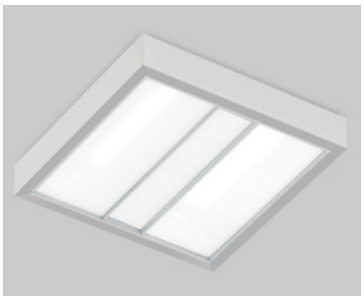
NOVA 2x2

SURFACE

LUMENWERX
WWW.LUMENWERX.COM



Shown with a Nova flat lens

Shown with a Nova Slope lens

PROJECT: _____

_____

_____

APPROVED BY: _____

SIGNATURE: _____

TYPE	QTY

DESCRIPTION

Nova is an efficient architectural LED troffer with a distinctive luminous shielding that distributes gentle brightness from the sides of its central optical element. Using advanced LED engines, Nova provides highly efficient illumination and offers comprehensive ceiling, electrical, and controls options in 2x2, 1x4, and 2x4 sizes. Nova is available with both Flat and Slope side diffusers.
See separate spec sheets for other available mountings.

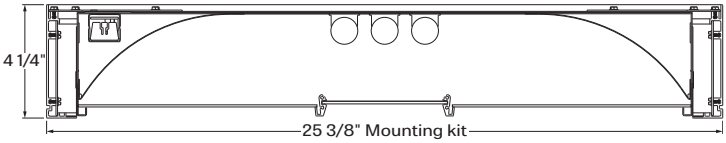
ORDER GUIDE

	22	PMO	HLO			
LUMINAIRE ID	**SIZE**	**CENTER OPTICS**	**SIDE OPTICS**	**LIGHT SOURCE**	**NUMBER OF LAMPS**	**VOLTAGE**
NOVSF - nova surface flat **NOVSS** - nova surface slope	**22** - 2'x2'	**PMO** - Precision Micro-Prism Optic	**HLO** - High-Efficiency Lambertian Optic	**T5** - T5 lamp **T5HO** - T5HO lamp **T8** - T8 lamp	**1** - 1 lamp **2** - 2 lamps **3** - 3 lamps	**120** - 120V **277** - 277V **UNV** - 120V-277V **347** - 347V (not available with Lutron)

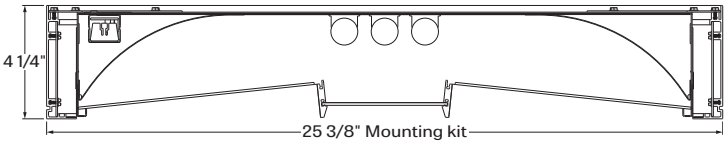
		SUR			
BALLAST	**ELECTRICAL**	**MOUNTING**	**FINISH**	**CONTROLS**	**OPTIONS**
RS - rapid start **D** - dimming 0-10V **ST** - step dimming **DA** - dali **LHL** - Lutron Hi-Lume 3D **LEH** - Lutron EcoSystem H	**1** - 1 circuit **2** - 2 circuits **EM** - emergency light circuit **NL** - night light circuit **+EB** - emergency battery pack **+GTD###** - generator transfer device, 120V or 277V	**SUR** - surface mount kit	**W** - matte white **CF#** - custom finish specify RAL#	INDIVIDUAL CONTROLS **OMS** - Onboard Occupancy **ODS** - Onboard Daylight **OCS** - Onboard Occupancy & Daylight GROUPED CONTROLS **LSC** - Local system **NSC** - Network system	**FU** - fuse **CU** - custom

See page 4 for ordering code detailed information

CROSS SECTION



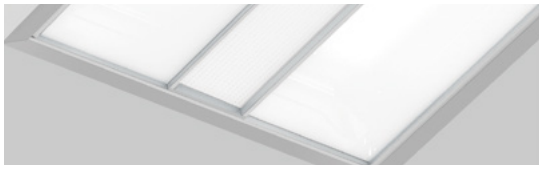
NOVSF - nova flat surface mount kit



NOVSS - nova slope surface mount kit

OPTICS

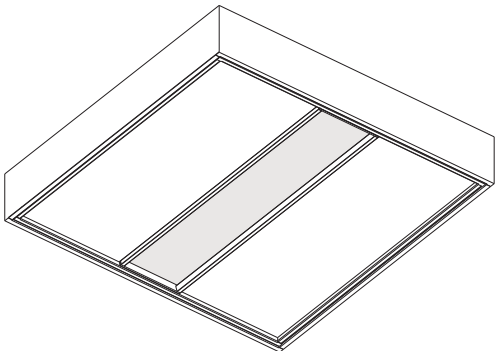
NOVSS - nova slope



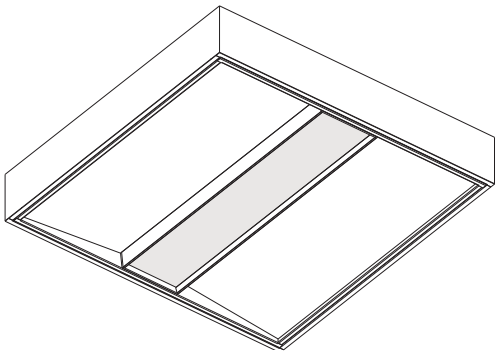
NOVSF - nova flat

Intertek

NOVA FLAT

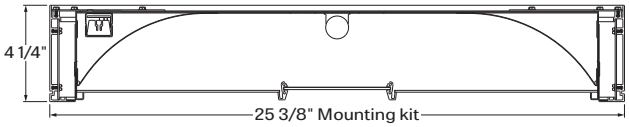


NOVA SLOPE

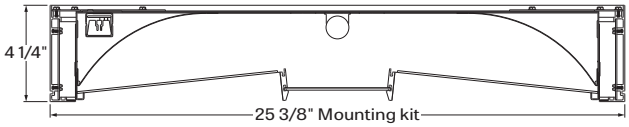


1 LAMP

☐ **NOVA FLAT** - SUR surface

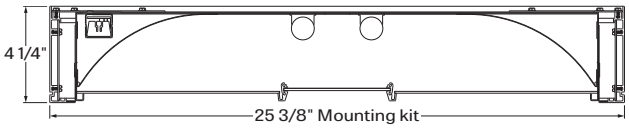


☐ **NOVA SLOPE** - SUR surface

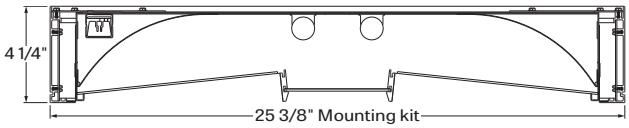


2 LAMPS

☐ **NOVA FLAT** - SUR surface

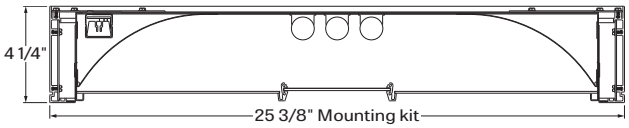


☐ **NOVA SLOPE** - SUR surface

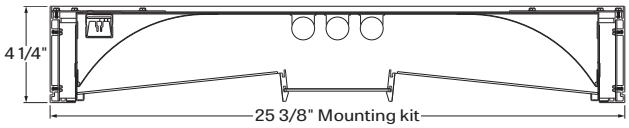


3 LAMPS

☐ **NOVA FLAT** - SUR surface



☐ **NOVA SLOPE** - SUR surface



ELECTRICAL CIRCUITS

☐ **RAPID START -**
1 Circuit

1 CIRCUIT	BLK	HOT (CIRCUIT-1)
	WHT	NEUTRAL (CIRCUIT -1)
	GRN	GROUND

☐ **RAPID START -**
1 Circuit + Emergency Battery

1 CIRCUIT+EB	BLK	HOT (CIRCUIT-1)
	WHT	NEUTRAL (CIRCUIT -1)
	GRN	GROUND (CIRCUIT-1)
	RED	UNSWITCHED HOT

☐ **RAPID START -**
1 Circuit + Emergency Circuit

1 CIRCUIT	BLK	HOT (CIRCUIT-1)
	WHT	NEUTRAL (CIRCUIT -1)
	GRN	GROUND (CIRCUIT-1)
EM	ORG	HOT (EM)
	WHT	NEUTRAL (EM)
	GRN	GROUND (EM)

NOTE: USE SEPARATE RACEWAY IN THE FIXTURE FOR EMERGENCY CIRCUIT

☐ **RAPID START -**
2 Circuits

2 CIRCUITS	BLK	HOT (CIRCUIT-1)
	WHT	NEUTRAL (CIRCUIT -1)
	GRN	GROUND (CIRCUIT-1)
	RED	HOT (CIRCUIT-2)

☐ **DIMMING 0-10V -**
1 Circuit

1 CIRCUIT	BLK	HOT (CIRCUIT-1)
	WHT	NEUTRAL (CIRCUIT -1)
	GRN	GROUND
	PPL	DIM(+) 0-10V
	GRY	DIM(-) 0-10V

NOTE: MUST FOLLOW WIRE SIZE AND MAXIMUM LENGTH FOR DIMMING APPLICATIONS.

☐ **DIMMING 0-10V -**
1 Circuit + Emergency Battery

1 CIRCUIT+EB	BLK	HOT (CIRCUIT-1)
	WHT	NEUTRAL (CIRCUIT -1)
	GRN	GROUND
	RED	UNSWITCHED HOT
	PPL	DIM(+) 0-10V
	GRY	DIM(-) 0-10V

NOTE: MUST FOLLOW WIRE SIZE AND MAXIMUM LENGTH FOR DIMMING APPLICATIONS.

☐ **LUTRON Hi-Lume 3D -**
1 Circuit

1 CIRCUIT	BLK	HOT
	WHT	NEUTRAL
	GRN	GROUND
	ORG	HOT DIMMING
	PPL	E1 To EcoSystem Digital Link
	GRY	E2

NOTE: MUST FOLLOW WIRE SIZE AND MAXIMUM LENGTH FOR DIMMING APPLICATIONS.

☐ **LUTRON Hi-Lume 3D -**
1 Circuit+ Emergency Battery

1 CIRCUIT+EB	BLK	HOT
	WHT	NEUTRAL
	GRN	GROUND
	ORG	HOT DIMMING
	RED	UNSWITCHED HOT
ECOSYSTEM	PPL	E1 To EcoSystem Digital Link
	GRY	E2

NOTE: MUST FOLLOW WIRE SIZE AND MAXIMUM LENGTH FOR DIMMING APPLICATIONS.

☐ **LUTRON ECOSYSTEM H -**
1 Circuit

1 CIRCUIT	BLK	HOT
	WHT	NEUTRAL
	GRN	GROUND
	PPL	E1 To EcoSystem Digital Link
	GRY	E2

NOTE: MUST FOLLOW WIRE SIZE AND MAXIMUM LENGTH FOR DIMMING APPLICATIONS.

☐ **LUTRON ECOSYSTEM H -**
1 Circuit + Emergency Battery

1 CIRCUIT+EB	BLK	HOT
	WHT	NEUTRAL
	GRN	GROUND
	RED	UNSWITCHED HOT
	PPL	E1 To EcoSystem Digital Link
	GRY	E2

NOTE: MUST FOLLOW WIRE SIZE AND MAXIMUM LENGTH FOR DIMMING APPLICATIONS.

OPTICS

CENTER LENS - PRECISION MICRO-PRISM-OPTIC (PMO) - utilizes a specially designed catadioptric lens that combines refraction and internal reflection. The square-base prism is 24% the size of those used in a high-performance fluorescent lens. The exclusive two-dimensional array of prisms is designed to eliminate the glare found at higher viewing angles and as such, enables a glare cut-off at a 45° viewing angle.
The acrylic material itself is untinted, relying entirely on catadioptric control for effective source obscuration. A highly efficient TIR process at the acrylic-air interface on the prism surfaces redirects incident light with less than a 0.1% loss per reflection. As a result, these LumenWerx optics attain a high optical efficiency greater than 90%, while maintaining visual comfort at normal viewing angles and presenting a pleasing luminous appearance.

SIDE LENS - HIGH EFFICIENCY LAMBERTIAN OPTIC (HLO) - shielding of diffusing 0.075" thick acrylic with up to 88% transmission and good source obscuration.

ELECTRICAL

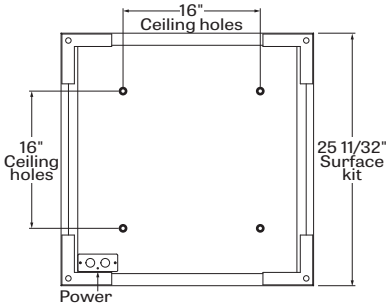
Universal input voltages with multiple control schemes offered. Consult factory for availability.

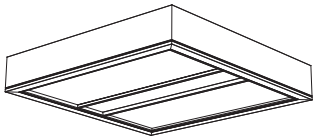
EMERGENCY

Factory installed long life high temperature recyclable Ni-Cad battery pack with test switch and charge indicator, minimum of 90 minutes operation. Recharge time of 24 hours.

MOUNTING OPTIONS

A separate kit for mounting fixtures directly to the ceiling surface. Kit is compatible with T-Bar, hard surface and drywall ceilings.





SUR - surface mount kit

FINISH

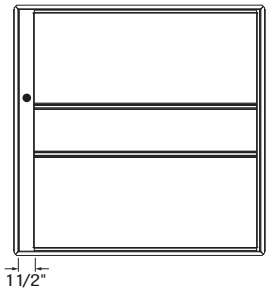
Interior reflectors - 95% reflective, matte white powder coating
Exterior - matte white powder coating.
Custom finish is also available.

CONTROLS

LumenWerx offers several options for integrating occupancy and daylight controls. Whether a sensors control its own fixture or is part of a group of fixtures, lights can be automatically controlled according to different energy saving strategies.
With **individual Controls**, an on-board sensor controls the fixture in which it is installed. Depending on the length, more than one sensor may be necessary and may control the entire fixture, or just a section.
With **Grouped Controls**, on-board or remote sensor are part of a either a local or network sensor infrastructure. It's possible to scale the controls, from a switch to a fixture setup, to a room or a whole building Occupancy and or daylight harvesting.

INDIVIDUAL CONTROLS

Individual controls are integrated into the fixture and are therefore easy to use and allow for a cleaner looking space as no ceiling or wall-mounted sensors are required. Individual controls can be one of three types (**OMS**) Occupancy, (**ODS**) Daylight Harvesting (Photocell), or (**OCS**) combined occupancy and daylight harvesting. These controls will be installed with factory settings, but most offer field adjustability with regular tools or manufacturer supplied configuration tools.



Location of an Onboard control

GROUPED CONTROLS

Local systems permit added flexibility and interconnectivity. Each fixture can now become part of a group of fixtures and be controlled by On-Board or remote sensors as well as wireless switches or controllers. With this architecture, it is now possible to have fewer fixtures with On-Board sensor which control all of the fixtures of the lighting zone. In order to have grouped controls programmed in factory, it is required that a floor layout with requested grouping and functionality be supplied. Field commissioning is also possible but must be requested and discussed before final Purchase Order is placed.

Network Controls, Lumenwerx fixtures are compatible with most popular BMS integration protocols such as DALI, DMX, EnOcean, BACnet, Enlighted and Lutron Ecosystem just to name a few. Field commissioning is usually required and details must be discussed before final Purchase Order is placed.
Please contact our controls department at controls@lumenwerx.com for further assistance.

CONSTRUCTION

Housing - Die formed cold rolled sheet steel 20 gauge thick, matte white powder coating.
Reflectors - Cold rolled steel 0.030" thick precisely die formed, 95% reflective matte white painted.
Interior brackets - Die formed cold rolled sheet steel 20 gauge thick.
Center basket - Extruded Aluminum 0.07" nominal, matte white and lens made in clear PMMA precisely formed into optical micro-structures forms.
Side lenses - Frost impact acrylic lens 88% transmissive.
Surface kit - Extruded Aluminum 0.07" nominal, matte white or aluminum powder coating. Custom finishes are also available.

WEIGHT

Nova 2x2: 16.52lbs.+5.51lbs. - 7.5kg+2.5kg

CERTIFICATIONS

ETL - Rated for Indoor Dry/Damp locations. Conforms to UL Standard 1598 and certified to CAN/CSA Standard C22.2 No. 250.0.