

IES Nashville Section

Lighting and the Section 179D Tax Deduction

2022-2023 Income Tax Incentives Discussion

28 September 2022



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- Founder and Principal Consultant, Lucas Tax + Energy Consulting (2009)
- Licensed Certified Public Accountant (NC)
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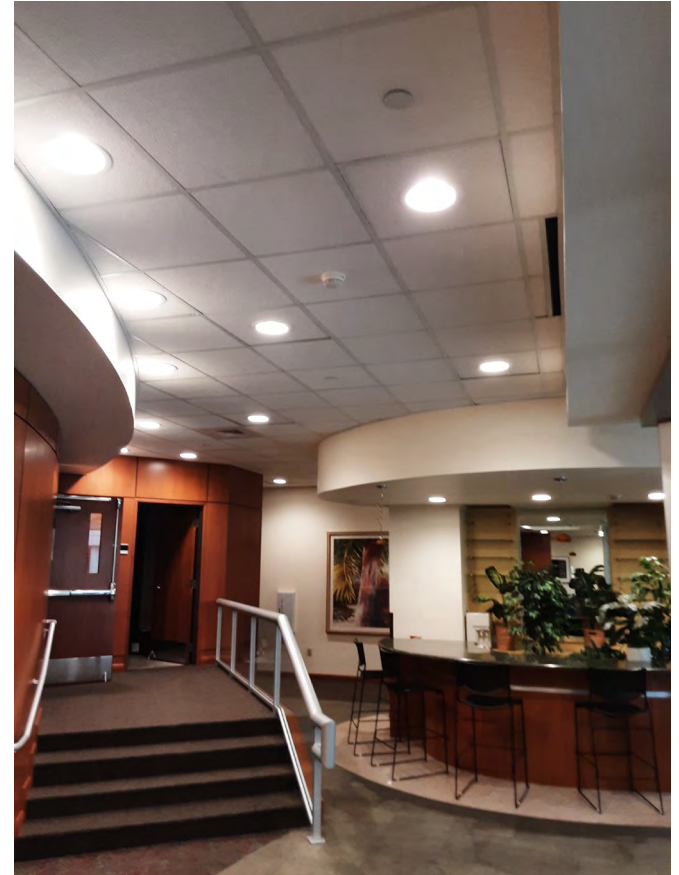












Agenda and Discussion Overview

1

Understand the basics of the §179D income tax deduction - how it is calculated, what it entails, and the 2022 tax benefits it provides for lighting projects.

2

Learn how the Inflation Reduction Act of 2022 increases this benefit and changes key parts of the deduction in 2023.

3

Briefly discuss other key elements of the Inflation Reduction Act of 2022.

Basics of Energy Efficient Commercial Building Deduction (§ 179D)

Quick Audience Poll (Please Use Chat Function)

- A. I have never utilized § 179D on a lighting project**
- B. I have utilized § 179D on a few lighting projects, but inconsistently (>50%)**
- C. I have utilized § 179D on a majority of my company's lighting projects**





Basics of the § 179D Deduction

Pre-Enactment vs. Post-Enactment of the Inflation Reduction Act of 2022



Basics of Energy Efficient Commercial Building Deduction (§ 179D)

Energy Efficient Commercial Buildings (I.R.C. § 179D)

- Introduced with Energy Policy Act (EPAct) established in 2005 and extended by Congress periodically 2006-2019.
- **FINALLY EXTENDED PERMANENTLY in December 2020**
- One-time Deduction for Qualifying Commercial Building Property placed in service in U.S.



Basics of Energy Efficient Commercial Building Deduction (§ 179D)

Energy Efficient Commercial Buildings (I.R.C. § 179D)

- § 179D Allows a One-Time Income Tax Deduction Ranging Between \$0.63-\$1.88/sqft in Year Building is Completed.
- Some Buildings will Qualify for a Partial Deduction (e.g. Lighting Upgrades).
- Designed to Encourage Taxpayers to Conserve Energy and Reduce Operating Costs in Commercial Buildings.



Basics of Energy Efficient Commercial Building Deduction (§ 179D)

Energy Efficient Commercial Buildings (I.R.C. § 179D)

- Commercial Buildings
- Hotels
- Parking Structures
- Multi-Family Housing Qualifies if 4 Story or Greater Structures
- Opportunity Zone Commercial Real Estate Properties
- Canopies / Covered Walkways
- Agribusiness Structures/Grow Houses/Greenhouses

Basics of Energy Efficient Commercial Building Deduction (§ 179D)

Energy Efficient Commercial Buildings (I.R.C. § 179D)

- There are **4.5 Methods** to determine the Tax Deduction
- Requires 50% Efficiency of the Building Project (**Based on the Building Type**) on Three Key Building Components:
 - 2 Methods For Interior Lighting,
 - Mechanical System (HVAC and Hot Water Systems),
 - Building Envelope

Basics of Energy Efficient Commercial Building Deduction (§ 179D)

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9 Lighting

Table 9.5.1 Lighting Power Density Allowances Using the Building Area Method

Building Area Type ^a	LPD, W/m ²
Automotive facility	0,71
Convention center	0,76
Courthouse	0,80
Dining: Bar lounge/leisure	0,80
Dining: Cafeteria/food	0,79
Dining: Family	0,78
Dormitory	0,61
Exercise center	0,65
Fire station	0,53
Gymnasium	0,68
Health-care clinic	0,82
Hospital	1,06
Hotel/motel	0,75
Library	0,78
Manufacturing facility	0,80
Motion picture theater	0,83
Multifamily	0,68
Museum	1,06
Office	0,79
Parking garage	0,15
Penitentiary	0,75
Performing arts theater	1,18
Police station	0,80
Post office	0,67
Religious facility	0,84
Retail	1,06
School/university	0,81
Sports arena	0,87
Town hall	0,80
Transportation	0,61
Warehouse	0,48
Workshop	0,80

^a In cases where both a general building area type and a specific building area type are listed, the specific building area type shall apply.

ASHRAE 90.1 2016 Table 9.5.1

Examples:

- Manufacturing .9/sqft
- Office .79/sqft
- Warehouse .48



Basics of Energy Efficient Commercial Building Deduction (§ 179D)

Energy Efficient Commercial Buildings (I.R.C. § 179D)

- **Requires Certification** from a Licensed Engineer or Contractor who Determines the Estimated Energy Efficiency through Energy Modeling.
- § 179D Tax Deduction May be Claimed in Conjunction with other Income Tax Deductions and Credits (e.g. Bonus Depreciation, Historic Tax Credits, etc.).

Section 179D Interim Lighting Rule Calculation

Subject Property Owner: XYZ Corporation (Manufacturing Area)

Subject Property: Metals Processing Bldg
Location: Charlotte, North Carolina
Tax Year: 2022

INPUT DATA		
	ASHRAE Baseline	Subject Building
Energy Consumption		
Lighting Conditioned Space (Watts)	139,500	45,477 Watts
Building Area		155,000 sq ft
Lighting Power Density (W/Sqft)	0.9	0.2934
Building Type		Manufacturing
Bi-Level Switching		Yes
Calculation		
Lighting Efficiency Improvement		94,023.00 Watts
Lighting Consumption Improvement		67.40%
Minimum Lighting Energy Consumption—Commercial		40%
Lighting Energy Savings Above Minimum		27.40%
Applicable Deduction for Lighting Improvement		\$ 0.63 b
Application Deduction Per Building Area		\$ 97,650.00 a*b

September 26, 2022

Lightserve Corp.
9115 Harris Corners, Suite 400
Charlotte, NC 28269

Re: Energy Reduction Program—Section 179D Certification Requirement

Dear Lightserve Corp, LLC,

This certification letter confirms that as a qualified professional under Section 179D, I have reviewed the project described in this Certificate of Compliance and, to the best of my knowledge, believe that it meets the criteria for your qualified buildings to partially qualify for the tax deduction created by the Energy Policy Act of 2005 and outlined in Internal Revenue Code Section 179D. In accordance with the tax code, this letter serves as the certification requirement outlined within the tax code and subsequently clarified and modified under IRS Notice 2006-52 and 2008-40 respectively for the qualified buildings referenced below.

1. Contact Information for the Qualified Professionals:

David Varga
Lightserve Corporation
3402 Service Street
Charlotte, NC 28206
Ph. 704.919.7841

2. Name and Address of Certified Building:

Kloekner Metals Corp
624 Black Satchel Road
Charlotte, North Carolina 28216

Energy Efficiency Assets Designed and Installed During: Calendar Year 2022

3. Type of Project and Type of Rule Statement:

The interior lighting systems that have been or are planned to be incorporated into the buildings satisfy the requirements of the interim rule of Section 2.03(1)(b) of IRS Notice 2006-52.

4. Energy Reduction Certification Method:

The Project's energy reduction has been determined under the rules of Notice 2006-52. The new lighting system was completed in a **Manufacturing and Corporate Office/Lobby Combined Facility**. The ASHRAE/IESNA 90.1 lighting power density standard for these building types is 0.9 and .79 watts/sq. ft respectively.

The newly installed lighting system in the manufacturing area of the subject property operates at **0.2934 watts/sq.ft.** This is reduction of lighting is 67.40% compared to ASHRAE Standard 90.1

for this building type. The total area of the interior space that received the new LED lighting upgrade is 155,000.00 sq. ft.

The newly installed lighting system in the corporate offices and lobby of the subject property operates at **0.28045 watts/sq.ft.** This is reduction of lighting is 64.50% compared to ASHRAE Standard 90.1 for this building type. The total area of the interior space that received the new LED lighting upgrade is 5,500.00 sq. ft.

5. Field Inspection Statement:

A qualified individual has field inspected that the Project buildings after the energy efficient lighting system has been placed in service and certifies that the specified lighting system was installed, is operating properly, and will meet the energy savings targets contained in the design plans and specifications. In addition, each qualified space has installed the required bi-level switching and meets the minimum IES light level requirements. This inspection was performed in accordance with the applicable sections of the National Renewable Energy Laboratory (NREL) as Energy Saving Modeling and Guidelines for Commercial Building Federal Tax Deductions that were in effect at the time of certification.

6. Statement of Energy Efficiency Features:

The building owner has received an explanation of the energy efficiency features of the building and its projected annual energy costs.

7. Statement on Computer Software NOT APPLICABLE

8. Statement on Components List:

Attached to this report documentation is a list identifying the components of the interior lighting systems installed on or in the building, the energy efficiency features of the building, and projected energy cost savings on an annual basis.

9. Declaration of Qualification:

I am a qualified professional under the guidelines of IRS Notice 2006-52. I am a licensed general contractor in the state of North Carolina, the same jurisdiction of the project buildings. I am not related to the taxpayer claiming the deduction under Section 179D. I have represented in writing to the taxpayer that I have the requisite qualifications to perform this certification inspection as outlined in IRS Notice 2006-52 (Section 4.05).

Under penalties of perjury, I declare that I have examined this certification, including accompanying documents, and to the best of my knowledge and belief, the facts presented in support of this certification are true, correct, and complete.

Printed Name of Qualified Professional: David Varga

Signature of Qualified Professional: _____

Date: _____

North Carolina Licensed Contractor License Number: U.26075

Basics of Energy Efficient Commercial Building Deduction (§ 179D)

Special Ruling for Architects, Engineers & Designers

- Architects, Engineers, and/or Designers May Claim For Their Own Company the § 179D Deduction for designs of publicly owned (government owned) buildings (§ 179D(d)(4))
- Additional Documentation Required to Allocate Deduction to the Designer(s)





Basics of Energy Efficient Commercial Building Deduction (§ 179D)

Special Ruling for Architects, Engineers & Designers

- If More Than One Designer, Public Building Owner May Determine The Primary Designer Or Allocate Deduction to All Designers of Energy Efficient Measures
- If Claimed, Deduction is Included in 'Other Deductions'; Flows to Tax Returns of Individuals for S-Corps/Partnerships



Pre-Enactment Basics of § 179D

Main Takeaways:

- 1. One-Time Deduction, Permanent for 2022 & Beyond**
- 2. \$0.63/sqfr Partial or \$1.88/sqft Whole Bldg**
- 3. 4.5 Methods to Claim**
- 4. Public Buildings (Gov't Owned) can be Allocated to Designer(s)**
- 5. Must Be Certified by Licensed Professional in State Jurisdiction**

2. The Inflation Reduction Act and Impact on § 179D



Inflation Reduction Act of 2022



Inflation Reduction Act of 2022 Fast Facts

- **Signed into Law August 16, 2022**
- **Multiple Areas of Focus Beyond Clean Energy Totals >\$750B**
- **Clean Energy Incentives: \$369B**
- **Most Incentives Available Beginning After 12/31/2022 Through 12/31/2033**
- **Non-Clean Energy Tax Incentives: Accelerated (Bonus) Depreciation, Opportunity Zones, Repairs & Maintenance Expenses, Etc. from Tax Cuts & Jobs Act (TCJA) Still Available**
- **Energy Incentives to Grow US Consumption of Clean Energy, Combat Climate Change, Combat Energy Insecurity/Environmental Injustice, Encourage Increased Manufacturing, and Impacts Every Sector of Economy (i.e., No Excuses)**



Pre-Enactment Basics of § 179D

Main Takeaways:

- 1. One-Time Deduction, Permanent for 2022 & Beyond**
- 2. \$0.63/sqfr Partial Deduction or \$1.88/sqft Whole Bldg (>50% Efficiency)**
- 3. 4.5 Methods to Claim**
- 4. Public Buildings (Gov't Owned) can be Allocated to Designer(s)**
- 5. Must Be Certified by Licensed Professional in State Jurisdiction**



Post Enactment Basics of § 179D

Main Takeaways:

1. Deduction Every 3-Yrs (4-Yrs Tax-Exempts), Permanent for 2023 & Beyond
2. Whole Building Focus with 25% to 50% Efficiency: \$2.50/ - \$5.00/sqft
3. 2 Methods to Claim: Building Modeling or Energy Use Intensity for Renovations (Partial Deduction Eliminated)
4. Tax Exempt Buildings Owned can be Allocated to Designer(s)
5. Must Be Certified by Licensed Professional in State Jurisdiction



Post Enactment Basics of § 179D

Main Takeaways:

- 6. Prevailing Wage and Apprenticeship Requirements**
- 7. Special Allocations for REITs**
- 8. Lighting Retrofits can move Building Efficiency to the 20-30%**
- 9. Incentive Encourages a Whole Building Focus—Find Good Retrofit Partners**
- 10. Think BIG and then BIGGER; Think Long-Term**

Project Incentive Comparison Example:

Pre-Enactment: $155,000\text{sqft} * \$0.63/\text{sqft} = \$97,650,000.$

**Post-Enactment (Modeling 30%): $155,000\text{sqft} * \$3.50/\text{sqft} =$
\$542,000.**

3. Other Incentives of the Inflation Reduction Act





Other Inflation Reduction Act Incentives To Consider

- 1. Investment Tax Credits for Solar/Wind/Geothermal/Other Renewables AND Energy Storage / 30% Through 2033**
- 2. Transportation: Clean Energy Vehicle Tax Credits (\$7500 New / \$4500 Used)**
 - I. EV Infrastructure Charging Stations—30% up to \$100K**
 - II. EV Commercial Fleet—30% Cost (Vehicle Weight Requirements)**
- 3. Home Builder Tax Credits (§ 45L): \$2,500 or \$5,000 per Unit / Requires Energy Star Registration**
- 4. Direct Pay Election of Credits / Transferability for Some Incentives (Not § 179D)**
- 5. Additional Guidance Forthcoming and Comment Period....Stay Tuned!!!**

What Questions Do You Have?





Thank You For Your Time.

My contact information:

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