Issuer Free Writing Prospectus Filed by: ARMOUR Residential REIT, Inc. Pursuant to Rule 433 under the Securities Act of 1933 Registration Statement on Form S-11: No. 333-166847



May 13, 2010

ARMOUR Residential REIT, Inc. (OTC:BB: AMRR) ("ARMOUR" or the "Company") today announced financial results for the quarter ended March 31, 2010.

First Quarter 2010 Highlights

- REIT taxable earnings of approximately \$0.40 per diluted share
- Declared a \$0.40 per share dividend
- Quarter end book value per common share of \$9.30
- Average net interest spread of 2.68%
- Annualized average principal repayment rate (CPR) for Q1 2010 of 14.5% (March 2010 rate of 20.7%)
- ARMOUR was fully invested as of January 26 (71% of Q1 2010)

First Quarter 2010 Results

REIT Taxable Earnings and CORE Earnings

REIT taxable earnings for the three-months ended March 31, 2010, were approximately \$0.40 per common share outstanding or approximately \$0.92 million. The Company distributes dividends based on its estimate of taxable earnings per common share, not GAAP (generally accepted accounting principles) earnings. REIT taxable earnings and GAAP earnings will differ primarily because the non-taxable unrealized changes in the value of the Company's interest rate hedges are included in GAAP earnings whereas, because they are not realized, hedge valuation changes are not included in taxable earnings.

Core earnings for the quarter ended March 31, 2010, were approximately \$0.31 per common share outstanding or \$0.70 million. "Core earnings" represents a non-GAAP measure and is defined as net income (loss) excluding impairment losses, gains or losses on sales of securities and termination of interest rate hedges, unrealized gains or losses on interest rate hedges, and certain non-recurring expenses. CORE earnings may differ from GAAP earnings as GAAP earnings include the unrealized change in the value of the Company's interest rate hedging program. ARMOUR was fully invested for 71% of Q1 2010 after completing the deployment of its initial equity on a leveraged basis on January 26, 2010.

GAAP Earnings

During the quarter ended March 31, 2010, the Company earned approximately \$0.13 per common share outstanding on net income of \$0.3 million. The Company reported a non-realized change in the value of interest rate hedges of (\$0.6 million), which accounts for the difference between REIT taxable earnings and GAAP earnings.

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The Company's portfolio, consisting of Fannie Mae, Freddie Mac and Ginnie Mae mortgage securities, was valued at \$180.4 million as of March 31, 2010, which included \$15.8 million of unsettled transactions. During the first quarter of 2010, the annualized yield on average assets was 3.06% and the annualized cost of funds on average liabilities (including hedges) was 0.38% resulting in a net interest spread of 2.68% for the quarter.

Dividends

The Company declared a dividend of \$0.40 per common share outstanding for stockholders of record on March 15, 2010, which was paid on April 29, 2010.

Portfolio

The \$180.4 million portfolio of Agency securities at March 31, 2010 consisted of 65.5% Hybrid ARMs and 11.2% ARMs. The Company defines "Hybrid ARMs" as those adjustable rate Agency securities with longer than 18 months to rate reset and "ARMs" as those adjustable Agency securities with rate resets shorter than 19 months. The Company's portfolio also consisted of 23.3% of fixed rate Agency assets comprised primarily of fifteen year final maturity fully amortizing Agency securities with original principal loan balances no larger than \$85,000.

Portfolio Financing, Leverage and Interest Rate Hedges

As of March 31, 2010, the Company financed its portfolio with approximately \$168.5 million of borrowings under repurchase agreements. The Company's debt-to-shareholders' equity ratio as of March 31, 2010, was 7.9 to 1. The Company's repurchase agreements had a weighted-average term of approximately 44 days. The Company also uses Eurodollar futures contracts to hedge financing rate risk. As of March 31, 2010, the Company had a notional amount of \$60.0 million of various maturities of Eurodollar futures contracts sold. The Eurodollar futures contracts have an average remaining term of 35 months at an average fixed rate of 1.79%.

Book Value

The Company's book value (shareholders' equity) per common share outstanding on March 31, 2010 was \$9.30 or \$21.4 million.



Regulation G Reconciliation

REIT taxable income is calculated according to the requirements of the Internal Revenue Code rather than GAAP. For the year ending December 31, 2010, ARMOUR plans to distribute at least 90% of its REIT taxable income in order to maintain its tax qualification as a REIT. The following table reconciles ARMOUR's consolidated results from operations to REIT taxable income for the three months ended March 31, 2010:

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	March 31, 2010
GAAP net income	305,833
Plus: GAAP net loss of taxable REIT subsidiary included above	13,760
GAAP net income from REIT operations	319,593
Add: Change in value of interest rate hedge	596,925
Add: Income tax expense	2,400
REIT estimated taxable income	918,918
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ARMOUR believes that the foregoing reconciliation of REIT taxable income is useful to investors because REIT taxable income is directly related to the amount of dividends the Company is required to distribute in order to maintain its REIT tax qualification status. However, because REIT taxable income is an incomplete measure of the Company's financial performance and involves differences from net income computed in accordance with GAAP, REIT taxable income should be considered as supplementary to, and not as a substitute for, ARMOUR's net income computed in accordance with GAAP as a measure of the Company's financial performance.

ARMOUR Residential REIT, Inc.

ARMOUR is a Maryland corporation that invests primarily in hybrid adjustable rate, adjustable rate and fixed rate residential mortgage-backed securities, or RMBS, issued or guaranteed by U.S. Government-chartered entities,. ARMOUR is externally managed and advised by ARMOUR RESIDENTIAL MANAGEMENT LLC ("ARRM"). ARMOUR Residential REIT, Inc. intends to qualify to be taxed as a real estate investment trust ("REIT") for U.S. federal income tax purposes, commencing with ARMOUR's taxable year ending December 31, 2009.



Safe Harbor

This press release includes "forward-looking statements" within the meaning of the safe harbor provisions of the United States Private Securities Litigation Reform Act of 1995. Actual results may differ from expectations, estimates and projections and, consequently, you should not rely on these forward looking statements as predictions of future events. Words such as "expect," "estimate," "project," "budget," "forecast," "anticipate," "intend," "plan," "may," "will," "could," "should," "believes," "predicts," "potential," "continue," and similar expressions are intended to identify such forward-looking statements. These forward-looking statements involve significant risks and uncertainties that could cause the actual results to differ materially from the expected results.

Additional information concerning these and other risk factors is contained in the Company's most recent filings with the Securities and Exchange Commission ("SEC"). All subsequent written and oral forward-looking statements concerning the Company are expressly qualified in their entirety by the cautionary statements above. The Company cautions readers not to place undue reliance upon any forward-looking statements, which speak only as of the date made. The Company does not undertake or accept any obligation or undertaking to release publicly any updates or revisions to any forward-looking statements to reflect any change in their expectations or any change in events, conditions or circumstances on which any such statement is based.

Additional Information and Where to Find It

Investors, security holders and other interested persons may find additional information regarding the Company at the SEC's Internet site at http://www.sec.gov/, or the Company website www.armourreit.com or by directing requests to: ARMOUR Residential REIT, Inc., 956 Beachland Blvd., Suite #11, Vero Beach, Florida 32963, Attention: Investor Relations.

Investor Contact:

Jeffrey Zimmer Co-Chief Executive Officer, President and Vice Chairman ARMOUR Residential REIT, Inc. (772) 617-4340