

Design-Build Contractors May Qualify for the Research Tax Credit and Energy Deductions Relating to Code Section 179D

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The Credit for Increasing Research Activities, also known as the Research & Development (R&D) tax credit or the Research and Experimentation (R&E) tax credit, is a rewarding program that design-build contractors may be able to take advantage of to reduce their Federal and State income tax liabilities.

About the Research Tax Credit

Historically, the R&E tax credit has been claimed by large manufacturing companies, research facilities, software development companies, biotechnology companies, and the pharmaceutical industry. However, changes to the governing Treasury Regulations have allowed additional industries, such as engineering firms, architectural firms, and design-build contractors to take advantage of this growing Federal tax incentive.

The R&E tax credit is a wage-based tax credit that rewards companies for investing in qualified research activities. In addition to qualified wages, companies may capture supply costs for prototypes or models, as well as 65 percent of any contracted labor used during the development process. Companies may benefit by both deducting the research expenditures and claiming the tax credit. While the research expenditures are a reduction of taxable income, the credit is a dollar-for-dollar reduction of income tax. Companies claiming the credit must first use the credit to offset tax for the year the credit is generated. However, if additional credit remains, the company may carry the credit back one previous tax year and forward the next 20 tax years. However, the recently enacted Small Business Jobs Act of 2010 allows research credits earned in 2010 by eligible small businesses to be carried back up to five previous tax years and forward the next 20 tax years.

The Requirements & Applicability to Design-Build Contractors

There are four basic requirements for an activity to qualify for a research tax credit. The following overview discusses the requirements and how these activities apply to design-build contractors.

1. Development or Improvement to a Business Component

In order for an activity to qualify, taxpayers must be developing a new business component or improving an existing business component that is held for sale, lease, or license, or used by the taxpayer in its trade or business. Business components are defined as products, processes, techniques, formulas, inventions, or software applications.

Design-build contractors are in the trade or business of constructing buildings. The building, and many times the design, is the product that is being held for sale by the contractor and is therefore considered a business component. The design-build contractor develops and sells the building/design to a customer, while retaining the proprietary research, in the same way a manufacturer of goods develops and sells its products to customers.

Thus, all of a contractor's research and/or design activities required to produce its product are intended to be useful in the development of a business component and are, therefore, qualified research activities, assuming the other requirements are met.

2. Eliminating Uncertainty which is Technological in Nature

In order for an activity to qualify, the research must be undertaken for the purpose of eliminating uncertainty concerning the development or improvement of a business component which is technological in nature.

Uncertainty exists if the information available to the taxpayer does not establish the capability of developing or improving the business component, the methodology of developing or improving the business component, or the appropriate design of the business component.

Taxpayers are not required to be seeking information that exceeds, expands, or refines the common knowledge of skilled professionals in the particular field of science or engineering in which the taxpayer is performing the research. Thus, multiple design alternatives may establish the uncertainty required.

Typically, the information available to design-build contractors establishes a level of certainty as to the contractor's capability to develop a business component. That is, the taxpayer believes it is capable of designing the buildings to meet the customer's specifications. In nearly all instances, however, the information available to the contractor does not establish certainty with respect to the methodology of developing or improving the business component and/or the appropriate design of its buildings.

For example, a contractor may be charged with designing and constructing a medical building. The contractor knows that it can design the medical building. However, the appropriate design of that particular medical building is not known at the outset. For each critical design decision, the contractor must undergo a process of experimentation to eliminate uncertainty with respect to how to properly integrate certain features and requirements into that particular building's design, often while having to meet external guidelines such as those imposed by the Federal Emergency Management Agency (FEMA) to prevent water intrusion or to protect from earthquakes or other natural disasters. The design process can be especially complicated. For instance, consider the challenges of designing a medical building. Specifically, a medical facility has special needs for lighting levels and emergency lighting, but these requirements may be in direct conflict with a state's energy standards. Research is conducted not only for lighting fixtures and designs to meet these standards, but also for the control and placement of the fixtures. The contractor will hypothesize various design features, alternatives, and requirements by utilizing a thorough understanding of engineering principles and then prove out these hypotheses through CAD simulation and modeling.

This example is typical of a design-build contractor's credit-qualified project and illustrates that the purpose of discovering information was to eliminate uncertainty.

Further, the information sought must be technological in nature. The information is technological in nature if the process of experimentation fundamentally relies upon the principles of physical, biological, engineering, or computer science. Additionally, a taxpayer may employ existing technologies and may rely on existing principles of the applicable science to satisfy this requirement.

Clearly, the process of experimentation employed by design-build contractors relies upon the engineering sciences. Thus the design activities of the contractor are technological in nature.

3. Qualified Purpose of Research

In order for a research activity to qualify, the research must relate to new or improved functionality, performance, reliability, or quality. A contractor's research efforts related to its building designs often relate to or improve functionality, performance, reliability, or quality.

For example, during the processes necessary to create a design to construct a building, a contractor may develop numerous hypotheses relating to, but not limited to, the following:

- Use of new and innovative materials to construct a structure
- Use of alternate means of assembling parts of a structure
- Improvement of acoustical qualities
- Development of alternative water flow / plumbing systems

- Development of alternative electricity conduction systems
- Development or improvement of lighting and/or ventilation within a structure
- Improvement of heating and cooling systems
- Integration of toxic waste and other waste disposal processes into a structure
- Limiting the environmental impact
- Creating a sustainable design
- Improvement of utilization of space
- Improvement of building access
- Development of designs using passive solar energy technology

4. Process of Experimentation

In order for an activity to qualify, a taxpayer must eliminate technological uncertainty by engaging in a process of experimentation. A process of experimentation is an evaluative process and should be capable of evaluating more than one alternative. Treasury regulations define a process of experimentation as modeling, simulation, or systematic trial and error.

After hypothesizing one or more of the above developments or improvements, a process of experimentation would commence to determine whether the hypotheses could be proven and integrated into the design. Frequently, this experimentation is not limited to the research of just one of the above alternatives, but extended to several alternatives as decisions related to one development or improvement often lead to a design conflict with another development or improvement.

Frequently, contractors rely upon CAD modeling, as well as systematic trial and error, often in the form of engineering simulations, in order to eliminate design uncertainty related to a specific building or facility. These activities regularly qualify for the research tax credit.

Energy Deductions Relating to IRS Code Section 179D

As a design build contractor, you may also qualify for a deduction under IRS Code Section 179D. The Energy Policy Act of 2003 (EPAcT) allows up to a \$1.80 per square foot ordinary tax deduction for buildings that achieve specified energy cost reductions as compared to reference buildings under ASHRAE 90.1-2001. At a minimum, arming your firm with the knowledge of this valuable cost effective application will set you apart from your competition by reducing costs and increasing valuable cash flow for your clients.

Building owners *or* contractors for governmental entities may qualify for the deduction if the building meets the specific criteria and is used for commercial or other multi-use functions.

A complete EPAcT analysis will be performed and certified by a qualified individual applying LEED modeling to EPAcT analysis to determine a maximum benefit of \$0.60 per square foot for each component of:

- **Lighting and Lighting Controls;**
- **HVAC/SWC (includes service water connection and hot water for the building); and**
- **The building envelope (includes roof fenestration, windows and doors)**

Obtaining a LEED certification often increases the market value of the building and often secures tenants at a higher rent per square foot. It is important to note however, LEED certification does not automatically qualify a structure or component for the energy deduction. An EPAcT Study both quantifies and qualifies the associated costs for the 179D deduction. Our team analyzes and compiles a report on the energy efficiency as well as on the lighting, HVAC and building envelope, qualifying significant deductions of value for you and your clients.

Mueller Prost has the ability to qualify any governmental job or private industry client's construction projects since January 1, 2006 and to determine the credit's applicability. When considering governmental contracts, it is important to note that the reason these contracts are so attractive to the design build contractor is that the governmental entity can't take the deduction but can assign this right to the deduction to the designated designer or constructor of the project. This is essentially a first-to-request, first-to-document, first-to-deduct application so timing is of the essence. Mueller Prost certifies the deduction and obtains the appropriate documentation, and the taxpayer is able to take a deduction of up to \$1.80 per square foot of affected space without any out-of-pocket expense to your firm.

The application of this deduction to design/build plans for your clients can dramatically decrease their costs, thereby increasing their cash flow, and setting you apart from competition, leaving valuable dollars available for positive change orders. Mueller Prost can easily assist in finding minimal adaptations that can dramatically affect the applicability of this deduction, making your design-build firm a hero in the eyes of your clients simply because you're the only one bringing these valuable ideas to the table.

Conclusion

A design-build contractor may qualify for the R&E credit and/or Energy deduction for its design-related activities. The R&E tax credit and the Energy deduction can reduce income tax liability and retain cash in an otherwise tight economy. The R&E tax credit and Energy deduction provide an opportunity to offset some risk assumed by contractors and encourages constant innovation surrounding the design of buildings and/or facilities.

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