



## Highlights from



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### **Brick Industry Association (BIA) Installed Cost of Non-Residential Wall Systems Comparative Study – February 2017 Revised Report**

4/4/2017



## Overall Summary

A study by RS Means® confirmed that when compared to other commercial-grade wall systems, brick wall systems are extremely cost-competitive compared to other commercial-grade wall systems throughout the country.

EIFS and Brick Veneer on Steel Stud wall systems were consistent at the low end of the range while the Glass and Metal Panel curtain wall systems were by far the most expensive. The Precast Concrete wall system was not only more expensive than Brick Veneer on Steel Stud, it was also more expensive than Brick Veneer with Concrete Masonry Unit cavity wall systems.

It should be noted that the installed wall system costs were directionally similar in all building types evaluated. In fact, the difference in wall costs were significant enough so that they frequently resulted in meaningful differences in the entire cost of the building project.

In fact, RS Means concludes that there are three factors that have real influence on a wall system's contribution to the building project cost:

- 1) **Building Type:** The cost impact of wall systems does vary on different types of buildings. For example, a wall system will have much more of an impact on a 20,000 square foot office building than it will on a 200,000 square foot hospital as shown in the following charts.
- 2) **Location:** High-cost metropolitan areas will be more expensive than lower-cost, rural areas. BIA and its members can furnish local data for any zip code in the USA with RS Means' own City Cost Index data.
- 3) **Labor Rate:** Similar to location, labor rates have an impact on overall building project costs. It should be noted that the following costs use Union Labor rates pulled from RS Means' average wage rates derived from 30 major U.S. cities.

**Note:** Numbers are derived and rounded according to RS Means' study materials provided to BIA.



# RS Means® Costs for 3 Story Office Building

National Average as of February, 2017

20,000 Square Foot Office Building	EIFS with Metal Studs	Brick and Steel Studs	Manufactured Stone with Steel Studs	Brick with CMU	Precast Concrete	Metal Panel Curtain Wall	Glass Panel Curtain Wall
Cost of Installed Cladding Material	\$185,800	\$251,000	\$317,800	\$321,800	\$399,400	\$667,800	\$692,400
Total Cost of Construction Per Square Foot	\$168.91	\$171.92	\$176.56	\$176.81	\$181.55	\$199.94	\$201.28
Total Cost of Construction of Building Project	\$3,378,182	\$3,438,356	\$3,531,111	\$3,536,264	\$3,630,909	\$3,998,802	\$4,025,581
Total Project Cost Comparison			2.7% more than Brick with Steel Studs		2.7% more than Brick with CMU	13.1% more than Brick with CMU	



# RS Means® Costs for 5-10 Story Office Building

National Average as of February, 2017

80,000 Square Foot Office Building	EIFS with Metal Studs	Brick and Steel Studs	Manufactured Stone with Steel Studs	Brick with CMU	Precast Concrete	Metal Panel Curtain Wall	Glass Panel Curtain Wall
Installed Cost of Cladding Material	\$577,600	\$780,800	\$988,800	\$1000,800	\$1,242,400	\$2,078,400	\$2,154,400
Total Cost of Construction Per Square Foot	\$147.35	\$150.15	\$156.46	\$156.38	\$165.21	\$173.20	\$174.87
Total Cost of Construction of Building Project	\$11,787,755	\$12,012,308	\$12,516,456	\$12,510,000	\$13,217,021	\$13,856,000	\$13,989,610
Total Project Comparison			4.2% more than Brick with Steel Studs		5.7% more than Brick with CMU	10.8% more than Brick with CMU	



# RS Means® Costs for 4-8 Story Hospital

National Average as of February, 2017

200,000 Square Foot Hospital	EIFS with Metal Studs	Brick and Steel Studs	Manufactured Stone with Steel Studs	Brick with CMU	Precast Concrete	Metal Panel Curtain Wall	Glass Panel Curtain Wall
Installed Cost of Cladding Material	\$894,000	\$1,208,000	\$1,530,000	\$1,548,000	\$1,920,000	\$3,214,000	\$3,332,000
Total Cost of Construction Per Square Foot	\$279.38	\$274.55	\$273.21	\$276.43	\$282.35	\$286.96	\$287.24
Total Cost of Construction of Building Project	\$55,875,000	\$54,909,090	\$54,642,857	\$55,285,714	\$56,470,588	\$57,392,857	\$57,448,276
Total Project Comparison						Project costs \$2M + over Brick Systems	Project costs \$2M+ over Brick Systems



# RS Means® Costs for 6 Story Dorm

National Average as of February, 2017

85,000 Square Foot Dorm	EIFS with Metal Studs	Brick and Steel Studs	Manufactured Stone with Steel Studs	Brick with CMU	Precast Concrete	Metal Panel Curtain Wall	Glass Panel Curtain Wall
Installed Cost of Cladding Material	\$515,950	\$697,000	\$883,150	\$894,200	\$1,109,250	\$1,855,550	\$1,923,550
Total Cost of Construction Per Square Foot	\$155.64	\$157.69	\$162.34	\$161.85	\$169.48	\$176.05	\$176.80
Total Cost of Construction of Building Project	\$13,229,487	\$13,403,846	\$13,799,219	\$13,756,923	\$14,405,844	\$14,964,113	\$15,027,734
Total Project Comparison			2.9% more than Brick with Steel Stud		4.7% more than Brick with CMU	8.8% more than Brick with CMU	