

# ESTIMATOR AND CONTRACTOR GUIDE



Finelite continues to set standards in the industry for easy-to-install lighting systems and complete project support. From design through implementation, Finelite embraces every detail to make your project successful.

## Planning

Whether through a traditional design team approach or design-build, Finelite will assist throughout the process to be the #1 performing supplier.

## Service

Finelite dedicates an account manager to ensure that you receive reliable service of the highest quality.

## Accuracy

Many Finelite innovations shorten installation time. Make accurate estimates using independently verified installation times.

## Affordability

Finelite will work with you to select a luminaire and layout.

## Sustainability

Using Finelite dramatically reduces material and labor requirements, saving money and time.

# FINELITE CREATES MORE VALUE



## Installation

With over 45,000 projects and up to 30,000 linear feet per project, Finelite has solved nearly every type of installation challenge.

## Design

Let Finelite be your extension of staff. Our qualified LC-credentialed applications engineering staff can provide complete layouts and technical expertise.



## Contractor Training

Finelite or representatives can meet with the construction team to develop the most efficient plans for the job and provides on-site contractor training to ensure a smooth installation.



## Submittals

Everyone involved in the project can rely on accurate and detailed submittal drawings. Finelite can include fixture ID numbers that correspond to plans.



## 10-Day Shipping

For fifteen years, Finelite has maintained its commitment to ship your released order for standard fixtures within 10 working days. You can count on Finelite.



# UNRIVALED PROJECT SUPPORT

## FOCUS ON TIME-SAVING PROCESS



### Quality Control

All Finelite products are 100% electrically tested as a system, exactly as they will be installed in the field.

### Install by Numbers

Each fixture is labeled with a unique ID that includes complete job information, telling installers exactly where every fixture needs to be installed and how they go together. This ID also allows Finelite to track the fixture throughout its life, providing a valuable, long-term service to the owner.



### Order Lamps Installed

Order fixtures pre-lamped to save three minutes for every four feet. Finelite charges only for the cost of the lamp.



### Job Packs

Request job packs to avoid excessive jobsite waste and save time.

### Pallets

Pallets can be custom-sized to meet specific jobsite conditions or custom-labeled to facilitate material handling on the job.

### Pre-Ship Hardware

Mounting hardware can be shipped ahead for a more efficient jobsite. Every order includes a contractor care kit with extra hardware to make sure the job keeps moving.



### Instruction Sheets

Big, easy-to-use installation sheets ship with every order and are also available for download at [www.finelite.com](http://www.finelite.com).

### Live Support

A Finelite account manager is only a phone call away to answer any questions. Call us at (510) 441-1100 or email us at [customerservice@finelite.com](mailto:customerservice@finelite.com).

# LUMINAIRE DESIGN

## FOCUS ON TIME-SAVING FEATURES

The Finelite exclusive GridBox™ is the first electrical box that enables indirect lighting to be mounted On-Grid™ and meets all national electrical codes. Pull the flex into the GridBox, thread through the strain relief, and make electrical connections.



### Fully Assembled

Finelite luminaires arrive fully assembled with fixture IDs, endcaps, powerfeeds, and emergency ballasts installed.

### Prewired

Finelite systems come prewired and pretested, no matter how complex the wiring! Fixture wiring in the field is guaranteed with installation by fixture ID number.

### Wire Management Channel

Wire management channels prevent wires from becoming a visible punch list item.

### Aligner Sleeves and Plug-Together Wiring

Factory installed aligner sleeves enhance joint stability and provide light-leak protection. Plug-together wiring eliminates field wiring errors.



# JOB ESTIMATING

## REDUCE RISK AND BE MORE COMPETITIVE

**Penn State University Study** - Installation times supplied by manufacturers are generally based on “perfect” rather than “real world” conditions. To understand “real world” conditions, Finelite sponsored an independent study conducted by Penn State University. Based on a real construction site using a variety of installer experience levels, contractors could easily complete the installation process within the times listed here.

**STEP 1: Start-up** Less than 1 min. per ft<sup>2</sup>  
 Start-up depends on the size and complexity of a project. This step includes assessing the unique site conditions and identifying and organizing parts.

**STEP 2: Rough-in**  
 Installing rigid metallic conduit (RMC) 2 min. per ft.  
 Installing metal conduit cable (MC) 1.5 min. per ft.  
 Installing ceiling supports for conduit or fixtures 10 min. per support  
*Includes all of the components installed above the ceiling.*

**STEP 3: Luminaire Installation**  
 Finelite pendant systems, hanging and leveling 1.5 min. per ft.  
 Recessed luminaires 45 min. each  
 Make electrical connections 10 min. each

**STEP 4: Clean-up and finish work**  
 Remove protective luminaire bags 2 min. each  
 Test system Less than 1 min. per ft<sup>2</sup>

*With Finelite ICLS for the classroom or conference room, you have a single-source solution. Allow additional installation times as listed here.*

**STEP 2A: Controls rough-in**  
 Rough-in Power Control Center 120 min. each  
 Rough-in Teacher Control Center 45 min. each  
 Rough-in Main Switch Bank 60 min. each  
 Rough-in Occupancy Sensor 30 min. each

**STEP 3A: Install controls**  
 Install Teacher Control Center 10 min. each  
 Install Main Switch Bank 10 min. each  
 Install Occupancy Sensor 15 min. each

*Whether you have an open office, private office, or ICLS installation, this step-by-step process is easily applied.*

# AMBIENT LUMINAIRE INSTALLATION OVERVIEW



**A two-person crew can install pendant-hung, fluorescent luminaires for a 2400 ft<sup>2</sup> space in less than a day!**

## Start-Up

**45 min.**

*Every project is different. Assessing and planning the job makes the work more efficient.*

Assess unique site conditions

30 min.

Identify and organize parts

15 min.



## Rough-In

**6 hours 55 minutes**

*The rough-in phase of the project involves installing junction boxes, ceiling supports, and running electrical conduit.*

Install rigid metallic conduit (RMC)

120 min.

Install metal conduit cable (MC)

45 min.

Rough-in ceiling supports

250 min.



## Luminaire Installation

**5 hours 15 minutes**

*Finelite has a rich history of developing easy-to-install products, and you will see that our luminaires install faster than traditional lighting products.*

Hang and level luminaires

240 min.

Make electrical connections

75 min.



## Clean-Up and Finish Work

**45 minutes**

*Finelite products are protected from dust and debris throughout the construction process.*

Remove protective luminaire bags

30 min.

Test system

15 min.

**Total Installation Time** (man-hours)

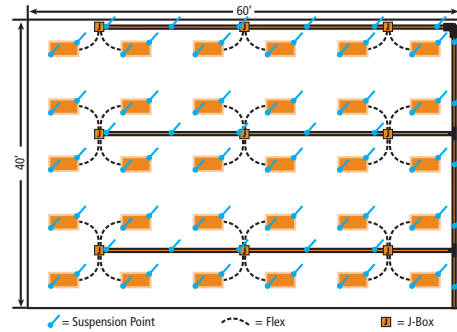
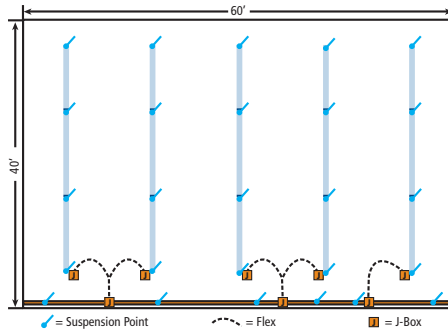
**13 HOURS 40 MINUTES**

# OPEN OFFICE

**60' x 40' Area**  
**2400 ft<sup>2</sup>**

Finelite Pendant: 5 - 32' Rows, 12' on center,  
0.41 w/ft<sup>2</sup> with 1 T8, 0.78 BF

Recessed High Efficiency 2x4: 30 fixtures, 8'x10' on  
center, 0.48 w/ft<sup>2</sup> with 1 T8, 1.2 BF



## Building System Wiring

### Finelite Pendant

### Recessed High Efficiency

Material	Unit Cost	Quantity	Total Cost	Quantity	Total Cost
Rigid metallic conduit (RMC)	\$0.98/ft	60	\$58.80	190	\$186.20
Conduit clips	\$0.77 ea	5	\$3.85	21	\$16.17
RMC bodies and covers	\$10.05 ea	0	\$0.00	3	\$30.15
RMC connectors	\$1.90 ea	5	\$9.50	15	\$28.50
J-boxes	\$2.55 ea	8	\$20.40	9	\$22.95
Metal conduit (MC)	\$0.41/ft	30	\$12.30	180	\$73.80
MC connectors	\$1.55 ea	10	\$15.50	60	\$93.00
Ceiling supports	\$2.05 ea	26	\$53.30	81	\$166.05
<b>SUBTOTAL</b>			<b>\$173.65</b>		<b>\$616.82</b>

## Labor

Minutes Quantity Total Cost  
Minutes @ \$65/hr

Quantity Total Cost  
Minutes @ \$65/hr

Start-up	45 total	45	\$48.75	45	\$48.75
Install RMC	2 per ft	120	\$130.00	380	\$411.67
Install MC	1.5 per ft	45	\$48.75	270	\$292.50
Rough-in ceiling supports	10 ea	260	\$281.67	810	\$877.50
<b>SUBTOTAL</b>			<b>\$509.17</b>		<b>\$1,630.42</b>

## Luminaires

Material	Unit Cost	Quantity	Total Cost	Unit Cost	Quantity	Total Cost
Luminaires	\$35-\$45/ft	160	\$5,600-\$7,200	\$135-\$250ea	30	\$4,050-\$7,500
<b>SUBTOTAL</b>			<b>\$5,600-\$7,200</b>			<b>\$4,050-\$7,500</b>

## Labor

Minutes Quantity Total Cost  
Minutes @ \$65/hr

Minutes Quantity Total Cost  
Minutes @ \$65/hr

Install luminaires	1.5/ft	240	\$260.00	45 ea	1350	\$1,462.50
Make electrical conn.	15 ea	75	\$81.25	15 ea	450	\$487.50
Remove luminaire bags	2 ea	30	\$32.50	2 ea	60	\$65.00
Rough-in ceiling supports	15 tot	15	\$16.25	15 tot	15	\$16.25
<b>SUBTOTAL</b>			<b>\$390.00</b>			<b>\$2,031.25</b>

<b>TOTAL</b>			<b>\$6,673-\$8,273</b>			<b>\$8,328-\$11,778</b>
<b>Per Ft<sup>2</sup></b>			<b>\$2.78-\$3.45</b>			<b>\$3.47-\$4.91</b>

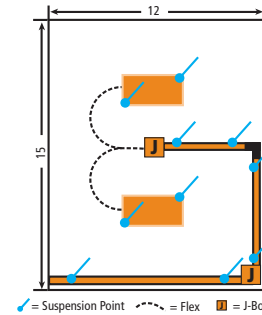
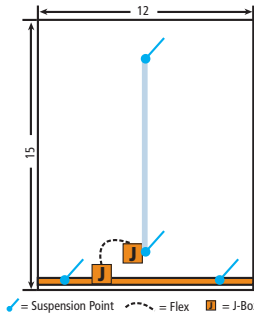
Notes: All costs are presented for illustration purposes only, to show how the step-by-step Contractor Estimator process is easily applied. Building system wiring material costs are obtained from Sweets Electrical Cost Guide 2009. Luminaire costs can vary significantly depending on the specific luminaire selected and options included. Labor rates will also vary, depending on geographic location and a variety of other factors. Using the method presented and your own cost data for a specific project, an accurate job estimate will result.

# PRIVATE OFFICE

**12' x 15' Area**  
**180 ft<sup>2</sup>**

Finelite Pendant: 1 - 12' Row, centered,  
0.56 w/ft<sup>2</sup> with 1 T8, 1.0 BF

Recessed High-Efficiency 2x4: 2 fixtures,  
8' on center, 0.61 w/ft<sup>2</sup> with 2 T8, 0.88 BF



Building System Wiring	Finelite Pendant			Recessed High Efficiency		
Material	Unit Cost	Quantity	Total Cost		Quantity	Total Cost
Rigid metallic conduit (RMC)	\$0.98/ft	12	\$11.76		26	\$25.48
Conduit clips	\$0.77 ea	2	\$1.54		6	\$4.62
RMC bodies and covers	\$10.05 ea	0	\$0.00		1	\$10.05
RMC connectors	\$1.90 ea	1	\$1.90		1	\$1.90
J-boxes	\$2.55 ea	2	\$5.10		2	\$5.10
Metal conduit (MC)	\$0.41/ft	5	\$2.05		10	\$4.10
MC connectors	\$1.55 ea	1	\$1.55		1	\$1.55
Ceiling supports	\$2.05 ea	4	\$8.20		10	\$20.50
<b>SUBTOTAL</b>			<b>\$32.10</b>			<b>\$73.30</b>
Labor	Minutes	Quantity	Total Cost		Quantity	Total Cost
		Minutes	@ \$65/hr		Minutes	@ \$65/hr
Start-up	30 total	30	\$32.50		30	\$32.50
Install RMC	2 per ft	24	\$26.00		52	\$56.33
Install MC	1.5 per ft	7.5	\$8.13		15	\$16.25
Rough-in ceiling supports	10 ea	40	\$43.33		100	\$108.33
<b>SUBTOTAL</b>			<b>\$109.96</b>			<b>\$213.42</b>
<b>Luminaires</b>						
Material	Unit Cost	Quantity	Total Cost	Unit Cost	Quantity	Total Cost
Luminaires	\$35-\$45/ft	12	\$420-\$540	\$135-\$250 ea	2	\$270-\$500
<b>SUBTOTAL</b>			<b>\$420-\$540</b>			<b>\$270-\$500</b>
Labor	Minutes	Quantity	Total Cost	Minutes	Quantity	Total Cost
		Minutes	@ \$65/hr		Minutes	@ \$65/hr
Install luminaires	1.5/ft	18	\$19.50	45 ea	1350	\$97.50
Make electrical conn.	15 ea	30	\$32.50	15 ea	450	\$32.50
Remove luminaire bags	2 ea	2	\$2.17	2 ea	60	\$4.33
Rough-in ceiling supports	5 tot	5	\$5.42	15 tot	15	\$5.42
<b>SUBTOTAL</b>			<b>\$59.59</b>			<b>\$139.75</b>
<b>TOTAL</b>			<b>\$622-\$742</b>			<b>\$696-\$926</b>
<b>Per Ft<sup>2</sup></b>			<b>\$3.45-\$4.12</b>			<b>\$3.87-\$5.15</b>

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# ICLS TEMPLATE

High-performance schools focus on construction elements that provide maximum benefit for the learning environment, while delivering superior energy performance. ICLS meets the needs of the high-performance classroom, requires just five integrated components to complete the system, and is backed by a five-year, single-source warranty from Finelite — the company that sets the standard for service in the lighting industry.

## 1 Indirect/Direct Luminaires

Two rows of two-scene indirect/direct luminaires are mounted perpendicular to the main teaching wall. Commonly used luminaires: Series X1, 16, 15, 14, 12ID, and Series 10.



## 2 Whiteboard Luminaire

A dedicated luminaire illuminates the whiteboard on the main teaching wall: Series X2.



## 3 Teacher Control Center (TCC)

Located at the front of the classroom, the TCC is placed within 6 inches of the whiteboard for easy teacher access.



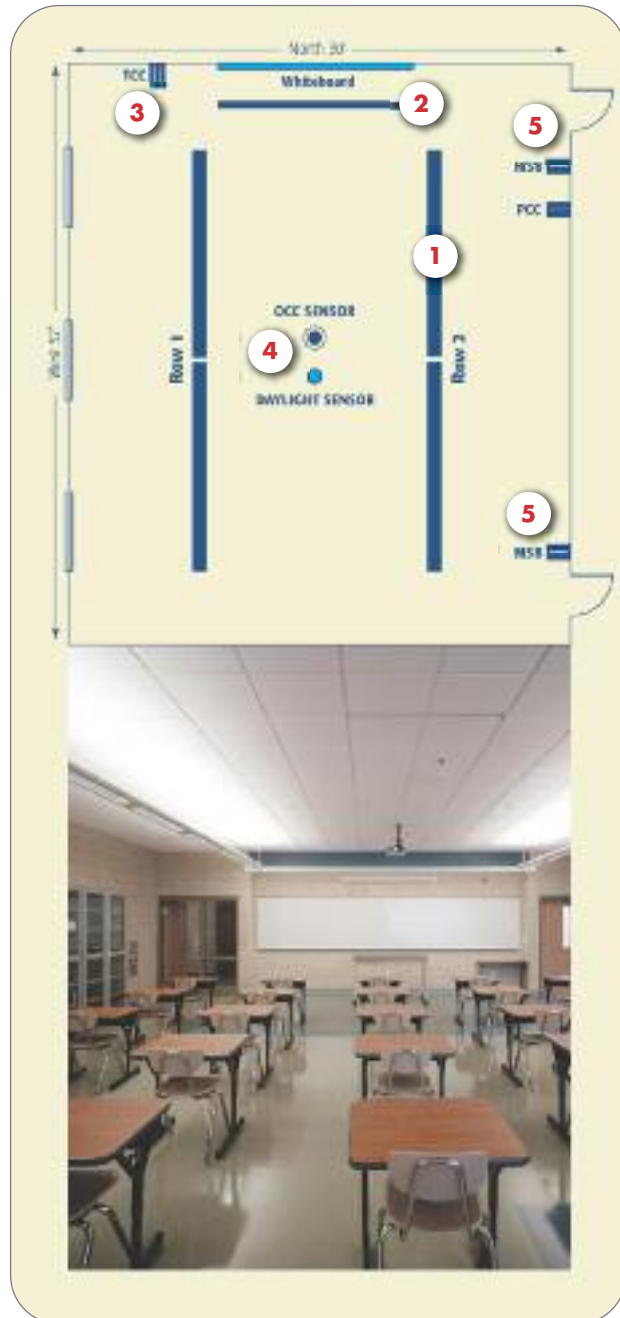
## 4 Sensors

Sensors are placed in the center of the classroom and always include occupancy. Daylight harvesting is added where appropriate.



## 5 Master On/Off Switch

A master on/off switch is by every door to the classroom.



# ICLS INSTALLATION OVERVIEW

**One classroom installs in just over 10 man-hours!**

## Start-Up

**1 hour 15 minutes**

*Every project is different. Assessing and planning the job makes the work more efficient.*



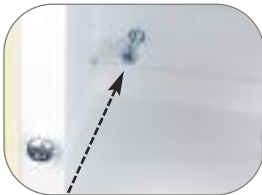
Assess unique site conditions  
Identify and organize parts

45 min.  
30 min.

## Rough-In

**5 hours 35 minutes**

*The rough-in phase of the project involves installing junction boxes, ceiling supports, and running conduit.*



### Power Control Center (PCC)

**120 min.**

Place and Install PCC

30 min.

*The PCC is generally installed above the ceiling by the main switch bank at the classroom entrance. Four mounting tabs make it easy to attach to the wall. Simply screw it in.*



Connect Building Wiring

30 min.

*Building wire is brought into the PCC and connected with terminal strips. The PCC features heavy-duty knockouts.*



Connect Fixture Wiring

45 min.

*Connect flex to the PCC for each of the luminaire rows. Three would be needed for the layout on page 192.*



Connect Plug-and-Play Wiring

15 min.

*Plenum rated plug-and-play, low-voltage wiring is used to connect the Teacher Control Center and any sensors to the system, reducing labor.*

*continued...*

# ICLS INSTALLATION OVERVIEW

continued from page 193

## Rough-In

**5 hours 35 minutes**

The rough-in phase of the project involves installing junction boxes, ceiling supports, and running conduit.



### Teacher Control Center (TCC)

45 min.

Run plug-and-play cables from the PCC and install junction box or low-voltage network bracket at desired location. In most cases, plug-and-play cabling can be run through the wall without conduit. (Check local regulations.)



### Main Switch Bank (MSB)

60 min.

Run power from the PCC line voltage and install junction box or low-voltage network bracket at desired location. (Refer to specifications for junction box size.) Install Main Switch Bank.



### Occupancy Sensor

30 min.

Run plug-and-play cables from the PCC and cut hole in ceiling tile (if present) or place junction box.

### Luminaire Supports

80 min.

## Luminaire Installation

**2 hours 15 minutes**

Luminaires used with ICLS install just as easily as all Finelite products.

Hang and level indirect/direct luminaires

72 min.

Hang and level whiteboard luminaire

18 min.

Make electrical connections

45 min.

## Controls Installation

**35 minutes**

Plug-and-play wiring reduces labor and makes your job easier.

### TCC

10 min.

Install the TCC on the teaching wall next to the whiteboard.

The low-voltage TCC is shipped fully assembled, requiring only one plug-and-play connection, thus reducing labor costs.

### MSB

10 min.

Install the main on/off switches by each door using line voltage with the power coming from the Power Control Center (PCC).

### Occupancy Sensor

15 min.

Install the occupancy sensor in the middle of the room with or without a junction box (depending on local codes). Plug-and-play wiring connects the sensor to the system.

## Clean-up and Finish Work

**35 minutes**

Remove luminaire bags

10 min.

Install faceplates

10 min.

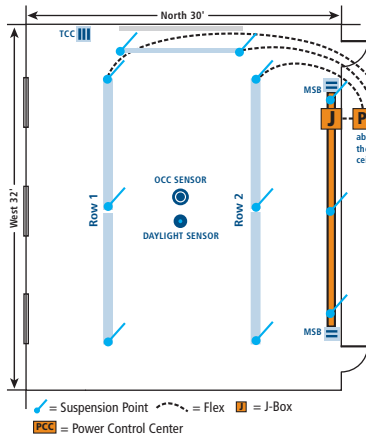
Test system

15 min.

**Total Installation Time (Man-Hours)**

**10 hours 15 minutes**

# ICLS CLASSROOM



Finelite Pendant:  
2 - 24' rows, 14' on center

1 - 12' whiteboard luminaire,  
30" from wall

TCC, OS, MSB2, A/V mode

A/V Mode: 0.35 w/ft<sup>2</sup> with  
1 T8, 0.88 BF

General Mode: 0.80 w/ft<sup>2</sup>  
with 2 T8, 0.88 BF  
and whiteboard luminaire

## Building System Wiring

30' x 32' Area - 960 ft<sup>2</sup>

Material	Unit Cost	Quantity	Total Cost
Rigid metallic conduit (RMC)	\$0.98/ft	30	\$29.40
Conduit clips	\$0.77 ea	4	\$3.08
RMC connectors	\$1.90 ea	4	\$7.60
J-boxes	\$2.55 ea	4	\$10.20
Metal conduit (MC)	\$0.41/ft	50	\$20.50
MC connectors	\$1.55 ea	7	\$10.85
Ceiling supports	\$2.05 ea	11	\$22.55

### SUBTOTAL

**\$104.18**

Labor	Minutes	Quantity Minutes	Total Cost @ \$65/hr
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Start-up	75 tot	75	\$81.25
Rough-in PCC	120 tot	120	\$130.00
Rough-in TCC	45 tot	45	\$48.75
Rough-in MSB	60 ea	120	\$130.00
Rough-in OCC	30 tot	30	\$32.50
Rough-in luminaire supports	10 ea	80	\$86.67

### SUBTOTAL

**\$509.17**

## Luminaires and Controls

Material	Unit Cost	Quantity	Total Cost
ICLS systems as described above	\$3,400 lot	1	\$3,400.00

### SUBTOTAL

**\$3,400.00**

Labor	Minutes	Quantity Minutes	Total Cost @ \$65/hr
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Install luminaires	1.5/ft	90	\$97.50
Make electrical connection	15 ea	45	\$48.75
Install TCC	10 ea	10	\$10.83
Install MSB	5 ea	10	\$10.83
Install OCC	15 ea	15	\$16.25
Remove luminaire bags	10 tot	10	\$10.83
Install faceplates	10 tot	10	\$10.83
Test system	15 tot	15	\$16.25

### SUBTOTAL

**\$222.08**

<b>TOTAL</b>			<b>\$4,235.43</b>
<b>Per Ft<sup>2</sup></b>			<b>\$4.41</b>

Notes: All costs are presented for illustration purposes only, to show how the step-by-step Contractor Estimator process is easily applied. Building system wiring material costs are obtained from Sweets Electrical Cost Guide 2009. Luminaire costs can vary significantly depending on the specific luminaire selected and options included. Labor rates will also vary, depending on geographic location and a variety of other factors. Using the method presented and your own cost data for a specific project, an accurate job estimate will result.