

Product Overview (for complete specifications, see page 2)

Upgrade Capability: As technology improves, internal LED components may be easily upgraded to take advantage of the latest systems.

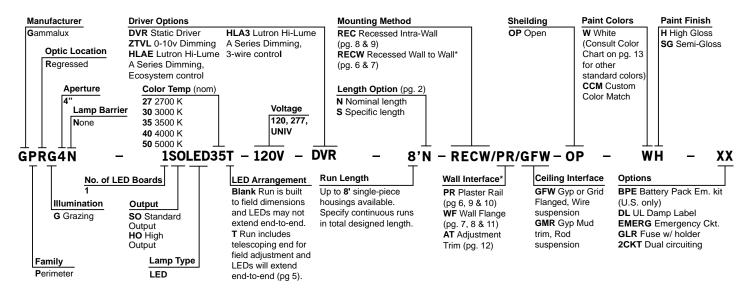
Construction: Extruded aluminum housing is available in one piece up to 8'. Continuous runs have hairline joints with no light leak. Runs of fixtures can be built to lengths matching field conditions, including patterns.

Electrical: Gammalux products are UL and cUL listed with quick electrical connectors and LED components by major manufacturers. Multiple dimming options available. Runs of fixtures are tested as a complete system prior to shipping. **Continuous Illumination:** LED boards can be oriented to provide consistent illumination.

Optical: Reflectors are formed to provide asymmetric distribution.

Finish/Color: High quality paint finish in high gloss or semi-gloss. Custom colors available.

Standard Nomenclature



^{*} When RECW is specified, exact field dimensions (at the wall height where the Wall Interface will be installed) are required from installing contractor on approved shop drawings.



Perimeter Series GPRG4N-LED-OP



Recessed Perimeter Drywall or Grid Mounted Ceiling Level Grazing Direct Illumination

Specifications

Construction

Housing: Extruded aluminum body, 6063T5, 0.090" minimum thickness. Available in one piece, unbroken lengths up to 8'.

Joiner System: Precision formed alignment spline with factory installed bolts for a hairline seam. No light leaks.

Mounting: Shall be perimeter mounted to wall via Plaster Rail (**PR**), Wall Flange (**WF**) or Adjustment Trim (**AT**) and recessed into a ceiling system. Power feed is accomplished through knockouts in housing. Designated fixtures can be ganged together mechanically and electrically in continuous rows. Patterns of fixtures are built to field measurements.

Electrical

Upgrade Capability: Standard fixtures use internal components which allow for simple upgrade to improved compatible LED systems provided by Gammalux. Restrictions may apply on a case-by-case basis.

Driver: Osram OT50 Optotronic driver, wired for static operation, is default* (specify **DVR**). Osram OT50 Optotronic driver, wired for 0-10v dimming to 10% output, is default* (specify **ZTVL**). Dimming by Lutron Hi-Lume A series L3D driver (specify **HLAE** for Ecosystem control or **HLA3** for 3-wire control). RoSH compliant and UL listed wiring and components throughout. Housing wired with quick-connect plugs at all mating joints and individually tested. Fixtures that are built for continuous runs and patterns are assembled into a complete pattern and tested at the factory prior to being individually packed and shipped. All fixtures bear UL & cUL labels. LED components and specifications subject to change without notice.

* Subject to availability, may be substituted by Gammalux.

LED Boards: OSRAM SYLVANIA or equal constant current. Distributed array, high efficacy, 80 + CRI.

LED System Lifespan: Rated for 60,000 hours at 70% lumen output (L70). Life and output based on maximum ambient temperature of 25 degrees C. 5 year limited warranty on LED components with driver options **DVR** or **ZTVL** (3 year warranty with **HLA** driver options). **Length Option:** Runs ordered in Nominal length are built to a length which optimizes for the most continuous LED illumination possible based on board lengths. Run length is coordinated with installer (specify Length Option **N**). Runs ordered in Specific length do no deviate from specified length, LED boards are centered in the run, ends of run may not be fully illuminated (specify Length Option **S**).

Optical Performance

Reflectors: Shall be formed high reflectance aluminum (**G**).

Performance: See charts for total lumens per foot delivered by each output and lens option.

ESTIMATED LUMENS PER FOOT DELIVERED BY COMBINATION OF LED COLOR AND LENS											
STANDARD OUTPUT LED					HIGH OUTPUT LED						
OPTION	2700 K	3000 K	3500 K*	4000 K	5000 K	OPTION	2700 K	3000 K	3500 K*	4000 K	5000 K
OPEN APERTURE (OP)	626.5	667.4	681.0	703.4	721.9	OPEN APERTURE (OP)	844.1	899.2	917.5	954.2	972.6
* IES files were created using 3500 K boards. Values were then adjusted by a factor of .92 for 2700K, .98 for 3000K, 1.04 for 4000K and 1.06 for 5000K boards.											

Finish

Housing assembly is electrostatically sprayed with high solids aliphatic two component polyurethane to an average thickness of 2 mils. over acid etching primer. High gloss or semi-gloss are standard. Specify **H** for high gloss in Paint Finish field. Specify **SG** for semi-gloss. Consult with factory for other finishes.

Packing and Shipping

Fixtures built for continuous rows and patterns are given a specific location identifier, clearly identified on factory layout drawings provided to installing contractor. Location identifier is printed on the fixture's ID Label, protective wrapping and on each end of fixture carton. Shipping pallets are built with 2" clearance, extending beyond the length and width of cartons, providing shipping protection.

Estimated shipping weight of 4' standard fixture is 23 lbs including carton (pallet and additional packing materials not factored in).





Perimeter Series GPRG4N-LED-OP

Recessed Perimeter Drywall or Grid Mounted Ceiling Level Grazing Direct Illumination

Photometric & Revit files

STANDARD OUTPUT FIXTURES

FIXTURE USES OPEN APERTURE AND 3500 K BOARDS.*

IESNA: LM 79-2008 ISSUE DATE: 10/31/14

TEST: GPRG4N1SOLED35OP.IES

TESTLAB: Photopia 3.2.6 see: www.ltioptics.com/ies MANUFAC: GAMMALUX LIGHTING SYSTEMS

LUMCAT: GPRG4N-1SOLED35-4'

LAMP: LED 7.5W 73605 PLPG2-Lin-1100-835-289x19-DC @ 185mA

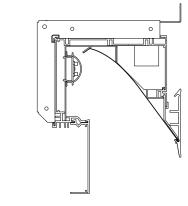
Summary Data

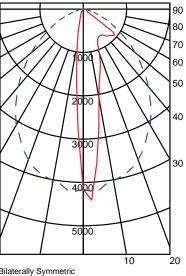
EFFICACY (Total): 90.8 LPW** EFFICACY (Uplight): 0.0 EFFICACY (Downlight): 90.8 CIE CLASSIFICATION: DIRECT

LUMINOUS OPENING: RECTANGULAR Width: 4.00 (Feet)

0.53 Height: 0.65

INPUT WATTS: 30.4





Bilaterally Symmetric Solid: 180-0 Degrees Dashed: 90-270 Degrees

Length:





HIGH OUTPUT FIXTURES

FIXTURE USES OPEN APERTURE AND 3500 K BOARDS.*

IESNA: LM 79-2008 ISSUE DATE: 10/31/14

TEST: GPRG4N1HOLED35OP.IES

TESTLAB: Photopia 3.2.6 see: www.ltioptics.com/ies MANUFAC: GAMMALUX LIGHTING SYSTEMS

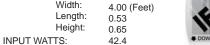
LUMCAT: GPRG4N-1HOLED35-4'

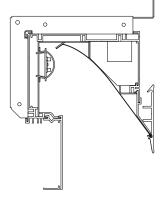
LAMP: LED 10.5W 73605 PLPG2-Lin-1100-835-289x19-DC @ 255mA

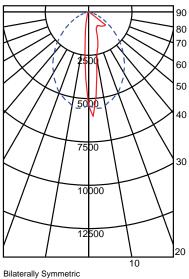
Summary Data

EFFICACY (Total): 86.6 LPW** EFFICACY (Uplight): 0.0 EFFICACY (Downlight): 86.6 CIE CLASSIFICATION: DIRECT

LUMINOUS OPENING: RECTANGULAR Width:







Solid: 180-0 Degrees Dashed: 90-270 Degrees

IES files were created using 3500 K boards. When using calculation programs, multiply lumen output or set correction factor to .92 for 2700K, .98 for 3000K, 1.04 for 4000K and 1.06 for 5000K boards. **Efficacy is a measure of lumens per watt, as delivered through the fixture aperture.





^{*} See performance notes, page 2.

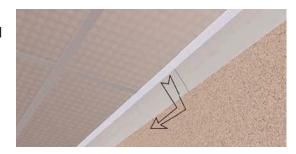


Perimeter Series GPRG4N-LED-OP

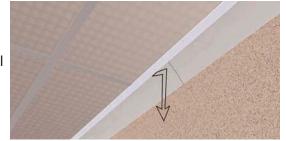
Recessed Perimeter Drywall or Grid Mounted Ceiling Level Grazing Direct Illumination

Illumination Options

A The Ambient illumination optic is designed to bounce light off the top of the wall, back out into occupied space. The reflector material is white high reflectance, low gloss painted. Reflectors are pre-installed in 4' increments. For the best ambient illumination effect, use no lamp barrier in the fixture.



G The Grazing illumination optic is designed to drive light directly down through the fixture aperture. The reflector material is high reflectance, semi specular aluminum. Reflectors are pre-installed in 4' increments. When Grazing illumination is being used on a flat wall where no shadows are desired, Gammalux recommends a level 5 wall finish. The Grazing illumination optic will highlight all inconsistencies in the wall surface.









Run Length

Specify fixtures in nominal run lengths. The level of detail required from the installing contractor is directly associated with the **LED Arrangement** selection:

Blank - Housings are built in custom lengths to create a perfect end-to-end installation of fixtures. However, the as-built field dimensions of the walls may not match the architect's designed dimensions exactly. Therefore, factory drawings will be produced showing the designed nominal run lengths and sent to the installing contractor for written verification or correction. Manufacturing of fixtures does not start until the final set of approved drawings (with field dimensions) comes back from the installing contractor. Dimensions must be measured at the wall height where the Wall Interface will be installed. Fixtures are built to exact length and have no field adjustment capability.

26'-8"						
8'-4"	10'	8'.4"				

T - Exact field dimensions are NOT required. Factory drawings will show the run of fixtures and telescoping module in such a configuration that the specified (nominal) run length is located as close as possible to the center of the telescoping fixture's range of adjustability. This eliminates the need for accurate field dimensions and allows for some construction variance in the field.

26'-8"								
	01	S'	4' TELESCOPIC					



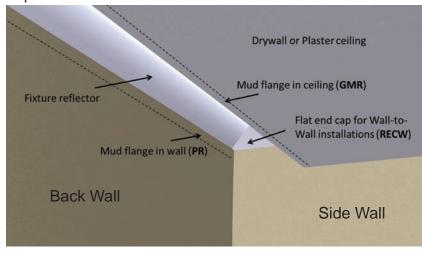




Perimeter Series Mounting Styles

Mounting style from page 1: RECW/PR/GMR

Fixture is recessed above the ceiling line and against a side wall (**RECW**). The exposed portion of the side wall above the ceiling line should be finished to match the rest of the wall. The Plaster Rail (**PR**) is positioned with mud ribs facing down, allowing it to be 'mudded' into the face of the back wall. The fixture bottom features a mud flange (**GMR**), allowing it to be 'mudded' into the drywall or plaster ceiling. Exact field dimensions are required.

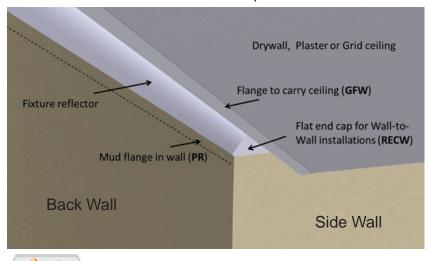


- PLASTER RAIL IS INSTALLED ONTO WALL BEFORE THE WALL IS FINISHED.
- PLASTER OR JOINT COMPOUND IS BLENDED DOWN THE WALL, EMBEDDING THE BOTTOM OF THE PLASTER RAIL INTO THE WALL.
- WALLS ARE FINISHED PER ARCHITECTURAL INSTRUCTIONS (SIDEWALL SHOULD BE FINISHED 4" ABOVE THE CEILING LINE AND 6" FROM THE BACK WALL).
- FIXTURE IS INSTALLED AND SUSPENDED FROM ABOVE.
- CEILING IS INSTALLED, FIXTURE BOTTOM FLANGE IS MUDDED OVER.
- FIXTURE IS MASKED AND CEILING IS FINISHED PER ARCHITECTURAL INSTRUCTIONS.

Perimeter Series Mounting Styles

Mounting style from page 1: REČW/PR/GFW

Fixture is recessed above the ceiling line and against a side wall (**RECW**). The exposed portion of the side wall above the ceiling line a telescoping end fixture may be required, resulting should be finished to match the rest of the wall. The Plaster Rail (**PR**) is positioned with mud ribs facing down, allowing it to be 'mudded' into the face of the back wall. The fixture bottom features a 1" flange (**GFW**), allowing it to rest under the ceiling material. Exact field dimesions are required.



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- PLASTER OR JOINT COMPOUND IS BLENDED DOWN THE WALL, EMBEDDING THE BOTTOM OF THE PLASTER RAIL INTO THE WALL.
- WALLS ARE FINISHED PER
 ARCHITECTURAL INSTRUCTIONS
 (SIDEWALL SHOULD BE FINISHED 4" ABOVE
 THE CEILING LINE AND 6" FROM THE
 BACK WALL).
- FIXTURE IS INSTALLED AND SUSPENDED FROM ABOVE.
- CEILING IS INSTALLED, FIXTURE BOTTOM FLANGE RESTS UNDER CEILING MATERIAL.
- FIXTURE IS MASKED AND CEILING IS FINISHED PER ARCHITECTURAL INSTRUCTIONS.



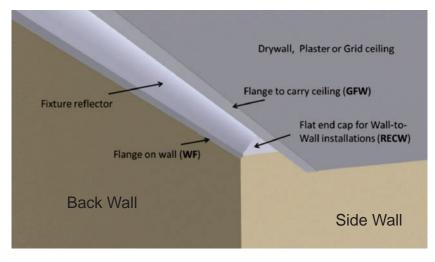




Perimeter Series Mounting Styles

Mounting style from page 1: RECW/WF/GFW

Fixture is recessed above the ceiling line and against a side wall (**RECW**). The exposed portion of the side wall above the ceiling line should be finished to match the rest of the wall. The Wall Flange (**WF**) is positioned with mud ribs facing up and not used. The flange is visible on the back wall. The fixture bottom features a 1" flange (**GFW**), allowing it to rest under the ceiling material. Exact field dimensions are required.

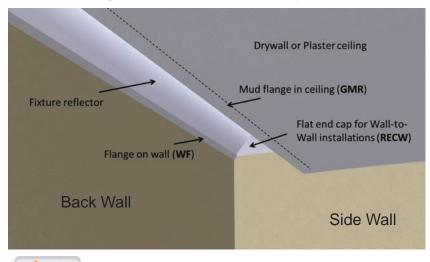


- WALLS ARE FINISHED PER ARCHITECTURAL INSTRUCTIONS.
 (SIDEWALL SHOULD BE FINISHED 4" ABOVE THE CEILING LINE AND 6" FROM THE BACK WALL).
- PLASTER RAIL IS INSTALLED ONTO WALL AFTER THE WALL IS FINISHED.
 MUD RIBS ARE FACING UP AND ARE NOT USED, PLASTER RAIL'S FLANGE IS VISIBLE ON THE BACK WALL.
- FIXTURE IS INSTALLED AND SUSPENDED FROM ABOVE.
- CEILING IS INSTALLED, FIXTURE'S BOTTOM FLANGE RESTS UNDER CEILING MATERIAL.
- IF NECESSARY, FIXTURE IS MASKED AND CEILING IS FINISHED PER ARCHITECTURAL INSTRUCTIONS.

Perimeter Series Mounting Styles

Mounting style from page 1: RECW/WF/GMR

Fixture is recessed above the ceiling line and against a side wall (**RECW**). The exposed portion of the side wall above the ceiling should be finished to match the rest of the wall. The Wall Flange (**WF**) is positioned with mud ribs facing up and not used. The flange is visible on the back wall. The fixture bottom features a mud flange (**GMR**), allowing it to be 'mudded' into the drywall or plaster ceiling. Exact field dimensions are required.



- WALLS ARE FINISHED PER
 ARCHITECTURAL INSTRUCTIONS.
 (SIDE WALL SHOULD BE FINISHED 4"
 ABOVE THE CEILING LINE AND 6" FROM THE BACK WALL).
- PLASTER RAIL IS INSTALLED ONTO WALL AFTER THE WALL IS FINISHED.
 MUD RIBS ARE FACING UP AND ARE NOT USED, PLASTER RAIL'S FLANGE IS VISIBLE ON THE BACK WALL.
- FIXTURE IS INSTALLED AND SUSPENDED FROM ABOVE.
- CEILING IS INSTALLED, FIXTURE'S BOTTOM FLANGE IS MUDDED OVER.
- FIXTURE IS MASKED AND CEILING IS FINISHED PER ARCHITECTURAL INSTRUCTIONS.





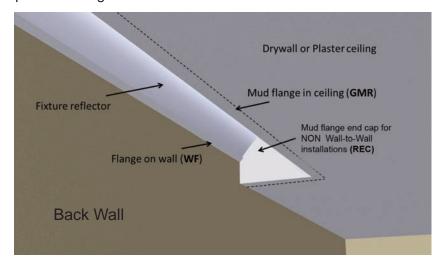




Perimeter Series Mounting Styles

Mounting style from page 1: REC/WF/GMR

Fixture is recessed above the ceiling line and IS NOT touching a side wall (**REC**). The Wall Flange (**WF**) is positioned with mud ribs facing up and not used. The flange is visible on the back wall. The fixture's bottom trim and end caps feature a mud flange (**GMR**), allowing them to be 'mudded' into the drywall or plaster ceiling.

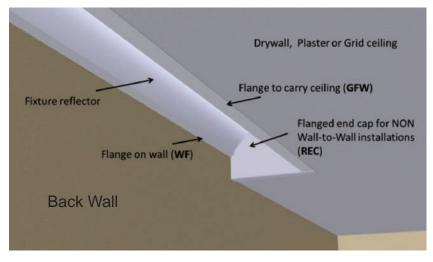


- WALLS ARE FINISHED PER ARCHITECTURAL INSTRUCTIONS.
- PLASTER RAIL IS INSTALLED ONTO WALL AFTER THE WALL IS FINISHED.
 MUD RIBS ARE FACING UP AND ARE NOT USED, PLASTER RAIL'S FLANGE IS VISIBLE ON THE BACK WALL.
- FIXTURE IS INSTALLED AND SUSPENDED FROM ABOVE.
- CEILING IS INSTALLED, FIXTURE'S BOTTOM FLANGE IS MUDDED OVER.
- FIXTURE IS MASKED AND CEILING IS FINISHED PER ARCHITECTURAL INSTRUCTIONS.

Perimeter Series Mounting Styles

Mounting style from page 1: REC/WF/GFW

Fixture is recessed above the ceiling line and IS NOT touching a side wall (**REC**). The Wall Flange (**WF**) is positioned with mud ribs facing up and not used. The plaster rail flange is visible on the back wall. The fixture's bottom trim and end caps feature a 1" flange (**GFW**), allowing them to rest under the ceiling material.



- WALLS ARE FINISHED PER ARCHITECTURAL INSTRUCTIONS.
- PLASTER RAIL IS INSTALLED ONTO WALL AFTER THE WALL IS FINISHED.
 MUD RIBS ARE FACING UP AND ARE NOT USED, PLASTER RAIL'S FLANGE IS VISIBLE ON THE BACK WALL.
- FIXTURE IS INSTALLED AND SUSPENDED FROM ABOVE.
- CEILING IS INSTALLED, FIXTURE'S BOTTOM FLANGE RESTS UNDER CEILING MATERIAL.
- IF NECESSARY, FIXTURE IS MASKED AND CEILING IS FINISHED PER ARCHITECTURAL INSTRUCTIONS.







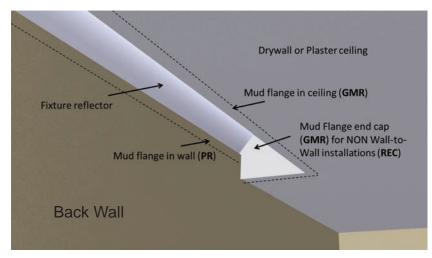




Perimeter Series Mounting Styles

Mounting style from page 1: REC/PR/GMR

Fixture is recessed above the ceiling line and IS NOT touching a side wall (**REC**). The Plaster Rail (**PR**) is positioned with mud ribs facing down, allowing it to be 'mudded' into the face of the back wall. The fixture bottom features a mud flange (**GMR**), allowing it to be 'mudded' into the drywall or plaster ceiling.

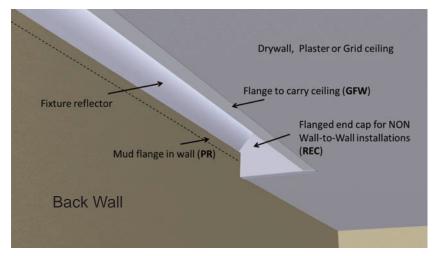


- PLASTER RAIL IS INSTALLED ONTO WALL BEFORE THE WALL IS FINISHED.
- FIXTURE IS ATTACHED TO PLASTER RAIL AND SUSPENDED FROM ABOVE.
- CEILING IS INSTALLED, FIXTURE IS MASKED.
- PLASTER OR JOINT COMPOUND IS BLENDED DOWN THE WALL, EMBEDDING THE BOTTOM OF THE PLASTER RAIL INTO THE WALL.
- CEILING MUD FLANGE IS COVERED BY PLASTER OR JOINT COMPOUND.
- WALLS AND CEILING ARE FINISHED PER ARCHITECTURAL INSTRUCTIONS.

Perimeter Series Mounting Styles

Mounting style from page 1: REC/PR/GFW

Fixture is recessed above the ceiling line and IS NOT touching a side wall (**REC**). The Plaster Rail (**PR**) is positioned with mud ribs facing down, allowing it to be 'mudded' into the face of the back wall. The fixture bottom features a 1" flange (**GFW**), allowing it to rest under the ceiling material.



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- FIXTURE IS ATTACHED TO PLASTER RAIL AND SUSPENDED FROM ABOVE.
- CEILING IS INSTALLED, FIXTURE IS MASKED.
- PLASTER OR JOINT COMPOUND IS BLENDED DOWN THE WALL, EMBEDDING THE BOTTOM OF THE PLASTER RAIL INTO THE WALL.
- WALLS AND CEILING ARE FINISHED PER ARCHITECTURAL INSTRUCTIONS.







Wall Interface

PR The Plaster Rail* is a patented invention of Gammalux Lighting Systems (U.S. Patent # 8,562,168). This extruded aluminum element allows for the fixtures to be mounted directly to the wall while eliminating the gaps that are created by putting a perfectly straight housing along a built wall that is slightly imperfect. Using appropriate fasteners and hitting studs where possible, the Plaster Rail should be shimmed for a straight installation on the wall before the mud ribs are covered with plaster or other compound which is then feathered down the wall. This corrects minor inconsistencies in the wall's straightness and provides a mechanism for the fixture's reflector assembly to join directly to the wall. This results in Total Architectural Integration, a perfectly straight and clean look at the ceiling line. Because imperfections in a flat wall will be illuminated, Gammalux recommends a Level 5 wall finish.



1) Plaster Rail is affixed to wall at a predetermined location prior to finishing.



2) Plaster or other compound is blended over the lower portion of the Rail and feathered down the wall, eliminating minor inconsistencies in wall straightness.



3) The wall is textured and finished. leaving a perfectly straight channel, ready to receive the fixture's reflector assembly.

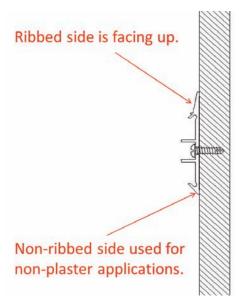


4) The run of fixtures and ceiling are installed. The fixture's reflector assembly snaps directly into the Plaster Rail just above the painted portion of the wall. Gaps between the fixtures and wall are eliminated, resulting in Total Architectural Integration.

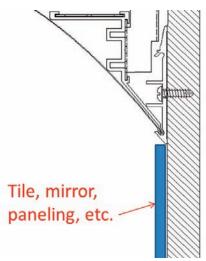


Wall Interface

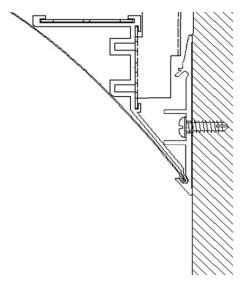
WF The Wall Flange is made of the same material as the Plaster Rail. In applications where the flange is NOT to be mudded into the wall, the mud ribs should be facing up and not used.



1) Wall Flange is installed with mud ribs facing up.



3) If required, materials can be added to wall and butted against the bottom of the Wall Flange. A bead of caulking or other filler material can be used to hide small gaps.



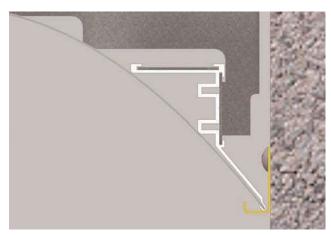
2) Fixture's reflector assembly is nested into groove in Wall Flange. Flange is visible on the wall.

Wall Interface

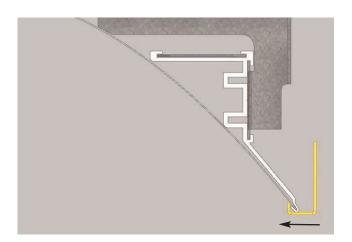
AT The Adjustment Trim is a supplemental flange that is affixed directly to the wall. It is flexible so that it can follow the unintentional inconsistencies of a built drywall construction wall. The Adjustment Trim eliminates the traditional gap found between most competitor fixtures and the wall.

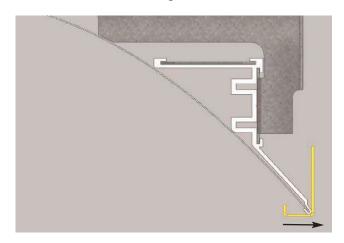


1) Adjustment Trim is added to the wall at a pre-determined height.

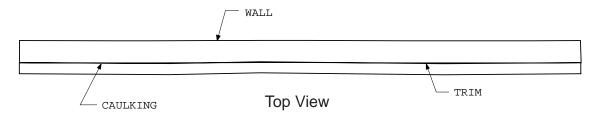


2) The bottom of the fixture's reflector assembly rests on the Adjustment Trim, providing 1/2" adjustability to allow for minor variances in wall straightness.





While this Adjustment Trim does accommodate for minor inconsistencies in wall straightness, it can not correct deep pits. In cases where there is a small gap created between the back of the Adjustment Trim and the wall, a thin bead of caulking or other compound should be used to fill in that gap.





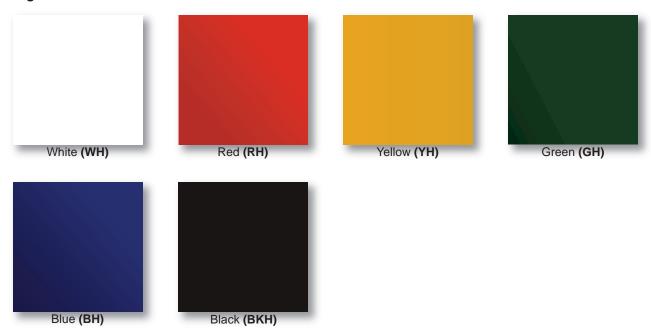


Standard Colors / Finishes

Due to variances in computer monitors and color printers, this page should be used for general reference only.

For a sheet of physical color samples, please consult factory.

High Gloss Finish



Semi Gloss Finish



Due to variances in computer monitors and color printers, this page should be used for general reference only.

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