vary by Property Needs

“Standard Restroom Fixtures”

**Description/Manufacture/Model**

o Toilet Paper Dispenser
  ➢ Georgia Pacific Cordless Brush Steel Double Roll Tissue Dispenser

o Toilet Seat Cover Dispenser
  ➢ Kimberly Clark Professional Reflections Toilet Seat Cover Dispenser

o Soap Dispenser
  ➢ enMotion Automated Touchless Soap & Sanitizer Dispenser

o Faucet
  ➢ American Standards – Selectronic Electronic Proximity Metering Faucet

o Toilet Bowl
  ➢ Kohler High Crest or Kingston

o Flush Valve – Toilet
  ➢ Sloan Solis – Solar Powered Dual Flush

o Trash Can
  ➢ Rubbermaid SH12E Half Round

o Paper Towel Dispenser
  ➢ Georgia Pacific enMotion Translucent Smoke Wall Mount Automated Touchless Towel Dispenser
o Electric Hand Dryer
  ➢ Dyson Airblade dB

o Auto Spray Air Freshener
  ➢ 1793533 Microburst 3000 LCD Dispense – Chrome

“Standard Customer Amenities”

Description/Manufacture/Model

o Window Washing Stations
  ➢ DCI Single Bucket Windshield View – T Full Service Center

o Tire Air Stations
  ➢ Excel Tire Gauge Digital Air Tower Model SC05

o Electric Vehicle Charging Stations
  ➢ Charge Point – CT4023 – Dual Output / with Network Service Support (Optional)
  ➢ Tesla – Single Charging Station – No Network Support

o Bicycle Parking
  ➢ Barco Product – Park-It Galvanized PLUS

o Infrared Ceiling Heaters
  ➢ TH/THSS Series Mul-T-Mount Electric Infrared

o Zip Car
  ➢ Vehicle Rental Service

o Zagster Bike Rack Station
  ➢ Bike Rental Service

o Shuttle Pick Up Services
  ➢ Bedrock Parking Services – Contracted through Royal Transportation
“Standards Garage Landscaping”

Landscaping Needs Vary Per Locations (However Include the Following):

- Trees
- Scrubs
- Planters
- Mulch
- Arrogation System
- Snow Removal

**Lighting**

1. Stairwells
   - Columbia Lighting Bi-level Luminaire BIL4 w/ controls

2. Parking Structure Lighting
   - CREE VG Series LED
   - Approved for Residential

3. Alleys
   i. RAB FXLED150T

4. Sidewalks

**Entry Terminal**

1. Amano McGann OPUS-2000

**Exit Terminal**

1. Amano McGann OPUS-4000

**Parking Gate**

1. Amano McGann AMG-1750
2. Approved for Residential
Timers
1. NSi Industries - Astro Digital 1 CH 40A 120-277V is preferred if timer is not integrated

Flooring
1. Garage Elevator Flooring
   • Nora Norament Grano, Color 4883 if no other color is specified (No spec available)

Garage Doors
1. Marathon High Performance Doors
   • Model 109-G
   • Approved for Residential

Charging Station
1. Charge Point CT4000 Level 2 Commercial Charging Stations
2. Approved for Residential

ELEVATORS
1. Up-Down lighting is required in all cabs.

2. The installation of weight sensors and alarms for over capacity are required in all elevators.

3. Call boxes and City of Detroit License plaques must meet code requirements for posting heights, but be placed at the lowest level allowable inside the cabs.
The following is a list of items needed for the security desk:

- Drawer for security badges
- Area to slide wheelchair into
- Area to slide caution Cones and signs
- Place for umbrellas, would like something to put them in so they do not leak on floor when returned
- CPU
- Printer
- Defibrillator
- First Aid Kit and flashlights
- Pencil drawer/Junk drawer
- Visitor Registration Book
- Binder Shelves (3-4 binders)
- Lost and Found box
- Garbage
- Area for beverages (so they are not on counter)
- Personal items drawer (lunches/purses)
- Outlets for phone and radio chargers (somewhat hidden, on lower open shelf)
- Panic button
- All lock by one key
STAIRWAY IDENTIFICATION SIGNS

Stairway identification signs provide information critical to firefighter orientation and occupant evacuation in the event of an emergency. They are required on new enclosed stairs serving three or more stories and existing enclosed stairs serving five or more stories.

**Sign Location**
- Located within the stairway enclosure at each floor landing;
- Posted at five feet above the floor level;
- Located in a position that is readily visible when the doors are in the open and closed positions.

**Sign Details**
A. The size shall be a minimum of 18 inches by 12 inches and constructed of durable material.
B. The stairway identification, such as STAIR A or STAIRWAY B, shall be placed at the top of the sign in 2-inch block lettering with ¼ inch stroke.
C. ROOF ACCESS or NO ROOF ACCESS shall be placed under the stairway identification in 1-inch block lettering with ¼ inch stroke.
D. The floor level number shall be placed in the middle of the sign in 5-inch block lettering with ¾ inch stroke. Basement levels shall have the letter B preceding the floor number. Mezzanine levels shall have the letter M preceding the floor number.
   a. The floor levels served by the stair, such as B3 THROUGH 12 shall be identified at the bottom of the sign in 1-inch block lettering with ¼ inch stroke.
F. The level of exit discharge and direction to that level shall be indicated on the sign in 1-inch block lettering with ¼ inch stroke.
G. Characters and their backgrounds shall have a non-glare finish. All lettering shall be in sharp contrast to the background (light letters on dark background or vice versa).

These recommendations are based on the 2009 International Fire Code (State of Michigan), 2012 NFPA 101 Life Safety Code, and the City of Detroit Fire Ordinance 26-08.

All signage must be approved by Building Management before being sent into production.
SPECIFICATION SHEETS
IDEA PAINT

Guide Specifications for Designers and Specifiers: This document specifies IdeaPaint™ CREATE White Dry Erase Coating, and is provided for your use in CSI 3-Part Format. For further assistance, call 617 / 14.1052, email customerservice@ideapaint.com or visit http://www.ideapaint.com/installation-and-specs.

SELECTION 099737 / DRY ERASE COATING
(IdeaPaint™ CREATE White)

GENERAL
1. SECTION INCLUDES
   A. This Section specifies field-applied dry erase coatings including surface preparation and primer.
2. RELATED SECTIONS
   A. Section 092116 - Gypsum Board Assemblies; gypsum board substrate.
   B. Section 101100 - Visual Display Surfaces; whiteboard and chalkboard substrates.
3. SUBMITTALS
   A. Comply with Division 1 Section: Submittals.
   B. Product Data: Manufacturer’s data sheets on each product to be used, including:
      i. Preparation instructions and recommendations.
      ii. Storage and handling requirements and recommendations.
      iii. Installation methods.
   C. Maintenance Instructions: Provide precautions against cleaning materials and methods that may be detrimental to finish and performance.
   D. Samples: Submit verification sample of specified color on manufacturer’s standard sample card.
4. QUALITY ASSURANCE
   A. Manufacturer Qualifications: Minimum 3 years manufacturing dry erase coatings.
   B. Mock-ups: Prepare mock-ups for Architect’s review and to establish requirements for substrate finish and final coating application, texture and color.
      i. Install dry erase coatings mock-up in area designated by Architect.
      ii. Correct areas, modify method of application/installation, or adjust finish texture as directed by Architect to comply with specified requirements.
      iii. Maintain mock-ups accessible to serve as a standard of quality for this Section.
   C. Sustainable Design:
      i. Indoor Air Quality: UL GREENGUARD Gold Certified product.
      ii. USGBC LEED IEQ Credit 4.2 for Low-Emitting Materials - Paints and Coatings
         a. Compliance achieved using 150 g/l VOC content threshold.
         b. Provide coating meeting SCAQMD Rule 1113 Section (c)(1) requirements, default limit of 250g/l VOC.
         c. Compliance achieved using CA 01350 indoor air emissions.
         d. Compliance achieved using USGBC VOC Budget Methodology for low-emitting materials.
5. DELIVERY, STORAGE, AND HANDLING
   A. Deliver materials in original factory wrappings and containers, clearly labeled with
      manufacturer, product name, and fire hazard classification.
   B. Store materials in original undamaged packages and containers inside a well-
      ventilated area protected from weather, moisture, soiling, extreme temperatures, and
      humidity. Store at temperatures above 40 degrees F. Do not allow product to freeze.

6. PROJECT CONDITIONS
   A. Maintain ambient temperature not less than 50 deg F minimum and 85 deg F
      maximum 72 hours prior to beginning of installation.
      I. Do not install dry erase coatings unless substrate temperature is above 60
         degrees F.
      II. Do not install dry erase coatings until the space is enclosed and weatherproof.
      III. Do not install dry erase coatings until temperature is stabilized and permanent
            lighting is in place.

7. WARRANTY
   A. Warranty: Manufacturer's 10 year limited material warranty.

PRODUCTS
1. MANUFACTURER
   A. Manufacturer: IdeaPaint, 40 Broad Street, 1st Floor, Boston, MA 02109, telephone

2. PRODUCTS
   A. Dry Erase Coating: CREATE by IdeaPaint, providing a surface suitable for use of dry
      erase markers.
      I. Color: Manufacturer's standard color as follows:
         b. Color: Specialty and Custom color as selected.
      II. Fire Rating (ASTM E84): Class A, flame spread index 10, smoke developed
          index 20.
      III. VOC (EPA Method 24): 18 g/L Part A and B mixed, 1.4 g/L Part A only, 97 g/L
           Part B only.
      IV. Solids: 98 percent Part A, 40 percent Part B.
      V. Density: 12.18 lbs/gal Part A, 8.14 lbs/gal Part B.
      VI. Opacity/Hiding Power (ASTM D2805): 98.3 percent.
      IX. Crack Resistance (ASTM D522): 29 percent.
      X. Finish/Gloss (ASTM D523) on Dry Wall Board:
         a. 20 degrees: 22.4.
         b. 60 degrees: 66.0.
         c. 85 degrees: 66.8.
      XI. Scrub Resistance (ASTM D2486): Greater than 11,100 cycles.
      XII. Stain Removal/Washability (ASTM D3450): 94.9 percent.
XIII. Flashpoint (ASTM D92 Open Cup): Greater than 200 degrees F Part A, greater than 200 degrees F Part B.
XIV. QUV (following 500 hours of exposure, samples prepared on Kilz primed drywall)
   Control panel: L = 96.74, a = -1.02, b = 2.14. Test panel: L = 96.27, a = -1.44, b = 4.04. Delta E = 2.00.
XV. Chemistry Type: A non isocyanate based coating.
   I. Priming is required over stained surfaces for optimal hiding power, such as stained whiteboards or stained chalkboards.
   II. Priming is required for surface color changes for optimal hiding power of original surface color.
   III. Priming is required over new drywall, plastic, aluminum, steel (galvanized and ungalvanized), and vinyl.
C. Roller Covers: Provided by manufacturer. No substitutions.

EXECUTION
1. EXAMINATION
   A. Examine areas and conditions in which dry erase coatings will be installed.
      I. Complete finishing operations, including painting, before beginning installation of dry erase coatings.
      II. Wall surfaces to receive dry erase coatings shall be dry and free from dirt, grease, loose paint, and scale.
      III. Do not proceed with installations until unsatisfactory conditions have been corrected.
2. SURFACE PREPARATION
   A. Remove hardware, accessories, plates and similar items to allow dry erase coatings to be installed.
   B. Repair damaged areas by filling voids with spackle. Sand smooth repaired or textured surfaces. Scuff glossy and non-porous surfaces using medium grit sandpaper. Paint product is a high gloss coating; imperfections and visible seams will telegraph.
   C. Plaster Surface: Remove surface chalk. In new work use moisture meter to determine moisture content. Do not begin installation when moisture content of the surface to be painted is greater than 5 percent.
   E. Previously Painted Surface: To have opaque White or Black applied, remove loose paint or scale. Sand surface of enamel or gloss paint. Remove dust with tack cloth or denatured alcohol prior to priming.
   F. Prime (if applicable): Prime substrate using materials recommended by manufacturer if changing color of the surface, if covering a stained surface, or if applying on new
drywall. Follow manufacturer’s application, dry time, and recoat instructions prior to proceeding.
I. Changing color of the surface: Prime surface until the color of the existing surface does not show through.
II. Covering stained surface: Prime surface until undesired marks and stains do not show through.
G. Clean: Wipe surface with a clean, damp cloth to remove dust and environmental debris. Allow surface to completely dry.
H. Ventilate area thoroughly to aid in curing process and to dissipate mild odor. Allow a high percentage of outside air into current ventilation.

3. APPLICATION
A. Comply with manufacturers printed installation instructions. Mix components in strict accordance with manufacturer’s instructions. Pot life is 1 hour maximum.
B. Apply dry erase coating with specified roller only. Comply with the following:
   I. Apply heavy single coat only, using 2 layer method as described. Do not recoat or touch up applied coating once 10 minute return time has passed.
   II. Divide your entire planned surface into areas up to 50 square feet.
   III. Use a 4 inch foam roller to cut in all edges and light switches within the current area.
   IV. Using the included 9 inch roller, from one end of the current area to the other, apply in sections up to 4 feet wide by the full height of the surface.
   V. Be sure to overlap the edges of each section and use a backrolling technique as you go to even out the application.
   VI. Watch for roller marks, drip marks, debris and missed spots, re-roll as needed.
   VII. Every 50 square feet or 3-5 minutes, return to the first section of the area you have just finished and apply the second layer using the same method detailed above. This helps to build up a thick and effective IdeaPaint surface.
   VIII. Do not wait more than 10 minutes to perform the second layer over the first.
   IX. Remove masking tape within 1 hour of painting.
C. Dry erase coating may be applied directly onto clean, dry, smooth surfaces which are:
   I. A finished drywall surface
   II. A latex-based topcoat
D. Coating shall cure for a minimum of 4 days after application before use.
E. Application Rate: 5 mls wet film thickness as measured with a wet film gauge; maximum 50 square feet per quart or 200 square feet per gallon.

4. CLEANING AND MAINTENANCE
A. Regular erasing and cleaning should be done with a standard dry erase eraser or a dry microfiber towel. For more thorough cleaning, a damp microfiber towel may be used or IdeaPaint Cleaner. If damaged, the original surface shall be deglossed by sanding surface and priming before recoating.

5. PROTECTION
A. Protect installed product and finished surfaces from damage during construction.

END OF SECTION. REV 10/16/15.
**FEATURES & SPECIFICATIONS**

**INTENDED USE** — Low-profile static luminaire provides general illumination for recessed applications; ideal for restricted plenum spaces. Certain airborne contaminants can diminish integrity of acrylic. **Click here for Acrylic Environmental Compatibility table for suitable uses.**

Attributes: Designed exclusively for use with T8 lamps, electronic ballasts and sockets.

**CONSTRUCTION** — Smooth hemmed sides and smooth, inward formed end flanges for easy handling. Lighter weight fixture allows for simple, easy installation.

Standard steel door frame has superior structural integrity with premium extruded appearance and precision machined corners. Steel doors allow easy lens replacement with foot frame disassembly for lenses up to 3/8” thick. Powder coated, steel latches provide easy, secure door closure.

Superior mechanical light seal requires no foam gasketing. Integral T-bar clips secure fixture to T-bar system. Housing formed from cold-rolled steel. Acrylic shielding material 100% UV stabilized. No adhesives is used in this product.

Finish: Five stage iron phosphate pretreatment ensures superior paint adhesion and rust resistance. Painted parts finished with high-gloss, baked white enamel.

**ELECTRICAL** — Standard ballast is electronic, thermally protected, resettable, Class 2, PF > 0.95, non-PCT, UL listed, CSA certified ballast, universal voltage and sound rated.

Eccentric is suitable for lamp locations. AIM, T10 or T8/N or used throughout, rated for required temperatures.

**LISTINGS** — UL listed extension, CSA certified or NOM certified (see Options).

**WARRANTY** — 1-year limited warranty. Complete warranty terms located at [www.bendock.com/Commerical_Sources/terms_and_conditions.aspx](http://www.bendock.com/Commerical_Sources/terms_and_conditions.aspx)

US patents: 6,710,325; 6,231,213; 4,298,471.

Note: Specifications subject to change without notice.

---

**Ordering Information**

For shortest lead times, compare products using bolded options.

**Example:** 2GT8 2 U316 A12 MVOLT GEB1015

<table>
<thead>
<tr>
<th>2GT8</th>
<th>Trim type</th>
<th>Number of lamps</th>
<th>Lamp type</th>
<th>Door frame</th>
<th>Diffuser type</th>
<th>Voltage</th>
<th>Ballast</th>
</tr>
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<tbody>
<tr>
<td>2</td>
<td>blank</td>
<td>Grid</td>
<td>2</td>
<td>17</td>
<td>17W T8 (24”</td>
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<td>A12</td>
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<td>4</td>
<td>Not included</td>
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<td>FW</td>
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<td>#37 pattern acrylic, 150” thick</td>
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<td>#37 pattern acrylic</td>
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<td>1/2” x 1/2” plastic cube, bronze, white</td>
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<td>1-1/2” x 1-1/2” x 1-1/2” plastic cube, bronze, silver w/ flange</td>
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<td>1-1/4” x 1/4” x 1/4” plastic cube, bronze, silver</td>
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</table>

**Notes:**
1. 4-lamp models available with 77-watt straight tubes only.
2. Not available on 2-lamp models. See GEB.
3. Available with flash door frames only.
4. MVOLT standard test 4T8/277V applications, 30-90K operation. Some options require voltage specified.
5. Not available with compact fluorescent lamps — use GEB1015.
6. Must specify voltage 120 or 277.
GT8 2'x2' Static T8 Troffer

MOUNTING DATA
Continuous or multi-mounting in ceiling or suspension. 3/8" x 4" (distance 1 + " to 3/8") swing-gate hinges 2. 1/16" x 3/4" swing-gate pins. 2. 3/8" x 24. 11/16" to 12" swing-gate pins. Russian swing-gate pins require additional 1 3/4" horizontal flange height.

DIMENSIONS
All dimensions are inches (mm). Reference specified otherwise.

PHOTOMETRICS
Conducting using the interior cavity method in accordance with IESNA LM-61 procedure. Four reflections are 20%.
Lamp configuration shown as typical. Full photometric data on request.

Lithonia Lighting
An Acuity Brands Company

Page 48
LITHONIA LIGHTING

FEATURES & SPECIFICATIONS

INTENDED USE — Low-profile static luminaire provides general illumination for new or existing applications; ideal for restricted plenum spaces.

Certain airborne contaminants can diminish integrity of acrylic. Click here for Acrylic Environmental Compatibility table for suitable uses.

ATTRIBUTES — Designed exclusively for use with T8 lamps, electronic ballasts and sockets.

CONSTRUCTION — Smooth hemmed sides and smooth, inward formed end flanges for safe handling. Lighter weight fixture allows for safer, easier installation.

Standard steel door frame has superior structural integrity with premium extruded appearance and precision flash mitered corners. Steel door allows easy lens replacement without frame disassembly (for lenses up to .156” thick). Powder coated, steel latches provide easy, secure door closure.

Superior mechanical light seal requires no trim gasketing. Integral T-bar clips secure fixture to T-bar system, minimizing formed flame cold-rolled steel. Acrylic shielding material 100% UV stabilized. No asbestos is used in this product.

FINISH — Five-stage electro-phosphate pretreatment ensures superior paint adhesion and frost resistance. Painted parts finished with High-gloss, baked white enamel.

ELECTRICAL — Standard ballast is electronic, thermally protected, resetting, Class P, HPF, non-PCB, UL Listed, CSA certified ballast, universal voltage and rated 4A.

Luminaires suitable for damp locations. AWN, 110 or 220VAC wire used throughout, rated for required temperatures.

LISTING — Standard UL Optional: Canada — CSA or cUL; Mexico — NOM.


12 patents: 5,118,025; 5,237,215; 6,288,513.

Note: Specifications subject to change without notice.

---

ORDERING INFORMATION

For shortest lead times, configure products using bolded options.

Example: 2GT8 222 A12 MVOLT GEB10IS

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<th>Trimm Type</th>
<th>Number of Lamps</th>
<th>Lamp Type</th>
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<td>NOM</td>
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NOTES:
1. Available with flush mount 55mm only.
2. MVOLT standard for 120-277V, 50-60 Hz operation, some options require voltage adjustment.
3. Must specify voltage: 120V or 277V.
FEATURES & SPECIFICATIONS

INTENDED USE — Ideal for a wide variety of low-to-medium height ceiling applications including commercial, retail and hospitality spaces where a baffled fixture is required.

CONSTRUCTION — Heavy gauge die formed galvanized steel mounting frame with mechanical trim retention clips; ensure secure and flush reflector mounting to ceiling. Attached to frame are vertically adjustable mounting brackets for use with C-channel, 1/16" steel conduit or 1/4 gauge flat bar hangers included, standard. Frames equipped with galvanized junction box kit. Listed for through wire applications. Junction boxes equipped with 1/2" NPT and 1/2" conduit knockouts with pendant slots and removable access door.

Maximum 1/3" ceiling thickness.

OPTICS — Aluminum full reflectors are optically designed to maximize lumen output and to provide superior glare control. The black or white baffled reflectors have a semi-specular upper finish with a white painted flange standard.

ELECTRICAL — Electronic ballast with end of lamp life protection standard. Class P thermally protected ballast protects against improper contact with insulation. Minimum starting temperature is 0°F-18°C. Rated for #12 AWG conductor thru-bushing. Minimum 90° supply wire.

Ground wire provided.

Lamp Socket Base:

DIT 4-pin lamps — 13W (G24Q-1); 18W (G24Q-2); 26W (G24Q-3)

LISTINGS — Fixtures are UL Listed for thru-bushing, Non-K recessed mounting, damp location, and to U.S. and Canadian Safety Standards.


Note: Specifications subject to change without notice.

COMPACT FLUORESCENT DOWNTIGHTING

8" LF8N

BAFFLE

Horizontal, 2-Lamp Double Twin-Tube (DTT)

Specifications

Max. height: 6 3/8 (16.2)

Ceiling opening: 8 3/4 (22.2)

Overhang trim: 9 1/2 (24.1)

Length: 15 (38.1)

Width: 13 3/8 (35.2)

All dimensions are inches (centimeters) unless otherwise indicated.

ORDERING INFORMATION

For shortest lead times, configure product using bolded options.

Example: LF8N 2/260TT F883 MVOLT

<table>
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<tr>
<th>LF8N</th>
<th>Wattage/Lamp</th>
<th>Reflector/Coll.</th>
<th>Voltage</th>
<th>Options</th>
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<td>ADVANCE</td>
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<td>2/260TT F883</td>
<td>White baffle</td>
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<td>ECOS</td>
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<td></td>
<td>2/260TT F883</td>
<td>White baffle</td>
<td>347</td>
<td>EL</td>
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</tbody>
</table>

Notes

8. Not available with ADVANCE.
9. Not available with ECOS.
10. Not available with EL or ELCOS.
11. For additional options, visit www.lithonia.com.
12. Ships standard with lamp and fixture. For 2-lamp emergency operation, consult installation instructions for details. Add 3 3/8 (10.1) and 4 1/2 (11.4) to length.

Accessories: Order as separate ordering number.

SCA8 Sloped ceiling adaptor. Degree of slope must be specified (10X, 15X, 20X, 25X, 30X) or SC8 1000.

CTA Ceiling thickness extends to desired when ceiling thickness is greater than 1 3/8 (3.5). Maximum thickness 2 3/3.
8" LF8N Horizontal, 2-Lamp Double Twin-Tube (DTT), Baffle

PHOTOMETRICS

<table>
<thead>
<tr>
<th>Distribution Curve</th>
<th>Distribution Data</th>
<th>Output Data</th>
<th>Coefficient of Utilization</th>
<th>Illuminance Data at 30° Above Floor for a Single Luminaire</th>
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<tr>
<td>LF8N 2/26 DTT FeB3 MViOLT, (2) 20W DTT lamps, 1.3 s/mh, 1000 rated lumens, test no. LTL9592</td>
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<th>90%</th>
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Notes:

Energy (Calculated in accordance with NEMA Standard IES-
Actual performance may differ as a result of end-user environment and application.
EMERGENCY LIGHTS

EMERGENCY LIGHTS

MODEL NUMBER:
Accessories:
Job:
Type:

FEATURES
- Completely self-contained, compact, low-profile design
- Rugged, injection-molded UL94 V-0 flame retardant, high-temperature thermoplastic housing
- Remote capabilities (8 volt) - up to 5 watts
- AC lockout for ease of installation and installer protection
- Low voltage disconnect eliminates deep discharge
- Brown-out, short circuit and voltage surge protection
- Charge rate/power "ON" LED indicator light with test button
- UL recognized maintenance free lead acid battery
- Optional NiCad battery available
- UL listed 90 minute emergency run time, 24 hour recharge time
- Universal J-box mounting system
- Optional Self Test/Self Diagnostics (G2) available
- Standard finishes: Black and white
- 120V/277V dual primary, 60Hz input
- Suitable for damp location

WARRANTY
Any component that fails due to manufacturer’s defect is guaranteed for 1 year with a separate 5 year pro-rated warranty on the battery. The warranty does not cover physical damage, abuse or acts of God. Manufacturer reserves the right to charge for such repairs if deemed necessary.

SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE

ORDERING INFORMATION
Example: LL90H-G2-R

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<td>BLK - White</td>
<td>G2  - Self Test / Diagnostics</td>
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<tr>
<td>LL90H</td>
<td>BL - Black</td>
<td>R7  - Remote Capacity (6V, 8W)</td>
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<td></td>
<td>KLP - Krypton Lamps</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NC2 - NiCad Battery</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LC2 - 3’ Line Cord</td>
</tr>
</tbody>
</table>

1 G2 option is not compatible with NiCad battery option
2 Not available on LL90H
CONSTRUCTION
The LL90 is a precision molded unit with lamp housings constructed of UV stable UL 924 V-0 flame retardant, corrosion proof thermoplastic. Units resist denting, peeling, scratching and corrosion. Not recommended for outdoor use. Tool-less access provided for easy maintenance, universal J-box mounting pattern and keyhole slots provided for simple installation.

ILLUMINATION
Two fully adjustable, attractive, square shaped lamp heads with rounded corners and vacuum metalized reflectors allow for maximum light to be delivered to the path of egress.

Emergency lights consist of two 6 volt, 5.4 watt high intensity incandescent lamp heads. Units with remote capability utilize two 8V, 4.8 watt high intensity incandescent lamp heads. Halogen units are illuminated with two 6V, 50 watt high intensity halogen lamps. Krypton lamps (6V, 5.4W) may be substituted (Option: KR/6).

ELECTRICAL
Input
Dual-voltage input 120 or 277VAC @ 60Hz.

Sealed Lead Acid Battery – SLA
Extruxon sealed lead acid batteries are maintenance-free with a life expectancy of 5 years. Sealed lead acid batteries provide a relatively large power-to-weight ratio making them ideal for emergency applications. Lead Acid batteries are constructed of a series of plates stacked with separators designed to optimize the efficiency and prolong the life of the battery. Lead Acid batteries perform optimally in temperatures ranging from 15-40 degrees C.

Sealed Nickel Cadmium Battery – NiCad (Option: NC)
Extruxon sealed nickel cadmium batteries are maintenance-free with a life expectancy of 15 years. Nickel cadmium batteries offer high discharge rates and continue to perform in a vast temperature range from 0-40 degrees C. NiCad technology provides long lasting, safe and reliable performance by utilizing the jelly-roll design and allows a NiCad cell to deliver a much higher maximum current than an equivalent size alternative battery. As a relatively larger area of the electrode is in contact with the active material in each cell, the internal resistance for an equivalent sized NiCad cell is lower which increases the maximum current that can be delivered.

Brownout Circuit
The brownout circuit monitors the flow of AC current to the unit and triggers the emergency lighting system once a set reduction of AC power occurs. This clip in the voltage will cause many fixtures to extinguish causing loss of normal lighting even though a total power failure has not occurred.

Low Voltage Disconnect
When the battery’s terminal voltage falls below predetermined levels, the low-voltage circuit disconnects the emergency lighting load. The disconnect remains in effect until normal power is restored, preventing deep battery discharge and improving the life of the battery. The disconnect will also automatically reconnect the load circuit once the battery voltage returns to a normal value after charging.

Solid-State Transfer
The unit features a solid-state switching transistor which eliminates damaged contacts or mechanical failures associated with relays. The switching circuit is designed to detect a loss of AC power and automatically energizes the lamps. Upon restoration of the AC voltage, the emergency lamps will switch off and the charger will automatically recharge the battery.

Overload and Short-Circuit Protection
The solid-state overload monitoring system in the DC circuit disconnects the lamp load from the battery should excessive wattage demands be made and automatically resets when the overload or short-circuit is removed. This overload current protective characteristic eliminates the need for fuses or circuit breakers for the DC load.

Test Button
Our easily located test button allows for manual verification of proper operation of the transfer circuit and emergency lamps.

INSTALLATION
Units are mountable in any orientation, on wall or ceilings. A universal mounting pattern and rear keyhole slots are provided.

Damp Location Rated
Damp location rating ensures the fixture is designed to operate safely in outdoor locations that are protected from the direct elements. Damp location rated fixtures may be installed indoors. Products with damp location ratings are not designed to withstand constant or significant moisture or direct contact with water or steam.

Guardian Self-Test/Self-Diagnostics (Option: G2)
The Guardian circuit continuously monitors the operating condition of the AC power, battery supply voltage, emergency lamp continuity and charging circuit.

The purpose of this option is to provide visual signaling in response to a fault at the EXIT sign battery and/or battery charger. If a failure is detected, visual status will occur immediately via the CHARGER LED and/or the BATTERY FAULT LED. The LEDs will stay illuminated until the fault is corrected.

The Guardian circuit also monitors the transfer circuit as well as performing automatic code compliant testing. The Guardian circuit will perform a 30 second discharge and self-test every 28-30 days. A 90 minute discharge and self-test is performed every 6 months.

Not available on LL90H.

Remote Capable (Option: R)
The R option provides this unit with an additional 8 watts of remote use with any remote traditional lamps. The LL90-R series is also RENEGADE compatible – 3.6W LED per head. Not available on LL90H.

CONFORMANCE TO CODES & STANDARDS
The LL90 Series is UL listed and meets or exceeds the following: UL 924, NEC requirements and NFPA 101.
PULL STATION COVERS

TOPPER® II

Helping stop
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requires

- UL Listed to U.S. and Canadian safety standards (also for custom labeling).
- Larger sizes and surface mounted pull stations accommodated with STI-3100 conduit spacer.
- Polycarbonate rated -40°F to 120°F (-40°C to 49°C).
- Weather models have closed cell gaskets.
- Power source is 9 VDC alkaline battery included on standard Stopper II (remote powered unit is available).
- "RC" models include one form "C" dry relay contact and is capable of operating from 9-24 VDC remote power or internal 9 VDC battery power.
- Not just for pull stations, this cover can also help protect other devices such as EPO’s, call boxes, telephones and emergency shutdowns just by changing the color and messaging.
- With backplate and gaskets, UL Listed to NEMA 3R Standards.
**STI Stopper II®**

**Dimensions and Technical Information**

**MODELS AVAILABLE**

**Stopper II® Models Indoor Use**
- STI-1100: With horn for flush mount
- STI-1130: With horn and spacer
- STI-1200: Without horn flush mount
- STI-1230: Without horn with spacer

**Weather Stopper® with gaskets**
(Indoor/Outdoor rated)
- STI-1150: Stopper II with horn flush mount
- STI-1155: Stopper II with horn and spacer
- STI-1250: STI-1200 flush mount and gasket
- STI-3150: STI-1200 with spacer and gaskets

**Accessories**
- STI-3100: 2" conduit spacer with 1/2" conduit entry (no gaskets included)
- STI-3104: 2" conduit spacer with 3/4" conduit entry (includes one 3/4" conduit entry gasket)
- STI-1102: Replacement horn for cover with alarm
- CUSTOM-LBL: Custom text message for horn housing
- STI-1260: Bezel plate for Stopper II and Weather Stopper series

**APPROVALS & WARRANTY**

**TESTING**

It has been tested and approved or listed by:
- UL Listed, UL File No. 50468
- FM Approved, FM Approvals, 3172
- Factory Mutual No. 0942A
- State of California: California-tested and approved

**WARRANTY**

Three year guarantee against breakage of polycarbonate in normal use (one year on mechanical and electronic components).

**IMPORTANT NOTICE**

Stopper II™ “FIRE” models are intended to be used in areas where the incidence of false fire alarms from manual pull stations is high or has proven to be serious problem. Any disadvantage of this device is more than balanced when one considers the consequences of false fire alarms, especially if it is service personnel and equipment are responding to a fire alarm when they are needed for a real fire somewhere else. Add to this the disruption to the facility when false alarms occur. If you have, or may have, a problem with false fire alarms or physical/operational damage to your fire alarm supervisory devices, the Stopper II could prove invaluable.

*WARNING* For PC models: UL Listing does not permit relay contacts to connect to the fire alarm or a life safety function. The power supply for horns, according to UL Listing, cannot be connected to a UL Listed fire alarm system. For electrical specifications see Install book. PC models contain one set of Form “C” dry contacts. Contacts rated 30 VAC/VDC 1 amp.

---

**EXTERNAL DIMENSIONS:**
- Flush 7.2 W x 10.2 H x 3.3 D in. (183x259x84 mm)
- Surface 7.2 W x 10.2 H x 5.5 D in. (183x259x140 mm)
**DRINKING FOUNTAINS - REFRIGERATED**

**GENERAL**
GreenSpec® Listed, energy and water efficient model. Single station barrier-free stainless steel water cooler has recessed in-the-wall refrigeration system and stainless steel grill. Stainless tubular steel support arm incorporates unique recess to be integrated with basin. All stainless steel polished to a lustrous satin finish with high shine outer edge. Fountain has contoured basin to minimize splashing, Flex-Guard® StreamSaver water-efficient bubbler and easy to operate, fully functional vandal-resistant front push button. Energy efficient refrigeration system utilizes a combination of tank continuous-tube type evaporator, refrigerator drier, and capillary tube.

**WATERSENTRY® VII FILTER SYSTEM**
Elkay Water Coolers are equipped with the WaterSentry VII Filter System. Tested to NSF/ANSI Standard 53 yields a reduction of soluble and insoluble lead content to less than 0.015mg/l. This translates to lead reduction levels of 93% to 99%. Class 1 particulate reduction as tested per NSF/ANSI 42. Removes over 97.5% of free available chlorine which provides Class 1 performance as tested to NSF/ANSI 42. Provides taste and odor improvement.

**THIS WATER COOLER COMPLIES WITH THE REQUIREMENTS OF A.D.A. (AMERICAN DISABILITIES ACT) WHEN PROPERLY INSTALLED.**

**NO LEAD DESIGN**

**THESE WATER COOLERS ARE CERTIFIED TO BE LEAD-FREE AS DEFINED BY THE SAFE DRINKING WATER ACT OF 1986 AND LEAD CONTAMINATION CONTROL ACT OF 1988.**

Elkay Water Coolers are manufactured with a waterway system utilizing诸多rin and filter components and completely lead-free materials. These waterways have no lead because all lead materials, such as leaded brass, have been removed. All joints are brazed using silver solder only. No lead solder is permitted. A strainer with an easily cleanable screen is provided to allow trapping and convenient removal of waterborne particulate of 140 microns and larger prior to their entry into the water cooler.

**CAPACITIES CHART**

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Water Capacity</th>
<th><em>°F</em></th>
<th>Rating</th>
<th>Full Load</th>
<th>Glass Filter</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRPBGRNM8K</td>
<td>75</td>
<td>9.3</td>
<td>8.3</td>
<td>7.3</td>
<td>260</td>
<td>2.8</td>
</tr>
<tr>
<td>LRPBGRNM8K</td>
<td>75</td>
<td>9.3</td>
<td>8.3</td>
<td>7.3</td>
<td>260</td>
<td>2.8</td>
</tr>
</tbody>
</table>

*Based on 80°F (27°C) Inlet water temperature. Rated watts shown are based on operational (run) time, in accordance with A.R.I. Standard 1010 conditions. Specific applications will determine the actual watts consumed per hour. Watts consumed will be based on number of people served per hour usage, ambient temperature, and inlet water temperature.

**COOLING SYSTEM**

**Motor Compressor:** Hermetically sealed, reciprocating type, 115 Volt/60 Hz, single phase. Sealed-in lifetime oil supply.

**Condenser:** Fan cooled, copper tube with aluminum fins. Fan motor is permanently lubricated.

**Cooling Unit:** Tube type. Self-cleansing. Continuous copper tubing which is fully insulated with EPS foam that meets UL requirements for self-extinguishing material.

**Refrigerant Control:** Refrigerant HFC-134a is controlled by accurately calibrated capillary tube for positively trouble-free operation.

**Temperature Control:** Enclosed adjustable thermostat is factory preset. Requires no adjustment other than for altitude requirements.

**CONSTRUCTION**

**Fountain Body:** #18 gauge, 300 series nickel bearing stainless steel basin polished to a lustrous satin finish with high shine outer edge. Contoured basin offers large strike area to minimize splashing. #16 gauge, 300 series tubular support arm incorporates unique recess to accept basin. Fully functional vandal-resistant push button is easy to operate.

**Exclusive Flex-Guard® Stream-Saver™ Bubbler:** Water-efficient, innovative design utilizes a pliable polyester elastomer to prevent accidental mouth injuries. Flexes on impact, then returns to original position. Strong, abrasion-resistant, Anti-sweat. Bubbler meets UL requirements and all sanitary codes and is keyed in location to prevent rotation.

**BUBBLER OPTION**

**Vandal-Resistant Bubbler:** (option) One-piece, heavy-duty, solid construction. Model LRPBGRNM8K.

**Front Panel Grill:** Made of 300 series stainless steel, polished to a uniform Elkay satin finish. Removable louvered ventilating grill encloses refrigeration unit and plumbing.

**Wall Mounting Frame:** MF100 frame furnished with each unit. Frame allows flush mounting to finished wall.

**Protected by Elkay's 5 Year Limited Warranty** on the refrigeration system of the unit. Elkay Pressure-Type Water Coolers are designed to operate on 20 psi (138 KPa) to 105 psi (724 KPa) supply line pressure. If inlet pressure is above 105 psi (724 KPa), a pressure regulator must be installed in the supply line. Any damage caused by reason of connecting this product to supply line pressures lower than 20 psi (138 KPa) or higher than 105 psi (724 KPa) is not covered by the warranty.

**STANDARDS**

Elkay Electric Air Cooled Water Coolers are listed by Underwriters Laboratories Inc. and comply with both Canadian and U.S. requirements. These units comply with A.R.I. Standard 1010.

This fountain is certified by UL to lead-free compliance including NSF/ANSI 61 and 372.

In keeping with our policy of continuing product improvement, Elkay reserves the right to change product specifications without notice. Please visit elkayusa.com for most current version of Elkay product specification sheets.

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(Rev. 1/15) SPEC12-65
Page 58
**GreenSpec® Listed Swirlflo® with WaterSentry® VII Filter System**

**Barrier-Free Access**

**Models LRPBGRNM8K and LRPBGRNMV8K**

**ROUGH-IN DIMENSIONS**

**IMPORTANT! INSTALLER PLEASE NOTE:**

The grounding of electrical equipment such as telephones, computers, etc., to water lines is a common procedure. This grounding may be in the building or may be away from the building. The grounding can cause electrical feedback into a water cooler, creating an electrolysis which causes a metallic taste of causes an increase in the metal content of the water. This condition is avoidable by using the proper materials as indicated below.

The drain fittings which are provided by the installer should also be plastic to electrically isolate the cooler from the building plumbing system.

**EPGBRN8K MOUNTING FRAME INSTRUCTIONS**

1. Cut a square rectangular wall opening 18-3/4" (476mm) W x 37-3/4" (959mm) H and 4-1/2" (114mm) above the floor line. These dimensions are required to obtain proper rim and bubbler heights for compliance with ANSI standard.

2. Reinforce the wall opening on all sides so that it will adequately support the water fountain. This reinforcement must support up to 150 lbs static load and provide a means for securing the frame assembly in place.

**NOTE:** Building construction must allow for adequate air flow on both sides and top of remote chiller unit. Minimum of 4" (102mm) is required. (See Figures 1 & 2)

3. Install plumbing and electrical rough-ins. See Figure 1 for location of the supply water inlet to chiller and for the location of the waste water outlet. A junction box for a (3) wire, 10 amp branch circuit is provided on the side of the chiller. (Standard 120 Volts, 60 Hz and single phase) See Figure 2 for the electrical inlet location.

4. Remove frame and related hardware from packaging. Release the two shelf rods by cutting cable ties. Install the frame squarely in wall opening with frame upright edge flush with the finished wall face (See Figure 2). Place shelf inside frame and line up the (2) holes on each. Insert loose ends of rods into holes on sides of shelf panel. Using appropriately sized wood screws (not provided), fasten the shelf and frame to bottom of wall opening. See Figure 2. Secure the frame sides and top to the wall using (10) 5/16" x 2" lag bolts or screws (not provided).

**NOTE:** Be sure that frame is squared in location. Do not use less than required screw quantity and size.

---

**Fig. 1**

**Fig. 2**

**NOTE:** WATERFLOW DIRECTION

**SERVICE STOP (NOT FURNISHED)**

**OPERATION OF QUICK CONNECT FITTINGS**

**SIMPLY PUSH IN TUBE TO ATTACH**

**TUBE IS SECURED IN POSITION**

**PUSH IN COLLET TO RELEASE TUBE**

**Screws or Bolts (Not Provided)**

**Frame**

**Electrical Inlet Location of Chiller (20mm) Min Depth**

**Back or Wall to be 12" (305mm)**

**2-1/8" (54mm)**

**1-1/4" (32mm)**

**5/16" Screws or Bolts (10) REDS - (Not Provided)**

**1-1/4" (32mm)**

**CHILLER SHELF**

**16-3/4" (426mm)**

**2-1/8" (54mm)**

**HOOK REDS (2)**

**Back or Wall to be 12" (305mm)**

**Min Depth**

---

**Elkay**

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(Rev: 1/15) SPEC12-65
No Lead Two-Level SwirlFlo®
with WaterSentry® VII Filter System
Barrier-Free Access
Model LRPF(MI)26K

ROUGH-IN DIMENSIONS

IMPORTANT!
INSTALLER PLEASE NOTE:
The grounding of electrical equipment such as telephones, computers, etc., to water lines is a common practice. This grounding may be in the building or may occur away from the building. This grounding can cause electrical feedback into a water colder, creating an electrolysis which causes a metallic sheath or causes an arc in the metal content of the water. This condition is acceptable by using the proper materials, as indicated below.
The door fittings which are provided by the installer should also be made to electrically isolate the cooler from the building plumbing system.

LRPF(MI)26K MOUNTING FRAME INSTRUCTIONS
1. Cut a square rectangular wall opening 3' 1/2" (990mm) W x 3' 1/2" (990mm) H and 4 1/2" (114mm) above the floor line. These dimensions are required to obtain proper rim and baffles heights for compliance with ANSI Standard A117.1 (See Figure 1).
2. Reinforce the wall opening on all sides so that it will adequately support the water fountain. The reinforced metal support up to 150 lbs. static load and provide a means for securing the frame assembly in place.
 MESSAGE: Building construction must allow for adequate air flow on both sides and top of remote Chiller unit. Minimum of 4" (102mm) is required (See Figures 1 & 2).
3. Install plumbing and electrical rough-ins. See figure 1 for location of the supply water inlet to Chiller and for the location of the waste water outlet. A junction box for 4" (102mm) long branch circuit is provided on the inside of the Chiller (Standard 120 Volts, 60 hz and 4-wire FLG and single phase). See figure 2 for the electrical inlet location.
4. Remove frame assembly and related hardware from packaging. Attach the two frames together using the upright supports with 6" (152mm) long bolts and nuts (not provided). Tighten securely.
5. Lay out the frame assembly squarely in wall opening with frame upright support edges flush with the finished wall face. Secure the frame to the wall thru holes with (12) 1/4" x 2" (6mm) long lag bolts or screws (not provided). Tighten securely.
6. Attach the Chiller shelf support rods to the right side frame uprights at the second set of holes counting from the bottom and to the shelf at the (E) shelf holes. Line up the other shelf holes with the frame bottom holes and fasten the assembly to the wall using appropriately sized screws, or bolts and nuts (not provided). (See Figure 2).

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**GENERAL**

Fuly exposed dual height stainless steel fountains have recessed n-line-wall refrigeration system and stainless steel grill. Stainless steel tubular support arms incorporate unique recess to be integrated with basins. All stainless steel polished to lustrous satin finish with high shined outer edge. Fountains have contoured basins to minimize splashing. Flexi-Guard® safety bubblers and easy to operate, fully functional vandal-resistant front push button. Flow regulator provides constant stream from 20 to 160 psi water pressure.

*NOTE:* Minimum 40 psi supply line pressure required in special circumstances where both sides of bi-level are in use simultaneously to ensure adequate stream height. Use of water filtered unit in this situation is not recommended.

Model LRBP28K is designed for applications with the early installation of the mounting frame, pre-ordered as MF-200. The fountain and water chiller are included with LRBP28K.

**WATER COOLER COMPLIES WITH THE REQUIREMENTS OF A.D.A. (AMERICANS WITH DISABILITIES ACT) WHEN PROPERLY INSTALLED. UNIT IS COMPLIANT IF INSTALLED IN AN ALCOVE AND IS ALSO COMPLIANT WHEN MOUNTED ON AN EXPOSED WALL. IF A WHINC WALL IS LOCATED ON THE LEFT SIDE OR IF AN LAXAPR1 APRON IS INSTALLED UNDER THE UPPER UNIT.**

**NO LEAD DESIGN**

**WATER COOLER COMPLIES WITH THE LEAD-FREE DEFINITION IN THE SAFE DRINKING WATER ACT OF 1986 AND LEAD CONTAMINATION CONTROL ACT OF 1988.**

Elkay Water Coolers are manufactured with a waterway system utilizing copper components and completely lead-free materials. These waterways have no lead because all leaded materials, such as leaded brass, have been removed. All joints are brazed using silver solder only. No lead solder is permitted. A strainer with an easily cleanable screen is provided to allow trapping and convenient removal of waterborne particulate of 140 microns and larger prior to their entry into the water cooler.

**WATERSENTRY® FILTER SYSTEM**

Elkay Water Coolers are equipped with the WaterSentry® Filter System, tested to NSF-ANSI Standard 53 yields a reduction of soluble and insoluble lead content to less than 0.015mg/l. This translates to lead reduction levels of 93% to 99%. Class 1 particulate reduction as tested per NSF-ANSI 42. Removes over 97.0% of free available chlorine which provides Class 1 performance as tested to NSF/ANSI 42. Provides taste and odor improvement.

**CAPACITIES CHART**

<table>
<thead>
<tr>
<th>Model</th>
<th>Flow Rate</th>
<th>Temperature</th>
<th>Full Load Watts</th>
<th>Full Load Amps</th>
<th>Class</th>
<th>Filter Options</th>
<th>Pre-Cooler</th>
<th>Spray Valve Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRBP28K</td>
<td>7.5</td>
<td>8.6</td>
<td>8.1</td>
<td>7.5</td>
<td>370</td>
<td>4.0</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

*Based on 80°F inlet water temperature

**COOLING SYSTEM**

Motor Compressor: Hermetically sealed, reciprocating type, 115V, 60 Hz or 230V, 50 Hz (International Model) single phase.

Condenser: Fan cooled. Fan motor is permanently lubricated.

In keeping with our policy of continuing product improvements, Elkay reserves the right to change product specifications without notice.

**STANDARDS**

Elkay Electric Air Cooled Water Coolers are listed by Underwriters Laboratories, Inc. and comply with both Canadian and U.S. requirements.

These units comply with ARI Standard 1010.

This cooler is certified by WQA to lead-free compliance including NSF/ANSI 61 and 372.

This specification describes an Elkay product with design, quality and functional benefits to the user. Elkay makes no representation or warranty, express or implied, that these benefits are not alleviated.

Elkay.com 2222 Camden Court Oak Brook, IL 60523

Printed in USA. 62015 Elkay (Rev 12/15) 12-44D
**EZH2O® In-Wall Bottle Filling Station with Single Filtered SwirlFlo® GRN Refrigerated Fountain**  
**Model LZW-SFGRN8K**

**RATED FOR INDOOR USE ONLY**

---

**PRODUCT SPECIFICATION**

In-wall bottle filling station with single refrigerated oval fountain with high efficiency ECHGRN chilling unit. LZW-SFGRN8K shall deliver 8 GPH of 50°F drinking water at 90°F ambient and 80°F inlet water. Single stainless steel fountain with rounded edges and vandal resistant pushbutton activation. Bottle filling unit shall be stainless steel construction with plastic ABS alcove Sensor activation with an auto 20 second shut off timer. Shall include Green Ticker™ displaying count of plastic bottles saved from waste. Bottle filler shall provide 1.3gpm flow rate with laminar flow to minimize splashing. Shall include the Water’s entry® Plus 3000 gallon capacity filter, certified to NSF/ANSI 42 and 53, with visual monitor to indicate when replacement is necessary. Shall include integrated silver ion anti microbial protection in key areas. Unit shall meet ADA guidelines. Unit shall be lead-free design which is certified to NSF/ANSI 61 and 372 and meets Federal and State low lead requirements. Unit shall be certified to UL 399 and CAN/CSA 22.2 No. 120.

**STANDARD FEATURES**

- 1 fountain feature the FlowGuard® StreamSaver™ Safety Bubbler
- Stiffly oval basin with pushbutton activation
- Features high-efficiency ECHGRN chilling unit

**Bottle Filler**

- Laminar, touchless activation with auto 20 second shut-off (Bottle Filler)
- Waters' entry® Plus 3000 gallon capacity filtration system, certified to NSF/ANSI 42 and 53 (Lead, Class 2, Particulate, Chlorine, Taste & Odor)
- Integrated Silver Ion Anti-Microbial Protection in key areas
- Quick Fill Rate: 1.3 gpm
- Laminar Flow provides minimal splash
- Real Drain System eliminates standing water
- Visual User Interface display includes:
  - Innovative Green Ticker™ counts bottles saved from waste
  - LED Visual Filler Monitor shows when replacement is necessary
- Includes lower hinged panel for easy access and servicing

**COOLING SYSTEM**

- Condenser: fan cooled. Fan motor is permanently lubricated.
- Cooling Unit: Combination tube-tank type. Continuous copper tubing with stainless steel tank. Fully insulated with EPS foam which meets UL requirements for self-extinguishing material.
- Refrigerant Control: Refrigerant R134a is controlled by accurately calibrated capillary tube.
- Temperature Control: Factory adjustable thermostats is factory preset. Requires no adjustment other than for altitude requirements. Easily accessible by removing lower grille panel.

**CONSTRUCTION**

- Stainless steel bottle filler construction with ABS plastic alcove
- Includes stainless steel ventilating lowered grille
- Furnished with MI 100 and MI WS 100 wall mounting boxes constructed of galvanized steel. Mounting can be ordered separately for pre-install
- Flow Guard™ StreamSaver™ Safety Bubbler utilizes an induced anti-microbial flexible polyester elastomer to prevent accidental mouth injuries. Flows on impact lower flow water but not water stream.

**REPLACEMENT FILTERS:**

Available as: Singles and Multi packs.

- 51300C (single)
- 51300C-3PK (three)
- 51300C-12PK (twelve)
- 51300C-24PK (twenty four)
- 51300C-48PK (forty eight)

**Warranty:** 5 year limited warranty on the unit’s refrigeration system. Electrical components and water system are warranted for 12 months from date of installation or 18 months from factory shipment, whichever date first.

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**CAPACITIES CHART**

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LZW-SFGRN8K</td>
<td>115V / 60 Hz</td>
<td>8 GPH</td>
<td>3.8</td>
<td>260</td>
<td>126</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
</tbody>
</table>

**Based on 80°F inlet water @ 90°F ambient air temp & 90°F chilled drinking water.**

---

*This specification does not describe an EZ lay product.*
**EZH2O® In-Wall Bottle Filling Station with Single Filtered SwirlFlo® GRN Refrigerated Fountain**

**Model LZWS-SFGRN8K**

---

**ROUGH-IN DIMENSIONS**

**RATED FOR INDOOR USE ONLY**

---

**Job Name:**

**Model:**

**Contact:**

**Approval Signature:**

**Notes:**

---

![Diagram of the rough-in dimensions for the EZH2O® In-Wall Bottle Filling Station with Single Filtered SwirlFlo® GRN Refrigerated Fountain Model LZWS-SFGRN8K.](image)

---

**NOTE:** Non-Refrigerated models (without chillers) do not need the chiller shelf.

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IMPORTANT INSTALLER PLEASE NOTE:
The grounding of electrical equipment such as telephone, computers, etc. to water lines is a common procedure. This grounding may be in the building or may occur away from the building. The grounding can cause electrical leakage into a water cooler, creating an electrolytic effect which causes a metallic taste or causes an increase in the metal content of the water. The condition is avoidable by using the proper materials as indicated below. The drain lines which are provided by the installer should also be plastic to electrically isolate the cooler from the building plumbing system.

FOUNTAIN MOUNTING FRAME INSTRUCTIONS:
1. Cut a square rectangular wall opening 18 3/4"(476mm) W x 37 3/4" (959mm) H and 4 1/2"(114mm) above floor line. These dimensions are required to obtain proper air and bubbler height for compliance with ANSI standard.
2. Reinforce the wall opening on all sides so that it will adequately support the water fountain. The reinforcement must support up to 150 lbs static load and provide a means for securing the frame assembly in place. NOTE: Building construction must allow for adequate air flow on both sides and top of remote chiller unit. Minimum of 8" (203mm) is required.
3. Install plumbing and electrical rough-ins. See Figure 4 for location of the supply water inlet to chiller and for the location of the waste water outlet. A junction box for a (3) wire, 15 amp branch circuit is provided on the inside of the chiller. (Standard 115 Volts, 60 Hz and single phase).
4. Remove frame and related hardware from packaging. Release the two shelf rods by cutting cable ties. Install the frame squarely in wall opening with frames upright edges. Push with the finished wall face. Have shelf inside frame and line up the (2) holes on each shelf; loose ends of rods into holes on sides of shelf panel using appropriately sized wood screws. Do not overdrive. Install the shelf and frame to bottom of wall opening. Secure the frame to the wall using (10) #6 x 2" lag bolts or screws (not provided).

NOTE: Be sure that frame is squared in location. Do not use less than required screw quantity and size.
**DRINKING FOUNTAINS - NON-REFRIGERATED**

**ELKAY SPECIFICATIONS**

**GENERAL**
Wall mounted drinking fountain basin constructed of #18 gauge, 300 series stainless steel polished to a lustrous satin finish with high shined outer edge. #16 gauge, type 304 tubular stainless steel support arm incorporates a recess to be integrated with basin.

Contoured basin minimizes splashing and has exclusive Flexi-Guard® safety bubbler to prevent accidental mouth injuries. Keyed in location to prevent rotation. Fully functional, vandal-resistant front push button is easy to operate. Flow regulator provides constant stream from 20 to 105 psi water pressure.

**NO LEAD DESIGN**
This drinking fountain complies with the lead-free definition in the Safe Drinking Water Act of 1986 and Lead Contamination Control Act of 1988.

Elkay Drinking Fountains are manufactured with a waterway system utilizing copper components and completely lead-free material. These waterways have no lead because all leaded materials, such as leaded brass, have been removed. This fountain is certified by WQA to lead-free compliance including NSF/ANSI 61 and 372.

**CONSTRUCTION**
EDFPB114C furnished complete with Flexi-Guard®, fully assembled front push button, flow regulator (20 to 105 psi). No trap furnished.

**ACCESSORIES**
MPW101 In wall mounting plate carrier accessory.
ML100 Optional in-wall support legs for use with MPW101.

**ALSO AVAILABLE**
EDPPBV114C includes a one-piece construction, heavy-duty, vandal-resistant bubbler.
No Lead SwirlFlo® Drinking Fountain
Fully Exposed Wall Mount
Barrier-Free Access
Model EDFPB114C

INSTALLER NOTE
THIS DRINKING FOUNTAIN IS FURNISHED WITH A SUBLER AND VALVE INCLUDING ALL CONNECTING FITTINGS WHICH ARE MANUFACTURED OF COMPLETELY LEAD-FREE MATERIAL. SHUT OFF VALVE (NOT FURNISHED) TO ACCEPT 3/8" O.D. UNPLATED COPPER TUBE.

OPERATION OF QUICK CONNECT FITTINGS
SIMPLY PUSH IN TUBE TO PINCH TUBE TO SECURE IN POSITION
PUSH IN COUPLER TO RELEASE TUBE

NOTE: WATERFALL EXTENSION
SERVICE STOP (NOT FURNISHED)

1-5/8" (41mm)
18-3/8" (467mm)
27" (686mm)
3-3/4" (963mm)
3-3/4" (963mm)

1-1/4" L.P.S. WASTE
(LEFT OR RIGHT)
WASTE IS SHOWN IN WALL, BUT MAY BE BEHIND WALL
3/8" L.P.S. SUPPLY
(LEFT OR RIGHT)

NOTE: INSTALLATION CAN BE MADE THRU OPTIONAL FRONT ACCESS PANEL OR FROM REAR ACCESS

SUPPORT PREPARATION
WASTE 1-1/4" L.P.S.
LEFT OR RIGHT SIDE
WASTE IS SHOWN IN WALL BUT MAY BE BEHIND WALL

NOTE: WALL PLATE MUST BE SUPPORTED SECURELY. ADD FIXTURE SUPPORT CARRIER IF WALL WILL NOT PROVIDE ADEQUATE SUPPORT.

FINISHED WALL MATERIAL MUST BE NOTECHED TO ACCOMMODATE LAG BOLT HEADS

FINISHED FLOOR
SIDE VIEW

Elkay
14-43D (Rev. 1/14)
Elkaypro.com

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GENERAL
Fully exposed two-level fountain basins are #18 gauge, 300 series stainless steel polished to a lustrous satin finish with high shine outer edge. #16 gauge, 300 series tubular stainless steel support arms incorporate unique recess to be integrated with basin. One fountain positioned lower on the right for wheelchair use. The other positioned on the left at standing height.

Fountains have contoured basin that minimizes splashing. Flexi-Guard® safety bubblers are keyed in location to prevent rotation. Fully functional, vandal-resistant front push button. Flow regulator provides constant stream from 20 to 105 psi water pressure.

THIS DRINKING FOUNTAIN COMPLIES WITH THE REQUIREMENTS OF A.D.A. (AMERICANS WITH DISABILITIES ACT) PROVIDING THE UNIT IS INSTALLED IN AN ALCOVE OR WITH LEFT WING WALL.

NO LEAD DESIGN

Elkay Drinking Fountains are manufactured with a waterway system utilizing copper components and completely lead-free material. These waterways have no lead because all leaded materials, such as leaded brass, have been removed.

This fountain is certified by WQA to lead-free compliance including NSF/ANSI 61-ANNEX G, AB 1953.

CONSTRUCTION
EDFPBM117C two-level fountain furnished complete with Flexi-Guard® fully assembled with front push button, flow regulator (120 to 105 psi), stainless steel back panel and surface mounting plate. No traps are furnished.

ALSO AVAILABLE
Model EDFPBMV117C: Includes vandal-resistant bubblers. Heavy duty, one-piece construction, chrome plated brass.
Models EDFPB117C and EDFPBV117C do not include the surface mounting plate. Designed to mount with MPW200 in-wall mounting plate carrier accessory. ML100 in-wall support legs are optional.
ELKAY®

SPECIFICATIONS

PRODUCT SPECIFICATION

Architectural fountain with integral bottle filing station. EZWS-EDFPBM114K shall deliver non-chilled drinking water unless connected to a remote water chiller. Unit shall be stainless steel construction with plastic ABS alcove, sensor activation with an auto 20-second shut-off timer. Shall include Green Ticker™ displaying count of plastic bottles saved from waste. Bottle filler shall provide 1.5 gpm fill rate with laminar flow to minimize splashing and 1.1 gpm fill rate when connected to a remote water chiller. Shall include integrated silver ion anti-microbial protection in key areas. Unit shall meet ADA guidelines. Unit shall be lead-free design which is certified to NSF/ANSI 61 and 372 and meets federal and state low lead requirements. Unit shall be certified to UL 399 and CAN/CSA 22.2 No. 120.

FOUNTAINS GENERAL

Fully exposed single fountain basin made of 300 series stainless steel, polished to a lustrous satin finish with high shine outer surfaces. Fountain has contoured basin that minimizes splashing. Flo-Guard® Safety bubbler is keyed in location to prevent rotation. Fully functional, vandal resistant front push button on the fountain. Flow regulator provides constant stream from 20 to 105 psi water pressure.

BOTTLE FILLER FEATURES

- No touch, sensor activated bottle filler
- Auto 20-second shut-off
- Integrated Silver Ion Anti-Microbial Protection in key areas
- Quick fill Rate: 1.5 gpm
- Laminar flow provides minimal splash
- Real Drain System eliminates standing water
- Visual User Interface display includes:
  - Innovative Green Ticker™ counts bottles saved from waste

Warranty: Electrical components and water system are warranted for 12 months from date of installation or 18 months from factory shipment, whichever date falls first.

CONSTRUCTION

EZWS-EDFPBM114K single fountain furnished complete with Flo-Guard® Safety bubbler, fully assembled with front push button on the fountain, flow regulator (20 to 105 psi), stainless steel back panel. No template furnished.

- Stainless Steel bottle filler construction with ABS plastic alcove
- Furnished with wall mounting frame constructed of galvanized steel
- Mounting can be ordered separately for pre-installation

CERTIFICATIONS / STANDARDS

- ADA Compliant
- UL 399 and CAN/CSA 22.2 No. 120 Certificate
- ANSI/NSF 61 and 372 Certificate
- GreenSpec® Listed

This specification describes an Elkay product with design, quality and functional benefits to the user. When making a comparison of other producer's offerings, be certain these features are not overlooked.
No Lead Single SwirlFlo®
Wall Mount, Barrier-Free
Drinking Fountain with EZH2O® Bottle Filling Station
Model EZWS-EDFPBM114K

ROUGH-IN DIMENSIONS

INSTALLER NOTE:
THIS DRINKING FOUNTAIN IS FURNISHED WITH A BUBBLER AND VALVE INCLUDING ALL CONNECTING FITTINGS WHICH ARE MANUFACTURED OF COMPLETELY LEAD FREE MATERIAL. SHUTOFF VALVE (NOT FURNISHED) TO ACCEPT 3/8" O.D., UNPLATED COPPER TUBE.

WALL OPENING
IMPORTANT: It is necessary to create a wall opening 18 1/2" W x 31 5/8" H and 25" above the floor line.

ELECTRICAL DATA
Electrical outlet, three (3) conductor grounded. Locate within safe reach of power cord.

MOUNTING INSTRUCTIONS
Refer to rough-in for location of plumbing and electrical sources. The support frame is to be installed first. Hang upper panel to hanger on frame. Fountain is to be attached to panel and wall frame. Water service line, waste line and electrical are assembled as required. Perform a final check for leaks and correct functions of fountains and chillers. (For details see the installation instructions.) Installation requires trap to be installed in wall. Trap and service stop not included.

Job Name:_
Date:_
Contact Info (Name, Phone, Email):_

Approvals:_

2222 Camden Court
Oak Brook, IL 60523
630-572-3192
elkay.com

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Page 70
UNDER COUNTER TRASH RECEP TACLES

Waste > Decorative Refuse: Indoor

FGA0T15SAPL CROWN OPEN TOP 56L/15G SATIN ALUMINUM

The Crowne decorative refuse indoor container has an attractive contemporary design with a curved open top that prevents objects from being placed on top of the can, keeping a neater overall appearance.

- The Open Top style has a large opening for easy waste disposal
- Base of receptacle is designed to protect floors
- Leak-proof rigid plastic liner included to contain liquids and keep the surrounding area cleaner
- Fire-safe construction
- Shipped fully assembled

AVAILABLE COLORS

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Satin Aluminum
SA

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ADDITIONAL INFORMATION:


Products in Crowne Open Top

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SLOAN SOLIS®
8111-1.6/1.1
Solar Powered Dual Flush

Description
Exterior, Solar Powered, Sensor Activated Sloan SOLIS® Dual Flush Model Water Closet Flushometer for floor mounted or wall hung top spud bowls, with Smart Sense Technology™.

Flush Cycle
Full Flush (Large Button) - 1.6 gpf/6.0 Lpf / Reduced Flush (Small Button) - 1.1 gpf/4.2 Lpf

ELECTRICAL SPECIFICATIONS

Control Circuit
Solid State
6 VDC Input
6 Second Arming Delay
3 Second Flush Delay

Sloan SOLIS® Dual Flush Sensor Type
Active Infrared

Sloan SOLIS® Dual Flush Sensor Range
Normal: 22” - 42” (559 mm - 1067 mm), Adjustable = 8” (203 mm)

Battery Back Up Type
(4) AA Alkaline

Battery Life
6 Years @ 4,000 Flushes/Month

Indicator Lights
Range Adjustment, Low Battery

Operating Pressure
15 - 103 psi (104 - 689 kPa)

Sentinel Flush
Once Every 72 Hours After the Last Flush

OPERATION
1. A continuous, invisible light beam is emitted from the Sloan SOLIS® Dual Flush Sensor.
2. As the user enters the beam’s effective range, 22” to 42” (559 mm to 1067 mm), the beam is reflected into the Scanner Window to activate the Output Circuit. Once activated, the Output Circuit remains in a “hold” mode for as long as the user remains within the effective range of the sensor. If the user stays longer than 65 seconds, a full flush will automatically initiate when the user leaves.
3. Once a user is detected, if the user leaves in 65 seconds or less, a reduced flush will automatically initiate. The circuit automatically resets and is ready for the next user.

VALVE ROUGH-IN
Model B111

When Installing the Sloan SOLIS® Dual Flush In a handicap stall:
Per the ADA Guidelines (section 654.9.4) it is recommended that the grab bars be split or shifted to the wide side of the stall.

SLOAN VALVE COMPANY • 10500 SEYMOUR AVENUE • FRANKLIN PARK, IL 60131
Phone: 1-800-962-5532 or 1-847-671-4300 • Fax: 1-800-447-8329 or 1-847-671-4380 • www.sloanvalve.com
Copyright © 2011 Sloan Valve Company
Sloan SOLIS® Dual Flush 8111-1.6/1.1 S5 - Rev. 06/03/11
SINGLE FLUSH VALVE – URINAL

Code Number
3370007

Description
Exposed, Solar Powered, Sensor Activated Sloan SOLUS® Model Urinal Flushometer, with Smart Sense Technology™.

Flush Cycle
Model B-86-1.5 Water Saver (1.5 gpf/5.7 Lpf)

Specifications
Quiet, Exposed, Diaphragm Type, Chrome Plated Urinal Flushometer for either left or right hand supply with the following features:
- Spud Coupling, Wall and Spud Flanges
- Flush Accuracy Controlled by CID Technology
- Diaphragm, Stop Seal and Vacuum Breaker to be molded from PERMEX® rubber compound for Chloramine resistance
- Initial Set-up Range Indicator Light (first 10 minutes)
- User friendly three (3) second Flush Delay
- "Low" Flashing LED
- Spud socket adapter with cover tube and cast wall flange with set screw
- Spud coupling and flange for 3/4" top spud
- 3/4" I.P.S. Screwdriver Bak-Chok® Angle Stop with free spinning, vandal resistant Stop Cap
- Solar Powered. The sensor assembly is powered by a solar cell that will harvest power from artificial indoor light, either incandescent or fluorescent light, and use it as the energy source. The solar cell can provide approximately 100% power with 650 luminance (lx).
- Four (4) Size AA Battery Back-up Power Source
- Synthetic rubber seals for chloramine resistance
- Infrared Sensor with Multiple-focused, Lobular Sensing Fields for high and low target detection
- Latching Solenoid Operator
- Infrared Sensor Range Adjustment Screw
- Fixed Metering Bypass and No External Volume Adjustment to Ensure Water Conservation
- Flex Tube Diaphragm designed for improved life and reduced maintenance
- Engineered Metal Cover with replaceable Lens Window
- ADA Compliant Sloan Solus® Solar Powered Infrared Sensor for automatic “No Hands” operation
- Courtesy Flush® Override Button
- Pressure compensating cartridge assembly
- Reduces water usage up to 80% over Standard Sensor Urinals.
- ADA Compliant Solus® Solar Powered Infrared Sensor for automatic “No Hands” operation

Valve Body, Tailpiece and Control Stop shall be in conformance with ASTM Alloy Classification for Semi-Red Brass. Valve shall be in compliance with the applicable sections of ASSE 1037 installation conforms to ADA requirements.

Smart Sense Technology™
The Sloan SOLUS® Solar powered Flushometer is equipped with Smart Sense Technology™ which applies extended range and logic techniques to significantly reduce water usage in high use urinal applications.

Automatic Operation
Sloan SOLUS® Solar powered Flushometers are activated via multilobular infrared sensor. Sloan’s SOLUS® Solar powered Flushometer is a breakthrough in design and function that transforms light into power. The SOLUS® Series of Flushometers provide the ultimate in conservation and performance.

Manual Operation
Sloan SOLUS® Solar powered Flushometers incorporate an intuitive button design for easy manual activation. Straightforward graphics alert user to proper activation. To further educate the user, two (2) Instructional wall plates are included with each Sloan Solus® Flushometer.

Functional & Hygienic
Touchless, sensor operation eliminates the need for user contact to help control the spread of infectious diseases. The Sloan SOLUS® Solar powered Flushometers are provided with an Override Button to allow a "courtesy flush" for individual user comfort.

Compliance

This space for Architect/Engineer Approval

Contact Information:
1-847-671-4300 Fax: 1-800-447-8329 or 1-847-671-4380 http://www.sloan.com

Page 74
**SOLIS® Solar-Powered Flushometer**  
**SOLIS 8186-1.5**

**Solid State**
6 YAC/7.6 VDC Input  
8 Second Arming Delay  
3 Second Flush Delay

**Sensor Type**  
Active Infrared

**Sensor Range**  
Nominal 22" - 42" [559 mm - 1067 mm], Adjustable ± 8" [203 mm]

**Battery Back Up Type**  
(4) AA Alkaline

**Battery Life**  
3 Years @ 4,000 flushes/month

**Indicator Lights**  
Range Adjustment

**Operating Pressure**  
15 - 100 psi [104 - 689 kPa]

**Sentinel Flush**  
Once Every 72 Hours After the Last Flush. Product shipped from factory with feature turned off. Consult factory to activate.

**OPERATION**
1. A continuous, invisible light beam is emitted from the SOLIS® Sensor.

2. As the user enters the beam’s effective range (15" to 30") the beam is reflected into the SOLIS® Scanner Window and transformed into a low voltage electrical circuit. Once activated, the Output Circuit continues in a “hold” mode for as long as the user remains within the effective range of the Sensor.

3. When the user steps away from the SOLIS® Sensor, the Sensor initiates an electrical signal that operates the Solenoid. This initiates the flushing cycle to flush the fixture. The Circuit then automatically resets and is ready for the next user.

**ROUGH-IN**

Model 8186

Note: Lens Deflector is not needed for targeting children or wheelchair users.
TOILET – FLOOR MOUNTED

KOHLER®

Highcliff™ Ultra
Elongated Flushometer Bowl - Bedpan Lugs
K-96057-L

Features
- Elongated bowl, ADA compliant.
- 1-1/2" top spud.
- Bedpan lugs.
- Also available with antimicrobial finish K-96057-SSL.
- Glazed 2-1/8" trapway.
- 10" x 7" water surface size.

Material
- Vitreous china.

Technology
- Design to outperform the competition in bowl cleanliness and plug resistance.
- Maximum waste removal.
- Engineered for toilet seat cover removal.
- Excellent bowl rinse.
- Engineered to flush effectively in buildings with low supply pressure and flow.
- Maximum drainage carry at all flush volumes per ASME Standard.

Installation
- 27-3/8" L x 14-5/8" W x 16-7/8" H
- 10" or 12" rough-in.

Water Conservation & Rebates
- 1.1 to 1.6 gpf flush range (1.1, 1.28 and 1.6 gpf).
- WaterSense compliant when used with a 1.1 or 1.28 gpf WaterSense flushometer.

Optional Accessories
- K-4731-C Commercial Heavy-Duty Toilet Seat
- K-4731-CA Commercial Heavy-Duty Toilet Seat
- K-7531 Tripoint™ HES 1.28 GPF WC Flushometer
- K-7535 Tripoint™ HES 1.5 GPF WC Flushometer
- K-7521 WAVE HES 1.28 GPF WC Flushometer
- K-7523 WAVE HES 1.6 GPF WC Flushometer
- K-10673 WAVE Touchless Toilet 1.28 gpf Flushometer
- K-10674 Wave DC 1.6 GPF WC Flushometer
- K-76320 Manual 1.1 GPF WC Flushometer
- K-76321 Manual 1.28 GPF WC Flushometer
- K-76322 Manual 1.6 GPF WC Flushometer

Components
- Additional included component/s: Spud, and Bolt Cap Accessory Pack.

Codes/Standards
- ASME A112.19.2/CSA B45.1
- EPA WaterSense®
- California Energy Commission (CEC)
- ADA
- ICO/ANSI A117.1
- CSA B651
- OBC

KOHLER® One-Year Limited Warranty
See website for detailed warranty information.

Available Color/Finishes
Color codes intended for reference only.

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Highcliff™ Ultra
Elongated Flushometer Bowl - Bedpan Lugs
K-96057-L

Technical Information
All product dimensions are nominal.
Toilet type: Flushometer, Floor-mount
Waste Outlet: Floor
Bowl shape: Elongated front
Flush type: Flushometer valve siphon
Spud size: 1-1/2", Inlet, Top
Trap passageway: 2-1/8" (54 mm)
Water Consumption
Full: 1.1 gpf (4.3 lpf) or 1.28 gpf (4.8 lpf)
or 1.6 gpf (6 lpf)
Water surface size: 10" x 7" (254 mm x 178 mm)
Rim to water surface: 6" (152 mm)
Rough-in: 10" or 12" (254 or 305 mm)
Seat-mounting holes: 5-1/2" (140 mm)

Fixture Supply Requirements
Min static pressure: 35 psi (241.3 kPa)
Max static pressure: 80 psi (551.6 kPa)
Min flowing pressure: 25 psi (172.4 kPa)
Min flow rate: 25 gpm (94.6 lpm)

Notes
Install this product according to the installation instructions.
For back-to-back toilet installations: Use only a 45° double wye fitting.
Requires flushometer valve to match desired water consumption 1.1 gpf (4.3 lpf) or 1.28 gpf (4.8 lpf) or 1.6 gpf (6 lpf).
ADA, OBC, CSA B651 compliant when installed to the specific requirements of these regulations.
Plumbing Codes require elongated toilets and elongated, open-front toilet seats in public bathrooms.
Accessibility standards require controls to be located on the open side of the toilet.
TOILET - WALL MOUNTED (Wall mounted is preferred.)

Features
- Vitreous china.
- Elongated bowl
- Siphon jet.
- Wall mount.
- 1-1/2" spud
- 1.28 gpf (4.8 lpf) or 1.6 gpf (6 lpf) depending on flushometer specified.
- 10-1/2" (267 mm) x 8" (203 mm) water area.
- 26-1/2" (673 mm) x 18-1/2" (470 mm) x 13-1/4" (337 mm).

Components
- Additional included components: Spud.

Kingston™
Bowl
K-4325

ADA | CSA B651 | OBC

Codes/Standards
ASME A112.19.2/CSA B45.1
EPA WaterSense®
California Energy Commission (CEC)
ADA
ICBO/ANSI A117.1
CSA B651
OBC

KOHLER® One-Year Limited Warranty
See website for detailed warranty information.

Available Color/Finishes
Color Code Description
0 White
96 Biscuit
47 Almond
7 Black Black™

USA/Canada: 1-800-4KOHLER (1-800-456-4537)
Kohler Co. reserves the right to make revisions without notice to product specifications. For the most current Specification Sheet, go to www.kohler.com.
12-3-2017 03:10
Technical Information
All product dimensions are nominal.
Toilet type: Flushometer, Wall-mount
Waste Outlet: Wall
Bowl shape: Elongated front
Spud size: 1-1/2", Inlet, Too
Trap passage way: 2-1/8" (54 mm)
Water surface size: 10-1/2" x 9" (267 mm x 229 mm)
Rim to water surface: 5-1/4" (133 mm)
Seat-mounting holes: 5-1/2" (140 mm)

Fixture Supply Requirements
Min static pressure: 36 psi (241.3 kPa)
Max static pressure: 80 psi (551.6 kPa)
Min flowing pressure: 25 psi (172.4 kPa)
Min flow rate: 25 gpm (94.6 lpm)

Notes
Install this product according to the installation instructions.
Refer to manufacturer’s instructions and local codes for flushometer requirements.
For back-to-back toilet installations: Use only a 45° double wye fitting.
ADA, OBC, CSA B651 compliant when installed to the specific requirements of these regulations.
Plumbing Codes require elongated toilets and elongated, open-front toilet seats in public bathrooms.
Accessibility standards require controls to be located on the open side of the toilet.
URINALS

KOHLER

Features
- Washout urinal.
- 3/4" top spud.
- 0.125 gpf (0.47 lpf) to 1.0 gpf (3.8 lpf).
- 14" (356 mm) extended rim.
- Will replace K-4904-ET.

Material
- Vitreous china.

Water Conservation & Rebates
- WaterSense compliant when used with a 0.125 gpf or 0.5 gpf WaterSense flushometer.

Recommended Accessories
K-10668 WAVE DC 1/8 GPF Urinal Flushometer
K-10949 Tripoint™ DC 1/8 GPF Urinal Flushometer
K-13520 Manual 1/8 GPF Urinal Flushometer
K-7528 WAVE HES 1/8 GPF Urinal Flushometer
K-7546 Tripoint™ HES 1/8 GPF Urinal Flushometer
K-10675 WAVE DC 0.5 GPF Urinal Flushometer
K-10958 Tripoint™ DC 0.5 GPF Urinal Flushometer
K-7537 Tripoint™ HES 0.5 GPF Urinal Flushometer
K-7526 WAVE HES 0.5 GPF Urinal Flushometer
K-13519 Manual 0.5 GPF Urinal Flushometer
K-10676 WAVE DC 1.0 GPF Wshdwn Flushometer
K-10980 Tripoint™ DC 1.0 GPF Wshdwn Flushometer
K-13518 Manual 1.0 GPF Wshdwn Flushometer
K-7539 Tripoint™ HES 1.0 GPF Wshdwn Flushometer
K-7542 Tripoint™ HES 1.0 GPF Wshdwn Flushometer
K-7527 WAVE HES 1.0 GPF Wshdwn Flushometer

Components
Additional included component(s): 3/4" inlet spud, 2" outlet spud, Strainer, and Hangers (2).

Bardon™
High-Efficiency Urinal
K-4991-ET

ADA

Codes/Standards
ASME A112.19.2/CSA B45.1
EPA WaterSense®
ADA
ICCS/ANSI A117.1

KOHLER® One-Year Limited Warranty
See website for detailed warranty information.

Available Color/Finishes
Color tiles intended for reference only.

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<tr>
<td>47</td>
<td>Almond</td>
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<tr>
<td>7</td>
<td>Black Black™</td>
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</tbody>
</table>
**Bardon™**
High-Efficiency Urinal
K-4991-ET

---

**Technical Information**
All product dimensions are nominal.
- Flush outlet: Washout technology
- Spud size: 3/4", Inlet, Top
- Min. Water per Flush: 0.125 gal (0.5 L)
- Max. Water per Flush: 1 gal (3.8 L)
- Designed for the above water use when installed with a water-saving flushometer.

---

**Notes**
Install this product according to the installation guide.
- Refer to manufacturer’s instructions and local codes for flushometer requirements.
- ADA compliant when installed to the specific requirements of these regulations.

---

USA/Canada: 1-800-4KOHLER (1-800-456-4537)
Kohler Co. reserves the right to make revisions without notice to product specifications.
For the most current Specification Sheet, go to [www.kohler.com](http://www.kohler.com).
2-24-2016 04:06
<table>
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<th>BOBRICK</th>
<th>SURFACE-MOUNTED UTILITY HOOK</th>
<th>B-670 B-6707</th>
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</table>

Equipment Limited, United Kingdom.      

The illustrations and descriptions herein are applicable to production as of the date of this Technical Data Sheet. 
The manufacturer reserves the right to, and does from time to time, make changes and improvements in designs and dimensions. 

© 2015 by Bobrick Washroom Equipment, Inc.
TOILET SEAT COVER DISPENSERS

**K-C PROFESSIONAL® Toilet Seat Cover Dispenser**

**CODE** 09512

**SIZE:**
16.63" x 12.25" x 2.5" / 42.2cm x 31.1cm x 6.4cm

**COLOR:** STAINLESS STEEL

The Toilet Seat Cover Dispenser gives you a graceful look. It is curved and contemporary. Dispenses one cover at a time. Fully enclosed for sanitation.

**Spare Parts and Keys**

**Availability:** North America

**Package Dimensions**

- Packaging Level 1: 1 Case = 1 Package(s)
- Packaging Level 2: 1 Package = 1 Unit(s)
- Packaging Level 3: 1 Case = 1 Unit(s)

TOILET COVER DISPENSER PAPER REFILLS

**SCOTT® Personal Seats**

**CODE** 07410

**SIZE:**
15.0" x 18.0" / 38.1cm x 45.1cm

**COLOR:** N/A

SCOTT® Personal Seats are flushable and offer sanitary protection, help reduce litter and clogging. Meets EPA guidelines for post consumer waste.

**Availability:** North America

**Package Dimensions**

- Packaging Level 1: 1 Case = 24 Package(s)
- Packaging Level 2: 1 Package = 125 Unit(s)
- Packaging Level 3: 1 Case = 3000 Unit(s)
<table>
<thead>
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<th>TOILET PAPER DISPENSER</th>
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| SURFACE-MOUNTED MULTI-ROLL TOILET TISSUE DISPENSER | B-2888 |

The illustrations and descriptions herein are applicable to production as of the date of this Technical Data Sheet.

Revised 4/27/11
Printed in U.S.A.

Page 84
Features
- Vitreous china
- Under-mount
- With overflow
- Without faucet hole(s)
- Includes 1193643 clamp assembly
- 17-1/4" (438 mm) x 13" (330 mm)

Codes/Standards Applicable
Specified model meets or exceeds the following:
- ADA
- ASME A112.19.2/CSA B45.1
- ICC/ANSI A117.1
**VERTICYL™**

### Technical Information

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<td>Water depth</td>
<td>3-1/8&quot; (79 mm)</td>
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<tr>
<td>Drain hole</td>
<td>Ø 1-3/4&quot; (44 mm)</td>
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* Approximate measurements for comparison only.

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<tr>
<td>Basin clamp assembly</td>
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### Installation Notes

Install this product according to the installation guide. **NOTICE:** Countertop manufacturer or cutter must use the current product template available at www.kohler.com, or by calling 1-800-4KOHLER. Kohler Co. is not responsible for cutout errors when the incorrect cutout template is used.

Will comply with **ADA** when installed per section 606 Lavatories and Sinks of the 2010 ADA Standards for Accessible Design.

For under-mount installation, countertop thickness cannot be greater than 1" (25 mm) for **ADA** compliance.

---

**Product Diagram**
FAUCET (RETAIL SPACE / PUBLIC RESTROOMS)

American Standard

LEAD.
SOAP DISPENSER (RETAIL SPACE / PUBLIC RESTROOMS)

No Spec Sheet Available: The Standard is the Technical Concepts OneShot Foam Automatic Soap Dispenser
**enMotion® Recessed Automated Towel Dispenser**

**SPECIFICATIONS**
The enMotion® Recessed Automated Towel Dispenser holds and dispenses proprietary hard-rolled roll towels. The cover is 24 gauge, #304 stainless steel, #4 AISI satin brush finish, with the grain in the vertical direction.

**Weight:**
6 Pounds
(without batteries or paper installed)

**Dimensions:**
16.48" H x 13.5" W x 7.75" D

**OPERATION**
The enMotion® Recessed Automated Towel dispenser runs on 4 D Cell alkaline batteries (included) or an optional AC power kit, SKU 59477 or 59472. The dispenser features 3 LEDs, from left to right, a low paper indicator, a motor/sensor activation light and a low battery light. It has 2 dispensing modes: an on-demand mode, where a new sheet is presented when a hand is waved in front of the sensor, and a hanging towel mode, where a new towel is dispensed as soon as a towel is removed from the dispenser. The enMotion® Recessed dispenser also features adjustable settings for paper length, and sheet delay. For more details, see the enMotion® Recessed Automated Towel dispenser instruction manual included with the unit.

**INSTALLATION**
When mounted directly into a wall, the unit is mounted using #10 self-tapping screws. Many possible methods can be used to mount the dispenser, given the wide variety of stud configurations behind the wall. The enMotion® Recessed Automated Towel dispenser has mounting holes on both sides of the backplate and directly in the rear of the unit. The unit must be mounted flush to the wall, 4" recessed to comply with ADA guidelines. The door of this unit can easily be removed in the event the hinge needs to be on the opposite side.

For questions or comments, please call 1-866-HELLO GP (435-5647)

---

Partition Cut-Out Required
is 10.6" W x 15½" H x 4" D or
[270mm W x 388 H x 102 D]

The installation description and illustration herein are to serve as a guide. Georgia-Pacific reserves the right and does from time to time make changes and improvements in design, dimensions and subsequent installation instructions. Georgia-Pacific does not take responsibility for any damage, or injury to persons or property or any other incidental or consequential losses due to these installation instructions.

Georgia-Pacific recommends the use of a professional installation service.

---

**BEDROCK**

**DETROIT**

---

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enMotion dispensers are available for lease through an authorized distributor.
August 2012
AUTOMATIC HAND DRYERS
dyson airblade dB

TECHNICAL SPECIFICATION

AB 14

REAR ELEVATION

SIDE ELEVATION

Mounting Bracket (including 2 fixings)

Alternative cable entry point

Fixing locations (4)

Knock out

Knock out

3⅜" 2⅜"

2⅜"

2⅜"

2⅛"

2⅛"

3⅛"

3⅜"

1⅛"

3⅜"

3⅜"

3⅜"

1⅛"

Cable entry point

26"

11⅔" 6"

11" 1½"

1½"

1½"

1½"

1½"

9½"

6⅔"

36x3" 1½"

36x3" 1½"

36x3" 1½"

11"

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**SPECIFICATION**

Surface Mounted Dual Sanitary Napkin & Tampon Dispenser shall hold 30 napkins and 27 tampons of specified sizes. Door shall be 18 gauge type 304 stainless steel alloy 18-8. All exposed surfaces shall be satin finish and be protected during shipment with PVC film easily removable after installation. Cabinet shall be 22 gauge same grade stainless steel. Door shall be attached with a full length 3/16" diameter (04.8) stainless steel multi-staked piano hinge and shall be held closed with two (2) tumbler locks keyed alike to other ASI washroom equipment. Internal coin-box shall be keyed differently than door locks. Dispensing mechanisms shall be fastener mounted internally to provide ability to change mechanisms for coinage denomination. Structural assembly of body and door components shall be of welded construction and have no exposed fasteners or welded seams. Weights for each feed track shall be supplied. Factory installed coin operation denomination shall be ______. (Please fill in 25¢ or 50¢, or FREE and add denomination as suffix to model No. (e.g., 0864-25)).

Surface Mounted Dual Sanitary Napkin and Tampon Dispenser shall be Model No. 0864 of American Specialties Inc., 441 Saw Mill River Road, Yonkers, New York 10701-4913

**INSTALLATION**

Mount unit on wall using four (4) No. 10 self-tapping screws (by others) through concealed holes provided in cabinet rear wall. For maximum usability and compliance with ADA Accessibility Guidelines, install unit so that coin slot is between 48" (1219) maximum above finished floor (MAX AFF) and 38" (965) minimum AFF. Note that coin slot is 7" (178) above bottom of cabinet. Installer must provide adequate wall anchoring for screw mounting.
OPERATION
Deposit of specified coin allows operation of dispenser. Napkin and tampon dispensers operate independently. Selected product drops into vending opening after operator actuation. Indicator displays empty condition and blocks coin slot when vend product is depleted. Unit vend product supply is replenished on cycle determined by maintenance needs by opening door and manually reloading product into dispenser supply tracks. Empty indicator automatically resets upon refill. Track weights MUST BE USED to provide positive feed. Coins are retrieved from cash drawer opened using different key than is used to open door for service.

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<th>Model No.</th>
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<tr>
<td>Stayfree</td>
<td>#4</td>
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<td>Garda</td>
<td>#6's 247, or 147</td>
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<td>#6's 704, 707, 07010, 07040, 07045, 07300, 07320</td>
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<td>Pure-Nat</td>
<td>#M-4</td>
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<tr>
<td>Modess</td>
<td>#4</td>
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<tr>
<td>TAMPONS, CYLINDER, CARDBOARD, SEMIGLOSS, CRIMPED ENDS; CAPACITY: 27</td>
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<td>TUBE SIZE: 3/4&quot; diameter x 5-1/4&quot; (Ø19 x 134)</td>
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<td>Modess Tampons</td>
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SANITARY NAPKIN DISPOSAL

ConturaSeries®
SURFACE-MOUNTED
SANITARY NAPKIN DISPOSAL
B-270

MATERIALS:
Container — 18-8, type-304, 22-gauge (0.8mm) stainless steel. All-welded construction. Exposed surfaces have satin finish. Integral finger depression for opening cover. Front of container has same degree of arc as front of cover and other Bobrick ConturaSeries washroom accessories. Radius on side edges of container match corners and edges of cover and other ConturaSeries accessories.

Cover — 18-8, type-304, 22-gauge (0.8mm) stainless steel with satin finish. Drawn, one-piece, seamless construction. Front of cover has same degree of arc as front of container and other Bobrick Contura Series washroom accessories. Radius on corners and edges of cover match side edges of container and other Contura Series accessories. Secured to container with a full-length stainless steel piano-hinge.

OPERATION:
Cover flips up for disposal of sanitary napkins and for servicing container.

INSTALLATION:
For partitions with particle-board or other solid core, secure with two #8 x 3/4” (4.2 x 19mm) sheet-metal screws (not furnished) at all points indicated by an S, or provide through-bolts, nuts, and washers.

For hollow-core metal partitions, provide solid backing into which sheet-metal screws can be secured. If two units are installed back-to-back, then provide threaded sleeves and machine screws for the full thickness of partition.

For masonry walls, provide fiber plugs or expansion shields for use with sheet-metal screws, or provide 3/16” (5mm) toggle bolts or expansion bolts.

For plaster or dry wall construction, provide concealed backing to comply with local building codes, then secure unit with sheet-metal screws.

SPECIFICATION:
Surface-mounted sanitary napkin disposal shall be type-304 stainless steel with all-welded construction; exposed surfaces shall have satin finish. Front of sanitary napkin disposal shall have same degree of arc and match other Bobrick ConturaSeries accessories in the washroom. Radius on corners and edges of sanitary napkin disposal shall complement other Bobrick ConturaSeries washroom accessories. Cover shall be drawn, one-piece, seamless construction and secured to container with a full-length stainless steel piano-hinge. Container shall have integral finger depression for opening cover.

Surface-Mounted Sanitary Napkin Disposal shall be Model B-270 of Bobrick Washroom Equipment, Inc., Clifton Park, New York; Jackson, Tennessee; Los Angeles, California; Bobrick Washroom Equipment Company, Scarborough, Ontario; Bobrick Washroom Equipment Pty. Ltd., Australia; and Bobrick Washroom Equipment Limited, United Kingdom.
SCENT DISPENSER

MB 3000 Dispensers

Scroll down to see 4 more products in the MB 3000 Dispensers group.

1793533 Microburst® 3000 LCD Dispenser - Chrome

Microburst® 3000 aerosol dispensing systems deliver power, performance and flexibility.

- Part of coordinated suite of washroom products
- Smart chip technology maximizes odor control effectiveness for 30 to 168 days
- LCD model features flexible programming options: 12/24 hours per day; or 5, 6, or 7 days per week
- LCD includes visual battery gauge and patented "Days To Refill" indicators
- Sleek, compact high-performance aerosol system

View/Download Images of This Product

SPECIFICATIONS

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<th>Metric</th>
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</tr>
<tr>
<td>Width:</td>
<td>3.0 in</td>
<td>7.5 cm</td>
</tr>
<tr>
<td>Carton Cube:</td>
<td>0.01 ft³</td>
<td>0.028 m³</td>
</tr>
<tr>
<td>Ship Weight/Carton:</td>
<td>5.46 lb</td>
<td>2.48 kg</td>
</tr>
<tr>
<td>Pack Quantity:</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Cartons Per Pallet:</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

ADDITIONAL INFORMATION:

Product Sell Sheets: RCP_RCP-005_ScratchScent_Microburst_Hi-res.pdf, RCP_RCP-001_Microburst_Brochure_Hi-res.pdf
**SINK (KITCHEN)**

**ELKAY® SPECIFICATIONS**

**PRODUCT SPECIFICATIONS**

Gourmet (Lustertone®) Stainless Steel Single Bowl Top Mount Bar Sink. Overall dimensions are 16" x 18" x 10-1/8". Sink is manufactured from 18 gauge 304 Stainless Steel with a Lustrous Highlighted Satin finish, Center drain placement and Full spray sides and bottom.

<table>
<thead>
<tr>
<th>Installation Type:</th>
<th>Top Mount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material:</td>
<td>304 Stainless Steel</td>
</tr>
<tr>
<td>Finish:</td>
<td>Lustrous Highlighted Satin</td>
</tr>
<tr>
<td>Gauge:</td>
<td>18</td>
</tr>
<tr>
<td>Sound Deadening:</td>
<td>Full spray sides and bottom</td>
</tr>
<tr>
<td>Number of Bowls:</td>
<td>1</td>
</tr>
<tr>
<td>Sink Dimensions:</td>
<td>15&quot; x 18&quot; x 10-1/8&quot;</td>
</tr>
<tr>
<td>Bowl 1 Dimensions:</td>
<td>16&quot; x 13-1/2&quot; x 10&quot;</td>
</tr>
<tr>
<td>Drain Size:</td>
<td>3-1/2&quot; (89mm)</td>
</tr>
<tr>
<td>Drain Location:</td>
<td>Center</td>
</tr>
<tr>
<td>Minimum Cabinet Size:</td>
<td>34&quot;</td>
</tr>
<tr>
<td>Mounting Hardware:</td>
<td>Part # 64000012 included for countertops up to 3/4&quot; (19mm) thick</td>
</tr>
<tr>
<td>Cutout Template #:</td>
<td><a href="#">100001760</a></td>
</tr>
</tbody>
</table>

Template is available for download at elkay.com

Cutout Dimensions for Top Mount Installation:

16-3/8" x 17-3/8" (417mm x 441mm) with 1-1/2" (38mm) corner radius

Special Note: No faucet ledge

**INSTALATION PROFILE:**

- Silicone Caulk
- U-Channel
- Screw
- Clip
- Not furnished

**OPTIONAL ACCESSORIES**

- Bottom Grid: LKWB61316SS
- Cutting Board: CB1613, CB1713, CBR1316, CBS1316
- Drain: LK99
- Faucet: LKGT1041, LKGT2041
- Hardware: LK364, LK463
- Rinsing Basket: LKWRB1316SS, LKWERBSS
- Sinkmate: LKSM17, LKSMHOOK, LKSMSPONGE, LKSMHSL
- Soap Dispenser: LKGT1054

**Gourmet (Lustertone®) Stainless Steel Single Bowl Top Mount Bar Sink**

**Model(s) DLFR191810**

**AMERICAN PRIDE: A LIFETIME TRADITION**

Like your family, the Elkay family has values and traditions that endure. For almost a century, Elkay has been a family owned and operated company, providing thousands of jobs that support our families and communities.

Sinks are listed by IAPMO® as meeting the applicable requirements of the Uniform Plumbing Code®, International Plumbing Code®, and National Plumbing Code of Canada.

**Product Compliance:**

BUY AMERICAN ACT

ASME A112.19.3/CSA B45.4

**Clean and Care Manual (PDF)**

**Installation Instructions (PDF)**

**Limited Lifetime Warranty (PDF)**

**Similar models are available with:** Perfect Drain

---

*In keeping with our policy of continuing product improvement, Elkay reserves the right to change product specifications without notice. Please visit elkay.com for the most current version of Elkay product specification sheets. This specification describes an Elkay product with design, quality, and functional benefits to the user. When making a comparison of other producers' offerings, be certain these features are not overlooked.*

Elkay REV 11022015
dlky.com/dlfr191810

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Page 98
5 year warranty if used in commercial installations
MOEN
Buy it for looks. Buy it for life.™

FAUCET DESCRIPTION
- Reflex™ pulldown system offers smooth operation, easy movement and secure docking
- Metal construction with various finishes identified by suffix
- Hydrolock® quick connect installation
- Pullout spray with 68” braided hose
- Flexible supply lines with 3/8” compression fittings
- High arc spout provides the perfect height and reach for prep sinks while the pulldown feature provides infinite maneuverability for food preparation tasks
- 360° rotating spout

OPERATION
- Lever style handle
- Temperature controlled by 100° arc of handle travel
- Operates with less than 5 lbs. of force
- Operates in stream or spray mode in the pullout or retracted position
- Spray function requires continuous button pressure
- When filling a vessel outside the sink, the auto-shutoff feature conveniently stops the flow of water as the wand passes over the counter top

FLOW
- Flow is limited to 2.2 gpm (8.3 L/min) at 60 psi

CARTRIDGE
- 1255™ Dualact™ cartridge for Single-Handle Faucets

STANDARDS
- Third party certified to ASME A112.18.1/CSA B125.1 and all applicable requirements referenced therein including NSF 61/9
- Contains no more than 0.25% weighted average lead content
- Complies with California Proposition 65 and with the Federal Safe Drinking Water Act
- The backflow protection system in the device consists of two independently operating check valves, a primary and a secondary which prevent backflow
- ADA for lever handle

WARRANTY
- Lifetime limited warranty against leaks, drips and finish defects to the original consumer purchaser
- 5 year warranty if used in commercial installations

Specifications

ARBOR™
Single Handle High Arc Pulldown Prep/Bar Faucet

Models: CA5995 series

NOTE: THIS FAUCET IS DESIGNED TO BE INSTALLED THRU 1 OR 3 HOLES, 1-1/2" (38mm) MIN. DIA.

CRITICAL DIMENSIONS

(DO NOT SCALE)

TO ORDER PARTS CALL: 1-800-BUY-MOEN
www.moen.com

Rev. 8/13
EVERPURE® H-300

H-300 DRINKING WATER SYSTEM

The same commercial quality that makes Pentair® Everpure® the overwhelming choice for water filtration in restaurants is also available for your home. The Pentair Everpure exclusive precoat filtration technology combines Micro-Pure® technology and a unique pleated filter membrane. This highly engineered design offers a large filtering surface area, longer filter life, and consistent performance.

FEATURES

Commercial Grade Filtration
- Exclusive Micro-Pure filter material reduces contaminants commonly found in tap water
- Commercial grade metal canister protects the filter system from splitting or bursting

Great Tasting Water
- Retains vital minerals found naturally in water to ensure the clean, crisp taste of your water
- Absorbs common earthy, moldy, fishy tastes, and odors

SPECIFICATIONS

- Flow rate controlled at 0.5 gpm (1.9 Lpm)
- Temperature: 35-100°F (2-38°C) cold water use only
- Pressure: 10-125 psi (0.7-8.6 bar) non-shock
- Capacity: 300 gal. (1,135 L)
- Required Space: 5W x 22H x 5D in (13W x 56H x 13D cm)

SUBSTANCE REDUCTION

- Lead
- NSF/ANSI Standard 53 certified to reduce cysts such as Cryptosporidium and Giardia by mechanical means
- Volatile Organic Chemicals (VOCs), including THMs
- Chlorine taste & odor
- Dirt and cloudiness*
- Mold and algae*
- Reduces particles as small as 0.5 micron in size by mechanical means

*As tested by Everpure, LLC.

EPA EST. NO. 002623-1L-002

FILTRATION & PROCESS

EVERPURE H-300 DRINKING WATER SYSTEM
GENERAL INSTALLATION / OPERATION / MAINTENANCE REQUIREMENTS

This drinking water system must be maintained according to the manufacturer’s instructions, including replacement of filter cartridges. The substances reduced or removed by this system are not necessarily in your water. Read the performance data sheet. It is recommended that before purchasing a water treatment unit, you have your water tested to determine your actual treatment needs.

Space required, 8W x 22H x 5D in (10W x 56H x 13D cm) including 2-1/2 inches of clear space under unit for cartridge change.

Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system. Systems certified for cyst reduction may be used on disinfected water that may contain filterable cysts.

A separate drinking water faucet is required.

Install vertically with cartridge hanging down.

Replace cartridge when capacity is reached, or when flow becomes too slow. To ensure optimum water filtration, cartridges should be changed annually.

Health Claim Performance Certified by NSF®

This system has been tested according to NSF/ANSI 42 and 53 for the reduction of the substances listed below. The concentration of the indicated substances in water entering the system was reduced to a concentration less than or equal to the permissible limit for water leaving the system, as specified in NSF/ANSI 42 and 53.

<table>
<thead>
<tr>
<th>SUBSTANCE</th>
<th>INFLUENT CHALLENGE CONCENTRATION</th>
<th>MAX. PERMISSIBLE PRODUCT WATER CONCENTRATION</th>
<th>REDUCTION REQUIREMENTS</th>
<th>MINIMUM REDUCTION</th>
<th>AVERAGE REDUCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard 42 – Aesthetics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chlorine</td>
<td>2.0 mg ± 10%</td>
<td>–</td>
<td>50%</td>
<td>–</td>
<td>96.8%</td>
</tr>
<tr>
<td>Particulate, Class I</td>
<td>at least 10,000 particles/mL</td>
<td>–</td>
<td>85%</td>
<td>–</td>
<td>99.2%</td>
</tr>
<tr>
<td>Standard 53 – Health Effects</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cyst</td>
<td>Minimum 50,000/L</td>
<td>–</td>
<td>99.95%</td>
<td>–</td>
<td>99.99%</td>
</tr>
<tr>
<td>Lead 6.5</td>
<td>0.15 mg/L ± 10%</td>
<td>0.010 mg/L</td>
<td>–</td>
<td>99.4%</td>
<td>98.8%</td>
</tr>
<tr>
<td>Lead 8.5</td>
<td>0.15 mg/L ± 10%</td>
<td>0.010 mg/L</td>
<td>–</td>
<td>97.3%</td>
<td>98.7%</td>
</tr>
<tr>
<td>Chloriform</td>
<td>0.310 mg/L</td>
<td>0.015 mg/L</td>
<td>–</td>
<td>95.7%</td>
<td>98.6%</td>
</tr>
</tbody>
</table>

*(Tested using flow rate = 0.5gpm, pressure = 60 psig, pH = 7.5 ± 0.5, temp. = 20°C ± 2.5°C)

Everpure®, Micro-Pure® and the silver canister color are registered trademarks of Pentair Filtration Solutions, LLC ©2013.

California Department of Public Health Certificate Number: 11-2104

Warranty – Everpure Drinking Water Systems are warranted to be free of defects for a full twelve (12) months after purchase. A detailed warranty statement is provided with each system.

System Tested and Certified by NSF International against NSF/ANSI Standard 42 and 53 for the reduction of:

- Standard No. 42 Aesthetics: Chemical Reduction
- Taste and Odor
- Chlorine Taste & Odor
- Mechanical Filtration
- Particulate Reduction: Class I

- Standard No. 53 Health Effects: Chemical Reduction
- VOC
- Lead
- Mechanical Filtration
- Syst

FILTRATION & PROCESS

5730 NORTH OLEN PARK ROAD, MILWAUKEE, WI 53209
D. 414.239.4400 | F. 414.239.4404 | WWW.PENTAIRWWW.COM | WWW.RESIDENTIAL.EVERPURE.COM | CUSTOMER CARE, 800.279.9404

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Food Waste Disposers

Specifications

<table>
<thead>
<tr>
<th>Type of Feed</th>
<th>Continuous</th>
</tr>
</thead>
<tbody>
<tr>
<td>On/Off Control</td>
<td>Wall Switch</td>
</tr>
<tr>
<td>Motor</td>
<td>Single Phase</td>
</tr>
<tr>
<td>HP</td>
<td>3/4</td>
</tr>
<tr>
<td>Volts</td>
<td>120</td>
</tr>
<tr>
<td>Hz</td>
<td>60</td>
</tr>
<tr>
<td>RPM</td>
<td>1725</td>
</tr>
<tr>
<td>Amp (Avg. Load)</td>
<td>9.5</td>
</tr>
<tr>
<td>Time Rating</td>
<td>Intermittent</td>
</tr>
<tr>
<td>Lubrication</td>
<td>Permanently Lubricated Upper &amp; Lower Bearings</td>
</tr>
<tr>
<td>Shipping Weight (Approx.)</td>
<td>15 lbs. 2 oz.</td>
</tr>
<tr>
<td>Unit Finish</td>
<td>Watershope</td>
</tr>
<tr>
<td>Paint Finish</td>
<td>Grey Enamel</td>
</tr>
<tr>
<td>Overall Height</td>
<td>12-5/8&quot;</td>
</tr>
<tr>
<td>Grind Chamber Capacity</td>
<td>26 oz.</td>
</tr>
<tr>
<td>Motor Protection</td>
<td>Manual Reset</td>
</tr>
<tr>
<td>Overload</td>
<td></td>
</tr>
<tr>
<td>Average Water Usage</td>
<td>Approx. 1 Gallon per Person Per Day</td>
</tr>
<tr>
<td>Average Electrical Usage</td>
<td>3.4 kWh per Year</td>
</tr>
<tr>
<td>Drain Connection</td>
<td>1-1/2&quot; Cuffed Slip Joint</td>
</tr>
<tr>
<td>Dishwasher Drain Connection</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Sample Specification

Food Waste Disposers shall be InSinkErator Badger 5XP®, continuous feed, with 3/4 H.P. motor, galvanized steel grinding elements with two stainless steel 360° swivel flaps. Self-service wrench.

Warranty:

3-Year parts and in-home service.

* The complete machine warranty is included in the can & base licensed packed with each unit.

Dimensions

- Distance from bottom of sink to center line of disposer outlet.
- Add 1/2" when stainless steel units are used.

NOTE: Flange waste line to prevent standing water in disposer motor housing.

Job Specifications

Food waste disposers can provide an environmentally responsible alternative to transporting food waste to landfills, and they can help reduce greenhouse gas emissions. At capable wastewater treatment plants, food waste can be recycled to produce renewable energy. Additionally, capable wastewater treatment plants can process food waste into fertilizer (check the plant in your area.)

EMERSON Appliance Solutions

1-800-558-5700
www.InSinkErator.com

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Page 103
SLIMFC37/PC

37, 57 and 82 Watt SLIM Wallpacks are designed to cover the footprint of most traditional wallpacks. They are suitable for mounting heights from 20' to 30', and replace HID Wallpacks from 250W MH to 330W MH. These ultra-high efficiency fixtures are available in cutoff or full cutoff models.

Color: Bronze
Weight: 7.5 lbs
**Technical Specifications**

**Other**

SLIM37 with Photocell:
120V Button Photocell included. Photocell is only compatible with 120V.

**HID Replacement Range:**
The SLIMFC37 can be used to replace 200W MH based on delivered lumen.

**Accessories:**
Available accessories include polystyrene and wire guard. Click to see all accessories.

**California Title 24:**
SLIMFC37/PC complies with 2013 California Title 24 building and electrical codes as a commercial outdoor pole mounted fixture > 30 Watts mounted at height greater than 24 feet. For mounting heights > 24 feet see WP/LED2DML with hi-laval operation, additional component requirements will be listed in the Title 24 section under technical specifications on the product page.

**Patents:**
The design of the SLIM™ is protected by patents pending in US, Canada, China, Taiwan and Mexico.

**Warranty:**
RAB warrants that our LED products will be free from defects in materials and workmanship for a period of five (5) years from the date of delivery to the end user, including coverage of light output, color stability, driver performance and fixture finish.

**Country of Origin:**
Designed by RAB in New Jersey and assembled in the USA by RAB's IBEW Local 3 workers.

**Buy American Act Compliant:**
This product is a COTS item manufactured in the United States, and is compliant with the Buy American Act.

**Recovery Act (ARRA) Compliant:**
This product complies with the 32.226-2.1 "Required Use of American Iron, Steel, and Manufactured Goods – Buy American Act – Construction Materials (October 2010)."

---

**Trade Agreements Act Compliant:**
This product is a COTS item manufactured in the United States, and is compliant with the Trade Agreements Act.

**GSA Schedule:**
Suitable in accordance with FAR Subpart 25.4.

**Listings:**
- UL Listing: Suitable for wall locations. Wall Mount only.
- Dark Sky Approved: The International Dark Sky Association has approved this product as a full cutoff, fully shielded luminaire.
- IESNA LM-79 & LM-80 Testing:
  - RAB LED luminaries have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80, and have received the Department of Energy "Lighting Facts" label.

**Construction**

**Footprint:**
Designed to replace RAB HID WP1 wall packs, both in size and footprint template, no upgrading to LED is easy and seamless.

**IP Rating:**
Ingress Protection rating of IP66 for dust and water.

**Cold Weather Starting:**
The minimum starting temperature is -40°F/-40°C.

**Ambient Temperature:**
Suitable for use in -40°C (104°F) ambient temperatures.

**Thermal Management:**
Superior thermal management with internal Air-Flow fans.

**Housing:**
Precision die-cast aluminum housing and door frame.

**Mounting:**
Die-cast back box with four (4) conduit entry points and knockout pattern for junction box or direct wall mounting. Hinged housing and bubble level for easy installation.

**Full Cutoff:**
Full cutoff meets dark sky requirements.

**Recommended Mounting Height:**
Up to 20 ft.

**Lens:**
Microprismatic diffusion glass lens reduces glare and has smooth and even light distribution.

**Reflector:**
Specular Thermoplastic.

**Gaskets:**
The unique design of the light-ock gasket ensures no water or environmental elements will ever get inside the SLIM.
Technical Specifications (continued)

Construction
Finish:
Our environmentally friendly polyester powder coatings are formulated for high-durability and long-lasting color, and contains no VOC or toxic heavy metals.

Green Technology:
Mercury and UV free, and RoHS compliant

LED Characteristics
LED:
Long-life, high-efficiency, micro-power, surface mount LEDs, binned and mixed for uniform light output and color.

Lifespan:
100,000 hour LED lifespan based on IES LM-80 results and TM-21 calculations.

Correlated Color Temp. (Nominal CCT):
6000K

Color Stability:
LED color temperature is warranted to shift no more than 200K in CCT over a 5 year period.

Color Consistency:
7-step MacAdam Ellipse binning to achieve consistent fixture-to-fixture color.

Electrical
Driver:
Constant Current, 100-277V, 50/60Hz, 100-277VAC, 0.8A, 4kV Surge Protection, 70mA Power Factor 90.8%

THD:
7.2% at 120V, 6.9% at 277V

Optical

BUG Rating:
BI LED 2D

Dimensions

Features
Covers footprint of most traditional wall packs
Easy installation with hinged access, bubble level and multiple conduit entries.

Lighting gasket keeps elements out
100,000-hour LED lifespan
6-Year warranty

Ordering Matrix

<table>
<thead>
<tr>
<th>Family</th>
<th>Cutoff</th>
<th>Watts</th>
<th>Color Temp</th>
<th>Finish</th>
<th>Photocell</th>
<th>Bi-Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLIM</td>
<td></td>
<td>63W</td>
<td>Cool</td>
<td>Bronze</td>
<td>No Photocell</td>
<td>No Bi-Level</td>
</tr>
<tr>
<td></td>
<td>C = Cutoff</td>
<td>57W</td>
<td>Y = Warm</td>
<td>W = White</td>
<td>IRC = 120V Button</td>
<td>/BL = Bi-Level</td>
</tr>
<tr>
<td></td>
<td>FC = Full Cutoff</td>
<td>37W</td>
<td>N = Neutral</td>
<td></td>
<td>IPC2 = 277V Button</td>
<td>IPC82 = 277V Swivel</td>
</tr>
</tbody>
</table>
# GARAGE LIGHTS

## VG Series

**LED Vehicle Garage Luminaire**

**Product Description**
Cree VG Series parking garage luminaires are designed to deliver optimal, low glare illumination by intelligently combining an in-house designed optical system consisting of indirect view LEDs, a highly efficient internal reflector and a precisely designed optical lens. Architectural design, quick and easy installation and low total cost of ownership makes the VG Series ideal for both new and existing parking garages.

**Applications:** Parking structures

**Performance Summary**
- **Initial Delivered Lumen:** 3,710-3,870 lumens
- **Input Power:** 50 watts
- **CRI:** Minimum 70 CRI
- **CCT:** 4000K (+/-300K), 5700K (+/-500K)
- **Limited Warranty:** 10 years on luminaire/10 years on Colorfast DeltaGuard™ finish

*See http://lighting.cree.com/warranty for warranty details*

### Accessories

<table>
<thead>
<tr>
<th>Field-Installed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bird Shield</td>
</tr>
<tr>
<td>PG-282</td>
</tr>
<tr>
<td>Perimeter Shield</td>
</tr>
<tr>
<td>VG-P28</td>
</tr>
<tr>
<td>Sensor Shield</td>
</tr>
<tr>
<td>VG-S28</td>
</tr>
<tr>
<td>Hand-Hold Remote</td>
</tr>
<tr>
<td>JA-35704</td>
</tr>
</tbody>
</table>

*Must be specially ordered and will require a 4 week minimum delivery time.

### Ordering Information

**Example:** VG-A-OM-5M-A-40K-UL-BK

<table>
<thead>
<tr>
<th>VG</th>
<th>A</th>
<th>Mounting</th>
<th>C Optical</th>
<th>Input Power Designator</th>
<th>CCT</th>
<th>UL Number</th>
<th>Color Options</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>VG</td>
<td>Vehicle Garage Set</td>
<td>A</td>
<td>OM</td>
<td>Type B Medium</td>
<td>A</td>
<td>40K</td>
<td>2770 V</td>
<td>Multi-Level Ref to spec sheet for details</td>
</tr>
</tbody>
</table>

**Weight:**
- 14.5 lbs (6.6kg)
VG Series LED Vehicle Garage Luminaire

Product Specifications

OPTICAL SYSTEM
- Indirect LED array eliminates direct view of highly efficient LEDs
- Precision engineered optical lens provides maximum low glare light distribution
- Internal white or specular optical reflectors provides choices of Type V Medium or Type V Wide distribution
- Comprehensive optical system provides consistent uniformity

CONSTRUCTION & MATERIALS
- Direct mount provided with factory-installed 3' (0.9m) power cord, plug by others
- Direct mount provided with mounting bracket that requires to any suitable surface appropriate for supporting luminaire
- J-Jax mount provided with mounting bracket designed to mount directly over existing 4" (102mm) square, rectangular, or octagonal junction boxes only
- Pendant mount includes 64” (1676mm) wires out of luminaire and is intended to be mounted by 3/4” IP pendant (by others)
- Low profile, lightweight design provides ease of installation
- Constructed of anodized die cast aluminum with integral, weather-resistant LED driver compartment and high performance heat sink
- Exclusive Colorfast SelfClean® finish features an E-Coat powder primer with an ultra-durable powder topcoat providing excellent resistance to corrosion, ultraviolet degradation and abrasion. Black, bronze, silver, and white are available
- Weight: See Weight Chart on pages 1 and 2

ELECTRICAL SYSTEM
- Input Voltage: 120-277VAC, 50/60Hz, Class 2 drivers
- Power Factor: 0.9 at full load
- Operating Temperature Range: -40°C to +40°C (-40°F to +104°F)
- Total Harmonic Distortion: < 20% at full load
- Integral 6kV surge suppression protection standard
- To address rush current, slow blow fuse or type C/O breaker should be used

REGULATORY & VOLUNTARY QUALIFICATIONS
- cULus Listed
- Suitable for wet locations
- Meets FCC Part 15, Subpart B, Class A standards for conducted and radiated emissions
- Enclosure rated IP66 per IEC 60529
- DLC qualified. Please refer to www.designlights.com/DLC for most current information
- 6kV surge suppression protection tested in accordance with IEEE/ANSI C62.41.2
- Meets Bay American requirements within ABRA
- RoHS compliant. General factory for additional details

Electrical Data

<table>
<thead>
<tr>
<th>Input Power Designation</th>
<th>120V</th>
<th>208V</th>
<th>240V</th>
<th>277V</th>
</tr>
</thead>
<tbody>
<tr>
<td>System Watts</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Current</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>50</td>
<td>0.43</td>
<td>0.25</td>
<td>0.22</td>
</tr>
</tbody>
</table>

* Electrical data at 25°C (77°F). Actual wattage may differ by ±10% when operating between 120-277V at ±10%.

Recommended VG Series Lumen Maintenance Factors (LMF)

<table>
<thead>
<tr>
<th>Ambient</th>
<th>Initial LMF</th>
<th>75K hr Projected LMF</th>
<th>50K hr Projected LMF</th>
<th>75K hr Calculated LMF</th>
<th>100K hr Calculated LMF</th>
</tr>
</thead>
<tbody>
<tr>
<td>5°C (41°F)</td>
<td>0.95</td>
<td>0.95</td>
<td>0.95</td>
<td>0.95</td>
<td>0.95</td>
</tr>
<tr>
<td>10°C (50°F)</td>
<td>0.85</td>
<td>0.85</td>
<td>0.85</td>
<td>0.85</td>
<td>0.85</td>
</tr>
<tr>
<td>15°C (59°F)</td>
<td>0.75</td>
<td>0.75</td>
<td>0.75</td>
<td>0.75</td>
<td>0.75</td>
</tr>
<tr>
<td>20°C (68°F)</td>
<td>0.65</td>
<td>0.65</td>
<td>0.65</td>
<td>0.65</td>
<td>0.65</td>
</tr>
<tr>
<td>25°C (77°F)</td>
<td>0.55</td>
<td>0.55</td>
<td>0.55</td>
<td>0.55</td>
<td>0.55</td>
</tr>
</tbody>
</table>

* Lumen maintenance values at 25°C are calculated per TM-21 based on L90-B data and 100,000 hour testing.

* In accordance with TM-21, Projected Values represent interpolated value based on time durations that are within six times (C6) the IESNA LM-80-08 total test duration (6,000 hours) for the device under testing (DUT) i.e. the packaged LED chip.

* In accordance with TM-21, Initial Values represent time durations that exceed six times (C6) the IESNA LM-80-08 total test duration (6,000 hours) for the device under testing (DUT) i.e. the packaged LED chip.

PD Mount

Multi-Level Sensor Location (ordered as an option)

Weight

14.5 lbs (6.5kg)
VG Series LED Vehicle Garage Luminaire

Photometry

All published luminaire photometric testing performed to IESNA LM-79-08 standards by a NVLAP accredited laboratory. To obtain an IES file specific to your project consult: www.cree.com/Lighting/Products/Outdoor/Parking-Structure/VG-Series

SM

VGA-220-20W-US
Initial Delivered Lumens: 3,776

VGA-220-40W-US
Mounting Height: 10' ELUM 3-A/70:
Initial Delivered Lumens: 3,716
Initial FC at grade

Type V Medium Distribution

<table>
<thead>
<tr>
<th>Input Power Designator</th>
<th>4000K</th>
<th>5700K</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial Delivered Lumens*</td>
<td>3,776</td>
<td>3,700</td>
</tr>
<tr>
<td>BUG Ratings** Per TM-15-11</td>
<td>92.24.02</td>
<td>92.24.03</td>
</tr>
<tr>
<td>Initial Delivered Lumens*</td>
<td>3,716</td>
<td>3,670</td>
</tr>
<tr>
<td>BUG Ratings** Per TM-15-11</td>
<td>92.24.02</td>
<td>92.24.03</td>
</tr>
</tbody>
</table>

*Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens
** For more information on the BUG (Backlighting Utility Grade) Rating visit: www.ies.org/ies bx/bugsreport/bugsreportpublication.pdf

SW

VGA-220-20W-US
Initial Delivered Lumens: 3,796

VGA-220-40W-US
Mounting Height: 10' ELUM 3-A/70:
Initial Delivered Lumens: 3,760
Initial FC at grade

Type V Wide Distribution

<table>
<thead>
<tr>
<th>Input Power Designator</th>
<th>4000K</th>
<th>5700K</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial Delivered Lumens*</td>
<td>3,796</td>
<td>3,760</td>
</tr>
<tr>
<td>BUG Ratings** Per TM-15-11</td>
<td>92.24.02</td>
<td>92.24.03</td>
</tr>
<tr>
<td>Initial Delivered Lumens*</td>
<td>3,760</td>
<td>3,700</td>
</tr>
<tr>
<td>BUG Ratings** Per TM-15-11</td>
<td>92.24.02</td>
<td>92.24.03</td>
</tr>
</tbody>
</table>

*Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens
** For more information on the BUG (Backlighting Utility Grade) Rating visit: www.ies.org/ies bx/bugsreport/bugsreportpublication.pdf
STAIRWELL LIGHTING (GARAGE)

Bi-Level Luminaire with Controls / 2-Lamp T8, T5, or T5HO

PROJECT INFORMATION

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Type</th>
<th>Date</th>
</tr>
</thead>
</table>

CATALOG NO.

HOUSING
White Aluminum 0.032” thick fixture body.

BALLASTS
Energy efficient, thermally protected, automatic resetting, Class P, high power factor, sound rated A, magnetic or electronic ballasts. CEE NEMA Premium compliant.

ELECTRICAL
Standard class “P”, thermally protected, autoreseting HF ballast, sound rated A. CEE NEMA Premium compliant. All ballast leads extend a minimum of 6” through access location. NEC/CREE-compliant ballast disconnect is standard.

LENSES
Highly efficient acrylic lens with a linear refractive pattern for even illumination and excellent lamp obscuration.

OCCUPANCY SENSOR
Hubbell Building Automation Internally mounted Passive Infrared Occupancy sensor. LED indicator for easy verification of coverage. Lens has a 1500 square-foot, 360° coverage area at a mounting height of 10 ft, and a 2:1 radius to height ratio coverage pattern. Sensor includes an adjustable time delay, and motion/photocell sensitivity.

CERTIFICATION
All luminaires are built to UL 1598 standards and bear appropriate UL and CUL or CSA labels. Lamp location labeling is standard. Units are UL 924 listed when equipped with optional battery back-up and meet requirements of the life safety code NFPA 101.

ORDERING INFORMATION

Example BIL4-232-EPLWU

<table>
<thead>
<tr>
<th>MODEL</th>
<th>SIZE</th>
<th>LAMPS IN CROSS SECTION</th>
<th>LAMP TYPE</th>
<th>PRIMARY BALLAST</th>
<th>VOLTAGE</th>
<th>OPTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIL</td>
<td>4”</td>
<td>2</td>
<td>32</td>
<td>Electronic T8, HSO, 120 V or T8 Programmed Start</td>
<td>120V-277V</td>
<td>EL Emergency Battery Pack, 2’ lamp 500 lumens</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>28</td>
<td>Electronic T8, Programmed Start, 0.77 BF</td>
<td></td>
<td>ELS</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>54</td>
<td>Electronic T8, Programmed Start, 120 V</td>
<td></td>
<td>ELSH</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>18 32, 30, 28, or 18 Watt</td>
<td>EP Electronic T8, Programmed Start, 0.77 BF</td>
<td></td>
<td>F0830</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>28 15-28 Watt and</td>
<td>EPLW Electronic T8, Programmed Start, 0.71 BF</td>
<td></td>
<td>F0835</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>15 14 Watt</td>
<td>EPLW Electronic T8, Programmed Start, 0.71 BF</td>
<td></td>
<td>FS030</td>
</tr>
<tr>
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<td></td>
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<td>15 54 Watt</td>
<td>EPLW Electronic T8, Programmed Start, 0.71 BF</td>
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<td>FS035</td>
</tr>
<tr>
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<td></td>
<td></td>
<td>54 54 Watt</td>
<td>EPLW Electronic T8, Programmed Start, 0.71 BF</td>
<td></td>
<td>FS041</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>34 2.8 Watt and 2, 18 15 Watt</td>
<td>EPLW Electronic T8, Programmed Start, 0.71 BF</td>
<td></td>
<td>FS050</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>15 14 Watt</td>
<td>EP Electronic T8, Programmed Start, 0.77 BF</td>
<td></td>
<td>OD51</td>
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</table>

UNOCCUPIED

<table>
<thead>
<tr>
<th>Ballast Type</th>
<th>Watts</th>
<th>Lumens</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP (0.88 BF)</td>
<td>15</td>
<td>989</td>
</tr>
<tr>
<td>EPLW (0.77 BF)</td>
<td>15</td>
<td>989</td>
</tr>
<tr>
<td>EPLW (1.18 BF)</td>
<td>15</td>
<td>989</td>
</tr>
</tbody>
</table>

OCCUPIED

<table>
<thead>
<tr>
<th>Ballast Type</th>
<th>Watts</th>
<th>Lumens</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP (0.88 BF)</td>
<td>15</td>
<td>989</td>
</tr>
<tr>
<td>EPLW (0.77 BF)</td>
<td>15</td>
<td>989</td>
</tr>
<tr>
<td>EPLW (1.18 BF)</td>
<td>15</td>
<td>989</td>
</tr>
</tbody>
</table>
ALLEY LIGHTING

FXLED150T

Ultra high output, high efficiency LED floodlight with wide NEMA type 6H x 6V beam spread. Patent Pending airflow technology ensures long LED and driver lifespan. Use for general and security lighting for large areas, building facades, signs and landscapes.

Color: Bronze
Weight: 25.0 lbs

Technical Specifications

Listings:
UL Listing:
Suitable for wet locations. Suitable for ground mounting.

IESNA LM-79 & LM-80 Testing:
RAB LED luminaries have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80, and have been received Department of Energy "Lighting Facts" label.

DLC Listed:
This product is on the Design Lights Consortium (DLC) Qualified Products List and is eligible for rebates from DLC Member Utilities. DLC Product Code: P00001735K

LED Characteristics

Efficiency:
97%

Color Consistency:
7-step MacAdam Ellipse binning to achieve consistent fixture-to-fixture color.

Color Stability:
Approved color temperature is warrantied to shift no more than 200K in CCT over a 5 year period.

Effective Projected Area:
EPA 2

Cold Weather Starting:
The minimum starting temperature is -40°F/-40°C.

Ambient Temperature:
Suitable for use in 40°F (104°F) ambient temperatures

Mounting:
Heavy-duty Trunnion mount with stainless steel hardware

Housing:
Die-cast aluminum housing and door frame

Lighting:
NEMA Beam Spread of 6H x 6V

Green Technology:
Mercury and UV free, and RoHS compliant. Polyester powder coat finish formulated without the use of VOCs or toxic heavy metals.

Electrical:
Drivers:
Two Drivers, Constant Current, Class 2, 2000mA, 100-277V, 50-60Hz, Power Factor 99%

Replacement:
The FXLED150 replaces 400W Metal Halide Floodlights.

THD:
5.3% at 120V, 13.1% at 277V

Optical:
NEMA Type:
NEMA Beam Spread of 6H x 6V

Sensor Characteristics:

Visual Angle:
Horizontal Beam Angle (50%): 91.8°, Vertical Beam Angle (50%): 73.5° Horizontal Field Angle (10%): 121.0°, Vertical Field Angle (10%): 108.0°

Other:

Warranty:
RAB warrants that our LED products will be free from defects in materials and workmanship for a period of five (5) years from the date of delivery to the end user, including coverage of light output, color stability, driver performance and fixture finish.

Patents:
The design of FXLED150 is protected by patents pending in US, Canada, China, Taiwan and Mexico.
**FXLED150T**

**Dimensions**
- 9” x 22.9 cm
- 6” x 22.9 cm
- 14” x 35.6 cm

**Features**
- 66% energy cost savings vs. HID
- NEMA Type - 6H x 6V
- Air-Flow technology heat dissipation
- 100,000-hour LED lifespan
- 5-year warranty

**Ordering Matrix**

<table>
<thead>
<tr>
<th>Family</th>
<th>Watts</th>
<th>Mount</th>
<th>Color Temp</th>
<th>Finish</th>
<th>Dimming</th>
<th>Voltage</th>
<th>Photocell</th>
<th>Bi-Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>FXLED</td>
<td>150W</td>
<td>T = Trunnion</td>
<td>5000K (Cool)</td>
<td>Bronze</td>
<td>No Dimming</td>
<td>120-277V</td>
<td>No Photocell</td>
<td>No Bi-Level</td>
</tr>
<tr>
<td></td>
<td>150W</td>
<td>SF = Slipfitter</td>
<td>3000K (Warm)</td>
<td>W = White</td>
<td>ID10 = Dimmable</td>
<td>480 = 480V</td>
<td>IPCT = 120-277V Twislock Photocell</td>
<td>IPCT4 = 480V Twislock Photocell</td>
</tr>
<tr>
<td></td>
<td></td>
<td>N = 4000K (Neutral)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>IBL = Bi-Level</td>
<td></td>
</tr>
</tbody>
</table>
**TORK**

**SPECIFICATION SHEET**

**EWZ SERIES**

**MULTIPURPOSE CONTROL 1 OR 2 CHANNELS**

**24 DAY TIME SWITCH**

**APPLICATIONS**
- Outdoor signs.
- Lighting security.
- Heating and air conditioning.

**FEATURES**

**SCHEDULING:**
20 ON & OFF set points for individual programs for each day of the week. Minimum setting is 1 minute.

**SunSet ASTRONOMIC:**
Adjusts daily to changes in sunset times. Adjustable 10° - 60° Northern or Southern latitudes. Can be individually offset +/- 1-240 minutes from both sunset and sunrise times.

**DAYLIGHT SAVING:**
Automatic (can be omitted).

**LEAP YEAR:**
Automatic Compensation.

**MANUAL OVERRIDE:**
Until the next regularly scheduled ON or OFF, automatic operation then resumes.

**CLOCK FORMAT:**
AM/PM.

**POWER OUTAGE BACKUP:**
Permanent schedule retention. Supercapacitor provides 4 days of real time backup.

**MOMENTARY OPTION:**
For mechanically held contacts: Model EWZ201 only. Configure with simple jumper change for single-channel momentary operation.

**SPECIFICATIONS**

**TIMING ACCURACY:**
Line frequency.

**INPUT VOLTAGE:**
120 - 277VAC, 50/60Hz (automatic detection).

**TERMINAL RANGE:**
#8 - #16AWG.

**OPERATING TEMPERATURE:**
-40°F to 149°F (-40°C to 65°C).

**POWER CONSUMPTION:**
6VA Max.

**ENCLOSURE:**
Polycarbonate Indoor/Outdoor NEMA 3R is standard with lockable hasp. Suffix -MB without enclosure and includes mounting bracket.

**OPTIONS:**
SUFFIX-Q Quartz crystal timing, maintains accurate timing where 50 or 60 Hz is not consistent such as on-site generator produced power. Consult factory for minimum order size.

---

**WIRING DIAGRAMS**

**ORDERING INFO**

<table>
<thead>
<tr>
<th>CAT. NO.</th>
<th>UDC CODE</th>
<th>INPUT SUPPLY (VAC 50/60Hz)</th>
<th>NO. OF CHANNELS</th>
<th>OUTPUT DRY CONTACTS</th>
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</thead>
<tbody>
<tr>
<td>EWZ101</td>
<td>82470</td>
<td>120-277</td>
<td>1</td>
<td>SPST</td>
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<tr>
<td>EWZ103</td>
<td>82473</td>
<td>120-277</td>
<td>1</td>
<td>DPST</td>
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<tr>
<td>EWZ120</td>
<td>82471</td>
<td>120-277</td>
<td>1</td>
<td>SPDT</td>
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<tr>
<td>EWZ201</td>
<td>82472</td>
<td>120-277</td>
<td>2</td>
<td>SPST</td>
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<tr>
<td>EWZ101-MB</td>
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<td>EWZ103-MB</td>
<td>82269</td>
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<td>EWZ120-MB</td>
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<td>EWZ201-MB</td>
<td>82281</td>
<td>120-277</td>
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<td>SPST</td>
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</table>

**CONTACT RATINGS**

<table>
<thead>
<tr>
<th>TYPE</th>
<th>VOLTAGE (VAC)</th>
<th>RATING (NO)</th>
<th>VOLTAGE (VAC)</th>
<th>RATING (NO)</th>
<th>NC</th>
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</thead>
<tbody>
<tr>
<td>EWZ101</td>
<td>EWZ103</td>
<td>EWZ201</td>
<td>EWZ120</td>
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<td></td>
</tr>
<tr>
<td>General Purpose</td>
<td>120-277</td>
<td>40A</td>
<td>120-277</td>
<td>30A</td>
<td>20A</td>
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<td>20A</td>
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<td>120</td>
<td>30A</td>
<td>10A</td>
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<td>70A</td>
<td>708-777</td>
<td>70A</td>
<td>10A</td>
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<td>Pilot Duty</td>
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<td>720VA</td>
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<td>720VA</td>
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<td>1HP</td>
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<td>1/2HP</td>
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<td>1/2HP</td>
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<td>2HP</td>
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<td>Resistive</td>
<td>20VDC</td>
<td>30A</td>
<td>20VDC</td>
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