AEC design software 6-yr return:

-12%

The segment most VCs love. Horsesh*t returns.

Meanwhile the "boring" physical businesses crushed the S&P. Swipe 👉

AEC vs. SPY: who wins?

Category	Cumulative return	Cumulative return SPY	Period start date
Specialty, general, homebuilder contractors	*712.30%*	*271.10%*	*Apr 2017*
Building materials manufacturers	*360.00%*	*234.20%*	*Oct 2017*
Design software, field + reality capture	*(36.0%)*	*92.10%*	*May 2021*
Engineering & consultancy	*175.50%*	*402.80%*	*Jan 2014*

Contractors have outperformed the market by roughly 2.6x: the businesses everyone writes off as thin-margin and commoditized quietly crushed it

Building materials (cement, etc.) also outperformed a composite of some of the market's sexiest industries

Software is the outlier, and not in a good way: the segment that carries the richest multiples has destroyed value for public investors

Source: the index was built with data from PortfolioMetrics; period end date is Jun-26

Period start date is based on the trading date of the last company to IPO in every index

Same window, same story

Normalize the window and the ranking doesn’t budge: physical wins, digital loses.

Category	Cumulative return	Cumulative return SPY	Period start date
Specialty, general, homebuilder contractors	*473.60%*	*150.10%*	*Sep 2020*
Building materials manufacturers	*226.20%*	*150.10%*	*Sep 2020*
Design software, field + reality capture*	*-12.40%*	*150.10%*	*Sep 2020*
Engineering & consultancy	*137.70%*	*150.10%*	*Sep 2020*

Contractors: +473.6% → three-plus times the market, again!

Building materials: +226.2% → comfortably ahead

Engineering & consultancy: +137.7% → basically matches the S&P, a hair under. So its long-run underperformance is mostly a pre-2020 story, not a recent one

Software: -12.4% → horsesh*t returns

Source: the index was built with data from PortfolioMetrics; period end date is Jun-26

**Procore removed (IPO'd after the start date)*

The multiples tell on themselves

The market pays a higher forward multiple for contractors than for software: more per dollar of future earnings for a thin-margin cyclical than for SaaS. Read that twice.

Category	P/S	Forward P/E	P/E Ratio (TTM)	EBITDA margin	Net profit margin
Specialty, general, homebuilder contractors	*1.58*	*25.55*	*33.38*	*9.80%*	*6.80%*
Building materials manufacturers	*3.04*	*20.04*	*40.11*	*20.60%*	*10.10%*
Design software, field + reality capture	*5.88*	*21.7*	*37.8*	*25.90%*	*15.00%*
Engineering & consultancy	*1.58*	*17.98*	*25.14*	*11.80%*	*6.50%*

The market pays up for software's margins, but building materials post ~21% EBITDA (closer to software than contractors) while still commanding the group's fattest P/E (40x), despite being filed under "commodity"

Those margins are the sector's commodity floor: undifferentiated cement, aggregates, gypsum. Move out of pure commodity, and the margins and multiples get even better (→ check out Indian material manufacturers in adhesives, paints, etc.)

This is the market pricing in durable pricing power in a supply-constrained world that needs an ever-increasing quantity of physical products.

(BTW: that's exactly why I'm personally excited about cloud manufacturers and new-age building-materials manufacturers)

Source: Koyfin, Yahoo Finance

Great economics ≠ great returns

The value in this sector accrues where technology touches the physical operations, not in the pure-software layer the market keeps overpaying for

Category	Current ratio	Total debt/EBITDA *	Net Debt/EBITDA *	ROIC*	FCF Margin %*	FCM market yield*
Specialty, general, homebuilder contractors	*1.47*	*2.76*	*1.65*	*10.90%*	*6.50%*	*7.60%*
Building materials manufacturers	*1.99*	*1.92*	*1.68*	*11.00%*	*7.10%*	*4.30%*
Design software, field + reality capture	*0.96*	*2.02*	*1.34*	*8.50%*	*24.70%*	*4.10%*
Engineering & consultancy	*1.25*	*1.98*	*1.64*	*12.80%*	*7.20%*	*4.70%*

Software has the highest FCF margin in the group and the lowest FCF yield: the business gushes cash, but the price means shareholders see almost none of it. Best margins, worst ROIC: its capital base is bloated relative to what it produces. Contractors are the opposite: almost no margin, and still the highest cash yield in the sector (7.6%) → capital-efficiency machines!

Building materials refuse the trade-off entirely: ~20% EBITDA margins AND 11% ROIC, the strongest balance sheet in the group (current ratio ~2.0, lowest gross leverage), and still a premium multiple *(what did I just say in the previous slide about cloud manufacturing? 😉)*

In software you pay ~6x sales for the lowest return on invested capital in the sector, which is a levered call on a future that hasn't shown up in five years of numbers. In the physical layer, you pay ~1.5-3x sales for proven ROIC and real cash yield today

Source: Koyfin, Yahoo Finance

How I built the indexes

Building materials manufacturers	Specialty, general, homebuilder contractors		Design software, field + reality capture	Engineering & consultancy
CRH	PulteGroup	Strabag	Bentley Systems	Jacobs Solutions
Holcim	Skanska	Eiffage	Trimble	Stantec
Heidelberg Materials	Obayashi	Kier	Dassault Systèmes	Tetra Tech
Cemex	Taisei	Balfour Beatty	Hexagon	WSP Global
Ultratech Cement	Samsung C&T	Ferrovial	Autodesk	Arcadis
Vulcan Materials	Hyundai E&C	Shimizu	Nemetschek	Fugro
Martin Marietta Materials	Acciona	Quanta Services	Procore Technologies	Engineers India
Eagle Materials	Sacyr	Sterling Infrastructure		AECOM
United States Lime & Minerals	Webuild	MasTec		AtkinsRéalis
Tecnoglass	PORR	MYR Group		
Compagnie de Saint-Gobain	Implenia	Hochtief		
Kingspan	Morgan Sindall	Dycom		
ArcelorMittal	Galliford Try	Kajima		
Ferguson	Daewoo E&C	Emcor		
Ambuja Cements	Fluor	Larsen & Toubro		
Builders FirstSource	KBR			
Buzzi	Tutor Perini			
J.K. Cement	Dilip Buildcon			
Mohawk Industries	PNC Infratech			
RPM International	Hindustan Construction			
Simpson Manufacturing	Bouygues			
Wienerberger	Granite Construction			
Sika	NVR			
Sherwin-Williams	Lennar			
Masco	Vinci			

(not the most beautiful slide, but it serves its purpose)