By Dominick Brook

The 179D tax deduction for energy-efficient lighting investments in parking structures.

This article is about a tax deduction. I've got my work cut out for me in making this interesting, but let me try: it's also about money in your company's pocket.

How does a $300,000 federal tax deduction for a lighting retrofit of a 500,000 square-foot parking garage sound? What about a $600,000 federal tax deduction for designing the lighting in a new parking structure for the U.S. General Services Administration? Interested now? Then read on. We're going to discuss what this deduction is all about, how much it may be worth, who can claim it, and how to claim it.

Energy Efficient lighting is big business in all types of buildings, including parking garages. Whether driven by higher electricity prices, potential savings, or customer expectations, facilities are becoming more energy efficient. The federal government wants to encourage this practice, so they have incentivized energy efficiency with tax deductions. While the energy savings from modern lighting are often sufficient to produce a very favorable return on investment (ROI), a tax deduction might improve an 18-month payback period to less than a year.
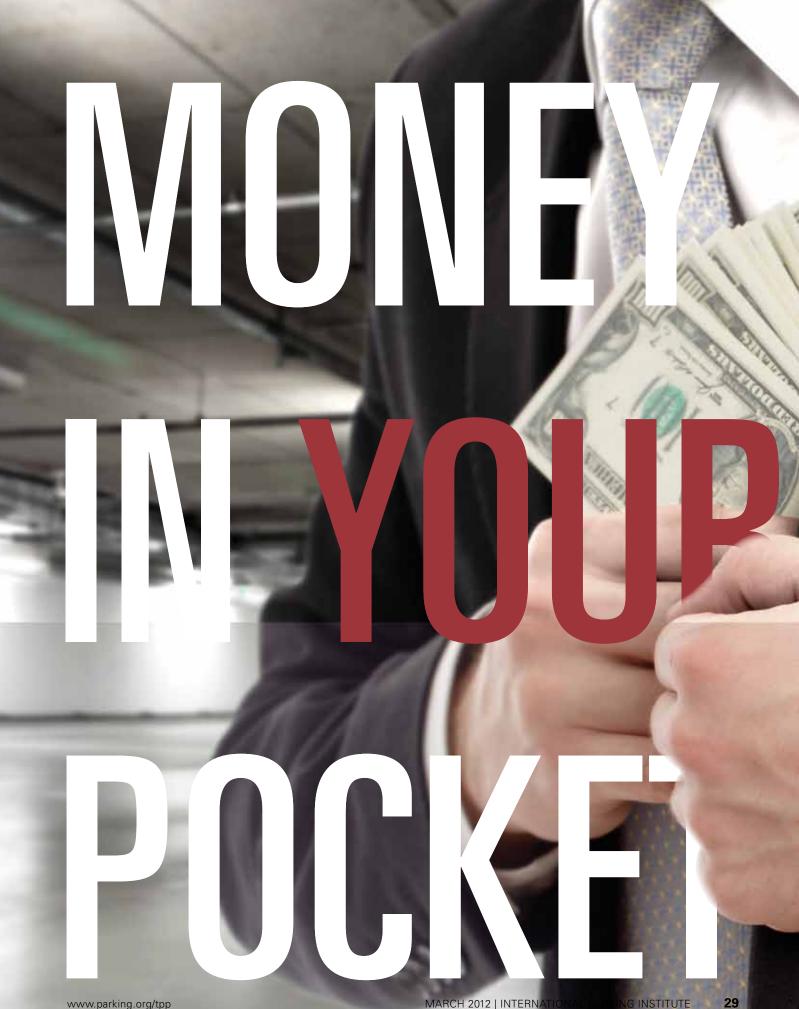
So, what is this tax deduction? On the tax side, we know it as Internal Revenue Code Section 179D or IRC §179D. Engineers generally refer to it as the EPACT 2005 deduction, referring to the piece of legislation that created it: the Energy Policy Act of 2005. In the simplest terms, it is a tax deduction that is triggered by installing energy efficient assets in commercial buildings. These assets can include energy efficient lighting, HVAC, and components of the building envelope. With parking garages often being exposed, unconditioned spaces, HVAC, and the building envelope are often not relevant to parking garages. But energy efficient lighting alone can trigger a substantial deduction, and thanks to the way the deduction is calculated, the large square footage of parking garages and their low levels of lighting make them outstanding candidates for this deduction.

Calculating the Deduction

The amount of the deduction is based on three factors: the energy efficiency of the lighting; the square footage of the parking garage in which the lighting is installed; and the total cost of the lighting (fixtures and installation costs).

For purposes of the 179D deduction, the energy efficiency is calculated against a baseline ASHRAE (American Society of Heating, Refrigerating, and Air-Conditioning Engineers) 90.1-2001 standard. Note that it is a 2001 standard, not a 2010, a 2007, or even a 2004 standard. For projects that include HVAC or

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the building envelope, a full energy model must be conducted using IRS-approved software. For projects that only incorporate lighting, which will include the majority of parking garages, you can either use energy modeling or lighting power density (LPD) calculations. The LPD is calculated by adding up the watts for all light fixtures in the garage and then dividing by the square footage of the garage to provide a number in watts per square foot.

For lighting-only projects, LPD calculations are generally the most simple and cost-effective method. The calculated LPD for the garage is compared to the baseline LPD reported in ASHRAE 90.1-2001. The LPD must be at least 25 percent below the ASHRAE standard to qualify for the deduction. At 25 percent below, the facility would qualify for a deduction in the amount of $.30 multiplied by the square footage of the building. At 40 percent or more below, the facility would qualify for a deduction in the amount of $.60 multiplied by the square footage of the parking garage.

In terms of the square footage used for the deduction, only enclosed space should be included. Unfortunately, this means that surface lots, even if they have very energy efficient lighting, are not eligible for the deduction. Also, parking garages with uncovered top stories should exclude the square footage of that uncovered space from their calculations.

Finally, in terms of calculating the deduction, the calculated amount of the deduction ($.30 - $.60 x square footage) is capped by the total cost of the lighting. Generally, this cost will include the fixtures, controls, wiring, and labor to install it. Often, and especially with new construction, this cap does not come into play. However, on retrofits where costs may be lower as wiring and controls are already installed, the calculated amount of this deduction may approach this cap.

Who Can Take the Deduction?

There are two main categories of taxpayers who can take the deduction. First, the owner of the lighting for tax purposes is eligible. More often than not, this will be the owner of the parking garage, although there could be alternate tax ownership of some of the tenant improvements if the parking garage is leased or managed. Second, for energy efficient lighting installed in government-owned parking garages, the designer of the lighting can take the deduction. That's right: for government buildings, the person taking the deduction doesn't even need to own the lighting. They just need to design it.

Basically, a government entity pays no tax and so would not be able to take the deduction. Therefore, the IRS allows them to assign the deduction to the taxpayer who designed the lighting. Any government entity—be it federal, state, or municipal—can make these allocations (non-profits are not able to). The "designer" can include a variety of taxpayers, including the architect, engineer, contractor, environmental consultant, or energy services provider. However, the designer must be the person who created the technical specifications for the installation of the lighting, not the person who merely installed the lighting.

If the taxpayer is able to claim the deduction, then he must evaluate whether he can realize a benefit. If a taxpayer has no income on which he pays tax, the deduction will not provide any

value to him on that year's tax return. There are also some restrictions around the designers of government buildings, especially for LLCs, S-corps, and partnerships. But if they can take the benefit, it can be substantial.

Potential Benefit

To provide an example of the magnitude of the potential benefit, let's consider a fairly large parking garage—say, 500,000 square feet of enclosed space. As part of an upgrade, all of the sodium lighting is being replaced with T8 linear florescent fixtures at a cost of $350,000. The calculated lighting power density for the facility works out to be 46 percent lower than the ASHRAE 90.1-2001 standard for parking garages.

Based on this information and assuming the other requirements discussed below are met, the parking garage will qualify for a deduction of $0.60 per square foot:

500,000 X $0.60 = $300,000 deduction.

It should be noted that 179D is a deduction, not a tax credit. As such, the cash value of the deduction depends on the effective tax rate of the taxpayer. Let's assume the taxpayer pays a typical federal tax rate of 35 percent:

$300,000 deduction x 35 percent effective tax rate = $105,000.

So on a 500,000 square-foot parking garage, the owner would realize a $105,000 cash benefit in the first year. The net present value of the benefit will actually be slightly smaller, as the taxpayer has to reduce his basis in the property by the amount of the deduction. As such, he does not get to depreciate the $105,000 over the life of the property—generally 39 years—in subsequent years. This does not apply to the designers of government property though, as they do not have to reduce their basis.

Technical Requirements

While energy efficiency is the ultimate requirement to secure the deduction, a couple of other requirements must also be met. First, the parking garage must have controls and circuiting that comply fully with the mandatory and prescriptive requirements of ASHRAE Standard 90.1-2001. Second, the lighting must meet the minimum requirements for calculated lighting levels as set forth in the IESNA (Illuminating Engineering Society of North America) Lighting Handbook, Reference & Application, Ninth Edition (2000). In addition to these technical requirements, there are several procedural requirements that must be adhered to.

Procedural Requirements

The first procedural requirement to take the deduction is to either conduct an energy model or calculate the LPD of the parking garage. Once you have confirmed that you meet the energy efficiency, you then need to certify these calculations. This is done through a field inspection by either an engineer or a contractor licensed in the state where

the parking garage is located. This certificate must contain statements that the technical requirements above have been met and that inspections were conducted in accordance with guidelines from the National Renewable Energy Laboratory, and must be signed under penalties of perjury.

While the certificate is required, it is the minimum amount of documentation needed. It is advisable to compile an audit support package that contains all documentation to support the calculations and value of the deduction. This would allow the IRS to verify the amount of the deduction should it ever be audited.

One additional step is required for an allocation of the deduction to a designer of a government building. For the allocation to be made, the government entity must provide a written form that provides information on the designer being allocated the deduction and the amount of the allocation. This allocation form must be signed by a representative of the government entity under penalties of perjury. Some government agencies, including the GSA and the U.S. Army, have established policies on who can request the allocation and how they can do so.

Once these requirements have been met, it is time to take the deduction on your tax return. Generally, the deduction must be taken in the year the property was placed in service, although there is a tax procedure that allows you to take deductions for property from as far back as 2006 on your current year tax return. It is taken on Form 1120 under the "other deductions" line. No supporting information—not even the certificate—needs to be attached to the tax return. However, as mentioned above, it is advisable to hold both the certificate and a full audit support package, in case the IRS ever reviews the deduction.

So there you have it. You may have learned more about this tax deduction than you ever wanted to, but, along with all the technical requirements, you now see the potential value of this deduction. As you proceed with the construction of your next parking garage, retrofit of your existing garage, or design of a government-owned garage, consider how the 179D deduction can further improve your ROI beyond the energy savings from the lighting fixtures. Ⓟ

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