

digital Construction

HOW IT'S BUILT

How the U.S. Government Incentivises Builders and Designers to Think Bigger and Greener

American construction companies may have a unique set of tax headaches, but for those companies committed to green building and R&D, the federal government offers some substantial rewards

BY **RIZWAN VIRANI**, Managing Director at alliantgroup

Coming out of tax season, most companies in the construction industry are understandably not in the mood to discuss the details of the U.S. tax code. Facing some of the most advanced accounting standards, multi-state tax issues, and increasingly stricter scrutiny over worker classifications, it's safe to say American construction companies have a unique set of tax headaches.

While builders and designers continue to deal with a host of tax issues, it may surprise many of these firms that the very same tax code also affords them great opportunity.

In fact, for construction companies making every day improvements to their approach in construction, renovation, or design, or for those companies entrenched in green building, the federal government offers a substantial reward: that is, if they choose to apply.

The **Research and Development (R&D) Tax Credit** and the **Energy Efficient Commercial Building Deduction** (better known as *Section 179D*) are two of the most substantial - and not to mention underutilized - federal incentives tailor made for the benefit of the construction industry.

Thanks to the U.S. Senate Finance Committee's recent tax extenders package, both incentives are set to be around for the long haul, with the committee agreeing to retroactively extend both until the end of 2015 and bipartisan support among both parties to make the incentives permanent in the near future.

With so much positive momentum surrounding these incentives, let's take a step back and explore their benefits for all kinds of construction and design firms.

The R&D Tax Credit

History and stats- Originally passed in 1981 to spark innovation among American businesses, the R&D tax credit has been extended 15 times and is one of the most generous tax incentives offered by the U.S. government.

According to the Washington Post, the research credit and other related tax breaks have saved American businesses more than \$12 billion a year, an obvious benefit for companies looking to reinvest back into their business.

How it works- The R&D tax credit rewards companies for improving a product, process, or technique in the form of valuable tax credits. While the term R&D may conjure images of scientists shifting through test tubes, searching for the next medical breakthrough, we have found the reality behind the credit to be much simpler.

The incentive rewards the daily innovations of any number of industries, with construction and design firms serving as some of the biggest beneficiaries.

Case in point: one engineering firm recently received \$800,000 in federal credits for providing engineering and construction services in the expansion of a water purification plant, including a new water well equipped with groundwater suppression systems, over 7,000 feet of yard piping, and construction of a new chemical feed facility.

This is an exotic example for sure, but it shows the significant federal savings out there for the most innovative of architecture, engineering and construction firms.

The above example also goes way beyond eligibility requirements. Make no mistake – even the simple improvements or problem solving that occurs in the field, on the construction site, or within design blueprints are eligible for the credit.

Fitting a more common mold, a construction company in the Midwest received \$450,000 in federal credits for constructing a steel beam bridge while another firm received \$415,000 in federal credits for developing a roadway bridge for vehicle and highway loads – credits awarded in both cases for practical solutions to common design challenges. When it comes to R&D, applied sciences definitely count.

Section 179D

A green benefit- Section 179D benefits architects, engineers, contractors, and other commercial builders when they renovate or create energy-efficient buildings for the U.S. government.

Passed by Congress as part of the 2005 Energy Policy Act, under section 179D, any business performing these services on buildings at the federal, state, and local levels can receive a tax deduction of up to \$1.80 per square foot, an obvious financial windfall depending on the size and scope of the project.

Eligible buildings and green standards

The definition of what constitutes a building under 179D is very broad and includes a variety of structures such as office buildings, factories, warehouses, parking garages, schools, universities, airports – basically any structure that is built for any level of government.

Under section 179D construction, architecture, or engineering firms can benefit from any government building they designed or retrofits that have been placed into service in the last three years.

Case in point, a firm designing a professional sports stadium in a major metropolitan city saved \$273,396 in taxes thanks to energy efficient renovations made throughout the facility. The stadium's distinctive façade,

including an outer skin of tessellated aluminum mesh enclosing the facility with transparent glazed panels, ensured that air could easily circulate throughout the building, lowering the energy use needed for ventilation. High-energy and non-water toilets were also installed, reducing water usage by 41 percent.

While the above example is impressive, neither aluminum mesh or non-water toilets are necessary to qualify. Currently, to be eligible for 179D you only need to surpass 2001 ASHRAE standards - standards that most state codes already surpass.

The deduction covers improvements and renovations made to interior lighting, heating, ventilation and air conditioning (HVAC), hot water systems, or enhancements to a building's envelope. *For improvements to such systems, one mechanical contracting firm received \$278,000 in deductions from 179D (as well as \$490,000 in federal R&D tax credits), proving there can be significant rewards for even the simplest of eco-friendly changes.*

Future prospects (R&D and 179D)

Not only have the actions of the Senate Finance Committee kept R&D and 179D around for the foreseeable future, the recent tax extenders package looks to expand their scope.

A potentially revamped R&D tax credit would allow recent startups (companies that have existed less than five years and make less than \$5 million in annual gross receipts) to claim up to \$250,000 in credits against their payroll taxes on employee wages.

Section 179D could also potentially be expanded so that buildings owned by charities and tribal governments could allocate the benefits to the building designers (just as government run entities currently do).

With their future secured and the tax rewards never as generous, the R&D tax credit and 179D deduction are poised to push the U.S. construction industry forward. For their daily activities, innovative architecture, construction, and engineering firms could be in-line for massive tax savings - isn't it about time that the tax code finally worked for the best builders and designers?



Rizwan Virani is a Managing Director in alliantgroup's Houston national office and is an Industry Specialist in the firm's Architecture & Engineering, Construction, Software & Technology, Semiconductor & Electronics, Power & Energy, and Aerospace industry groups, part of alliantgroup's Industry Specialization Program. Rizwan is an experienced electrical engineer with prior experience in the semiconductor industry. He brings several years of experience and expertise in manufacturing technology, semiconductor process, electrical and mechanical hardware development, and fundamental engineering principals. Rizwan has worked with many of the world's leading semiconductor companies, such as Intel, Samsung, AMD, and Micron. His work involved developing semiconductor hardware and processes based on specifications and requirements defined by the client. Prior to joining alliantgroup, Rizwan was a project engineer and consultant for one of the largest semiconductor capital equipment makers.