

Brick vs. Vinyl Houses

By the Numbers

The additional money you pay for brick on the day you buy as well as the small increase in mortgage payments, you will get back and then some on the day you sell.

EXECUTIVE SUMMARY

BRICK HOUSES DON'T <u>REALLY</u> COST MORE...IN FACT, YOU GET MORE!

HOUSE PARTICULARS:

Two two-story, 2,500 square foot houses constructed on similar lots that are identical with one exception (one is sided with vinyl and one is sided with brick)

- The 2,500 square foot house with vinyl siding cost = \$250,000.00
- The 2,500 square foot house with brick siding cost = \$266,500.00 (6.6% increase over vinyl)

INITIAL COSTS FOR HOMEOWNER:

Case 1 (20% Down Payment):

Mortgage and Down Payment (assume 20% down, 80% mortgage, 4.375% interest rate for 30 years):

- Vinyl: 50,000.00 cash down, Mortgage = \$ 200,000.00
- Brick: 53,300.00 cash down, Mortgage = \$213,200.00

Case 2 (10% Down Payment):

Mortgage and Down Payment (assume 10% down, 90% mortgage, 4.375% interest rate for 30 years):

- Vinyl: 25,000.00 cash down, Mortgage = \$ 225,000.00
- Brick: 26,650.00 cash down, Mortgage = \$ 239,850.00

ADDITIONAL COSTS FOR HOMEOWNER OF BRICK HOUSE DURING OWNERSHIP FOR 5 YEARS:

Case 1 (20% Down Payment):Additional Down Payment for Brick at Closing:\$ 3,300.00Annual Additional Mortgage Cost:\$ 635.88/year (\$52.99/month)

Neglects any cost benefits such as: Lower Insurance Premiums, Lower Utility Costs, No Maintenance Costs

Case 2 (10% Down Payment):Additional Down Payment for Brick at Closing:\$ 1,650.00Annual Additional Mortgage Cost:\$ 715.44/year (\$59.62/month)

Neglects any cost benefits such as: Lower Insurance Premiums, Lower Utility Costs, No Maintenance Costs

FIVE YEARS LATER- HOMEOWNER SELLS HOUSE (HOUSE VALUE HAS <u>APPRECIATED</u>)

Case 1 (20% Down Payment):

Vinyl House appraised value = \$ 295,473.38 - Remaining Loan Balance = \$ 182,302.02 Brick House appraised value = \$ 320,586.41 - Remaining Loan Balance = \$ 194,333.96

Vinyl House sells at appraised value (less 6% realtor commission) = 277,744.98Brick House sells at appraised value (less 6% realtor commission) = 301,351.23

Due to Homeowner at Closing:

- Vinyl House: \$ 277,744.98 \$ 182,302.02 = \$ 95,442.96
- Brick House: \$ 301,351.23 \$ 194,333.96 = \$ 107,017.27

Vinyl House additional cash:

Loss of use of additional down pay	yment (\$ 3,300.00) for 5 years	\$ = \$ 3,468.33
Additional mortgage cost:	\$ 635.88/year x 5 years	= \$ 3,179.40

BOTTOM LINE (after 5 years of ownership and sale of house):

Vinyl House Homeowner cash in hand: \$ 3,468.33 + 3,179.40 + 95,442.96 = \$ 102,090.69 Brick House Homeowner cash in hand: = \$ 107,017.27 BRICK HOUSE DIDN'T COST MORE - HOMEOWNER GAINS ~ \$ 5,000.00

Case 2 (10% Down Payment):

Vinyl House appraised value = \$ 295,473.38 - Remaining Loan Balance = \$ 205,089.78 Brick House appraised value = \$ 320,586.41 - Remaining Loan Balance = \$ 218,625.70

Vinyl House sells at appraised value (less 6% realtor commission) = 277,744.98Brick House sells at appraised value (less 6% realtor commission) = 301,351.23

Due to Homeowner at Closing:

- Vinyl House: \$ 277,744.98 \$ 205,089.78 = \$ 72,655.20
- Brick House: \$ 301,351.23 \$ 218,625.70 = \$ 82,725.53

Vinyl House additional cash:

Loss of use of additional down payment (\$ 1,650.00) for 5 years = \$ 1,734.17 Additional mortgage cost: \$ 715.44/year x 5 years = \$ 3,577.20

BOTTOM LINE (after 5 years of ownership and sale of house):

Vinyl House Homeowner cash in hand: \$ 1,734.17 + 3,577.20 + 72,655.20 = \$ 77,966.57 Brick House Homeowner cash in hand: = \$ 82,725.53 BRICK HOUSE DIDN'T COST MORE - HOMEOWNER GAINS ~ \$ 5,000.00

BACKGROUND

Two identical houses constructed on similar lots with one exception (One of the houses has brick siding and one has vinyl siding). They are two story houses and have 2,500 square feet.

COSTS (Initial and Impact on Mortgage Payment)

Vinyl sided house cost	=	\$250,000.00
Brick veneer house cost	=	$$266,500.00 (6.6\% \text{ increase over vinyl})^{1}$

¹Residential Wall Cost Information Report (Using costs developed by an Independent Professional Estimator)

Case 1 (20% Down Payment)

Extra Costs in Mortgage and Down Payment (assume 20% cash down, 80% mortgage, and a fixed interest rate of 4.375% for 30 years):

Vinyl: \$ 50,000.00 cash down, Mortgage = \$ 200,000.00 Brick: \$ 53,300.00 cash down, Mortgage = \$ 213,200.00

Additional Down Payment for Brick at Closing:	\$ 3,300.00
Increase in Monthly Mortgage:	\$65.91/month (\$790.92/year)
"Real" Increase in Monthly Mortgage ^{2a} :	\$ 52.99/month (\$ 635.88/year)

^{2a} The additional mortgage amount of \$65.91/month does not account for the fact that approximately 70% of this would be interest (vs. principal) which would be itemized on Schedule A of the Homeowner's Tax Forms. Assuming a 28% tax bracket, this represents a credit of \$65.91 x $0.70 \times 0.28 = 12.92 . (e.g., it's not really an additional payment of \$65.91, it is \$65.91 - \$12.92 = \$52.99/month additional payment brick house. The \$12.92 per month "benefit" would be collected by the homeowner on a yearly basis as part of filing your tax returns).

Case 2 (10% Down Payment)

Extra Costs in Mortgage and Down Payment (assume 10% cash down, 90% mortgage, and a fixed interest rate of 4.375% for 30 years):

Vinyl: \$ 25,000.00 cash down, Mortgage = \$ 225,000.00 Brick: \$ 26,650.00 cash down, Mortgage = \$ 239,850.00

Additional Down Payment for Brick at Closing:	\$ 1,650.00	
Increase in Monthly Mortgage:	\$74.15/month	(\$ 889.80/year)
"Real" Increase in Monthly Mortgage ^{2b} :	\$ 59.62/month	(\$ 715.44/year)

^{2b} The additional mortgage amount of \$74.15/month does not account for the fact that approximately 70% of this would be interest (vs. principal) which would be itemized on Schedule A of the Homeowner's Tax Forms. Assuming a 28% tax bracket, this represents a credit of \$74.15 x $0.70 \times 0.28 = 14.53 . (e.g., it's not really an additional payment of \$74.15,

it is 374.15 - 14.53 = 59.62/month additional payment brick house. The 14.53 per month "benefit" would be collected by the homeowner on a yearly basis as part of filing your tax returns).

FIVE YEARS LATER (Homeowners sell houses)

Assume the 2,500 square foot house appraised initially at \$250,000. "Vinyl" House is lived in for 5 years with a 4% per year appreciation index for years 1 and 2 and 3% for years 3, 4 and 5:

Year 0:	\$ 250,000.00	Year 1:	\$ 260,000.00
Year 2:	\$ 270,400.00	Year 3:	\$ 278,512.00
Year 4:	\$ 286,867.36	Year 5:	\$ 295,473.38

Vinyl House appraised value = 295,473.38Brick House appraised value = $320,586.41^3$

³ Based on the 2009 Marshall and Swift Residential Cost Handbook. Assume "average quality" construction and a lot cost of \$40,000. Vinyl sided house is appraised at \$295,473.38 - \$40,000.00 (lot) = \$255,473.38. Now, need to apply the 9.83% increased factor based on the siding being masonry veneer versus vinyl siding. Vinyl at \$60.91 per square foot and brick veneer at \$66.90 per square foot, brick is (66.90 - 60.91)/ $60.91 \times 100\% = 9.83\%$ increase over vinyl. Therefore, \$255,473.38 x 1.0983 = \$280,586.41. \$280,586.41 + \$40,000.00 (lot) = \$320,586.41

WHAT DOES EACH HOMEOWNER HAVE AFTER SELLING HOUSE?

Case 1 (20% Down Payment)

The owner of the vinyl sided house has after 5 years:

- Cash not used as additional down payment (left in an ordinary savings account at 1% interest)
 Cash value after 5 years: FV = PV(1+i)ⁿ or \$3,300.00 x (1 + 0.01)⁵ = \$3,468.33
- Additional mortgage savings \$635.88/year x 5 years = \$3,179.40
- Equity from Sale of House (assumes house sells for appraised value less 6% realtor commission)
- Vinyl House: Sells for \$295,473.38 6% = \$277,744.98
- Loan balance at time of sale: \$182, 302.02
- Cash from sale: \$ 277,744.98 \$ 182,302.02 = \$ 95,442.96
- Vinyl House Homeowner cash in hand:
 \$ 3,468.33 + \$ 3,179.40 + \$ 95,442.96 = \$ 102,090.69

The owner of the brick sided house has after 5 years:

- Equity from Sale of House (assumes house sells for appraised value less 6% realtor commission)
- Brick House: Sells for \$320,586.41 6% = \$301,351.23
- Loan balance at time of sale: \$ 194,333.96
- Cash from sale: \$ 301,351.23 \$ 194,333.96 = \$ 107,017.27

Case 2 (10% Down Payment)

The owner of the vinyl sided house has after 5 years:

- Cash not used as additional down payment (left in an ordinary savings account at 1% interest)
 Cash value after 5 years: FV = PV(1+i)ⁿ or \$ 1,650.00 x (1 + 0.01)⁵ = \$ 1,734.17
- Additional mortgage savings \$715.44/year x 5 years = \$3,577.20
- Equity from Sale of House (assumes house sells for appraised value less 6% realtor commission)
- Vinyl House: Sells for \$295,473.38 6% = \$277,744.98
- Loan balance at time of sale: \$205, 089.78
- Cash from sale: \$ 277,744.98 \$ 205,089.78 = \$ 72,655.20
- Vinyl House Homeowner cash in hand:
 \$ 1,734.17 + \$ 3,577.20 + \$ 72,655.20 = \$ 77,966.57

The owner of the brick sided house has after 5 years:

- Equity from Sale of House (assumes house sells for appraised value less 6% realtor commission)
- Brick House: Sells for 320,586.41 6% = 301,351.23
- Loan balance at time of sale: \$218,625.70
- Cash from sale: \$ 301,351.23 \$ 218,625.70 = \$ 82,725.53