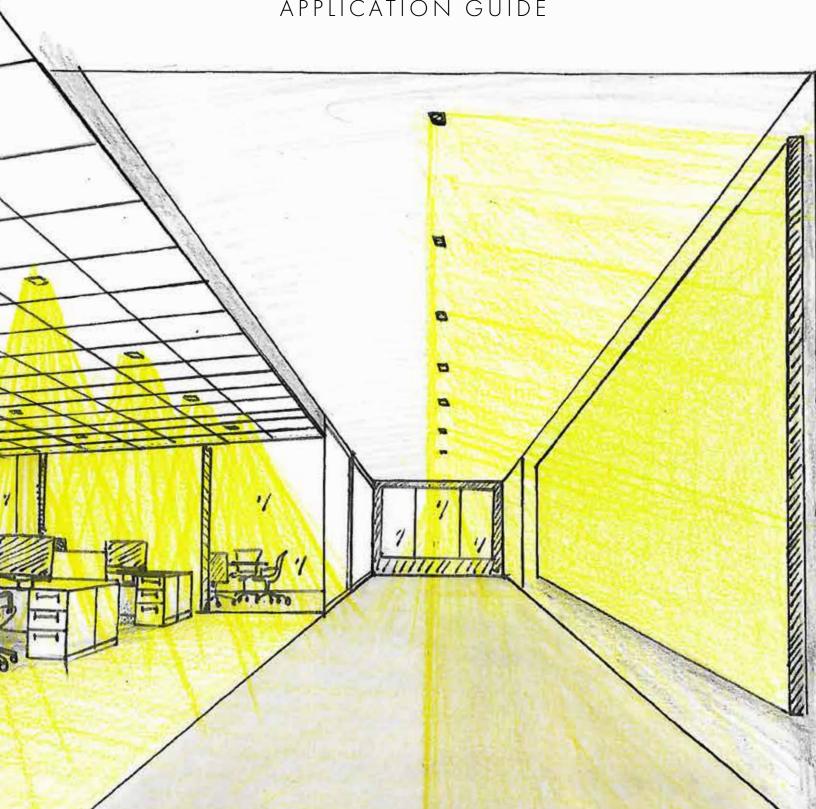
# **USAI** Lighting

# True Zero360®

APPLICATION GUIDE

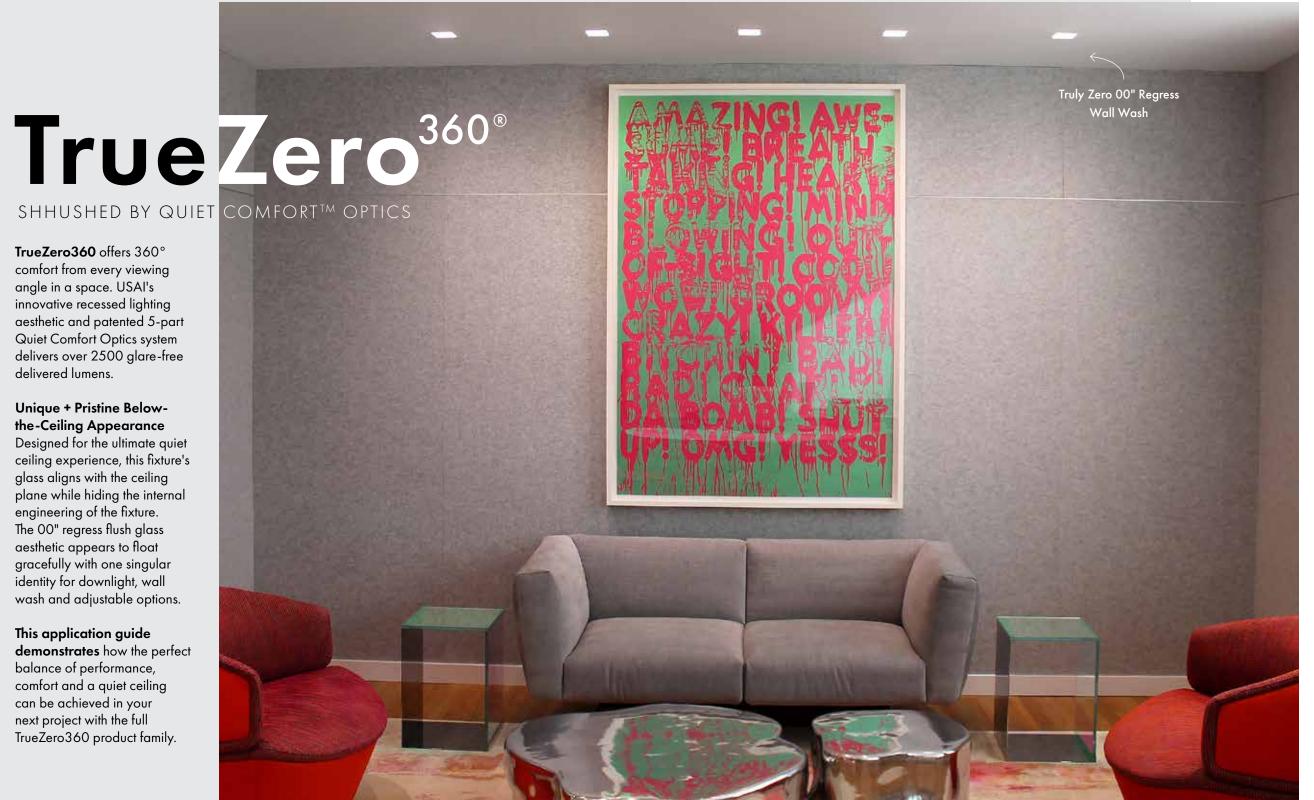


TrueZero360 offers 360° comfort from every viewing angle in a space. USAI's innovative recessed lighting aesthetic and patented 5-part Quiet Comfort Optics system delivers over 2500 glare-free delivered lumens.

#### Unique + Pristine Belowthe-Ceiling Appearance

Designed for the ultimate quiet ceiling experience, this fixture's glass aligns with the ceiling plane while hiding the internal engineering of the fixture. The 00" regress flush glass aesthetic appears to float gracefully with one singular identity for downlight, wall wash and adjustable options.

This application guide demonstrates how the perfect balance of performance, comfort and a quiet ceiling can be achieved in your next project with the full TrueZero360 product family.



### **Contents**

**Full Family** Platform

Optical **Features** 

Wall Wash

Downlight & Adjustable

Housing **Options** 

**Companion USAI** Products/FAQs

# FULL FAMILY PLATFORM



#### HIGH PERFORMANCE FEATURES AND SPECIFICATIONS

#### **APERTURE**

3"

#### SHAPE

Round and Square

#### **GLARE CONTROL**

Minimum UGR is Less than 1

#### WATTAGE

9W, 12W, 15W, 18W, 20W, 29W

#### **BEAM SPREADS**

25°, 30°, 35°, 45°, 55°, 60°, 65°, 70° + Wall Wash

#### **TRIM OPTIONS**

Round and Square: 00" Regress, Trimmed, Trimless, Millwork Square Only: 3/8" Regress, Trimmed, Trimless, Millwork

#### THE POWER

00" Regress up to 2400 Delivered Lumens 3/8" Regress up to **2550** Delivered Lumens

#### **HOUSING**

Flat, New Construction, Insulation Contact, Chicago Plenum Housing Options



Classic White®

2700K, 3000K, 3500K, 4000K, 80+ and 90+ CRI



Warm Glow<sup>®</sup> Dimming

2700K-2200K, 3000K - 2200K, 80+ and 90+ CRI



Color Select® Tunable White

6000K-2200K, Tunable White Light 80+ CRI 4800K-2700K, Tunable White Light 90+ CRI



Infinite Color+®

Dynamic Color + White, 1600K-12,000K



IBEW Union Made



Meets WELL **Building Standards** 



Options

Dry, Damp,

Wet Locations



Warranty

NRTL/CSA-US Listed

### Flush & Regress **Glass Trims** with Advanced Glare Control

#### **Design Features**

- Flush Glass Design for Quiet Ceilings 24/7, Lights On or Off
- Glass aligns with ceiling plane seamless, clean monolithic ceiling.
- Lights On provides a slight glow/ Lights Off glass completes the ceiling with no black holes.
- Shared Below-the Ceiling Appearance across fixture functions downlight, wall wash and adjustable
- Straight Baffle Sides for low brightness and smooth beam control.
- Finish Options to match any interior aesthetic black, white, or white + black finish

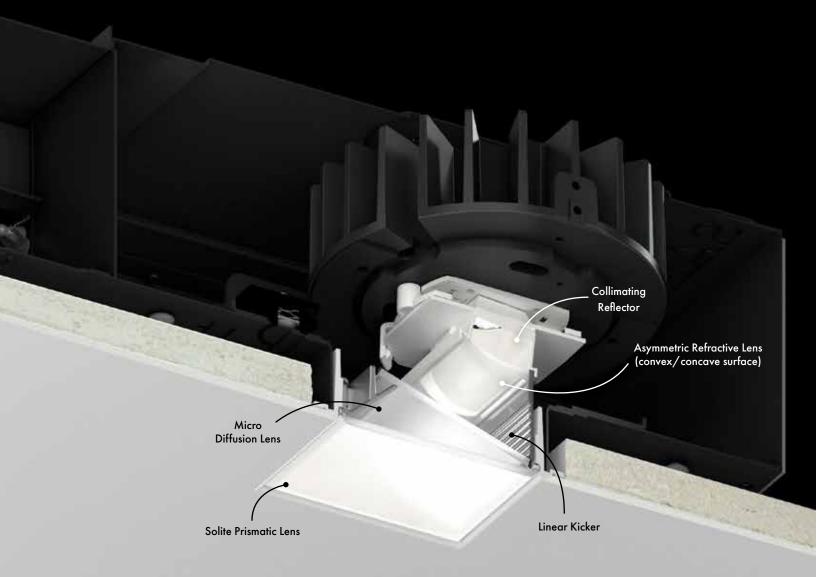
	Trim Style	Downlight, Adjustable	Wall Wash
Round	00" Regress Trimless or Millwork		
Ro	00" Regress Trimmed	0	
Square	00" Regress Trimless or Millwork		
	00" Regress Trimmed		
	<sup>3</sup> / <sub>8</sub> " Regress Trimless or Millwork		
	³/8″ Regress Trimmed		

# OPTICAL FEATURES

# Quiet Comfort™ Optics

**USAI invested** in a very deliberate use of optics and engineering to place light where you want it. The **TrueZero360**® light fixture was designed with a lofty vision to reach specific high-achieving performance goals. Through a great deal of research and development, USAI created a 5-part patented optical system to deliver that result – **Quiet Comfort Optics**.

Our innovative reflector and lens combination keeps the light focused and framed into a beam to prevent scatter and unwanted brightness from bouncing back into the space. This reduces glare, backlight, and maintains a subtle luminance on the lens face so that the entire assembly disappears into the light. The **TrueZero360** wall wash fixture boasts superior application efficiency, with over **82% of light output** illuminating the wall. Downlight optics are provided with an inner baffle to control glare.



### **Experience All The Color Possibilities**

USAI Lighting engineers are the trailblazers who innovated new possibilities and tools that were never before available – offering white color temperatures ranging from 2200K to 6000K. These patented technologies offer design opportunities only limited by the imagination and include, Classic White®, Color Select®, Warm Glow® Dimming, and Infinite Color+®.



#### Classic White®

2700K, 3000K, 3500K, 4000K, 80+ and 90+ CRI









2700K

3000K

3500K

4000K



#### Warm Glow<sup>®</sup> Dimming

2700K-2200K, 3000K - 2200K, 80+ and 90+ CRI







100% INTENSITY AT 3000K

45% INTENSITY AT 2700K

18% INTENSITY AT 2200K



#### Color Select® Tunable White

6000K-2200K, Tunable White Light 80+ CRI, 4800K-2700K, Tunable White Light 90+ CRI







3600K, 80% INTENSITY

4800K, 70% INTENSITY

2400K, 50% INTENSITY



#### Infinite Color+®

Dynamic Color + White, 1600K-12,000K







FULL DYNAMIC COLOR

VIOLET ENERGY

NEUTRAL LOUNGE

# WALL WASH



round and square

# INCREASED EFFICIENCY

**82**%

Light on the wall, eliminates backlight and scatter providing minimal waste and more light on the wall.

# EVEN LIGHT DISTRIBUTION

Lights evenly from top to bottom.

# EXPANDED USABILITY RANGE

Place fixture as close as 12"

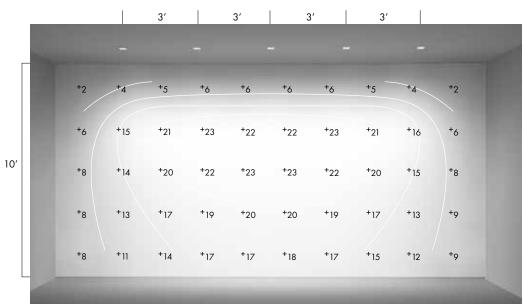
to the wall without compromising performance no puddles of light.

# DESIGNED FOR COMFORT

Occupants can walk, sit or work under this wall wash with extraordinary visual comfort + minimum glare.

### **Vertical Illumination**





**Vertical light** makes spaces feel bright and inviting. The **TrueZero360** wall wash is superior when it comes to applying light to walls. Place fixtures 3' apart and 3' off the wall in this 10' ceiling height space to achieve beautiful uniformity without backlight, scatter, or spilling light onto neighboring areas.

# Limitless Application Possibilities.

Explore the endless potential with TrueZero360® Wall Wash. Here is one example.

#### Wall Wash for 6' Wide Corridors

Clearly illuminate corridors for navigation and promote wayfinding with light. In this typical 6' wide corridor, the **TrueZero360 Wall Wash** is aimed at the opposite wall to emphasize the vertical plane and create a sense of spaciousness. Additionally, the light on this wall provides indirect lighting on the floor, ensuring safe and comfortable transitions from space-to-space.





Wall Wash

FIXTURE SPEC: Z3SWL-00-20L3-35KS-W4-SD4

WATTAGE: 20W

COLOR TEMPERATURE: 3500K, 80+ CRI
DELIVERED LIGHT: 1023 Lumens

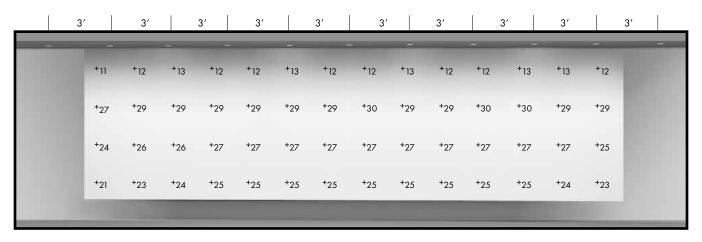
EFFICIENCY: 50 Lumens/Watt



#### **Fixture Location Flexibility**

In the application shown below, we demonstrate that the **TrueZero360 Wall Wash** can be spaced 3' on center in a 9'ceiling to achieve well above the 10 fc on the floor that the IES recommends for light levels in a corridor. Even when the wall wash fixtures are installed as close as 12" away from the wall, the light will still illuminate the wall evenly from top to bottom, whereas other fixtures may create bright spots. The suggested distance is 24" -36" away from the wall for 8' to 12' walls.

#### **ELEVATION VIEW**



#### LIGHTING INTENSITY

Avg On Artwork: 21.4 FC Max/Min On Wall: 4.7

Avg On Floor: 32.8 FC Max/Min On Floor: 3

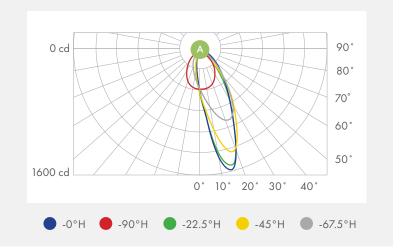
**NOTE:** Light level calculations reflectance values use standard 20% for floors, 50% for walls, and 80% for ceilings.

#### **CORRIDOR DIMENSION:**

6'W x 40'L x 9'H Wall Offset: 3'

#### Wall Wash Distribution

The TrueZero360 Wall Wash features USAI's Quiet Comfort Optics, a patented 5-part optical system with superior task efficiency that delivers over 82% of all light emitted by the fixture onto the wall. The result is supremely efficient vertical lighting with minimal backlight and scatter.



# DOWNLIGHT & ADJUSTABLE

The Perfect Product for Accents and Highlights



#### The Ultimate Lighting Design Flexibility

round and square

362°

Lockable Rotation to highlight art and decorative objects.

25° – 60°

Field Interchangeable Optics/Beam Spreads for on-site adjustments. Up to **40°**Lockable Tilt to aim, lock and light.

# Downlight & Adjustable with Superior Glare Control

#### OVER 2500 DELIVERED LUMENS

#### HIGH PERFORMANCE

Delivers as much light as larger fixtures with superior optical design



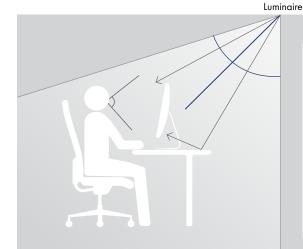
#### **QUIET CEILINGS**

Minimal glare and scatter re-establishes the texture in a space and provides comfort at all angles.



#### MODERN LIGHTING

Upgrade your space with seamless ceilings and a clean trim aesthetic



ı	JGR	Discomfort Glare Criterion	
	1	TrueZero360 Lowest UGR!	
	10	Imperceptible	
	13	Just Perceptible	
	16	Perceptible	
	19	Acceptable	
	22	Unacceptable	
	25	Just Uncomfortable	
	28	Uncomfortable	

**TrueZero360** downlights provide excellent general illumination while minimizing brightness and maximizing visual comfort. USAI can provide UGR values for every specification and help projects meet LEED(<19) and WELL(<19) requirements for glare control.

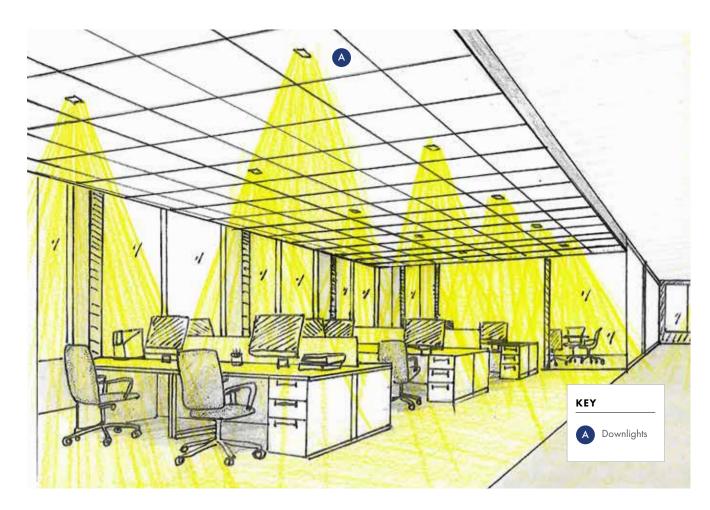
11 usailighting.com

# Limitless Application Possibilities.

Experience the versatility of TrueZero360® Downlights and Adjustables—starting with this example.

#### **Downlights for 8' High Open Office Ceilings**

Light up open office spaces for focus, collaboration, and work. By installing the  $^3/8''$  Regress fixture with a 6' x 6' spacing in an 8' high ceiling, we achieve the average recommended light levels on all surfaces with an outstanding low glare score.



#### LAYER A SPECIFICATION:

Downlight

FIXTURE SPEC: Z3SDF-38-20L3-35KS-60-S-BW

BEAM ANGLE: 60° WATTAGE: 20W

COLOR TEMPERATURE: 3500K, 80+ CRI
DELIVERED LIGHT: 1565 Lumens

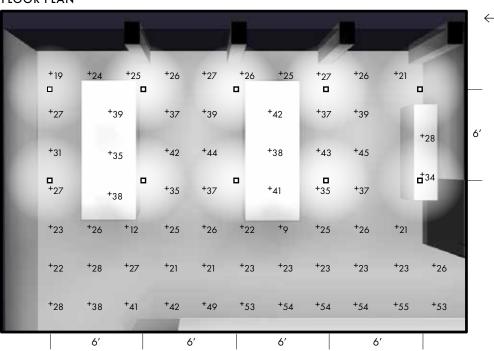
EFFICIENCY: 76 Lumens
GLARE (UGR): 16.9



#### **Excellent Power With Minimal Glare**

Below we show a plan view of the lighting calculation for the open office. Here we can demonstrate that the **TrueZero360** downlight can deliver 44 foot candles on the work-plane and over 20 foot candles on the floor when installed in a 8' high ceiling and spaced 6' apart. These light levels meet IES recommendations and provide plenty of illumination for computer work, reading, writing and more – making for a productive and comfortable workplace.

#### FLOOR PLAN



#### ← LIGHTING INTENSITY

Avg On Floor: 37.8 FC Max/Min On Floor: 3

Avg On Desk: 29.25 FC Max/Min On Desk: 1.3

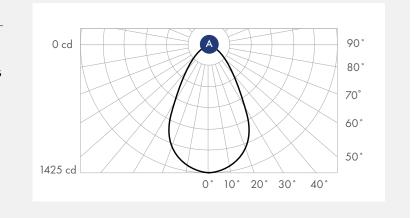
ROOM DIMENSION: 15'W x 30'L x 8'H

TABLE DIMENSION: 4'W x 10'L x 2'-6"H

NOTE: Light level calculations reflectance values use standard 20% for floors, 50% for walls, and 80% for ceilings.

#### 60° Beam Distribution

The 60° beam distribution specified with **TrueZero360** provides a smooth and even illuminance on the work-plane and floor, with excellent uniformity.



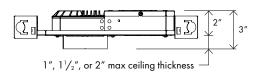
# True Zero<sup>360®</sup>

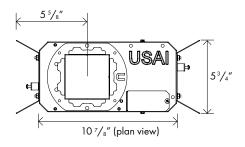
#### SMALLEST HOUSING OPTION DETAILS

#### **DOWNLIGHT**

Flat Housing - FT

IC and CP rated housing options available

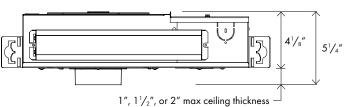




#### **ADJUSTABLE**

Flat Adjustable Housing - FTA2

IC and CP rated housing options available



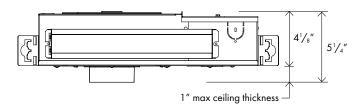
101/8"

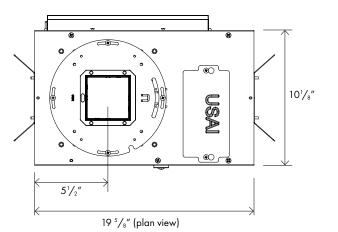
 $16^{1}/_{2}''$  (plan view)

#### WALL WASH

Flat Glass Housing - FG

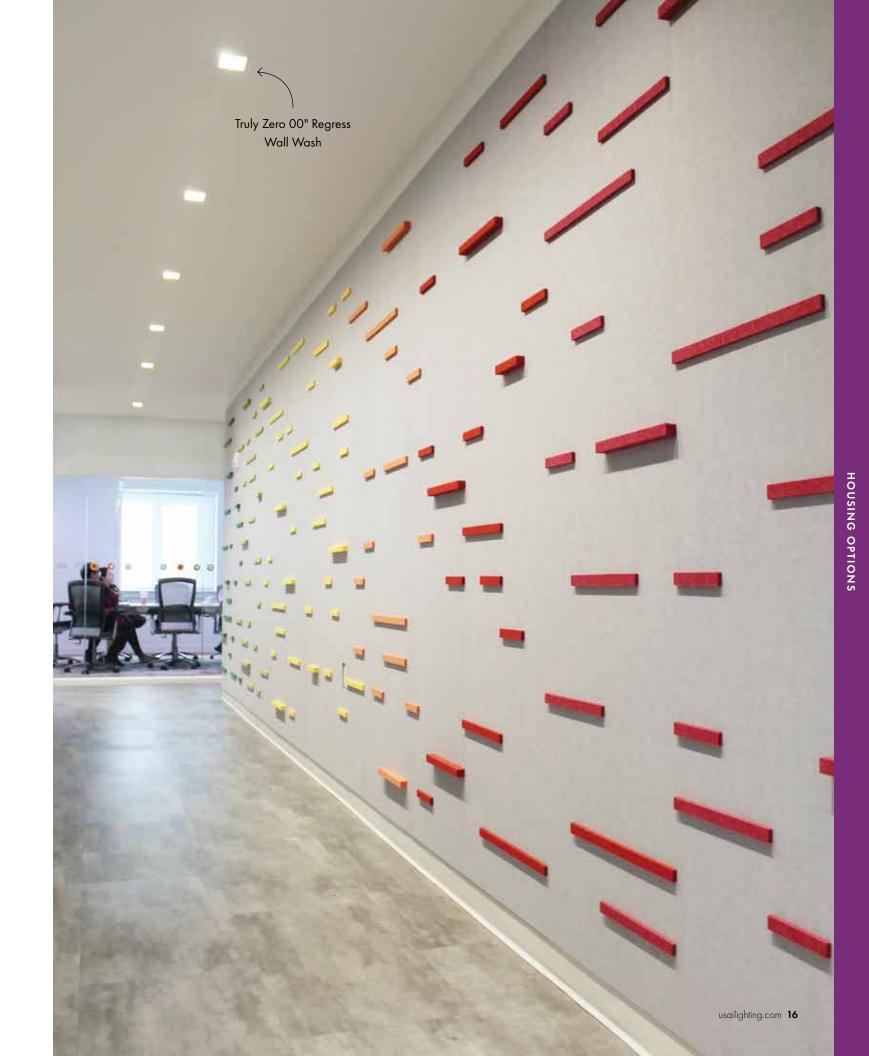
IC and CP rated housing options available







TIP: Use USAI's orange gasketed spackle cover (provided for trimless fixtures) to create cleaner edges during sheetrock ceiling fixture installations. Once dry, the cover can be easily removed before the trim is inserted.



# RELATED PRODUCTS FAQS

### **Companion USAI Products**

USAI Lighting believes in the power of innovating for small, whether it is housings, recessed downlights, or surface mounts and pendants. Mix and match **TrueZero360®** with other USAI high-performance product ranges. Each product has its own set of capabilities with full family offerings to address every design requirement with the greatest flexibility from space-to-space.

#### SHALLOW HOUSINGS

#### **RECESSED DOWNLIGHTS**



the LittleTwos® Flex Driver Case 2" aperture



BeveLED Mini® Complete Flat Housing 3" aperture



BeveLED Mini® Pancake SuperFlat Adjustable Housing 3" aperture



# SURFACE MOUNTED + PENDANTS



Micro Multi-Cell Pendant 1.25" cells



the LittleTwos® Cylinder
2"



BeveLED Mini® Cylinder 3.5"

# **FAQs**

# Q: How can I choose between the flat glass version and the regressed lens?

A: The True Zero flat glass (00" regress) aligns with the ceiling plane which creates a seamless, minimalistic below-ceiling appearance. Also, the flat glass option is aesthetically identical between downlight, adjustable and wall wash, which helps maintain visual consistency in the ceiling even when the light fixture functions may be different. When the lights are off, the True Zero 00" regress keeps a uniform, monolithic surface. This trim is available with a white or black edge detail for smooth integration with light and dark ceilings.

The 3/8" regress lens trim with black baffle finish provides the lowest glare rating available. The below ceiling appearance of this trim style is closer to that of a traditional downlight, while still providing all the performance and benefits of the Quiet Comfort<sup>TM</sup> Optics optical system. The white baffle finish is brighter and can provide the highest light levels possible.

# Q: What design challenges can this fixture help resolve?

A: The Quiet Comfort Optics for the wall wash optical system is extremely forgiving. For an odd geometry like a soffit, you will be able to mount the fixture as close as 12 inches away from the wall. The downlights can provide highly efficient light levels with flexibility in fixture placement and low to no glare. In finished installations, the full TrueZero360 family forms a flat and seamless ceiling plane with a modern aesthetic.

# Q: Can the trim be painted to match the ceiling finish color?

A: True Zero trims are available with white and black edge details for seamless integration with both light and dark ceilings. In the case of trimless fixtures, there is no flange, so no painting to match is necessary. For trimmed and millwork fixtures, the flange edge can be field painted if needed.

USAI cannot warranty field painted finishes.

# Q: Which control systems are compatible with TrueZero360?

A: As with all USAI Lighting products, TrueZero360 is compatible with every major architectural control system you could choose to use, including 0 - 10V low voltage dimming, line voltage phase dimming, and digital dimming protocols such as DMX and DALI.

# Q: Can I place TrueZero360 in wet locations such as showers and outdoor covered spaces?

A: Yes! The TrueZero360 family is UL dry/damp/wet location rated and can be installed outdoors under covered ceilings.

### Q: Can I change the TrueZero360 LED color and beam spread from below?

A: Yes! Optics, LEDs and dimming drivers are field interchangeable. If a change is desired in any of these components, USAI's engineering has made this access easy and painless.

# Q: Can I use TrueZero360 to meet my project's code requirements?

A: Yes! As with all USAI Lighting fixtures, this product family is NRTL/CSA-US tested to UL standards and IBEW union made. TrueZero360 is rated for use in steam rooms and saunas, up to 15W maximum, and is UL2043 rated for use in air handling plenums. We offer many Airtight housing options, as well as Insulation Contact and Chicago Plenum rated housings. TrueZero360 can be used to meet Title 24, JA8 Certified, LEED and WELL Building requirements. Certain configurations of USAI Lighting products can be manufactured to comply with requirements for federally funded infrastructure projects. For more information,

visit <u>usailighting.com/</u> <u>buy-american</u>

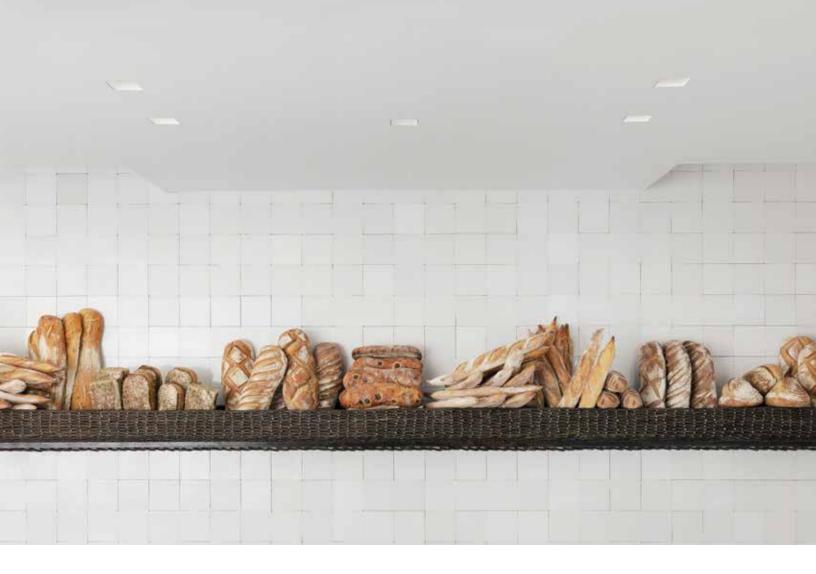
If your project requires something else not listed here, please contact us!



**SCAN** to contact us.

# True Zero360®

TRULY QUIET BELOW-CEILING APPEARANCE





CALL, EMAIL, OR VISIT USAILIGHTING.COM TO LEARN MORE

USAI LIGHTING HEADQUARTERS 1126 RIVER ROAD NEW WINDSOR, NY 12553 (845) 565-8500

INFO@USAILIGHTING.COM

©2025 USAI, LLC. All rights reserved.
USAI, the LittleTwos are trademarked. TrueZero360,
Pancake, BabyLED, BeveLED, BeveLED Mini,
the LittleOnes, Zepto, SliverLED, Classic White,
Warm Glow, Color Select and Infinite Color+ are
registered trademarks of USAI LLC. All designs
protected by copyright. Covered by US Patents.
Patents pending CA-159.