

Lighting Efficiency Tax Deduction

Writing off the cost of a capital investment such as energy-efficient lighting is not new. Under current law, the cost of energy-saving investments must be capitalized and depreciated or amortized over time.

What is new, thanks to the Commercial Buildings Deduction, is the owner can now potentially write off the *entire* cost of the new lighting in the taxable year it is placed in service. When “placed in service” occurs is typically defined between the IRS and the taxpayer, but generally, the term defines the time at which the lighting is ready for its intended use. So it’s an *accelerated tax deduction*: If a cost item associated with installing new lighting is normally depreciated and claimed over a period of years, it can now be claimed in a single tax year.

Note that the Commercial Buildings Deduction is a tax deduction, not a tax credit. A tax credit is a direct dollar-for-dollar reduction of tax liability. A tax deduction is a cost subtracted from adjusted gross income when calculating taxable income; tax liability is therefore not reduced dollar for dollar, but in proportion to the taxpayer’s tax bracket.

The Commercial Buildings Deduction essentially has two levels depending on whether one wants to achieve savings targets for the entire building—interior lighting, HVAC/hot water and building envelope—or each of these systems individually. There is no limit to the amount of money available to fund this incentive.

From January 1, 2009 to December 31, 2009, the Commercial Buildings Deduction offers an accelerated tax deduction that is the lesser of:

1. The complete cost of installing “energy-efficient commercial property”
2. \$1.80/sq.ft.

“Energy-efficient commercial building property” is defined as:

1. Interior lighting systems, HVAC/hot water systems and building envelope features, which are
2. Otherwise depreciable as a cost, and
3. Installed in the United States or its territories, and
4. Part of new construction or renovation within the scope of ASHRAE/IES Standard 90.1-2001, and
5. Certified to reduce total annual energy and power costs to at least 50% less than a building satisfying ASHRAE/IES Standard 90.1-2001.

If the owner does not want to pursue the complete tax deduction capped at \$1.80/sq.ft., the owner can focus on just one of the three qualifying building systems including interior lighting.

Like the complete deduction, this level of deduction can be used to write off the complete cost of an individual system upgrade, but it is capped at a lower amount—\$0.60/sq.ft.

IRS Notice 2009-52 established each system target as 16 2/3 % of the whole building annual energy cost reduction. Be sure to refer to the June 26, 2009 corrected version in [Internal Revenue Bulletin 2009-26](#).

From January 1, 2009 until the Treasury Department issues final regulations defining savings targets for individual building systems, the Commercial Buildings Deduction’s Interim Rules for Lighting Systems are in effect. The Interim Rules offer an accelerated tax deduction that is the lesser of:

- The complete cost of installing energy-efficient interior lighting; or
- \$0.30 to \$0.60/sq.ft. proportional to lighting power density (LPD, calculated as watts per square foot) savings of 25-40% below 90.1-2001, as shown in the below sliding scale.

% of LPD reduction beyond Standard 90.1-2001	25%	26%	27%	28%	29%	30%	31%	32%	33%
Amount of Eligible Tax Deduction/sq.ft	\$0.30	\$0.32	\$0.34	\$0.36	\$0.38	\$0.40	\$0.42	\$0.44	\$0.46
% of LPD reduction beyond Standard 90.1-2001	34%	35%	36%	37%	38%	39%	40%	>40%	
Amount of Eligible Tax Deduction/sq.ft.	\$0.48	\$0.50	\$0.52	\$0.54	\$0.56	\$0.58	\$0.60	\$0.60	

So if you reduce an office building’s LPD to say 33% below the minimum required value in Standard 90.1-2001, then the owner could write off the complete cost of the new lighting, capped at \$0.46/sq.ft.

If there is an amount of cost left over after the cap, then it is depreciated and claimed normally. For example, if a lighting upgrade in a 100,000 sq.ft. commercial office building costs \$100,000 and the cap is \$0.60/sq.ft., then \$60,000 could be written off in the tax year the new lighting is placed in service. The remaining \$40,000 would then be written off in the traditional manner—that is, capitalized and depreciated over time beginning in the same year placed in service.

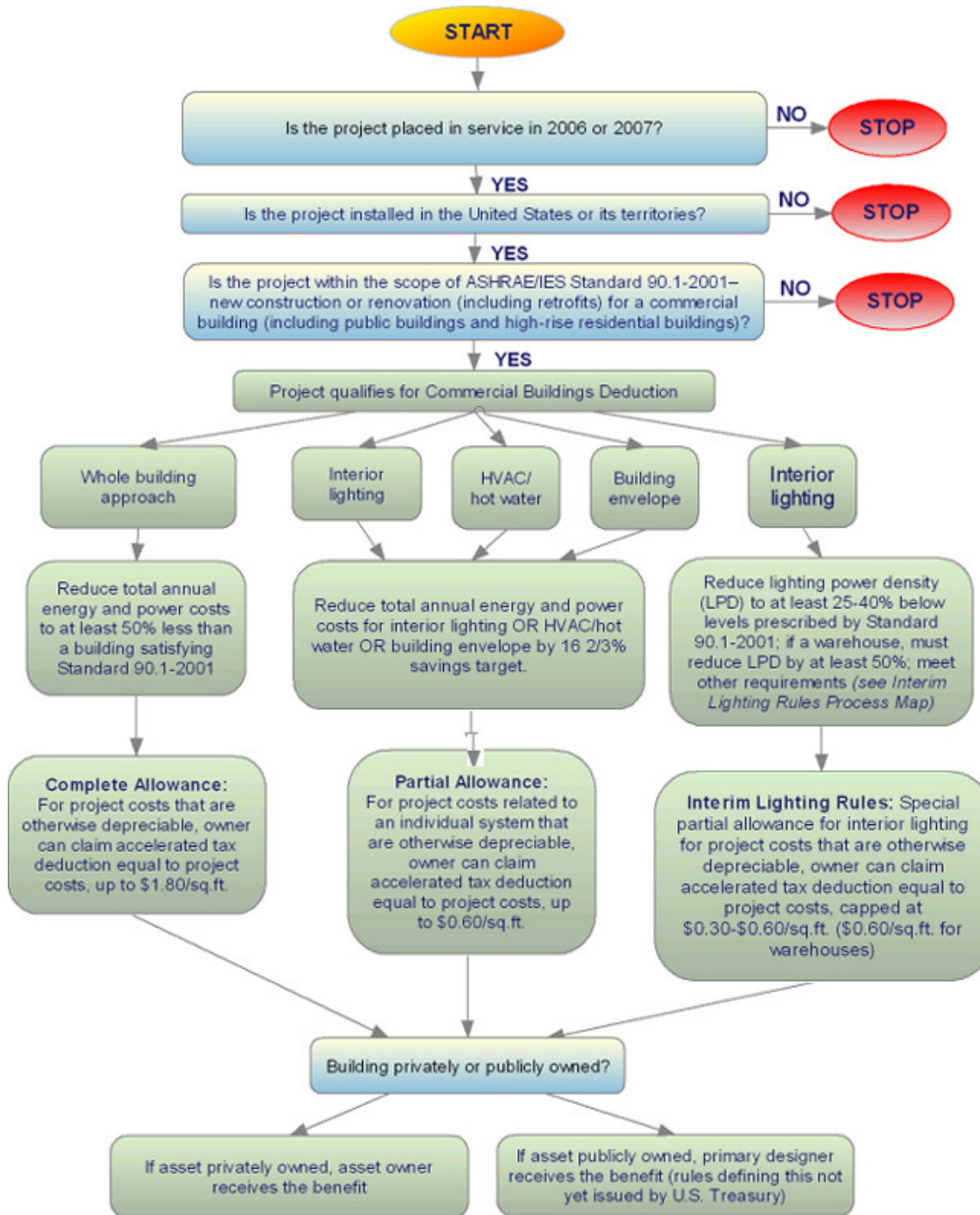
Under Commercial Building Deduction rules, “energy-efficient interior lighting” is defined as:

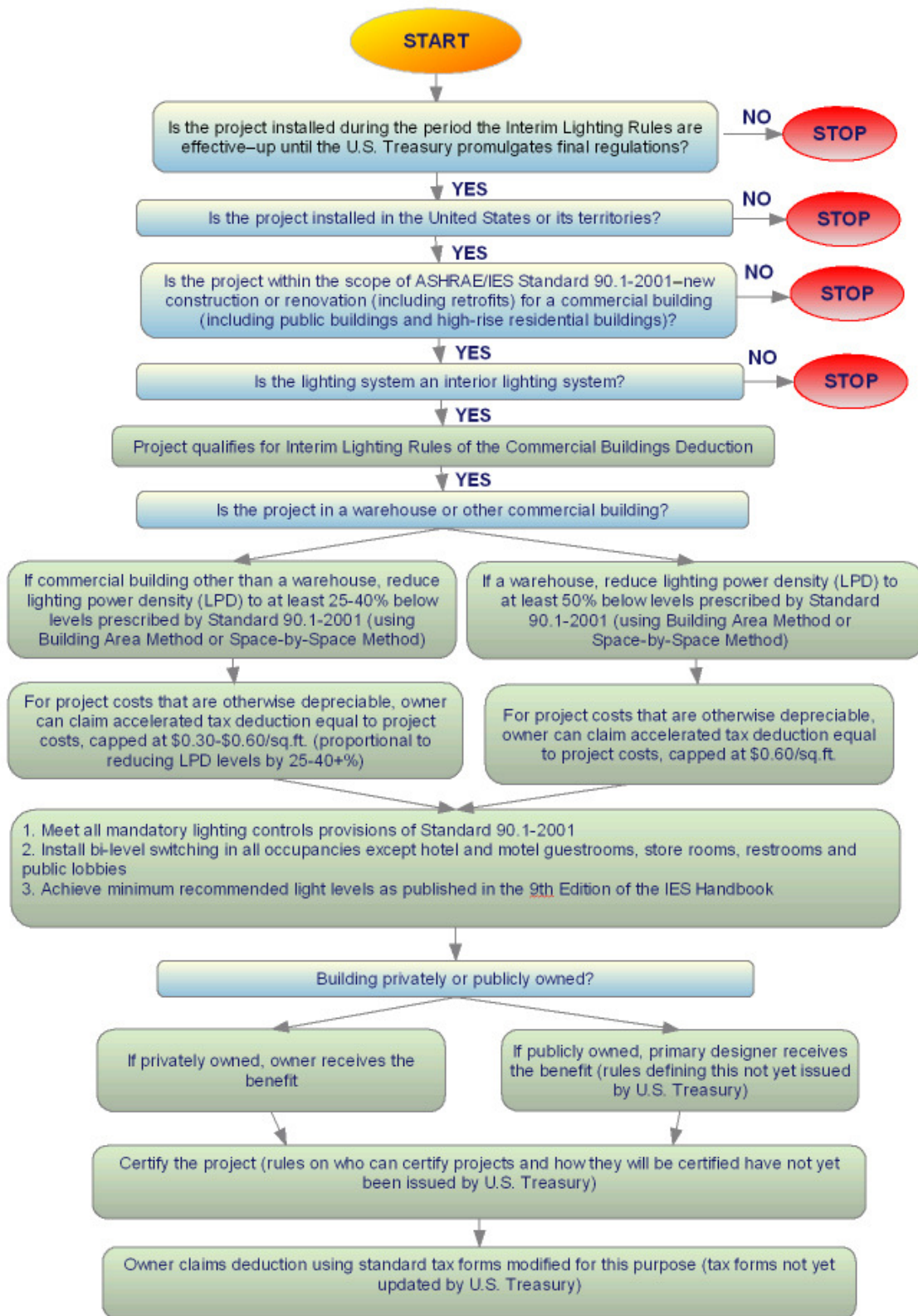
- Lighting that is classified as interior lighting, and
- Otherwise depreciable as a cost, and
- Installed in the United States or its territories, and
- Part of new construction or renovation within the scope of the ASHRAE/IES 90.1-2001 Standard, including retrofits, and
- Certified to reduce LPD to 25-40% less than the minimum requirements in Standard 90.1-2001’s Table 9.3.1.1 (building area method) or Table 9.3.1.2 space-by-space method) (not including additional interior lighting power allowances), unless
- The space is a warehouse, in which case 90.1 must be exceeded by 50% to qualify for a tax deduction of \$0.60/sq.ft.

In addition:

- All mandatory controls provisions in Standard 90.1-2001 must be met (for lighting retrofits, be sure to read carefully the "lighting alterations" sections in 90.1), and
- Bi-level switching must be installed in all occupancies except hotel and motel guest rooms, store rooms, restrooms and public lobbies, and

- The minimum recommended calculated light levels as established in the 9th Edition of the IES Lighting Handbook must be achieved.





- The lighting controls required under the Commercial Buildings Deduction rules are prerequisites—while they produce cost savings for the owner’s benefit, they do not produce LPD savings that are required to qualify for the Deduction.
- Bi-level switching requirement is required by the rules, but not Standard 90.1-2001. It was included because it is considered a simple controls addition that can reduce power input by 10-15% on an annual basis. Bi-level switching strategies could, for example, include split-ballasting to allow separate control of 50% of lamps or fixtures, bi-level ballasts, multiple-ballasts within one fixture (as in the case of compact fluorescent hi-bays), dimming ballasts, manual controls or dimmers or photosensors, and other strategies.

This is intended to be used only for the purpose of making ACT customer’s aware of potential tax benefits from adding LED lighting to a facility. The owner of the facility should consult their own tax adviser to determine the consequences of adding LED lighting to their particular building. This overview should not be relied on as a legal opinion of the full scope of the energy tax deduction program!