

# Architectural Services

8.31.2020

NAICS CODES: 54131, 54132

SIC CODES: 0781, 8712

## Industry Overview

Companies in this industry plan and design residential, institutional, leisure, and industrial buildings and spaces, as well as landscapes. Prominent firms include US-based AECOM, Gensler, HDR, and Perkins & Will, as well as IBI (Canada), Nikken Sekkei (Japan), and Woods Bagot (Australia).

In many markets worldwide, improving economic conditions are helping boost construction investment and driving demand for architectural services. For many major firms, working globally is the norm.

The US architecture industry includes about 26,000 establishments (single-location companies and units of multi-location companies) with combined annual revenue of about \$42 billion.

## Competitive Landscape

Demand for architectural services depends heavily on the volume of residential and commercial construction. Because most costs are fixed, profitability depends on a constant inflow of work. Architectural firms are often small because there are **few economies of scale** in the industry: architectural design costs for a large company are typically greater than for a small company. The industry is **highly fragmented**: the 50 largest US firms account for about 20% of revenue.

## Products, Operations & Technology

Building-related architectural services account for about 90% of industry revenue; landscape architecture accounts for about 10%. Among building-related services, nonresidential buildings account for about 75% of industry revenue. Residential buildings account for about 15%.

Architects prepare detailed **plans** that can be used by construction companies to build or modify various types of structures. Most architectural work has both an aesthetic and an engineering component. For many projects, the architect's responsibility (and the work contract) extends from the initial design work through to the end of construction, a process that may span several years. On most projects, architects work closely with engineering and construction companies.

Major categories of nonresidential projects include office, health care, retail, and schools. Because most architecture firms are small, they often specialize in the design of one particular type of building. A typical small firm has three licensed partners, four professional design assistants, and three administrative staff.

### Technology

**Computer-aided design (CAD)** software has profoundly impacted the architecture business, enabling small firms to compete with large ones by eliminating the clerical drafting work that could most effectively be done by larger firms. **Building information modeling (BIM)** software allows architects and designers to create and communicate building design, predict performance, and better estimate building costs before construction begins. Most architectural plans are now produced and delivered to the client electronically.

New **3D printing technology**, which transforms computer renderings into physical objects, allows architects to create models easily and affordably. While smaller, consumer-oriented 3D printers can be used for small-scale projects, larger ones can be used to "print" entire buildings. Architects around the world are experimenting with printing full-size homes and other structures.

## Sales & Marketing

The success of most architecture firms is closely linked to the reputation of the **leading partners**. Firms cultivate contacts with engineering and construction firms, developers and government officials, and commercial property owners and managers. Large and small firms spend very little money marketing; some advertise in trade publications. Recognizing the need to promote architects' value to society, the American Institute of Architects (AIA) launched a three-year integrated "Look Up" awareness campaign using social media, digital marketing, and broadcast and print advertising. The AIA's goal for the campaign, which ended in 2018, was to remind the public that architects need to be considered in discussions about infrastructure, the US economy, and community health.

Firms may be invited by potential customers to submit plans for a competitive selection. The customer eventually selects a particular design based on total estimated design and construction costs, rather than on the architect's fee. Small firms typically get a significant portion of their work from repeat customers. New clients come from both competitive and noncompetitive selections. Large firms get about half their work from competitive selections. Large companies often work for large corporate customers with continuing design needs. Gensler, for example, grew rapidly by providing design work for more than 1,000 Gap stores. Large firms may have a sizable **international** business.

## Finance & Regulation

On longer-term projects, firms may receive progress payments, but the bulk of revenue is usually received when plans are transmitted to the client. For the industry in the US, accounts receivable average about 30 days' sales. Design contracts may be based on hours of actual work or on a fixed price. Well-known architects can charge a substantial design fee on top of other billings. Because of potential harm from faulty design, the cost of liability insurance can be high. Many firms (especially larger ones) buy "project-based" liability insurance for large projects.

The US landscape architecture industry is labor-intensive: average annual revenue per employee is about \$93,000. For the architecture industry, revenue per employee is about \$182,000.

### Working Capital Turnover by Company Size

The working capital turnover ratio, also known as working capital to sales, is a measure of how efficiently a company uses its capital to generate sales. Companies should be compared to others in their industry.



Financial industry data provided by MicroBilt Corporation collected from 32 different data sources and represents financial performance of over 4.5 million privately held businesses and detailed industry financial benchmarks of companies in over 900 industries (SIC and NAICS). More data available at [www.microbilt.com](http://www.microbilt.com).

## Regulation

Most states require architects to be licensed, which can include registration, examinations, and practice requirements. Many architecture school graduates work in the field but are not licensed and so cannot call themselves architects. The licensing restrictions discourage the formation of larger companies with multi-state clients. However, some architects are licensed in multiple states in order to work with regional and national clients.

Large architecture firms that work with government agencies and entities must comply with laws and regulations relating to the contracts that they enter. Architecture firms that work internationally must adhere to local government regulations and are subject to the US Foreign Corrupt Practices Act and other laws.

## International Insights

Worldwide, improving market conditions are helping boost construction investment and driving demand for architectural services. For many architects, working globally is the norm. Leading firms based outside the US include IBI (Canada), Nikken Sekkei (Japan), and Woods Bagot (Australia).

Rapid economic and population growth in countries including China, India, and Indonesia present key opportunities for architects. Cities in those countries have among the fewest architects per capita in the world, according to the American Institute of Architects. The **architect-per-capita gap** is expected to widen in these countries over the next several years. Industry associations such as the International Trade Administration and the American Institute of Architects have held conferences to introduce US firms to potential partners in India, for instance. In addition, architects fleeing the economic downturn in the US and Europe are finding greener pastures in emerging markets such as China, which is expected to build 50,000 new skyscrapers by 2025.

Architectural services firms with worldwide operations are vulnerable to a number of risks in developed and emerging markets alike. **Regulatory requirements** vary across developed nations, while political unrest, poverty, and corruption present challenges to working in emerging regions. Managing foreign risk is especially critical for firms with significant international revenue.

Expansion of architecture services on a **global scale** will rely extensively on the support of **multinational free-trade agreements** and licensure regulatory agreements. With slow recovery at home and abundant opportunities overseas, many US architects are pushing for a national licensing body to improve global practices.

## Regional Highlights

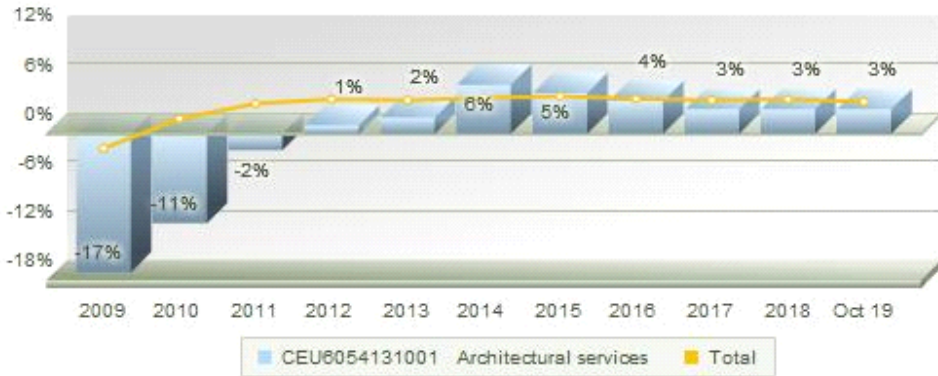
Most US firms are small and serve a local clientèle. As a result, their revenue is sharply affected by changing regional economic conditions, which in turn impact **construction rates**. Construction activity is highest in states with the largest populations and major business centers. [California](#), [Texas](#), [New York](#), [Illinois](#), and [Florida](#) are among states with the highest number of architecture establishments.

Demand for new office construction increases with white-collar job growth, office rent increases, and vacancy rate declines in a local market. Contractions in government spending can affect demand for architectural services in regions that are heavily dependent upon federal dollars.

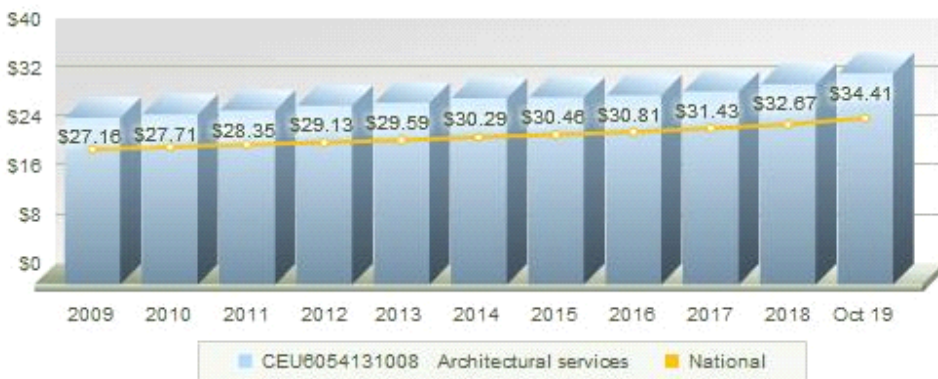
## Human Resources

Average wages for employees of US architectural services firms are **significantly higher** than the national average. Because demand for construction drives an architecture firm's business, junior architects' jobs can be at risk when business is slow. The personnel turnover rate for the professional services sector in the US is about 20% higher than the national average. Architecture firms can avoid hiring and laying off permanent workers by contracting with independent architects on a per-project basis. Injury rates for architects in the US are negligible. For landscape architects, the injury rate is about half that of the rest of the workforce.

Industry Employment Growth  
Bureau of Labor Statistics



### Average Hourly Earnings & Annual Wage Increase Bureau of Labor Statistics



## Industry Growth Rating



Demand: Depends on construction activity  
Need efficient labor and constant inflow of work  
Risk: Housing slumps

## Quarterly Industry Update

8.31.2020

**Trend: Architectural Changes Due to COVID-19** - Changes brought about by the need to prevent the transmission of coronavirus can create demand for architectural services. A number of convention centers, gymnasiums, dormitories, hotel rooms, and parking lots have been converted into alternate patient care facilities to lighten the load of the hospitals. Schools, offices, and commercial spaces can be redesigned with touchless entry and fixtures and germ-resistant materials. Woods Bagot in Australia introduced the Split Shift Home design that uses moveable walls to allot spaces at home for an office, food storage, and for planting fruits and vegetables. An architecture company in Austria designed Parc de la Distance, a maze-like park that prevents crowds and ensures social distancing with paths 2.4 m apart separated by hedges. An architect designed a 16-sqm micromarket that can be easily assembled in public areas close to the communities and ensures social distancing. Some places in Europe are aiming to establish compact cities where the providers of basic needs and services are located close to the

people in order to reduce commute times, air pollution, noise, energy consumption, and the possibility of spreading the coronavirus.

**Industry Impact** - Architectural service companies may see an increase in projects due to the need to adapt buildings and infrastructures to preventing the transmission of coronavirus.

### 5.11.2020

**Challenge: Demand Drops for Architectural Services Amid Coronavirus Outbreak** - Architectural firms are bracing for an ongoing drop in demand related to the coronavirus pandemic. According to the Architectural Billings Index (ABI), billings at architectural firms fell to a score of 33.3 in March 2020 compared to 53.4 in February 2020 (the baseline is 50 and represents no change). The difference marks the largest downturn ever recorded in the history of the ABI. The metric for inquiries into new design contracts also fell from 52 in February 2020 to 27.1 in March 2020. Regionally, the Northeast fared the worst in March 2020 with billings at 38.4, while the rest of the country also posted declines as construction work stalled as a result of the virus outbreak. While most states have allowed construction work to resume under certain guidelines, many companies are cancelling or delaying construction plans due to the ongoing economic uncertainty. Two-thirds of firms surveyed by the American Institute of Architects in late March said projects had slowed or stopped as a result of the virus, and more than 90% expect revenue to drop. Many architectural firms have cut pay for workers and instituted furloughs and layoffs to respond to the decline in business.

**Industry Impact** - Architectural firms will need to be flexible with changing conditions related to the coronavirus and be ready to adapt to budget changes and new safety regulations while working on projects.

### 9.23.2019

**Opportunity: California Leads Construction Activity in US** - US construction growth, a demand driver for architectural services, is largely concentrated in a small number of states, according to a recent report. California leads the US in terms of the number of construction projects (1,302) and the greatest value of projects (\$524 billion), according to a recent report by GlobalData titled "Construction in Key US States." The report examined more than 11,200 construction projects in the US valued at \$2.7 trillion in both the public and private sectors. California is one of 10 states that account for nearly 60% of the total US construction market. The state in second place in terms of project value is Texas with \$425 billion in value. The other top states for construction projects in order of project value are New York, Florida, Washington, Illinois, Pennsylvania, Georgia, Ohio, and North Carolina. States with the fastest construction growth, according to the report, are Florida, Georgia, and Washington, with annual average growth rates in the past five years of 9.9%, 8.7%, and 6%, respectively.

**Industry Impact** - Architectural services firms looking for growth may want to consider expanding into one of the high-activity construction states.

### 3.18.2019

**Trend: Uptick in Off-Site Residential Construction** - Use of off-site construction techniques on residential projects has risen in recent years, according to a recent survey of construction management and general contractors, architects, engineers, trade contractors, and developers by the Building Sciences Off-Site Construction Council. Between 2014 and 2018, use of off-site building methods increased from 8% to 18.5% for single-family projects and 24% to 38% for multi-family projects. Nearly 90% of the survey respondents indicated they had used off-site fabricated components over the past 12 months, while more than 80% indicated that they expect to use off-site construction more often or the same amount over the next year. Benefits of off-site construction cited in the survey were a shortened overall project schedule, a shortened duration of the construction phase, higher-quality product, and cost effectiveness. The most significant barrier to off-site construction was transportation to the job site. Existing construction culture and late design changes were also cited as obstacles.

**Industry Impact** - Architectural firms may want to explore how off-site construction techniques could benefit certain projects and establish a trusted network of off-site construction providers.

## Industry Indicators

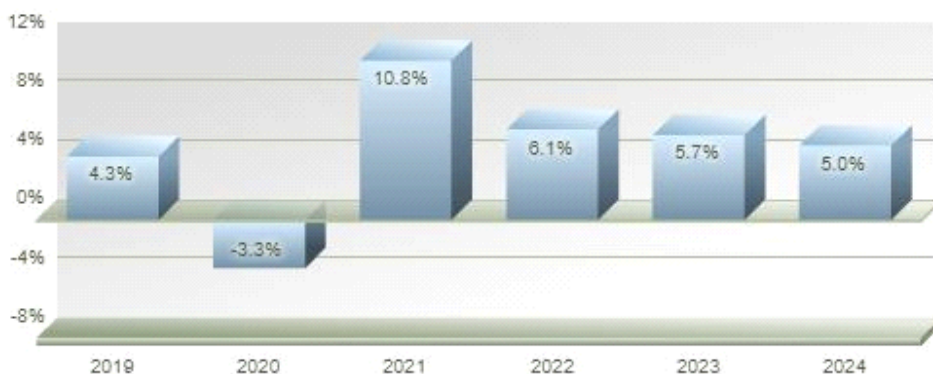
The value of US nonresidential construction spending, a demand indicator for architect services, rose 2.7 percent year-to-date in July 2020 compared to the same period in 2019.

The value of US residential construction spending, which impacts demand for architect services, rose 6.0 percent year-to-date in July 2020 compared to the same period in 2019.

Total US revenue for architectural and related services fell 3.4 percent in the second quarter of 2020 compared to the same period in 2019.

## Industry Forecast

Revenue (in current dollars) for US architectural services is forecast to grow at an annual compounded rate of 6% between 2020 and 2024. Data Published: July 2020



First Research forecasts are based on INFORUM forecasts that are licensed from the Interindustry Economic Research Fund, Inc. (IERF) in College Park, MD. INFORUM's "interindustry-macro" approach to modeling the economy captures the links between industries and the aggregate economy. [Forecast FAQs](#)

## Industry Drivers

Changes in the economic environment that may positively or negatively affect industry growth.

Data provided by First Research analysts and reviewed annually



**Interest Rates** Change in prime and related interest rates



**Construction Spending** Change in the overall level of commercial and residential construction spending

## Critical Issues

**Dependence on Construction Activity** - The industry greatly depends on the amount of building construction in the US, which often changes in multi-year cycles. US construction activity, which fell during the recession of the late 2000s, has since begun to increase, especially in the residential and private sectors. Construction spending increased by about 5% in the first half of 2018 from the same period the year before. The construction industry can also be affected by unexpected global events, such as a worldwide pandemic or political instability. Demand in specific segments, like schools or office buildings, can be volatile. Public spending on highway and construction projects depends on legislative action.

**Dependence on Skilled Labor** - Many architectural firms depend heavily on the reputation of a single partner and on personnel trained to operate various CAD systems. Because design skills are also in demand in other industries, many firms have trouble finding and keeping technical and design staff. Because of the difficulty of finding skilled workers, firms often keep all workers even when business is slow.

## Business Challenges

**Increasing Design Complexity** - Technology and security considerations have affected building design, and state and local building codes have become more complicated. Tracking and complying with all regulations can be difficult for architects, especially if they work on a project outside their usual territory. The necessity for expertise in eco-friendly building and design is also increasing. Green projects in both the public and private sectors demand that architects are well-versed in a variety of technologies and products.

**Uneven Workload, Cash Flow** - Because work in the industry is on a project basis, work demands can be very uneven, especially for smaller firms. Cash flow is also uneven, even for firms that have continuous work, because the bulk of payments are typically made upon completion of a project. Small firms can't usually afford to cut their workforce when activity is slow.

**Customer Concentration** - Most architect firms are small and receive a substantial amount of work from a few large customers. Most firms rely heavily on repeat business.

**Quality of Receivables** - Architects can have a significant portion of their payments held until after a project is complete. During periods of financial difficulty, which seem to run in cycles in the real estate business, architects may be unable to collect these payments. Receivables that languish for too long may also make it difficult for a firm to get credit, raising the cost of borrowing money.

## Business Trends

**Partnering with Engineering Firms** - More architects are teaming up with engineers in so-called architect/engineering (AE) firms, as the line between the two has blurred. More project work is of the "design-build" type, where one firm does both the design and building work to ensure good project integration. Larger firms, especially, have adopted this format to offer a broader line of service to clients; among the 100 largest design firms in the country, only a handful are pure architect firms.

**Security Considerations** - Architects are finding security and evacuation systems to be a higher priority in the design of buildings and other facilities. Lobbies are larger to accommodate enhanced security functions, protective barriers are often included, while adjacent or underground parking areas are avoided. More attention is paid to engineering upgrades, such as better fireproofing, improved structural supports, and impact-resistant stairwells.

**Green Building** - The number of green, LEED-certified homes grew nearly 20% in the US from 2017 to 2019, according to the US Green Building Council. Green building, or environmentally sensitive architecture, is benefiting from more government incentives, grant programs, success stories, and better marketing strategies. Design and construction teams can meet Leadership in Energy and Environmental Design (LEED) standards in order to have buildings reach green certification, which is highly desirable in the marketplace. Architectural services firms that can design new homes and buildings with environmentally sound features are in demand.

**Resilient Structures** - Increasingly severe storms, numerous wildfires, and damaging earthquakes have created a strong demand for resilient homes and buildings. Architects are deploying the latest technology, materials, and design techniques when planning new homes, schools, office buildings, and other structures. Many are choosing to use concrete, cement, and steel in their residential designs, as clients want buildings to be fire-resistant and able to withstand strong winds and other conditions.

## Industry Opportunities

**Consolidation Smooths Construction Cycles** - Since larger firms are better able to provide a constant work supply and offer a greater range of services than smaller firms, many firms have an active consolidation strategy. The number of firms with more than 50 employees has risen recently as smaller firms merge with larger ones.

**Decayed Public Infrastructure** - Spending to improve or replace essential public buildings, such as schools and hospitals, is likely to continue. Many public schools are in poor physical condition. Hospital rehabilitation and replacement are also expected to continue. Governments also are facing pressure to increase spending to replace and repair airports, highways, water supply plants, and other public infrastructure.

**Computer Software Technology** - Using 3D computer animation programs, architects can design more intricate interiors and walk clients through structures. Computers replaced most drafting work more than a decade ago, but newer hardware and software allow designers to produce more sophisticated designs. Programs like AutoCAD, Maya, and Catia, powered by high-end PCs, let designers work with 3D models. The latest design applications can help architects quickly develop renderings and 3D models of their designs to help clients understand and commit to a proposal, and help construction crews visualize the architect's intent.

**Crowdfunding in Architecture** - Architects can find alternative financing for projects through web-based crowdfunding. The increasingly popular method of raising money can attract investors and get various real estate and design projects off a designer's drawing board. The American Institute of Architects expects crowdfunding to become a major fundraising tool for small projects moving forward. Going directly to the public for funding can help architects collaborate and build community support.

## Financial Information

### COMPANY BENCHMARK TRENDS

#### Quick Ratio by Company Size

The quick ratio, also known as the acid test ratio, measures a company's ability to meet short-term obligations with liquid assets. The higher the ratio, the better; a number below 1 signals financial distress. Use the quick ratio to determine if companies in an industry are typically able to pay off their current liabilities.



Financial industry data provided by MicroBilt Corporation collected from 32 different data sources and represents financial performance of over 4.5 million privately held businesses and detailed industry financial benchmarks of companies in over 900 industries (SIC and NAICS). More data available at [www.microbilt.com](http://www.microbilt.com).

#### Current Liabilities to Net Worth by Company Size

The ratio of current liabilities to net worth, also called current liabilities to equity, indicates the amount due creditors within a year as a percentage of stockholders' equity in a company. A high ratio (above 80 percent) can indicate trouble.





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## COMPANY BENCHMARK INFORMATION

NAICS: 54131, 54132

Data Period: 2018

Last Update February 2020

Table Data Format

Mean

Company Size	All	Large	Medium	Small
Size by Revenue		Over \$50M	\$5M - \$50M	Under \$5M
Company Count	20058	7	213	19838

### Income Statement

	All	Large	Medium	Small
Net Sales	100%	100%	100%	100%
Gross Margin	93.6%	94.8%	95.5%	92.5%
Officer Compensation	7.2%	7.1%	6.7%	7.5%
Advertising & Sales	0.3%	0.2%	0.3%	0.3%
Other Operating Expenses	84.3%	85.5%	86.9%	82.9%
Operating Expenses	91.8%	92.8%	93.9%	90.7%
Operating Income	1.8%	2.0%	1.6%	1.9%
Net Income	0.8%	0.9%	0.7%	0.8%

### Balance Sheet

	All	Large	Medium	Small
Cash	13.9%	13.0%	14.3%	13.9%
Accounts Receivable	31.3%	30.9%	32.0%	31.0%
Inventory	1.7%	1.8%	1.4%	1.8%

<b>Total Current Assets</b>	55.8%	56.3%	56.0%	55.6%
<b>Property, Plant &amp; Equipment</b>	28.0%	28.7%	27.6%	28.0%
<b>Other Non-Current Assets</b>	16.2%	15.1%	16.4%	16.4%
<b>Total Assets</b>	100.0%	100.0%	100.0%	100.0%
<b>Accounts Payable</b>	15.6%	15.0%	16.3%	15.4%
<b>Total Current Liabilities</b>	42.2%	41.1%	43.4%	41.9%
<b>Total Long Term Liabilities</b>	19.6%	14.1%	18.8%	21.3%
<b>Net Worth</b>	38.2%	44.8%	37.9%	36.8%

**Financial Ratios**  
(Click on any ratio for comprehensive definitions)

<b>Quick Ratio</b>	1.09	1.10	1.09	1.09
<b>Current Ratio</b>	1.32	1.37	1.29	1.33
<b>Current Liabilities to Net Worth</b>	110.4%	91.7%	114.5%	113.8%
<b>Current Liabilities to Inventory</b>	x25.12	x22.95	x30.53	x23.67
<b>Total Debt to Net Worth</b>	x1.62	x1.23	x1.64	x1.72
<b>Fixed Assets to Net Worth</b>	x0.73	x0.64	x0.73	x0.76
<b>Days Accounts Receivable</b>	41	43	45	39
<b>Inventory Turnover</b>	x10.50	x7.64	x8.32	x12.15
<b>Total Assets to Sales</b>	36.0%	37.9%	37.8%	34.7%
<b>Working Capital to Sales</b>	4.9%	5.7%	4.8%	4.8%
<b>Accounts Payable to Sales</b>	5.7%	5.8%	6.2%	5.4%
<b>Pre-Tax Return on Sales</b>	1.3%	1.5%	1.1%	1.3%
<b>Pre-Tax Return on Assets</b>	3.6%	4.0%	3.0%	3.8%
<b>Pre-Tax Return on Net Worth</b>	9.3%	8.8%	7.9%	10.3%
<b>Interest Coverage</b>	x2.94	x3.15	x2.55	x3.12
<b>EBITDA to Sales</b>	4.7%	5.1%	4.3%	4.8%
<b>Capital Expenditures to Sales</b>	3.0%	3.1%	2.8%	3.1%

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## **ECONOMIC STATISTICS AND INFORMATION**

Annual Construction Put into Place - Census Bureau



## VALUATION MULTIPLES

### Architectural Services

Acquisition multiples below are calculated medians using at least 3 US private industry transactions completed between 1/2008 and 12/2019 and are based on middle-market transactions where the market value of invested capital (the selling price) was less than \$1B. Data updated annually. Last updated: December 2019.

Valuation Multiple	MVIC/Net Sales	MVIC/Gross Profit	MVIC/EBIT	MVIC/EBITDA
Median Value	0.4	0.7	3.9	3.5

**MVIC (Market Value of Invested Capital)** = Also known as the selling price, the MVIC is the total consideration paid to the seller and includes any cash, notes and/or securities that were used as a form of payment plus any interest-bearing liabilities assumed by the buyer.

**Net Sales** = Annual Gross Sales, net of returns and discounts allowed, if any.

**Gross Profit** = Net Sales - Cost of Goods Sold

**EBIT** = Operating Profit

**EBITDA** = Operating Profit + Noncash Charges



SOURCE: DealStats (formerly Pratt's Stats), 2019 (Portland, OR: Business Valuation Resources, LLC). Used with permission. DealStats is available at <https://www.bvresources.com/learn/dealstats>

## Industry Websites

### American Institute of Architects

Primary site for information, articles, and statistics.

### American Society of Landscape Architects

News, advocacy, and educational resources for landscape resources.

### ArchDaily

News, projects, and interviews.

### Archpreneur

Industry news, trends, and strategies.

### Architect Magazine

Industry highlights.

**Architects' Journal**

UK-based news about architectural industry.

**Architectural Foundation**

Educational organization.

**Architectural Record**

Online magazine, design news.

**Dodge Data & Analytics**

Construction industry news.

**Engineering News-Record**

Design-build news and trends.

**Lawn & Landscape**

Industry news and research.

**Royal Architectural Institute of Canada**

Education, resources, events, and lists.

**The Architect's Newspaper**

News and trends.

**The Architectural Review**

News, opinion, and reviews.

**World Architecture**

News, directories, industry issues.

## Glossary of Acronyms

**AAF** - American Architect Foundation

**AIA** - American Institute of Architects

**BIM** - building information modeling

**BSA** - Business Software Alliance

**CAD** - computer-aided design

**GIS** - geographic information systems

**LEED** - Leadership in Energy and Environmental Design

**NAR** - National Association of Realtors